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Brunswick Steam Electric Plant, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. DPR-71 and DPR-62
Docket Nos. 50-325 and 50-324

Catawba Nuclear Station, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. NPF-35 and NPF-52
Docket Nos. 50-413 and 50-414

Shearon Harris Nuclear Power Plant, Unit 1
Renewed Facility Operating License No. NPF-63
Docket No. 50-400

McGuire Nuclear Station, Unit Nos. 1 and 2
Renewed Facility Operating License Nos. NPF-9 and NPF-17
Docket Nos. 50-369 and 50-370

Oconee Nuclear Station, Unit Nos. 1, 2 and 3
Renewed Facility Operating License Nos. DPR-38, DPR-47 and DPR-55
Docket Nos. 50-269, 50-270 and 50-287

H. B. Robinson Steam Electric Plant, Unit 2
Renewed Facility Operating License No. DPR-23
Docket No. 50-261

SUBJECT: Annual Radiological Environmental Operating Report - 2021

Ladies and Gentlemen:

Duke Energy Carolinas, LLC and Duke Energy Progress, LLC (collectively referred to as Duke Energy), in accordance with Technical Specification (TS) 5.6.2 for Brunswick Steam Electric Plant Units 1 and 2 (BNP), TS 5.6.2 and Selected Licensing Commitment (SLC) 16.11-16 for Catawba Nuclear Station Units 1 and 2 (CNS), TS 6.9.1.3 for Shearon Harris Nuclear Power Plant Unit 1 (HNP), TS 5.6.2 and SLC 16.11.16 for McGuire Nuclear Station Units 1 and 2 (MNS), TS 5.6.2 and SLC 16.11.10 for Oconee Nuclear Station Units 1, 2, and 3 (ONS), and TS 5.6.2 for H. B. Robinson Steam Electric Plant Unit 2 (RNP), is submitting the Annual Radiological Environmental Operating Reports (AREORs) for the period from January 1, 2021, through December 31, 2021. The AREORs are provided in Enclosures 1 through 6.

No regulatory commitments are contained in this submittal.

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Please refer any questions concerning this letter and its enclosures to Lee Grzeck, Acting Manager - Nuclear Fleet Licensing, at (980) 373-1530.

Sincerely,



M. Christopher Nolan
Vice President, Nuclear Regulatory Affairs, Policy & Emergency Preparedness

Enclosures:

1. [BNP Annual Radiological Environmental Operating Report](#)
2. [CNS Annual Radiological Environmental Operating Report](#)
3. [HNP Annual Radiological Environmental Operating Report](#)
4. [MNS Annual Radiological Environmental Operating Report](#)
5. [ONS Annual Radiological Environmental Operating Report](#)
6. [RNP Annual Radiological Environmental Operating Report](#)

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Enclosure 1
RA-22-0030

ENCLOSURE 1: [BNP Annual Radiological Environmental Operating Report](#)



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

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

2021



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

A	Annually
AP	Air Particulate
AR	Air Radioiodine = Air Cartridge
AREOR	Annual Radiological Environmental Operating Report
BO	Benthic Organisms
BSEP	Brunswick Steam Electric Plant
C	Control
CM	Community
CR	Condition Report (analogous to Nuclear Condition Report (NCR))
EZA	Eckert & Ziegler Analytics, Inc.
GEL	General Engineering Laboratories, LLC.
GPS	Global Positioning System
GW	Ground water
I	Indicator
IR	Inner Ring - TLDs
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
LUC	Land Use Census
M	Monthly
MAPEP	Department of Energy Mixed Analyte Performance Evaluation Program
MDA	Minimum Detectable Activity
mrem	Millirem
mR/Std Qtr	milliroentgen per standard quarter
MSL	Mean sea level
NIST	National Institute of Standards and Technology
NCR	Nuclear Condition Report (analogous to Condition Report (CR))
NRC	Nuclear Regulatory Commission
OD	Ocean discharge
ODCM	Offsite Dose Calculation Manual
OR	Outer Ring - TLDs
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
PMAC	Projected Maximum Annual Concentration
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SB	Site Boundary
SDSP	Storm Drain Stabilization Pond
SH	Shellfish
SI	Special Interest - TLDs
SW	Surface Water
TLD	Thermoluminescent Dosimeter
UFSAR	Updated Final Safety Analysis Report
W	Weekly

1.0 EXECUTIVE SUMMARY

This Annual Radiological Environmental Operating Report (AREOR) describes the Brunswick Steam Electric Plant (BSEP) Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2021.

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

Sampling activities were conducted as prescribed by the BSEP Offsite Dose Calculation Manual (ODCM). One thousand, three hundred seventy-five samples were analyzed comprising 1,375 test results to compile data for the 2021 BSEP Annual Radiological Environmental Operating Report. Based on the annual BSEP land use census, the current number of sampling sites for BSEP is sufficient.

Concentrations observed in the environment in 2021 for station related radionuclides were within the ranges of concentrations observed in the past. Inspection of the data showed that radioactivity concentrations were as expected and positively identified measurements attributable to plant operation were within limits as specified in the BSEP ODCM. Measured concentrations, including tritium, were not higher than expected and all positively identified measurements attributable to station operation were within limits as specified in the BSEP ODCM and regulatory limits. The radiological environmental data for 2021 indicates that radioactivity concentrations and all positively identified measurements attributable to BSEP operations in 2021 were within limits as specified in the BSEP ODCM, thus presenting no significant impact on the environment or public health and safety.

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

Duke Energy's Brunswick Steam Electric Plant (BSEP) is located in Brunswick County, North Carolina, approximately 16 miles south of Wilmington, North Carolina. The site is along state route 87 approximately two and a half miles north of Southport, North Carolina. The community of Boiling Spring Lakes is about three miles northwest of the site. The towns of Caswell Beach and Oak Island are on a barrier island south of the plant.

The Brunswick Steam Electric Plant consists of two boiling water reactors with a design rating of 2923 megawatts thermal. Commercial production was initiated by Unit 2 on November 3, 1975 and by Unit 1 on March 18, 1977.

The Cape Fear River is east of the plant and cooling water is drawn from the river through a canal. The cooling water and plant liquid effluents are both discharged to the Atlantic Ocean through a canal, pumping station, and piping. The discharge point is south of the town of Caswell Beach. The plant site varies in elevation from sea level to 30 feet above mean sea level (MSL) and is surrounded by extensive marshes.

Sampling locations are chosen based upon meteorological factors, preoperational monitoring, and land use surveys. Additional locations were selected and identified as controls because they are unlikely to be affected by plant operations. Figures 2.1-1, 2.1-2, and 2.1-3 are maps depicting BSEP sampling locations and the Thermoluminescent Dosimeter (TLD) monitoring locations. The location numbers shown on these maps correspond to those listed in Tables 2.1-A and 2.1-B.

The Brunswick site centerline used for GPS measurements was referenced from the Brunswick Nuclear Station Updated Final Safety Analysis Report (UFSAR), section 2.1.1, Site Location and Description. Waypoint coordinates used for BNP GPS measurements were latitude 33°57'30" North and longitude 78°00'30" West. Maps and tables were generated using North American Datum (NAD) 27. Data normally reflect accuracy to within one tenth mile 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 two significant figures.

2.2 SCOPE AND REQUIREMENTS OF THE REMP

A Radiological Environmental Monitoring Program (REMP) has been in effect at BSEP, and 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 BSEP Offsite Dose Calculation Manual (ODCM), with regards to sample media, sampling locations, sampling

frequency and analytical sensitivity requirements. Indicator and control locations were established for comparison purposes to distinguish radioactivity of plant origin from natural or other “man-made” environmental radioactivity. The environmental monitoring program also verifies projected and anticipated radionuclide concentrations in the environment and related exposures from releases of radionuclides from BSEP. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10CFR50 and provides surveillance of all appropriate critical exposure pathways to man and protects vital interests of the company, public and state and federal agencies concerned with the environment. Reporting levels for activity found in environmental samples are listed in Table 2.2-A. Table 2.2-B lists the REMP analysis and frequency schedule. The Annual Land Use Census, required by the BSEP ODCM, is performed to ensure that changes in the use of areas at or beyond the site boundary are identified and that modifications to the REMP are made if required by changes in land use. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10CFR50. Results are shown in Tables 3.9-A and 3.9-B.

Participation in an interlaboratory comparison program is performed in fulfillment of BSEP ODCM Operational Requirement provides for independent checks on the precision and accuracy of measurements of radioactive material in REMP sample matrices. Such checks are performed as part of the quality assurance program for environmental monitoring in order to demonstrate that the results are valid for the purposes of Section IV.B.2 of Appendix I to 10CFR50. A summary of the results obtained as part of this comparison program are in Section 4 of this annual report.

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

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

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

Where:

\bar{x} = estimate of the mean,

i = individual sample,

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

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

2.3.2 LOWER LIMIT OF DETECTION AND MINIMUM DETECTABLE ACTIVITY

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

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

MDA - The MDA is the net counting rate (sample after subtraction of background) that must be surpassed before a sample is considered to contain a scientifically measurable amount of a radioactive material exceeding background amounts. The MDA is calculated using a sample background and may be thought of as an "actual" LLD for a 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 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 radionuclide's release from the nuclear plant will greatly affect the resulting environmental levels; therefore, a knowledge of the release of a radionuclide from the nuclear plant is necessary to completely interpret the trends, or lack of trends, determined from the environmental data. Factors that may affect environmental levels of radionuclides include prevailing weather conditions (periods of drought, solar cycles or heavier than normal precipitation), construction in or around either the nuclear plant or the sampling location, and addition or deletion of other sources of radioactive materials (such as the 1986 Chernobyl accident and the 2011 Japan earthquake and tsunami, which triggered the Fukushima Dai-ichi Nuclear Power Plant incident). Some of these factors may be obvious while others are sometimes unknown. Therefore, how trends are identified will include some judgment by plant personnel.

Figure 2.1-1

BSEP Environmental Sampling Locations – One mile radius

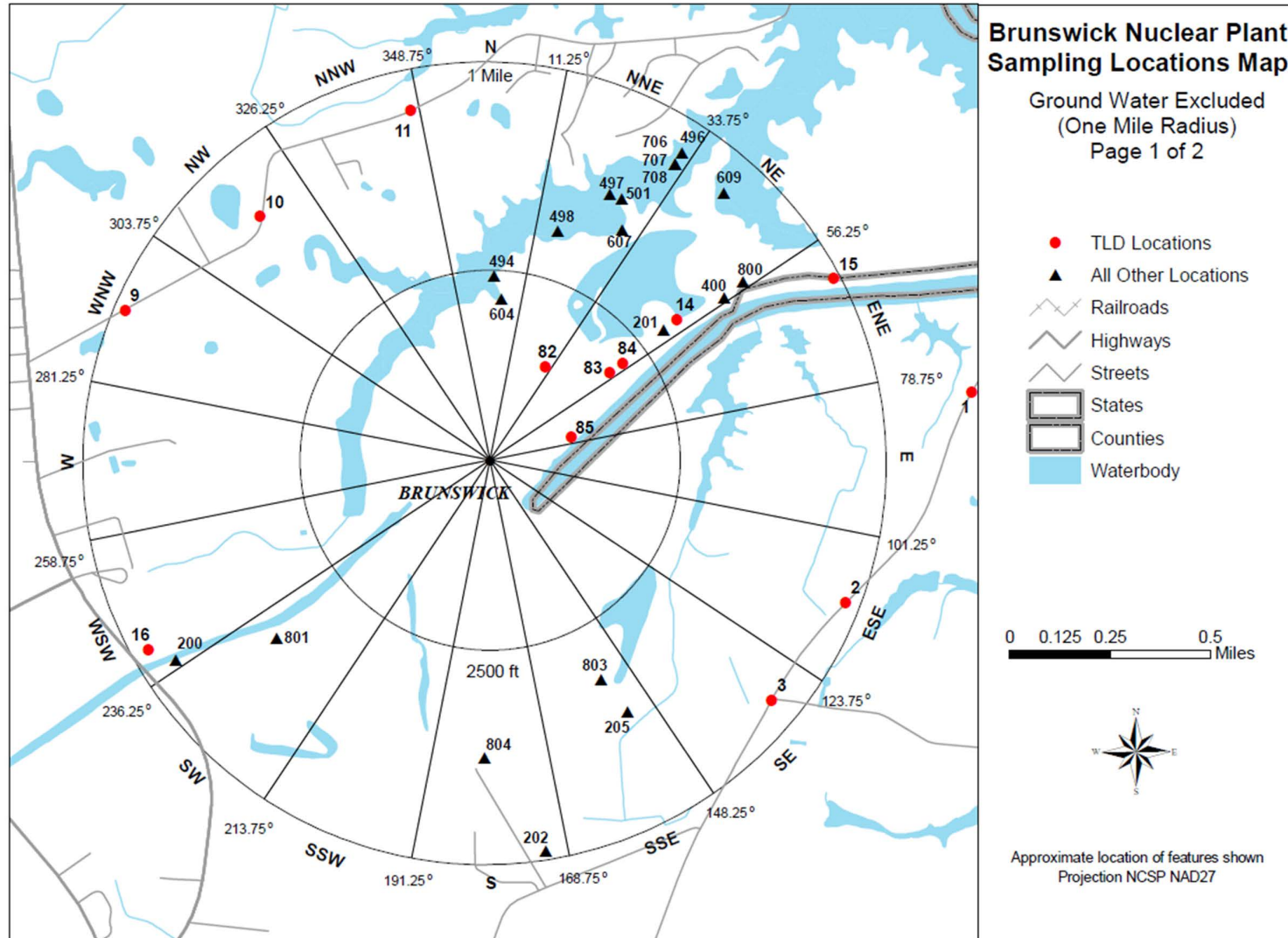


Figure 2.1-2

BSEP Environmental Sampling Locations (Ground Water Only) - One mile radius

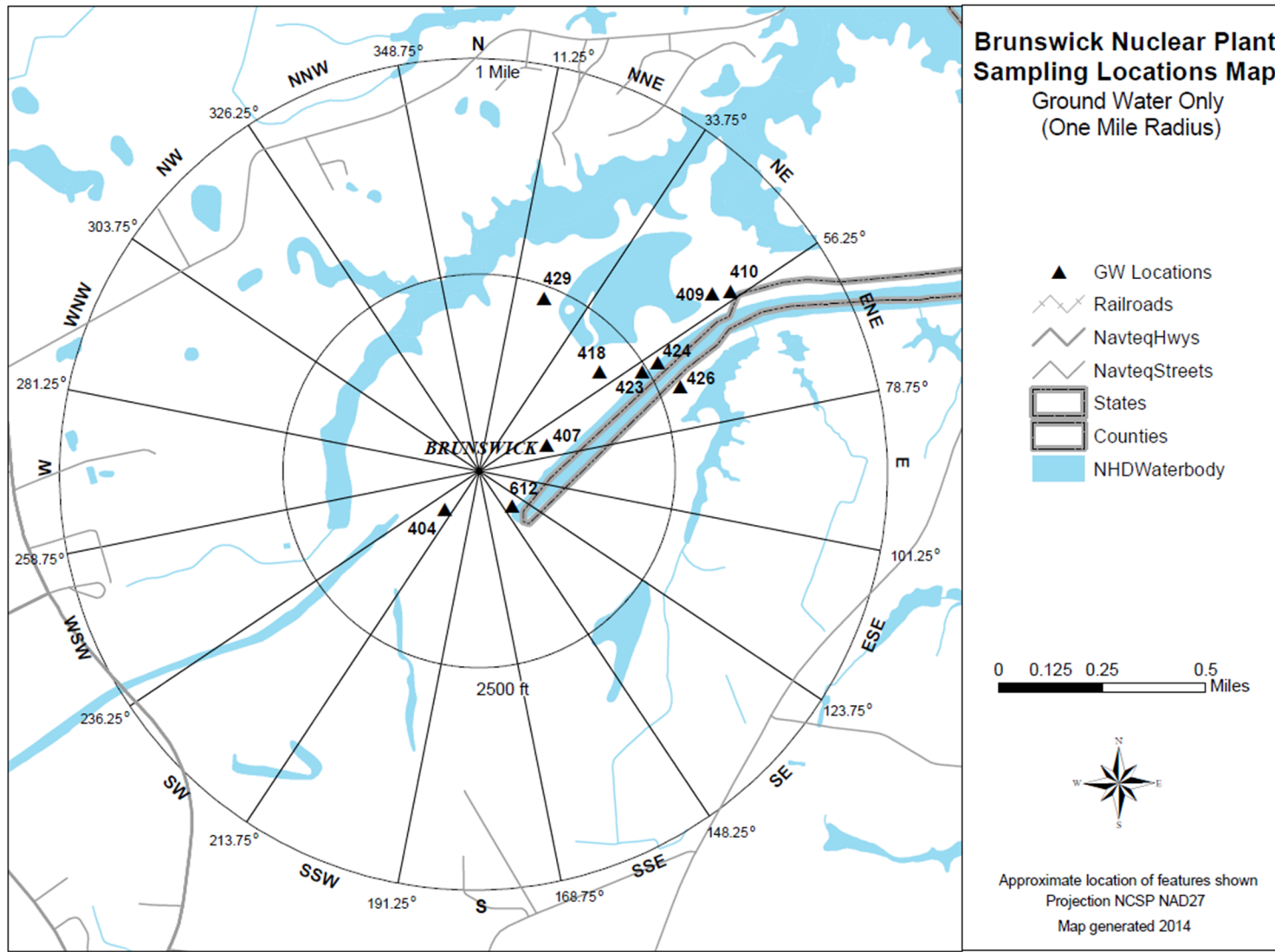


Figure 2.1-3

BSEP Environmental Sample Locations - Ten mile radius

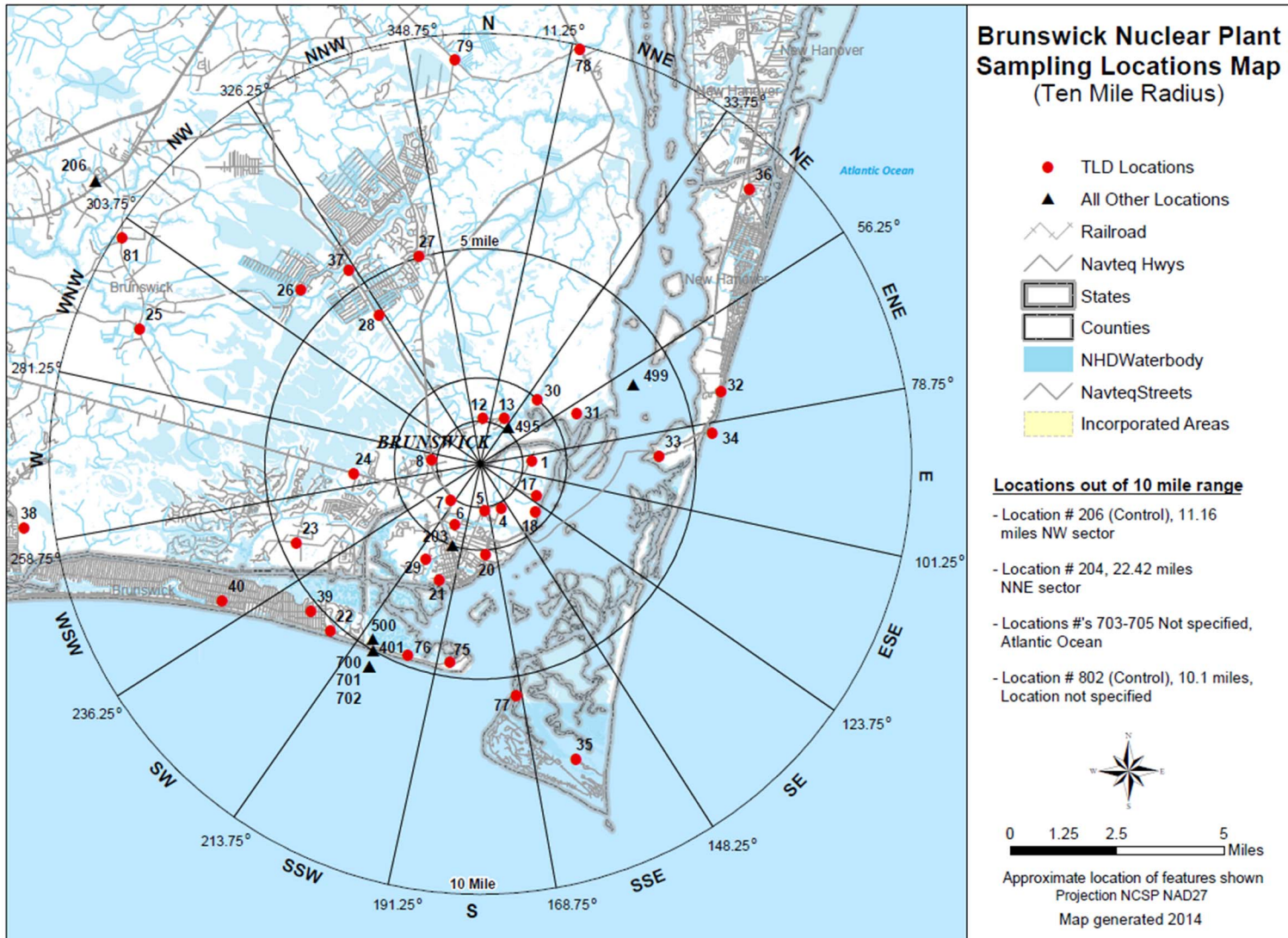


TABLE 2.1-A

RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS

BRUNSWICK STEAM ELECTRIC PLANT (BSEP) ODCM

Table 2.1-A Codes			
A	Annually	SA	Semiannually
C	Control ^(d)	SB	Site Boundary
CM	Community	SDSP	Storm Drain Stabilization Pond
I	Indicator	W	Weekly
M	Monthly	WP	Waypoint
Q	Quarterly		

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

TABLE 2.1-A (Continued)

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

(a) When Available

(b) Edible Portions

(c) When in Season

(d) Control Station – These stations are presumed to be outside the influence of plant effluents.

(e) A sample of one free swimmer, one bottom feeder, and one shellfish (shrimp) will be collected if available. A control sample of each species collected will be obtained if available.

(f) The purpose of this sample is to obtain background information. If it is not practical to establish control locations in accordance with the distance and wind direction criteria, other sites that provide valid background data may be substituted.

(g) The “upstream” sample shall be taken at a distance beyond significant influence of the discharge. The “downstream” sample shall be taken in an area beyond but near the mixing zone. “Upstream” samples in an estuary must be taken far enough upstream to be beyond the plant influence. Salt-water shall be sampled only when the receiving water is utilized for recreational activities.

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

TABLE 2.1-B

RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS (TLD SITES) ^(b)

BRUNSWICK STEAM ELECTRIC PLANT (BSEP)

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

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

(a) Control Station – These stations are presumed to be outside the influence of plant effluents.

(b) One or more instruments such as a pressurized ion chamber, for measuring and recording dose rate continuously may be used in place of, or in addition to, integrating dosimeters. Film badges shall not be used as dosimeters for measuring direct radiation. The frequency of analysis or readout for TLD systems will depend upon the characteristics of the specific system used and should be selected to obtain optimum dose information with minimal fading.

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

TABLE 2.2-A

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

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

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

Sample Medium	Analysis Schedule	Gamma Isotopic ^(e)	Tritium	Gross Beta	TLD
Air Radioiodine	Weekly	X			
Air Particulate	Weekly			(c)	
	Quarterly	X			
Direct Radiation (TLD)	Quarterly				X
Surface Water	Monthly Composite (400 & 401) ^{(d)(h)}	X	X		
	Monthly Grab (494 - 499, 604, 607, & 609)	(f)	X		
Ground Water	Quarterly Grab	X	X		
	Semiannual Grab	X			
Shoreline Sediment	Semiannually (500)	X			
	Annually (501) ^(g)	(g)			
Fish and Shellfish/Invertebrates ^(a)	Semiannually (700 – 705) ⁽ⁱ⁾	X			
	Annually (706 – 708)	X			
Broadleaf Vegetation ^(j)	Monthly ^(b)	X			

(a) Edible portions

(b) When available

(c) Airborne particulate samples shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than ten times the yearly mean of control samples, gamma isotopic shall be performed on the individual samples.

(d) Composite samples shall be collected by collecting an aliquot at intervals not exceeding 6 hours.

(e) Gamma isotopic analysis means the identification and quantification of gamma-emitting radionuclides that may be attributable to the effluents from the facility.

(f) The samples are to be analyzed for gamma isotopic analyses. If plant activity is detected from the gamma isotopic analysis, Sr-89, 90 and Fe-55 analysis are to be performed.

(g) If plant activity is detected, Sr-89, 90 and Fe-55 analysis are to be performed and frequency will be increased to Semi-Annual.

(h) A composite sample is one in which the quantity (aliquot) of liquid sampled is proportional to the quantity of flowing liquid and in which the method of sampling employed results in a specimen that is representative of the liquid flow. Composite samples shall be collected with equipment that is capable of collecting an aliquot at time intervals that are short (e.g., once per 6 hours) relative to compositing period (e.g., monthly) in order to assure obtaining a representative sample.

(i) When less than three (3) milking animal locations are available for testing within an 8-km distance, sampling of broadleaf vegetation shall be performed as indicated in [BSEPD ODCM] Table 7.3.15-1, 4.c, in lieu of milk sampling.

(j) When in Season

TABLE 2.2-C**DETECTION CAPABILITIES FOR THE *A PRIORI* LOWER LIMIT OF DETECTION^{(a)(b)(d)}**

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

(a) This list does not mean that only these nuclides are to be considered. Other peaks that are identifiable, together with these of the above nuclides, shall be analyzed and reported in the AREOR.

(b) The LLD is defined in the BSEP ODCM.

(c) LLD for drinking water samples. If no drinking water pathway exists, a value of 15 pCi/L may be used.

(d) The LLD for each analysis is specified, with the exception of the Nancy's Creek Marsh Area principal gamma isotopic and I-131. The LLD for the Nancy's Creek Marsh Area gamma isotopic is 5×10^{-7} μ Ci/ml for Principal Gamma Emitters and 1×10^{-9} μ Ci/ml for I-131.

3.0 INTERPRETATION OF RESULTS

Review of 2021 REMP analysis results was performed to detect and identify changes in environmental levels as a result of station operation. The radionuclides with ODCM reporting levels that indicate consistent detectable activity have been historically trended from preoperation to present. Summary tables containing 2021 information required by Technical Specification Administrative Control 5.6.2, BSEP ODCM 7.4.1 are located in Appendix B. Brunswick 2021 REMP results are located in Appendix E.

The highest annual mean concentration of applicable ODCM radionuclides from the indicator locations for each media type was used for trending purposes. Trending was performed by comparing annual mean concentrations to historical results. Factors evaluated include the frequency of detection and the concentration in terms of the percent of the radionuclide's ODCM reporting level (Table 2.2-A). Evaluation for significant trends was performed for radionuclides that are listed as required in the BSEP ODCM. The radionuclides include: H-3, Mn-54, Fe-59, Co-58, Co-60, Zn-65, Zr-95, Nb-95, I-131, Cs-134, Cs-137, Ba-140 and La-140. Gross beta results were trended for air particulate and tritium in surface water samples.

Review of the 2021 data presented in this section supports the conclusion that there were no significant changes in environmental sample radionuclide concentrations of samples collected and analyzed from BSEP and surrounding areas that were attributable to plant operations. The radiological environmental data for 2021 indicates that radioactivity concentrations were not higher than expected and all positively identified measurements attributable to BSEP operations in 2021 were within limits as specified in the BSEP ODCM, thus presenting no significant impact on the environment or public health and safety.

Data presented in Sections 3.1 through 3.8 support the conclusion that there was no significant increase in radioactivity in the environment around Brunswick Steam Electric Plant due to station operations in 2021. Similarly, there was no significant increase in ambient background radiation levels in the surrounding areas. The 2021 land use census data, shown in Section 3.9, indicates that no program changes are required as a result of the census.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

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

In 2021, 371 radioiodine and particulate samples were analyzed, 265 from five indicator locations and 106 from the two control locations. The air samplers operated for a total of 99.95% availability for the 2021 year.

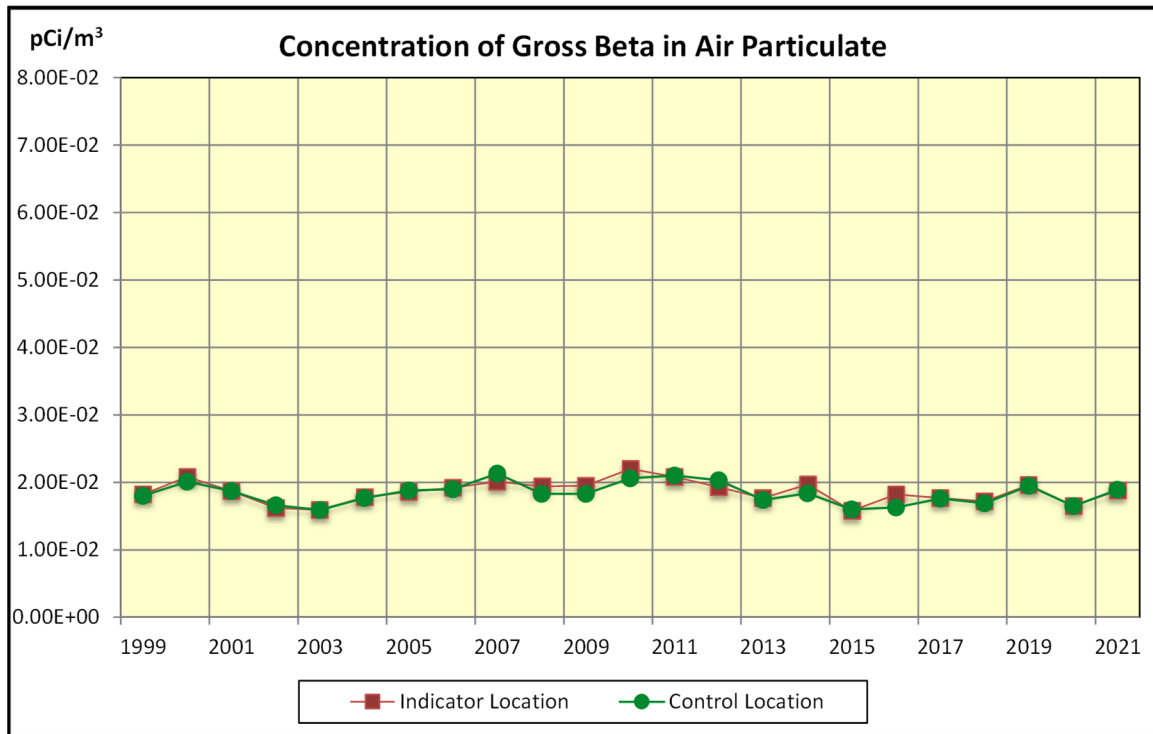
Gross beta analyses indicated $1.88\text{E-}2$ pCi/m³ at the location with the highest annual mean and $1.89\text{E-}2$ pCi/m³ at the two control locations. The preoperational (1973 – 1974) gross beta average concentration was $8.2\text{E-}2$ pCi/m³. No gamma emitting radionuclides attributable to BNP plant operation were detected in any 2021 radioiodine samples.

Figure 3.1 and Table 3.1-A provide individual sample gross beta results for the highest annual mean indicator location and the control locations concentration since 1999. There is no reporting level for gross beta in air particulate.

Table 3.1-B gives indicator location highest annual means and control means since 1999 for I-131. No I-131 activity due to BSEP operation has been detected since 2006. Since no activity was detected in 2021, no reporting levels were approached.

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

Figure 3.1



There is no reporting level for gross beta in air particulate.

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

Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1999	1.82E-2	1.80E-2
2000	2.08E-2	2.01E-2
2001	1.87E-2	1.87E-2
2002	1.62E-2	1.66E-2
2003	1.59E-2	1.59E-2
2004	1.78E-2	1.77E-2
2005	1.86E-2	1.88E-2
2006	1.92E-2	1.90E-2
2007	2.01E-2	2.13E-2
2008	1.94E-2	1.83E-2
2009	1.95E-2	1.83E-2
2010	2.20E-2	2.06E-2
2011	2.08E-2	2.10E-2
2012	1.93E-2	2.03E-2
2013	1.77E-2	1.74E-2
2014	1.97E-2	1.84E-2
2015	1.58E-2	1.60E-2
2016	1.82E-2	1.63E-2
2017	1.77E-2	1.76E-2
2018	1.72E-2	1.69E-2
2019	1.96E-2	1.95E-2
2020	1.64E-2	1.65E-2
2021	1.88E-2	1.89E-2

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

Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1999	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0
2005	0.00E+0	0.00E+0
2006 ⁽¹⁾	5.31E-2	0.00E+0
2007	0.00E+0	0.00E+0
2008	0.00E+0	0.00E+0
2009	0.00E+0	0.00E+0
2010	0.00E+0	0.00E+0
2011 ⁽²⁾	1.31E-1	1.00E-1
2012	0.00E+0	0.00E+0
2013	0.00E+0	0.00E+0
2014 ⁽³⁾	0.00E+0	0.00E+0
2015	0.00E+0	0.00E+0
2016	0.00E+0	0.00E+0
2017	0.00E+0	0.00E+0
2018	0.00E+0	0.00E+0
2019	0.00E+0	0.00E+0
2020	0.00E+0	0.00E+0
2021	0.00E+0	0.00E+0

0.00E+0 indicates no detectable measurements

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

(2) 2011 concentrations affected by Fukushima Dai-ichi (NCR # 0456564).

(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.

3.2 SURFACE WATER

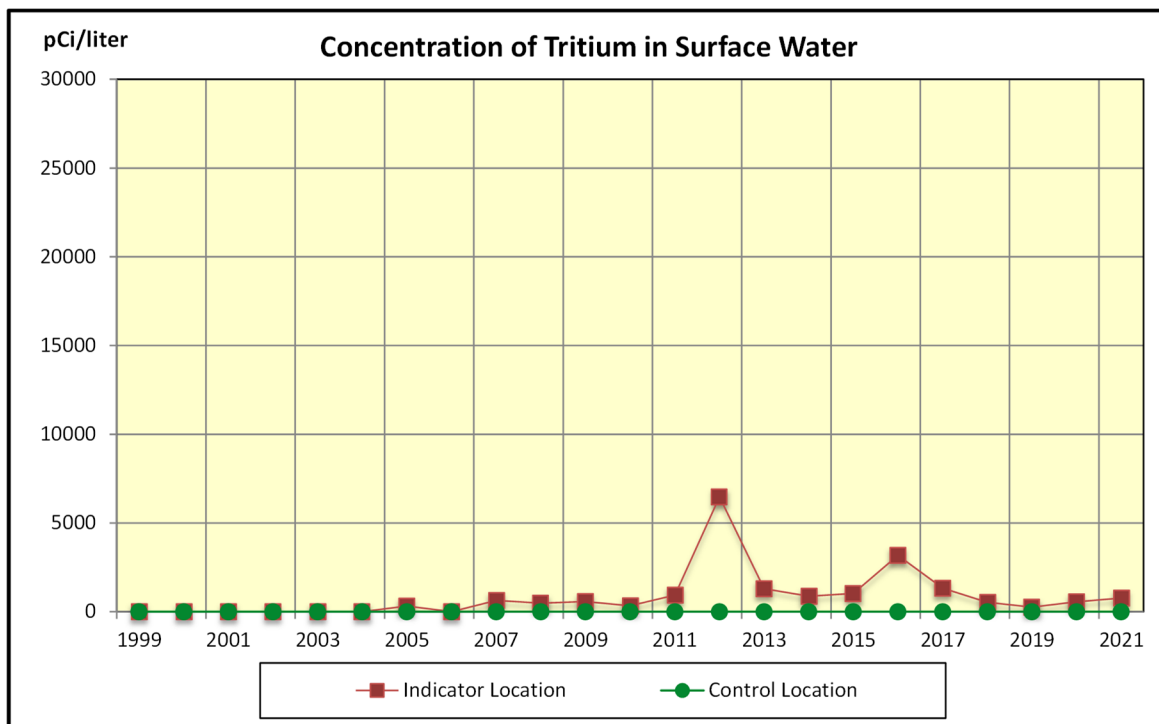
Surface water samples were taken monthly from the intake canal, the discharge canal, five Nancy's Creek surface water locations, and four Nancy's Creek Marsh Area surface water locations. Monthly composite samples were collected from locations 400 and 401 and monthly grab samples were collected from locations 494 – 499, 604, 607, and 609.

In 2021, 132 surface water samples were analyzed for gamma emitting radionuclides and tritium. No detectable gamma activity attributable to BSEP operation was found in surface water samples in 2021. K-40 and Be-7 observed in some surface water samples are naturally occurring radionuclides. Tritium was detected in 8 of the 132 surface water samples taken in 2021. Tritium was not detected in any of the control location samples in 2021.

The predominate indicator location indicating tritium in 2021 was at location 604, Nancy's Creek Marsh Area (Waypoint-92) with an annual mean concentration of 763 pCi/L as five of the twelve samples from location 604 indicated the presence of tritium. All indicator samples from Nancy's Creek and Nancy's Creek Marsh Area had an average tritium concentration of 599 pCi/L. The reporting limit for tritium in environmental surface water samples is 30,000 pCi/L.

Figure 3.2 displays the tritium results for the highest annual mean indicator and control locations concentrations since 1999. Table 3.2 lists the highest annual mean concentrations for indicator and control locations.

Figure 3.2



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

Table 3.2 Mean Concentration of Tritium in Surface Water

Year	Indicator Location (pCi/l)	Control Location (pCi/l)
1999	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0
2005	3.22E+2	0.00E+0
2006	0.00E+0	0.00E+0
2007	6.30E+2	0.00E+0
2008	4.85E+2	0.00E+0
2009	5.75E+2	0.00E+0
2010	3.39E+2	0.00E+0
2011	9.28E+2	0.00E+0
2012	6.47E+3	0.00E+0
2013	1.29E+3	0.00E+0
2014	8.80E+2	0.00E+0
2015	1.02E+3	0.00E+0
2016	3.18E+3	0.00E+0
2017	1.33E+3	0.00E+0
2018	5.36E+2	0.00E+0
2019	2.51E+2	0.00E+0
2020	5.55E+2	0.00E+0
2021	7.63E+2	0.00E+0

0.00E+0 indicates no detectable measurements

3.3 GROUND WATER

In 2021, there were 40 grab samples collected from ten ground water indicator locations and analyzed for gamma emitting radionuclides and/or tritium. The grab samples were collected quarterly for tritium testing and semiannually for gamma spectroscopy testing. There is no ground water control location sampled.

No detectable gamma activity attributable to BSEP operation was found in ground water samples in 2021. K-40 observed in some ground water samples is a naturally occurring radionuclide. Tritium was detected in seven of the forty indicator ground water samples taken in 2021 with a mean tritium concentration of 253 pCi/L.

Brunswick county utilizes water from the Cape Fear River, which is processed at the Northwest Water Treatment Plant, and groundwater that is pumped from the Castle Hayne Aquifer, which is processed at the 211 Water Treatment Plant in Southport. The 211 Water Treatment Plant supplies drinking water to Southport, Oak Island, and St. James Plantation. The 211 Water Treatment Plant uses ground water from fourteen wells screened in the Castle Hayne formation approximately 175 feet below the ground's surface and is located approximately 4 miles northwest, up gradient, of the site according to the North Carolina Department of Environmental Quality (NCDEQ) Public Water Supply Section and the Brunswick County Public Utilities Water Distribution Division. The City of Southport has a network of ground water supply wells installed in the Castle Hayne and PeeDee aquifers, within two miles of the BNP Storm Drain Stabilization Pond (SDSP) area; however, these wells are only maintained as emergency or backup supply wells. Between the Ground Water Program at BSEP, the BSEP REMP, the information provided by the Castle Hayne Aquifer/formation, and Silar Services, Inc.; the drinking water source for the public is sufficiently monitored and a control point for sampling drinking water is not needed.

Table 3.3 lists the tritium results for the highest annual mean concentrations for indicator and control locations (if applicable) since 1999.

Table 3.3 Mean Concentration of Tritium in Ground Water

Year	Indicator Location (pCi/l)	Control Location (pCi/l)
1999	N/A	N/A
2000	N/A	N/A
2001	N/A	N/A
2002	N/A	N/A
2003	N/A	N/A
2004	N/A	N/A
2005	N/A	N/A
2006	N/A	N/A
2007	N/A	N/A
2008	1.50E+6	No Control
2009	6.48E+5	No Control
2010	5.66E+5	No Control
2011	3.10E+2	No Control
2012	4.00E+2	No Control
2013	4.66E+2	No Control
2014	6.54E+2	No Control
2015	4.02E+2	No Control
2016	0.00E+0	No Control
2017	3.76E+2	No Control
2018	3.22E+2	No Control
2019	3.34E+2	No Control
2020	2.24E+2	No Control
2021	2.94E+2	No Control

0.00E+0 indicates no detectable measurements

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

3.4 MILK

No milk sampling locations are currently identified in BSEP environs, therefore no sampling of this media was available or performed in 2021. No indicator dairies were identified by the 2021 land use census.

3.5 BROADLEAF VEGETATION

In 2021, sixty broadleaf vegetation samples were collected monthly (as available) and analyzed by gamma spectroscopy, 48 at the four indicator locations and twelve at the control location. No detectable gamma activity attributable to BSEP operation was found in broadleaf vegetation samples in 2021.

Gamma spectroscopy analysis did not detect Cs-137 in any of the indicator or control location samples, however it is not unusual for Cs-137 to be present in broadleaf 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. Figure 3.5 displays the highest annual mean indicator and control location concentrations for Cs-137 in broadleaf vegetation since 1999. Table 3.5 lists the highest indicator location annual mean and control location annual means for Cs-134, Cs-137, Co-60, and I-131 since 1999. 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

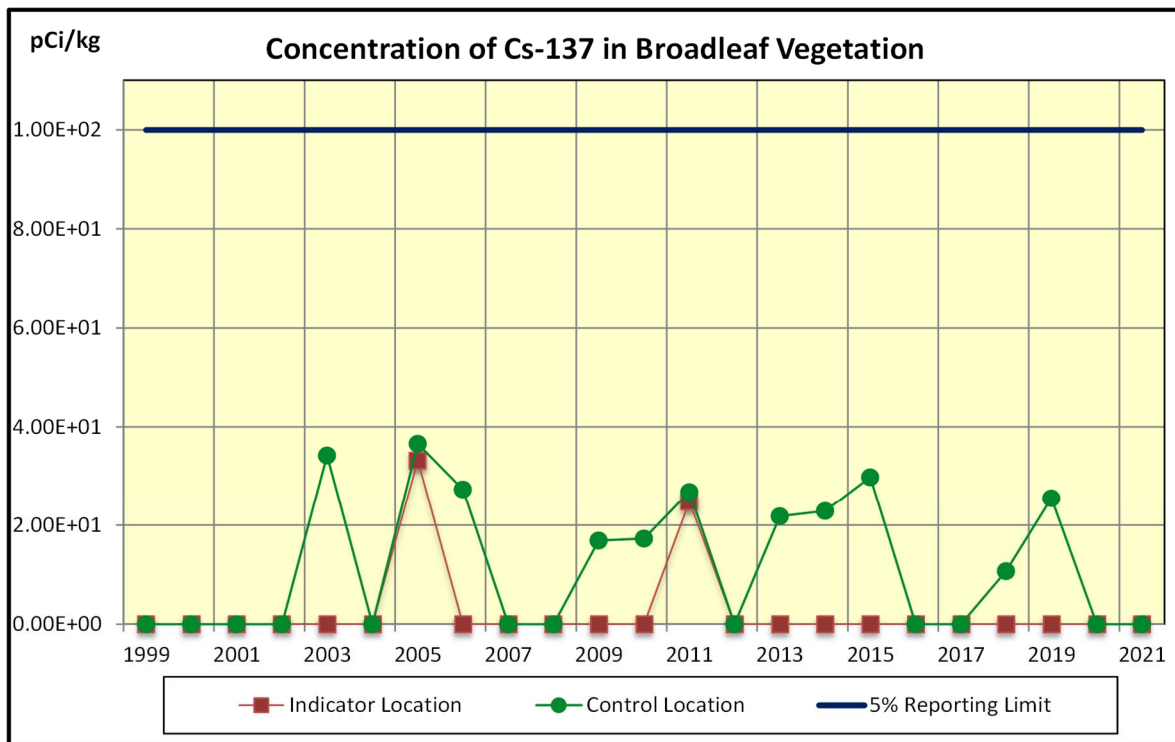


Table 3.5 Mean Concentrations of Radionuclides in Broadleaf Vegetation (pCi/kg)

Year	Cs-134 Indicator	Cs-134 Control	Cs-137 Indicator	Cs-137 Control	Co-60 Indicator	Co-60 Control	I-131 Indicator	I-131 Control
1999	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0	0.00E+0	3.42E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2005	0.00E+0	0.00E+0	3.32E+1	3.66E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2006	0.00E+0	0.00E+0	0.00E+0	2.73E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2007	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2008	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2009	0.00E+0	0.00E+0	0.00E+0	1.69E+1	4.94E+1	0.00E+0	0.00E+0	0.00E+0
2010	0.00E+0	0.00E+0	0.00E+0	1.73E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2011 ⁽¹⁾	2.60E+1	1.64E+1	2.48E+1	2.68E+1	0.00E+0	0.00E+0	2.20E+2	1.48E+2
2012	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2013	0.00E+0	0.00E+0	0.00E+0	2.18E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2014 ⁽²⁾	0.00E+0	0.00E+0	0.00E+0	2.29E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2015	0.00E+0	0.00E+0	0.00E+0	2.98E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2016	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2017	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2018	0.00E+0	0.00E+0	0.00E+0	1.07E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2019	0.00E+0	0.00E+0	0.00E+0	2.55E+1	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2020	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0
2021	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0	0.00E+0

0.00E+0 indicates no detectable measurements

(1) 2011 concentration affected by Fukushima Dai-ichi

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

3.6 FISH and INVERTEBRATES

In 2021, fifteen fish samples were collected and analyzed for gamma emitting radionuclides, nine at the indicator locations and six at the control locations. Fish (free swimmers and bottom feeders), invertebrate (SH), and benthic organism (BO) samples were collected semiannually. Gamma spectroscopy analysis on the edible portions of each sample indicated no gamma emitting radionuclides attributable to BSEP plant operations in any indicator or control location 2021 fish samples.

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

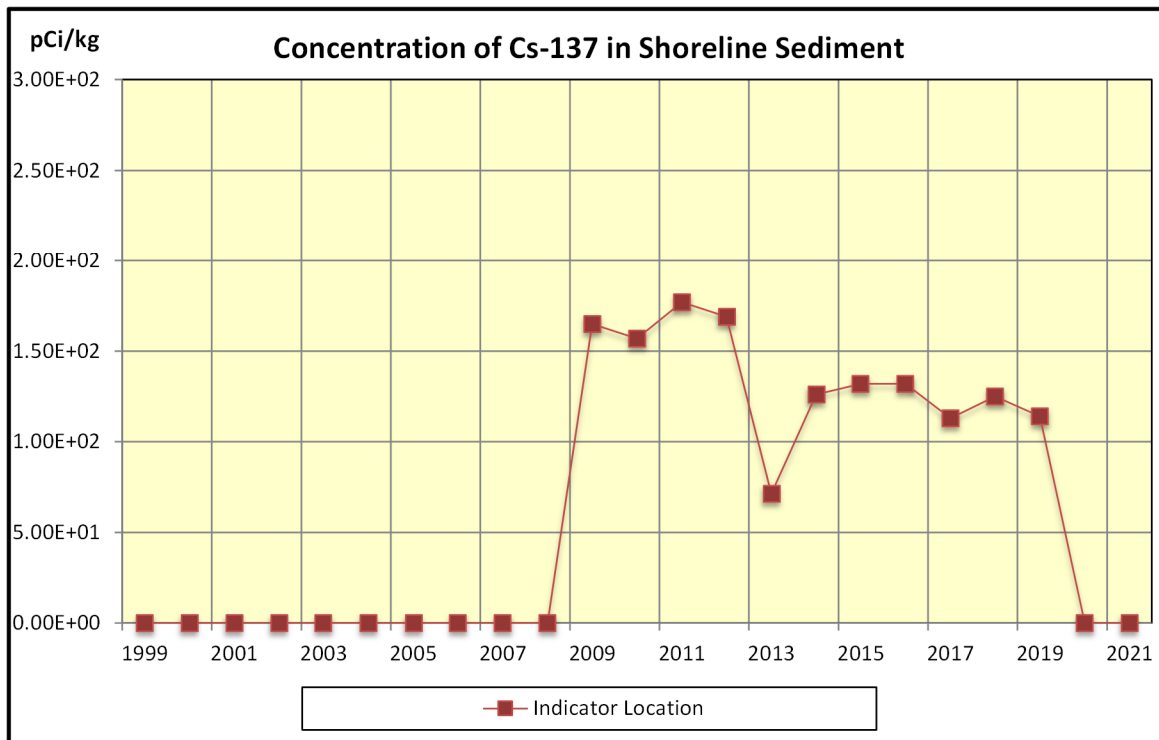
3.7 SHORELINE SEDIMENT

In 2021, four shoreline sediment samples were analyzed from two indicator locations. A gamma analysis was performed on each sample following the drying and removal of rocks and clams. There is no control shoreline sediment location. No detectable gamma activity attributable to BSEP operation was found in shoreline sediment samples in 2021.

Figure 3.7 shows Cs-137 highest annual mean indicator concentrations since 1999. Table 3.7 shows indicator location highest annual means since 1999. There is no reporting level for shoreline sediment.

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

Figure 3.7



There is no reporting level for Cs-137 in shoreline sediment

Table 3.7 Mean Concentration of Radionuclides in Shoreline Sediment

YEAR	Cs-137 Indicator (pCi/kg)
1999	0.00E+0
2000	0.00E+0
2001	0.00E+0
2002	0.00E+0
2003	0.00E+0
2004	0.00E+0
2005	0.00E+0
2006	0.00E+0
2007	0.00E+0
2008	0.00E+0
2009	1.65E+2
2010	1.57E+2
2011	1.77E+2
2012	1.69E+2
2013	7.13E+1
2014 ⁽¹⁾	1.26E+2
2015	1.32E+2
2016	1.32E+2
2017	1.13E+2
2018	1.25E+2
2019	1.14E+2
2020	0.00E+0
2021	0.00E+0

0.00E+0 indicates no detectable measurements

There is no control location for Shoreline Sediment.

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

3.8 DIRECT GAMMA RADIATION

3.8.1 ENVIRONMENTAL TLD

The BSEP site is located on land owned entirely by Duke Energy Progress, Inc. BSEP is licensed with an exclusion area boundary defined by UFSAR Section 2.1.2. No permanent public access is permitted within the exclusion area. For the purpose of effluent release calculations, the boundary for atmospheric releases is the site boundary and the boundary for liquid releases is the site boundary or prior to dilution by a natural body of water, whichever occurs first.

In 2021, there were 180 TLDs analyzed, 176 at indicator locations and 4 at the control location. TLDs were collected and analyzed quarterly. Transit TLDs and laboratory background TLDs were used for determining transit and laboratory background dose and were subtracted from gross field readings as required by ANSI N545-1975. Environmental TLD (Alpha & Bravo) dual placement was implemented for BSEP ODCM TLD locations first quarter 2020.

TLD locations designated as "inner ring" are placed in each meteorological sector in the general area of the site boundary as is reasonably accessible and practical and all are used as indicators. Due to close proximity with Brunswick, and most being within the exclusion area boundary, 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 placed in each meteorological sector at distances of 8 kilometers or greater from the site as is reasonably accessible and practical. All outer ring TLD locations are used as indicators. The one "control" location is 9.9 miles WNW from station center. This location was chosen to reduce the probability of influence from Brunswick operation on data. The control location is not used as background subtraction in the TLD analysis. Its purpose is to provide a comparison to indicator locations.

The environmental data on external radiation exposure for 2021 was essentially unchanged from 1989-2021, with an average exposure for all of 2021 indicator locations of 10.2 mR per std. quarter. The TLD location with the highest annual mean of 17.4 mR per std. quarter was location 17, located 1.4 miles ESE of the plant. Control TLD location 81 had an annual mean of 10.5 mR per std. quarter.

Figure 3.8 and Table 3.8-A show TLD inner ring, outer ring, and control location annual averages in mR per std. qtr. since 1999. The differences among these locations are attributed to variations in soils, local geology, and are not the result of plant operations. Table 3.8-B shows average TLD results (All Locations) from 1972 to 1994 in mR per week. Table 3.8-C shows TLD results (All Indicator Locations) from 1995 to 2021 in mR per std. quarter.

Quarterly, environmental ODCM TLD results are compared by location to its historical data to evaluate any significant changes. The comparison utilizes the location's average exposure history to determine if quarterly results fall within expected low and high ranges and provides a reliable indication of potential changes occurring at a specific TLD location. The low and

high ranges are determined by the historical average \pm two standard deviations. The quarterly TLD evaluation implements portions of American National Standard ANSI/HPS N13.37-2014, “Environmental Dosimetry – Criteria for System Design and Implementation, for environmental Thermoluminescent Dosimeters (TLD)”. The CSD-RP-ALL-0030 – Updated Radiological Environmental Monitoring Program TLD Analytical Method, describes the process implemented in late 2018 for the fleet TLD programs. TLD values identified as < Low Range or > High Range are evaluated in consideration of factors including possible TLD damage, sampling deviations, glow curve irregularities, and any known environmental location changes which may affect results. TLD results are found in Appendix E.

The first quarter 2021 TLD from location 17 (1.4 miles ESE) result of 19.9 mR/Std Qtr exceeded the location’s acceptance range. Investigation did not indicate any analytical abnormalities or any known TLD site changes and the result is considered valid.

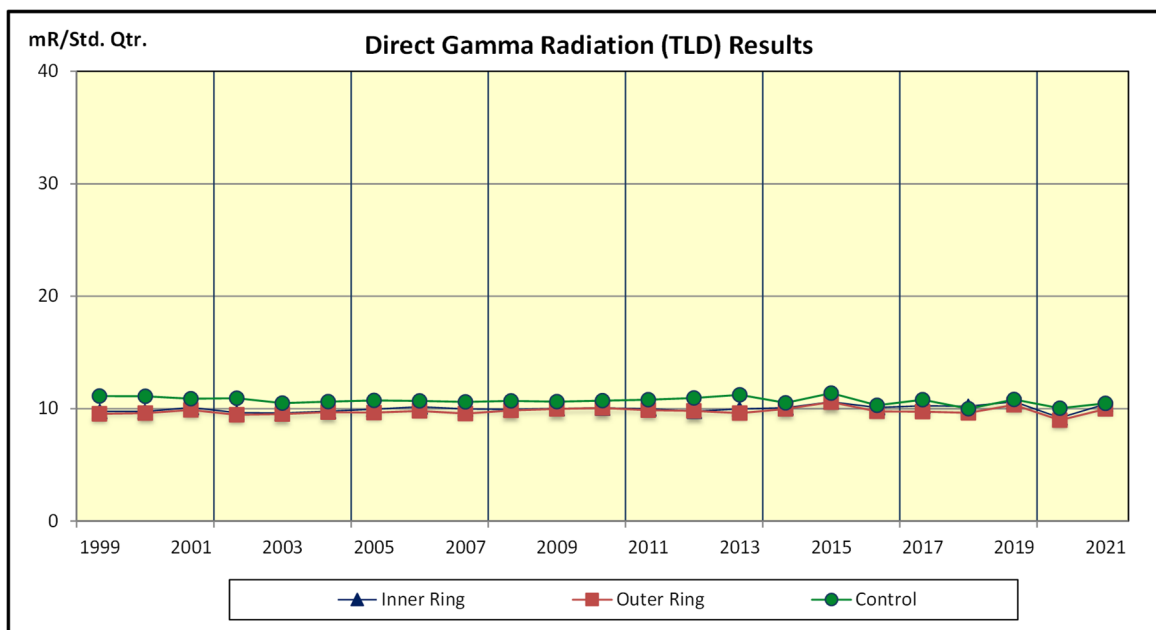
The fourth quarter 2021 TLD from ISFSI location 84 (0.27 miles NE) result of 28.97 mR/Std Qtr exceeded the location’s acceptance range. Investigation did not indicate any analytical abnormalities or any known TLD site changes, and there were no ISFSI fuel movements or additions during the 4Q2021. The result is considered valid.

A TLD Intercomparison Program is conducted as part of the quality assurance program. Results of this program are included in Section 4.7.

3.8.2 ISFSI

BSEP ISFSI TLDs were added to the program in the 3rd quarter of 2010. The ISFSI TLDs are not part of the plant’s environmental TLD monitoring program. Comparison of the 2021 ISFSI TLD data after loaded fuel with preoperational data (2008 – 3rd Quarter 2010) indicates that the average pre-op TLD dose levels were about the same as the average after fuel was loaded (Table 3.8-D). Dry fuel storage radiation measurements have been monitored since 2008 and additional information can be found in the BSEP 2021 Annual Radioactive Effluent Release Report (ARERR).

Figure 3.8



There is no reporting level for Direct Radiation (TLD)

Table 3.8-A Direct Gamma Radiation (TLD) Results

Year	Inner Ring Average (mR/Std. Qtr.)	Outer Ring Average (mR/Std. Qtr.)	Control Average (mR/Std. Qtr.)
1999	9.76E+0	9.53E+0	1.11E+1
2000	9.75E+0	9.61E+0	1.11E+1
2001	1.01E+1	9.88E+0	1.09E+1
2002	9.65E+0	9.45E+0	1.09E+1
2003	9.60E+0	9.51E+0	1.05E+1
2004	9.78E+0	9.68E+0	1.06E+1
2005	9.94E+0	9.64E+0	1.07E+1
2006	1.02E+1	9.80E+0	1.07E+1
2007	9.96E+0	9.55E+0	1.06E+1
2008	9.93E+0	9.83E+0	1.07E+1
2009	1.00E+1	9.98E+0	1.06E+1
2010	1.01E+1	1.01E+1	1.07E+1
2011	1.00E+1	9.86E+0	1.08E+1
2012	9.78E+0	9.79E+0	1.10E+1
2013	9.98E+0	9.61E+0	1.12E+1
2014 ⁽¹⁾	1.01E+1	9.98E+0	1.05E+1
2015	1.06E+1	1.06E+1	1.14E+1
2016	1.01E+1	9.76E+0	1.03E+1
2017	1.03E+1	9.73E+0	1.08E+1
2018	1.02E+1	9.62E+0	1.00E+1
2019	1.06E+1	1.03E+1	1.08E+1
2020 ⁽²⁾	9.18E+0	8.98E+0	1.00E+1
2021	1.04E+1	9.96E+0	1.05E+1

(1) In 1Q2014 Panasonic TLDs were replaced with Harshaw TLDs causing a step change in activity (NCR # 01982479)

(2) Environmental TLD dual placement (Alpha & Bravo) implemented first quarter 2020.

Table 3.8-B
BSEP TLD RESULTS (1972-1994)

Year	Average TLD Exposure All Monitoring Locations (mR per week)*
1972 (4th Qtr.)	8.00E-1
1973	1.25E+0
1974	9.70E-1
1975 (1st, 2nd Qtr)	8.00E-1
1976	9.80E-1
1977	1.32E+0
1978	1.24E+0
1979	9.30E-1
1980	9.00E-1
1981	9.60E-1
1982	1.18E+0
1983	1.21E+0
1984	9.80E-1
1985	1.03E+0
1986	8.90E-1
1987	9.20E-1
1988	8.60E-1
1989	7.50E-1
1990	7.60E-1
1991	7.60E-1
1992	7.50E-1
1993	7.80E-1
1994	7.70E-1

*TLD exposure in mR per quarter beginning in 1995, reference Table 3.8-C.

Table 3.8-C
BSEP TLD RESULTS (1995-2021)

Year	Average TLD Exposure All Indicator Locations mR per standard quarter *
1995	1.01E+1
1996	1.01E+1
1997	1.01E+1
1998	9.70E+0
1999	9.70E+0
2000	9.70E+0
2001	1.00E+1
2002	9.60E+0
2003	9.60E+0
2004	9.70E+0
2005	9.80E+0
2006	1.00E+1
2007	9.80E+0
2008	9.90E+0
2009	1.00E+1
2010	1.01E+1
2011	9.90E+0
2012	9.80E+0
2013	9.80E+0
2014	1.00E+1
2015	1.07E+1
2016	1.00E+1
2017	1.01E+1
2018	1.00E+1
2019	1.05E+1
2020	9.09E+0
2021	1.02E+1**

* TLD exposure reported in milliroentgen (mR) per standard quarter (91 days), beginning 1995.
 ** The equivalent 2021 weekly exposure is 7.8E-1 mR.

Table 3.8-D
ISFSI TLD Dose (mR/Std. Qtr.)

Year	TLD # 82	TLD # 83	TLD # 84	TLD # 85
Average Pre-Op (1Q2008 to 3Q2010)	3.01E+1	2.24E+1	1.67E+1	5.32E+1
Average after Fuel Loaded (4Q2010 to 4Q2021)	2.99E+1	2.38E+1	1.91E+1	3.48E+1

3.9 LAND USE CENSUS

The 2021 BSEP Land Use Census (LUC) was conducted on 6/7 – 6/9/2021 during the growing season as required by the BSEP ODCM to identify within 8 kilometers (5.0 miles) from the plant the nearest location from the site boundary in each of the sixteen meteorological sectors, the following: nearest residence, nearest garden greater than 50 square meters or 500 square feet, and the nearest milk-giving animal (cow, goat, etc.). Additionally, the LUC must also identify (for elevated releases) within the three-mile (4.8 kilometer) radius of the plant (garden census) for each of the 16 meteorological sectors the following: all milk animals and all gardens greater in size than 500 square feet (50 square meters).

The primary method of performing the land use census is visual inspection from the roadside within the five (5) mile radius, with the exception of the Sunny Point Military Ocean terminal. This information may be supplemented with data from aerial photographs and a Global Positioning System (GPS) to determine distance and direction from the plant. Distances from the plant are accurate to within one tenth of a mile.

Table 3.9-A summarizes the land use census results that was conducted within five miles of BSEP. Table 3.9-B summarizes the results of the garden census that was conducted within three miles of BSEP. A map indicating identified locations is shown in Figure 3.9.

During the 2021 census, no milk locations were identified. The nearest residence is located in the North sector at 0.74 miles. No environmental program changes were required as a result of the 2021 land use census.

The fleet Land Use Procedure AD-CP-ALL-0014 (Revision 4), Land Use Census Evaluation, was revised in 2020 to standardize the approach for the evaluation of Land Use Dose Calculations (NCR # 02343171).

Table 3.9-A
Brunswick Steam Electric Plant
Land Use Census Comparison (2020 – 2021)
Performed - June 7-9, 2021
Nearest Pathway (Miles)

SECTOR	RESIDENT		GARDEN		MILK ANIMALS	
	2020	2021	2020	2021	2020	2021
N	0.74	0.74	---	---	---	---
NNE	0.82	0.82	0.87	0.87	---	---
NE	---	---	---	---	---	---
ENE	---	---	---	---	---	---
E	---	---	---	---	---	---
ESE	1.37	1.37	1.37	---*	---	---
SE	---	---	---	---	---	---
SSE	2.13	2.13	---	---	---	---
S	1.12	1.12	2.28	2.28	---	---
SSW	1.38	1.38	1.62	1.62	---	---
SW	1.09	1.09	1.09	1.09	---	---
WSW	1.24	1.24	3.31	1.36*	---	---
W	0.85	0.85	2.59	1.34*	---	---
WNW	0.93	0.93	0.98	0.98	---	---
NW	0.82	0.82	4.86	4.86	---	---
NNW	0.84	0.84	0.92	0.92	---	---

* Represents a change from the previous year.
Sector and distance determined by Global Positioning System.
--- Indicates no occurrence within 3 or 5 mile radius.

Table 3.9-B
Brunswick Steam Electric Plant
Garden Census – 2021
Performed - June 7-9, 2021

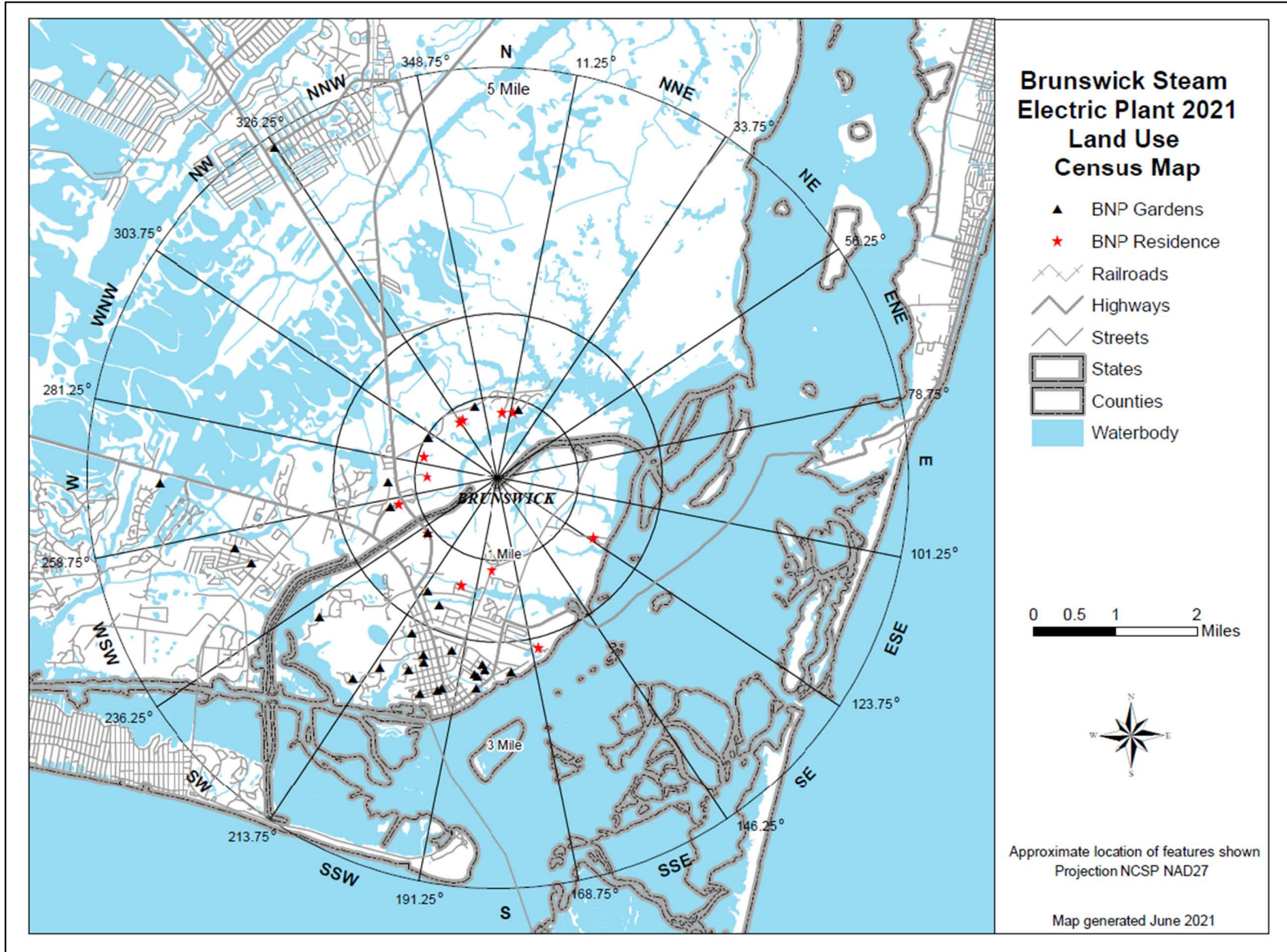
SECTOR	Bearing (degrees)	DISTANCE (miles)	SECTOR	Bearing (degrees)	DISTANCE (miles)
N	---	---	SSW	23	2.34
NNE	197	0.87*	SSW	22	2.42
NE	---	---	SSW	25	2.57
ENE	---	---	SSW	15	2.65
E	---	---	SSW	16	2.69
ESE	---	---	SSW	32	2.72
SE	---	---	SSW	20	2.79
SSE	---	---	SW	52	1.09*
S	05	2.28*	SW	52	2.76
S	04	2.34	SW	36	3.01
S	356	2.37	WSW	75	1.36*
S	07	2.40	WSW	71	3.17
S	06	2.43	WSW	75	3.31
S	06	2.57	W	88	1.34*
SSW	32	1.62*	W	89	4.12
SSW	25	1.71	WNW	120	0.98*
SSW	29	2.16	NW	146	4.86*
SSW	15	2.18	NNW	162	0.92*

Sector and distance determined by Global Positioning System

--- Indicates no occurrence within 3 or 5 mile radius.

* Indicates nearest garden in sector.

Figure 3.9



4.0 QUALITY ASSURANCE

4.1 SAMPLE COLLECTION

Environmental sample collection at BSEP was performed by BSEP Station Sciences in 2021 as specified by approved sample collection procedures.

4.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is located in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.3 DOSIMETRY ANALYSIS

The Dosimetry and Records group performed the environmental dosimetry measurements as specified by approved dosimetry analysis procedures. The Dosimetry and Records group is located in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

4.4.1 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.

4.4.2 CALIBRATION VERIFICATION

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

4.4.3 BATCH PROCESSING

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

4.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2021 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.

EnRad Laboratory participated in an interlaboratory program with Eckert & Ziegler Analytics (EZA) in 2021. 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.

4.5.1 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EZA mixed gamma in liquid, mixed gamma in vegetation, mixed gamma in soil, low-level I-131 in liquid, mixed gamma air filter composites, I-131 air cartridges, gross beta in water, gross beta in filters, and tritium in water were analyzed at various times of the year at EnRad Laboratories. A summary of the applicable REMP EnRad Laboratory program results for 2021 is documented in Table 4.0-A.

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

4.6 STATE OF NORTH CAROLINA INTERCOMPARISON PROGRAM

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

4.7 TLD INTERCOMPARISON PROGRAM

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 using the NIST-traceable Hopewell and submits them for analysis of the unknown estimated delivered exposure. A summary of the 2021 Internal Cross Check (Duke Energy) Program is documented in Table 4.0-B.

4.8 GENERAL ENGINEERING LABORATORY, LLC (GEL)

General Engineering Laboratory, LLC (GEL) participated in various Quality Assurance Programs for Inter-laboratory, Intra-laboratory, Third Party Cross Check programs, and a number of proficiency testing programs during 2021. A summary of the GEL quality assurance program results for the sample media types sent to GEL during 2021 is documented in Table 4.0-C. Table 4.0-C may not be applicable to all plants or stations.

TABLE 4.0-A

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2021 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter in Planchet	E13430A	Cs-137	2	pCi	126	126	1.00	Agreement
I-131 in Charcoal Cartridge	E13428	I-131	2	pCi	95.5	92.8	1.03	Agreement
Gamma in Soil	E13429	Ce-141	2	pCi/g	0.158	0.163	0.97	Agreement
		Co-58	2	pCi/g	0.155	0.162	0.96	Agreement
		Co-60	2	pCi/g	0.176	0.195	0.90	Agreement
		Cr-51	2	pCi/g	0.430	0.482	0.89	Agreement
		Cs-134	2	pCi/g	0.202	0.193	1.05	Agreement
		Cs-137	2	pCi/g	0.222	0.242	0.92	Agreement
		Fe-59	2	pCi/g	0.168	0.166	1.01	Agreement
		Mn-54	2	pCi/g	0.226	0.226	1.00	Agreement
		Zn-65	2	pCi/g	0.267	0.272	0.98	Agreement
Gamma in Simulated Vegetation	E13437	Ce-141	3	pCi/g	0.194	0.194	1.00	Agreement
		Co-58	3	pCi/g	0.208	0.200	1.04	Agreement
		Co-60	3	pCi/g	0.258	0.246	1.05	Agreement
		Cr-51	3	pCi/g	0.373	0.401	0.93	Agreement
		Cs-134	3	pCi/g	0.141	0.158	0.89	Agreement
		Cs-137	3	pCi/g	0.193	0.190	1.02	Agreement
		Fe-59	3	pCi/g	0.183	0.173	1.06	Agreement
		Mn-54	3	pCi/g	0.226	0.218	1.04	Agreement
		Zn-65	3	pCi/g	0.274	0.260	1.05	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E13435B	Ce-141	3	pCi	121	116	1.04	Agreement
		Co-58	3	pCi	123	120	1.03	Agreement
		Co-60	3	pCi	153	147	1.04	Agreement
		Cr-51	3	pCi	241	240	1.00	Agreement
		Cs-134	3	pCi	90.1	94.8	0.95	Agreement
		Cs-137	3	pCi	118	114	1.04	Agreement
		Fe-59	3	pCi	114	104	1.10	Agreement
		Mn-54	3	pCi	139	131	1.06	Agreement
		Zn-65	3	pCi	171	156	1.10	Agreement
Gamma in Water	E13436	Ce-141	3	pCi/L	161	151	1.07	Agreement
		Co-58	3	pCi/L	165	155	1.06	Agreement
		Co-60	3	pCi/L	196	191	1.03	Agreement
		Cr-51	3	pCi/L	330	311	1.06	Agreement
		Cs-134	3	pCi/L	118	123	0.96	Agreement
		Cs-137	3	pCi/L	154	147	1.04	Agreement
		Fe-59	3	pCi/L	149	134	1.11	Agreement
		I-131	3	pCi/L	261	243	1.07	Agreement
		Mn-54	3	pCi/L	185	169	1.09	Agreement
Zn-65	3	pCi/L	227	202	1.12	Agreement		
Milk LLI-131	E13431	I-131	2	pCi/L	96.8	90.1	1.07	Agreement
Gross Beta in Water	E13433	Cs-137	2	pCi/L	243	258	0.94	Agreement
Tritium in Water	E13438	H-3	3	pCi/L	11600	11700	0.99	Agreement

TABLE 4.0-B

2021 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 2021						2nd Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103087	62.75	59.56	5.36	<+/-15%	Pass	102970	17.06	17.74	-3.83	<+/-15%	Pass
103742	62.37	59.56	4.72	<+/-15%	Pass	103199	18.11	17.74	2.09	<+/-15%	Pass
100029	55.52	59.56	-6.78	<+/-15%	Pass	100154	17.12	17.74	-3.49	<+/-15%	Pass
102931	61.41	59.56	3.11	<+/-15%	Pass	102770	18.79	17.74	5.92	<+/-15%	Pass
100033	56.41	59.56	-5.29	<+/-15%	Pass	102058	17.15	17.74	-3.33	<+/-15%	Pass
100038	57.37	59.56	-3.68	<+/-15%	Pass	103295	18.58	17.74	4.74	<+/-15%	Pass
103615	61.40	59.56	3.09	<+/-15%	Pass	103602	18.57	17.74	4.68	<+/-15%	Pass
102442	57.43	59.56	-3.58	<+/-15%	Pass	100180	17.26	17.74	-2.71	<+/-15%	Pass
102407	59.65	59.56	0.15	<+/-15%	Pass	102741	18.31	17.74	3.21	<+/-15%	Pass
100245	56.51	59.56	-5.12	<+/-15%	Pass	103557	18.80	17.74	5.98	<+/-15%	Pass
Average Bias (B)			-0.80			Average Bias (B)			1.32		
Standard Deviation (S)			4.60			Standard Deviation (S)			4.18		
Measure Performance B +S			5.40	<15%	Pass	Measure Performance B +S			5.51	<15%	Pass
3rd Quarter 2021						4th Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
104637	36.05	39.31	-8.29	<+/-15%	Pass	104816	45.83	49.95	-8.25	<+/-15%	Pass
104499	37.40	39.31	-4.86	<+/-15%	Pass	104381	44.88	49.95	-10.15	<+/-15%	Pass
104449	36.14	39.31	-8.06	<+/-15%	Pass	104676	46.19	49.95	-7.53	<+/-15%	Pass
104466	36.49	39.31	-7.17	<+/-15%	Pass	104817	46.03	49.95	-7.85	<+/-15%	Pass
104639	36.13	39.31	-8.09	<+/-15%	Pass	104383	46.24	49.95	-7.43	<+/-15%	Pass
104634	36.71	39.31	-6.61	<+/-15%	Pass	104550	45.88	49.95	-8.15	<+/-15%	Pass
104638	36.58	39.31	-6.94	<+/-15%	Pass	104818	45.55	49.95	-8.81	<+/-15%	Pass
104498	36.08	39.31	-8.22	<+/-15%	Pass	104804	45.46	49.95	-8.99	<+/-15%	Pass
104453	36.42	39.31	-7.35	<+/-15%	Pass	104584	46.88	49.95	-6.15	<+/-15%	Pass
104465	35.76	39.31	-9.03	<+/-15%	Pass	104677	47.28	49.95	-5.35	<+/-15%	Pass
Average Bias (B)			-7.46			Average Bias (B)			-7.86		
Standard Deviation (S)			1.17			Standard Deviation (S)			1.38		
Measure Performance B +S			8.63	<15%	Pass	Measure Performance B +S			9.25	<15%	Pass

TABLE 4.0-C

2021 GEL Laboratories, LLC QA Results

Interlaboratory cross check samples from Eckert & Ziegler Analytics (EZA) were received and analyzed by GEL during 2021. Table 4.0-C lists the performance for specific samples. Table 4.0-C may not be applicable to all plants/stations.

Sample	Sample ID	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
I-131 in Milk with EZA	E13358	I-131	1	pCi/L	83.9	86.9	0.97	Agreement
	E13362	I-131	2	pCi/L	80.4	83.8	0.96	Agreement
	E13366	I-131	3	pCi/L	90.8	85.6	1.06	Agreement
	E13370	I-131	4	pCi/L	92.8	90.3	1.03	Agreement

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 the Brunswick Steam Electric Plant (BSEP) was required to ensure compliance with the BSEP Offsite Dose Calculation Manual (ODCM). Analytical procedures were employed to ensure that the ODCM detection capabilities were achieved.

Environmental sampling was performed by BNP Nuclear Station Sciences. Analyses were performed by EnRad Laboratories and Dosimetry and Records.

This appendix provides a description of the specific analyses performed on samples collected in the field. Changes to the sampling procedures and analyses procedures are also discussed in the section.

I. CHANGE OF SAMPLING PROCEDURES

No changes of sampling procedures were implemented during 2021.

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-determined amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried and mixed thoroughly 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 4910TR 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 of air filters is performed by analyzing filters on Tennelec XLB Series gas-flow proportional counters. Samples are batch processed with a blank to ensure sample contamination has not occurred.

Gross beta analysis of liquid samples is performed by concentrating a designated aliquot of sample and analyzing by Perkin-Elmer 4910TR liquid scintillation system. Samples are batch processed with a blank to ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

Acquisition times for charcoal cartridge gamma spectroscopy analyses were reduced in early May 2021 as a result of fleet air sampling equipment standardization.

The procedure for preparing milk samples for Low-Level Iodine-131 (LLI-131) analysis was modified to allow incremental sample additions for milk samples with higher fat content (NCR # 02393159).

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

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

Brunswick Steam Electric Plant
Brunswick County, North Carolina

Docket Numbers 50-324, 325
Calendar Year 2021

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 371 ⁽⁴⁾	See Table 2.2-C	1.82E-2 (265/265) 7.18E-3 – 4.04E-2	202 (1.00 mi S)	1.88E-2 (53/53) 8.03E-3 – 3.56E-2	204 (22.4 mi NNE) 206 (11.3 mi NW) 1.89E-2 (106/106) 7.97E-3 – 3.52E-2	0
	Gamma 35 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Air Radioiodine (pCi/m ³)	Gamma 371 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Broadleaf Vegetation (pCi/kg, wet)	Gamma 60	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Fish and Invertebrates (pCi/l)	Gamma 15	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Sediment - Shoreline (pCi/kg, dry)	Gamma 4	See Table 2.2-C	All less than LLD	----	----	No Control	0

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

Brunswick Steam Electric Plant
Brunswick County, North Carolina

Docket Numbers 50-324, 325
Calendar Year 2021

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)}		
Surface Water (pCi/l)	Gamma 132	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
	Tritium 132	See Table 2.2-C	5.99E+02 (8/108) 1.92E+02 – 2.53E+03	604 Nancy's Creek Marsh Area Waypoint-92	7.63E+02 (5/12) 1.93E+02 – 2.53E+03	All less than LLD	0
Ground Water (pCi/l)	Gamma 20	See Table 2.2-C	All less than LLD	-----	-----	No Control	0
	Tritium 40	See Table 2.2-C	2.53E+02 (7/40) 1.92E+02 – 3.32E+02	407 Monitoring Well ESS-13B	2.94E+02 (2/4) 2.56E+02 – 3.32E+02	No Control	0
Direct Gamma Radiation (TLD) (mR per Std quarter) ⁽⁵⁾	TLD Readout 180 ⁽⁴⁾	-----	1.02E+01 (176/176) 4.98E+00 – 1.99E+01	17 (1.4 mi ESE)	1.74E+01 (4/4) 1.63E+01 – 1.99E+01	81 (9.9 mi WNW) 1.05E+01 (4/4) 8.90E+00 – 1.21E+01	0
Direct Gamma Radiation (TLD) ISFSI (mR per Std quarter) ⁽⁵⁾	TLD Readout 15 ⁽⁴⁾	-----	2.66E+01 (15/15) 2.13E+01 – 3.93E+01	82 SW corner of ISFSI (0.17 mi NNE)	3.27E+01 (3/3) 2.74E+01 – 3.93E+01	No Control	0

Footnotes to Appendix B

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

APPENDIX C

**SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES**

APPENDIX C

BRUNSWICK NUCLEAR PLANT 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 Brunswick REMP air samplers operated for a total of 99.95% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
203	3/30 – 4/6/2021	PI	22.03 hours downtime due to a faulty power receptacle. Receptacle was replaced.	NCR # 02377239 NCR # 02377027
201	6/15 – 6/22/2021	PI	5.81 hours downtime from breaker trip due to storm.	NCR # 02387002
206	7/27 – 8/3/2021	PI	0.78 hours downtime due to power interrupt.	NCR # 02392064
206	9/7 - 9/14/2021	IW	1.71 hours downtime from power interrupt due to severe thunderstorm.	NCR # 02396882
200	11/30 – 12/7/2021	PI	0.12 hours downtime due to temporary power pole replacement work.	NCR # 02408163

Surface Water

REMP monthly 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 surface water samplers operated for a total of 100% availability in 2021. There were no surface water sampling deviations or unavailable surface water samples during 2021.

C.2 UNAVAILABLE ANALYSES

TLD

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
18	1/6 – 4/8/2021	VN	TLDs (alpha & bravo) missing at time of collection due to vandalism. Second quarter TLDs placed.	NCR # 02378533
21	4/7 – 7/7/2021	OT	TLDs (alpha & bravo) were found on the ground at the location at time of collection, rendering them invalid. Third quarter TLDs placed.	NCR # 02390409
85	1/5 – 4/5/2021	CN	TLD location 85 is an Independent Spent Fuel Storage Installation (ISFSI) location, located at the ISFSI's SE corner. Due to intake canal refurbishment work, the TLDs (alpha & bravo) were collected by a work crew to prevent physical loss prior to the scheduled collection date. The TLDs were rendered invalid. Second quarter TLDs placed.	NCR # 02370624

APPENDIX D

ANALYTICAL DEVIATIONS

No Analytical Deviations were incurred for the
2021 Radiological Environmental Monitoring Program

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2021

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2021.

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536521	12/29/2020 - 1/5/2021	Beta	1.56E-02	2.49E-03	2.72E-03
536710	1/5/2021 - 1/12/2021	Beta	2.01E-02	3.01E-03	3.17E-03
537263	1/12/2021 - 1/19/2021	Beta	2.18E-02	3.07E-03	3.08E-03
537634	1/19/2021 - 1/26/2021	Beta	1.82E-02	2.88E-03	3.08E-03
538026	1/26/2021 - 2/2/2021	Beta	1.40E-02	2.52E-03	3.00E-03
538274	2/2/2021 - 2/9/2021	Beta	1.44E-02	2.90E-03	3.61E-03
538486	2/9/2021 - 2/16/2021	Beta	8.19E-03	2.20E-03	2.98E-03
538771	2/16/2021 - 2/23/2021	Beta	1.84E-02	2.71E-03	2.95E-03
539011	2/23/2021 - 3/2/2021	Beta	1.55E-02	2.98E-03	3.61E-03
539222	3/2/2021 - 3/9/2021	Beta	1.72E-02	3.12E-03	3.75E-03
540003	3/9/2021 - 3/16/2021	Beta	2.28E-02	3.17E-03	3.24E-03
540674	3/16/2021 - 3/23/2021	Beta	1.28E-02	2.76E-03	3.43E-03
541386	3/23/2021 - 3/30/2021	Beta	1.46E-02	2.59E-03	3.10E-03
541885	12/29/2020 - 3/30/2021	Cs-134	<1.93E-03	0.00E+00	1.93E-03
		Cs-137	<1.59E-03	0.00E+00	1.59E-03
		Be-7	1.49E-01	3.97E-02	4.07E-02
		K-40	<3.30E-02	0.00E+00	3.30E-02
541878	3/30/2021 - 4/6/2021	Beta	1.80E-02	2.94E-03	3.26E-03
542192	4/6/2021 - 4/13/2021	Beta	2.58E-02	3.32E-03	3.27E-03
542826	4/13/2021 - 4/20/2021	Beta	1.70E-02	2.59E-03	2.82E-03
543213	4/20/2021 - 4/27/2021	Beta	2.08E-02	2.67E-03	2.53E-03
544071	4/27/2021 - 5/4/2021	Beta	2.48E-02	3.28E-03	3.22E-03
544265	5/4/2021 - 5/11/2021	Beta	1.85E-02	2.77E-03	3.12E-03
544596	5/11/2021 - 5/18/2021	Beta	1.56E-02	2.52E-03	2.82E-03
544975	5/18/2021 - 5/25/2021	Beta	2.06E-02	3.07E-03	3.17E-03

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
545460	5/25/2021 - 6/1/2021	Beta	2.10E-02	2.70E-03	2.63E-03
545750	6/1/2021 - 6/8/2021	Beta	7.65E-03	2.26E-03	3.01E-03
545989	6/8/2021 - 6/15/2021	Beta	9.03E-03	2.25E-03	2.98E-03
546860	6/15/2021 - 6/22/2021	Beta	1.78E-02	2.92E-03	3.17E-03
547151	6/22/2021 - 6/29/2021	Beta	1.16E-02	2.59E-03	3.21E-03
547670	3/30/2021 - 6/29/2021	Cs-134	<1.48E-03	0.00E+00	1.48E-03
		Cs-137	<1.23E-03	0.00E+00	1.23E-03
		Be-7	1.50E-01	3.87E-02	3.93E-02
		K-40	<1.84E-02	0.00E+00	1.84E-02
547427	6/29/2021 - 7/6/2021	Beta	9.72E-03	2.43E-03	3.12E-03
547663	7/6/2021 - 7/13/2021	Beta	1.50E-02	2.78E-03	3.18E-03
548059	7/13/2021 - 7/20/2021	Beta	9.64E-03	2.58E-03	3.47E-03
548483	7/20/2021 - 7/27/2021	Beta	1.46E-02	2.46E-03	2.78E-03
548694	7/27/2021 - 8/3/2021	Beta	1.83E-02	2.63E-03	2.71E-03
548934	8/3/2021 - 8/10/2021	Beta	1.10E-02	2.56E-03	3.28E-03
549225	8/10/2021 - 8/17/2021	Beta	8.88E-03	2.65E-03	3.69E-03
549724	8/17/2021 - 8/24/2021	Beta	7.18E-03	2.37E-03	3.33E-03
550000	8/24/2021 - 8/31/2021	Beta	2.43E-02	3.37E-03	3.58E-03
550630	8/31/2021 - 9/7/2021	Beta	1.62E-02	2.62E-03	2.97E-03
550993	9/7/2021 - 9/14/2021	Beta	2.10E-02	2.80E-03	2.91E-03
551624	9/14/2021 - 9/21/2021	Beta	2.29E-02	3.24E-03	3.37E-03
552250	9/21/2021 - 9/28/2021	Beta	1.91E-02	3.09E-03	3.41E-03
552730	6/29/2021 - 9/28/2021	Cs-134	<1.44E-03	0.00E+00	1.44E-03
		Cs-137	<1.18E-03	0.00E+00	1.18E-03
		Be-7	1.17E-01	3.24E-02	3.09E-02
		K-40	2.00E-02	1.48E-02	1.97E-02
552419	9/28/2021 - 10/5/2021	Beta	3.38E-02	3.81E-03	3.63E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
552723	10/5/2021 - 10/12/2021	Beta	1.15E-02	2.69E-03	3.48E-03
553216	10/12/2021 - 10/19/2021	Beta	2.29E-02	2.89E-03	2.94E-03
553805	10/19/2021 - 10/26/2021	Beta	3.32E-02	3.56E-03	2.93E-03
554249	10/26/2021 - 11/2/2021	Beta	1.21E-02	2.48E-03	2.90E-03
554559	11/2/2021 - 11/9/2021	Beta	1.98E-02	3.18E-03	3.59E-03
555044	11/9/2021 - 11/16/2021	Beta	2.32E-02	2.96E-03	3.08E-03
555907	11/16/2021 - 11/23/2021	Beta	1.80E-02	2.65E-03	2.81E-03
556711	11/23/2021 - 11/30/2021	Beta	2.08E-02	3.11E-03	3.25E-03
557027	11/30/2021 - 12/7/2021	Beta	3.36E-02	3.71E-03	3.50E-03
557452	12/7/2021 - 12/14/2021	Beta	2.36E-02	2.92E-03	2.89E-03
557919	12/14/2021 - 12/21/2021	Beta	1.71E-02	3.04E-03	3.59E-03
558360	12/21/2021 - 12/28/2021	Beta	2.95E-02	3.52E-03	3.23E-03
559189	9/28/2021 - 12/28/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<1.65E-03	0.00E+00	1.65E-03
		Be-7	1.80E-01	3.97E-02	3.21E-02
		K-40	3.84E-02	1.63E-02	4.52E-03
558575	12/28/2021 - 1/4/2022	Beta	1.38E-02	2.42E-03	2.80E-03
559953	12/28/2021 - 1/4/2022	Cs-134	<1.21E-02	0.00E+00	1.21E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	2.93E-01	1.55E-01	1.98E-01

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536522	12/29/2020 - 1/5/2021	Beta	1.39E-02	2.40E-03	2.73E-03
536711	1/5/2021 - 1/12/2021	Beta	2.05E-02	3.03E-03	3.17E-03
537264	1/12/2021 - 1/19/2021	Beta	2.28E-02	3.12E-03	3.08E-03
537635	1/19/2021 - 1/26/2021	Beta	2.01E-02	2.98E-03	3.10E-03
538027	1/26/2021 - 2/2/2021	Beta	1.28E-02	2.45E-03	3.00E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
538275	2/2/2021 - 2/9/2021	Beta	1.34E-02	2.84E-03	3.60E-03
538487	2/9/2021 - 2/16/2021	Beta	8.03E-03	2.19E-03	2.98E-03
538772	2/16/2021 - 2/23/2021	Beta	1.78E-02	2.69E-03	2.96E-03
539012	2/23/2021 - 3/2/2021	Beta	1.53E-02	2.97E-03	3.60E-03
539223	3/2/2021 - 3/9/2021	Beta	1.93E-02	3.22E-03	3.75E-03
540004	3/9/2021 - 3/16/2021	Beta	2.22E-02	3.15E-03	3.25E-03
540675	3/16/2021 - 3/23/2021	Beta	1.49E-02	2.87E-03	3.43E-03
541387	3/23/2021 - 3/30/2021	Beta	1.18E-02	2.45E-03	3.10E-03
541886	12/29/2020 - 3/30/2021	Cs-134	<1.12E-03	0.00E+00	1.12E-03
		Cs-137	<8.29E-04	0.00E+00	8.29E-04
		Be-7	1.15E-01	2.33E-02	1.96E-02
		K-40	2.35E-02	9.07E-03	2.27E-03
541879	3/30/2021 - 4/6/2021	Beta	2.16E-02	3.09E-03	3.22E-03
542193	4/6/2021 - 4/13/2021	Beta	3.01E-02	3.54E-03	3.31E-03
542827	4/13/2021 - 4/20/2021	Beta	2.00E-02	2.73E-03	2.82E-03
543214	4/20/2021 - 4/27/2021	Beta	2.25E-02	2.76E-03	2.54E-03
544072	4/27/2021 - 5/4/2021	Beta	2.40E-02	3.25E-03	3.24E-03
544266	5/4/2021 - 5/11/2021	Beta	1.80E-02	2.74E-03	3.08E-03
544597	5/11/2021 - 5/18/2021	Beta	1.35E-02	2.40E-03	2.80E-03
544976	5/18/2021 - 5/25/2021	Beta	2.05E-02	3.09E-03	3.19E-03
545461	5/25/2021 - 6/1/2021	Beta	2.24E-02	2.77E-03	2.64E-03
545751	6/1/2021 - 6/8/2021	Beta	7.72E-03	2.26E-03	3.01E-03
545990	6/8/2021 - 6/15/2021	Beta	1.23E-02	2.42E-03	2.97E-03
546861	6/15/2021 - 6/22/2021	Beta	2.14E-02	3.17E-03	3.27E-03
547152	6/22/2021 - 6/29/2021	Beta	1.08E-02	2.56E-03	3.23E-03

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547671	3/30/2021 - 6/29/2021	Cs-134	<1.61E-03	0.00E+00	1.61E-03
		Cs-137	<1.66E-03	0.00E+00	1.66E-03
		Be-7	1.76E-01	3.97E-02	3.55E-02
		K-40	3.07E-02	1.62E-02	1.65E-02
547428	6/29/2021 - 7/6/2021	Beta	1.08E-02	2.50E-03	3.12E-03
547664	7/6/2021 - 7/13/2021	Beta	1.26E-02	2.64E-03	3.17E-03
548060	7/13/2021 - 7/20/2021	Beta	1.19E-02	2.71E-03	3.48E-03
548484	7/20/2021 - 7/27/2021	Beta	1.56E-02	2.50E-03	2.76E-03
548695	7/27/2021 - 8/3/2021	Beta	1.67E-02	2.57E-03	2.73E-03
548935	8/3/2021 - 8/10/2021	Beta	1.06E-02	2.52E-03	3.25E-03
549226	8/10/2021 - 8/17/2021	Beta	1.07E-02	2.78E-03	3.74E-03
549725	8/17/2021 - 8/24/2021	Beta	9.92E-03	2.52E-03	3.32E-03
550001	8/24/2021 - 8/31/2021	Beta	2.15E-02	3.23E-03	3.57E-03
550631	8/31/2021 - 9/7/2021	Beta	1.85E-02	2.73E-03	2.97E-03
550994	9/7/2021 - 9/14/2021	Beta	2.05E-02	2.78E-03	2.92E-03
551625	9/14/2021 - 9/21/2021	Beta	1.90E-02	3.06E-03	3.38E-03
552251	9/21/2021 - 9/28/2021	Beta	2.01E-02	3.12E-03	3.37E-03
552731	6/29/2021 - 9/28/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.36E-03	0.00E+00	1.36E-03
		Be-7	1.49E-01	3.48E-02	2.34E-02
		K-40	2.91E-02	1.54E-02	1.37E-02
552420	9/28/2021 - 10/5/2021	Beta	3.11E-02	3.68E-03	3.61E-03
552724	10/5/2021 - 10/12/2021	Beta	1.19E-02	2.72E-03	3.49E-03
553217	10/12/2021 - 10/19/2021	Beta	2.02E-02	2.78E-03	2.95E-03
553806	10/19/2021 - 10/26/2021	Beta	3.46E-02	3.61E-03	2.92E-03
554250	10/26/2021 - 11/2/2021	Beta	1.11E-02	2.42E-03	2.91E-03
554560	11/2/2021 - 11/9/2021	Beta	1.61E-02	2.99E-03	3.56E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555045	11/9/2021 - 11/16/2021	Beta	2.27E-02	2.93E-03	3.07E-03
555908	11/16/2021 - 11/23/2021	Beta	1.77E-02	2.64E-03	2.84E-03
556712	11/23/2021 - 11/30/2021	Beta	2.15E-02	3.13E-03	3.21E-03
557028	11/30/2021 - 12/7/2021	Beta	3.85E-02	3.91E-03	3.51E-03
557453	12/7/2021 - 12/14/2021	Beta	2.31E-02	2.92E-03	2.93E-03
557920	12/14/2021 - 12/21/2021	Beta	1.94E-02	3.14E-03	3.57E-03
558361	12/21/2021 - 12/28/2021	Beta	3.14E-02	3.62E-03	3.26E-03
559190	9/28/2021 - 12/28/2021	Cs-134	<1.29E-03	0.00E+00	1.29E-03
		Cs-137	<1.22E-03	0.00E+00	1.22E-03
		Be-7	1.69E-01	3.93E-02	3.23E-02
		K-40	2.03E-02	1.33E-02	1.44E-02
558576	12/28/2021 - 1/4/2022	Beta	1.53E-02	2.48E-03	2.78E-03
559954	12/28/2021 - 1/4/2022	Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	1.18E-01	9.51E-02	0.00E+00
		K-40	3.55E-01	1.28E-01	3.00E-02

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536523	12/29/2020 - 1/5/2021	Beta	1.52E-02	2.46E-03	2.72E-03
536712	1/5/2021 - 1/12/2021	Beta	2.31E-02	3.16E-03	3.17E-03
537265	1/12/2021 - 1/19/2021	Beta	2.23E-02	3.10E-03	3.07E-03
537636	1/19/2021 - 1/26/2021	Beta	1.94E-02	2.96E-03	3.10E-03
538028	1/26/2021 - 2/2/2021	Beta	1.60E-02	2.61E-03	3.01E-03
538276	2/2/2021 - 2/9/2021	Beta	1.70E-02	3.02E-03	3.60E-03
538488	2/9/2021 - 2/16/2021	Beta	8.32E-03	2.21E-03	2.98E-03
538773	2/16/2021 - 2/23/2021	Beta	1.90E-02	2.74E-03	2.95E-03
539013	2/23/2021 - 3/2/2021	Beta	1.50E-02	2.96E-03	3.61E-03
539224	3/2/2021 - 3/9/2021	Beta	2.04E-02	3.27E-03	3.75E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
540005	3/9/2021 - 3/16/2021	Beta	2.70E-02	3.37E-03	3.24E-03
540676	3/16/2021 - 3/23/2021	Beta	1.46E-02	2.86E-03	3.43E-03
541388	3/23/2021 - 3/30/2021	Beta	1.27E-02	2.49E-03	3.10E-03
541887	12/29/2020 - 3/30/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.67E-03	0.00E+00	1.67E-03
		Be-7	1.34E-01	3.45E-02	3.20E-02
		K-40	<2.52E-02	0.00E+00	2.52E-02
541880	3/30/2021 - 4/6/2021	Beta	2.09E-02	3.07E-03	3.25E-03
542194	4/6/2021 - 4/13/2021	Beta	2.92E-02	3.48E-03	3.27E-03
542828	4/13/2021 - 4/20/2021	Beta	2.04E-02	2.75E-03	2.82E-03
543215	4/20/2021 - 4/27/2021	Beta	2.15E-02	2.71E-03	2.54E-03
544073	4/27/2021 - 5/4/2021	Beta	2.75E-02	3.40E-03	3.22E-03
544267	5/4/2021 - 5/11/2021	Beta	1.66E-02	2.69E-03	3.11E-03
544598	5/11/2021 - 5/18/2021	Beta	1.61E-02	2.55E-03	2.82E-03
544977	5/18/2021 - 5/25/2021	Beta	2.00E-02	3.04E-03	3.17E-03
545462	5/25/2021 - 6/1/2021	Beta	2.11E-02	2.71E-03	2.63E-03
545752	6/1/2021 - 6/8/2021	Beta	8.03E-03	2.28E-03	3.02E-03
545991	6/8/2021 - 6/15/2021	Beta	8.82E-03	2.24E-03	2.97E-03
546862	6/15/2021 - 6/22/2021	Beta	2.11E-02	3.09E-03	3.18E-03
547153	6/22/2021 - 6/29/2021	Beta	1.28E-02	2.54E-03	3.02E-03
547672	3/30/2021 - 6/29/2021	Cs-134	<1.75E-03	0.00E+00	1.75E-03
		Cs-137	<1.46E-03	0.00E+00	1.46E-03
		Be-7	1.43E-01	3.52E-02	2.86E-02
		K-40	1.46E-02	1.51E-02	2.31E-02
547429	6/29/2021 - 7/6/2021	Beta	9.79E-03	2.43E-03	3.12E-03
547665	7/6/2021 - 7/13/2021	Beta	1.55E-02	2.80E-03	3.18E-03
548061	7/13/2021 - 7/20/2021	Beta	9.08E-03	2.55E-03	3.47E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
548485	7/20/2021 - 7/27/2021	Beta	1.44E-02	2.44E-03	2.78E-03
548696	7/27/2021 - 8/3/2021	Beta	1.84E-02	2.64E-03	2.71E-03
548936	8/3/2021 - 8/10/2021	Beta	1.23E-02	2.64E-03	3.29E-03
549227	8/10/2021 - 8/17/2021	Beta	1.06E-02	2.74E-03	3.68E-03
549726	8/17/2021 - 8/24/2021	Beta	8.76E-03	2.45E-03	3.31E-03
550002	8/24/2021 - 8/31/2021	Beta	2.34E-02	3.33E-03	3.59E-03
550632	8/31/2021 - 9/7/2021	Beta	1.82E-02	2.71E-03	2.96E-03
550995	9/7/2021 - 9/14/2021	Beta	2.00E-02	2.76E-03	2.91E-03
551626	9/14/2021 - 9/21/2021	Beta	1.96E-02	3.09E-03	3.38E-03
552252	9/21/2021 - 9/28/2021	Beta	1.88E-02	3.08E-03	3.41E-03
552732	6/29/2021 - 9/28/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.11E-01	3.30E-02	3.45E-02
		K-40	<2.66E-02	0.00E+00	2.66E-02
552421	9/28/2021 - 10/5/2021	Beta	3.24E-02	3.73E-03	3.61E-03
552725	10/5/2021 - 10/12/2021	Beta	1.20E-02	2.72E-03	3.48E-03
553218	10/12/2021 - 10/19/2021	Beta	2.05E-02	2.79E-03	2.94E-03
553807	10/19/2021 - 10/26/2021	Beta	3.56E-02	3.66E-03	2.92E-03
554251	10/26/2021 - 11/2/2021	Beta	1.39E-02	2.58E-03	2.90E-03
554561	11/2/2021 - 11/9/2021	Beta	1.93E-02	3.15E-03	3.58E-03
555046	11/9/2021 - 11/16/2021	Beta	2.29E-02	2.95E-03	3.08E-03
555909	11/16/2021 - 11/23/2021	Beta	2.19E-02	2.83E-03	2.82E-03
556713	11/23/2021 - 11/30/2021	Beta	2.16E-02	3.13E-03	3.22E-03
557029	11/30/2021 - 12/7/2021	Beta	3.37E-02	3.72E-03	3.51E-03
557454	12/7/2021 - 12/14/2021	Beta	2.58E-02	3.01E-03	2.90E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557921	12/14/2021 - 12/21/2021	Beta	1.59E-02	2.98E-03	3.59E-03
558362	12/21/2021 - 12/28/2021	Beta	3.19E-02	3.61E-03	3.22E-03
559191	9/28/2021 - 12/28/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.02E-03	0.00E+00	1.02E-03
		Be-7	1.98E-01	3.99E-02	2.31E-02
		K-40	<2.92E-02	0.00E+00	2.92E-02
558577	12/28/2021 - 1/4/2022	Beta	1.41E-02	2.44E-03	2.81E-03
559955	12/28/2021 - 1/4/2022	Cs-134	<1.01E-02	0.00E+00	1.01E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	3.19E-01	1.50E-01	1.77E-01

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536524	12/29/2020 - 1/5/2021	Beta	1.34E-02	2.38E-03	2.73E-03
536713	1/5/2021 - 1/12/2021	Beta	2.05E-02	3.04E-03	3.17E-03
537266	1/12/2021 - 1/19/2021	Beta	2.24E-02	3.10E-03	3.08E-03
537637	1/19/2021 - 1/26/2021	Beta	1.84E-02	2.89E-03	3.09E-03
538029	1/26/2021 - 2/2/2021	Beta	1.39E-02	2.52E-03	3.01E-03
538277	2/2/2021 - 2/9/2021	Beta	1.58E-02	2.97E-03	3.60E-03
538489	2/9/2021 - 2/16/2021	Beta	8.97E-03	2.24E-03	2.98E-03
538774	2/16/2021 - 2/23/2021	Beta	1.92E-02	2.74E-03	2.95E-03
539014	2/23/2021 - 3/2/2021	Beta	1.51E-02	2.96E-03	3.61E-03
539225	3/2/2021 - 3/9/2021	Beta	1.85E-02	3.18E-03	3.75E-03
540006	3/9/2021 - 3/16/2021	Beta	2.39E-02	3.23E-03	3.24E-03
540677	3/16/2021 - 3/23/2021	Beta	1.43E-02	2.84E-03	3.43E-03
541389	3/23/2021 - 3/30/2021	Beta	1.25E-02	2.48E-03	3.10E-03
541888	12/29/2020 - 3/30/2021	Cs-134	<9.87E-04	0.00E+00	9.87E-04
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.30E-01	3.15E-02	2.26E-02
		K-40	1.46E-02	1.54E-02	2.39E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
541881	3/30/2021 - 4/6/2021	Beta	2.01E-02	3.35E-03	3.75E-03
542195	4/6/2021 - 4/13/2021	Beta	2.82E-02	3.42E-03	3.26E-03
542829	4/13/2021 - 4/20/2021	Beta	1.81E-02	2.65E-03	2.82E-03
543216	4/20/2021 - 4/27/2021	Beta	2.17E-02	2.72E-03	2.53E-03
544074	4/27/2021 - 5/4/2021	Beta	2.17E-02	3.13E-03	3.22E-03
544268	5/4/2021 - 5/11/2021	Beta	1.85E-02	2.78E-03	3.11E-03
544599	5/11/2021 - 5/18/2021	Beta	1.52E-02	2.50E-03	2.82E-03
544978	5/18/2021 - 5/25/2021	Beta	1.51E-02	2.78E-03	3.17E-03
545463	5/25/2021 - 6/1/2021	Beta	2.03E-02	2.67E-03	2.63E-03
545753	6/1/2021 - 6/8/2021	Beta	8.02E-03	2.28E-03	3.01E-03
545992	6/8/2021 - 6/15/2021	Beta	9.47E-03	2.27E-03	2.98E-03
546863	6/15/2021 - 6/22/2021	Beta	1.84E-02	2.96E-03	3.17E-03
547154	6/22/2021 - 6/29/2021	Beta	1.37E-02	2.71E-03	3.21E-03
547673	3/30/2021 - 6/29/2021	Cs-134	<2.16E-03	0.00E+00	2.16E-03
		Cs-137	<1.35E-03	0.00E+00	1.35E-03
		Be-7	1.68E-01	3.53E-02	1.85E-02
		K-40	<3.42E-02	0.00E+00	3.42E-02
547430	6/29/2021 - 7/6/2021	Beta	1.15E-02	2.53E-03	3.12E-03
547666	7/6/2021 - 7/13/2021	Beta	1.49E-02	2.77E-03	3.18E-03
548062	7/13/2021 - 7/20/2021	Beta	1.37E-02	2.81E-03	3.47E-03
548486	7/20/2021 - 7/27/2021	Beta	1.58E-02	2.52E-03	2.78E-03
548697	7/27/2021 - 8/3/2021	Beta	1.78E-02	2.60E-03	2.71E-03
548937	8/3/2021 - 8/10/2021	Beta	9.27E-03	2.47E-03	3.29E-03
549228	8/10/2021 - 8/17/2021	Beta	8.76E-03	2.64E-03	3.69E-03
549727	8/17/2021 - 8/24/2021	Beta	7.34E-03	2.38E-03	3.32E-03

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
550003	8/24/2021 - 8/31/2021	Beta	2.53E-02	3.41E-03	3.58E-03
550633	8/31/2021 - 9/7/2021	Beta	1.65E-02	2.63E-03	2.97E-03
550996	9/7/2021 - 9/14/2021	Beta	2.14E-02	2.82E-03	2.91E-03
551627	9/14/2021 - 9/21/2021	Beta	2.11E-02	3.16E-03	3.37E-03
552253	9/21/2021 - 9/28/2021	Beta	2.17E-02	3.22E-03	3.41E-03
552733	6/29/2021 - 9/28/2021	Cs-134	<1.66E-03	0.00E+00	1.66E-03
		Cs-137	<1.37E-03	0.00E+00	1.37E-03
		Be-7	1.25E-01	3.28E-02	2.76E-02
		K-40	1.20E-02	1.03E-02	1.26E-02
552422	9/28/2021 - 10/5/2021	Beta	3.04E-02	3.66E-03	3.62E-03
552726	10/5/2021 - 10/12/2021	Beta	1.26E-02	2.75E-03	3.48E-03
553219	10/12/2021 - 10/19/2021	Beta	2.24E-02	2.87E-03	2.94E-03
553808	10/19/2021 - 10/26/2021	Beta	3.51E-02	3.64E-03	2.92E-03
554252	10/26/2021 - 11/2/2021	Beta	1.15E-02	2.44E-03	2.90E-03
554562	11/2/2021 - 11/9/2021	Beta	1.97E-02	3.17E-03	3.59E-03
555047	11/9/2021 - 11/16/2021	Beta	2.48E-02	3.03E-03	3.08E-03
555910	11/16/2021 - 11/23/2021	Beta	2.08E-02	2.77E-03	2.81E-03
556714	11/23/2021 - 11/30/2021	Beta	2.40E-02	3.25E-03	3.23E-03
557030	11/30/2021 - 12/7/2021	Beta	4.04E-02	3.98E-03	3.51E-03
557455	12/7/2021 - 12/14/2021	Beta	2.62E-02	3.03E-03	2.90E-03
557922	12/14/2021 - 12/21/2021	Beta	1.87E-02	3.12E-03	3.59E-03
558363	12/21/2021 - 12/28/2021	Beta	3.17E-02	3.61E-03	3.23E-03
559192	9/28/2021 - 12/28/2021	Cs-134	<1.95E-03	0.00E+00	1.95E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.63E-01	3.77E-02	2.97E-02
		K-40	<2.57E-02	0.00E+00	2.57E-02
558578	12/28/2021 - 1/4/2022	Beta	1.51E-02	2.49E-03	2.81E-03

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	559956	Sample Dates:	12/28/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.37E-02	0.00E+00	1.37E-02
				Cs-137	<1.39E-02	0.00E+00	1.39E-02
				Be-7	2.32E-01	1.03E-01	0.00E+00
				K-40	<2.17E-01	0.00E+00	2.17E-01

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	536525	Sample Dates:	12/29/2020 - 1/5/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.59E-02	2.49E-03	2.72E-03
Sample ID:	536714	Sample Dates:	1/5/2021 - 1/12/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.54E-02	3.28E-03	3.19E-03
Sample ID:	537267	Sample Dates:	1/12/2021 - 1/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.12E-02	3.04E-03	3.06E-03
Sample ID:	537638	Sample Dates:	1/19/2021 - 1/26/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.93E-02	2.95E-03	3.10E-03
Sample ID:	538030	Sample Dates:	1/26/2021 - 2/2/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.48E-02	2.56E-03	3.01E-03
Sample ID:	538278	Sample Dates:	2/2/2021 - 2/9/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.73E-02	3.04E-03	3.60E-03
Sample ID:	538490	Sample Dates:	2/9/2021 - 2/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	9.83E-03	2.29E-03	2.99E-03
Sample ID:	538775	Sample Dates:	2/16/2021 - 2/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.27E-02	2.89E-03	2.93E-03
Sample ID:	539015	Sample Dates:	2/23/2021 - 3/2/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.65E-02	3.03E-03	3.62E-03
Sample ID:	539226	Sample Dates:	3/2/2021 - 3/9/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.93E-02	3.22E-03	3.75E-03
Sample ID:	540007	Sample Dates:	3/9/2021 - 3/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.69E-02	3.36E-03	3.24E-03
Sample ID:	540678	Sample Dates:	3/16/2021 - 3/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.40E-02	2.83E-03	3.44E-03
Sample ID:	541390	Sample Dates:	3/23/2021 - 3/30/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.23E-02	2.47E-03	3.10E-03
Sample ID:	541889	Sample Dates:	12/29/2020 - 3/30/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<2.21E-03	0.00E+00	2.21E-03
				Cs-137	<1.45E-03	0.00E+00	1.45E-03
				Be-7	1.90E-01	4.12E-02	3.04E-02
				K-40	<3.43E-02	0.00E+00	3.43E-02
Sample ID:	541882	Sample Dates:	3/30/2021 - 4/6/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.17E-02	3.13E-03	3.28E-03
Sample ID:	542196	Sample Dates:	4/6/2021 - 4/13/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.83E-02	3.42E-03	3.25E-03
Sample ID:	542830	Sample Dates:	4/13/2021 - 4/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.04E-02	2.75E-03	2.83E-03
Sample ID:	543217	Sample Dates:	4/20/2021 - 4/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.21E-02	2.73E-03	2.53E-03
Sample ID:	544075	Sample Dates:	4/27/2021 - 5/4/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.67E-02	3.38E-03	3.24E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544269	5/4/2021 - 5/11/2021	Beta	1.96E-02	2.81E-03	3.09E-03
544600	5/11/2021 - 5/18/2021	Beta	1.66E-02	2.58E-03	2.82E-03
544979	5/18/2021 - 5/25/2021	Beta	2.02E-02	3.04E-03	3.14E-03
545464	5/25/2021 - 6/1/2021	Beta	2.30E-02	2.82E-03	2.67E-03
545754	6/1/2021 - 6/8/2021	Beta	7.97E-03	2.26E-03	2.98E-03
545993	6/8/2021 - 6/15/2021	Beta	1.02E-02	2.31E-03	2.98E-03
546864	6/15/2021 - 6/22/2021	Beta	1.97E-02	3.03E-03	3.20E-03
547155	6/22/2021 - 6/29/2021	Beta	1.22E-02	2.60E-03	3.17E-03
547674	3/30/2021 - 6/29/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.71E-01	3.98E-02	3.72E-02
		K-40	3.92E-02	2.06E-02	2.47E-02
547431	6/29/2021 - 7/6/2021	Beta	1.23E-02	2.59E-03	3.15E-03
547667	7/6/2021 - 7/13/2021	Beta	1.49E-02	2.77E-03	3.17E-03
548063	7/13/2021 - 7/20/2021	Beta	1.15E-02	2.70E-03	3.48E-03
548487	7/20/2021 - 7/27/2021	Beta	1.73E-02	2.60E-03	2.79E-03
548698	7/27/2021 - 8/3/2021	Beta	2.02E-02	2.69E-03	2.67E-03
548938	8/3/2021 - 8/10/2021	Beta	1.29E-02	2.71E-03	3.36E-03
549229	8/10/2021 - 8/17/2021	Beta	1.04E-02	2.70E-03	3.64E-03
549728	8/17/2021 - 8/24/2021	Beta	9.32E-03	2.51E-03	3.35E-03
550004	8/24/2021 - 8/31/2021	Beta	2.04E-02	3.19E-03	3.58E-03
550634	8/31/2021 - 9/7/2021	Beta	1.79E-02	2.68E-03	2.94E-03
550997	9/7/2021 - 9/14/2021	Beta	2.17E-02	2.86E-03	2.95E-03
551628	9/14/2021 - 9/21/2021	Beta	2.42E-02	3.31E-03	3.38E-03
552254	9/21/2021 - 9/28/2021	Beta	1.94E-02	3.07E-03	3.35E-03

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552734	6/29/2021 - 9/28/2021	Cs-134	<1.67E-03	0.00E+00	1.67E-03
		Cs-137	<1.37E-03	0.00E+00	1.37E-03
		Be-7	1.50E-01	3.81E-02	3.59E-02
		K-40	<3.78E-02	0.00E+00	3.78E-02
552423	9/28/2021 - 10/5/2021	Beta	3.36E-02	3.81E-03	3.65E-03
552727	10/5/2021 - 10/12/2021	Beta	1.19E-02	2.70E-03	3.46E-03
553220	10/12/2021 - 10/19/2021	Beta	2.24E-02	2.89E-03	2.97E-03
553809	10/19/2021 - 10/26/2021	Beta	3.29E-02	3.51E-03	2.87E-03
554253	10/26/2021 - 11/2/2021	Beta	1.23E-02	2.50E-03	2.91E-03
554563	11/2/2021 - 11/9/2021	Beta	1.97E-02	3.18E-03	3.59E-03
555048	11/9/2021 - 11/16/2021	Beta	2.95E-02	3.22E-03	3.09E-03
555911	11/16/2021 - 11/23/2021	Beta	2.12E-02	2.78E-03	2.80E-03
556715	11/23/2021 - 11/30/2021	Beta	2.51E-02	3.31E-03	3.24E-03
557031	11/30/2021 - 12/7/2021	Beta	3.34E-02	3.73E-03	3.54E-03
557456	12/7/2021 - 12/14/2021	Beta	2.82E-02	3.09E-03	2.87E-03
557923	12/14/2021 - 12/21/2021	Beta	1.59E-02	2.98E-03	3.59E-03
558364	12/21/2021 - 12/28/2021	Beta	3.28E-02	3.63E-03	3.20E-03
559193	9/28/2021 - 12/28/2021	Cs-134	<1.82E-03	0.00E+00	1.82E-03
		Cs-137	<1.71E-03	0.00E+00	1.71E-03
		Be-7	1.89E-01	4.28E-02	3.37E-02
		K-40	5.80E-02	2.04E-02	4.63E-03
558579	12/28/2021 - 1/4/2022	Beta	1.44E-02	2.46E-03	2.80E-03
559957	12/28/2021 - 1/4/2022	Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	1.21E-01	1.07E-01	0.00E+00
		K-40	4.25E-01	1.68E-01	1.69E-01

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536526	12/29/2020 - 1/5/2021	Beta	1.33E-02	2.37E-03	2.72E-03
536715	1/5/2021 - 1/12/2021	Beta	2.04E-02	3.03E-03	3.17E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
537268	1/12/2021 - 1/19/2021	Beta	1.98E-02	2.98E-03	3.07E-03
537639	1/19/2021 - 1/26/2021	Beta	1.66E-02	2.82E-03	3.11E-03
538031	1/26/2021 - 2/2/2021	Beta	1.41E-02	2.52E-03	3.00E-03
538279	2/2/2021 - 2/9/2021	Beta	1.64E-02	2.99E-03	3.60E-03
538491	2/9/2021 - 2/16/2021	Beta	7.86E-03	2.17E-03	2.98E-03
538776	2/16/2021 - 2/23/2021	Beta	1.96E-02	2.77E-03	2.96E-03
539016	2/23/2021 - 3/2/2021	Beta	1.54E-02	2.97E-03	3.60E-03
539227	3/2/2021 - 3/9/2021	Beta	2.11E-02	3.30E-03	3.75E-03
540008	3/9/2021 - 3/16/2021	Beta	2.21E-02	3.14E-03	3.25E-03
540679	3/16/2021 - 3/23/2021	Beta	1.36E-02	2.80E-03	3.43E-03
541391	3/23/2021 - 3/30/2021	Beta	1.61E-02	2.65E-03	3.10E-03
541890	12/29/2020 - 3/30/2021	Cs-134	<1.75E-03	0.00E+00	1.75E-03
		Cs-137	<1.44E-03	0.00E+00	1.44E-03
		Be-7	1.03E-01	3.33E-02	3.89E-02
		K-40	<3.66E-02	0.00E+00	3.66E-02
541883	3/30/2021 - 4/6/2021	Beta	1.95E-02	3.00E-03	3.24E-03
542197	4/6/2021 - 4/13/2021	Beta	2.76E-02	3.42E-03	3.28E-03
542831	4/13/2021 - 4/20/2021	Beta	1.88E-02	2.68E-03	2.82E-03
543218	4/20/2021 - 4/27/2021	Beta	1.99E-02	2.63E-03	2.54E-03
544076	4/27/2021 - 5/4/2021	Beta	2.51E-02	3.31E-03	3.24E-03
544270	5/4/2021 - 5/11/2021	Beta	1.51E-02	2.60E-03	3.08E-03
544601	5/11/2021 - 5/18/2021	Beta	1.35E-02	2.42E-03	2.82E-03
544980	5/18/2021 - 5/25/2021	Beta	1.65E-02	2.86E-03	3.17E-03
545465	5/25/2021 - 6/1/2021	Beta	2.23E-02	2.76E-03	2.63E-03
545755	6/1/2021 - 6/8/2021	Beta	7.20E-03	2.22E-03	3.01E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
545994	6/8/2021 - 6/15/2021	Beta	9.43E-03	2.27E-03	2.97E-03
546865	6/15/2021 - 6/22/2021	Beta	1.73E-02	2.90E-03	3.19E-03
547156	6/22/2021 - 6/29/2021	Beta	1.16E-02	2.58E-03	3.20E-03
547675	3/30/2021 - 6/29/2021	Cs-134	<1.01E-03	0.00E+00	1.01E-03
		Cs-137	<1.06E-03	0.00E+00	1.06E-03
		Be-7	1.57E-01	3.56E-02	2.57E-02
		K-40	<2.57E-02	0.00E+00	2.57E-02
547432	6/29/2021 - 7/6/2021	Beta	1.02E-02	2.45E-03	3.12E-03
547668	7/6/2021 - 7/13/2021	Beta	1.57E-02	2.81E-03	3.17E-03
548064	7/13/2021 - 7/20/2021	Beta	8.59E-03	2.52E-03	3.47E-03
548488	7/20/2021 - 7/27/2021	Beta	1.39E-02	2.42E-03	2.78E-03
548699	7/27/2021 - 8/3/2021	Beta	1.73E-02	2.58E-03	2.71E-03
548939	8/3/2021 - 8/10/2021	Beta	1.06E-02	2.55E-03	3.30E-03
549230	8/10/2021 - 8/17/2021	Beta	1.13E-02	2.78E-03	3.68E-03
549729	8/17/2021 - 8/24/2021	Beta	9.23E-03	2.48E-03	3.31E-03
550005	8/24/2021 - 8/31/2021	Beta	2.06E-02	3.21E-03	3.59E-03
550635	8/31/2021 - 9/7/2021	Beta	1.97E-02	2.77E-03	2.96E-03
550998	9/7/2021 - 9/14/2021	Beta	2.12E-02	2.81E-03	2.92E-03
551629	9/14/2021 - 9/21/2021	Beta	1.98E-02	3.11E-03	3.39E-03
552255	9/21/2021 - 9/28/2021	Beta	1.53E-02	2.89E-03	3.41E-03
552735	6/29/2021 - 9/28/2021	Cs-134	<1.90E-03	0.00E+00	1.90E-03
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.25E-01	3.39E-02	3.25E-02
		K-40	<3.58E-02	0.00E+00	3.58E-02
552424	9/28/2021 - 10/5/2021	Beta	2.94E-02	3.62E-03	3.63E-03
552728	10/5/2021 - 10/12/2021	Beta	1.00E-02	2.60E-03	3.46E-03
553221	10/12/2021 - 10/19/2021	Beta	1.90E-02	2.73E-03	2.94E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID: 553810	Sample Dates: 10/19/2021 - 10/26/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	3.01E-02	3.42E-03	2.92E-03
Sample ID: 554254	Sample Dates: 10/26/2021 - 11/2/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.15E-02	2.44E-03	2.90E-03
Sample ID: 554564	Sample Dates: 11/2/2021 - 11/9/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.86E-02	3.12E-03	3.58E-03
Sample ID: 555049	Sample Dates: 11/9/2021 - 11/16/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.25E-02	2.93E-03	3.08E-03
Sample ID: 555912	Sample Dates: 11/16/2021 - 11/23/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.98E-02	2.74E-03	2.84E-03
Sample ID: 556716	Sample Dates: 11/23/2021 - 11/30/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.34E-02	3.20E-03	3.19E-03
Sample ID: 557032	Sample Dates: 11/30/2021 - 12/8/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	3.25E-02	3.36E-03	3.06E-03
Sample ID: 557457	Sample Dates: 12/8/2021 - 12/14/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.54E-02	3.34E-03	3.43E-03
Sample ID: 557924	Sample Dates: 12/14/2021 - 12/21/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.59E-02	2.98E-03	3.59E-03
Sample ID: 558365	Sample Dates: 12/21/2021 - 12/28/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.64E-02	3.37E-03	3.21E-03
Sample ID: 559194	Sample Dates: 9/28/2021 - 12/28/2021	Nuclide	Activity	2 Sigma Error	MDA
		Cs-134	<2.12E-03	0.00E+00	2.12E-03
		Cs-137	<1.55E-03	0.00E+00	1.55E-03
		Be-7	1.42E-01	3.41E-02	2.63E-02
		K-40	<2.78E-02	0.00E+00	2.78E-02
Sample ID: 558580	Sample Dates: 12/28/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.34E-02	2.41E-03	2.82E-03
Sample ID: 559958	Sample Dates: 12/28/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	1.88E-01	1.27E-01	0.00E+00
		K-40	3.16E-01	1.61E-01	2.06E-01

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID: 536527	Sample Dates: 12/29/2020 - 1/5/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.59E-02	2.51E-03	2.72E-03
Sample ID: 536716	Sample Dates: 1/5/2021 - 1/12/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.82E-02	2.93E-03	3.19E-03
Sample ID: 537269	Sample Dates: 1/12/2021 - 1/19/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.76E-02	2.85E-03	3.06E-03
Sample ID: 537640	Sample Dates: 1/19/2021 - 1/26/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.84E-02	2.90E-03	3.10E-03
Sample ID: 538032	Sample Dates: 1/26/2021 - 2/2/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.40E-02	2.52E-03	3.01E-03
Sample ID: 538280	Sample Dates: 2/2/2021 - 2/9/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.82E-02	3.09E-03	3.60E-03
Sample ID: 538492	Sample Dates: 2/9/2021 - 2/16/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	9.55E-03	2.27E-03	2.99E-03

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
538777	2/16/2021 - 2/23/2021	Beta	2.20E-02	2.87E-03	2.93E-03
539017	2/23/2021 - 3/2/2021	Beta	1.91E-02	3.17E-03	3.62E-03
539228	3/2/2021 - 3/9/2021	Beta	1.94E-02	3.22E-03	3.76E-03
540009	3/9/2021 - 3/16/2021	Beta	2.03E-02	3.05E-03	3.24E-03
540680	3/16/2021 - 3/23/2021	Beta	1.58E-02	2.92E-03	3.44E-03
541392	3/23/2021 - 3/30/2021	Beta	1.19E-02	2.45E-03	3.10E-03
541891	12/29/2020 - 3/30/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.39E-01	3.59E-02	3.48E-02
		K-40	<3.49E-02	0.00E+00	3.49E-02
541884	3/30/2021 - 4/6/2021	Beta	1.92E-02	3.02E-03	3.28E-03
542198	4/6/2021 - 4/13/2021	Beta	2.93E-02	3.48E-03	3.25E-03
542832	4/13/2021 - 4/20/2021	Beta	1.85E-02	2.67E-03	2.83E-03
543219	4/20/2021 - 4/27/2021	Beta	2.06E-02	2.66E-03	2.53E-03
544077	4/27/2021 - 5/4/2021	Beta	2.75E-02	3.42E-03	3.24E-03
544271	5/4/2021 - 5/11/2021	Beta	1.51E-02	2.60E-03	3.08E-03
544602	5/11/2021 - 5/18/2021	Beta	1.40E-02	2.46E-03	2.84E-03
544981	5/18/2021 - 5/25/2021	Beta	1.92E-02	2.99E-03	3.14E-03
545466	5/25/2021 - 6/1/2021	Beta	2.12E-02	2.74E-03	2.67E-03
545756	6/1/2021 - 6/8/2021	Beta	8.41E-03	2.29E-03	2.98E-03
545995	6/8/2021 - 6/15/2021	Beta	1.13E-02	2.37E-03	2.98E-03
546866	6/15/2021 - 6/22/2021	Beta	2.13E-02	3.12E-03	3.20E-03
547157	6/22/2021 - 6/29/2021	Beta	1.17E-02	2.57E-03	3.17E-03
547676	3/30/2021 - 6/29/2021	Cs-134	<2.01E-03	0.00E+00	2.01E-03
		Cs-137	<1.18E-03	0.00E+00	1.18E-03
		Be-7	1.91E-01	4.07E-02	3.36E-02
		K-40	3.19E-02	1.68E-02	1.74E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
547433	6/29/2021 - 7/6/2021	Beta	9.27E-03	2.42E-03	3.15E-03
547669	7/6/2021 - 7/13/2021	Beta	1.52E-02	2.79E-03	3.17E-03
548065	7/13/2021 - 7/20/2021	Beta	1.16E-02	2.70E-03	3.48E-03
548489	7/20/2021 - 7/27/2021	Beta	1.37E-02	2.42E-03	2.79E-03
548700	7/27/2021 - 8/3/2021	Beta	1.62E-02	2.51E-03	2.68E-03
548940	8/3/2021 - 8/10/2021	Beta	1.16E-02	2.56E-03	3.22E-03
549231	8/10/2021 - 8/17/2021	Beta	1.28E-02	2.94E-03	3.80E-03
549730	8/17/2021 - 8/24/2021	Beta	9.09E-03	2.50E-03	3.35E-03
550006	8/24/2021 - 8/31/2021	Beta	2.14E-02	3.24E-03	3.58E-03
550636	8/31/2021 - 9/7/2021	Beta	1.55E-02	2.57E-03	2.94E-03
550999	9/7/2021 - 9/14/2021	Beta	2.45E-02	3.00E-03	2.98E-03
551630	9/14/2021 - 9/21/2021	Beta	2.12E-02	3.17E-03	3.38E-03
552256	9/21/2021 - 9/28/2021	Beta	1.91E-02	3.06E-03	3.35E-03
552736	6/29/2021 - 9/28/2021	Cs-134	<3.75E-04	0.00E+00	3.75E-04
		Cs-137	<1.37E-03	0.00E+00	1.37E-03
		Be-7	1.35E-01	3.42E-02	2.82E-02
		K-40	<2.72E-02	0.00E+00	2.72E-02
552425	9/28/2021 - 10/5/2021	Beta	3.11E-02	3.71E-03	3.65E-03
552729	10/5/2021 - 10/12/2021	Beta	1.12E-02	2.66E-03	3.46E-03
553222	10/12/2021 - 10/19/2021	Beta	2.01E-02	2.79E-03	2.97E-03
553811	10/19/2021 - 10/26/2021	Beta	2.97E-02	3.37E-03	2.88E-03
554255	10/26/2021 - 11/2/2021	Beta	1.33E-02	2.50E-03	2.82E-03
554565	11/2/2021 - 11/9/2021	Beta	1.90E-02	3.23E-03	3.73E-03
555050	11/9/2021 - 11/16/2021	Beta	2.85E-02	3.18E-03	3.08E-03
555913	11/16/2021 - 11/23/2021	Beta	2.29E-02	2.85E-03	2.80E-03

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
556717	11/23/2021 - 11/30/2021	Beta	2.14E-02	3.14E-03	3.24E-03
557033	11/30/2021 - 12/7/2021	Beta	3.52E-02	3.80E-03	3.54E-03
557458	12/7/2021 - 12/14/2021	Beta	2.43E-02	2.95E-03	2.90E-03
557925	12/14/2021 - 12/21/2021	Beta	1.77E-02	3.10E-03	3.63E-03
558366	12/21/2021 - 12/28/2021	Beta	3.21E-02	3.62E-03	3.19E-03
559195	9/28/2021 - 12/28/2021	Cs-134	<2.20E-03	0.00E+00	2.20E-03
		Cs-137	<1.89E-03	0.00E+00	1.89E-03
		Be-7	1.55E-01	3.67E-02	2.86E-02
		K-40	<3.01E-02	0.00E+00	3.01E-02
558581	12/28/2021 - 1/4/2022	Beta	1.41E-02	2.45E-03	2.81E-03
559959	12/28/2021 - 1/4/2022	Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	1.11E-01	1.14E-01	0.00E+00
		K-40	3.62E-01	1.82E-01	2.41E-01

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536528	12/29/2020 - 1/5/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	5.71E-01	1.90E-01	1.49E-01
536724	1/5/2021 - 1/12/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	6.84E-01	1.94E-01	3.43E-02
537270	1/12/2021 - 1/19/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-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	5.60E-01	2.11E-01	2.29E-01
537641	1/19/2021 - 1/26/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.27E-01	2.04E-01	2.24E-01
538033	1/26/2021 - 2/2/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538033	1/26/2021 - 2/2/2021	K-40	3.66E-01	1.99E-01	2.71E-01
538281	2/2/2021 - 2/9/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.48E-01	1.55E-01	3.47E-02
538493	2/9/2021 - 2/16/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	5.07E-01	1.78E-01	1.43E-01
538778	2/16/2021 - 2/23/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	4.98E-01	1.64E-01	3.46E-02
539018	2/23/2021 - 3/2/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	3.72E-01	1.53E-01	1.33E-01
539229	3/2/2021 - 3/9/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<9.77E-02	0.00E+00	9.77E-02
		K-40	4.04E-01	1.53E-01	1.06E-01
540010	3/9/2021 - 3/16/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	6.05E-01	2.08E-01	2.01E-01
540681	3/16/2021 - 3/23/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	5.82E-01	2.03E-01	1.93E-01
541393	3/23/2021 - 3/30/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	5.49E-01	2.04E-01	2.13E-01
541892	3/30/2021 - 4/6/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	5.86E-01	2.15E-01	2.33E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542199	4/6/2021 - 4/13/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.50E-01	1.68E-01	1.41E-01
542833	4/13/2021 - 4/20/2021	I-131	<2.42E-02	0.00E+00	2.42E-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	<1.40E-01	0.00E+00	1.40E-01
		K-40	5.65E-01	1.84E-01	1.25E-01
543220	4/20/2021 - 4/27/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.87E-01	0.00E+00	4.87E-01
544078	4/27/2021 - 5/4/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	5.83E-01	1.78E-01	3.43E-02
544272	5/4/2021 - 5/11/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	5.94E-01	3.14E-01	3.79E-01
544603	5/11/2021 - 5/18/2021	I-131	<3.66E-02	0.00E+00	3.66E-02
		Cs-134	<3.21E-02	0.00E+00	3.21E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	<5.58E-01	0.00E+00	5.58E-01
544982	5/18/2021 - 5/25/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	6.93E-01	2.72E-01	6.95E-02
545467	5/25/2021 - 6/1/2021	I-131	<3.26E-02	0.00E+00	3.26E-02
		Cs-134	<3.21E-02	0.00E+00	3.21E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	3.87E-01	2.24E-01	2.22E-01
545757	6/1/2021 - 6/8/2021	I-131	<3.37E-02	0.00E+00	3.37E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<4.83E-01	0.00E+00	4.83E-01
545996	6/8/2021 - 6/15/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545996	6/8/2021 - 6/15/2021	Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<5.30E-01	0.00E+00	5.30E-01
546867	6/15/2021 - 6/22/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<2.85E-02	0.00E+00	2.85E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.41E-01	0.00E+00	5.41E-01
547158	6/22/2021 - 6/29/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	<2.75E-01	0.00E+00	2.75E-01
547434	6/29/2021 - 7/6/2021	I-131	<3.31E-02	0.00E+00	3.31E-02
		Cs-134	<2.87E-02	0.00E+00	2.87E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	5.06E-01	2.69E-01	2.99E-01
547677	7/6/2021 - 7/13/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	<5.59E-01	0.00E+00	5.59E-01
548066	7/13/2021 - 7/20/2021	I-131	<3.12E-02	0.00E+00	3.12E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	5.14E-01	2.59E-01	2.58E-01
548490	7/20/2021 - 7/27/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<5.56E-01	0.00E+00	5.56E-01
548701	7/27/2021 - 8/3/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	<4.04E-01	0.00E+00	4.04E-01
548941	8/3/2021 - 8/10/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<4.94E-03	0.00E+00	4.94E-03
		Cs-137	<2.22E-02	0.00E+00	2.22E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	5.76E-01	2.75E-01	2.96E-01
549232	8/10/2021 - 8/17/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<6.47E-01	0.00E+00	6.47E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549731	8/17/2021 - 8/24/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<2.81E-02	0.00E+00	2.81E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
550007	8/24/2021 - 8/31/2021	I-131	<3.19E-02	0.00E+00	3.19E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	2.55E-01	1.81E-01	1.99E-01
550637	8/31/2021 - 9/7/2021	I-131	<3.43E-02	0.00E+00	3.43E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	3.72E-01	2.73E-01	3.78E-01
551000	9/7/2021 - 9/14/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<5.06E-03	0.00E+00	5.06E-03
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	<4.56E-01	0.00E+00	4.56E-01
551631	9/14/2021 - 9/21/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	3.29E-01	2.31E-01	2.98E-01
552257	9/21/2021 - 9/28/2021	I-131	<3.77E-02	0.00E+00	3.77E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<2.27E-01	0.00E+00	2.27E-01
		K-40	5.02E-01	3.04E-01	3.95E-01
552426	9/28/2021 - 10/5/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<4.44E-01	0.00E+00	4.44E-01
552737	10/5/2021 - 10/12/2021	I-131	<3.49E-02	0.00E+00	3.49E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	4.36E-01	2.85E-01	3.80E-01
553223	10/12/2021 - 10/19/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	5.31E-01	2.95E-01	3.60E-01
553812	10/19/2021 - 10/26/2021	I-131	<5.46E-02	0.00E+00	5.46E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553812	10/19/2021 - 10/26/2021	Be-7	<2.15E-01	0.00E+00	2.15E-01
		K-40	<4.85E-01	0.00E+00	4.85E-01
554256	10/26/2021 - 11/2/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<3.18E-02	0.00E+00	3.18E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.90E-01	2.81E-01	3.43E-01
554566	11/2/2021 - 11/9/2021	I-131	<3.42E-02	0.00E+00	3.42E-02
		Cs-134	<3.06E-02	0.00E+00	3.06E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<2.17E-01	0.00E+00	2.17E-01
		K-40	<6.65E-01	0.00E+00	6.65E-01
555051	11/9/2021 - 11/16/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	4.07E-01	2.67E-01	3.48E-01
555914	11/16/2021 - 11/23/2021	I-131	<4.91E-02	0.00E+00	4.91E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	5.11E-01	2.72E-01	3.02E-01
556718	11/23/2021 - 11/30/2021	I-131	<3.53E-02	0.00E+00	3.53E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	8.45E-01	3.02E-01	6.94E-02
557034	11/30/2021 - 12/7/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	<5.81E-01	0.00E+00	5.81E-01
557459	12/7/2021 - 12/14/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	6.08E-01	2.88E-01	2.93E-01
557926	12/14/2021 - 12/21/2021	I-131	<5.20E-02	0.00E+00	5.20E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.95E-02	0.00E+00	2.95E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<6.70E-01	0.00E+00	6.70E-01
558367	12/21/2021 - 12/28/2021	I-131	<2.82E-02	0.00E+00	2.82E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	<5.95E-01	0.00E+00	5.95E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - WSW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558582	12/28/2021 - 1/4/2022	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<3.61E-02	0.00E+00	3.61E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<5.58E-01	0.00E+00	5.58E-01

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536529	12/29/2020 - 1/5/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	4.16E-01	1.99E-01	2.53E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536725	1/5/2021 - 1/12/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	7.14E-01	2.16E-01	1.58E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537271	1/12/2021 - 1/19/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	5.27E-01	1.91E-01	1.86E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537642	1/19/2021 - 1/26/2021	I-131	<1.15E-02	0.00E+00	1.15E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<9.55E-03	0.00E+00	9.55E-03
		Be-7	<6.68E-02	0.00E+00	6.68E-02
		K-40	3.46E-01	1.32E-01	1.64E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538034	1/26/2021 - 2/2/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<8.25E-02	0.00E+00	8.25E-02
		K-40	4.21E-01	1.68E-01	1.64E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538282	2/2/2021 - 2/9/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<9.75E-02	0.00E+00	9.75E-02
		K-40	4.42E-01	1.93E-01	2.28E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538494	2/9/2021 - 2/16/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	5.76E-01	1.99E-01	1.90E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538779	2/16/2021 - 2/23/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.50E-01	2.09E-01	2.64E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539019	2/23/2021 - 3/2/2021	I-131	<1.84E-02	0.00E+00	1.84E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
539019	2/23/2021 - 3/2/2021	Cs-134	<2.14E-02	0.00E+00	2.14E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<9.58E-02	0.00E+00	9.58E-02
		K-40	4.25E-01	2.05E-01	2.66E-01
539230	3/2/2021 - 3/9/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	5.56E-01	1.72E-01	3.35E-02
540011	3/9/2021 - 3/16/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	4.04E-01	1.77E-01	2.01E-01
540682	3/16/2021 - 3/23/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<8.87E-02	0.00E+00	8.87E-02
		K-40	5.62E-01	1.90E-01	1.63E-01
541394	3/23/2021 - 3/30/2021	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.99E-01	2.11E-01	2.54E-01
541893	3/30/2021 - 4/6/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	6.36E-01	2.16E-01	2.17E-01
542200	4/6/2021 - 4/13/2021	I-131	<2.10E-02	0.00E+00	2.10E-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	<1.07E-01	0.00E+00	1.07E-01
		K-40	4.20E-01	1.67E-01	1.59E-01
542834	4/13/2021 - 4/20/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.38E-01	1.52E-01	3.39E-02
543221	4/20/2021 - 4/27/2021	I-131	<3.35E-02	0.00E+00	3.35E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
544079	4/27/2021 - 5/4/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544079	4/27/2021 - 5/4/2021	K-40	4.30E-01	2.64E-01	3.31E-01
544273	5/4/2021 - 5/11/2021	I-131	<3.07E-02	0.00E+00	3.07E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	3.97E-01	2.43E-01	2.93E-01
544604	5/11/2021 - 5/18/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<5.66E-01	0.00E+00	5.66E-01
544983	5/18/2021 - 5/25/2021	I-131	<3.72E-02	0.00E+00	3.72E-02
		Cs-134	<2.57E-02	0.00E+00	2.57E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.32E-01	2.42E-01	2.63E-01
545468	5/25/2021 - 6/1/2021	I-131	<3.49E-02	0.00E+00	3.49E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<5.08E-01	0.00E+00	5.08E-01
545758	6/1/2021 - 6/8/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<3.09E-02	0.00E+00	3.09E-02
		K-40	<3.05E-01	0.00E+00	3.05E-01
545997	6/8/2021 - 6/15/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.91E-02	0.00E+00	2.91E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	3.97E-01	2.01E-01	6.72E-02
546868	6/15/2021 - 6/22/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	4.19E-01	2.61E-01	3.25E-01
547159	6/22/2021 - 6/29/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<2.01E-01	0.00E+00	2.01E-01
		K-40	4.75E-01	2.55E-01	2.54E-01
547435	6/29/2021 - 7/6/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	2.73E-01	2.41E-01	3.56E-01

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547678	7/6/2021 - 7/13/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<4.47E-01	0.00E+00	4.47E-01
548067	7/13/2021 - 7/20/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
548491	7/20/2021 - 7/27/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	5.01E-01	3.00E-01	3.93E-01
548702	7/27/2021 - 8/3/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	3.56E-01	2.13E-01	2.27E-01
548942	8/3/2021 - 8/10/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<3.18E-01	0.00E+00	3.18E-01
549233	8/10/2021 - 8/17/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.59E-02	0.00E+00	2.59E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	3.22E-01	2.06E-01	2.25E-01
549732	8/17/2021 - 8/24/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	3.00E-01	2.23E-01	2.95E-01
550008	8/24/2021 - 8/31/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<4.14E-01	0.00E+00	4.14E-01
550638	8/31/2021 - 9/7/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.81E-01	2.74E-01	3.24E-01
551001	9/7/2021 - 9/14/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551001	9/7/2021 - 9/14/2021	Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<4.75E-01	0.00E+00	4.75E-01
551632	9/14/2021 - 9/21/2021	I-131	<3.00E-02	0.00E+00	3.00E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	5.23E-01	2.48E-01	2.20E-01
552258	9/21/2021 - 9/28/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	2.47E-01	2.17E-01	3.13E-01
552427	9/28/2021 - 10/5/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	4.57E-01	2.85E-01	3.75E-01
552738	10/5/2021 - 10/12/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	<4.11E-01	0.00E+00	4.11E-01
553224	10/12/2021 - 10/19/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	4.19E-01	2.57E-01	3.24E-01
553813	10/19/2021 - 10/26/2021	I-131	<3.74E-02	0.00E+00	3.74E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	<5.18E-01	0.00E+00	5.18E-01
554257	10/26/2021 - 11/2/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<3.33E-02	0.00E+00	3.33E-02
		Cs-137	<2.87E-02	0.00E+00	2.87E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	6.14E-01	3.09E-01	3.63E-01
554567	11/2/2021 - 11/9/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	5.48E-01	2.52E-01	2.19E-01
555052	11/9/2021 - 11/16/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<4.27E-01	0.00E+00	4.27E-01

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555915	11/16/2021 - 11/23/2021	I-131	<4.28E-02	0.00E+00	4.28E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<2.13E-01	0.00E+00	2.13E-01
		K-40	3.37E-01	2.37E-01	3.13E-01
556719	11/23/2021 - 11/30/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
557035	11/30/2021 - 12/7/2021	I-131	<3.55E-02	0.00E+00	3.55E-02
		Cs-134	<3.19E-02	0.00E+00	3.19E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	7.09E-01	2.74E-01	6.87E-02
557460	12/7/2021 - 12/14/2021	I-131	<3.43E-02	0.00E+00	3.43E-02
		Cs-134	<5.18E-03	0.00E+00	5.18E-03
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<2.29E-01	0.00E+00	2.29E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01
557927	12/14/2021 - 12/21/2021	I-131	<5.56E-02	0.00E+00	5.56E-02
		Cs-134	<3.00E-02	0.00E+00	3.00E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	<6.24E-01	0.00E+00	6.24E-01
558368	12/21/2021 - 12/28/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<2.01E-01	0.00E+00	2.01E-01
		K-40	<4.85E-01	0.00E+00	4.85E-01
558583	12/28/2021 - 1/4/2022	I-131	<3.07E-02	0.00E+00	3.07E-02
		Cs-134	<2.24E-02	0.00E+00	2.24E-02
		Cs-137	<2.92E-02	0.00E+00	2.92E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	5.37E-01	2.88E-01	3.48E-01

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536530	12/29/2020 - 1/5/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	2.10E-01	1.78E-01	2.72E-01
536726	1/5/2021 - 1/12/2021	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<7.75E-03	0.00E+00	7.75E-03
		Be-7	<7.88E-02	0.00E+00	7.88E-02
		K-40	4.54E-01	1.75E-01	1.67E-01
537272	1/12/2021 - 1/19/2021	I-131	<2.29E-02	0.00E+00	2.29E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537272	1/12/2021 - 1/19/2021	Cs-134	<1.12E-02	0.00E+00	1.12E-02
		Cs-137	<9.27E-03	0.00E+00	9.27E-03
		Be-7	<8.82E-02	0.00E+00	8.82E-02
		K-40	6.46E-01	1.45E-01	9.09E-02
537643	1/19/2021 - 1/26/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<7.35E-02	0.00E+00	7.35E-02
		K-40	<2.82E-01	0.00E+00	2.82E-01
538035	1/26/2021 - 2/2/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	3.49E-01	1.97E-01	2.69E-01
538283	2/2/2021 - 2/9/2021	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.07E-02	0.00E+00	1.07E-02
		Be-7	<8.73E-02	0.00E+00	8.73E-02
		K-40	5.63E-01	1.85E-01	1.42E-01
538495	2/9/2021 - 2/16/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	8.14E-01	2.22E-01	1.36E-01
538780	2/16/2021 - 2/23/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	5.24E-01	2.01E-01	2.14E-01
539020	2/23/2021 - 3/2/2021	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-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	2.71E-01	1.44E-01	1.70E-01
539231	3/2/2021 - 3/9/2021	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	4.83E-01	1.66E-01	1.17E-01
540012	3/9/2021 - 3/16/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	4.72E-01	1.76E-01	1.64E-01
540683	3/16/2021 - 3/23/2021	I-131	<1.31E-02	0.00E+00	1.31E-02
		Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540683	3/16/2021 - 3/23/2021	K-40	2.79E-01	1.45E-01	1.67E-01
541395	3/23/2021 - 3/30/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.98E-02	0.00E+00	9.98E-02
		K-40	5.84E-01	2.08E-01	2.16E-01
541894	3/30/2021 - 4/6/2021	I-131	<1.56E-02	0.00E+00	1.56E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	5.14E-01	1.90E-01	1.90E-01
542201	4/6/2021 - 4/13/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<9.49E-02	0.00E+00	9.49E-02
		K-40	3.89E-01	1.85E-01	2.21E-01
542835	4/13/2021 - 4/20/2021	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	4.68E-01	2.30E-01	3.12E-01
543222	4/20/2021 - 4/27/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<2.94E-02	0.00E+00	2.94E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<5.02E-01	0.00E+00	5.02E-01
544080	4/27/2021 - 5/4/2021	I-131	<3.42E-02	0.00E+00	3.42E-02
		Cs-134	<3.02E-02	0.00E+00	3.02E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	7.82E-01	2.83E-01	6.62E-02
544274	5/4/2021 - 5/11/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	3.24E-01	2.53E-01	3.58E-01
544605	5/11/2021 - 5/18/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	6.41E-01	2.80E-01	2.55E-01
544984	5/18/2021 - 5/25/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	5.19E-01	2.30E-01	6.70E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545469	5/25/2021 - 6/1/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	<5.88E-01	0.00E+00	5.88E-01
545759	6/1/2021 - 6/8/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<3.11E-02	0.00E+00	3.11E-02
		Cs-137	<2.83E-02	0.00E+00	2.83E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
545998	6/8/2021 - 6/15/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	4.91E-01	2.23E-01	6.66E-02
546869	6/15/2021 - 6/22/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	4.16E-01	2.05E-01	6.64E-02
547160	6/22/2021 - 6/29/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<2.59E-02	0.00E+00	2.59E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	<5.84E-01	0.00E+00	5.84E-01
547436	6/29/2021 - 7/6/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	<5.33E-01	0.00E+00	5.33E-01
547679	7/6/2021 - 7/13/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	6.77E-01	3.36E-01	4.02E-01
548068	7/13/2021 - 7/20/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<3.30E-01	0.00E+00	3.30E-01
548492	7/20/2021 - 7/27/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.56E-01	2.32E-01	2.15E-01
548703	7/27/2021 - 8/3/2021	I-131	<3.03E-02	0.00E+00	3.04E-02
		Cs-134	<2.37E-02	0.00E+00	2.37E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548703	7/27/2021 - 8/3/2021	Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<4.27E-01	0.00E+00	4.27E-01
548943	8/3/2021 - 8/10/2021	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<3.27E-02	0.00E+00	3.27E-02
		Cs-137	<2.26E-02	0.00E+00	2.26E-02
		Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	<5.00E-01	0.00E+00	5.00E-01
549234	8/10/2021 - 8/17/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.22E-02	0.00E+00	2.22E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01
549733	8/17/2021 - 8/24/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.96E-02	0.00E+00	2.96E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	<5.09E-01	0.00E+00	5.09E-01
550009	8/24/2021 - 8/31/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	4.29E-01	2.64E-01	3.38E-01
550639	8/31/2021 - 9/7/2021	I-131	<3.33E-02	0.00E+00	3.33E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	<5.49E-01	0.00E+00	5.49E-01
551002	9/7/2021 - 9/14/2021	I-131	<3.26E-02	0.00E+00	3.26E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<3.06E-02	0.00E+00	3.06E-02
		Be-7	<2.29E-01	0.00E+00	2.29E-01
		K-40	4.95E-01	2.47E-01	2.27E-01
551633	9/14/2021 - 9/21/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	5.75E-01	2.39E-01	6.49E-02
552259	9/21/2021 - 9/28/2021	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<2.98E-02	0.00E+00	2.98E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<3.86E-01	0.00E+00	3.86E-01
552428	9/28/2021 - 10/5/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	3.88E-01	2.55E-01	3.32E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552739	10/5/2021 - 10/12/2021	I-131	<3.23E-02	0.00E+00	3.23E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<5.48E-01	0.00E+00	5.48E-01
553225	10/12/2021 - 10/19/2021	I-131	<3.37E-02	0.00E+00	3.37E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	3.48E-01	2.26E-01	2.76E-01
553814	10/19/2021 - 10/26/2021	I-131	<3.96E-02	0.00E+00	3.96E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<4.21E-01	0.00E+00	4.21E-01
554258	10/26/2021 - 11/2/2021	I-131	<3.45E-02	0.00E+00	3.45E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	4.11E-01	2.83E-01	3.86E-01
554568	11/2/2021 - 11/9/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<4.64E-01	0.00E+00	4.64E-01
555053	11/9/2021 - 11/16/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<3.47E-02	0.00E+00	3.47E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	7.72E-01	3.05E-01	2.51E-01
555916	11/16/2021 - 11/23/2021	I-131	<3.48E-02	0.00E+00	3.48E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	5.80E-01	2.63E-01	2.29E-01
556720	11/23/2021 - 11/30/2021	I-131	<3.40E-02	0.00E+00	3.40E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	3.71E-01	2.57E-01	3.46E-01
557036	11/30/2021 - 12/7/2021	I-131	<3.86E-02	0.00E+00	3.86E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	4.17E-01	2.47E-01	2.86E-01
557461	12/7/2021 - 12/14/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 202 [INDICATOR - S @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557461	12/7/2021 - 12/14/2021	Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	5.43E-01	2.35E-01	6.69E-02
557928	12/14/2021 - 12/21/2021	I-131	<4.91E-02	0.00E+00	4.91E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
558369	12/21/2021 - 12/28/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<6.72E-02	0.00E+00	6.72E-02
558584	12/28/2021 - 1/4/2022	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<3.63E-02	0.00E+00	3.63E-02
		Cs-137	<2.98E-02	0.00E+00	2.98E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.15E-01	0.00E+00	5.15E-01

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536531	12/29/2020 - 1/5/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	3.16E-01	1.59E-01	1.88E-01
536727	1/5/2021 - 1/12/2021	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<7.64E-03	0.00E+00	7.64E-03
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	6.18E-01	2.03E-01	1.87E-01
537273	1/12/2021 - 1/19/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-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	5.43E-01	1.90E-01	1.75E-01
537644	1/19/2021 - 1/26/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	3.72E-01	1.86E-01	2.34E-01
538036	1/26/2021 - 2/2/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<3.42E-01	0.00E+00	3.42E-01
538284	2/2/2021 - 2/9/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<9.81E-02	0.00E+00	9.81E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
538284	2/2/2021 - 2/9/2021	K-40	4.47E-01	1.69E-01	1.50E-01
538496	2/9/2021 - 2/16/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<8.94E-02	0.00E+00	8.94E-02
		K-40	5.32E-01	2.11E-01	2.44E-01
538781	2/16/2021 - 2/23/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	6.40E-01	2.17E-01	2.12E-01
539021	2/23/2021 - 3/2/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	<3.44E-01	0.00E+00	3.44E-01
539232	3/2/2021 - 3/9/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<9.37E-02	0.00E+00	9.37E-02
		K-40	5.49E-01	1.82E-01	1.34E-01
540013	3/9/2021 - 3/16/2021	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<7.96E-02	0.00E+00	7.96E-02
		K-40	<3.70E-01	0.00E+00	3.70E-01
540684	3/16/2021 - 3/23/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<9.58E-02	0.00E+00	9.58E-02
		K-40	4.75E-01	1.74E-01	1.54E-01
541396	3/23/2021 - 3/30/2021	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<9.94E-03	0.00E+00	9.94E-03
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	5.97E-01	2.10E-01	2.18E-01
541895	3/30/2021 - 4/6/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	5.42E-01	2.33E-01	2.84E-01
542202	4/6/2021 - 4/13/2021	I-131	<1.36E-02	0.00E+00	1.36E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.46E-01	1.87E-01	2.11E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542836	4/13/2021 - 4/20/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	5.89E-01	1.76E-01	3.32E-02
543223	4/20/2021 - 4/27/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<4.63E-01	0.00E+00	4.63E-01
544081	4/27/2021 - 5/4/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<5.18E-03	0.00E+00	5.18E-03
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	2.49E-01	1.89E-01	2.35E-01
544275	5/4/2021 - 5/11/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<5.09E-01	0.00E+00	5.09E-01
544606	5/11/2021 - 5/18/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	2.69E-01	2.62E-01	4.02E-01
544985	5/18/2021 - 5/25/2021	I-131	<3.28E-02	0.00E+00	3.28E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	<5.66E-01	0.00E+00	5.66E-01
545470	5/25/2021 - 6/1/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.16E-01	0.00E+00	5.16E-01
545760	6/1/2021 - 6/8/2021	I-131	<3.12E-02	0.00E+00	3.12E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	3.35E-01	2.10E-01	2.32E-01
545999	6/8/2021 - 6/15/2021	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	4.37E-01	2.67E-01	3.36E-01
546870	6/15/2021 - 6/22/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546870	6/15/2021 - 6/22/2021	Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<4.85E-01	0.00E+00	4.85E-01
547161	6/22/2021 - 6/29/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<4.74E-01	0.00E+00	4.74E-01
547437	6/29/2021 - 7/6/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<3.73E-02	0.00E+00	3.73E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	2.15E-01	2.40E-01	3.79E-01
547680	7/6/2021 - 7/13/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.91E-02	0.00E+00	2.91E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	3.20E-01	2.41E-01	3.32E-01
548069	7/13/2021 - 7/20/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<2.17E-01	0.00E+00	2.17E-01
		K-40	6.41E-01	3.13E-01	3.56E-01
548493	7/20/2021 - 7/27/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.52E-01	0.00E+00	4.52E-01
548704	7/27/2021 - 8/3/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<3.13E-02	0.00E+00	3.13E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	5.38E-01	2.83E-01	3.05E-01
548944	8/3/2021 - 8/10/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	3.50E-01	2.80E-01	4.11E-01
549235	8/10/2021 - 8/17/2021	I-131	<2.36E-02	0.00E+00	2.36E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	3.94E-01	2.67E-01	3.59E-01
549734	8/17/2021 - 8/24/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	4.23E-01	2.08E-01	6.74E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550010	8/24/2021 - 8/31/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<3.80E-01	0.00E+00	3.80E-01
550640	8/31/2021 - 9/7/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<2.91E-02	0.00E+00	2.91E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	4.14E-01	2.81E-01	3.78E-01
551003	9/7/2021 - 9/14/2021	I-131	<3.36E-02	0.00E+00	3.36E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
551634	9/14/2021 - 9/21/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<4.18E-01	0.00E+00	4.18E-01
552260	9/21/2021 - 9/28/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<2.57E-02	0.00E+00	2.57E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
552429	9/28/2021 - 10/5/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<3.03E-02	0.00E+00	3.03E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	5.07E-01	2.63E-01	2.77E-01
552740	10/5/2021 - 10/12/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<3.19E-02	0.00E+00	3.19E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.66E-01	2.17E-01	6.65E-02
553226	10/12/2021 - 10/19/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	2.46E-01	2.07E-01	2.89E-01
553815	10/19/2021 - 10/26/2021	I-131	<4.74E-02	0.00E+00	4.74E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<5.76E-01	0.00E+00	5.76E-01
554259	10/26/2021 - 11/2/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 203 [INDICATOR - SSW @ 2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554259	10/26/2021 - 11/2/2021	Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	5.65E-01	3.00E-01	3.62E-01
554569	11/2/2021 - 11/9/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.87E-01	2.43E-01	2.22E-01
555054	11/9/2021 - 11/16/2021	I-131	<3.46E-02	0.00E+00	3.46E-02
		Cs-134	<3.20E-02	0.00E+00	3.20E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<5.73E-01	0.00E+00	5.73E-01
555917	11/16/2021 - 11/23/2021	I-131	<4.46E-02	0.00E+00	4.46E-02
		Cs-134	<5.21E-03	0.00E+00	5.21E-03
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	<4.52E-01	0.00E+00	4.52E-01
556721	11/23/2021 - 11/30/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	3.96E-01	2.01E-01	6.71E-02
557037	11/30/2021 - 12/7/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	<6.34E-01	0.00E+00	6.34E-01
557462	12/7/2021 - 12/14/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	2.08E-01	2.06E-01	3.09E-01
557929	12/14/2021 - 12/21/2021	I-131	<4.75E-02	0.00E+00	4.75E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
558370	12/21/2021 - 12/28/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	2.14E-01	1.78E-01	2.31E-01
558585	12/28/2021 - 1/4/2022	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	4.88E-01	2.22E-01	6.61E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536532	12/29/2020 - 1/5/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.58E-01	1.73E-01	1.64E-01
536728	1/5/2021 - 1/12/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	5.47E-01	2.13E-01	2.46E-01
537274	1/12/2021 - 1/19/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<9.05E-03	0.00E+00	9.05E-03
		Be-7	<9.51E-02	0.00E+00	9.51E-02
		K-40	3.28E-01	1.49E-01	1.50E-01
537645	1/19/2021 - 1/26/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	3.83E-01	1.77E-01	2.10E-01
538037	1/26/2021 - 2/2/2021	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	1.85E-01	1.57E-01	2.36E-01
538285	2/2/2021 - 2/9/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	4.30E-01	1.93E-01	2.34E-01
538497	2/9/2021 - 2/16/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	4.13E-01	1.97E-01	2.46E-01
538782	2/16/2021 - 2/23/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.80E-01	1.82E-01	1.18E-01
539022	2/23/2021 - 3/2/2021	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.27E-02	0.00E+00	1.27E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	2.45E-01	1.44E-01	1.80E-01
539233	3/2/2021 - 3/9/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539233	3/2/2021 - 3/9/2021	Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	5.25E-01	1.81E-01	1.53E-01
540014	3/9/2021 - 3/16/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	4.62E-01	1.91E-01	2.18E-01
540685	3/16/2021 - 3/23/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.15E-02	0.00E+00	1.15E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	5.16E-01	1.64E-01	3.33E-02
541397	3/23/2021 - 3/30/2021	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<9.05E-03	0.00E+00	9.05E-03
		Be-7	<9.39E-02	0.00E+00	9.39E-02
		K-40	2.96E-01	1.60E-01	1.99E-01
541896	3/30/2021 - 4/6/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	3.13E-01	1.41E-01	1.34E-01
542203	4/6/2021 - 4/13/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	5.19E-01	1.92E-01	1.90E-01
542837	4/13/2021 - 4/20/2021	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<9.86E-02	0.00E+00	9.86E-02
		K-40	3.90E-01	1.83E-01	2.14E-01
543224	4/20/2021 - 4/27/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	4.80E-01	2.38E-01	2.16E-01
544082	4/27/2021 - 5/4/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	4.66E-01	2.17E-01	6.65E-02
544276	5/4/2021 - 5/11/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<5.11E-01	0.00E+00	5.11E-01

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544607	5/11/2021 - 5/18/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<3.69E-01	0.00E+00	3.69E-01
544986	5/18/2021 - 5/25/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	4.73E-01	2.54E-01	2.81E-01
545471	5/25/2021 - 6/1/2021	I-131	<2.99E-02	0.00E+00	2.99E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	5.88E-01	2.67E-01	2.34E-01
545761	6/1/2021 - 6/8/2021	I-131	<3.69E-02	0.00E+00	3.69E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.86E-02	0.00E+00	2.86E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	7.89E-01	2.90E-01	6.89E-02
546000	6/8/2021 - 6/15/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	3.44E-01	1.86E-01	6.66E-02
546871	6/15/2021 - 6/22/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	<5.67E-01	0.00E+00	5.67E-01
547162	6/22/2021 - 6/29/2021	I-131	<3.13E-02	0.00E+00	3.13E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	4.83E-01	2.66E-01	3.11E-01
547438	6/29/2021 - 7/6/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<4.33E-01	0.00E+00	4.33E-01
547681	7/6/2021 - 7/13/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<5.19E-01	0.00E+00	5.19E-01
548070	7/13/2021 - 7/20/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548070	7/13/2021 - 7/20/2021	Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	5.34E-01	2.54E-01	2.29E-01
548494	7/20/2021 - 7/27/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	1.83E-01	2.11E-01	3.34E-01
548705	7/27/2021 - 8/3/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
548945	8/3/2021 - 8/10/2021	I-131	<3.61E-02	0.00E+00	3.61E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<4.95E-01	0.00E+00	4.95E-01
549236	8/10/2021 - 8/17/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<2.20E-02	0.00E+00	2.20E-02
		Cs-137	<2.80E-02	0.00E+00	2.80E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<4.60E-01	0.00E+00	4.60E-01
549735	8/17/2021 - 8/24/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<5.28E-01	0.00E+00	5.28E-01
550011	8/24/2021 - 8/31/2021	I-131	<2.99E-02	0.00E+00	2.99E-02
		Cs-134	<3.54E-02	0.00E+00	3.54E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
550641	8/31/2021 - 9/7/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<3.33E-02	0.00E+00	3.33E-02
		Cs-137	<2.87E-02	0.00E+00	2.87E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	3.11E-01	2.48E-01	3.53E-01
551004	9/7/2021 - 9/14/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	4.25E-01	2.31E-01	2.38E-01
551635	9/14/2021 - 9/21/2021	I-131	<3.11E-02	0.00E+00	3.11E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	3.77E-01	2.99E-01	4.35E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552261	9/21/2021 - 9/28/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	4.88E-01	2.79E-01	3.46E-01
552430	9/28/2021 - 10/5/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	3.99E-01	2.30E-01	2.51E-01
552741	10/5/2021 - 10/12/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	3.69E-01	2.73E-01	3.88E-01
553227	10/12/2021 - 10/19/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	4.56E-01	2.12E-01	6.50E-02
553816	10/19/2021 - 10/26/2021	I-131	<3.62E-02	0.00E+00	3.62E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<2.53E-02	0.00E+00	2.53E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<5.23E-01	0.00E+00	5.23E-01
554260	10/26/2021 - 11/2/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.12E-01	0.00E+00	5.12E-01
554570	11/2/2021 - 11/9/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<5.01E-01	0.00E+00	5.01E-01
555055	11/9/2021 - 11/16/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	4.32E-01	2.30E-01	2.25E-01
555918	11/16/2021 - 11/23/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	<4.68E-01	0.00E+00	4.68E-01
556722	11/23/2021 - 11/30/2021	I-131	<3.59E-02	0.00E+00	3.59E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 204 [CONTROL - NNE @ 22.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556722	11/23/2021 - 11/30/2021	Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	5.10E-01	2.50E-01	2.44E-01
		I-131	<3.67E-02	0.00E+00	3.67E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
557038	11/30/2021 - 12/7/2021	Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<6.40E-01	0.00E+00	6.40E-01
		I-131	<2.62E-02	0.00E+00	2.62E-02
557463	12/7/2021 - 12/14/2021	Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	5.10E-01	2.47E-01	2.33E-01
557930	12/14/2021 - 12/21/2021	I-131	<5.52E-02	0.00E+00	5.52E-02
		Cs-134	<2.15E-02	0.00E+00	2.15E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
558371	12/21/2021 - 12/28/2021	K-40	<5.42E-01	0.00E+00	5.42E-01
		I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
558586	12/28/2021 - 1/4/2022	Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
		I-131	<3.07E-02	0.00E+00	3.07E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	5.14E-01	2.28E-01	6.63E-02
		I-131	<1.87E-02	0.00E+00	1.87E-02

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536533	12/29/2020 - 1/5/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<9.06E-03	0.00E+00	9.06E-03
		Be-7	<8.05E-02	0.00E+00	8.05E-02
536729	1/5/2021 - 1/12/2021	K-40	<3.10E-01	0.00E+00	3.10E-01
		I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
537275	1/12/2021 - 1/19/2021	Be-7	<8.35E-02	0.00E+00	8.35E-02
		K-40	6.78E-01	2.25E-01	2.30E-01
		I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
537646	1/19/2021 - 1/26/2021	Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	4.01E-01	1.89E-01	2.27E-01
		I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<8.48E-02	0.00E+00	8.48E-02
		I-131	<1.87E-02	0.00E+00	1.87E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537646	1/19/2021 - 1/26/2021	K-40	2.89E-01	1.65E-01	2.15E-01
538038	1/26/2021 - 2/2/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<8.31E-02	0.00E+00	8.31E-02
		K-40	4.49E-01	1.75E-01	1.57E-01
538286	2/2/2021 - 2/9/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<8.93E-02	0.00E+00	8.93E-02
		K-40	<2.46E-01	0.00E+00	2.46E-01
538498	2/9/2021 - 2/16/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	7.16E-01	2.07E-01	1.40E-01
538783	2/16/2021 - 2/23/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	4.77E-01	1.83E-01	1.78E-01
539023	2/23/2021 - 3/2/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.62E-01	1.89E-01	1.36E-01
539234	3/2/2021 - 3/9/2021	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<9.01E-03	0.00E+00	9.01E-03
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<8.43E-02	0.00E+00	8.43E-02
		K-40	<2.53E-01	0.00E+00	2.53E-01
540015	3/9/2021 - 3/16/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<9.40E-02	0.00E+00	9.40E-02
		K-40	<2.91E-01	0.00E+00	2.91E-01
540686	3/16/2021 - 3/23/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	<4.84E-01	0.00E+00	4.84E-01
541398	3/23/2021 - 3/30/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<4.29E-01	0.00E+00	4.29E-01

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541897	3/30/2021 - 4/6/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	3.88E-01	1.95E-01	2.56E-01
542204	4/6/2021 - 4/13/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	5.63E-01	1.88E-01	1.57E-01
542838	4/13/2021 - 4/20/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<8.69E-02	0.00E+00	8.69E-02
		K-40	3.69E-01	1.95E-01	2.62E-01
543225	4/20/2021 - 4/27/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<4.81E-01	0.00E+00	4.81E-01
544083	4/27/2021 - 5/4/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	2.85E-01	2.18E-01	2.85E-01
544277	5/4/2021 - 5/11/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	<4.65E-01	0.00E+00	4.65E-01
544608	5/11/2021 - 5/18/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<2.80E-02	0.00E+00	2.80E-02
		Be-7	<2.05E-01	0.00E+00	2.05E-01
		K-40	4.11E-01	2.38E-01	2.53E-01
544987	5/18/2021 - 5/25/2021	I-131	<2.82E-02	0.00E+00	2.82E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	5.50E-01	2.69E-01	2.48E-01
545472	5/25/2021 - 6/1/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.75E-01	0.00E+00	1.75E-01
		K-40	<4.72E-01	0.00E+00	4.72E-01
545762	6/1/2021 - 6/8/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545762	6/1/2021 - 6/8/2021	Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	3.16E-01	3.17E-01	4.98E-01
546001	6/8/2021 - 6/15/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.20E-01	0.00E+00	4.20E-01
546872	6/15/2021 - 6/22/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<4.90E-01	0.00E+00	4.90E-01
547163	6/22/2021 - 6/29/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<4.22E-01	0.00E+00	4.22E-01
547439	6/29/2021 - 7/6/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<3.01E-02	0.00E+00	3.01E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	4.59E-01	2.30E-01	2.00E-01
547682	7/6/2021 - 7/13/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<6.26E-01	0.00E+00	6.26E-01
548071	7/13/2021 - 7/20/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	2.77E-01	1.68E-01	6.81E-02
548495	7/20/2021 - 7/27/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<4.37E-01	0.00E+00	4.37E-01
548706	7/27/2021 - 8/3/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.77E-02	0.00E+00	2.77E-02
		Cs-137	<2.83E-02	0.00E+00	2.83E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	2.89E-01	2.57E-01	3.82E-01
548946	8/3/2021 - 8/10/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<8.03E-02	0.00E+00	8.03E-02
		K-40	6.53E-01	2.57E-01	6.56E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549237	8/10/2021 - 8/17/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	<5.94E-01	0.00E+00	5.94E-01
549736	8/17/2021 - 8/24/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<4.16E-01	0.00E+00	4.16E-01
550012	8/24/2021 - 8/31/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<3.06E-02	0.00E+00	3.06E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	7.42E-01	2.82E-01	6.94E-02
550642	8/31/2021 - 9/7/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
551005	9/7/2021 - 9/14/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<3.18E-02	0.00E+00	3.18E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	7.33E-01	2.79E-01	6.85E-02
551636	9/14/2021 - 9/21/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.74E-01	0.00E+00	5.74E-01
552262	9/21/2021 - 9/28/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<2.24E-02	0.00E+00	2.24E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	3.84E-01	2.01E-01	6.94E-02
552431	9/28/2021 - 10/5/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01
552742	10/5/2021 - 10/12/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	5.10E-01	2.32E-01	6.91E-02
553228	10/12/2021 - 10/19/2021	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553228	10/12/2021 - 10/19/2021	Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<4.35E-01	0.00E+00	4.35E-01
553817	10/19/2021 - 10/26/2021	I-131	<3.72E-02	0.00E+00	3.72E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<2.68E-02	0.00E+00	2.68E-02
		Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	<5.53E-01	0.00E+00	5.53E-01
554261	10/26/2021 - 11/2/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<3.17E-02	0.00E+00	3.17E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	<5.79E-01	0.00E+00	5.79E-01
554571	11/2/2021 - 11/9/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-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	2.19E-01	1.88E-01	2.57E-01
555056	11/9/2021 - 11/16/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
555919	11/16/2021 - 11/23/2021	I-131	<3.07E-02	0.00E+00	3.07E-02
		Cs-134	<5.36E-03	0.00E+00	5.36E-03
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<4.81E-01	0.00E+00	4.81E-01
556723	11/23/2021 - 11/30/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.48E-01	0.00E+00	1.47E-01
		K-40	<3.51E-01	0.00E+00	3.51E-01
557039	11/30/2021 - 12/8/2021	I-131	<3.92E-02	0.00E+00	3.92E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<2.25E-02	0.00E+00	2.25E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	<4.71E-01	0.00E+00	4.71E-01
557464	12/8/2021 - 12/14/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<6.24E-03	0.00E+00	6.24E-03
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<5.42E-01	0.00E+00	5.42E-01
557931	12/14/2021 - 12/21/2021	I-131	<3.83E-02	0.00E+00	3.83E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.84E-02	0.00E+00	2.84E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	5.37E-01	2.74E-01	2.93E-01

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 205 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558372	12/21/2021 - 12/28/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<4.61E-01	0.00E+00	4.61E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558587	12/28/2021 - 1/4/2022	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<3.36E-02	0.00E+00	3.36E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	4.52E-01	2.67E-01	3.22E-01

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536534	12/29/2020 - 1/5/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	3.78E-01	2.03E-01	2.70E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536730	1/5/2021 - 1/12/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	5.39E-01	1.90E-01	1.69E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537276	1/12/2021 - 1/19/2021	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	<7.44E-02	0.00E+00	7.44E-02
		K-40	6.24E-01	2.10E-01	2.02E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537647	1/19/2021 - 1/26/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.26E-01	1.69E-01	1.66E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538039	1/26/2021 - 2/2/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	4.34E-01	1.65E-01	1.39E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538287	2/2/2021 - 2/9/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	5.11E-01	1.78E-01	1.36E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538499	2/9/2021 - 2/16/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	7.35E-01	2.50E-01	2.78E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538784	2/16/2021 - 2/23/2021	I-131	<2.17E-02	0.00E+00	2.17E-02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538784	2/16/2021 - 2/23/2021	Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	4.66E-01	1.94E-01	2.18E-01
539024	2/23/2021 - 3/2/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.96E-01	1.81E-01	1.61E-01
539235	3/2/2021 - 3/9/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.74E-01	1.91E-01	1.37E-01
540016	3/9/2021 - 3/16/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	4.93E-01	1.79E-01	1.44E-01
540687	3/16/2021 - 3/23/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.19E-01	1.76E-01	1.88E-01
541399	3/23/2021 - 3/30/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<9.53E-03	0.00E+00	9.53E-03
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<8.88E-02	0.00E+00	8.88E-02
		K-40	4.76E-01	1.92E-01	2.01E-01
541898	3/30/2021 - 4/6/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<9.02E-02	0.00E+00	9.02E-02
		K-40	2.50E-01	1.64E-01	2.28E-01
542205	4/6/2021 - 4/13/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<8.04E-02	0.00E+00	8.04E-02
		K-40	3.62E-01	1.38E-01	3.38E-02
542839	4/13/2021 - 4/20/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	6.87E-01	2.16E-01	1.96E-01
543226	4/20/2021 - 4/27/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<3.20E-02	0.00E+00	3.20E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
543226	4/20/2021 - 4/27/2021	K-40	<5.28E-01	0.00E+00	5.28E-01
544084	4/27/2021 - 5/4/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
544278	5/4/2021 - 5/11/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<4.46E-01	0.00E+00	4.46E-01
544609	5/11/2021 - 5/18/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<4.99E-01	0.00E+00	4.99E-01
544988	5/18/2021 - 5/25/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<3.02E-02	0.00E+00	3.02E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<4.80E-01	0.00E+00	4.80E-01
545473	5/25/2021 - 6/1/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<1.91E-02	0.00E+00	1.91E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	<4.45E-01	0.00E+00	4.45E-01
545763	6/1/2021 - 6/8/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<3.03E-02	0.00E+00	3.03E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	<4.78E-01	0.00E+00	4.78E-01
546002	6/8/2021 - 6/15/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<1.91E-02	0.00E+00	1.91E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<6.14E-01	0.00E+00	6.14E-01
546873	6/15/2021 - 6/22/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<5.17E-03	0.00E+00	5.17E-03
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<4.48E-01	0.00E+00	4.48E-01
547164	6/22/2021 - 6/29/2021	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	<4.75E-01	0.00E+00	4.75E-01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547440	6/29/2021 - 7/6/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	5.23E-01	2.76E-01	3.13E-01
547683	7/6/2021 - 7/13/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<5.07E-01	0.00E+00	5.07E-01
548072	7/13/2021 - 7/20/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<3.33E-02	0.00E+00	3.33E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
548496	7/20/2021 - 7/27/2021	I-131	<3.43E-02	0.00E+00	3.43E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.81E-02	0.00E+00	2.81E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	<5.99E-01	0.00E+00	5.99E-01
548707	7/27/2021 - 8/3/2021	I-131	<3.57E-02	0.00E+00	3.57E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	6.66E-01	2.96E-01	2.81E-01
548947	8/3/2021 - 8/10/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	8.99E-01	3.04E-01	6.59E-02
549238	8/10/2021 - 8/17/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.63E-02	0.00E+00	2.63E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	2.59E-01	2.18E-01	3.04E-01
549737	8/17/2021 - 8/24/2021	I-131	<3.37E-02	0.00E+00	3.37E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<2.18E-01	0.00E+00	2.18E-01
		K-40	<4.46E-01	0.00E+00	4.46E-01
550013	8/24/2021 - 8/31/2021	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	4.14E-01	2.72E-01	3.59E-01
550643	8/31/2021 - 9/7/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550643	8/31/2021 - 9/7/2021	Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
551006	9/7/2021 - 9/14/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	4.05E-01	2.65E-01	3.48E-01
551637	9/14/2021 - 9/21/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<3.28E-02	0.00E+00	3.28E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	3.83E-01	2.13E-01	2.06E-01
552263	9/21/2021 - 9/28/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<5.29E-01	0.00E+00	5.29E-01
552432	9/28/2021 - 10/5/2021	I-131	<2.75E-02	0.00E+00	2.75E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.87E-02	0.00E+00	2.87E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	3.04E-01	2.81E-01	4.28E-01
552743	10/5/2021 - 10/12/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	<5.21E-01	0.00E+00	5.21E-01
553229	10/12/2021 - 10/19/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	2.44E-01	2.08E-01	2.86E-01
553818	10/19/2021 - 10/26/2021	I-131	<4.69E-02	0.00E+00	4.69E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	6.84E-01	2.64E-01	6.62E-02
554262	10/26/2021 - 11/2/2021	I-131	<3.38E-02	0.00E+00	3.38E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<5.80E-01	0.00E+00	5.80E-01
554572	11/2/2021 - 11/9/2021	I-131	<2.82E-02	0.00E+00	2.82E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<2.29E-01	0.00E+00	2.29E-01
		K-40	<4.11E-01	0.00E+00	4.11E-01

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 206 [CONTROL - NW @ 11.3 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
555057	11/9/2021 - 11/16/2021		I-131	<2.57E-02	0.00E+00	2.57E-02
			Cs-134	<2.50E-02	0.00E+00	2.50E-02
			Cs-137	<2.47E-02	0.00E+00	2.47E-02
			Be-7	<1.55E-01	0.00E+00	1.55E-01
			K-40	<5.65E-01	0.00E+00	5.65E-01
555920	11/16/2021 - 11/23/2021		I-131	<4.33E-02	0.00E+00	4.33E-02
			Cs-134	<2.71E-02	0.00E+00	2.71E-02
			Cs-137	<3.32E-02	0.00E+00	3.32E-02
			Be-7	<2.13E-01	0.00E+00	2.13E-01
			K-40	5.27E-01	2.55E-01	2.41E-01
556724	11/23/2021 - 11/30/2021		I-131	<2.82E-02	0.00E+00	2.82E-02
			Cs-134	<2.88E-02	0.00E+00	2.88E-02
			Cs-137	<2.48E-02	0.00E+00	2.48E-02
			Be-7	<1.55E-01	0.00E+00	1.55E-01
			K-40	3.67E-01	2.45E-01	3.08E-01
557040	11/30/2021 - 12/7/2021		I-131	<4.30E-02	0.00E+00	4.30E-02
			Cs-134	<2.72E-02	0.00E+00	2.72E-02
			Cs-137	<2.15E-02	0.00E+00	2.15E-02
			Be-7	<1.84E-01	0.00E+00	1.84E-01
			K-40	2.21E-01	2.61E-01	4.19E-01
557465	12/7/2021 - 12/14/2021		I-131	<3.18E-02	0.00E+00	3.18E-02
			Cs-134	<2.07E-02	0.00E+00	2.07E-02
			Cs-137	<2.34E-02	0.00E+00	2.34E-02
			Be-7	<1.33E-01	0.00E+00	1.33E-01
			K-40	5.25E-01	2.59E-01	2.58E-01
557932	12/14/2021 - 12/21/2021		I-131	<5.46E-02	0.00E+00	5.46E-02
			Cs-134	<2.33E-02	0.00E+00	2.33E-02
			Cs-137	<2.61E-02	0.00E+00	2.61E-02
			Be-7	<1.75E-01	0.00E+00	1.75E-01
			K-40	<6.28E-01	0.00E+00	6.28E-01
558373	12/21/2021 - 12/28/2021		I-131	<2.96E-02	0.00E+00	2.96E-02
			Cs-134	<2.07E-02	0.00E+00	2.07E-02
			Cs-137	<2.60E-02	0.00E+00	2.60E-02
			Be-7	<2.10E-01	0.00E+00	2.10E-01
			K-40	<6.51E-01	0.00E+00	6.51E-01
558588	12/28/2021 - 1/4/2022		I-131	<2.89E-02	0.00E+00	2.89E-02
			Cs-134	<2.72E-02	0.00E+00	2.72E-02
			Cs-137	<2.32E-02	0.00E+00	2.32E-02
			Be-7	<2.18E-01	0.00E+00	2.18E-01
			K-40	6.49E-01	2.84E-01	2.46E-01

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

Sample Point 700 [INDICATOR - SSW @ 5.5 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
547219	5/20/2021 - 5/20/2021		Mn-54	<5.11E+01	0.00E+00	5.11E+01
			Co-58	<6.54E+01	0.00E+00	6.54E+01
			Fe-59	<1.23E+02	0.00E+00	1.23E+02
			Co-60	<3.66E+01	0.00E+00	3.66E+01
			Zn-65	<1.29E+02	0.00E+00	1.29E+02
			Nb-95	<9.60E+01	0.00E+00	9.60E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 700 [INDICATOR - SSW @ 5.5 miles]

Sample ID:	547219	Sample Dates:	5/20/2021 - 5/20/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					I-131	<2.49E+02	0.00E+00	2.49E+02
					Cs-134	<4.79E+01	0.00E+00	4.79E+01
					Cs-137	<7.90E+01	0.00E+00	7.90E+01
					Be-7	<5.35E+02	0.00E+00	5.35E+02
					K-40	4.96E+03	1.10E+03	6.00E+02
					Ag-110M	<5.59E+01	0.00E+00	5.59E+01
					Sb-122	<1.02E+04	0.00E+00	1.02E+04
					Sb-125	<1.68E+02	0.00E+00	1.68E+02

Sample ID:	558172	Sample Dates:	11/9/2021 - 11/9/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<4.17E+01	0.00E+00	4.17E+01
					Co-58	<4.16E+01	0.00E+00	4.16E+01
					Fe-59	<1.31E+02	0.00E+00	1.31E+02
					Co-60	<4.27E+01	0.00E+00	4.27E+01
					Zn-65	<1.04E+02	0.00E+00	1.04E+02
					Nb-95	<7.87E+01	0.00E+00	7.87E+01
					I-131	<3.34E+02	0.00E+00	3.34E+02
					Cs-134	<5.88E+01	0.00E+00	5.88E+01
					Cs-137	<5.77E+01	0.00E+00	5.77E+01
					Be-7	<4.37E+02	0.00E+00	4.37E+02
					K-40	2.80E+03	8.39E+02	8.64E+02
					Ag-110M	<4.17E+01	0.00E+00	4.17E+01
					Sb-122	<1.73E+04	0.00E+00	1.73E+04
					Sb-125	<1.29E+02	0.00E+00	1.29E+02

Sample Point 701 [INDICATOR - SSW @ 5.5 miles]

Sample ID:	547220	Sample Dates:	5/20/2021 - 5/20/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.89E+01	0.00E+00	6.89E+01
					Co-58	<4.65E+01	0.00E+00	4.65E+01
					Fe-59	<1.28E+02	0.00E+00	1.28E+02
					Co-60	<3.83E+01	0.00E+00	3.83E+01
					Zn-65	<1.52E+02	0.00E+00	1.52E+02
					Nb-95	<1.04E+02	0.00E+00	1.04E+02
					I-131	<2.84E+02	0.00E+00	2.84E+02
					Cs-134	<3.07E+01	0.00E+00	3.07E+01
					Cs-137	<6.58E+01	0.00E+00	6.58E+01
					Be-7	<4.96E+02	0.00E+00	4.96E+02
					K-40	3.62E+03	1.12E+03	1.21E+03
					Ag-110M	<6.97E+01	0.00E+00	6.97E+01
					Sb-122	<1.07E+04	0.00E+00	1.07E+04
					Sb-125	<1.49E+02	0.00E+00	1.49E+02

Sample ID:	558173	Sample Dates:	11/9/2021 - 11/9/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<5.03E+01	0.00E+00	5.03E+01
					Co-58	<5.89E+01	0.00E+00	5.89E+01
					Fe-59	<1.14E+02	0.00E+00	1.14E+02
					Co-60	<7.23E+01	0.00E+00	7.23E+01
					Zn-65	<1.69E+02	0.00E+00	1.69E+02
					Nb-95	<8.39E+01	0.00E+00	8.39E+01
					I-131	<3.86E+02	0.00E+00	3.86E+02
					Cs-134	<8.54E+01	0.00E+00	8.54E+01
					Cs-137	<4.72E+01	0.00E+00	4.72E+01
					Be-7	<5.26E+02	0.00E+00	5.26E+02
					K-40	5.29E+03	1.09E+03	1.29E+02
					Ag-110M	<5.51E+01	0.00E+00	5.51E+01
					Sb-122	<2.28E+04	0.00E+00	2.28E+04
					Sb-125	<1.51E+02	0.00E+00	1.51E+02

Sample Point 702 [INDICATOR - SSW @ 5.5 miles]

Sample ID:	547221	Sample Dates:	5/20/2021 - 5/20/2021	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<5.00E+01	0.00E+00	5.00E+01
					Co-58	<7.51E+01	0.00E+00	7.51E+01
					Fe-59	<8.58E+01	0.00E+00	8.58E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 702 [INDICATOR - SSW @ 5.5 miles]

Sample ID:	547221	Sample Dates:	5/20/2021 - 5/20/2021	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Co-60	<6.08E+01	0.00E+00	6.08E+01
					Zn-65	<1.47E+02	0.00E+00	1.47E+02
					Nb-95	<7.18E+01	0.00E+00	7.19E+01
					I-131	<3.04E+02	0.00E+00	3.04E+02
					Cs-134	<6.88E+01	0.00E+00	6.88E+01
					Cs-137	<4.73E+01	0.00E+00	4.73E+01
					Be-7	<3.47E+02	0.00E+00	3.47E+02
					K-40	3.44E+03	1.10E+03	1.14E+03
					Ag-110M	<5.83E+01	0.00E+00	5.83E+01
					Sb-122	<9.77E+03	0.00E+00	9.77E+03
					Sb-125	<1.38E+02	0.00E+00	1.38E+02

Sample ID:	558174	Sample Dates:	11/9/2021 - 11/9/2021	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<5.49E+01	0.00E+00	5.49E+01
					Co-58	<5.54E+01	0.00E+00	5.54E+01
					Fe-59	<1.43E+02	0.00E+00	1.43E+02
					Co-60	<5.76E+01	0.00E+00	5.76E+01
					Zn-65	<1.47E+02	0.00E+00	1.47E+02
					Nb-95	<7.38E+01	0.00E+00	7.38E+01
					I-131	<3.34E+02	0.00E+00	3.34E+02
					Cs-134	<5.17E+01	0.00E+00	5.17E+01
					Cs-137	<6.86E+01	0.00E+00	6.86E+01
					Be-7	<5.00E+02	0.00E+00	5.00E+02
					K-40	5.20E+03	1.11E+03	7.45E+02
					Ag-110M	<2.96E+01	0.00E+00	2.96E+01
					Sb-122	<2.13E+04	0.00E+00	2.13E+04
					Sb-125	<1.36E+02	0.00E+00	1.36E+02

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

Sample ID:	547222	Sample Dates:	5/20/2021 - 5/20/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.38E+01	0.00E+00	6.38E+01
					Co-58	<8.90E+01	0.00E+00	8.90E+01
					Fe-59	<1.79E+02	0.00E+00	1.79E+02
					Co-60	<8.25E+01	0.00E+00	8.25E+01
					Zn-65	<1.60E+02	0.00E+00	1.60E+02
					Nb-95	<9.59E+01	0.00E+00	9.59E+01
					I-131	<2.72E+02	0.00E+00	2.72E+02
					Cs-134	<7.71E+01	0.00E+00	7.71E+01
					Cs-137	<6.91E+01	0.00E+00	6.91E+01
					Be-7	<5.47E+02	0.00E+00	5.47E+02
					K-40	4.66E+03	1.25E+03	1.18E+03
					Ag-110M	<6.45E+01	0.00E+00	6.45E+01
					Sb-122	<8.88E+03	0.00E+00	8.88E+03
					Sb-125	<1.47E+02	0.00E+00	1.47E+02

Sample ID:	558175	Sample Dates:	11/9/2021 - 11/9/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.70E+01	0.00E+00	6.70E+01
					Co-58	<5.97E+01	0.00E+00	5.97E+01
					Fe-59	<1.51E+02	0.00E+00	1.51E+02
					Co-60	<8.55E+01	0.00E+00	8.55E+01
					Zn-65	<2.07E+02	0.00E+00	2.07E+02
					Nb-95	<1.17E+02	0.00E+00	1.17E+02
					I-131	<4.48E+02	0.00E+00	4.48E+02
					Cs-134	<6.52E+01	0.00E+00	6.52E+01
					Cs-137	<7.46E+01	0.00E+00	7.46E+01
					Be-7	<6.03E+02	0.00E+00	6.03E+02
					K-40	4.02E+03	1.14E+03	1.03E+03
					Ag-110M	<4.91E+01	0.00E+00	4.91E+01
					Sb-122	<3.43E+04	0.00E+00	3.43E+04
					Sb-125	<1.74E+02	0.00E+00	1.74E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	547223	Sample Dates:	5/20/2021 - 5/20/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.21E+01	0.00E+00	6.21E+01
					Co-58	<7.06E+01	0.00E+00	7.06E+01
					Fe-59	<8.08E+01	0.00E+00	8.08E+01
					Co-60	<5.74E+01	0.00E+00	5.74E+01
					Zn-65	<1.71E+02	0.00E+00	1.71E+02
					Nb-95	<8.96E+01	0.00E+00	8.96E+01
					I-131	<2.28E+02	0.00E+00	2.28E+02
					Cs-134	<8.67E+01	0.00E+00	8.67E+01
					Cs-137	<5.88E+01	0.00E+00	5.88E+01
					Be-7	<5.52E+02	0.00E+00	5.52E+02
					K-40	3.46E+03	9.91E+02	8.31E+02
					Ag-110M	<6.96E+01	0.00E+00	6.96E+01
					Sb-122	<9.01E+03	0.00E+00	9.01E+03
					Sb-125	<1.42E+02	0.00E+00	1.42E+02

Sample ID:	558176	Sample Dates:	11/9/2021 - 11/9/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.39E+01	0.00E+00	3.39E+01
					Co-58	<4.10E+01	0.00E+00	4.10E+01
					Fe-59	<1.00E+02	0.00E+00	1.00E+02
					Co-60	<4.58E+01	0.00E+00	4.58E+01
					Zn-65	<8.60E+01	0.00E+00	8.60E+01
					Nb-95	<5.21E+01	0.00E+00	5.21E+01
					I-131	<1.91E+02	0.00E+00	1.91E+02
					Cs-134	<4.55E+01	0.00E+00	4.55E+01
					Cs-137	<3.93E+01	0.00E+00	3.93E+01
					Be-7	<3.12E+02	0.00E+00	3.12E+02
					K-40	3.44E+03	6.79E+02	5.06E+02
					Ag-110M	<3.36E+01	0.00E+00	3.36E+01
					Sb-122	<1.95E+04	0.00E+00	1.95E+04
					Sb-125	<9.47E+01	0.00E+00	9.47E+01

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

Sample ID:	547224	Sample Dates:	5/20/2021 - 5/20/2021	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.82E+01	0.00E+00	6.82E+01
					Co-58	<9.02E+01	0.00E+00	9.02E+01
					Fe-59	<1.34E+02	0.00E+00	1.34E+02
					Co-60	<4.61E+01	0.00E+00	4.61E+01
					Zn-65	<1.20E+02	0.00E+00	1.20E+02
					Nb-95	<8.65E+01	0.00E+00	8.65E+01
					I-131	<2.49E+02	0.00E+00	2.49E+02
					Cs-134	<5.83E+01	0.00E+00	5.83E+01
					Cs-137	<5.72E+01	0.00E+00	5.72E+01
					Be-7	<5.54E+02	0.00E+00	5.54E+02
					K-40	4.66E+03	1.10E+03	7.61E+02
					Ag-110M	<5.59E+01	0.00E+00	5.59E+01
					Sb-122	<1.04E+04	0.00E+00	1.04E+04
					Sb-125	<1.68E+02	0.00E+00	1.68E+02

Sample ID:	558177	Sample Dates:	11/9/2021 - 11/9/2021	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.10E+01	0.00E+00	6.10E+01
					Co-58	<8.77E+01	0.00E+00	8.77E+01
					Fe-59	<8.35E+01	0.00E+00	8.35E+01
					Co-60	<3.81E+01	0.00E+00	3.81E+01
					Zn-65	<1.04E+02	0.00E+00	1.04E+02
					Nb-95	<8.59E+01	0.00E+00	8.59E+01
					I-131	<3.78E+02	0.00E+00	3.78E+02
					Cs-134	<6.32E+01	0.00E+00	6.32E+01
					Cs-137	<5.73E+01	0.00E+00	5.73E+01
					Be-7	<4.07E+02	0.00E+00	4.07E+02
					K-40	4.71E+03	1.08E+03	5.68E+02
					Ag-110M	<4.80E+01	0.00E+00	4.80E+01
					Sb-122	<2.28E+04	0.00E+00	2.28E+04
					Sb-125	<1.57E+02	0.00E+00	1.57E+02

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	547225	Sample Dates:	5/25/2021 - 5/25/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<4.04E+01	0.00E+00	4.04E+01
					Co-58	<5.53E+01	0.00E+00	5.53E+01
					Fe-59	<9.48E+01	0.00E+00	9.48E+01
					Co-60	<4.28E+01	0.00E+00	4.28E+01
					Zn-65	<1.19E+02	0.00E+00	1.19E+02
					Nb-95	<6.75E+01	0.00E+00	6.75E+01
					I-131	<1.27E+02	0.00E+00	1.27E+02
					Cs-134	<5.92E+01	0.00E+00	5.92E+01
					Cs-137	<5.11E+01	0.00E+00	5.11E+01
					Be-7	<4.11E+02	0.00E+00	4.11E+02
					K-40	2.93E+03	7.70E+02	1.24E+02
					Ag-110M	<4.18E+01	0.00E+00	4.18E+01
					Sb-122	<2.54E+03	0.00E+00	2.54E+03
					Sb-125	<1.31E+02	0.00E+00	1.31E+02

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

Sample ID:	547226	Sample Dates:	5/25/2021 - 5/25/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.79E+01	0.00E+00	6.79E+01
					Co-58	<5.59E+01	0.00E+00	5.59E+01
					Fe-59	<1.23E+02	0.00E+00	1.23E+02
					Co-60	<5.79E+01	0.00E+00	5.79E+01
					Zn-65	<9.07E+01	0.00E+00	9.07E+01
					Nb-95	<8.82E+01	0.00E+00	8.82E+01
					I-131	<1.72E+02	0.00E+00	1.72E+02
					Cs-134	<7.83E+01	0.00E+00	7.83E+01
					Cs-137	<5.27E+01	0.00E+00	5.27E+01
					Be-7	<6.62E+02	0.00E+00	6.62E+02
					K-40	3.75E+03	1.08E+03	9.90E+02
					Ag-110M	<5.16E+01	0.00E+00	5.16E+01
					Sb-122	<2.48E+03	0.00E+00	2.48E+03
					Sb-125	<1.64E+02	0.00E+00	1.64E+02

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

Sample ID:	547227	Sample Dates:	5/25/2021 - 5/25/2021	INVERTEBRA	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<7.26E+01	0.00E+00	7.26E+01
					Co-58	<7.56E+01	0.00E+00	7.56E+01
					Fe-59	<1.71E+02	0.00E+00	1.71E+02
					Co-60	<7.86E+01	0.00E+00	7.86E+01
					Zn-65	<1.54E+02	0.00E+00	1.54E+02
					Nb-95	<9.12E+01	0.00E+00	9.12E+01
					I-131	<1.65E+02	0.00E+00	1.65E+02
					Cs-134	<8.75E+01	0.00E+00	8.75E+01
					Cs-137	<7.56E+01	0.00E+00	7.56E+01
					Be-7	<5.08E+02	0.00E+00	5.08E+02
					K-40	3.82E+03	1.15E+03	1.11E+03
					Ag-110M	<6.09E+01	0.00E+00	6.09E+01
					Sb-122	<2.52E+03	0.00E+00	2.52E+03
					Sb-125	<1.65E+02	0.00E+00	1.65E+02

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

Sample Point 404 [INDICATOR - SW @ 0.16 miles]

Sample ID:	538720	Sample Dates:	3/8/2021 - 3/8/2021		Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.76E+00	0.00E+00	6.76E+00
					Co-58	<4.60E+00	0.00E+00	4.60E+00
					Fe-59	<1.19E+01	0.00E+00	1.19E+01
					Co-60	<5.83E+00	0.00E+00	5.83E+00
					Zn-65	<1.17E+01	0.00E+00	1.17E+01
					Zr-95	<8.93E+00	0.00E+00	8.93E+00
					Nb-95	<6.15E+00	0.00E+00	6.15E+00
					I-131	<1.00E+01	0.00E+00	1.00E+01
					Cs-134	<5.72E+00	0.00E+00	5.72E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 404 [INDICATOR - SW @ 0.16 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538720	3/8/2021 - 3/8/2021	Cs-137	<4.52E+00	0.00E+00	4.52E+00
		BaLa-140	<9.80E+00	0.00E+00	9.80E+00
		Total-Gam	0.00E+00		
		H3GW	<-1.5E+01	0.00E+00	1.87E+02
544933	6/3/2021 - 6/3/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3GW	<2.82E+01	0.00E+00	1.84E+02
549705	9/6/2021 - 9/6/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<5.86E+00	0.00E+00	5.86E+00
		Co-58	<5.73E+00	0.00E+00	5.73E+00
		Fe-59	<1.15E+01	0.00E+00	1.15E+01
		Co-60	<5.07E+00	0.00E+00	5.07E+00
		Zn-65	<1.25E+01	0.00E+00	1.25E+01
		Zr-95	<1.29E+01	0.00E+00	1.29E+01
		Nb-95	<8.07E+00	0.00E+00	8.07E+00
		I-131	<1.01E+01	0.00E+00	1.01E+01
		Cs-134	<7.84E+00	0.00E+00	7.84E+00
		Cs-137	<6.27E+00	0.00E+00	6.27E+00
		BaLa-140	<9.98E+00	0.00E+00	9.98E+00
		Total-Gam	0.00E+00		
		H3GW	<-6.0E+01	0.00E+00	1.90E+02
555865	12/7/2021 - 12/7/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3GW	<9.53E+01	0.00E+00	1.75E+02

Sample Point 407 [INDICATOR - ENE @ 0.06 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538721	3/9/2021 - 3/9/2021	Mn-54	<5.03E+00	0.00E+00	5.03E+00
		Co-58	<5.21E+00	0.00E+00	5.21E+00
		Fe-59	<1.02E+01	0.00E+00	1.02E+01
		Co-60	<5.12E+00	0.00E+00	5.12E+00
		Zn-65	<9.09E+00	0.00E+00	9.09E+00
		Zr-95	<9.91E+00	0.00E+00	9.91E+00
		Nb-95	<7.67E+00	0.00E+00	7.67E+00
		I-131	<8.49E+00	0.00E+00	8.49E+00
		Cs-134	<5.07E+00	0.00E+00	5.07E+00
		Cs-137	<4.66E+00	0.00E+00	4.66E+00
		BaLa-140	<7.87E+00	0.00E+00	7.87E+00
		Total-Gam	0.00E+00		
		H3GW	<1.85E+02	0.00E+00	1.86E+02
		544934	6/8/2021 - 6/8/2021	Nuclide	Activity
H3GW	<1.16E+02			0.00E+00	1.90E+02
549706	9/7/2021 - 9/7/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<6.66E+00	0.00E+00	6.66E+00
		Co-58	<5.19E+00	0.00E+00	5.19E+00
		Fe-59	<1.27E+01	0.00E+00	1.27E+01
		Co-60	<5.05E+00	0.00E+00	5.05E+00
		Zn-65	<1.39E+01	0.00E+00	1.39E+01
		Zr-95	<9.04E+00	0.00E+00	9.04E+00
		Nb-95	<5.71E+00	0.00E+00	5.71E+00
		I-131	<7.23E+00	0.00E+00	7.23E+00
		Cs-134	<6.27E+00	0.00E+00	6.27E+00
		Cs-137	<6.01E+00	0.00E+00	6.01E+00
		BaLa-140	<6.32E+00	0.00E+00	6.32E+00
		Total-Gam	0.00E+00		
		H3GW	2.56E+02	1.18E+02	1.89E+02
555866	12/15/2021 - 12/15/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3GW	3.32E+02	1.12E+02	1.75E+02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 409 [INDICATOR - NE @ 0.65 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538722	3/8/2021 - 3/8/2021	Mn-54	<5.89E+00	0.00E+00	5.89E+00
		Co-58	<4.74E+00	0.00E+00	4.74E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<5.98E+00	0.00E+00	5.98E+00
		Zn-65	<1.14E+01	0.00E+00	1.14E+01
		Zr-95	<8.77E+00	0.00E+00	8.77E+00
		Nb-95	<7.33E+00	0.00E+00	7.33E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<5.88E+00	0.00E+00	5.88E+00
		Cs-137	<5.69E+00	0.00E+00	5.69E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Total-Gam	0.00E+00		
		H3GW	<-7.2E+01	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544935	6/7/2021 - 6/7/2021	H3GW	<5.16E+01	0.00E+00	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549707	9/3/2021 - 9/3/2021	Mn-54	<5.29E+00	0.00E+00	5.29E+00
		Co-58	<4.45E+00	0.00E+00	4.45E+00
		Fe-59	<1.15E+01	0.00E+00	1.15E+01
		Co-60	<5.27E+00	0.00E+00	5.27E+00
		Zn-65	<1.09E+01	0.00E+00	1.09E+01
		Zr-95	<1.08E+01	0.00E+00	1.08E+01
		Nb-95	<6.88E+00	0.00E+00	6.88E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<5.26E+00	0.00E+00	5.26E+00
		Cs-137	<5.59E+00	0.00E+00	5.59E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Total-Gam	0.00E+00		
		H3GW	<4.30E+01	0.00E+00	1.88E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555867	12/7/2021 - 12/7/2021	H3GW	<7.50E+01	0.00E+00	1.76E+02

Sample Point 410 [INDICATOR - NE @ 0.65 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538723	3/8/2021 - 3/8/2021	Mn-54	<5.34E+00	0.00E+00	5.34E+00
		Co-58	<5.58E+00	0.00E+00	5.58E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<6.21E+00	0.00E+00	6.21E+00
		Zn-65	<1.11E+01	0.00E+00	1.11E+01
		Zr-95	<1.01E+01	0.00E+00	1.01E+01
		Nb-95	<5.30E+00	0.00E+00	5.30E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<7.01E+00	0.00E+00	7.01E+00
		Cs-137	<5.17E+00	0.00E+00	5.17E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Total-Gam	0.00E+00		
		H3GW	<-6.7E+01	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544936	6/3/2021 - 6/3/2021	H3GW	<-7.1E+00	0.00E+00	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549708	9/3/2021 - 9/3/2021	Mn-54	<4.75E+00	0.00E+00	4.75E+00
		Co-58	<5.18E+00	0.00E+00	5.18E+00
		Fe-59	<9.78E+00	0.00E+00	9.78E+00
		Co-60	<5.23E+00	0.00E+00	5.23E+00
		Zn-65	<1.15E+01	0.00E+00	1.15E+01
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<7.18E+00	0.00E+00	7.18E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<5.45E+00	0.00E+00	5.45E+00

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 410 [INDICATOR - NE @ 0.65 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549708	9/3/2021 - 9/3/2021	Cs-137	<6.00E+00	0.00E+00	6.00E+00
		BaLa-140	<1.11E+01	0.00E+00	1.11E+01
		Total-Gam	0.00E+00		
		H3GW	<1.11E+02	0.00E+00	1.90E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555868	12/7/2021 - 12/7/2021	H3GW	<9.30E+01	0.00E+00	1.75E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538730	3/8/2021 - 3/8/2021	Mn-54	<5.28E+00	0.00E+00	5.28E+00
		Co-58	<6.36E+00	0.00E+00	6.36E+00
		Fe-59	<9.65E+00	0.00E+00	9.65E+00
		Co-60	<4.59E+00	0.00E+00	4.59E+00
		Zn-65	<9.96E+00	0.00E+00	9.96E+00
		Zr-95	<9.64E+00	0.00E+00	9.64E+00
		Nb-95	<6.77E+00	0.00E+00	6.77E+00
		I-131	<9.61E+00	0.00E+00	9.61E+00
		Cs-134	<8.46E+00	0.00E+00	8.46E+00
		Cs-137	<5.72E+00	0.00E+00	5.72E+00
		BaLa-140	<1.02E+01	0.00E+00	1.02E+01
		Total-Gam	0.00E+00		
		H3GW	1.92E+02	1.14E+02	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544944	6/7/2021 - 6/7/2021	H3GW	1.97E+02	1.13E+02	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549715	9/6/2021 - 9/6/2021	Mn-54	<5.33E+00	0.00E+00	5.33E+00
		Co-58	<4.56E+00	0.00E+00	4.56E+00
		Fe-59	<1.22E+01	0.00E+00	1.22E+01
		Co-60	<6.89E+00	0.00E+00	6.89E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<5.84E+00	0.00E+00	5.84E+00
		I-131	<8.95E+00	0.00E+00	8.95E+00
		Cs-134	<6.39E+00	0.00E+00	6.39E+00
		Cs-137	<6.07E+00	0.00E+00	6.07E+00
		BaLa-140	<6.60E+00	0.00E+00	6.60E+00
		Total-Gam	0.00E+00		
		H3GW	<1.63E+02	0.00E+00	1.89E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555876	12/7/2021 - 12/7/2021	H3GW	<8.87E+01	0.00E+00	1.86E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538732	3/8/2021 - 3/8/2021	Mn-54	<5.80E+00	0.00E+00	5.80E+00
		Co-58	<6.21E+00	0.00E+00	6.21E+00
		Fe-59	<1.35E+01	0.00E+00	1.35E+01
		Co-60	<5.04E+00	0.00E+00	5.04E+00
		Zn-65	<1.18E+01	0.00E+00	1.18E+01
		Zr-95	<9.80E+00	0.00E+00	9.80E+00
		Nb-95	<7.62E+00	0.00E+00	7.62E+00
		I-131	<9.77E+00	0.00E+00	9.77E+00
		Cs-134	<7.46E+00	0.00E+00	7.46E+00
		Cs-137	<6.63E+00	0.00E+00	6.63E+00
		BaLa-140	<1.04E+01	0.00E+00	1.04E+01
		Total-Gam	0.00E+00		
		H3GW	<-3.4E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544947	6/3/2021 - 6/3/2021	H3GW	<-5.4E+01	0.00E+00	1.84E+02

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

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

Sample ID:	549717	Sample Dates:	9/3/2021 - 9/3/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.07E+00	0.00E+00	5.07E+00
				Co-58	<6.28E+00	0.00E+00	6.28E+00
				Fe-59	<1.48E+01	0.00E+00	1.48E+01
				Co-60	<6.77E+00	0.00E+00	6.77E+00
				Zn-65	<7.09E+00	0.00E+00	7.09E+00
				Zr-95	<1.02E+01	0.00E+00	1.02E+01
				Nb-95	<6.39E+00	0.00E+00	6.39E+00
				I-131	<1.02E+01	0.00E+00	1.02E+01
				Cs-134	<5.90E+00	0.00E+00	5.90E+00
				Cs-137	<5.33E+00	0.00E+00	5.33E+00
				BaLa-140	<1.14E+01	0.00E+00	1.14E+01
				Total-Gam	0.00E+00		
				H3GW	<-1.4E+01	0.00E+00	1.88E+02

Sample ID:	555881	Sample Dates:	12/7/2021 - 12/7/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3GW	<-6.1E+01	0.00E+00	1.86E+02

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

Sample ID:	538733	Sample Dates:	3/8/2021 - 3/8/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<7.01E+00	0.00E+00	7.01E+00
				Co-58	<5.86E+00	0.00E+00	5.86E+00
				Fe-59	<1.21E+01	0.00E+00	1.21E+01
				Co-60	<5.50E+00	0.00E+00	5.50E+00
				Zn-65	<9.80E+00	0.00E+00	9.80E+00
				Zr-95	<1.16E+01	0.00E+00	1.16E+01
				Nb-95	<6.05E+00	0.00E+00	6.05E+00
				I-131	<1.16E+01	0.00E+00	1.16E+01
				Cs-134	<4.60E+00	0.00E+00	4.60E+00
				Cs-137	<7.49E+00	0.00E+00	7.49E+00
				BaLa-140	<1.09E+01	0.00E+00	1.09E+01
				Total-Gam	0.00E+00		
				H3GW	<-5.7E+01	0.00E+00	1.84E+02

Sample ID:	544948	Sample Dates:	6/3/2021 - 6/3/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3GW	<-7.1E+00	0.00E+00	1.84E+02

Sample ID:	549718	Sample Dates:	9/3/2021 - 9/3/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.82E+00	0.00E+00	5.82E+00
				Co-58	<5.10E+00	0.00E+00	5.10E+00
				Fe-59	<9.08E+00	0.00E+00	9.08E+00
				Co-60	<5.10E+00	0.00E+00	5.10E+00
				Zn-65	<1.15E+01	0.00E+00	1.15E+01
				Zr-95	<9.73E+00	0.00E+00	9.73E+00
				Nb-95	<5.85E+00	0.00E+00	5.85E+00
				I-131	<1.12E+01	0.00E+00	1.12E+01
				Cs-134	<4.97E+00	0.00E+00	4.97E+00
				Cs-137	<5.34E+00	0.00E+00	5.34E+00
				BaLa-140	<8.39E+00	0.00E+00	8.39E+00
				Total-Gam	0.00E+00		
				H3GW	<-7.2E+00	0.00E+00	1.90E+02

Sample ID:	555882	Sample Dates:	12/7/2021 - 12/7/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3GW	<-6.1E+01	0.00E+00	1.86E+02

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

Sample ID:	538735	Sample Dates:	3/8/2021 - 3/8/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<6.09E+00	0.00E+00	6.09E+00
				Co-58	<6.52E+00	0.00E+00	6.52E+00
				Fe-59	<1.15E+01	0.00E+00	1.15E+01
				Co-60	<5.25E+00	0.00E+00	5.25E+00
				Zn-65	<1.13E+01	0.00E+00	1.13E+01
				Zr-95	<1.02E+01	0.00E+00	1.02E+01
				Nb-95	<6.90E+00	0.00E+00	6.90E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538735	3/8/2021 - 3/8/2021	I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<5.55E+00	0.00E+00	5.55E+00
		Cs-137	<4.61E+00	0.00E+00	4.61E+00
		BaLa-140	<1.16E+01	0.00E+00	1.16E+01
		Total-Gam	0.00E+00		
		H3GW	<2.4E+00	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544950	6/3/2021 - 6/3/2021	H3GW	<2.11E+01	0.00E+00	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549720	9/6/2021 - 9/6/2021	Mn-54	<5.51E+00	0.00E+00	5.51E+00
		Co-58	<4.86E+00	0.00E+00	4.86E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<5.16E+00	0.00E+00	5.16E+00
		Zn-65	<1.11E+01	0.00E+00	1.11E+01
		Zr-95	<8.72E+00	0.00E+00	8.72E+00
		Nb-95	<6.57E+00	0.00E+00	6.57E+00
		I-131	<8.37E+00	0.00E+00	8.37E+00
		Cs-134	<6.16E+00	0.00E+00	6.16E+00
		Cs-137	<5.44E+00	0.00E+00	5.44E+00
		BaLa-140	<9.69E+00	0.00E+00	9.69E+00
		Total-Gam	0.00E+00		
		H3GW	<7.88E+01	0.00E+00	1.88E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555884	12/7/2021 - 12/7/2021	H3GW	<3.5E+01	0.00E+00	1.86E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538737	3/8/2021 - 3/8/2021	Mn-54	<5.04E+00	0.00E+00	5.04E+00
		Co-58	<4.44E+00	0.00E+00	4.44E+00
		Fe-59	<1.28E+01	0.00E+00	1.28E+01
		Co-60	<5.98E+00	0.00E+00	5.98E+00
		Zn-65	<1.37E+01	0.00E+00	1.37E+01
		Zr-95	<8.74E+00	0.00E+00	8.74E+00
		Nb-95	<7.97E+00	0.00E+00	7.97E+00
		I-131	<1.03E+01	0.00E+00	1.03E+01
		Cs-134	<7.58E+00	0.00E+00	7.58E+00
		Cs-137	<6.71E+00	0.00E+00	6.71E+00
		BaLa-140	<9.24E+00	0.00E+00	9.24E+00
		Total-Gam	0.00E+00		
		H3GW	3.16E+02	1.19E+02	1.87E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544951	6/7/2021 - 6/7/2021	H3GW	2.23E+02	1.14E+02	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549721	9/7/2021 - 9/7/2021	Mn-54	<6.07E+00	0.00E+00	6.07E+00
		Co-58	<6.92E+00	0.00E+00	6.92E+00
		Fe-59	<1.04E+01	0.00E+00	1.04E+01
		Co-60	<6.56E+00	0.00E+00	6.56E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<7.00E+00	0.00E+00	7.00E+00
		I-131	<9.53E+00	0.00E+00	9.53E+00
		Cs-134	<5.71E+00	0.00E+00	5.71E+00
		Cs-137	<6.07E+00	0.00E+00	6.07E+00
		BaLa-140	<9.56E+00	0.00E+00	9.56E+00
		Total-Gam	0.00E+00		
		H3GW	2.55E+02	1.18E+02	1.90E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555885	12/7/2021 - 12/7/2021	H3GW	<2.10E+01	0.00E+00	1.86E+02

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

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

Sample ID: 538738 Sample Dates: 3/9/2021 - 3/9/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.59E+00	0.00E+00	6.59E+00
Co-58	<5.72E+00	0.00E+00	5.72E+00
Fe-59	<9.91E+00	0.00E+00	9.91E+00
Co-60	<5.83E+00	0.00E+00	5.83E+00
Zn-65	<1.48E+01	0.00E+00	1.48E+01
Zr-95	<1.19E+01	0.00E+00	1.19E+01
Nb-95	<5.64E+00	0.00E+00	5.64E+00
I-131	<9.35E+00	0.00E+00	9.35E+00
Cs-134	<4.93E+00	0.00E+00	4.93E+00
Cs-137	<5.36E+00	0.00E+00	5.36E+00
BaLa-140	<7.70E+00	0.00E+00	7.70E+00
Total-Gam	0.00E+00		
H3GW	<1.39E+02	0.00E+00	1.86E+02

Sample ID: 544953 Sample Dates: 6/8/2021 - 6/8/2021

Nuclide	Activity	2 Sigma Error	MDA
H3GW	<1.39E+02	0.00E+00	1.88E+02

Sample ID: 549722 Sample Dates: 9/7/2021 - 9/7/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.07E+00	0.00E+00	6.07E+00
Co-58	<5.41E+00	0.00E+00	5.41E+00
Fe-59	<8.58E+00	0.00E+00	8.58E+00
Co-60	<5.59E+00	0.00E+00	5.59E+00
Zn-65	<1.13E+01	0.00E+00	1.13E+01
Zr-95	<9.84E+00	0.00E+00	9.84E+00
Nb-95	<5.71E+00	0.00E+00	5.71E+00
I-131	<8.16E+00	0.00E+00	8.16E+00
Cs-134	<5.88E+00	0.00E+00	5.88E+00
Cs-137	<3.85E+00	0.00E+00	3.85E+00
BaLa-140	<6.54E+00	0.00E+00	6.54E+00
Total-Gam	0.00E+00		
H3GW	<5.99E+01	0.00E+00	1.89E+02

Sample ID: 555887 Sample Dates: 12/9/2021 - 12/9/2021

Nuclide	Activity	2 Sigma Error	MDA
H3GW	<6.53E+01	0.00E+00	1.86E+02

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

Sample Point 500 [INDICATOR - SSW @ 5 miles]

Sample ID: 546061 Sample Dates: 5/13/2021 - 5/13/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.16E+01	0.00E+00	3.16E+01
Co-58	<4.19E+01	0.00E+00	4.19E+01
Fe-59	<1.27E+02	0.00E+00	1.27E+02
Co-60	<5.59E+01	0.00E+00	5.59E+01
Zn-65	<7.96E+01	0.00E+00	7.96E+01
Zr-95	<8.29E+01	0.00E+00	8.29E+01
Nb-95	<4.89E+01	0.00E+00	4.89E+01
I-131	<2.34E+02	0.00E+00	2.34E+02
Cs-134	<5.27E+01	0.00E+00	5.27E+01
Cs-137	<4.54E+01	0.00E+00	4.54E+01
Be-7	<4.04E+02	0.00E+00	4.04E+02
K-40	2.03E+03	6.34E+02	1.25E+02
Co-57	<3.21E+01	0.00E+00	3.21E+01
Mo-99	<4.07E+04	0.00E+00	4.07E+04
Ag-110M	<3.95E+01	0.00E+00	3.95E+01
Sb-122	<1.02E+04	0.00E+00	1.02E+04
Sb-125	<1.14E+02	0.00E+00	1.14E+02

Sample ID: 557536 Sample Dates: 11/17/2021 - 11/17/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<3.91E+01	0.00E+00	3.91E+01
Co-58	<4.12E+01	0.00E+00	4.12E+01
Fe-59	<1.19E+02	0.00E+00	1.19E+02
Co-60	<4.19E+01	0.00E+00	4.19E+01
Zn-65	<9.29E+01	0.00E+00	9.29E+01
Zr-95	<5.15E+01	0.00E+00	5.15E+01
Nb-95	<6.58E+01	0.00E+00	6.58E+01

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

Sample Point 500 [INDICATOR - SSW @ 5 miles]

Sample ID:	557536	Sample Dates:	11/17/2021 - 11/17/2021	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<1.41E+02	0.00E+00	1.41E+02
				Cs-134	<5.07E+01	0.00E+00	5.07E+01
				Cs-137	<4.69E+01	0.00E+00	4.69E+01
				Be-7	<3.79E+02	0.00E+00	3.79E+02
				K-40	1.72E+03	5.60E+02	3.75E+02
				Co-57	<2.67E+01	0.00E+00	2.67E+01
				Mo-99	<2.98E+04	0.00E+00	2.98E+04
				Ag-110M	<2.60E+01	0.00E+00	2.60E+01
				Sb-122	<5.45E+03	0.00E+00	5.45E+03
				Sb-125	<1.04E+02	0.00E+00	1.04E+02

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

Sample ID:	546059	Sample Dates:	5/19/2021 - 5/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<8.47E+01	0.00E+00	8.47E+01
				Co-58	<8.96E+01	0.00E+00	8.96E+01
				Fe-59	<1.72E+02	0.00E+00	1.72E+02
				Co-60	<9.00E+01	0.00E+00	9.00E+01
				Zn-65	<2.05E+02	0.00E+00	2.05E+02
				Zr-95	<1.93E+02	0.00E+00	1.93E+02
				Nb-95	<1.09E+02	0.00E+00	1.09E+02
				I-131	<2.27E+02	0.00E+00	2.27E+02
				Cs-134	<8.39E+01	0.00E+00	8.39E+01
				Cs-137	<1.14E+02	0.00E+00	1.14E+02
				Be-7	<6.47E+02	0.00E+00	6.47E+02
				K-40	1.05E+04	1.92E+03	1.27E+03
				Co-57	<5.73E+01	0.00E+00	5.73E+01
				Mo-99	<1.88E+04	0.00E+00	1.88E+04
				Ag-110M	<6.68E+01	0.00E+00	6.68E+01
				Sb-122	<3.99E+03	0.00E+00	3.99E+03
				Sb-125	<2.07E+02	0.00E+00	2.07E+02

Sample ID:	557537	Sample Dates:	11/17/2021 - 11/17/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<7.23E+01	0.00E+00	7.23E+01
				Co-58	<9.25E+01	0.00E+00	9.25E+01
				Fe-59	<1.89E+02	0.00E+00	1.89E+02
				Co-60	<7.51E+01	0.00E+00	7.51E+01
				Zn-65	<1.19E+02	0.00E+00	1.19E+02
				Zr-95	<1.46E+02	0.00E+00	1.46E+02
				Nb-95	<1.07E+02	0.00E+00	1.07E+02
				I-131	<3.36E+02	0.00E+00	3.36E+02
				Cs-134	<8.48E+01	0.00E+00	8.48E+01
				Cs-137	<8.82E+01	0.00E+00	8.82E+01
				Be-7	<5.64E+02	0.00E+00	5.64E+02
				K-40	1.07E+04	1.95E+03	7.16E+02
				Co-57	<5.50E+01	0.00E+00	5.50E+01
				Mo-99	<6.90E+04	0.00E+00	6.90E+04
				Ag-110M	<7.91E+01	0.00E+00	7.91E+01
				Sb-122	<1.08E+04	0.00E+00	1.08E+04
				Sb-125	<1.63E+02	0.00E+00	1.63E+02

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

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID:	538505	Sample Dates:	1/5/2021 - 2/3/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<1.63E+00	0.00E+00	1.63E+00
				Co-58	<3.34E+00	0.00E+00	3.34E+00
				Fe-59	<7.04E+00	0.00E+00	7.04E+00
				Co-60	<2.59E+00	0.00E+00	2.59E+00
				Zn-65	<6.01E+00	0.00E+00	6.01E+00
				Zr-95	<4.13E+00	0.00E+00	4.13E+00
				Nb-95	<4.16E+00	0.00E+00	4.16E+00
				I-131	<1.17E+01	0.00E+00	1.17E+01
				Cs-134	<2.60E+00	0.00E+00	2.60E+00

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538505	1/5/2021 - 2/3/2021	Cs-137	<2.65E+00	0.00E+00	2.65E+00
		BaLa-140	<7.97E+00	0.00E+00	7.97E+00
		H3SW	<1.39E+02	0.00E+00	1.85E+02
540022	2/3/2021 - 3/1/2021	Mn-54	<3.06E+00	0.00E+00	3.06E+00
		Co-58	<2.87E+00	0.00E+00	2.87E+00
		Fe-59	<8.64E+00	0.00E+00	8.64E+00
		Co-60	<3.23E+00	0.00E+00	3.23E+00
		Zn-65	<5.22E+00	0.00E+00	5.22E+00
		Zr-95	<6.85E+00	0.00E+00	6.85E+00
		Nb-95	<4.58E+00	0.00E+00	4.59E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.00E+00	0.00E+00	3.00E+00
		Cs-137	<3.07E+00	0.00E+00	3.07E+00
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		H3SW	<3.54E+01	0.00E+00	1.81E+02
		542211	3/1/2021 - 4/1/2021	Mn-54	<1.91E+00
Co-58	<2.11E+00			0.00E+00	2.11E+00
Fe-59	<4.54E+00			0.00E+00	4.54E+00
Co-60	<1.77E+00			0.00E+00	1.77E+00
Zn-65	<3.86E+00			0.00E+00	3.86E+00
Zr-95	<3.86E+00			0.00E+00	3.86E+00
Nb-95	<2.39E+00			0.00E+00	2.39E+00
I-131	<1.20E+01			0.00E+00	1.20E+01
Cs-134	<2.09E+00			0.00E+00	2.09E+00
Cs-137	<1.69E+00			0.00E+00	1.69E+00
BaLa-140	<5.56E+00			0.00E+00	5.56E+00
H3SW	<3.90E+01			0.00E+00	1.90E+02
544284	4/1/2021 - 5/3/2021			Mn-54	<2.26E+00
		Co-58	<2.61E+00	0.00E+00	2.61E+00
		Fe-59	<4.67E+00	0.00E+00	4.67E+00
		Co-60	<1.96E+00	0.00E+00	1.96E+00
		Zn-65	<4.60E+00	0.00E+00	4.60E+00
		Zr-95	<4.67E+00	0.00E+00	4.67E+00
		Nb-95	<2.78E+00	0.00E+00	2.78E+00
		I-131	<1.47E+01	0.00E+00	1.47E+01
		Cs-134	<2.94E+00	0.00E+00	2.94E+00
		Cs-137	<2.28E+00	0.00E+00	2.28E+00
		BaLa-140	<7.72E+00	0.00E+00	7.72E+00
		H3SW	<1.18E+01	0.00E+00	1.82E+02
		545769	5/3/2021 - 6/1/2021	Mn-54	<2.56E+00
Co-58	<3.37E+00			0.00E+00	3.37E+00
Fe-59	<5.25E+00			0.00E+00	5.25E+00
Co-60	<2.79E+00			0.00E+00	2.79E+00
Zn-65	<6.10E+00			0.00E+00	6.10E+00
Zr-95	<5.23E+00			0.00E+00	5.23E+00
Nb-95	<4.22E+00			0.00E+00	4.22E+00
I-131	<1.11E+01			0.00E+00	1.11E+01
Cs-134	<3.57E+00			0.00E+00	3.57E+00
Cs-137	<3.36E+00			0.00E+00	3.36E+00
BaLa-140	<8.76E+00			0.00E+00	8.76E+00
H3SW	<-2.6E+01			0.00E+00	1.94E+02
547446	6/1/2021 - 7/1/2021			Mn-54	<1.89E+00
		Co-58	<2.48E+00	0.00E+00	2.48E+00
		Fe-59	<4.52E+00	0.00E+00	4.52E+00
		Co-60	<1.95E+00	0.00E+00	1.95E+00
		Zn-65	<4.18E+00	0.00E+00	4.18E+00

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

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547446	6/1/2021 - 7/1/2021	Zr-95	<4.17E+00	0.00E+00	4.17E+00
		Nb-95	<2.68E+00	0.00E+00	2.68E+00
		I-131	<1.22E+01	0.00E+00	1.22E+01
		Cs-134	<1.94E+00	0.00E+00	1.94E+00
		Cs-137	<2.10E+00	0.00E+00	2.10E+00
		BaLa-140	<6.18E+00	0.00E+00	6.18E+00
		H3SW	<1.93E+02	0.00E+00	1.94E+02
548713	7/1/2021 - 8/2/2021	Mn-54	<1.84E+00	0.00E+00	1.84E+00
		Co-58	<2.02E+00	0.00E+00	2.02E+00
		Fe-59	<5.05E+00	0.00E+00	5.05E+00
		Co-60	<1.72E+00	0.00E+00	1.72E+00
		Zn-65	<4.19E+00	0.00E+00	4.19E+00
		Zr-95	<3.54E+00	0.00E+00	3.54E+00
		Nb-95	<2.59E+00	0.00E+00	2.59E+00
		I-131	<9.88E+00	0.00E+00	9.88E+00
		Cs-134	<2.36E+00	0.00E+00	2.36E+00
		Cs-137	<1.87E+00	0.00E+00	1.87E+00
		BaLa-140	<4.40E+00	0.00E+00	4.40E+00
		H3SW	<0.00E+00	0.00E+00	1.91E+02
		550019	8/2/2021 - 9/1/2021	Mn-54	<1.38E+00
Co-58	<1.55E+00			0.00E+00	1.55E+00
Fe-59	<3.75E+00			0.00E+00	3.75E+00
Co-60	<1.53E+00			0.00E+00	1.53E+00
Zn-65	<2.91E+00			0.00E+00	2.91E+00
Zr-95	<3.15E+00			0.00E+00	3.15E+00
Nb-95	<2.06E+00			0.00E+00	2.06E+00
I-131	<1.08E+01			0.00E+00	1.08E+01
Cs-134	<1.66E+00			0.00E+00	1.66E+00
Cs-137	<1.51E+00			0.00E+00	1.51E+00
BaLa-140	<5.33E+00			0.00E+00	5.33E+00
H3SW	<9.42E+00			0.00E+00	1.82E+02
553824	9/1/2021 - 10/1/2021			Mn-54	<2.29E+00
		Co-58	<2.55E+00	0.00E+00	2.55E+00
		Fe-59	<5.79E+00	0.00E+00	5.79E+00
		Co-60	<2.42E+00	0.00E+00	2.42E+00
		Zn-65	<4.52E+00	0.00E+00	4.52E+00
		Zr-95	<5.55E+00	0.00E+00	5.55E+00
		Nb-95	<3.42E+00	0.00E+00	3.42E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.99E+00	0.00E+00	2.99E+00
		Cs-137	<1.93E+00	0.00E+00	1.93E+00
		BaLa-140	<7.20E+00	0.00E+00	7.20E+00
		H3SW	<6.36E+01	0.00E+00	1.77E+02
		555926	10/1/2021 - 11/3/2021	Mn-54	<1.85E+00
Co-58	<1.92E+00			0.00E+00	1.92E+00
Fe-59	<4.58E+00			0.00E+00	4.58E+00
Co-60	<1.89E+00			0.00E+00	1.89E+00
Zn-65	<3.19E+00			0.00E+00	3.19E+00
Zr-95	<3.84E+00			0.00E+00	3.84E+00
Nb-95	<2.61E+00			0.00E+00	2.61E+00
I-131	<1.20E+01			0.00E+00	1.20E+01
Cs-134	<1.95E+00			0.00E+00	1.95E+00
Cs-137	<1.67E+00			0.00E+00	1.67E+00
BaLa-140	<4.45E+00			0.00E+00	4.45E+00
H3SW	<-4.4E+01			0.00E+00	1.89E+02
557938	11/3/2021 - 12/2/2021			Nuclide	Activity
		Mn-54	<1.81E+00	0.00E+00	1.81E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 400 [CONTROL - NE @ 0.6 miles]

Sample ID: 557938 Sample Dates: 11/3/2021 - 12/2/2021

Nuclide	Activity	2 Sigma Error	MDA
Co-58	<2.13E+00	0.00E+00	2.13E+00
Fe-59	<4.89E+00	0.00E+00	4.89E+00
Co-60	<1.93E+00	0.00E+00	1.93E+00
Zn-65	<4.13E+00	0.00E+00	4.13E+00
Zr-95	<3.91E+00	0.00E+00	3.91E+00
Nb-95	<2.52E+00	0.00E+00	2.52E+00
I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<2.33E+00	0.00E+00	2.33E+00
Cs-137	<1.91E+00	0.00E+00	1.91E+00
BaLa-140	<5.81E+00	0.00E+00	5.81E+00
H3SW	<-3.7E+01	0.00E+00	1.78E+02

Sample ID: 552269 Sample Dates: 12/2/2021 - 1/5/2022

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.67E+00	0.00E+00	1.67E+00
Co-58	<1.60E+00	0.00E+00	1.60E+00
Fe-59	<4.45E+00	0.00E+00	4.45E+00
Co-60	<1.58E+00	0.00E+00	1.58E+00
Zn-65	<3.47E+00	0.00E+00	3.47E+00
Zr-95	<3.09E+00	0.00E+00	3.09E+00
Nb-95	<2.50E+00	0.00E+00	2.50E+00
I-131	<1.10E+01	0.00E+00	1.10E+01
Cs-134	<1.72E+00	0.00E+00	1.72E+00
Cs-137	<1.71E+00	0.00E+00	1.71E+00
BaLa-140	<5.50E+00	0.00E+00	5.50E+00
H3SW	<-1.1E+02	0.00E+00	1.83E+02

Sample Point 401 [INDICATOR - SSW @ 4.9 miles]

Sample ID: 538506 Sample Dates: 1/5/2021 - 2/3/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<1.68E+00	0.00E+00	1.68E+00
Co-58	<1.61E+00	0.00E+00	1.61E+00
Fe-59	<4.31E+00	0.00E+00	4.31E+00
Co-60	<1.40E+00	0.00E+00	1.40E+00
Zn-65	<3.83E+00	0.00E+00	3.83E+00
Zr-95	<3.41E+00	0.00E+00	3.41E+00
Nb-95	<2.54E+00	0.00E+00	2.54E+00
I-131	<9.37E+00	0.00E+00	9.37E+00
Cs-134	<1.85E+00	0.00E+00	1.85E+00
Cs-137	<1.68E+00	0.00E+00	1.68E+00
BaLa-140	<4.84E+00	0.00E+00	4.84E+00
H3SW	<9.26E+01	0.00E+00	1.83E+02

Sample ID: 540023 Sample Dates: 2/3/2021 - 3/1/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.87E+00	0.00E+00	2.87E+00
Co-58	<3.90E+00	0.00E+00	3.90E+00
Fe-59	<5.22E+00	0.00E+00	5.22E+00
Co-60	<2.87E+00	0.00E+00	2.87E+00
Zn-65	<8.38E+00	0.00E+00	8.38E+00
Zr-95	<5.16E+00	0.00E+00	5.16E+00
Nb-95	<4.40E+00	0.00E+00	4.40E+00
I-131	<1.11E+01	0.00E+00	1.11E+01
Cs-134	<3.43E+00	0.00E+00	3.43E+00
Cs-137	<3.99E+00	0.00E+00	3.99E+00
BaLa-140	<7.41E+00	0.00E+00	7.41E+00
H3SW	<7.32E+01	0.00E+00	1.81E+02

Sample ID: 542212 Sample Dates: 3/1/2021 - 4/1/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<2.01E+00	0.00E+00	2.01E+00
Co-58	<1.96E+00	0.00E+00	1.96E+00
Fe-59	<4.70E+00	0.00E+00	4.70E+00
Co-60	<1.67E+00	0.00E+00	1.67E+00
Zn-65	<3.77E+00	0.00E+00	3.77E+00
Zr-95	<3.57E+00	0.00E+00	3.57E+00
Nb-95	<3.20E+00	0.00E+00	3.20E+00
I-131	<1.13E+01	0.00E+00	1.13E+01

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

Sample Point 401 [INDICATOR - SSW @ 4.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542212	3/1/2021 - 4/1/2021	Cs-134	<2.19E+00	0.00E+00	2.19E+00
		Cs-137	<1.94E+00	0.00E+00	1.94E+00
		BaLa-140	<6.05E+00	0.00E+00	6.05E+00
		H3SW	5.34E+02	1.26E+02	1.87E+02
544285	4/1/2021 - 5/4/2021	Mn-54	<2.15E+00	0.00E+00	2.15E+00
		Co-58	<1.89E+00	0.00E+00	1.89E+00
		Fe-59	<4.64E+00	0.00E+00	4.64E+00
		Co-60	<1.75E+00	0.00E+00	1.75E+00
		Zn-65	<3.65E+00	0.00E+00	3.65E+00
		Zr-95	<4.16E+00	0.00E+00	4.16E+00
		Nb-95	<2.59E+00	0.00E+00	2.59E+00
		I-131	<1.23E+01	0.00E+00	1.23E+01
		Cs-134	<2.42E+00	0.00E+00	2.42E+00
		Cs-137	<2.25E+00	0.00E+00	2.25E+00
		BaLa-140	<5.24E+00	0.00E+00	5.24E+00
		H3SW	<3.06E+01	0.00E+00	1.82E+02
545770	5/4/2021 - 6/1/2021	Mn-54	<3.13E+00	0.00E+00	3.13E+00
		Co-58	<3.13E+00	0.00E+00	3.13E+00
		Fe-59	<7.12E+00	0.00E+00	7.12E+00
		Co-60	<2.88E+00	0.00E+00	2.88E+00
		Zn-65	<6.91E+00	0.00E+00	6.91E+00
		Zr-95	<6.28E+00	0.00E+00	6.28E+00
		Nb-95	<3.66E+00	0.00E+00	3.66E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<2.64E+00	0.00E+00	2.64E+00
		Cs-137	<3.45E+00	0.00E+00	3.45E+00
		BaLa-140	<7.73E+00	0.00E+00	7.73E+00
		H3SW	<-9.4E+00	0.00E+00	1.93E+02
		547447	6/1/2021 - 7/1/2021	Mn-54	<1.67E+00
Co-58	<1.77E+00			0.00E+00	1.77E+00
Fe-59	<4.17E+00			0.00E+00	4.17E+00
Co-60	<1.46E+00			0.00E+00	1.46E+00
Zn-65	<3.52E+00			0.00E+00	3.52E+00
Zr-95	<3.45E+00			0.00E+00	3.45E+00
Nb-95	<2.36E+00			0.00E+00	2.36E+00
I-131	<1.10E+01			0.00E+00	1.10E+01
Cs-134	<1.91E+00			0.00E+00	1.91E+00
Cs-137	<1.61E+00			0.00E+00	1.61E+00
BaLa-140	<5.21E+00			0.00E+00	5.21E+00
H3SW	2.48E+02			1.20E+02	1.93E+02
548714	7/1/2021 - 8/2/2021			Mn-54	<2.33E+00
		Co-58	<2.15E+00	0.00E+00	2.15E+00
		Fe-59	<6.00E+00	0.00E+00	6.00E+00
		Co-60	<2.26E+00	0.00E+00	2.26E+00
		Zn-65	<5.81E+00	0.00E+00	5.81E+00
		Zr-95	<4.88E+00	0.00E+00	4.88E+00
		Nb-95	<3.23E+00	0.00E+00	3.23E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<2.62E+00	0.00E+00	2.62E+00
		Cs-137	<2.62E+00	0.00E+00	2.62E+00
		BaLa-140	<7.12E+00	0.00E+00	7.12E+00
		H3SW	<-9.4E+01	0.00E+00	1.91E+02
		550020	8/2/2021 - 9/1/2021	Mn-54	<1.34E+00
Co-58	<1.94E+00			0.00E+00	1.94E+00
Fe-59	<4.09E+00			0.00E+00	4.09E+00
Co-60	<1.57E+00			0.00E+00	1.57E+00

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

Sample Point 401 [INDICATOR - SSW @ 4.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550020	8/2/2021 - 9/1/2021	Zn-65	<3.36E+00	0.00E+00	3.36E+00
		Zr-95	<3.23E+00	0.00E+00	3.23E+00
		Nb-95	<2.57E+00	0.00E+00	2.57E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<1.47E+00	0.00E+00	1.47E+00
		Cs-137	<1.51E+00	0.00E+00	1.51E+00
		BaLa-140	<5.51E+00	0.00E+00	5.51E+00
		H3SW	<2.83E+01	0.00E+00	1.82E+02
		553825	9/1/2021 - 10/1/2021	Mn-54	<2.11E+00
Co-58	<2.69E+00			0.00E+00	2.69E+00
Fe-59	<5.29E+00			0.00E+00	5.29E+00
Co-60	<1.99E+00			0.00E+00	1.99E+00
Zn-65	<4.73E+00			0.00E+00	4.73E+00
Zr-95	<3.63E+00			0.00E+00	3.63E+00
Nb-95	<2.81E+00			0.00E+00	2.81E+00
I-131	<1.06E+01			0.00E+00	1.06E+01
Cs-134	<2.49E+00			0.00E+00	2.49E+00
Cs-137	<2.34E+00			0.00E+00	2.34E+00
BaLa-140	<5.88E+00			0.00E+00	5.88E+00
H3SW	<-2.6E+01			0.00E+00	1.77E+02
555927	10/1/2021 - 11/3/2021			Mn-54	<1.35E+00
		Co-58	<1.64E+00	0.00E+00	1.64E+00
		Fe-59	<3.50E+00	0.00E+00	3.50E+00
		Co-60	<1.14E+00	0.00E+00	1.14E+00
		Zn-65	<3.04E+00	0.00E+00	3.04E+00
		Zr-95	<2.71E+00	0.00E+00	2.71E+00
		Nb-95	<2.31E+00	0.00E+00	2.31E+00
		I-131	<9.17E+00	0.00E+00	9.17E+00
		Cs-134	<1.63E+00	0.00E+00	1.63E+00
		Cs-137	<1.39E+00	0.00E+00	1.39E+00
		BaLa-140	<4.35E+00	0.00E+00	4.35E+00
		H3SW	<-4.7E+01	0.00E+00	1.89E+02
		557939	11/3/2021 - 12/2/2021	Mn-54	<1.88E+00
Co-58	<2.34E+00			0.00E+00	2.34E+00
Fe-59	<5.36E+00			0.00E+00	5.36E+00
Co-60	<1.96E+00			0.00E+00	1.96E+00
Zn-65	<4.10E+00			0.00E+00	4.10E+00
Zr-95	<3.93E+00			0.00E+00	3.93E+00
Nb-95	<2.91E+00			0.00E+00	2.91E+00
I-131	<1.07E+01			0.00E+00	1.07E+01
Cs-134	<1.84E+00			0.00E+00	1.84E+00
Cs-137	<2.22E+00			0.00E+00	2.22E+00
BaLa-140	<6.68E+00			0.00E+00	6.68E+00
H3SW	<-4.7E+01			0.00E+00	1.78E+02
552270	12/2/2021 - 1/5/2022			Mn-54	<1.92E+00
		Co-58	<2.24E+00	0.00E+00	2.24E+00
		Fe-59	<4.56E+00	0.00E+00	4.56E+00
		Co-60	<1.84E+00	0.00E+00	1.84E+00
		Zn-65	<4.58E+00	0.00E+00	4.58E+00
		Zr-95	<3.83E+00	0.00E+00	3.83E+00
		Nb-95	<2.96E+00	0.00E+00	2.96E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.53E+00	0.00E+00	2.53E+00
		Cs-137	<2.23E+00	0.00E+00	2.23E+00
		BaLa-140	<5.54E+00	0.00E+00	5.54E+00
		H3SW	<1.17E+01	0.00E+00	1.83E+02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536149	1/20/2021 - 1/20/2021	Mn-54	<6.64E+00	0.00E+00	6.64E+00
		Co-58	<4.09E+00	0.00E+00	4.09E+00
		Fe-59	<7.78E+00	0.00E+00	7.78E+00
		Co-60	<5.64E+00	0.00E+00	5.64E+00
		Zn-65	<1.10E+01	0.00E+00	1.10E+01
		Zr-95	<1.17E+01	0.00E+00	1.17E+01
		Nb-95	<6.13E+00	0.00E+00	6.13E+00
		I-131	<8.07E+00	0.00E+00	8.07E+00
		Cs-134	<6.62E+00	0.00E+00	6.62E+00
		Cs-137	<5.62E+00	0.00E+00	5.62E+00
		BaLa-140	<6.21E+00	0.00E+00	6.21E+00
		Total-Gam	0.00E+00		
		H3SW	<7.22E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537967	2/17/2021 - 2/17/2021	Mn-54	<3.53E+00	0.00E+00	3.53E+00
		Co-58	<3.85E+00	0.00E+00	3.85E+00
		Fe-59	<7.50E+00	0.00E+00	7.50E+00
		Co-60	<3.54E+00	0.00E+00	3.54E+00
		Zn-65	<6.54E+00	0.00E+00	6.54E+00
		Zr-95	<7.21E+00	0.00E+00	7.21E+00
		Nb-95	<4.43E+00	0.00E+00	4.43E+00
		I-131	<3.82E+00	0.00E+00	3.82E+00
		Cs-134	<4.76E+00	0.00E+00	4.76E+00
		Cs-137	<4.48E+00	0.00E+00	4.48E+00
		BaLa-140	<3.54E+00	0.00E+00	3.54E+00
		Total-Gam	0.00E+00		
		H3SW	<4.8E+01	0.00E+00	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538950	3/18/2021 - 3/18/2021	Mn-54	<5.37E+00	0.00E+00	5.37E+00
		Co-58	<7.25E+00	0.00E+00	7.25E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<4.51E+00	0.00E+00	4.51E+00
		Zn-65	<1.29E+01	0.00E+00	1.29E+01
		Zr-95	<9.17E+00	0.00E+00	9.17E+00
		Nb-95	<7.11E+00	0.00E+00	7.11E+00
		I-131	<8.37E+00	0.00E+00	8.37E+00
		Cs-134	<7.07E+00	0.00E+00	7.07E+00
		Cs-137	<6.78E+00	0.00E+00	6.78E+00
		BaLa-140	<9.18E+00	0.00E+00	9.18E+00
		Total-Gam	0.00E+00		
		H3SW	<5.99E+01	0.00E+00	1.89E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541356	4/21/2021 - 4/21/2021	Mn-54	<6.47E+00	0.00E+00	6.47E+00
		Co-58	<6.77E+00	0.00E+00	6.77E+00
		Fe-59	<1.17E+01	0.00E+00	1.17E+01
		Co-60	<7.00E+00	0.00E+00	7.00E+00
		Zn-65	<1.33E+01	0.00E+00	1.33E+01
		Zr-95	<1.20E+01	0.00E+00	1.20E+01
		Nb-95	<7.22E+00	0.00E+00	7.22E+00
		I-131	<7.94E+00	0.00E+00	7.94E+00
		Cs-134	<7.39E+00	0.00E+00	7.39E+00
		Cs-137	<5.89E+00	0.00E+00	5.89E+00
		BaLa-140	<1.09E+01	0.00E+00	1.09E+01
		Total-Gam	0.00E+00		
		H3SW	<2.91E+01	0.00E+00	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543779	5/19/2021 - 5/19/2021	Mn-54	<4.21E+00	0.00E+00	4.21E+00
		Co-58	<7.21E+00	0.00E+00	7.21E+00
		Fe-59	<1.28E+01	0.00E+00	1.28E+01
		Co-60	<5.05E+00	0.00E+00	5.05E+00
		Zn-65	<9.79E+00	0.00E+00	9.79E+00
		Zr-95	<1.14E+01	0.00E+00	1.14E+01

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543779	5/19/2021 - 5/19/2021	Nb-95	<7.44E+00	0.00E+00	7.44E+00
		I-131	<8.20E+00	0.00E+00	8.20E+00
		Cs-134	<5.82E+00	0.00E+00	5.82E+00
		Cs-137	<6.66E+00	0.00E+00	6.66E+00
		BaLa-140	<8.21E+00	0.00E+00	8.21E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.1E+02	0.00E+00	1.96E+02
545428	6/24/2021 - 6/24/2021	Mn-54	<5.40E+00	0.00E+00	5.40E+00
		Co-58	<5.07E+00	0.00E+00	5.07E+00
		Fe-59	<1.31E+01	0.00E+00	1.31E+01
		Co-60	<7.63E+00	0.00E+00	7.63E+00
		Zn-65	<1.40E+01	0.00E+00	1.40E+01
		Zr-95	<9.61E+00	0.00E+00	9.61E+00
		Nb-95	<5.31E+00	0.00E+00	5.31E+00
		I-131	<8.44E+00	0.00E+00	8.44E+00
		Cs-134	<6.28E+00	0.00E+00	6.28E+00
		Cs-137	<7.11E+00	0.00E+00	7.11E+00
		BaLa-140	<7.04E+00	0.00E+00	7.04E+00
		Total-Gam	0.00E+00		
		H3SW	<-7.2E+00	0.00E+00	1.99E+02
		547121	7/22/2021 - 7/22/2021	Mn-54	<6.88E+00
Co-58	<5.20E+00			0.00E+00	5.20E+00
Fe-59	<1.14E+01			0.00E+00	1.14E+01
Co-60	<7.20E+00			0.00E+00	7.20E+00
Zn-65	<1.27E+01			0.00E+00	1.27E+01
Zr-95	<9.44E+00			0.00E+00	9.44E+00
Nb-95	<6.38E+00			0.00E+00	6.38E+00
I-131	<8.94E+00			0.00E+00	8.94E+00
Cs-134	<6.17E+00			0.00E+00	6.17E+00
Cs-137	<4.52E+00			0.00E+00	4.52E+00
BaLa-140	<9.70E+00			0.00E+00	9.70E+00
Total-Gam	0.00E+00				
H3SW	<6.31E+01			0.00E+00	1.68E+02
548607	8/16/2021 - 8/16/2021			Mn-54	<6.28E+00
		Co-58	<6.64E+00	0.00E+00	6.64E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<4.21E+00	0.00E+00	4.21E+00
		Zn-65	<6.84E+00	0.00E+00	6.84E+00
		Zr-95	<8.96E+00	0.00E+00	8.96E+00
		Nb-95	<7.53E+00	0.00E+00	7.53E+00
		I-131	<6.84E+00	0.00E+00	6.84E+00
		Cs-134	<6.86E+00	0.00E+00	6.86E+00
		Cs-137	<7.35E+00	0.00E+00	7.35E+00
		BaLa-140	<6.96E+00	0.00E+00	6.96E+00
		Total-Gam	0.00E+00		
		H3SW	<3.54E+01	0.00E+00	1.86E+02
		549962	9/13/2021 - 9/13/2021	Mn-54	<5.38E+00
Co-58	<6.35E+00			0.00E+00	6.35E+00
Fe-59	<8.82E+00			0.00E+00	8.82E+00
Co-60	<6.67E+00			0.00E+00	6.67E+00
Zn-65	<1.11E+01			0.00E+00	1.11E+01
Zr-95	<1.13E+01			0.00E+00	1.13E+01
Nb-95	<5.88E+00			0.00E+00	5.88E+00
I-131	<7.04E+00			0.00E+00	7.04E+00
Cs-134	<5.00E+00			0.00E+00	5.00E+00
Cs-137	<5.83E+00			0.00E+00	5.83E+00
BaLa-140	<9.26E+00			0.00E+00	9.26E+00
Total-Gam	0.00E+00				

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549962	9/13/2021 - 9/13/2021	H3SW	<-2.2E+01	0.00E+00	1.91E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552214	10/19/2021 - 10/19/2021	Mn-54	<6.31E+00	0.00E+00	6.31E+00
		Co-58	<6.65E+00	0.00E+00	6.65E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<5.92E+00	0.00E+00	5.92E+00
		Zn-65	<9.69E+00	0.00E+00	9.69E+00
		Zr-95	<1.00E+01	0.00E+00	1.00E+01
		Nb-95	<5.98E+00	0.00E+00	5.98E+00
		I-131	<7.07E+00	0.00E+00	7.07E+00
		Cs-134	<8.65E+00	0.00E+00	8.65E+00
		Cs-137	<6.82E+00	0.00E+00	6.82E+00
		BaLa-140	<8.95E+00	0.00E+00	8.95E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.6E+01	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554083	11/18/2021 - 11/18/2021	Mn-54	<6.89E+00	0.00E+00	6.89E+00
		Co-58	<5.71E+00	0.00E+00	5.71E+00
		Fe-59	<1.64E+01	0.00E+00	1.64E+01
		Co-60	<6.06E+00	0.00E+00	6.06E+00
		Zn-65	<1.65E+01	0.00E+00	1.65E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<7.09E+00	0.00E+00	7.09E+00
		I-131	<9.22E+00	0.00E+00	9.22E+00
		Cs-134	<7.21E+00	0.00E+00	7.21E+00
		Cs-137	<7.11E+00	0.00E+00	7.11E+00
		BaLa-140	<7.67E+00	0.00E+00	7.67E+00
		Total-Gam	0.00E+00		
		H3SW	<2.31E+00	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556679	12/21/2021 - 12/21/2021	Mn-54	<6.51E+00	0.00E+00	6.51E+00
		Co-58	<5.14E+00	0.00E+00	5.14E+00
		Fe-59	<1.44E+01	0.00E+00	1.44E+01
		Co-60	<8.69E+00	0.00E+00	8.69E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<9.77E+00	0.00E+00	9.77E+00
		Nb-95	<5.01E+00	0.00E+00	5.01E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<7.08E+00	0.00E+00	7.08E+00
		Cs-137	<6.63E+00	0.00E+00	6.63E+00
		BaLa-140	<9.57E+00	0.00E+00	9.57E+00
		Total-Gam	0.00E+00		
		H3SW	<3.93E+01	0.00E+00	1.84E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536150	1/20/2021 - 1/20/2021	Mn-54	<4.52E+00	0.00E+00	4.52E+00
		Co-58	<5.60E+00	0.00E+00	5.60E+00
		Fe-59	<1.00E+01	0.00E+00	1.00E+01
		Co-60	<6.36E+00	0.00E+00	6.36E+00
		Zn-65	<8.13E+00	0.00E+00	8.13E+00
		Zr-95	<1.08E+01	0.00E+00	1.08E+01
		Nb-95	<6.83E+00	0.00E+00	6.83E+00
		I-131	<7.37E+00	0.00E+00	7.37E+00
		Cs-134	<7.92E+00	0.00E+00	7.92E+00
		Cs-137	<5.09E+00	0.00E+00	5.09E+00
		BaLa-140	<9.02E+00	0.00E+00	9.02E+00
		Total-Gam	0.00E+00		
		H3SW	<8.19E+01	0.00E+00	1.86E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537968	2/17/2021 - 2/17/2021	Mn-54	<4.84E+00	0.00E+00	4.84E+00
		Co-58	<5.45E+00	0.00E+00	5.45E+00
		Fe-59	<8.51E+00	0.00E+00	8.51E+00
		Co-60	<7.49E+00	0.00E+00	7.49E+00
		Zn-65	<8.71E+00	0.00E+00	8.71E+00
		Zr-95	<8.76E+00	0.00E+00	8.76E+00
		Nb-95	<5.99E+00	0.00E+00	5.99E+00
		I-131	<7.37E+00	0.00E+00	7.37E+00
		Cs-134	<4.91E+00	0.00E+00	4.91E+00
		Cs-137	<4.96E+00	0.00E+00	4.96E+00
		BaLa-140	<6.52E+00	0.00E+00	6.52E+00
		Total-Gam	0.00E+00		
		H3SW	<2.40E+00	0.00E+00	1.97E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538951	3/18/2021 - 3/18/2021	Mn-54	<6.40E+00	0.00E+00	6.40E+00
		Co-58	<5.77E+00	0.00E+00	5.77E+00
		Fe-59	<9.88E+00	0.00E+00	9.88E+00
		Co-60	<7.06E+00	0.00E+00	7.06E+00
		Zn-65	<1.31E+01	0.00E+00	1.31E+01
		Zr-95	<8.90E+00	0.00E+00	8.90E+00
		Nb-95	<6.18E+00	0.00E+00	6.18E+00
		I-131	<7.63E+00	0.00E+00	7.63E+00
		Cs-134	<5.05E+00	0.00E+00	5.05E+00
		Cs-137	<6.55E+00	0.00E+00	6.55E+00
		BaLa-140	<6.12E+00	0.00E+00	6.12E+00
		Total-Gam	0.00E+00		
		H3SW	<-9.7E+00	0.00E+00	1.91E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541357	4/21/2021 - 4/21/2021	Mn-54	<7.05E+00	0.00E+00	7.05E+00
		Co-58	<5.42E+00	0.00E+00	5.42E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<5.76E+00	0.00E+00	5.76E+00
		Zn-65	<1.28E+01	0.00E+00	1.28E+01
		Zr-95	<1.19E+01	0.00E+00	1.19E+01
		Nb-95	<6.75E+00	0.00E+00	6.75E+00
		I-131	<9.00E+00	0.00E+00	9.00E+00
		Cs-134	<5.29E+00	0.00E+00	5.29E+00
		Cs-137	<4.97E+00	0.00E+00	4.97E+00
		BaLa-140	<8.13E+00	0.00E+00	8.13E+00
		Total-Gam	0.00E+00		
		H3SW	<-2.4E+00	0.00E+00	1.95E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543780	5/19/2021 - 5/19/2021	Mn-54	<5.33E+00	0.00E+00	5.33E+00
		Co-58	<4.22E+00	0.00E+00	4.22E+00
		Fe-59	<1.30E+01	0.00E+00	1.30E+01
		Co-60	<4.64E+00	0.00E+00	4.64E+00
		Zn-65	<1.09E+01	0.00E+00	1.09E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<5.71E+00	0.00E+00	5.71E+00
		I-131	<7.90E+00	0.00E+00	7.90E+00
		Cs-134	<7.04E+00	0.00E+00	7.04E+00
		Cs-137	<5.35E+00	0.00E+00	5.35E+00
		BaLa-140	<5.84E+00	0.00E+00	5.84E+00
		Total-Gam	0.00E+00		
		H3SW	<-5.9E+01	0.00E+00	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545429	6/24/2021 - 6/24/2021	Mn-54	<5.77E+00	0.00E+00	5.77E+00
		Co-58	<5.48E+00	0.00E+00	5.48E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<5.49E+00	0.00E+00	5.49E+00
		Zn-65	<1.24E+01	0.00E+00	1.24E+01
		Zr-95	<1.12E+01	0.00E+00	1.12E+01

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545429	6/24/2021 - 6/24/2021	Nb-95	<4.80E+00	0.00E+00	4.80E+00
		I-131	<8.37E+00	0.00E+00	8.37E+00
		Cs-134	<5.26E+00	0.00E+00	5.26E+00
		Cs-137	<5.62E+00	0.00E+00	5.62E+00
		BaLa-140	<1.13E+01	0.00E+00	1.13E+01
		Total-Gam	0.00E+00		
		H3SW	<2.66E+01	0.00E+00	2.00E+02
547122	7/22/2021 - 7/22/2021	Mn-54	<6.58E+00	0.00E+00	6.58E+00
		Co-58	<4.32E+00	0.00E+00	4.32E+00
		Fe-59	<1.45E+01	0.00E+00	1.45E+01
		Co-60	<7.06E+00	0.00E+00	7.06E+00
		Zn-65	<1.31E+01	0.00E+00	1.31E+01
		Zr-95	<7.01E+00	0.00E+00	7.01E+00
		Nb-95	<6.90E+00	0.00E+00	6.90E+00
		I-131	<9.55E+00	0.00E+00	9.55E+00
		Cs-134	<7.18E+00	0.00E+00	7.18E+00
		Cs-137	<6.71E+00	0.00E+00	6.71E+00
		BaLa-140	<1.05E+01	0.00E+00	1.05E+01
		Total-Gam	0.00E+00		
		H3SW	<-3.7E+01	0.00E+00	1.68E+02
548608	8/16/2021 - 8/16/2021	Mn-54	<6.28E+00	0.00E+00	6.28E+00
		Co-58	<5.36E+00	0.00E+00	5.36E+00
		Fe-59	<1.26E+01	0.00E+00	1.26E+01
		Co-60	<5.03E+00	0.00E+00	5.03E+00
		Zn-65	<1.04E+01	0.00E+00	1.04E+01
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<6.50E+00	0.00E+00	6.50E+00
		I-131	<7.60E+00	0.00E+00	7.60E+00
		Cs-134	<7.05E+00	0.00E+00	7.05E+00
		Cs-137	<6.63E+00	0.00E+00	6.63E+00
		BaLa-140	<6.92E+00	0.00E+00	6.92E+00
		Total-Gam	0.00E+00		
		H3SW	<2.83E+01	0.00E+00	1.86E+02
549963	9/13/2021 - 9/13/2021	Mn-54	<6.45E+00	0.00E+00	6.45E+00
		Co-58	<5.15E+00	0.00E+00	5.15E+00
		Fe-59	<1.00E+01	0.00E+00	1.00E+01
		Co-60	<7.29E+00	0.00E+00	7.29E+00
		Zn-65	<1.17E+01	0.00E+00	1.17E+01
		Zr-95	<9.34E+00	0.00E+00	9.34E+00
		Nb-95	<7.54E+00	0.00E+00	7.54E+00
		I-131	<6.30E+00	0.00E+00	6.30E+00
		Cs-134	<6.86E+00	0.00E+00	6.86E+00
		Cs-137	<6.47E+00	0.00E+00	6.47E+00
		BaLa-140	<6.26E+00	0.00E+00	6.26E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.2E+01	0.00E+00	1.92E+02
552215	10/19/2021 - 10/19/2021	Mn-54	<5.43E+00	0.00E+00	5.43E+00
		Co-58	<2.78E+00	0.00E+00	2.78E+00
		Fe-59	<8.83E+00	0.00E+00	8.83E+00
		Co-60	<3.13E+00	0.00E+00	3.13E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<1.05E+01	0.00E+00	1.05E+01
		Nb-95	<5.68E+00	0.00E+00	5.68E+00
		I-131	<5.74E+00	0.00E+00	5.74E+00
		Cs-134	<6.10E+00	0.00E+00	6.10E+00
		Cs-137	<4.14E+00	0.00E+00	4.14E+00
		BaLa-140	<5.31E+00	0.00E+00	5.31E+00
		Total-Gam	0.00E+00		

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552215	10/19/2021 - 10/19/2021	H3SW	<-2.5E+01	0.00E+00	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554084	11/18/2021 - 11/18/2021	Mn-54	<6.36E+00	0.00E+00	6.36E+00
		Co-58	<7.63E+00	0.00E+00	7.63E+00
		Fe-59	<1.56E+01	0.00E+00	1.56E+01
		Co-60	<6.31E+00	0.00E+00	6.31E+00
		Zn-65	<1.50E+01	0.00E+00	1.50E+01
		Zr-95	<1.10E+01	0.00E+00	1.10E+01
		Nb-95	<7.36E+00	0.00E+00	7.36E+00
		I-131	<9.28E+00	0.00E+00	9.28E+00
		Cs-134	<7.86E+00	0.00E+00	7.86E+00
		Cs-137	<6.19E+00	0.00E+00	6.19E+00
		BaLa-140	<8.67E+00	0.00E+00	8.67E+00
		Total-Gam	0.00E+00		
		H3SW	<2.54E+01	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556680	12/21/2021 - 12/21/2021	Mn-54	<4.53E+00	0.00E+00	4.53E+00
		Co-58	<4.84E+00	0.00E+00	4.84E+00
		Fe-59	<9.41E+00	0.00E+00	9.41E+00
		Co-60	<5.74E+00	0.00E+00	5.74E+00
		Zn-65	<1.17E+01	0.00E+00	1.17E+01
		Zr-95	<1.02E+01	0.00E+00	1.02E+01
		Nb-95	<5.49E+00	0.00E+00	5.49E+00
		I-131	<7.99E+00	0.00E+00	7.99E+00
		Cs-134	<6.88E+00	0.00E+00	6.88E+00
		Cs-137	<5.35E+00	0.00E+00	5.35E+00
		BaLa-140	<1.14E+01	0.00E+00	1.14E+01
		Total-Gam	0.00E+00		
		H3SW	<-2.8E+01	0.00E+00	1.84E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536151	1/20/2021 - 1/20/2021	Mn-54	<5.89E+00	0.00E+00	5.89E+00
		Co-58	<4.52E+00	0.00E+00	4.52E+00
		Fe-59	<1.15E+01	0.00E+00	1.15E+01
		Co-60	<5.42E+00	0.00E+00	5.42E+00
		Zn-65	<9.61E+00	0.00E+00	9.61E+00
		Zr-95	<8.75E+00	0.00E+00	8.75E+00
		Nb-95	<5.92E+00	0.00E+00	5.92E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<4.62E+00	0.00E+00	4.62E+00
		Cs-137	<5.73E+00	0.00E+00	5.73E+00
		BaLa-140	<1.12E+01	0.00E+00	1.12E+01
		Total-Gam	0.00E+00		
		H3SW	<5.71E+01	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537969	2/17/2021 - 2/17/2021	Mn-54	<6.01E+00	0.00E+00	6.01E+00
		Co-58	<4.47E+00	0.00E+00	4.47E+00
		Fe-59	<1.43E+01	0.00E+00	1.43E+01
		Co-60	<7.09E+00	0.00E+00	7.09E+00
		Zn-65	<1.18E+01	0.00E+00	1.18E+01
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<6.00E+00	0.00E+00	6.00E+00
		I-131	<6.33E+00	0.00E+00	6.33E+00
		Cs-134	<6.33E+00	0.00E+00	6.33E+00
		Cs-137	<5.72E+00	0.00E+00	5.72E+00
		BaLa-140	<8.39E+00	0.00E+00	8.39E+00
		Total-Gam	0.00E+00		
		H3SW	<-9.7E+01	0.00E+00	1.94E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538952	3/18/2021 - 3/18/2021	Mn-54	<5.88E+00	0.00E+00	5.88E+00
		Co-58	<6.00E+00	0.00E+00	6.00E+00
		Fe-59	<1.19E+01	0.00E+00	1.19E+01
		Co-60	<4.45E+00	0.00E+00	4.45E+00
		Zn-65	<1.10E+01	0.00E+00	1.10E+01
		Zr-95	<9.06E+00	0.00E+00	9.06E+00
		Nb-95	<6.71E+00	0.00E+00	6.71E+00
		I-131	<7.91E+00	0.00E+00	7.91E+00
		Cs-134	<5.46E+00	0.00E+00	5.46E+00
		Cs-137	<4.96E+00	0.00E+00	4.96E+00
		BaLa-140	<8.44E+00	0.00E+00	8.44E+00
		Total-Gam	0.00E+00		
		H3SW	<1.11E+02	0.00E+00	1.89E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541358	4/21/2021 - 4/21/2021	Mn-54	<5.31E+00	0.00E+00	5.31E+00
		Co-58	<6.21E+00	0.00E+00	6.21E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<5.09E+00	0.00E+00	5.09E+00
		Zn-65	<9.04E+00	0.00E+00	9.04E+00
		Zr-95	<1.12E+01	0.00E+00	1.12E+01
		Nb-95	<6.99E+00	0.00E+00	6.99E+00
		I-131	<8.56E+00	0.00E+00	8.56E+00
		Cs-134	<5.87E+00	0.00E+00	5.87E+00
		Cs-137	<7.31E+00	0.00E+00	7.31E+00
		BaLa-140	<8.23E+00	0.00E+00	8.23E+00
		Total-Gam	0.00E+00		
		H3SW	<-8.8E+01	0.00E+00	1.93E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543781	5/19/2021 - 5/19/2021	Mn-54	<5.68E+00	0.00E+00	5.68E+00
		Co-58	<6.18E+00	0.00E+00	6.18E+00
		Fe-59	<1.25E+01	0.00E+00	1.25E+01
		Co-60	<6.62E+00	0.00E+00	6.62E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<6.88E+00	0.00E+00	6.88E+00
		I-131	<8.23E+00	0.00E+00	8.23E+00
		Cs-134	<6.91E+00	0.00E+00	6.91E+00
		Cs-137	<6.72E+00	0.00E+00	6.72E+00
		BaLa-140	<7.76E+00	0.00E+00	7.76E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.3E+02	0.00E+00	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545430	6/24/2021 - 6/24/2021	Mn-54	<5.23E+00	0.00E+00	5.23E+00
		Co-58	<5.56E+00	0.00E+00	5.56E+00
		Fe-59	<1.17E+01	0.00E+00	1.17E+01
		Co-60	<3.93E+00	0.00E+00	3.93E+00
		Zn-65	<1.41E+01	0.00E+00	1.41E+01
		Zr-95	<1.17E+01	0.00E+00	1.17E+01
		Nb-95	<6.55E+00	0.00E+00	6.55E+00
		I-131	<7.34E+00	0.00E+00	7.34E+00
		Cs-134	<6.34E+00	0.00E+00	6.34E+00
		Cs-137	<7.58E+00	0.00E+00	7.58E+00
		BaLa-140	<7.91E+00	0.00E+00	7.91E+00
		Total-Gam	0.00E+00		
		H3SW	<-4.8E+01	0.00E+00	1.99E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547123	7/22/2021 - 7/22/2021	Mn-54	<4.78E+00	0.00E+00	4.78E+00
		Co-58	<4.33E+00	0.00E+00	4.33E+00
		Fe-59	<1.17E+01	0.00E+00	1.17E+01
		Co-60	<3.14E+00	0.00E+00	3.14E+00
		Zn-65	<1.13E+01	0.00E+00	1.13E+01
		Zr-95	<1.08E+01	0.00E+00	1.08E+01

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13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547123	7/22/2021 - 7/22/2021	Nb-95	<6.39E+00	0.00E+00	6.39E+00
		I-131	<7.13E+00	0.00E+00	7.13E+00
		Cs-134	<5.21E+00	0.00E+00	5.21E+00
		Cs-137	<4.66E+00	0.00E+00	4.66E+00
		BaLa-140	<8.72E+00	0.00E+00	8.72E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.9E+01	0.00E+00	1.67E+02
548609	8/16/2021 - 8/16/2021	Mn-54	<5.42E+00	0.00E+00	5.42E+00
		Co-58	<5.22E+00	0.00E+00	5.22E+00
		Fe-59	<1.07E+01	0.00E+00	1.07E+01
		Co-60	<5.97E+00	0.00E+00	5.97E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<9.81E+00	0.00E+00	9.81E+00
		Nb-95	<6.09E+00	0.00E+00	6.09E+00
		I-131	<7.15E+00	0.00E+00	7.15E+00
		Cs-134	<7.54E+00	0.00E+00	7.54E+00
		Cs-137	<6.55E+00	0.00E+00	6.55E+00
		BaLa-140	<8.22E+00	0.00E+00	8.22E+00
		Total-Gam	0.00E+00		
		H3SW	<8.02E+01	0.00E+00	1.86E+02
549964	9/13/2021 - 9/13/2021	Mn-54	<5.67E+00	0.00E+00	5.67E+00
		Co-58	<4.86E+00	0.00E+00	4.86E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<6.55E+00	0.00E+00	6.55E+00
		Zn-65	<1.21E+01	0.00E+00	1.21E+01
		Zr-95	<9.57E+00	0.00E+00	9.57E+00
		Nb-95	<5.59E+00	0.00E+00	5.59E+00
		I-131	<7.02E+00	0.00E+00	7.02E+00
		Cs-134	<6.78E+00	0.00E+00	6.78E+00
		Cs-137	<6.23E+00	0.00E+00	6.23E+00
		BaLa-140	<5.33E+00	0.00E+00	5.33E+00
		Total-Gam	0.00E+00		
		H3SW	<4.81E+00	0.00E+00	1.91E+02
552216	10/19/2021 - 10/19/2021	Mn-54	<6.01E+00	0.00E+00	6.01E+00
		Co-58	<7.34E+00	0.00E+00	7.34E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<7.89E+00	0.00E+00	7.89E+00
		Zn-65	<5.86E+00	0.00E+00	5.86E+00
		Zr-95	<1.05E+01	0.00E+00	1.05E+01
		Nb-95	<6.99E+00	0.00E+00	6.99E+00
		I-131	<6.77E+00	0.00E+00	6.77E+00
		Cs-134	<6.76E+00	0.00E+00	6.76E+00
		Cs-137	<7.03E+00	0.00E+00	7.03E+00
		BaLa-140	<7.32E+00	0.00E+00	7.32E+00
		Total-Gam	0.00E+00		
		H3SW	<5.80E+01	0.00E+00	1.85E+02
554085	11/18/2021 - 11/18/2021	Mn-54	<4.77E+00	0.00E+00	4.77E+00
		Co-58	<6.55E+00	0.00E+00	6.55E+00
		Fe-59	<1.22E+01	0.00E+00	1.22E+01
		Co-60	<6.72E+00	0.00E+00	6.72E+00
		Zn-65	<1.06E+01	0.00E+00	1.06E+01
		Zr-95	<1.04E+01	0.00E+00	1.04E+01
		Nb-95	<6.76E+00	0.00E+00	6.75E+00
		I-131	<8.08E+00	0.00E+00	8.08E+00
		Cs-134	<5.86E+00	0.00E+00	5.86E+00
		Cs-137	<6.05E+00	0.00E+00	6.05E+00
		BaLa-140	<9.41E+00	0.00E+00	9.41E+00
		Total-Gam	0.00E+00		

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554085	11/18/2021 - 11/18/2021	H3SW	<-1.6E+01	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556681	12/21/2021 - 12/21/2021	Mn-54	<6.75E+00	0.00E+00	6.75E+00
		Co-58	<4.29E+00	0.00E+00	4.29E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<6.89E+00	0.00E+00	6.89E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<4.40E+00	0.00E+00	4.40E+00
		I-131	<1.02E+01	0.00E+00	1.02E+01
		Cs-134	<6.18E+00	0.00E+00	6.18E+00
		Cs-137	<5.16E+00	0.00E+00	5.16E+00
		BaLa-140	<9.46E+00	0.00E+00	9.46E+00
		Total-Gam	0.00E+00		
		H3SW	<-8.4E+01	0.00E+00	1.84E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536152	1/20/2021 - 1/20/2021	Mn-54	<6.93E+00	0.00E+00	6.93E+00
		Co-58	<4.06E+00	0.00E+00	4.06E+00
		Fe-59	<1.19E+01	0.00E+00	1.19E+01
		Co-60	<5.59E+00	0.00E+00	5.59E+00
		Zn-65	<1.13E+01	0.00E+00	1.13E+01
		Zr-95	<9.80E+00	0.00E+00	9.80E+00
		Nb-95	<7.02E+00	0.00E+00	7.02E+00
		I-131	<7.78E+00	0.00E+00	7.78E+00
		Cs-134	<5.07E+00	0.00E+00	5.07E+00
		Cs-137	<3.16E+00	0.00E+00	3.16E+00
		BaLa-140	<9.07E+00	0.00E+00	9.07E+00
		Total-Gam	0.00E+00		
		H3SW	<1.29E+02	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537970	2/17/2021 - 2/17/2021	Mn-54	<6.58E+00	0.00E+00	6.58E+00
		Co-58	<5.08E+00	0.00E+00	5.08E+00
		Fe-59	<1.30E+01	0.00E+00	1.30E+01
		Co-60	<5.40E+00	0.00E+00	5.40E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<7.70E+00	0.00E+00	7.70E+00
		I-131	<6.02E+00	0.00E+00	6.02E+00
		Cs-134	<7.41E+00	0.00E+00	7.41E+00
		Cs-137	<5.85E+00	0.00E+00	5.85E+00
		BaLa-140	<8.56E+00	0.00E+00	8.56E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.2E+02	0.00E+00	1.97E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538953	3/18/2021 - 3/18/2021	Mn-54	<5.86E+00	0.00E+00	5.86E+00
		Co-58	<5.12E+00	0.00E+00	5.12E+00
		Fe-59	<9.91E+00	0.00E+00	9.91E+00
		Co-60	<6.40E+00	0.00E+00	6.40E+00
		Zn-65	<1.06E+01	0.00E+00	1.06E+01
		Zr-95	<1.08E+01	0.00E+00	1.08E+01
		Nb-95	<5.13E+00	0.00E+00	5.13E+00
		I-131	<6.93E+00	0.00E+00	6.93E+00
		Cs-134	<5.06E+00	0.00E+00	5.06E+00
		Cs-137	<4.14E+00	0.00E+00	4.14E+00
		BaLa-140	<6.15E+00	0.00E+00	6.15E+00
		Total-Gam	0.00E+00		
		H3SW	<7.67E+01	0.00E+00	1.89E+02

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID: 541359 Sample Dates: 4/21/2021 - 4/21/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.24E+00	0.00E+00	6.24E+00
Co-58	<5.01E+00	0.00E+00	5.01E+00
Fe-59	<1.25E+01	0.00E+00	1.25E+01
Co-60	<3.84E+00	0.00E+00	3.84E+00
Zn-65	<1.28E+01	0.00E+00	1.28E+01
Zr-95	<9.51E+00	0.00E+00	9.51E+00
Nb-95	<7.73E+00	0.00E+00	7.73E+00
I-131	<8.69E+00	0.00E+00	8.69E+00
Cs-134	<5.71E+00	0.00E+00	5.71E+00
Cs-137	<6.23E+00	0.00E+00	6.23E+00
BaLa-140	<8.78E+00	0.00E+00	8.78E+00
Total-Gam	0.00E+00		
H3SW	<-5.8E+01	0.00E+00	1.96E+02

Sample ID: 543782 Sample Dates: 5/19/2021 - 5/19/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.24E+00	0.00E+00	6.24E+00
Co-58	<3.94E+00	0.00E+00	3.94E+00
Fe-59	<1.35E+01	0.00E+00	1.35E+01
Co-60	<4.97E+00	0.00E+00	4.97E+00
Zn-65	<1.16E+01	0.00E+00	1.16E+01
Zr-95	<9.15E+00	0.00E+00	9.15E+00
Nb-95	<5.07E+00	0.00E+00	5.07E+00
I-131	<9.04E+00	0.00E+00	9.04E+00
Cs-134	<6.80E+00	0.00E+00	6.80E+00
Cs-137	<6.55E+00	0.00E+00	6.55E+00
BaLa-140	<8.09E+00	0.00E+00	8.09E+00
Total-Gam	0.00E+00		
H3SW	<-7.3E+01	0.00E+00	1.97E+02

Sample ID: 545431 Sample Dates: 6/24/2021 - 6/24/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.86E+00	0.00E+00	5.86E+00
Co-58	<5.12E+00	0.00E+00	5.12E+00
Fe-59	<9.21E+00	0.00E+00	9.21E+00
Co-60	<6.40E+00	0.00E+00	6.40E+00
Zn-65	<9.88E+00	0.00E+00	9.88E+00
Zr-95	<8.50E+00	0.00E+00	8.50E+00
Nb-95	<5.36E+00	0.00E+00	5.36E+00
I-131	<7.09E+00	0.00E+00	7.09E+00
Cs-134	<5.35E+00	0.00E+00	5.35E+00
Cs-137	<5.12E+00	0.00E+00	5.12E+00
BaLa-140	<6.15E+00	0.00E+00	6.15E+00
Total-Gam	0.00E+00		
H3SW	<-1.4E+01	0.00E+00	1.99E+02

Sample ID: 547124 Sample Dates: 7/22/2021 - 7/22/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.09E+00	0.00E+00	6.09E+00
Co-58	<4.98E+00	0.00E+00	4.98E+00
Fe-59	<1.01E+01	0.00E+00	1.01E+01
Co-60	<5.15E+00	0.00E+00	5.15E+00
Zn-65	<1.49E+01	0.00E+00	1.49E+01
Zr-95	<1.16E+01	0.00E+00	1.16E+01
Nb-95	<7.14E+00	0.00E+00	7.14E+00
I-131	<7.85E+00	0.00E+00	7.85E+00
Cs-134	<6.98E+00	0.00E+00	6.98E+00
Cs-137	<4.75E+00	0.00E+00	4.75E+00
BaLa-140	<6.14E+00	0.00E+00	6.14E+00
Total-Gam	0.00E+00		
H3SW	<-4.4E+01	0.00E+00	1.68E+02

Sample ID: 548610 Sample Dates: 8/16/2021 - 8/16/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.85E+00	0.00E+00	5.85E+00
Co-58	<5.08E+00	0.00E+00	5.08E+00
Fe-59	<9.89E+00	0.00E+00	9.89E+00
Co-60	<3.04E+00	0.00E+00	3.04E+00
Zn-65	<1.15E+01	0.00E+00	1.15E+01
Zr-95	<9.56E+00	0.00E+00	9.56E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548610	8/16/2021 - 8/16/2021	Nb-95	<4.98E+00	0.00E+00	4.98E+00
		I-131	<6.62E+00	0.00E+00	6.62E+00
		Cs-134	<6.16E+00	0.00E+00	6.16E+00
		Cs-137	<4.96E+00	0.00E+00	4.96E+00
		BaLa-140	<4.19E+00	0.00E+00	4.19E+00
		Total-Gam	0.00E+00		
		H3SW	<1.65E+01	0.00E+00	1.86E+02
549965	9/13/2021 - 9/13/2021	Mn-54	<6.43E+00	0.00E+00	6.43E+00
		Co-58	<7.21E+00	0.00E+00	7.21E+00
		Fe-59	<9.49E+00	0.00E+00	9.49E+00
		Co-60	<6.80E+00	0.00E+00	6.80E+00
		Zn-65	<1.50E+01	0.00E+00	1.50E+01
		Zr-95	<1.12E+01	0.00E+00	1.12E+01
		Nb-95	<5.00E+00	0.00E+00	5.00E+00
		I-131	<7.45E+00	0.00E+00	7.45E+00
		Cs-134	<6.52E+00	0.00E+00	6.52E+00
		Cs-137	<5.68E+00	0.00E+00	5.68E+00
		BaLa-140	<8.23E+00	0.00E+00	8.23E+00
		Total-Gam	0.00E+00		
		H3SW	<9.67E+00	0.00E+00	1.92E+02
552217	10/19/2021 - 10/19/2021	Mn-54	<7.12E+00	0.00E+00	7.12E+00
		Co-58	<6.31E+00	0.00E+00	6.31E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<7.00E+00	0.00E+00	7.00E+00
		Zn-65	<1.23E+01	0.00E+00	1.23E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<4.34E+00	0.00E+00	4.34E+00
		I-131	<6.30E+00	0.00E+00	6.30E+00
		Cs-134	<7.66E+00	0.00E+00	7.66E+00
		Cs-137	<6.66E+00	0.00E+00	6.66E+00
		BaLa-140	<9.43E+00	0.00E+00	9.43E+00
		Total-Gam	0.00E+00		
		H3SW	<2.56E+01	0.00E+00	1.86E+02
554086	11/18/2021 - 11/18/2021	Mn-54	<5.81E+00	0.00E+00	5.81E+00
		Co-58	<6.32E+00	0.00E+00	6.32E+00
		Fe-59	<1.36E+01	0.00E+00	1.36E+01
		Co-60	<7.01E+00	0.00E+00	7.01E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<8.50E+00	0.00E+00	8.50E+00
		I-131	<8.87E+00	0.00E+00	8.87E+00
		Cs-134	<7.68E+00	0.00E+00	7.68E+00
		Cs-137	<7.25E+00	0.00E+00	7.25E+00
		BaLa-140	<1.05E+01	0.00E+00	1.05E+01
		Total-Gam	0.00E+00		
		H3SW	<-1.2E+02	0.00E+00	1.77E+02
556682	12/21/2021 - 12/21/2021	Mn-54	<5.27E+00	0.00E+00	5.27E+00
		Co-58	<6.30E+00	0.00E+00	6.30E+00
		Fe-59	<1.09E+01	0.00E+00	1.09E+01
		Co-60	<5.12E+00	0.00E+00	5.12E+00
		Zn-65	<1.43E+01	0.00E+00	1.43E+01
		Zr-95	<7.19E+00	0.00E+00	7.19E+00
		Nb-95	<7.20E+00	0.00E+00	7.20E+00
		I-131	<8.50E+00	0.00E+00	8.50E+00
		Cs-134	<7.00E+00	0.00E+00	7.00E+00
		Cs-137	<6.43E+00	0.00E+00	6.43E+00
		BaLa-140	<5.46E+00	0.00E+00	5.46E+00
		Total-Gam	0.00E+00		

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID: 556682 Sample Dates: 12/21/2021 - 12/21/2021

Nuclide	Activity	2 Sigma Error	MDA
H3SW	<-3.3E+01	0.00E+00	1.84E+02

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

Sample ID: 536153 Sample Dates: 1/20/2021 - 1/20/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.62E+00	0.00E+00	6.62E+00
Co-58	<5.49E+00	0.00E+00	5.49E+00
Fe-59	<1.35E+01	0.00E+00	1.35E+01
Co-60	<8.09E+00	0.00E+00	8.09E+00
Zn-65	<1.11E+01	0.00E+00	1.11E+01
Zr-95	<1.19E+01	0.00E+00	1.19E+01
Nb-95	<6.69E+00	0.00E+00	6.69E+00
I-131	<8.56E+00	0.00E+00	8.56E+00
Cs-134	<7.76E+00	0.00E+00	7.76E+00
Cs-137	<6.89E+00	0.00E+00	6.89E+00
BaLa-140	<9.51E+00	0.00E+00	9.51E+00
Total-Gam	0.00E+00		
H3SW	1.92E+02	1.14E+02	1.85E+02

Sample ID: 537971 Sample Dates: 2/17/2021 - 2/17/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.00E+00	0.00E+00	6.00E+00
Co-58	<4.72E+00	0.00E+00	4.72E+00
Fe-59	<1.16E+01	0.00E+00	1.16E+01
Co-60	<4.55E+00	0.00E+00	4.55E+00
Zn-65	<1.24E+01	0.00E+00	1.24E+01
Zr-95	<9.00E+00	0.00E+00	9.00E+00
Nb-95	<6.80E+00	0.00E+00	6.80E+00
I-131	<6.57E+00	0.00E+00	6.57E+00
Cs-134	<6.09E+00	0.00E+00	6.09E+00
Cs-137	<5.69E+00	0.00E+00	5.69E+00
BaLa-140	<6.70E+00	0.00E+00	6.70E+00
Total-Gam	0.00E+00		
H3SW	<-4.8E+01	0.00E+00	1.96E+02

Sample ID: 538954 Sample Dates: 3/18/2021 - 3/18/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.75E+00	0.00E+00	6.75E+00
Co-58	<5.39E+00	0.00E+00	5.39E+00
Fe-59	<1.34E+01	0.00E+00	1.34E+01
Co-60	<7.09E+00	0.00E+00	7.09E+00
Zn-65	<1.49E+01	0.00E+00	1.49E+01
Zr-95	<1.02E+01	0.00E+00	1.02E+01
Nb-95	<5.88E+00	0.00E+00	5.88E+00
I-131	<8.59E+00	0.00E+00	8.59E+00
Cs-134	<7.77E+00	0.00E+00	7.77E+00
Cs-137	<6.21E+00	0.00E+00	6.21E+00
BaLa-140	<8.34E+00	0.00E+00	8.34E+00
Total-Gam	0.00E+00		
H3SW	<6.50E+01	0.00E+00	1.89E+02

Sample ID: 541360 Sample Dates: 4/21/2021 - 4/21/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.94E+00	0.00E+00	5.94E+00
Co-58	<6.80E+00	0.00E+00	6.80E+00
Fe-59	<1.52E+01	0.00E+00	1.52E+01
Co-60	<4.48E+00	0.00E+00	4.48E+00
Zn-65	<1.23E+01	0.00E+00	1.23E+01
Zr-95	<1.19E+01	0.00E+00	1.19E+01
Nb-95	<6.52E+00	0.00E+00	6.52E+00
I-131	<9.82E+00	0.00E+00	9.82E+00
Cs-134	<7.94E+00	0.00E+00	7.94E+00
Cs-137	<6.12E+00	0.00E+00	6.12E+00
BaLa-140	<1.01E+01	0.00E+00	1.01E+01
Total-Gam	0.00E+00		
H3SW	<-6.8E+01	0.00E+00	1.96E+02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543783	5/19/2021 - 5/19/2021	Mn-54	<6.18E+00	0.00E+00	6.18E+00
		Co-58	<6.35E+00	0.00E+00	6.35E+00
		Fe-59	<1.19E+01	0.00E+00	1.19E+01
		Co-60	<6.71E+00	0.00E+00	6.71E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.11E+01	0.00E+00	1.11E+01
		Nb-95	<7.21E+00	0.00E+00	7.21E+00
		I-131	<9.39E+00	0.00E+00	9.39E+00
		Cs-134	<7.57E+00	0.00E+00	7.57E+00
		Cs-137	<5.14E+00	0.00E+00	5.14E+00
		BaLa-140	<9.53E+00	0.00E+00	9.53E+00
		Total-Gam	0.00E+00		
		H3SW	<-8.2E+01	0.00E+00	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545432	6/24/2021 - 6/24/2021	Mn-54	<5.75E+00	0.00E+00	5.75E+00
		Co-58	<6.50E+00	0.00E+00	6.50E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<6.30E+00	0.00E+00	6.30E+00
		Zn-65	<8.52E+00	0.00E+00	8.52E+00
		Zr-95	<8.47E+00	0.00E+00	8.47E+00
		Nb-95	<6.91E+00	0.00E+00	6.91E+00
		I-131	<7.68E+00	0.00E+00	7.68E+00
		Cs-134	<7.36E+00	0.00E+00	7.36E+00
		Cs-137	<6.93E+00	0.00E+00	6.93E+00
		BaLa-140	<8.34E+00	0.00E+00	8.34E+00
		Total-Gam	0.00E+00		
		H3SW	<-2.7E+01	0.00E+00	2.00E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547125	7/22/2021 - 7/22/2021	Mn-54	<6.48E+00	0.00E+00	6.48E+00
		Co-58	<6.44E+00	0.00E+00	6.44E+00
		Fe-59	<1.04E+01	0.00E+00	1.04E+01
		Co-60	<6.65E+00	0.00E+00	6.65E+00
		Zn-65	<1.49E+01	0.00E+00	1.49E+01
		Zr-95	<1.15E+01	0.00E+00	1.15E+01
		Nb-95	<5.90E+00	0.00E+00	5.90E+00
		I-131	<8.29E+00	0.00E+00	8.29E+00
		Cs-134	<5.78E+00	0.00E+00	5.78E+00
		Cs-137	<6.78E+00	0.00E+00	6.78E+00
		BaLa-140	<7.04E+00	0.00E+00	7.04E+00
		Total-Gam	0.00E+00		
		H3SW	<2.56E+01	0.00E+00	1.67E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548611	8/16/2021 - 8/16/2021	Mn-54	<6.55E+00	0.00E+00	6.55E+00
		Co-58	<6.04E+00	0.00E+00	6.04E+00
		Fe-59	<9.56E+00	0.00E+00	9.56E+00
		Co-60	<4.58E+00	0.00E+00	4.58E+00
		Zn-65	<1.06E+01	0.00E+00	1.06E+01
		Zr-95	<9.48E+00	0.00E+00	9.48E+00
		Nb-95	<5.34E+00	0.00E+00	5.34E+00
		I-131	<6.36E+00	0.00E+00	6.36E+00
		Cs-134	<6.11E+00	0.00E+00	6.11E+00
		Cs-137	<5.72E+00	0.00E+00	5.72E+00
		BaLa-140	<9.31E+00	0.00E+00	9.31E+00
		Total-Gam	0.00E+00		
		H3SW	<2.59E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549966	9/13/2021 - 9/13/2021	Mn-54	<5.83E+00	0.00E+00	5.83E+00
		Co-58	<5.45E+00	0.00E+00	5.45E+00
		Fe-59	<8.90E+00	0.00E+00	8.90E+00
		Co-60	<6.00E+00	0.00E+00	6.00E+00
		Zn-65	<1.19E+01	0.00E+00	1.19E+01
		Zr-95	<8.72E+00	0.00E+00	8.72E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549966	9/13/2021 - 9/13/2021	Nb-95	<4.68E+00	0.00E+00	4.68E+00
		I-131	<5.75E+00	0.00E+00	5.75E+00
		Cs-134	<6.11E+00	0.00E+00	6.11E+00
		Cs-137	<4.90E+00	0.00E+00	4.90E+00
		BaLa-140	<6.35E+00	0.00E+00	6.35E+00
		Total-Gam	0.00E+00		
		H3SW	<1.71E+01	0.00E+00	1.95E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552218	10/19/2021 - 10/19/2021	Mn-54	<5.21E+00	0.00E+00	5.21E+00
		Co-58	<5.83E+00	0.00E+00	5.83E+00
		Fe-59	<1.01E+01	0.00E+00	1.01E+01
		Co-60	<7.42E+00	0.00E+00	7.42E+00
		Zn-65	<1.25E+01	0.00E+00	1.25E+01
		Zr-95	<8.26E+00	0.00E+00	8.26E+00
		Nb-95	<4.87E+00	0.00E+00	4.87E+00
		I-131	<4.94E+00	0.00E+00	4.94E+00
		Cs-134	<5.61E+00	0.00E+00	5.61E+00
		Cs-137	<5.53E+00	0.00E+00	5.53E+00
		BaLa-140	<7.53E+00	0.00E+00	7.53E+00
		Total-Gam	0.00E+00		
		H3SW	<0.00E+00	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554087	11/18/2021 - 11/18/2021	Mn-54	<5.51E+00	0.00E+00	5.51E+00
		Co-58	<5.42E+00	0.00E+00	5.42E+00
		Fe-59	<9.66E+00	0.00E+00	9.66E+00
		Co-60	<6.21E+00	0.00E+00	6.21E+00
		Zn-65	<1.10E+01	0.00E+00	1.10E+01
		Zr-95	<9.46E+00	0.00E+00	9.46E+00
		Nb-95	<5.23E+00	0.00E+00	5.23E+00
		I-131	<8.60E+00	0.00E+00	8.60E+00
		Cs-134	<6.59E+00	0.00E+00	6.59E+00
		Cs-137	<5.16E+00	0.00E+00	5.16E+00
		BaLa-140	<7.03E+00	0.00E+00	7.03E+00
		Total-Gam	0.00E+00		
		H3SW	<1.85E+01	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556683	12/21/2021 - 12/21/2021	Mn-54	<8.32E+00	0.00E+00	8.32E+00
		Co-58	<6.97E+00	0.00E+00	6.97E+00
		Fe-59	<1.40E+01	0.00E+00	1.40E+01
		Co-60	<5.05E+00	0.00E+00	5.05E+00
		Zn-65	<1.19E+01	0.00E+00	1.19E+01
		Zr-95	<9.46E+00	0.00E+00	9.46E+00
		Nb-95	<8.40E+00	0.00E+00	8.40E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<6.73E+00	0.00E+00	6.73E+00
		Cs-137	<6.02E+00	0.00E+00	6.02E+00
		BaLa-140	<1.10E+01	0.00E+00	1.10E+01
		Total-Gam	0.00E+00		
		H3SW	<6.96E+00	0.00E+00	1.84E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536154	1/20/2021 - 1/20/2021	Mn-54	<5.86E+00	0.00E+00	5.86E+00
		Co-58	<5.61E+00	0.00E+00	5.61E+00
		Fe-59	<1.34E+01	0.00E+00	1.34E+01
		Co-60	<5.09E+00	0.00E+00	5.09E+00
		Zn-65	<1.51E+01	0.00E+00	1.51E+01
		Zr-95	<1.05E+01	0.00E+00	1.05E+01
		Nb-95	<6.08E+00	0.00E+00	6.08E+00
		I-131	<8.06E+00	0.00E+00	8.06E+00
		Cs-134	<7.37E+00	0.00E+00	7.37E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536154	1/20/2021 - 1/20/2021	Cs-137	<6.87E+00	0.00E+00	6.87E+00
		BaLa-140	<1.09E+01	0.00E+00	1.09E+01
		Total-Gam	0.00E+00		
		H3SW	<3.85E+01	0.00E+00	1.81E+02
537972	2/17/2021 - 2/17/2021	Mn-54	<6.68E+00	0.00E+00	6.68E+00
		Co-58	<4.82E+00	0.00E+00	4.82E+00
		Fe-59	<9.76E+00	0.00E+00	9.76E+00
		Co-60	<6.55E+00	0.00E+00	6.55E+00
		Zn-65	<1.36E+01	0.00E+00	1.36E+01
		Zr-95	<1.05E+01	0.00E+00	1.05E+01
		Nb-95	<6.31E+00	0.00E+00	6.31E+00
		I-131	<5.18E+00	0.00E+00	5.18E+00
		Cs-134	<3.92E+00	0.00E+00	3.92E+00
		Cs-137	<5.73E+00	0.00E+00	5.73E+00
		BaLa-140	<6.54E+00	0.00E+00	6.54E+00
		Total-Gam	0.00E+00		
		H3SW	<-6.4E+01	0.00E+00	1.95E+02
538955	3/18/2021 - 3/18/2021	Mn-54	<6.96E+00	0.00E+00	6.96E+00
		Co-58	<6.26E+00	0.00E+00	6.26E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<8.16E+00	0.00E+00	8.16E+00
		Zn-65	<1.29E+01	0.00E+00	1.29E+01
		Zr-95	<1.09E+01	0.00E+00	1.09E+01
		Nb-95	<6.46E+00	0.00E+00	6.46E+00
		I-131	<8.56E+00	0.00E+00	8.56E+00
		Cs-134	<7.80E+00	0.00E+00	7.80E+00
		Cs-137	<6.78E+00	0.00E+00	6.78E+00
		BaLa-140	<9.82E+00	0.00E+00	9.82E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.8E+01	0.00E+00	1.84E+02
541361	4/21/2021 - 4/21/2021	Mn-54	<4.20E+00	0.00E+00	4.20E+00
		Co-58	<5.74E+00	0.00E+00	5.74E+00
		Fe-59	<1.32E+01	0.00E+00	1.32E+01
		Co-60	<5.52E+00	0.00E+00	5.52E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<9.28E+00	0.00E+00	9.28E+00
		Nb-95	<6.74E+00	0.00E+00	6.74E+00
		I-131	<8.91E+00	0.00E+00	8.91E+00
		Cs-134	<7.66E+00	0.00E+00	7.66E+00
		Cs-137	<6.65E+00	0.00E+00	6.65E+00
		BaLa-140	<1.02E+01	0.00E+00	1.02E+01
		Total-Gam	0.00E+00		
		H3SW	<-9.4E+00	0.00E+00	1.90E+02
543784	5/19/2021 - 5/19/2021	Mn-54	<6.17E+00	0.00E+00	6.17E+00
		Co-58	<4.31E+00	0.00E+00	4.31E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<6.32E+00	0.00E+00	6.32E+00
		Zn-65	<1.24E+01	0.00E+00	1.24E+01
		Zr-95	<1.11E+01	0.00E+00	1.11E+01
		Nb-95	<6.58E+00	0.00E+00	6.58E+00
		I-131	<7.95E+00	0.00E+00	7.95E+00
		Cs-134	<7.10E+00	0.00E+00	7.10E+00
		Cs-137	<6.00E+00	0.00E+00	6.00E+00
		BaLa-140	<7.36E+00	0.00E+00	7.36E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.4E+02	0.00E+00	1.96E+02

EnRad Laboratories

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545433	6/24/2021 - 6/24/2021	Mn-54	<6.69E+00	0.00E+00	6.69E+00
		Co-58	<5.72E+00	0.00E+00	5.72E+00
		Fe-59	<1.35E+01	0.00E+00	1.35E+01
		Co-60	<7.01E+00	0.00E+00	7.01E+00
		Zn-65	<1.30E+01	0.00E+00	1.30E+01
		Zr-95	<9.98E+00	0.00E+00	9.98E+00
		Nb-95	<6.67E+00	0.00E+00	6.67E+00
		I-131	<8.47E+00	0.00E+00	8.47E+00
		Cs-134	<6.50E+00	0.00E+00	6.50E+00
		Cs-137	<6.01E+00	0.00E+00	6.01E+00
		BaLa-140	<9.24E+00	0.00E+00	9.24E+00
		Total-Gam	0.00E+00		
		H3SW	<-7.7E+01	0.00E+00	1.99E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547126	7/22/2021 - 7/22/2021	Mn-54	<5.31E+00	0.00E+00	5.31E+00
		Co-58	<4.74E+00	0.00E+00	4.74E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<5.88E+00	0.00E+00	5.88E+00
		Zn-65	<1.22E+01	0.00E+00	1.22E+01
		Zr-95	<9.07E+00	0.00E+00	9.07E+00
		Nb-95	<4.75E+00	0.00E+00	4.75E+00
		I-131	<8.37E+00	0.00E+00	8.37E+00
		Cs-134	<6.99E+00	0.00E+00	6.99E+00
		Cs-137	<5.73E+00	0.00E+00	5.73E+00
		BaLa-140	<7.78E+00	0.00E+00	7.78E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.2E+01	0.00E+00	1.67E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548612	8/16/2021 - 8/16/2021	Mn-54	<6.23E+00	0.00E+00	6.23E+00
		Co-58	<5.59E+00	0.00E+00	5.59E+00
		Fe-59	<1.41E+01	0.00E+00	1.41E+01
		Co-60	<7.18E+00	0.00E+00	7.18E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<9.72E+00	0.00E+00	9.72E+00
		Nb-95	<5.24E+00	0.00E+00	5.24E+00
		I-131	<5.97E+00	0.00E+00	5.97E+00
		Cs-134	<6.26E+00	0.00E+00	6.26E+00
		Cs-137	<7.36E+00	0.00E+00	7.36E+00
		BaLa-140	<8.18E+00	0.00E+00	8.18E+00
		Total-Gam	0.00E+00		
		H3SW	<2.59E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549967	9/13/2021 - 9/13/2021	Mn-54	<6.53E+00	0.00E+00	6.53E+00
		Co-58	<4.39E+00	0.00E+00	4.39E+00
		Fe-59	<1.15E+01	0.00E+00	1.15E+01
		Co-60	<5.82E+00	0.00E+00	5.82E+00
		Zn-65	<1.37E+01	0.00E+00	1.37E+01
		Zr-95	<1.08E+01	0.00E+00	1.08E+01
		Nb-95	<6.27E+00	0.00E+00	6.27E+00
		I-131	<7.17E+00	0.00E+00	7.17E+00
		Cs-134	<6.16E+00	0.00E+00	6.16E+00
		Cs-137	<4.96E+00	0.00E+00	4.96E+00
		BaLa-140	<6.16E+00	0.00E+00	6.16E+00
		Total-Gam	0.00E+00		
		H3SW	<-7.7E+01	0.00E+00	1.92E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552219	10/19/2021 - 10/19/2021	Mn-54	<4.49E+00	0.00E+00	4.49E+00
		Co-58	<5.07E+00	0.00E+00	5.07E+00
		Fe-59	<9.09E+00	0.00E+00	9.09E+00
		Co-60	<5.73E+00	0.00E+00	5.73E+00
		Zn-65	<1.01E+01	0.00E+00	1.01E+01
		Zr-95	<1.10E+01	0.00E+00	1.10E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552219	10/19/2021 - 10/19/2021	Nb-95	<5.60E+00	0.00E+00	5.60E+00
		I-131	<5.73E+00	0.00E+00	5.73E+00
		Cs-134	<7.28E+00	0.00E+00	7.28E+00
		Cs-137	<5.92E+00	0.00E+00	5.92E+00
		BaLa-140	<6.19E+00	0.00E+00	6.19E+00
		Total-Gam	0.00E+00		
		H3SW	<2.10E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554088	11/18/2021 - 11/18/2021	Mn-54	<4.97E+00	0.00E+00	4.97E+00
		Co-58	<6.50E+00	0.00E+00	6.50E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<6.67E+00	0.00E+00	6.67E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<5.77E+00	0.00E+00	5.77E+00
		I-131	<8.81E+00	0.00E+00	8.81E+00
		Cs-134	<7.68E+00	0.00E+00	7.68E+00
		Cs-137	<6.18E+00	0.00E+00	6.18E+00
		BaLa-140	<1.16E+01	0.00E+00	1.16E+01
		Total-Gam	0.00E+00		
		H3SW	<-2.3E+00	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556684	12/21/2021 - 12/21/2021	Mn-54	<7.14E+00	0.00E+00	7.14E+00
		Co-58	<6.01E+00	0.00E+00	6.01E+00
		Fe-59	<1.01E+01	0.00E+00	1.01E+01
		Co-60	<6.99E+00	0.00E+00	6.99E+00
		Zn-65	<1.40E+01	0.00E+00	1.40E+01
		Zr-95	<1.08E+01	0.00E+00	1.08E+01
		Nb-95	<1.08E+01	0.00E+00	1.08E+01
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<6.68E+00	0.00E+00	6.68E+00
		Cs-137	<8.25E+00	0.00E+00	8.25E+00
		BaLa-140	<9.60E+00	0.00E+00	9.60E+00
		Total-Gam	0.00E+00		
		H3SW	<-3.0E+01	0.00E+00	1.84E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536155	1/20/2021 - 1/20/2021	Mn-54	<5.31E+00	0.00E+00	5.31E+00
		Co-58	<5.45E+00	0.00E+00	5.45E+00
		Fe-59	<1.30E+01	0.00E+00	1.30E+01
		Co-60	<5.42E+00	0.00E+00	5.42E+00
		Zn-65	<1.22E+01	0.00E+00	1.22E+01
		Zr-95	<9.52E+00	0.00E+00	9.52E+00
		Nb-95	<6.48E+00	0.00E+00	6.48E+00
		I-131	<7.42E+00	0.00E+00	7.42E+00
		Cs-134	<5.95E+00	0.00E+00	5.95E+00
		Cs-137	<5.16E+00	0.00E+00	5.16E+00
		BaLa-140	<1.07E+01	0.00E+00	1.07E+01
		Total-Gam	0.00E+00		
		H3SW	2.53E+03	1.71E+02	1.81E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537973	2/17/2021 - 2/17/2021	Mn-54	<7.48E+00	0.00E+00	7.48E+00
		Co-58	<5.19E+00	0.00E+00	5.19E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<7.09E+00	0.00E+00	7.09E+00
		Zn-65	<8.97E+00	0.00E+00	8.97E+00
		Zr-95	<9.76E+00	0.00E+00	9.76E+00
		Nb-95	<5.65E+00	0.00E+00	5.65E+00
		I-131	<6.48E+00	0.00E+00	6.48E+00
		Cs-134	<5.31E+00	0.00E+00	5.31E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537973	2/17/2021 - 2/17/2021	Cs-137	<5.72E+00	0.00E+00	5.72E+00
		BaLa-140	<7.92E+00	0.00E+00	7.92E+00
		Total-Gam	0.00E+00		
		H3SW	<2.38E+01	0.00E+00	1.95E+02
538956	3/18/2021 - 3/18/2021	Mn-54	<5.60E+00	0.00E+00	5.60E+00
		Co-58	<5.10E+00	0.00E+00	5.10E+00
		Fe-59	<1.00E+01	0.00E+00	1.00E+01
		Co-60	<4.87E+00	0.00E+00	4.87E+00
		Zn-65	<1.40E+01	0.00E+00	1.40E+01
		Zr-95	<1.17E+01	0.00E+00	1.17E+01
		Nb-95	<6.89E+00	0.00E+00	6.89E+00
		I-131	<7.36E+00	0.00E+00	7.36E+00
		Cs-134	<6.87E+00	0.00E+00	6.87E+00
		Cs-137	<7.64E+00	0.00E+00	7.64E+00
		BaLa-140	<6.74E+00	0.00E+00	6.74E+00
		Total-Gam	0.00E+00		
		H3SW	1.93E+02	1.13E+02	1.84E+02
541362	4/21/2021 - 4/21/2021	Mn-54	<7.27E+00	0.00E+00	7.27E+00
		Co-58	<6.31E+00	0.00E+00	6.31E+00
		Fe-59	<1.32E+01	0.00E+00	1.32E+01
		Co-60	<5.50E+00	0.00E+00	5.50E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<6.19E+00	0.00E+00	6.19E+00
		I-131	<1.02E+01	0.00E+00	1.02E+01
		Cs-134	<7.63E+00	0.00E+00	7.63E+00
		Cs-137	<7.22E+00	0.00E+00	7.22E+00
		BaLa-140	<8.93E+00	0.00E+00	8.93E+00
		Total-Gam	0.00E+00		
		H3SW	<6.60E+01	0.00E+00	1.91E+02
543785	5/19/2021 - 5/19/2021	Mn-54	<5.82E+00	0.00E+00	5.82E+00
		Co-58	<4.87E+00	0.00E+00	4.87E+00
		Fe-59	<1.23E+01	0.00E+00	1.23E+01
		Co-60	<6.32E+00	0.00E+00	6.32E+00
		Zn-65	<1.19E+01	0.00E+00	1.19E+01
		Zr-95	<1.14E+01	0.00E+00	1.14E+01
		Nb-95	<6.96E+00	0.00E+00	6.96E+00
		I-131	<9.78E+00	0.00E+00	9.78E+00
		Cs-134	<6.93E+00	0.00E+00	6.93E+00
		Cs-137	<6.66E+00	0.00E+00	6.66E+00
		BaLa-140	<1.20E+01	0.00E+00	1.20E+01
		Total-Gam	0.00E+00		
		H3SW	<8.22E+01	0.00E+00	1.96E+02
545434	6/24/2021 - 6/24/2021	Mn-54	<6.96E+00	0.00E+00	6.96E+00
		Co-58	<5.04E+00	0.00E+00	5.04E+00
		Fe-59	<1.04E+01	0.00E+00	1.04E+01
		Co-60	<5.91E+00	0.00E+00	5.91E+00
		Zn-65	<1.24E+01	0.00E+00	1.24E+01
		Zr-95	<9.24E+00	0.00E+00	9.24E+00
		Nb-95	<5.71E+00	0.00E+00	5.71E+00
		I-131	<8.56E+00	0.00E+00	8.56E+00
		Cs-134	<6.02E+00	0.00E+00	6.02E+00
		Cs-137	<7.62E+00	0.00E+00	7.62E+00
		BaLa-140	<7.86E+00	0.00E+00	7.86E+00
		Total-Gam	0.00E+00		
		H3SW	2.09E+02	1.22E+02	1.99E+02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547127	7/22/2021 - 7/22/2021	Mn-54	<5.86E+00	0.00E+00	5.86E+00
		Co-58	<5.36E+00	0.00E+00	5.36E+00
		Fe-59	<1.23E+01	0.00E+00	1.23E+01
		Co-60	<5.59E+00	0.00E+00	5.59E+00
		Zn-65	<1.20E+01	0.00E+00	1.20E+01
		Zr-95	<1.08E+01	0.00E+00	1.08E+01
		Nb-95	<6.40E+00	0.00E+00	6.40E+00
		I-131	<8.93E+00	0.00E+00	8.93E+00
		Cs-134	<6.99E+00	0.00E+00	6.99E+00
		Cs-137	<7.06E+00	0.00E+00	7.06E+00
		BaLa-140	<1.00E+01	0.00E+00	1.00E+01
		Total-Gam	0.00E+00		
		H3SW	3.47E+02	1.09E+02	1.67E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548613	8/16/2021 - 8/16/2021	Mn-54	<4.74E+00	0.00E+00	4.74E+00
		Co-58	<5.44E+00	0.00E+00	5.44E+00
		Fe-59	<1.27E+01	0.00E+00	1.27E+01
		Co-60	<6.35E+00	0.00E+00	6.35E+00
		Zn-65	<1.35E+01	0.00E+00	1.35E+01
		Zr-95	<9.47E+00	0.00E+00	9.47E+00
		Nb-95	<6.27E+00	0.00E+00	6.27E+00
		I-131	<6.56E+00	0.00E+00	6.56E+00
		Cs-134	<6.32E+00	0.00E+00	6.32E+00
		Cs-137	<6.71E+00	0.00E+00	6.71E+00
		BaLa-140	<6.30E+00	0.00E+00	6.30E+00
		Total-Gam	0.00E+00		
		H3SW	<5.90E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549968	9/13/2021 - 9/13/2021	Mn-54	<4.22E+00	0.00E+00	4.22E+00
		Co-58	<6.04E+00	0.00E+00	6.04E+00
		Fe-59	<1.07E+01	0.00E+00	1.07E+01
		Co-60	<6.71E+00	0.00E+00	6.71E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<1.17E+01	0.00E+00	1.17E+01
		Nb-95	<5.54E+00	0.00E+00	5.54E+00
		I-131	<7.00E+00	0.00E+00	7.00E+00
		Cs-134	<5.04E+00	0.00E+00	5.04E+00
		Cs-137	<6.22E+00	0.00E+00	6.22E+00
		BaLa-140	<8.26E+00	0.00E+00	8.26E+00
		Total-Gam	0.00E+00		
		H3SW	<1.16E+02	0.00E+00	1.91E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552220	10/19/2021 - 10/19/2021	Mn-54	<5.92E+00	0.00E+00	5.92E+00
		Co-58	<6.27E+00	0.00E+00	6.27E+00
		Fe-59	<8.70E+00	0.00E+00	8.70E+00
		Co-60	<7.29E+00	0.00E+00	7.29E+00
		Zn-65	<1.23E+01	0.00E+00	1.23E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<7.19E+00	0.00E+00	7.19E+00
		I-131	<7.91E+00	0.00E+00	7.91E+00
		Cs-134	<6.00E+00	0.00E+00	6.00E+00
		Cs-137	<7.35E+00	0.00E+00	7.35E+00
		BaLa-140	<6.09E+00	0.00E+00	6.09E+00
		Total-Gam	0.00E+00		
		H3SW	<1.11E+02	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554089	11/18/2021 - 11/18/2021	Mn-54	<5.24E+00	0.00E+00	5.24E+00
		Co-58	<6.00E+00	0.00E+00	6.00E+00
		Fe-59	<1.18E+01	0.00E+00	1.18E+01
		Co-60	<6.76E+00	0.00E+00	6.76E+00
		Zn-65	<1.13E+01	0.00E+00	1.13E+01
		Zr-95	<8.53E+00	0.00E+00	8.53E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554089	11/18/2021 - 11/18/2021	Nb-95	<6.03E+00	0.00E+00	6.03E+00
		I-131	<8.05E+00	0.00E+00	8.05E+00
		Cs-134	<5.35E+00	0.00E+00	5.35E+00
		Cs-137	<2.16E+00	0.00E+00	2.16E+00
		BaLa-140	<7.24E+00	0.00E+00	7.24E+00
		Total-Gam	0.00E+00		
		H3SW	5.36E+02	1.20E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556685	12/21/2021 - 12/21/2021	Mn-54	<5.33E+00	0.00E+00	5.33E+00
		Co-58	<6.67E+00	0.00E+00	6.67E+00
		Fe-59	<1.23E+01	0.00E+00	1.23E+01
		Co-60	<5.83E+00	0.00E+00	5.83E+00
		Zn-65	<1.23E+01	0.00E+00	1.23E+01
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<6.47E+00	0.00E+00	6.47E+00
		I-131	<9.69E+00	0.00E+00	9.69E+00
		Cs-134	<7.00E+00	0.00E+00	7.00E+00
		Cs-137	<6.55E+00	0.00E+00	6.55E+00
		BaLa-140	<5.33E+00	0.00E+00	5.33E+00
		Total-Gam	0.00E+00		
		H3SW	<-4.7E+00	0.00E+00	1.85E+02

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536156	1/20/2021 - 1/20/2021	Mn-54	<6.25E+00	0.00E+00	6.25E+00
		Co-58	<6.78E+00	0.00E+00	6.78E+00
		Fe-59	<1.07E+01	0.00E+00	1.07E+01
		Co-60	<6.40E+00	0.00E+00	6.40E+00
		Zn-65	<1.13E+01	0.00E+00	1.13E+01
		Zr-95	<9.42E+00	0.00E+00	9.42E+00
		Nb-95	<8.13E+00	0.00E+00	8.13E+00
		I-131	<9.23E+00	0.00E+00	9.23E+00
		Cs-134	<6.79E+00	0.00E+00	6.79E+00
		Cs-137	<4.90E+00	0.00E+00	4.90E+00
		BaLa-140	<1.16E+01	0.00E+00	1.16E+01
		Total-Gam	0.00E+00		
		H3SW	<9.54E+01	0.00E+00	1.82E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537974	2/17/2021 - 2/17/2021	Mn-54	<6.36E+00	0.00E+00	6.36E+00
		Co-58	<5.45E+00	0.00E+00	5.45E+00
		Fe-59	<1.27E+01	0.00E+00	1.27E+01
		Co-60	<4.96E+00	0.00E+00	4.96E+00
		Zn-65	<1.32E+01	0.00E+00	1.32E+01
		Zr-95	<8.39E+00	0.00E+00	8.39E+00
		Nb-95	<6.91E+00	0.00E+00	6.91E+00
		I-131	<7.21E+00	0.00E+00	7.21E+00
		Cs-134	<6.77E+00	0.00E+00	6.77E+00
		Cs-137	<4.52E+00	0.00E+00	4.52E+00
		BaLa-140	<7.17E+00	0.00E+00	7.17E+00
		Total-Gam	0.00E+00		
		H3SW	<-7.0E+01	0.00E+00	1.97E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538957	3/18/2021 - 3/18/2021	Mn-54	<5.88E+00	0.00E+00	5.88E+00
		Co-58	<5.41E+00	0.00E+00	5.41E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<5.83E+00	0.00E+00	5.83E+00
		Zn-65	<1.64E+01	0.00E+00	1.64E+01
		Zr-95	<9.07E+00	0.00E+00	9.07E+00
		Nb-95	<5.21E+00	0.00E+00	5.21E+00
		I-131	<9.72E+00	0.00E+00	9.72E+00
		Cs-134	<6.17E+00	0.00E+00	6.17E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538957	3/18/2021 - 3/18/2021	Cs-137	<4.74E+00	0.00E+00	4.74E+00
		BaLa-140	<6.95E+00	0.00E+00	6.95E+00
		Total-Gam	0.00E+00		
		H3SW	<6.82E+01	0.00E+00	1.84E+02
541363	4/21/2021 - 4/21/2021	Mn-54	<5.00E+00	0.00E+00	5.00E+00
		Co-58	<5.82E+00	0.00E+00	5.82E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<4.90E+00	0.00E+00	4.90E+00
		Zn-65	<1.29E+01	0.00E+00	1.29E+01
		Zr-95	<1.19E+01	0.00E+00	1.19E+01
		Nb-95	<5.87E+00	0.00E+00	5.87E+00
		I-131	<8.56E+00	0.00E+00	8.56E+00
		Cs-134	<6.51E+00	0.00E+00	6.51E+00
		Cs-137	<5.70E+00	0.00E+00	5.70E+00
		BaLa-140	<9.13E+00	0.00E+00	9.13E+00
		Total-Gam	0.00E+00		
		H3SW	<-3.8E+01	0.00E+00	1.91E+02
543786	5/19/2021 - 5/19/2021	Mn-54	<5.58E+00	0.00E+00	5.58E+00
		Co-58	<5.93E+00	0.00E+00	5.93E+00
		Fe-59	<1.22E+01	0.00E+00	1.22E+01
		Co-60	<6.65E+00	0.00E+00	6.65E+00
		Zn-65	<1.35E+01	0.00E+00	1.35E+01
		Zr-95	<1.10E+01	0.00E+00	1.10E+01
		Nb-95	<5.80E+00	0.00E+00	5.80E+00
		I-131	<8.47E+00	0.00E+00	8.47E+00
		Cs-134	<8.14E+00	0.00E+00	8.14E+00
		Cs-137	<6.47E+00	0.00E+00	6.47E+00
		BaLa-140	<7.37E+00	0.00E+00	7.37E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.1E+02	0.00E+00	1.97E+02
545435	6/24/2021 - 6/24/2021	Mn-54	<4.51E+00	0.00E+00	4.51E+00
		Co-58	<4.61E+00	0.00E+00	4.61E+00
		Fe-59	<9.89E+00	0.00E+00	9.89E+00
		Co-60	<4.56E+00	0.00E+00	4.56E+00
		Zn-65	<6.97E+00	0.00E+00	6.97E+00
		Zr-95	<1.04E+01	0.00E+00	1.04E+01
		Nb-95	<7.23E+00	0.00E+00	7.23E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<6.56E+00	0.00E+00	6.56E+00
		Cs-137	<6.05E+00	0.00E+00	6.05E+00
		BaLa-140	<6.14E+00	0.00E+00	6.14E+00
		Total-Gam	0.00E+00		
		H3SW	<-7.0E+01	0.00E+00	1.99E+02
547128	7/22/2021 - 7/22/2021	Mn-54	<5.95E+00	0.00E+00	5.95E+00
		Co-58	<6.27E+00	0.00E+00	6.27E+00
		Fe-59	<5.10E+00	0.00E+00	5.10E+00
		Co-60	<5.91E+00	0.00E+00	5.91E+00
		Zn-65	<1.11E+01	0.00E+00	1.11E+01
		Zr-95	<8.79E+00	0.00E+00	8.79E+00
		Nb-95	<6.81E+00	0.00E+00	6.81E+00
		I-131	<9.10E+00	0.00E+00	9.10E+00
		Cs-134	<6.87E+00	0.00E+00	6.87E+00
		Cs-137	<5.23E+00	0.00E+00	5.23E+00
		BaLa-140	<6.09E+00	0.00E+00	6.09E+00
		Total-Gam	0.00E+00		
		H3SW	<2.10E+01	0.00E+00	1.67E+02

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548614	8/16/2021 - 8/16/2021	Mn-54	<6.03E+00	0.00E+00	6.03E+00
		Co-58	<3.51E+00	0.00E+00	3.51E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<6.20E+00	0.00E+00	6.20E+00
		Zn-65	<1.32E+01	0.00E+00	1.32E+01
		Zr-95	<9.57E+00	0.00E+00	9.57E+00
		Nb-95	<5.20E+00	0.00E+00	5.20E+00
		I-131	<5.74E+00	0.00E+00	5.74E+00
		Cs-134	<6.78E+00	0.00E+00	6.78E+00
		Cs-137	<5.90E+00	0.00E+00	5.90E+00
		BaLa-140	<6.16E+00	0.00E+00	6.16E+00
		Total-Gam	0.00E+00		
		H3SW	<7.08E+00	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549969	9/13/2021 - 9/13/2021	Mn-54	<5.13E+00	0.00E+00	5.13E+00
		Co-58	<5.56E+00	0.00E+00	5.56E+00
		Fe-59	<1.21E+01	0.00E+00	1.21E+01
		Co-60	<6.29E+00	0.00E+00	6.29E+00
		Zn-65	<1.11E+01	0.00E+00	1.11E+01
		Zr-95	<8.57E+00	0.00E+00	8.57E+00
		Nb-95	<6.35E+00	0.00E+00	6.35E+00
		I-131	<7.05E+00	0.00E+00	7.05E+00
		Cs-134	<7.43E+00	0.00E+00	7.43E+00
		Cs-137	<6.15E+00	0.00E+00	6.15E+00
		BaLa-140	<6.96E+00	0.00E+00	6.96E+00
		Total-Gam	0.00E+00		
		H3SW	<-2.7E+01	0.00E+00	1.91E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552221	10/19/2021 - 10/19/2021	Mn-54	<6.19E+00	0.00E+00	6.19E+00
		Co-58	<5.82E+00	0.00E+00	5.82E+00
		Fe-59	<1.07E+01	0.00E+00	1.07E+01
		Co-60	<7.05E+00	0.00E+00	7.05E+00
		Zn-65	<1.30E+01	0.00E+00	1.30E+01
		Zr-95	<1.04E+01	0.00E+00	1.04E+01
		Nb-95	<6.22E+00	0.00E+00	6.22E+00
		I-131	<5.97E+00	0.00E+00	5.97E+00
		Cs-134	<6.54E+00	0.00E+00	6.54E+00
		Cs-137	<5.69E+00	0.00E+00	5.69E+00
		BaLa-140	<6.86E+00	0.00E+00	6.86E+00
		Total-Gam	0.00E+00		
		H3SW	<-5.1E+01	0.00E+00	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554090	11/18/2021 - 11/18/2021	Mn-54	<6.00E+00	0.00E+00	6.00E+00
		Co-58	<5.12E+00	0.00E+00	5.12E+00
		Fe-59	<7.77E+00	0.00E+00	7.77E+00
		Co-60	<5.28E+00	0.00E+00	5.28E+00
		Zn-65	<1.29E+01	0.00E+00	1.29E+01
		Zr-95	<1.20E+01	0.00E+00	1.20E+01
		Nb-95	<5.55E+00	0.00E+00	5.55E+00
		I-131	<8.22E+00	0.00E+00	8.22E+00
		Cs-134	<6.72E+00	0.00E+00	6.72E+00
		Cs-137	<6.05E+00	0.00E+00	6.05E+00
		BaLa-140	<6.88E+00	0.00E+00	6.88E+00
		Total-Gam	0.00E+00		
		H3SW	<-4.6E+01	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556686	12/21/2021 - 12/21/2021	Mn-54	<5.27E+00	0.00E+00	5.27E+00
		Co-58	<6.31E+00	0.00E+00	6.31E+00
		Fe-59	<1.02E+01	0.00E+00	1.02E+01
		Co-60	<5.12E+00	0.00E+00	5.12E+00
		Zn-65	<1.26E+01	0.00E+00	1.26E+01
		Zr-95	<7.74E+00	0.00E+00	7.74E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID: 556686 Sample Dates: 12/21/2021 - 12/21/2021

Nuclide	Activity	2 Sigma Error	MDA
Nb-95	<7.56E+00	0.00E+00	7.56E+00
I-131	<1.00E+01	0.00E+00	1.00E+01
Cs-134	<7.40E+00	0.00E+00	7.40E+00
Cs-137	<5.12E+00	0.00E+00	5.12E+00
BaLa-140	<6.92E+00	0.00E+00	6.92E+00
Total-Gam	0.00E+00		
H3SW	<6.96E+00	0.00E+00	1.84E+02

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

Sample ID: 536157 Sample Dates: 1/20/2021 - 1/20/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.12E+00	0.00E+00	5.12E+00
Co-58	<5.25E+00	0.00E+00	5.25E+00
Fe-59	<9.38E+00	0.00E+00	9.38E+00
Co-60	<5.20E+00	0.00E+00	5.20E+00
Zn-65	<1.58E+01	0.00E+00	1.58E+01
Zr-95	<1.22E+01	0.00E+00	1.22E+01
Nb-95	<7.19E+00	0.00E+00	7.19E+00
I-131	<8.89E+00	0.00E+00	8.89E+00
Cs-134	<6.91E+00	0.00E+00	6.91E+00
Cs-137	<6.45E+00	0.00E+00	6.45E+00
BaLa-140	<7.77E+00	0.00E+00	7.77E+00
Total-Gam	0.00E+00		
H3SW	<8.98E+00	0.00E+00	1.80E+02

Sample ID: 537975 Sample Dates: 2/17/2021 - 2/17/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.42E+00	0.00E+00	5.42E+00
Co-58	<4.73E+00	0.00E+00	4.73E+00
Fe-59	<8.05E+00	0.00E+00	8.05E+00
Co-60	<6.39E+00	0.00E+00	6.39E+00
Zn-65	<1.05E+01	0.00E+00	1.05E+01
Zr-95	<9.03E+00	0.00E+00	9.03E+00
Nb-95	<5.26E+00	0.00E+00	5.26E+00
I-131	<6.07E+00	0.00E+00	6.07E+00
Cs-134	<7.36E+00	0.00E+00	7.36E+00
Cs-137	<5.12E+00	0.00E+00	5.12E+00
BaLa-140	<8.45E+00	0.00E+00	8.45E+00
Total-Gam	0.00E+00		
H3SW	<-1.0E+02	0.00E+00	1.97E+02

Sample ID: 538958 Sample Dates: 3/18/2021 - 3/18/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<4.78E+00	0.00E+00	4.78E+00
Co-58	<2.85E+00	0.00E+00	2.85E+00
Fe-59	<8.45E+00	0.00E+00	8.45E+00
Co-60	<5.12E+00	0.00E+00	5.12E+00
Zn-65	<1.06E+01	0.00E+00	1.06E+01
Zr-95	<9.73E+00	0.00E+00	9.73E+00
Nb-95	<6.57E+00	0.00E+00	6.57E+00
I-131	<7.92E+00	0.00E+00	7.92E+00
Cs-134	<7.93E+00	0.00E+00	7.93E+00
Cs-137	<4.90E+00	0.00E+00	4.90E+00
BaLa-140	<6.18E+00	0.00E+00	6.18E+00
Total-Gam	0.00E+00		
H3SW	<3.85E+01	0.00E+00	1.84E+02

Sample ID: 541364 Sample Dates: 4/21/2021 - 4/21/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.51E+00	0.00E+00	5.51E+00
Co-58	<4.52E+00	0.00E+00	4.52E+00
Fe-59	<1.04E+01	0.00E+00	1.04E+01
Co-60	<4.45E+00	0.00E+00	4.45E+00
Zn-65	<1.33E+01	0.00E+00	1.33E+01
Zr-95	<8.75E+00	0.00E+00	8.75E+00
Nb-95	<5.29E+00	0.00E+00	5.29E+00
I-131	<8.33E+00	0.00E+00	8.33E+00
Cs-134	<6.39E+00	0.00E+00	6.39E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541364	4/21/2021 - 4/21/2021	Cs-137	<6.84E+00	0.00E+00	6.84E+00
		BaLa-140	<9.48E+00	0.00E+00	9.48E+00
		Total-Gam	0.00E+00		
		H3SW	<2.11E+01	0.00E+00	1.90E+02
543787	5/19/2021 - 5/19/2021	Mn-54	<5.44E+00	0.00E+00	5.44E+00
		Co-58	<5.74E+00	0.00E+00	5.74E+00
		Fe-59	<1.27E+01	0.00E+00	1.27E+01
		Co-60	<5.70E+00	0.00E+00	5.70E+00
		Zn-65	<1.08E+01	0.00E+00	1.08E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<6.18E+00	0.00E+00	6.18E+00
		I-131	<8.94E+00	0.00E+00	8.94E+00
		Cs-134	<6.26E+00	0.00E+00	6.26E+00
		Cs-137	<6.25E+00	0.00E+00	6.25E+00
		BaLa-140	<9.30E+00	0.00E+00	9.30E+00
		Total-Gam	0.00E+00		
		H3SW	<-1.0E+02	0.00E+00	1.97E+02
545436	6/24/2021 - 6/24/2021	Mn-54	<5.29E+00	0.00E+00	5.29E+00
		Co-58	<5.40E+00	0.00E+00	5.40E+00
		Fe-59	<7.89E+00	0.00E+00	7.89E+00
		Co-60	<4.29E+00	0.00E+00	4.29E+00
		Zn-65	<1.28E+01	0.00E+00	1.28E+01
		Zr-95	<1.25E+01	0.00E+00	1.25E+01
		Nb-95	<5.61E+00	0.00E+00	5.61E+00
		I-131	<6.50E+00	0.00E+00	6.50E+00
		Cs-134	<5.25E+00	0.00E+00	5.25E+00
		Cs-137	<4.12E+00	0.00E+00	4.12E+00
		BaLa-140	<7.46E+00	0.00E+00	7.46E+00
		Total-Gam	0.00E+00		
		H3SW	<2.40E+01	0.00E+00	1.99E+02
547129	7/22/2021 - 7/22/2021	Mn-54	<6.23E+00	0.00E+00	6.23E+00
		Co-58	<5.35E+00	0.00E+00	5.35E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<3.12E+00	0.00E+00	3.12E+00
		Zn-65	<1.06E+01	0.00E+00	1.06E+01
		Zr-95	<1.14E+01	0.00E+00	1.14E+01
		Nb-95	<5.79E+00	0.00E+00	5.79E+00
		I-131	<8.90E+00	0.00E+00	8.90E+00
		Cs-134	<7.56E+00	0.00E+00	7.56E+00
		Cs-137	<5.74E+00	0.00E+00	5.74E+00
		BaLa-140	<7.14E+00	0.00E+00	7.14E+00
		Total-Gam	0.00E+00		
		H3SW	<1.13E+02	0.00E+00	1.69E+02
548615	8/16/2021 - 8/16/2021	Mn-54	<6.56E+00	0.00E+00	6.56E+00
		Co-58	<5.86E+00	0.00E+00	5.86E+00
		Fe-59	<8.16E+00	0.00E+00	8.16E+00
		Co-60	<6.76E+00	0.00E+00	6.75E+00
		Zn-65	<8.06E+00	0.00E+00	8.06E+00
		Zr-95	<9.12E+00	0.00E+00	9.12E+00
		Nb-95	<6.11E+00	0.00E+00	6.11E+00
		I-131	<5.60E+00	0.00E+00	5.60E+00
		Cs-134	<6.11E+00	0.00E+00	6.11E+00
		Cs-137	<6.43E+00	0.00E+00	6.43E+00
		BaLa-140	<6.34E+00	0.00E+00	6.34E+00
		Total-Gam	0.00E+00		
		H3SW	<4.72E+00	0.00E+00	1.86E+02

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

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

Sample ID: 549970 Sample Dates: 9/13/2021 - 9/13/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.58E+00	0.00E+00	5.58E+00
Co-58	<5.99E+00	0.00E+00	5.99E+00
Fe-59	<1.31E+01	0.00E+00	1.31E+01
Co-60	<5.51E+00	0.00E+00	5.51E+00
Zn-65	<1.58E+01	0.00E+00	1.58E+01
Zr-95	<1.01E+01	0.00E+00	1.01E+01
Nb-95	<6.55E+00	0.00E+00	6.55E+00
I-131	<6.67E+00	0.00E+00	6.67E+00
Cs-134	<8.01E+00	0.00E+00	8.01E+00
Cs-137	<6.97E+00	0.00E+00	6.97E+00
BaLa-140	<9.68E+00	0.00E+00	9.68E+00
Total-Gam	0.00E+00		
H3SW	<1.45E+01	0.00E+00	1.92E+02

Sample ID: 552222 Sample Dates: 10/19/2021 - 10/19/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.27E+00	0.00E+00	5.27E+00
Co-58	<4.61E+00	0.00E+00	4.61E+00
Fe-59	<1.19E+01	0.00E+00	1.19E+01
Co-60	<5.82E+00	0.00E+00	5.82E+00
Zn-65	<1.21E+01	0.00E+00	1.21E+01
Zr-95	<1.02E+01	0.00E+00	1.02E+01
Nb-95	<5.15E+00	0.00E+00	5.15E+00
I-131	<7.27E+00	0.00E+00	7.27E+00
Cs-134	<6.78E+00	0.00E+00	6.78E+00
Cs-137	<6.54E+00	0.00E+00	6.54E+00
BaLa-140	<6.01E+00	0.00E+00	6.01E+00
Total-Gam	0.00E+00		
H3SW	<-2.1E+01	0.00E+00	1.85E+02

Sample ID: 554091 Sample Dates: 11/18/2021 - 11/18/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<5.46E+00	0.00E+00	5.46E+00
Co-58	<5.80E+00	0.00E+00	5.80E+00
Fe-59	<1.12E+01	0.00E+00	1.12E+01
Co-60	<6.40E+00	0.00E+00	6.40E+00
Zn-65	<1.20E+01	0.00E+00	1.20E+01
Zr-95	<9.37E+00	0.00E+00	9.37E+00
Nb-95	<5.16E+00	0.00E+00	5.16E+00
I-131	<7.63E+00	0.00E+00	7.63E+00
Cs-134	<6.99E+00	0.00E+00	6.99E+00
Cs-137	<4.14E+00	0.00E+00	4.14E+00
BaLa-140	<6.27E+00	0.00E+00	6.27E+00
Total-Gam	0.00E+00		
H3SW	<6.96E+00	0.00E+00	1.77E+02

Sample ID: 556687 Sample Dates: 12/21/2021 - 12/21/2021

Nuclide	Activity	2 Sigma Error	MDA
Mn-54	<6.29E+00	0.00E+00	6.29E+00
Co-58	<4.38E+00	0.00E+00	4.38E+00
Fe-59	<1.37E+01	0.00E+00	1.37E+01
Co-60	<5.72E+00	0.00E+00	5.72E+00
Zn-65	<1.27E+01	0.00E+00	1.27E+01
Zr-95	<1.14E+01	0.00E+00	1.14E+01
Nb-95	<6.19E+00	0.00E+00	6.19E+00
I-131	<9.07E+00	0.00E+00	9.07E+00
Cs-134	<6.06E+00	0.00E+00	6.06E+00
Cs-137	<6.35E+00	0.00E+00	6.35E+00
BaLa-140	<8.43E+00	0.00E+00	8.43E+00
Total-Gam	0.00E+00		
H3SW	<2.78E+01	0.00E+00	1.84E+02

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 1 [INDICATOR - E @ 1.1 miles]

TLD RING TLD_INNER

Sample ID: 539701 Sample Dates: 1/8/2021 - 4/8/2021

Nuclide	Activity
mR/Std Qtr	11.21

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 1 [INDICATOR - E @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	546128	Sample Dates:	4/8/2021 - 7/14/2021	Nuclide	Activity
				mR/Std Qtr	10.24

Sample ID:	551247	Sample Dates:	7/14/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	8.1

Sample ID:	557586	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	10.27

Sample Point 2 [INDICATOR - ESE @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	539711	Sample Dates:	1/8/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	11.21

Sample ID:	546138	Sample Dates:	4/8/2021 - 7/14/2021	Nuclide	Activity
				mR/Std Qtr	10.86

Sample ID:	551257	Sample Dates:	7/14/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	6.34

Sample ID:	557596	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	10.26

Sample Point 3 [INDICATOR - SE @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	539722	Sample Dates:	1/6/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	12.07

Sample ID:	546149	Sample Dates:	4/8/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	11.11

Sample ID:	551268	Sample Dates:	7/2/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	9.58

Sample ID:	557607	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	9.81

Sample Point 4 [INDICATOR - SSE @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	539733	Sample Dates:	1/6/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	10.93

Sample ID:	546160	Sample Dates:	4/8/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	10.01

Sample ID:	551279	Sample Dates:	7/2/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	9.45

Sample ID:	557618	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	10.36

Sample Point 5 [INDICATOR - S @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	539735	Sample Dates:	1/6/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	12.00

Sample ID:	546162	Sample Dates:	4/8/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	9.73

Sample ID:	551281	Sample Dates:	7/2/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	8.42

Sample ID:	557620	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	10.35

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 6 [INDICATOR - SSW @ 1.6 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539736	1/6/2021 - 4/8/2021	mR/Std Qtr	9.57
546163	4/8/2021 - 7/2/2021	mR/Std Qtr	10.20
551282	7/2/2021 - 10/11/2021	mR/Std Qtr	8.81
557621	10/11/2021 - 1/4/2022	mR/Std Qtr	9.54

Sample Point 7 [INDICATOR - SW @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539737	1/6/2021 - 4/8/2021	mR/Std Qtr	10.16
546164	4/8/2021 - 7/2/2021	mR/Std Qtr	9.84
551283	7/2/2021 - 10/11/2021	mR/Std Qtr	9.01
557622	10/11/2021 - 1/4/2022	mR/Std Qtr	9.33

Sample Point 8 [INDICATOR - W @ 1.2 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539743	1/6/2021 - 4/6/2021	mR/Std Qtr	10.03
546170	4/6/2021 - 7/2/2021	mR/Std Qtr	10.16
551289	7/2/2021 - 10/6/2021	mR/Std Qtr	8.61
557628	10/6/2021 - 1/4/2022	mR/Std Qtr	10.36

Sample Point 9 [INDICATOR - WNW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539749	1/6/2021 - 4/6/2021	mR/Std Qtr	10.95
546176	4/6/2021 - 7/2/2021	mR/Std Qtr	10.60
551295	7/2/2021 - 10/6/2021	mR/Std Qtr	9.23
557634	10/6/2021 - 1/4/2022	mR/Std Qtr	11.17

Sample Point 10 [INDICATOR - NW @ 0.8 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539702	1/6/2021 - 4/6/2021	mR/Std Qtr	8.72
546129	4/6/2021 - 7/2/2021	mR/Std Qtr	8.27
551248	7/2/2021 - 10/6/2021	mR/Std Qtr	5.64
557587	10/6/2021 - 1/4/2022	mR/Std Qtr	8.51

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 11 [INDICATOR - NNW @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	539703	Sample Dates:	1/6/2021 - 4/6/2021	Nuclide	Activity
				mR/Std Qtr	12.18
Sample ID:	546130	Sample Dates:	4/6/2021 - 7/5/2021	Nuclide	Activity
				mR/Std Qtr	9.40
Sample ID:	551249	Sample Dates:	7/5/2021 - 10/6/2021	Nuclide	Activity
				mR/Std Qtr	8.82
Sample ID:	557588	Sample Dates:	10/6/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	10.75

Sample Point 12 [INDICATOR - N @ 1.1 miles]

TLD RING TLD_INNER

Sample ID:	539704	Sample Dates:	1/6/2021 - 4/6/2021	Nuclide	Activity
				mR/Std Qtr	11.75
Sample ID:	546131	Sample Dates:	4/6/2021 - 7/5/2021	Nuclide	Activity
				mR/Std Qtr	10.09
Sample ID:	551250	Sample Dates:	7/5/2021 - 10/6/2021	Nuclide	Activity
				mR/Std Qtr	8.26
Sample ID:	557589	Sample Dates:	10/6/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	10.69

Sample Point 13 [INDICATOR - NNE @ 1.2 miles]

TLD RING TLD_INNER

Sample ID:	539705	Sample Dates:	1/6/2021 - 4/6/2021	Nuclide	Activity
				mR/Std Qtr	10.71
Sample ID:	546132	Sample Dates:	4/6/2021 - 7/5/2021	Nuclide	Activity
				mR/Std Qtr	10.14
Sample ID:	551251	Sample Dates:	7/5/2021 - 10/6/2021	Nuclide	Activity
				mR/Std Qtr	8.38
Sample ID:	557590	Sample Dates:	10/6/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	9.89

Sample Point 14 [INDICATOR - NE @ 0.5 miles]

TLD RING TLD_INNER

Sample ID:	539706	Sample Dates:	1/5/2021 - 4/5/2021	Nuclide	Activity
				mR/Std Qtr	11.26
Sample ID:	546133	Sample Dates:	4/5/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	9.54
Sample ID:	551252	Sample Dates:	7/2/2021 - 10/5/2021	Nuclide	Activity
				mR/Std Qtr	8.97
Sample ID:	557591	Sample Dates:	10/5/2021 - 1/10/2022	Nuclide	Activity
				mR/Std Qtr	10.81

Sample Point 15 [INDICATOR - ENE @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	539707	Sample Dates:	1/5/2021 - 4/5/2021	Nuclide	Activity
				mR/Std Qtr	12.47
Sample ID:	546134	Sample Dates:	4/5/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	10.65
Sample ID:	551253	Sample Dates:	7/2/2021 - 10/5/2021	Nuclide	Activity
				mR/Std Qtr	9.8
Sample ID:	557592	Sample Dates:	10/5/2021 - 1/10/2022	Nuclide	Activity
				mR/Std Qtr	11.00

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 16 [INDICATOR - WSW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	539708	Sample Dates:	1/6/2021 - 4/6/2021	Nuclide	Activity
				mR/Std Qtr	10.25
Sample ID:	546135	Sample Dates:	4/6/2021 - 7/5/2021	Nuclide	Activity
				mR/Std Qtr	10.64
Sample ID:	551254	Sample Dates:	7/5/2021 - 10/6/2021	Nuclide	Activity
				mR/Std Qtr	8.57
Sample ID:	557593	Sample Dates:	10/6/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	10.46

Sample Point 17 [INDICATOR - ESE @ 1.4 miles]

TLD RING TLD_INNER

Sample ID:	539709	Sample Dates:	1/6/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	19.93
Sample ID:	546136	Sample Dates:	4/8/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	16.29
Sample ID:	551255	Sample Dates:	7/2/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	16.63
Sample ID:	557594	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	16.75

Sample Point 18 [INDICATOR - SE @ 1.7 miles]

TLD RING TLD_INNER

Sample ID:	546137	Sample Dates:	4/8/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	9.83
Sample ID:	551256	Sample Dates:	7/2/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	7.76
Sample ID:	557595	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	9.38

Sample Point 20 [INDICATOR - S @ 2.1 miles]

TLD RING TLD_INNER

Sample ID:	539712	Sample Dates:	1/6/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	11.23
Sample ID:	546139	Sample Dates:	4/8/2021 - 7/2/2021	Nuclide	Activity
				mR/Std Qtr	8.92
Sample ID:	551258	Sample Dates:	7/2/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	8.41
Sample ID:	557597	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	9.33

Sample Point 21 [INDICATOR - SSW @ 2.9 miles]

TLD RING TLD_INNER

Sample ID:	539713	Sample Dates:	1/6/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	13.46
Sample ID:	551259	Sample Dates:	7/2/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	9.41
Sample ID:	557598	Sample Dates:	10/11/2021 - 1/4/2022	Nuclide	Activity
				mR/Std Qtr	11.51

Sample Point 22 [INDICATOR - SW @ 5.3 miles]

TLD RING TLD_OUTER

Sample ID:	539714	Sample Dates:	1/7/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	11.84

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 22 [INDICATOR - SW @ 5.3 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
546141	4/8/2021 - 7/7/2021	mR/Std Qtr	12.07
551260	7/7/2021 - 10/7/2021	mR/Std Qtr	8.02
557599	10/7/2021 - 1/5/2022	mR/Std Qtr	11.66

Sample Point 23 [INDICATOR - WSW @ 4.6 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539715	1/7/2021 - 4/9/2021	mR/Std Qtr	7.77
546142	4/9/2021 - 7/7/2021	mR/Std Qtr	7.17
551261	7/7/2021 - 10/7/2021	mR/Std Qtr	5.76
557600	10/7/2021 - 1/5/2022	mR/Std Qtr	7.21

Sample Point 24 [INDICATOR - W @ 3 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539716	1/7/2021 - 4/8/2021	mR/Std Qtr	14.15
546143	4/8/2021 - 7/6/2021	mR/Std Qtr	13.07
551262	7/6/2021 - 10/7/2021	mR/Std Qtr	10.77
557601	10/7/2021 - 1/5/2022	mR/Std Qtr	14.14

Sample Point 25 [INDICATOR - WNW @ 8.6 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539717	1/7/2021 - 4/8/2021	mR/Std Qtr	9.83
546144	4/8/2021 - 7/6/2021	mR/Std Qtr	10.74
551263	7/6/2021 - 10/7/2021	mR/Std Qtr	8.35
557602	10/7/2021 - 1/5/2022	mR/Std Qtr	10.55

Sample Point 26 [INDICATOR - NW @ 5.9 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539718	1/7/2021 - 4/8/2021	mR/Std Qtr	12.27
546145	4/8/2021 - 7/6/2021	mR/Std Qtr	11.68
551264	7/6/2021 - 10/11/2021	mR/Std Qtr	10.41
557603	10/11/2021 - 1/5/2022	mR/Std Qtr	11.82

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 27 [INDICATOR - NNW @ 5.1 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539719	1/7/2021 - 4/8/2021	mR/Std Qtr	9.37
546146	4/8/2021 - 7/6/2021	mR/Std Qtr	8.82
551265	7/6/2021 - 10/11/2021	mR/Std Qtr	7.35
557604	10/11/2021 - 1/5/2022	mR/Std Qtr	9.77

Sample Point 28 [INDICATOR - NW @ 4.2 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539720	1/7/2021 - 4/8/2021	mR/Std Qtr	9.68
546147	4/8/2021 - 7/6/2021	mR/Std Qtr	10.03
551266	7/6/2021 - 10/11/2021	mR/Std Qtr	7.82
557605	10/11/2021 - 1/5/2022	mR/Std Qtr	8.65

Sample Point 29 [INDICATOR - SSW @ 2.6 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539721	1/6/2021 - 4/8/2021	mR/Std Qtr	10.56
546148	4/8/2021 - 7/2/2021	mR/Std Qtr	9.06
551267	7/2/2021 - 10/11/2021	mR/Std Qtr	9.3
557606	10/11/2021 - 1/4/2022	mR/Std Qtr	9.57

Sample Point 30 [INDICATOR - NE @ 2 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539723	1/12/2021 - 4/8/2021	mR/Std Qtr	10.32
546150	4/8/2021 - 7/8/2021	mR/Std Qtr	8.91
551269	7/8/2021 - 10/12/2021	mR/Std Qtr	8.01
557608	10/12/2021 - 1/11/2022	mR/Std Qtr	8.67

Sample Point 31 [INDICATOR - ENE @ 2.5 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539724	1/12/2021 - 4/8/2021	mR/Std Qtr	12.21
546151	4/8/2021 - 7/8/2021	mR/Std Qtr	11.72
551270	7/8/2021 - 10/12/2021	mR/Std Qtr	10.9
557609	10/12/2021 - 1/11/2022	mR/Std Qtr	11.86

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 32 [INDICATOR - ENE @ 5.8 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539725	1/5/2021 - 4/12/2021	mR/Std Qtr	14.55
546152	4/12/2021 - 7/8/2021	mR/Std Qtr	11.04
551271	7/8/2021 - 10/13/2021	mR/Std Qtr	10.45
557610	10/13/2021 - 1/10/2022	mR/Std Qtr	12.13

Sample Point 33 [INDICATOR - E @ 4.1 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539726	1/5/2021 - 4/12/2021	mR/Std Qtr	11.26
546153	4/12/2021 - 7/8/2021	mR/Std Qtr	8.01
551272	7/8/2021 - 10/13/2021	mR/Std Qtr	6.68
557611	10/13/2021 - 1/10/2022	mR/Std Qtr	9.62

Sample Point 34 [INDICATOR - E @ 5.4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539727	1/5/2021 - 4/12/2021	mR/Std Qtr	10.75
546154	4/12/2021 - 7/8/2021	mR/Std Qtr	8.60
551273	7/8/2021 - 10/13/2021	mR/Std Qtr	6.8
557612	10/13/2021 - 1/10/2022	mR/Std Qtr	9.68

Sample Point 35 [INDICATOR - SSE @ 7.3 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539728	1/6/2021 - 4/5/2021	mR/Std Qtr	9.36
546155	4/5/2021 - 7/14/2021	mR/Std Qtr	9.47
551274	7/14/2021 - 10/12/2021	mR/Std Qtr	6.14
557613	10/12/2021 - 1/6/2022	mR/Std Qtr	8.19

Sample Point 36 [INDICATOR - NE @ 8.9 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539729	1/5/2021 - 4/12/2021	mR/Std Qtr	12.92
546156	4/12/2021 - 7/8/2021	mR/Std Qtr	10.95
551275	7/8/2021 - 10/13/2021	mR/Std Qtr	9.59
557614	10/13/2021 - 1/10/2022	mR/Std Qtr	11.14

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 37 [INDICATOR - NW @ 5.5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539730	1/7/2021 - 4/8/2021	mR/Std Qtr	9.28
546157	4/8/2021 - 7/6/2021	mR/Std Qtr	8.51
551276	7/6/2021 - 10/4/2021	mR/Std Qtr	6.83
557615	10/4/2021 - 1/5/2022	mR/Std Qtr	9.39

Sample Point 38 [INDICATOR - W @ 11 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539731	1/7/2021 - 4/8/2021	mR/Std Qtr	10.01
546158	4/8/2021 - 7/6/2021	mR/Std Qtr	9.11
551277	7/6/2021 - 10/7/2021	mR/Std Qtr	6.52
557616	10/7/2021 - 1/5/2022	mR/Std Qtr	9.11

Sample Point 39 [INDICATOR - SW @ 5.3 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539732	1/7/2021 - 4/9/2021	mR/Std Qtr	17.88
546159	4/9/2021 - 7/7/2021	mR/Std Qtr	13.38
551278	7/7/2021 - 10/7/2021	mR/Std Qtr	13.72
557617	10/7/2021 - 1/5/2022	mR/Std Qtr	15.64

Sample Point 40 [INDICATOR - WSW @ 6.9 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539734	1/7/2021 - 4/9/2021	mR/Std Qtr	14.39
546161	4/9/2021 - 7/7/2021	mR/Std Qtr	11.79
551280	7/7/2021 - 10/7/2021	mR/Std Qtr	11.68
557619	10/7/2021 - 1/5/2022	mR/Std Qtr	13.18

Sample Point 75 [INDICATOR - S @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539738	1/7/2021 - 4/9/2021	mR/Std Qtr	13.04
546165	4/9/2021 - 7/7/2021	mR/Std Qtr	10.52
551284	7/7/2021 - 10/7/2021	mR/Std Qtr	9.26
557623	10/7/2021 - 1/5/2022	mR/Std Qtr	12.23

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 76 [INDICATOR - SSW @ 4.8 miles]

TLD RING TLD_OUTER

Sample ID:	539739	Sample Dates:	1/7/2021 - 4/9/2021	Nuclide	Activity
				mR/Std Qtr	13.29
Sample ID:	546166	Sample Dates:	4/9/2021 - 7/7/2021	Nuclide	Activity
				mR/Std Qtr	10.46
Sample ID:	551285	Sample Dates:	7/7/2021 - 10/7/2021	Nuclide	Activity
				mR/Std Qtr	9.88
Sample ID:	557624	Sample Dates:	10/7/2021 - 1/5/2022	Nuclide	Activity
				mR/Std Qtr	11.30

Sample Point 77 [INDICATOR - S @ 5.4 miles]

TLD RING TLD_OUTER

Sample ID:	539740	Sample Dates:	1/6/2021 - 4/5/2021	Nuclide	Activity
				mR/Std Qtr	10.68
Sample ID:	546167	Sample Dates:	4/5/2021 - 7/14/2021	Nuclide	Activity
				mR/Std Qtr	7.63
Sample ID:	551286	Sample Dates:	7/14/2021 - 10/12/2021	Nuclide	Activity
				mR/Std Qtr	6.14
Sample ID:	557625	Sample Dates:	10/12/2021 - 1/6/2022	Nuclide	Activity
				mR/Std Qtr	8.22

Sample Point 78 [INDICATOR - NNE @ 9.9 miles]

TLD RING TLD_OUTER

Sample ID:	539741	Sample Dates:	1/7/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	9.13
Sample ID:	546168	Sample Dates:	4/8/2021 - 7/6/2021	Nuclide	Activity
				mR/Std Qtr	7.89
Sample ID:	551287	Sample Dates:	7/6/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	6.33
Sample ID:	557626	Sample Dates:	10/11/2021 - 1/5/2022	Nuclide	Activity
				mR/Std Qtr	8.05

Sample Point 79 [INDICATOR - N @ 9.5 miles]

TLD RING TLD_OUTER

Sample ID:	539742	Sample Dates:	1/7/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	10.06
Sample ID:	546169	Sample Dates:	4/8/2021 - 7/6/2021	Nuclide	Activity
				mR/Std Qtr	9.16
Sample ID:	551288	Sample Dates:	7/6/2021 - 10/11/2021	Nuclide	Activity
				mR/Std Qtr	8.28
Sample ID:	557627	Sample Dates:	10/11/2021 - 1/5/2022	Nuclide	Activity
				mR/Std Qtr	8.64

Sample Point 81 [CONTROL - WNW @ 9.9 miles]

TLD RING TLD_CTRL

Sample ID:	539744	Sample Dates:	1/7/2021 - 4/8/2021	Nuclide	Activity
				mR/Std Qtr	12.11
Sample ID:	546171	Sample Dates:	4/8/2021 - 7/6/2021	Nuclide	Activity
				mR/Std Qtr	11.11
Sample ID:	551290	Sample Dates:	7/6/2021 - 10/7/2021	Nuclide	Activity
				mR/Std Qtr	8.9
Sample ID:	557629	Sample Dates:	10/7/2021 - 1/5/2022	Nuclide	Activity
				mR/Std Qtr	9.75

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 82 [INDICATOR - NNE @ 0.17 miles]

TLD RING TLD_ISFSI

Sample ID:	Sample Dates:	Nuclide	Activity
539745	1/5/2021 - 4/5/2021	mR/Std Qtr	30.61
546172	4/5/2021 - 7/2/2021	mR/Std Qtr	27.40
551291	7/2/2021 - 10/5/2021	mR/Std Qtr	33.43
557630	10/5/2021 - 1/10/2022	mR/Std Qtr	39.29

Sample Point 83 [INDICATOR - NE @ 0.27 miles]

TLD RING TLD_ISFSI

Sample ID:	Sample Dates:	Nuclide	Activity
539746	1/5/2021 - 4/5/2021	mR/Std Qtr	25.65
546173	4/5/2021 - 7/2/2021	mR/Std Qtr	23.69
551292	7/2/2021 - 10/5/2021	mR/Std Qtr	22.13
557631	10/5/2021 - 1/10/2022	mR/Std Qtr	24.80

Sample Point 84 [INDICATOR - NE @ 0.27 miles]

TLD RING TLD_ISFSI

Sample ID:	Sample Dates:	Nuclide	Activity
539747	1/5/2021 - 4/5/2021	mR/Std Qtr	21.27
546174	4/5/2021 - 7/2/2021	mR/Std Qtr	22.42
551293	7/2/2021 - 10/5/2021	mR/Std Qtr	24.51
557632	10/5/2021 - 1/10/2022	mR/Std Qtr	28.97

Sample Point 85 [INDICATOR - ENE @ 0.09 miles]

TLD RING TLD_ISFSI

Sample ID:	Sample Dates:	Nuclide	Activity
546175	4/5/2021 - 7/2/2021	mR/Std Qtr	22.19
551294	7/2/2021 - 10/5/2021	mR/Std Qtr	25.41
557633	10/5/2021 - 1/10/2022	mR/Std Qtr	27.14

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

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
537277	1/5/2021 - 1/5/2021		Mn-54	<2.09E+01	0.00E+00	2.09E+01
			Co-58	<2.09E+01	0.00E+00	2.09E+01
			Fe-59	<3.68E+01	0.00E+00	3.68E+01
			Co-60	<2.68E+01	0.00E+00	2.68E+01
			Zn-65	<5.65E+01	0.00E+00	5.65E+01
			Zr-95	<3.89E+01	0.00E+00	3.89E+01
			Nb-95	<2.84E+01	0.00E+00	2.84E+01
			I-131	<3.68E+01	0.00E+00	3.68E+01
			Cs-134	<2.48E+01	0.00E+00	2.48E+01
			Cs-137	<2.42E+01	0.00E+00	2.42E+01
			BaLa-140	<2.91E+01	0.00E+00	2.91E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
537277	1/5/2021 - 1/5/2021		Be-7	1.40E+03	2.90E+02	2.98E+02
			K-40	2.68E+03	5.07E+02	3.89E+02
538500	2/3/2021 - 2/3/2021		Mn-54	<2.94E+01	0.00E+00	2.94E+01
			Co-58	<3.34E+01	0.00E+00	3.34E+01
			Fe-59	<3.72E+01	0.00E+00	3.72E+01
			Co-60	<2.83E+01	0.00E+00	2.83E+01
			Zn-65	<7.63E+01	0.00E+00	7.63E+01
			Zr-95	<3.87E+01	0.00E+00	3.87E+01
			Nb-95	<2.77E+01	0.00E+00	2.77E+01
			I-131	<4.10E+01	0.00E+00	4.10E+01
			Cs-134	<3.29E+01	0.00E+00	3.29E+01
			Cs-137	<3.34E+01	0.00E+00	3.34E+01
			BaLa-140	<3.86E+01	0.00E+00	3.86E+01
			Be-7	1.63E+03	3.64E+02	4.12E+02
			K-40	2.81E+03	5.80E+02	4.97E+02
540017	3/1/2021 - 3/1/2021		Mn-54	<2.87E+01	0.00E+00	2.87E+01
			Co-58	<2.87E+01	0.00E+00	2.87E+01
			Fe-59	<5.33E+01	0.00E+00	5.33E+01
			Co-60	<2.18E+01	0.00E+00	2.18E+01
			Zn-65	<4.90E+01	0.00E+00	4.90E+01
			Zr-95	<3.72E+01	0.00E+00	3.72E+01
			Nb-95	<3.02E+01	0.00E+00	3.02E+01
			I-131	<2.64E+01	0.00E+00	2.64E+01
			Cs-134	<3.00E+01	0.00E+00	3.00E+01
			Cs-137	<2.38E+01	0.00E+00	2.38E+01
			BaLa-140	<2.95E+01	0.00E+00	2.95E+01
			Be-7	3.44E+03	4.70E+02	3.08E+02
			K-40	3.11E+03	5.25E+02	2.85E+02
542206	4/1/2021 - 4/1/2021		Mn-54	<1.66E+01	0.00E+00	1.66E+01
			Co-58	<1.35E+01	0.00E+00	1.35E+01
			Fe-59	<2.90E+01	0.00E+00	2.90E+01
			Co-60	<1.88E+01	0.00E+00	1.88E+01
			Zn-65	<3.45E+01	0.00E+00	3.45E+01
			Zr-95	<2.97E+01	0.00E+00	2.97E+01
			Nb-95	<1.85E+01	0.00E+00	1.85E+01
			I-131	<2.41E+01	0.00E+00	2.41E+01
			Cs-134	<1.85E+01	0.00E+00	1.85E+01
			Cs-137	<1.73E+01	0.00E+00	1.73E+01
			BaLa-140	<1.88E+01	0.00E+00	1.88E+01
			Be-7	3.65E+03	4.38E+02	2.35E+02
			K-40	3.10E+03	4.56E+02	2.44E+02
544279	5/3/2021 - 5/3/2021		Mn-54	<2.58E+01	0.00E+00	2.58E+01
			Co-58	<2.95E+01	0.00E+00	2.95E+01
			Fe-59	<5.16E+01	0.00E+00	5.16E+01
			Co-60	<2.87E+01	0.00E+00	2.87E+01
			Zn-65	<6.28E+01	0.00E+00	6.28E+01
			Zr-95	<4.64E+01	0.00E+00	4.64E+01
			Nb-95	<3.10E+01	0.00E+00	3.10E+01
			I-131	<4.23E+01	0.00E+00	4.23E+01
			Cs-134	<3.97E+01	0.00E+00	3.97E+01
			Cs-137	<2.66E+01	0.00E+00	2.66E+01
			BaLa-140	<3.76E+01	0.00E+00	3.76E+01
			Be-7	1.45E+03	3.28E+02	3.39E+02
			K-40	3.76E+03	6.72E+02	4.44E+02
545764	6/1/2021 - 6/1/2021		Mn-54	<2.58E+01	0.00E+00	2.58E+01
			Co-58	<2.35E+01	0.00E+00	2.35E+01

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13339 Hagers Ferry Road

Huntersville, North Carolina 28078

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
545764	6/1/2021 - 6/1/2021	WAXMYRTLE	Fe-59	<4.94E+01	0.00E+00	4.94E+01
			Co-60	<2.47E+01	0.00E+00	2.47E+01
			Zn-65	<6.11E+01	0.00E+00	6.11E+01
			Zr-95	<4.56E+01	0.00E+00	4.56E+01
			Nb-95	<2.46E+01	0.00E+00	2.46E+01
			I-131	<2.84E+01	0.00E+00	2.84E+01
			Cs-134	<2.43E+01	0.00E+00	2.43E+01
			Cs-137	<2.39E+01	0.00E+00	2.39E+01
			BaLa-140	<2.98E+01	0.00E+00	2.98E+01
			Be-7	9.36E+02	2.44E+02	2.91E+02
			K-40	3.58E+03	5.98E+02	4.18E+02
			547441	7/1/2021 - 7/1/2021	WAXMYRTLE	Mn-54
Co-58	<2.16E+01	0.00E+00				2.16E+01
Fe-59	<4.39E+01	0.00E+00				4.39E+01
Co-60	<1.78E+01	0.00E+00				1.78E+01
Zn-65	<4.19E+01	0.00E+00				4.19E+01
Zr-95	<4.05E+01	0.00E+00				4.05E+01
Nb-95	<2.17E+01	0.00E+00				2.17E+01
I-131	<3.19E+01	0.00E+00				3.19E+01
Cs-134	<2.69E+01	0.00E+00				2.69E+01
Cs-137	<2.13E+01	0.00E+00				2.13E+01
BaLa-140	<3.27E+01	0.00E+00				3.27E+01
Be-7	1.47E+03	2.72E+02				2.50E+02
K-40	3.12E+03	5.19E+02	3.54E+02			
548708	8/2/2021 - 8/2/2021	WAXMYRTLE	Mn-54	<1.92E+01	0.00E+00	1.92E+01
			Co-58	<1.54E+01	0.00E+00	1.54E+01
			Fe-59	<3.31E+01	0.00E+00	3.31E+01
			Co-60	<1.51E+01	0.00E+00	1.51E+01
			Zn-65	<4.00E+01	0.00E+00	4.00E+01
			Zr-95	<2.82E+01	0.00E+00	2.82E+01
			Nb-95	<1.98E+01	0.00E+00	1.98E+01
			I-131	<2.01E+01	0.00E+00	2.01E+01
			Cs-134	<1.91E+01	0.00E+00	1.91E+01
			Cs-137	<2.16E+01	0.00E+00	2.16E+01
			BaLa-140	<1.38E+01	0.00E+00	1.38E+01
			Be-7	1.38E+03	2.33E+02	2.05E+02
K-40	2.73E+03	4.30E+02	2.59E+02			
550014	9/2/2021 - 9/2/2021	WAXMYRTLE	Mn-54	<2.32E+01	0.00E+00	2.32E+01
			Co-58	<2.25E+01	0.00E+00	2.25E+01
			Fe-59	<5.29E+01	0.00E+00	5.29E+01
			Co-60	<2.53E+01	0.00E+00	2.53E+01
			Zn-65	<4.95E+01	0.00E+00	4.95E+01
			Zr-95	<3.14E+01	0.00E+00	3.14E+01
			Nb-95	<2.71E+01	0.00E+00	2.71E+01
			I-131	<4.75E+01	0.00E+00	4.75E+01
			Cs-134	<2.65E+01	0.00E+00	2.65E+01
			Cs-137	<2.11E+01	0.00E+00	2.11E+01
			BaLa-140	<3.28E+01	0.00E+00	3.28E+01
			Be-7	2.75E+03	3.91E+02	3.02E+02
K-40	3.53E+03	5.26E+02	3.22E+02			
553819	10/4/2021 - 10/4/2021	WAXMYRTLE	Mn-54	<2.24E+01	0.00E+00	2.24E+01
			Co-58	<2.38E+01	0.00E+00	2.38E+01
			Fe-59	<5.60E+01	0.00E+00	5.60E+01
			Co-60	<2.42E+01	0.00E+00	2.42E+01
			Zn-65	<5.85E+01	0.00E+00	5.85E+01
			Zr-95	<5.34E+01	0.00E+00	5.34E+01
			Nb-95	<2.45E+01	0.00E+00	2.45E+01
			I-131	<2.87E+01	0.00E+00	2.87E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 800 [INDICATOR - NE @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
553819	10/4/2021 - 10/4/2021		Cs-134	<2.51E+01	0.00E+00	2.51E+01
			Cs-137	<2.71E+01	0.00E+00	2.71E+01
			BaLa-140	<2.48E+01	0.00E+00	2.48E+01
			Be-7	3.16E+03	4.48E+02	2.84E+02
			K-40	3.14E+03	5.68E+02	3.83E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
555921	11/2/2021 - 11/2/2021		Mn-54	<2.09E+01	0.00E+00	2.09E+01
			Co-58	<1.92E+01	0.00E+00	1.92E+01
			Fe-59	<4.41E+01	0.00E+00	4.41E+01
			Co-60	<1.52E+01	0.00E+00	1.52E+01
			Zn-65	<3.99E+01	0.00E+00	3.99E+01
			Zr-95	<4.16E+01	0.00E+00	4.16E+01
			Nb-95	<2.58E+01	0.00E+00	2.58E+01
			I-131	<3.56E+01	0.00E+00	3.56E+01
			Cs-134	<2.11E+01	0.00E+00	2.11E+01
			Cs-137	<2.11E+01	0.00E+00	2.11E+01
			BaLa-140	<3.28E+01	0.00E+00	3.28E+01
			Be-7	2.00E+03	3.15E+02	2.76E+02
			K-40	2.98E+03	4.61E+02	2.39E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
557933	12/1/2021 - 12/1/2021		Mn-54	<2.07E+01	0.00E+00	2.07E+01
			Co-58	<1.58E+01	0.00E+00	1.58E+01
			Fe-59	<4.85E+01	0.00E+00	4.85E+01
			Co-60	<2.21E+01	0.00E+00	2.21E+01
			Zn-65	<5.08E+01	0.00E+00	5.08E+01
			Zr-95	<3.44E+01	0.00E+00	3.44E+01
			Nb-95	<1.88E+01	0.00E+00	1.88E+01
			I-131	<3.11E+01	0.00E+00	3.11E+01
			Cs-134	<1.58E+01	0.00E+00	1.58E+01
			Cs-137	<1.95E+01	0.00E+00	1.95E+01
			BaLa-140	<3.39E+01	0.00E+00	3.39E+01
			Be-7	2.20E+03	2.82E+02	1.85E+02
			K-40	3.22E+03	4.91E+02	2.53E+02

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
537278	1/6/2021 - 1/6/2021		Mn-54	<1.89E+01	0.00E+00	1.89E+01
			Co-58	<1.44E+01	0.00E+00	1.44E+01
			Fe-59	<4.02E+01	0.00E+00	4.02E+01
			Co-60	<1.84E+01	0.00E+00	1.84E+01
			Zn-65	<4.36E+01	0.00E+00	4.36E+01
			Zr-95	<3.46E+01	0.00E+00	3.46E+01
			Nb-95	<2.25E+01	0.00E+00	2.25E+01
			I-131	<2.57E+01	0.00E+00	2.57E+01
			Cs-134	<2.25E+01	0.00E+00	2.25E+01
			Cs-137	<1.55E+01	0.00E+00	1.55E+01
			BaLa-140	<3.08E+01	0.00E+00	3.08E+01
			Be-7	2.80E+03	3.72E+02	2.46E+02
			K-40	2.28E+03	4.14E+02	3.18E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
538501	2/3/2021 - 2/3/2021		Mn-54	<3.34E+01	0.00E+00	3.34E+01
			Co-58	<3.00E+01	0.00E+00	3.00E+01
			Fe-59	<5.17E+01	0.00E+00	5.17E+01
			Co-60	<3.56E+01	0.00E+00	3.56E+01
			Zn-65	<6.25E+01	0.00E+00	6.25E+01
			Zr-95	<4.67E+01	0.00E+00	4.67E+01
			Nb-95	<2.93E+01	0.00E+00	2.93E+01
			I-131	<4.19E+01	0.00E+00	4.19E+01
			Cs-134	<4.06E+01	0.00E+00	4.06E+01
			Cs-137	<3.45E+01	0.00E+00	3.45E+01
			BaLa-140	<3.58E+01	0.00E+00	3.58E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
538501	2/3/2021 - 2/3/2021	WAXMYRTLE	Be-7	4.60E+03	5.98E+02	3.31E+02
			K-40	2.62E+03	5.65E+02	5.07E+02
540018	3/1/2021 - 3/1/2021	WAXMYRTLE	Mn-54	<1.94E+01	0.00E+00	1.94E+01
			Co-58	<1.55E+01	0.00E+00	1.55E+01
			Fe-59	<3.20E+01	0.00E+00	3.20E+01
			Co-60	<1.48E+01	0.00E+00	1.48E+01
			Zn-65	<3.24E+01	0.00E+00	3.24E+01
			Zr-95	<3.20E+01	0.00E+00	3.20E+01
			Nb-95	<2.00E+01	0.00E+00	2.00E+01
			I-131	<1.90E+01	0.00E+00	1.90E+01
			Cs-134	<2.22E+01	0.00E+00	2.22E+01
			Cs-137	<2.03E+01	0.00E+00	2.03E+01
			BaLa-140	<2.10E+01	0.00E+00	2.10E+01
			Be-7	3.31E+03	3.96E+02	2.51E+02
			K-40	2.94E+03	4.05E+02	1.75E+02
			542207	4/1/2021 - 4/1/2021	WAXMYRTLE	Mn-54
Co-58	<2.16E+01	0.00E+00				2.16E+01
Fe-59	<4.81E+01	0.00E+00				4.81E+01
Co-60	<2.88E+01	0.00E+00				2.88E+01
Zn-65	<3.97E+01	0.00E+00				3.97E+01
Zr-95	<3.67E+01	0.00E+00				3.67E+01
Nb-95	<2.02E+01	0.00E+00				2.02E+01
I-131	<3.64E+01	0.00E+00				3.64E+01
Cs-134	<2.10E+01	0.00E+00				2.10E+01
Cs-137	<2.16E+01	0.00E+00				2.16E+01
BaLa-140	<2.96E+01	0.00E+00				2.96E+01
Be-7	3.16E+03	4.31E+02				3.12E+02
K-40	3.28E+03	5.21E+02				2.67E+02
544280	5/4/2021 - 5/4/2021	WAXMYRTLE				Mn-54
			Co-58	<2.04E+01	0.00E+00	2.04E+01
			Fe-59	<5.65E+01	0.00E+00	5.65E+01
			Co-60	<2.37E+01	0.00E+00	2.37E+01
			Zn-65	<6.60E+01	0.00E+00	6.60E+01
			Zr-95	<4.77E+01	0.00E+00	4.77E+01
			Nb-95	<2.69E+01	0.00E+00	2.69E+01
			I-131	<3.01E+01	0.00E+00	3.01E+01
			Cs-134	<2.22E+01	0.00E+00	2.22E+01
			Cs-137	<2.50E+01	0.00E+00	2.50E+01
			BaLa-140	<4.17E+01	0.00E+00	4.17E+01
			Be-7	8.31E+02	2.35E+02	2.70E+02
			K-40	3.40E+03	5.74E+02	2.04E+02
			545765	6/1/2021 - 6/1/2021	WAXMYRTLE	Mn-54
Co-58	<1.85E+01	0.00E+00				1.85E+01
Fe-59	<4.57E+01	0.00E+00				4.57E+01
Co-60	<2.18E+01	0.00E+00				2.18E+01
Zn-65	<5.91E+01	0.00E+00				5.91E+01
Zr-95	<3.06E+01	0.00E+00				3.06E+01
Nb-95	<2.32E+01	0.00E+00				2.32E+01
I-131	<2.68E+01	0.00E+00				2.68E+01
Cs-134	<2.80E+01	0.00E+00				2.80E+01
Cs-137	<2.31E+01	0.00E+00				2.31E+01
BaLa-140	<2.73E+01	0.00E+00				2.73E+01
Be-7	4.55E+02	1.93E+02				2.71E+02
K-40	4.21E+03	6.66E+02				4.50E+02
547442	7/1/2021 - 7/1/2021	WAXMYRTLE				Mn-54
			Co-58	<2.20E+01	0.00E+00	2.20E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
547442	7/1/2021 - 7/1/2021	WAXMYRTLE	Fe-59	<4.89E+01	0.00E+00	4.89E+01
			Co-60	<2.33E+01	0.00E+00	2.33E+01
			Zn-65	<4.70E+01	0.00E+00	4.70E+01
			Zr-95	<4.90E+01	0.00E+00	4.90E+01
			Nb-95	<2.79E+01	0.00E+00	2.79E+01
			I-131	<4.61E+01	0.00E+00	4.61E+01
			Cs-134	<2.67E+01	0.00E+00	2.67E+01
			Cs-137	<2.80E+01	0.00E+00	2.80E+01
			BaLa-140	<4.70E+01	0.00E+00	4.70E+01
			Be-7	1.06E+03	2.53E+02	2.85E+02
			K-40	3.34E+03	5.46E+02	3.27E+02
548709	8/2/2021 - 8/2/2021	WAXMYRTLE	Mn-54	<1.56E+01	0.00E+00	1.56E+01
			Co-58	<1.30E+01	0.00E+00	1.30E+01
			Fe-59	<2.88E+01	0.00E+00	2.88E+01
			Co-60	<1.75E+01	0.00E+00	1.75E+01
			Zn-65	<2.81E+01	0.00E+00	2.81E+01
			Zr-95	<2.53E+01	0.00E+00	2.53E+01
			Nb-95	<1.39E+01	0.00E+00	1.39E+01
			I-131	<1.70E+01	0.00E+00	1.70E+01
			Cs-134	<1.71E+01	0.00E+00	1.71E+01
			Cs-137	<1.72E+01	0.00E+00	1.72E+01
			BaLa-140	<9.88E+00	0.00E+00	9.88E+00
Be-7	1.77E+03	2.57E+02	1.96E+02			
K-40	3.13E+03	4.49E+02	2.19E+02			
550015	9/2/2021 - 9/2/2021	WAXMYRTLE	Mn-54	<1.65E+01	0.00E+00	1.65E+01
			Co-58	<1.53E+01	0.00E+00	1.53E+01
			Fe-59	<3.67E+01	0.00E+00	3.67E+01
			Co-60	<1.26E+01	0.00E+00	1.26E+01
			Zn-65	<4.21E+01	0.00E+00	4.21E+01
			Zr-95	<3.09E+01	0.00E+00	3.09E+01
			Nb-95	<1.93E+01	0.00E+00	1.93E+01
			I-131	<3.69E+01	0.00E+00	3.69E+01
			Cs-134	<2.05E+01	0.00E+00	2.05E+01
			Cs-137	<1.53E+01	0.00E+00	1.53E+01
			BaLa-140	<4.21E+01	0.00E+00	4.21E+01
Be-7	3.07E+03	3.97E+02	2.18E+02			
K-40	2.92E+03	4.56E+02	2.40E+02			
553820	10/4/2021 - 10/4/2021	WAXMYRTLE	Mn-54	<2.39E+01	0.00E+00	2.39E+01
			Co-58	<2.25E+01	0.00E+00	2.25E+01
			Fe-59	<4.84E+01	0.00E+00	4.84E+01
			Co-60	<3.09E+01	0.00E+00	3.09E+01
			Zn-65	<5.02E+01	0.00E+00	5.02E+01
			Zr-95	<3.41E+01	0.00E+00	3.41E+01
			Nb-95	<2.25E+01	0.00E+00	2.25E+01
			I-131	<2.88E+01	0.00E+00	2.88E+01
			Cs-134	<2.54E+01	0.00E+00	2.54E+01
			Cs-137	<2.43E+01	0.00E+00	2.43E+01
			BaLa-140	<3.52E+01	0.00E+00	3.52E+01
Be-7	2.76E+03	4.07E+02	3.17E+02			
K-40	3.06E+03	5.34E+02	3.10E+02			
555922	11/3/2021 - 11/3/2021	WAXMYRTLE	Mn-54	<2.23E+01	0.00E+00	2.23E+01
			Co-58	<2.18E+01	0.00E+00	2.18E+01
			Fe-59	<4.93E+01	0.00E+00	4.93E+01
			Co-60	<2.75E+01	0.00E+00	2.75E+01
			Zn-65	<5.49E+01	0.00E+00	5.49E+01
			Zr-95	<3.39E+01	0.00E+00	3.39E+01
			Nb-95	<2.57E+01	0.00E+00	2.57E+01
			I-131	<2.92E+01	0.00E+00	2.92E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 801 [INDICATOR - SW @ 0.8 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
555922	11/3/2021 - 11/3/2021		Cs-134	<2.37E+01	0.00E+00	2.37E+01
			Cs-137	<1.98E+01	0.00E+00	1.98E+01
			BaLa-140	<2.72E+01	0.00E+00	2.72E+01
			Be-7	3.07E+03	4.05E+02	2.82E+02
			K-40	3.22E+03	4.84E+02	2.57E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
557934	12/1/2021 - 12/1/2021		Mn-54	<1.89E+01	0.00E+00	1.89E+01
			Co-58	<1.71E+01	0.00E+00	1.71E+01
			Fe-59	<4.49E+01	0.00E+00	4.49E+01
			Co-60	<1.88E+01	0.00E+00	1.88E+01
			Zn-65	<3.79E+01	0.00E+00	3.79E+01
			Zr-95	<3.63E+01	0.00E+00	3.63E+01
			Nb-95	<2.08E+01	0.00E+00	2.08E+01
			I-131	<2.89E+01	0.00E+00	2.89E+01
			Cs-134	<1.66E+01	0.00E+00	1.66E+01
			Cs-137	<1.97E+01	0.00E+00	1.97E+01
			BaLa-140	<3.11E+01	0.00E+00	3.11E+01
			Be-7	1.93E+03	4.37E+02	1.83E+02
			K-40	2.95E+03	4.66E+02	2.69E+02

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
537279	1/6/2021 - 1/6/2021		Mn-54	<2.62E+01	0.00E+00	2.62E+01
			Co-58	<2.49E+01	0.00E+00	2.49E+01
			Fe-59	<4.88E+01	0.00E+00	4.88E+01
			Co-60	<2.66E+01	0.00E+00	2.66E+01
			Zn-65	<4.70E+01	0.00E+00	4.70E+01
			Zr-95	<4.08E+01	0.00E+00	4.08E+01
			Nb-95	<2.45E+01	0.00E+00	2.45E+01
			I-131	<3.64E+01	0.00E+00	3.64E+01
			Cs-134	<2.62E+01	0.00E+00	2.62E+01
			Cs-137	<1.96E+01	0.00E+00	1.96E+01
			BaLa-140	<3.65E+01	0.00E+00	3.65E+01
			Be-7	5.92E+03	6.97E+02	3.19E+02
			K-40	1.53E+03	3.88E+02	3.43E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
538502	2/3/2021 - 2/3/2021		Mn-54	<2.18E+01	0.00E+00	2.18E+01
			Co-58	<2.29E+01	0.00E+00	2.29E+01
			Fe-59	<4.82E+01	0.00E+00	4.82E+01
			Co-60	<2.94E+01	0.00E+00	2.94E+01
			Zn-65	<5.17E+01	0.00E+00	5.17E+01
			Zr-95	<4.81E+01	0.00E+00	4.81E+01
			Nb-95	<2.87E+01	0.00E+00	2.87E+01
			I-131	<3.40E+01	0.00E+00	3.40E+01
			Cs-134	<3.15E+01	0.00E+00	3.15E+01
			Cs-137	<2.40E+01	0.00E+00	2.40E+01
			BaLa-140	<2.92E+01	0.00E+00	2.92E+01
			Be-7	8.32E+03	8.89E+02	2.57E+02
			K-40	1.55E+03	3.35E+02	4.24E+01

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
540019	3/1/2021 - 3/1/2021		Mn-54	<2.09E+01	0.00E+00	2.09E+01
			Co-58	<1.84E+01	0.00E+00	1.84E+01
			Fe-59	<3.53E+01	0.00E+00	3.53E+01
			Co-60	<2.16E+01	0.00E+00	2.16E+01
			Zn-65	<5.31E+01	0.00E+00	5.31E+01
			Zr-95	<3.36E+01	0.00E+00	3.36E+01
			Nb-95	<2.11E+01	0.00E+00	2.11E+01
			I-131	<2.55E+01	0.00E+00	2.55E+01
			Cs-134	<2.64E+01	0.00E+00	2.64E+01
			Cs-137	<1.98E+01	0.00E+00	1.98E+01
			BaLa-140	<2.74E+01	0.00E+00	2.74E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
540019	3/1/2021 - 3/1/2021		Be-7	8.41E+03	8.63E+02	2.40E+02
			K-40	2.14E+03	4.14E+02	3.18E+02
542208	4/1/2021 - 4/1/2021		Mn-54	<1.73E+01	0.00E+00	1.73E+01
			Co-58	<1.65E+01	0.00E+00	1.65E+01
			Fe-59	<3.51E+01	0.00E+00	3.51E+01
			Co-60	<1.52E+01	0.00E+00	1.52E+01
			Zn-65	<3.71E+01	0.00E+00	3.71E+01
			Zr-95	<2.62E+01	0.00E+00	2.62E+01
			Nb-95	<1.84E+01	0.00E+00	1.84E+01
			I-131	<1.98E+01	0.00E+00	1.98E+01
			Cs-134	<2.10E+01	0.00E+00	2.10E+01
			Cs-137	<1.74E+01	0.00E+00	1.74E+01
			BaLa-140	<2.16E+01	0.00E+00	2.16E+01
			Be-7	4.71E+03	5.33E+02	2.47E+02
			K-40	1.67E+03	3.33E+02	2.66E+02
544281	5/4/2021 - 5/4/2021		Mn-54	<2.80E+01	0.00E+00	2.80E+01
			Co-58	<2.67E+01	0.00E+00	2.67E+01
			Fe-59	<4.51E+01	0.00E+00	4.51E+01
			Co-60	<3.46E+01	0.00E+00	3.46E+01
			Zn-65	<6.88E+01	0.00E+00	6.88E+01
			Zr-95	<4.99E+01	0.00E+00	4.99E+01
			Nb-95	<2.89E+01	0.00E+00	2.89E+01
			I-131	<3.80E+01	0.00E+00	3.80E+01
			Cs-134	<3.02E+01	0.00E+00	3.02E+01
			Cs-137	<3.02E+01	0.00E+00	3.02E+01
			BaLa-140	<4.76E+01	0.00E+00	4.76E+01
			Be-7	1.44E+03	3.27E+02	3.42E+02
			K-40	2.96E+03	6.15E+02	4.96E+02
545766	6/1/2021 - 6/1/2021		Mn-54	<2.14E+01	0.00E+00	2.14E+01
			Co-58	<2.33E+01	0.00E+00	2.33E+01
			Fe-59	<5.00E+01	0.00E+00	5.00E+01
			Co-60	<2.00E+01	0.00E+00	2.00E+01
			Zn-65	<5.22E+01	0.00E+00	5.22E+01
			Zr-95	<4.14E+01	0.00E+00	4.14E+01
			Nb-95	<2.15E+01	0.00E+00	2.15E+01
			I-131	<2.38E+01	0.00E+00	2.38E+01
			Cs-134	<2.55E+01	0.00E+00	2.55E+01
			Cs-137	<2.92E+01	0.00E+00	2.92E+01
			BaLa-140	<3.07E+01	0.00E+00	3.07E+01
			Be-7	5.61E+02	2.24E+02	3.14E+02
			K-40	3.25E+03	5.54E+02	3.70E+02
547443	7/1/2021 - 7/1/2021		Mn-54	<2.85E+01	0.00E+00	2.85E+01
			Co-58	<2.72E+01	0.00E+00	2.72E+01
			Fe-59	<5.78E+01	0.00E+00	5.78E+01
			Co-60	<2.71E+01	0.00E+00	2.71E+01
			Zn-65	<4.86E+01	0.00E+00	4.86E+01
			Zr-95	<6.00E+01	0.00E+00	6.00E+01
			Nb-95	<3.16E+01	0.00E+00	3.16E+01
			I-131	<4.18E+01	0.00E+00	4.18E+01
			Cs-134	<2.85E+01	0.00E+00	2.85E+01
			Cs-137	<2.78E+01	0.00E+00	2.78E+01
			BaLa-140	<3.55E+01	0.00E+00	3.55E+01
			Be-7	2.91E+03	4.39E+02	3.26E+02
			K-40	3.63E+03	6.17E+02	4.49E+02
548710	8/3/2021 - 8/3/2021		Mn-54	<1.11E+01	0.00E+00	1.11E+01
			Co-58	<9.31E+00	0.00E+00	9.31E+00

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
548710	8/3/2021 - 8/3/2021	WAXMYRTLE	Fe-59	<2.59E+01	0.00E+00	2.59E+01
			Co-60	<1.02E+01	0.00E+00	1.02E+01
			Zn-65	<2.15E+01	0.00E+00	2.15E+01
			Zr-95	<1.74E+01	0.00E+00	1.74E+01
			Nb-95	<1.16E+01	0.00E+00	1.16E+01
			I-131	<1.17E+01	0.00E+00	1.17E+01
			Cs-134	<8.56E+00	0.00E+00	8.56E+00
			Cs-137	<1.35E+01	0.00E+00	1.35E+01
			BaLa-140	<1.11E+01	0.00E+00	1.11E+01
			Be-7	3.20E+03	3.59E+02	1.45E+02
			K-40	1.51E+03	2.72E+02	2.05E+02
550016	9/2/2021 - 9/2/2021	WAXMYRTLE	Mn-54	<1.20E+01	0.00E+00	1.20E+01
			Co-58	<9.93E+00	0.00E+00	9.93E+00
			Fe-59	<2.31E+01	0.00E+00	2.31E+01
			Co-60	<9.99E+00	0.00E+00	9.99E+00
			Zn-65	<1.73E+01	0.00E+00	1.73E+01
			Zr-95	<2.09E+01	0.00E+00	2.09E+01
			Nb-95	<1.20E+01	0.00E+00	1.20E+01
			I-131	<2.45E+01	0.00E+00	2.45E+01
			Cs-134	<1.24E+01	0.00E+00	1.24E+01
			Cs-137	<1.00E+01	0.00E+00	1.00E+01
			BaLa-140	<1.78E+01	0.00E+00	1.78E+01
			Be-7	<8.24E+01	0.00E+00	8.24E+01
			K-40	2.75E+02	1.08E+02	1.35E+02
553821	10/4/2021 - 10/4/2021	WAXMYRTLE	Mn-54	<2.31E+01	0.00E+00	2.31E+01
			Co-58	<2.09E+01	0.00E+00	2.09E+01
			Fe-59	<4.95E+01	0.00E+00	4.95E+01
			Co-60	<2.95E+01	0.00E+00	2.95E+01
			Zn-65	<4.72E+01	0.00E+00	4.72E+01
			Zr-95	<4.63E+01	0.00E+00	4.63E+01
			Nb-95	<2.17E+01	0.00E+00	2.17E+01
			I-131	<2.21E+01	0.00E+00	2.21E+01
			Cs-134	<2.59E+01	0.00E+00	2.59E+01
			Cs-137	<2.65E+01	0.00E+00	2.65E+01
			BaLa-140	<2.60E+01	0.00E+00	2.60E+01
			Be-7	6.62E+03	7.63E+02	3.02E+02
			K-40	2.48E+03	4.48E+02	4.42E+01
555923	11/2/2021 - 11/2/2021	WAXMYRTLE	Mn-54	<1.98E+01	0.00E+00	1.98E+01
			Co-58	<1.80E+01	0.00E+00	1.80E+01
			Fe-59	<4.11E+01	0.00E+00	4.11E+01
			Co-60	<1.60E+01	0.00E+00	1.60E+01
			Zn-65	<2.84E+01	0.00E+00	2.84E+01
			Zr-95	<3.51E+01	0.00E+00	3.51E+01
			Nb-95	<2.22E+01	0.00E+00	2.22E+01
			I-131	<3.41E+01	0.00E+00	3.41E+01
			Cs-134	<2.08E+01	0.00E+00	2.08E+01
			Cs-137	<1.71E+01	0.00E+00	1.71E+01
			BaLa-140	<1.85E+01	0.00E+00	1.85E+01
			Be-7	4.74E+03	5.30E+02	2.14E+02
			K-40	2.59E+03	4.27E+02	2.65E+02
557935	12/2/2021 - 12/2/2021	WAXMYRTLE	Mn-54	<2.11E+01	0.00E+00	2.11E+01
			Co-58	<2.21E+01	0.00E+00	2.21E+01
			Fe-59	<3.96E+01	0.00E+00	3.96E+01
			Co-60	<2.00E+01	0.00E+00	2.00E+01
			Zn-65	<4.19E+01	0.00E+00	4.19E+01
			Zr-95	<2.96E+01	0.00E+00	2.96E+01
			Nb-95	<2.09E+01	0.00E+00	2.09E+01
			I-131	<2.89E+01	0.00E+00	2.89E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 802 [CONTROL - -- @ 10.1 miles]

Sample ID:	557935	Sample Dates:	12/2/2021 - 12/2/2021	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
					Cs-134	<2.41E+01	0.00E+00	2.41E+01
					Cs-137	<1.80E+01	0.00E+00	1.80E+01
					BaLa-140	<2.93E+01	0.00E+00	2.93E+01
					Be-7	5.44E+03	6.19E+02	2.42E+02
					K-40	1.87E+03	3.69E+02	2.56E+02

Sample Point 803 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	537280	Sample Dates:	1/5/2021 - 1/5/2021	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.13E+01	0.00E+00	2.13E+01
					Co-58	<2.54E+01	0.00E+00	2.54E+01
					Fe-59	<4.42E+01	0.00E+00	4.42E+01
					Co-60	<2.16E+01	0.00E+00	2.16E+01
					Zn-65	<5.41E+01	0.00E+00	5.41E+01
					Zr-95	<4.77E+01	0.00E+00	4.77E+01
					Nb-95	<2.70E+01	0.00E+00	2.70E+01
					I-131	<4.19E+01	0.00E+00	4.19E+01
					Cs-134	<2.24E+01	0.00E+00	2.24E+01
					Cs-137	<2.26E+01	0.00E+00	2.26E+01
					BaLa-140	<3.58E+01	0.00E+00	3.58E+01
					Be-7	2.76E+03	4.00E+02	2.87E+02
					K-40	2.47E+03	4.89E+02	4.32E+02

Sample ID:	538503	Sample Dates:	2/3/2021 - 2/3/2021	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.47E+01	0.00E+00	2.47E+01
					Co-58	<2.38E+01	0.00E+00	2.38E+01
					Fe-59	<5.03E+01	0.00E+00	5.03E+01
					Co-60	<2.85E+01	0.00E+00	2.85E+01
					Zn-65	<5.77E+01	0.00E+00	5.77E+01
					Zr-95	<4.02E+01	0.00E+00	4.02E+01
					Nb-95	<2.45E+01	0.00E+00	2.45E+01
					I-131	<3.31E+01	0.00E+00	3.31E+01
					Cs-134	<3.16E+01	0.00E+00	3.16E+01
					Cs-137	<2.05E+01	0.00E+00	2.05E+01
					BaLa-140	<3.06E+01	0.00E+00	3.06E+01
					Be-7	4.63E+03	5.76E+02	2.92E+02
					K-40	2.97E+03	5.38E+02	3.69E+02

Sample ID:	540020	Sample Dates:	3/1/2021 - 3/1/2021	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.20E+01	0.00E+00	2.20E+01
					Co-58	<2.65E+01	0.00E+00	2.65E+01
					Fe-59	<4.82E+01	0.00E+00	4.82E+01
					Co-60	<2.80E+01	0.00E+00	2.80E+01
					Zn-65	<5.99E+01	0.00E+00	5.99E+01
					Zr-95	<4.60E+01	0.00E+00	4.60E+01
					Nb-95	<2.58E+01	0.00E+00	2.58E+01
					I-131	<2.96E+01	0.00E+00	2.96E+01
					Cs-134	<2.90E+01	0.00E+00	2.90E+01
					Cs-137	<2.89E+01	0.00E+00	2.89E+01
					BaLa-140	<3.59E+01	0.00E+00	3.59E+01
					Be-7	5.41E+03	6.53E+02	3.11E+02
					K-40	2.58E+03	5.20E+02	3.97E+02

Sample ID:	542209	Sample Dates:	4/1/2021 - 4/1/2021	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.90E+01	0.00E+00	1.90E+01
					Co-58	<1.50E+01	0.00E+00	1.50E+01
					Fe-59	<3.63E+01	0.00E+00	3.63E+01
					Co-60	<1.94E+01	0.00E+00	1.94E+01
					Zn-65	<3.70E+01	0.00E+00	3.70E+01
					Zr-95	<3.26E+01	0.00E+00	3.26E+01
					Nb-95	<1.77E+01	0.00E+00	1.77E+01
					I-131	<2.71E+01	0.00E+00	2.71E+01
					Cs-134	<2.03E+01	0.00E+00	2.03E+01
					Cs-137	<1.90E+01	0.00E+00	1.90E+01
					BaLa-140	<2.25E+01	0.00E+00	2.25E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 803 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
542209	4/1/2021 - 4/1/2021		Be-7	2.99E+03	3.98E+02	2.84E+02
			K-40	2.93E+03	4.55E+02	2.67E+02
544282	5/4/2021 - 5/4/2021		Mn-54	<2.27E+01	0.00E+00	2.27E+01
			Co-58	<2.27E+01	0.00E+00	2.27E+01
			Fe-59	<4.77E+01	0.00E+00	4.77E+01
			Co-60	<2.51E+01	0.00E+00	2.51E+01
			Zn-65	<6.10E+01	0.00E+00	6.10E+01
			Zr-95	<3.27E+01	0.00E+00	3.27E+01
			Nb-95	<2.42E+01	0.00E+00	2.42E+01
			I-131	<3.15E+01	0.00E+00	3.15E+01
			Cs-134	<2.47E+01	0.00E+00	2.47E+01
			Cs-137	<2.84E+01	0.00E+00	2.84E+01
			BaLa-140	<2.43E+01	0.00E+00	2.43E+01
			Be-7	1.11E+03	2.74E+02	3.20E+02
			K-40	3.02E+03	5.29E+02	3.27E+02
545767	6/1/2021 - 6/1/2021		Mn-54	<2.30E+01	0.00E+00	2.30E+01
			Co-58	<2.41E+01	0.00E+00	2.41E+01
			Fe-59	<4.52E+01	0.00E+00	4.52E+01
			Co-60	<2.77E+01	0.00E+00	2.77E+01
			Zn-65	<5.19E+01	0.00E+00	5.19E+01
			Zr-95	<3.55E+01	0.00E+00	3.55E+01
			Nb-95	<2.65E+01	0.00E+00	2.65E+01
			I-131	<2.57E+01	0.00E+00	2.57E+01
			Cs-134	<2.65E+01	0.00E+00	2.65E+01
			Cs-137	<2.96E+01	0.00E+00	2.96E+01
			BaLa-140	<2.71E+01	0.00E+00	2.71E+01
			Be-7	5.63E+02	2.19E+02	3.05E+02
			K-40	3.08E+03	5.33E+02	3.48E+02
547444	7/1/2021 - 7/1/2021		Mn-54	<2.39E+01	0.00E+00	2.39E+01
			Co-58	<1.84E+01	0.00E+00	1.84E+01
			Fe-59	<3.66E+01	0.00E+00	3.66E+01
			Co-60	<2.02E+01	0.00E+00	2.02E+01
			Zn-65	<5.35E+01	0.00E+00	5.35E+01
			Zr-95	<3.08E+01	0.00E+00	3.08E+01
			Nb-95	<2.31E+01	0.00E+00	2.31E+01
			I-131	<3.70E+01	0.00E+00	3.70E+01
			Cs-134	<2.75E+01	0.00E+00	2.75E+01
			Cs-137	<1.96E+01	0.00E+00	1.96E+01
			BaLa-140	<4.12E+01	0.00E+00	4.12E+01
			Be-7	2.04E+03	3.23E+02	2.60E+02
			K-40	3.49E+03	5.35E+02	2.35E+02
548711	8/2/2021 - 8/2/2021		Mn-54	<1.64E+01	0.00E+00	1.64E+01
			Co-58	<1.35E+01	0.00E+00	1.35E+01
			Fe-59	<3.55E+01	0.00E+00	3.55E+01
			Co-60	<1.70E+01	0.00E+00	1.70E+01
			Zn-65	<3.31E+01	0.00E+00	3.31E+01
			Zr-95	<2.69E+01	0.00E+00	2.69E+01
			Nb-95	<1.48E+01	0.00E+00	1.48E+01
			I-131	<1.76E+01	0.00E+00	1.76E+01
			Cs-134	<2.02E+01	0.00E+00	2.02E+01
			Cs-137	<1.39E+01	0.00E+00	1.39E+01
			BaLa-140	<2.39E+01	0.00E+00	2.39E+01
			Be-7	2.66E+03	3.35E+02	1.87E+02
			K-40	2.91E+03	4.28E+02	2.28E+02
550017	9/2/2021 - 9/2/2021		Mn-54	<1.71E+01	0.00E+00	1.71E+01
			Co-58	<1.73E+01	0.00E+00	1.73E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 803 [INDICATOR - SSE @ 0.6 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
550017	9/2/2021 - 9/2/2021		Fe-59	<3.92E+01	0.00E+00	3.92E+01
			Co-60	<1.66E+01	0.00E+00	1.66E+01
			Zn-65	<4.23E+01	0.00E+00	4.23E+01
			Zr-95	<3.21E+01	0.00E+00	3.21E+01
			Nb-95	<2.01E+01	0.00E+00	2.01E+01
			I-131	<3.98E+01	0.00E+00	3.98E+01
			Cs-134	<1.51E+01	0.00E+00	1.51E+01
			Cs-137	<1.40E+01	0.00E+00	1.40E+01
			BaLa-140	<2.98E+01	0.00E+00	2.98E+01
			Be-7	2.35E+03	3.32E+02	2.24E+02
			K-40	2.80E+03	4.18E+02	1.06E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
553822	10/4/2021 - 10/4/2021		Mn-54	<2.04E+01	0.00E+00	2.04E+01
			Co-58	<1.98E+01	0.00E+00	1.98E+01
			Fe-59	<4.65E+01	0.00E+00	4.65E+01
			Co-60	<2.26E+01	0.00E+00	2.26E+01
			Zn-65	<4.34E+01	0.00E+00	4.34E+01
			Zr-95	<2.97E+01	0.00E+00	2.97E+01
			Nb-95	<2.25E+01	0.00E+00	2.25E+01
			I-131	<2.06E+01	0.00E+00	2.06E+01
			Cs-134	<1.84E+01	0.00E+00	1.84E+01
			Cs-137	<1.60E+01	0.00E+00	1.60E+01
			BaLa-140	<2.05E+01	0.00E+00	2.05E+01
			Be-7	6.27E+03	9.46E+02	1.87E+02
			K-40	3.09E+03	4.96E+02	1.87E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
555924	11/4/2021 - 11/4/2021		Mn-54	<1.38E+01	0.00E+00	1.38E+01
			Co-58	<1.36E+01	0.00E+00	1.36E+01
			Fe-59	<2.81E+01	0.00E+00	2.81E+01
			Co-60	<1.86E+01	0.00E+00	1.86E+01
			Zn-65	<3.51E+01	0.00E+00	3.51E+01
			Zr-95	<1.36E+01	0.00E+00	1.36E+01
			Nb-95	<1.71E+01	0.00E+00	1.71E+01
			I-131	<2.36E+01	0.00E+00	2.36E+01
			Cs-134	<1.94E+01	0.00E+00	1.94E+01
			Cs-137	<1.53E+01	0.00E+00	1.53E+01
			BaLa-140	<3.07E+01	0.00E+00	3.07E+01
			Be-7	2.76E+03	3.53E+02	2.20E+02
			K-40	2.65E+03	4.36E+02	3.28E+02

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
557936	12/1/2021 - 12/1/2021		Mn-54	<1.97E+01	0.00E+00	1.97E+01
			Co-58	<2.18E+01	0.00E+00	2.18E+01
			Fe-59	<3.91E+01	0.00E+00	3.91E+01
			Co-60	<1.73E+01	0.00E+00	1.73E+01
			Zn-65	<4.09E+01	0.00E+00	4.09E+01
			Zr-95	<2.69E+01	0.00E+00	2.69E+01
			Nb-95	<1.88E+01	0.00E+00	1.88E+01
			I-131	<2.58E+01	0.00E+00	2.58E+01
			Cs-134	<1.94E+01	0.00E+00	1.94E+01
			Cs-137	<1.97E+01	0.00E+00	1.97E+01
			BaLa-140	<2.57E+01	0.00E+00	2.57E+01
			Be-7	2.83E+03	3.95E+02	2.81E+02
			K-40	2.52E+03	4.72E+02	4.34E+02

Sample Point 804 [INDICATOR - S @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
537281	1/6/2021 - 1/6/2021		Mn-54	<2.16E+01	0.00E+00	2.16E+01
			Co-58	<2.11E+01	0.00E+00	2.11E+01
			Fe-59	<4.41E+01	0.00E+00	4.41E+01
			Co-60	<2.55E+01	0.00E+00	2.55E+01
			Zn-65	<3.78E+01	0.00E+00	3.78E+01

BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 804 [INDICATOR - S @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
537281	1/6/2021 - 1/6/2021		Zr-95	<3.58E+01	0.00E+00	3.58E+01
			Nb-95	<2.40E+01	0.00E+00	2.40E+01
			I-131	<3.26E+01	0.00E+00	3.26E+01
			Cs-134	<2.17E+01	0.00E+00	2.17E+01
			Cs-137	<2.29E+01	0.00E+00	2.29E+01
			BaLa-140	<2.73E+01	0.00E+00	2.73E+01
			Be-7	3.43E+03	4.44E+02	2.68E+02
			K-40	2.16E+03	4.41E+02	3.89E+02
538504	2/3/2021 - 2/3/2021		Mn-54	<2.64E+01	0.00E+00	2.64E+01
			Co-58	<2.34E+01	0.00E+00	2.34E+01
			Fe-59	<5.60E+01	0.00E+00	5.60E+01
			Co-60	<2.95E+01	0.00E+00	2.95E+01
			Zn-65	<6.00E+01	0.00E+00	6.00E+01
			Zr-95	<4.32E+01	0.00E+00	4.32E+01
			Nb-95	<2.56E+01	0.00E+00	2.56E+01
			I-131	<3.83E+01	0.00E+00	3.83E+01
			Cs-134	<2.47E+01	0.00E+00	2.47E+01
			Cs-137	<2.72E+01	0.00E+00	2.72E+01
			BaLa-140	<3.20E+01	0.00E+00	3.20E+01
			Be-7	7.13E+03	8.08E+02	3.28E+02
			K-40	2.83E+03	5.12E+02	2.67E+02
			540021	3/1/2021 - 3/1/2021		Mn-54
Co-58	<2.11E+01	0.00E+00				2.11E+01
Fe-59	<4.22E+01	0.00E+00				4.22E+01
Co-60	<2.46E+01	0.00E+00				2.46E+01
Zn-65	<4.10E+01	0.00E+00				4.10E+01
Zr-95	<3.21E+01	0.00E+00				3.21E+01
Nb-95	<2.23E+01	0.00E+00				2.23E+01
I-131	<2.16E+01	0.00E+00				2.16E+01
Cs-134	<2.31E+01	0.00E+00				2.31E+01
Cs-137	<1.87E+01	0.00E+00				1.87E+01
BaLa-140	<2.61E+01	0.00E+00				2.61E+01
Be-7	7.62E+03	6.90E+02				1.88E+02
K-40	2.06E+03	4.29E+02				3.46E+02
542210	4/1/2021 - 4/1/2021					Mn-54
			Co-58	<1.84E+01	0.00E+00	1.84E+01
			Fe-59	<3.67E+01	0.00E+00	3.67E+01
			Co-60	<2.42E+01	0.00E+00	2.42E+01
			Zn-65	<4.52E+01	0.00E+00	4.52E+01
			Zr-95	<3.61E+01	0.00E+00	3.61E+01
			Nb-95	<2.16E+01	0.00E+00	2.16E+01
			I-131	<2.73E+01	0.00E+00	2.73E+01
			Cs-134	<1.93E+01	0.00E+00	1.93E+01
			Cs-137	<1.97E+01	0.00E+00	1.97E+01
			BaLa-140	<3.14E+01	0.00E+00	3.14E+01
			Be-7	5.97E+03	6.56E+02	2.40E+02
			K-40	2.85E+03	4.70E+02	3.21E+02
			544283	5/4/2021 - 5/4/2021		Mn-54
Co-58	<1.95E+01	0.00E+00				1.95E+01
Fe-59	<4.25E+01	0.00E+00				4.25E+01
Co-60	<3.01E+01	0.00E+00				3.01E+01
Zn-65	<5.80E+01	0.00E+00				5.80E+01
Zr-95	<3.40E+01	0.00E+00				3.40E+01
Nb-95	<2.72E+01	0.00E+00				2.72E+01
I-131	<3.07E+01	0.00E+00				3.07E+01
Cs-134	<2.25E+01	0.00E+00				2.25E+01
Cs-137	<1.84E+01	0.00E+00				1.84E+01
BaLa-140	<3.54E+01	0.00E+00				3.54E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 804 [INDICATOR - S @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
544283	5/4/2021 - 5/4/2021	WAXMYRTLE	Be-7	9.30E+02	2.63E+02	3.12E+02
			K-40	3.32E+03	5.76E+02	2.83E+02
545768	6/1/2021 - 6/1/2021	WAXMYRTLE	Mn-54	<2.34E+01	0.00E+00	2.34E+01
			Co-58	<1.70E+01	0.00E+00	1.70E+01
			Fe-59	<5.36E+01	0.00E+00	5.36E+01
			Co-60	<2.82E+01	0.00E+00	2.82E+01
			Zn-65	<5.29E+01	0.00E+00	5.29E+01
			Zr-95	<3.73E+01	0.00E+00	3.73E+01
			Nb-95	<1.81E+01	0.00E+00	1.81E+01
			I-131	<2.47E+01	0.00E+00	2.47E+01
			Cs-134	<2.69E+01	0.00E+00	2.69E+01
			Cs-137	<2.59E+01	0.00E+00	2.59E+01
			BaLa-140	<2.53E+01	0.00E+00	2.53E+01
			Be-7	9.10E+02	2.36E+02	2.78E+02
			K-40	4.19E+03	6.25E+02	1.93E+02
547445	7/1/2021 - 7/1/2021	WAXMYRTLE	Mn-54	<2.31E+01	0.00E+00	2.31E+01
			Co-58	<3.29E+01	0.00E+00	3.29E+01
			Fe-59	<5.02E+01	0.00E+00	5.02E+01
			Co-60	<2.04E+01	0.00E+00	2.04E+01
			Zn-65	<5.19E+01	0.00E+00	5.19E+01
			Zr-95	<4.43E+01	0.00E+00	4.43E+01
			Nb-95	<2.74E+01	0.00E+00	2.74E+01
			I-131	<4.43E+01	0.00E+00	4.43E+01
			Cs-134	<2.19E+01	0.00E+00	2.19E+01
			Cs-137	<2.45E+01	0.00E+00	2.45E+01
			BaLa-140	<3.06E+01	0.00E+00	3.06E+01
			Be-7	1.73E+03	3.26E+02	3.18E+02
			K-40	3.13E+03	5.28E+02	2.83E+02
548712	8/2/2021 - 8/2/2021	WAXMYRTLE	Mn-54	<1.34E+01	0.00E+00	1.34E+01
			Co-58	<1.21E+01	0.00E+00	1.21E+01
			Fe-59	<2.43E+01	0.00E+00	2.43E+01
			Co-60	<1.67E+01	0.00E+00	1.67E+01
			Zn-65	<3.28E+01	0.00E+00	3.28E+01
			Zr-95	<2.40E+01	0.00E+00	2.40E+01
			Nb-95	<1.60E+01	0.00E+00	1.60E+01
			I-131	<1.66E+01	0.00E+00	1.66E+01
			Cs-134	<1.83E+01	0.00E+00	1.83E+01
			Cs-137	<1.54E+01	0.00E+00	1.54E+01
			BaLa-140	<1.91E+01	0.00E+00	1.91E+01
			Be-7	3.98E+03	4.57E+02	2.20E+02
			K-40	2.15E+03	3.52E+02	2.04E+02
550018	9/2/2021 - 9/2/2021	WAXMYRTLE	Mn-54	<1.87E+01	0.00E+00	1.87E+01
			Co-58	<1.74E+01	0.00E+00	1.74E+01
			Fe-59	<4.20E+01	0.00E+00	4.20E+01
			Co-60	<1.97E+01	0.00E+00	1.97E+01
			Zn-65	<3.38E+01	0.00E+00	3.38E+01
			Zr-95	<2.88E+01	0.00E+00	2.88E+01
			Nb-95	<2.05E+01	0.00E+00	2.05E+01
			I-131	<3.91E+01	0.00E+00	3.91E+01
			Cs-134	<2.15E+01	0.00E+00	2.15E+01
			Cs-137	<1.95E+01	0.00E+00	1.95E+01
			BaLa-140	<3.43E+01	0.00E+00	3.43E+01
			Be-7	2.39E+03	3.42E+02	2.49E+02
			K-40	2.91E+03	4.41E+02	2.13E+02
553823	10/4/2021 - 10/4/2021	WAXMYRTLE	Mn-54	<3.18E+01	0.00E+00	3.18E+01
			Co-58	<2.60E+01	0.00E+00	2.60E+01

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BRUNSWICK Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 804 [INDICATOR - S @ 0.7 miles]

Sample ID:	Sample Dates:	WAXMYRTLE	Nuclide	Activity	2 Sigma Error	MDA
553823	10/4/2021 - 10/4/2021	WAXMYRTLE	Fe-59	<4.91E+01	0.00E+00	4.91E+01
			Co-60	<2.64E+01	0.00E+00	2.64E+01
			Zn-65	<6.59E+01	0.00E+00	6.59E+01
			Zr-95	<5.02E+01	0.00E+00	5.02E+01
			Nb-95	<3.20E+01	0.00E+00	3.20E+01
			I-131	<3.28E+01	0.00E+00	3.28E+01
			Cs-134	<3.26E+01	0.00E+00	3.26E+01
			Cs-137	<2.89E+01	0.00E+00	2.89E+01
			BaLa-140	<3.54E+01	0.00E+00	3.54E+01
			Be-7	3.36E+03	4.85E+02	3.30E+02
			K-40	3.16E+03	5.73E+02	3.10E+02
555925	11/3/2021 - 11/3/2021	WAXMYRTLE	Mn-54	<1.64E+01	0.00E+00	1.64E+01
			Co-58	<1.25E+01	0.00E+00	1.25E+01
			Fe-59	<2.47E+01	0.00E+00	2.47E+01
			Co-60	<1.83E+01	0.00E+00	1.83E+01
			Zn-65	<3.36E+01	0.00E+00	3.36E+01
			Zr-95	<2.18E+01	0.00E+00	2.18E+01
			Nb-95	<1.57E+01	0.00E+00	1.57E+01
			I-131	<2.38E+01	0.00E+00	2.38E+01
			Cs-134	<2.12E+01	0.00E+00	2.12E+01
			Cs-137	<1.33E+01	0.00E+00	1.33E+01
			BaLa-140	<1.87E+01	0.00E+00	1.87E+01
			Be-7	6.06E+03	6.41E+02	1.92E+02
			K-40	1.40E+03	2.96E+02	2.38E+02
557937	12/1/2021 - 12/1/2021	WAXMYRTLE	Mn-54	<1.71E+01	0.00E+00	1.71E+01
			Co-58	<1.31E+01	0.00E+00	1.31E+01
			Fe-59	<3.35E+01	0.00E+00	3.35E+01
			Co-60	<1.73E+01	0.00E+00	1.73E+01
			Zn-65	<3.76E+01	0.00E+00	3.76E+01
			Zr-95	<2.93E+01	0.00E+00	2.93E+01
			Nb-95	<1.85E+01	0.00E+00	1.85E+01
			I-131	<2.49E+01	0.00E+00	2.49E+01
			Cs-134	<1.76E+01	0.00E+00	1.76E+01
			Cs-137	<1.33E+01	0.00E+00	1.33E+01
			BaLa-140	<2.29E+01	0.00E+00	2.29E+01
			Be-7	4.27E+03	4.91E+02	2.08E+02
			K-40	1.90E+03	3.58E+02	2.73E+02

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APPENDIX F

**ERRATA TO
PREVIOUS REPORTS**

APPENDIX F

ERRATA TO THE 2021 AREOR

Brunswick AREOR: 2020

BNP AREOR section 3.8, Direct Gamma Radiation, Table 3.8-C

Error identified in the BNP 2020 AREOR section 3.8, Direct Gamma Radiation, table 3.8-C, “Average TLD Exposure All Indicator Locations mR per quarter.” The mR per quarter for year 2020 indicated 9.09E+1 mR per quarter but should have indicated 9.09E+0 mR per quarter. The subsequent calculation (equivalent 2020 weekly exposure) appearing as a tabular footnote and dependent on the 2020 mR per quarter value was correct (NCR # 02417280).

Enclosure 2
RA-22-0030

ENCLOSURE 2: [CNS Annual Radiological Environmental Operating Report](#)



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

**DUKE ENERGY CORPORATION
CATAWBA NUCLEAR STATION
Units 1 and 2**

2021



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

AREOR	Annual Radiological Environmental Operating Report
BW	BiWeekly
C	Control
CM	Community
CNS	Catawba Nuclear Station
EZA	Eckert & Ziegler Analytics
GEL	General Engineering Laboratory, LLC
GPS	Global Positioning System
I	Indicator
IR	Inner Ring
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
LLI	Low Level Iodine
LUC	Land Use Census
M	Monthly
MAPEP	Department of Energy Mixed Analyte Performance Evaluation Program
MDA	Minimum Detectable Activity
mR/Std Qtr	milliroentgen per standard quarter
MWe	Megawatt (electrical)
NIST	National Institute of Standards and Technology
NCR	Nuclear Condition Report – Corrective Action Program
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OR	Outer Ring
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SB	Site Boundary
SI	Special Interest
SLCs	Selected Licensee Commitments
SM	Semimonthly
TECH SPECS	Technical Specifications
TLD	Thermoluminescent Dosimeter
μCi/ml	microcurie per milliliter
UFSAR	Updated Final Safety Analysis Report
W	Weekly

1.0 EXECUTIVE SUMMARY

This Annual Radiological Environmental Operating Report describes the Catawba Nuclear Station Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2021.

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, analysis of trends in environmental radiological data as potentially affected by station operations, and a summary of environmental radiological sampling results. Quality assurance practices, sampling deviations, unavailable samples, and program changes are also discussed.

Sampling activities were conducted as prescribed by the Catawba Nuclear Station Offsite Dose Calculated Manual (ODCM) and Selected Licensee Commitments (SLCs). Nine hundred and seventeen samples were analyzed comprising nine hundred and sixty-nine test results in order to compile data for the 2021 report. Based on the annual land use census, the current number of sampling sites for Catawba Nuclear Station is sufficient.

Concentrations observed in the environment in 2021 for station related radionuclides were generally within the ranges of concentrations observed in the past. Inspection of data showed that radioactivity concentrations in drinking water, surface water, and broad leaf vegetation are higher than the activities reported for samples collected prior to the operation of the station. Measured concentrations were not higher than expected and all positively identified measurements attributable to station operation were within limits as specified in the CNS ODCM and SLCs, thus presenting no significant impact on the environment or public health and safety.

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

Duke Energy Corporation's Catawba Nuclear Station is a two-unit facility located on the shore of Lake Wylie in York County, South Carolina. Each of the two essentially identical units employs a pressurized water reactor nuclear steam supply system furnished by Westinghouse Electric Corporation. Unit one produces a net electrical output of 1165 MWe, while Unit 2 produces a net electrical output of 1145 MWe. Units 1 and 2 achieved initial criticality on January 7, 1985, and May 8, 1986, respectively.

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

Sampling locations are chosen based upon meteorological factors, preoperational monitoring, and results of the land use surveys. Figures 2.1-1 and 2.1-2 are maps depicting the Thermoluminescent Dosimeter (TLD) monitoring locations and the sampling locations. The location numbers shown on these maps correspond to those listed in Tables 2.1-A and 2.1-B. Figure 2.1-1 comprises all sample locations within a one mile radius of CNS. Figure 2.1-2 comprises all sample locations within a 10 mile radius of CNS.

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

2.2 SCOPE AND REQUIREMENTS OF THE REMP

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

This monitoring program is based on NRC guidance as reflected in the Selected Licensee Commitments Manual, with regard to sample media, sampling locations, sampling frequency and analytical sensitivity requirements. Indicator and control locations were established for comparison purposes to distinguish radioactivity of station origin from natural or other “man-made” environmental radioactivity.

The environmental monitoring program also verifies projected and anticipated radionuclide concentrations in the environment and related exposures from releases of radionuclides from Catawba Nuclear Station. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10CFR50 and provides surveillance of all appropriate critical exposure pathways to man and protects vital interests of the company, public and state and federal agencies concerned with the environment. Reporting levels for activity found in environmental samples are listed in Table 2.2-A. Table 2.2-B lists the REMP analysis and frequency schedule.

The Annual Land Use Census, required by Selected Licensee Commitments, is performed to ensure that changes in the use of areas at or beyond the site boundary are identified and that modifications to the REMP are made if required by changes in land use. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10CFR50. Results are shown in Table 3.10.

Participation in an interlaboratory comparison program as required by Selected Licensee Commitments provides for independent checks on the precision and accuracy of measurements of radioactive material in REMP sample matrices. Such checks are performed as part of the quality assurance program for environmental monitoring in order to demonstrate that the results are valid for the purposes of Section IV.B.2 of Appendix I to 10CFR50. A summary of the results obtained as part of this comparison program are in Section 4 of this annual report.

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

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

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

Where:

\bar{x} = estimate of the mean,

i = individual sample,

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

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

2.3.2 LOWER LIMIT OF DETECTION AND MINIMUM DETECTABLE ACTIVITY

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

LLD - The LLD, as defined in the 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* (before the fact) lower limit of detection. The actual LLD is dependent upon the standard deviation of the background counting rate, the counting efficiency, the sample size (mass or volume), the radiochemical yield and the radioactive decay of the sample between sample collection and counting. The "required" LLDs for each sample medium and selected radionuclides are given in the Selected Licensee Commitments and are listed in Table 2.2-C.

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

2.3.3 TREND IDENTIFICATION

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

the normal removal processes (radioactive decay, deposition, resuspension, etc.) are influencing the concentration.

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

Figure 2.1-1

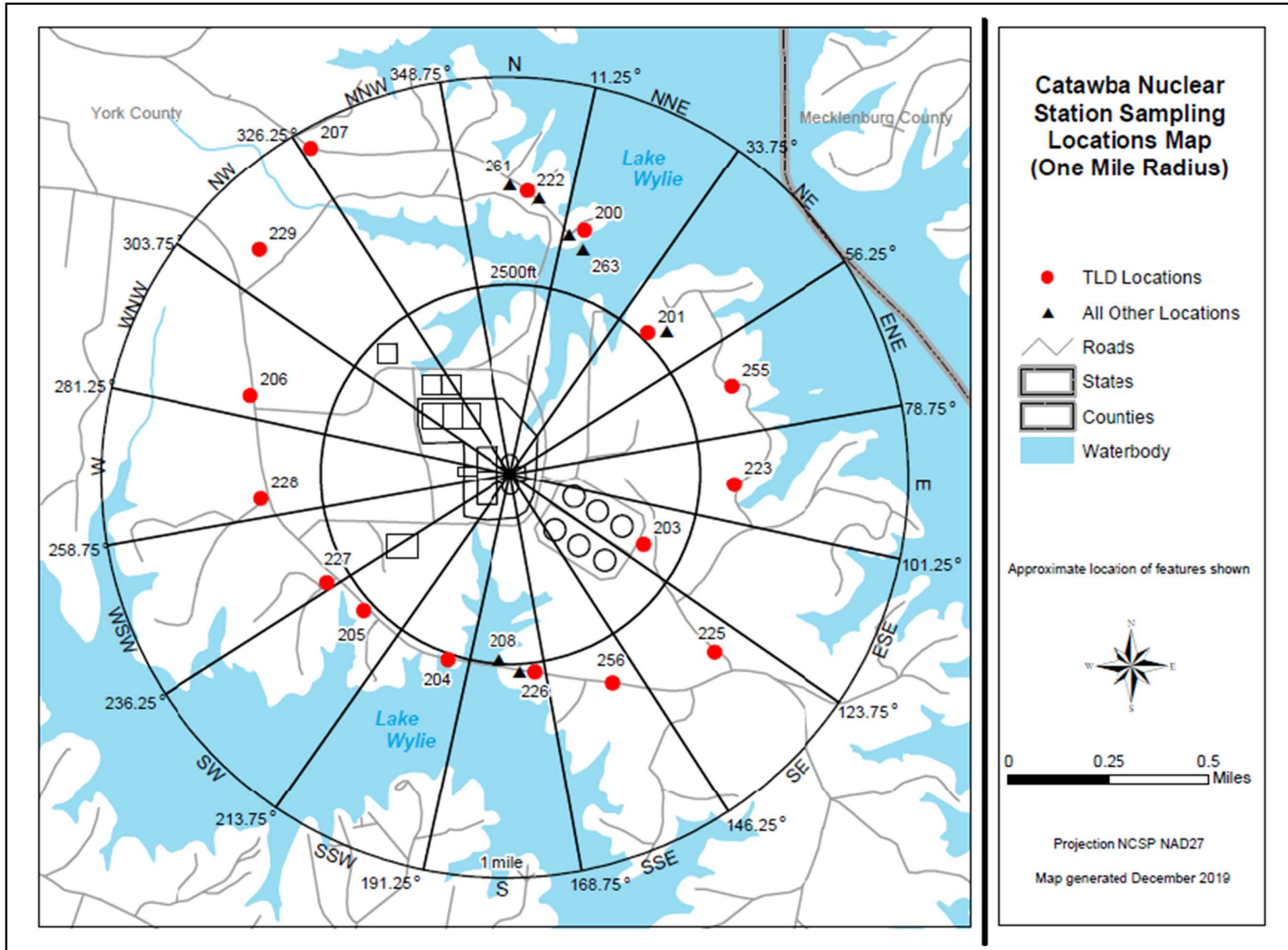


Figure 2.1-2

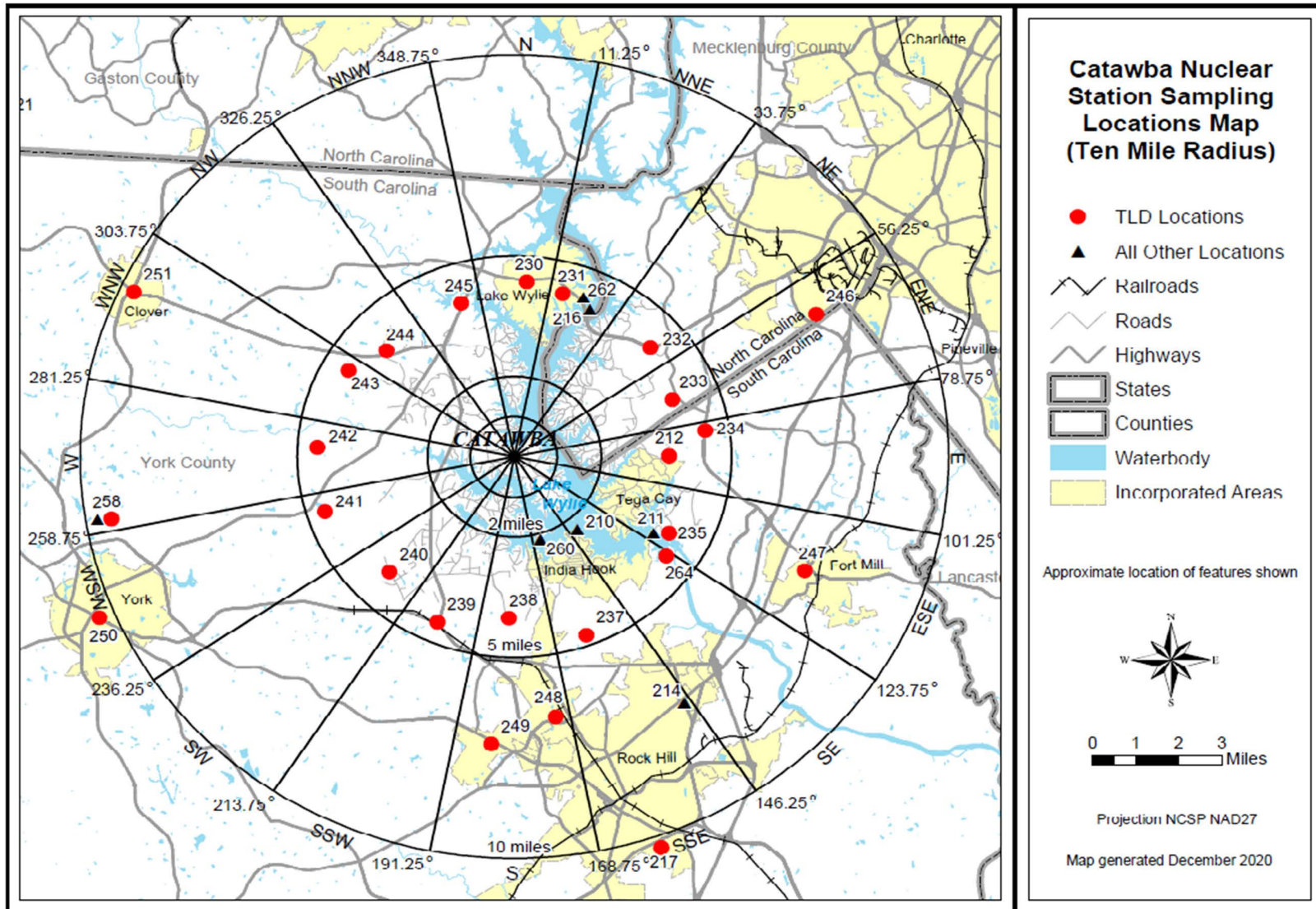


TABLE 2.1-A

**CATAWBA RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS**

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

Site #	Measure Type	Location Description*	Air Rad. & Part.	Surface Water	Drinking Water	Shoreline Sediment	Food Products (a)	Fish	Milk	Broad Leaf Veg. (b)	Ground Water**
200	I	Site Boundary (0.63 mi NNE)	W							M	
201	I	Site Boundary (0.53 mi NE)	W, CM							M	
208	I	Discharge Canal – Site Boundary (0.45 mi S)	W	M		SA		SA			
210	I	Ebenezer Access (2.31 mi SE)				SA					
211	I	Wylie Dam (4.06 mi ESE)		M							
214	I	Rock Hill Water Supply (7.30 mi SSE)			M						
216	C	Hwy 49 Bridge (4.19 mi NNE)						SA			
218	C	Belmont Water Supply (13.5 mi NNE)			M						
221	C	Dairy (14.5 mi NW)							SM		
222	I	Site Boundary (0.70 mi N)								M	
226	I	Site Boundary (0.48 mi S)								M	
258	C	Fairhope Road (9.84 mi W)	W							M	
260	I	Irrigated Gardens (2.00 mi SSE)					M(a)				
261	I	Firing Range-Site Boundary (0.72 mi N)	W								
262	C	Lake Wylie Marina- Hwy 49 (4.19 mi NNE)				SA					
263	C	Liberty Hill Road (0.59 mi NNE)		M							

(a) During Harvest Season

(b) When Available

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

** Currently no off-site ground water monitoring locations available that are used for drinking or irrigation purposes where hydraulic gradient or recharge properties are suitable for contamination.

TABLE 2.1-B

**CATAWBA RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS (TLD SITES)**

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

Site #	Measure Type	Location ^{*(a)}	Distance (miles)	Sector	Site #	Measure Type	Location ^{*(a)}	Distance (miles)	Sector
200	IR	SITE BOUNDARY	0.63	NNE	235	OR	LAKE WYLIE DAM	4.07	ESE
201	IR	SITE BOUNDARY	0.53	NE	237	OR	TWIN LAKES ROAD AND HOMESTEAD ROAD	4.75	SSE
203	IR	SITE BOUNDARY	0.38	ESE	238	OR	PENNINGTON ROAD AND WEST OAK ROAD	4.02	S
204	IR	SITE BOUNDARY	0.48	SSW	239	OR	CARTER LUMBER COMPANY	4.49	SSW
205	IR	SITE BOUNDARY	0.50	SW	240	OR	PARAHAM ROAD	4.07	SW
206	IR	SITE BOUNDARY	0.67	WNW	241	OR	CAMPBELL ROAD	4.58	WSW
207	IR	SITE BOUNDARY	0.95	NNW	242	OR	TRANSMISSION TOWER ON PARAHAM ROAD	4.56	W
212	SI	TEGA CAY	3.32	E	243	OR	KINGSBURY ROAD	4.39	WNW
217	C	BLACKMON ROAD	10.3	SSE	244	OR	BETHEL ELEMENTARY SCHOOL	4.02	NW
222	IR	SITE BOUNDARY	0.71	N	245	OR	CROWDERS CREEK BOAT LANDING	4.01	NNW
223	IR	SITE BOUNDARY	0.57	E	246	SI	CAROWINDS GUARD HOUSE	7.87	ENE
225	IR	SITE BOUNDARY	0.68	SE	247	C	FORT MILL	7.33	ESE
226	IR	SITE BOUNDARY	0.48	S	248	SI	PIEDMONT MEDICAL CENTER	6.54	S
227	IR	SITE BOUNDARY	0.52	WSW	249	SI	YORK COUNTY OPERATIONS CENTER	7.17	S
228	IR	SITE BOUNDARY	0.61	W	250	SI	YORK DUKE POWER OFFICE	10.4	WSW
229	IR	SITE BOUNDARY	0.84	NW	251	C	CLOVER	9.72	WNW
230	OR	RIVER HILLS COMMUNITY CHURCH	4.37	N	255	IR	SITE BOUNDARY	0.61	ENE
231	OR	RIVER HILLS FRONT ENTRANCE	4.21	NNE	256	IR	SITE BOUNDARY	0.58	SSE
232	OR	PLEASANT HILL ROAD	4.18	NE	258	SI	FAIRHOPE ROAD	9.84	W
233	OR	ZOAR ROAD AND THOMAS DRIVE	3.95	ENE	264	OR	INDIA HOOK ROAD	4.32	SE
234	OR	WELLS FARGO BANK	4.50	E					

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

(a) One or more instruments, such as a pressurized ion chamber, for measuring and recording dose rate continuously may be used in place of, or in addition to, integrating dosimeters. For the purposes of this table, a thermoluminescent dosimeter (TLD) is considered to be one phosphor; two or more phosphors in a packet are considered as two or more dosimeters. Film badges shall not be used as dosimeters for measuring direct radiation. (The 40 stations is not an absolute number. The number of direct radiation monitoring stations may be reduced according to geographical limitations; e.g., at an ocean site, some sectors will be over water so that the number of dosimeters may be reduced accordingly. The frequency of analysis or readout for TLD systems will depend upon the characteristics of the specific system used and should be selected to obtain optimum dose information within minimal fading.)

TABLE 2.2-A

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

Analysis	Water (pCi/liter)	Air Particulates or Gases (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (pCi/kg-wet)
H-3	20,000 ^{(a),(b)}	---	---	---	---
Mn-54	1,000	---	30,000	---	---
Fe-59	400	---	10,000	---	---
Co-58	1,000	---	30,000	---	---
Co-60	300	---	10,000	---	---
Zn-65	300	---	20,000	---	---
Zr-Nb-95	400	---	---	---	---
I-131	2	0.9	---	3	100
Cs-134	30	10	1,000	60	1,000
Cs-137	50	20	2,000	70	2,000
Ba-La-140	200	---	---	300	---

(a) If no drinking water pathway exists, a value of 30,000 pCi/liter may be used.

(b) H-3 Reporting level not applicable to surface water.

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

Sample Medium	Analysis Schedule	Gamma Isotopic ^(d)	Tritium	Low Level I-131	Gross Beta	TLD
Air Radioiodine	Weekly	X	---	---	---	---
Air Particulate	Weekly	---	---	---	(c)	---
	Quarterly Composite	X	---	---	---	---
Direct Radiation	Quarterly	---	---	---	---	X
Surface Water	Monthly Composite ^{(e)(f)}	X	---	---	---	---
	Quarterly Composite	---	X	---	---	---
Drinking Water	Monthly Composite ^(e)	X	---	(a)	X	---
	Quarterly Composite	---	X	---	---	---
Ground Water	Quarterly	X	X	---	---	---
Shoreline Sediment	Semiannually	X	---	---	---	---
Milk	Semi-monthly	X	---	X	---	---
Fish	Semiannually	X	---	---	---	---
Broadleaf Vegetation	Monthly ^(b)	X	---	---	---	---
Food Products	Monthly ^(g)	X	---	---	---	---

- (a) Low-level I-131 analysis will be performed if the dose calculated for the consumption of drinking water is > 1 mrem per year. An LLD of 1 pCi/liter will be required for this analysis.
- (b) When Available.
- (c) Airborne particulate sample filters shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than 10 times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.
- (d) Gamma isotopic analysis means the identification and quantification of gamma emitting radionuclides that may be attributable to the effluents from the facility.
- (e) A composite sample is one in which the rate at which the liquid sampled is uniform and in which the method of sampling employed results in a specimen that is representative of the time-averages concentration at the location being sampled. In this program composite sample aliquots shall be collected at time intervals that are very short (e.g. hourly) relative to the composite period (e.g. monthly) in order to assure obtaining a representative sample.
- (f) The “upstream sample” shall be taken at a distance beyond significant influence of the discharge. The “downstream” sample shall be taken in an area beyond but near the mixing zone. “Upstream” samples in an estuary must be taken far enough upstream to be beyond the plant influence. Salt water shall be sampled only when the receiving water is utilized for recreational activities.
- (g) If harvest occurs more than once a year, sampling shall be performed during each discrete harvest. If harvest occurs continuously, sampling shall be monthly. Attention shall be paid to including samples of tuberous and root food products.

TABLE 2.2-C

MAXIMUM VALUES FOR THE *A PRIORI* LOWER LIMIT OF DETECTION^{(c) (d)}

Analysis	Water (pCi/liter)	Air Particulates or Gases (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (pCi/kg-wet)	Sediment (pCi/kg-dry)
Gross Beta	4	0.01	---	---	---	---
H-3	2000 ^(a)	---	---	---	---	---
Mn-54	15	---	130	---	---	---
Fe-59	30	---	260	---	---	---
Co-58, 60	15	---	130	---	---	---
Zn-65	30	---	260	---	---	---
Zr-Nb-95	15	---	---	---	---	---
I-131	1 ^(b)	0.07	---	1	60	---
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15	---	---	15	---	---

- (a) If no drinking water pathway exists, a value of 3,000 pCi/liter may be used.
- (b) If no drinking water pathway exists, the LLD of gamma isotopic analysis may be used.
- (c) Lower Limit of Detection is defined in Section 2.3.2.
- (d) This list does not mean that only these nuclides are to be considered. Other peaks that are identifiable, together with those of the above nuclides, shall also be analyzed and reported in the Annual Radiological Environmental Operating Report pursuant to Technical Specification 5.6.2.

3.0 INTERPRETATION OF RESULTS

Review of all 2021 REMP analysis results was performed to identify changes in environmental levels as a result of station operations. The following section depicts and explains the review of these results. Sample data for 2021 was compared to preoperational and historical data. Over the years of operation, analysis and collection changes have taken place that do not allow direct comparisons for some data collected from 1984 (preoperational) through 2021. Summary tables containing 2021 information required by Technical Specification Administrative Control 5.6.2 are located in Appendix B. REMP results for 2021 are located in Appendix E.

Evaluation for significant trends was performed for radionuclides that are listed as required within Selected Licensee Commitments 16.11-13. The radionuclides include: H-3, Mn-54, Fe-59, Co-58, Co-60, Zn-65, Zr-95, Nb-95, I-131, Cs-134, Cs-137, Ba-140 and La-140. Gross beta analysis results were trended for drinking water. Other radionuclides detected that are the result of plant operation, but not required for reporting, are trended.

A comparison of annual mean concentrations of effluent-based detected radionuclides to historical results provided trending bases. Frequency of detection and concentrations related to SLC reporting levels (Table 2.2-A) were used as criteria for trending conclusions. All 2021 maximum percentages of reporting levels attributed to CNS operation were well below the 100% action level.

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

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

All 2021 sample analysis results were reviewed to detect and identify any significant trends. Tables and graphs are used throughout this section to display data from effluent-based radionuclides identified since the system change in late 1987. All negative concentration values were replaced with zero for calculation purposes. Any zero concentrations used in tables or graphs represent activity measurements less than detectable levels.

Review of all 2021 data presented in this section supports the conclusion that there were no significant changes in environmental sample radionuclide concentrations of samples collected and analyzed from CNS site and surrounding areas that were attributable to plant operations. Inspection of the data showed that radioactivity concentrations were as expected and all positively identified measurements attributed to plant operations were within CNS Offsite Dose

Calculation Manual (ODCM) and SLC regulatory limits; thus presenting no significant impact to the environment or public health and safety.

Data presented in Sections 3.1 through 3.9 support the conclusion that there was no significant increase in radioactivity in the environment around Catawba Nuclear Station due to station operations in 2021. Similarly, there was no significant increase in ambient background radiation levels in the surrounding areas. The 2021 land use census data, shown in Section 3.10, indicates that no program changes are required as a result of the census.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

Airborne particulate and radioiodine samples at each of five locations were composited 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.

In 2021, 265 radioiodine and particulate samples were analyzed, 212 from four indicator locations and 53 at the control location. Particulate samples were analyzed weekly for gross beta. A quarterly gamma analysis was performed on the quarterly filter composite (by location). Radioiodine samples received a weekly gamma analysis.

Figure 3.1 shows individual sample gross beta results for the indicator location with highest annual mean and the control location samples during 2021. The two sample locations' results are similar in concentration and have varied negligibly since preoperational periods.

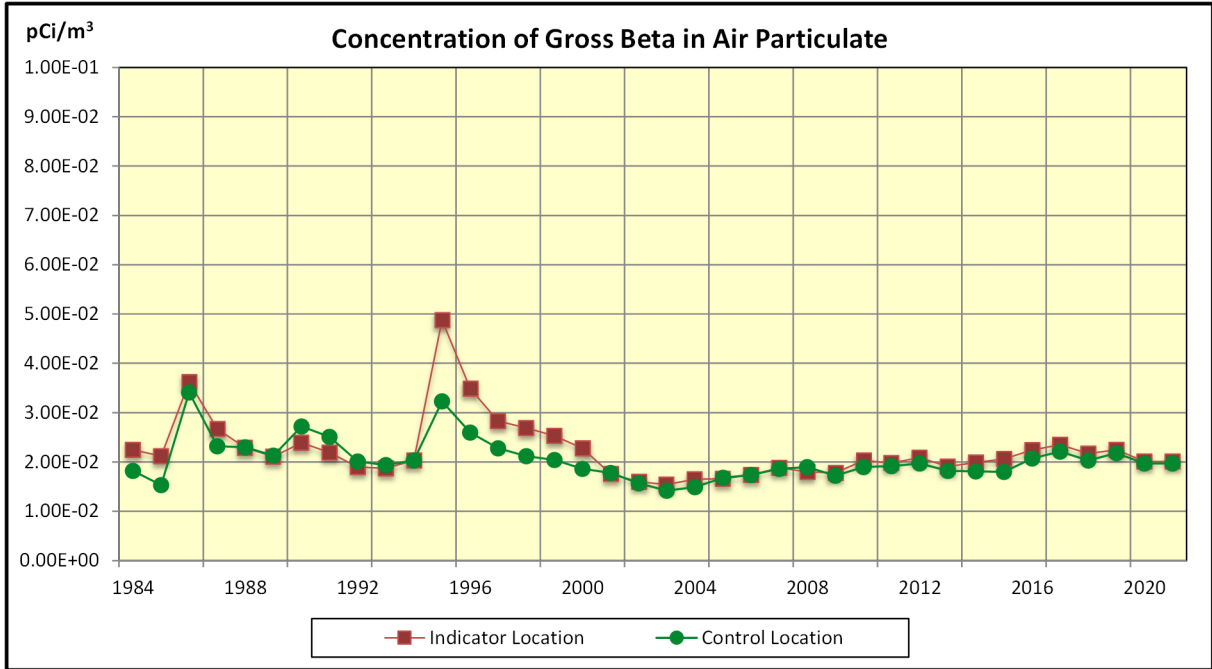
There were no detectable gamma emitters attributable to plant operations identified for particulate filters analyzed during 2021. Table 3.1-A shows the highest indicator annual mean and control location annual mean for gross beta in air particulate.

There was no detectable I-131 in air radioiodine samples analyzed in 2021. Table 3.1-B shows the highest indicator annual mean and control location annual mean for I-131 since 1984 (preoperational period). The table shows similar concentrations for both the indicator and control locations and the activities decreasing from early in the operational history of the plant. No I-131 activity due to CNS plant operations has been detected since 1987.

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

In 2020, Nuclear Oversight (NOS) determined (NCR #2347403) that air sampling location 212 (Tega Cay, 3.32 mi E) did not currently meet the definition of a community air sampling location per CNS SLC 16.11-13. The geography and population demographics have changed considerably since Location 212 was initially deemed the community air sampler. To meet the CNS SLC 16.11-13 requirements, Location 201 (Site Boundary, 0.53 mi NE) was removed as a site boundary location (as it had the 4th highest average D/Q) and is now the new community air sampler as it is within a community on the edge of the station. Location 208 (Discharge Canal – Site Boundary, 0.45 mi S), the location with the third highest average D/Q was formally made a site boundary location as it had not been previously designated as so. Location 212 (Tega Cay, 3.32 mi E) was a surplus location and was removed from the CNS REMP. All changes to the CNS REMP as a result of the NOS community air sampling finding were effective with the 30DEC2020 Rev. 64 of the CNS ODCM.

Figure 3.1



There is no reporting level for gross beta in air particulate

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

Year	Indicator Location (pCi/m³)	Control Location (pCi/m³)
1984	2.25E-2	1.82E-2
1985	2.12E-2	1.53E-2
1986	3.62E-2	3.41E-2
1987	2.67E-2	2.32E-2
1988	2.29E-2	2.30E-2
1989	2.11E-2	2.13E-2
1990	2.39E-2	2.72E-2
1991	2.19E-2	2.51E-2
1992	1.90E-2	2.01E-2
1993	1.87E-2	1.94E-2
1994	2.03E-2	2.03E-2
1995	4.88E-2	3.23E-2
1996	3.49E-2	2.60E-2
1997	2.83E-2	2.28E-2
1998	2.69E-2	2.12E-2
1999	2.53E-2	2.04E-2
2000	2.28E-2	1.86E-2
2001	1.76E-2	1.78E-2
2002	1.60E-2	1.57E-2
2003	1.54E-2	1.42E-2
2004	1.65E-2	1.49E-2
2005	1.66E-2	1.68E-2
2006	1.74E-2	1.74E-2
2007	1.88E-2	1.86E-2
2008	1.80E-2	1.90E-2
2009	1.78E-2	1.72E-2
2010	2.03E-2	1.90E-2
2011	1.98E-2	1.92E-2
2012	2.09E-2	1.97E-2
2013	1.92E-2	1.82E-2
2014	1.99E-2	1.81E-2
2015	2.06E-2	1.80E-2
2016	2.24E-2	2.07E-2
2017	2.35E-2	2.21E-2
2018	2.17E-2	2.03E-2
2019	2.25E-2	2.18E-2
2020	2.01E-2	1.97E-2
2021	2.38E-2	2.34E-2

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

Year	Indicator Location (pCi/m³)	Control Location (pCi/m³)
1984	1.30E-3	1.46E-2
1985	4.75E-3	2.38E-2
1986	1.43E-2	1.02E-2
1987	1.38E-2	0.00E0
1988	0.00E0	0.00E0
1989	0.00E0	0.00E0
1990	0.00E0	0.00E0
1991	0.00E0	0.00E0
1992	0.00E0	0.00E0
1993	0.00E0	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	0.00E0
2005	0.00E0	0.00E0
2006	0.00E0	0.00E0
2007	0.00E0	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011 ⁽¹⁾	5.53E-2	5.65E-2
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0
2014 ⁽²⁾	0.00E0	0.00E0
2015	0.00E0	0.00E0
2016	0.00E0	0.00E0
2017	0.00E0	0.00E0
2018	0.00E0	0.00E0
2019	0.00E0	0.00E0
2020	0.00E0	0.00E0
2021	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

(1) 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.

3.2 DRINKING WATER

Gross beta analysis and gamma spectroscopy were performed on 26 drinking water samples. These samples were composited to create 8 quarterly composite period samples for tritium analysis. Monthly composite drinking water samples were collected at each of two locations; one indicator location, along with one control location.

No gamma emitting radionuclides attributable to plant operations were identified in 2021 drinking water samples.

Figure 3.2-1 and Table 3.2 shows highest annual mean gross beta concentrations for the indicator location and control location since preoperation. The indicator location (downstream of the plant effluent release point) average concentration was 4.10 pCi/l in 2021 and the control location concentration was 4.19 pCi/l. The gross beta mean indicator activity and mean control activity increased in 2019 due to an analytical method change affecting analytical sensitivities in 2019 (NCR # 02303030).

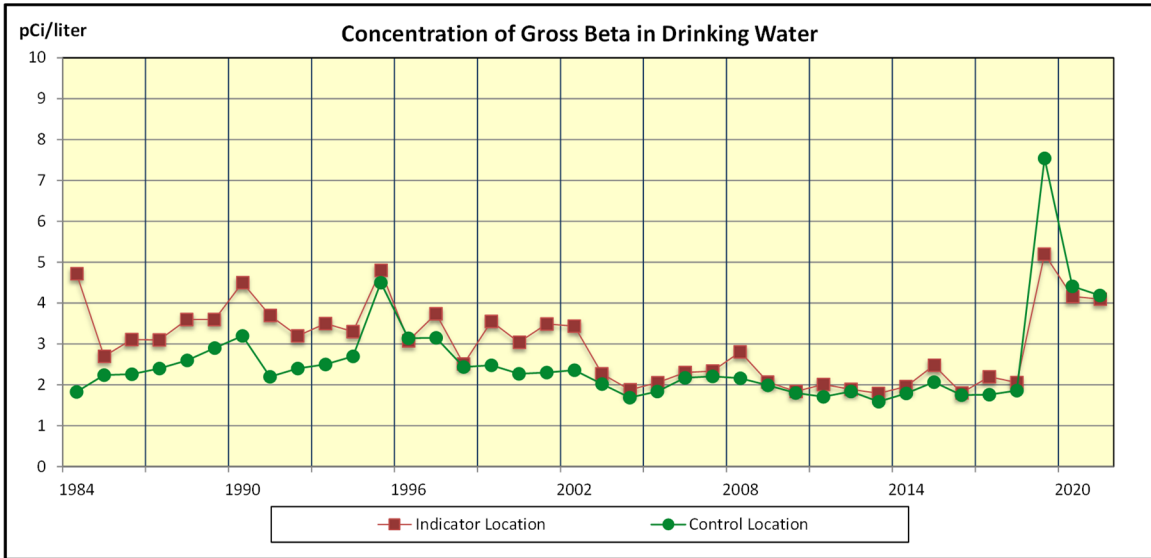
Tritium was detected in three of the four indicator samples as well as control location samples during 2021. The mean indicator tritium concentration for 2021 was 744 pCi/l, 3.72% of reporting level. The mean control tritium concentration for 2021 was 298 pCi/l, 1.49% of reporting level. Figure 3.2-2 and Table 3.2 display the highest indicator and control location annual mean concentrations for tritium since 1984.

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

The dose for consumption of water was less than one mrem per year, historically and for 2021; therefore low-level iodine analysis is not required.

K-40 and Be-7 are naturally occurring radionuclides observed in drinking water samples in 2021.

Figure 3.2-1



Analytical method change implemented in 2019.

Figure 3.2-2

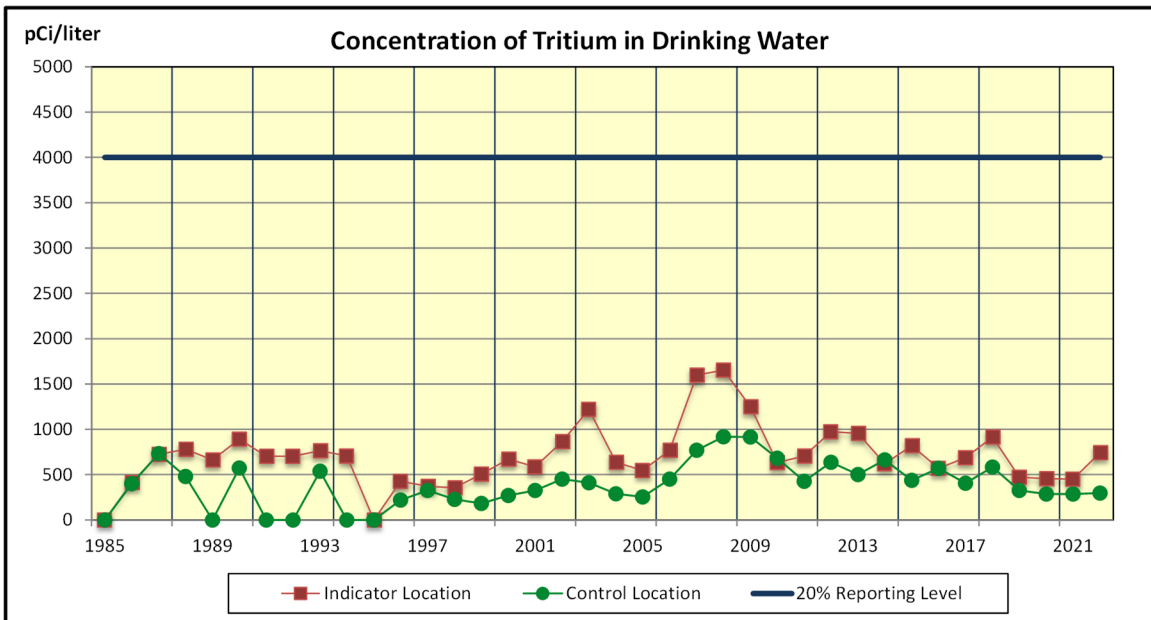


Table 3.2 Mean Concentration of Radionuclides in Drinking Water

YEAR	Gross Beta (pCi/l)		Tritium (pCi/l)	
	Indicator Location	Control Location	Indicator Location	Control Location
1984	4.72	1.83	3.10E-2	3.10E-2
1985	2.70	2.24	4.13E2	4.00E2
1986	3.11	2.26	7.23E2	7.33E2
1987	3.10	2.40	7.80E2	4.80E2
1988	3.60	2.60	6.64E2	0.00E0
1989	3.60	2.90	8.91E2	5.72E2
1990	4.50	3.20	7.03E2	0.00E0
1991	3.70	2.20	7.04E2	0.00E0
1992	3.20	2.40	7.65E2	5.38E2
1993	3.50	2.50	7.06E2	0.00E0
1994	3.30	2.70	0.00E0	0.00E0
1995	4.80	4.50	4.28E2	2.21E2
1996	3.08	3.14	3.71E2	3.27E2
1997	3.74	3.15	3.54E2	2.28E2
1998	2.51	2.44	5.07E2	1.83E2
1999	3.55	2.48	6.71E2	2.70E2
2000	3.04	2.27	5.87E2	3.26E2
2001	3.49	2.30	8.66E2	4.50E2
2002	3.44	2.36	1.22E3	4.11E2
2003	2.27	2.02	6.36E2	2.88E2
2004	1.88	1.69	5.47E2	2.54E2
2005	2.05	1.84	7.69E2	4.50E2
2006	2.30	2.17	1.59E3	7.70E2
2007	2.34	2.21	1.65E3	9.18E2
2008	2.81	2.16	1.25E3	9.16E2
2009	2.07	1.99	6.34E2	6.81E2
2010	1.84	1.80	7.05E2	4.27E2
2011	2.01	1.71	9.73E2	6.36E2
2012	1.89	1.84	9.54E2	5.02E2
2013	1.79	1.59	6.22E2	6.64E2
2014	1.96	1.79	8.21E2	4.37E2
2015	2.48	2.07	5.70E2	5.70E2
2016	1.80	1.75	6.88E2	4.06E2
2017	2.20	1.76	9.16E2	5.83E2
2018	2.06	1.86	4.71E2	3.26E2
2019 ⁽¹⁾	5.20	7.54	4.55E2	2.85E2
2020	4.16	4.41	4.52E2	2.87E2
2021	4.10	4.19	7.44E2	2.98E2

0.00E0 indicates no detectable measurements

1984 - 1986 mean based on all net activity

(1) Gross beta preparation/analysis methodology change (NCR # 02303030).

3.3 SURFACE WATER

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

Tritium was identified in all 8 indicator samples with an average concentration of 4,358 pCi/l. Indicator location 208 (Discharge Canal) showed a range of activities from 2,770 to 15,100 pCi/l which had the highest mean concentration of 8,060 pCi/l. Tritium was detected in two of the four control samples during 2021 with an average concentration of 467 pCi/l.

Surface Water location 215 (River Pointe – Hwy 49) was terminated on 2JAN2019 and replaced with location 263 (Liberty Hill Road) on 2JAN2019. Location 215 was removed from the REMP since it was on private property, location 263 is on Duke Energy owned property (NCR # 02250746).

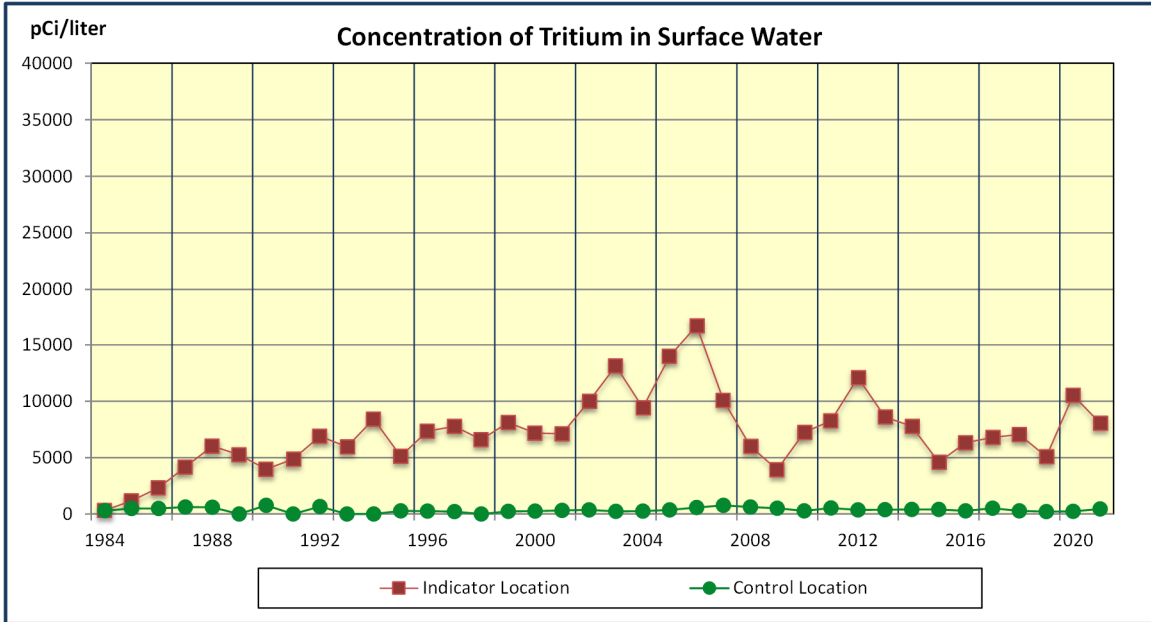
No gamma emitting radionuclides attributable to plant operations were identified in 2021 surface water samples. Table 3.3 summarizes the indicator annual means of radionuclides detected since 1984. Visual inspection of the tabular data did not reveal any increasing trends.

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

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

K-40 is a naturally occurring radionuclide observed in surface water samples in 2021.

Figure 3.3



There is no reporting level for tritium in surface water, however, if no drinking water pathway exists, a value of 30,000 pCi/l may be used. A drinking water pathway exists for Catawba Nuclear Station, so this limit does not apply for surface water. See section 3.2 for drinking water results.

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

YEAR	Co-58	Co-60	Cs-137	H-3 Indicator	H-3 Control
1984	4.59E-1	5.71E-1	9.08E-1	3.35E2	3.18E2
1985	3.46E0	4.83E-2	8.19E-1	1.19E3	5.05E2
1986	3.10E-1	-4.12E-2	4.85E-1	2.34E3	5.05E2
1987 ⁽¹⁾	0.00E0	3.10E0	9.90E0	4.17E3	6.20E2
1988	9.20E0	0.00E0	0.00E0	6.03E3	6.07E2
1989	0.00E0	0.00E0	0.00E0	5.27E3	0.00E0
1990	6.50E0	0.00E0	0.00E0	3.98E3	7.73E2
1991	0.00E0	0.00E0	0.00E0	4.87E3	0.00E0
1992	0.00E0	0.00E0	0.00E0	6.91E3	6.64E2
1993	4.70E0	1.80E0	0.00E0	5.98E3	0.00E0
1994	0.00E0	0.00E0	0.00E0	8.42E3	0.00E0
1995	0.00E0	0.00E0	0.00E0	5.13E3	2.89E2
1996	0.00E0	0.00E0	0.00E0	7.36E3	2.61E2
1997	0.00E0	0.00E0	0.00E0	7.77E3	2.20E2
1998	0.00E0	0.00E0	0.00E0	6.61E3	0.00E0
1999	0.00E0	0.00E0	0.00E0	8.13E3	2.41E2
2000	0.00E0	0.00E0	0.00E0	7.19E3	2.56E2
2001	0.00E0	0.00E0	0.00E0	7.13E3	3.28E2
2002	0.00E0	0.00E0	0.00E0	1.00E4	3.80E2
2003	0.00E0	0.00E0	0.00E0	1.31E4	2.37E2
2004	0.00E0	0.00E0	0.00E0	9.43E3	2.60E2
2005	0.00E0	0.00E0	0.00E0	1.40E4	3.78E2
2006	0.00E0	0.00E0	0.00E0	1.67E4	5.83E2
2007	0.00E0	0.00E0	0.00E0	1.01E4	7.82E2
2008	6.80E0	1.16E1	0.00E0	6.02E3	6.31E2
2009	9.40E0	1.06E1	0.00E0	3.93E3	5.29E2
2010	0.00E0	0.00E0	0.00E0	7.26E3	2.94E2
2011	8.75E0	1.96E1	0.00E0	8.29E3	5.41E2
2012	0.00E0	0.00E0	0.00E0	1.21E4	3.71E2
2013	0.00E0	0.00E0	0.00E0	8.62E3	4.02E2
2014 ⁽²⁾⁽³⁾	7.23E0	4.69E0	0.00E0	7.79E3	4.18E2
2015 ⁽⁴⁾	1.15E1	1.07E0	0.00E0	4.61E3	4.14E2
2016	0.00E0	0.00E0	0.00E0	6.34E3	2.81E2
2017	0.00E0	0.00E0	0.00E0	6.80E3	5.24E2
2018	0.00E0	0.00E0	0.00E0	7.07E3	2.79E2
2019	0.00E0	0.00E0	0.00E0	5.10E3	2.21E2
2020	0.00E0	0.00E0	0.00E0	1.05E4	2.37E2
2021	0.00E0	0.00E0	0.00E0	8.06E3	4.67E2

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) 2014 – During the 3rd quarter, CNS experienced higher levels than normal of mixed fission and activation products in the liquid radioactive waste processing system and higher than normal liquid waste discharges (NCR # 01897053).

(4) 2015 – Co-58 and Co-60 were detected at SW Location 208 (NCR # 01934713).

3.4 MILK

A total of 26 biweekly grab samples of milk were analyzed by gamma spectroscopy and low-level Iodine-131 during 2021. There was one control location sampled. No indicator dairies were identified by the 2021 land use census.

There were no gamma emitting radionuclides attributable to plant operations identified in milk samples in 2021. Cs-137 is the only radionuclide, other than naturally occurring, reported in milk samples since 1996. Cs-137 in milk is not unusual. It is a constituent of nuclear weapons test fallout and nuclear plant accidents and has been observed periodically in samples from indicator and control locations since the preoperational period. Airborne Cs-137 has not been released from the plant since 1992.

Table 3.4 lists highest indicator location annual mean and control location annual mean for Cs-137 since the preoperational period.

K-40 is a naturally occurring radionuclide observed in milk samples in 2021.

Table 3.4 Mean Concentration of Radionuclides in Milk

YEAR	Cs-137 Indicator (pCi/l)	Cs-137 Control (pCi/l)
1984	2.95E0	2.98E0
1985	2.11E0	2.12E0
1986	3.76E0	4.54E0
1987 ⁽¹⁾	5.00E0	5.50E0
1988	3.20E0	3.80E0
1989	0.00E0	0.00E0
1990	8.00E0	6.70E0
1991	0.00E0	0.00E0
1992	3.40E0	5.00E0
1993	5.00E0	0.00E0
1994	2.80E0	0.00E0
1995	8.60E0	0.00E0
1996	6.05E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	No Indicator Location	0.00E0
2005	No Indicator Location	0.00E0
2006	No Indicator Location	0.00E0
2007	No Indicator Location	0.00E0
2008	No Indicator Location	0.00E0
2009	No Indicator Location	0.00E0
2010	No Indicator Location	0.00E0
2011	No Indicator Location	0.00E0
2012	No Indicator Location	0.00E0
2013	No Indicator Location	0.00E0
2014 ⁽²⁾	No Indicator Location	0.00E0
2015	No Indicator Location	0.00E0
2016	No Indicator Location	0.00E0
2017	No Indicator Location	0.00E0
2018	No Indicator Location	0.00E0
2019	No Indicator Location	0.00E0
2020	No Indicator Location	0.00E0
2021	No Indicator Location	0.00E0

0.00E0 indicates no detectable measurements

1984 - 1986 mean based on all net activity

(1) 1987 – Gamma spectroscopy system change

(2) 2014 – Gamma spectroscopy system 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 60 broadleaf vegetation samples collected monthly from five locations during 2021. Four indicator locations and one control location were sampled. Cs-137 was reported in one indicator location, Location 201, in four of twelve samples collected with a mean concentration of 21.8 pCi/kg (1.09 % of reporting level). Cs-137 was not detected in any of the control samples in 2021.

Cs-137 is the only gamma emitting radionuclide, other than naturally occurring, reported in vegetation samples. It is not unusual for Cs-137 to be present in vegetation. It is a constituent of nuclear weapons test fallout and nuclear plant accidents and has been observed in samples from indicator and control locations since the preoperational period. Table 3.5 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.

Figure 3.5 shows indicator and control annual means for Cs-137 in vegetation since 1984. Values shown from 1984 to 2021 show a stable trend for Cs-137 in vegetation. No airborne Cs-137 has been released from the plant since 1992.

K-40 and Be-7 are naturally occurring radionuclides that were observed in broadleaf vegetation samples in 2021.

Figure 3.5

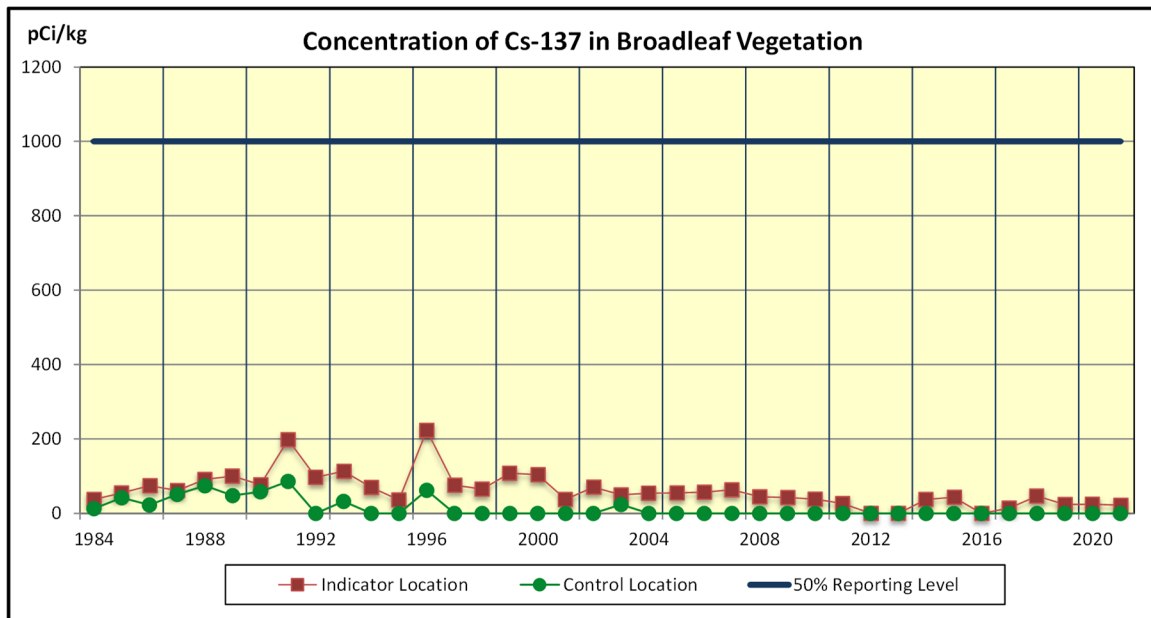


Table 3.5 Mean Concentration of Radionuclides in Broadleaf Vegetation

YEAR	Cs-137 Indicator (pCi/kg)	Cs-137 Control (pCi/kg)
1984	3.76E1	1.30E1
1985	5.48E1	4.16E1
1986	7.42E1	2.22E1
1987 ⁽¹⁾	6.10E1	5.10E1
1988	9.10E1	7.40E1
1989	1.00E2	4.80E1
1990	7.70E1	5.80E1
1991	1.98E2	8.60E1
1992	9.70E1	0.00E0
1993	1.13E2	3.20E1
1994	7.00E1	0.00E0
1995	3.60E1	0.00E0
1996	2.23E2	6.22E1
1997	7.57E1	0.00E0
1998	6.53E1	0.00E0
1999	1.08E2	0.00E0
2000	1.04E2	0.00E0
2001	3.76E1	0.00E0
2002	7.02E1	0.00E0
2003	4.96E1	2.40E1
2004	5.45E1	0.00E0
2005	5.48E1	0.00E0
2006	5.79E1	0.00E0
2007	6.31E1	0.00E0
2008	4.44E1	0.00E0
2009	4.25E1	0.00E0
2010	3.77E1	0.00E0
2011	2.62E1	0.00E0
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0
2014 ⁽²⁾	3.72E1	0.00E0
2015	4.29E1	0.00E0
2016	0.00E0	0.00E0
2017	1.43E1	0.00E0
2018	4.67E1	0.00E0
2019	2.35E1	0.00E0
2020	2.46E1	0.00E0
2021	2.18E1	0.00E0

0.00E0 indicates no detectable measurements

1984 - 1986 mean based on all net activity

2011 concentration affected by Fukushima Daiichi

(1) 1987 – Gamma spectroscopy system change

(2) 2014 – Gamma spectroscopy system 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 FOOD PRODUCTS

Collection of food product samples (crops) from an irrigated garden began in 1989. The irrigated garden is located on Lake Wylie downstream from CNS, Location 260. During the 2021 growing season nine samples were collected (monthly when available) and analyzed for gamma radionuclides.

There were no gamma emitting radionuclides attributable to plant operations identified in food product samples in 2021. There is no control location for this media type.

K-40 and Be-7 are naturally occurring radionuclides that were observed in food product samples in 2021.

3.7 FISH

Gamma spectroscopy was performed on the edible portions of the twelve fish samples collected semiannually during 2021. One downstream indicator location and one control location were sampled.

No fish indicator or control samples were positive for gamma emitting radionuclides, attributable to plant operations during 2021.

Co-58, Co-60, and Cs-137 are normally the predominant radionuclides identified in fish samples.

Figures 3.7-1 and 3.7-2 are graphs displaying annual mean concentrations for Co-60 and Cs-137. Table 3.7 depicts the highest indicator location annual mean for radionuclides detected. In addition, radionuclides identified in fish samples since 1984 have been included in the table. Overall, radionuclides have not shown a significant trend or accumulation.

K-40 is a naturally occurring radionuclide that was observed in some fish samples collected during 2021.

Figure 3.7-1

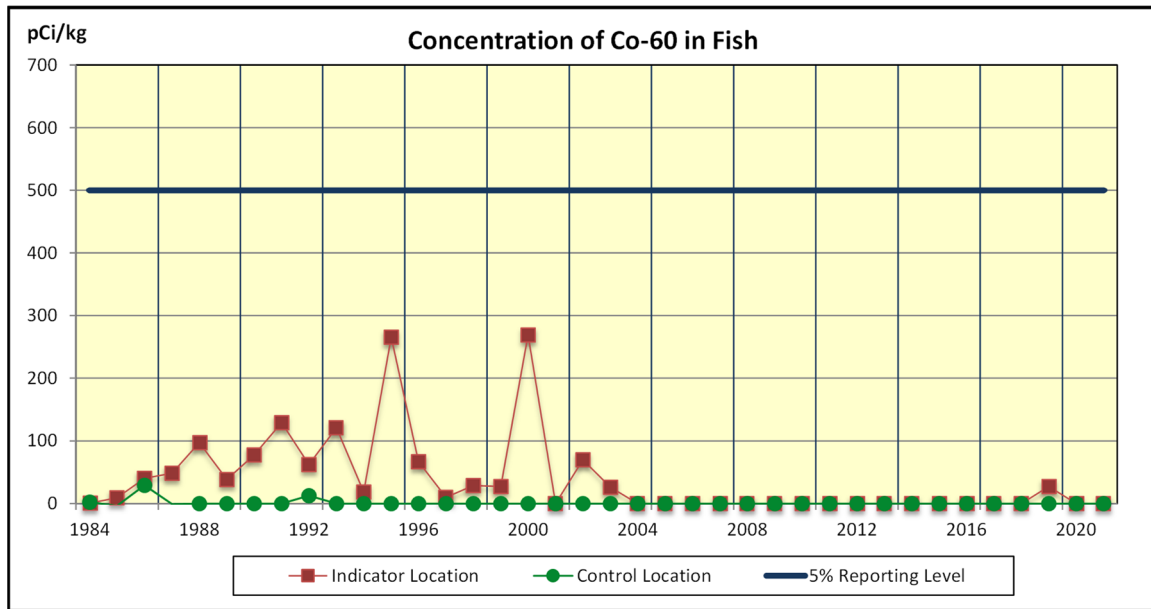


Figure 3.7-2

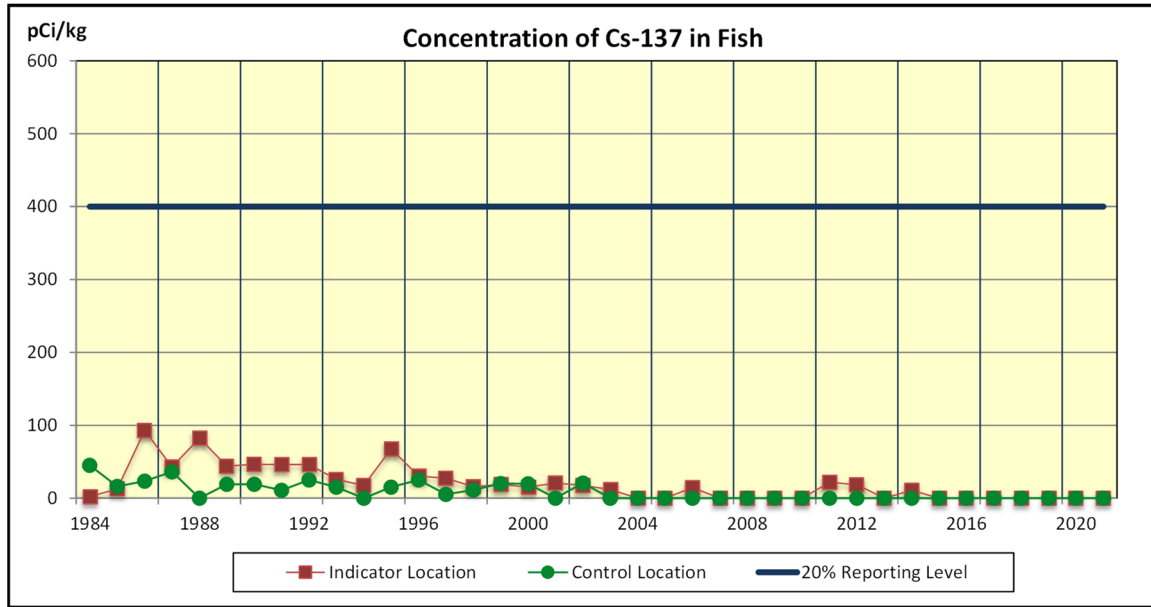


Table 3.7 Mean Concentrations of Radionuclides in Fish (pCi/kg)

Year	Co-58	Co-60	Cs-134	Cs-137
1984	3.00E0	6.11E-1	-5.32E0	1.83E0
1985	3.40E1	9.11E0	3.22E0	1.28E1
1986	1.86E2	4.01E1	3.51E1	9.29E1
1987 ⁽¹⁾	7.57E1	4.81E1	3.83E0	4.27E1
1988	1.40E2	9.70E1	1.67E1	8.24E1
1989	1.33E2	3.83E1	1.47E1	4.37E1
1990	1.75E2	7.77E1	1.32E1	4.66E1
1991	1.46E2	1.29E2	1.03E1	4.60E1
1992	9.02E1	6.20E1	1.27E1	4.61E1
1993	3.58E2	1.21E2	2.73E0	2.56E1
1994	4.75E1	1.81E1	0.00E0	1.75E1
1995	8.90E2	2.66E2	0.00E0	6.77E1
1996	5.95E1	6.68E1	0.00E0	3.02E1
1997	4.93E1	9.88E0	0.00E0	2.74E1
1998	6.44E1	2.86E1	0.00E0	1.58E1
1999	3.12E1	2.71E1	0.00E0	1.87E1
2000	2.13E2	2.69E2	0.00E0	1.52E1
2001	4.66E1	0.00E0	0.00E0	2.08E1
2002	5.23E1	7.00E1	0.00E0	1.73E1
2003	1.43E2	2.61E1	0.00E0	1.19E1
2004	1.81E1	0.00E0	0.00E0	0.00E0
2005	0.00E0	0.00E0	0.00E0	0.00E0
2006	0.00E0	0.00E0	0.00E0	1.44E1
2007	0.00E0	0.00E0	0.00E0	0.00E0
2008	0.00E0	0.00E0	0.00E0	0.00E0
2009	0.00E0	0.00E0	0.00E0	0.00E0
2010	0.00E0	0.00E0	0.00E0	0.00E0
2011	0.00E0	0.00E0	0.00E0	2.16E1
2012	0.00E0	0.00E0	0.00E0	1.84E1
2013	0.00E0	0.00E0	0.00E0	0.00E0
2014 ⁽²⁾	0.00E0	0.00E0	0.00E0	1.10E1
2015	0.00E0	0.00E0	0.00E0	0.00E0
2016	0.00E0	0.00E0	0.00E0	0.00E0
2017	0.00E0	0.00E0	0.00E0	0.00E0
2018	0.00E0	0.00E0	0.00E0	0.00E0
2019	0.00E0	2.72E1	0.00E0	0.00E0
2020	0.00E0	0.00E0	0.00E0	0.00E0
2021	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

1984 - 1986 mean based on all net activity

(1) 1987 – Gamma spectroscopy system change

(2) 2014 – Gamma spectroscopy system 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 SHORELINE SEDIMENT

During 2021, a total of six shoreline sediment samples were collected semiannually and analyzed, four from two indicator locations and two from the control location.

The sample is dried, then sifted to remove any rocks and clams prior to analysis. Gamma analysis of the six samples detected only natural activity in the samples collected in 2021.

Shoreline Sediment location 262 received a location description change in Revision 063 of the CNS ODCM (effective 12DEC2019). The prior name included a restaurant which is no longer in operation. The revised name was generalized to prevent future revision needs.

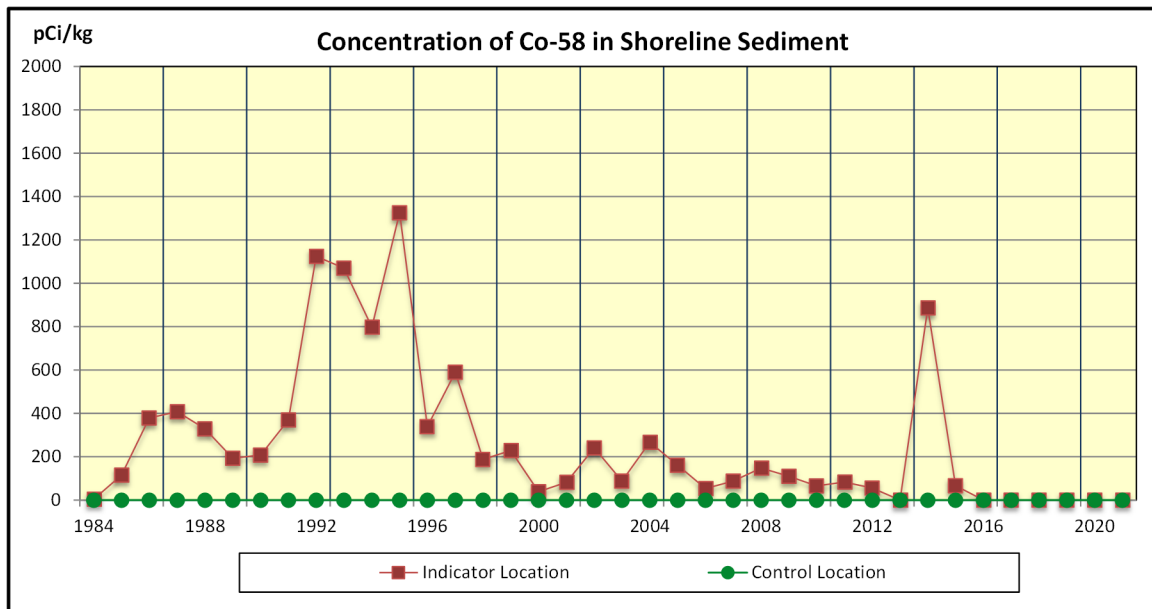
Co-58, Co-60, and Cs-137 are normally the predominant radionuclides identified in shoreline sediment samples. There were no gamma emitting radionuclides attributable to plant operations identified in samples from the indicator locations or the control location in 2021.

Table 3.8 lists highest indicator location annual mean since 1984. Included in the table are radionuclides that have been identified in shoreline sediment samples since 1988.

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

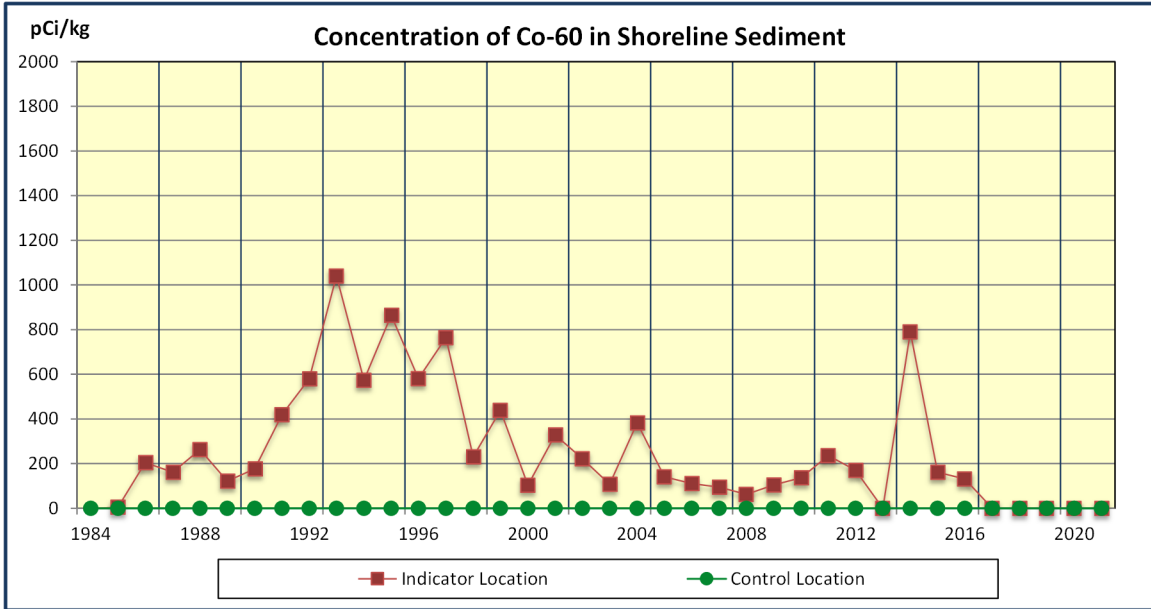
Naturally occurring K-40 was observed in some shoreline sediment samples collected during 2021.

Figure 3.8-1



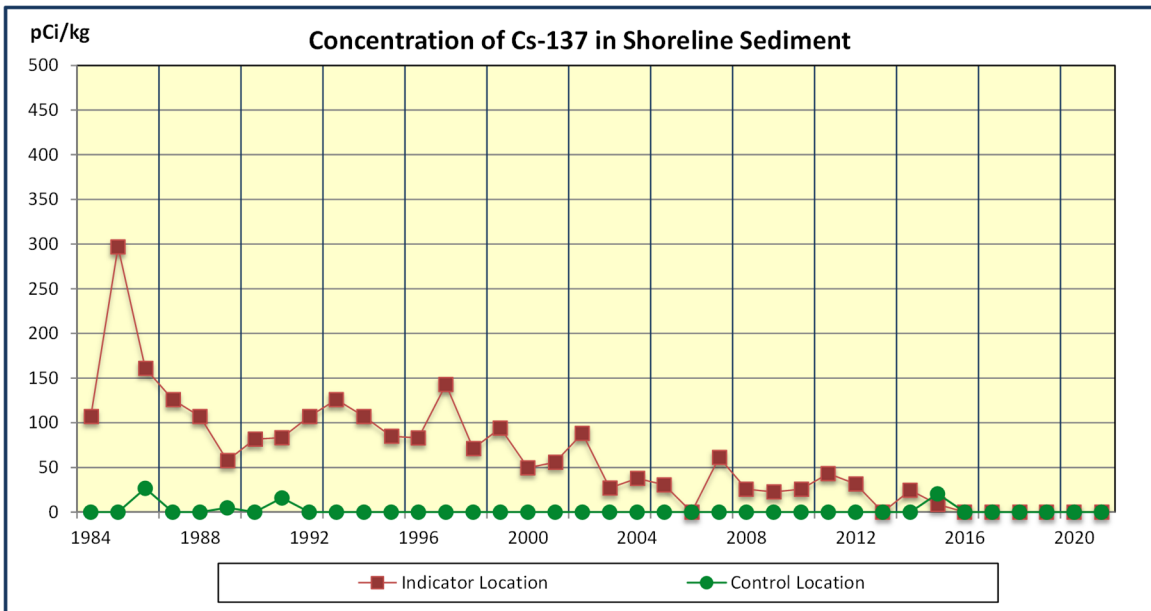
There is no reporting level for Co-58 in Shoreline Sediment

Figure 3.8-2



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

Figure 3.8-3



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

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

Year	Mn-54	Co-58	Co-60	Cs-134	Cs-137	Co-57
1984	1.03E0	4.40E0	-2.34E0	3.19E1	1.07E2	0.00E0
1985	-3.12E0	1.16E2	5.18E0	2.11E2	2.97E2	0.00E0
1986	1.09E2	3.79E2	2.05E2	6.50E1	1.61E2	0.00E0
1987 ⁽¹⁾	8.83E1	4.08E2	1.61E2	6.08E1	1.26E2	0.00E0
1988	1.07E2	3.29E2	2.63E2	2.59E1	1.07E2	7.65E-1
1989	4.58E1	1.94E2	1.21E2	1.65E1	5.77E1	0.00E0
1990	5.39E1	2.08E2	1.77E2	1.66E1	8.18E1	0.00E0
1991	8.50E1	3.70E2	4.19E2	1.82E1	8.33E1	1.20E0
1992	1.17E2	1.13E3	5.80E2	1.69E1	1.07E2	3.00E0
1993	1.33E2	1.07E3	1.04E3	2.80E1	1.26E2	2.47E1
1994	4.93E1	7.98E2	5.73E2	5.67E0	1.07E2	4.38E0
1995	1.02E2	1.33E3	8.65E2	0.00E0	8.50E1	3.69E1
1996	8.73E1	3.39E2	5.81E2	0.00E0	8.30E1	0.00E0
1997	6.96E1	5.90E2	7.64E2	0.00E0	1.43E2	0.00E0
1998	3.07E1	1.88E2	2.30E2	0.00E0	7.11E1	0.00E0
1999	7.28E1	2.29E2	4.39E2	0.00E0	9.42E1	0.00E0
2000	0.00E0	3.90E1	1.03E2	0.00E0	4.96E1	0.00E0
2001	3.86E1	8.27E1	3.29E2	0.00E0	5.58E1	0.00E0
2002	3.51E1	2.41E2	2.22E2	0.00E0	8.83E1	0.00E0
2003	2.17E1	8.75E1	1.08E2	0.00E0	2.69E1	0.00E0
2004	6.60E1	2.67E2	3.83E2	0.00E0	3.79E1	0.00E0
2005	0.00E0	1.61E2	1.41E2	0.00E0	3.04E1	0.00E0
2006	0.00E0	5.40E1	1.11E2	0.00E0	0.00E0	0.00E0
2007	0.00E0	8.77E1	9.46E1	0.00E0	6.13E1	0.00E0
2008	0.00E0	1.48E2	6.24E1	0.00E0	2.57E1	0.00E0
2009	0.00E0	1.10E2	1.04E2	0.00E0	2.27E1	0.00E0
2010	0.00E0	6.56E1	1.37E2	0.00E0	2.56E1	0.00E0
2011	0.00E0	8.36E1	2.36E2	3.62E1	4.33E1	1.05E1
2012	0.00E0	5.59E1	1.70E2	0.00E0	3.15E1	0.00E0
2013	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2014 ⁽²⁾ (3)	6.84E1	8.87E2	7.90E2	0.00E0	2.46E1	0.00E0
2015	0.00E0	6.73E1	1.61E2	0.00E0	8.75E0	0.00E0
2016	0.00E0	0.00E0	1.31E2	0.00E0	0.00E0	0.00E0
2017	0.00E0	0.00E0	1.31E2	0.00E0	0.00E0	0.00E0
2018	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2019	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2020	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2021	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

1984 - 1986 mean based on all net activity

(1) 1987 – Gamma spectroscopy system change

(2) 2014 – Gamma spectroscopy system 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) 2014 – During the 3rd quarter, CNS experienced higher levels than normal of mixed fission and activation products in the liquid radioactive waste processing system and higher than normal liquid waste discharges (NCR # 01897053).

3.9 DIRECT GAMMA RADIATION

3.9.1 ENVIRONMENTAL TLD

Catawba is licensed with an exclusion area boundary defined by UFSAR Section 2.1.1.2 as a 2500 foot radius from station center. This is the same boundary established for determining radioactive effluent release limits. No permanent public access is permitted within the exclusion area. Catawba has forty-one Thermoluminescent dosimeter (TLD) locations which are collected quarterly. Sixteen TLDs, one in each meteorological sector in the general area of the site boundary are designated as "inner ring" and are within a 1 mile radius from station center and all are used as indicators. Sixteen TLD locations, one in each meteorological sector in the 6 to 8 kilometer range, are designated as "outer ring," they are outside the 1 mile "inner ring" but within a 5 mile radius of station center. All outer ring TLD locations are used as indicators. A subset of TLD locations within a 7 to 11 mile radius from station center are designated as "special interest," they are placed in population centers, residential areas, or schools. The three "control" locations are greater than 7 miles from station center. These locations were chosen to reduce the probability of influence from Catawba operation on data. The control locations are not used as background subtraction in the TLD analysis. Their purpose is to provide a comparison to indicator locations.

In 2021, 164 total TLDs were analyzed, 152 at indicator locations and 12 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 data on external radiation exposure for 2021 was essentially unchanged, with an average exposure for all of indicator locations of 18.5 mR per std. quarter. The TLD location with the highest annual mean of 28.3 mR per std. quarter was indicator location 264, India Hook Road, 4.32 mi SE. The three control TLD locations (217 (Blackmon Road 10.3 mi. SSE), 247 (Fort Mill 7.33 mi. ESE), 251 (Clover 9.72 mi. WNW)) had an annual mean of 14.5 mR per std. quarter. Figure 3.9 and Table 3.9 show TLD inner ring, outer ring, and control location annual averages in mR per std. quarter. Data is provided from 1984 when TLD locations were added and arranged in an inner ring and outer ring configuration. Preoperational data is also provided in the table. As shown in the graph, doses measured by environmental TLDs show little or no change since the current TLD system was implemented.

Quarterly, environmental ODCM TLD results are compared by location to its historical data to evaluate any significant changes. The comparison utilizes the location's average exposure history to determine if quarterly results fall within low and high ranges and provides a reliable indication of potential changes occurring at a specific TLD location. The low and high ranges are determined by the historical average \pm two standard deviations. The quarterly TLD evaluation implements portions of American National Standard ANSI/HPS N13.37-2014, "Environmental Dosimetry – Criteria for System Design and Implementation, for environmental Thermoluminescent Dosimeters (TLD)." The CSD-RP-ALL-0030 – Updated Radiological Environmental Monitoring Program TLD Analytical Method, describes the process implemented in late 2018 for the fleet TLD programs.

TLD values identified as < Low Range or > High Range are evaluated in consideration of factors including possible TLD damage, sampling deviations, glow curve irregularities, and any known environmental location changes which may affect results. Quarterly TLD results are in Appendix E.

In the first quarter of 2021 the TLD from location 212 (Tega Cay) with a high range result of 21.2 mR per Std. qtr exceeded the location's acceptance range. The investigations did not determine any exposure ratio flags, glow curves were reviewed and found to be acceptable, and the TLD elements were reviewed and revealed no abnormalities. The TLD results were deemed acceptable.

In the first quarter of 2021 the TLD from location 264 (India Hook Road) with a high range result of 29.6 mR per Std. qtr exceeded the location's acceptance range. The investigations did not determine any exposure ratio flags, glow curves were reviewed and found to be acceptable, and the TLD elements were reviewed and revealed no abnormalities. This is a new TLD location as of the 2nd quarter of 2020 and the location data was still being gathered to calculate an average exposure. The TLD results were deemed acceptable.

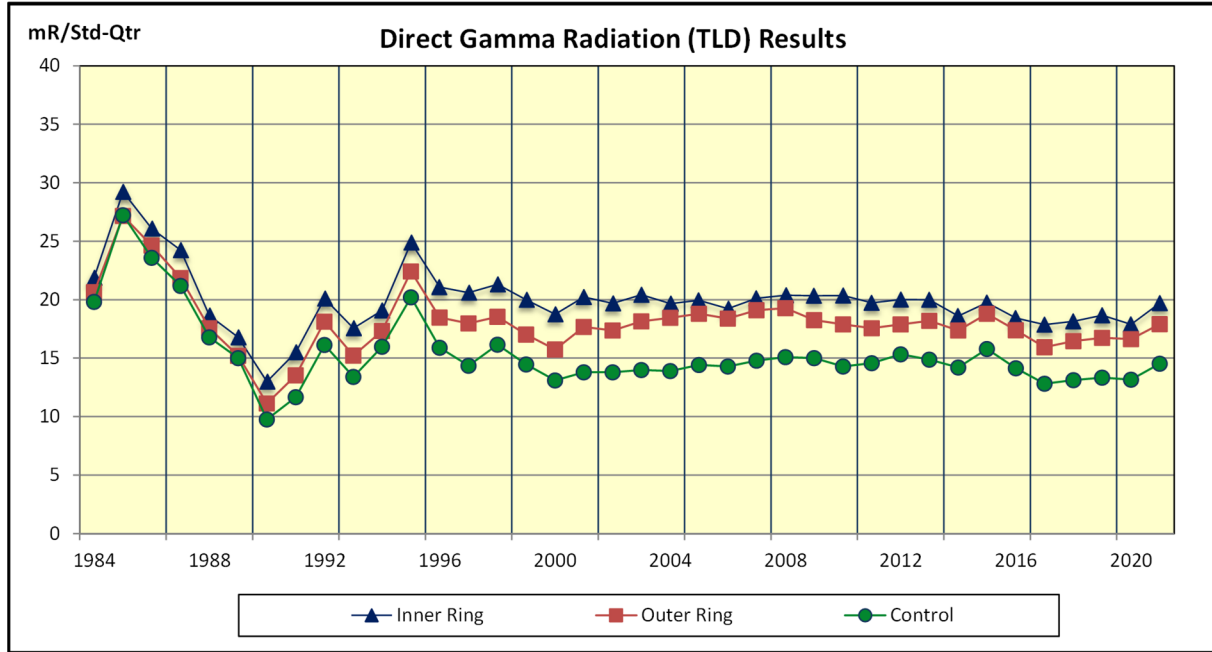
A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in section 4.7.

3.9.2 ISFSI

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

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

Figure 3.9



There is no reporting level for Direct Radiation (TLD)

Table 3.9 Direct Gamma Radiation (TLD) Results⁽¹⁾

Year	Inner Ring Average (mR per std. quarter)	Outer Ring Average (mR per std. quarter)	Control Average (mR per std. quarter)
1984*	2.19E+01	2.07E+01	1.98E+01
1985	2.92E+01	2.72E+01	2.72E+01
1986	2.61E+01	2.46E+01	2.36E+01
1987	2.43E+01	2.19E+01	2.12E+01
1988	1.87E+01	1.76E+01	1.68E+01
1989	1.68E+01	1.52E+01	1.50E+01
1990	1.30E+01	1.11E+01	9.78E+00
1991	1.55E+01	1.35E+01	1.17E+01
1992	2.01E+01	1.81E+01	1.61E+01
1993	1.76E+01	1.52E+01	1.34E+01
1994	1.91E+01	1.73E+01	1.60E+01
1995	2.49E+01	2.24E+01	2.02E+01
1996	2.11E+01	1.85E+01	1.59E+01
1997	2.06E+01	1.80E+01	1.44E+01
1998	2.13E+01	1.86E+01	1.62E+01
1999	2.00E+01	1.70E+01	1.45E+01
2000	1.88E+01	1.57E+01	1.31E+01
2001	2.02E+01	1.77E+01	1.38E+01
2002	1.97E+01	1.74E+01	1.38E+01
2003	2.04E+01	1.82E+01	1.40E+01
2004	1.97E+01	1.85E+01	1.39E+01
2005	2.00E+01	1.88E+01	1.44E+01
2006	1.92E+01	1.84E+01	1.43E+01
2007	2.01E+01	1.91E+01	1.48E+01
2008	2.04E+01	1.93E+01	1.51E+01
2009	2.04E+01	1.83E+01	1.50E+01
2010	2.04E+01	1.79E+01	1.43E+01
2011	1.97E+01	1.76E+01	1.46E+01
2012	2.00E+01	1.79E+01	1.53E+01
2013	2.00E+01	1.82E+01	1.49E+01
2014	1.86E+01	1.74E+01	1.42E+01
2015	1.98E+01	1.88E+01	1.58E+01
2016	1.84E+01	1.74E+01	1.41E+01
2017	1.79E+01	1.60E+01	1.28E+01
2018	1.82E+01	1.65E+01	1.31E+01
2019	1.87E+01	1.68E+01	1.34E+01
2020	1.79E+01	1.66E+01	1.32E+01
2021	1.97E+01	1.79E+01	1.45E+01

* Preoperational Data

(1) Table converted to Average mR/Std. Qtr. Effective with the 2021 report.

3.10 LAND USE CENSUS

The 2021 Annual Land Use Census was conducted June 23 - 24, 2021 as required by SLC 16.11-14. The Land Use Census was conducted to identify within a distance of 8 kilometers (5.0 miles) from the station, the nearest location from the site boundary in each of the sixteen meteorological sectors, which includes: the nearest residence, the nearest garden greater than 50 square meters (500 square feet), the nearest milk-giving animal (cow, goat, etc.).

Table 3.10 summarizes the comparison between the 2020 and 2021 census results. A map indicating identified locations is shown in Figure 3.10.

During the 2021 census no irrigated gardens (superior to existing gardens) or milk locations were identified. The nearest residence is located in the NE sector at 0.56 miles. No environmental program changes were required as a result of the 2021 land use census.

The Fleet Land Use Procedure AD-CP-ALL-0014 (Revision 4), Land Use Census Evaluation, was revised in 2020 to standardize the approach for the evaluation of Land Use Dose Calculations (NCR # 02343171).

Table 3.10 Catawba 2021 Land Use Census Results

**Performed 6/23/2021 - 6/24/2021
Nearest Pathways (Miles)**

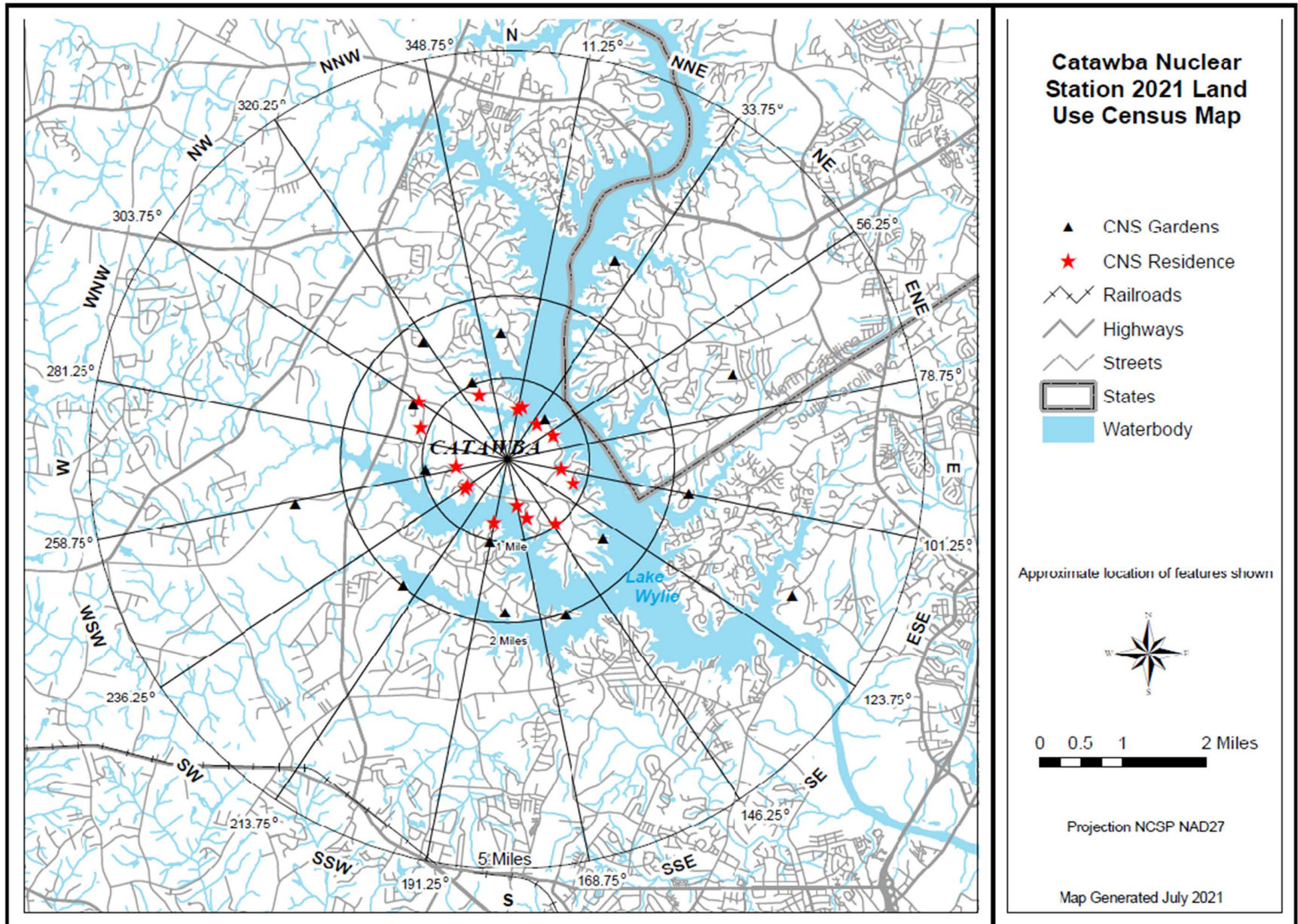
SECTOR	RESIDENCE		GARDEN		MILK ANIMAL	
	2020	2021	2020	2021	2020	2021
North	0.63	0.63	1.55	1.55	---	---
North-Northeast	0.66	0.66	2.51	2.75*	---	---
Northeast	0.56	0.56	0.67	0.67	---	---
East-Northeast	0.61	0.61	2.89	2.89	---	---
East	0.65	0.65	2.26	2.21*	---	---
East-Southeast	0.84	0.84	3.80	3.80	---	---
Southeast	0.97	0.97	1.50	1.50	---	---
South-Southeast	0.74	0.74	2.02	2.02	---	---
South	0.63	0.63	1.26	1.87*	---	---
South-Southwest	0.78	0.78	1.33	1.03*	---	---
Southwest	0.63	0.63	2.88	1.99*	---	---
West-Southwest	0.57	0.57	0.91	2.60*	---	---
West	0.62	0.62	0.96	0.96	---	---
West-Northwest	1.10	1.10	1.35	1.31*	---	---
Northwest	1.27	1.27	1.76	1.75*	---	---
North-Northwest	0.86	0.86	1.17	1.04*	---	---

NOTE: Sector and distances were determined by Global Positioning System

*** Represents a change from the previous year**

--- Indicates no occurrence within 5 mile radius

Figure 3.10



4.0 QUALITY ASSURANCE

4.1 SAMPLE COLLECTION

EnRad Laboratories and the Environmental Services Group performed the environmental sample collections as specified by approved sample collection procedures.

4.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.3 DOSIMETRY ANALYSIS

The Dosimetry and Records group performed the environmental dosimetry measurements as specified by approved dosimetry analysis procedures. The Dosimetry and Records Laboratory is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

4.4.1 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.

4.4.2 CALIBRATION VERIFICATION

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

4.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. These include tritium analyses in drinking water, surface water, and ground water samples; beta analysis in drinking water samples, and Low-Level Iodine-131 analysis in milk samples.

4.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2021 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.

EnRad Laboratory participated in an interlaboratory program with Eckert & Ziegler Analytics (EZA) in 2021. 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.

4.5.1 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EZA mixed gamma in liquid, mixed gamma in vegetation, mixed gamma in soil, low-level I-131 in liquid, mixed gamma air filter composites, I-131 air cartridges, gross beta in water, gross beta in filters, and tritium in water were analyzed at various times of the year at EnRad Laboratories. A summary of the applicable REMP EnRad Laboratory program results for 2021 is documented in Table 4.0-A.

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

4.6 INTERCOMPARISON PROGRAM

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

4.7 TLD INTERCOMPARISON PROGRAM

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 using the NIST-traceable Hopewell and submits them for analysis of the unknown estimated delivered exposure. A summary of the 2021 Internal Cross Check (Duke Energy) Program is documented in Table 4.0-B.

4.8 GENERAL ENGINEERING LABORATORY, LLC (GEL)

General Engineering Laboratory, LLC (GEL) participated in various Quality Assurance Programs for Inter-laboratory, Intra-laboratory, Third Party Cross Check programs, and a number of proficiency testing programs during 2021. A summary of the GEL quality assurance program results for the sample media types sent to GEL during 2021 is documented in Table 4.0-C. Table 4.0-C may not be applicable to all plants or stations.

TABLE 4.0-A

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2021 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter in Planchet	E13430A	Cs-137	2	pCi	126	126	1.00	Agreement
I-131 in Charcoal Cartridge	E13428	I-131	2	pCi	95.5	92.8	1.03	Agreement
Gamma in Soil	E13429	Ce-141	2	pCi/g	0.158	0.163	0.97	Agreement
		Co-58	2	pCi/g	0.155	0.162	0.96	Agreement
		Co-60	2	pCi/g	0.176	0.195	0.90	Agreement
		Cr-51	2	pCi/g	0.430	0.482	0.89	Agreement
		Cs-134	2	pCi/g	0.202	0.193	1.05	Agreement
		Cs-137	2	pCi/g	0.222	0.242	0.92	Agreement
		Fe-59	2	pCi/g	0.168	0.166	1.01	Agreement
		Mn-54	2	pCi/g	0.226	0.226	1.00	Agreement
		Zn-65	2	pCi/g	0.267	0.272	0.98	Agreement
Gamma in Simulated Vegetation	E13437	Ce-141	3	pCi/g	0.194	0.194	1.00	Agreement
		Co-58	3	pCi/g	0.208	0.200	1.04	Agreement
		Co-60	3	pCi/g	0.258	0.246	1.05	Agreement
		Cr-51	3	pCi/g	0.373	0.401	0.93	Agreement
		Cs-134	3	pCi/g	0.141	0.158	0.89	Agreement
		Cs-137	3	pCi/g	0.193	0.190	1.02	Agreement
		Fe-59	3	pCi/g	0.183	0.173	1.06	Agreement
		Mn-54	3	pCi/g	0.226	0.218	1.04	Agreement
		Zn-65	3	pCi/g	0.274	0.260	1.05	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E13435B	Ce-141	3	pCi	121	116	1.04	Agreement
		Co-58	3	pCi	123	120	1.03	Agreement
		Co-60	3	pCi	153	147	1.04	Agreement
		Cr-51	3	pCi	241	240	1.00	Agreement
		Cs-134	3	pCi	90.1	94.8	0.95	Agreement
		Cs-137	3	pCi	118	114	1.04	Agreement
		Fe-59	3	pCi	114	104	1.10	Agreement
		Mn-54	3	pCi	139	131	1.06	Agreement
		Zn-65	3	pCi	171	156	1.10	Agreement
Gamma in Water	E13436	Ce-141	3	pCi/L	161	151	1.07	Agreement
		Co-58	3	pCi/L	165	155	1.06	Agreement
		Co-60	3	pCi/L	196	191	1.03	Agreement
		Cr-51	3	pCi/L	330	311	1.06	Agreement
		Cs-134	3	pCi/L	118	123	0.96	Agreement
		Cs-137	3	pCi/L	154	147	1.04	Agreement
		Fe-59	3	pCi/L	149	134	1.11	Agreement
		I-131	3	pCi/L	261	243	1.07	Agreement
		Mn-54	3	pCi/L	185	169	1.09	Agreement
Zn-65	3	pCi/L	227	202	1.12	Agreement		
Milk LLI-131	E13431	I-131	2	pCi/L	96.8	90.1	1.07	Agreement
Gross Beta in Water	E13433	Cs-137	2	pCi/L	243	258	0.94	Agreement
Tritium in Water	E13438	H-3	3	pCi/L	11600	11700	0.99	Agreement

TABLE 4.0-B

2021 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 2021						2nd Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103087	62.75	59.56	5.36	<+/-15%	Pass	102970	17.06	17.74	-3.83	<+/-15%	Pass
103742	62.37	59.56	4.72	<+/-15%	Pass	103199	18.11	17.74	2.09	<+/-15%	Pass
100029	55.52	59.56	-6.78	<+/-15%	Pass	100154	17.12	17.74	-3.49	<+/-15%	Pass
102931	61.41	59.56	3.11	<+/-15%	Pass	102770	18.79	17.74	5.92	<+/-15%	Pass
100033	56.41	59.56	-5.29	<+/-15%	Pass	102058	17.15	17.74	-3.33	<+/-15%	Pass
100038	57.37	59.56	-3.68	<+/-15%	Pass	103295	18.58	17.74	4.74	<+/-15%	Pass
103615	61.40	59.56	3.09	<+/-15%	Pass	103602	18.57	17.74	4.68	<+/-15%	Pass
102442	57.43	59.56	-3.58	<+/-15%	Pass	100180	17.26	17.74	-2.71	<+/-15%	Pass
102407	59.65	59.56	0.15	<+/-15%	Pass	102741	18.31	17.74	3.21	<+/-15%	Pass
100245	56.51	59.56	-5.12	<+/-15%	Pass	103557	18.80	17.74	5.98	<+/-15%	Pass
Average Bias (B)			-0.80			Average Bias (B)			1.32		
Standard Deviation (S)			4.60			Standard Deviation (S)			4.18		
Measure Performance B +S			5.40	<15%	Pass	Measure Performance B +S			5.51	<15%	Pass
3rd Quarter 2021						4th Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
104637	36.05	39.31	-8.29	<+/-15%	Pass	104816	45.83	49.95	-8.25	<+/-15%	Pass
104499	37.40	39.31	-4.86	<+/-15%	Pass	104381	44.88	49.95	-10.15	<+/-15%	Pass
104449	36.14	39.31	-8.06	<+/-15%	Pass	104676	46.19	49.95	-7.53	<+/-15%	Pass
104466	36.49	39.31	-7.17	<+/-15%	Pass	104817	46.03	49.95	-7.85	<+/-15%	Pass
104639	36.13	39.31	-8.09	<+/-15%	Pass	104383	46.24	49.95	-7.43	<+/-15%	Pass
104634	36.71	39.31	-6.61	<+/-15%	Pass	104550	45.88	49.95	-8.15	<+/-15%	Pass
104638	36.58	39.31	-6.94	<+/-15%	Pass	104818	45.55	49.95	-8.81	<+/-15%	Pass
104498	36.08	39.31	-8.22	<+/-15%	Pass	104804	45.46	49.95	-8.99	<+/-15%	Pass
104453	36.42	39.31	-7.35	<+/-15%	Pass	104584	46.88	49.95	-6.15	<+/-15%	Pass
104465	35.76	39.31	-9.03	<+/-15%	Pass	104677	47.28	49.95	-5.35	<+/-15%	Pass
Average Bias (B)			-7.46			Average Bias (B)			-7.86		
Standard Deviation (S)			1.17			Standard Deviation (S)			1.38		
Measure Performance B +S			8.63	<15%	Pass	Measure Performance B +S			9.25	<15%	Pass

TABLE 4.0-C

2021 GEL Laboratories, LLC QA Results

Interlaboratory cross check samples from Eckert & Ziegler Analytics (EZA) were received and analyzed by GEL during 2021. Table 4.0-C lists the performance for specific samples. Table 4.0-C may not be applicable to all plants/stations.

Sample	Sample ID	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
I-131 in Milk with EZA	E13358	I-131	1	pCi/L	83.9	86.9	0.97	Agreement
	E13362	I-131	2	pCi/L	80.4	83.8	0.96	Agreement
	E13366	I-131	3	pCi/L	90.8	85.6	1.06	Agreement
	E13370	I-131	4	pCi/L	92.8	90.3	1.03	Agreement

APPENDIX A

ENVIRONMENTAL SAMPLING
&
ANALYSIS PROCEDURES

2021

APPENDIX A

ENVIRONMENTAL SAMPLING AND ANALYSIS PROCEDURES

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

Environmental sampling was performed by EnRad Laboratories and Environmental Services. Environmental sample analysis was performed by EnRad Laboratories and Dosimetry and Records.

This appendix provides a description of the specific analyses performed on samples collected in the field. Changes to the sampling procedures and analyses procedures are also discussed in the section.

I. CHANGE OF SAMPLING PROCEDURES

There were no changes to the Catawba Nuclear Station sampling procedures implemented during 2021.

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-determined amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried and mixed thoroughly 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 4910TR 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, and sample contamination has not occurred.

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

Gross beta analysis of liquid samples is performed by concentrating a designated aliquot of sample and analyzing by Perkin-Elmer 4910TR liquid scintillation system liquid scintillation system. Samples are batch processed with a laboratory fortified blank and blank to verify instrument performance and ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

Acquisition times for charcoal cartridge gamma spectroscopy analyses were reduced in early May 2021 as a result of fleet air sampling equipment standardization.

The procedure for preparing milk samples for Low-Level Iodine-131 (LLI-131) analysis was modified to allow incremental sample additions for milk samples with higher fat content (NCR # 02393159).

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

2021

**CATAWBA NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

Catawba Nuclear Station
York County, South Carolina

Docket Numbers 50-413, 414
Calendar Year 2021

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 265 ⁽⁴⁾	See Table 2.2-C	2.31E-02 (212/212) 9.23E-03 – 4.89E-02	208 (0.45 mi S)	2.38E-02 (53/53) 1.21E-02 – 4.89E-02	258 (9.84 mi W) 2.34E-02 (53/53) 9.87E-03 – 4.73E-02	0
	Gamma 25 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Air Radioiodine (pCi/m ³)	Gamma 265 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Drinking Water (pCi/l)	Gross Beta 26 ⁽⁴⁾	See Table 2.2-C	4.10E+00 (4/13) 3.35E+00 – 4.78E+00	214 (7.30 mi SSE)	4.10E+00 (4/13) 3.35E+00 – 4.78E+00	218 (13.5 mi NNE) 4.19E+00 (3/13) 3.39E+00 – 5.15E+00	0
	Gamma 26 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Surface Water (pCi/l)	Tritium 8 ⁽⁴⁾⁽⁵⁾	See Table 2.2-C	7.44E+02 (3/4) 2.49E+02 – 1.40E+03	214 (7.30 mi SSE)	7.44E+02 (3/4) 2.49E+02 – 1.40E+03	218 (13.5 mi NNE) 2.98E+02 (3/4) 2.30E+02 – 4.21E+02	0
	Gamma 39 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Milk (pCi/l)	Tritium 12 ⁽⁴⁾⁽⁵⁾	See Table 2.2-C	4.36E+03 (8/8) 2.50E+02 – 1.51E+04	208 (0.45 mi S)	8.06E+03 (4/4) 2.77E+03 – 1.51E+04	263 (0.59 mi NNE) 4.67E+02 (2/4) 3.18E+02 – 6.15E+02	0
	Gamma 26	See Table 2.2-C	No Indicator Location	-----	-----	All less than LLD	0
	I-131 26	See Table 2.2-C	No Indicator Location	-----	-----	All less than LLD	0

**CATAWBA NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

Catawba Nuclear Station
York County, South Carolina

Docket Numbers 50-413, 414
Calendar Year 2021

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations ^{(2) (3)} Mean Range	Location w/Highest Annual Mean		Control Locations Mean Range ^{(2) (3)}	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean Range ^{(2) (3)}		
Broadleaf Vegetation (pCi/kg, wet)	Gamma 60 Cs-137	See Table 2.2-C	2.18E+01 (4/48) 1.77E+01 – 3.24E+01	201 (0.53 mi NE)	2.18E+01 (4/12) 1.77E+01 – 3.24E+01	All less than LLD	0
Food Products (pCi/kg, wet)	Gamma 9 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	No Control Location	0
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Sediments--Shoreline (pCi/kg, dry)	Gamma 6	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
TLD (mR/Std Qtr)	TLD Readout 164 ⁽⁶⁾	-----	1.85E+01 (152/152) 1.18E+01 – 3.03E+01	264 (4.32 mi SE)	2.83E+01 (4/4) 2.62E+01 – 3.03E+01	217 (10.3 mi SSE) 247 (7.33 mi ESE) 251 (9.72 mi WNW) 1.45E+01 (12/12) 1.05E+01 – 2.01E+01	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. Quarterly tritium composites determined using quarter days (92 days +/- 25% (23 days)).
6. TLD exposure is reported in milliroentgen (mR) per standard quarter (91 days).

APPENDIX C

**SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES**

2021

APPENDIX C

CATAWBA NUCLEAR STATION SAMPLING DEVIATIONS & UNAVAILABLE ANALYSES

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

C.1 SAMPLING DEVIATIONS

Air Particulate and Air Radioiodine

REMP weekly air samples (Air Particulate (AP) or Air Radioiodine (AR)) that experience any downtime during a surveillance period are reported as a Deviation and classified as a “Sampling Deviation.” However, the sample is counted and the data reported, whereas a Deviation with no available sample is classified as an “Unavailable Analyses” and does not have any data reported. The Catawba REMP air samplers operated for a total of 99.99% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
261	3/23 – 3/30/2021	PS	Indeterminate downtime due to pump repair and rotameter flow being stuck at 3.0 cfm. Air sampler changed out on 3/30/21 to prevent recurrence.	NCR # 02376307
258	6/2 – 6/8/2021	PI	0.94 hours downtime due to unknown power interruption.	NCR # 02385263
200	12/13 – 12/20/2021	PO	0.67 hours downtime due to power outage, loss of retail power to the site.	NCR # 02409375
201	12/13 – 12/20/2021	PO	0.68 hours downtime due to power outage, loss of retail power to the site.	NCR # 02409375
208	12/13 – 12/20/2021	PO	0.67 hours downtime due to power outage, loss of retail power to the site.	NCR # 02409375
261	12/13 – 12/20/2021	PO	0.69 hours downtime due to power outage, loss of retail power to the site.	NCR # 02409375

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 water samplers operated for a total of 99.08% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
218 DW	12/29/2020-1/26/2021	CN	2.0 hours downtime. Water line was cut off due to construction in the area. Water was shut off and then restored after repair.	NCR # 02367098
208 SW	7/13 – 8/10/2021	PO	410.40 hours downtime due to power outage at the primary sampling location (house). The pier backup location failed. Solar panel and rechargeable battery installed 2/10/22 to prevent recurrence.	NCR # 02393197

C.2 UNAVAILABLE ANALYSES

Food Products / Crops

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
260	2/2/2021	SU	Sample seasonally unavailable at time of collection.	NCR # 02368114
260	3/2/2021	SU	Sample seasonally unavailable at time of collection.	NCR # 02372204
260	4/6/2021	SU	Sample seasonally unavailable at time of collection.	NCR # 02377227

APPENDIX D

ANALYTICAL DEVIATIONS

2021

APPENDIX D

CATAWBA NUCLEAR STATION ANALYTICAL DEVIATIONS

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

D.1 ANALYTICAL DEVIATIONS

Catawba environmental Alpha (A) and Bravo (B) TLDs are co-located TLDs placed next to each other to comply with ANSI/HPS N13.37-2014 Section 7.1 Paragraph 7. The TLD collections indicated incurred tampering/vandalism with one of the two co-located TLDs. One TLD for each collection was available and did not appear to have experienced any tampering/vandalism during the quarter. The remaining Bravo (B) TLD was collected and analyzed, but did not get averaged with the unusable Alpha (A) TLD which is normally included in the established process for the Catawba REMP TLDs.

TLDs

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
239	9/16 – 12/16/2021	VN	Alpha TLD vandalized, not usable, 1 TLD reported.	NCR # 02409671

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2021

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2021.

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536535	12/29/2020 - 1/6/2021	Beta	1.79E-02	2.74E-03	2.92E-03
536731	1/6/2021 - 1/12/2021	Beta	2.42E-02	3.23E-03	3.24E-03
537284	1/12/2021 - 1/20/2021	Beta	2.28E-02	2.94E-03	2.87E-03
537648	1/20/2021 - 1/26/2021	Beta	1.92E-02	3.38E-03	3.85E-03
538040	1/26/2021 - 2/2/2021	Beta	1.65E-02	2.53E-03	2.71E-03
538288	2/2/2021 - 2/9/2021	Beta	1.51E-02	2.78E-03	3.17E-03
538507	2/9/2021 - 2/16/2021	Beta	1.21E-02	2.79E-03	3.59E-03
538785	2/16/2021 - 2/23/2021	Beta	2.06E-02	3.02E-03	3.03E-03
539025	2/23/2021 - 3/2/2021	Beta	1.52E-02	2.95E-03	3.60E-03
539236	3/2/2021 - 3/9/2021	Beta	2.49E-02	3.31E-03	3.24E-03
540024	3/9/2021 - 3/15/2021	Beta	2.44E-02	3.14E-03	3.09E-03
540688	3/15/2021 - 3/23/2021	Beta	1.61E-02	2.66E-03	2.97E-03
541400	3/23/2021 - 3/30/2021	Beta	1.71E-02	2.86E-03	3.14E-03
541904	12/29/2020 - 3/30/2021	Cs-134	<1.81E-03	0.00E+00	1.81E-03
		Cs-137	<1.06E-03	0.00E+00	1.06E-03
		Be-7	1.37E-01	3.25E-02	2.26E-02
		K-40	<3.34E-02	0.00E+00	3.34E-02
541899	3/30/2021 - 4/6/2021	Beta	2.82E-02	2.94E-03	2.37E-03
542213	4/6/2021 - 4/13/2021	Beta	2.76E-02	3.43E-03	3.29E-03
542840	4/13/2021 - 4/20/2021	Beta	2.49E-02	3.21E-03	3.08E-03
543227	4/20/2021 - 4/27/2021	Beta	2.53E-02	3.26E-03	3.02E-03
544085	4/27/2021 - 5/4/2021	Beta	2.36E-02	3.13E-03	3.01E-03
544286	5/4/2021 - 5/11/2021	Beta	1.74E-02	2.88E-03	3.18E-03
544610	5/11/2021 - 5/18/2021	Beta	1.96E-02	2.69E-03	2.75E-03
544989	5/18/2021 - 5/25/2021	Beta	2.95E-02	3.47E-03	3.07E-03
545474	5/25/2021 - 6/2/2021	Beta	1.95E-02	2.76E-03	2.79E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
545771	6/2/2021 - 6/8/2021	Beta	1.31E-02	3.12E-03	4.00E-03
546003	6/8/2021 - 6/15/2021	Beta	9.23E-03	2.16E-03	2.76E-03
546874	6/15/2021 - 6/22/2021	Beta	2.08E-02	3.05E-03	3.13E-03
547165	6/22/2021 - 6/29/2021	Beta	1.21E-02	2.45E-03	3.08E-03
547689	3/30/2021 - 6/29/2021	Cs-134	<1.88E-03	0.00E+00	1.88E-03
		Cs-137	<1.92E-03	0.00E+00	1.92E-03
		Be-7	1.66E-01	4.02E-02	4.05E-02
		K-40	2.62E-02	1.67E-02	2.09E-02
547448	6/29/2021 - 7/7/2021	Beta	1.67E-02	2.30E-03	2.31E-03
547684	7/7/2021 - 7/13/2021	Beta	1.55E-02	3.27E-03	4.10E-03
548073	7/13/2021 - 7/20/2021	Beta	1.62E-02	3.00E-03	3.56E-03
548497	7/20/2021 - 7/27/2021	Beta	2.57E-02	2.96E-03	2.70E-03
548715	7/27/2021 - 8/3/2021	Beta	3.30E-02	3.69E-03	3.38E-03
548948	8/3/2021 - 8/10/2021	Beta	2.05E-02	3.05E-03	3.22E-03
549239	8/10/2021 - 8/17/2021	Beta	2.19E-02	3.24E-03	3.46E-03
549738	8/17/2021 - 8/24/2021	Beta	1.67E-02	2.83E-03	3.08E-03
550021	8/24/2021 - 8/31/2021	Beta	3.32E-02	3.69E-03	3.30E-03
550644	8/31/2021 - 9/8/2021	Beta	2.92E-02	3.18E-03	2.77E-03
551007	9/8/2021 - 9/14/2021	Beta	3.20E-02	4.09E-03	4.05E-03
551638	9/14/2021 - 9/21/2021	Beta	2.80E-02	2.98E-03	2.49E-03
552271	9/21/2021 - 9/28/2021	Beta	2.23E-02	2.82E-03	2.77E-03
552749	6/29/2021 - 9/28/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	2.15E-01	4.14E-02	2.09E-02
		K-40	2.59E-02	1.50E-02	1.59E-02
552433	9/28/2021 - 10/5/2021	Beta	4.60E-02	3.76E-03	2.98E-03
552744	10/5/2021 - 10/12/2021	Beta	1.54E-02	2.83E-03	3.25E-03
553230	10/12/2021 - 10/19/2021	Beta	2.79E-02	3.43E-03	3.29E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553826	10/19/2021 - 10/26/2021	Beta	3.57E-02	3.77E-03	3.26E-03
554263	10/26/2021 - 11/2/2021	Beta	1.54E-02	2.41E-03	2.56E-03
554573	11/2/2021 - 11/9/2021	Beta	2.60E-02	2.95E-03	2.70E-03
555058	11/9/2021 - 11/16/2021	Beta	2.95E-02	3.22E-03	3.04E-03
555928	11/16/2021 - 11/22/2021	Beta	2.77E-02	3.67E-03	3.66E-03
556725	11/22/2021 - 11/30/2021	Beta	2.53E-02	3.10E-03	3.05E-03
557041	11/30/2021 - 12/7/2021	Beta	4.58E-02	4.12E-03	3.13E-03
557466	12/7/2021 - 12/13/2021	Beta	2.73E-02	3.58E-03	3.39E-03
557940	12/13/2021 - 12/20/2021	Beta	2.47E-02	3.18E-03	2.94E-03
558374	12/20/2021 - 12/27/2021	Beta	3.43E-02	3.89E-03	3.68E-03
559171	9/28/2021 - 12/27/2021	Cs-134	<1.68E-03	0.00E+00	1.68E-03
		Cs-137	<1.73E-03	0.00E+00	1.73E-03
		Be-7	1.62E-01	4.22E-02	4.49E-02
		K-40	<1.62E-02	0.00E+00	1.62E-02
558589	12/28/2021 - 1/5/2022	Beta	1.39E-02	2.47E-03	2.78E-03
559960	12/28/2021 - 1/5/2022	Cs-134	<8.23E-03	0.00E+00	8.23E-03
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	1.64E-01	9.40E-02	0.00E+00
		K-40	2.10E-01	1.08E-01	1.33E-01

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536536	12/29/2020 - 1/6/2021	Beta	2.04E-02	2.85E-03	2.91E-03
536732	1/6/2021 - 1/12/2021	Beta	2.31E-02	3.17E-03	3.24E-03
537285	1/12/2021 - 1/20/2021	Beta	2.34E-02	2.97E-03	2.87E-03
537649	1/20/2021 - 1/26/2021	Beta	1.77E-02	3.31E-03	3.86E-03
538041	1/26/2021 - 2/2/2021	Beta	1.61E-02	2.51E-03	2.71E-03
538289	2/2/2021 - 2/9/2021	Beta	1.61E-02	2.83E-03	3.16E-03
538508	2/9/2021 - 2/16/2021	Beta	1.16E-02	2.77E-03	3.59E-03
538786	2/16/2021 - 2/23/2021	Beta	2.33E-02	3.15E-03	3.04E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
539026	2/23/2021 - 3/2/2021	Beta	2.08E-02	3.23E-03	3.60E-03
539237	3/2/2021 - 3/9/2021	Beta	2.35E-02	3.24E-03	3.23E-03
540025	3/9/2021 - 3/15/2021	Beta	2.41E-02	3.12E-03	3.09E-03
540689	3/15/2021 - 3/23/2021	Beta	1.80E-02	2.75E-03	2.98E-03
541401	3/23/2021 - 3/30/2021	Beta	1.93E-02	2.97E-03	3.14E-03
541905	12/29/2020 - 3/30/2021	Cs-134	<2.21E-03	0.00E+00	2.21E-03
		Cs-137	<1.59E-03	0.00E+00	1.59E-03
		Be-7	1.57E-01	4.03E-02	4.03E-02
		K-40	1.94E-02	1.37E-02	1.58E-02
541900	3/30/2021 - 4/6/2021	Beta	2.58E-02	2.84E-03	2.37E-03
542214	4/6/2021 - 4/13/2021	Beta	2.83E-02	3.45E-03	3.28E-03
542841	4/13/2021 - 4/20/2021	Beta	2.40E-02	3.17E-03	3.09E-03
543228	4/20/2021 - 4/27/2021	Beta	2.33E-02	3.15E-03	3.02E-03
544086	4/27/2021 - 5/4/2021	Beta	2.38E-02	3.14E-03	3.01E-03
544287	5/4/2021 - 5/11/2021	Beta	1.82E-02	2.92E-03	3.17E-03
544611	5/11/2021 - 5/18/2021	Beta	2.24E-02	2.82E-03	2.76E-03
544990	5/18/2021 - 5/25/2021	Beta	2.93E-02	3.45E-03	3.06E-03
545475	5/25/2021 - 6/2/2021	Beta	1.99E-02	2.78E-03	2.80E-03
545772	6/2/2021 - 6/8/2021	Beta	1.41E-02	3.17E-03	3.99E-03
546004	6/8/2021 - 6/15/2021	Beta	1.07E-02	2.26E-03	2.78E-03
546875	6/15/2021 - 6/22/2021	Beta	2.03E-02	3.01E-03	3.10E-03
547166	6/22/2021 - 6/29/2021	Beta	1.39E-02	2.54E-03	3.08E-03
547690	3/30/2021 - 6/29/2021	Cs-134	<1.62E-03	0.00E+00	1.62E-03
		Cs-137	<1.46E-03	0.00E+00	1.46E-03
		Be-7	2.15E-01	4.06E-02	1.98E-02
		K-40	<3.87E-02	0.00E+00	3.87E-02
547449	6/29/2021 - 7/7/2021	Beta	1.87E-02	2.39E-03	2.31E-03
547685	7/7/2021 - 7/13/2021	Beta	1.55E-02	3.27E-03	4.11E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548074	7/13/2021 - 7/20/2021	Beta	1.37E-02	2.86E-03	3.55E-03
548498	7/20/2021 - 7/27/2021	Beta	2.97E-02	3.12E-03	2.70E-03
548716	7/27/2021 - 8/3/2021	Beta	3.59E-02	3.82E-03	3.38E-03
548949	8/3/2021 - 8/10/2021	Beta	2.51E-02	3.27E-03	3.22E-03
549240	8/10/2021 - 8/17/2021	Beta	1.67E-02	2.98E-03	3.45E-03
549739	8/17/2021 - 8/24/2021	Beta	1.57E-02	2.78E-03	3.08E-03
550022	8/24/2021 - 8/31/2021	Beta	3.29E-02	3.69E-03	3.30E-03
550645	8/31/2021 - 9/8/2021	Beta	2.55E-02	3.03E-03	2.79E-03
551008	9/8/2021 - 9/14/2021	Beta	2.96E-02	3.96E-03	4.03E-03
551639	9/14/2021 - 9/21/2021	Beta	2.84E-02	3.00E-03	2.49E-03
552272	9/21/2021 - 9/28/2021	Beta	2.51E-02	2.94E-03	2.77E-03
552750	6/29/2021 - 9/28/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.06E-03	0.00E+00	1.06E-03
		Be-7	1.86E-01	3.79E-02	1.65E-02
		K-40	<3.10E-02	0.00E+00	3.10E-02
552434	9/28/2021 - 10/5/2021	Beta	4.46E-02	3.72E-03	2.99E-03
552745	10/5/2021 - 10/12/2021	Beta	1.71E-02	2.92E-03	3.24E-03
553231	10/12/2021 - 10/19/2021	Beta	2.77E-02	3.41E-03	3.29E-03
553827	10/19/2021 - 10/26/2021	Beta	3.60E-02	3.79E-03	3.26E-03
554264	10/26/2021 - 11/2/2021	Beta	1.62E-02	2.46E-03	2.57E-03
554574	11/2/2021 - 11/9/2021	Beta	2.34E-02	2.84E-03	2.69E-03
555059	11/9/2021 - 11/16/2021	Beta	2.70E-02	3.11E-03	3.04E-03
555929	11/16/2021 - 11/22/2021	Beta	2.84E-02	3.70E-03	3.66E-03
556726	11/22/2021 - 11/30/2021	Beta	2.39E-02	3.05E-03	3.05E-03
557042	11/30/2021 - 12/7/2021	Beta	4.55E-02	4.11E-03	3.13E-03
557467	12/7/2021 - 12/13/2021	Beta	2.63E-02	3.52E-03	3.38E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557941	12/13/2021 - 12/20/2021	Beta	2.51E-02	3.21E-03	2.95E-03
558375	12/20/2021 - 12/27/2021	Beta	3.42E-02	3.89E-03	3.69E-03
559172	9/28/2021 - 12/27/2021	Cs-134	<2.04E-03	0.00E+00	2.04E-03
		Cs-137	<1.34E-03	0.00E+00	1.34E-03
		Be-7	1.51E-01	3.56E-02	2.93E-02
		K-40	1.37E-02	1.08E-02	1.24E-02
558590	12/28/2021 - 1/5/2022	Beta	1.24E-02	2.39E-03	2.78E-03
559961	12/28/2021 - 1/5/2022	Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.04E-02	0.00E+00	1.04E-02
		Be-7	8.39E-02	9.23E-02	0.00E+00
		K-40	3.21E-01	1.18E-01	1.08E-01

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536537	12/29/2020 - 1/6/2021	Beta	2.02E-02	2.84E-03	2.91E-03
536733	1/6/2021 - 1/12/2021	Beta	2.31E-02	3.17E-03	3.24E-03
537286	1/12/2021 - 1/20/2021	Beta	2.12E-02	2.87E-03	2.87E-03
537650	1/20/2021 - 1/26/2021	Beta	1.32E-02	3.06E-03	3.86E-03
538042	1/26/2021 - 2/2/2021	Beta	1.95E-02	2.67E-03	2.70E-03
538290	2/2/2021 - 2/9/2021	Beta	1.76E-02	2.91E-03	3.16E-03
538509	2/9/2021 - 2/16/2021	Beta	1.24E-02	2.80E-03	3.59E-03
538787	2/16/2021 - 2/23/2021	Beta	2.62E-02	3.29E-03	3.04E-03
539027	2/23/2021 - 3/2/2021	Beta	1.86E-02	3.13E-03	3.60E-03
539238	3/2/2021 - 3/9/2021	Beta	2.20E-02	3.17E-03	3.24E-03
540026	3/9/2021 - 3/15/2021	Beta	2.69E-02	3.24E-03	3.09E-03
540690	3/15/2021 - 3/23/2021	Beta	1.68E-02	2.70E-03	2.98E-03
541402	3/23/2021 - 3/30/2021	Beta	2.05E-02	3.03E-03	3.14E-03
541906	12/29/2020 - 3/30/2021	Cs-134	<1.61E-03	0.00E+00	1.61E-03
		Cs-137	<1.32E-03	0.00E+00	1.32E-03
		Be-7	1.40E-01	3.40E-02	2.91E-02
		K-40	1.94E-02	1.31E-02	1.48E-02
541901	3/30/2021 - 4/6/2021	Beta	2.83E-02	2.95E-03	2.37E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542215	4/6/2021 - 4/13/2021	Beta	3.24E-02	3.63E-03	3.28E-03
542842	4/13/2021 - 4/20/2021	Beta	2.68E-02	3.30E-03	3.09E-03
543229	4/20/2021 - 4/27/2021	Beta	2.68E-02	3.32E-03	3.02E-03
544087	4/27/2021 - 5/4/2021	Beta	2.50E-02	3.20E-03	3.01E-03
544288	5/4/2021 - 5/11/2021	Beta	2.23E-02	3.12E-03	3.17E-03
544612	5/11/2021 - 5/18/2021	Beta	2.57E-02	2.97E-03	2.76E-03
544991	5/18/2021 - 5/25/2021	Beta	3.53E-02	3.72E-03	3.06E-03
545476	5/25/2021 - 6/2/2021	Beta	1.94E-02	2.76E-03	2.80E-03
545773	6/2/2021 - 6/8/2021	Beta	1.37E-02	3.15E-03	4.00E-03
546005	6/8/2021 - 6/15/2021	Beta	1.21E-02	2.33E-03	2.78E-03
546876	6/15/2021 - 6/22/2021	Beta	2.08E-02	3.04E-03	3.10E-03
547167	6/22/2021 - 6/29/2021	Beta	1.29E-02	2.50E-03	3.08E-03
547691	3/30/2021 - 6/29/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<1.56E-03	0.00E+00	1.56E-03
		Be-7	1.72E-01	3.94E-02	3.59E-02
		K-40	<3.38E-02	0.00E+00	3.38E-02
547450	6/29/2021 - 7/7/2021	Beta	1.65E-02	2.29E-03	2.31E-03
547686	7/7/2021 - 7/13/2021	Beta	1.81E-02	3.40E-03	4.11E-03
548075	7/13/2021 - 7/20/2021	Beta	1.26E-02	2.80E-03	3.55E-03
548499	7/20/2021 - 7/27/2021	Beta	2.95E-02	3.11E-03	2.70E-03
548717	7/27/2021 - 8/3/2021	Beta	3.65E-02	3.84E-03	3.38E-03
548950	8/3/2021 - 8/10/2021	Beta	2.54E-02	3.28E-03	3.23E-03
549241	8/10/2021 - 8/17/2021	Beta	1.57E-02	2.92E-03	3.45E-03
549740	8/17/2021 - 8/24/2021	Beta	1.54E-02	2.77E-03	3.08E-03
550023	8/24/2021 - 8/31/2021	Beta	2.86E-02	3.49E-03	3.30E-03
550646	8/31/2021 - 9/8/2021	Beta	3.06E-02	3.24E-03	2.78E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
551009	9/8/2021 - 9/14/2021	Beta	2.71E-02	3.85E-03	4.03E-03
551640	9/14/2021 - 9/21/2021	Beta	3.02E-02	3.07E-03	2.49E-03
552273	9/21/2021 - 9/28/2021	Beta	2.17E-02	2.80E-03	2.77E-03
552751	6/29/2021 - 9/28/2021	Cs-134	<1.78E-03	0.00E+00	1.78E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.60E-01	4.29E-02	4.43E-02
		K-40	4.01E-02	1.74E-02	4.94E-03
552435	9/28/2021 - 10/5/2021	Beta	4.89E-02	3.87E-03	2.99E-03
552746	10/5/2021 - 10/12/2021	Beta	1.52E-02	2.82E-03	3.24E-03
553232	10/12/2021 - 10/19/2021	Beta	2.98E-02	3.50E-03	3.29E-03
553828	10/19/2021 - 10/26/2021	Beta	3.53E-02	3.76E-03	3.26E-03
554265	10/26/2021 - 11/2/2021	Beta	1.51E-02	2.40E-03	2.57E-03
554575	11/2/2021 - 11/9/2021	Beta	2.89E-02	3.06E-03	2.69E-03
555060	11/9/2021 - 11/16/2021	Beta	2.83E-02	3.17E-03	3.04E-03
555930	11/16/2021 - 11/22/2021	Beta	2.77E-02	3.67E-03	3.66E-03
556727	11/22/2021 - 11/30/2021	Beta	2.49E-02	3.09E-03	3.05E-03
557043	11/30/2021 - 12/7/2021	Beta	4.41E-02	4.05E-03	3.13E-03
557468	12/7/2021 - 12/13/2021	Beta	2.90E-02	3.65E-03	3.38E-03
557942	12/13/2021 - 12/20/2021	Beta	1.85E-02	2.89E-03	2.95E-03
558376	12/20/2021 - 12/27/2021	Beta	3.20E-02	3.80E-03	3.68E-03
559173	9/28/2021 - 12/27/2021	Cs-134	<1.50E-03	0.00E+00	1.50E-03
		Cs-137	<1.73E-03	0.00E+00	1.73E-03
		Be-7	1.56E-01	3.45E-02	1.98E-02
		K-40	2.00E-02	1.46E-02	1.88E-02
558591	12/28/2021 - 1/5/2022	Beta	1.37E-02	2.46E-03	2.78E-03
559962	12/28/2021 - 1/5/2022	Cs-134	<8.50E-03	0.00E+00	8.50E-03
		Cs-137	<9.63E-03	0.00E+00	9.63E-03
		Be-7	6.96E-02	7.21E-02	0.00E+00
		K-40	1.91E-01	1.08E-01	1.39E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536539	12/29/2020 - 1/6/2021	Beta	2.01E-02	2.84E-03	2.92E-03
536734	1/6/2021 - 1/12/2021	Beta	2.36E-02	3.18E-03	3.23E-03
537287	1/12/2021 - 1/20/2021	Beta	2.34E-02	2.97E-03	2.87E-03
537651	1/20/2021 - 1/26/2021	Beta	2.04E-02	3.45E-03	3.86E-03
538043	1/26/2021 - 2/2/2021	Beta	1.87E-02	2.64E-03	2.71E-03
538291	2/2/2021 - 2/9/2021	Beta	1.46E-02	2.74E-03	3.16E-03
538510	2/9/2021 - 2/16/2021	Beta	9.87E-03	2.67E-03	3.58E-03
538788	2/16/2021 - 2/23/2021	Beta	2.41E-02	3.19E-03	3.04E-03
539028	2/23/2021 - 3/2/2021	Beta	1.76E-02	3.08E-03	3.61E-03
539239	3/2/2021 - 3/9/2021	Beta	2.43E-02	3.27E-03	3.23E-03
540027	3/9/2021 - 3/15/2021	Beta	2.39E-02	3.10E-03	3.09E-03
540691	3/15/2021 - 3/23/2021	Beta	1.53E-02	2.62E-03	2.98E-03
541403	3/23/2021 - 3/30/2021	Beta	1.78E-02	2.89E-03	3.13E-03
541907	12/29/2020 - 3/30/2021	Cs-134	<1.90E-03	0.00E+00	1.90E-03
		Cs-137	<1.20E-03	0.00E+00	1.20E-03
		Be-7	1.61E-01	3.62E-02	2.80E-02
		K-40	2.52E-02	1.32E-02	4.55E-03
541902	3/30/2021 - 4/6/2021	Beta	2.80E-02	2.95E-03	2.39E-03
542216	4/6/2021 - 4/13/2021	Beta	3.07E-02	3.54E-03	3.25E-03
542843	4/13/2021 - 4/20/2021	Beta	2.69E-02	3.31E-03	3.09E-03
543230	4/20/2021 - 4/27/2021	Beta	2.74E-02	3.35E-03	3.01E-03
544088	4/27/2021 - 5/4/2021	Beta	2.71E-02	3.31E-03	3.02E-03
544289	5/4/2021 - 5/11/2021	Beta	2.25E-02	3.12E-03	3.16E-03
544613	5/11/2021 - 5/18/2021	Beta	2.09E-02	2.75E-03	2.77E-03
544992	5/18/2021 - 5/25/2021	Beta	3.55E-02	3.70E-03	3.03E-03
545477	5/25/2021 - 6/2/2021	Beta	2.28E-02	2.94E-03	2.83E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
545774	6/2/2021 - 6/8/2021	Beta	1.44E-02	3.18E-03	4.00E-03
546006	6/8/2021 - 6/15/2021	Beta	1.22E-02	2.34E-03	2.78E-03
546877	6/15/2021 - 6/22/2021	Beta	2.14E-02	3.07E-03	3.10E-03
547168	6/22/2021 - 6/29/2021	Beta	1.34E-02	2.52E-03	3.09E-03
547692	3/30/2021 - 6/29/2021	Cs-134	<1.66E-03	0.00E+00	1.66E-03
		Cs-137	<1.23E-03	0.00E+00	1.23E-03
		Be-7	1.76E-01	4.12E-02	3.89E-02
		K-40	<2.06E-02	0.00E+00	2.06E-02
547451	6/29/2021 - 7/7/2021	Beta	1.76E-02	2.34E-03	2.31E-03
547687	7/7/2021 - 7/13/2021	Beta	1.52E-02	3.25E-03	4.10E-03
548076	7/13/2021 - 7/20/2021	Beta	1.60E-02	2.98E-03	3.55E-03
548500	7/20/2021 - 7/27/2021	Beta	2.82E-02	3.07E-03	2.70E-03
548718	7/27/2021 - 8/3/2021	Beta	3.26E-02	3.68E-03	3.39E-03
548951	8/3/2021 - 8/10/2021	Beta	2.34E-02	3.19E-03	3.22E-03
549242	8/10/2021 - 8/17/2021	Beta	1.77E-02	3.03E-03	3.45E-03
549741	8/17/2021 - 8/24/2021	Beta	1.46E-02	2.72E-03	3.08E-03
550024	8/24/2021 - 8/31/2021	Beta	2.92E-02	3.51E-03	3.30E-03
550647	8/31/2021 - 9/8/2021	Beta	2.80E-02	3.15E-03	2.80E-03
551010	9/8/2021 - 9/14/2021	Beta	2.87E-02	3.91E-03	4.01E-03
551641	9/14/2021 - 9/21/2021	Beta	3.08E-02	3.10E-03	2.49E-03
552274	9/21/2021 - 9/28/2021	Beta	2.22E-02	2.81E-03	2.76E-03
552752	6/29/2021 - 9/28/2021	Cs-134	<1.44E-03	0.00E+00	1.44E-03
		Cs-137	<1.55E-03	0.00E+00	1.55E-03
		Be-7	1.52E-01	3.62E-02	3.03E-02
		K-40	2.72E-02	1.75E-02	2.24E-02
552436	9/28/2021 - 10/5/2021	Beta	4.73E-02	3.82E-03	3.00E-03
552747	10/5/2021 - 10/12/2021	Beta	1.42E-02	2.76E-03	3.25E-03
553233	10/12/2021 - 10/19/2021	Beta	2.95E-02	3.49E-03	3.28E-03

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	553829	Sample Dates:	10/19/2021 - 10/26/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.67E-02	3.81E-03	3.26E-03
Sample ID:	554266	Sample Dates:	10/26/2021 - 11/2/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.37E-02	2.34E-03	2.58E-03
Sample ID:	554576	Sample Dates:	11/2/2021 - 11/9/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.52E-02	2.91E-03	2.68E-03
Sample ID:	555061	Sample Dates:	11/9/2021 - 11/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.95E-02	3.22E-03	3.04E-03
Sample ID:	555931	Sample Dates:	11/16/2021 - 11/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.70E-02	3.64E-03	3.65E-03
Sample ID:	556728	Sample Dates:	11/22/2021 - 11/30/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.49E-02	3.09E-03	3.05E-03
Sample ID:	557044	Sample Dates:	11/30/2021 - 12/7/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	4.46E-02	4.08E-03	3.13E-03
Sample ID:	557469	Sample Dates:	12/7/2021 - 12/13/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.63E-02	3.52E-03	3.37E-03
Sample ID:	557943	Sample Dates:	12/13/2021 - 12/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.54E-02	2.70E-03	2.93E-03
Sample ID:	558377	Sample Dates:	12/20/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.03E-02	3.73E-03	3.69E-03
Sample ID:	559174	Sample Dates:	9/28/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.03E-03	0.00E+00	1.03E-03
				Cs-137	<1.82E-03	0.00E+00	1.82E-03
				Be-7	1.60E-01	4.00E-02	3.70E-02
				K-40	2.93E-02	1.97E-02	2.68E-02
Sample ID:	558592	Sample Dates:	12/28/2021 - 1/5/2022	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.51E-02	2.54E-03	2.79E-03
Sample ID:	559963	Sample Dates:	12/28/2021 - 1/5/2022	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<7.58E-03	0.00E+00	7.58E-03
				Cs-137	<1.12E-02	0.00E+00	1.12E-02
				Be-7	8.14E-02	8.82E-02	0.00E+00
				K-40	3.47E-01	1.22E-01	1.09E-01
Sample Point 261 [INDICATOR - N @ 0.72 miles]							
Sample ID:	536540	Sample Dates:	12/29/2020 - 1/6/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.75E-02	2.72E-03	2.92E-03
Sample ID:	536735	Sample Dates:	1/6/2021 - 1/12/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.47E-02	3.24E-03	3.24E-03
Sample ID:	537288	Sample Dates:	1/12/2021 - 1/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.46E-02	3.03E-03	2.87E-03
Sample ID:	537652	Sample Dates:	1/20/2021 - 1/26/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.64E-02	3.23E-03	3.85E-03
Sample ID:	538044	Sample Dates:	1/26/2021 - 2/2/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.58E-02	2.50E-03	2.71E-03
Sample ID:	538292	Sample Dates:	2/2/2021 - 2/9/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.43E-02	2.73E-03	3.17E-03
Sample ID:	538511	Sample Dates:	2/9/2021 - 2/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.13E-02	2.75E-03	3.59E-03
Sample ID:	538789	Sample Dates:	2/16/2021 - 2/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.32E-02	3.14E-03	3.03E-03

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
539029	2/23/2021 - 3/2/2021	Beta	1.66E-02	3.03E-03	3.61E-03
539240	3/2/2021 - 3/9/2021	Beta	2.23E-02	3.19E-03	3.24E-03
540028	3/9/2021 - 3/15/2021	Beta	2.45E-02	3.15E-03	3.09E-03
540692	3/15/2021 - 3/23/2021	Beta	1.45E-02	2.58E-03	2.97E-03
541404	3/23/2021 - 3/30/2021	Beta	1.34E-02	2.27E-03	2.51E-03
541908	12/29/2020 - 3/30/2021	Cs-134	<1.58E-03	0.00E+00	1.58E-03
		Cs-137	<1.42E-03	0.00E+00	1.42E-03
		Be-7	1.45E-01	3.44E-02	2.88E-02
		K-40	<3.96E-02	0.00E+00	3.96E-02
541903	3/30/2021 - 4/6/2021	Beta	2.91E-02	2.98E-03	2.37E-03
542217	4/6/2021 - 4/13/2021	Beta	2.53E-02	3.32E-03	3.29E-03
542844	4/13/2021 - 4/20/2021	Beta	2.44E-02	3.21E-03	3.10E-03
543231	4/20/2021 - 4/27/2021	Beta	2.81E-02	3.37E-03	3.01E-03
544089	4/27/2021 - 5/4/2021	Beta	2.58E-02	3.24E-03	3.01E-03
544290	5/4/2021 - 5/11/2021	Beta	2.17E-02	3.10E-03	3.17E-03
544614	5/11/2021 - 5/18/2021	Beta	1.93E-02	2.69E-03	2.77E-03
544993	5/18/2021 - 5/25/2021	Beta	3.22E-02	3.57E-03	3.05E-03
545478	5/25/2021 - 6/2/2021	Beta	1.99E-02	2.78E-03	2.80E-03
545775	6/2/2021 - 6/8/2021	Beta	1.61E-02	3.28E-03	4.00E-03
546007	6/8/2021 - 6/15/2021	Beta	1.02E-02	2.21E-03	2.76E-03
546878	6/15/2021 - 6/22/2021	Beta	2.13E-02	3.08E-03	3.13E-03
547169	6/22/2021 - 6/29/2021	Beta	1.28E-02	2.49E-03	3.08E-03
547693	3/30/2021 - 6/29/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<2.02E-03	0.00E+00	2.02E-03
		Be-7	1.72E-01	3.90E-02	3.02E-02
		K-40	2.91E-02	1.78E-02	2.14E-02
547452	6/29/2021 - 7/7/2021	Beta	1.68E-02	2.30E-03	2.31E-03
547688	7/7/2021 - 7/13/2021	Beta	1.72E-02	3.35E-03	4.10E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548077	7/13/2021 - 7/20/2021	Beta	1.26E-02	2.80E-03	3.56E-03
548501	7/20/2021 - 7/27/2021	Beta	2.74E-02	3.03E-03	2.70E-03
548719	7/27/2021 - 8/3/2021	Beta	3.31E-02	3.70E-03	3.38E-03
548952	8/3/2021 - 8/10/2021	Beta	2.23E-02	3.14E-03	3.22E-03
549243	8/10/2021 - 8/17/2021	Beta	1.88E-02	3.09E-03	3.46E-03
549742	8/17/2021 - 8/24/2021	Beta	1.92E-02	2.97E-03	3.08E-03
550025	8/24/2021 - 8/31/2021	Beta	3.17E-02	3.62E-03	3.30E-03
550648	8/31/2021 - 9/8/2021	Beta	2.83E-02	3.15E-03	2.78E-03
551011	9/8/2021 - 9/14/2021	Beta	2.45E-02	3.73E-03	4.03E-03
551642	9/14/2021 - 9/21/2021	Beta	2.53E-02	2.87E-03	2.49E-03
552275	9/21/2021 - 9/28/2021	Beta	2.22E-02	2.82E-03	2.77E-03
552753	6/29/2021 - 9/28/2021	Cs-134	<1.02E-03	0.00E+00	1.02E-03
		Cs-137	<1.80E-03	0.00E+00	1.80E-03
		Be-7	1.82E-01	4.08E-02	3.28E-02
		K-40	<2.88E-02	0.00E+00	2.88E-02
552437	9/28/2021 - 10/5/2021	Beta	4.24E-02	3.64E-03	2.98E-03
552748	10/5/2021 - 10/12/2021	Beta	1.52E-02	2.82E-03	3.25E-03
553234	10/12/2021 - 10/19/2021	Beta	2.64E-02	3.36E-03	3.29E-03
553830	10/19/2021 - 10/26/2021	Beta	3.57E-02	3.78E-03	3.26E-03
554267	10/26/2021 - 11/2/2021	Beta	1.64E-02	2.47E-03	2.56E-03
554577	11/2/2021 - 11/9/2021	Beta	2.35E-02	2.85E-03	2.70E-03
555062	11/9/2021 - 11/16/2021	Beta	2.67E-02	3.11E-03	3.04E-03
555932	11/16/2021 - 11/22/2021	Beta	2.81E-02	3.69E-03	3.66E-03
556729	11/22/2021 - 11/30/2021	Beta	2.45E-02	3.08E-03	3.05E-03
557045	11/30/2021 - 12/7/2021	Beta	3.77E-02	3.81E-03	3.13E-03
557470	12/7/2021 - 12/13/2021	Beta	2.42E-02	3.44E-03	3.40E-03

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557944	12/13/2021 - 12/20/2021	Beta	2.21E-02	3.06E-03	2.93E-03
558378	12/20/2021 - 12/27/2021	Beta	3.13E-02	3.76E-03	3.68E-03
559175	9/28/2021 - 12/27/2021	Cs-134	<2.36E-03	0.00E+00	2.36E-03
		Cs-137	<1.57E-03	0.00E+00	1.57E-03
		Be-7	1.54E-01	3.68E-02	3.24E-02
		K-40	<3.29E-02	0.00E+00	3.29E-02
558593	12/28/2021 - 1/5/2022	Beta	1.29E-02	2.42E-03	2.78E-03
559964	12/28/2021 - 1/5/2022	Cs-134	<9.69E-03	0.00E+00	9.69E-03
		Cs-137	<7.79E-03	0.00E+00	7.79E-03
		Be-7	1.19E-01	7.30E-02	0.00E+00
		K-40	1.24E-01	9.03E-02	1.26E-01

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536541	12/29/2020 - 1/6/2021	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<7.76E-02	0.00E+00	7.76E-02
		K-40	3.33E-01	1.52E-01	1.68E-01
536742	1/6/2021 - 1/12/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<8.47E-03	0.00E+00	8.47E-03
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	4.90E-01	2.24E-01	2.69E-01
537289	1/12/2021 - 1/20/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.03E-02	0.00E+00	1.03E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	3.17E-01	1.41E-01	1.50E-01
537653	1/20/2021 - 1/26/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	7.36E-01	2.38E-01	2.16E-01
538045	1/26/2021 - 2/2/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.15E-02	0.00E+00	1.15E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	6.15E-01	2.00E-01	1.75E-01
538293	2/2/2021 - 2/9/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<8.75E-02	0.00E+00	8.75E-02
		K-40	2.85E-01	1.21E-01	3.36E-02
538512	2/9/2021 - 2/16/2021	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538512	2/9/2021 - 2/16/2021	Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	6.12E-01	2.14E-01	2.23E-01
538790	2/16/2021 - 2/23/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<9.98E-02	0.00E+00	9.98E-02
		K-40	5.45E-01	1.72E-01	3.43E-02
539030	2/23/2021 - 3/2/2021	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<9.69E-02	0.00E+00	9.69E-02
		K-40	2.60E-01	1.47E-01	1.84E-01
539241	3/2/2021 - 3/9/2021	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.13E-01	2.09E-01	2.40E-01
540029	3/9/2021 - 3/15/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	4.91E-01	2.14E-01	2.53E-01
540693	3/15/2021 - 3/23/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<9.23E-03	0.00E+00	9.23E-03
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<8.58E-02	0.00E+00	8.58E-02
		K-40	4.96E-01	1.61E-01	1.14E-01
541405	3/23/2021 - 3/30/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	3.55E-01	1.50E-01	1.21E-01
541909	3/30/2021 - 4/6/2021	I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	4.33E-01	1.84E-01	2.09E-01
542218	4/6/2021 - 4/13/2021	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	6.57E-01	2.13E-01	1.97E-01
542845	4/13/2021 - 4/20/2021	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	2.97E-01	1.71E-01	2.30E-01

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543232	4/20/2021 - 4/27/2021	I-131	<1.01E-02	0.00E+00	1.01E-02
		Cs-134	<1.09E-02	0.00E+00	1.09E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<8.61E-02	0.00E+00	8.61E-02
		K-40	5.45E-01	1.74E-01	2.16E-01
544090	4/27/2021 - 5/4/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	4.42E-01	2.41E-01	2.47E-01
544291	5/4/2021 - 5/11/2021	I-131	<2.94E-02	0.00E+00	2.94E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	7.66E-01	2.86E-01	6.92E-02
544615	5/11/2021 - 5/18/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	5.65E-01	2.93E-01	3.38E-01
544994	5/18/2021 - 5/25/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	3.62E-01	2.43E-01	3.08E-01
545479	5/25/2021 - 6/2/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	3.99E-01	1.91E-01	6.00E-02
545776	6/2/2021 - 6/8/2021	I-131	<3.39E-02	0.00E+00	3.39E-02
		Cs-134	<3.15E-02	0.00E+00	3.15E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<2.20E-01	0.00E+00	2.20E-01
		K-40	4.63E-01	2.85E-01	3.47E-01
546008	6/8/2021 - 6/15/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<5.52E-01	0.00E+00	5.52E-01
546879	6/15/2021 - 6/22/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<2.57E-02	0.00E+00	2.57E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	<4.58E-01	0.00E+00	4.58E-01
547170	6/22/2021 - 6/29/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	5.61E-01	2.43E-01	6.91E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547453	6/29/2021 - 7/7/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	<3.50E-01	0.00E+00	3.50E-01
547694	7/7/2021 - 7/13/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<3.35E-02	0.00E+00	3.35E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<2.54E-01	0.00E+00	2.54E-01
		K-40	<6.13E-01	0.00E+00	6.13E-01
548078	7/13/2021 - 7/20/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	4.35E-01	2.56E-01	3.01E-01
548502	7/20/2021 - 7/27/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<1.91E-02	0.00E+00	1.91E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	3.95E-01	2.27E-01	2.23E-01
548720	7/27/2021 - 8/3/2021	I-131	<3.12E-02	0.00E+00	3.12E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<6.11E-01	0.00E+00	6.11E-01
548953	8/3/2021 - 8/10/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<5.18E-03	0.00E+00	5.18E-03
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	4.40E-01	2.70E-01	3.39E-01
549244	8/10/2021 - 8/17/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.91E-01	0.00E+00	5.91E-01
549743	8/17/2021 - 8/24/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	7.38E-01	2.76E-01	6.66E-02
550026	8/24/2021 - 8/31/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	4.31E-01	2.28E-01	2.04E-01
550649	8/31/2021 - 9/8/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	<3.79E-01	0.00E+00	3.79E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551012	9/8/2021 - 9/14/2021	I-131	<3.98E-02	0.00E+00	3.98E-02
		Cs-134	<3.60E-02	0.00E+00	3.60E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	6.77E-01	3.14E-01	2.78E-01
551643	9/14/2021 - 9/21/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	5.20E-01	2.59E-01	2.53E-01
552276	9/21/2021 - 9/28/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<2.84E-02	0.00E+00	2.84E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
552438	9/28/2021 - 10/5/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	2.37E-01	2.29E-01	3.46E-01
552754	10/5/2021 - 10/12/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	5.55E-01	2.73E-01	2.93E-01
553235	10/12/2021 - 10/19/2021	I-131	<1.33E-02	0.00E+00	1.33E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<5.81E-01	0.00E+00	5.81E-01
553831	10/19/2021 - 10/26/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<5.39E-01	0.00E+00	5.39E-01
554268	10/26/2021 - 11/2/2021	I-131	<3.49E-02	0.00E+00	3.49E-02
		Cs-134	<2.87E-02	0.00E+00	2.87E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	5.85E-01	2.77E-01	2.72E-01
554578	11/2/2021 - 11/9/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<6.64E-01	0.00E+00	6.64E-01
555063	11/9/2021 - 11/16/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	4.82E-01	2.74E-01	3.24E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555933	11/16/2021 - 11/22/2021	I-131	<3.00E-02	0.00E+00	3.00E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<3.09E-02	0.00E+00	3.09E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	5.23E-01	2.97E-01	3.43E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556730	11/22/2021 - 11/30/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.59E-02	0.00E+00	2.59E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	4.50E-01	2.21E-01	1.96E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557046	11/30/2021 - 12/7/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	3.00E-01	2.34E-01	3.23E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557471	12/7/2021 - 12/13/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<3.23E-02	0.00E+00	3.23E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<2.46E-01	0.00E+00	2.46E-01
		K-40	<7.12E-01	0.00E+00	7.12E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557945	12/13/2021 - 12/20/2021	I-131	<3.13E-02	0.00E+00	3.13E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	2.72E-01	2.59E-01	3.93E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558379	12/20/2021 - 12/27/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<2.14E-02	0.00E+00	2.14E-02
		Cs-137	<2.96E-02	0.00E+00	2.96E-02
		Be-7	<2.19E-01	0.00E+00	2.19E-01
		K-40	3.61E-01	2.52E-01	3.31E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558594	12/28/2021 - 1/5/2022	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	<4.66E-01	0.00E+00	4.66E-01

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536542	12/29/2020 - 1/6/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<9.49E-02	0.00E+00	9.49E-02
		K-40	5.22E-01	1.82E-01	1.76E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536743	1/6/2021 - 1/12/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537290	1/12/2021 - 1/20/2021	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<9.50E-03	0.00E+00	9.50E-03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537290	1/12/2021 - 1/20/2021	Be-7	<8.47E-02	0.00E+00	8.47E-02
		K-40	4.16E-01	1.50E-01	1.26E-01
537654	1/20/2021 - 1/26/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	3.36E-01	1.74E-01	2.05E-01
538046	1/26/2021 - 2/2/2021	I-131	<9.90E-03	0.00E+00	9.90E-03
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	4.05E-01	1.58E-01	1.30E-01
538294	2/2/2021 - 2/9/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	3.37E-01	1.76E-01	2.27E-01
538513	2/9/2021 - 2/16/2021	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.18E-02	0.00E+00	1.18E-02
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	1.89E-01	1.28E-01	1.69E-01
538791	2/16/2021 - 2/23/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	4.32E-01	1.50E-01	3.35E-02
539031	2/23/2021 - 3/2/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<8.89E-03	0.00E+00	8.89E-03
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	4.28E-01	1.77E-01	1.91E-01
539242	3/2/2021 - 3/9/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<8.81E-02	0.00E+00	8.81E-02
		K-40	4.53E-01	1.74E-01	1.66E-01
540030	3/9/2021 - 3/15/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.13E-02	0.00E+00	1.13E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.96E-01	2.14E-01	2.48E-01
540694	3/15/2021 - 3/23/2021	I-131	<1.24E-02	0.00E+00	1.24E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.13E-02	0.00E+00	1.13E-02
		Be-7	<8.75E-02	0.00E+00	8.75E-02
		K-40	3.09E-01	1.41E-01	1.52E-01
541406	3/23/2021 - 3/30/2021	I-131	<1.28E-02	0.00E+00	1.28E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541406	3/23/2021 - 3/30/2021	Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	5.40E-01	2.12E-01	2.46E-01
541910	3/30/2021 - 4/6/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	6.38E-01	2.30E-01	2.63E-01
542219	4/6/2021 - 4/13/2021	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<5.23E-02	0.00E+00	5.23E-02
		K-40	4.32E-01	1.76E-01	1.81E-01
542846	4/13/2021 - 4/20/2021	I-131	<1.56E-02	0.00E+00	1.56E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	2.56E-01	1.63E-01	2.21E-01
543233	4/20/2021 - 4/27/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	4.97E-01	1.85E-01	1.84E-01
544091	4/27/2021 - 5/4/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	4.30E-01	2.92E-01	4.02E-01
544292	5/4/2021 - 5/11/2021	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.89E-01	0.00E+00	5.89E-01
544616	5/11/2021 - 5/18/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<4.46E-03	0.00E+00	4.46E-03
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	6.43E-01	2.77E-01	2.42E-01
544995	5/18/2021 - 5/25/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<2.75E-02	0.00E+00	2.75E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<2.18E-01	0.00E+00	2.18E-01
		K-40	6.06E-01	2.86E-01	2.93E-01
545480	5/25/2021 - 6/2/2021	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<9.38E-02	0.00E+00	9.38E-02
		K-40	3.74E-01	1.30E-01	2.90E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545777	6/2/2021 - 6/8/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	5.03E-01	2.80E-01	2.99E-01
546009	6/8/2021 - 6/15/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<4.49E-01	0.00E+00	4.49E-01
546880	6/15/2021 - 6/22/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	4.66E-01	2.54E-01	2.82E-01
547171	6/22/2021 - 6/29/2021	I-131	<3.26E-02	0.00E+00	3.26E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
547454	6/29/2021 - 7/7/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	2.42E-01	1.47E-01	5.96E-02
547695	7/7/2021 - 7/13/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	<5.43E-01	0.00E+00	5.43E-01
548079	7/13/2021 - 7/20/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	4.26E-01	2.40E-01	2.62E-01
548503	7/20/2021 - 7/27/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	6.66E-01	2.67E-01	6.94E-02
548721	7/27/2021 - 8/3/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	6.91E-01	2.89E-01	2.52E-01
548954	8/3/2021 - 8/10/2021	I-131	<3.33E-02	0.00E+00	3.33E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.98E-02	0.00E+00	2.98E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	7.62E-01	2.85E-01	6.89E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549245	8/10/2021 - 8/17/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.91E-02	0.00E+00	2.91E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<5.60E-01	0.00E+00	5.60E-01
549744	8/17/2021 - 8/24/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	<5.30E-01	0.00E+00	5.30E-01
550027	8/24/2021 - 8/31/2021	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<4.39E-01	0.00E+00	4.39E-01
550650	8/31/2021 - 9/8/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	4.54E-01	2.07E-01	6.16E-02
551013	9/8/2021 - 9/14/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	6.16E-01	2.98E-01	2.83E-01
551644	9/14/2021 - 9/21/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	4.89E-01	2.22E-01	6.63E-02
552277	9/21/2021 - 9/28/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	6.29E-01	2.77E-01	2.33E-01
552439	9/28/2021 - 10/5/2021	I-131	<3.11E-02	0.00E+00	3.11E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<6.23E-01	0.00E+00	6.23E-01
552755	10/5/2021 - 10/12/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	3.98E-01	2.02E-01	6.74E-02
553236	10/12/2021 - 10/19/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<4.02E-01	0.00E+00	4.02E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553832	10/19/2021 - 10/26/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<4.51E-01	0.00E+00	4.51E-01
554269	10/26/2021 - 11/2/2021	I-131	<3.07E-02	0.00E+00	3.07E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	<5.34E-01	0.00E+00	5.34E-01
554579	11/2/2021 - 11/9/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<2.56E-02	0.00E+00	2.56E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	3.58E-01	2.58E-01	3.57E-01
555064	11/9/2021 - 11/16/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<5.16E-03	0.00E+00	5.16E-03
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<2.04E-01	0.00E+00	2.04E-01
		K-40	<6.30E-01	0.00E+00	6.30E-01
555934	11/16/2021 - 11/22/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<3.42E-02	0.00E+00	3.42E-02
		Cs-137	<2.80E-02	0.00E+00	2.80E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<7.09E-01	0.00E+00	7.09E-01
556731	11/22/2021 - 11/30/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<4.58E-03	0.00E+00	4.58E-03
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	<5.16E-01	0.00E+00	5.16E-01
557047	11/30/2021 - 12/7/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<2.64E-02	0.00E+00	2.64E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<6.08E-01	0.00E+00	6.08E-01
557472	12/7/2021 - 12/13/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.61E-02	0.00E+00	2.61E-02
		Cs-137	<3.41E-02	0.00E+00	3.41E-02
		Be-7	<2.23E-01	0.00E+00	2.23E-01
		K-40	5.95E-01	2.90E-01	2.81E-01
557946	12/13/2021 - 12/20/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<3.14E-02	0.00E+00	3.14E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<2.04E-01	0.00E+00	2.04E-01
		K-40	6.20E-01	2.69E-01	2.25E-01
558380	12/20/2021 - 12/27/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<2.43E-01	0.00E+00	2.43E-01
		K-40	4.55E-01	2.17E-01	6.85E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558595	12/28/2021 - 1/5/2022	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<4.07E-01	0.00E+00	4.07E-01

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536543	12/29/2020 - 1/6/2021	I-131	<1.31E-02	0.00E+00	1.31E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	5.81E-01	1.75E-01	1.27E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536744	1/6/2021 - 1/12/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	4.88E-01	2.03E-01	2.13E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537291	1/12/2021 - 1/20/2021	I-131	<1.11E-02	0.00E+00	1.11E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<8.96E-02	0.00E+00	8.96E-02
		K-40	<2.22E-01	0.00E+00	2.22E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537655	1/20/2021 - 1/26/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	3.80E-01	1.52E-01	3.96E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538047	1/26/2021 - 2/2/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	6.80E-01	1.98E-01	3.61E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538295	2/2/2021 - 2/9/2021	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.29E-01	1.48E-01	1.50E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538514	2/9/2021 - 2/16/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	5.43E-01	1.84E-01	1.25E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538792	2/16/2021 - 2/23/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.85E-02	0.00E+00	1.85E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<9.44E-02	0.00E+00	9.44E-02
		K-40	3.47E-01	1.43E-01	1.18E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539032	2/23/2021 - 3/2/2021	I-131	<1.42E-02	0.00E+00	1.42E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539032	2/23/2021 - 3/2/2021	Be-7	<8.81E-02	0.00E+00	8.81E-02
		K-40	3.19E-01	1.53E-01	1.68E-01
539243	3/2/2021 - 3/9/2021	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.40E-01	1.93E-01	1.86E-01
540031	3/9/2021 - 3/15/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	7.12E-01	2.23E-01	1.64E-01
540695	3/15/2021 - 3/23/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<6.33E-02	0.00E+00	6.33E-02
		K-40	2.64E-01	1.56E-01	2.08E-01
541407	3/23/2021 - 3/30/2021	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<8.37E-02	0.00E+00	8.37E-02
		K-40	3.89E-01	1.68E-01	1.78E-01
541911	3/30/2021 - 4/6/2021	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<3.18E-01	0.00E+00	3.18E-01
542220	4/6/2021 - 4/13/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<8.32E-02	0.00E+00	8.32E-02
		K-40	<3.41E-01	0.00E+00	3.41E-01
542847	4/13/2021 - 4/20/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<8.56E-02	0.00E+00	8.56E-02
		K-40	4.48E-01	1.59E-01	1.08E-01
543234	4/20/2021 - 4/27/2021	I-131	<1.48E-02	0.00E+00	1.48E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	4.44E-01	1.97E-01	2.39E-01
544092	4/27/2021 - 5/4/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<3.18E-02	0.00E+00	3.18E-02
		Cs-137	<2.74E-02	0.00E+00	2.75E-02
		Be-7	<7.99E-02	0.00E+00	7.99E-02
		K-40	6.70E-01	2.83E-01	2.42E-01
544293	5/4/2021 - 5/11/2021	I-131	<2.88E-02	0.00E+00	2.88E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544293	5/4/2021 - 5/11/2021	Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<8.04E-02	0.00E+00	8.04E-02
		K-40	<4.28E-01	0.00E+00	4.28E-01
544617	5/11/2021 - 5/18/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	4.84E-01	2.93E-01	3.70E-01
544996	5/18/2021 - 5/25/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<3.06E-02	0.00E+00	3.06E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.05E-01	2.30E-01	2.45E-01
545481	5/25/2021 - 6/2/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
545778	6/2/2021 - 6/8/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<5.79E-01	0.00E+00	5.79E-01
546010	6/8/2021 - 6/15/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<4.77E-01	0.00E+00	4.77E-01
546881	6/15/2021 - 6/22/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	<4.75E-01	0.00E+00	4.75E-01
547172	6/22/2021 - 6/29/2021	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<6.62E-01	0.00E+00	6.62E-01
547455	6/29/2021 - 7/7/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
547696	7/7/2021 - 7/13/2021	I-131	<2.98E-02	0.00E+00	2.98E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<6.26E-01	0.00E+00	6.26E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548080	7/13/2021 - 7/20/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<5.26E-01	0.00E+00	5.26E-01
548504	7/20/2021 - 7/27/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	4.93E-01	2.64E-01	2.95E-01
548722	7/27/2021 - 8/3/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	3.14E-01	2.80E-01	4.22E-01
548955	8/3/2021 - 8/10/2021	I-131	<3.34E-02	0.00E+00	3.34E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	5.39E-01	2.76E-01	2.98E-01
549246	8/10/2021 - 8/17/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	<5.81E-01	0.00E+00	5.81E-01
549745	8/17/2021 - 8/24/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<4.55E-01	0.00E+00	4.55E-01
550028	8/24/2021 - 8/31/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	4.33E-01	2.28E-01	2.17E-01
550651	8/31/2021 - 9/8/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.77E-02	0.00E+00	2.77E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	4.75E-01	2.26E-01	2.04E-01
551014	9/8/2021 - 9/14/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	2.72E-01	2.32E-01	3.20E-01
551645	9/14/2021 - 9/21/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<4.97E-01	0.00E+00	4.97E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552278	9/21/2021 - 9/28/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	4.92E-01	2.85E-01	3.60E-01
552440	9/28/2021 - 10/5/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<4.78E-01	0.00E+00	4.78E-01
552756	10/5/2021 - 10/12/2021	I-131	<3.12E-02	0.00E+00	3.12E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
553237	10/12/2021 - 10/19/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<5.47E-01	0.00E+00	5.47E-01
553833	10/19/2021 - 10/26/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.27E-01	2.76E-01	3.21E-01
554270	10/26/2021 - 11/2/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<5.23E-01	0.00E+00	5.23E-01
554580	11/2/2021 - 11/9/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<3.54E-01	0.00E+00	3.54E-01
555065	11/9/2021 - 11/16/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	6.46E-01	2.58E-01	6.73E-02
555935	11/16/2021 - 11/22/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.65E-01	0.00E+00	5.65E-01
556732	11/22/2021 - 11/30/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.22E-02	0.00E+00	2.22E-02
		Be-7	<9.12E-02	0.00E+00	9.12E-02
		K-40	3.53E-01	1.79E-01	5.98E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557048	11/30/2021 - 12/7/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.96E-01	0.00E+00	1.96E-01
		K-40	<5.21E-01	0.00E+00	5.21E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557473	12/7/2021 - 12/13/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.62E-02	0.00E+00	2.62E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<5.52E-01	0.00E+00	5.52E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557947	12/13/2021 - 12/20/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.51E-01	0.00E+00	5.51E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558381	12/20/2021 - 12/27/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<2.56E-02	0.00E+00	2.56E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	3.64E-01	2.56E-01	3.42E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558596	12/28/2021 - 1/5/2022	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	5.41E-01	2.55E-01	2.78E-01

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536545	12/29/2020 - 1/6/2021	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	4.25E-01	1.63E-01	1.67E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536745	1/6/2021 - 1/12/2021	I-131	<1.27E-02	0.00E+00	1.27E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	6.30E-01	2.41E-01	2.53E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537292	1/12/2021 - 1/20/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.18E-01	1.87E-01	2.29E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537656	1/20/2021 - 1/26/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	5.50E-01	1.98E-01	1.52E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538048	1/26/2021 - 2/2/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538048	1/26/2021 - 2/2/2021	Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.63E-01	2.52E-01	3.32E-01
538296	2/2/2021 - 2/9/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<8.71E-02	0.00E+00	8.71E-02
		K-40	5.54E-01	2.13E-01	2.32E-01
538515	2/9/2021 - 2/16/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	6.51E-01	1.97E-01	1.32E-01
538793	2/16/2021 - 2/23/2021	I-131	<1.56E-02	0.00E+00	1.56E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<9.26E-02	0.00E+00	9.26E-02
		K-40	3.62E-01	1.50E-01	1.33E-01
539033	2/23/2021 - 3/2/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	2.98E-01	1.85E-01	2.57E-01
539244	3/2/2021 - 3/9/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	3.75E-01	1.55E-01	1.41E-01
540032	3/9/2021 - 3/15/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	7.02E-01	2.41E-01	2.46E-01
540696	3/15/2021 - 3/23/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.33E-01	1.75E-01	1.42E-01
541408	3/23/2021 - 3/30/2021	I-131	<1.29E-02	0.00E+00	1.29E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	4.03E-01	1.51E-01	1.04E-01
541912	3/30/2021 - 4/6/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	4.35E-01	1.95E-01	2.29E-01
542221	4/6/2021 - 4/13/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<1.70E-02	0.00E+00	1.70E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542221	4/6/2021 - 4/13/2021	Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	4.73E-01	1.86E-01	1.82E-01
542848	4/13/2021 - 4/20/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.15E-01	1.95E-01	1.99E-01
543235	4/20/2021 - 4/27/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	3.42E-01	1.61E-01	1.81E-01
544093	4/27/2021 - 5/4/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.06E-01	0.00E+00	5.06E-01
544294	5/4/2021 - 5/11/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	<6.25E-01	0.00E+00	6.25E-01
544618	5/11/2021 - 5/18/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<5.70E-01	0.00E+00	5.70E-01
544997	5/18/2021 - 5/25/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<3.76E-01	0.00E+00	3.76E-01
545482	5/25/2021 - 6/2/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<4.70E-01	0.00E+00	4.70E-01
545779	6/2/2021 - 6/8/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<5.32E-03	0.00E+00	5.32E-03
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
546011	6/8/2021 - 6/15/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	<5.74E-01	0.00E+00	5.74E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546882	6/15/2021 - 6/22/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<2.22E-02	0.00E+00	2.22E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<4.03E-01	0.00E+00	4.03E-01
547173	6/22/2021 - 6/29/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	2.67E-01	1.89E-01	2.18E-01
547456	6/29/2021 - 7/7/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.37E-02	0.00E+00	2.37E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	4.54E-01	2.57E-01	3.18E-01
547697	7/7/2021 - 7/13/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<3.14E-02	0.00E+00	3.14E-02
		Cs-137	<3.06E-02	0.00E+00	3.06E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	<5.84E-01	0.00E+00	5.84E-01
548081	7/13/2021 - 7/20/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	<4.89E-01	0.00E+00	4.89E-01
548505	7/20/2021 - 7/27/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<3.12E-02	0.00E+00	3.12E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	4.70E-01	2.74E-01	3.39E-01
548723	7/27/2021 - 8/3/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	3.67E-01	2.29E-01	2.75E-01
548956	8/3/2021 - 8/10/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	3.04E-01	2.25E-01	2.98E-01
549247	8/10/2021 - 8/17/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	<5.06E-01	0.00E+00	5.06E-01
549746	8/17/2021 - 8/24/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.00E-01	0.00E+00	5.00E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550029	8/24/2021 - 8/31/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<3.34E-02	0.00E+00	3.34E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<2.13E-01	0.00E+00	2.13E-01
		K-40	6.74E-01	2.87E-01	2.40E-01
550652	8/31/2021 - 9/8/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	4.89E-01	2.12E-01	6.02E-02
551015	9/8/2021 - 9/14/2021	I-131	<3.28E-02	0.00E+00	3.28E-02
		Cs-134	<3.11E-02	0.00E+00	3.11E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	7.70E-01	3.02E-01	7.73E-02
551646	9/14/2021 - 9/21/2021	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.73E-01	2.43E-01	6.75E-02
552279	9/21/2021 - 9/28/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<3.10E-02	0.00E+00	3.10E-02
		Be-7	<9.89E-02	0.00E+00	9.89E-02
		K-40	3.63E-01	2.40E-01	3.01E-01
552441	9/28/2021 - 10/5/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<5.72E-01	0.00E+00	5.72E-01
552757	10/5/2021 - 10/12/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.84E-02	0.00E+00	2.84E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	<4.44E-01	0.00E+00	4.44E-01
553238	10/12/2021 - 10/19/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	<6.15E-01	0.00E+00	6.15E-01
553834	10/19/2021 - 10/26/2021	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<3.24E-02	0.00E+00	3.24E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	<4.20E-01	0.00E+00	4.20E-01
554271	10/26/2021 - 11/2/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<3.19E-02	0.00E+00	3.19E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	2.81E-01	2.85E-01	4.45E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554581	11/2/2021 - 11/9/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	4.82E-01	3.12E-01	4.22E-01
555066	11/9/2021 - 11/16/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	4.02E-01	2.04E-01	6.81E-02
555936	11/16/2021 - 11/22/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	5.61E-01	3.52E-01	4.81E-01
556733	11/22/2021 - 11/30/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<3.89E-01	0.00E+00	3.89E-01
557049	11/30/2021 - 12/7/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	2.58E-01	2.47E-01	3.76E-01
557474	12/7/2021 - 12/13/2021	I-131	<3.26E-02	0.00E+00	3.26E-02
		Cs-134	<3.01E-02	0.00E+00	3.01E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<5.33E-01	0.00E+00	5.33E-01
557948	12/13/2021 - 12/20/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<3.92E-01	0.00E+00	3.92E-01
558382	12/20/2021 - 12/27/2021	I-131	<3.34E-02	0.00E+00	3.34E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<2.04E-01	0.00E+00	2.04E-01
		K-40	<5.73E-01	0.00E+00	5.73E-01
558597	12/28/2021 - 1/5/2022	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	<2.89E-01	0.00E+00	2.89E-01

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536546	12/29/2020 - 1/6/2021	I-131	<1.45E-02	0.00E+00	1.45E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536546	12/29/2020 - 1/6/2021	Be-7	<8.60E-02	0.00E+00	8.60E-02
		K-40	3.64E-01	1.62E-01	1.89E-01
536746	1/6/2021 - 1/12/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.41E-02	0.00E+00	2.41E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	8.89E-01	2.69E-01	2.36E-01
537293	1/12/2021 - 1/20/2021	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	3.48E-01	1.63E-01	1.98E-01
537657	1/20/2021 - 1/26/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	2.30E-02	8.01E-02	1.43E-01
		K-40	5.26E-01	1.99E-01	1.81E-01
538049	1/26/2021 - 2/2/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<8.65E-02	0.00E+00	8.65E-02
		K-40	5.55E-01	1.91E-01	1.74E-01
538297	2/2/2021 - 2/9/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	3.86E-01	2.10E-01	2.87E-01
538516	2/9/2021 - 2/16/2021	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	4.11E-01	1.93E-01	2.36E-01
538794	2/16/2021 - 2/23/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.86E-02	0.00E+00	9.86E-02
		K-40	5.04E-01	1.80E-01	1.64E-01
539034	2/23/2021 - 3/2/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.33E-01	1.97E-01	1.96E-01
539245	3/2/2021 - 3/9/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<9.73E-02	0.00E+00	9.73E-02
		K-40	<2.99E-01	0.00E+00	2.99E-01
540033	3/9/2021 - 3/15/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<1.91E-02	0.00E+00	1.91E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540033	3/9/2021 - 3/15/2021	Cs-134	<2.15E-02	0.00E+00	2.15E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	5.42E-01	2.03E-01	1.96E-01
540697	3/15/2021 - 3/23/2021	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	4.19E-01	1.73E-01	1.97E-01
541409	3/23/2021 - 3/30/2021	I-131	<1.09E-02	0.00E+00	1.09E-02
		Cs-134	<1.02E-02	0.00E+00	1.02E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<7.77E-02	0.00E+00	7.77E-02
		K-40	<2.59E-01	0.00E+00	2.59E-01
541913	3/30/2021 - 4/6/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	3.95E-01	1.77E-01	2.03E-01
542222	4/6/2021 - 4/13/2021	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<9.03E-02	0.00E+00	9.03E-02
		K-40	5.57E-01	2.10E-01	2.24E-01
542849	4/13/2021 - 4/20/2021	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<7.45E-02	0.00E+00	7.45E-02
		K-40	6.39E-01	1.42E-01	7.96E-02
543236	4/20/2021 - 4/27/2021	I-131	<1.37E-02	0.00E+00	1.37E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	4.57E-01	1.77E-01	1.75E-01
544094	4/27/2021 - 5/4/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	4.71E-01	2.80E-01	3.55E-01
544295	5/4/2021 - 5/11/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<4.11E-01	0.00E+00	4.11E-01
544619	5/11/2021 - 5/18/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	4.91E-01	2.23E-01	6.66E-02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544998	5/18/2021 - 5/25/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<4.97E-01	0.00E+00	4.97E-01
545483	5/25/2021 - 6/2/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	<4.56E-01	0.00E+00	4.56E-01
545780	6/2/2021 - 6/8/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<3.11E-02	0.00E+00	3.11E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.88E-01	0.00E+00	5.88E-01
546012	6/8/2021 - 6/15/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	3.47E-01	2.14E-01	2.40E-01
546883	6/15/2021 - 6/22/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	<5.45E-01	0.00E+00	5.45E-01
547174	6/22/2021 - 6/29/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<5.26E-03	0.00E+00	5.26E-03
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<3.31E-01	0.00E+00	3.31E-01
547457	6/29/2021 - 7/7/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	4.77E-01	2.07E-01	5.87E-02
547698	7/7/2021 - 7/13/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<3.27E-02	0.00E+00	3.27E-02
		Cs-137	<2.98E-02	0.00E+00	2.98E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	<5.61E-01	0.00E+00	5.61E-01
548082	7/13/2021 - 7/20/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<5.56E-01	0.00E+00	5.56E-01
548506	7/20/2021 - 7/27/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.92E-02	0.00E+00	2.92E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<4.57E-01	0.00E+00	4.57E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548724	7/27/2021 - 8/3/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<4.53E-03	0.00E+00	4.53E-03
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	3.26E-01	1.83E-01	6.80E-02
548957	8/3/2021 - 8/10/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<4.94E-01	0.00E+00	4.94E-01
549248	8/10/2021 - 8/17/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<5.03E-01	0.00E+00	5.03E-01
549747	8/17/2021 - 8/24/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<3.56E-01	0.00E+00	3.56E-01
550030	8/24/2021 - 8/31/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	<3.79E-01	0.00E+00	3.79E-01
550653	8/31/2021 - 9/8/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<4.44E-01	0.00E+00	4.44E-01
551016	9/8/2021 - 9/14/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<3.11E-02	0.00E+00	3.11E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	<5.68E-01	0.00E+00	5.68E-01
551647	9/14/2021 - 9/21/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	<5.69E-01	0.00E+00	5.69E-01
552280	9/21/2021 - 9/28/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	4.69E-01	2.43E-01	2.19E-01
552442	9/28/2021 - 10/5/2021	I-131	<3.74E-02	0.00E+00	3.74E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	4.60E-01	3.04E-01	4.17E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552758	10/5/2021 - 10/12/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<7.84E-02	0.00E+00	7.84E-02
		K-40	3.90E-01	2.33E-01	2.60E-01
553239	10/12/2021 - 10/19/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	5.64E-01	2.84E-01	3.22E-01
553835	10/19/2021 - 10/26/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	4.98E-01	2.32E-01	7.11E-02
554272	10/26/2021 - 11/2/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<2.63E-02	0.00E+00	2.63E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<2.01E-01	0.00E+00	2.01E-01
		K-40	<5.62E-01	0.00E+00	5.62E-01
554582	11/2/2021 - 11/9/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<3.21E-02	0.00E+00	3.21E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	8.07E-01	3.04E-01	2.20E-01
555067	11/9/2021 - 11/16/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	4.13E-01	2.03E-01	6.58E-02
555937	11/16/2021 - 11/22/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<4.52E-01	0.00E+00	4.52E-01
556734	11/22/2021 - 11/30/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.79E-01	2.00E-01	1.90E-01
557050	11/30/2021 - 12/7/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<5.38E-01	0.00E+00	5.38E-01
557475	12/7/2021 - 12/13/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<4.81E-01	0.00E+00	4.81E-01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 261 [INDICATOR - N @ 0.72 miles]

Sample ID:	557949	Sample Dates:	12/13/2021 - 12/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<2.53E-02	0.00E+00	2.53E-02
				Cs-134	<2.01E-02	0.00E+00	2.01E-02
				Cs-137	<2.42E-02	0.00E+00	2.42E-02
				Be-7	<1.40E-01	0.00E+00	1.40E-01
				K-40	<5.98E-01	0.00E+00	5.98E-01

Sample ID:	558383	Sample Dates:	12/20/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<1.94E-02	0.00E+00	1.94E-02
				Cs-134	<2.84E-02	0.00E+00	2.84E-02
				Cs-137	<1.61E-02	0.00E+00	1.61E-02
				Be-7	<1.54E-01	0.00E+00	1.54E-01
				K-40	2.59E-01	1.84E-01	2.01E-01

Sample ID:	558598	Sample Dates:	12/28/2021 - 1/5/2022	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<2.27E-02	0.00E+00	2.27E-02
				Cs-134	<2.01E-02	0.00E+00	2.01E-02
				Cs-137	<1.89E-02	0.00E+00	1.89E-02
				Be-7	<1.15E-01	0.00E+00	1.15E-01
				K-40	4.59E-01	2.43E-01	2.80E-01

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

Sample Point 260 [INDICATOR - SSE @ 2 miles]

Sample ID:	536688	Sample Dates:	1/6/2021 - 1/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<1.38E+01	0.00E+00	1.38E+01
					Fe-59	<3.49E+01	0.00E+00	3.49E+01
					Co-60	<1.31E+01	0.00E+00	1.31E+01
					Zn-65	<3.15E+01	0.00E+00	3.15E+01
					Zr-95	<2.39E+01	0.00E+00	2.39E+01
					Nb-95	<1.80E+01	0.00E+00	1.80E+01
					I-131	<1.37E+01	0.00E+00	1.37E+01
					Cs-134	<1.94E+01	0.00E+00	1.94E+01
					Cs-137	<1.44E+01	0.00E+00	1.44E+01
					BaLa-140	<1.69E+01	0.00E+00	1.69E+01
					Be-7	3.04E+02	1.24E+02	1.74E+02
					K-40	3.77E+03	5.06E+02	2.84E+02

Sample ID:	544174	Sample Dates:	5/4/2021 - 5/4/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<1.11E+01	0.00E+00	1.11E+01
					Fe-59	<2.52E+01	0.00E+00	2.52E+01
					Co-60	<1.33E+01	0.00E+00	1.33E+01
					Zn-65	<2.44E+01	0.00E+00	2.44E+01
					Zr-95	<1.65E+01	0.00E+00	1.65E+01
					Nb-95	<1.26E+01	0.00E+00	1.26E+01
					I-131	<1.06E+01	0.00E+00	1.06E+01
					Cs-134	<1.18E+01	0.00E+00	1.18E+01
					Cs-137	<1.20E+01	0.00E+00	1.20E+01
					BaLa-140	<9.89E+00	0.00E+00	9.89E+00
					Be-7	1.19E+02	8.44E+01	1.30E+02
					K-40	3.02E+03	4.07E+02	1.41E+02

Sample ID:	545689	Sample Dates:	6/2/2021 - 6/2/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<8.85E+00	0.00E+00	8.85E+00
					Fe-59	<1.87E+01	0.00E+00	1.87E+01
					Co-60	<1.20E+01	0.00E+00	1.20E+01
					Zn-65	<1.90E+01	0.00E+00	1.90E+01
					Zr-95	<1.47E+01	0.00E+00	1.47E+01
					Nb-95	<7.99E+00	0.00E+00	7.99E+00
					I-131	<7.70E+00	0.00E+00	7.70E+00
					Cs-134	<1.04E+01	0.00E+00	1.04E+01
					Cs-137	<9.55E+00	0.00E+00	9.55E+00
					BaLa-140	<7.98E+00	0.00E+00	7.98E+00
					Be-7	<6.86E+01	0.00E+00	6.86E+01
					K-40	2.50E+03	3.15E+02	1.46E+02

Sample ID:	547397	Sample Dates:	7/7/2021 - 7/7/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<1.32E+01	0.00E+00	1.32E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 260 [INDICATOR - SSE @ 2 miles]

Sample ID:	Sample Dates:	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
547397	7/7/2021 - 7/7/2021	MIXEDCROPS	Fe-59	<3.75E+01	0.00E+00	3.75E+01
			Co-60	<1.39E+01	0.00E+00	1.39E+01
			Zn-65	<3.74E+01	0.00E+00	3.74E+01
			Zr-95	<2.65E+01	0.00E+00	2.65E+01
			Nb-95	<1.53E+01	0.00E+00	1.53E+01
			I-131	<1.19E+01	0.00E+00	1.19E+01
			Cs-134	<1.41E+01	0.00E+00	1.41E+01
			Cs-137	<1.13E+01	0.00E+00	1.13E+01
			BaLa-140	<1.76E+01	0.00E+00	1.76E+01
			Be-7	<1.18E+02	0.00E+00	1.18E+02
			K-40	2.32E+03	4.08E+02	2.14E+02
548672	8/3/2021 - 8/3/2021	MIXEDCROPS	Co-58	<7.04E+00	0.00E+00	7.04E+00
			Fe-59	<1.76E+01	0.00E+00	1.76E+01
			Co-60	<8.12E+00	0.00E+00	8.12E+00
			Zn-65	<1.83E+01	0.00E+00	1.83E+01
			Zr-95	<1.57E+01	0.00E+00	1.57E+01
			Nb-95	<9.06E+00	0.00E+00	9.06E+00
			I-131	<8.12E+00	0.00E+00	8.12E+00
			Cs-134	<8.13E+00	0.00E+00	8.13E+00
			Cs-137	<9.20E+00	0.00E+00	9.20E+00
			BaLa-140	<9.84E+00	0.00E+00	9.84E+00
			Be-7	<6.26E+01	0.00E+00	6.26E+01
K-40	2.35E+03	2.89E+02	1.25E+02			
549978	9/8/2021 - 9/8/2021	MIXEDCROPS	Co-58	<9.97E+00	0.00E+00	9.97E+00
			Fe-59	<2.36E+01	0.00E+00	2.36E+01
			Co-60	<9.48E+00	0.00E+00	9.48E+00
			Zn-65	<2.53E+01	0.00E+00	2.53E+01
			Zr-95	<1.73E+01	0.00E+00	1.73E+01
			Nb-95	<1.02E+01	0.00E+00	1.02E+01
			I-131	<1.30E+01	0.00E+00	1.30E+01
			Cs-134	<1.04E+01	0.00E+00	1.04E+01
			Cs-137	<1.15E+01	0.00E+00	1.15E+01
			BaLa-140	<8.65E+00	0.00E+00	8.65E+00
			Be-7	<9.20E+01	0.00E+00	9.20E+01
K-40	2.71E+03	3.40E+02	1.23E+02			
552281	10/5/2021 - 10/5/2021	MIXEDCROPS	Co-58	<1.05E+01	0.00E+00	1.05E+01
			Fe-59	<1.99E+01	0.00E+00	1.99E+01
			Co-60	<9.54E+00	0.00E+00	9.54E+00
			Zn-65	<2.24E+01	0.00E+00	2.24E+01
			Zr-95	<1.36E+01	0.00E+00	1.36E+01
			Nb-95	<9.06E+00	0.00E+00	9.06E+00
			I-131	<9.10E+00	0.00E+00	9.10E+00
			Cs-134	<1.02E+01	0.00E+00	1.02E+01
			Cs-137	<9.78E+00	0.00E+00	9.78E+00
			BaLa-140	<8.75E+00	0.00E+00	8.75E+00
			Be-7	8.98E+01	6.89E+01	1.08E+02
K-40	2.25E+03	3.03E+02	1.62E+02			
554031	11/2/2021 - 11/2/2021	MIXEDCROPS	Co-58	<1.09E+01	0.00E+00	1.09E+01
			Fe-59	<2.18E+01	0.00E+00	2.18E+01
			Co-60	<8.14E+00	0.00E+00	8.14E+00
			Zn-65	<2.66E+01	0.00E+00	2.66E+01
			Zr-95	<1.51E+01	0.00E+00	1.51E+01
			Nb-95	<9.81E+00	0.00E+00	9.81E+00
			I-131	<9.49E+00	0.00E+00	9.49E+00
			Cs-134	<1.09E+01	0.00E+00	1.09E+01
			Cs-137	<7.22E+00	0.00E+00	7.22E+00
			BaLa-140	<1.38E+01	0.00E+00	1.38E+01
			Be-7	2.04E+02	7.93E+01	1.07E+02
K-40	2.70E+03	3.52E+02	1.10E+02			

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 260 [INDICATOR - SSE @ 2 miles]

Sample ID:	556374	Sample Dates:	12/7/2021 - 12/7/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<7.92E+00	0.00E+00	7.92E+00
					Fe-59	<2.25E+01	0.00E+00	2.25E+01
					Co-60	<1.18E+01	0.00E+00	1.18E+01
					Zn-65	<2.44E+01	0.00E+00	2.44E+01
					Zr-95	<1.46E+01	0.00E+00	1.46E+01
					Nb-95	<8.60E+00	0.00E+00	8.60E+00
					I-131	<8.76E+00	0.00E+00	8.76E+00
					Cs-134	<1.06E+01	0.00E+00	1.06E+01
					Cs-137	<8.79E+00	0.00E+00	8.79E+00
					BaLa-140	<8.28E+00	0.00E+00	8.28E+00
					Be-7	1.09E+02	7.30E+01	1.13E+02
					K-40	3.86E+03	4.36E+02	1.47E+02

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID:	537768	Sample Dates:	12/29/2020 - 1/26/2021		Nuclide	Activity	2 Sigma Error	MDA
					Beta	<3.19E+00	0.00E+00	3.19E+00
					Mn-54	<2.55E+00	0.00E+00	2.55E+00
					Co-58	<3.50E+00	0.00E+00	3.50E+00
					Fe-59	<6.61E+00	0.00E+00	6.61E+00
					Co-60	<2.66E+00	0.00E+00	2.66E+00
					Zn-65	<5.62E+00	0.00E+00	5.62E+00
					Zr-95	<7.19E+00	0.00E+00	7.19E+00
					Nb-95	<3.53E+00	0.00E+00	3.53E+00
					I-131	<1.12E+01	0.00E+00	1.12E+01
					Cs-134	<3.52E+00	0.00E+00	3.52E+00
					Cs-137	<3.25E+00	0.00E+00	3.25E+00
					BaLa-140	<5.74E+00	0.00E+00	5.74E+00
					Be-7	<3.36E+01	0.00E+00	3.36E+01
					K-40	8.59E+01	4.03E+01	5.46E+01

Sample ID:	538873	Sample Dates:	1/26/2021 - 2/23/2021		Nuclide	Activity	2 Sigma Error	MDA
					Beta	<3.24E+00	0.00E+00	3.24E+00
					Mn-54	<4.57E+00	0.00E+00	4.57E+00
					Co-58	<3.35E+00	0.00E+00	3.35E+00
					Fe-59	<1.04E+01	0.00E+00	1.04E+01
					Co-60	<4.02E+00	0.00E+00	4.02E+00
					Zn-65	<9.80E+00	0.00E+00	9.80E+00
					Zr-95	<6.98E+00	0.00E+00	6.98E+00
					Nb-95	<5.19E+00	0.00E+00	5.19E+00
					I-131	<1.17E+01	0.00E+00	1.17E+01
					Cs-134	<3.37E+00	0.00E+00	3.37E+00
					Cs-137	<3.46E+00	0.00E+00	3.46E+00
					BaLa-140	<1.08E+01	0.00E+00	1.08E+01
					Be-7	<3.42E+01	0.00E+00	3.42E+01
					K-40	<5.27E+01	0.00E+00	5.27E+01

Sample ID:	541045	Sample Dates:	2/23/2021 - 3/23/2021		Nuclide	Activity	2 Sigma Error	MDA
					Beta	<3.29E+00	0.00E+00	3.29E+00
					Mn-54	<3.87E+00	0.00E+00	3.87E+00
					Co-58	<3.07E+00	0.00E+00	3.07E+00
					Fe-59	<7.94E+00	0.00E+00	7.94E+00
					Co-60	<5.19E+00	0.00E+00	5.19E+00
					Zn-65	<7.50E+00	0.00E+00	7.50E+00
					Zr-95	<8.53E+00	0.00E+00	8.53E+00
					Nb-95	<4.74E+00	0.00E+00	4.74E+00
					I-131	<1.16E+01	0.00E+00	1.16E+01
					Cs-134	<4.67E+00	0.00E+00	4.67E+00
					Cs-137	<3.92E+00	0.00E+00	3.92E+00
					BaLa-140	<7.60E+00	0.00E+00	7.60E+00
					Be-7	1.03E+01	1.95E+01	3.36E+01
					K-40	6.70E+01	3.55E+01	4.15E+01

Sample ID:	538517	Sample Dates:	12/29/2020 - 4/20/2021		Nuclide	Activity	2 Sigma Error	MDA
					H3DW	<1.72E+02	0.00E+00	1.98E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542940	3/23/2021 - 4/20/2021	Beta	3.39E+00	4.43E+00	3.25E+00
		Mn-54	<3.02E+00	0.00E+00	3.02E+00
		Co-58	<3.85E+00	0.00E+00	3.85E+00
		Fe-59	<8.81E+00	0.00E+00	8.81E+00
		Co-60	<3.85E+00	0.00E+00	3.85E+00
		Zn-65	<7.08E+00	0.00E+00	7.08E+00
		Zr-95	<7.62E+00	0.00E+00	7.62E+00
		Nb-95	<4.80E+00	0.00E+00	4.80E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<4.42E+00	0.00E+00	4.42E+00
		Cs-137	<4.30E+00	0.00E+00	4.30E+00
		BaLa-140	<8.10E+00	0.00E+00	8.10E+00
		Be-7	<2.88E+01	0.00E+00	2.88E+01
		K-40	3.45E+01	3.40E+01	5.37E+01
544835	4/20/2021 - 5/18/2021	Beta	4.73E+00	4.38E+00	3.19E+00
		Mn-54	<4.06E+00	0.00E+00	4.06E+00
		Co-58	<4.14E+00	0.00E+00	4.14E+00
		Fe-59	<6.63E+00	0.00E+00	6.63E+00
		Co-60	<3.38E+00	0.00E+00	3.38E+00
		Zn-65	<7.38E+00	0.00E+00	7.38E+00
		Zr-95	<7.75E+00	0.00E+00	7.75E+00
		Nb-95	<4.47E+00	0.00E+00	4.47E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<4.04E+00	0.00E+00	4.04E+00
		Cs-137	<3.42E+00	0.00E+00	3.42E+00
		BaLa-140	<8.31E+00	0.00E+00	8.31E+00
		Be-7	<3.55E+01	0.00E+00	3.55E+01
		K-40	9.18E+01	3.80E+01	4.42E+01
546766	5/18/2021 - 6/15/2021	Beta	<3.20E+00	0.00E+00	3.20E+00
		Mn-54	<2.31E+00	0.00E+00	2.31E+00
		Co-58	<3.72E+00	0.00E+00	3.72E+00
		Fe-59	<7.45E+00	0.00E+00	7.45E+00
		Co-60	<3.63E+00	0.00E+00	3.63E+00
		Zn-65	<5.45E+00	0.00E+00	5.45E+00
		Zr-95	<6.12E+00	0.00E+00	6.12E+00
		Nb-95	<3.76E+00	0.00E+00	3.76E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<4.05E+00	0.00E+00	4.05E+00
		Cs-137	<2.98E+00	0.00E+00	2.98E+00
		BaLa-140	<7.47E+00	0.00E+00	7.47E+00
		Be-7	<2.23E+01	0.00E+00	2.23E+01
		K-40	1.22E+02	3.30E+01	2.65E+01
544457	4/20/2021 - 7/13/2021	H3DW	2.49E+02	1.09E+02	1.72E+02
547900	6/15/2021 - 7/13/2021	Beta	4.78E+00	4.36E+00	3.18E+00
		Mn-54	<3.16E+00	0.00E+00	3.16E+00
		Co-58	<3.62E+00	0.00E+00	3.62E+00
		Fe-59	<8.83E+00	0.00E+00	8.83E+00
		Co-60	<3.28E+00	0.00E+00	3.28E+00
		Zn-65	<6.42E+00	0.00E+00	6.42E+00
		Zr-95	<6.85E+00	0.00E+00	6.85E+00
		Nb-95	<4.03E+00	0.00E+00	4.03E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.64E+00	0.00E+00	3.64E+00
		Cs-137	<3.98E+00	0.00E+00	3.98E+00
		BaLa-140	<4.53E+00	0.00E+00	4.53E+00
		Be-7	<2.96E+01	0.00E+00	2.96E+01
		K-40	4.68E+01	2.87E+01	3.84E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549083	7/13/2021 - 8/10/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<4.28E+00	0.00E+00	4.28E+00
		Co-58	<4.37E+00	0.00E+00	4.37E+00
		Fe-59	<7.08E+00	0.00E+00	7.08E+00
		Co-60	<3.25E+00	0.00E+00	3.25E+00
		Zn-65	<9.69E+00	0.00E+00	9.69E+00
		Zr-95	<5.34E+00	0.00E+00	5.34E+00
		Nb-95	<5.06E+00	0.00E+00	5.06E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<4.01E+00	0.00E+00	4.01E+00
		Cs-137	<3.51E+00	0.00E+00	3.51E+00
		BaLa-140	<9.55E+00	0.00E+00	9.55E+00
		Be-7	<3.07E+01	0.00E+00	3.07E+01
		K-40	<4.99E+01	0.00E+00	4.99E+01
550918	8/10/2021 - 9/8/2021	Beta	<3.18E+00	0.00E+00	3.18E+00
		Mn-54	<3.01E+00	0.00E+00	3.01E+00
		Co-58	<2.86E+00	0.00E+00	2.86E+00
		Fe-59	<6.52E+00	0.00E+00	6.52E+00
		Co-60	<3.17E+00	0.00E+00	3.17E+00
		Zn-65	<6.10E+00	0.00E+00	6.10E+00
		Zr-95	<6.49E+00	0.00E+00	6.49E+00
		Nb-95	<3.53E+00	0.00E+00	3.53E+00
		I-131	<1.00E+01	0.00E+00	1.00E+01
		Cs-134	<2.54E+00	0.00E+00	2.54E+00
		Cs-137	<2.33E+00	0.00E+00	2.33E+00
		BaLa-140	<7.46E+00	0.00E+00	7.46E+00
		Be-7	<2.41E+01	0.00E+00	2.41E+01
		K-40	4.87E+01	2.28E+01	2.55E+01
549190	7/13/2021 - 10/5/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3DW	5.82E+02	1.22E+02	1.77E+02
552519	9/8/2021 - 10/5/2021	Beta	3.35E+00	4.35E+00	3.19E+00
		Mn-54	<3.88E+00	0.00E+00	3.88E+00
		Co-58	<3.33E+00	0.00E+00	3.33E+00
		Fe-59	<8.19E+00	0.00E+00	8.19E+00
		Co-60	<3.20E+00	0.00E+00	3.20E+00
		Zn-65	<8.42E+00	0.00E+00	8.42E+00
		Zr-95	<6.42E+00	0.00E+00	6.42E+00
		Nb-95	<4.71E+00	0.00E+00	4.71E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.67E+00	0.00E+00	3.67E+00
		Cs-137	<3.22E+00	0.00E+00	3.22E+00
		BaLa-140	<9.34E+00	0.00E+00	9.34E+00
		Be-7	<2.94E+01	0.00E+00	2.94E+01
		K-40	8.30E+01	3.57E+01	4.05E+01
554397	10/5/2021 - 11/2/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.28E+00	0.00E+00	3.28E+00
		Co-58	<3.62E+00	0.00E+00	3.62E+00
		Fe-59	<8.55E+00	0.00E+00	8.55E+00
		Co-60	<3.17E+00	0.00E+00	3.17E+00
		Zn-65	<6.76E+00	0.00E+00	6.76E+00
		Zr-95	<5.62E+00	0.00E+00	5.62E+00
		Nb-95	<3.40E+00	0.00E+00	3.40E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.42E+00	0.00E+00	3.42E+00
		Cs-137	<3.18E+00	0.00E+00	3.18E+00
		BaLa-140	<5.24E+00	0.00E+00	5.24E+00
		Be-7	<2.69E+01	0.00E+00	2.69E+01
		K-40	7.34E+01	3.70E+01	5.00E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 214 [INDICATOR - SSE @ 7.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556829	11/2/2021 - 11/30/2021	Beta	<3.29E+00	0.00E+00	3.29E+00
		Mn-54	<3.38E+00	0.00E+00	3.38E+00
		Co-58	<3.34E+00	0.00E+00	3.34E+00
		Fe-59	<6.43E+00	0.00E+00	6.43E+00
		Co-60	<3.06E+00	0.00E+00	3.06E+00
		Zn-65	<7.14E+00	0.00E+00	7.14E+00
		Zr-95	<6.17E+00	0.00E+00	6.17E+00
		Nb-95	<5.46E+00	0.00E+00	5.46E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<4.32E+00	0.00E+00	4.32E+00
		Cs-137	<3.17E+00	0.00E+00	3.17E+00
		BaLa-140	<7.53E+00	0.00E+00	7.53E+00
		Be-7	<3.55E+01	0.00E+00	3.55E+01
		K-40	4.65E+01	3.48E+01	5.20E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555068	10/5/2021 - 12/28/2021	H3DW	1.40E+03	1.49E+02	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558500	11/30/2021 - 12/28/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<2.31E+00	0.00E+00	2.31E+00
		Co-58	<3.80E+00	0.00E+00	3.80E+00
		Fe-59	<5.66E+00	0.00E+00	5.66E+00
		Co-60	<3.10E+00	0.00E+00	3.10E+00
		Zn-65	<4.08E+00	0.00E+00	4.08E+00
		Zr-95	<6.39E+00	0.00E+00	6.39E+00
		Nb-95	<3.67E+00	0.00E+00	3.67E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.53E+00	0.00E+00	3.53E+00
		Cs-137	<4.00E+00	0.00E+00	4.00E+00
		BaLa-140	<8.19E+00	0.00E+00	8.19E+00
		Be-7	<2.52E+01	0.00E+00	2.52E+01
		K-40	5.65E+01	3.13E+01	4.23E+01

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537769	12/29/2020 - 1/26/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.03E+00	0.00E+00	3.03E+00
		Co-58	<3.44E+00	0.00E+00	3.44E+00
		Fe-59	<6.98E+00	0.00E+00	6.98E+00
		Co-60	<2.85E+00	0.00E+00	2.85E+00
		Zn-65	<6.34E+00	0.00E+00	6.34E+00
		Zr-95	<5.43E+00	0.00E+00	5.43E+00
		Nb-95	<4.30E+00	0.00E+00	4.30E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<2.37E+00	0.00E+00	2.37E+00
		Cs-137	<3.66E+00	0.00E+00	3.66E+00
		BaLa-140	<7.13E+00	0.00E+00	7.13E+00
		Be-7	<3.07E+01	0.00E+00	3.07E+01
		K-40	6.25E+01	3.15E+01	4.19E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538874	1/26/2021 - 2/23/2021	Beta	<3.24E+00	0.00E+00	3.24E+00
		Mn-54	<3.62E+00	0.00E+00	3.62E+00
		Co-58	<3.41E+00	0.00E+00	3.41E+00
		Fe-59	<4.55E+00	0.00E+00	4.55E+00
		Co-60	<3.06E+00	0.00E+00	3.06E+00
		Zn-65	<5.91E+00	0.00E+00	5.91E+00
		Zr-95	<6.05E+00	0.00E+00	6.05E+00
		Nb-95	<3.92E+00	0.00E+00	3.92E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.60E+00	0.00E+00	3.60E+00
		Cs-137	<3.07E+00	0.00E+00	3.07E+00
		BaLa-140	<6.28E+00	0.00E+00	6.28E+00
		Be-7	<2.98E+01	0.00E+00	2.98E+01
		K-40	6.62E+01	2.89E+01	3.39E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541046	2/23/2021 - 3/23/2021	Beta	<3.29E+00	0.00E+00	3.29E+00
		Mn-54	<4.42E+00	0.00E+00	4.42E+00
		Co-58	<4.40E+00	0.00E+00	4.40E+00
		Fe-59	<9.10E+00	0.00E+00	9.10E+00
		Co-60	<4.89E+00	0.00E+00	4.89E+00
		Zn-65	<8.99E+00	0.00E+00	8.99E+00
		Zr-95	<7.81E+00	0.00E+00	7.81E+00
		Nb-95	<4.91E+00	0.00E+00	4.91E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<4.25E+00	0.00E+00	4.25E+00
		Cs-137	<5.45E+00	0.00E+00	5.45E+00
		BaLa-140	<8.40E+00	0.00E+00	8.40E+00
		Be-7	<3.65E+01	0.00E+00	3.65E+01
		K-40	7.90E+01	4.18E+01	5.42E+01
538518	12/29/2020 - 4/20/2021	H3DW	2.44E+02	1.23E+02	1.99E+02
542941	3/23/2021 - 4/20/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<2.05E+00	0.00E+00	2.05E+00
		Co-58	<3.86E+00	0.00E+00	3.86E+00
		Fe-59	<6.31E+00	0.00E+00	6.31E+00
		Co-60	<3.35E+00	0.00E+00	3.35E+00
		Zn-65	<7.14E+00	0.00E+00	7.14E+00
		Zr-95	<6.23E+00	0.00E+00	6.23E+00
		Nb-95	<4.40E+00	0.00E+00	4.40E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.14E+00	0.00E+00	3.14E+00
		Cs-137	<3.31E+00	0.00E+00	3.31E+00
		BaLa-140	<6.80E+00	0.00E+00	6.80E+00
		Be-7	<2.63E+01	0.00E+00	2.63E+01
		K-40	6.78E+01	2.88E+01	3.31E+01
544836	4/20/2021 - 5/18/2021	Beta	3.39E+00	4.35E+00	3.19E+00
		Mn-54	<3.05E+00	0.00E+00	3.05E+00
		Co-58	<3.37E+00	0.00E+00	3.37E+00
		Fe-59	<6.97E+00	0.00E+00	6.97E+00
		Co-60	<3.37E+00	0.00E+00	3.37E+00
		Zn-65	<7.49E+00	0.00E+00	7.49E+00
		Zr-95	<7.92E+00	0.00E+00	7.92E+00
		Nb-95	<3.91E+00	0.00E+00	3.91E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<3.39E+00	0.00E+00	3.39E+00
		Cs-137	<2.97E+00	0.00E+00	2.97E+00
		BaLa-140	<6.44E+00	0.00E+00	6.44E+00
		Be-7	<2.55E+01	0.00E+00	2.55E+01
		K-40	5.10E+01	3.15E+01	4.38E+01
546767	5/18/2021 - 6/15/2021	Beta	<3.20E+00	0.00E+00	3.20E+00
		Mn-54	<2.75E+00	0.00E+00	2.75E+00
		Co-58	<3.53E+00	0.00E+00	3.53E+00
		Fe-59	<7.94E+00	0.00E+00	7.94E+00
		Co-60	<3.27E+00	0.00E+00	3.27E+00
		Zn-65	<6.01E+00	0.00E+00	6.01E+00
		Zr-95	<7.02E+00	0.00E+00	7.02E+00
		Nb-95	<4.92E+00	0.00E+00	4.92E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.26E+00	0.00E+00	3.26E+00
		Cs-137	<3.18E+00	0.00E+00	3.18E+00
		BaLa-140	<5.62E+00	0.00E+00	5.62E+00
		Be-7	<2.72E+01	0.00E+00	2.72E+01
		K-40	8.57E+01	3.49E+01	4.23E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544458	4/20/2021 - 7/13/2021	H3DW	<7.74E+01	0.00E+00	1.72E+02
547901	6/15/2021 - 7/13/2021	Beta	4.04E+00	4.35E+00	3.18E+00
		Mn-54	<3.58E+00	0.00E+00	3.58E+00
		Co-58	<3.96E+00	0.00E+00	3.96E+00
		Fe-59	<7.19E+00	0.00E+00	7.19E+00
		Co-60	<4.07E+00	0.00E+00	4.07E+00
		Zn-65	<5.41E+00	0.00E+00	5.41E+00
		Zr-95	<6.01E+00	0.00E+00	6.01E+00
		Nb-95	<5.09E+00	0.00E+00	5.09E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<2.45E+00	0.00E+00	2.45E+00
		Cs-137	<2.35E+00	0.00E+00	2.35E+00
		BaLa-140	<7.02E+00	0.00E+00	7.02E+00
		Be-7	<2.96E+01	0.00E+00	2.96E+01
		K-40	3.15E+01	2.79E+01	4.21E+01
549084	7/13/2021 - 8/10/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.64E+00	0.00E+00	3.64E+00
		Co-58	<3.49E+00	0.00E+00	3.49E+00
		Fe-59	<5.45E+00	0.00E+00	5.45E+00
		Co-60	<2.11E+00	0.00E+00	2.11E+00
		Zn-65	<5.77E+00	0.00E+00	5.77E+00
		Zr-95	<6.02E+00	0.00E+00	6.02E+00
		Nb-95	<3.89E+00	0.00E+00	3.89E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<4.04E+00	0.00E+00	4.04E+00
		Cs-137	<3.39E+00	0.00E+00	3.39E+00
		BaLa-140	<6.32E+00	0.00E+00	6.32E+00
		Be-7	<2.78E+01	0.00E+00	2.78E+01
		K-40	1.10E+02	3.47E+01	3.23E+01
550919	8/10/2021 - 9/8/2021	Beta	<3.18E+00	0.00E+00	3.18E+00
		Mn-54	<2.86E+00	0.00E+00	2.86E+00
		Co-58	<2.78E+00	0.00E+00	2.78E+00
		Fe-59	<5.72E+00	0.00E+00	5.72E+00
		Co-60	<3.35E+00	0.00E+00	3.35E+00
		Zn-65	<5.96E+00	0.00E+00	5.96E+00
		Zr-95	<5.22E+00	0.00E+00	5.22E+00
		Nb-95	<3.21E+00	0.00E+00	3.21E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<2.78E+00	0.00E+00	2.78E+00
		Cs-137	<2.91E+00	0.00E+00	2.91E+00
		BaLa-140	<8.02E+00	0.00E+00	8.02E+00
		Be-7	<2.51E+01	0.00E+00	2.51E+01
		K-40	1.32E+02	3.96E+01	4.43E+01
549191	7/13/2021 - 10/5/2021	H3DW	2.30E+02	1.11E+02	1.77E+02
552520	9/8/2021 - 10/5/2021	Beta	5.15E+00	4.38E+00	3.19E+00
		Mn-54	<3.55E+00	0.00E+00	3.55E+00
		Co-58	<2.98E+00	0.00E+00	2.98E+00
		Fe-59	<1.03E+01	0.00E+00	1.03E+01
		Co-60	<4.02E+00	0.00E+00	4.02E+00
		Zn-65	<9.26E+00	0.00E+00	9.26E+00
		Zr-95	<5.90E+00	0.00E+00	5.90E+00
		Nb-95	<4.61E+00	0.00E+00	4.61E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<4.44E+00	0.00E+00	4.44E+00
		Cs-137	<3.69E+00	0.00E+00	3.69E+00
		BaLa-140	<1.04E+01	0.00E+00	1.04E+01
		Be-7	<3.66E+01	0.00E+00	3.66E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 218 [CONTROL - NNE @ 13.5 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
552520	9/8/2021 - 10/5/2021		K-40	<4.50E+01	0.00E+00	4.50E+01
554398	10/5/2021 - 11/2/2021		Beta	<3.26E+00	0.00E+00	3.26E+00
			Mn-54	<2.90E+00	0.00E+00	2.90E+00
			Co-58	<3.61E+00	0.00E+00	3.61E+00
			Fe-59	<4.65E+00	0.00E+00	4.65E+00
			Co-60	<2.54E+00	0.00E+00	2.54E+00
			Zn-65	<7.48E+00	0.00E+00	7.48E+00
			Zr-95	<5.53E+00	0.00E+00	5.53E+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	<3.13E+00	0.00E+00	3.13E+00
			Cs-137	<3.30E+00	0.00E+00	3.30E+00
			BaLa-140	<6.32E+00	0.00E+00	6.32E+00
			Be-7	<2.35E+01	0.00E+00	2.35E+01
			K-40	8.78E+01	3.46E+01	4.26E+01
556830	11/2/2021 - 11/30/2021		Beta	<3.29E+00	0.00E+00	3.29E+00
			Mn-54	<3.81E+00	0.00E+00	3.81E+00
			Co-58	<2.86E+00	0.00E+00	2.86E+00
			Fe-59	<6.11E+00	0.00E+00	6.11E+00
			Co-60	<3.92E+00	0.00E+00	3.92E+00
			Zn-65	<8.58E+00	0.00E+00	8.58E+00
			Zr-95	<4.83E+00	0.00E+00	4.83E+00
			Nb-95	<3.86E+00	0.00E+00	3.86E+00
			I-131	<1.11E+01	0.00E+00	1.11E+01
			Cs-134	<3.47E+00	0.00E+00	3.47E+00
			Cs-137	<3.23E+00	0.00E+00	3.23E+00
			BaLa-140	<7.87E+00	0.00E+00	7.87E+00
			Be-7	<2.53E+01	0.00E+00	2.53E+01
			K-40	9.01E+01	3.67E+01	4.44E+01
555069	10/5/2021 - 12/28/2021		H3DW	4.21E+02	1.21E+02	1.86E+02
558501	11/30/2021 - 12/28/2021		Beta	<3.25E+00	0.00E+00	3.25E+00
			Mn-54	<3.49E+00	0.00E+00	3.49E+00
			Co-58	<4.19E+00	0.00E+00	4.19E+00
			Fe-59	<9.83E+00	0.00E+00	9.83E+00
			Co-60	<3.44E+00	0.00E+00	3.44E+00
			Zn-65	<9.28E+00	0.00E+00	9.28E+00
			Zr-95	<8.14E+00	0.00E+00	8.14E+00
			Nb-95	<4.14E+00	0.00E+00	4.14E+00
			I-131	<1.19E+01	0.00E+00	1.19E+01
			Cs-134	<4.82E+00	0.00E+00	4.82E+00
			Cs-137	<4.28E+00	0.00E+00	4.28E+00
			BaLa-140	<7.88E+00	0.00E+00	7.88E+00
			Be-7	<3.42E+01	0.00E+00	3.42E+01
			K-40	1.39E+02	4.27E+01	4.12E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	PREDATOR	Nuclide	Activity	2 Sigma Error	MDA
542705	4/7/2021 - 4/7/2021		Mn-54	<5.12E+01	0.00E+00	5.12E+01
			Co-58	<6.36E+01	0.00E+00	6.36E+01
			Fe-59	<7.82E+01	0.00E+00	7.82E+01
			Co-60	<5.18E+01	0.00E+00	5.18E+01
			Zn-65	<9.22E+01	0.00E+00	9.22E+01
			Nb-95	<5.82E+01	0.00E+00	5.82E+01
			I-131	<6.99E+01	0.00E+00	6.99E+01
			Cs-134	<7.33E+01	0.00E+00	7.33E+01
			Cs-137	<6.03E+01	0.00E+00	6.03E+01
			Be-7	<4.58E+02	0.00E+00	4.58E+02

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
542705	4/7/2021 - 4/7/2021	PREDATOR	K-40	4.49E+03	1.04E+03	7.93E+02
			Ag-110M	<3.81E+01	0.00E+00	3.81E+01
			Sb-122	<2.51E+02	0.00E+00	2.51E+02
			Sb-125	<1.06E+02	0.00E+00	1.06E+02
542706	4/7/2021 - 4/7/2021	FORAGER	Mn-54	<4.56E+01	0.00E+00	4.56E+01
			Co-58	<4.47E+01	0.00E+00	4.47E+01
			Fe-59	<9.71E+01	0.00E+00	9.71E+01
			Co-60	<5.42E+01	0.00E+00	5.42E+01
			Zn-65	<9.64E+01	0.00E+00	9.64E+01
			Nb-95	<5.38E+01	0.00E+00	5.38E+01
			I-131	<5.14E+01	0.00E+00	5.14E+01
			Cs-134	<5.77E+01	0.00E+00	5.77E+01
			Cs-137	<4.65E+01	0.00E+00	4.65E+01
			Be-7	<3.38E+02	0.00E+00	3.38E+02
			K-40	3.54E+03	8.45E+02	5.94E+02
			Ag-110M	<3.39E+01	0.00E+00	3.39E+01
			Sb-122	<1.89E+02	0.00E+00	1.89E+02
			Sb-125	<1.10E+02	0.00E+00	1.10E+02
			542707	4/7/2021 - 4/7/2021	BOTMFEEDER	Mn-54
Co-58	<4.41E+01	0.00E+00				4.41E+01
Fe-59	<1.14E+02	0.00E+00				1.14E+02
Co-60	<5.11E+01	0.00E+00				5.11E+01
Zn-65	<1.20E+02	0.00E+00				1.20E+02
Nb-95	<5.29E+01	0.00E+00				5.29E+01
I-131	<7.26E+01	0.00E+00				7.26E+01
Cs-134	<5.93E+01	0.00E+00				5.93E+01
Cs-137	<5.58E+01	0.00E+00				5.58E+01
Be-7	<4.74E+02	0.00E+00				4.74E+02
K-40	3.68E+03	9.01E+02				6.33E+02
Ag-110M	<4.65E+01	0.00E+00				4.65E+01
Sb-122	<2.10E+02	0.00E+00				2.10E+02
Sb-125	<1.56E+02	0.00E+00				1.56E+02
553177	10/4/2021 - 10/4/2021	PREDATOR				Mn-54
			Co-58	<5.26E+01	0.00E+00	5.26E+01
			Fe-59	<1.08E+02	0.00E+00	1.08E+02
			Co-60	<3.41E+01	0.00E+00	3.41E+01
			Zn-65	<1.34E+02	0.00E+00	1.34E+02
			Nb-95	<5.30E+01	0.00E+00	5.30E+01
			I-131	<4.68E+01	0.00E+00	4.68E+01
			Cs-134	<6.74E+01	0.00E+00	6.74E+01
			Cs-137	<5.39E+01	0.00E+00	5.39E+01
			Be-7	<2.60E+02	0.00E+00	2.60E+02
			K-40	4.21E+03	1.06E+03	9.23E+02
			Ag-110M	<4.99E+01	0.00E+00	4.99E+01
			Sb-122	<7.75E+01	0.00E+00	7.75E+01
			Sb-125	<1.19E+02	0.00E+00	1.19E+02
			553178	10/4/2021 - 10/4/2021	FORAGER	Mn-54
Co-58	<6.75E+01	0.00E+00				6.75E+01
Fe-59	<6.09E+01	0.00E+00				6.09E+01
Co-60	<6.34E+01	0.00E+00				6.34E+01
Zn-65	<1.22E+02	0.00E+00				1.22E+02
Nb-95	<6.77E+01	0.00E+00				6.77E+01
I-131	<6.67E+01	0.00E+00				6.67E+01
Cs-134	<7.37E+01	0.00E+00				7.37E+01
Cs-137	<7.44E+01	0.00E+00				7.44E+01
Be-7	<4.01E+02	0.00E+00				4.01E+02
K-40	3.73E+03	1.05E+03				9.11E+02
Ag-110M	<5.96E+01	0.00E+00				5.96E+01
Sb-122	<9.34E+01	0.00E+00				9.34E+01

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	553178	Sample Dates:	10/4/2021 - 10/4/2021	FORAGER	Nuclide	Activity	2 Sigma Error	MDA
					Sb-125	<1.09E+02	0.00E+00	1.09E+02

Sample ID:	553179	Sample Dates:	10/4/2021 - 10/4/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.81E+01	0.00E+00	6.81E+01
					Co-58	<5.90E+01	0.00E+00	5.90E+01
					Fe-59	<1.66E+02	0.00E+00	1.66E+02
					Co-60	<6.85E+01	0.00E+00	6.85E+01
					Zn-65	<1.58E+02	0.00E+00	1.58E+02
					Nb-95	<6.89E+01	0.00E+00	6.89E+01
					I-131	<6.83E+01	0.00E+00	6.83E+01
					Cs-134	<5.50E+01	0.00E+00	5.50E+01
					Cs-137	<7.44E+01	0.00E+00	7.44E+01
					Be-7	<4.59E+02	0.00E+00	4.59E+02
					K-40	4.64E+03	1.15E+03	1.72E+02
					Ag-110M	<5.60E+01	0.00E+00	5.60E+01
					Sb-122	<7.57E+01	0.00E+00	7.57E+01
					Sb-125	<1.39E+02	0.00E+00	1.39E+02

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID:	542708	Sample Dates:	4/7/2021 - 4/7/2021	PREDATOR	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<5.53E+01	0.00E+00	5.53E+01
					Co-58	<4.78E+01	0.00E+00	4.78E+01
					Fe-59	<6.79E+01	0.00E+00	6.79E+01
					Co-60	<5.28E+01	0.00E+00	5.28E+01
					Zn-65	<9.39E+01	0.00E+00	9.39E+01
					Nb-95	<5.78E+01	0.00E+00	5.78E+01
					I-131	<6.95E+01	0.00E+00	6.95E+01
					Cs-134	<4.21E+01	0.00E+00	4.21E+01
					Cs-137	<5.06E+01	0.00E+00	5.06E+01
					Be-7	<3.16E+02	0.00E+00	3.16E+02
					K-40	4.09E+03	9.50E+02	8.01E+02
					Ag-110M	<4.71E+01	0.00E+00	4.71E+01
					Sb-122	<3.37E+02	0.00E+00	3.37E+02
					Sb-125	<8.73E+01	0.00E+00	8.73E+01

Sample ID:	542709	Sample Dates:	4/7/2021 - 4/7/2021	FORAGER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.77E+01	0.00E+00	6.77E+01
					Co-58	<3.89E+01	0.00E+00	3.89E+01
					Fe-59	<1.08E+02	0.00E+00	1.08E+02
					Co-60	<4.85E+01	0.00E+00	4.85E+01
					Zn-65	<9.42E+01	0.00E+00	9.42E+01
					Nb-95	<4.52E+01	0.00E+00	4.52E+01
					I-131	<7.48E+01	0.00E+00	7.48E+01
					Cs-134	<3.87E+01	0.00E+00	3.87E+01
					Cs-137	<5.65E+01	0.00E+00	5.65E+01
					Be-7	<4.29E+02	0.00E+00	4.29E+02
					K-40	4.36E+03	9.88E+02	7.43E+02
					Ag-110M	<5.81E+01	0.00E+00	5.81E+01
					Sb-122	<2.68E+02	0.00E+00	2.68E+02
					Sb-125	<1.19E+02	0.00E+00	1.19E+02

Sample ID:	542710	Sample Dates:	4/7/2021 - 4/8/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<5.08E+01	0.00E+00	5.08E+01
					Co-58	<5.89E+01	0.00E+00	5.89E+01
					Fe-59	<8.59E+01	0.00E+00	8.59E+01
					Co-60	<5.60E+01	0.00E+00	5.60E+01
					Zn-65	<1.14E+02	0.00E+00	1.14E+02
					Nb-95	<3.79E+01	0.00E+00	3.79E+01
					I-131	<7.56E+01	0.00E+00	7.56E+01
					Cs-134	<4.82E+01	0.00E+00	4.82E+01
					Cs-137	<4.96E+01	0.00E+00	4.96E+01
					Be-7	<3.87E+02	0.00E+00	3.87E+02
					K-40	4.37E+03	1.05E+03	9.01E+02
					Ag-110M	<5.04E+01	0.00E+00	5.04E+01
					Sb-122	<2.75E+02	0.00E+00	2.75E+02
					Sb-125	<1.30E+02	0.00E+00	1.30E+02

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

Sample Point 216 [CONTROL - NNE @ 4.19 miles]

Sample ID:	553180	Sample Dates:	10/4/2021 - 10/4/2021	PREDATOR	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.69E+01	0.00E+00	6.69E+01
					Co-58	<6.29E+01	0.00E+00	6.29E+01
					Fe-59	<1.86E+02	0.00E+00	1.86E+02
					Co-60	<7.07E+01	0.00E+00	7.07E+01
					Zn-65	<1.56E+02	0.00E+00	1.56E+02
					Nb-95	<7.05E+01	0.00E+00	7.05E+01
					I-131	<6.63E+01	0.00E+00	6.63E+01
					Cs-134	<7.14E+01	0.00E+00	7.14E+01
					Cs-137	<6.60E+01	0.00E+00	6.60E+01
					Be-7	<6.64E+02	0.00E+00	6.64E+02
					K-40	5.07E+03	1.23E+03	7.86E+02
					Ag-110M	<5.87E+01	0.00E+00	5.87E+01
					Sb-122	<1.09E+02	0.00E+00	1.09E+02
					Sb-125	<1.69E+02	0.00E+00	1.69E+02

Sample ID:	553181	Sample Dates:	10/4/2021 - 10/4/2021	FORAGER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<4.41E+01	0.00E+00	4.41E+01
					Co-58	<6.81E+01	0.00E+00	6.81E+01
					Fe-59	<1.37E+02	0.00E+00	1.37E+02
					Co-60	<6.89E+01	0.00E+00	6.89E+01
					Zn-65	<1.43E+02	0.00E+00	1.43E+02
					Nb-95	<5.61E+01	0.00E+00	5.61E+01
					I-131	<5.77E+01	0.00E+00	5.77E+01
					Cs-134	<6.50E+01	0.00E+00	6.50E+01
					Cs-137	<5.67E+01	0.00E+00	5.67E+01
					Be-7	<4.38E+02	0.00E+00	4.38E+02
					K-40	3.44E+03	9.67E+02	5.98E+02
					Ag-110M	<5.05E+01	0.00E+00	5.05E+01
					Sb-122	<1.16E+02	0.00E+00	1.16E+02
					Sb-125	<1.39E+02	0.00E+00	1.39E+02

Sample ID:	553182	Sample Dates:	10/4/2021 - 10/4/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<4.62E+01	0.00E+00	4.62E+01
					Co-58	<7.46E+01	0.00E+00	7.46E+01
					Fe-59	<1.14E+02	0.00E+00	1.14E+02
					Co-60	<6.44E+01	0.00E+00	6.44E+01
					Zn-65	<1.14E+02	0.00E+00	1.14E+02
					Nb-95	<6.62E+01	0.00E+00	6.62E+01
					I-131	<7.55E+01	0.00E+00	7.55E+01
					Cs-134	<8.06E+01	0.00E+00	8.06E+01
					Cs-137	<7.37E+01	0.00E+00	7.37E+01
					Be-7	<5.04E+02	0.00E+00	5.04E+02
					K-40	5.37E+03	1.21E+03	1.62E+02
					Ag-110M	<5.66E+01	0.00E+00	5.66E+01
					Sb-122	<1.28E+02	0.00E+00	1.28E+02
					Sb-125	<1.66E+02	0.00E+00	1.66E+02

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	537294	Sample Dates:	1/6/2021 - 1/6/2021		Nuclide	Activity	2 Sigma Error	MDA
					LLI-131	<6.14E-01	0.00E+00	6.14E-01
					I-131	<6.21E+00	0.00E+00	6.21E+00
					Cs-134	<5.15E+00	0.00E+00	5.15E+00
					Cs-137	<1.02E+01	0.00E+00	1.02E+01
					BaLa-140	<5.92E+00	0.00E+00	5.92E+00
					Be-7	<5.41E+01	0.00E+00	5.41E+01
					K-40	1.71E+03	2.59E+02	1.05E+02

Sample ID:	538050	Sample Dates:	1/20/2021 - 1/20/2021		Nuclide	Activity	2 Sigma Error	MDA
					LLI-131	<6.50E-01	0.00E+00	6.50E-01
					I-131	<8.41E+00	0.00E+00	8.41E+00
					Cs-134	<7.77E+00	0.00E+00	7.77E+00
					Cs-137	<1.02E+01	0.00E+00	1.02E+01
					BaLa-140	<6.00E+00	0.00E+00	6.00E+00
					Be-7	<4.53E+01	0.00E+00	4.53E+01

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Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538050	1/20/2021 - 1/20/2021	K-40	1.52E+03	2.33E+02	1.78E+01
538519	2/2/2021 - 2/2/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<7.08E+00	0.00E+00	7.08E+00
		Cs-134	<5.87E+00	0.00E+00	5.87E+00
		Cs-137	<1.00E+01	0.00E+00	1.00E+01
		BaLa-140	<7.32E+00	0.00E+00	7.32E+00
		Be-7	<5.33E+01	0.00E+00	5.33E+01
		K-40	1.30E+03	2.25E+02	1.42E+02
539035	2/16/2021 - 2/16/2021	LLI-131	<6.07E-01	0.00E+00	6.07E-01
		I-131	<6.07E+00	0.00E+00	6.07E+00
		Cs-134	<1.07E+01	0.00E+00	1.07E+01
		Cs-137	<8.12E+00	0.00E+00	8.12E+00
		BaLa-140	<5.83E+00	0.00E+00	5.83E+00
		Be-7	<4.50E+01	0.00E+00	4.50E+01
		K-40	1.47E+03	2.36E+02	1.22E+02
540034	3/2/2021 - 3/2/2021	LLI-131	<6.37E-01	0.00E+00	6.37E-01
		I-131	<5.37E+00	0.00E+00	5.37E+00
		Cs-134	<7.81E+00	0.00E+00	7.81E+00
		Cs-137	<8.56E+00	0.00E+00	8.56E+00
		BaLa-140	<5.93E+00	0.00E+00	5.93E+00
		Be-7	<5.15E+01	0.00E+00	5.15E+01
		K-40	1.52E+03	2.38E+02	8.12E+01
541410	3/15/2021 - 3/15/2021	LLI-131	<5.90E-01	0.00E+00	5.90E-01
		I-131	<7.31E+00	0.00E+00	7.31E+00
		Cs-134	<5.09E+00	0.00E+00	5.09E+00
		Cs-137	<8.81E+00	0.00E+00	8.81E+00
		BaLa-140	<6.06E+00	0.00E+00	6.06E+00
		Be-7	<6.50E+01	0.00E+00	6.50E+01
		K-40	1.48E+03	2.32E+02	7.74E+01
542223	3/30/2021 - 3/30/2021	LLI-131	<6.45E-01	0.00E+00	6.45E-01
		I-131	<6.36E+00	0.00E+00	6.36E+00
		Cs-134	<8.18E+00	0.00E+00	8.18E+00
		Cs-137	<7.26E+00	0.00E+00	7.26E+00
		BaLa-140	<7.30E+00	0.00E+00	7.30E+00
		Be-7	<6.01E+01	0.00E+00	6.01E+01
		K-40	1.43E+03	2.29E+02	9.67E+01
543237	4/13/2021 - 4/13/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<6.82E+00	0.00E+00	6.82E+00
		Cs-134	<9.08E+00	0.00E+00	9.08E+00
		Cs-137	<8.42E+00	0.00E+00	8.42E+00
		BaLa-140	<9.44E+00	0.00E+00	9.44E+00
		Be-7	<4.80E+01	0.00E+00	4.80E+01
		K-40	1.38E+03	2.25E+02	1.01E+02
544296	4/27/2021 - 4/27/2021	LLI-131	<6.44E-01	0.00E+00	6.44E-01
		I-131	<6.49E+00	0.00E+00	6.49E+00
		Cs-134	<8.59E+00	0.00E+00	8.59E+00
		Cs-137	<7.60E+00	0.00E+00	7.60E+00
		BaLa-140	<5.78E+00	0.00E+00	5.78E+00
		Be-7	<4.14E+01	0.00E+00	4.14E+01
		K-40	1.37E+03	2.28E+02	1.20E+02
544999	5/11/2021 - 5/11/2021	LLI-131	<6.21E-01	0.00E+00	6.21E-01
		I-131	<7.99E+00	0.00E+00	7.99E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544999	5/11/2021 - 5/11/2021	Cs-134	<7.76E+00	0.00E+00	7.76E+00
		Cs-137	<5.24E+00	0.00E+00	5.24E+00
		BaLa-140	<8.50E+00	0.00E+00	8.50E+00
		Be-7	<6.00E+01	0.00E+00	6.00E+01
		K-40	1.51E+03	2.37E+02	9.92E+01
545781	5/25/2021 - 5/25/2021	LLI-131	<6.03E-01	0.00E+00	6.03E-01
		I-131	<7.84E+00	0.00E+00	7.84E+00
		Cs-134	<9.50E+00	0.00E+00	9.50E+00
		Cs-137	<9.42E+00	0.00E+00	9.42E+00
		BaLa-140	<7.52E+00	0.00E+00	7.52E+00
		Be-7	<3.87E+01	0.00E+00	3.87E+01
K-40	1.66E+03	2.56E+02	1.30E+02		
546884	6/8/2021 - 6/8/2021	LLI-131	<5.74E-01	0.00E+00	5.74E-01
		I-131	<7.03E+00	0.00E+00	7.03E+00
		Cs-134	<7.14E+00	0.00E+00	7.14E+00
		Cs-137	<9.10E+00	0.00E+00	9.10E+00
		BaLa-140	<2.12E+00	0.00E+00	2.12E+00
		Be-7	<5.56E+01	0.00E+00	5.56E+01
K-40	1.36E+03	2.20E+02	8.11E+01		
547458	6/22/2021 - 6/22/2021	LLI-131	<6.31E-01	0.00E+00	6.31E-01
		I-131	<7.24E+00	0.00E+00	7.24E+00
		Cs-134	<5.87E+00	0.00E+00	5.87E+00
		Cs-137	<6.82E+00	0.00E+00	6.82E+00
		BaLa-140	<8.44E+00	0.00E+00	8.44E+00
		Be-7	<5.56E+01	0.00E+00	5.56E+01
K-40	1.43E+03	2.27E+02	7.60E+01		
548083	7/7/2021 - 7/7/2021	LLI-131	<6.06E-01	0.00E+00	6.06E-01
		I-131	<7.43E+00	0.00E+00	7.43E+00
		Cs-134	<8.64E+00	0.00E+00	8.64E+00
		Cs-137	<7.26E+00	0.00E+00	7.26E+00
		BaLa-140	<5.77E+00	0.00E+00	5.77E+00
		Be-7	<5.79E+01	0.00E+00	5.79E+01
K-40	1.57E+03	2.41E+02	8.56E+01		
548725	7/20/2021 - 7/20/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<5.91E+00	0.00E+00	5.91E+00
		Cs-134	<5.95E+00	0.00E+00	5.95E+00
		Cs-137	<9.55E+00	0.00E+00	9.55E+00
		BaLa-140	<2.15E+00	0.00E+00	2.15E+00
		Be-7	<4.56E+01	0.00E+00	4.56E+01
K-40	1.32E+03	2.23E+02	1.20E+02		
549249	8/3/2021 - 8/3/2021	LLI-131	<5.49E-01	0.00E+00	5.49E-01
		I-131	<6.32E+00	0.00E+00	6.32E+00
		Cs-134	<9.49E+00	0.00E+00	9.49E+00
		Cs-137	<1.09E+01	0.00E+00	1.09E+01
		BaLa-140	<7.27E+00	0.00E+00	7.27E+00
		Be-7	<3.83E+01	0.00E+00	3.83E+01
K-40	1.38E+03	2.19E+02	1.78E+01		
550031	8/17/2021 - 8/17/2021	LLI-131	<6.42E-01	0.00E+00	6.42E-01
		I-131	<7.74E+00	0.00E+00	7.74E+00
		Cs-134	<7.22E+00	0.00E+00	7.22E+00
		Cs-137	<1.04E+01	0.00E+00	1.04E+01
		BaLa-140	<6.08E+00	0.00E+00	6.08E+00
		Be-7	<5.11E+01	0.00E+00	5.11E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550031	8/17/2021 - 8/17/2021	K-40	1.53E+03	2.41E+02	1.09E+02
551017	8/31/2021 - 8/31/2021	LLI-131	<5.90E-01	0.00E+00	5.90E-01
		I-131	<7.50E+00	0.00E+00	7.50E+00
		Cs-134	<7.61E+00	0.00E+00	7.61E+00
		Cs-137	<7.99E+00	0.00E+00	7.99E+00
		BaLa-140	<5.76E+00	0.00E+00	5.76E+00
		Be-7	<4.18E+01	0.00E+00	4.18E+01
		K-40	1.63E+03	2.47E+02	8.50E+01
552282	9/14/2021 - 9/14/2021	LLI-131	<6.47E-01	0.00E+00	6.47E-01
		I-131	<5.72E+00	0.00E+00	5.72E+00
		Cs-134	<9.17E+00	0.00E+00	9.17E+00
		Cs-137	<9.80E+00	0.00E+00	9.80E+00
		BaLa-140	<2.12E+00	0.00E+00	2.12E+00
		Be-7	<6.20E+01	0.00E+00	6.20E+01
		K-40	1.58E+03	2.42E+02	7.74E+01
552759	9/28/2021 - 9/28/2021	LLI-131	<6.41E-01	0.00E+00	6.41E-01
		I-131	<5.88E+00	0.00E+00	5.88E+00
		Cs-134	<7.61E+00	0.00E+00	7.61E+00
		Cs-137	<8.70E+00	0.00E+00	8.70E+00
		BaLa-140	<9.42E+00	0.00E+00	9.42E+00
		Be-7	<5.06E+01	0.00E+00	5.06E+01
		K-40	1.37E+03	2.19E+02	1.77E+01
553841	10/12/2021 - 10/12/2021	LLI-131	<6.37E-01	0.00E+00	6.37E-01
		I-131	<8.16E+00	0.00E+00	8.16E+00
		Cs-134	<8.81E+00	0.00E+00	8.81E+00
		Cs-137	<7.79E+00	0.00E+00	7.79E+00
		BaLa-140	<2.20E+00	0.00E+00	2.20E+00
		Be-7	<3.88E+01	0.00E+00	3.88E+01
		K-40	1.28E+03	2.15E+02	7.71E+01
554583	10/26/2021 - 10/26/2021	LLI-131	<6.43E-01	0.00E+00	6.43E-01
		I-131	<5.55E+00	0.00E+00	5.55E+00
		Cs-134	<8.74E+00	0.00E+00	8.74E+00
		Cs-137	<8.50E+00	0.00E+00	8.50E+00
		BaLa-140	<5.83E+00	0.00E+00	5.83E+00
		Be-7	<6.64E+01	0.00E+00	6.64E+01
		K-40	1.24E+03	2.10E+02	9.09E+01
555938	11/9/2021 - 11/9/2021	LLI-131	<6.20E-01	0.00E+00	6.20E-01
		I-131	<6.36E+00	0.00E+00	6.36E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<7.74E+00	0.00E+00	7.74E+00
		BaLa-140	<1.04E+01	0.00E+00	1.04E+01
		Be-7	<5.58E+01	0.00E+00	5.58E+01
		K-40	1.63E+03	2.46E+02	7.18E+01
557051	11/22/2021 - 11/22/2021	LLI-131	<5.63E-01	0.00E+00	5.63E-01
		I-131	<6.80E+00	0.00E+00	6.80E+00
		Cs-134	<6.62E+00	0.00E+00	6.62E+00
		Cs-137	<9.51E+00	0.00E+00	9.51E+00
		BaLa-140	<8.52E+00	0.00E+00	8.52E+00
		Be-7	<6.44E+01	0.00E+00	6.44E+01
		K-40	1.54E+03	2.39E+02	8.63E+01
557950	12/7/2021 - 12/7/2021	LLI-131	<6.47E-01	0.00E+00	6.47E-01
		I-131	<6.09E+00	0.00E+00	6.09E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 221 [CONTROL - NW @ 14.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557950	12/7/2021 - 12/7/2021	Cs-134	<6.61E+00	0.00E+00	6.61E+00
		Cs-137	<8.49E+00	0.00E+00	8.49E+00
		BaLa-140	<5.83E+00	0.00E+00	5.83E+00
		Be-7	<4.50E+01	0.00E+00	4.50E+01
		K-40	1.38E+03	2.28E+02	1.21E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558599	12/20/2021 - 12/20/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<6.57E+00	0.00E+00	6.57E+00
		Cs-134	<1.11E+01	0.00E+00	1.11E+01
		Cs-137	<7.74E+00	0.00E+00	7.74E+00
		BaLa-140	<1.12E+01	0.00E+00	1.12E+01
		Be-7	<6.03E+01	0.00E+00	6.03E+01
K-40	1.47E+03	2.32E+02	8.31E+01		

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540035	4/6/2021 - 4/6/2021	Mn-54	<8.17E+01	0.00E+00	8.17E+01
		Co-58	<6.81E+01	0.00E+00	6.81E+01
		Fe-59	<1.83E+02	0.00E+00	1.83E+02
		Co-60	<7.79E+01	0.00E+00	7.79E+01
		Zn-65	<1.56E+02	0.00E+00	1.56E+02
		Zr-95	<1.48E+02	0.00E+00	1.48E+02
		Nb-95	<7.87E+01	0.00E+00	7.87E+01
		I-131	<1.17E+02	0.00E+00	1.17E+02
		Cs-134	<1.12E+02	0.00E+00	1.12E+02
		Cs-137	<8.40E+01	0.00E+00	8.40E+01
		Be-7	<5.92E+02	0.00E+00	5.92E+02
		K-40	1.44E+04	2.23E+03	1.19E+03
		Co-57	<5.45E+01	0.00E+00	5.45E+01
		Mo-99	<3.00E+03	0.00E+00	3.00E+03
		Ag-110M	<5.77E+01	0.00E+00	5.77E+01
		Sb-122	<4.50E+02	0.00E+00	4.50E+02
		Sb-125	<1.78E+02	0.00E+00	1.78E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551648	10/12/2021 - 10/12/2021	Mn-54	<5.45E+01	0.00E+00	5.45E+01
		Co-58	<7.37E+01	0.00E+00	7.37E+01
		Fe-59	<2.05E+02	0.00E+00	2.05E+02
		Co-60	<9.31E+01	0.00E+00	9.31E+01
		Zn-65	<1.58E+02	0.00E+00	1.58E+02
		Zr-95	<1.01E+02	0.00E+00	1.01E+02
		Nb-95	<9.26E+01	0.00E+00	9.26E+01
		I-131	<2.10E+02	0.00E+00	2.10E+02
		Cs-134	<9.83E+01	0.00E+00	9.83E+01
		Cs-137	<7.36E+01	0.00E+00	7.36E+01
		Be-7	<6.32E+02	0.00E+00	6.32E+02
		K-40	1.73E+04	2.36E+03	9.71E+02
		Co-57	<3.83E+01	0.00E+00	3.83E+01
		Mo-99	<3.75E+04	0.00E+00	3.75E+04
		Ag-110M	<4.81E+01	0.00E+00	4.81E+01
		Sb-122	<3.41E+03	0.00E+00	3.41E+03
		Sb-125	<1.26E+02	0.00E+00	1.26E+02

Sample Point 210 [INDICATOR - SE @ 2.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540036	4/6/2021 - 4/6/2021	Mn-54	<3.98E+01	0.00E+00	3.98E+01
		Co-58	<4.72E+01	0.00E+00	4.72E+01
		Fe-59	<1.21E+02	0.00E+00	1.21E+02
		Co-60	<6.00E+01	0.00E+00	6.00E+01
		Zn-65	<9.11E+01	0.00E+00	9.11E+01
		Zr-95	<8.26E+01	0.00E+00	8.26E+01
		Nb-95	<4.83E+01	0.00E+00	4.83E+01
		I-131	<6.17E+01	0.00E+00	6.17E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 210 [INDICATOR - SE @ 2.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540036	4/6/2021 - 4/6/2021	Cs-134	<6.39E+01	0.00E+00	6.39E+01
		Cs-137	<4.43E+01	0.00E+00	4.43E+01
		Be-7	<3.13E+02	0.00E+00	3.13E+02
		K-40	1.07E+04	1.61E+03	4.50E+02
		Co-57	<3.77E+01	0.00E+00	3.77E+01
		Mo-99	<2.05E+03	0.00E+00	2.05E+03
		Ag-110M	<4.23E+01	0.00E+00	4.23E+01
		Sb-122	<2.96E+02	0.00E+00	2.96E+02
		Sb-125	<1.13E+02	0.00E+00	1.13E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551649	10/12/2021 - 10/12/2021	Mn-54	<6.03E+01	0.00E+00	6.03E+01
		Co-58	<6.75E+01	0.00E+00	6.75E+01
		Fe-59	<1.36E+02	0.00E+00	1.36E+02
		Co-60	<4.89E+01	0.00E+00	4.89E+01
		Zn-65	<1.00E+02	0.00E+00	1.00E+02
		Zr-95	<1.10E+02	0.00E+00	1.10E+02
		Nb-95	<9.00E+01	0.00E+00	9.00E+01
		I-131	<1.95E+02	0.00E+00	1.95E+02
		Cs-134	<5.18E+01	0.00E+00	5.18E+01
		Cs-137	<6.75E+01	0.00E+00	6.75E+01
		Be-7	<5.10E+02	0.00E+00	5.10E+02
		K-40	1.16E+04	1.72E+03	1.22E+02
		Co-57	<4.13E+01	0.00E+00	4.13E+01
		Mo-99	<2.97E+04	0.00E+00	2.97E+04
		Ag-110M	<4.67E+01	0.00E+00	4.67E+01
		Sb-122	<5.29E+03	0.00E+00	5.29E+03
		Sb-125	<1.17E+02	0.00E+00	1.17E+02

Sample Point 262 [CONTROL - NNE @ 4.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540037	4/6/2021 - 4/6/2021	Mn-54	<7.00E+01	0.00E+00	7.00E+01
		Co-58	<7.67E+01	0.00E+00	7.67E+01
		Fe-59	<1.46E+02	0.00E+00	1.46E+02
		Co-60	<6.75E+01	0.00E+00	6.75E+01
		Zn-65	<1.30E+02	0.00E+00	1.30E+02
		Zr-95	<1.21E+02	0.00E+00	1.21E+02
		Nb-95	<7.85E+01	0.00E+00	7.85E+01
		I-131	<8.60E+01	0.00E+00	8.60E+01
		Cs-134	<1.08E+02	0.00E+00	1.08E+02
		Cs-137	<9.14E+01	0.00E+00	9.14E+01
		Be-7	<7.41E+02	0.00E+00	7.41E+02
		K-40	5.53E+03	1.19E+03	6.06E+02
		Co-57	<7.08E+01	0.00E+00	7.08E+01
		Mo-99	<3.58E+03	0.00E+00	3.58E+03
		Ag-110M	<7.94E+01	0.00E+00	7.94E+01
		Sb-122	<5.82E+02	0.00E+00	5.82E+02
		Sb-125	<1.65E+02	0.00E+00	1.65E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551650	10/12/2021 - 10/12/2021	Mn-54	<9.34E+01	0.00E+00	9.34E+01
		Co-58	<8.66E+01	0.00E+00	8.66E+01
		Fe-59	<1.67E+02	0.00E+00	1.67E+02
		Co-60	<8.35E+01	0.00E+00	8.35E+01
		Zn-65	<1.66E+02	0.00E+00	1.66E+02
		Zr-95	<2.00E+02	0.00E+00	2.00E+02
		Nb-95	<1.01E+02	0.00E+00	1.01E+02
		I-131	<3.14E+02	0.00E+00	3.14E+02
		Cs-134	<1.10E+02	0.00E+00	1.10E+02
		Cs-137	<9.65E+01	0.00E+00	9.65E+01
		Be-7	<8.03E+02	0.00E+00	8.03E+02
		K-40	5.58E+03	1.34E+03	1.32E+03
		Co-57	<8.36E+01	0.00E+00	8.36E+01
		Mo-99	<5.25E+04	0.00E+00	5.25E+04
		Ag-110M	<8.13E+01	0.00E+00	8.13E+01
		Sb-122	<7.39E+03	0.00E+00	7.39E+03

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 262 [CONTROL - NNE @ 4.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551650	10/12/2021 - 10/12/2021	Sb-125	<2.23E+02	0.00E+00	2.23E+02

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537770	12/29/2020 - 1/26/2021	Mn-54	<2.80E+00	0.00E+00	2.80E+00
		Co-58	<2.69E+00	0.00E+00	2.69E+00
		Fe-59	<5.91E+00	0.00E+00	5.91E+00
		Co-60	<2.18E+00	0.00E+00	2.18E+00
		Zn-65	<5.34E+00	0.00E+00	5.34E+00
		Zr-95	<4.44E+00	0.00E+00	4.44E+00
		Nb-95	<3.09E+00	0.00E+00	3.09E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<2.31E+00	0.00E+00	2.31E+00
		Cs-137	<2.66E+00	0.00E+00	2.66E+00
		BaLa-140	<5.80E+00	0.00E+00	5.80E+00
		Be-7	<2.85E+01	0.00E+00	2.85E+01
		K-40	8.25E+01	3.01E+01	3.40E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538875	1/26/2021 - 2/23/2021	Mn-54	<2.91E+00	0.00E+00	2.91E+00
		Co-58	<2.45E+00	0.00E+00	2.45E+00
		Fe-59	<5.80E+00	0.00E+00	5.80E+00
		Co-60	<2.95E+00	0.00E+00	2.95E+00
		Zn-65	<5.92E+00	0.00E+00	5.92E+00
		Zr-95	<6.13E+00	0.00E+00	6.13E+00
		Nb-95	<3.87E+00	0.00E+00	3.87E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.06E+00	0.00E+00	3.06E+00
		Cs-137	<2.25E+00	0.00E+00	2.25E+00
		BaLa-140	<7.95E+00	0.00E+00	7.95E+00
		Be-7	<3.04E+01	0.00E+00	3.04E+01
		K-40	8.57E+01	3.89E+01	5.32E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541047	2/23/2021 - 3/23/2021	Mn-54	<3.79E+00	0.00E+00	3.79E+00
		Co-58	<4.04E+00	0.00E+00	4.04E+00
		Fe-59	<7.58E+00	0.00E+00	7.58E+00
		Co-60	<4.29E+00	0.00E+00	4.29E+00
		Zn-65	<8.28E+00	0.00E+00	8.28E+00
		Zr-95	<7.16E+00	0.00E+00	7.16E+00
		Nb-95	<4.95E+00	0.00E+00	4.95E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.76E+00	0.00E+00	3.76E+00
		Cs-137	<3.91E+00	0.00E+00	3.91E+00
		BaLa-140	<1.03E+01	0.00E+00	1.03E+01
		Be-7	<3.10E+01	0.00E+00	3.10E+01
		K-40	5.26E+01	4.32E+01	6.66E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538520	12/29/2020 - 4/20/2021	H3SW	6.19E+03	2.47E+02	1.97E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542942	3/23/2021 - 4/20/2021	Mn-54	<2.87E+00	0.00E+00	2.87E+00
		Co-58	<2.86E+00	0.00E+00	2.86E+00
		Fe-59	<5.26E+00	0.00E+00	5.26E+00
		Co-60	<3.31E+00	0.00E+00	3.31E+00
		Zn-65	<7.46E+00	0.00E+00	7.46E+00
		Zr-95	<6.58E+00	0.00E+00	6.58E+00
		Nb-95	<4.05E+00	0.00E+00	4.05E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<3.18E+00	0.00E+00	3.18E+00
		Cs-137	<3.19E+00	0.00E+00	3.19E+00
		BaLa-140	<4.76E+00	0.00E+00	4.76E+00
		Be-7	<2.73E+01	0.00E+00	2.73E+01
		K-40	7.65E+01	2.35E+01	3.33E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544837	4/20/2021 - 5/18/2021	Mn-54	<3.30E+00	0.00E+00	3.30E+00
		Co-58	<3.97E+00	0.00E+00	3.97E+00
		Fe-59	<6.07E+00	0.00E+00	6.07E+00
		Co-60	<3.84E+00	0.00E+00	3.84E+00
		Zn-65	<5.71E+00	0.00E+00	5.71E+00
		Zr-95	<5.83E+00	0.00E+00	5.83E+00
		Nb-95	<4.43E+00	0.00E+00	4.43E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.99E+00	0.00E+00	3.99E+00
		Cs-137	<3.83E+00	0.00E+00	3.83E+00
		BaLa-140	<7.05E+00	0.00E+00	7.05E+00
		Be-7	<2.56E+01	0.00E+00	2.56E+01
		K-40	4.44E+01	2.73E+01	3.66E+01
546768	5/18/2021 - 6/15/2021	Mn-54	<3.40E+00	0.00E+00	3.40E+00
		Co-58	<4.16E+00	0.00E+00	4.16E+00
		Fe-59	<6.39E+00	0.00E+00	6.39E+00
		Co-60	<2.99E+00	0.00E+00	2.99E+00
		Zn-65	<6.89E+00	0.00E+00	6.89E+00
		Zr-95	<7.38E+00	0.00E+00	7.38E+00
		Nb-95	<4.78E+00	0.00E+00	4.78E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<3.47E+00	0.00E+00	3.47E+00
		Cs-137	<3.18E+00	0.00E+00	3.18E+00
		BaLa-140	<4.86E+00	0.00E+00	4.86E+00
		Be-7	<2.64E+01	0.00E+00	2.64E+01
		K-40	2.30E+01	2.21E+01	3.31E+01
544459	4/20/2021 - 7/13/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	2.77E+03	1.75E+02	1.72E+02
547902	6/15/2021 - 7/13/2021	Mn-54	<2.72E+00	0.00E+00	2.72E+00
		Co-58	<3.00E+00	0.00E+00	3.00E+00
		Fe-59	<7.82E+00	0.00E+00	7.82E+00
		Co-60	<3.07E+00	0.00E+00	3.07E+00
		Zn-65	<6.68E+00	0.00E+00	6.68E+00
		Zr-95	<4.92E+00	0.00E+00	4.92E+00
		Nb-95	<4.09E+00	0.00E+00	4.09E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.93E+00	0.00E+00	3.93E+00
		Cs-137	<3.08E+00	0.00E+00	3.08E+00
		BaLa-140	<6.76E+00	0.00E+00	6.76E+00
		Be-7	<3.25E+01	0.00E+00	3.25E+01
		K-40	9.26E+01	3.51E+01	4.07E+01
549085	7/13/2021 - 8/10/2021	Mn-54	<1.70E+00	0.00E+00	1.70E+00
		Co-58	<3.03E+00	0.00E+00	3.03E+00
		Fe-59	<6.02E+00	0.00E+00	6.02E+00
		Co-60	<2.76E+00	0.00E+00	2.76E+00
		Zn-65	<6.06E+00	0.00E+00	6.06E+00
		Zr-95	<5.67E+00	0.00E+00	5.67E+00
		Nb-95	<3.78E+00	0.00E+00	3.78E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.02E+00	0.00E+00	3.02E+00
		Cs-137	<3.25E+00	0.00E+00	3.25E+00
		BaLa-140	<5.81E+00	0.00E+00	5.81E+00
		Be-7	<2.60E+01	0.00E+00	2.60E+01
		K-40	9.62E+01	3.58E+01	4.37E+01
550920	8/10/2021 - 9/8/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.89E+00	0.00E+00	2.89E+00
		Co-58	<2.81E+00	0.00E+00	2.81E+00
		Fe-59	<5.71E+00	0.00E+00	5.71E+00
		Co-60	<3.23E+00	0.00E+00	3.23E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550920	8/10/2021 - 9/8/2021	Zn-65	<5.80E+00	0.00E+00	5.80E+00
		Zr-95	<4.64E+00	0.00E+00	4.64E+00
		Nb-95	<3.42E+00	0.00E+00	3.42E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<2.74E+00	0.00E+00	2.74E+00
		Cs-137	<2.41E+00	0.00E+00	2.41E+00
		BaLa-140	<6.65E+00	0.00E+00	6.65E+00
		Be-7	<2.58E+01	0.00E+00	2.58E+01
		K-40	9.13E+01	3.26E+01	4.04E+01
		549192	7/13/2021 - 10/5/2021	H3SW	1.51E+04
552521	9/8/2021 - 10/5/2021	Mn-54	<3.96E+00	0.00E+00	3.96E+00
		Co-58	<4.12E+00	0.00E+00	4.12E+00
		Fe-59	<1.75E+00	0.00E+00	1.75E+00
		Co-60	<4.01E+00	0.00E+00	4.01E+00
		Zn-65	<8.03E+00	0.00E+00	8.03E+00
		Zr-95	<5.84E+00	0.00E+00	5.84E+00
		Nb-95	<5.29E+00	0.00E+00	5.29E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.64E+00	0.00E+00	3.64E+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	<4.32E+01	0.00E+00	4.32E+01
		K-40	<9.18E+01	0.00E+00	9.18E+01
554399	10/5/2021 - 11/2/2021	Mn-54	<4.03E+00	0.00E+00	4.03E+00
		Co-58	<4.21E+00	0.00E+00	4.21E+00
		Fe-59	<7.17E+00	0.00E+00	7.17E+00
		Co-60	<9.23E-01	0.00E+00	9.23E-01
		Zn-65	<1.18E+01	0.00E+00	1.18E+01
		Zr-95	<7.46E+00	0.00E+00	7.46E+00
		Nb-95	<5.68E+00	0.00E+00	5.68E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<4.69E+00	0.00E+00	4.69E+00
		Cs-137	<4.10E+00	0.00E+00	4.10E+00
		BaLa-140	<9.87E+00	0.00E+00	9.87E+00
		Be-7	<3.70E+01	0.00E+00	3.70E+01
		K-40	5.74E+01	3.85E+01	5.23E+01
556831	11/2/2021 - 11/30/2021	Mn-54	<3.04E+00	0.00E+00	3.04E+00
		Co-58	<3.61E+00	0.00E+00	3.61E+00
		Fe-59	<7.28E+00	0.00E+00	7.28E+00
		Co-60	<4.46E+00	0.00E+00	4.46E+00
		Zn-65	<7.14E+00	0.00E+00	7.14E+00
		Zr-95	<6.61E+00	0.00E+00	6.61E+00
		Nb-95	<4.16E+00	0.00E+00	4.16E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.96E+00	0.00E+00	3.96E+00
		Cs-137	<3.64E+00	0.00E+00	3.64E+00
		BaLa-140	<7.83E+00	0.00E+00	7.83E+00
		Be-7	<2.75E+01	0.00E+00	2.75E+01
		K-40	6.10E+01	3.40E+01	4.62E+01
555070	10/5/2021 - 12/28/2021	H3SW	8.18E+03	2.70E+02	1.85E+02
558502	11/30/2021 - 12/28/2021	Mn-54	<3.18E+00	0.00E+00	3.18E+00
		Co-58	<3.79E+00	0.00E+00	3.79E+00
		Fe-59	<9.25E+00	0.00E+00	9.25E+00
		Co-60	<3.42E+00	0.00E+00	3.42E+00
		Zn-65	<8.11E+00	0.00E+00	8.11E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 208 [INDICATOR - S @ 0.45 miles]

Sample ID:	558502	Sample Dates:	11/30/2021 - 12/28/2021	Nuclide	Activity	2 Sigma Error	MDA
				Zr-95	<5.95E+00	0.00E+00	5.95E+00
				Nb-95	<3.74E+00	0.00E+00	3.74E+00
				I-131	<1.12E+01	0.00E+00	1.12E+01
				Cs-134	<4.08E+00	0.00E+00	4.08E+00
				Cs-137	<3.34E+00	0.00E+00	3.34E+00
				BaLa-140	<7.72E+00	0.00E+00	7.72E+00
				Be-7	<3.97E+01	0.00E+00	3.97E+01
				K-40	8.33E+01	3.34E+01	4.90E+01

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	537771	Sample Dates:	12/29/2020 - 1/26/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.16E+00	0.00E+00	3.16E+00
				Co-58	<3.10E+00	0.00E+00	3.10E+00
				Fe-59	<7.77E+00	0.00E+00	7.77E+00
				Co-60	<2.85E+00	0.00E+00	2.85E+00
				Zn-65	<5.25E+00	0.00E+00	5.25E+00
				Zr-95	<4.20E+00	0.00E+00	4.20E+00
				Nb-95	<4.61E+00	0.00E+00	4.61E+00
				I-131	<1.18E+01	0.00E+00	1.18E+01
				Cs-134	<3.85E+00	0.00E+00	3.85E+00
				Cs-137	<3.52E+00	0.00E+00	3.52E+00
				BaLa-140	<1.89E+00	0.00E+00	1.89E+00
				Be-7	<2.58E+01	0.00E+00	2.58E+01
				K-40	<4.94E+01	0.00E+00	4.94E+01

Sample ID:	538876	Sample Dates:	1/26/2021 - 2/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.01E+00	0.00E+00	3.01E+00
				Co-58	<3.25E+00	0.00E+00	3.25E+00
				Fe-59	<6.00E+00	0.00E+00	6.00E+00
				Co-60	<3.20E+00	0.00E+00	3.20E+00
				Zn-65	<6.13E+00	0.00E+00	6.13E+00
				Zr-95	<6.76E+00	0.00E+00	6.76E+00
				Nb-95	<4.00E+00	0.00E+00	4.00E+00
				I-131	<1.12E+01	0.00E+00	1.12E+01
				Cs-134	<3.26E+00	0.00E+00	3.26E+00
				Cs-137	<3.15E+00	0.00E+00	3.15E+00
				BaLa-140	<5.94E+00	0.00E+00	5.94E+00
				Be-7	<2.84E+01	0.00E+00	2.84E+01
				K-40	1.01E+02	3.67E+01	4.37E+01

Sample ID:	541048	Sample Dates:	2/23/2021 - 3/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<2.42E+00	0.00E+00	2.42E+00
				Co-58	<3.29E+00	0.00E+00	3.29E+00
				Fe-59	<8.09E+00	0.00E+00	8.09E+00
				Co-60	<3.44E+00	0.00E+00	3.44E+00
				Zn-65	<7.63E+00	0.00E+00	7.63E+00
				Zr-95	<5.84E+00	0.00E+00	5.84E+00
				Nb-95	<3.96E+00	0.00E+00	3.96E+00
				I-131	<1.12E+01	0.00E+00	1.12E+01
				Cs-134	<3.45E+00	0.00E+00	3.45E+00
				Cs-137	<3.35E+00	0.00E+00	3.35E+00
				BaLa-140	<7.94E+00	0.00E+00	7.94E+00
				Be-7	<3.33E+01	0.00E+00	3.33E+01
				K-40	8.84E+01	3.69E+01	4.34E+01

Sample ID:	538521	Sample Dates:	12/29/2020 - 4/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3SW	2.60E+02	1.23E+02	1.98E+02

Sample ID:	542943	Sample Dates:	3/23/2021 - 4/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.78E+00	0.00E+00	3.78E+00
				Co-58	<2.81E+00	0.00E+00	2.81E+00
				Fe-59	<8.05E+00	0.00E+00	8.05E+00
				Co-60	<2.40E+00	0.00E+00	2.40E+00
				Zn-65	<7.56E+00	0.00E+00	7.56E+00
				Zr-95	<6.63E+00	0.00E+00	6.63E+00
				Nb-95	<3.99E+00	0.00E+00	3.99E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542943	3/23/2021 - 4/20/2021	I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.24E+00	0.00E+00	3.24E+00
		Cs-137	<4.23E+00	0.00E+00	4.23E+00
		BaLa-140	<7.45E+00	0.00E+00	7.45E+00
		Be-7	<3.38E+01	0.00E+00	3.38E+01
		K-40	9.00E+01	4.55E+01	6.16E+01
544838	4/20/2021 - 5/18/2021	Mn-54	<3.62E+00	0.00E+00	3.62E+00
		Co-58	<4.50E+00	0.00E+00	4.50E+00
		Fe-59	<6.64E+00	0.00E+00	6.64E+00
		Co-60	<3.19E+00	0.00E+00	3.19E+00
		Zn-65	<6.61E+00	0.00E+00	6.61E+00
		Zr-95	<5.54E+00	0.00E+00	5.54E+00
		Nb-95	<4.20E+00	0.00E+00	4.20E+00
		I-131	<1.32E+01	0.00E+00	1.32E+01
		Cs-134	<3.14E+00	0.00E+00	3.14E+00
		Cs-137	<4.21E+00	0.00E+00	4.21E+00
		BaLa-140	<7.87E+00	0.00E+00	7.87E+00
		Be-7	<2.74E+01	0.00E+00	2.74E+01
		K-40	9.51E+01	3.06E+01	3.52E+01
		546769	5/18/2021 - 6/15/2021	Mn-54	<3.33E+00
Co-58	<2.90E+00			0.00E+00	2.90E+00
Fe-59	<5.66E+00			0.00E+00	5.66E+00
Co-60	<3.07E+00			0.00E+00	3.07E+00
Zn-65	<6.19E+00			0.00E+00	6.19E+00
Zr-95	<7.49E+00			0.00E+00	7.49E+00
Nb-95	<3.69E+00			0.00E+00	3.69E+00
I-131	<1.18E+01			0.00E+00	1.18E+01
Cs-134	<3.94E+00			0.00E+00	3.94E+00
Cs-137	<3.00E+00			0.00E+00	3.00E+00
BaLa-140	<6.71E+00			0.00E+00	6.71E+00
Be-7	<2.76E+01			0.00E+00	2.76E+01
K-40	4.60E+01			3.69E+01	5.71E+01
544460	4/20/2021 - 7/13/2021			H3SW	2.50E+02
547903	6/15/2021 - 7/13/2021	Mn-54	<2.29E+00	0.00E+00	2.29E+00
		Co-58	<2.99E+00	0.00E+00	2.99E+00
		Fe-59	<4.07E+00	0.00E+00	4.07E+00
		Co-60	<2.36E+00	0.00E+00	2.36E+00
		Zn-65	<5.53E+00	0.00E+00	5.53E+00
		Zr-95	<5.22E+00	0.00E+00	5.22E+00
		Nb-95	<2.93E+00	0.00E+00	2.93E+00
		I-131	<8.96E+00	0.00E+00	8.96E+00
		Cs-134	<2.27E+00	0.00E+00	2.27E+00
		Cs-137	<2.84E+00	0.00E+00	2.84E+00
		BaLa-140	<5.27E+00	0.00E+00	5.27E+00
		Be-7	<1.81E+01	0.00E+00	1.81E+01
		K-40	7.60E+01	3.31E+01	4.64E+01
		549086	7/13/2021 - 8/10/2021	Mn-54	<3.19E+00
Co-58	<3.03E+00			0.00E+00	3.03E+00
Fe-59	<6.65E+00			0.00E+00	6.65E+00
Co-60	<3.10E+00			0.00E+00	3.10E+00
Zn-65	<6.76E+00			0.00E+00	6.76E+00
Zr-95	<4.29E+00			0.00E+00	4.29E+00
Nb-95	<3.51E+00			0.00E+00	3.51E+00
I-131	<1.19E+01			0.00E+00	1.19E+01
Cs-134	<3.26E+00			0.00E+00	3.26E+00
Cs-137	<2.68E+00			0.00E+00	2.68E+00
BaLa-140	<8.30E+00			0.00E+00	8.30E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549086	7/13/2021 - 8/10/2021	Be-7	<2.93E+01	0.00E+00	2.93E+01
		K-40	7.77E+01	3.29E+01	4.00E+01
550921	8/10/2021 - 9/8/2021	Mn-54	<2.72E+00	0.00E+00	2.72E+00
		Co-58	<3.32E+00	0.00E+00	3.32E+00
		Fe-59	<7.61E+00	0.00E+00	7.61E+00
		Co-60	<2.87E+00	0.00E+00	2.87E+00
		Zn-65	<6.15E+00	0.00E+00	6.15E+00
		Zr-95	<7.63E+00	0.00E+00	7.63E+00
		Nb-95	<3.13E+00	0.00E+00	3.13E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.32E+00	0.00E+00	3.32E+00
		Cs-137	<3.36E+00	0.00E+00	3.36E+00
		BaLa-140	<6.87E+00	0.00E+00	6.87E+00
		Be-7	<2.63E+01	0.00E+00	2.63E+01
		K-40	8.35E+01	4.31E+01	6.19E+01
549193	7/13/2021 - 10/5/2021	H3SW	6.55E+02	1.24E+02	1.77E+02
552522	9/8/2021 - 10/5/2021	Mn-54	<3.81E+00	0.00E+00	3.81E+00
		Co-58	<4.04E+00	0.00E+00	4.04E+00
		Fe-59	<7.58E+00	0.00E+00	7.58E+00
		Co-60	<3.67E+00	0.00E+00	3.67E+00
		Zn-65	<9.01E+00	0.00E+00	9.01E+00
		Zr-95	<8.33E+00	0.00E+00	8.33E+00
		Nb-95	<4.48E+00	0.00E+00	4.48E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<4.09E+00	0.00E+00	4.09E+00
		Cs-137	<3.94E+00	0.00E+00	3.94E+00
		BaLa-140	<7.22E+00	0.00E+00	7.22E+00
		Be-7	<4.17E+01	0.00E+00	4.17E+01
		K-40	1.03E+02	4.21E+01	4.89E+01
554400	10/5/2021 - 11/2/2021	Mn-54	<2.55E+00	0.00E+00	2.55E+00
		Co-58	<2.64E+00	0.00E+00	2.64E+00
		Fe-59	<4.50E+00	0.00E+00	4.50E+00
		Co-60	<2.73E+00	0.00E+00	2.73E+00
		Zn-65	<4.27E+00	0.00E+00	4.27E+00
		Zr-95	<4.70E+00	0.00E+00	4.70E+00
		Nb-95	<3.40E+00	0.00E+00	3.40E+00
		I-131	<9.67E+00	0.00E+00	9.67E+00
		Cs-134	<2.27E+00	0.00E+00	2.27E+00
		Cs-137	<2.32E+00	0.00E+00	2.32E+00
		BaLa-140	<5.58E+00	0.00E+00	5.58E+00
		Be-7	<2.51E+01	0.00E+00	2.51E+01
		K-40	9.87E+01	2.62E+01	2.42E+01
556832	11/2/2021 - 11/30/2021	Mn-54	<2.67E+00	0.00E+00	2.67E+00
		Co-58	<3.28E+00	0.00E+00	3.28E+00
		Fe-59	<7.23E+00	0.00E+00	7.23E+00
		Co-60	<2.10E+00	0.00E+00	2.10E+00
		Zn-65	<5.71E+00	0.00E+00	5.71E+00
		Zr-95	<6.07E+00	0.00E+00	6.07E+00
		Nb-95	<3.77E+00	0.00E+00	3.77E+00
		I-131	<1.07E+01	0.00E+00	1.07E+01
		Cs-134	<3.58E+00	0.00E+00	3.58E+00
		Cs-137	<3.96E+00	0.00E+00	3.96E+00
		BaLa-140	<7.89E+00	0.00E+00	7.89E+00
		Be-7	<2.55E+01	0.00E+00	2.55E+01
		K-40	1.00E+02	3.92E+01	4.88E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 211 [INDICATOR - ESE @ 4.06 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555071	10/5/2021 - 12/28/2021	H3SW	1.46E+03	1.50E+02	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558503	11/30/2021 - 12/28/2021	Mn-54	<2.71E+00	0.00E+00	2.71E+00
		Co-58	<4.13E+00	0.00E+00	4.13E+00
		Fe-59	<7.40E+00	0.00E+00	7.40E+00
		Co-60	<3.95E+00	0.00E+00	3.95E+00
		Zn-65	<6.29E+00	0.00E+00	6.29E+00
		Zr-95	<6.30E+00	0.00E+00	6.30E+00
		Nb-95	<5.05E+00	0.00E+00	5.05E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<4.37E+00	0.00E+00	4.37E+00
		Cs-137	<4.16E+00	0.00E+00	4.16E+00
		BaLa-140	<7.84E+00	0.00E+00	7.84E+00
		Be-7	<2.48E+01	0.00E+00	2.48E+01
		K-40	7.40E+01	3.44E+01	4.23E+01

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537772	12/29/2020 - 1/26/2021	Mn-54	<2.54E+00	0.00E+00	2.54E+00
		Co-58	<2.97E+00	0.00E+00	2.97E+00
		Fe-59	<7.72E+00	0.00E+00	7.72E+00
		Co-60	<3.41E+00	0.00E+00	3.41E+00
		Zn-65	<7.58E+00	0.00E+00	7.58E+00
		Zr-95	<7.06E+00	0.00E+00	7.06E+00
		Nb-95	<4.06E+00	0.00E+00	4.06E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.66E+00	0.00E+00	3.66E+00
		Cs-137	<3.87E+00	0.00E+00	3.87E+00
		BaLa-140	<7.91E+00	0.00E+00	7.91E+00
		Be-7	<3.02E+01	0.00E+00	3.02E+01
		K-40	<5.75E+01	0.00E+00	5.75E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538877	1/26/2021 - 2/23/2021	Mn-54	<3.83E+00	0.00E+00	3.83E+00
		Co-58	<3.71E+00	0.00E+00	3.71E+00
		Fe-59	<7.23E+00	0.00E+00	7.23E+00
		Co-60	<3.37E+00	0.00E+00	3.37E+00
		Zn-65	<1.01E+01	0.00E+00	1.01E+01
		Zr-95	<5.44E+00	0.00E+00	5.44E+00
		Nb-95	<3.92E+00	0.00E+00	3.92E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<4.41E+00	0.00E+00	4.41E+00
		Cs-137	<3.08E+00	0.00E+00	3.08E+00
		BaLa-140	<8.13E+00	0.00E+00	8.13E+00
		Be-7	<3.95E+01	0.00E+00	3.95E+01
		K-40	<5.59E+01	0.00E+00	5.59E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541049	2/23/2021 - 3/23/2021	Mn-54	<2.25E+00	0.00E+00	2.25E+00
		Co-58	<3.01E+00	0.00E+00	3.01E+00
		Fe-59	<4.71E+00	0.00E+00	4.71E+00
		Co-60	<2.11E+00	0.00E+00	2.11E+00
		Zn-65	<5.03E+00	0.00E+00	5.03E+00
		Zr-95	<4.71E+00	0.00E+00	4.71E+00
		Nb-95	<3.31E+00	0.00E+00	3.31E+00
		I-131	<9.45E+00	0.00E+00	9.45E+00
		Cs-134	<2.84E+00	0.00E+00	2.84E+00
		Cs-137	<2.74E+00	0.00E+00	2.74E+00
		BaLa-140	<3.71E+00	0.00E+00	3.71E+00
		Be-7	<2.06E+01	0.00E+00	2.06E+01
		K-40	1.05E+02	2.96E+01	3.25E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538522	12/29/2020 - 4/20/2021	H3SW	<1.05E+02	0.00E+00	1.99E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542944	3/23/2021 - 4/20/2021	Mn-54	<4.54E+00	0.00E+00	4.54E+00
		Co-58	<4.82E+00	0.00E+00	4.82E+00
		Fe-59	<9.26E+00	0.00E+00	9.26E+00
		Co-60	<4.73E+00	0.00E+00	4.73E+00
		Zn-65	<9.79E+00	0.00E+00	9.79E+00
		Zr-95	<7.78E+00	0.00E+00	7.78E+00
		Nb-95	<5.81E+00	0.00E+00	5.81E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<4.40E+00	0.00E+00	4.40E+00
		Cs-137	<4.88E+00	0.00E+00	4.88E+00
		BaLa-140	<1.08E+01	0.00E+00	1.08E+01
		Be-7	<2.74E+01	0.00E+00	2.74E+01
		K-40	8.12E+01	4.50E+01	5.85E+01
		544839	4/20/2021 - 5/18/2021	Mn-54	<2.54E+00
Co-58	<3.46E+00			0.00E+00	3.46E+00
Fe-59	<7.04E+00			0.00E+00	7.04E+00
Co-60	<2.58E+00			0.00E+00	2.58E+00
Zn-65	<6.23E+00			0.00E+00	6.23E+00
Zr-95	<5.87E+00			0.00E+00	5.87E+00
Nb-95	<3.69E+00			0.00E+00	3.69E+00
I-131	<1.30E+01			0.00E+00	1.30E+01
Cs-134	<3.33E+00			0.00E+00	3.33E+00
Cs-137	<3.83E+00			0.00E+00	3.83E+00
BaLa-140	<8.38E+00			0.00E+00	8.38E+00
Be-7	<2.98E+01			0.00E+00	2.98E+01
K-40	6.63E+01			2.85E+01	2.70E+01
546770	5/18/2021 - 6/15/2021			Mn-54	<3.36E+00
		Co-58	<4.24E+00	0.00E+00	4.24E+00
		Fe-59	<8.22E+00	0.00E+00	8.22E+00
		Co-60	<1.65E+00	0.00E+00	1.65E+00
		Zn-65	<6.86E+00	0.00E+00	6.86E+00
		Zr-95	<6.57E+00	0.00E+00	6.57E+00
		Nb-95	<4.61E+00	0.00E+00	4.61E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<4.03E+00	0.00E+00	4.03E+00
		Cs-137	<3.26E+00	0.00E+00	3.26E+00
		BaLa-140	<5.52E+00	0.00E+00	5.52E+00
		Be-7	<2.43E+01	0.00E+00	2.43E+01
		K-40	7.32E+01	3.62E+01	4.73E+01
		544461	4/20/2021 - 7/13/2021	H3SW	<9.15E+01
547904	6/15/2021 - 7/13/2021	Mn-54	<2.85E+00	0.00E+00	2.85E+00
		Co-58	<3.33E+00	0.00E+00	3.33E+00
		Fe-59	<7.63E+00	0.00E+00	7.63E+00
		Co-60	<3.18E+00	0.00E+00	3.18E+00
		Zn-65	<7.38E+00	0.00E+00	7.38E+00
		Zr-95	<6.88E+00	0.00E+00	6.88E+00
		Nb-95	<4.07E+00	0.00E+00	4.07E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<3.97E+00	0.00E+00	3.97E+00
		Cs-137	<4.04E+00	0.00E+00	4.04E+00
		BaLa-140	<5.82E+00	0.00E+00	5.82E+00
		Be-7	<3.08E+01	0.00E+00	3.08E+01
		K-40	6.22E+01	3.18E+01	4.32E+01
		549087	7/13/2021 - 8/10/2021	Mn-54	<2.63E+00
Co-58	<3.60E+00			0.00E+00	3.60E+00
Fe-59	<6.85E+00			0.00E+00	6.85E+00
Co-60	<2.31E+00			0.00E+00	2.31E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549087	7/13/2021 - 8/10/2021	Zn-65	<4.26E+00	0.00E+00	4.26E+00
		Zr-95	<6.83E+00	0.00E+00	6.83E+00
		Nb-95	<3.37E+00	0.00E+00	3.37E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<3.34E+00	0.00E+00	3.34E+00
		Cs-137	<3.01E+00	0.00E+00	3.01E+00
		BaLa-140	<7.74E+00	0.00E+00	7.74E+00
		Be-7	<2.65E+01	0.00E+00	2.65E+01
		K-40	<4.48E+01	0.00E+00	4.48E+01
		550922	8/10/2021 - 9/8/2021	Mn-54	<2.85E+00
Co-58	<3.25E+00			0.00E+00	3.25E+00
Fe-59	<5.62E+00			0.00E+00	5.62E+00
Co-60	<3.26E+00			0.00E+00	3.26E+00
Zn-65	<5.51E+00			0.00E+00	5.51E+00
Zr-95	<5.61E+00			0.00E+00	5.61E+00
Nb-95	<4.40E+00			0.00E+00	4.40E+00
I-131	<1.19E+01			0.00E+00	1.19E+01
Cs-134	<3.41E+00			0.00E+00	3.41E+00
Cs-137	<3.24E+00			0.00E+00	3.24E+00
BaLa-140	<8.27E+00			0.00E+00	8.27E+00
Be-7	<2.34E+01			0.00E+00	2.34E+01
K-40	7.72E+01			3.52E+01	4.68E+01
549194	7/13/2021 - 10/5/2021	H3SW	3.18E+02	1.14E+02	1.77E+02
552523	9/8/2021 - 10/5/2021	Mn-54	<2.90E+00	0.00E+00	2.90E+00
		Co-58	<3.82E+00	0.00E+00	3.82E+00
		Fe-59	<5.58E+00	0.00E+00	5.58E+00
		Co-60	<2.87E+00	0.00E+00	2.87E+00
		Zn-65	<6.70E+00	0.00E+00	6.70E+00
		Zr-95	<6.10E+00	0.00E+00	6.10E+00
		Nb-95	<3.82E+00	0.00E+00	3.82E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.13E+00	0.00E+00	3.13E+00
		Cs-137	<3.04E+00	0.00E+00	3.04E+00
		BaLa-140	<6.16E+00	0.00E+00	6.16E+00
		Be-7	<4.06E+01	0.00E+00	4.06E+01
		K-40	7.59E+01	3.17E+01	3.89E+01
554401	10/5/2021 - 11/2/2021	Mn-54	<2.93E+00	0.00E+00	2.93E+00
		Co-58	<3.33E+00	0.00E+00	3.33E+00
		Fe-59	<5.06E+00	0.00E+00	5.06E+00
		Co-60	<3.43E+00	0.00E+00	3.43E+00
		Zn-65	<6.56E+00	0.00E+00	6.56E+00
		Zr-95	<7.25E+00	0.00E+00	7.25E+00
		Nb-95	<3.08E+00	0.00E+00	3.08E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<3.16E+00	0.00E+00	3.16E+00
		Cs-137	<3.21E+00	0.00E+00	3.21E+00
		BaLa-140	<6.90E+00	0.00E+00	6.90E+00
		Be-7	<2.71E+01	0.00E+00	2.71E+01
		K-40	8.82E+01	3.40E+01	4.06E+01
556833	11/2/2021 - 11/30/2021	Mn-54	<2.83E+00	0.00E+00	2.83E+00
		Co-58	<2.70E+00	0.00E+00	2.70E+00
		Fe-59	<6.37E+00	0.00E+00	6.37E+00
		Co-60	<2.83E+00	0.00E+00	2.83E+00
		Zn-65	<4.78E+00	0.00E+00	4.78E+00
		Zr-95	<5.56E+00	0.00E+00	5.56E+00
		Nb-95	<4.51E+00	0.00E+00	4.51E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556833	11/2/2021 - 11/30/2021	Cs-134	<4.34E+00	0.00E+00	4.34E+00
		Cs-137	<2.87E+00	0.00E+00	2.87E+00
		BaLa-140	<6.25E+00	0.00E+00	6.25E+00
		Be-7	<2.91E+01	0.00E+00	2.91E+01
		K-40	<5.14E+01	0.00E+00	5.14E+01
555072	10/5/2021 - 12/28/2021	H3SW	6.15E+02	1.27E+02	1.86E+02
558504	11/30/2021 - 12/28/2021	Mn-54	<3.23E+00	0.00E+00	3.23E+00
		Co-58	<2.89E+00	0.00E+00	2.89E+00
		Fe-59	<6.36E+00	0.00E+00	6.36E+00
		Co-60	<3.74E+00	0.00E+00	3.74E+00
		Zn-65	<8.60E+00	0.00E+00	8.60E+00
		Zr-95	<7.31E+00	0.00E+00	7.31E+00
		Nb-95	<2.99E+00	0.00E+00	2.99E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<4.52E+00	0.00E+00	4.52E+00
		Cs-137	<3.28E+00	0.00E+00	3.28E+00
		BaLa-140	<6.13E+00	0.00E+00	6.13E+00
		Be-7	<3.19E+01	0.00E+00	3.19E+01
K-40	9.79E+01	3.92E+01	4.40E+01		

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539750	12/16/2020 - 3/17/2021	mR/Std Qtr	19.03
546177	3/17/2021 - 6/17/2021	mR/Std Qtr	16.95
551296	6/17/2021 - 9/16/2021	mR/Std Qtr	15.70
557635	9/16/2021 - 12/16/2021	mR/Std Qtr	15.80

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539751	12/16/2020 - 3/17/2021	mR/Std Qtr	20.27
546178	3/17/2021 - 6/17/2021	mR/Std Qtr	15.94
551297	6/17/2021 - 9/16/2021	mR/Std Qtr	15.20
557636	9/16/2021 - 12/16/2021	mR/Std Qtr	15.95

Sample Point 203 [INDICATOR - ESE @ 0.38 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539752	12/16/2020 - 3/17/2021	mR/Std Qtr	20.99
546179	3/17/2021 - 6/17/2021	mR/Std Qtr	17.30
551298	6/17/2021 - 9/16/2021	mR/Std Qtr	17.14
557637	9/16/2021 - 12/16/2021	mR/Std Qtr	18.53

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 204 [INDICATOR - SSW @ 0.48 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539753	12/16/2020 - 3/17/2021	mR/Std Qtr	20.84
546180	3/17/2021 - 6/17/2021	mR/Std Qtr	16.63
551299	6/17/2021 - 9/16/2021	mR/Std Qtr	16.19
557638	9/16/2021 - 12/16/2021	mR/Std Qtr	17.44

Sample Point 205 [INDICATOR - SW @ 0.5 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539754	12/16/2020 - 3/17/2021	mR/Std Qtr	21.76
546181	3/17/2021 - 6/17/2021	mR/Std Qtr	18.61
551300	6/17/2021 - 9/16/2021	mR/Std Qtr	18.00
557639	9/16/2021 - 12/16/2021	mR/Std Qtr	19.39

Sample Point 206 [INDICATOR - WNW @ 0.67 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539755	12/16/2020 - 3/17/2021	mR/Std Qtr	26.49
546182	3/17/2021 - 6/17/2021	mR/Std Qtr	23.40
551301	6/17/2021 - 9/16/2021	mR/Std Qtr	20.61
557640	9/16/2021 - 12/16/2021	mR/Std Qtr	22.77

Sample Point 207 [INDICATOR - NNW @ 0.95 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539756	12/16/2020 - 3/17/2021	mR/Std Qtr	23.39
546183	3/17/2021 - 6/17/2021	mR/Std Qtr	18.94
551302	6/17/2021 - 9/16/2021	mR/Std Qtr	18.87
557641	9/16/2021 - 12/16/2021	mR/Std Qtr	20.30

Sample Point 212 [INDICATOR - E @ 3.32 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
539757	12/16/2020 - 3/17/2021	mR/Std Qtr	21.24
546184	3/17/2021 - 6/17/2021	mR/Std Qtr	15.47
551303	6/17/2021 - 9/16/2021	mR/Std Qtr	15.40
557642	9/16/2021 - 12/16/2021	mR/Std Qtr	15.68

Sample Point 217 [CONTROL - SSE @ 10.3 miles]

TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
539758	12/16/2020 - 3/17/2021	mR/Std Qtr	14.83

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 217 [CONTROL - SSE @ 10.3 miles]

TLD RING TLD_CTRL

Sample ID: 546185	Sample Dates: 3/17/2021 - 6/17/2021	Nuclide	Activity
		mR/Std Qtr	12.10
Sample ID: 551304	Sample Dates: 6/17/2021 - 9/16/2021	Nuclide	Activity
		mR/Std Qtr	11.25
Sample ID: 557643	Sample Dates: 9/16/2021 - 12/16/2021	Nuclide	Activity
		mR/Std Qtr	10.49

Sample Point 222 [INDICATOR - N @ 0.71 miles]

TLD RING TLD_INNER

Sample ID: 539759	Sample Dates: 12/16/2020 - 3/17/2021	Nuclide	Activity
		mR/Std Qtr	20.59
Sample ID: 546186	Sample Dates: 3/17/2021 - 6/17/2021	Nuclide	Activity
		mR/Std Qtr	16.84
Sample ID: 551305	Sample Dates: 6/17/2021 - 9/16/2021	Nuclide	Activity
		mR/Std Qtr	18.14
Sample ID: 557644	Sample Dates: 9/16/2021 - 12/16/2021	Nuclide	Activity
		mR/Std Qtr	18.90

Sample Point 223 [INDICATOR - E @ 0.57 miles]

TLD RING TLD_INNER

Sample ID: 539760	Sample Dates: 12/16/2020 - 3/17/2021	Nuclide	Activity
		mR/Std Qtr	23.07
Sample ID: 546187	Sample Dates: 3/17/2021 - 6/17/2021	Nuclide	Activity
		mR/Std Qtr	18.72
Sample ID: 551306	Sample Dates: 6/17/2021 - 9/16/2021	Nuclide	Activity
		mR/Std Qtr	19.86
Sample ID: 557645	Sample Dates: 9/16/2021 - 12/16/2021	Nuclide	Activity
		mR/Std Qtr	20.96

Sample Point 225 [INDICATOR - SE @ 0.68 miles]

TLD RING TLD_INNER

Sample ID: 539761	Sample Dates: 12/16/2020 - 3/17/2021	Nuclide	Activity
		mR/Std Qtr	23.50
Sample ID: 546188	Sample Dates: 3/17/2021 - 6/17/2021	Nuclide	Activity
		mR/Std Qtr	19.95
Sample ID: 551307	Sample Dates: 6/17/2021 - 9/16/2021	Nuclide	Activity
		mR/Std Qtr	18.39
Sample ID: 557646	Sample Dates: 9/16/2021 - 12/16/2021	Nuclide	Activity
		mR/Std Qtr	19.34

Sample Point 226 [INDICATOR - S @ 0.48 miles]

TLD RING TLD_INNER

Sample ID: 539762	Sample Dates: 12/16/2020 - 3/17/2021	Nuclide	Activity
		mR/Std Qtr	22.42
Sample ID: 546189	Sample Dates: 3/17/2021 - 6/17/2021	Nuclide	Activity
		mR/Std Qtr	20.09
Sample ID: 551308	Sample Dates: 6/17/2021 - 9/16/2021	Nuclide	Activity
		mR/Std Qtr	20.06
Sample ID: 557647	Sample Dates: 9/16/2021 - 12/16/2021	Nuclide	Activity
		mR/Std Qtr	17.71

Sample Point 227 [INDICATOR - WSW @ 0.52 miles]

TLD RING TLD_INNER

Sample ID: 539763	Sample Dates: 12/16/2020 - 3/17/2021	Nuclide	Activity
		mR/Std Qtr	20.10
Sample ID: 546190	Sample Dates: 3/17/2021 - 6/17/2021	Nuclide	Activity
		mR/Std Qtr	17.95

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 227 [INDICATOR - WSW @ 0.52 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
551309	6/17/2021 - 9/16/2021	mR/Std Qtr	17.80
557648	9/16/2021 - 12/16/2021	mR/Std Qtr	16.87

Sample Point 228 [INDICATOR - W @ 0.61 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539764	12/16/2020 - 3/17/2021	mR/Std Qtr	21.07
546191	3/17/2021 - 6/17/2021	mR/Std Qtr	19.80
551310	6/17/2021 - 9/16/2021	mR/Std Qtr	19.38
557649	9/16/2021 - 12/16/2021	mR/Std Qtr	17.00

Sample Point 229 [INDICATOR - NW @ 0.84 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539765	12/16/2020 - 3/17/2021	mR/Std Qtr	25.33
546192	3/17/2021 - 6/17/2021	mR/Std Qtr	21.41
551311	6/17/2021 - 9/16/2021	mR/Std Qtr	20.26
557650	9/16/2021 - 12/16/2021	mR/Std Qtr	21.61

Sample Point 230 [INDICATOR - N @ 4.37 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539766	12/16/2020 - 3/17/2021	mR/Std Qtr	16.38
546193	3/17/2021 - 6/17/2021	mR/Std Qtr	12.38
551312	6/17/2021 - 9/16/2021	mR/Std Qtr	12.97
557651	9/16/2021 - 12/16/2021	mR/Std Qtr	13.70

Sample Point 231 [INDICATOR - NNE @ 4.21 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539767	12/16/2020 - 3/17/2021	mR/Std Qtr	19.27
546194	3/17/2021 - 6/17/2021	mR/Std Qtr	16.65
551313	6/17/2021 - 9/16/2021	mR/Std Qtr	17.63
557652	9/16/2021 - 12/16/2021	mR/Std Qtr	19.69

Sample Point 232 [INDICATOR - NE @ 4.18 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539768	12/16/2020 - 3/17/2021	mR/Std Qtr	24.12
546195	3/17/2021 - 6/17/2021	mR/Std Qtr	20.33
551314	6/17/2021 - 9/16/2021	mR/Std Qtr	21.86

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 232 [INDICATOR - NE @ 4.18 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
557653	9/16/2021 - 12/16/2021	mR/Std Qtr	20.99

Sample Point 233 [INDICATOR - ENE @ 3.95 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539769	12/16/2020 - 3/17/2021	mR/Std Qtr	16.20

Sample ID:	Sample Dates:	Nuclide	Activity
546196	3/17/2021 - 6/17/2021	mR/Std Qtr	14.44

Sample ID:	Sample Dates:	Nuclide	Activity
551315	6/17/2021 - 9/16/2021	mR/Std Qtr	13.93

Sample ID:	Sample Dates:	Nuclide	Activity
557654	9/16/2021 - 12/16/2021	mR/Std Qtr	14.16

Sample Point 234 [INDICATOR - E @ 4.5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539770	12/16/2020 - 3/17/2021	mR/Std Qtr	21.73

Sample ID:	Sample Dates:	Nuclide	Activity
546197	3/17/2021 - 6/17/2021	mR/Std Qtr	18.07

Sample ID:	Sample Dates:	Nuclide	Activity
551316	6/17/2021 - 9/16/2021	mR/Std Qtr	17.91

Sample ID:	Sample Dates:	Nuclide	Activity
557655	9/16/2021 - 12/16/2021	mR/Std Qtr	16.77

Sample Point 235 [INDICATOR - ESE @ 4.07 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539771	12/16/2020 - 3/17/2021	mR/Std Qtr	18.42

Sample ID:	Sample Dates:	Nuclide	Activity
546198	3/17/2021 - 6/17/2021	mR/Std Qtr	13.73

Sample ID:	Sample Dates:	Nuclide	Activity
551317	6/17/2021 - 9/16/2021	mR/Std Qtr	15.15

Sample ID:	Sample Dates:	Nuclide	Activity
557656	9/16/2021 - 12/16/2021	mR/Std Qtr	15.41

Sample Point 237 [INDICATOR - SSE @ 4.75 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539772	12/16/2020 - 3/17/2021	mR/Std Qtr	24.68

Sample ID:	Sample Dates:	Nuclide	Activity
546199	3/17/2021 - 6/17/2021	mR/Std Qtr	20.16

Sample ID:	Sample Dates:	Nuclide	Activity
551318	6/17/2021 - 9/16/2021	mR/Std Qtr	19.73

Sample ID:	Sample Dates:	Nuclide	Activity
557657	9/16/2021 - 12/16/2021	mR/Std Qtr	22.42

Sample Point 238 [INDICATOR - S @ 4.02 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539773	12/16/2020 - 3/17/2021	mR/Std Qtr	19.40

Sample ID:	Sample Dates:	Nuclide	Activity
546200	3/17/2021 - 6/17/2021	mR/Std Qtr	16.58

Sample ID:	Sample Dates:	Nuclide	Activity
551319	6/17/2021 - 9/16/2021	mR/Std Qtr	16.92

Sample ID:	Sample Dates:	Nuclide	Activity
557658	9/16/2021 - 12/16/2021	mR/Std Qtr	16.21

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 239 [INDICATOR - SSW @ 4.49 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539774	12/16/2020 - 3/17/2021	mR/Std Qtr	20.07
546201	3/17/2021 - 6/17/2021	mR/Std Qtr	16.76
551320	6/17/2021 - 9/16/2021	mR/Std Qtr	17.14
557659	9/16/2021 - 12/16/2021	mR/Std Qtr	20.91

Sample Point 240 [INDICATOR - SW @ 4.07 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539775	12/16/2020 - 3/17/2021	mR/Std Qtr	15.09
546202	3/17/2021 - 6/17/2021	mR/Std Qtr	12.69
551321	6/17/2021 - 9/16/2021	mR/Std Qtr	12.75
557660	9/16/2021 - 12/16/2021	mR/Std Qtr	11.84

Sample Point 241 [INDICATOR - WSW @ 4.58 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539776	12/16/2020 - 3/17/2021	mR/Std Qtr	16.27
546203	3/17/2021 - 6/17/2021	mR/Std Qtr	13.20
551322	6/17/2021 - 9/16/2021	mR/Std Qtr	14.78
557661	9/16/2021 - 12/16/2021	mR/Std Qtr	15.62

Sample Point 242 [INDICATOR - W @ 4.56 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539777	12/16/2020 - 3/17/2021	mR/Std Qtr	18.02
546204	3/17/2021 - 6/17/2021	mR/Std Qtr	14.21
551323	6/17/2021 - 9/16/2021	mR/Std Qtr	16.27
557662	9/16/2021 - 12/16/2021	mR/Std Qtr	15.93

Sample Point 243 [INDICATOR - WNW @ 4.39 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539778	12/16/2020 - 3/17/2021	mR/Std Qtr	19.40
546205	3/17/2021 - 6/17/2021	mR/Std Qtr	14.71
551324	6/17/2021 - 9/16/2021	mR/Std Qtr	17.59
557663	9/16/2021 - 12/16/2021	mR/Std Qtr	17.95

Sample Point 244 [INDICATOR - NW @ 4.02 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539779	12/16/2020 - 3/17/2021	mR/Std Qtr	22.10

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 244 [INDICATOR - NW @ 4.02 miles]

TLD RING TLD_OUTER

Sample ID:	546206	Sample Dates:	3/17/2021 - 6/17/2021	Nuclide	Activity
				mR/Std Qtr	17.72
Sample ID:	551325	Sample Dates:	6/17/2021 - 9/16/2021	Nuclide	Activity
				mR/Std Qtr	20.67
Sample ID:	557664	Sample Dates:	9/16/2021 - 12/16/2021	Nuclide	Activity
				mR/Std Qtr	19.34

Sample Point 245 [INDICATOR - NNW @ 4.01 miles]

TLD RING TLD_OUTER

Sample ID:	539780	Sample Dates:	12/16/2020 - 3/17/2021	Nuclide	Activity
				mR/Std Qtr	18.54
Sample ID:	546207	Sample Dates:	3/17/2021 - 6/17/2021	Nuclide	Activity
				mR/Std Qtr	14.41
Sample ID:	551326	Sample Dates:	6/17/2021 - 9/16/2021	Nuclide	Activity
				mR/Std Qtr	13.95
Sample ID:	557665	Sample Dates:	9/16/2021 - 12/16/2021	Nuclide	Activity
				mR/Std Qtr	16.72

Sample Point 246 [INDICATOR - ENE @ 7.87 miles]

TLD RING TLD_SPEC

Sample ID:	539781	Sample Dates:	12/16/2020 - 3/17/2021	Nuclide	Activity
				mR/Std Qtr	16.74
Sample ID:	546208	Sample Dates:	3/17/2021 - 6/17/2021	Nuclide	Activity
				mR/Std Qtr	13.91
Sample ID:	551327	Sample Dates:	6/17/2021 - 9/16/2021	Nuclide	Activity
				mR/Std Qtr	14.71
Sample ID:	557666	Sample Dates:	9/16/2021 - 12/16/2021	Nuclide	Activity
				mR/Std Qtr	14.53

Sample Point 247 [CONTROL - ESE @ 7.33 miles]

TLD RING TLD_CTRL

Sample ID:	539782	Sample Dates:	12/16/2020 - 3/17/2021	Nuclide	Activity
				mR/Std Qtr	16.22
Sample ID:	546209	Sample Dates:	3/17/2021 - 6/17/2021	Nuclide	Activity
				mR/Std Qtr	13.09
Sample ID:	551328	Sample Dates:	6/17/2021 - 9/16/2021	Nuclide	Activity
				mR/Std Qtr	13.30
Sample ID:	557667	Sample Dates:	9/16/2021 - 12/16/2021	Nuclide	Activity
				mR/Std Qtr	13.33

Sample Point 248 [INDICATOR - S @ 6.54 miles]

TLD RING TLD_SPEC

Sample ID:	539783	Sample Dates:	12/16/2020 - 3/17/2021	Nuclide	Activity
				mR/Std Qtr	18.08
Sample ID:	546210	Sample Dates:	3/17/2021 - 6/17/2021	Nuclide	Activity
				mR/Std Qtr	13.38
Sample ID:	551329	Sample Dates:	6/17/2021 - 9/16/2021	Nuclide	Activity
				mR/Std Qtr	13.55
Sample ID:	557668	Sample Dates:	9/16/2021 - 12/16/2021	Nuclide	Activity
				mR/Std Qtr	13.38

Sample Point 249 [INDICATOR - S @ 7.17 miles]

TLD RING TLD_SPEC

Sample ID:	539784	Sample Dates:	12/16/2020 - 3/17/2021	Nuclide	Activity
				mR/Std Qtr	19.13
Sample ID:	546211	Sample Dates:	3/17/2021 - 6/17/2021	Nuclide	Activity
				mR/Std Qtr	17.60

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 249 [INDICATOR - S @ 7.17 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
551330	6/17/2021 - 9/16/2021	mR/Std Qtr	16.47
557669	9/16/2021 - 12/16/2021	mR/Std Qtr	16.08

Sample Point 250 [INDICATOR - WSW @ 10.4 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
539785	12/16/2020 - 3/17/2021	mR/Std Qtr	20.12
546212	3/17/2021 - 6/17/2021	mR/Std Qtr	16.89
551331	6/17/2021 - 9/16/2021	mR/Std Qtr	15.99
557670	9/16/2021 - 12/16/2021	mR/Std Qtr	16.00

Sample Point 251 [CONTROL - WNW @ 9.72 miles]

TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
539786	12/16/2020 - 3/17/2021	mR/Std Qtr	20.09
546213	3/17/2021 - 6/17/2021	mR/Std Qtr	15.81
551332	6/17/2021 - 9/16/2021	mR/Std Qtr	16.65
557671	9/16/2021 - 12/16/2021	mR/Std Qtr	17.29

Sample Point 255 [INDICATOR - ENE @ 0.61 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539787	12/16/2020 - 3/17/2021	mR/Std Qtr	23.57
546214	3/17/2021 - 6/17/2021	mR/Std Qtr	20.88
551333	6/17/2021 - 9/16/2021	mR/Std Qtr	21.33
557672	9/16/2021 - 12/16/2021	mR/Std Qtr	19.50

Sample Point 256 [INDICATOR - SSE @ 0.58 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539788	12/16/2020 - 3/17/2021	mR/Std Qtr	24.25
546215	3/17/2021 - 6/17/2021	mR/Std Qtr	21.00
551334	6/17/2021 - 9/16/2021	mR/Std Qtr	20.49
557673	9/16/2021 - 12/16/2021	mR/Std Qtr	20.54

Sample Point 258 [INDICATOR - W @ 9.84 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
539789	12/16/2020 - 3/17/2021	mR/Std Qtr	20.30
546216	3/17/2021 - 6/17/2021	mR/Std Qtr	19.68
551335	6/17/2021 - 9/16/2021	mR/Std Qtr	20.11

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 258 [INDICATOR - W @ 9.84 miles]

TLD RING TLD_SPEC

Sample ID: 557674	Sample Dates: 9/16/2021 - 12/16/2021	Nuclide	Activity
		mR/Std Qtr	18.65

Sample Point 264 [INDICATOR - SE @ 4.32 miles]

TLD RING TLD_OUTER

Sample ID: 539790	Sample Dates: 12/16/2020 - 3/17/2021	Nuclide	Activity
		mR/Std Qtr	30.28

Sample ID: 546217	Sample Dates: 3/17/2021 - 6/17/2021	Nuclide	Activity
		mR/Std Qtr	26.15

Sample ID: 551336	Sample Dates: 6/17/2021 - 9/16/2021	Nuclide	Activity
		mR/Std Qtr	28.80

Sample ID: 557675	Sample Dates: 9/16/2021 - 12/16/2021	Nuclide	Activity
		mR/Std Qtr	28.13

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
536683	1/6/2021 - 1/6/2021		Mn-54	<3.11E+01	0.00E+00	3.11E+01
			Co-58	<3.07E+01	0.00E+00	3.07E+01
			Fe-59	<5.95E+01	0.00E+00	5.95E+01
			Co-60	<2.71E+01	0.00E+00	2.71E+01
			Zn-65	<6.51E+01	0.00E+00	6.51E+01
			Zr-95	<6.00E+01	0.00E+00	6.00E+01
			Nb-95	<3.38E+01	0.00E+00	3.38E+01
			I-131	<2.99E+01	0.00E+00	2.99E+01
			Cs-134	<3.99E+01	0.00E+00	3.99E+01
			Cs-137	<3.13E+01	0.00E+00	3.13E+01
			BaLa-140	<3.82E+01	0.00E+00	3.82E+01
			Be-7	2.01E+03	3.72E+02	3.67E+02
			K-40	4.57E+03	7.35E+02	5.02E+02
			538220	2/2/2021 - 2/2/2021		Mn-54
Co-58	<1.66E+01	0.00E+00				1.66E+01
Fe-59	<2.87E+01	0.00E+00				2.87E+01
Co-60	<1.33E+01	0.00E+00				1.33E+01
Zn-65	<2.90E+01	0.00E+00				2.90E+01
Zr-95	<2.78E+01	0.00E+00				2.78E+01
Nb-95	<1.61E+01	0.00E+00				1.61E+01
I-131	<1.53E+01	0.00E+00				1.53E+01
Cs-134	<2.01E+01	0.00E+00				2.01E+01
Cs-137	<1.56E+01	0.00E+00				1.56E+01
BaLa-140	<1.42E+01	0.00E+00				1.42E+01
Be-7	3.66E+03	4.22E+02				2.21E+02
K-40	3.29E+03	4.45E+02				1.97E+02
539196	3/2/2021 - 3/2/2021					Mn-54
			Co-58	<1.95E+01	0.00E+00	1.95E+01
			Fe-59	<3.24E+01	0.00E+00	3.24E+01
			Co-60	<1.60E+01	0.00E+00	1.60E+01
			Zn-65	<4.05E+01	0.00E+00	4.05E+01
			Zr-95	<3.05E+01	0.00E+00	3.05E+01
			Nb-95	<1.73E+01	0.00E+00	1.73E+01
			I-131	<1.58E+01	0.00E+00	1.58E+01
			Cs-134	<2.21E+01	0.00E+00	2.21E+01
			Cs-137	<1.56E+01	0.00E+00	1.56E+01
			BaLa-140	<1.68E+01	0.00E+00	1.68E+01
			Be-7	1.92E+03	2.77E+02	2.02E+02
			K-40	2.97E+03	4.38E+02	2.27E+02
			541914	4/6/2021 - 4/6/2021		Mn-54
Co-58	<1.83E+01	0.00E+00				1.83E+01
Fe-59	<4.08E+01	0.00E+00				4.08E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
541914	4/6/2021 - 4/6/2021	MIXEDBLV	Co-60	<2.11E+01	0.00E+00	2.11E+01
			Zn-65	<4.99E+01	0.00E+00	4.99E+01
			Zr-95	<4.39E+01	0.00E+00	4.39E+01
			Nb-95	<2.26E+01	0.00E+00	2.26E+01
			I-131	<2.44E+01	0.00E+00	2.44E+01
			Cs-134	<3.09E+01	0.00E+00	3.09E+01
			Cs-137	<2.60E+01	0.00E+00	2.60E+01
			BaLa-140	<2.87E+01	0.00E+00	2.87E+01
			Be-7	1.15E+03	2.60E+02	3.04E+02
			K-40	4.52E+03	6.16E+02	2.61E+02
			544151	5/4/2021 - 5/4/2021	MIXEDBLV	Mn-54
Co-58	<2.25E+01	0.00E+00				2.25E+01
Fe-59	<4.45E+01	0.00E+00				4.45E+01
Co-60	<2.81E+01	0.00E+00				2.81E+01
Zn-65	<5.51E+01	0.00E+00				5.51E+01
Zr-95	<4.16E+01	0.00E+00				4.16E+01
Nb-95	<2.76E+01	0.00E+00				2.76E+01
I-131	<2.14E+01	0.00E+00				2.14E+01
Cs-134	<2.96E+01	0.00E+00				2.96E+01
Cs-137	<2.56E+01	0.00E+00				2.56E+01
BaLa-140	<1.89E+01	0.00E+00				1.89E+01
Be-7	7.42E+02	2.29E+02				3.00E+02
K-40	4.18E+03	6.19E+02				3.19E+02
545657	6/2/2021 - 6/2/2021	MIXEDBLV	Mn-54	<1.46E+01	0.00E+00	1.46E+01
			Co-58	<1.21E+01	0.00E+00	1.21E+01
			Fe-59	<2.62E+01	0.00E+00	2.62E+01
			Co-60	<1.29E+01	0.00E+00	1.29E+01
			Zn-65	<3.62E+01	0.00E+00	3.62E+01
			Zr-95	<2.46E+01	0.00E+00	2.46E+01
			Nb-95	<1.39E+01	0.00E+00	1.39E+01
			I-131	<1.26E+01	0.00E+00	1.26E+01
			Cs-134	<1.92E+01	0.00E+00	1.92E+01
			Cs-137	<1.44E+01	0.00E+00	1.44E+01
			BaLa-140	<1.06E+01	0.00E+00	1.06E+01
			Be-7	8.18E+02	1.56E+02	1.57E+02
			K-40	4.66E+03	5.39E+02	1.66E+02
547381	7/7/2021 - 7/7/2021	MIXEDBLV	Mn-54	<1.65E+01	0.00E+00	1.65E+01
			Co-58	<1.57E+01	0.00E+00	1.57E+01
			Fe-59	<3.14E+01	0.00E+00	3.14E+01
			Co-60	<2.09E+01	0.00E+00	2.09E+01
			Zn-65	<3.43E+01	0.00E+00	3.43E+01
			Zr-95	<3.10E+01	0.00E+00	3.10E+01
			Nb-95	<1.54E+01	0.00E+00	1.54E+01
			I-131	<1.50E+01	0.00E+00	1.50E+01
			Cs-134	<2.20E+01	0.00E+00	2.20E+01
			Cs-137	<1.67E+01	0.00E+00	1.67E+01
			BaLa-140	<1.63E+01	0.00E+00	1.63E+01
			Be-7	1.14E+03	2.00E+02	1.83E+02
			K-40	4.51E+03	5.73E+02	2.61E+02
548667	8/3/2021 - 8/3/2021	MIXEDBLV	Mn-54	<1.49E+01	0.00E+00	1.49E+01
			Co-58	<1.60E+01	0.00E+00	1.60E+01
			Fe-59	<3.07E+01	0.00E+00	3.07E+01
			Co-60	<1.81E+01	0.00E+00	1.81E+01
			Zn-65	<2.88E+01	0.00E+00	2.88E+01
			Zr-95	<3.27E+01	0.00E+00	3.27E+01
			Nb-95	<1.66E+01	0.00E+00	1.66E+01
			I-131	<1.76E+01	0.00E+00	1.76E+01
			Cs-134	<2.37E+01	0.00E+00	2.37E+01
			Cs-137	<1.96E+01	0.00E+00	1.96E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 200 [INDICATOR - NNE @ 0.63 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
548667	8/3/2021 - 8/3/2021		BaLa-140	<1.81E+01	0.00E+00	1.81E+01
			Be-7	1.18E+03	2.12E+02	1.97E+02
			K-40	2.95E+03	4.48E+02	2.70E+02
549971	9/8/2021 - 9/8/2021		Mn-54	<2.39E+01	0.00E+00	2.39E+01
			Co-58	<2.33E+01	0.00E+00	2.33E+01
			Fe-59	<3.74E+01	0.00E+00	3.74E+01
			Co-60	<2.51E+01	0.00E+00	2.51E+01
			Zn-65	<5.60E+01	0.00E+00	5.60E+01
			Zr-95	<4.13E+01	0.00E+00	4.13E+01
			Nb-95	<2.14E+01	0.00E+00	2.14E+01
			I-131	<2.57E+01	0.00E+00	2.57E+01
			Cs-134	<3.14E+01	0.00E+00	3.14E+01
			Cs-137	<2.43E+01	0.00E+00	2.43E+01
			BaLa-140	<2.62E+01	0.00E+00	2.62E+01
			Be-7	9.78E+02	2.36E+02	2.67E+02
			K-40	4.83E+03	6.81E+02	2.89E+02
552189	10/5/2021 - 10/5/2021		Mn-54	<2.63E+01	0.00E+00	2.63E+01
			Co-58	<2.20E+01	0.00E+00	2.20E+01
			Fe-59	<4.89E+01	0.00E+00	4.89E+01
			Co-60	<2.19E+01	0.00E+00	2.19E+01
			Zn-65	<6.01E+01	0.00E+00	6.01E+01
			Zr-95	<4.36E+01	0.00E+00	4.36E+01
			Nb-95	<2.71E+01	0.00E+00	2.71E+01
			I-131	<2.33E+01	0.00E+00	2.33E+01
			Cs-134	<3.39E+01	0.00E+00	3.39E+01
			Cs-137	<2.92E+01	0.00E+00	2.92E+01
			BaLa-140	<2.32E+01	0.00E+00	2.32E+01
			Be-7	1.06E+03	2.47E+02	2.77E+02
			K-40	4.60E+03	6.66E+02	3.68E+02
553836	11/2/2021 - 11/2/2021		Mn-54	<1.79E+01	0.00E+00	1.79E+01
			Co-58	<1.99E+01	0.00E+00	1.99E+01
			Fe-59	<3.08E+01	0.00E+00	3.08E+01
			Co-60	<2.04E+01	0.00E+00	2.04E+01
			Zn-65	<4.54E+01	0.00E+00	4.54E+01
			Zr-95	<2.66E+01	0.00E+00	2.66E+01
			Nb-95	<1.80E+01	0.00E+00	1.80E+01
			I-131	<1.89E+01	0.00E+00	1.89E+01
			Cs-134	<2.24E+01	0.00E+00	2.24E+01
			Cs-137	<2.03E+01	0.00E+00	2.03E+01
			BaLa-140	<2.30E+01	0.00E+00	2.30E+01
			Be-7	8.93E+02	1.82E+02	1.75E+02
			K-40	3.81E+03	5.44E+02	3.48E+02
556009	12/7/2021 - 12/7/2021		Mn-54	<1.97E+01	0.00E+00	1.97E+01
			Co-58	<1.96E+01	0.00E+00	1.96E+01
			Fe-59	<4.48E+01	0.00E+00	4.48E+01
			Co-60	<2.02E+01	0.00E+00	2.02E+01
			Zn-65	<4.51E+01	0.00E+00	4.51E+01
			Zr-95	<3.96E+01	0.00E+00	3.96E+01
			Nb-95	<2.19E+01	0.00E+00	2.19E+01
			I-131	<2.23E+01	0.00E+00	2.23E+01
			Cs-134	<2.73E+01	0.00E+00	2.73E+01
			Cs-137	<2.45E+01	0.00E+00	2.45E+01
			BaLa-140	<1.76E+01	0.00E+00	1.76E+01
			Be-7	1.04E+03	2.15E+02	2.19E+02
			K-40	3.87E+03	5.61E+02	3.05E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
536684	1/6/2021 - 1/6/2021	MIXEDBLV	Mn-54	<2.37E+01	0.00E+00	2.37E+01
			Co-58	<1.82E+01	0.00E+00	1.82E+01
			Fe-59	<4.25E+01	0.00E+00	4.25E+01
			Co-60	<2.59E+01	0.00E+00	2.59E+01
			Zn-65	<5.31E+01	0.00E+00	5.31E+01
			Zr-95	<3.51E+01	0.00E+00	3.51E+01
			Nb-95	<1.57E+01	0.00E+00	1.57E+01
			I-131	<2.22E+01	0.00E+00	2.22E+01
			Cs-134	<2.25E+01	0.00E+00	2.25E+01
			Cs-137	<2.25E+01	0.00E+00	2.25E+01
			BaLa-140	<2.22E+01	0.00E+00	2.22E+01
			Be-7	2.17E+03	3.24E+02	2.49E+02
			K-40	4.47E+03	6.28E+02	2.58E+02
538221	2/2/2021 - 2/2/2021	MIXEDBLV	Mn-54	<1.82E+01	0.00E+00	1.82E+01
			Co-58	<1.59E+01	0.00E+00	1.59E+01
			Fe-59	<3.41E+01	0.00E+00	3.41E+01
			Co-60	<1.92E+01	0.00E+00	1.92E+01
			Zn-65	<4.74E+01	0.00E+00	4.74E+01
			Zr-95	<2.92E+01	0.00E+00	2.92E+01
			Nb-95	<1.77E+01	0.00E+00	1.77E+01
			I-131	<2.05E+01	0.00E+00	2.05E+01
			Cs-134	<2.47E+01	0.00E+00	2.47E+01
			Cs-137	<1.64E+01	0.00E+00	1.64E+01
			BaLa-140	<2.58E+01	0.00E+00	2.58E+01
			Be-7	2.59E+03	3.48E+02	2.37E+02
			K-40	4.05E+03	5.67E+02	2.72E+02
539197	3/2/2021 - 3/2/2021	MIXEDBLV	Mn-54	<2.21E+01	0.00E+00	2.21E+01
			Co-58	<2.24E+01	0.00E+00	2.24E+01
			Fe-59	<3.16E+01	0.00E+00	3.16E+01
			Co-60	<2.33E+01	0.00E+00	2.33E+01
			Zn-65	<4.91E+01	0.00E+00	4.91E+01
			Zr-95	<3.80E+01	0.00E+00	3.80E+01
			Nb-95	<2.11E+01	0.00E+00	2.11E+01
			I-131	<1.92E+01	0.00E+00	1.92E+01
			Cs-134	<3.04E+01	0.00E+00	3.04E+01
			Cs-137	<2.31E+01	0.00E+00	2.31E+01
			BaLa-140	<2.73E+01	0.00E+00	2.73E+01
			Be-7	1.79E+03	2.94E+02	2.60E+02
			K-40	3.87E+03	5.72E+02	3.26E+02
541915	4/6/2021 - 4/6/2021	MIXEDBLV	Mn-54	<3.18E+01	0.00E+00	3.18E+01
			Co-58	<2.28E+01	0.00E+00	2.28E+01
			Fe-59	<5.58E+01	0.00E+00	5.58E+01
			Co-60	<3.05E+01	0.00E+00	3.05E+01
			Zn-65	<4.68E+01	0.00E+00	4.68E+01
			Zr-95	<5.18E+01	0.00E+00	5.18E+01
			Nb-95	<2.52E+01	0.00E+00	2.52E+01
			I-131	<3.31E+01	0.00E+00	3.31E+01
			Cs-134	<3.13E+01	0.00E+00	3.13E+01
			Cs-137	<2.81E+01	0.00E+00	2.81E+01
			BaLa-140	<2.59E+01	0.00E+00	2.59E+01
			Be-7	4.94E+02	2.33E+02	3.41E+02
			K-40	4.36E+03	6.69E+02	3.33E+02
544152	5/4/2021 - 5/4/2021	MIXEDBLV	Mn-54	<2.35E+01	0.00E+00	2.35E+01
			Co-58	<1.93E+01	0.00E+00	1.93E+01
			Fe-59	<5.33E+01	0.00E+00	5.33E+01
			Co-60	<2.52E+01	0.00E+00	2.52E+01
			Zn-65	<5.95E+01	0.00E+00	5.95E+01
			Zr-95	<3.61E+01	0.00E+00	3.61E+01
			Nb-95	<2.62E+01	0.00E+00	2.62E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
544152	5/4/2021 - 5/4/2021	MIXEDBLV	I-131	<1.80E+01	0.00E+00	1.80E+01
			Cs-134	<2.83E+01	0.00E+00	2.83E+01
			Cs-137	<3.22E+01	0.00E+00	3.22E+01
			BaLa-140	<1.21E+01	0.00E+00	1.21E+01
			Be-7	5.87E+02	1.98E+02	2.67E+02
			K-40	4.17E+03	6.15E+02	3.73E+02
545658	6/2/2021 - 6/2/2021	MIXEDBLV	Mn-54	<1.63E+01	0.00E+00	1.63E+01
			Co-58	<1.06E+01	0.00E+00	1.06E+01
			Fe-59	<3.01E+01	0.00E+00	3.01E+01
			Co-60	<1.44E+01	0.00E+00	1.44E+01
			Zn-65	<3.23E+01	0.00E+00	3.23E+01
			Zr-95	<2.40E+01	0.00E+00	2.40E+01
			Nb-95	<1.28E+01	0.00E+00	1.28E+01
			I-131	<1.34E+01	0.00E+00	1.34E+01
			Cs-134	<1.60E+01	0.00E+00	1.60E+01
			Cs-137	<2.19E+01	0.00E+00	2.19E+01
			BaLa-140	<7.74E+00	0.00E+00	7.74E+00
			Be-7	5.33E+02	1.43E+02	1.79E+02
			K-40	3.71E+03	4.73E+02	2.11E+02
547382	7/7/2021 - 7/7/2021	MIXEDBLV	Mn-54	<1.86E+01	0.00E+00	1.86E+01
			Co-58	<1.62E+01	0.00E+00	1.62E+01
			Fe-59	<2.96E+01	0.00E+00	2.96E+01
			Co-60	<1.85E+01	0.00E+00	1.85E+01
			Zn-65	<4.35E+01	0.00E+00	4.35E+01
			Zr-95	<2.59E+01	0.00E+00	2.59E+01
			Nb-95	<1.56E+01	0.00E+00	1.56E+01
			I-131	<1.82E+01	0.00E+00	1.82E+01
			Cs-134	<2.31E+01	0.00E+00	2.31E+01
			Cs-137	1.77E+01	1.54E+01	2.43E+01
			BaLa-140	<1.45E+01	0.00E+00	1.45E+01
			Be-7	9.09E+02	1.88E+02	1.98E+02
			K-40	4.51E+03	6.02E+02	3.20E+02
548668	8/3/2021 - 8/3/2021	MIXEDBLV	Mn-54	<1.11E+01	0.00E+00	1.11E+01
			Co-58	<1.21E+01	0.00E+00	1.21E+01
			Fe-59	<2.24E+01	0.00E+00	2.24E+01
			Co-60	<1.11E+01	0.00E+00	1.11E+01
			Zn-65	<2.78E+01	0.00E+00	2.78E+01
			Zr-95	<2.19E+01	0.00E+00	2.19E+01
			Nb-95	<1.06E+01	0.00E+00	1.06E+01
			I-131	<1.79E+01	0.00E+00	1.79E+01
			Cs-134	<1.30E+01	0.00E+00	1.30E+01
			Cs-137	1.87E+01	9.97E+00	1.47E+01
			BaLa-140	<1.65E+01	0.00E+00	1.65E+01
			Be-7	1.34E+03	1.92E+02	1.64E+02
			K-40	2.86E+03	3.58E+02	2.26E+02
549972	9/8/2021 - 9/8/2021	MIXEDBLV	Mn-54	<2.20E+01	0.00E+00	2.20E+01
			Co-58	<2.12E+01	0.00E+00	2.12E+01
			Fe-59	<4.47E+01	0.00E+00	4.47E+01
			Co-60	<2.60E+01	0.00E+00	2.60E+01
			Zn-65	<5.18E+01	0.00E+00	5.18E+01
			Zr-95	<4.49E+01	0.00E+00	4.49E+01
			Nb-95	<2.84E+01	0.00E+00	2.84E+01
			I-131	<3.00E+01	0.00E+00	3.00E+01
			Cs-134	<3.68E+01	0.00E+00	3.68E+01
			Cs-137	<3.18E+01	0.00E+00	3.18E+01
			BaLa-140	<3.28E+01	0.00E+00	3.28E+01
			Be-7	1.21E+03	2.83E+02	3.22E+02
			K-40	3.21E+03	5.74E+02	4.15E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 201 [INDICATOR - NE @ 0.53 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
552190	10/5/2021 - 10/5/2021	MIXEDBLV	Mn-54	<3.67E+01	0.00E+00	3.67E+01
			Co-58	<3.05E+01	0.00E+00	3.05E+01
			Fe-59	<6.06E+01	0.00E+00	6.06E+01
			Co-60	<3.31E+01	0.00E+00	3.31E+01
			Zn-65	<6.04E+01	0.00E+00	6.04E+01
			Zr-95	<5.16E+01	0.00E+00	5.16E+01
			Nb-95	<3.17E+01	0.00E+00	3.17E+01
			I-131	<3.06E+01	0.00E+00	3.06E+01
			Cs-134	<3.36E+01	0.00E+00	3.36E+01
			Cs-137	1.84E+01	2.16E+01	3.52E+01
			BaLa-140	<3.73E+01	0.00E+00	3.73E+01
			Be-7	1.68E+03	3.43E+02	3.38E+02
			K-40	4.42E+03	7.66E+02	5.96E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
553837	11/2/2021 - 11/2/2021	MIXEDBLV	Mn-54	<1.97E+01	0.00E+00	1.97E+01
			Co-58	<1.63E+01	0.00E+00	1.63E+01
			Fe-59	<3.36E+01	0.00E+00	3.36E+01
			Co-60	<2.06E+01	0.00E+00	2.06E+01
			Zn-65	<4.40E+01	0.00E+00	4.40E+01
			Zr-95	<2.99E+01	0.00E+00	2.99E+01
			Nb-95	<1.72E+01	0.00E+00	1.72E+01
			I-131	<2.28E+01	0.00E+00	2.28E+01
			Cs-134	<2.14E+01	0.00E+00	2.14E+01
			Cs-137	3.24E+01	1.97E+01	2.95E+01
			BaLa-140	<2.52E+01	0.00E+00	2.52E+01
			Be-7	2.24E+03	3.15E+02	2.16E+02
			K-40	3.25E+03	5.06E+02	3.14E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
556010	12/7/2021 - 12/7/2021	MIXEDBLV	Mn-54	<1.72E+01	0.00E+00	1.72E+01
			Co-58	<1.25E+01	0.00E+00	1.25E+01
			Fe-59	<3.25E+01	0.00E+00	3.25E+01
			Co-60	<1.49E+01	0.00E+00	1.49E+01
			Zn-65	<3.15E+01	0.00E+00	3.15E+01
			Zr-95	<2.74E+01	0.00E+00	2.74E+01
			Nb-95	<2.06E+01	0.00E+00	2.06E+01
			I-131	<1.96E+01	0.00E+00	1.96E+01
			Cs-134	<2.41E+01	0.00E+00	2.41E+01
			Cs-137	<1.71E+01	0.00E+00	1.71E+01
			BaLa-140	<1.85E+01	0.00E+00	1.85E+01
			Be-7	1.00E+03	1.94E+02	1.79E+02
			K-40	2.62E+03	4.41E+02	3.22E+02

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
536685	1/6/2021 - 1/6/2021	MIXEDBLV	Mn-54	<4.41E+01	0.00E+00	4.41E+01
			Co-58	<4.36E+01	0.00E+00	4.36E+01
			Fe-59	<9.59E+01	0.00E+00	9.59E+01
			Co-60	<3.70E+01	0.00E+00	3.70E+01
			Zn-65	<8.52E+01	0.00E+00	8.52E+01
			Zr-95	<9.12E+01	0.00E+00	9.12E+01
			Nb-95	<6.58E+01	0.00E+00	6.58E+01
			I-131	<4.41E+01	0.00E+00	4.41E+01
			Cs-134	<5.62E+01	0.00E+00	5.62E+01
			Cs-137	<4.16E+01	0.00E+00	4.16E+01
			BaLa-140	<4.20E+01	0.00E+00	4.20E+01
			Be-7	8.42E+02	3.16E+02	4.02E+02
			K-40	2.34E+03	6.11E+02	4.51E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538222	2/2/2021 - 2/2/2021	MIXEDBLV	Mn-54	<2.09E+01	0.00E+00	2.09E+01
			Co-58	<2.03E+01	0.00E+00	2.03E+01
			Fe-59	<4.04E+01	0.00E+00	4.04E+01
			Co-60	<1.70E+01	0.00E+00	1.70E+01
			Zn-65	<3.50E+01	0.00E+00	3.50E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538222	2/2/2021 - 2/2/2021	MIXEDBLV	Zr-95	<3.90E+01	0.00E+00	3.90E+01
			Nb-95	<2.19E+01	0.00E+00	2.19E+01
			I-131	<1.94E+01	0.00E+00	1.94E+01
			Cs-134	<2.14E+01	0.00E+00	2.14E+01
			Cs-137	<2.19E+01	0.00E+00	2.19E+01
			BaLa-140	<2.04E+01	0.00E+00	2.04E+01
			Be-7	8.79E+02	2.01E+02	2.03E+02
			K-40	2.14E+03	4.22E+02	3.08E+02
539198	3/2/2021 - 3/2/2021	MIXEDBLV	Mn-54	<1.65E+01	0.00E+00	1.65E+01
			Co-58	<2.06E+01	0.00E+00	2.06E+01
			Fe-59	<3.03E+01	0.00E+00	3.03E+01
			Co-60	<2.56E+01	0.00E+00	2.56E+01
			Zn-65	<4.82E+01	0.00E+00	4.82E+01
			Zr-95	<3.18E+01	0.00E+00	3.18E+01
			Nb-95	<1.62E+01	0.00E+00	1.62E+01
			I-131	<1.84E+01	0.00E+00	1.84E+01
			Cs-134	<2.34E+01	0.00E+00	2.34E+01
			Cs-137	<1.85E+01	0.00E+00	1.85E+01
			BaLa-140	<1.69E+01	0.00E+00	1.69E+01
			Be-7	3.17E+03	4.07E+02	2.61E+02
			K-40	5.50E+03	7.21E+02	3.62E+02
541916	4/6/2021 - 4/6/2021	MIXEDBLV	Mn-54	<3.77E+01	0.00E+00	3.77E+01
			Co-58	<2.87E+01	0.00E+00	2.87E+01
			Fe-59	<5.85E+01	0.00E+00	5.85E+01
			Co-60	<3.95E+01	0.00E+00	3.95E+01
			Zn-65	<6.41E+01	0.00E+00	6.41E+01
			Zr-95	<3.89E+01	0.00E+00	3.89E+01
			Nb-95	<2.88E+01	0.00E+00	2.88E+01
			I-131	<3.42E+01	0.00E+00	3.42E+01
			Cs-134	<3.32E+01	0.00E+00	3.32E+01
			Cs-137	<3.18E+01	0.00E+00	3.18E+01
			BaLa-140	<2.95E+01	0.00E+00	2.95E+01
			Be-7	2.87E+03	4.20E+02	2.93E+02
			K-40	7.37E+03	9.66E+02	4.22E+02
544153	5/4/2021 - 5/4/2021	MIXEDBLV	Mn-54	<2.63E+01	0.00E+00	2.63E+01
			Co-58	<1.91E+01	0.00E+00	1.91E+01
			Fe-59	<4.56E+01	0.00E+00	4.56E+01
			Co-60	<1.72E+01	0.00E+00	1.72E+01
			Zn-65	<3.82E+01	0.00E+00	3.82E+01
			Zr-95	<3.49E+01	0.00E+00	3.49E+01
			Nb-95	<2.11E+01	0.00E+00	2.11E+01
			I-131	<2.02E+01	0.00E+00	2.02E+01
			Cs-134	<2.79E+01	0.00E+00	2.79E+01
			Cs-137	<1.77E+01	0.00E+00	1.77E+01
			BaLa-140	<2.48E+01	0.00E+00	2.48E+01
			Be-7	<2.31E+02	0.00E+00	2.31E+02
			K-40	4.17E+03	5.87E+02	2.28E+02
545659	6/2/2021 - 6/2/2021	MIXEDBLV	Mn-54	<2.26E+01	0.00E+00	2.26E+01
			Co-58	<1.47E+01	0.00E+00	1.47E+01
			Fe-59	<4.21E+01	0.00E+00	4.21E+01
			Co-60	<2.07E+01	0.00E+00	2.07E+01
			Zn-65	<4.35E+01	0.00E+00	4.35E+01
			Zr-95	<3.73E+01	0.00E+00	3.73E+01
			Nb-95	<2.00E+01	0.00E+00	2.00E+01
			I-131	<1.87E+01	0.00E+00	1.87E+01
			Cs-134	<2.49E+01	0.00E+00	2.49E+01
			Cs-137	<2.44E+01	0.00E+00	2.44E+01
			BaLa-140	<2.37E+01	0.00E+00	2.37E+01
			Be-7	2.93E+02	1.80E+02	2.78E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
545659	6/2/2021 - 6/2/2021		K-40	2.92E+03	4.66E+02	2.49E+02
547383	7/7/2021 - 7/7/2021		Mn-54	<1.53E+01	0.00E+00	1.53E+01
			Co-58	<1.24E+01	0.00E+00	1.24E+01
			Fe-59	<2.58E+01	0.00E+00	2.58E+01
			Co-60	<9.20E+00	0.00E+00	9.20E+00
			Zn-65	<2.48E+01	0.00E+00	2.48E+01
			Zr-95	<2.10E+01	0.00E+00	2.10E+01
			Nb-95	<1.38E+01	0.00E+00	1.38E+01
			I-131	<1.29E+01	0.00E+00	1.29E+01
			Cs-134	<1.84E+01	0.00E+00	1.84E+01
			Cs-137	<1.19E+01	0.00E+00	1.19E+01
			BaLa-140	<1.30E+01	0.00E+00	1.30E+01
			Be-7	6.01E+02	1.43E+02	1.64E+02
			K-40	2.16E+03	3.40E+02	1.99E+02
548669	8/3/2021 - 8/3/2021		Mn-54	<1.69E+01	0.00E+00	1.69E+01
			Co-58	<1.30E+01	0.00E+00	1.30E+01
			Fe-59	<2.45E+01	0.00E+00	2.45E+01
			Co-60	<9.66E+00	0.00E+00	9.66E+00
			Zn-65	<4.27E+01	0.00E+00	4.27E+01
			Zr-95	<3.05E+01	0.00E+00	3.05E+01
			Nb-95	<1.40E+01	0.00E+00	1.40E+01
			I-131	<1.43E+01	0.00E+00	1.43E+01
			Cs-134	<2.27E+01	0.00E+00	2.27E+01
			Cs-137	<1.68E+01	0.00E+00	1.68E+01
			BaLa-140	<1.94E+01	0.00E+00	1.94E+01
			Be-7	7.61E+02	1.53E+02	1.31E+02
			K-40	2.42E+03	3.85E+02	1.91E+02
549973	9/8/2021 - 9/8/2021		Mn-54	<2.85E+01	0.00E+00	2.85E+01
			Co-58	<1.86E+01	0.00E+00	1.86E+01
			Fe-59	<5.12E+01	0.00E+00	5.12E+01
			Co-60	<2.58E+01	0.00E+00	2.58E+01
			Zn-65	<5.15E+01	0.00E+00	5.15E+01
			Zr-95	<3.36E+01	0.00E+00	3.36E+01
			Nb-95	<2.70E+01	0.00E+00	2.70E+01
			I-131	<3.04E+01	0.00E+00	3.04E+01
			Cs-134	<2.89E+01	0.00E+00	2.89E+01
			Cs-137	<2.66E+01	0.00E+00	2.66E+01
			BaLa-140	<3.43E+01	0.00E+00	3.43E+01
			Be-7	<3.30E+02	0.00E+00	3.30E+02
			K-40	2.58E+03	5.21E+02	4.38E+02
552191	10/5/2021 - 10/5/2021		Mn-54	<2.44E+01	0.00E+00	2.44E+01
			Co-58	<1.80E+01	0.00E+00	1.80E+01
			Fe-59	<4.44E+01	0.00E+00	4.44E+01
			Co-60	<3.03E+01	0.00E+00	3.03E+01
			Zn-65	<4.77E+01	0.00E+00	4.77E+01
			Zr-95	<3.60E+01	0.00E+00	3.60E+01
			Nb-95	<2.55E+01	0.00E+00	2.55E+01
			I-131	<2.43E+01	0.00E+00	2.43E+01
			Cs-134	<2.41E+01	0.00E+00	2.41E+01
			Cs-137	<2.36E+01	0.00E+00	2.36E+01
			BaLa-140	<2.62E+01	0.00E+00	2.62E+01
			Be-7	1.06E+03	2.70E+02	3.33E+02
			K-40	2.68E+03	4.82E+02	2.76E+02
553838	11/2/2021 - 11/2/2021		Mn-54	<1.69E+01	0.00E+00	1.69E+01
			Co-58	<1.16E+01	0.00E+00	1.16E+01
			Fe-59	<2.34E+01	0.00E+00	2.34E+01
			Co-60	<1.17E+01	0.00E+00	1.17E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 222 [INDICATOR - N @ 0.71 miles]

Sample ID:	553838	Sample Dates:	11/2/2021 - 11/2/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Zn-65	<3.51E+01	0.00E+00	3.51E+01
					Zr-95	<2.22E+01	0.00E+00	2.22E+01
					Nb-95	<1.21E+01	0.00E+00	1.21E+01
					I-131	<1.31E+01	0.00E+00	1.31E+01
					Cs-134	<1.74E+01	0.00E+00	1.74E+01
					Cs-137	<1.28E+01	0.00E+00	1.28E+01
					BaLa-140	<1.29E+01	0.00E+00	1.29E+01
					Be-7	6.04E+02	1.36E+02	1.40E+02
					K-40	2.16E+03	3.51E+02	2.31E+02

Sample ID:	556011	Sample Dates:	12/7/2021 - 12/7/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.40E+01	0.00E+00	2.40E+01
					Co-58	<2.19E+01	0.00E+00	2.19E+01
					Fe-59	<5.76E+01	0.00E+00	5.76E+01
					Co-60	<2.29E+01	0.00E+00	2.29E+01
					Zn-65	<5.35E+01	0.00E+00	5.35E+01
					Zr-95	<4.88E+01	0.00E+00	4.88E+01
					Nb-95	<2.74E+01	0.00E+00	2.74E+01
					I-131	<2.57E+01	0.00E+00	2.57E+01
					Cs-134	<2.69E+01	0.00E+00	2.69E+01
					Cs-137	<2.56E+01	0.00E+00	2.56E+01
					BaLa-140	<1.63E+01	0.00E+00	1.63E+01
					Be-7	1.73E+02	1.69E+02	2.72E+02
					K-40	2.87E+03	5.38E+02	4.05E+02

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID:	536686	Sample Dates:	1/6/2021 - 1/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.39E+01	0.00E+00	2.39E+01
					Co-58	<1.99E+01	0.00E+00	1.99E+01
					Fe-59	<4.31E+01	0.00E+00	4.31E+01
					Co-60	<2.02E+01	0.00E+00	2.02E+01
					Zn-65	<5.33E+01	0.00E+00	5.33E+01
					Zr-95	<3.53E+01	0.00E+00	3.53E+01
					Nb-95	<2.00E+01	0.00E+00	2.00E+01
					I-131	<1.92E+01	0.00E+00	1.92E+01
					Cs-134	<2.60E+01	0.00E+00	2.60E+01
					Cs-137	<2.00E+01	0.00E+00	2.00E+01
					BaLa-140	<1.95E+01	0.00E+00	1.95E+01
					Be-7	8.13E+02	2.16E+02	2.68E+02
					K-40	4.78E+03	6.48E+02	3.08E+02

Sample ID:	538223	Sample Dates:	2/2/2021 - 2/2/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.92E+01	0.00E+00	1.92E+01
					Co-58	<1.59E+01	0.00E+00	1.59E+01
					Fe-59	<3.52E+01	0.00E+00	3.52E+01
					Co-60	<1.86E+01	0.00E+00	1.86E+01
					Zn-65	<3.80E+01	0.00E+00	3.80E+01
					Zr-95	<3.26E+01	0.00E+00	3.26E+01
					Nb-95	<2.01E+01	0.00E+00	2.01E+01
					I-131	<1.79E+01	0.00E+00	1.79E+01
					Cs-134	<2.24E+01	0.00E+00	2.24E+01
					Cs-137	<2.01E+01	0.00E+00	2.01E+01
					BaLa-140	<1.81E+01	0.00E+00	1.81E+01
					Be-7	1.15E+03	2.14E+02	2.02E+02
					K-40	4.79E+03	6.25E+02	3.10E+02

Sample ID:	539199	Sample Dates:	3/2/2021 - 3/2/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.71E+01	0.00E+00	1.71E+01
					Co-58	<1.47E+01	0.00E+00	1.47E+01
					Fe-59	<3.10E+01	0.00E+00	3.10E+01
					Co-60	<1.89E+01	0.00E+00	1.89E+01
					Zn-65	<4.25E+01	0.00E+00	4.25E+01
					Zr-95	<2.61E+01	0.00E+00	2.61E+01
					Nb-95	<1.69E+01	0.00E+00	1.69E+01
					I-131	<1.35E+01	0.00E+00	1.35E+01
					Cs-134	<1.42E+01	0.00E+00	1.42E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
539199	3/2/2021 - 3/2/2021	MIXEDBLV	Cs-137	<1.58E+01	0.00E+00	1.58E+01
			BaLa-140	<1.43E+01	0.00E+00	1.43E+01
			Be-7	9.92E+02	1.80E+02	1.64E+02
			K-40	4.88E+03	5.91E+02	2.12E+02
541917	4/6/2021 - 4/6/2021	MIXEDBLV	Mn-54	<2.10E+01	0.00E+00	2.10E+01
			Co-58	<2.32E+01	0.00E+00	2.32E+01
			Fe-59	<4.18E+01	0.00E+00	4.18E+01
			Co-60	<2.42E+01	0.00E+00	2.42E+01
			Zn-65	<6.96E+01	0.00E+00	6.96E+01
			Zr-95	<4.35E+01	0.00E+00	4.35E+01
			Nb-95	<2.79E+01	0.00E+00	2.79E+01
			I-131	<2.25E+01	0.00E+00	2.25E+01
			Cs-134	<3.03E+01	0.00E+00	3.03E+01
			Cs-137	<2.37E+01	0.00E+00	2.37E+01
			BaLa-140	<3.16E+01	0.00E+00	3.16E+01
			Be-7	4.34E+02	1.90E+02	2.71E+02
			K-40	6.72E+03	8.48E+02	4.19E+02
544154	5/4/2021 - 5/4/2021	MIXEDBLV	Mn-54	<2.00E+01	0.00E+00	2.00E+01
			Co-58	<1.81E+01	0.00E+00	1.81E+01
			Fe-59	<4.20E+01	0.00E+00	4.20E+01
			Co-60	<2.14E+01	0.00E+00	2.14E+01
			Zn-65	<5.05E+01	0.00E+00	5.05E+01
			Zr-95	<3.55E+01	0.00E+00	3.55E+01
			Nb-95	<1.97E+01	0.00E+00	1.97E+01
			I-131	<1.86E+01	0.00E+00	1.86E+01
			Cs-134	<2.37E+01	0.00E+00	2.37E+01
			Cs-137	<1.94E+01	0.00E+00	1.94E+01
			BaLa-140	<1.79E+01	0.00E+00	1.79E+01
			Be-7	3.85E+02	1.46E+02	1.98E+02
			K-40	4.85E+03	6.39E+02	2.99E+02
545660	6/2/2021 - 6/2/2021	MIXEDBLV	Mn-54	<2.59E+01	0.00E+00	2.59E+01
			Co-58	<2.23E+01	0.00E+00	2.23E+01
			Fe-59	<4.44E+01	0.00E+00	4.44E+01
			Co-60	<2.78E+01	0.00E+00	2.78E+01
			Zn-65	<6.22E+01	0.00E+00	6.22E+01
			Zr-95	<3.68E+01	0.00E+00	3.68E+01
			Nb-95	<2.34E+01	0.00E+00	2.34E+01
			I-131	<2.37E+01	0.00E+00	2.37E+01
			Cs-134	<2.47E+01	0.00E+00	2.47E+01
			Cs-137	<2.13E+01	0.00E+00	2.13E+01
			BaLa-140	<2.57E+01	0.00E+00	2.57E+01
			Be-7	3.02E+02	1.83E+02	2.80E+02
			K-40	7.02E+03	8.89E+02	4.09E+02
547384	7/7/2021 - 7/7/2021	MIXEDBLV	Mn-54	<2.70E+01	0.00E+00	2.70E+01
			Co-58	<2.21E+01	0.00E+00	2.21E+01
			Fe-59	<6.42E+01	0.00E+00	6.42E+01
			Co-60	<2.74E+01	0.00E+00	2.74E+01
			Zn-65	<6.82E+01	0.00E+00	6.82E+01
			Zr-95	<5.16E+01	0.00E+00	5.16E+01
			Nb-95	<3.20E+01	0.00E+00	3.20E+01
			I-131	<2.78E+01	0.00E+00	2.78E+01
			Cs-134	<3.47E+01	0.00E+00	3.47E+01
			Cs-137	<2.62E+01	0.00E+00	2.62E+01
			BaLa-140	<3.48E+01	0.00E+00	3.48E+01
			Be-7	6.48E+02	2.08E+02	2.44E+02
			K-40	6.46E+03	9.08E+02	4.42E+02
548670	8/3/2021 - 8/3/2021	MIXEDBLV	Mn-54	<1.67E+01	0.00E+00	1.67E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
548670	8/3/2021 - 8/3/2021	MIXEDBLV	Co-58	<1.57E+01	0.00E+00	1.57E+01
			Fe-59	<4.08E+01	0.00E+00	4.08E+01
			Co-60	<1.76E+01	0.00E+00	1.76E+01
			Zn-65	<4.00E+01	0.00E+00	4.00E+01
			Zr-95	<3.54E+01	0.00E+00	3.54E+01
			Nb-95	<1.53E+01	0.00E+00	1.53E+01
			I-131	<1.79E+01	0.00E+00	1.79E+01
			Cs-134	<2.06E+01	0.00E+00	2.06E+01
			Cs-137	<1.92E+01	0.00E+00	1.92E+01
			BaLa-140	<1.59E+01	0.00E+00	1.59E+01
			Be-7	4.52E+02	1.73E+02	2.44E+02
			K-40	5.11E+03	6.53E+02	3.20E+02
			549974	9/8/2021 - 9/8/2021	MIXEDBLV	Mn-54
Co-58	<2.51E+01	0.00E+00				2.51E+01
Fe-59	<5.51E+01	0.00E+00				5.51E+01
Co-60	<2.03E+01	0.00E+00				2.03E+01
Zn-65	<5.48E+01	0.00E+00				5.48E+01
Zr-95	<4.80E+01	0.00E+00				4.80E+01
Nb-95	<2.65E+01	0.00E+00				2.65E+01
I-131	<2.79E+01	0.00E+00				2.79E+01
Cs-134	<2.98E+01	0.00E+00				2.98E+01
Cs-137	<2.66E+01	0.00E+00				2.66E+01
BaLa-140	<2.87E+01	0.00E+00				2.87E+01
Be-7	8.93E+02	2.38E+02				2.94E+02
K-40	4.04E+03	6.37E+02				4.57E+02
552192	10/5/2021 - 10/5/2021	MIXEDBLV	Mn-54	<2.36E+01	0.00E+00	2.36E+01
			Co-58	<2.49E+01	0.00E+00	2.49E+01
			Fe-59	<4.99E+01	0.00E+00	4.99E+01
			Co-60	<2.13E+01	0.00E+00	2.13E+01
			Zn-65	<5.14E+01	0.00E+00	5.14E+01
			Zr-95	<4.07E+01	0.00E+00	4.07E+01
			Nb-95	<1.65E+01	0.00E+00	1.65E+01
			I-131	<2.27E+01	0.00E+00	2.27E+01
			Cs-134	<2.49E+01	0.00E+00	2.49E+01
			Cs-137	<1.97E+01	0.00E+00	1.97E+01
			BaLa-140	<1.74E+01	0.00E+00	1.74E+01
			Be-7	1.12E+03	2.33E+02	2.30E+02
			K-40	5.78E+03	7.60E+02	3.45E+02
553839	11/2/2021 - 11/2/2021	MIXEDBLV	Mn-54	<1.77E+01	0.00E+00	1.77E+01
			Co-58	<1.66E+01	0.00E+00	1.66E+01
			Fe-59	<3.41E+01	0.00E+00	3.41E+01
			Co-60	<2.03E+01	0.00E+00	2.03E+01
			Zn-65	<4.10E+01	0.00E+00	4.10E+01
			Zr-95	<3.47E+01	0.00E+00	3.47E+01
			Nb-95	<1.54E+01	0.00E+00	1.54E+01
			I-131	<1.70E+01	0.00E+00	1.70E+01
			Cs-134	<2.03E+01	0.00E+00	2.03E+01
			Cs-137	<1.94E+01	0.00E+00	1.94E+01
			BaLa-140	<1.31E+01	0.00E+00	1.31E+01
			Be-7	6.84E+02	1.92E+02	2.49E+02
			K-40	4.44E+03	5.84E+02	3.13E+02
556012	12/7/2021 - 12/7/2021	MIXEDBLV	Mn-54	<2.55E+01	0.00E+00	2.55E+01
			Co-58	<2.59E+01	0.00E+00	2.59E+01
			Fe-59	<5.49E+01	0.00E+00	5.49E+01
			Co-60	<3.10E+01	0.00E+00	3.10E+01
			Zn-65	<5.96E+01	0.00E+00	5.96E+01
			Zr-95	<5.23E+01	0.00E+00	5.23E+01
			Nb-95	<2.43E+01	0.00E+00	2.43E+01
			I-131	<2.85E+01	0.00E+00	2.85E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 226 [INDICATOR - S @ 0.48 miles]

Sample ID:	556012	Sample Dates:	12/7/2021 - 12/7/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Cs-134	<3.68E+01	0.00E+00	3.68E+01
					Cs-137	<2.97E+01	0.00E+00	2.97E+01
					BaLa-140	<3.28E+01	0.00E+00	3.28E+01
					Be-7	6.44E+02	2.29E+02	3.16E+02
					K-40	5.88E+03	8.05E+02	4.94E+02

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	536687	Sample Dates:	1/6/2021 - 1/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.41E+01	0.00E+00	2.41E+01
					Co-58	<2.03E+01	0.00E+00	2.03E+01
					Fe-59	<3.08E+01	0.00E+00	3.08E+01
					Co-60	<2.57E+01	0.00E+00	2.57E+01
					Zn-65	<5.77E+01	0.00E+00	5.77E+01
					Zr-95	<4.07E+01	0.00E+00	4.07E+01
					Nb-95	<2.13E+01	0.00E+00	2.13E+01
					I-131	<2.00E+01	0.00E+00	2.00E+01
					Cs-134	<2.57E+01	0.00E+00	2.57E+01
					Cs-137	<2.57E+01	0.00E+00	2.57E+01
					BaLa-140	<1.24E+01	0.00E+00	1.24E+01
					Be-7	1.08E+03	2.23E+02	2.20E+02
					K-40	5.29E+03	7.02E+02	3.39E+02

Sample ID:	538224	Sample Dates:	2/2/2021 - 2/2/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.04E+01	0.00E+00	2.04E+01
					Co-58	<2.65E+01	0.00E+00	2.65E+01
					Fe-59	<4.38E+01	0.00E+00	4.38E+01
					Co-60	<2.30E+01	0.00E+00	2.30E+01
					Zn-65	<5.68E+01	0.00E+00	5.68E+01
					Zr-95	<4.87E+01	0.00E+00	4.87E+01
					Nb-95	<2.33E+01	0.00E+00	2.33E+01
					I-131	<2.39E+01	0.00E+00	2.39E+01
					Cs-134	<3.11E+01	0.00E+00	3.11E+01
					Cs-137	<2.83E+01	0.00E+00	2.83E+01
					BaLa-140	<2.63E+01	0.00E+00	2.63E+01
					Be-7	9.88E+02	2.52E+02	3.11E+02
					K-40	4.52E+03	6.56E+02	4.08E+02

Sample ID:	539200	Sample Dates:	3/2/2021 - 3/2/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.87E+01	0.00E+00	1.87E+01
					Co-58	<1.61E+01	0.00E+00	1.61E+01
					Fe-59	<3.55E+01	0.00E+00	3.55E+01
					Co-60	<1.76E+01	0.00E+00	1.76E+01
					Zn-65	<3.50E+01	0.00E+00	3.50E+01
					Zr-95	<3.20E+01	0.00E+00	3.20E+01
					Nb-95	<2.02E+01	0.00E+00	2.02E+01
					I-131	<1.57E+01	0.00E+00	1.57E+01
					Cs-134	<2.01E+01	0.00E+00	2.01E+01
					Cs-137	<1.92E+01	0.00E+00	1.92E+01
					BaLa-140	<1.86E+01	0.00E+00	1.86E+01
					Be-7	1.36E+03	2.33E+02	2.08E+02
					K-40	4.54E+03	6.01E+02	2.99E+02

Sample ID:	541918	Sample Dates:	4/6/2021 - 4/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.99E+01	0.00E+00	3.99E+01
					Co-58	<4.10E+01	0.00E+00	4.10E+01
					Fe-59	<7.57E+01	0.00E+00	7.57E+01
					Co-60	<3.19E+01	0.00E+00	3.19E+01
					Zn-65	<7.79E+01	0.00E+00	7.79E+01
					Zr-95	<5.50E+01	0.00E+00	5.50E+01
					Nb-95	<3.19E+01	0.00E+00	3.19E+01
					I-131	<4.10E+01	0.00E+00	4.10E+01
					Cs-134	<4.67E+01	0.00E+00	4.67E+01
					Cs-137	<4.01E+01	0.00E+00	4.01E+01
					BaLa-140	<4.97E+01	0.00E+00	4.97E+01
					Be-7	1.08E+03	3.21E+02	4.01E+02
					K-40	4.61E+03	7.84E+02	5.42E+02

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
544155	5/4/2021 - 5/4/2021	MIXEDBLV	Mn-54	<2.46E+01	0.00E+00	2.46E+01
			Co-58	<1.73E+01	0.00E+00	1.73E+01
			Fe-59	<4.74E+01	0.00E+00	4.74E+01
			Co-60	<2.00E+01	0.00E+00	2.00E+01
			Zn-65	<5.96E+01	0.00E+00	5.96E+01
			Zr-95	<3.82E+01	0.00E+00	3.82E+01
			Nb-95	<2.18E+01	0.00E+00	2.18E+01
			I-131	<2.31E+01	0.00E+00	2.31E+01
			Cs-134	<2.37E+01	0.00E+00	2.37E+01
			Cs-137	<2.44E+01	0.00E+00	2.44E+01
			BaLa-140	<2.72E+01	0.00E+00	2.72E+01
			Be-7	4.13E+02	2.01E+02	2.96E+02
			K-40	3.95E+03	6.28E+02	3.95E+02
545661	6/2/2021 - 6/2/2021	MIXEDBLV	Mn-54	<2.21E+01	0.00E+00	2.21E+01
			Co-58	<1.84E+01	0.00E+00	1.84E+01
			Fe-59	<4.65E+01	0.00E+00	4.65E+01
			Co-60	<2.18E+01	0.00E+00	2.18E+01
			Zn-65	<4.98E+01	0.00E+00	4.98E+01
			Zr-95	<3.93E+01	0.00E+00	3.93E+01
			Nb-95	<1.97E+01	0.00E+00	1.97E+01
			I-131	<2.01E+01	0.00E+00	2.01E+01
			Cs-134	<2.33E+01	0.00E+00	2.33E+01
			Cs-137	<2.57E+01	0.00E+00	2.57E+01
			BaLa-140	<2.66E+01	0.00E+00	2.66E+01
			Be-7	4.23E+02	1.58E+02	2.11E+02
			K-40	3.68E+03	5.67E+02	3.71E+02
547385	7/7/2021 - 7/7/2021	MIXEDBLV	Mn-54	<2.23E+01	0.00E+00	2.23E+01
			Co-58	<2.58E+01	0.00E+00	2.58E+01
			Fe-59	<4.35E+01	0.00E+00	4.35E+01
			Co-60	<2.12E+01	0.00E+00	2.12E+01
			Zn-65	<4.68E+01	0.00E+00	4.68E+01
			Zr-95	<4.06E+01	0.00E+00	4.06E+01
			Nb-95	<2.49E+01	0.00E+00	2.49E+01
			I-131	<1.96E+01	0.00E+00	1.96E+01
			Cs-134	<2.80E+01	0.00E+00	2.80E+01
			Cs-137	<2.65E+01	0.00E+00	2.65E+01
			BaLa-140	<2.48E+01	0.00E+00	2.48E+01
			Be-7	5.28E+02	2.17E+02	3.05E+02
			K-40	3.21E+03	5.53E+02	3.36E+02
548671	8/3/2021 - 8/3/2021	MIXEDBLV	Mn-54	<1.64E+01	0.00E+00	1.64E+01
			Co-58	<1.81E+01	0.00E+00	1.81E+01
			Fe-59	<2.99E+01	0.00E+00	2.99E+01
			Co-60	<1.90E+01	0.00E+00	1.90E+01
			Zn-65	<4.14E+01	0.00E+00	4.14E+01
			Zr-95	<3.14E+01	0.00E+00	3.14E+01
			Nb-95	<1.76E+01	0.00E+00	1.76E+01
			I-131	<1.70E+01	0.00E+00	1.70E+01
			Cs-134	<2.46E+01	0.00E+00	2.46E+01
			Cs-137	<2.01E+01	0.00E+00	2.01E+01
			BaLa-140	<1.52E+01	0.00E+00	1.52E+01
			Be-7	9.14E+02	1.91E+02	2.11E+02
			K-40	2.77E+03	4.07E+02	2.05E+02
549975	9/8/2021 - 9/8/2021	MIXEDBLV	Mn-54	<2.70E+01	0.00E+00	2.70E+01
			Co-58	<2.26E+01	0.00E+00	2.26E+01
			Fe-59	<4.05E+01	0.00E+00	4.05E+01
			Co-60	<2.39E+01	0.00E+00	2.39E+01
			Zn-65	<5.24E+01	0.00E+00	5.24E+01
			Zr-95	<4.60E+01	0.00E+00	4.60E+01
			Nb-95	<2.29E+01	0.00E+00	2.29E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 258 [CONTROL - W @ 9.84 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
549975	9/8/2021 - 9/8/2021	MIXEDBLV	I-131	<2.51E+01	0.00E+00	2.51E+01
			Cs-134	<3.28E+01	0.00E+00	3.28E+01
			Cs-137	<2.42E+01	0.00E+00	2.42E+01
			BaLa-140	<2.77E+01	0.00E+00	2.77E+01
			Be-7	1.17E+03	2.94E+02	3.78E+02
			K-40	2.84E+03	5.18E+02	4.33E+02
552193	10/5/2021 - 10/5/2021	MIXEDBLV	Mn-54	<2.36E+01	0.00E+00	2.36E+01
			Co-58	<2.35E+01	0.00E+00	2.35E+01
			Fe-59	<4.82E+01	0.00E+00	4.82E+01
			Co-60	<2.09E+01	0.00E+00	2.09E+01
			Zn-65	<4.51E+01	0.00E+00	4.51E+01
			Zr-95	<4.51E+01	0.00E+00	4.51E+01
			Nb-95	<2.66E+01	0.00E+00	2.66E+01
			I-131	<2.24E+01	0.00E+00	2.24E+01
			Cs-134	<3.95E+01	0.00E+00	3.95E+01
			Cs-137	<2.54E+01	0.00E+00	2.54E+01
			BaLa-140	<2.78E+01	0.00E+00	2.78E+01
			Be-7	1.37E+03	2.72E+02	2.69E+02
			K-40	2.36E+03	4.59E+02	3.43E+02
			553840	11/2/2021 - 11/2/2021	MIXEDBLV	Mn-54
Co-58	<1.55E+01	0.00E+00				1.55E+01
Fe-59	<2.91E+01	0.00E+00				2.91E+01
Co-60	<1.59E+01	0.00E+00				1.59E+01
Zn-65	<3.83E+01	0.00E+00				3.83E+01
Zr-95	<2.83E+01	0.00E+00				2.83E+01
Nb-95	<1.77E+01	0.00E+00				1.77E+01
I-131	<1.78E+01	0.00E+00				1.78E+01
Cs-134	<1.80E+01	0.00E+00				1.80E+01
Cs-137	<1.90E+01	0.00E+00				1.90E+01
BaLa-140	<1.34E+01	0.00E+00				1.34E+01
Be-7	1.32E+03	2.30E+02				2.09E+02
K-40	2.43E+03	4.10E+02				2.97E+02
556013	12/7/2021 - 12/7/2021	MIXEDBLV				Mn-54
			Co-58	<2.35E+01	0.00E+00	2.35E+01
			Fe-59	<5.61E+01	0.00E+00	5.61E+01
			Co-60	<2.63E+01	0.00E+00	2.63E+01
			Zn-65	<6.10E+01	0.00E+00	6.10E+01
			Zr-95	<4.47E+01	0.00E+00	4.47E+01
			Nb-95	<2.56E+01	0.00E+00	2.56E+01
			I-131	<2.57E+01	0.00E+00	2.57E+01
			Cs-134	<2.80E+01	0.00E+00	2.80E+01
			Cs-137	<2.66E+01	0.00E+00	2.66E+01
			BaLa-140	<2.69E+01	0.00E+00	2.69E+01
			Be-7	2.07E+03	3.45E+02	3.24E+02
			K-40	4.20E+03	6.26E+02	3.63E+02

APPENDIX F

**ERRATA TO
PREVIOUS REPORTS**

2021

APPENDIX F

ERRATA TO THE 2019 CNS AREOR

During the creation and preliminary review of the 2021 CNS AREOR it was discovered that the 2019 CNS AREOR Appendix E section did not include sample results for surface water control location 263 (Liberty Hill Road 0.59 mi NNE of site) which was introduced into the CNS REMP program on 2JAN2019 replacing surface water control location 215 (River Pointe – HWY 49 4.29 mi NNE from site).

REMP data for reporting purposes (sample tally, annual averages) for location 263 was included in the 2019 AREOR, so no reporting requirements were missed. In the 2019 CNS AREOR, discussion and data about surface water control location 263 was included in Section 3.3 (Surface Water), Figure 3.3, and Appendix B.

This omission is self-identified (NCR # 02418464).

The corrected 2019 data is appended.

ERRATA TO THE 2020 CNS AREOR

During the creation and preliminary review of the 2021 CNS AREOR it was discovered that the 2020 CNS AREOR Appendix E section did not include sample results for surface water control location 263 (Liberty Hill Road 0.59 mi NNE of site) which was introduced into the CNS REMP program on 2JAN2019 replacing surface water control location 215 (River Pointe – HWY 49 4.29 mi NNE from site).

REMP data for reporting purposes (sample tally, annual averages) for location 263 was included in the 2020 AREOR, so no reporting requirements were missed. In the 2020 CNS AREOR, discussion and data about surface water control location 263 was included in Section 3.3 (Surface Water), Figure 3.3, and Appendix B.

This omission is self-identified (NCR # 02418464).

The corrected 2020 data is appended.

CATAWBA Radiological Environmental Monitoring Analysis Report - 2019 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
493561	1/2/2019 - 1/29/2019	Mn-54	<4.20E+00	0.00E+00	4.20E+00
		Co-58	<2.58E+00	0.00E+00	2.58E+00
		Fe-59	<9.21E+00	0.00E+00	9.21E+00
		Co-60	<4.02E+00	0.00E+00	4.02E+00
		Zn-65	<5.73E+00	0.00E+00	5.73E+00
		Zr-95	<5.30E+00	0.00E+00	5.30E+00
		Nb-95	<4.35E+00	0.00E+00	4.35E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.95E+00	0.00E+00	3.95E+00
		Cs-137	<4.09E+00	0.00E+00	4.09E+00
		BaLa-140	<9.42E+00	0.00E+00	9.42E+00
		Be-7	<3.25E+01	0.00E+00	3.25E+01
		K-40	<5.78E+01	0.00E+00	5.78E+01
495260	1/29/2019 - 2/26/2019	Mn-54	<3.79E+00	0.00E+00	3.79E+00
		Co-58	<4.64E+00	0.00E+00	4.64E+00
		Fe-59	<7.88E+00	0.00E+00	7.88E+00
		Co-60	<4.02E+00	0.00E+00	4.02E+00
		Zn-65	<7.42E+00	0.00E+00	7.42E+00
		Zr-95	<8.96E+00	0.00E+00	8.96E+00
		Nb-95	<4.66E+00	0.00E+00	4.66E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.02E+00	0.00E+00	3.02E+00
		Cs-137	<3.46E+00	0.00E+00	3.46E+00
		BaLa-140	<2.41E+00	0.00E+00	2.41E+00
		Be-7	<3.69E+01	0.00E+00	3.69E+01
		K-40	<5.78E+01	0.00E+00	5.78E+01
497535	2/26/2019 - 3/26/2019	Mn-54	<1.88E+00	0.00E+00	1.88E+00
		Co-58	<2.16E+00	0.00E+00	2.16E+00
		Fe-59	<3.59E+00	0.00E+00	3.59E+00
		Co-60	<1.90E+00	0.00E+00	1.90E+00
		Zn-65	<3.94E+00	0.00E+00	3.94E+00
		Zr-95	<4.10E+00	0.00E+00	4.10E+00
		Nb-95	<3.09E+00	0.00E+00	3.09E+00
		I-131	<1.03E+01	0.00E+00	1.03E+01
		Cs-134	<2.37E+00	0.00E+00	2.37E+00
		Cs-137	<1.65E+00	0.00E+00	1.65E+00
		BaLa-140	<4.89E+00	0.00E+00	4.89E+00
		Be-7	<1.87E+01	0.00E+00	1.87E+01
		K-40	6.59E+01	2.24E+01	2.86E+01
493734	1/2/2019 - 4/23/2019	H3SW	<4.28E+01	0.00E+00	1.89E+02
499441	3/26/2019 - 4/23/2019	Mn-54	<1.52E+00	0.00E+00	1.52E+00
		Co-58	<1.74E+00	0.00E+00	1.74E+00
		Fe-59	<3.22E+00	0.00E+00	3.22E+00
		Co-60	<1.52E+00	0.00E+00	1.52E+00
		Zn-65	<3.58E+00	0.00E+00	3.58E+00
		Zr-95	<3.43E+00	0.00E+00	3.43E+00
		Nb-95	<2.55E+00	0.00E+00	2.55E+00
		I-131	<9.94E+00	0.00E+00	9.94E+00
		Cs-134	<1.62E+00	0.00E+00	1.62E+00
		Cs-137	<1.74E+00	0.00E+00	1.74E+00
		BaLa-140	<6.41E+00	0.00E+00	6.41E+00
		Be-7	<1.44E+01	0.00E+00	1.44E+01
		K-40	3.61E+01	1.93E+01	2.87E+01
500725	4/23/2019 - 5/21/2019	Mn-54	<3.19E+00	0.00E+00	3.19E+00
		Co-58	<4.06E+00	0.00E+00	4.06E+00
		Fe-59	<8.44E+00	0.00E+00	8.44E+00
		Co-60	<2.39E+00	0.00E+00	2.39E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2019 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
500725	4/23/2019 - 5/21/2019	Zn-65	<7.87E+00	0.00E+00	7.87E+00
		Zr-95	<6.76E+00	0.00E+00	6.76E+00
		Nb-95	<3.98E+00	0.00E+00	3.98E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.81E+00	0.00E+00	3.81E+00
		Cs-137	<3.58E+00	0.00E+00	3.58E+00
		BaLa-140	<9.71E+00	0.00E+00	9.71E+00
		Be-7	<3.57E+01	0.00E+00	3.57E+01
		K-40	<7.23E+01	0.00E+00	7.23E+01
		502400	5/21/2019 - 6/18/2019	Mn-54	<2.61E+00
Co-58	<2.99E+00			0.00E+00	2.99E+00
Fe-59	<5.84E+00			0.00E+00	5.84E+00
Co-60	<2.57E+00			0.00E+00	2.57E+00
Zn-65	<4.36E+00			0.00E+00	4.36E+00
Zr-95	<4.56E+00			0.00E+00	4.56E+00
Nb-95	<3.26E+00			0.00E+00	3.26E+00
I-131	<1.18E+01			0.00E+00	1.18E+01
Cs-134	<2.68E+00			0.00E+00	2.68E+00
Cs-137	<2.72E+00			0.00E+00	2.72E+00
BaLa-140	<4.72E+00			0.00E+00	4.72E+00
Be-7	<2.35E+01			0.00E+00	2.35E+01
K-40	3.83E+01			2.41E+01	3.47E+01
500028	4/23/2019 - 7/16/2019	H3SW	2.04E+02	1.17E+02	1.90E+02
504429	6/18/2019 - 7/16/2019	Mn-54	<4.24E+00	0.00E+00	4.24E+00
		Co-58	<4.92E+00	0.00E+00	4.92E+00
		Fe-59	<9.89E+00	0.00E+00	9.89E+00
		Co-60	<2.64E+00	0.00E+00	2.64E+00
		Zn-65	<9.29E+00	0.00E+00	9.29E+00
		Zr-95	<4.86E+00	0.00E+00	4.86E+00
		Nb-95	<4.95E+00	0.00E+00	4.95E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<3.19E+00	0.00E+00	3.19E+00
		Cs-137	<3.65E+00	0.00E+00	3.65E+00
		BaLa-140	<7.08E+00	0.00E+00	7.08E+00
		Be-7	<2.92E+01	0.00E+00	2.92E+01
		K-40	<6.69E+01	0.00E+00	6.69E+01
505519	7/16/2019 - 8/13/2019	Mn-54	<3.87E+00	0.00E+00	3.87E+00
		Co-58	<3.62E+00	0.00E+00	3.62E+00
		Fe-59	<7.31E+00	0.00E+00	7.31E+00
		Co-60	<5.18E+00	0.00E+00	5.18E+00
		Zn-65	<6.16E+00	0.00E+00	6.16E+00
		Zr-95	<5.96E+00	0.00E+00	5.96E+00
		Nb-95	<4.99E+00	0.00E+00	4.99E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<5.18E+00	0.00E+00	5.18E+00
		Cs-137	<3.57E+00	0.00E+00	3.57E+00
		BaLa-140	<1.09E+01	0.00E+00	1.09E+01
		Be-7	<3.72E+01	0.00E+00	3.72E+01
		K-40	<4.88E+01	0.00E+00	4.88E+01
507809	8/13/2019 - 9/10/2019	Mn-54	<3.93E+00	0.00E+00	3.93E+00
		Co-58	<4.77E+00	0.00E+00	4.77E+00
		Fe-59	<4.75E+00	0.00E+00	4.75E+00
		Co-60	<3.54E+00	0.00E+00	3.54E+00
		Zn-65	<6.53E+00	0.00E+00	6.53E+00
		Zr-95	<8.46E+00	0.00E+00	8.46E+00
		Nb-95	<3.29E+00	0.00E+00	3.29E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2019 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
507809	8/13/2019 - 9/10/2019	Cs-134	<4.13E+00	0.00E+00	4.13E+00
		Cs-137	<3.82E+00	0.00E+00	3.82E+00
		BaLa-140	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<2.72E+01	0.00E+00	2.72E+01
		K-40	<2.40E+01	0.00E+00	2.40E+01
505066	7/16/2019 - 10/8/2019	H3SW	<1.37E+02	0.00E+00	1.91E+02
510514	9/10/2019 - 10/8/2019	Mn-54	<3.60E+00	0.00E+00	3.60E+00
		Co-58	<4.17E+00	0.00E+00	4.17E+00
		Fe-59	<6.55E+00	0.00E+00	6.55E+00
		Co-60	<3.61E+00	0.00E+00	3.61E+00
		Zn-65	<6.65E+00	0.00E+00	6.65E+00
		Zr-95	<6.47E+00	0.00E+00	6.47E+00
		Nb-95	<5.66E+00	0.00E+00	5.66E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<4.31E+00	0.00E+00	4.31E+00
		Cs-137	<4.50E+00	0.00E+00	4.50E+00
		BaLa-140	<8.26E+00	0.00E+00	8.26E+00
		Be-7	<3.27E+01	0.00E+00	3.27E+01
		K-40	6.66E+01	4.26E+01	6.10E+01
511858	10/8/2019 - 11/5/2019	Mn-54	<3.02E+00	0.00E+00	3.02E+00
		Co-58	<3.59E+00	0.00E+00	3.59E+00
		Fe-59	<7.06E+00	0.00E+00	7.06E+00
		Co-60	<2.30E+00	0.00E+00	2.30E+00
		Zn-65	<6.57E+00	0.00E+00	6.57E+00
		Zr-95	<5.52E+00	0.00E+00	5.52E+00
		Nb-95	<3.19E+00	0.00E+00	3.19E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.35E+00	0.00E+00	3.35E+00
		Cs-137	<2.93E+00	0.00E+00	2.93E+00
		BaLa-140	<6.42E+00	0.00E+00	6.42E+00
		Be-7	<2.37E+01	0.00E+00	2.37E+01
		K-40	<4.97E+01	0.00E+00	4.97E+01
513608	11/5/2019 - 12/3/2019	Mn-54	<2.69E+00	0.00E+00	2.69E+00
		Co-58	<3.35E+00	0.00E+00	3.35E+00
		Fe-59	<7.33E+00	0.00E+00	7.33E+00
		Co-60	<2.82E+00	0.00E+00	2.82E+00
		Zn-65	<6.90E+00	0.00E+00	6.90E+00
		Zr-95	<5.50E+00	0.00E+00	5.50E+00
		Nb-95	<4.67E+00	0.00E+00	4.67E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.37E+00	0.00E+00	3.37E+00
		Cs-137	<4.22E+00	0.00E+00	4.22E+00
		BaLa-140	<8.60E+00	0.00E+00	8.61E+00
		Be-7	1.00E+01	1.53E+01	2.56E+01
		K-40	3.56E+01	3.42E+01	5.40E+01
511709	10/8/2019 - 12/31/2019	H3SW	2.38E+02	1.25E+02	2.02E+02
514530	12/3/2019 - 12/31/2019	Mn-54	<2.90E+00	0.00E+00	2.90E+00
		Co-58	<3.54E+00	0.00E+00	3.54E+00
		Fe-59	<5.84E+00	0.00E+00	5.84E+00
		Co-60	<2.80E+00	0.00E+00	2.80E+00
		Zn-65	<6.54E+00	0.00E+00	6.54E+00
		Zr-95	<6.55E+00	0.00E+00	6.55E+00
		Nb-95	<4.00E+00	0.00E+00	4.00E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<3.21E+00	0.00E+00	3.21E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2019 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID: 514530	Sample Dates: 12/3/2019 - 12/31/2019	Nuclide	Activity	2 Sigma Error	MDA
		Cs-137	<2.95E+00	0.00E+00	2.95E+00
		BaLa-140	<5.38E+00	0.00E+00	5.38E+00
		Be-7	<2.89E+01	0.00E+00	2.89E+01
		K-40	5.30E+01	2.65E+01	3.39E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2020 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
515717	12/31/2019 - 1/28/2020	Mn-54	<2.73E+00	0.00E+00	2.73E+00
		Co-58	<3.02E+00	0.00E+00	3.02E+00
		Fe-59	<5.60E+00	0.00E+00	5.60E+00
		Co-60	<2.85E+00	0.00E+00	2.85E+00
		Zn-65	<7.28E+00	0.00E+00	7.28E+00
		Zr-95	<6.05E+00	0.00E+00	6.05E+00
		Nb-95	<3.81E+00	0.00E+00	3.81E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.03E+00	0.00E+00	3.03E+00
		Cs-137	<3.31E+00	0.00E+00	3.31E+00
		BaLa-140	<7.66E+00	0.00E+00	7.66E+00
		Be-7	<2.57E+01	0.00E+00	2.57E+01
		K-40	<3.42E+01	0.00E+00	3.42E+01
517236	1/28/2020 - 2/25/2020	Mn-54	<3.73E+00	0.00E+00	3.73E+00
		Co-58	<2.94E+00	0.00E+00	2.94E+00
		Fe-59	<6.29E+00	0.00E+00	6.29E+00
		Co-60	<2.77E+00	0.00E+00	2.77E+00
		Zn-65	<7.07E+00	0.00E+00	7.07E+00
		Zr-95	<7.03E+00	0.00E+00	7.03E+00
		Nb-95	<4.12E+00	0.00E+00	4.12E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<2.93E+00	0.00E+00	2.93E+00
		Cs-137	<3.00E+00	0.00E+00	3.00E+00
		BaLa-140	<8.35E+00	0.00E+00	8.35E+00
		Be-7	<2.43E+01	0.00E+00	2.43E+01
		K-40	5.22E+01	2.79E+01	3.53E+01
519406	2/25/2020 - 3/24/2020	Mn-54	<3.50E+00	0.00E+00	3.50E+00
		Co-58	<3.90E+00	0.00E+00	3.90E+00
		Fe-59	<6.61E+00	0.00E+00	6.61E+00
		Co-60	<5.39E+00	0.00E+00	5.39E+00
		Zn-65	<8.59E+00	0.00E+00	8.59E+00
		Zr-95	<7.68E+00	0.00E+00	7.68E+00
		Nb-95	<4.12E+00	0.00E+00	4.12E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.89E+00	0.00E+00	3.89E+00
		Cs-137	<2.72E+00	0.00E+00	2.72E+00
		BaLa-140	<8.01E+00	0.00E+00	8.01E+00
		Be-7	<2.91E+01	0.00E+00	2.91E+01
		K-40	<2.26E+01	0.00E+00	2.26E+01
516436	12/31/2019 - 4/21/2020	H3SW	2.58E+02	1.12E+02	1.77E+02
521272	3/24/2020 - 4/21/2020	Mn-54	<3.22E+00	0.00E+00	3.22E+00
		Co-58	<3.27E+00	0.00E+00	3.27E+00
		Fe-59	<7.11E+00	0.00E+00	7.11E+00
		Co-60	<2.96E+00	0.00E+00	2.96E+00
		Zn-65	<7.19E+00	0.00E+00	7.19E+00
		Zr-95	<5.49E+00	0.00E+00	5.49E+00
		Nb-95	<4.45E+00	0.00E+00	4.45E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.42E+00	0.00E+00	3.42E+00
		Cs-137	<3.25E+00	0.00E+00	3.25E+00
		BaLa-140	<7.03E+00	0.00E+00	7.03E+00
		Be-7	<2.71E+01	0.00E+00	2.71E+01
		K-40	9.30E+01	3.30E+01	3.70E+01
522840	4/21/2020 - 5/19/2020	Mn-54	<4.54E+00	0.00E+00	4.54E+00
		Co-58	<4.60E+00	0.00E+00	4.60E+00
		Fe-59	<7.83E+00	0.00E+00	7.83E+00
		Co-60	<4.37E+00	0.00E+00	4.37E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2020 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
522840	4/21/2020 - 5/19/2020	Zn-65	<5.70E+00	0.00E+00	5.70E+00
		Zr-95	<6.41E+00	0.00E+00	6.41E+00
		Nb-95	<4.03E+00	0.00E+00	4.03E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.64E+00	0.00E+00	3.64E+00
		Cs-137	<3.19E+00	0.00E+00	3.19E+00
		BaLa-140	<6.48E+00	0.00E+00	6.48E+00
		Be-7	<3.38E+01	0.00E+00	3.38E+01
		K-40	6.88E+01	3.90E+01	4.88E+01
		524505	5/19/2020 - 6/16/2020	Mn-54	<2.97E+00
Co-58	<3.49E+00			0.00E+00	3.49E+00
Fe-59	<7.21E+00			0.00E+00	7.21E+00
Co-60	<3.68E+00			0.00E+00	3.68E+00
Zn-65	<4.81E+00			0.00E+00	4.81E+00
Zr-95	<5.82E+00			0.00E+00	5.82E+00
Nb-95	<4.12E+00			0.00E+00	4.12E+00
I-131	<1.16E+01			0.00E+00	1.16E+01
Cs-134	<3.71E+00			0.00E+00	3.71E+00
Cs-137	<2.89E+00			0.00E+00	2.89E+00
BaLa-140	<6.92E+00			0.00E+00	6.92E+00
Be-7	<3.58E+01			0.00E+00	3.58E+01
K-40	<6.54E+01			0.00E+00	6.54E+01
522528	4/21/2020 - 7/14/2020	H3SW	<9.50E+01	0.00E+00	1.85E+02
525822	6/16/2020 - 7/14/2020	Mn-54	<3.67E+00	0.00E+00	3.67E+00
		Co-58	<3.75E+00	0.00E+00	3.75E+00
		Fe-59	<6.01E+00	0.00E+00	6.01E+00
		Co-60	<3.44E+00	0.00E+00	3.44E+00
		Zn-65	<6.97E+00	0.00E+00	6.97E+00
		Zr-95	<6.65E+00	0.00E+00	6.65E+00
		Nb-95	<4.75E+00	0.00E+00	4.75E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.54E+00	0.00E+00	3.54E+00
		Cs-137	<3.89E+00	0.00E+00	3.89E+00
		BaLa-140	<6.24E+00	0.00E+00	6.24E+00
		Be-7	<3.09E+01	0.00E+00	3.09E+01
		K-40	5.79E+01	3.44E+01	4.83E+01
527090	7/14/2020 - 8/11/2020	Mn-54	<2.85E+00	0.00E+00	2.85E+00
		Co-58	<2.80E+00	0.00E+00	2.80E+00
		Fe-59	<5.10E+00	0.00E+00	5.10E+00
		Co-60	<2.48E+00	0.00E+00	2.48E+00
		Zn-65	<4.74E+00	0.00E+00	4.74E+00
		Zr-95	<4.86E+00	0.00E+00	4.86E+00
		Nb-95	<3.39E+00	0.00E+00	3.39E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<2.73E+00	0.00E+00	2.73E+00
		Cs-137	<2.89E+00	0.00E+00	2.89E+00
		BaLa-140	<6.37E+00	0.00E+00	6.37E+00
		Be-7	<2.24E+01	0.00E+00	2.24E+01
		K-40	6.40E+01	2.88E+01	3.90E+01
528913	8/11/2020 - 9/9/2020	Mn-54	<3.44E+00	0.00E+00	3.44E+00
		Co-58	<3.54E+00	0.00E+00	3.54E+00
		Fe-59	<5.70E+00	0.00E+00	5.70E+00
		Co-60	<2.27E+00	0.00E+00	2.27E+00
		Zn-65	<6.02E+00	0.00E+00	6.02E+00
		Zr-95	<6.02E+00	0.00E+00	6.02E+00
		Nb-95	<4.83E+00	0.00E+00	4.83E+00
		I-131	<1.06E+01	0.00E+00	1.06E+01

CATAWBA Radiological Environmental Monitoring Analysis Report - 2020 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
528913	8/11/2020 - 9/9/2020	Cs-134	<3.39E+00	0.00E+00	3.39E+00
		Cs-137	<3.28E+00	0.00E+00	3.28E+00
		BaLa-140	<7.14E+00	0.00E+00	7.14E+00
		Be-7	3.05E+00	1.66E+01	2.95E+01
		K-40	1.05E+02	3.87E+01	4.86E+01
527293	7/14/2020 - 10/6/2020	H3SW	2.15E+02	1.13E+02	1.82E+02
530687	9/9/2020 - 10/6/2020	Mn-54	<3.26E+00	0.00E+00	3.26E+00
		Co-58	<4.35E+00	0.00E+00	4.35E+00
		Fe-59	<8.53E+00	0.00E+00	8.53E+00
		Co-60	<4.13E+00	0.00E+00	4.13E+00
		Zn-65	<6.29E+00	0.00E+00	6.29E+00
		Zr-95	<9.42E+00	0.00E+00	9.42E+00
		Nb-95	<4.39E+00	0.00E+00	4.39E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.44E+00	0.00E+00	3.44E+00
		Cs-137	<4.16E+00	0.00E+00	4.16E+00
		BaLa-140	<7.61E+00	0.00E+00	7.61E+00
		Be-7	<3.67E+01	0.00E+00	3.67E+01
		K-40	5.64E+01	4.10E+01	6.12E+01
532596	10/6/2020 - 11/3/2020	Mn-54	<3.40E+00	0.00E+00	3.40E+00
		Co-58	<2.82E+00	0.00E+00	2.82E+00
		Fe-59	<8.21E+00	0.00E+00	8.21E+00
		Co-60	<3.19E+00	0.00E+00	3.19E+00
		Zn-65	<7.64E+00	0.00E+00	7.64E+00
		Zr-95	<7.73E+00	0.00E+00	7.73E+00
		Nb-95	<4.80E+00	0.00E+00	4.80E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.08E+00	0.00E+00	3.08E+00
		Cs-137	<3.48E+00	0.00E+00	3.48E+00
		BaLa-140	<4.37E+00	0.00E+00	4.37E+00
		Be-7	<2.89E+01	0.00E+00	2.89E+01
		K-40	7.99E+01	3.04E+01	2.98E+01
534192	11/3/2020 - 12/1/2020	Mn-54	<3.21E+00	0.00E+00	3.21E+00
		Co-58	<2.84E+00	0.00E+00	2.84E+00
		Fe-59	<6.75E+00	0.00E+00	6.75E+00
		Co-60	<2.98E+00	0.00E+00	2.98E+00
		Zn-65	<8.16E+00	0.00E+00	8.16E+00
		Zr-95	<5.86E+00	0.00E+00	5.86E+00
		Nb-95	<5.23E+00	0.00E+00	5.23E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<4.35E+00	0.00E+00	4.35E+00
		Cs-137	<3.98E+00	0.00E+00	3.98E+00
		BaLa-140	<7.59E+00	0.00E+00	7.59E+00
		Be-7	<3.35E+01	0.00E+00	3.35E+01
		K-40	8.91E+01	3.56E+01	3.98E+01
533288	10/6/2020 - 12/29/2020	H3SW	<1.46E+02	0.00E+00	1.94E+02
536306	12/1/2020 - 12/29/2020	Mn-54	<3.61E+00	0.00E+00	3.61E+00
		Co-58	<4.10E+00	0.00E+00	4.10E+00
		Fe-59	<7.19E+00	0.00E+00	7.19E+00
		Co-60	<4.49E+00	0.00E+00	4.49E+00
		Zn-65	<5.20E+00	0.00E+00	5.20E+00
		Zr-95	<6.15E+00	0.00E+00	6.15E+00
		Nb-95	<4.52E+00	0.00E+00	4.52E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.14E+00	0.00E+00	3.14E+00

CATAWBA Radiological Environmental Monitoring Analysis Report - 2020 (Appendix E)

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

Sample Point 263 [CONTROL - NNE @ 0.59 miles]

Sample ID: 536306	Sample Dates: 12/1/2020 - 12/29/2020	Nuclide	Activity	2 Sigma Error	MDA
		Cs-137	<2.93E+00	0.00E+00	2.93E+00
		BaLa-140	<8.39E+00	0.00E+00	8.39E+00
		Be-7	<2.84E+01	0.00E+00	2.84E+01
		K-40	1.38E+02	4.03E+01	3.89E+01

Enclosure 3
RA-22-0030

ENCLOSURE 3: [HNP Annual Radiological Environmental Operating Report](#)



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

DUKE ENERGY PROGRESS, LLC

SHEARON HARRIS NUCLEAR POWER PLANT

2021



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

A	Annually
APAC	Air Particulate Air Cartridge/Radioiodine
AR	Action Request - Corrective Action Program
AREOR	Annual Radiological Environmental Operating Report
BLV	Broadleaf Vegetation
BW	Biweekly
C	Control
CM	Community
DRR	Document Revision Request
DW	Drinking Water
EZA	Eckert and Ziegler Analytics
GEL	General Engineering Laboratory, LLC
GPS	Global Positioning System
GW	Ground Water
HNP	Harris Nuclear Plant or Shearon Harris Nuclear Plant
LLD	Lower Limit of Detection
LUC	Land Use Census
M	Monthly
MAPEP	Department of Energy Mixed Analyte Performance Evaluation Program
MDA	Minimum Detectable Activity
mR/STD Qtr	milliroentgen per standard quarter
MWe	Mega Watts electric
NIST	National Institute of Standards and Technology
NCR	Nuclear Condition Report - Corrective Action Program
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SB	Site Boundary
SHNPP	Shearon Harris Nuclear Power Plant
SM	Semimonthly
SW	Surface Water
TLD	Thermoluminescent Dosimeter
UFSAR	Updated Final Safety Analysis Report
W	Weekly

1.0 EXECUTIVE SUMMARY

This Annual Radiological Environmental Operating Report describes the Shearon Harris Nuclear Plant Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2021.

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

Sampling activities were conducted as prescribed by the Harris Nuclear Plant Offsite Dose Calculation Manual (ODCM). One thousand three hundred and twenty-four samples were analyzed comprising one thousand three hundred and ninety-nine test results in order to compile data for the 2021 report. Based on the annual land use census, the current number of sampling sites for Harris Nuclear Plant is sufficient.

Concentrations observed in the environment in 2021 for plant related radionuclides were generally within the ranges of concentrations observed in the past. Inspection of the data showed that radioactivity concentrations in drinking water, ground water, surface water, bottom sediment, and aquatic vegetation are higher than the activities reported for samples collected prior to the operation of the station. Measured concentrations, including tritium, were not higher than expected and all positively identified measurements attributable to station operation were within limits as specified in the HNP ODCM and regulatory limits, thus presenting no significant impact on the environment or public health and safety.

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

Duke Energy Progress, LLC (Duke Energy), Shearon Harris Nuclear Power Plant, is a single-unit facility located on the shore of Harris Lake in southwest Wake County, North Carolina. The pressurized water reactor nuclear steam supply system furnished by Westinghouse Electric Corporation is designed to produce a net electrical output of approximately 930 MWe. Initial criticality was achieved on January 3, 1987.

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

Sampling locations are chosen based upon meteorological factors, preoperational monitoring, and results of the land use surveys. Figure 2.1-1 is a map of the HNP site boundary. Sample points beyond the site boundary are considered offsite. Figures 2.1-2, 2.1-3, and 2.1-4 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 2.1-2 comprises all sample locations within a one-mile radius of HNP. Figure 2.1-3 and 2.1-4 comprises all sample locations within a 10-mile radius of HNP.

The Shearon Harris Nuclear Plant centerline used for GPS measurements was referenced from the Shearon Harris Nuclear Plant Updated Final Safety Analysis Report (UFSAR), section 2.1.1.1, Specification of Location. Waypoint coordinates used for HNP GPS measurements were latitude 35°-38'-00"N and longitude 78°-57'-22"W. Maps and tables were generated using North American Datum (NAD) 27. Data normally reflect accuracy to within 2 to 5 meters from point of measurement. All GPS field measurements were taken as close as possible to the item of interest. Distances for the locations are displayed using three significant figures.

2.2 SCOPE AND REQUIREMENTS OF THE REMP

An environmental monitoring program has been in effect at Harris Nuclear Plant since 1982, five years prior to commencing operation. 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 and is conducted in accordance with Operational Requirement 3.12.1 in the HNP Offsite Dose Calculation Manual and applicable

procedures; with regards to sample media, sampling locations, sampling frequency and analytical sensitivity requirements. Indicator and control locations were established for comparison purposes to distinguish radioactivity of plant origin from natural or other “man-made” environmental radioactivity. The environmental monitoring program also verifies projected and anticipated radionuclide concentrations in the environment and related exposures from releases of radionuclides from Shearon Harris Nuclear Plant. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10CFR50 and provides surveillance of all appropriate critical exposure pathways to man and protects vital interests of the company, public and state and federal agencies concerned with the environment. Reporting levels for activity found in environmental samples are listed in Table 2.2-A. Table 2.2-B lists the REMP analysis and frequency schedule. The Annual Land Use Census, required by the HNP Offsite Dose Calculation Manual is performed to ensure that changes in the use of areas at or beyond the site boundary are identified and that modifications to the REMP are made if required by changes in land use. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10CFR50. Results are shown in Table 3.13.

Participation in an interlaboratory comparison program is performed in fulfillment of HNP ODCM Operational Requirements. The comparison program 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 4 of this annual report.

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

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

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

Where:

\bar{x} = estimate of the mean,

i = individual sample,

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

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 REMP.

LLD - The LLD, as defined in the ODCM as 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* (before the fact) lower limit of detection. The actual LLD is dependent upon the standard deviation of the background-counting rate, the counting efficiency, the sample size (mass or volume), the radiochemical yield and the radioactive decay of the sample between sample collection and counting. The "required" LLDs for each sample medium and selected radionuclides are given in the ODCM 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 plant. Visual inspection of tabular or graphical presentations of data (including preoperational) is used to determine if a trend exists. A decrease in a particular radionuclide's concentration in an environmental medium does not indicate that reactor operations are removing radioactivity from the environment, but that reactor operations are not adding that radionuclide to the environment in quantities exceeding the preoperational level and that the normal removal processes (radioactive decay, deposition, resuspension, etc.) are influencing the concentration.

Substantial increases or decreases in the amount of a particular radionuclide's release from the nuclear plant will greatly affect the resulting environmental levels; therefore, a knowledge of the release of a radionuclide from the nuclear plant is necessary to completely interpret the trends, or lack of trends, determined from the environmental data. Factors that may affect environmental levels of radionuclides include prevailing weather conditions (periods of drought, solar cycles or heavier than normal precipitation), construction in or around either the nuclear plant or the sampling location, and addition or deletion of other sources of radioactive materials (such as the 1986 Chernobyl accident and the Japan earthquake and tsunami, which triggered the 2011 Fukushima Dai-ichi

Nuclear Power Plant incident). Some of these factors may be obvious while others are sometimes unknown. Therefore, how trends are identified will include some judgment by plant personnel.

Figure 2.1-1

Map of Site Boundary

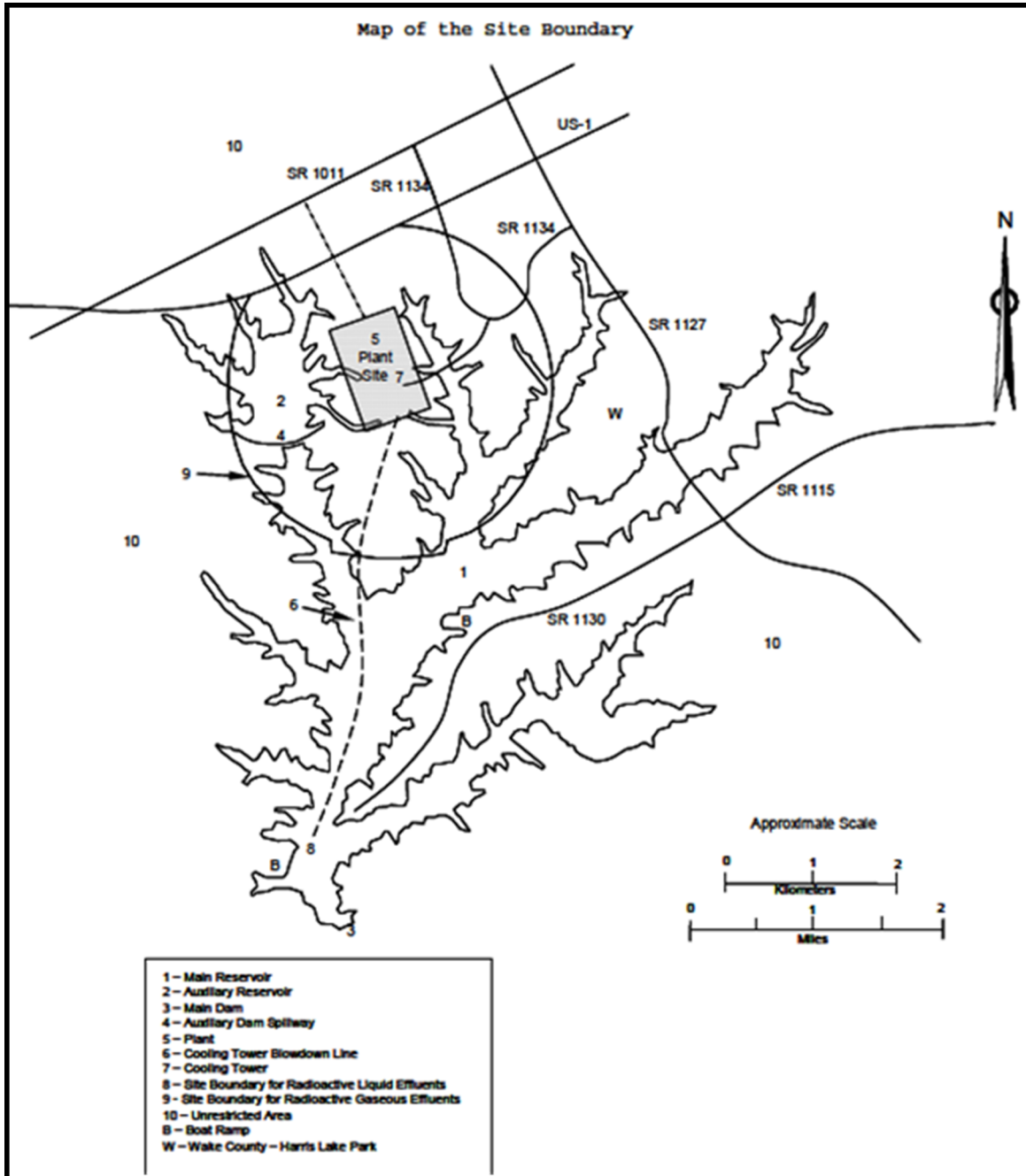
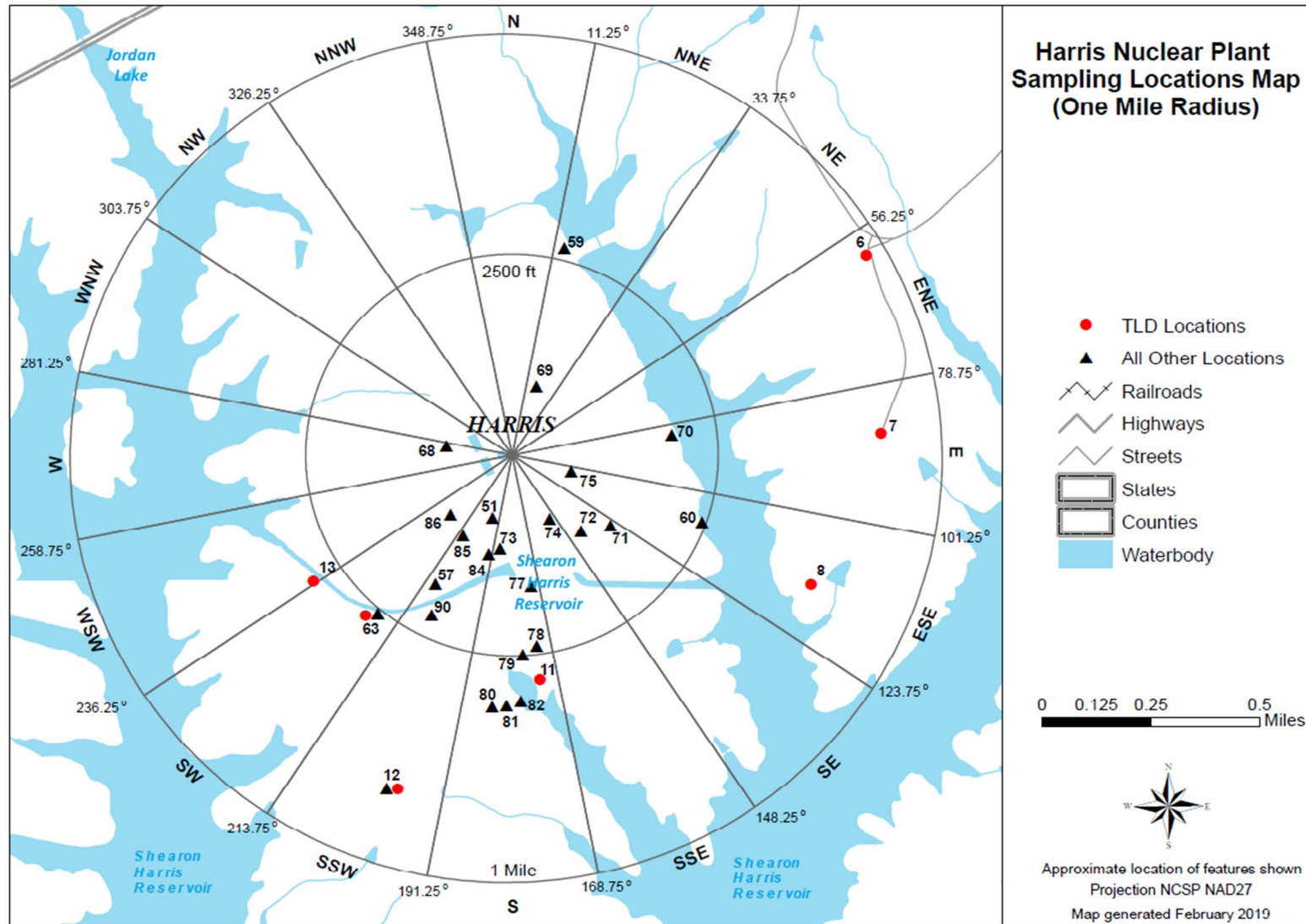
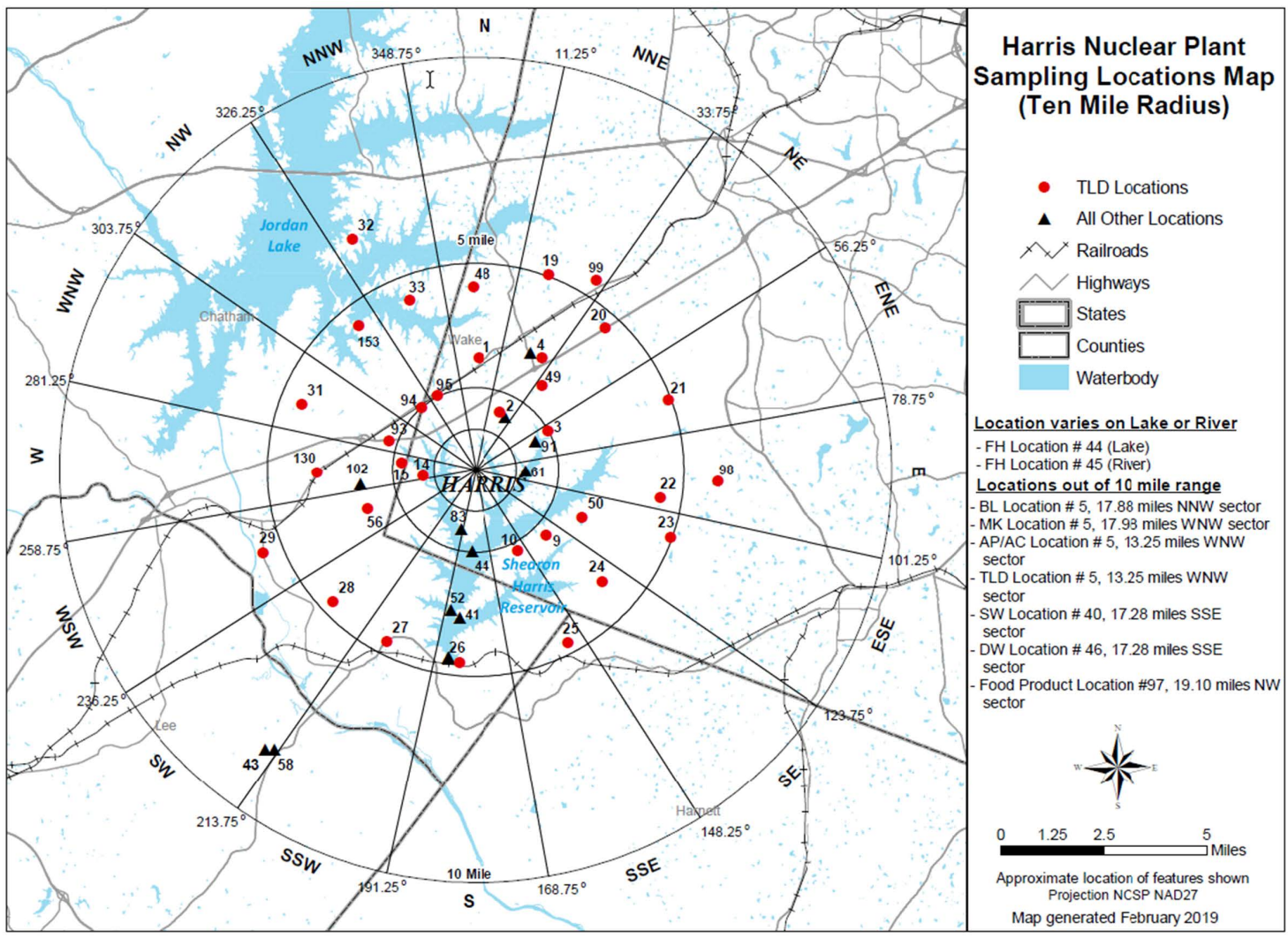


Figure 2.1-2

Harris Nuclear Plant Sampling Locations - One Mile Radius

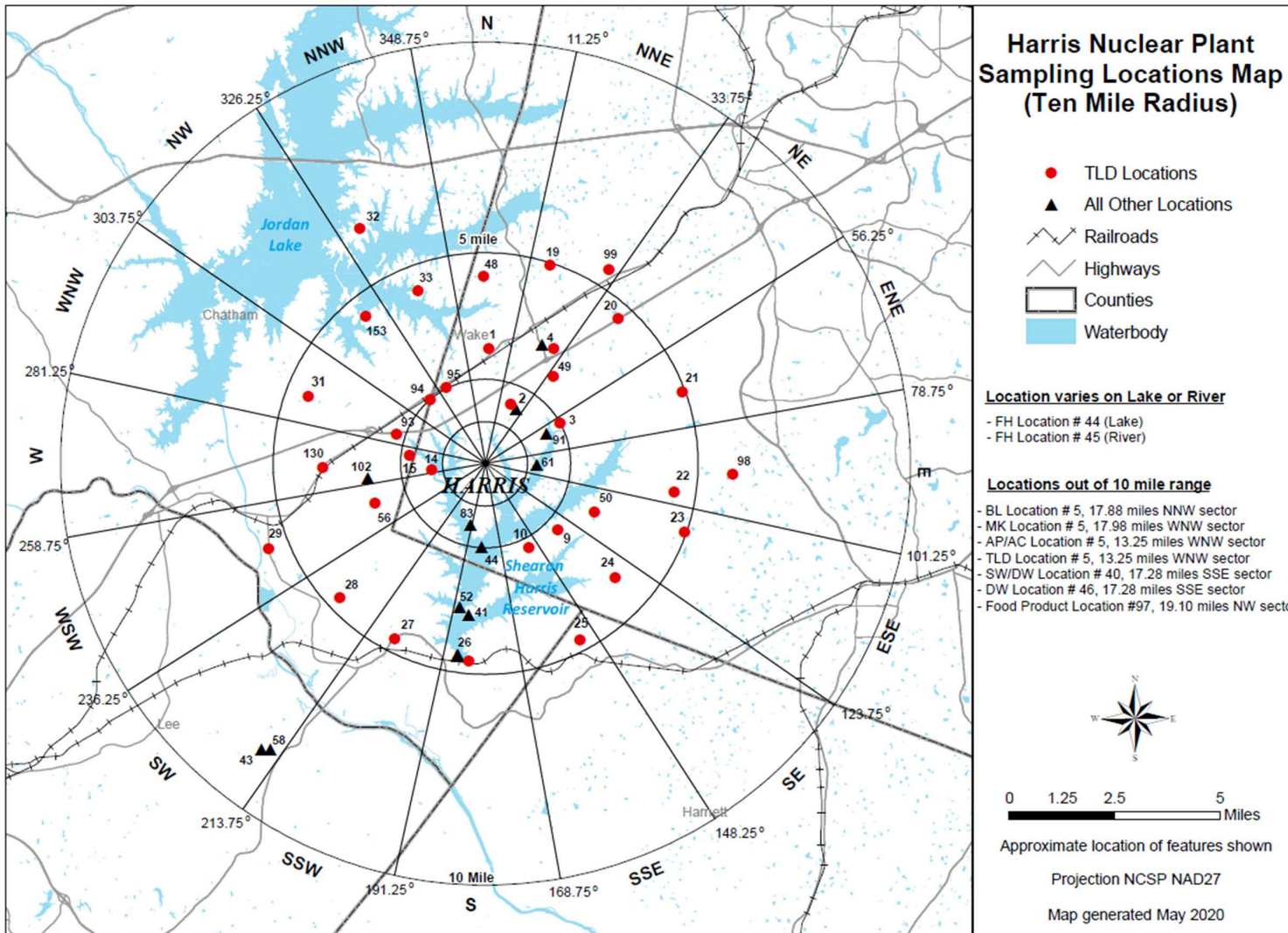


**Figure 2.1-3
Harris Nuclear Plant Sampling Locations - Ten Mile Radius (HNP ODCM Rev. 028)**



TLD Location #19 is located in the yard of a Private Residence (0.6 mi. E on SR 1142 from Intersection of SR 1141, NNE Sector, 5.0 mi. from site) in the current revision of the HNP ODCM.

**Figure 2.1-4
Harris Nuclear Plant Sampling Locations - Ten Mile Radius (Proposed ODCM Change, DRR# 02326048)**



On 15APR2020 TLD Location #19 was moved from the yard of a Private Residence to a Power Pole (Humie Olive Rd, NNE Sector, 4.95 mi. from site). DRR # 02326048 was initiated to change the HNP ODCM.

TABLE 2.1-A

HARRIS NUCLEAR PLANT

RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS

Table 2.1-A Codes									
A	Annual	BW	BiWeekly	FP	Food Product	Q	Quarterly	SS	Sediment Shoreline
AC	Air Cartridge	C	Control ⁽⁵⁾	GW	Ground Water	SA	Semiannually	SW	Surface Water
AP	Air Particulate	CM	Community	I	Indicator	SB	Site Boundary	W	Weekly
AV	Aquatic Vegetation	DW	Drinking Water	M	Monthly	SBT	Sediment Bottom		
BLV	Broadleaf Vegetation	FI	Fish	MK	Milk	SM	Semimonthly		

Site#	Type	Location Description ⁽⁴⁾	AC & AP	SW	DW	SS	SBT	AV	FP ⁽¹⁾	Fish (FI)	Milk (Mk)	BLV ⁽²⁾	GW
2	I	1.4 miles NNE	W/Q/SB										
4	I	3.1 miles NNE	W/Q/CM										
5	C	>12 miles WNW – Pittsboro >12 miles NNW – Pittsboro (BLV)	W/Q								SM/M	M ⁽²⁾⁽⁶⁾	
12	I	0.9 miles SSW										M ⁽²⁾	
26	I	4.7 miles S	W/Q	BW/M		SA		A					
40	I	17.2 miles SSE - Lillington		M/Q									
41	I	3.8 miles S				SA		A					
43	C	8.5 miles SW		M/Q									
44	I	Site varies in Harris Lake								SA			
45	C	Site varies in Cape Fear River above Buckhorn Dam								SA			
46	I	17.2 miles SSE - Lillington			M/Q								
51	I	Water Treatment Building (On Site)			BW/M								
52	I	3.8 miles S					SA						
57	I	0.4 miles SSW											Q
58	C	8.5 miles SW			M/Q								
59	I	0.5 miles NNE											Q
60	I	0.5 miles ESE											Q
61	C	2.5 miles E						A					
63	I	0.6 miles SW	W/Q/SB									M ⁽²⁾	
68	I	0.2 miles W											Q
69	I	0.2 miles NNE											Q
70	I	0.4 miles E											Q
71	I	0.3 miles SE											Q
72	I	0.2 miles SE											Q
73	I	0.2 miles S											Q
74	I	0.2 miles SSE											Q
75	I	0.1 miles ESE											Q
77	I	0.4 miles S											Q
78	I	0.5 miles S											Q
79	I	0.5 miles S											Q
80	I	0.6 miles S											Q
81	I	0.6 miles S											Q
82	I	0.6 miles S											Q
83	I	1.6 miles SSW											Q
84	I	0.2 miles SSW											Q
85	I	0.2 miles SSW											Q
86	I	0.2 miles SW											Q
90	I	0.5 miles SSW	W/Q/SB										
91	I	1.6 miles ENE	W/Q										
97	C	19.1 miles NW Granite Springs Farm							M ⁽¹⁾				
102	I	2.82 miles W									SM ⁽³⁾		

(1) When Available, during Harvest/Growing Season
 (2) Broadleaf vegetation refers to any natural vegetation, plants, shrubs, or trees that have wide, flat leaves or leaves with veins which branch from a main vein. Typically leaves are only present during the growing season May through October.
 (3) Goat milk is seasonally available. Typically, goats lactate during the spring, summer, and early fall (April through October).
 (4) GPS data reflect approximate accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.
 (5) Control sample stations (or background stations) are located in areas that are unaffected by plant operations. All other stations that have the potential to be affected by radioactive emissions from plant operations are considered indicator locations.
 (6) BLV is sampled in the NNW Sector but is designated as Location 5 in the HNP ODCM as Pittsboro, >12 mi. from site.

TABLE 2.1-B**HARRIS NUCLEAR PLANT****RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS (TLD SITES)**

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

Site #	Measure Type	Location ^{(1) (3)}	Distance (miles)	Sector	Site #	Measure Type	Location ^{(1) (3)}	Distance (miles)	Sector
1	IR		2.6	N	25	OR		4.7	SSE
2	IR		1.4	NNE	26	OR		4.7	S
3	SI	HE&EC Visitor Center (Population Center)	1.9	ENE	27	OR		4.8	SSW
4	SI	New Hill (Population Center)	3.1	NNE	28	OR		4.8	SW
5	C	Pittsboro (Control Station)	13.3	WNW	29	OR		5.7	WSW
6	IR		0.8	ENE	31	OR		4.7	WNW
7	IR		0.7	E	32	SI	Jordan Lake (Population Center)	6.4	NNW
8	IR		0.6	ESE	33	OR		4.5	NNW
9	IR		2.2	SE	48	OR		4.5	N
10	IR		2.2	SSE	49	IR		2.5	NE
11	IR		0.6	S	50	SI	Holleman Crossroads (Population Center)	2.6	ESE
12	IR		0.9	SSW	56	IR		3.0	WSW
13	IR		0.7	WSW	63	IR		0.6	SW
14	IR		1.5	W	93	IR		2.2	WNW
15	IR		2.0	W	94	IR		2.0	NW
19 ⁽²⁾	OR		5.0	NNE	95	IR		2.0	NNW
20	OR		4.5	NE	98	SI	Holly Springs School Complex (Population Center)	5.9	E
21	OR		4.8	ENE	99	SI	Friendship School (Population Center)	5.5	NNE
22	OR		4.3	E	130	OR		3.9	W
23	OR		4.8	ESE	153	OR		4.5	NW
24	OR		4.0	SE					

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

(2) Location listed reflects current revision of HNP ODCM. TLD #19 was moved minimally. DRR #02326048 initiated to document change.

(3) One or more instruments, such as a pressurized ion chamber, for measuring and recording dose rate continuously may be used in place of, or in addition to, integrating dosimeters. For the purposes of this table, a thermoluminescent dosimeter (TLD) is considered to be one phosphor; two or more phosphors in a packet are considered as two or more dosimeters. Film badges shall not be used as dosimeters for measuring direct radiation. (The 40 stations is not an absolute number. The number of direct radiation monitoring stations may be reduced according to geographical limitations; e.g., at an ocean site, some sectors will be over water so that the number of dosimeters may be reduced accordingly. The frequency of analysis or readout for TLD systems will depend upon the characteristics of the specific system used and should be selected to obtain optimum dose information within minimal fading.)

TABLE 2.2-A

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

Analysis	Water (pCi/liter)	Airborne Particulate or Gases (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (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. This is 40 CFR Part 141 value. If no drinking water pathway exists, a value of 30,000 pCi/liter may be used.

(b) If no drinking water pathway exists, a value of 20 pCi/liter may be used.

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

Sample Medium	Analysis Schedule	Gamma Isotopic ^(e)	Tritium	Low Level I-131	Gross Beta	TLD
Air Radioiodine	Weekly	X				
Air Particulate	Weekly				(d)	
	Quarterly	X				
Direct Radiation	Quarterly					X
Surface Water	Monthly Composite ^{(f) (h)}	X	X			
Drinking Water	Monthly Composite ^{(c) (f) (i)}	X	X		X	
Ground Water	Quarterly ^(g)	X	X			
Bottom Sediment	Semiannually	X				
Shoreline Sediment	Semiannually	X				
Milk	Semimonthly/Monthly ^{(j) (k)}	X		X		
Fish	Semiannually	X				
Aquatic Vegetation	Annually	X				
Broadleaf Vegetation	Monthly ^(a)	X				
Food Products	Monthly ^{(b) (l)}	X				

- (a) During growing season per ODCM - May through October.
- (b) If harvest occurs more than once a year, sampling shall be performed during each discrete harvest. If harvest occurs continuously, sampling shall be monthly.
- (c) Low-level I-131 will be analyzed on each composite when the dose calculated for the consumption of the water is greater than 1 mrem/yr.
- (d) Airborne particulate sample filters shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than 10 times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.
- (e) Gamma isotopic analysis means the identification and quantification of gamma emitting radionuclides that may be attributable to the effluents from the facility.
- (f) A composite sample is one in which the rate at which the liquid sampled is uniform and in which the method of sampling employed results in a specimen that is representative of the time-averages concentration at the location being sampled. In this program composite sample aliquots shall be collected at time intervals that are very short (e.g. hourly) relative to the composite period (e.g. monthly) in order to assure obtaining a representative sample.
- (g) Groundwater samples shall be taken when the source is tapped for drinking or irrigation purposes in areas where the hydraulic gradient or recharge properties are suitable for contamination. None of the previously identified locations have been used for drinking water since pre-operational days of Harris Nuclear Project nor have these wells ever been used for irrigation purposes. These wells were abandoned for drinking water purposes prior to plant operations. Since that time, these wells have been used to monitor the hydraulic gradient or gradient properties for the Harris Site and for the operational Radiological Environmental Monitoring Program.
- (h) The “upstream sample” shall be taken at a distance beyond significant influence of the discharge. The “downstream” sample shall be taken in an area beyond the but near the mixing zone. “Upstream” samples in an estuary must be taken far enough upstream to be beyond the plant influence. Salt water shall be sampled only when the receiving water is utilized for recreational activities.
- (i) The dose shall be calculated for the maximum organ and age group, using the methodology and parameters in the ODCM.
- (j) If milk animals are not present or unavailable for sampling at indicator locations, sampling of BLV can be substituted.
- (k) When no milk animals are available at indicator locations, milk sampling of the control location can be reduced to once per month to maintain historical data.
- (l) Attention shall be paid to including samples of tuberous and root food products.

TABLE 2.2-C**DETECTION CAPABILITIES FOR THE *A PRIORI* LOWER LIMIT OF DETECTION**

Analysis	Water (pCi/liter)	Airborne Particulates or Gases (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (pCi/kg-wet)	Sediment (pCi/kg-dry)
Gross Beta	4	0.01				
H-3	2000 ^(a)					
Mn-54	15		130			
Fe-59	30		260			
Co-58, 60	15		130			
Zn-65	30		260			
Zr-Nb-95	15					
I-131	1 ^(b)	0.07		1	60	
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15			15		

(a) If no drinking water pathway exists, a value of 3000 pCi/liter may be used.

(b) If no drinking water pathway exists, a value of 15 pCi/liter may be used.

3.0 INTERPRETATION OF RESULTS

Review of all 2021 REMP analysis results was performed to identify changes in environmental levels as a result of plant operations. The following section depicts and explains the review of these results. Sample data for 2021 was compared to historical data. Over the years of operation, analysis and collection changes have taken place that do not allow direct comparisons for some data collected from 1984 (preoperational) through 2021. Summary tables containing 2021 information required by Technical Specifications 6.9.1.3 and HNP ODCM E.3 are located in Appendix B. REMP results for 2021 are located in Appendix E.

Evaluation for significant trends was performed for radionuclides that are listed as required within the HNP ODCM. The radionuclides include: H-3, Mn-54, Fe-59, Co-58, Co-60, Zn-65, Zr-95, Nb-95, I-131, Cs-134, Cs-137, Ba-140 and La-140. Other radionuclides detected that are the result of plant operation, but not required for reporting, are trended.

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

All 2021 sample analysis results were reviewed to detect and identify any significant trends. All negative concentration values were replaced with zero for calculation purposes. Any zero concentrations used in tables or graphs represent activity measurements less than detectable levels.

Review of the 2021 data presented in this section supports the conclusion that there were no significant changes in environmental sample radionuclide concentrations of samples collected and analyzed from HNP and surrounding areas that were attributable to plant operations. Inspection of the data showed that radioactivity concentrations were as expected and all positively identified measurements attributed to plant operations were within HNP ODCM regulatory limits; thus, presenting no significant impact to the environment or public health and safety.

Data presented in Sections 3.1 through 3.12 support the conclusion that there was no significant increase in radioactivity in the environment around Harris Nuclear Plant due to station operations in 2021. Similarly, there was no significant increase in ambient background radiation levels in the surrounding areas. The 2021 land use census data, shown in Section 3.13, indicates that no program changes are required as a result of the census.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

Airborne particulate and radioiodine samples at each of seven locations were composited 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.

In 2021, 371 radioiodine and particulate samples were collected and analyzed, 318 from six indicator locations and 53 at the control location. Particulate samples were analyzed weekly for gross beta. A quarterly gamma analysis was performed on the quarterly filter composite (by location). The radioiodine samples received a weekly gamma analysis.

Figure 3.1 shows individual sample gross beta results for the indicator location with highest annual mean and the control location samples during 2021. The two sample locations' results are similar in concentration and have varied negligibly.

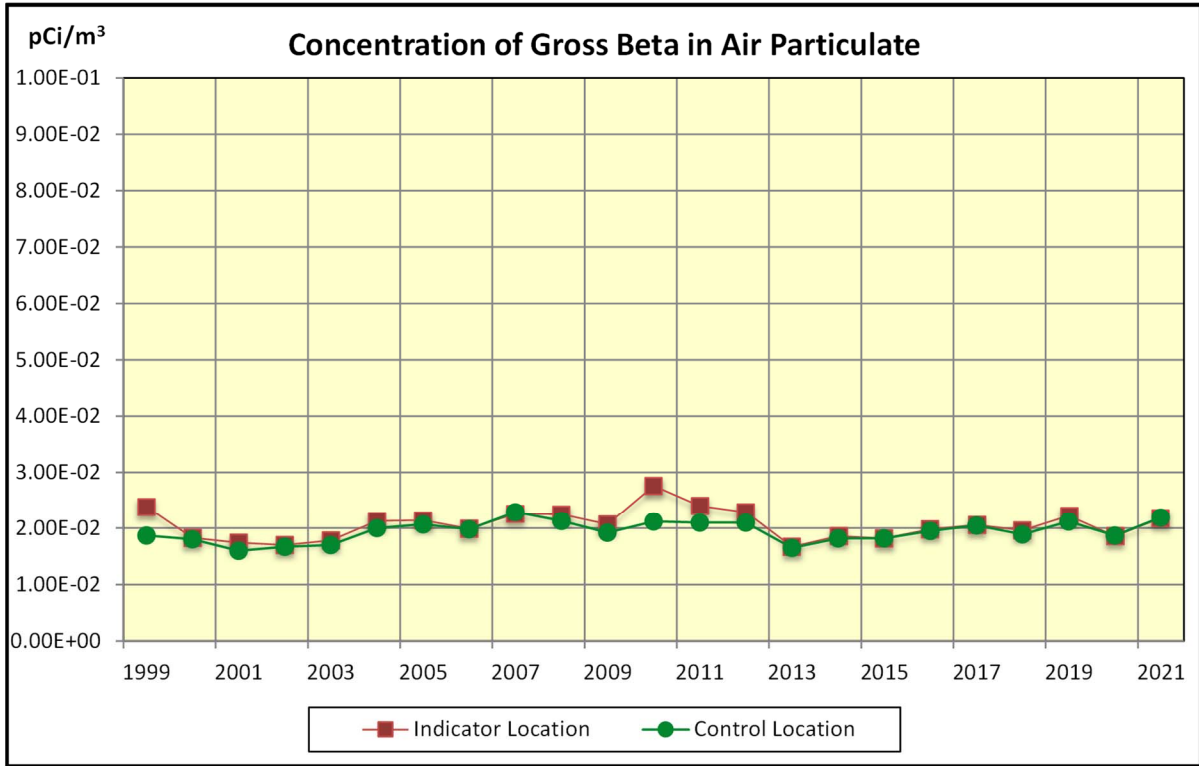
There were no detectable gamma emitters attributable to plant operations identified for particulate filters analyzed during 2021. Table 3.1-A shows the highest indicator annual mean and control location annual mean for gross beta in air particulate.

There was no detectable I-131 in air radioiodine samples analyzed in 2021. Table 3.1-B shows the highest indicator annual mean and control location annual mean for I-131 since 1999. No I-131 activity due to HNP operations has been detected during the entire operating history of the plant.

Two Airborne Radioiodine and Particulate indicator sampling locations were removed from the HNP REMP (AR # 02240431) as it was determined that they were not located in the highest three DOQ sectors nor in the vicinity of a community. Locations #1 (2.6 miles N) and #47 (3.4 miles SSW) were removed. The last sample was obtained on 3JUN2019. The HNP REMP currently has six indicator and one control Airborne Radioiodine and Particulate sampling locations.

K-40 and Be-7 were observed in air samples and quarterly particulate composites but are naturally occurring radionuclides.

Figure 3.1



There is no reporting level for gross beta in air particulate

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

Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1999	2.38E-2	1.87E-2
2000	1.83E-2	1.80E-2
2001	1.74E-2	1.60E-2
2002	1.70E-2	1.67E-2
2003	1.78E-2	1.70E-2
2004	2.13E-2	2.00E-2
2005	2.14E-2	2.07E-2
2006	1.99E-2	1.98E-2
2007	2.26E-2	2.29E-2
2008	2.25E-2	2.13E-2
2009	2.07E-2	1.92E-2
2010	2.76E-2	2.12E-2
2011	2.40E-2	2.10E-2
2012	2.29E-2	2.10E-2
2013	1.67E-2	1.65E-2
2014	1.86E-2	1.82E-2
2015	1.82E-2	1.82E-2
2016	1.98E-2	1.95E-2
2017	2.06E-2	2.05E-2
2018	1.96E-2	1.89E-2
2019	2.22E-2	2.12E-2
2020	1.86E-2	1.87E-2
2021	2.18E-2	2.19E-2

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

Year	Indicator Location (pCi/m³)	Control Location (pCi/m³)
1999	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0
2005	0.00E+0	0.00E+0
2006	0.00E+0	0.00E+0
2007	0.00E+0	0.00E+0
2008	0.00E+0	0.00E+0
2009	0.00E+0	0.00E+0
2010	0.00E+0	0.00E+0
2011 ⁽¹⁾	1.66E-1	1.08E-1
2012	0.00E+0	0.00E+0
2013	0.00E+0	0.00E+0
2014 ⁽²⁾	0.00E+0	0.00E+0
2015	0.00E+0	0.00E+0
2016	0.00E+0	0.00E+0
2017	0.00E+0	0.00E+0
2018	0.00E+0	0.00E+0
2019	0.00E+0	0.00E+0
2020	0.00E+0	0.00E+0
2021	0.00E+0	0.00E+0

0.00E+0 indicates no detectable measurements

(1) 2011 concentrations affected by Fukushima Dai-ichi

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

3.2 DRINKING WATER

Gross beta analysis and gamma spectroscopy were performed on 42 drinking water monthly composite samples. Two indicator locations were sampled, along with one control location. Indicator location 51 was analyzed monthly for tritium, while the two remaining locations analyses consisted of a quarterly composite.

No gamma emitting radionuclides attributable to plant operations were identified in any 2021 drinking water samples. There have been no gamma emitting radionuclides attributable to plant operations identified in drinking water samples during the entire operating history of the plant.

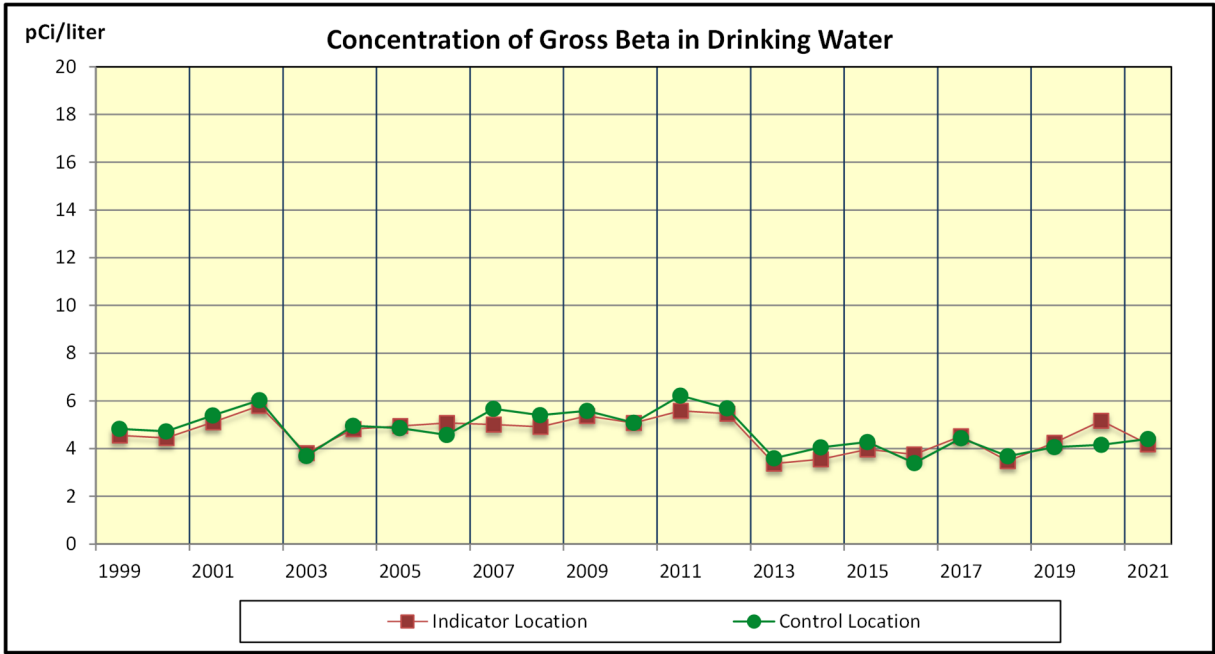
Figure 3.2-1 and Table 3.2 shows highest annual mean gross beta concentrations for the indicator location and control location since 1999. The highest annual mean for the indicator location (downstream of the plant effluent release point) was 4.18 pCi/l in 2021 and the control location concentration was 4.41 pCi/l. The gross beta mean indicator activity and mean control activity increased in 2019 due to an analytical method change affecting analytical sensitivities (NCR # 02303027).

Tritium was detected in fourteen indicator samples from Location 51 and in no control samples during 2021. The mean indicator tritium concentration for 2021 was 1,774 pCi/l, 8.87% of reporting level. Figure 3.2-2 and Table 3.2 display the highest indicator and control location annual mean concentrations for tritium since 1999.

The dose for consumption of water was less than one mrem per year, historically and for 2021; therefore, low-level iodine analysis is not required.

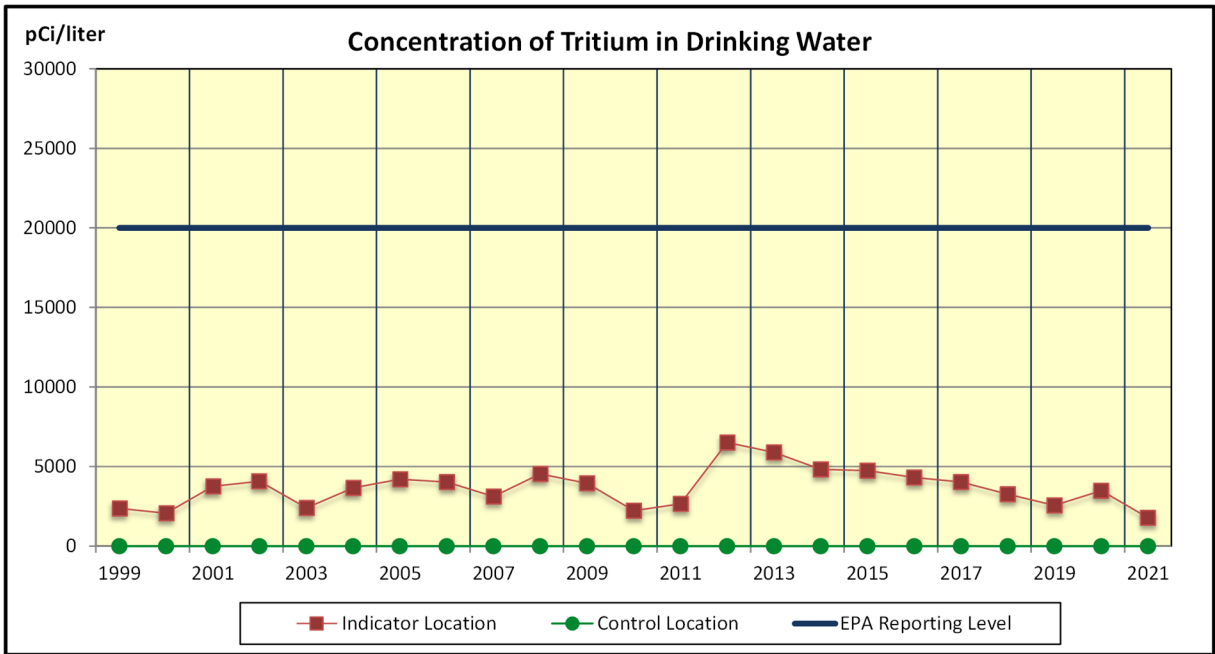
K-40 is a naturally occurring radionuclides that was observed in drinking water samples in 2021.

Figure 3.2-1



There is no reporting level for gross beta in drinking water

Figure 3.2-2



Prior to 2009, drinking water indicator location # 51 was previously not classified as a public drinking water source. In 2009, location # 51 was classified as a public drinking water source; however, it is not a community drinking water source.

Table 3.2 Mean Concentration of Radionuclides in Drinking Water

YEAR	Gross Beta (pCi/l)		Tritium (pCi/l)	
	Indicator Location	Control Location	Indicator Location	Control Location
1999	4.55E+0	4.83E+0	2.37E+3	0.00E+0
2000	4.45E+0	4.73E+0	2.06E+3	0.00E+0
2001	5.11E+0	5.39E+0	3.76E+3	0.00E+0
2002	5.80E+0	6.03E+0	4.07E+3	0.00E+0
2003	3.81E+0	3.69E+0	2.40E+3	0.00E+0
2004	4.82E+0	4.96E+0	3.66E+3	0.00E+0
2005	4.95E+0	4.86E+0	4.20E+3	0.00E+0
2006	5.07E+0	4.58E+0	4.03E+3	0.00E+0
2007	5.01E+0	5.67E+0	3.12E+3	0.00E+0
2008	4.92E+0	5.40E+0	4.54E+3	0.00E+0
2009	5.37E+0	5.58E+0	3.95E+3	0.00E+0
2010	5.07E+0	5.09E+0	2.23E+3	0.00E+0
2011	5.58E+0	6.22E+0	2.65E+3	0.00E+0
2012	5.47E+0	5.69E+0	6.51E+3	0.00E+0
2013	3.37E+0	3.60E+0	5.89E+3	0.00E+0
2014	3.56E+0	4.06E+0	4.83E+3	0.00E+0
2015	3.97E+0	4.28E+0	4.74E+3	0.00E+0
2016	3.76E+0	3.40E+0	4.32E+3	0.00E+0
2017	4.52E+0	4.44E+0	4.02E+3	0.00E+0
2018	3.48E+0	3.68E+0	3.27E+3	0.00E+0
2019 ⁽¹⁾	4.25E+0	4.07E+0	2.57E+3	0.00E+0
2020	5.17E+0	4.16E+0	3.48E+3	0.00E+0
2021	4.18E+0	4.41E+0	1.77E+3	0.00E+0

0.00E+0 indicates no detectable measurements

Prior to 2009, drinking water indicator location # 51 was previously not classified as a public drinking water source. In 2009, location # 51 was classified as a public drinking water source; however, it is not a community drinking water source.

(1) Gross beta preparation/analysis methodology change (NCR # 02303027).

3.3 SURFACE WATER

A total of 42 monthly surface water samples were analyzed for gamma emitting radionuclides from two indicator locations and one control location. Indicator location 26 was analyzed monthly for tritium, while the two remaining locations analyses consisted of a quarterly composite.

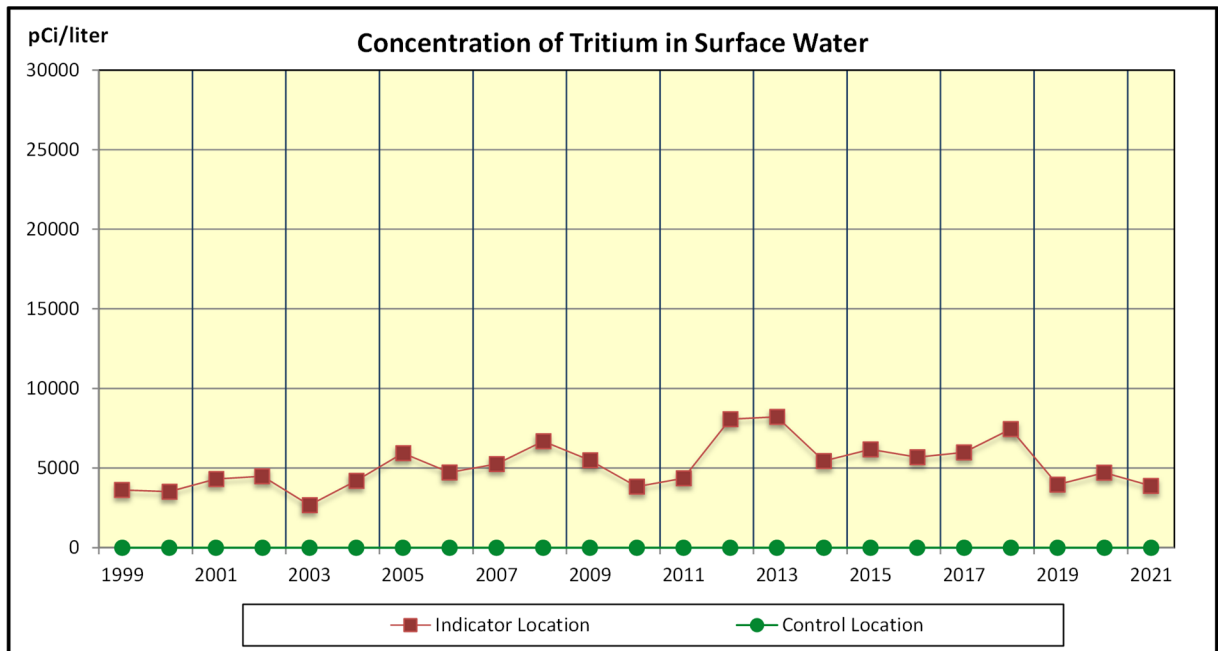
Location 26, Harris Lake Spillway, is the only indicator location sample that contained tritium with an average concentration of 3,890 pCi/l and showed a range of activities from 2,870 to 6,420 pCi/l. Tritium was not detected in the four control samples collected during 2021.

No gamma emitting radionuclides attributable to plant operations were identified in 2021 surface water samples.

Table 3.3 and Figure 3.3 display the highest indicator and control annual means for tritium since 1999.

K-40 and Be-7 are naturally occurring radionuclide that were observed in surface water samples in 2021.

Figure 3.3



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

Table 3.3 Mean Concentrations of Tritium in Surface Water

Year	Indicator Location (pCi/l)	Control Location (pCi/l)
1999	3.63E+3	0.00E+0
2000	3.52E+3	0.00E+0
2001	4.31E+3	0.00E+0
2002	4.49E+3	0.00E+0
2003	2.67E+3	0.00E+0
2004	4.20E+3	0.00E+0
2005	5.94E+3	0.00E+0
2006	4.73E+3	0.00E+0
2007	5.26E+3	0.00E+0
2008	6.68E+3	0.00E+0
2009	5.50E+3	0.00E+0
2010	3.83E+3	0.00E+0
2011	4.36E+3	0.00E+0
2012	8.08E+3	0.00E+0
2013	8.21E+3	0.00E+0
2014	5.44E+3	0.00E+0
2015	6.17E+3	0.00E+0
2016	5.68E+3	0.00E+0
2017	5.98E+3	0.00E+0
2018	7.46E+3	0.00E+0
2019	3.97E+3	0.00E+0
2020	4.71E+3	0.00E+0
2021	3.89E+3	0.00E+0

0.00E+0 indicates no detectable measurements

3.4 GROUND WATER

Twenty-one indicator ground water sample locations were sampled quarterly via grab samples on site at HNP, there is no control location. In total, eighty-four ground water samples were analyzed for gamma emitters and tritium in 2021. The measured ground water gamma and tritium concentrations were below environmental requirements stated in the HNP ODCM.

Three new ground water wells were added to the program in 2019 (AR # 02173466). Locations 84, 85, and 86 were installed outside of the protected area and are more representative of the ground water close to the plant.

No gamma emitting radionuclides attributable to plant operations were identified in 2021 ground water samples.

Tritium was detected in some ground water samples, ranging from 183 pCi/l to 881 pCi/l in 2021; however, the results are well below the EPA reportable drinking water limit (20,000 pCi/l) and non-drinking water limit (30,000 pCi/l). The ground water wells, located on site at HNP, are monitoring wells and are not a water supply for drinking or irrigation. Therefore, there is no radiological dose via this pathway.

K-40 and Be-7 are naturally occurring radionuclides that were observed in ground water samples in 2021.

3.5 MILK

Semimonthly grab samples are collected from the control location and indicator location from late spring to late fall. When the indicator location is not available, the control location is sampled monthly via grab samples.

A total of 33 milk samples were analyzed by gamma spectroscopy and low-level iodine during 2021. One indicator goat milk location was sampled from late spring to late fall and one control cow milk location was sampled the entire year.

There were no gamma emitting radionuclides attributable to plant operations identified in milk samples in 2021. However, it is not unusual for Cs-137 to be present in milk samples. It is a constituent of nuclear weapons test fallout and nuclear plant accidents and has been observed in samples from the indicator goat milk location in the past.

K-40 is a naturally occurring radionuclide that was observed in milk samples in 2021.

3.6 BROADLEAF VEGETATION

Gamma spectroscopy was performed on 18 broadleaf vegetation samples collected in 2021 during the growing season (May through October). Two indicator locations and one control location were sampled.

No gamma emitting radionuclides, other than naturally occurring, were reported in vegetation samples. However, 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 in the past. Figure 3.6 and Table 3.6 shows the mean activity of Cs-137 at the indicator and control locations.

K-40 and Be-7 are naturally occurring radionuclides that were observed in broadleaf vegetation samples in 2021.

Figure 3.6

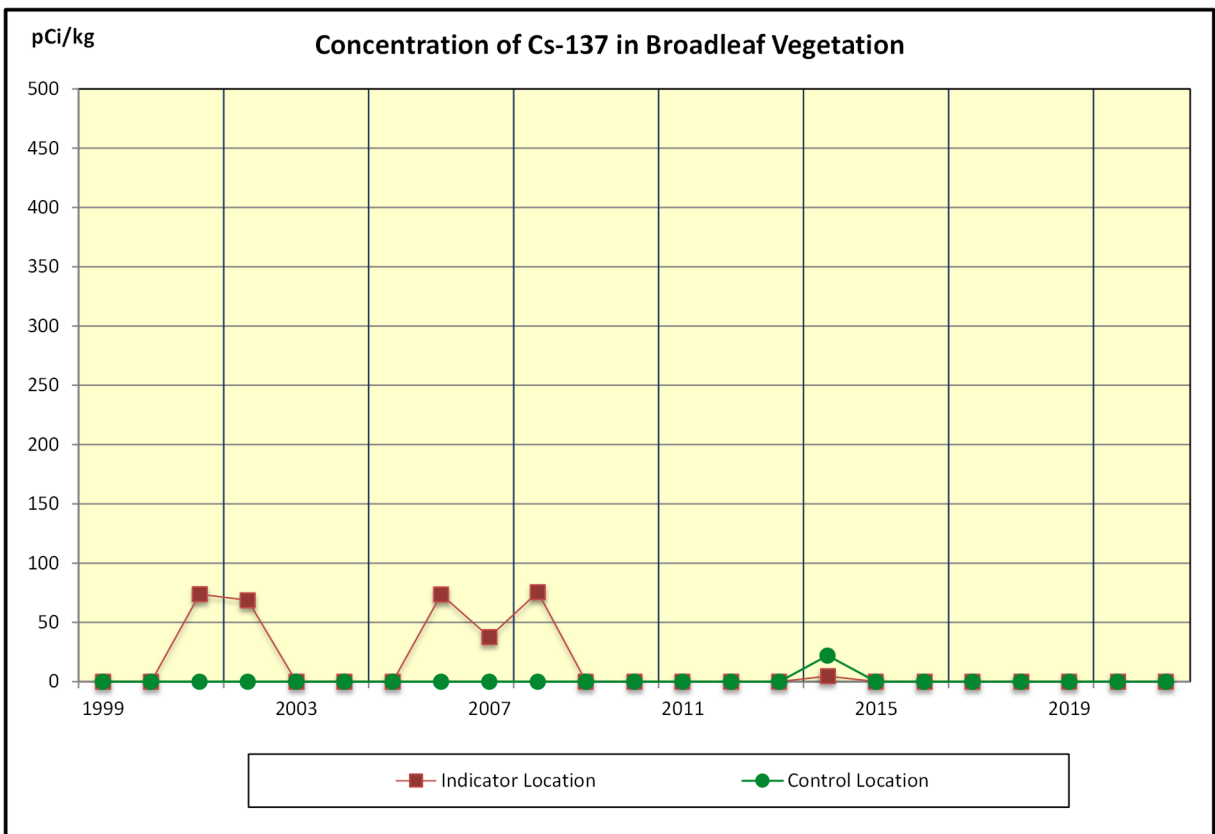


Table 3.6 Mean Concentration of Cs-137 in Broadleaf Vegetation

Year	Indicator Location (pCi/kg)	Control Location (pCi/kg)
1999	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0
2001	7.39E+1	0.00E+0
2002	6.86E+1	0.00E+0
2003	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0
2005	0.00E+0	0.00E+0
2006	7.35E+1	0.00E+0
2007	3.77E+1	0.00E+0
2008	6.23E+1	0.00E+0
2009	0.00E+0	0.00E+0
2010	0.00E+0	0.00E+0
2011	0.00E+0	0.00E+0
2012	0.00E+0	0.00E+0
2013	0.00E+0	0.00E+0
2014 ⁽¹⁾	4.77E+0	2.20E+1
2015	0.00E+0	0.00E+0
2016	0.00E+0	0.00E+0
2017	0.00E+0	0.00E+0
2018	0.00E+0	0.00E+0
2019	0.00E+0	0.00E+0
2020	0.00E+0	0.00E+0
2021	0.00E+0	0.00E+0

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were observed due to the 2014 gamma spectroscopy system change.

3.7 FOOD PRODUCTS

The HNP Land Use Census (LUC) has never identified any gardens irrigated by water in which liquid plant wastes have been discharged; therefore, food product collection is not required. There is no indicator location for this media type and sampling at a control location is maintained for historical integrity.

There were no gamma emitting radionuclides attributable to plant operations identified in any of the twelve food products samples analyzed via gamma spectroscopy during the 2021 growing season.

K-40 and Be-7 are naturally occurring radionuclides that were observed in food product samples in 2021.

3.8 AQUATIC VEGETATION

In 2021 three aquatic vegetation samples were collected from Harris Lake, two indicator locations and one control location were sampled. The aquatic vegetation samples are sampled annually. The aquatic vegetation samples (Lyngbya and Hydrilla) from Harris Lake are not consumed by humans, thus pose no radiological dose to the general public by the ingestion pathway.

There were no gamma emitting radionuclides attributable to plant operations identified in any aquatic vegetation samples in 2021.

No long-term trends have been readily observed in these samples.

K-40 and Be-7 are naturally occurring radionuclides that were observed in aquatic vegetation samples in 2021.

3.9 FISH

Gamma spectroscopy was performed on the edible portions of the 12 fish samples collected semiannually during 2021; four samples of bottom-feeding species (catfish) and eight samples of free-swimming species (sunfish and largemouth bass) from the indicator and control locations.

There were no gamma emitting radionuclides attributable to plant operations identified in any fish samples in 2021.

K-40 is a naturally occurring radionuclide that was observed in fish samples collected during 2021.

3.10 SHORELINE SEDIMENT

Shoreline sediment samples were collected semiannually in 2021 from two indicator locations. There is no control location for this sample media type.

Samples were dried, then sifted to remove rocks and clams prior to analysis. Gamma analyses of the four shoreline sediments detected natural activity in the samples collected during 2021. No long-term trends are readily observed in these samples.

K-40 and Be-7 are naturally occurring radionuclides that were observed in shoreline sediment samples collected during 2021.

3.11 BOTTOM SEDIMENT

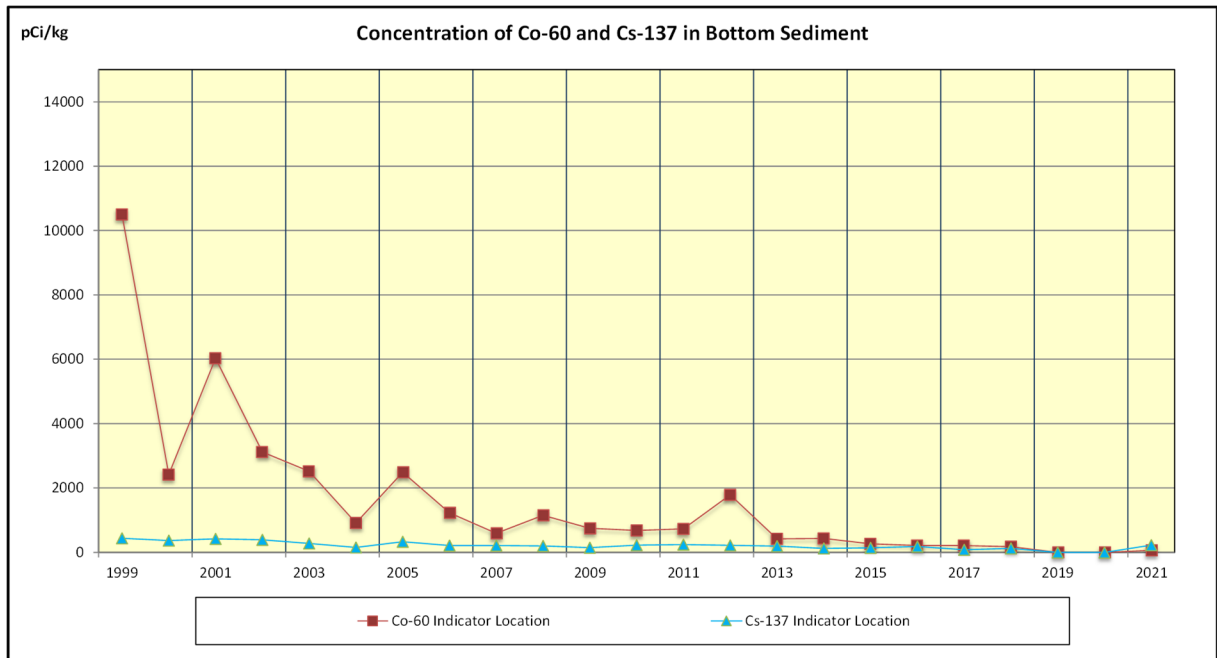
During 2021, a total of two bottom sediment samples were analyzed from the indicator location. There is no control location for bottom sediment.

In 2021, one of the two semiannual samples obtained indicated an activity of 64 pCi/kg of Co-60, and 223 pCi/kg of Cs-137. The bottom sediment sample from Harris Lake poses no radiological dose to the general public via this pathway due to the fact that it is not easily accessible (i.e. bottom sediment is approximately forty to sixty feet underwater). The positive detection most likely is from past nuclear weapons testing and historical plant discharges. These samples are for long-term trends for liquid effluent monitoring.

Samples were dried, then sifted to remove rocks and clams prior to gamma analysis. Figure 3.11 and Table 3.11 provide individual sample gamma results for the highest annual mean indicator location concentrations since 1999 for Co-60 and Cs-137.

Naturally occurring K-40 was observed in some bottom sediment samples collected during 2021.

Figure 3.11



There is no reporting level for Co-60 or Cs-137 in Bottom Sediment.

Table 3.11 Mean Concentration of Radionuclides in Bottom Sediment

YEAR	Control Location	Co-60 (pCi/kg) Indicator Location	Cs-137 (pCi/kg) Indicator Location
1999	No Control	1.05E+4	4.40E+2
2000	No Control	2.42E+3	3.69E+2
2001	No Control	6.03E+3	4.20E+2
2002	No Control	3.12E+3	3.91E+2
2003	No Control	2.52E+3	2.78E+2
2004	No Control	9.17E+2	1.52E+2
2005	No Control	2.49E+3	3.33E+2
2006	No Control	1.23E+3	2.11E+2
2007	No Control	5.92E+2	2.15E+2
2008	No Control	1.15E+3	1.99E+2
2009	No Control	7.50E+2	1.50E+2
2010	No Control	6.84E+2	2.23E+2
2011	No Control	7.30E+2	2.43E+2
2012	No Control	1.79E+3	2.19E+2
2013	No Control	4.20E+2	1.94E+2
2014 ⁽¹⁾	No Control	4.31E+2	1.26E+2
2015	No Control	2.66E+2	1.39E+2
2016	No Control	2.13E+2	1.85E+2
2017	No Control	2.14E+2	8.35E+1
2018	No Control	1.77E+2	1.25E+2
2019	No Control	0.00E+0	0.00E+0
2020	No Control	0.00E+0	0.00E+0
2021	No Control	6.40E+1	2.23E+2

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were observed due to the 2014 gamma spectroscopy system change.

3.12 DIRECT GAMMA RADIATION

3.12.1 ENVIRONMENTAL TLD

The Harris Updated Final Safety Analysis Report (UFSAR) Section 2.1.1.2 identifies that the minimum distance (± 25 ft.) and direction from the reactor to an exclusion area boundary is 6790 ft. ESE. This is the same boundary established for determining radioactive effluent release limits. No permanent public access is permitted within the exclusion area. Harris has forty-one routine monitoring stations. Thermoluminescent dosimeter (TLD) locations designated as "inner ring" are located in each of the sixteen meteorological sectors in the general area of the Site Boundary. The eighteen inner ring TLDs are used as indicators. TLD locations designated as "outer ring" are outside the Site Boundary, in each of the sixteen meteorological sectors, and are within 6 – 8 km from the site. All sixteen of the outer ring TLD locations are used as indicators. The balance of the stations are placed in locations such as population centers, nearby residences, or schools and are designated as "special interest" and one "control" location. These locations were chosen to reduce the probability of influence from Harris operation on data. The control location is not used as background subtraction in the TLD analysis. It's purpose is to provide a comparison to indicator locations.

TLDs were used to monitor ambient radiation exposures in the plant environs. In 2021, 163 TLDs were analyzed, 159 at indicator locations and 4 at the control location. TLDs are collected and analyzed quarterly. The TLD with the highest annual mean of 17.0 mR/Std Qtr. was at indicator location #49, (SR 1127, 0.3 mi. S of intersection with US 1) located 2.5 miles NE of the plant.

On 8JAN2020 dual TLDs (alpha and bravo) at each sampling location were implemented at HNP to meet American National Standard ANSI/HPS N13.37-2014, "Environmental Dosimetry – Criteria for System Design and Implementation, for environmental Thermoluminescent Dosimeters (TLD)."

REMP TLD Location #19 (0.6 mi. E on SR 1142 from Intersection of SR 1141, NNE Sector, 5.0 mi. from site) was minimally moved on 15APR2020 from the yard of a private residence to a power pole nearby in the same sector (Humie Olive Rd, NNE Sector 4.95 mi. from site). DRR # 02326048 was initiated to document the location change of TLD #19 for incorporation in the next revision of the HNP ODCM.

Comparison of the average annual TLD exposure within the area of the Site Boundary (inner ring) of the plant with a distance of 6 – 8 km (outer ring) and the "special interest" and control since 1999 is presented in Figure 3.12 and Table 3.12.

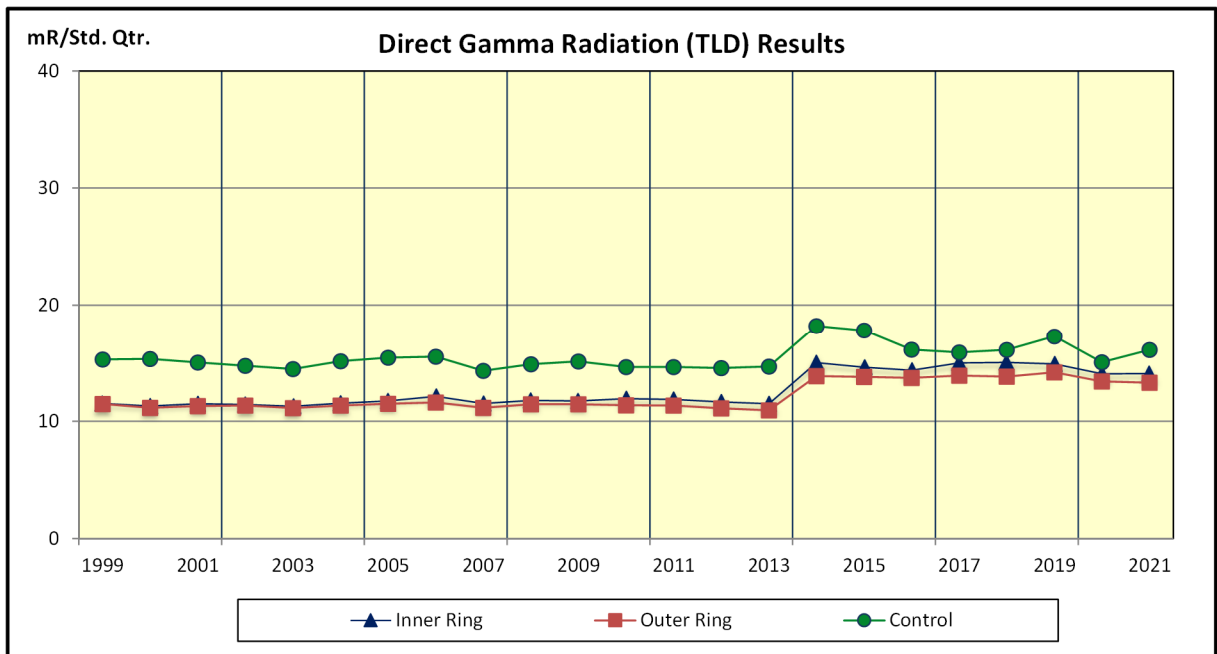
Quarterly, environmental ODCM TLD results are compared by location to its historical data to evaluate any significant changes. The comparison utilizes the location's average exposure history to determine if quarterly results fall within low and high ranges and provides a reliable indication of potential changes occurring at a specific TLD location. The low and high ranges are determined by the historical average \pm two standard deviations. The quarterly TLD evaluation implements portions of American National Standard

ANSI/HPS N13.37-2014, “Environmental Dosimetry – Criteria for System Design and Implementation, for environmental Thermoluminescent Dosimeters (TLD).” The CSD-RP-ALL-0030 – Updated Radiological Environmental Monitoring Program TLD Analytical Method, describes the process implemented in late 2018 for the fleet TLD programs.

TLD values identified as < Low Range or > High Range are evaluated in consideration of factors including possible TLD damage, sampling deviations, glow curve irregularities, and any known environmental location changes which may affect results. No 2021 ODCM TLD location exceeded the quarterly investigation level therefore no additional evaluation was performed. Quarterly TLD results are in Appendix E.

A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in Section 4.7.

Figure 3.12



There is no reporting level for Direct Radiation (TLD).

Table 3.12 Direct Gamma Radiation (TLD) Results

Year	Inner Ring Average (mR/Std. Qtr.)	Outer Ring Average (mR/Std. Qtr.)	Control Average (mR/Std. Qtr.)
1999	1.15E+1	1.15E+1	1.53E+1
2000	1.13E+1	1.12E+1	1.54E+1
2001	1.15E+1	1.13E+1	1.50E+1
2002	1.14E+1	1.14E+1	1.48E+1
2003	1.13E+1	1.11E+1	1.45E+1
2004	1.16E+1	1.14E+1	1.52E+1
2005	1.18E+1	1.15E+1	1.55E+1
2006	1.21E+1	1.16E+1	1.55E+1
2007	1.15E+1	1.12E+1	1.43E+1
2008	1.18E+1	1.15E+1	1.49E+1
2009	1.18E+1	1.15E+1	1.51E+1
2010	1.19E+1	1.14E+1	1.47E+1
2011	1.19E+1	1.14E+1	1.47E+1
2012	1.17E+1	1.11E+1	1.46E+1
2013	1.15E+1	1.09E+1	1.47E+1
2014 ⁽¹⁾	1.50E+1	1.39E+1	1.82E+1
2015	1.46E+1	1.38E+1	1.78E+1
2016	1.44E+1	1.37E+1	1.61E+1
2017	1.50E+1	1.39E+1	1.59E+1
2018	1.50E+1	1.38E+1	1.61E+1
2019	1.49E+1	1.42E+1	1.73E+1
2020	1.41E+1	1.34E+1	1.51E+1
2021	1.41E+1	1.33E+1	1.61E+1

(1) In 1Q2014 Panasonic TLDs were replaced with Harshaw TLDs causing a step change in activity (NCR # 01982479).

3.13 LAND USE CENSUS

The 2021 HNP Annual Land Use Census was conducted July 12 and 13, 2021, as required by the HNP ODCM 4.12.2. The Land Use Census was conducted to identify within a distance of 8 kilometers (5.0 miles) from the plant, the nearest location from the site boundary in each of the sixteen meteorological sectors, which includes: the nearest residence, the nearest garden greater than 50 square meters (500 square feet), the nearest milk-giving animal, and the nearest meat animal (only identified at the nearest garden or closer in each sector). Poultry and egg laying animals were not classified as meat animals for the purposes of the Land Use Census.

Table 3.13 summarizes the comparison between the 2020 and 2021 census results. A map indicating identified locations is shown in Figure 3.13.

During the 2021 census no irrigated gardens, no new meat animals nearer than existing gardens, or new milk locations were identified. The nearest residence is located in the NNW sector at 1.55 miles. No environmental program changes were required as a result of the 2021 land use census.

The Fleet Land Use Procedure AD-CP-ALL-0014 (Revision 4), Land Use Census Evaluation, was revised in 2020 to standardize the approach for the evaluation of Land Use Dose Calculations (NCR # 02343171).

Table 3.13 Harris Land Use Census Comparison (2020 – 2021)

Nearest Pathway (Miles)

SECTOR	RESIDENCE		GARDEN		MEAT ANIMAL ⁽¹⁾		MILK ANIMAL	
	2020	2021	2020	2021	2020	2021	2020	2021
North	2.21	2.21	2.29	2.29	---	2.21*	4.14 ⁽²⁾	4.14 ⁽²⁾
North-Northeast	1.81	1.81	1.81	1.81	---	---	---	---
Northeast	2.29	2.29	2.92	2.92	---	---	---	---
East-Northeast	1.78	1.78	2.16	2.16	2.01	2.01	---	---
East	1.88	1.88	2.15	2.15	---	---	---	---
East-Southeast	2.73	2.56*	2.83	2.83	---	---	---	---
Southeast	4.11	4.11	---	---	---	---	---	---
South-Southeast	4.26	4.26	4.33	4.82*	---	---	---	---
South	---	---	---	---	---	---	---	---
South-Southwest	3.82	3.82	3.94	3.94	---	---	---	---
Southwest	2.76	2.76	4.32	4.32	---	---	---	---
West-Southwest	4.29	4.29	4.29	4.29	---	---	---	---
West	2.75	2.75	2.82	2.82	---	---	2.82 ⁽³⁾	2.82 ⁽³⁾
West-Northwest	2.13	2.13	2.91	2.91	---	---	---	---
Northwest	2.11	2.11*	2.58	2.58	---	---	---	---
North-Northwest	1.55	1.55	1.82	1.82	1.82	1.82	---	---

Sector and distance determined by Global Positioning System.

* Represents a change from the previous year.

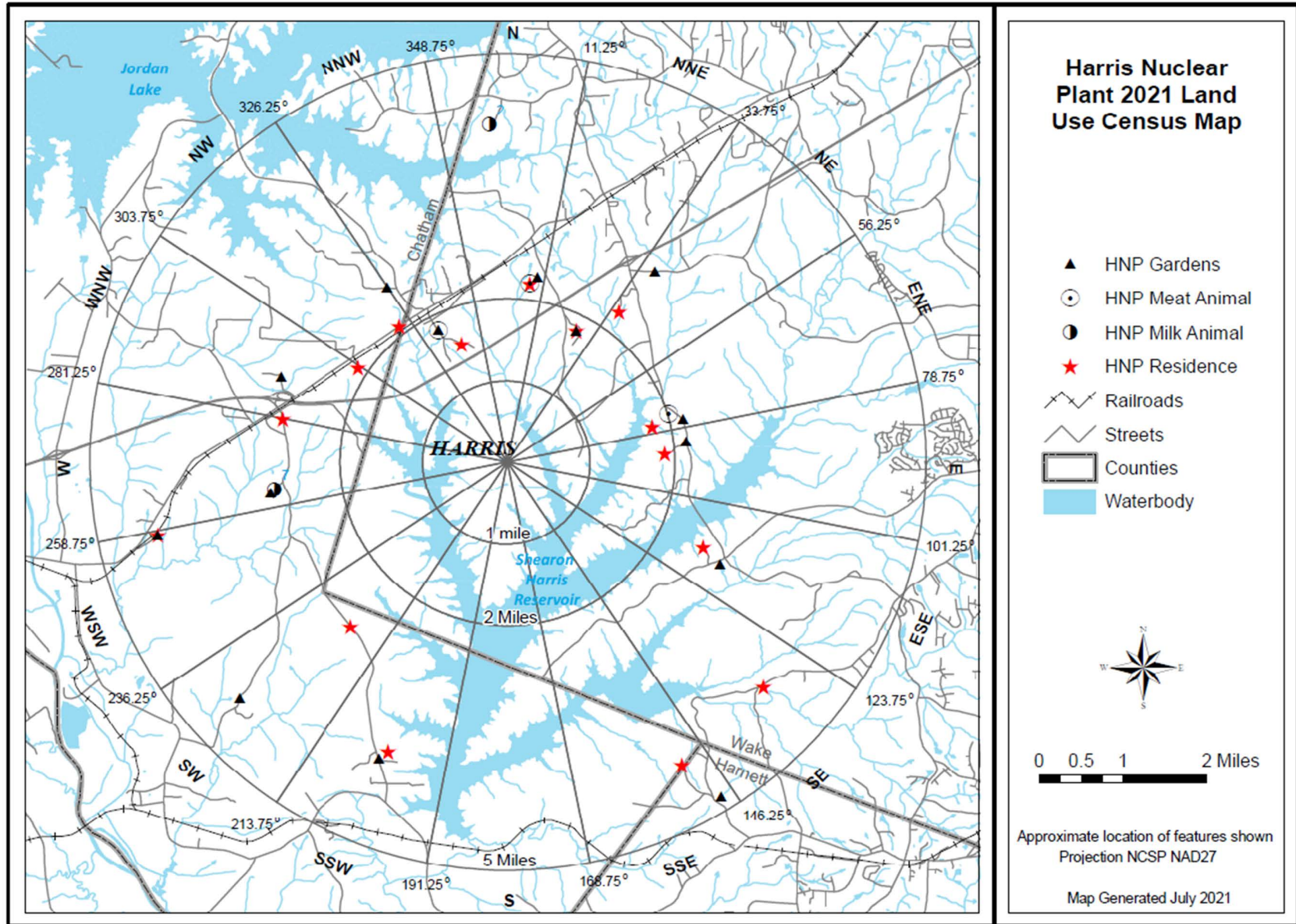
--- Indicates no occurrences within the 5-mile radius

(1) Meat animal was only identified at the nearest garden or closer in each sector. Poultry and egg laying animals were not classified as meat animals for the 2021 census.

(2) Goat Milk - Milk is used to feed goat kids, make a small quantity of cheese, and to make soap for personal use. Owner said they can now supply enough milk to participate in the HNP REMP. This dairy is not required due to HNP already having a dairy within 5 km (3.11 miles) and the dose being <1.0 mRem/year.

(3) Goat Milk - Milk is used to feed goat kids during the breeding months and the family consumes what is left. The milk that is not suitable for consumption is given to someone to make soap. This location participates in the REMP and milk is collected for 4 - 6 consecutive months per year (Late-Spring to Late-Fall months).

Figure 3.13



4.0 QUALITY ASSURANCE

4.1 SAMPLE COLLECTION

EnRad Laboratories and the Environmental Services Group performed the environmental sample collections as specified by approved sample collection procedures.

4.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.3 DOSIMETRY ANALYSIS

The Dosimetry and Records group performed the environmental dosimetry measurements as specified by approved dosimetry analysis procedures. The Dosimetry and Records Laboratory is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

4.4.1 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.

4.4.2 CALIBRATION VERIFICATION

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

4.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. These include tritium analyses in drinking water, surface water, and ground water samples; beta analysis in drinking water samples, and Low-Level Iodine-131 analysis in milk samples.

4.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2021 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.

EnRad Laboratory participated in an interlaboratory program with Eckert & Ziegler Analytics (EZA) in 2021. 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.

4.5.1 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EZA mixed gamma in liquid, mixed gamma in vegetation, mixed gamma in soil, low-level I-131 in liquid, mixed gamma air filter composites, I-131 air cartridges, gross beta in water, gross beta in filters, and tritium in water were analyzed at various times of the year at EnRad Laboratories. A summary of the applicable REMP EnRad Laboratory program results for 2021 is documented in Table 4.0-A.

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

4.6 STATE OF NORTH CAROLINA INTERCOMPARISON PROGRAM

EnRad Laboratories routinely participates with the North Carolina Department of Health and Human Services in an intercomparison program. EnRad Laboratories sends Harris Nuclear Plant Radiological Environmental Monitoring Program surface water, ground water, cow milk, air particulate, air radioiodine, fish, bottom sediment, and shoreline sediment samples to the North Carolina Department of Health and Human Services, Division of Public Health for intercomparison analysis.

4.7 TLD INTERCOMPARISON PROGRAM

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 using the NIST-traceable Hopewell and submits them for analysis of the unknown estimated delivered exposure. A summary of the 2021 Internal Cross Check (Duke Energy) Program is documented in Table 4.0-B.

4.8 GENERAL ENGINEERING LABORATORY, LLC (GEL)

General Engineering Laboratory, LLC (GEL) participated in various Quality Assurance Programs for Inter-laboratory, Intra-laboratory, Third Party Cross Check programs, and a number of proficiency testing programs during 2021. A summary of the GEL quality assurance program results for the sample media types sent to GEL during 2021 is documented in Table 4.0-C. Table 4.0-C may not be applicable to all plants or stations.

TABLE 4.0-A

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2021 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter in Planchet	E13430A	Cs-137	2	pCi	126	126	1.00	Agreement
I-131 in Charcoal Cartridge	E13428	I-131	2	pCi	95.5	92.8	1.03	Agreement
Gamma in Soil	E13429	Ce-141	2	pCi/g	0.158	0.163	0.97	Agreement
		Co-58	2	pCi/g	0.155	0.162	0.96	Agreement
		Co-60	2	pCi/g	0.176	0.195	0.90	Agreement
		Cr-51	2	pCi/g	0.430	0.482	0.89	Agreement
		Cs-134	2	pCi/g	0.202	0.193	1.05	Agreement
		Cs-137	2	pCi/g	0.222	0.242	0.92	Agreement
		Fe-59	2	pCi/g	0.168	0.166	1.01	Agreement
		Mn-54	2	pCi/g	0.226	0.226	1.00	Agreement
		Zn-65	2	pCi/g	0.267	0.272	0.98	Agreement
Gamma in Simulated Vegetation	E13437	Ce-141	3	pCi/g	0.194	0.194	1.00	Agreement
		Co-58	3	pCi/g	0.208	0.200	1.04	Agreement
		Co-60	3	pCi/g	0.258	0.246	1.05	Agreement
		Cr-51	3	pCi/g	0.373	0.401	0.93	Agreement
		Cs-134	3	pCi/g	0.141	0.158	0.89	Agreement
		Cs-137	3	pCi/g	0.193	0.190	1.02	Agreement
		Fe-59	3	pCi/g	0.183	0.173	1.06	Agreement
		Mn-54	3	pCi/g	0.226	0.218	1.04	Agreement
		Zn-65	3	pCi/g	0.274	0.260	1.05	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E13435B	Ce-141	3	pCi	121	116	1.04	Agreement
		Co-58	3	pCi	123	120	1.03	Agreement
		Co-60	3	pCi	153	147	1.04	Agreement
		Cr-51	3	pCi	241	240	1.00	Agreement
		Cs-134	3	pCi	90.1	94.8	0.95	Agreement
		Cs-137	3	pCi	118	114	1.04	Agreement
		Fe-59	3	pCi	114	104	1.10	Agreement
		Mn-54	3	pCi	139	131	1.06	Agreement
		Zn-65	3	pCi	171	156	1.10	Agreement
Gamma in Water	E13436	Ce-141	3	pCi/L	161	151	1.07	Agreement
		Co-58	3	pCi/L	165	155	1.06	Agreement
		Co-60	3	pCi/L	196	191	1.03	Agreement
		Cr-51	3	pCi/L	330	311	1.06	Agreement
		Cs-134	3	pCi/L	118	123	0.96	Agreement
		Cs-137	3	pCi/L	154	147	1.04	Agreement
		Fe-59	3	pCi/L	149	134	1.11	Agreement
		I-131	3	pCi/L	261	243	1.07	Agreement
		Mn-54	3	pCi/L	185	169	1.09	Agreement
Zn-65	3	pCi/L	227	202	1.12	Agreement		
Milk LLI-131	E13431	I-131	2	pCi/L	96.8	90.1	1.07	Agreement
Gross Beta in Water	E13433	Cs-137	2	pCi/L	243	258	0.94	Agreement
Tritium in Water	E13438	H-3	3	pCi/L	11600	11700	0.99	Agreement

TABLE 4.0-B

2021 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 2021						2nd Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103087	62.75	59.56	5.36	<+/-15%	Pass	102970	17.06	17.74	-3.83	<+/-15%	Pass
103742	62.37	59.56	4.72	<+/-15%	Pass	103199	18.11	17.74	2.09	<+/-15%	Pass
100029	55.52	59.56	-6.78	<+/-15%	Pass	100154	17.12	17.74	-3.49	<+/-15%	Pass
102931	61.41	59.56	3.11	<+/-15%	Pass	102770	18.79	17.74	5.92	<+/-15%	Pass
100033	56.41	59.56	-5.29	<+/-15%	Pass	102058	17.15	17.74	-3.33	<+/-15%	Pass
100038	57.37	59.56	-3.68	<+/-15%	Pass	103295	18.58	17.74	4.74	<+/-15%	Pass
103615	61.40	59.56	3.09	<+/-15%	Pass	103602	18.57	17.74	4.68	<+/-15%	Pass
102442	57.43	59.56	-3.58	<+/-15%	Pass	100180	17.26	17.74	-2.71	<+/-15%	Pass
102407	59.65	59.56	0.15	<+/-15%	Pass	102741	18.31	17.74	3.21	<+/-15%	Pass
100245	56.51	59.56	-5.12	<+/-15%	Pass	103557	18.80	17.74	5.98	<+/-15%	Pass
Average Bias (B)			-0.80			Average Bias (B)			1.32		
Standard Deviation (S)			4.60			Standard Deviation (S)			4.18		
Measure Performance B +S			5.40	<15%	Pass	Measure Performance B +S			5.51	<15%	Pass
3rd Quarter 2021						4th Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
104637	36.05	39.31	-8.29	<+/-15%	Pass	104816	45.83	49.95	-8.25	<+/-15%	Pass
104499	37.40	39.31	-4.86	<+/-15%	Pass	104381	44.88	49.95	-10.15	<+/-15%	Pass
104449	36.14	39.31	-8.06	<+/-15%	Pass	104676	46.19	49.95	-7.53	<+/-15%	Pass
104466	36.49	39.31	-7.17	<+/-15%	Pass	104817	46.03	49.95	-7.85	<+/-15%	Pass
104639	36.13	39.31	-8.09	<+/-15%	Pass	104383	46.24	49.95	-7.43	<+/-15%	Pass
104634	36.71	39.31	-6.61	<+/-15%	Pass	104550	45.88	49.95	-8.15	<+/-15%	Pass
104638	36.58	39.31	-6.94	<+/-15%	Pass	104818	45.55	49.95	-8.81	<+/-15%	Pass
104498	36.08	39.31	-8.22	<+/-15%	Pass	104804	45.46	49.95	-8.99	<+/-15%	Pass
104453	36.42	39.31	-7.35	<+/-15%	Pass	104584	46.88	49.95	-6.15	<+/-15%	Pass
104465	35.76	39.31	-9.03	<+/-15%	Pass	104677	47.28	49.95	-5.35	<+/-15%	Pass
Average Bias (B)			-7.46			Average Bias (B)			-7.86		
Standard Deviation (S)			1.17			Standard Deviation (S)			1.38		
Measure Performance B +S			8.63	<15%	Pass	Measure Performance B +S			9.25	<15%	Pass

TABLE 4.0-C

2021 GEL Laboratories, LLC QA Results

Interlaboratory cross check samples from Eckert & Ziegler Analytics (EZA) were received and analyzed by GEL during 2021. Table 4.0-C lists the performance for specific samples. Table 4.0-C may not be applicable to all plants/stations.

Sample	Sample ID	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
I-131 in Milk with EZA	E13358	I-131	1	pCi/L	83.9	86.9	0.97	Agreement
	E13362	I-131	2	pCi/L	80.4	83.8	0.96	Agreement
	E13366	I-131	3	pCi/L	90.8	85.6	1.06	Agreement
	E13370	I-131	4	pCi/L	92.8	90.3	1.03	Agreement

APPENDIX A

ENVIRONMENTAL SAMPLING

&

ANALYSIS PROCEDURES

2021

APPENDIX A

ENVIRONMENTAL SAMPLING AND ANALYSIS PROCEDURES

Adherence to established procedures for sampling and analysis of environmental media at Harris Nuclear Plant was required to ensure compliance with the Harris Nuclear Plant Offsite Dose Calculation Manual. Analytical procedures were employed to ensure that the ODCM detection capabilities were achieved.

Environmental sampling was performed by EnRad Laboratories and Environmental Services. Environmental analysis was performed by EnRad Laboratories, Dosimetry and Records, and General Engineering Laboratories, LLC (GEL).

This appendix provides a description of the specific analyses performed on samples collected in the field. Changes to the sampling procedures and analyses procedures are also discussed in the section.

I. CHANGE OF SAMPLING PROCEDURES

Water Sampling procedure 748, Water Sampling at Harris Nuclear Plant was revised to allow SW Location 26 (Harris Spillway, S Sector, 4.7 miles from site) and DW Location 51 (SHNPP Building on site) to be sampled monthly as stated in the HNP ODCM rather than bi-monthly composite sampling as had been occurring as a programmatic enhancement. Monthly composite sampling at locations 26 and 51 was initiated on 25JAN2021.

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

Low-level iodine analyses are performed by passing a designated sample aliquot through a pre-determined amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried and mixed thoroughly 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 4910TR 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, and sample contamination has not occurred.

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

Gross beta analysis of liquid samples is performed by concentrating a designated aliquot of sample and analyzing by Perkin-Elmer 4910TR liquid scintillation system. Samples are batch processed with a laboratory fortified blank and blank to verify instrument performance and ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

Acquisition times for charcoal cartridge gamma spectroscopy analyses were reduced in early May 2021 as a result of fleet air sampling equipment standardization.

The procedure for preparing milk samples for Low-Level Iodine-131 (LLI-131) analysis was modified to allow incremental sample additions for milk samples with higher fat content (NCR # 02393159).

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

2021

**HARRIS NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Numbers: STN 50-400
Calendar Year: 2021

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	Location w/Highest Annual Mean ⁽²⁾		Control Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean ⁽²⁾⁽³⁾ Range ⁽²⁾		
Air Particulate (pCi/m ³)	Gross Beta 371 ⁽⁴⁾	See Table 2.2-C	2.12E-02 (318/318) 8.53E-03 – 4.94E-02	Loc. # 2 1.4 miles NNE	2.18E-02 (53/53) 8.79E-03 – 4.64E-02	Loc. # 5 2.19E-02 (53/53) 1.04E-02 – 4.96E-02	0
	Gamma 35	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Air Radioiodine (pCi/m ³)	I-131 371 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Drinking Water ⁽⁷⁾ (pCi/l)	Gross Beta 42	See Table 2.2-C	4.18E+00 (4/28) 3.34E+00 – 5.77E+00	Loc. # 46 NE Harnett Metro Water Treatment Plant - Lillington 17.2 miles SSE	4.18E+00 (4/14) 3.34E+00 – 5.77E+00	Loc. # 58 4.41E+00 (5/14) 3.23E+00 – 5.79E+00	0
	Gamma 42	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium ⁽⁵⁾ 24	See Table 2.2-C	1.77E+03 (14/19) 1.08E+03 – 2.49E+03	Loc. # 51 Water Treatment Building on Site	1.77E+03 (14/14) 1.08E+03 – 2.49E+03	All less than LLD	0
Surface Water ⁽⁴⁾ (pCi/l)	Gamma 42 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium ⁽⁵⁾ 24 ⁽⁴⁾	See Table 2.2-C	3.89E+03 (14/19) 2.87E+03 – 6.42E+03	Loc. # 26 Harris Lake Spillway 4.7 miles S	3.89E+3 (14/14) 2.87E+03 – 6.42E+03	All less than LLD	0

**HARRIS NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY (cont.)**

Shearon Harris Nuclear Power Plant
Wake County, North Carolina

Docket Numbers: STN 50-400
Calendar Year: 2021

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	Location w/Highest Annual Mean ⁽²⁾		Control Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean ⁽²⁾⁽³⁾ Range ⁽²⁾		
Ground Water (pCi/l)	Gamma 84	See Table 2.2-C	All less than LLD	----	----	No Control	0
	Tritium 84	See Table 2.2-C	4.49E+02 (12/72) 1.83E+02 – 8.81E+02	Loc. # 83 On Site (BD-MW16) along Cooling Tower Blowdown line 1.6 miles SSW	8.32E+02 (4/4) 7.25E+02 – 8.81E+02	No Control	0
Milk (pCi/l)	I-131 33	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Gamma 33	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Broadleaf Vegetation (pCi/kg, wet)	Gamma 18	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Food Products (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Aquatic Vegetation (pCi/kg, wet)	Gamma 3	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0

**HARRIS NUCLEAR PLANT
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY (cont.)**

Shearon Harris Nuclear Plant
Wake County, North Carolina

Docket Numbers: STN 50-400
Calendar Year: 2021

Medium or Pathway Sampled or Measured (Unit of Measurement)	Type and Total No. of Measurements Performed	Lower Limit of Detection (LLD) ⁽¹⁾	All Indicator Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	Location w/Highest Annual Mean ⁽²⁾		Control Locations Mean ⁽²⁾⁽³⁾ Range ⁽²⁾	No. of Non-Routine Report Meas.
				Name, Distance, and Direction	Mean ⁽²⁾⁽³⁾ Range ⁽²⁾		
Sediments -- Shoreline (pCi/kg, dry)	Gamma 4	See Table 2.2-C	All less than LLD	----	----	No Control	0
Sediments -- Bottom (pCi/kg, dry)	Gamma 2	See Table 2.2-C				No Control	0
		Co-60	6.40E+01 (1/2) 6.40E+01 – 6.40E+01	3.8 miles S -- Harris Lake vicinity of Mixing Zone of	6.40E+01 (1/2) 6.40E+01 – 6.40E+01		
		Cs-137	2.23E+02 (1/2) 2.23E+02 – 2.23E+02	Cooling Tower (Bottom Sed.)	2.23E+02 (1/2) 2.23E+02 – 2.23E+02		
Direct Radiation (TLD) (mR/Std Qtr) ⁽⁶⁾	TLD Readout 163 ⁽⁴⁾	----	1.36E+01 (159/159) 9.54E+00 – 1.97E+01	Loc. # 49 SR 1127, 0.3 mi S of Intersection w/ US 1 2.5 miles NE	1.70E+01 (4/4) 1.49E+01 – 1.94E+01	Loc. # 5 1.61E+01 (4/4) 1.47E+01 – 1.83E+01	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. Although quarterly composite samples are required, monthly composite samples are used to provide more frequent and sensitive analyses for some locations.
6. TLD exposure is reported in milliroentgen (mR) per standard quarter (91 days).
7. Drinking Water 51 (DW-51) has been included, as of 2009, in the Data Summary even though it does not meet the EPA (Environmental Protection Agency) definition of a public drinking water supply.

APPENDIX C

SAMPLING DEVIATIONS

&

UNAVAILABLE ANALYSES

2021

APPENDIX C

HARRIS NUCLEAR PLANT 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 Harris REMP air samplers operated for a total of 99.94% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
5	12/28/2020 – 1/5/2021	PI	1.36 hours of downtime due to unknown power interruption.	NCR # 02363905
91	1/25 – 2/1/2021	PI	22.66 hours of downtime due to power interruption from GFCI outlet malfunction.	NCR # 02368092
2	3/29 – 4/5/2021	PI	98.85 hours of downtime due to power interruption from tripped GFCI breaker.	NCR # 02377221
26	7/12 – 7/19/2021	PI	10.91 hours of downtime due to severe thunderstorms.	NCR # 02390190

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.” 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 Harris REMP water samplers operated for a total of 98.72% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
26 (SW)	11/1 – 11/29/2021	OT	662 hours of downtime for monthly composite due to sample tubing cracked.	NCR # 02407449

C.2 UNAVAILABLE ANALYSES

TLDs

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
23	10/13/21 – 1/13/2022	CN	TLDs (alpha and bravo) were unavailable at the time of collection. The utility pole that the TLDs are suspended on had been replaced during the quarter with a new pole.	NCR # 02411992

APPENDIX D

ANALYTICAL DEVIATIONS

2021

No Analytical deviations were incurred for the 2021 HNP Radiological Environmental Monitoring Program.

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2021

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2021.

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536548	12/28/2020 - 1/5/2021	Beta	1.42E-02	2.56E-03	3.02E-03
536747	1/5/2021 - 1/11/2021	Beta	2.65E-02	3.62E-03	3.59E-03
537295	1/11/2021 - 1/19/2021	Beta	2.41E-02	2.66E-03	2.33E-03
537658	1/19/2021 - 1/25/2021	Beta	1.91E-02	3.12E-03	3.30E-03
538051	1/25/2021 - 2/1/2021	Beta	1.41E-02	2.81E-03	3.36E-03
538298	2/1/2021 - 2/8/2021	Beta	1.55E-02	2.42E-03	2.55E-03
538523	2/8/2021 - 2/15/2021	Beta	1.51E-02	2.89E-03	3.48E-03
538795	2/15/2021 - 2/22/2021	Beta	2.20E-02	2.92E-03	2.67E-03
539036	2/22/2021 - 3/1/2021	Beta	1.20E-02	2.80E-03	3.65E-03
539247	3/1/2021 - 3/8/2021	Beta	2.21E-02	2.82E-03	2.80E-03
540038	3/8/2021 - 3/15/2021	Beta	2.43E-02	3.33E-03	3.39E-03
540698	3/15/2021 - 3/22/2021	Beta	1.87E-02	2.87E-03	2.94E-03
541411	3/22/2021 - 3/29/2021	Beta	1.56E-02	2.90E-03	3.35E-03
541926	12/28/2020 - 3/29/2021	Cs-134	<1.88E-03	0.00E+00	1.88E-03
		Cs-137	<1.74E-03	0.00E+00	1.74E-03
		Be-7	1.36E-01	3.38E-02	2.93E-02
		K-40	<3.66E-02	0.00E+00	3.66E-02
541919	3/29/2021 - 4/1/2021	Beta	1.83E-02	5.69E-03	7.73E-03
542224	4/5/2021 - 4/12/2021	Beta	3.07E-02	3.57E-03	3.33E-03
542850	4/12/2021 - 4/19/2021	Beta	2.29E-02	3.08E-03	3.07E-03
543238	4/19/2021 - 4/26/2021	Beta	2.54E-02	3.27E-03	2.97E-03
544095	4/26/2021 - 5/3/2021	Beta	2.82E-02	3.08E-03	2.82E-03
544297	5/3/2021 - 5/10/2021	Beta	2.07E-02	3.10E-03	3.26E-03
544620	5/10/2021 - 5/17/2021	Beta	1.86E-02	2.93E-03	3.13E-03
545000	5/17/2021 - 5/24/2021	Beta	2.75E-02	3.16E-03	3.04E-03
545484	5/24/2021 - 6/1/2021	Beta	1.86E-02	2.69E-03	2.71E-03

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545782	6/1/2021 - 6/7/2021	Beta	1.52E-02	2.72E-03	3.12E-03
546013	6/7/2021 - 6/14/2021	Beta	8.79E-03	2.12E-03	2.76E-03
546885	6/14/2021 - 6/21/2021	Beta	2.34E-02	3.31E-03	3.40E-03
547175	6/21/2021 - 6/28/2021	Beta	1.09E-02	2.58E-03	3.28E-03
547706	3/29/2021 - 6/28/2021	Cs-134	<1.99E-03	0.00E+00	1.99E-03
		Cs-137	<1.64E-03	0.00E+00	1.64E-03
		Be-7	1.78E-01	3.75E-02	2.10E-02
		K-40	<3.85E-02	0.00E+00	3.85E-02
547459	6/28/2021 - 7/6/2021	Beta	1.25E-02	2.52E-03	3.12E-03
547699	7/6/2021 - 7/12/2021	Beta	1.83E-02	3.24E-03	3.71E-03
548084	7/12/2021 - 7/19/2021	Beta	1.50E-02	2.87E-03	3.39E-03
548507	7/19/2021 - 7/26/2021	Beta	2.48E-02	2.87E-03	2.56E-03
548726	7/26/2021 - 8/2/2021	Beta	2.56E-02	3.02E-03	2.93E-03
548958	8/2/2021 - 8/9/2021	Beta	1.99E-02	2.98E-03	3.16E-03
549250	8/9/2021 - 8/16/2021	Beta	2.15E-02	2.81E-03	2.80E-03
549748	8/16/2021 - 8/23/2021	Beta	1.03E-02	2.55E-03	3.31E-03
550032	8/23/2021 - 8/30/2021	Beta	2.99E-02	3.10E-03	2.59E-03
550654	8/30/2021 - 9/7/2021	Beta	2.36E-02	2.63E-03	2.38E-03
551018	9/7/2021 - 9/13/2021	Beta	2.57E-02	3.32E-03	3.33E-03
551651	9/13/2021 - 9/20/2021	Beta	2.33E-02	3.18E-03	3.18E-03
552283	9/20/2021 - 9/27/2021	Beta	2.19E-02	2.77E-03	2.70E-03
552767	6/28/2021 - 9/27/2021	Cs-134	<1.60E-03	0.00E+00	1.60E-03
		Cs-137	<1.72E-03	0.00E+00	1.72E-03
		Be-7	1.60E-01	3.91E-02	3.09E-02
		K-40	2.15E-02	1.41E-02	1.53E-02
552443	9/27/2021 - 10/4/2021	Beta	4.64E-02	4.11E-03	3.00E-03
552760	10/4/2021 - 10/11/2021	Beta	1.87E-02	2.65E-03	2.77E-03
553240	10/11/2021 - 10/18/2021	Beta	2.19E-02	3.17E-03	3.28E-03

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553842	10/18/2021 - 10/25/2021	Beta	3.74E-02	3.41E-03	2.75E-03
554273	10/25/2021 - 11/1/2021	Beta	9.88E-03	2.42E-03	3.07E-03
554584	11/1/2021 - 11/8/2021	Beta	2.40E-02	3.31E-03	3.36E-03
555073	11/8/2021 - 11/15/2021	Beta	3.22E-02	3.51E-03	2.83E-03
555939	11/15/2021 - 11/22/2021	Beta	2.31E-02	3.13E-03	3.08E-03
556735	11/22/2021 - 11/29/2021	Beta	2.43E-02	3.26E-03	3.31E-03
557052	11/29/2021 - 12/6/2021	Beta	3.79E-02	3.95E-03	3.40E-03
557476	12/6/2021 - 12/13/2021	Beta	2.89E-02	3.42E-03	3.03E-03
557951	12/13/2021 - 12/20/2021	Beta	2.28E-02	3.12E-03	3.08E-03
558384	12/20/2021 - 12/27/2021	Beta	2.95E-02	3.42E-03	3.17E-03
559182	9/27/2021 - 12/27/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.06E-03	0.00E+00	1.06E-03
		Be-7	1.52E-01	3.60E-02	2.74E-02
		K-40	<2.41E-02	0.00E+00	2.41E-02
558600	12/27/2021 - 1/4/2022	Beta	1.18E-02	2.44E-03	3.00E-03
559965	12/27/2021 - 1/4/2022	Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	3.06E-01	1.79E-01	1.93E-01

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536550	12/28/2020 - 1/5/2021	Beta	1.16E-02	2.43E-03	3.02E-03
536749	1/5/2021 - 1/11/2021	Beta	2.48E-02	3.54E-03	3.59E-03
537297	1/11/2021 - 1/19/2021	Beta	2.28E-02	2.60E-03	2.33E-03
537660	1/19/2021 - 1/25/2021	Beta	1.65E-02	2.98E-03	3.29E-03
538053	1/25/2021 - 2/1/2021	Beta	1.46E-02	2.83E-03	3.36E-03
538300	2/1/2021 - 2/8/2021	Beta	1.41E-02	2.35E-03	2.55E-03
538525	2/8/2021 - 2/15/2021	Beta	1.46E-02	2.86E-03	3.48E-03
538797	2/15/2021 - 2/22/2021	Beta	2.09E-02	2.86E-03	2.67E-03

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539038	2/22/2021 - 3/1/2021	Beta	1.09E-02	2.76E-03	3.67E-03
539249	3/1/2021 - 3/8/2021	Beta	2.10E-02	2.77E-03	2.79E-03
540040	3/8/2021 - 3/15/2021	Beta	2.16E-02	3.20E-03	3.39E-03
540700	3/15/2021 - 3/22/2021	Beta	1.81E-02	2.83E-03	2.94E-03
541413	3/22/2021 - 3/29/2021	Beta	1.32E-02	2.77E-03	3.35E-03
541928	12/28/2020 - 3/29/2021	Cs-134	<1.62E-03	0.00E+00	1.62E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.28E-01	3.69E-02	4.11E-02
		K-40	1.65E-02	1.20E-02	1.37E-02
541921	3/29/2021 - 4/5/2021	Beta	2.35E-02	3.19E-03	3.12E-03
542226	4/5/2021 - 4/12/2021	Beta	3.10E-02	3.60E-03	3.36E-03
542852	4/12/2021 - 4/19/2021	Beta	1.83E-02	2.87E-03	3.07E-03
543240	4/19/2021 - 4/26/2021	Beta	2.11E-02	3.07E-03	2.97E-03
544097	4/26/2021 - 5/3/2021	Beta	2.88E-02	3.09E-03	2.81E-03
544299	5/3/2021 - 5/10/2021	Beta	1.65E-02	2.89E-03	3.26E-03
544622	5/10/2021 - 5/17/2021	Beta	1.67E-02	2.84E-03	3.14E-03
545002	5/17/2021 - 5/24/2021	Beta	2.54E-02	3.08E-03	3.04E-03
545486	5/24/2021 - 6/1/2021	Beta	1.95E-02	2.74E-03	2.72E-03
545784	6/1/2021 - 6/7/2021	Beta	1.26E-02	2.57E-03	3.10E-03
546015	6/7/2021 - 6/14/2021	Beta	9.53E-03	2.17E-03	2.77E-03
546887	6/14/2021 - 6/21/2021	Beta	1.85E-02	3.07E-03	3.40E-03
547177	6/21/2021 - 6/28/2021	Beta	1.54E-02	2.84E-03	3.28E-03
547708	3/29/2021 - 6/28/2021	Cs-134	<3.73E-04	0.00E+00	3.73E-04
		Cs-137	<8.38E-04	0.00E+00	8.38E-04
		Be-7	1.76E-01	4.04E-02	3.60E-02
		K-40	1.99E-02	1.33E-02	1.50E-02
547461	6/28/2021 - 7/6/2021	Beta	9.54E-03	2.35E-03	3.10E-03
547701	7/6/2021 - 7/12/2021	Beta	1.84E-02	3.31E-03	3.79E-03

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548086	7/12/2021 - 7/19/2021	Beta	1.37E-02	2.78E-03	3.35E-03
548509	7/19/2021 - 7/26/2021	Beta	2.82E-02	3.01E-03	2.56E-03
548728	7/26/2021 - 8/2/2021	Beta	2.84E-02	3.13E-03	2.92E-03
548960	8/2/2021 - 8/9/2021	Beta	2.21E-02	3.09E-03	3.17E-03
549252	8/9/2021 - 8/16/2021	Beta	1.91E-02	2.71E-03	2.79E-03
549750	8/16/2021 - 8/23/2021	Beta	9.32E-03	2.50E-03	3.31E-03
550034	8/23/2021 - 8/30/2021	Beta	2.94E-02	3.08E-03	2.59E-03
550656	8/30/2021 - 9/7/2021	Beta	2.57E-02	2.71E-03	2.38E-03
551020	9/7/2021 - 9/13/2021	Beta	2.63E-02	3.35E-03	3.34E-03
551653	9/13/2021 - 9/20/2021	Beta	2.29E-02	3.16E-03	3.18E-03
552285	9/20/2021 - 9/27/2021	Beta	2.28E-02	2.81E-03	2.69E-03
552769	6/28/2021 - 9/27/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.63E-01	3.99E-02	3.81E-02
		K-40	<3.48E-02	0.00E+00	3.48E-02
552445	9/27/2021 - 10/4/2021	Beta	4.94E-02	4.21E-03	2.99E-03
552762	10/4/2021 - 10/11/2021	Beta	2.08E-02	2.75E-03	2.78E-03
553242	10/11/2021 - 10/18/2021	Beta	2.48E-02	3.32E-03	3.28E-03
553844	10/18/2021 - 10/25/2021	Beta	3.91E-02	3.48E-03	2.75E-03
554275	10/25/2021 - 11/1/2021	Beta	1.54E-02	2.74E-03	3.07E-03
554586	11/1/2021 - 11/8/2021	Beta	2.14E-02	3.18E-03	3.36E-03
555075	11/8/2021 - 11/15/2021	Beta	3.21E-02	3.50E-03	2.83E-03
555941	11/15/2021 - 11/22/2021	Beta	2.20E-02	3.08E-03	3.08E-03
556737	11/22/2021 - 11/29/2021	Beta	2.51E-02	3.29E-03	3.31E-03
557054	11/29/2021 - 12/6/2021	Beta	3.58E-02	3.87E-03	3.40E-03
557478	12/6/2021 - 12/13/2021	Beta	3.08E-02	3.50E-03	3.03E-03

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557953	12/13/2021 - 12/20/2021	Beta	1.85E-02	2.90E-03	3.08E-03
558386	12/20/2021 - 12/27/2021	Beta	3.28E-02	3.55E-03	3.16E-03
559184	9/27/2021 - 12/27/2021	Cs-134	<1.45E-03	0.00E+00	1.45E-03
		Cs-137	<8.11E-04	0.00E+00	8.11E-04
		Be-7	1.22E-01	3.82E-02	4.50E-02
		K-40	<3.47E-02	0.00E+00	3.47E-02
558602	12/27/2021 - 1/4/2022	Beta	1.16E-02	2.43E-03	3.00E-03
559967	12/27/2021 - 1/4/2022	Cs-134	<1.09E-02	0.00E+00	1.09E-02
		Cs-137	<8.64E-03	0.00E+00	8.64E-03
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	2.75E-01	1.25E-01	1.35E-01

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536551	12/28/2020 - 1/5/2021	Beta	1.53E-02	2.62E-03	3.04E-03
536750	1/5/2021 - 1/11/2021	Beta	2.67E-02	3.69E-03	3.66E-03
537298	1/11/2021 - 1/19/2021	Beta	2.39E-02	2.63E-03	2.30E-03
537661	1/19/2021 - 1/25/2021	Beta	1.84E-02	3.12E-03	3.36E-03
538054	1/25/2021 - 2/1/2021	Beta	1.36E-02	2.75E-03	3.31E-03
538301	2/1/2021 - 2/8/2021	Beta	1.59E-02	2.44E-03	2.55E-03
538526	2/8/2021 - 2/15/2021	Beta	1.65E-02	2.96E-03	3.48E-03
538798	2/15/2021 - 2/22/2021	Beta	2.27E-02	2.99E-03	2.72E-03
539039	2/22/2021 - 3/1/2021	Beta	1.26E-02	2.80E-03	3.59E-03
539250	3/1/2021 - 3/8/2021	Beta	2.05E-02	2.75E-03	2.80E-03
540041	3/8/2021 - 3/15/2021	Beta	2.04E-02	3.14E-03	3.40E-03
540701	3/15/2021 - 3/22/2021	Beta	2.04E-02	2.98E-03	2.98E-03
541414	3/22/2021 - 3/29/2021	Beta	1.57E-02	2.87E-03	3.29E-03
541929	12/28/2020 - 3/29/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.49E-01	3.32E-02	2.00E-02
		K-40	1.82E-02	1.24E-02	1.36E-02
541922	3/29/2021 - 4/5/2021	Beta	2.34E-02	3.19E-03	3.12E-03

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

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542227	4/5/2021 - 4/12/2021	Beta	3.01E-02	3.57E-03	3.35E-03
542853	4/12/2021 - 4/19/2021	Beta	2.09E-02	3.03E-03	3.13E-03
543241	4/19/2021 - 4/26/2021	Beta	2.73E-02	3.33E-03	2.92E-03
544098	4/26/2021 - 5/3/2021	Beta	2.85E-02	3.08E-03	2.81E-03
544300	5/3/2021 - 5/10/2021	Beta	1.89E-02	3.02E-03	3.26E-03
544623	5/10/2021 - 5/17/2021	Beta	1.71E-02	2.89E-03	3.18E-03
545003	5/17/2021 - 5/24/2021	Beta	2.64E-02	3.08E-03	2.99E-03
545487	5/24/2021 - 6/1/2021	Beta	1.84E-02	2.68E-03	2.71E-03
545785	6/1/2021 - 6/7/2021	Beta	1.36E-02	2.63E-03	3.10E-03
546016	6/7/2021 - 6/14/2021	Beta	1.04E-02	2.24E-03	2.82E-03
546888	6/14/2021 - 6/21/2021	Beta	1.79E-02	3.00E-03	3.34E-03
547178	6/21/2021 - 6/28/2021	Beta	1.49E-02	2.81E-03	3.27E-03
547709	3/29/2021 - 6/28/2021	Cs-134	<2.23E-03	0.00E+00	2.23E-03
		Cs-137	<1.74E-03	0.00E+00	1.74E-03
		Be-7	1.71E-01	4.01E-02	3.81E-02
		K-40	<3.36E-02	0.00E+00	3.36E-02
547462	6/28/2021 - 7/6/2021	Beta	1.25E-02	2.51E-03	3.12E-03
547702	7/6/2021 - 7/12/2021	Beta	1.68E-02	3.24E-03	3.84E-03
548087	7/12/2021 - 7/19/2021	Beta	1.47E-02	2.79E-03	3.29E-03
548510	7/19/2021 - 7/26/2021	Beta	2.27E-02	2.78E-03	2.56E-03
548729	7/26/2021 - 8/2/2021	Beta	2.76E-02	3.09E-03	2.92E-03
548961	8/2/2021 - 8/9/2021	Beta	2.14E-02	3.09E-03	3.22E-03
549253	8/9/2021 - 8/16/2021	Beta	2.13E-02	2.78E-03	2.75E-03
549751	8/16/2021 - 8/23/2021	Beta	1.21E-02	2.65E-03	3.31E-03
550035	8/23/2021 - 8/30/2021	Beta	3.47E-02	3.28E-03	2.60E-03
550657	8/30/2021 - 9/7/2021	Beta	2.55E-02	2.71E-03	2.40E-03

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

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551021	9/7/2021 - 9/13/2021	Beta	2.88E-02	3.43E-03	3.30E-03
551654	9/13/2021 - 9/20/2021	Beta	2.76E-02	3.38E-03	3.18E-03
552286	9/20/2021 - 9/27/2021	Beta	2.14E-02	2.75E-03	2.69E-03
552770	6/28/2021 - 9/27/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.61E-03	0.00E+00	1.61E-03
		Be-7	1.59E-01	3.97E-02	3.74E-02
		K-40	<2.41E-02	0.00E+00	2.41E-02
552446	9/27/2021 - 10/4/2021	Beta	4.96E-02	4.25E-03	3.02E-03
552763	10/4/2021 - 10/11/2021	Beta	2.20E-02	2.78E-03	2.75E-03
553243	10/11/2021 - 10/18/2021	Beta	2.60E-02	3.39E-03	3.29E-03
553845	10/18/2021 - 10/25/2021	Beta	4.15E-02	3.56E-03	2.75E-03
554276	10/25/2021 - 11/1/2021	Beta	1.04E-02	2.50E-03	3.15E-03
554587	11/1/2021 - 11/8/2021	Beta	1.70E-02	2.92E-03	3.28E-03
555076	11/8/2021 - 11/15/2021	Beta	3.06E-02	3.43E-03	2.82E-03
555942	11/15/2021 - 11/22/2021	Beta	2.31E-02	3.13E-03	3.08E-03
556738	11/22/2021 - 11/29/2021	Beta	2.45E-02	3.31E-03	3.37E-03
557055	11/29/2021 - 12/6/2021	Beta	3.52E-02	3.80E-03	3.34E-03
557479	12/6/2021 - 12/13/2021	Beta	3.15E-02	3.53E-03	3.02E-03
557954	12/13/2021 - 12/20/2021	Beta	1.36E-02	2.64E-03	3.08E-03
558387	12/20/2021 - 12/27/2021	Beta	2.83E-02	3.41E-03	3.23E-03
559185	9/27/2021 - 12/27/2021	Cs-134	<1.66E-03	0.00E+00	1.66E-03
		Cs-137	<1.37E-03	0.00E+00	1.37E-03
		Be-7	1.37E-01	3.67E-02	3.57E-02
		K-40	<2.71E-02	0.00E+00	2.71E-02
558603	12/27/2021 - 1/4/2022	Beta	1.23E-02	2.45E-03	2.95E-03
559968	12/27/2021 - 1/4/2022	Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	2.51E-01	1.00E-01	0.00E+00
		K-40	2.67E-01	1.35E-01	1.66E-01

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536549	12/28/2020 - 1/5/2021	Beta	1.28E-02	2.51E-03	3.06E-03
536748	1/5/2021 - 1/11/2021	Beta	2.00E-02	3.33E-03	3.63E-03
537296	1/11/2021 - 1/19/2021	Beta	2.35E-02	2.61E-03	2.30E-03
537659	1/19/2021 - 1/25/2021	Beta	1.89E-02	3.14E-03	3.33E-03
538052	1/25/2021 - 2/1/2021	Beta	1.06E-02	2.59E-03	3.33E-03
538299	2/1/2021 - 2/8/2021	Beta	1.46E-02	2.38E-03	2.56E-03
538524	2/8/2021 - 2/15/2021	Beta	1.41E-02	2.83E-03	3.48E-03
538796	2/15/2021 - 2/22/2021	Beta	2.21E-02	2.96E-03	2.71E-03
539037	2/22/2021 - 3/1/2021	Beta	1.29E-02	2.82E-03	3.59E-03
539248	3/1/2021 - 3/8/2021	Beta	2.22E-02	2.83E-03	2.81E-03
540039	3/8/2021 - 3/15/2021	Beta	2.10E-02	3.17E-03	3.39E-03
540699	3/15/2021 - 3/22/2021	Beta	1.80E-02	2.86E-03	2.98E-03
541412	3/22/2021 - 3/29/2021	Beta	1.66E-02	2.92E-03	3.30E-03
541927	12/28/2020 - 3/29/2021	Cs-134	<2.01E-03	0.00E+00	2.01E-03
		Cs-137	<1.44E-03	0.00E+00	1.44E-03
		Be-7	9.79E-02	2.90E-02	2.82E-02
		K-40	<3.66E-02	0.00E+00	3.66E-02
541920	3/29/2021 - 4/5/2021	Beta	2.17E-02	3.11E-03	3.12E-03
542225	4/5/2021 - 4/12/2021	Beta	2.84E-02	3.50E-03	3.36E-03
542851	4/12/2021 - 4/19/2021	Beta	2.12E-02	3.04E-03	3.11E-03
543239	4/19/2021 - 4/26/2021	Beta	2.25E-02	3.11E-03	2.93E-03
544096	4/26/2021 - 5/3/2021	Beta	2.94E-02	3.14E-03	2.83E-03
544298	5/3/2021 - 5/10/2021	Beta	1.81E-02	2.97E-03	3.26E-03
544621	5/10/2021 - 5/17/2021	Beta	1.74E-02	2.89E-03	3.16E-03
545001	5/17/2021 - 5/24/2021	Beta	2.69E-02	3.11E-03	3.00E-03
545485	5/24/2021 - 6/1/2021	Beta	2.16E-02	2.84E-03	2.71E-03

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545783	6/1/2021 - 6/7/2021	Beta	1.44E-02	2.66E-03	3.08E-03
546014	6/7/2021 - 6/14/2021	Beta	9.89E-03	2.22E-03	2.82E-03
546886	6/14/2021 - 6/21/2021	Beta	2.01E-02	3.13E-03	3.37E-03
547176	6/21/2021 - 6/28/2021	Beta	1.21E-02	2.66E-03	3.29E-03
547707	3/29/2021 - 6/28/2021	Cs-134	<1.44E-03	0.00E+00	1.44E-03
		Cs-137	<1.56E-03	0.00E+00	1.56E-03
		Be-7	1.86E-01	3.95E-02	3.00E-02
		K-40	1.68E-02	1.71E-02	2.65E-02
547460	6/28/2021 - 7/6/2021	Beta	1.00E-02	2.37E-03	3.09E-03
547700	7/6/2021 - 7/12/2021	Beta	1.66E-02	3.24E-03	3.85E-03
548085	7/12/2021 - 7/19/2021	Beta	1.57E-02	3.00E-03	3.54E-03
548508	7/19/2021 - 7/26/2021	Beta	2.50E-02	2.87E-03	2.55E-03
548727	7/26/2021 - 8/2/2021	Beta	2.38E-02	2.93E-03	2.90E-03
548959	8/2/2021 - 8/9/2021	Beta	1.91E-02	2.99E-03	3.24E-03
549251	8/9/2021 - 8/16/2021	Beta	1.80E-02	2.63E-03	2.76E-03
549749	8/16/2021 - 8/23/2021	Beta	1.04E-02	2.55E-03	3.30E-03
550033	8/23/2021 - 8/30/2021	Beta	2.78E-02	3.01E-03	2.59E-03
550655	8/30/2021 - 9/7/2021	Beta	2.47E-02	2.63E-03	2.32E-03
551019	9/7/2021 - 9/13/2021	Beta	2.57E-02	3.40E-03	3.45E-03
551652	9/13/2021 - 9/20/2021	Beta	2.29E-02	3.16E-03	3.17E-03
552284	9/20/2021 - 9/27/2021	Beta	2.33E-02	2.83E-03	2.70E-03
552768	6/28/2021 - 9/27/2021	Cs-134	<1.50E-03	0.00E+00	1.50E-03
		Cs-137	<1.61E-03	0.00E+00	1.61E-03
		Be-7	1.78E-01	3.93E-02	2.73E-02
		K-40	<2.89E-02	0.00E+00	2.89E-02
552444	9/27/2021 - 10/4/2021	Beta	4.50E-02	3.98E-03	2.90E-03
552761	10/4/2021 - 10/11/2021	Beta	1.75E-02	2.63E-03	2.83E-03
553241	10/11/2021 - 10/18/2021	Beta	2.24E-02	3.24E-03	3.33E-03

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553843	10/18/2021 - 10/25/2021	Beta	3.58E-02	3.36E-03	2.75E-03
554274	10/25/2021 - 11/1/2021	Beta	1.18E-02	2.58E-03	3.14E-03
554585	11/1/2021 - 11/8/2021	Beta	1.99E-02	3.06E-03	3.28E-03
555074	11/8/2021 - 11/15/2021	Beta	3.08E-02	3.44E-03	2.83E-03
555940	11/15/2021 - 11/22/2021	Beta	1.84E-02	2.90E-03	3.08E-03
556736	11/22/2021 - 11/29/2021	Beta	2.19E-02	3.18E-03	3.37E-03
557053	11/29/2021 - 12/6/2021	Beta	3.93E-02	3.97E-03	3.34E-03
557477	12/6/2021 - 12/13/2021	Beta	2.70E-02	3.33E-03	3.03E-03
557952	12/13/2021 - 12/20/2021	Beta	1.86E-02	2.91E-03	3.08E-03
558385	12/20/2021 - 12/27/2021	Beta	2.82E-02	3.40E-03	3.22E-03
559183	9/27/2021 - 12/27/2021	Cs-134	<1.50E-03	0.00E+00	1.50E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.35E-01	4.01E-02	4.46E-02
		K-40	2.43E-02	1.78E-02	2.46E-02
558601	12/27/2021 - 1/4/2022	Beta	1.39E-02	2.52E-03	2.95E-03
559966	12/27/2021 - 1/4/2022	Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.14E-02	0.00E+00	1.14E-02
		Be-7	6.84E-02	8.25E-02	0.00E+00
		K-40	2.70E-01	1.47E-01	1.97E-01

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536552	12/28/2020 - 1/5/2021	Beta	1.15E-02	2.42E-03	3.01E-03
536751	1/5/2021 - 1/11/2021	Beta	2.36E-02	3.49E-03	3.59E-03
537299	1/11/2021 - 1/19/2021	Beta	2.21E-02	2.58E-03	2.34E-03
537662	1/19/2021 - 1/25/2021	Beta	1.59E-02	2.93E-03	3.27E-03
538055	1/25/2021 - 2/1/2021	Beta	1.32E-02	2.77E-03	3.39E-03
538302	2/1/2021 - 2/8/2021	Beta	1.61E-02	2.45E-03	2.55E-03
538527	2/8/2021 - 2/15/2021	Beta	1.28E-02	2.77E-03	3.49E-03
538799	2/15/2021 - 2/22/2021	Beta	2.55E-02	3.09E-03	2.67E-03

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539040	2/22/2021 - 3/1/2021	Beta	1.36E-02	2.90E-03	3.65E-03
539251	3/1/2021 - 3/8/2021	Beta	2.02E-02	2.74E-03	2.80E-03
540042	3/8/2021 - 3/15/2021	Beta	1.93E-02	3.08E-03	3.39E-03
540702	3/15/2021 - 3/22/2021	Beta	1.99E-02	2.91E-03	2.92E-03
541415	3/22/2021 - 3/29/2021	Beta	1.36E-02	2.80E-03	3.37E-03
541930	12/28/2020 - 3/29/2021	Cs-134	<1.75E-03	0.00E+00	1.75E-03
		Cs-137	<1.32E-03	0.00E+00	1.32E-03
		Be-7	1.45E-01	3.74E-02	3.79E-02
		K-40	<3.14E-02	0.00E+00	3.14E-02
541923	3/29/2021 - 4/5/2021	Beta	2.57E-02	3.30E-03	3.12E-03
542228	4/5/2021 - 4/12/2021	Beta	3.36E-02	3.71E-03	3.35E-03
542854	4/12/2021 - 4/19/2021	Beta	1.96E-02	2.92E-03	3.05E-03
543242	4/19/2021 - 4/26/2021	Beta	2.39E-02	3.21E-03	2.98E-03
544099	4/26/2021 - 5/3/2021	Beta	2.76E-02	3.07E-03	2.84E-03
544301	5/3/2021 - 5/10/2021	Beta	1.81E-02	2.97E-03	3.26E-03
544624	5/10/2021 - 5/17/2021	Beta	1.86E-02	2.91E-03	3.10E-03
545004	5/17/2021 - 5/24/2021	Beta	2.55E-02	3.08E-03	3.06E-03
545488	5/24/2021 - 6/1/2021	Beta	1.58E-02	2.56E-03	2.71E-03
545786	6/1/2021 - 6/7/2021	Beta	1.32E-02	2.63E-03	3.14E-03
546017	6/7/2021 - 6/14/2021	Beta	8.70E-03	2.10E-03	2.73E-03
546889	6/14/2021 - 6/21/2021	Beta	1.73E-02	3.03E-03	3.43E-03
547179	6/21/2021 - 6/28/2021	Beta	1.28E-02	2.69E-03	3.27E-03
547710	3/29/2021 - 6/28/2021	Cs-134	<2.33E-03	0.00E+00	2.33E-03
		Cs-137	<1.12E-03	0.00E+00	1.12E-03
		Be-7	1.49E-01	3.99E-02	4.12E-02
		K-40	<2.89E-02	0.00E+00	2.89E-02
547463	6/28/2021 - 7/6/2021	Beta	8.53E-03	2.32E-03	3.14E-03
547703	7/6/2021 - 7/12/2021	Beta	2.00E-02	3.32E-03	3.70E-03

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548088	7/12/2021 - 7/19/2021	Beta	1.66E-02	2.94E-03	3.37E-03
548511	7/19/2021 - 7/26/2021	Beta	2.30E-02	2.79E-03	2.56E-03
548730	7/26/2021 - 8/2/2021	Beta	2.56E-02	3.03E-03	2.94E-03
548962	8/2/2021 - 8/9/2021	Beta	1.78E-02	2.86E-03	3.13E-03
549254	8/9/2021 - 8/16/2021	Beta	1.70E-02	2.62E-03	2.81E-03
549752	8/16/2021 - 8/23/2021	Beta	1.04E-02	2.56E-03	3.31E-03
550036	8/23/2021 - 8/30/2021	Beta	2.82E-02	3.03E-03	2.60E-03
550658	8/30/2021 - 9/7/2021	Beta	2.29E-02	2.61E-03	2.41E-03
551022	9/7/2021 - 9/13/2021	Beta	2.76E-02	3.37E-03	3.28E-03
551655	9/13/2021 - 9/20/2021	Beta	1.98E-02	3.01E-03	3.18E-03
552287	9/20/2021 - 9/27/2021	Beta	2.14E-02	2.75E-03	2.69E-03
552771	6/28/2021 - 9/27/2021	Cs-134	<2.10E-03	0.00E+00	2.10E-03
		Cs-137	<2.21E-03	0.00E+00	2.21E-03
		Be-7	1.68E-01	4.11E-02	3.52E-02
		K-40	<3.18E-02	0.00E+00	3.18E-02
552447	9/27/2021 - 10/4/2021	Beta	4.33E-02	4.02E-03	3.03E-03
552764	10/4/2021 - 10/11/2021	Beta	1.93E-02	2.66E-03	2.74E-03
553244	10/11/2021 - 10/18/2021	Beta	2.26E-02	3.21E-03	3.28E-03
553846	10/18/2021 - 10/25/2021	Beta	3.51E-02	3.33E-03	2.75E-03
554277	10/25/2021 - 11/1/2021	Beta	1.10E-02	2.49E-03	3.07E-03
554588	11/1/2021 - 11/8/2021	Beta	2.02E-02	3.12E-03	3.36E-03
555077	11/8/2021 - 11/15/2021	Beta	2.51E-02	3.19E-03	2.83E-03
555943	11/15/2021 - 11/22/2021	Beta	2.33E-02	3.15E-03	3.08E-03
556739	11/22/2021 - 11/29/2021	Beta	2.49E-02	3.28E-03	3.30E-03
557056	11/29/2021 - 12/6/2021	Beta	3.49E-02	3.85E-03	3.42E-03
557480	12/6/2021 - 12/13/2021	Beta	2.60E-02	3.28E-03	3.03E-03

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557955	12/13/2021 - 12/20/2021	Beta	2.10E-02	3.03E-03	3.08E-03
558388	12/20/2021 - 12/27/2021	Beta	2.78E-02	3.33E-03	3.14E-03
559186	9/27/2021 - 12/27/2021	Cs-134	<1.82E-03	0.00E+00	1.82E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.43E-01	3.68E-02	3.14E-02
		K-40	2.15E-02	2.03E-02	3.13E-02
558604	12/27/2021 - 1/4/2022	Beta	1.49E-02	2.62E-03	3.02E-03
559969	12/27/2021 - 1/4/2022	Cs-134	<1.07E-02	0.00E+00	1.07E-02
		Cs-137	<7.77E-03	0.00E+00	7.77E-03
		Be-7	1.14E-01	5.97E-02	0.00E+00
		K-40	<2.78E-01	0.00E+00	2.78E-01

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536553	12/28/2020 - 1/5/2021	Beta	1.41E-02	2.54E-03	3.01E-03
536752	1/5/2021 - 1/11/2021	Beta	2.78E-02	3.69E-03	3.59E-03
537300	1/11/2021 - 1/19/2021	Beta	2.37E-02	2.65E-03	2.34E-03
537663	1/19/2021 - 1/25/2021	Beta	2.01E-02	3.16E-03	3.27E-03
538056	1/25/2021 - 2/1/2021	Beta	1.11E-02	2.65E-03	3.39E-03
538303	2/1/2021 - 2/8/2021	Beta	1.54E-02	2.41E-03	2.55E-03
538528	2/8/2021 - 2/15/2021	Beta	1.40E-02	2.83E-03	3.49E-03
538800	2/15/2021 - 2/22/2021	Beta	2.17E-02	2.91E-03	2.67E-03
539041	2/22/2021 - 3/1/2021	Beta	1.31E-02	2.87E-03	3.65E-03
539252	3/1/2021 - 3/8/2021	Beta	1.97E-02	2.72E-03	2.80E-03
540043	3/8/2021 - 3/15/2021	Beta	2.23E-02	3.23E-03	3.39E-03
540703	3/15/2021 - 3/22/2021	Beta	1.55E-02	2.68E-03	2.92E-03
541416	3/22/2021 - 3/29/2021	Beta	1.44E-02	2.86E-03	3.37E-03
541931	12/28/2020 - 3/29/2021	Cs-134	<1.62E-03	0.00E+00	1.62E-03
		Cs-137	<1.56E-03	0.00E+00	1.56E-03
		Be-7	1.54E-01	3.64E-02	3.14E-02
		K-40	<3.58E-02	0.00E+00	3.58E-02
541924	3/29/2021 - 4/5/2021	Beta	2.20E-02	3.12E-03	3.12E-03

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

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542229	4/5/2021 - 4/12/2021	Beta	2.85E-02	3.50E-03	3.35E-03
542855	4/12/2021 - 4/19/2021	Beta	2.14E-02	3.01E-03	3.05E-03
543243	4/19/2021 - 4/26/2021	Beta	2.42E-02	3.23E-03	2.98E-03
544100	4/26/2021 - 5/3/2021	Beta	2.76E-02	3.07E-03	2.84E-03
544302	5/3/2021 - 5/10/2021	Beta	2.01E-02	3.07E-03	3.26E-03
544625	5/10/2021 - 5/17/2021	Beta	2.00E-02	2.98E-03	3.10E-03
545005	5/17/2021 - 5/24/2021	Beta	2.47E-02	3.06E-03	3.06E-03
545489	5/24/2021 - 6/1/2021	Beta	1.95E-02	2.74E-03	2.71E-03
545787	6/1/2021 - 6/7/2021	Beta	1.29E-02	2.61E-03	3.14E-03
546018	6/7/2021 - 6/14/2021	Beta	1.12E-02	2.23E-03	2.73E-03
546890	6/14/2021 - 6/21/2021	Beta	2.20E-02	3.26E-03	3.43E-03
547180	6/21/2021 - 6/28/2021	Beta	1.40E-02	2.75E-03	3.27E-03
547711	3/29/2021 - 6/28/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.69E-01	4.07E-02	4.00E-02
		K-40	1.34E-02	1.35E-02	2.02E-02
547464	6/28/2021 - 7/6/2021	Beta	9.45E-03	2.37E-03	3.14E-03
547704	7/6/2021 - 7/12/2021	Beta	2.01E-02	3.33E-03	3.70E-03
548089	7/12/2021 - 7/19/2021	Beta	1.40E-02	2.80E-03	3.37E-03
548512	7/19/2021 - 7/26/2021	Beta	2.21E-02	2.75E-03	2.56E-03
548731	7/26/2021 - 8/2/2021	Beta	2.66E-02	3.06E-03	2.94E-03
548963	8/2/2021 - 8/9/2021	Beta	2.25E-02	3.08E-03	3.13E-03
549255	8/9/2021 - 8/16/2021	Beta	1.77E-02	2.65E-03	2.81E-03
549753	8/16/2021 - 8/23/2021	Beta	1.06E-02	2.56E-03	3.31E-03
550037	8/23/2021 - 8/30/2021	Beta	2.84E-02	3.03E-03	2.60E-03
550659	8/30/2021 - 9/7/2021	Beta	2.37E-02	2.65E-03	2.41E-03

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

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551023	9/7/2021 - 9/13/2021	Beta	2.68E-02	3.33E-03	3.28E-03
551656	9/13/2021 - 9/20/2021	Beta	2.64E-02	3.32E-03	3.18E-03
552288	9/20/2021 - 9/27/2021	Beta	2.00E-02	2.68E-03	2.69E-03
552772	6/28/2021 - 9/27/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.55E-03	0.00E+00	1.55E-03
		Be-7	1.64E-01	3.94E-02	3.63E-02
		K-40	2.68E-02	1.82E-02	2.45E-02
552448	9/27/2021 - 10/4/2021	Beta	4.63E-02	4.14E-03	3.03E-03
552765	10/4/2021 - 10/11/2021	Beta	2.14E-02	2.75E-03	2.74E-03
553245	10/11/2021 - 10/18/2021	Beta	1.97E-02	3.07E-03	3.28E-03
553847	10/18/2021 - 10/25/2021	Beta	3.61E-02	3.37E-03	2.75E-03
554278	10/25/2021 - 11/1/2021	Beta	1.29E-02	2.60E-03	3.07E-03
554589	11/1/2021 - 11/8/2021	Beta	2.10E-02	3.16E-03	3.36E-03
555078	11/8/2021 - 11/15/2021	Beta	2.74E-02	3.29E-03	2.83E-03
555944	11/15/2021 - 11/22/2021	Beta	2.19E-02	3.07E-03	3.08E-03
556740	11/22/2021 - 11/29/2021	Beta	2.34E-02	3.21E-03	3.30E-03
557057	11/29/2021 - 12/6/2021	Beta	3.24E-02	3.74E-03	3.42E-03
557481	12/6/2021 - 12/13/2021	Beta	3.03E-02	3.48E-03	3.03E-03
557956	12/13/2021 - 12/20/2021	Beta	1.70E-02	2.83E-03	3.08E-03
558389	12/20/2021 - 12/27/2021	Beta	3.00E-02	3.42E-03	3.14E-03
559187	9/27/2021 - 12/27/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.65E-03	0.00E+00	1.65E-03
		Be-7	1.47E-01	3.54E-02	2.83E-02
		K-40	<3.47E-02	0.00E+00	3.47E-02
558605	12/27/2021 - 1/4/2022	Beta	1.03E-02	2.37E-03	3.02E-03
559970	12/27/2021 - 1/4/2022	Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	5.10E-02	8.60E-02	0.00E+00
		K-40	1.92E-01	1.06E-01	1.20E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536554	12/28/2020 - 1/5/2021	Beta	1.11E-02	2.38E-03	2.99E-03
536753	1/5/2021 - 1/11/2021	Beta	2.52E-02	3.57E-03	3.59E-03
537301	1/11/2021 - 1/19/2021	Beta	2.22E-02	2.58E-03	2.33E-03
537664	1/19/2021 - 1/25/2021	Beta	1.74E-02	3.01E-03	3.27E-03
538057	1/25/2021 - 2/1/2021	Beta	1.29E-02	3.09E-03	3.95E-03
538304	2/1/2021 - 2/8/2021	Beta	1.37E-02	2.33E-03	2.55E-03
538529	2/8/2021 - 2/15/2021	Beta	1.30E-02	2.77E-03	3.48E-03
538801	2/15/2021 - 2/22/2021	Beta	2.25E-02	2.95E-03	2.66E-03
539042	2/22/2021 - 3/1/2021	Beta	1.09E-02	2.76E-03	3.67E-03
539253	3/1/2021 - 3/8/2021	Beta	2.22E-02	2.83E-03	2.81E-03
540044	3/8/2021 - 3/15/2021	Beta	1.94E-02	3.09E-03	3.39E-03
540704	3/15/2021 - 3/22/2021	Beta	1.77E-02	2.80E-03	2.91E-03
541417	3/22/2021 - 3/29/2021	Beta	1.83E-02	3.07E-03	3.38E-03
541932	12/28/2020 - 3/29/2021	Cs-134	<1.63E-03	0.00E+00	1.63E-03
		Cs-137	<1.20E-03	0.00E+00	1.20E-03
		Be-7	1.11E-01	3.10E-02	2.91E-02
		K-40	2.43E-02	1.48E-02	1.64E-02
541925	3/29/2021 - 4/5/2021	Beta	2.77E-02	3.41E-03	3.12E-03
542230	4/5/2021 - 4/12/2021	Beta	2.95E-02	3.54E-03	3.35E-03
542856	4/12/2021 - 4/19/2021	Beta	2.10E-02	2.99E-03	3.06E-03
543244	4/19/2021 - 4/26/2021	Beta	2.35E-02	3.19E-03	2.98E-03
544101	4/26/2021 - 5/3/2021	Beta	2.67E-02	3.02E-03	2.83E-03
544303	5/3/2021 - 5/10/2021	Beta	1.81E-02	2.97E-03	3.25E-03
544626	5/10/2021 - 5/17/2021	Beta	1.79E-02	2.89E-03	3.12E-03
545006	5/17/2021 - 5/24/2021	Beta	2.13E-02	2.91E-03	3.05E-03
545490	5/24/2021 - 6/1/2021	Beta	2.02E-02	2.77E-03	2.71E-03

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545788	6/1/2021 - 6/7/2021	Beta	1.51E-02	2.71E-03	3.10E-03
546019	6/7/2021 - 6/14/2021	Beta	9.80E-03	2.18E-03	2.76E-03
546891	6/14/2021 - 6/21/2021	Beta	1.75E-02	3.03E-03	3.43E-03
547181	6/21/2021 - 6/28/2021	Beta	1.28E-02	2.69E-03	3.27E-03
547712	3/29/2021 - 6/28/2021	Cs-134	<2.01E-03	0.00E+00	2.01E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.80E-01	4.02E-02	3.50E-02
		K-40	<3.27E-02	0.00E+00	3.27E-02
547465	6/28/2021 - 7/6/2021	Beta	9.81E-03	2.37E-03	3.12E-03
547705	7/6/2021 - 7/12/2021	Beta	1.88E-02	3.32E-03	3.79E-03
548090	7/12/2021 - 7/19/2021	Beta	1.19E-02	2.67E-03	3.33E-03
548513	7/19/2021 - 7/26/2021	Beta	2.25E-02	2.77E-03	2.56E-03
548732	7/26/2021 - 8/2/2021	Beta	2.54E-02	3.00E-03	2.91E-03
548964	8/2/2021 - 8/9/2021	Beta	2.04E-02	3.00E-03	3.15E-03
549256	8/9/2021 - 8/16/2021	Beta	2.07E-02	2.79E-03	2.82E-03
549754	8/16/2021 - 8/23/2021	Beta	9.26E-03	2.49E-03	3.31E-03
550038	8/23/2021 - 8/30/2021	Beta	3.00E-02	3.10E-03	2.60E-03
550660	8/30/2021 - 9/7/2021	Beta	2.29E-02	2.55E-03	2.32E-03
551024	9/7/2021 - 9/13/2021	Beta	2.56E-02	3.40E-03	3.46E-03
551657	9/13/2021 - 9/20/2021	Beta	2.25E-02	3.14E-03	3.18E-03
552289	9/20/2021 - 9/27/2021	Beta	2.25E-02	2.80E-03	2.69E-03
552773	6/28/2021 - 9/27/2021	Cs-134	<1.02E-03	0.00E+00	1.02E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.36E-01	3.79E-02	3.94E-02
		K-40	<3.01E-02	0.00E+00	3.01E-02
552449	9/27/2021 - 10/4/2021	Beta	4.42E-02	3.95E-03	2.89E-03
552766	10/4/2021 - 10/11/2021	Beta	1.85E-02	2.72E-03	2.90E-03
553246	10/11/2021 - 10/18/2021	Beta	2.59E-02	3.36E-03	3.25E-03

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553848	10/18/2021 - 10/25/2021	Beta	3.49E-02	3.32E-03	2.75E-03
554279	10/25/2021 - 11/1/2021	Beta	1.51E-02	2.72E-03	3.05E-03
554590	11/1/2021 - 11/8/2021	Beta	2.24E-02	3.24E-03	3.38E-03
555079	11/8/2021 - 11/15/2021	Beta	3.04E-02	3.43E-03	2.83E-03
555945	11/15/2021 - 11/22/2021	Beta	2.29E-02	3.12E-03	3.08E-03
556741	11/22/2021 - 11/29/2021	Beta	2.08E-02	3.09E-03	3.30E-03
557058	11/29/2021 - 12/6/2021	Beta	3.85E-02	4.01E-03	3.42E-03
557482	12/6/2021 - 12/13/2021	Beta	3.01E-02	3.48E-03	3.03E-03
557957	12/13/2021 - 12/20/2021	Beta	2.19E-02	3.08E-03	3.08E-03
558390	12/20/2021 - 12/27/2021	Beta	3.02E-02	3.43E-03	3.15E-03
559188	9/27/2021 - 12/27/2021	Cs-134	<1.28E-03	0.00E+00	1.28E-03
		Cs-137	<1.22E-03	0.00E+00	1.22E-03
		Be-7	1.27E-01	3.23E-02	2.40E-02
		K-40	<2.56E-02	0.00E+00	2.56E-02
558606	12/27/2021 - 1/4/2022	Beta	1.44E-02	2.59E-03	3.02E-03
559971	12/27/2021 - 1/4/2022	Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	1.04E-01	1.04E-01	0.00E+00
		K-40	4.44E-01	1.66E-01	1.69E-01

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536555	12/28/2020 - 1/5/2021	I-131	<1.35E-02	0.00E+00	1.35E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<8.55E-02	0.00E+00	8.55E-02
		K-40	2.78E-01	1.41E-01	1.70E-01
536761	1/5/2021 - 1/11/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	6.27E-01	2.37E-01	2.57E-01
537302	1/11/2021 - 1/19/2021	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.13E-02	0.00E+00	1.13E-02
		Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<9.70E-02	0.00E+00	9.70E-02
		K-40	5.11E-01	1.86E-01	1.99E-01
537665	1/19/2021 - 1/25/2021	I-131	<2.22E-02	0.00E+00	2.22E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537665	1/19/2021 - 1/25/2021	Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	5.40E-01	2.02E-01	1.96E-01
538058	1/25/2021 - 2/1/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
538305	2/1/2021 - 2/8/2021	K-40	3.42E-01	1.88E-01	2.49E-01
		I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
538530	2/8/2021 - 2/15/2021	Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	6.31E-01	2.03E-01	1.75E-01
		I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
538802	2/15/2021 - 2/22/2021	Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	2.71E-01	1.81E-01	2.60E-01
		I-131	<2.04E-02	0.00E+00	2.04E-02
539043	2/22/2021 - 3/1/2021	Cs-134	<1.49E-02	0.00E+00	1.49E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.63E-01	1.86E-01	2.01E-01
539254	3/1/2021 - 3/8/2021	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
540045	3/8/2021 - 3/15/2021	K-40	<2.45E-01	0.00E+00	2.45E-01
		I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
540705	3/15/2021 - 3/22/2021	Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	4.11E-01	2.00E-01	2.55E-01
		I-131	<1.26E-02	0.00E+00	1.26E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
541418	3/22/2021 - 3/29/2021	Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	3.67E-01	2.07E-01	2.87E-01
		I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	6.77E-01	2.05E-01	1.55E-01
		I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	4.73E-01	1.79E-01	1.62E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541933	3/29/2021 - 4/1/2021	I-131	<5.21E-02	0.00E+00	5.21E-02
		Cs-134	<3.60E-02	0.00E+00	3.60E-02
		Cs-137	<4.03E-02	0.00E+00	4.03E-02
		Be-7	<3.15E-01	0.00E+00	3.15E-01
		K-40	9.93E-01	4.09E-01	4.09E-01
542231	4/5/2021 - 4/12/2021	I-131	<2.22E-02	0.00E+00	2.22E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	6.20E-01	1.94E-01	1.37E-01
542857	4/12/2021 - 4/19/2021	I-131	<3.52E-02	0.00E+00	3.52E-02
		Cs-134	<2.96E-02	0.00E+00	2.96E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	4.12E-01	2.22E-01	2.10E-01
543245	4/19/2021 - 4/26/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	3.74E-01	1.53E-01	1.26E-01
544102	4/26/2021 - 5/3/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	6.61E-01	2.64E-01	6.89E-02
544304	5/3/2021 - 5/10/2021	I-131	<3.47E-02	0.00E+00	3.47E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	4.07E-01	2.06E-01	6.90E-02
544627	5/10/2021 - 5/17/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	4.38E-01	3.10E-01	4.40E-01
545007	5/17/2021 - 5/24/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.81E-02	0.00E+00	2.81E-02
		Cs-137	<3.09E-02	0.00E+00	3.09E-02
		Be-7	<2.17E-01	0.00E+00	2.17E-01
		K-40	5.25E-01	2.75E-01	2.96E-01
545491	5/24/2021 - 6/1/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	3.57E-01	1.81E-01	6.05E-02
545789	6/1/2021 - 6/7/2021	I-131	<4.03E-02	0.00E+00	4.03E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<3.10E-02	0.00E+00	3.10E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<5.06E-01	0.00E+00	5.06E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546020	6/7/2021 - 6/14/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.64E-02	0.00E+00	2.64E-02
		Cs-137	<2.79E-02	0.00E+00	2.79E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<4.83E-01	0.00E+00	4.83E-01
546892	6/14/2021 - 6/21/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<2.98E-02	0.00E+00	2.98E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
547182	6/21/2021 - 6/28/2021	I-131	<3.31E-02	0.00E+00	3.31E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	<6.12E-01	0.00E+00	6.12E-01
547466	6/28/2021 - 7/6/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<2.26E-02	0.00E+00	2.26E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	5.27E-01	2.15E-01	5.72E-02
547713	7/6/2021 - 7/12/2021	I-131	<3.99E-02	0.00E+00	3.99E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<3.45E-02	0.00E+00	3.45E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	<6.98E-01	0.00E+00	6.98E-01
548094	7/12/2021 - 7/19/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	<6.65E-01	0.00E+00	6.65E-01
548514	7/19/2021 - 7/26/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.87E-01	0.00E+00	5.87E-01
548733	7/26/2021 - 8/2/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
548965	8/2/2021 - 8/9/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.94E-02	0.00E+00	2.94E-02
		Be-7	<1.96E-01	0.00E+00	1.96E-01
		K-40	6.19E-01	2.88E-01	3.03E-01
549257	8/9/2021 - 8/16/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<2.60E-02	0.00E+00	2.60E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<5.50E-01	0.00E+00	5.50E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549755	8/16/2021 - 8/23/2021	I-131	<2.99E-02	0.00E+00	2.99E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	<4.64E-01	0.00E+00	4.64E-01
550039	8/23/2021 - 8/30/2021	I-131	<3.48E-02	0.00E+00	3.48E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	5.28E-01	2.53E-01	2.20E-01
550661	8/30/2021 - 9/7/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<3.37E-02	0.00E+00	3.37E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	3.63E-01	2.32E-01	2.98E-01
551025	9/7/2021 - 9/13/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.97E-02	0.00E+00	2.97E-02
		Cs-137	<3.51E-02	0.00E+00	3.51E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<6.24E-01	0.00E+00	6.24E-01
551658	9/13/2021 - 9/20/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	2.25E-01	2.61E-01	4.18E-01
552290	9/20/2021 - 9/27/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<4.80E-01	0.00E+00	4.80E-01
552450	9/27/2021 - 10/4/2021	I-131	<3.42E-02	0.00E+00	3.42E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<6.38E-01	0.00E+00	6.38E-01
552774	10/4/2021 - 10/11/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<3.28E-02	0.00E+00	3.28E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<6.23E-01	0.00E+00	6.23E-01
553247	10/11/2021 - 10/18/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<5.52E-01	0.00E+00	5.52E-01
553849	10/18/2021 - 10/25/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<2.99E-02	0.00E+00	2.99E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<5.47E-01	0.00E+00	5.47E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554280	10/25/2021 - 11/1/2021	I-131	<3.27E-02	0.00E+00	3.27E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<5.69E-01	0.00E+00	5.69E-01
554591	11/1/2021 - 11/8/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<2.81E-02	0.00E+00	2.81E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	6.15E-01	2.86E-01	2.69E-01
555080	11/8/2021 - 11/15/2021	I-131	<3.28E-02	0.00E+00	3.28E-02
		Cs-134	<3.49E-02	0.00E+00	3.49E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<6.52E-01	0.00E+00	6.52E-01
555946	11/15/2021 - 11/22/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	<5.28E-01	0.00E+00	5.28E-01
556742	11/22/2021 - 11/29/2021	I-131	<3.56E-02	0.00E+00	3.56E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<1.75E-01	0.00E+00	1.75E-01
		K-40	4.64E-01	2.53E-01	2.81E-01
557059	11/29/2021 - 12/6/2021	I-131	<3.42E-02	0.00E+00	3.42E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<2.55E-02	0.00E+00	2.55E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.16E-01	0.00E+00	5.16E-01
557483	12/6/2021 - 12/13/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<8.71E-02	0.00E+00	8.71E-02
		K-40	2.70E-01	1.52E-01	1.90E-01
557958	12/13/2021 - 12/20/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	5.18E-01	2.59E-01	2.53E-01
558391	12/20/2021 - 12/27/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<3.63E-01	0.00E+00	3.63E-01
558607	12/27/2021 - 1/4/2022	I-131	<2.44E-02	0.00E+00	2.45E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.52E-01	0.00E+00	5.52E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536557	12/28/2020 - 1/5/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.27E-02	0.00E+00	1.27E-02
		Be-7	<8.18E-02	0.00E+00	8.18E-02
		K-40	1.47E-01	1.18E-01	1.71E-01
536763	1/5/2021 - 1/11/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.02E-02	0.00E+00	1.02E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	3.65E-01	1.70E-01	1.80E-01
537304	1/11/2021 - 1/19/2021	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<9.63E-02	0.00E+00	9.63E-02
		K-40	4.51E-01	1.67E-01	1.50E-01
537667	1/19/2021 - 1/25/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	4.37E-01	2.22E-01	2.88E-01
538060	1/25/2021 - 2/1/2021	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<8.70E-02	0.00E+00	8.70E-02
		K-40	<2.62E-01	0.00E+00	2.62E-01
538307	2/1/2021 - 2/8/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	5.15E-01	1.86E-01	1.69E-01
538532	2/8/2021 - 2/15/2021	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	5.31E-01	1.95E-01	1.99E-01
538804	2/15/2021 - 2/22/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<8.48E-02	0.00E+00	8.48E-02
		K-40	4.35E-01	1.68E-01	1.61E-01
539045	2/22/2021 - 3/1/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	4.87E-01	1.79E-01	1.50E-01
539256	3/1/2021 - 3/8/2021	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	4.14E-01	1.98E-01	2.55E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540047	3/8/2021 - 3/15/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	4.58E-01	2.11E-01	2.66E-01
540707	3/15/2021 - 3/22/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	2.92E-01	1.62E-01	2.10E-01
541420	3/22/2021 - 3/29/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	4.40E-01	1.55E-01	3.50E-02
541935	3/29/2021 - 4/5/2021	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	3.08E-01	1.47E-01	1.57E-01
542233	4/5/2021 - 4/12/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<9.16E-02	0.00E+00	9.16E-02
		K-40	5.80E-01	1.85E-01	1.30E-01
542859	4/12/2021 - 4/19/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<2.61E-02	0.00E+00	2.61E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<2.01E-01	0.00E+00	2.01E-01
		K-40	<5.34E-01	0.00E+00	5.34E-01
543247	4/19/2021 - 4/26/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	6.13E-01	2.27E-01	2.42E-01
544104	4/26/2021 - 5/3/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.60E-01	2.69E-01	2.72E-01
544306	5/3/2021 - 5/10/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	2.21E-01	2.21E-01	3.32E-01
544629	5/10/2021 - 5/17/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	7.03E-01	2.76E-01	7.05E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545009	5/17/2021 - 5/24/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.81E-02	0.00E+00	2.81E-02
		Cs-137	<2.97E-02	0.00E+00	2.97E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	4.22E-01	2.58E-01	3.11E-01
545493	5/24/2021 - 6/1/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	3.18E-01	2.35E-01	3.30E-01
545791	6/1/2021 - 6/7/2021	I-131	<2.94E-02	0.00E+00	2.94E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<2.22E-01	0.00E+00	2.22E-01
		K-40	5.71E-01	2.59E-01	7.73E-02
546022	6/7/2021 - 6/14/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<2.80E-02	0.00E+00	2.80E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	2.97E-01	1.98E-01	2.30E-01
546894	6/14/2021 - 6/21/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	3.48E-01	2.50E-01	3.38E-01
547184	6/21/2021 - 6/28/2021	I-131	<2.94E-02	0.00E+00	2.94E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	5.00E-01	2.74E-01	3.08E-01
547468	6/28/2021 - 7/6/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.20E-01	2.61E-01	3.38E-01
547715	7/6/2021 - 7/12/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<2.98E-02	0.00E+00	2.98E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	5.08E-01	2.76E-01	2.95E-01
548096	7/12/2021 - 7/19/2021	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<2.77E-02	0.00E+00	2.77E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	3.95E-01	2.24E-01	2.25E-01
548516	7/19/2021 - 7/26/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<6.39E-01	0.00E+00	6.39E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548735	7/26/2021 - 8/2/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	3.72E-01	2.79E-01	3.96E-01
548967	8/2/2021 - 8/9/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	3.91E-01	2.42E-01	2.95E-01
549259	8/9/2021 - 8/16/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<5.59E-01	0.00E+00	5.59E-01
549757	8/16/2021 - 8/23/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<4.90E-01	0.00E+00	4.90E-01
550041	8/23/2021 - 8/30/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	4.35E-01	2.36E-01	2.52E-01
550663	8/30/2021 - 9/7/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.21E-01	2.36E-01	2.04E-01
551027	9/7/2021 - 9/13/2021	I-131	<3.94E-02	0.00E+00	3.94E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<3.08E-02	0.00E+00	3.08E-02
		Be-7	<2.37E-01	0.00E+00	2.37E-01
		K-40	9.94E-01	3.86E-01	3.30E-01
551660	9/13/2021 - 9/20/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<3.48E-02	0.00E+00	3.48E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<3.95E-01	0.00E+00	3.95E-01
552292	9/20/2021 - 9/27/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	4.41E-01	2.11E-01	6.64E-02
552452	9/27/2021 - 10/4/2021	I-131	<3.89E-02	0.00E+00	3.89E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<3.38E-02	0.00E+00	3.38E-02
		Be-7	<1.96E-01	0.00E+00	1.96E-01
		K-40	<6.60E-01	0.00E+00	6.60E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552776	10/4/2021 - 10/11/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<3.23E-02	0.00E+00	3.23E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<4.38E-01	0.00E+00	4.38E-01
553249	10/11/2021 - 10/18/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.75E-01	0.00E+00	1.75E-01
		K-40	<5.31E-01	0.00E+00	5.31E-01
553851	10/18/2021 - 10/25/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.29E-01	0.00E+00	5.29E-01
554282	10/25/2021 - 11/1/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	5.98E-01	2.68E-01	2.49E-01
554593	11/1/2021 - 11/8/2021	I-131	<1.56E-02	0.00E+00	1.56E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	2.66E-01	1.81E-01	1.81E-01
555082	11/8/2021 - 11/15/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	2.46E-01	1.57E-01	6.67E-02
555948	11/15/2021 - 11/22/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<3.09E-02	0.00E+00	3.09E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	7.15E-01	2.76E-01	6.92E-02
556744	11/22/2021 - 11/29/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	5.45E-01	2.31E-01	6.42E-02
557061	11/29/2021 - 12/6/2021	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<4.35E-01	0.00E+00	4.35E-01
557485	12/6/2021 - 12/13/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	3.73E-01	1.95E-01	6.73E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557960	12/13/2021 - 12/20/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<5.17E-03	0.00E+00	5.17E-03
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.65E-01	2.40E-01	6.66E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558393	12/20/2021 - 12/27/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.87E-01	0.00E+00	5.87E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558609	12/27/2021 - 1/4/2022	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	5.17E-01	2.36E-01	2.09E-01

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536558	12/28/2020 - 1/5/2021	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<9.82E-03	0.00E+00	9.82E-03
		Cs-137	<8.74E-03	0.00E+00	8.74E-03
		Be-7	<7.48E-02	0.00E+00	7.48E-02
		K-40	4.66E-01	1.22E-01	1.08E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536764	1/5/2021 - 1/11/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	6.83E-01	2.35E-01	2.31E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537305	1/11/2021 - 1/19/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	6.93E-01	2.12E-01	2.01E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537668	1/19/2021 - 1/25/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	8.47E-01	2.45E-01	1.67E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538061	1/25/2021 - 2/1/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	4.51E-01	1.71E-01	1.34E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538308	2/1/2021 - 2/8/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	5.69E-01	1.87E-01	1.52E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538533	2/8/2021 - 2/15/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538533	2/8/2021 - 2/15/2021	Be-7	<9.33E-02	0.00E+00	9.33E-02
		K-40	<3.03E-01	0.00E+00	3.03E-01
538805	2/15/2021 - 2/22/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	4.21E-01	1.90E-01	2.28E-01
539046	2/22/2021 - 3/1/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.48E-02	0.00E+00	1.48E-02
		Cs-137	<1.12E-02	0.00E+00	1.12E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<2.23E-01	0.00E+00	2.23E-01
539257	3/1/2021 - 3/8/2021	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	3.09E-01	1.44E-01	1.47E-01
540048	3/8/2021 - 3/15/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<8.98E-03	0.00E+00	8.98E-03
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<9.71E-02	0.00E+00	9.71E-02
		K-40	4.13E-01	1.69E-01	1.71E-01
540708	3/15/2021 - 3/22/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	4.67E-01	1.89E-01	2.05E-01
541421	3/22/2021 - 3/29/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.88E-01	2.10E-01	2.56E-01
541936	3/29/2021 - 4/5/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<8.39E-02	0.00E+00	8.39E-02
		K-40	3.94E-01	1.54E-01	1.31E-01
542234	4/5/2021 - 4/12/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	3.14E-01	1.56E-01	1.82E-01
542860	4/12/2021 - 4/19/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	6.04E-01	1.91E-01	1.35E-01
543248	4/19/2021 - 4/26/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<1.63E-02	0.00E+00	1.63E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543248	4/19/2021 - 4/26/2021	Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<7.80E-02	0.00E+00	7.80E-02
		K-40	2.84E-01	1.81E-01	2.55E-01
544105	4/26/2021 - 5/3/2021	I-131	<3.14E-02	0.00E+00	3.14E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<3.74E-01	0.00E+00	3.74E-01
544307	5/3/2021 - 5/10/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.11E-01	0.00E+00	5.11E-01
544630	5/10/2021 - 5/17/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<4.63E-01	0.00E+00	4.63E-01
545010	5/17/2021 - 5/24/2021	I-131	<3.55E-02	0.00E+00	3.55E-02
		Cs-134	<5.30E-03	0.00E+00	5.30E-03
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
545494	5/24/2021 - 6/1/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<4.67E-01	0.00E+00	4.67E-01
545792	6/1/2021 - 6/7/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.44E-02	0.00E+00	2.44E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<4.66E-01	0.00E+00	4.66E-01
546023	6/7/2021 - 6/14/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	3.47E-01	1.88E-01	6.72E-02
546895	6/14/2021 - 6/21/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.96E-02	0.00E+00	2.96E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	2.80E-01	1.70E-01	6.91E-02
547185	6/21/2021 - 6/28/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	5.33E-01	2.37E-01	6.88E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547469	6/28/2021 - 7/6/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	6.54E-01	2.66E-01	2.22E-01
547716	7/6/2021 - 7/12/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<3.52E-02	0.00E+00	3.52E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<2.04E-01	0.00E+00	2.04E-01
		K-40	3.64E-01	2.34E-01	2.57E-01
548097	7/12/2021 - 7/19/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<5.82E-01	0.00E+00	5.82E-01
548517	7/19/2021 - 7/26/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	3.11E-01	2.39E-01	3.32E-01
548736	7/26/2021 - 8/2/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	4.07E-01	2.49E-01	2.99E-01
548968	8/2/2021 - 8/9/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<4.58E-01	0.00E+00	4.58E-01
549260	8/9/2021 - 8/16/2021	I-131	<3.72E-02	0.00E+00	3.72E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<3.13E-02	0.00E+00	3.13E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<5.50E-01	0.00E+00	5.50E-01
549758	8/16/2021 - 8/23/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	3.77E-01	2.12E-01	2.10E-01
550042	8/23/2021 - 8/30/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	<2.72E-01	0.00E+00	2.72E-01
550664	8/30/2021 - 9/7/2021	I-131	<3.50E-02	0.00E+00	3.50E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	4.31E-01	2.22E-01	2.22E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551028	9/7/2021 - 9/13/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<2.37E-02	0.00E+00	2.37E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<2.28E-01	0.00E+00	2.28E-01
		K-40	<4.52E-01	0.00E+00	4.52E-01
551661	9/13/2021 - 9/20/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.28E-01	0.00E+00	5.28E-01
552293	9/20/2021 - 9/27/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<4.82E-01	0.00E+00	4.82E-01
552453	9/27/2021 - 10/4/2021	I-131	<3.83E-02	0.00E+00	3.83E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<2.20E-01	0.00E+00	2.20E-01
		K-40	<5.32E-01	0.00E+00	5.32E-01
552777	10/4/2021 - 10/11/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<2.81E-02	0.00E+00	2.81E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	5.47E-01	2.81E-01	3.14E-01
553250	10/11/2021 - 10/18/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<4.21E-01	0.00E+00	4.21E-01
553852	10/18/2021 - 10/25/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.64E-02	0.00E+00	2.64E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	2.75E-01	2.60E-01	3.99E-01
554283	10/25/2021 - 11/1/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	3.23E-01	2.16E-01	2.62E-01
554594	11/1/2021 - 11/8/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.91E-02	0.00E+00	2.91E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<6.26E-01	0.00E+00	6.26E-01
555083	11/8/2021 - 11/15/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<5.29E-01	0.00E+00	5.29E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555949	11/15/2021 - 11/22/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	<5.35E-01	0.00E+00	5.35E-01
556745	11/22/2021 - 11/29/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<4.06E-01	0.00E+00	4.06E-01
557062	11/29/2021 - 12/6/2021	I-131	<3.27E-02	0.00E+00	3.27E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	<5.21E-01	0.00E+00	5.21E-01
557486	12/6/2021 - 12/13/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	4.86E-01	2.44E-01	2.41E-01
557961	12/13/2021 - 12/20/2021	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	4.87E-01	2.41E-01	2.18E-01
558394	12/20/2021 - 12/27/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.44E-02	0.00E+00	2.44E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	3.22E-01	2.00E-01	2.19E-01
558610	12/27/2021 - 1/4/2022	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<9.02E-02	0.00E+00	9.02E-02
		K-40	4.88E-01	2.32E-01	2.20E-01
Sample Point 26 [INDICATOR - S @ 4.7 miles]					
536556	12/28/2020 - 1/5/2021	I-131	<1.10E-02	0.00E+00	1.10E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	3.88E-01	1.33E-01	2.92E-02
536762	1/5/2021 - 1/11/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<8.92E-02	0.00E+00	8.92E-02
		K-40	6.53E-01	2.46E-01	2.62E-01
537303	1/11/2021 - 1/19/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<1.13E-02	0.00E+00	1.13E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537303	1/11/2021 - 1/19/2021	Be-7	<9.76E-02	0.00E+00	9.76E-02
		K-40	1.30E-01	1.16E-01	1.74E-01
537666	1/19/2021 - 1/25/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	6.66E-01	2.52E-01	2.75E-01
538059	1/25/2021 - 2/1/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.18E-02	0.00E+00	1.18E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	4.27E-01	1.66E-01	1.50E-01
538306	2/1/2021 - 2/8/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<9.15E-02	0.00E+00	9.15E-02
		K-40	5.68E-01	1.82E-01	1.25E-01
538531	2/8/2021 - 2/15/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-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	5.43E-01	1.89E-01	1.67E-01
538803	2/15/2021 - 2/22/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	6.30E-01	1.96E-01	1.52E-01
539044	2/22/2021 - 3/1/2021	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<9.48E-02	0.00E+00	9.48E-02
		K-40	5.68E-01	1.81E-01	3.66E-02
539255	3/1/2021 - 3/8/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<8.31E-02	0.00E+00	8.31E-02
		K-40	3.06E-01	1.70E-01	2.21E-01
540046	3/8/2021 - 3/15/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.27E-01	2.07E-01	2.32E-01
540706	3/15/2021 - 3/22/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	3.91E-01	1.89E-01	2.39E-01
541419	3/22/2021 - 3/29/2021	I-131	<1.93E-02	0.00E+00	1.93E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541419	3/22/2021 - 3/29/2021	Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	3.84E-01	1.92E-01	2.47E-01
541934	3/29/2021 - 4/5/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<9.26E-02	0.00E+00	9.26E-02
		K-40	3.57E-01	1.73E-01	2.11E-01
542232	4/5/2021 - 4/12/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<8.86E-02	0.00E+00	8.86E-02
		K-40	7.32E-01	2.20E-01	1.89E-01
542858	4/12/2021 - 4/19/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	5.86E-01	2.70E-01	2.60E-01
543246	4/19/2021 - 4/26/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<1.85E-02	0.00E+00	1.85E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.39E-01	2.00E-01	2.02E-01
544103	4/26/2021 - 5/3/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.69E-01	0.00E+00	4.69E-01
544305	5/3/2021 - 5/10/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	2.94E-01	1.72E-01	6.65E-02
544628	5/10/2021 - 5/17/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<2.25E-01	0.00E+00	2.25E-01
		K-40	4.58E-01	2.13E-01	6.53E-02
545008	5/17/2021 - 5/24/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<2.95E-02	0.00E+00	2.95E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	2.55E-01	1.86E-01	2.14E-01
545492	5/24/2021 - 6/1/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	3.28E-01	2.34E-01	3.21E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545790	6/1/2021 - 6/7/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<2.91E-02	0.00E+00	2.91E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	6.15E-01	3.29E-01	3.85E-01
546021	6/7/2021 - 6/14/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.89E-02	0.00E+00	2.89E-02
		Be-7	<2.30E-01	0.00E+00	2.30E-01
		K-40	5.47E-01	3.13E-01	4.04E-01
546893	6/14/2021 - 6/21/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	2.68E-01	1.95E-01	2.36E-01
547183	6/21/2021 - 6/28/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	3.49E-01	2.45E-01	3.23E-01
547467	6/28/2021 - 7/6/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.07E-02	0.00E+00	1.07E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<3.65E-01	0.00E+00	3.65E-01
547714	7/6/2021 - 7/12/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<2.41E-02	0.00E+00	2.41E-02
		Cs-137	<2.91E-02	0.00E+00	2.91E-02
		Be-7	<2.33E-01	0.00E+00	2.33E-01
		K-40	<6.14E-01	0.00E+00	6.14E-01
548095	7/12/2021 - 7/19/2021	I-131	<3.26E-02	0.00E+00	3.26E-02
		Cs-134	<2.97E-02	0.00E+00	2.97E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	4.20E-01	2.39E-01	2.45E-01
548515	7/19/2021 - 7/26/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	3.90E-01	2.51E-01	3.18E-01
548734	7/26/2021 - 8/2/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<3.01E-01	0.00E+00	3.01E-01
548966	8/2/2021 - 8/9/2021	I-131	<2.99E-02	0.00E+00	2.99E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	4.76E-01	2.40E-01	2.28E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549258	8/9/2021 - 8/16/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<4.53E-03	0.00E+00	4.53E-03
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<5.74E-01	0.00E+00	5.74E-01
549756	8/16/2021 - 8/23/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<4.80E-01	0.00E+00	4.80E-01
550040	8/23/2021 - 8/30/2021	I-131	<3.34E-02	0.00E+00	3.34E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	6.12E-01	3.11E-01	3.64E-01
550662	8/30/2021 - 9/7/2021	I-131	<3.34E-02	0.00E+00	3.34E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	3.64E-01	2.70E-01	3.91E-01
551026	9/7/2021 - 9/13/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<3.46E-02	0.00E+00	3.46E-02
		Cs-137	<2.39E-02	0.00E+00	2.39E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	4.09E-01	2.47E-01	2.56E-01
551659	9/13/2021 - 9/20/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	4.02E-01	2.39E-01	2.80E-01
552291	9/20/2021 - 9/27/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<5.20E-01	0.00E+00	5.20E-01
552451	9/27/2021 - 10/4/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.75E-01	0.00E+00	1.75E-01
		K-40	<4.80E-01	0.00E+00	4.80E-01
552775	10/4/2021 - 10/11/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.87E-02	0.00E+00	2.87E-02
		Be-7	<2.34E-01	0.00E+00	2.34E-01
		K-40	7.80E-01	3.19E-01	3.05E-01
553248	10/11/2021 - 10/18/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	<3.98E-01	0.00E+00	3.98E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553850	10/18/2021 - 10/25/2021	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	6.87E-01	2.92E-01	2.69E-01
554281	10/25/2021 - 11/1/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.96E-01	0.00E+00	1.96E-01
		K-40	<5.43E-01	0.00E+00	5.43E-01
554592	11/1/2021 - 11/8/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<5.34E-01	0.00E+00	5.34E-01
555081	11/8/2021 - 11/15/2021	I-131	<3.23E-02	0.00E+00	3.23E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<4.60E-01	0.00E+00	4.60E-01
555947	11/15/2021 - 11/22/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<3.20E-02	0.00E+00	3.20E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	<5.15E-01	0.00E+00	5.15E-01
556743	11/22/2021 - 11/29/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	4.31E-01	2.06E-01	6.49E-02
557060	11/29/2021 - 12/6/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	6.11E-01	2.49E-01	6.63E-02
557484	12/6/2021 - 12/13/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	<5.10E-01	0.00E+00	5.10E-01
557959	12/13/2021 - 12/20/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	4.99E-01	2.74E-01	3.27E-01
558392	12/20/2021 - 12/27/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	2.24E-01	1.81E-01	2.32E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558608	12/27/2021 - 1/4/2022	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<1.34E-02	0.00E+00	1.34E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	2.50E-01	2.18E-01	3.23E-01

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536559	12/28/2020 - 1/5/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	4.08E-01	1.83E-01	2.28E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536765	1/5/2021 - 1/11/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	5.55E-01	2.06E-01	1.96E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537306	1/11/2021 - 1/19/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.08E-01	1.65E-01	1.76E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537669	1/19/2021 - 1/25/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-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	4.95E-01	2.11E-01	2.41E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538062	1/25/2021 - 2/1/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	4.04E-01	1.85E-01	2.14E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538309	2/1/2021 - 2/8/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	4.24E-01	1.72E-01	1.78E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538534	2/8/2021 - 2/15/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<9.54E-03	0.00E+00	9.54E-03
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	2.76E-01	1.74E-01	2.39E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538806	2/15/2021 - 2/22/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	4.18E-01	1.73E-01	1.87E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539047	2/22/2021 - 3/1/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539047	2/22/2021 - 3/1/2021	Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.53E-01	1.76E-01	1.49E-01
539258	3/1/2021 - 3/8/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	4.08E-01	1.55E-01	1.21E-01
540049	3/8/2021 - 3/15/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	6.01E-01	1.91E-01	1.31E-01
540709	3/15/2021 - 3/22/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<9.76E-02	0.00E+00	9.76E-02
		K-40	6.22E-01	1.88E-01	1.27E-01
541422	3/22/2021 - 3/29/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	3.77E-01	1.61E-01	1.54E-01
541937	3/29/2021 - 4/5/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.44E-01	1.45E-01	1.24E-01
542235	4/5/2021 - 4/12/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.15E-02	0.00E+00	1.15E-02
		Cs-137	<9.96E-03	0.00E+00	9.96E-03
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	5.09E-01	1.81E-01	1.64E-01
542861	4/12/2021 - 4/19/2021	I-131	<1.37E-02	0.00E+00	1.37E-02
		Cs-134	<1.12E-02	0.00E+00	1.12E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	4.58E-01	1.71E-01	1.60E-01
543249	4/19/2021 - 4/26/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	6.07E-01	1.97E-01	1.46E-01
544106	4/26/2021 - 5/3/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	<5.26E-01	0.00E+00	5.26E-01
544308	5/3/2021 - 5/10/2021	I-131	<2.85E-02	0.00E+00	2.85E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544308	5/3/2021 - 5/10/2021	Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	5.09E-01	2.70E-01	2.99E-01
544631	5/10/2021 - 5/17/2021	I-131	<2.98E-02	0.00E+00	2.98E-02
		Cs-134	<2.41E-02	0.00E+00	2.41E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<4.77E-01	0.00E+00	4.77E-01
545011	5/17/2021 - 5/24/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<3.18E-02	0.00E+00	3.18E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	6.89E-01	2.76E-01	7.18E-02
545495	5/24/2021 - 6/1/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	<5.05E-01	0.00E+00	5.05E-01
545793	6/1/2021 - 6/7/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<3.40E-02	0.00E+00	3.40E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	6.29E-01	3.61E-01	4.50E-01
546024	6/7/2021 - 6/14/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<2.59E-02	0.00E+00	2.59E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	<5.43E-01	0.00E+00	5.43E-01
546896	6/14/2021 - 6/21/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.39E-01	0.00E+00	5.39E-01
547186	6/21/2021 - 6/28/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	<5.96E-01	0.00E+00	5.96E-01
547470	6/28/2021 - 7/6/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	3.53E-01	1.79E-01	5.99E-02
547717	7/6/2021 - 7/12/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.95E-02	0.00E+00	2.95E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	4.68E-01	2.85E-01	3.57E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548098	7/12/2021 - 7/19/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<3.00E-02	0.00E+00	3.00E-02
		K-40	<5.86E-01	0.00E+00	5.86E-01
548518	7/19/2021 - 7/26/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	5.40E-01	2.67E-01	2.65E-01
548737	7/26/2021 - 8/2/2021	I-131	<3.37E-02	0.00E+00	3.37E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	7.29E-01	2.98E-01	2.41E-01
548969	8/2/2021 - 8/9/2021	I-131	<2.82E-02	0.00E+00	2.82E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<3.02E-02	0.00E+00	3.02E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.09E-01	0.00E+00	5.09E-01
549261	8/9/2021 - 8/16/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<4.14E-01	0.00E+00	4.14E-01
549759	8/16/2021 - 8/23/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<5.09E-01	0.00E+00	5.09E-01
550043	8/23/2021 - 8/30/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	5.20E-01	2.59E-01	2.51E-01
550665	8/30/2021 - 9/7/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	5.02E-01	2.33E-01	2.19E-01
551029	9/7/2021 - 9/13/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<3.04E-02	0.00E+00	3.04E-02
		Be-7	<2.20E-01	0.00E+00	2.20E-01
		K-40	5.99E-01	2.66E-01	7.73E-02
551662	9/13/2021 - 9/20/2021	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<4.40E-01	0.00E+00	4.40E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552294	9/20/2021 - 9/27/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
552454	9/27/2021 - 10/4/2021	I-131	<3.40E-02	0.00E+00	3.40E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	7.34E-01	2.98E-01	2.32E-01
552778	10/4/2021 - 10/11/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.79E-02	0.00E+00	2.79E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	5.76E-01	2.39E-01	6.50E-02
553251	10/11/2021 - 10/18/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	4.30E-01	2.81E-01	3.79E-01
553853	10/18/2021 - 10/25/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<2.71E-01	0.00E+00	2.71E-01
554284	10/25/2021 - 11/1/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.39E-01	0.00E+00	4.39E-01
554595	11/1/2021 - 11/8/2021	I-131	<3.38E-02	0.00E+00	3.38E-02
		Cs-134	<2.61E-02	0.00E+00	2.61E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	7.71E-01	2.88E-01	6.97E-02
555084	11/8/2021 - 11/15/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01
555950	11/15/2021 - 11/22/2021	I-131	<2.22E-02	0.00E+00	2.22E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<6.16E-01	0.00E+00	6.16E-01
556746	11/22/2021 - 11/29/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<2.24E-02	0.00E+00	2.24E-02
		Cs-137	<4.36E-03	0.00E+00	4.36E-03
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<2.91E-01	0.00E+00	2.91E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557063	11/29/2021 - 12/6/2021	I-131	<3.37E-02	0.00E+00	3.37E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<2.26E-02	0.00E+00	2.26E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	3.22E-01	2.11E-01	2.41E-01
557487	12/6/2021 - 12/13/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<3.31E-01	0.00E+00	3.31E-01
557962	12/13/2021 - 12/20/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	6.08E-01	2.67E-01	2.36E-01
558395	12/20/2021 - 12/27/2021	I-131	<3.45E-02	0.00E+00	3.45E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	6.22E-01	3.22E-01	4.01E-01
558611	12/27/2021 - 1/4/2022	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<3.95E-01	0.00E+00	3.95E-01

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536560	12/28/2020 - 1/5/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<9.45E-02	0.00E+00	9.45E-02
		K-40	3.64E-01	1.48E-01	1.52E-01
536766	1/5/2021 - 1/11/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	7.66E-01	2.15E-01	3.77E-02
537307	1/11/2021 - 1/19/2021	I-131	<1.42E-02	0.00E+00	1.42E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<9.34E-02	0.00E+00	9.34E-02
		K-40	4.57E-01	2.67E-01	3.00E-02
537670	1/19/2021 - 1/25/2021	I-131	<2.36E-02	0.00E+00	2.36E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	5.17E-01	2.01E-01	1.96E-01
538063	1/25/2021 - 2/1/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538063	1/25/2021 - 2/1/2021	Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	3.92E-01	1.85E-01	2.25E-01
538310	2/1/2021 - 2/8/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<9.53E-02	0.00E+00	9.53E-02
		K-40	5.41E-01	2.00E-01	2.11E-01
538535	2/8/2021 - 2/15/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	3.69E-01	1.67E-01	1.88E-01
538807	2/15/2021 - 2/22/2021	I-131	<1.35E-02	0.00E+00	1.35E-02
		Cs-134	<9.76E-03	0.00E+00	9.76E-03
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.97E-01	2.02E-01	2.37E-01
539048	2/22/2021 - 3/1/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	6.18E-01	2.27E-01	2.49E-01
539259	3/1/2021 - 3/8/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	2.31E-01	1.22E-01	1.22E-01
540050	3/8/2021 - 3/15/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<9.71E-02	0.00E+00	9.71E-02
		K-40	3.15E-01	1.73E-01	2.25E-01
540710	3/15/2021 - 3/22/2021	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	6.63E-01	1.85E-01	3.21E-02
541423	3/22/2021 - 3/29/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	3.32E-01	1.78E-01	2.22E-01
541938	3/29/2021 - 4/5/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	3.03E-01	1.77E-01	2.36E-01
542236	4/5/2021 - 4/12/2021	I-131	<1.75E-02	0.00E+00	1.75E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542236	4/5/2021 - 4/12/2021	Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	4.89E-01	2.24E-01	2.83E-01
542862	4/12/2021 - 4/19/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.03E-01	1.82E-01	2.21E-01
543250	4/19/2021 - 4/26/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	3.47E-01	1.91E-01	2.55E-01
544107	4/26/2021 - 5/3/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<3.09E-02	0.00E+00	3.09E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	<5.55E-01	0.00E+00	5.55E-01
544309	5/3/2021 - 5/10/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	3.68E-01	2.35E-01	2.88E-01
544632	5/10/2021 - 5/17/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<3.83E-01	0.00E+00	3.83E-01
545012	5/17/2021 - 5/24/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<3.19E-02	0.00E+00	3.19E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	<5.03E-01	0.00E+00	5.03E-01
545496	5/24/2021 - 6/1/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	<4.55E-01	0.00E+00	4.55E-01
545794	6/1/2021 - 6/7/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<3.22E-02	0.00E+00	3.22E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	<5.26E-01	0.00E+00	5.26E-01
546025	6/7/2021 - 6/14/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	5.29E-01	2.82E-01	3.21E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546897	6/14/2021 - 6/21/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	1.62E-01	1.89E-01	2.95E-01
547187	6/21/2021 - 6/28/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	4.56E-01	2.18E-01	6.87E-02
547471	6/28/2021 - 7/6/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<5.00E-01	0.00E+00	5.00E-01
547718	7/6/2021 - 7/12/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	2.95E-01	2.80E-01	4.24E-01
548099	7/12/2021 - 7/19/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<3.00E-02	0.00E+00	3.00E-02
		Cs-137	<2.24E-02	0.00E+00	2.24E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	3.65E-01	2.17E-01	2.16E-01
548519	7/19/2021 - 7/26/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	7.73E-01	3.07E-01	2.60E-01
548738	7/26/2021 - 8/2/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	3.86E-01	2.57E-01	3.35E-01
548970	8/2/2021 - 8/9/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<6.42E-01	0.00E+00	6.42E-01
549262	8/9/2021 - 8/16/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<3.00E-02	0.00E+00	3.00E-02
		Cs-137	<3.14E-02	0.00E+00	3.14E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	2.57E-01	1.64E-01	6.96E-02
549760	8/16/2021 - 8/23/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<3.50E-02	0.00E+00	3.50E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	4.32E-01	2.28E-01	2.03E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550044	8/23/2021 - 8/30/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	5.18E-01	2.46E-01	2.19E-01
550666	8/30/2021 - 9/7/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<4.26E-01	0.00E+00	4.26E-01
551030	9/7/2021 - 9/13/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<4.33E-01	0.00E+00	4.33E-01
551663	9/13/2021 - 9/20/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01
552295	9/20/2021 - 9/27/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<3.55E-01	0.00E+00	3.55E-01
552455	9/27/2021 - 10/4/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<2.14E-01	0.00E+00	2.14E-01
		K-40	4.89E-01	2.28E-01	6.97E-02
552779	10/4/2021 - 10/11/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<3.27E-02	0.00E+00	3.27E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	<5.16E-01	0.00E+00	5.16E-01
553252	10/11/2021 - 10/18/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.95E-02	0.00E+00	2.95E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<3.83E-01	0.00E+00	3.83E-01
553854	10/18/2021 - 10/25/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	2.21E-01	2.45E-01	3.86E-01
554285	10/25/2021 - 11/1/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<3.44E-01	0.00E+00	3.44E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 90 [INDICATOR - SSW @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554596	11/1/2021 - 11/8/2021	I-131	<3.07E-02	0.00E+00	3.07E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	<6.64E-01	0.00E+00	6.64E-01
555085	11/8/2021 - 11/15/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<4.55E-03	0.00E+00	4.55E-03
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<4.75E-01	0.00E+00	4.75E-01
555951	11/15/2021 - 11/22/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<4.14E-01	0.00E+00	4.14E-01
556747	11/22/2021 - 11/29/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.76E-02	0.00E+00	2.76E-02
		Cs-137	<2.21E-02	0.00E+00	2.21E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	4.22E-01	2.65E-01	3.37E-01
557064	11/29/2021 - 12/6/2021	I-131	<3.35E-02	0.00E+00	3.35E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<2.24E-02	0.00E+00	2.24E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	<6.12E-01	0.00E+00	6.12E-01
557488	12/6/2021 - 12/13/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	8.30E-01	3.11E-01	2.30E-01
557963	12/13/2021 - 12/20/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<5.23E-01	0.00E+00	5.23E-01
558396	12/20/2021 - 12/27/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.62E-02	0.00E+00	2.62E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<6.29E-01	0.00E+00	6.29E-01
558612	12/27/2021 - 1/4/2022	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	2.35E-01	1.57E-01	1.53E-01

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536561	12/28/2020 - 1/5/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536561	12/28/2020 - 1/5/2021	Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	3.41E-01	1.31E-01	1.02E-01
536767	1/5/2021 - 1/11/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.40E-02	0.00E+00	2.40E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	7.17E-01	2.09E-01	3.81E-02
537308	1/11/2021 - 1/19/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	3.20E-01	1.42E-01	1.49E-01
537671	1/19/2021 - 1/25/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	3.42E-01	1.92E-01	2.54E-01
538064	1/25/2021 - 2/1/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	3.86E-01	1.67E-01	1.41E-01
538311	2/1/2021 - 2/8/2021	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	6.49E-01	2.04E-01	1.48E-01
538536	2/8/2021 - 2/15/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	4.92E-01	1.91E-01	1.99E-01
538808	2/15/2021 - 2/22/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	2.93E-01	1.22E-01	3.31E-02
539049	2/22/2021 - 3/1/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<9.19E-03	0.00E+00	9.19E-03
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	2.68E-01	1.55E-01	1.99E-01
539260	3/1/2021 - 3/8/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<7.54E-03	0.00E+00	7.54E-03
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	3.86E-01	1.97E-01	2.52E-01
540051	3/8/2021 - 3/15/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<2.46E-02	0.00E+00	2.46E-02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540051	3/8/2021 - 3/15/2021	Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	8.43E-01	2.26E-01	1.33E-01
540711	3/15/2021 - 3/22/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<8.59E-02	0.00E+00	8.59E-02
		K-40	3.65E-01	1.57E-01	1.61E-01
541424	3/22/2021 - 3/29/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<9.21E-02	0.00E+00	9.21E-02
		K-40	4.51E-01	1.87E-01	2.02E-01
541939	3/29/2021 - 4/5/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	5.57E-01	2.07E-01	2.20E-01
542237	4/5/2021 - 4/12/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	4.59E-01	2.11E-01	2.66E-01
542863	4/12/2021 - 4/19/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.21E-02	0.00E+00	1.21E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	5.20E-01	1.73E-01	1.24E-01
543251	4/19/2021 - 4/26/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.76E-01	1.89E-01	1.84E-01
544108	4/26/2021 - 5/3/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	4.54E-01	2.37E-01	2.34E-01
544310	5/3/2021 - 5/10/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	5.14E-01	2.64E-01	2.88E-01
544633	5/10/2021 - 5/17/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<2.25E-02	0.00E+00	2.25E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.64E-01	2.35E-01	2.26E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545013	5/17/2021 - 5/24/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	5.27E-01	2.81E-01	3.21E-01
545497	5/24/2021 - 6/1/2021	I-131	<1.32E-02	0.00E+00	1.32E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<4.47E-01	0.00E+00	4.47E-01
545795	6/1/2021 - 6/7/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<3.13E-02	0.00E+00	3.13E-02
		Cs-137	<3.04E-02	0.00E+00	3.04E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	5.52E-01	2.83E-01	2.81E-01
546026	6/7/2021 - 6/14/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<2.39E-02	0.00E+00	2.39E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	3.11E-01	2.24E-01	2.97E-01
546898	6/14/2021 - 6/21/2021	I-131	<3.82E-02	0.00E+00	3.82E-02
		Cs-134	<3.00E-02	0.00E+00	3.00E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	<5.79E-01	0.00E+00	5.79E-01
547188	6/21/2021 - 6/28/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	5.19E-01	2.88E-01	3.52E-01
547472	6/28/2021 - 7/6/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<3.98E-03	0.00E+00	3.98E-03
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<3.85E-01	0.00E+00	3.85E-01
547719	7/6/2021 - 7/12/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.98E-02	0.00E+00	2.98E-02
		Be-7	<2.38E-01	0.00E+00	2.38E-01
		K-40	5.60E-01	3.25E-01	4.03E-01
548100	7/12/2021 - 7/19/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.37E-02	0.00E+00	2.37E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	5.23E-01	2.53E-01	2.29E-01
548520	7/19/2021 - 7/26/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.74E-01	0.00E+00	5.74E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548739	7/26/2021 - 8/2/2021	I-131	<3.40E-02	0.00E+00	3.40E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<5.27E-01	0.00E+00	5.27E-01
548971	8/2/2021 - 8/9/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<3.88E-01	0.00E+00	3.88E-01
549263	8/9/2021 - 8/16/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<2.84E-02	0.00E+00	2.84E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	4.53E-01	2.82E-01	3.59E-01
549761	8/16/2021 - 8/23/2021	I-131	<3.13E-02	0.00E+00	3.13E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	7.41E-01	2.81E-01	6.93E-02
550045	8/23/2021 - 8/30/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<4.01E-01	0.00E+00	4.01E-01
550667	8/30/2021 - 9/7/2021	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<4.22E-01	0.00E+00	4.22E-01
551031	9/7/2021 - 9/13/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<1.69E-02	0.00E+00	1.69E-02
		Cs-137	<2.98E-02	0.00E+00	2.98E-02
		Be-7	<2.36E-01	0.00E+00	2.36E-01
		K-40	<6.45E-01	0.00E+00	6.45E-01
551664	9/13/2021 - 9/20/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	4.26E-01	2.61E-01	3.22E-01
552296	9/20/2021 - 9/27/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<2.77E-02	0.00E+00	2.77E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	3.33E-01	2.25E-01	2.75E-01
552456	9/27/2021 - 10/4/2021	I-131	<3.31E-02	0.00E+00	3.31E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<5.65E-01	0.00E+00	5.65E-01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552780	10/4/2021 - 10/11/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.79E-01	0.00E+00	5.79E-01
553253	10/11/2021 - 10/18/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	3.99E-01	2.55E-01	3.15E-01
553855	10/18/2021 - 10/25/2021	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.83E-02	0.00E+00	2.83E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	4.18E-01	2.82E-01	3.85E-01
554286	10/25/2021 - 11/1/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<3.11E-02	0.00E+00	3.11E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<5.24E-01	0.00E+00	5.24E-01
554597	11/1/2021 - 11/8/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<2.78E-02	0.00E+00	2.78E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<2.29E-01	0.00E+00	2.29E-01
		K-40	6.12E-01	2.55E-01	6.91E-02
555086	11/8/2021 - 11/15/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	4.58E-01	2.61E-01	2.95E-01
555952	11/15/2021 - 11/22/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	3.80E-01	2.10E-01	1.99E-01
556748	11/22/2021 - 11/29/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.77E-02	0.00E+00	2.77E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	3.72E-01	2.37E-01	2.98E-01
557065	11/29/2021 - 12/6/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<3.56E-02	0.00E+00	3.56E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	4.93E-01	2.50E-01	2.42E-01
557489	12/6/2021 - 12/13/2021	I-131	<3.34E-02	0.00E+00	3.34E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<6.14E-01	0.00E+00	6.14E-01

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

Sample Point 91 [INDICATOR - ENE @ 1.6 miles]

Sample ID: 557964	Sample Dates: 12/13/2021 - 12/20/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	3.14E-01	2.90E-01	4.43E-01

Sample ID: 558397	Sample Dates: 12/20/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<4.98E-01	0.00E+00	4.98E-01

Sample ID: 558613	Sample Dates: 12/27/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<3.19E-02	0.00E+00	3.19E-02
		Cs-134	<2.44E-02	0.00E+00	2.44E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	<5.27E-01	0.00E+00	5.27E-01

Media Type: AQUATIC VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID: 548091	Sample Dates: 7/15/2021 - 7/15/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.12E+01	0.00E+00	2.12E+01
		Co-58	<2.07E+01	0.00E+00	2.07E+01
		Fe-59	<5.28E+01	0.00E+00	5.28E+01
		Co-60	<2.60E+01	0.00E+00	2.60E+01
		Zn-65	<5.88E+01	0.00E+00	5.88E+01
		Zr-95	<3.59E+01	0.00E+00	3.59E+01
		Nb-95	<2.37E+01	0.00E+00	2.37E+01
		I-131	<3.59E+01	0.00E+00	3.59E+01
		Cs-134	<2.68E+01	0.00E+00	2.68E+01
		Cs-137	<2.54E+01	0.00E+00	2.54E+01
		BaLa-140	<3.83E+01	0.00E+00	3.83E+01
		Be-7	2.53E+02	1.83E+02	2.80E+02
		K-40	4.41E+03	6.85E+02	2.19E+02

Sample Point 41 [INDICATOR - S @ 3.8 miles]

Sample ID: 548092	Sample Dates: 7/15/2021 - 7/15/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.27E+01	0.00E+00	2.27E+01
		Co-58	<2.09E+01	0.00E+00	2.09E+01
		Fe-59	<3.88E+01	0.00E+00	3.88E+01
		Co-60	<2.57E+01	0.00E+00	2.57E+01
		Zn-65	<7.15E+01	0.00E+00	7.15E+01
		Zr-95	<4.71E+01	0.00E+00	4.71E+01
		Nb-95	<2.53E+01	0.00E+00	2.53E+01
		I-131	<3.08E+01	0.00E+00	3.08E+01
		Cs-134	<3.06E+01	0.00E+00	3.06E+01
		Cs-137	<1.58E+01	0.00E+00	1.58E+01
		BaLa-140	<4.36E+01	0.00E+00	4.36E+01
		Be-7	<2.66E+02	0.00E+00	2.66E+02
		K-40	3.30E+03	6.03E+02	3.61E+02

Sample Point 61 [CONTROL - E @ 2.5 miles]

Sample ID: 548093	Sample Dates: 7/15/2021 - 7/15/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<1.44E+01	0.00E+00	1.44E+01
		Co-58	<1.41E+01	0.00E+00	1.41E+01
		Fe-59	<3.41E+01	0.00E+00	3.41E+01
		Co-60	<1.27E+01	0.00E+00	1.27E+01
		Zn-65	<3.42E+01	0.00E+00	3.42E+01
		Zr-95	<2.28E+01	0.00E+00	2.28E+01
		Nb-95	<1.64E+01	0.00E+00	1.64E+01
		I-131	<1.81E+01	0.00E+00	1.81E+01
		Cs-134	<1.57E+01	0.00E+00	1.57E+01

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Media Type: AQUATIC VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 61 [CONTROL - E @ 2.5 miles]

Sample ID:	548093	Sample Dates:	7/15/2021 - 7/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-137	<1.41E+01	0.00E+00	1.41E+01
				BaLa-140	<1.76E+01	0.00E+00	1.76E+01
				Be-7	3.34E+02	1.19E+02	1.58E+02
				K-40	5.75E+03	6.56E+02	2.72E+02

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

Sample Point 97 [CONTROL - NW @ 19.1 miles]

Sample ID:	537309	Sample Dates:	1/5/2021 - 1/5/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<8.84E+00	0.00E+00	8.84E+00
					Fe-59	<1.96E+01	0.00E+00	1.96E+01
					Co-60	<1.10E+01	0.00E+00	1.10E+01
					Zn-65	<2.10E+01	0.00E+00	2.10E+01
					Zr-95	<1.57E+01	0.00E+00	1.57E+01
					Nb-95	<9.43E+00	0.00E+00	9.43E+00
					I-131	<9.67E+00	0.00E+00	9.67E+00
					Cs-134	<1.09E+01	0.00E+00	1.09E+01
					Cs-137	<1.05E+01	0.00E+00	1.05E+01
					BaLa-140	<1.01E+01	0.00E+00	1.01E+01
					Be-7	<9.62E+01	0.00E+00	9.62E+01
					K-40	2.64E+03	3.39E+02	1.81E+02

Sample ID:	538537	Sample Dates:	2/1/2021 - 2/1/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<7.96E+00	0.00E+00	7.96E+00
					Fe-59	<1.49E+01	0.00E+00	1.49E+01
					Co-60	<9.08E+00	0.00E+00	9.08E+00
					Zn-65	<1.78E+01	0.00E+00	1.78E+01
					Zr-95	<1.43E+01	0.00E+00	1.43E+01
					Nb-95	<8.49E+00	0.00E+00	8.49E+00
					I-131	<6.76E+00	0.00E+00	6.76E+00
					Cs-134	<9.56E+00	0.00E+00	9.56E+00
					Cs-137	<7.51E+00	0.00E+00	7.51E+00
					BaLa-140	<7.69E+00	0.00E+00	7.69E+00
					Be-7	<6.33E+01	0.00E+00	6.33E+01
					K-40	2.72E+03	3.19E+02	1.17E+02

Sample ID:	540052	Sample Dates:	3/1/2021 - 3/1/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<1.02E+01	0.00E+00	1.02E+01
					Fe-59	<2.08E+01	0.00E+00	2.08E+01
					Co-60	<1.10E+01	0.00E+00	1.10E+01
					Zn-65	<2.23E+01	0.00E+00	2.23E+01
					Zr-95	<1.55E+01	0.00E+00	1.55E+01
					Nb-95	<1.19E+01	0.00E+00	1.19E+01
					I-131	<8.60E+00	0.00E+00	8.60E+00
					Cs-134	<1.11E+01	0.00E+00	1.11E+01
					Cs-137	<1.07E+01	0.00E+00	1.07E+01
					BaLa-140	<1.04E+01	0.00E+00	1.04E+01
					Be-7	<7.25E+01	0.00E+00	7.25E+01
					K-40	2.63E+03	3.31E+02	1.13E+02

Sample ID:	542864	Sample Dates:	4/5/2021 - 4/5/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<1.05E+01	0.00E+00	1.05E+01
					Fe-59	<2.07E+01	0.00E+00	2.07E+01
					Co-60	<1.02E+01	0.00E+00	1.02E+01
					Zn-65	<1.55E+01	0.00E+00	1.55E+01
					Zr-95	<1.61E+01	0.00E+00	1.61E+01
					Nb-95	<1.13E+01	0.00E+00	1.13E+01
					I-131	<9.86E+00	0.00E+00	9.86E+00
					Cs-134	<1.05E+01	0.00E+00	1.05E+01
					Cs-137	<9.91E+00	0.00E+00	9.91E+00
					BaLa-140	<1.17E+01	0.00E+00	1.17E+01
					Be-7	<6.99E+01	0.00E+00	6.99E+01
					K-40	3.85E+03	4.23E+02	1.39E+02

Sample ID:	544637	Sample Dates:	5/3/2021 - 5/3/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<7.37E+00	0.00E+00	7.37E+00
					Fe-59	<1.53E+01	0.00E+00	1.53E+01

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

Sample Point 97 [CONTROL - NW @ 19.1 miles]

Sample ID:	Sample Dates:	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
544637	5/3/2021 - 5/3/2021	MIXEDCROPS	Co-60	<8.86E+00	0.00E+00	8.86E+00
			Zn-65	<2.01E+01	0.00E+00	2.01E+01
			Zr-95	<1.34E+01	0.00E+00	1.34E+01
			Nb-95	<8.42E+00	0.00E+00	8.42E+00
			I-131	<6.62E+00	0.00E+00	6.62E+00
			Cs-134	<9.37E+00	0.00E+00	9.37E+00
			Cs-137	<9.63E+00	0.00E+00	9.63E+00
			BaLa-140	<9.80E+00	0.00E+00	9.80E+00
			Be-7	<5.57E+01	0.00E+00	5.57E+01
			K-40	3.15E+03	3.63E+02	1.36E+02
			546902	6/7/2021 - 6/7/2021	MIXEDCROPS	Co-58
Fe-59	<1.49E+01	0.00E+00				1.49E+01
Co-60	<9.72E+00	0.00E+00				9.72E+00
Zn-65	<1.86E+01	0.00E+00				1.86E+01
Zr-95	<1.50E+01	0.00E+00				1.50E+01
Nb-95	<7.42E+00	0.00E+00				7.42E+00
I-131	<9.36E+00	0.00E+00				9.36E+00
Cs-134	<1.01E+01	0.00E+00				1.01E+01
Cs-137	<8.69E+00	0.00E+00				8.69E+00
BaLa-140	<1.15E+01	0.00E+00				1.15E+01
Be-7	<6.85E+01	0.00E+00				6.85E+01
K-40	1.96E+03	2.61E+02	1.23E+02			
548104	7/6/2021 - 7/6/2021	MIXEDCROPS	Co-58	<6.91E+00	0.00E+00	6.91E+00
			Fe-59	<1.60E+01	0.00E+00	1.60E+01
			Co-60	<6.05E+00	0.00E+00	6.05E+00
			Zn-65	<2.27E+01	0.00E+00	2.27E+01
			Zr-95	<1.20E+01	0.00E+00	1.20E+01
			Nb-95	<8.93E+00	0.00E+00	8.93E+00
			I-131	<7.72E+00	0.00E+00	7.72E+00
			Cs-134	<7.64E+00	0.00E+00	7.64E+00
			Cs-137	<8.98E+00	0.00E+00	8.98E+00
			BaLa-140	<7.01E+00	0.00E+00	7.01E+00
			Be-7	<5.48E+01	0.00E+00	5.48E+01
K-40	2.52E+03	3.04E+02	1.30E+02			
549267	8/2/2021 - 8/2/2021	MIXEDCROPS	Co-58	<8.69E+00	0.00E+00	8.69E+00
			Fe-59	<1.57E+01	0.00E+00	1.57E+01
			Co-60	<6.57E+00	0.00E+00	6.57E+00
			Zn-65	<1.87E+01	0.00E+00	1.87E+01
			Zr-95	<1.43E+01	0.00E+00	1.43E+01
			Nb-95	<7.01E+00	0.00E+00	7.01E+00
			I-131	<7.04E+00	0.00E+00	7.04E+00
			Cs-134	<8.87E+00	0.00E+00	8.87E+00
			Cs-137	<7.35E+00	0.00E+00	7.35E+00
			BaLa-140	<7.00E+00	0.00E+00	7.00E+00
			Be-7	<6.46E+01	0.00E+00	6.46E+01
K-40	1.68E+03	2.27E+02	9.42E+01			
551668	9/7/2021 - 9/7/2021	MIXEDCROPS	Co-58	<7.32E+00	0.00E+00	7.32E+00
			Fe-59	<1.71E+01	0.00E+00	1.71E+01
			Co-60	<7.70E+00	0.00E+00	7.70E+00
			Zn-65	<1.50E+01	0.00E+00	1.50E+01
			Zr-95	<1.15E+01	0.00E+00	1.15E+01
			Nb-95	<8.80E+00	0.00E+00	8.80E+00
			I-131	<1.16E+01	0.00E+00	1.16E+01
			Cs-134	<8.21E+00	0.00E+00	8.21E+00
			Cs-137	<8.53E+00	0.00E+00	8.53E+00
			BaLa-140	<1.01E+01	0.00E+00	1.01E+01
			Be-7	<6.74E+01	0.00E+00	6.74E+01
K-40	1.79E+03	2.48E+02	1.17E+02			

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

Sample Point 97 [CONTROL - NW @ 19.1 miles]

Sample ID:	553257	Sample Dates:	10/4/2021 - 10/4/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<8.99E+00	0.00E+00	8.99E+00
					Fe-59	<1.69E+01	0.00E+00	1.69E+01
					Co-60	<7.42E+00	0.00E+00	7.42E+00
					Zn-65	<2.16E+01	0.00E+00	2.16E+01
					Zr-95	<1.47E+01	0.00E+00	1.47E+01
					Nb-95	<9.96E+00	0.00E+00	9.96E+00
					I-131	<9.10E+00	0.00E+00	9.10E+00
					Cs-134	<8.82E+00	0.00E+00	8.82E+00
					Cs-137	<9.47E+00	0.00E+00	9.47E+00
					BaLa-140	<7.01E+00	0.00E+00	7.01E+00
					Be-7	<6.28E+01	0.00E+00	6.28E+01
					K-40	3.27E+03	3.71E+02	1.23E+02

Sample ID:	555087	Sample Dates:	11/1/2021 - 11/1/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<5.45E+00	0.00E+00	5.45E+00
					Fe-59	<1.80E+01	0.00E+00	1.80E+01
					Co-60	<1.04E+01	0.00E+00	1.04E+01
					Zn-65	<1.87E+01	0.00E+00	1.87E+01
					Zr-95	<1.33E+01	0.00E+00	1.33E+01
					Nb-95	<7.48E+00	0.00E+00	7.48E+00
					I-131	<8.11E+00	0.00E+00	8.11E+00
					Cs-134	<6.93E+00	0.00E+00	6.93E+00
					Cs-137	<8.96E+00	0.00E+00	8.96E+00
					BaLa-140	<7.68E+00	0.00E+00	7.68E+00
					Be-7	<5.81E+01	0.00E+00	5.81E+01
					K-40	2.36E+03	2.92E+02	7.90E+01

Sample ID:	557965	Sample Dates:	12/6/2021 - 12/6/2021	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<9.88E+00	0.00E+00	9.88E+00
					Fe-59	<2.19E+01	0.00E+00	2.19E+01
					Co-60	<1.11E+01	0.00E+00	1.11E+01
					Zn-65	<2.90E+01	0.00E+00	2.90E+01
					Zr-95	<1.99E+01	0.00E+00	1.99E+01
					Nb-95	<1.26E+01	0.00E+00	1.26E+01
					I-131	<1.11E+01	0.00E+00	1.11E+01
					Cs-134	<1.38E+01	0.00E+00	1.38E+01
					Cs-137	<1.07E+01	0.00E+00	1.07E+01
					BaLa-140	<7.79E+00	0.00E+00	7.79E+00
					Be-7	<8.58E+01	0.00E+00	8.58E+01
					K-40	3.93E+03	4.60E+02	1.57E+02

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

Sample Point 46 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	537705	Sample Dates:	12/21/2020 - 1/11/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.19E+00	0.00E+00	3.19E+00
				Mn-54	<4.74E+00	0.00E+00	4.74E+00
				Co-58	<4.13E+00	0.00E+00	4.13E+00
				Fe-59	<9.66E+00	0.00E+00	9.66E+00
				Co-60	<2.48E+00	0.00E+00	2.48E+00
				Zn-65	<8.10E+00	0.00E+00	8.10E+00
				Zr-95	<7.72E+00	0.00E+00	7.72E+00
				Nb-95	<5.26E+00	0.00E+00	5.26E+00
				I-131	<1.16E+01	0.00E+00	1.16E+01
				Cs-134	<4.21E+00	0.00E+00	4.21E+00
				Cs-137	<4.46E+00	0.00E+00	4.46E+00
				BaLa-140	<8.88E+00	0.00E+00	8.88E+00
				Be-7	<3.63E+01	0.00E+00	3.63E+01
				K-40	5.70E+01	3.71E+01	4.93E+01

Sample ID:	538358	Sample Dates:	1/11/2021 - 1/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.19E+00	0.00E+00	3.19E+00
				Mn-54	<4.39E+00	0.00E+00	4.39E+00
				Co-58	<2.99E+00	0.00E+00	2.99E+00
				Fe-59	<8.96E+00	0.00E+00	8.96E+00
				Co-60	<3.32E+00	0.00E+00	3.32E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 46 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538358	1/11/2021 - 1/25/2021	Zn-65	<8.48E+00	0.00E+00	8.48E+00
		Zr-95	<9.20E+00	0.00E+00	9.20E+00
		Nb-95	<4.85E+00	0.00E+00	4.85E+00
		I-131	<9.12E+00	0.00E+00	9.12E+00
		Cs-134	<5.74E+00	0.00E+00	5.74E+00
		Cs-137	<4.70E+00	0.00E+00	4.70E+00
		BaLa-140	<8.95E+00	0.00E+00	8.95E+00
		Be-7	<4.07E+01	0.00E+00	4.07E+01
		K-40	1.00E+02	4.16E+01	3.55E+01
		538638	12/21/2020 - 1/25/2021	H3DW	<1.34E+02
539080	1/25/2021 - 2/22/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.11E+00	0.00E+00	3.11E+00
		Co-58	<3.00E+00	0.00E+00	3.00E+00
		Fe-59	<5.76E+00	0.00E+00	5.76E+00
		Co-60	<2.90E+00	0.00E+00	2.90E+00
		Zn-65	<6.32E+00	0.00E+00	6.32E+00
		Zr-95	<6.33E+00	0.00E+00	6.33E+00
		Nb-95	<3.52E+00	0.00E+00	3.52E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.22E+00	0.00E+00	3.22E+00
		Cs-137	<3.36E+00	0.00E+00	3.36E+00
		BaLa-140	<7.62E+00	0.00E+00	7.62E+00
		Be-7	<2.98E+01	0.00E+00	2.98E+01
		K-40	4.57E+01	3.28E+01	4.88E+01
541455	2/22/2021 - 3/22/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.36E+00	0.00E+00	3.36E+00
		Co-58	<3.48E+00	0.00E+00	3.48E+00
		Fe-59	<7.58E+00	0.00E+00	7.58E+00
		Co-60	<3.62E+00	0.00E+00	3.62E+00
		Zn-65	<7.04E+00	0.00E+00	7.04E+00
		Zr-95	<5.68E+00	0.00E+00	5.68E+00
		Nb-95	<5.31E+00	0.00E+00	5.31E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.73E+00	0.00E+00	3.73E+00
		Cs-137	<4.02E+00	0.00E+00	4.02E+00
		BaLa-140	<8.40E+00	0.00E+00	8.40E+00
		Be-7	<3.23E+01	0.00E+00	3.23E+01
		K-40	1.07E+02	3.65E+01	3.44E+01
539261	1/25/2021 - 4/19/2021	H3DW	<3.80E+01	0.00E+00	1.93E+02
543282	3/22/2021 - 4/19/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.16E+00	0.00E+00	3.16E+00
		Co-58	<3.99E+00	0.00E+00	3.99E+00
		Fe-59	<7.73E+00	0.00E+00	7.73E+00
		Co-60	<2.69E+00	0.00E+00	2.69E+00
		Zn-65	<7.20E+00	0.00E+00	7.20E+00
		Zr-95	<6.25E+00	0.00E+00	6.25E+00
		Nb-95	<4.36E+00	0.00E+00	4.36E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<2.96E+00	0.00E+00	2.96E+00
		Cs-137	<3.07E+00	0.00E+00	3.07E+00
		BaLa-140	<8.21E+00	0.00E+00	8.21E+00
		Be-7	<3.37E+01	0.00E+00	3.37E+01
		K-40	7.92E+01	3.46E+01	4.11E+01
545044	4/19/2021 - 5/17/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<2.71E+00	0.00E+00	2.71E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 46 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA		
545044	4/19/2021 - 5/17/2021	Co-58	<2.37E+00	0.00E+00	2.37E+00		
		Fe-59	<6.46E+00	0.00E+00	6.46E+00		
		Co-60	<3.61E+00	0.00E+00	3.61E+00		
		Zn-65	<6.97E+00	0.00E+00	6.97E+00		
		Zr-95	<7.04E+00	0.00E+00	7.04E+00		
		Nb-95	<3.97E+00	0.00E+00	3.97E+00		
		I-131	<1.18E+01	0.00E+00	1.18E+01		
		Cs-134	<2.87E+00	0.00E+00	2.87E+00		
		Cs-137	<3.27E+00	0.00E+00	3.27E+00		
		BaLa-140	<4.45E+00	0.00E+00	4.45E+00		
		Be-7	<2.93E+01	0.00E+00	2.93E+01		
		K-40	1.08E+02	4.31E+01	5.39E+01		
		546939	5/17/2021 - 6/14/2021	Beta	3.34E+00	4.35E+00	3.20E+00
				Mn-54	<3.56E+00	0.00E+00	3.56E+00
Co-58	<2.26E+00			0.00E+00	2.26E+00		
Fe-59	<7.69E+00			0.00E+00	7.69E+00		
Co-60	<2.70E+00			0.00E+00	2.70E+00		
Zn-65	<6.62E+00			0.00E+00	6.62E+00		
Zr-95	<6.33E+00			0.00E+00	6.33E+00		
Nb-95	<4.24E+00			0.00E+00	4.24E+00		
I-131	<1.15E+01			0.00E+00	1.15E+01		
Cs-134	<3.66E+00			0.00E+00	3.66E+00		
Cs-137	<2.83E+00			0.00E+00	2.83E+00		
BaLa-140	<9.09E+00			0.00E+00	9.09E+00		
Be-7	<3.15E+01			0.00E+00	3.15E+01		
K-40	6.25E+01			3.74E+01	5.39E+01		
545872	4/19/2021 - 7/12/2021	H3DW	<-8.0E+01	0.00E+00	1.86E+02		
548141	6/14/2021 - 7/12/2021	Beta	5.77E+00	4.45E+00	3.23E+00		
		Mn-54	<2.72E+00	0.00E+00	2.72E+00		
		Co-58	<3.46E+00	0.00E+00	3.46E+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	<6.16E+00	0.00E+00	6.16E+00		
		Zr-95	<5.37E+00	0.00E+00	5.37E+00		
		Nb-95	<4.11E+00	0.00E+00	4.11E+00		
		I-131	<1.12E+01	0.00E+00	1.12E+01		
		Cs-134	<2.77E+00	0.00E+00	2.77E+00		
		Cs-137	<3.43E+00	0.00E+00	3.43E+00		
		BaLa-140	<7.35E+00	0.00E+00	7.35E+00		
		Be-7	<3.41E+01	0.00E+00	3.41E+01		
		K-40	7.52E+01	4.01E+01	5.68E+01		
549304	7/12/2021 - 8/9/2021	Beta	<3.25E+00	0.00E+00	3.25E+00		
		Mn-54	<2.52E+00	0.00E+00	2.52E+00		
		Co-58	<3.34E+00	0.00E+00	3.34E+00		
		Fe-59	<7.10E+00	0.00E+00	7.10E+00		
		Co-60	<3.11E+00	0.00E+00	3.11E+00		
		Zn-65	<5.73E+00	0.00E+00	5.73E+00		
		Zr-95	<6.35E+00	0.00E+00	6.35E+00		
		Nb-95	<3.57E+00	0.00E+00	3.57E+00		
		I-131	<1.12E+01	0.00E+00	1.12E+01		
		Cs-134	<3.17E+00	0.00E+00	3.17E+00		
		Cs-137	<3.06E+00	0.00E+00	3.06E+00		
		BaLa-140	<6.51E+00	0.00E+00	6.51E+00		
		Be-7	<2.78E+01	0.00E+00	2.78E+01		
		K-40	1.03E+02	3.00E+01	2.14E+01		
551070	8/9/2021 - 9/7/2021	Beta	<3.30E+00	0.00E+00	3.30E+00		
		Mn-54	<2.67E+00	0.00E+00	2.67E+00		

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 46 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA		
551070	8/9/2021 - 9/7/2021	Co-58	<3.51E+00	0.00E+00	3.51E+00		
		Fe-59	<3.93E+00	0.00E+00	3.93E+00		
		Co-60	<2.59E+00	0.00E+00	2.59E+00		
		Zn-65	<5.89E+00	0.00E+00	5.89E+00		
		Zr-95	<6.64E+00	0.00E+00	6.64E+00		
		Nb-95	<3.67E+00	0.00E+00	3.67E+00		
		I-131	<1.08E+01	0.00E+00	1.08E+01		
		Cs-134	<2.75E+00	0.00E+00	2.75E+00		
		Cs-137	<3.18E+00	0.00E+00	3.18E+00		
		BaLa-140	<6.87E+00	0.00E+00	6.87E+00		
		Be-7	<2.68E+01	0.00E+00	2.68E+01		
		K-40	7.66E+01	3.38E+01	4.35E+01		
		550923	7/12/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3DW	<-4.7E+00	0.00E+00	1.78E+02
552839	9/7/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA		
		Beta	<3.23E+00	0.00E+00	3.23E+00		
		Mn-54	<3.62E+00	0.00E+00	3.62E+00		
		Co-58	<3.11E+00	0.00E+00	3.11E+00		
		Fe-59	<6.25E+00	0.00E+00	6.25E+00		
		Co-60	<1.95E+00	0.00E+00	1.95E+00		
		Zn-65	<6.41E+00	0.00E+00	6.41E+00		
		Zr-95	<6.82E+00	0.00E+00	6.82E+00		
		Nb-95	<5.26E+00	0.00E+00	5.26E+00		
		I-131	<1.20E+01	0.00E+00	1.20E+01		
		Cs-134	<1.63E+00	0.00E+00	1.63E+00		
		Cs-137	<3.08E+00	0.00E+00	3.08E+00		
		BaLa-140	<8.52E+00	0.00E+00	8.52E+00		
		Be-7	<3.74E+01	0.00E+00	3.74E+01		
K-40	<4.95E+01	0.00E+00	4.95E+01				
554633	10/4/2021 - 11/1/2021	Nuclide	Activity	2 Sigma Error	MDA		
		Beta	<3.25E+00	0.00E+00	3.25E+00		
		Mn-54	<3.15E+00	0.00E+00	3.15E+00		
		Co-58	<2.83E+00	0.00E+00	2.83E+00		
		Fe-59	<7.00E+00	0.00E+00	7.00E+00		
		Co-60	<3.67E+00	0.00E+00	3.67E+00		
		Zn-65	<6.03E+00	0.00E+00	6.03E+00		
		Zr-95	<6.50E+00	0.00E+00	6.50E+00		
		Nb-95	<3.84E+00	0.00E+00	3.84E+00		
		I-131	<1.15E+01	0.00E+00	1.15E+01		
		Cs-134	<3.31E+00	0.00E+00	3.31E+00		
		Cs-137	<3.71E+00	0.00E+00	3.71E+00		
		BaLa-140	<7.89E+00	0.00E+00	7.89E+00		
		Be-7	<2.68E+01	0.00E+00	2.68E+01		
K-40	4.68E+01	3.30E+01	4.95E+01				
557097	11/1/2021 - 11/29/2021	Nuclide	Activity	2 Sigma Error	MDA		
		Beta	3.34E+00	4.40E+00	3.23E+00		
		Mn-54	<2.68E+00	0.00E+00	2.68E+00		
		Co-58	<2.25E+00	0.00E+00	2.25E+00		
		Fe-59	<5.90E+00	0.00E+00	5.90E+00		
		Co-60	<2.39E+00	0.00E+00	2.39E+00		
		Zn-65	<6.07E+00	0.00E+00	6.07E+00		
		Zr-95	<5.10E+00	0.00E+00	5.10E+00		
		Nb-95	<3.31E+00	0.00E+00	3.31E+00		
		I-131	<1.04E+01	0.00E+00	1.04E+01		
		Cs-134	<2.73E+00	0.00E+00	2.73E+00		
		Cs-137	<2.10E+00	0.00E+00	2.10E+00		
		BaLa-140	<6.77E+00	0.00E+00	6.77E+00		
		Be-7	<2.51E+01	0.00E+00	2.51E+01		
K-40	1.01E+02	3.48E+01	4.33E+01				
557413	10/4/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA		
		H3DW	<-1.1E+02	0.00E+00	1.85E+02		

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 46 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558645	11/29/2021 - 12/27/2021	Beta	4.26E+00	4.43E+00	3.24E+00
		Mn-54	<2.62E+00	0.00E+00	2.62E+00
		Co-58	<2.87E+00	0.00E+00	2.87E+00
		Fe-59	<5.27E+00	0.00E+00	5.27E+00
		Co-60	<2.29E+00	0.00E+00	2.29E+00
		Zn-65	<5.05E+00	0.00E+00	5.05E+00
		Zr-95	<4.91E+00	0.00E+00	4.91E+00
		Nb-95	<3.12E+00	0.00E+00	3.12E+00
		I-131	<1.06E+01	0.00E+00	1.06E+01
		Cs-134	<2.76E+00	0.00E+00	2.76E+00
		Cs-137	<2.54E+00	0.00E+00	2.54E+00
		BaLa-140	<6.72E+00	0.00E+00	6.72E+00
		Be-7	<2.76E+01	0.00E+00	2.76E+01
		K-40	8.07E+01	2.81E+01	3.35E+01

Sample Point 51 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537706	12/21/2020 - 1/11/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.55E+00	0.00E+00	3.55E+00
		Co-58	<4.57E+00	0.00E+00	4.57E+00
		Fe-59	<7.71E+00	0.00E+00	7.71E+00
		Co-60	<5.35E+00	0.00E+00	5.35E+00
		Zn-65	<6.65E+00	0.00E+00	6.65E+00
		Zr-95	<8.81E+00	0.00E+00	8.81E+00
		Nb-95	<5.45E+00	0.00E+00	5.45E+00
		I-131	<9.96E+00	0.00E+00	9.96E+00
		Cs-134	<6.14E+00	0.00E+00	6.14E+00
		Cs-137	<4.46E+00	0.00E+00	4.46E+00
		BaLa-140	<8.78E+00	0.00E+00	8.78E+00
		Be-7	<3.05E+01	0.00E+00	3.05E+01
		K-40	<8.54E+01	0.00E+00	8.54E+01
		H3DW	2.10E+03	1.68E+02	1.89E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537343	1/11/2021 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<4.11E+00	0.00E+00	4.11E+00
		Co-58	<3.66E+00	0.00E+00	3.66E+00
		Fe-59	<8.33E+00	0.00E+00	8.33E+00
		Co-60	<3.09E+00	0.00E+00	3.09E+00
		Zn-65	<1.01E+01	0.00E+00	1.01E+01
		Zr-95	<7.62E+00	0.00E+00	7.62E+00
		Nb-95	<4.73E+00	0.00E+00	4.73E+00
		I-131	<9.80E+00	0.00E+00	9.80E+00
		Cs-134	<2.97E+00	0.00E+00	2.97E+00
		Cs-137	<3.86E+00	0.00E+00	3.86E+00
		BaLa-140	<7.52E+00	0.00E+00	7.52E+00
		Be-7	<4.38E+01	0.00E+00	4.38E+01
		K-40	9.46E+01	4.98E+01	6.53E+01
		H3DW	1.72E+03	1.53E+02	1.81E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539081	1/25/2021 - 2/22/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<2.89E+00	0.00E+00	2.89E+00
		Co-58	<2.64E+00	0.00E+00	2.64E+00
		Fe-59	<5.66E+00	0.00E+00	5.66E+00
		Co-60	<1.75E+00	0.00E+00	1.75E+00
		Zn-65	<5.41E+00	0.00E+00	5.41E+00
		Zr-95	<4.68E+00	0.00E+00	4.68E+00
		Nb-95	<3.71E+00	0.00E+00	3.71E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<2.75E+00	0.00E+00	2.75E+00
		Cs-137	<2.84E+00	0.00E+00	2.84E+00
		BaLa-140	<7.24E+00	0.00E+00	7.24E+00
		Be-7	<2.60E+01	0.00E+00	2.60E+01
		K-40	6.65E+01	2.82E+01	3.73E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 51 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539081	1/25/2021 - 2/22/2021	H3DW	2.08E+03	1.63E+02	1.85E+02
541456	2/22/2021 - 3/22/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.79E+00	0.00E+00	3.79E+00
		Co-58	<4.47E+00	0.00E+00	4.47E+00
		Fe-59	<8.53E+00	0.00E+00	8.53E+00
		Co-60	<3.65E+00	0.00E+00	3.65E+00
		Zn-65	<7.96E+00	0.00E+00	7.96E+00
		Zr-95	<6.67E+00	0.00E+00	6.67E+00
		Nb-95	<4.57E+00	0.00E+00	4.57E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.59E+00	0.00E+00	3.59E+00
		Cs-137	<4.99E+00	0.00E+00	4.99E+00
		BaLa-140	<6.66E+00	0.00E+00	6.66E+00
		Be-7	<3.07E+01	0.00E+00	3.07E+01
		K-40	6.06E+01	4.50E+01	6.82E+01
		H3DW	2.16E+03	1.65E+02	1.82E+02
543283	3/22/2021 - 4/19/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<2.92E+00	0.00E+00	2.92E+00
		Co-58	<2.83E+00	0.00E+00	2.83E+00
		Fe-59	<5.21E+00	0.00E+00	5.21E+00
		Co-60	<2.80E+00	0.00E+00	2.80E+00
		Zn-65	<7.74E+00	0.00E+00	7.74E+00
		Zr-95	<6.52E+00	0.00E+00	6.52E+00
		Nb-95	<4.30E+00	0.00E+00	4.30E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.59E+00	0.00E+00	3.59E+00
		Cs-137	<3.42E+00	0.00E+00	3.42E+00
		BaLa-140	<7.69E+00	0.00E+00	7.69E+00
		Be-7	<3.21E+01	0.00E+00	3.21E+01
		K-40	7.72E+01	3.10E+01	3.60E+01
		H3DW	2.34E+03	1.73E+02	1.92E+02
545045	4/19/2021 - 5/17/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<2.55E+00	0.00E+00	2.55E+00
		Co-58	<2.74E+00	0.00E+00	2.74E+00
		Fe-59	<7.18E+00	0.00E+00	7.18E+00
		Co-60	<3.42E+00	0.00E+00	3.42E+00
		Zn-65	<5.63E+00	0.00E+00	5.63E+00
		Zr-95	<6.33E+00	0.00E+00	6.33E+00
		Nb-95	<4.00E+00	0.00E+00	4.00E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.01E+00	0.00E+00	3.01E+00
		Cs-137	<3.11E+00	0.00E+00	3.11E+00
		BaLa-140	<8.44E+00	0.00E+00	8.44E+00
		Be-7	<3.01E+01	0.00E+00	3.01E+01
		K-40	9.26E+01	3.46E+01	4.15E+01
		H3DW	1.35E+03	1.45E+02	1.78E+02
546940	5/17/2021 - 6/14/2021	Beta	<3.20E+00	0.00E+00	3.20E+00
		Mn-54	<3.85E+00	0.00E+00	3.85E+00
		Co-58	<2.83E+00	0.00E+00	2.83E+00
		Fe-59	<1.01E+01	0.00E+00	1.01E+01
		Co-60	<2.62E+00	0.00E+00	2.62E+00
		Zn-65	<7.82E+00	0.00E+00	7.82E+00
		Zr-95	<8.42E+00	0.00E+00	8.42E+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	<3.33E+00	0.00E+00	3.33E+00
		Cs-137	<1.92E+00	0.00E+00	1.92E+00
		BaLa-140	<8.33E+00	0.00E+00	8.33E+00
		Be-7	<2.00E+01	0.00E+00	2.00E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 51 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546940	5/17/2021 - 6/14/2021	K-40	2.36E+01	2.57E+01	4.03E+01
		H3DW	1.08E+03	1.41E+02	1.88E+02
548142	6/14/2021 - 7/12/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.31E+00	0.00E+00	3.31E+00
		Co-58	<5.08E+00	0.00E+00	5.08E+00
		Fe-59	<6.15E+00	0.00E+00	6.15E+00
		Co-60	<5.32E+00	0.00E+00	5.32E+00
		Zn-65	<6.66E+00	0.00E+00	6.66E+00
		Zr-95	<7.47E+00	0.00E+00	7.47E+00
		Nb-95	<5.70E+00	0.00E+00	5.70E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<5.46E+00	0.00E+00	5.46E+00
		Cs-137	<2.64E+00	0.00E+00	2.64E+00
		BaLa-140	<8.54E+00	0.00E+00	8.54E+00
		Be-7	<4.21E+01	0.00E+00	4.21E+01
		K-40	<5.27E+01	0.00E+00	5.27E+01
		H3DW	1.38E+03	1.50E+02	1.90E+02
549305	7/12/2021 - 8/9/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.52E+00	0.00E+00	3.52E+00
		Co-58	<3.79E+00	0.00E+00	3.79E+00
		Fe-59	<6.86E+00	0.00E+00	6.86E+00
		Co-60	<3.64E+00	0.00E+00	3.64E+00
		Zn-65	<5.30E+00	0.00E+00	5.30E+00
		Zr-95	<6.11E+00	0.00E+00	6.11E+00
		Nb-95	<5.33E+00	0.00E+00	5.33E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<3.68E+00	0.00E+00	3.68E+00
		Cs-137	<3.22E+00	0.00E+00	3.22E+00
		BaLa-140	<7.86E+00	0.00E+00	7.86E+00
		Be-7	<2.94E+01	0.00E+00	2.94E+01
		K-40	5.17E+01	4.05E+01	6.25E+01
		H3DW	1.08E+03	1.40E+02	1.85E+02
551071	8/9/2021 - 9/7/2021	Beta	<3.30E+00	0.00E+00	3.30E+00
		Mn-54	<2.54E+00	0.00E+00	2.54E+00
		Co-58	<2.94E+00	0.00E+00	2.94E+00
		Fe-59	<6.75E+00	0.00E+00	6.75E+00
		Co-60	<2.64E+00	0.00E+00	2.64E+00
		Zn-65	<6.49E+00	0.00E+00	6.49E+00
		Zr-95	<5.74E+00	0.00E+00	5.74E+00
		Nb-95	<2.94E+00	0.00E+00	2.94E+00
		I-131	<1.29E+01	0.00E+00	1.29E+01
		Cs-134	<3.31E+00	0.00E+00	3.31E+00
		Cs-137	<3.05E+00	0.00E+00	3.05E+00
		BaLa-140	<7.53E+00	0.00E+00	7.53E+00
		Be-7	<3.19E+01	0.00E+00	3.19E+01
		K-40	1.01E+02	2.96E+01	1.82E+01
		H3DW	1.96E+03	1.61E+02	1.83E+02
552840	9/7/2021 - 10/4/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.54E+00	0.00E+00	3.54E+00
		Co-58	<3.46E+00	0.00E+00	3.46E+00
		Fe-59	<6.14E+00	0.00E+00	6.14E+00
		Co-60	<2.38E+00	0.00E+00	2.38E+00
		Zn-65	<6.12E+00	0.00E+00	6.12E+00
		Zr-95	<5.92E+00	0.00E+00	5.92E+00
		Nb-95	<3.87E+00	0.00E+00	3.87E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.71E+00	0.00E+00	3.71E+00
		Cs-137	<3.71E+00	0.00E+00	3.71E+00
		BaLa-140	<6.48E+00	0.00E+00	6.48E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 51 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552840	9/7/2021 - 10/4/2021	Be-7	<3.36E+01	0.00E+00	3.36E+01
		K-40	9.94E+01	3.84E+01	4.42E+01
		H3DW	1.45E+03	1.46E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554634	10/4/2021 - 11/1/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<2.90E+00	0.00E+00	2.90E+00
		Co-58	<2.78E+00	0.00E+00	2.78E+00
		Fe-59	<7.94E+00	0.00E+00	7.94E+00
		Co-60	<2.89E+00	0.00E+00	2.89E+00
		Zn-65	<7.10E+00	0.00E+00	7.10E+00
		Zr-95	<5.96E+00	0.00E+00	5.96E+00
		Nb-95	<3.12E+00	0.00E+00	3.12E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<3.08E+00	0.00E+00	3.08E+00
		Cs-137	<2.28E+00	0.00E+00	2.28E+00
		BaLa-140	<1.02E+01	0.00E+00	1.02E+01
		Be-7	<2.46E+01	0.00E+00	2.46E+01
		K-40	<5.58E+01	0.00E+00	5.58E+01
		H3DW	1.72E+03	1.54E+02	1.78E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557098	11/1/2021 - 11/29/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.26E+00	0.00E+00	3.26E+00
		Co-58	<3.62E+00	0.00E+00	3.62E+00
		Fe-59	<6.75E+00	0.00E+00	6.75E+00
		Co-60	<3.27E+00	0.00E+00	3.27E+00
		Zn-65	<5.51E+00	0.00E+00	5.51E+00
		Zr-95	<6.42E+00	0.00E+00	6.42E+00
		Nb-95	<4.51E+00	0.00E+00	4.51E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.78E+00	0.00E+00	3.78E+00
		Cs-137	<3.23E+00	0.00E+00	3.23E+00
		BaLa-140	<7.31E+00	0.00E+00	7.31E+00
		Be-7	<2.64E+01	0.00E+00	2.64E+01
		K-40	1.09E+02	3.91E+01	4.69E+01
		H3DW	1.92E+03	1.59E+02	1.80E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558646	11/29/2021 - 12/27/2021	Beta	<3.24E+00	0.00E+00	3.24E+00
		Mn-54	<3.72E+00	0.00E+00	3.72E+00
		Co-58	<3.61E+00	0.00E+00	3.61E+00
		Fe-59	<8.39E+00	0.00E+00	8.39E+00
		Co-60	<3.00E+00	0.00E+00	3.00E+00
		Zn-65	<6.11E+00	0.00E+00	6.11E+00
		Zr-95	<5.88E+00	0.00E+00	5.88E+00
		Nb-95	<3.73E+00	0.00E+00	3.73E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.70E+00	0.00E+00	3.70E+00
		Cs-137	<2.89E+00	0.00E+00	2.89E+00
		BaLa-140	<5.14E+00	0.00E+00	5.14E+00
		Be-7	<2.60E+01	0.00E+00	2.60E+01
		K-40	7.77E+01	3.05E+01	3.29E+01
		H3DW	2.49E+03	1.70E+02	1.74E+02

Sample Point 58 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537707	12/21/2020 - 1/11/2021	Beta	4.25E+00	4.36E+00	3.19E+00
		Mn-54	<3.85E+00	0.00E+00	3.85E+00
		Co-58	<3.72E+00	0.00E+00	3.72E+00
		Fe-59	<7.34E+00	0.00E+00	7.34E+00
		Co-60	<3.27E+00	0.00E+00	3.27E+00
		Zn-65	<7.52E+00	0.00E+00	7.52E+00
		Zr-95	<6.58E+00	0.00E+00	6.58E+00
		Nb-95	<4.77E+00	0.00E+00	4.77E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 58 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537707	12/21/2020 - 1/11/2021	Cs-134	<3.97E+00	0.00E+00	3.97E+00
		Cs-137	<4.37E+00	0.00E+00	4.37E+00
		BaLa-140	<9.30E+00	0.00E+00	9.30E+00
		Be-7	<3.80E+01	0.00E+00	3.80E+01
		K-40	6.55E+01	4.42E+01	6.49E+01
538359	1/11/2021 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<4.09E+00	0.00E+00	4.09E+00
		Co-58	<4.86E+00	0.00E+00	4.86E+00
		Fe-59	<7.71E+00	0.00E+00	7.71E+00
		Co-60	<3.98E+00	0.00E+00	3.98E+00
		Zn-65	<7.20E+00	0.00E+00	7.20E+00
		Zr-95	<9.70E+00	0.00E+00	9.70E+00
		Nb-95	<4.71E+00	0.00E+00	4.71E+00
		I-131	<8.85E+00	0.00E+00	8.85E+00
		Cs-134	<3.60E+00	0.00E+00	3.60E+00
		Cs-137	<4.39E+00	0.00E+00	4.39E+00
		BaLa-140	<4.61E+00	0.00E+00	4.61E+00
		Be-7	<2.68E+01	0.00E+00	2.68E+01
K-40	9.28E+01	4.48E+01	5.36E+01		
538639	12/21/2020 - 1/25/2021	H3DW	<8.00E+01	0.00E+00	1.74E+02
539082	1/25/2021 - 2/22/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.09E+00	0.00E+00	3.09E+00
		Co-58	<2.81E+00	0.00E+00	2.81E+00
		Fe-59	<7.47E+00	0.00E+00	7.47E+00
		Co-60	<2.53E+00	0.00E+00	2.53E+00
		Zn-65	<6.71E+00	0.00E+00	6.71E+00
		Zr-95	<6.88E+00	0.00E+00	6.88E+00
		Nb-95	<3.66E+00	0.00E+00	3.66E+00
		I-131	<1.01E+01	0.00E+00	1.01E+01
		Cs-134	<2.92E+00	0.00E+00	2.92E+00
		Cs-137	<3.31E+00	0.00E+00	3.31E+00
		BaLa-140	<7.08E+00	0.00E+00	7.08E+00
		Be-7	<2.85E+01	0.00E+00	2.85E+01
K-40	<5.63E+01	0.00E+00	5.63E+01		
541457	2/22/2021 - 3/22/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.09E+00	0.00E+00	3.09E+00
		Co-58	<3.69E+00	0.00E+00	3.69E+00
		Fe-59	<7.84E+00	0.00E+00	7.84E+00
		Co-60	<3.78E+00	0.00E+00	3.78E+00
		Zn-65	<6.98E+00	0.00E+00	6.98E+00
		Zr-95	<5.05E+00	0.00E+00	5.05E+00
		Nb-95	<4.42E+00	0.00E+00	4.42E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<3.68E+00	0.00E+00	3.68E+00
		Cs-137	<2.33E+00	0.00E+00	2.33E+00
		BaLa-140	<8.29E+00	0.00E+00	8.29E+00
		Be-7	<3.00E+01	0.00E+00	3.00E+01
K-40	6.53E+01	3.68E+01	5.09E+01		
539262	1/25/2021 - 4/19/2021	H3DW	<-8.8E+01	0.00E+00	1.93E+02
543284	3/22/2021 - 4/19/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<2.51E+00	0.00E+00	2.51E+00
		Co-58	<3.36E+00	0.00E+00	3.36E+00
		Fe-59	<6.35E+00	0.00E+00	6.35E+00
		Co-60	<2.92E+00	0.00E+00	2.92E+00
		Zn-65	<7.24E+00	0.00E+00	7.24E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 58 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543284	3/22/2021 - 4/19/2021	Zr-95	<5.13E+00	0.00E+00	5.13E+00
		Nb-95	<3.58E+00	0.00E+00	3.58E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<2.89E+00	0.00E+00	2.89E+00
		Cs-137	<2.94E+00	0.00E+00	2.94E+00
		BaLa-140	<5.48E+00	0.00E+00	5.48E+00
		Be-7	<3.40E+01	0.00E+00	3.40E+01
		K-40	6.90E+01	3.56E+01	4.96E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545046	4/19/2021 - 5/17/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<2.42E+00	0.00E+00	2.42E+00
		Co-58	<2.88E+00	0.00E+00	2.88E+00
		Fe-59	<5.40E+00	0.00E+00	5.40E+00
		Co-60	<2.59E+00	0.00E+00	2.59E+00
		Zn-65	<4.16E+00	0.00E+00	4.16E+00
		Zr-95	<5.10E+00	0.00E+00	5.10E+00
		Nb-95	<3.42E+00	0.00E+00	3.42E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<2.78E+00	0.00E+00	2.78E+00
		Cs-137	<3.51E+00	0.00E+00	3.51E+00
		BaLa-140	<5.75E+00	0.00E+00	5.75E+00
		Be-7	<2.47E+01	0.00E+00	2.47E+01
		K-40	4.11E+01	2.44E+01	3.32E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546941	5/17/2021 - 6/14/2021	Beta	3.23E+00	4.35E+00	3.20E+00
		Mn-54	<2.36E+00	0.00E+00	2.36E+00
		Co-58	<3.47E+00	0.00E+00	3.47E+00
		Fe-59	<5.73E+00	0.00E+00	5.73E+00
		Co-60	<3.28E+00	0.00E+00	3.28E+00
		Zn-65	<5.34E+00	0.00E+00	5.34E+00
		Zr-95	<5.60E+00	0.00E+00	5.60E+00
		Nb-95	<4.21E+00	0.00E+00	4.21E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.88E+00	0.00E+00	3.88E+00
		Cs-137	<3.60E+00	0.00E+00	3.60E+00
		BaLa-140	<8.39E+00	0.00E+00	8.39E+00
		Be-7	<2.22E+01	0.00E+00	2.22E+01
K-40	5.63E+01	2.90E+01	3.89E+01		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545873	4/19/2021 - 7/12/2021	H3DW	<4.12E+01	0.00E+00	1.92E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548143	6/14/2021 - 7/12/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.47E+00	0.00E+00	3.47E+00
		Co-58	<3.43E+00	0.00E+00	3.43E+00
		Fe-59	<7.74E+00	0.00E+00	7.74E+00
		Co-60	<2.27E+00	0.00E+00	2.27E+00
		Zn-65	<6.32E+00	0.00E+00	6.32E+00
		Zr-95	<5.42E+00	0.00E+00	5.42E+00
		Nb-95	<4.32E+00	0.00E+00	4.32E+00
		I-131	<1.00E+01	0.00E+00	1.00E+01
		Cs-134	<4.00E+00	0.00E+00	4.00E+00
		Cs-137	<3.55E+00	0.00E+00	3.55E+00
		BaLa-140	<9.13E+00	0.00E+00	9.13E+00
		Be-7	<2.81E+01	0.00E+00	2.81E+01
K-40	5.78E+01	3.38E+01	4.84E+01		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549306	7/12/2021 - 8/9/2021	Beta	4.62E+00	4.46E+00	3.25E+00
		Mn-54	<3.37E+00	0.00E+00	3.37E+00
		Co-58	<2.59E+00	0.00E+00	2.59E+00
		Fe-59	<6.17E+00	0.00E+00	6.17E+00
		Co-60	<2.98E+00	0.00E+00	2.98E+00
		Zn-65	<7.15E+00	0.00E+00	7.15E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 58 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549306	7/12/2021 - 8/9/2021	Zr-95	<5.56E+00	0.00E+00	5.56E+00
		Nb-95	<3.93E+00	0.00E+00	3.93E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.74E+00	0.00E+00	3.74E+00
		Cs-137	<2.66E+00	0.00E+00	2.66E+00
		BaLa-140	<8.66E+00	0.00E+00	8.66E+00
		Be-7	<2.67E+01	0.00E+00	2.67E+01
		K-40	7.44E+01	3.00E+01	3.42E+01
551072	8/9/2021 - 9/7/2021	Beta	<3.30E+00	0.00E+00	3.30E+00
		Mn-54	<2.75E+00	0.00E+00	2.75E+00
		Co-58	<2.54E+00	0.00E+00	2.54E+00
		Fe-59	<5.42E+00	0.00E+00	5.42E+00
		Co-60	<3.02E+00	0.00E+00	3.02E+00
		Zn-65	<5.83E+00	0.00E+00	5.83E+00
		Zr-95	<5.92E+00	0.00E+00	5.92E+00
		Nb-95	<3.95E+00	0.00E+00	3.95E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<3.05E+00	0.00E+00	3.05E+00
		Cs-137	<2.10E+00	0.00E+00	2.10E+00
		BaLa-140	<8.17E+00	0.00E+00	8.17E+00
		Be-7	<2.53E+01	0.00E+00	2.53E+01
		K-40	4.49E+01	2.14E+01	2.31E+01
550924	7/12/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3DW	<-4.0E+01	0.00E+00	1.78E+02
552841	9/7/2021 - 10/4/2021	Beta	4.15E+00	4.41E+00	3.23E+00
		Mn-54	<2.62E+00	0.00E+00	2.62E+00
		Co-58	<4.51E+00	0.00E+00	4.51E+00
		Fe-59	<7.33E+00	0.00E+00	7.33E+00
		Co-60	<3.52E+00	0.00E+00	3.52E+00
		Zn-65	<6.88E+00	0.00E+00	6.88E+00
		Zr-95	<4.39E+00	0.00E+00	4.39E+00
		Nb-95	<3.46E+00	0.00E+00	3.46E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<3.28E+00	0.00E+00	3.28E+00
		Cs-137	<2.72E+00	0.00E+00	2.72E+00
		BaLa-140	<9.47E+00	0.00E+00	9.47E+00
		Be-7	<3.67E+01	0.00E+00	3.67E+01
		K-40	8.57E+01	4.31E+01	5.78E+01
554635	10/4/2021 - 11/1/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<2.67E+00	0.00E+00	2.67E+00
		Co-58	<2.10E+00	0.00E+00	2.10E+00
		Fe-59	<7.87E+00	0.00E+00	7.87E+00
		Co-60	<2.65E+00	0.00E+00	2.65E+00
		Zn-65	<6.41E+00	0.00E+00	6.41E+00
		Zr-95	<5.40E+00	0.00E+00	5.40E+00
		Nb-95	<2.90E+00	0.00E+00	2.90E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<2.81E+00	0.00E+00	2.81E+00
		Cs-137	<2.84E+00	0.00E+00	2.84E+00
		BaLa-140	<5.82E+00	0.00E+00	5.82E+00
		Be-7	<2.81E+01	0.00E+00	2.81E+01
		K-40	6.62E+01	3.47E+01	4.97E+01
557099	11/1/2021 - 11/29/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	5.79E+00	4.45E+00	3.23E+00
		Mn-54	<2.61E+00	0.00E+00	2.61E+00
		Co-58	<3.72E+00	0.00E+00	3.72E+00
		Fe-59	<5.86E+00	0.00E+00	5.86E+00
		Co-60	<3.16E+00	0.00E+00	3.16E+00
		Zn-65	<8.69E+00	0.00E+00	8.69E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 58 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557099	11/1/2021 - 11/29/2021	Zr-95	<7.10E+00	0.00E+00	7.10E+00
		Nb-95	<4.81E+00	0.00E+00	4.81E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<4.09E+00	0.00E+00	4.09E+00
		Cs-137	<3.65E+00	0.00E+00	3.65E+00
		BaLa-140	<7.06E+00	0.00E+00	7.06E+00
		Be-7	<3.60E+01	0.00E+00	3.60E+01
		K-40	6.21E+01	3.64E+01	5.18E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557414	10/4/2021 - 12/27/2021	H3DW	<-1.0E+02	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558647	11/29/2021 - 12/27/2021	Beta	<3.24E+00	0.00E+00	3.24E+00
		Mn-54	<3.54E+00	0.00E+00	3.54E+00
		Co-58	<2.79E+00	0.00E+00	2.79E+00
		Fe-59	<7.54E+00	0.00E+00	7.54E+00
		Co-60	<3.14E+00	0.00E+00	3.14E+00
		Zn-65	<6.13E+00	0.00E+00	6.13E+00
		Zr-95	<6.46E+00	0.00E+00	6.46E+00
		Nb-95	<3.97E+00	0.00E+00	3.97E+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	<3.26E+00	0.00E+00	3.26E+00
		BaLa-140	<6.99E+00	0.00E+00	6.99E+00
		Be-7	<2.95E+01	0.00E+00	2.95E+01
		K-40	1.03E+02	3.55E+01	3.64E+01

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

Sample Point 44 [INDICATOR - -- @ 0 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542142	4/12/2021 - 4/12/2021	FREESWIM	Mn-54	<5.83E+01	0.00E+00	5.83E+01
			Co-58	<6.71E+01	0.00E+00	6.71E+01
			Fe-59	<1.18E+02	0.00E+00	1.18E+02
			Co-60	<6.79E+01	0.00E+00	6.79E+01
			Zn-65	<1.37E+02	0.00E+00	1.37E+02
			Nb-95	<4.38E+01	0.00E+00	4.38E+01
			I-131	<8.01E+01	0.00E+00	8.01E+01
			Cs-134	<6.89E+01	0.00E+00	6.89E+01
			Cs-137	<6.28E+01	0.00E+00	6.28E+01
			Be-7	<4.70E+02	0.00E+00	4.70E+02
			K-40	5.20E+03	1.16E+03	6.71E+02
			Ag-110M	<7.41E+01	0.00E+00	7.41E+01
			Sb-122	<1.59E+02	0.00E+00	1.59E+02
			Sb-125	<1.52E+02	0.00E+00	1.52E+02

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542143	4/12/2021 - 4/12/2021	FREESWIM	Mn-54	<4.01E+01	0.00E+00	4.01E+01
			Co-58	<4.22E+01	0.00E+00	4.22E+01
			Fe-59	<4.77E+01	0.00E+00	4.77E+01
			Co-60	<4.10E+01	0.00E+00	4.10E+01
			Zn-65	<9.51E+01	0.00E+00	9.51E+01
			Nb-95	<4.50E+01	0.00E+00	4.50E+01
			I-131	<4.69E+01	0.00E+00	4.69E+01
			Cs-134	<4.40E+01	0.00E+00	4.40E+01
			Cs-137	<3.93E+01	0.00E+00	3.93E+01
			Be-7	<2.71E+02	0.00E+00	2.71E+02
			K-40	3.92E+03	7.91E+02	6.81E+02
			Ag-110M	<3.90E+01	0.00E+00	3.90E+01
			Sb-122	<9.45E+01	0.00E+00	9.45E+01
			Sb-125	<1.05E+02	0.00E+00	1.05E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
542144	4/12/2021 - 4/12/2021	BOTMFEEDER	Mn-54	<6.46E+01	0.00E+00	6.46E+01
			Co-58	<6.19E+01	0.00E+00	6.19E+01
			Fe-59	<1.15E+02	0.00E+00	1.15E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 44 [INDICATOR - -- @ 0 miles]

Sample ID:	542144	Sample Dates:	4/12/2021 - 4/12/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Co-60	<7.17E+01	0.00E+00	7.17E+01
					Zn-65	<7.11E+01	0.00E+00	7.11E+01
					Nb-95	<6.10E+01	0.00E+00	6.10E+01
					I-131	<6.87E+01	0.00E+00	6.87E+01
					Cs-134	<6.91E+01	0.00E+00	6.91E+01
					Cs-137	<8.33E+01	0.00E+00	8.33E+01
					Be-7	<4.05E+02	0.00E+00	4.05E+02
					K-40	4.75E+03	1.09E+03	1.48E+02
					Ag-110M	<6.17E+01	0.00E+00	6.17E+01
					Sb-122	<1.19E+02	0.00E+00	1.19E+02
					Sb-125	<1.76E+02	0.00E+00	1.76E+02

Sample ID:	552689	Sample Dates:	10/11/2021 - 10/11/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<4.65E+01	0.00E+00	4.65E+01
					Co-58	<4.90E+01	0.00E+00	4.90E+01
					Fe-59	<8.45E+01	0.00E+00	8.45E+01
					Co-60	<5.89E+01	0.00E+00	5.89E+01
					Zn-65	<1.24E+02	0.00E+00	1.24E+02
					Nb-95	<6.03E+01	0.00E+00	6.03E+01
					I-131	<5.14E+01	0.00E+00	5.14E+01
					Cs-134	<5.52E+01	0.00E+00	5.52E+01
					Cs-137	<5.65E+01	0.00E+00	5.65E+01
					Be-7	<4.25E+02	0.00E+00	4.25E+02
					K-40	4.49E+03	1.05E+03	7.83E+02
					Ag-110M	<5.04E+01	0.00E+00	5.04E+01
					Sb-122	<1.13E+02	0.00E+00	1.13E+02
					Sb-125	<1.11E+02	0.00E+00	1.11E+02

Sample ID:	552690	Sample Dates:	10/11/2021 - 10/11/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<5.61E+01	0.00E+00	5.61E+01
					Co-58	<5.95E+01	0.00E+00	5.95E+01
					Fe-59	<9.23E+01	0.00E+00	9.23E+01
					Co-60	<5.47E+01	0.00E+00	5.47E+01
					Zn-65	<9.55E+01	0.00E+00	9.55E+01
					Nb-95	<4.19E+01	0.00E+00	4.19E+01
					I-131	<5.16E+01	0.00E+00	5.16E+01
					Cs-134	<5.13E+01	0.00E+00	5.13E+01
					Cs-137	<4.43E+01	0.00E+00	4.43E+01
					Be-7	<3.63E+02	0.00E+00	3.63E+02
					K-40	3.32E+03	8.87E+02	7.72E+02
					Ag-110M	<3.51E+01	0.00E+00	3.51E+01
					Sb-122	<9.42E+01	0.00E+00	9.42E+01
					Sb-125	<1.22E+02	0.00E+00	1.22E+02

Sample ID:	552691	Sample Dates:	10/11/2021 - 10/11/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<7.11E+01	0.00E+00	7.11E+01
					Co-58	<5.99E+01	0.00E+00	5.99E+01
					Fe-59	<1.59E+02	0.00E+00	1.59E+02
					Co-60	<5.71E+01	0.00E+00	5.71E+01
					Zn-65	<1.83E+02	0.00E+00	1.83E+02
					Nb-95	<7.40E+01	0.00E+00	7.40E+01
					I-131	<7.23E+01	0.00E+00	7.23E+01
					Cs-134	<7.41E+01	0.00E+00	7.41E+01
					Cs-137	<6.74E+01	0.00E+00	6.74E+01
					Be-7	<4.92E+02	0.00E+00	4.92E+02
					K-40	4.20E+03	1.06E+03	7.29E+02
					Ag-110M	<5.52E+01	0.00E+00	5.52E+01
					Sb-122	<1.07E+02	0.00E+00	1.07E+02
					Sb-125	<1.61E+02	0.00E+00	1.61E+02

Sample Point 45 [CONTROL - -- @ 0 miles]

Sample ID:	542145	Sample Dates:	4/12/2021 - 4/12/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<6.17E+01	0.00E+00	6.17E+01
					Co-58	<1.01E+02	0.00E+00	1.01E+02
					Fe-59	<1.64E+02	0.00E+00	1.64E+02
					Co-60	<9.49E+01	0.00E+00	9.49E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 45 [CONTROL - -- @ 0 miles]

Sample ID:	Sample Dates:	Location:	Nuclide	Activity	2 Sigma Error	MDA			
542145	4/12/2021 - 4/12/2021	FREESWIM	Zn-65	<2.03E+02	0.00E+00	2.03E+02			
			Nb-95	<7.65E+01	0.00E+00	7.65E+01			
			I-131	<9.54E+01	0.00E+00	9.54E+01			
			Cs-134	<9.16E+01	0.00E+00	9.16E+01			
			Cs-137	<6.61E+01	0.00E+00	6.61E+01			
			Be-7	<6.57E+02	0.00E+00	6.57E+02			
			K-40	4.82E+03	1.44E+03	1.40E+03			
			Ag-110M	<8.17E+01	0.00E+00	8.17E+01			
			Sb-122	<2.22E+02	0.00E+00	2.22E+02			
			Sb-125	<1.77E+02	0.00E+00	1.77E+02			
			542146	4/12/2021 - 4/12/2021	FREESWIM	Mn-54	<3.87E+01	0.00E+00	3.87E+01
						Co-58	<6.56E+01	0.00E+00	6.56E+01
Fe-59	<5.99E+01	0.00E+00				5.99E+01			
Co-60	<6.06E+01	0.00E+00				6.06E+01			
Zn-65	<1.26E+02	0.00E+00				1.26E+02			
Nb-95	<6.20E+01	0.00E+00				6.20E+01			
I-131	<6.80E+01	0.00E+00				6.80E+01			
Cs-134	<7.33E+01	0.00E+00				7.33E+01			
Cs-137	<6.14E+01	0.00E+00				6.14E+01			
Be-7	<4.72E+02	0.00E+00				4.72E+02			
K-40	3.90E+03	9.92E+02				6.61E+02			
Ag-110M	<5.92E+01	0.00E+00				5.92E+01			
Sb-122	<1.66E+02	0.00E+00				1.66E+02			
Sb-125	<1.34E+02	0.00E+00				1.34E+02			
542147	4/12/2021 - 4/12/2021	BOTMFEEDER	Mn-54	<6.78E+01	0.00E+00	6.78E+01			
			Co-58	<6.53E+01	0.00E+00	6.53E+01			
			Fe-59	<1.16E+02	0.00E+00	1.16E+02			
			Co-60	<6.61E+01	0.00E+00	6.61E+01			
			Zn-65	<1.27E+02	0.00E+00	1.27E+02			
			Nb-95	<6.44E+01	0.00E+00	6.44E+01			
			I-131	<7.32E+01	0.00E+00	7.32E+01			
			Cs-134	<8.24E+01	0.00E+00	8.24E+01			
			Cs-137	<6.06E+01	0.00E+00	6.06E+01			
			Be-7	<3.62E+02	0.00E+00	3.62E+02			
			K-40	3.53E+03	1.02E+03	8.63E+02			
			Ag-110M	<6.87E+01	0.00E+00	6.87E+01			
			Sb-122	<1.98E+02	0.00E+00	1.98E+02			
			Sb-125	<1.81E+02	0.00E+00	1.81E+02			
552692	10/11/2021 - 10/11/2021	FREESWIM	Mn-54	<6.46E+01	0.00E+00	6.46E+01			
			Co-58	<6.45E+01	0.00E+00	6.45E+01			
			Fe-59	<1.44E+02	0.00E+00	1.44E+02			
			Co-60	<7.26E+01	0.00E+00	7.26E+01			
			Zn-65	<1.50E+02	0.00E+00	1.50E+02			
			Nb-95	<6.64E+01	0.00E+00	6.64E+01			
			I-131	<7.65E+01	0.00E+00	7.65E+01			
			Cs-134	<6.35E+01	0.00E+00	6.35E+01			
			Cs-137	<7.96E+01	0.00E+00	7.96E+01			
			Be-7	<5.93E+02	0.00E+00	5.93E+02			
			K-40	5.12E+03	1.19E+03	1.63E+02			
			Ag-110M	<6.56E+01	0.00E+00	6.56E+01			
			Sb-122	<1.26E+02	0.00E+00	1.26E+02			
			Sb-125	<1.72E+02	0.00E+00	1.72E+02			
552693	10/11/2021 - 10/11/2021	FREESWIM	Mn-54	<6.46E+01	0.00E+00	6.46E+01			
			Co-58	<4.88E+01	0.00E+00	4.88E+01			
			Fe-59	<1.44E+02	0.00E+00	1.44E+02			
			Co-60	<4.20E+01	0.00E+00	4.20E+01			
			Zn-65	<1.09E+02	0.00E+00	1.09E+02			
			Nb-95	<7.18E+01	0.00E+00	7.18E+01			
			I-131	<6.22E+01	0.00E+00	6.22E+01			

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

Sample Point 45 [CONTROL - -- @ 0 miles]

Sample ID:	552693	Sample Dates:	10/11/2021 - 10/11/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Cs-134	<6.01E+01	0.00E+00	6.01E+01
					Cs-137	<5.24E+01	0.00E+00	5.24E+01
					Be-7	<4.37E+02	0.00E+00	4.37E+02
					K-40	3.30E+03	9.89E+02	8.09E+02
					Ag-110M	<4.67E+01	0.00E+00	4.67E+01
					Sb-122	<1.39E+02	0.00E+00	1.39E+02
					Sb-125	<1.51E+02	0.00E+00	1.51E+02

Sample ID:	552694	Sample Dates:	10/11/2021 - 10/11/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<8.95E+01	0.00E+00	8.95E+01
					Co-58	<8.61E+01	0.00E+00	8.61E+01
					Fe-59	<2.06E+02	0.00E+00	2.06E+02
					Co-60	<7.13E+01	0.00E+00	7.13E+01
					Zn-65	<1.76E+02	0.00E+00	1.76E+02
					Nb-95	<6.53E+01	0.00E+00	6.53E+01
					I-131	<7.79E+01	0.00E+00	7.79E+01
					Cs-134	<1.01E+02	0.00E+00	1.01E+02
					Cs-137	<8.16E+01	0.00E+00	8.16E+01
					Be-7	<4.88E+02	0.00E+00	4.88E+02
					K-40	5.08E+03	1.28E+03	7.46E+02
					Ag-110M	<6.62E+01	0.00E+00	6.62E+01
					Sb-122	<1.57E+02	0.00E+00	1.57E+02
					Sb-125	<1.70E+02	0.00E+00	1.70E+02

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

Sample Point 57 [INDICATOR - SSW @ 0.4 miles]

Sample ID:	538246	Sample Dates:	2/22/2021 - 2/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<6.34E+00	0.00E+00	6.34E+00
				Co-58	<5.14E+00	0.00E+00	5.14E+00
				Fe-59	<1.48E+01	0.00E+00	1.48E+01
				Co-60	<6.30E+00	0.00E+00	6.30E+00
				Zn-65	<1.55E+01	0.00E+00	1.55E+01
				Zr-95	<1.09E+01	0.00E+00	1.09E+01
				Nb-95	<7.27E+00	0.00E+00	7.27E+00
				I-131	<8.43E+00	0.00E+00	8.43E+00
				Cs-134	<6.26E+00	0.00E+00	6.26E+00
				Cs-137	<6.31E+00	0.00E+00	6.31E+00
				BaLa-140	<8.85E+00	0.00E+00	8.85E+00
				Be-7	<4.46E+01	0.00E+00	4.46E+01
				K-40	1.66E+02	7.23E+01	8.97E+01
				H3GW	<4.3E+01	0.00E+00	1.85E+02

Sample ID:	544221	Sample Dates:	5/24/2021 - 5/24/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.95E+00	0.00E+00	5.95E+00
				Co-58	<6.61E+00	0.00E+00	6.61E+00
				Fe-59	<1.05E+01	0.00E+00	1.05E+01
				Co-60	<5.51E+00	0.00E+00	5.51E+00
				Zn-65	<1.49E+01	0.00E+00	1.49E+01
				Zr-95	<9.64E+00	0.00E+00	9.64E+00
				Nb-95	<7.81E+00	0.00E+00	7.81E+00
				I-131	<6.00E+00	0.00E+00	6.00E+00
				Cs-134	<7.65E+00	0.00E+00	7.65E+00
				Cs-137	<6.66E+00	0.00E+00	6.66E+00
				BaLa-140	<9.96E+00	0.00E+00	9.96E+00
				Be-7	<5.00E+01	0.00E+00	5.00E+01
				K-40	1.50E+02	5.84E+01	5.63E+01
				H3GW	1.83E+02	1.08E+02	1.76E+02

Sample ID:	548879	Sample Dates:	8/16/2021 - 8/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.25E+00	0.00E+00	5.25E+00
				Co-58	<5.65E+00	0.00E+00	5.65E+00
				Fe-59	<1.01E+01	0.00E+00	1.01E+01
				Co-60	<3.93E+00	0.00E+00	3.93E+00
				Zn-65	<1.06E+01	0.00E+00	1.06E+01
				Zr-95	<1.02E+01	0.00E+00	1.02E+01

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

Sample Point 57 [INDICATOR - SSW @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548879	8/16/2021 - 8/16/2021	Nb-95	<5.53E+00	0.00E+00	5.53E+00
		I-131	<9.45E+00	0.00E+00	9.45E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<6.05E+00	0.00E+00	6.05E+00
		BaLa-140	<9.46E+00	0.00E+00	9.46E+00
		Be-7	<4.54E+01	0.00E+00	4.54E+01
		K-40	1.24E+02	5.84E+01	6.90E+01
		H3GW	<1.92E+01	0.00E+00	1.92E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554537	11/15/2021 - 11/15/2021	Mn-54	<7.26E+00	0.00E+00	7.26E+00
		Co-58	<6.46E+00	0.00E+00	6.46E+00
		Fe-59	<9.93E+00	0.00E+00	9.93E+00
		Co-60	<7.61E+00	0.00E+00	7.61E+00
		Zn-65	<1.11E+01	0.00E+00	1.11E+01
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<7.03E+00	0.00E+00	7.03E+00
		I-131	<6.94E+00	0.00E+00	6.94E+00
		Cs-134	<7.48E+00	0.00E+00	7.48E+00
		Cs-137	<6.36E+00	0.00E+00	6.36E+00
		BaLa-140	<8.27E+00	0.00E+00	8.27E+00
		Be-7	<5.11E+01	0.00E+00	5.11E+01
		K-40	3.34E+02	9.66E+01	1.02E+02
		H3GW	<6.11E+01	0.00E+00	1.77E+02

Sample Point 59 [INDICATOR - NNE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538247	2/23/2021 - 2/23/2021	Mn-54	<5.24E+00	0.00E+00	5.24E+00
		Co-58	<6.22E+00	0.00E+00	6.22E+00
		Fe-59	<8.54E+00	0.00E+00	8.54E+00
		Co-60	<6.72E+00	0.00E+00	6.72E+00
		Zn-65	<1.42E+01	0.00E+00	1.42E+01
		Zr-95	<9.00E+00	0.00E+00	9.00E+00
		Nb-95	<6.30E+00	0.00E+00	6.30E+00
		I-131	<7.65E+00	0.00E+00	7.65E+00
		Cs-134	<4.05E+00	0.00E+00	4.05E+00
		Cs-137	<6.05E+00	0.00E+00	6.05E+00
		BaLa-140	<6.45E+00	0.00E+00	6.45E+00
		Be-7	<3.49E+01	0.00E+00	3.49E+01
		K-40	<1.08E+02	0.00E+00	1.08E+02
		H3GW	<3.12E+01	0.00E+00	1.82E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544222	5/24/2021 - 5/24/2021	Mn-54	<5.72E+00	0.00E+00	5.72E+00
		Co-58	<6.72E+00	0.00E+00	6.72E+00
		Fe-59	<1.04E+01	0.00E+00	1.04E+01
		Co-60	<3.89E+00	0.00E+00	3.89E+00
		Zn-65	<6.82E+00	0.00E+00	6.82E+00
		Zr-95	<8.47E+00	0.00E+00	8.47E+00
		Nb-95	<5.88E+00	0.00E+00	5.88E+00
		I-131	<6.71E+00	0.00E+00	6.71E+00
		Cs-134	<7.24E+00	0.00E+00	7.24E+00
		Cs-137	<6.15E+00	0.00E+00	6.15E+00
		BaLa-140	<5.88E+00	0.00E+00	5.88E+00
		Be-7	<4.46E+01	0.00E+00	4.46E+01
		K-40	2.22E+02	7.58E+01	7.94E+01
		H3GW	<1.01E+02	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548880	8/16/2021 - 8/16/2021	Mn-54	<6.67E+00	0.00E+00	6.67E+00
		Co-58	<6.55E+00	0.00E+00	6.55E+00
		Fe-59	<1.13E+01	0.00E+00	1.13E+01
		Co-60	<5.50E+00	0.00E+00	5.50E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<8.10E+00	0.00E+00	8.10E+00
		Nb-95	<6.10E+00	0.00E+00	6.10E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 59 [INDICATOR - NNE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548880	8/16/2021 - 8/16/2021	I-131	<1.00E+01	0.00E+00	1.00E+01
		Cs-134	<5.79E+00	0.00E+00	5.79E+00
		Cs-137	<5.23E+00	0.00E+00	5.23E+00
		BaLa-140	<6.64E+00	0.00E+00	6.64E+00
		Be-7	<4.07E+01	0.00E+00	4.07E+01
		K-40	1.78E+02	7.26E+01	8.64E+01
		H3GW	<-6.1E+01	0.00E+00	1.94E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545438	11/15/2021 - 11/15/2021	Mn-54	<6.37E+00	0.00E+00	6.37E+00
		Co-58	<4.73E+00	0.00E+00	4.73E+00
		Fe-59	<1.39E+01	0.00E+00	1.39E+01
		Co-60	<6.39E+00	0.00E+00	6.39E+00
		Zn-65	<1.41E+01	0.00E+00	1.41E+01
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<6.35E+00	0.00E+00	6.35E+00
		I-131	<7.54E+00	0.00E+00	7.54E+00
		Cs-134	<6.55E+00	0.00E+00	6.55E+00
		Cs-137	<6.43E+00	0.00E+00	6.43E+00
		BaLa-140	<6.05E+00	0.00E+00	6.05E+00
		Be-7	<4.95E+01	0.00E+00	4.95E+01
		K-40	<1.00E+02	0.00E+00	1.00E+02
		H3GW	<3.51E+01	0.00E+00	1.76E+02

Sample Point 60 [INDICATOR - ESE @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538248	2/22/2021 - 2/22/2021	Mn-54	<6.39E+00	0.00E+00	6.39E+00
		Co-58	<5.91E+00	0.00E+00	5.91E+00
		Fe-59	<1.15E+01	0.00E+00	1.15E+01
		Co-60	<5.55E+00	0.00E+00	5.55E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<9.59E+00	0.00E+00	9.59E+00
		Nb-95	<6.59E+00	0.00E+00	6.59E+00
		I-131	<8.09E+00	0.00E+00	8.09E+00
		Cs-134	<6.97E+00	0.00E+00	6.97E+00
		Cs-137	<7.58E+00	0.00E+00	7.58E+00
		BaLa-140	<9.38E+00	0.00E+00	9.38E+00
		Be-7	<4.39E+01	0.00E+00	4.39E+01
		K-40	<1.06E+02	0.00E+00	1.06E+02
		H3GW	<6.76E+00	0.00E+00	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544223	5/24/2021 - 5/24/2021	Mn-54	<6.18E+00	0.00E+00	6.18E+00
		Co-58	<6.83E+00	0.00E+00	6.83E+00
		Fe-59	<1.00E+01	0.00E+00	1.00E+01
		Co-60	<7.67E+00	0.00E+00	7.67E+00
		Zn-65	<1.63E+01	0.00E+00	1.63E+01
		Zr-95	<1.04E+01	0.00E+00	1.04E+01
		Nb-95	<5.80E+00	0.00E+00	5.80E+00
		I-131	<6.50E+00	0.00E+00	6.50E+00
		Cs-134	<6.75E+00	0.00E+00	6.75E+00
		Cs-137	<7.98E+00	0.00E+00	7.98E+00
		BaLa-140	<9.65E+00	0.00E+00	9.65E+00
		Be-7	<4.75E+01	0.00E+00	4.75E+01
		K-40	1.35E+02	5.72E+01	5.99E+01
		H3GW	<5.66E+01	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548881	8/16/2021 - 8/16/2021	Mn-54	<4.41E+00	0.00E+00	4.41E+00
		Co-58	<5.91E+00	0.00E+00	5.91E+00
		Fe-59	<9.89E+00	0.00E+00	9.89E+00
		Co-60	<4.97E+00	0.00E+00	4.97E+00
		Zn-65	<1.28E+01	0.00E+00	1.28E+01
		Zr-95	<8.41E+00	0.00E+00	8.41E+00
		Nb-95	<6.23E+00	0.00E+00	6.23E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01

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

Sample Point 60 [INDICATOR - ESE @ 0.5 miles]

Sample ID:	548881	Sample Dates:	8/16/2021 - 8/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<6.39E+00	0.00E+00	6.39E+00
				Cs-137	<5.36E+00	0.00E+00	5.36E+00
				BaLa-140	<6.58E+00	0.00E+00	6.58E+00
				Be-7	<5.16E+01	0.00E+00	5.16E+01
				K-40	1.51E+02	8.07E+01	1.14E+02
				H3GW	<1.93E+01	0.00E+00	1.93E+02

Sample ID:	554539	Sample Dates:	11/15/2021 - 11/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.42E+00	0.00E+00	5.42E+00
				Co-58	<6.69E+00	0.00E+00	6.69E+00
				Fe-59	<8.05E+00	0.00E+00	8.05E+00
				Co-60	<5.58E+00	0.00E+00	5.58E+00
				Zn-65	<1.24E+01	0.00E+00	1.24E+01
				Zr-95	<9.04E+00	0.00E+00	9.04E+00
				Nb-95	<7.12E+00	0.00E+00	7.12E+00
				I-131	<6.30E+00	0.00E+00	6.30E+00
				Cs-134	<6.77E+00	0.00E+00	6.77E+00
				Cs-137	<5.53E+00	0.00E+00	5.53E+00
				BaLa-140	<8.46E+00	0.00E+00	8.46E+00
				Be-7	<4.25E+01	0.00E+00	4.25E+01
				K-40	<8.03E+01	0.00E+00	8.03E+01
				H3GW	<-2.1E+01	0.00E+00	1.76E+02

Sample Point 68 [INDICATOR - W @ 0.2 miles]

Sample ID:	538249	Sample Dates:	2/23/2021 - 2/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<7.35E+00	0.00E+00	7.35E+00
				Co-58	<5.66E+00	0.00E+00	5.66E+00
				Fe-59	<8.92E+00	0.00E+00	8.92E+00
				Co-60	<6.76E+00	0.00E+00	6.76E+00
				Zn-65	<9.82E+00	0.00E+00	9.82E+00
				Zr-95	<1.02E+01	0.00E+00	1.02E+01
				Nb-95	<6.47E+00	0.00E+00	6.47E+00
				I-131	<7.16E+00	0.00E+00	7.16E+00
				Cs-134	<6.11E+00	0.00E+00	6.11E+00
				Cs-137	<5.53E+00	0.00E+00	5.53E+00
				BaLa-140	<9.40E+00	0.00E+00	9.40E+00
				Be-7	<3.56E+01	0.00E+00	3.56E+01
				K-40	<1.03E+02	0.00E+00	1.03E+02
				H3GW	<2.25E+00	0.00E+00	1.84E+02

Sample ID:	544224	Sample Dates:	5/24/2021 - 5/24/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.84E+00	0.00E+00	5.84E+00
				Co-58	<6.80E+00	0.00E+00	6.80E+00
				Fe-59	<1.22E+01	0.00E+00	1.22E+01
				Co-60	<7.77E+00	0.00E+00	7.77E+00
				Zn-65	<1.31E+01	0.00E+00	1.31E+01
				Zr-95	<9.12E+00	0.00E+00	9.12E+00
				Nb-95	<5.82E+00	0.00E+00	5.82E+00
				I-131	<7.11E+00	0.00E+00	7.11E+00
				Cs-134	<7.85E+00	0.00E+00	7.85E+00
				Cs-137	<5.55E+00	0.00E+00	5.55E+00
				BaLa-140	<5.84E+00	0.00E+00	5.84E+00
				Be-7	<5.48E+01	0.00E+00	5.48E+01
				K-40	1.08E+02	6.77E+01	9.70E+01
				H3GW	<7.75E+01	0.00E+00	1.76E+02

Sample ID:	548882	Sample Dates:	8/16/2021 - 8/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<4.54E+00	0.00E+00	4.54E+00
				Co-58	<6.08E+00	0.00E+00	6.08E+00
				Fe-59	<1.08E+01	0.00E+00	1.08E+01
				Co-60	<4.74E+00	0.00E+00	4.74E+00
				Zn-65	<9.09E+00	0.00E+00	9.09E+00
				Zr-95	<7.16E+00	0.00E+00	7.16E+00
				Nb-95	<5.55E+00	0.00E+00	5.55E+00
				I-131	<9.47E+00	0.00E+00	9.47E+00
				Cs-134	<5.07E+00	0.00E+00	5.07E+00

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

Sample Point 68 [INDICATOR - W @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548882	8/16/2021 - 8/16/2021	Cs-137	<5.33E+00	0.00E+00	5.33E+00
		BaLa-140	<8.75E+00	0.00E+00	8.75E+00
		Be-7	<4.64E+01	0.00E+00	4.64E+01
		K-40	<9.58E+01	0.00E+00	9.58E+01
		H3GW	<2.17E+01	0.00E+00	1.93E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554540	11/15/2021 - 11/15/2021	Mn-54	<7.01E+00	0.00E+00	7.01E+00
		Co-58	<7.43E+00	0.00E+00	7.43E+00
		Fe-59	<1.46E+01	0.00E+00	1.46E+01
		Co-60	<3.93E+00	0.00E+00	3.93E+00
		Zn-65	<1.40E+01	0.00E+00	1.40E+01
		Zr-95	<1.01E+01	0.00E+00	1.01E+01
		Nb-95	<6.47E+00	0.00E+00	6.47E+00
		I-131	<6.85E+00	0.00E+00	6.85E+00
		Cs-134	<8.06E+00	0.00E+00	8.06E+00
		Cs-137	<8.11E+00	0.00E+00	8.11E+00
		BaLa-140	<8.77E+00	0.00E+00	8.77E+00
		Be-7	<5.19E+01	0.00E+00	5.19E+01
		K-40	1.05E+02	7.18E+01	1.06E+02
H3GW	<2.34E+00	0.00E+00	1.76E+02		

Sample Point 69 [INDICATOR - NNE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538250	2/22/2021 - 2/22/2021	Mn-54	<6.09E+00	0.00E+00	6.09E+00
		Co-58	<6.49E+00	0.00E+00	6.49E+00
		Fe-59	<1.23E+01	0.00E+00	1.23E+01
		Co-60	<5.83E+00	0.00E+00	5.83E+00
		Zn-65	<7.92E+00	0.00E+00	7.92E+00
		Zr-95	<7.98E+00	0.00E+00	7.98E+00
		Nb-95	<6.63E+00	0.00E+00	6.63E+00
		I-131	<1.06E+01	0.00E+00	1.06E+01
		Cs-134	<4.93E+00	0.00E+00	4.93E+00
		Cs-137	<5.55E+00	0.00E+00	5.55E+00
		BaLa-140	<6.67E+00	0.00E+00	6.67E+00
		Be-7	<5.17E+01	0.00E+00	5.17E+01
		K-40	1.87E+02	6.95E+01	7.51E+01
H3GW	<-8.8E+01	0.00E+00	1.84E+02		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544225	5/24/2021 - 5/24/2021	Mn-54	<7.06E+00	0.00E+00	7.06E+00
		Co-58	<5.22E+00	0.00E+00	5.22E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<5.36E+00	0.00E+00	5.36E+00
		Zn-65	<1.03E+01	0.00E+00	1.03E+01
		Zr-95	<9.88E+00	0.00E+00	9.88E+00
		Nb-95	<7.00E+00	0.00E+00	7.00E+00
		I-131	<6.09E+00	0.00E+00	6.09E+00
		Cs-134	<6.17E+00	0.00E+00	6.17E+00
		Cs-137	<7.72E+00	0.00E+00	7.72E+00
		BaLa-140	<8.25E+00	0.00E+00	8.25E+00
		Be-7	<4.19E+01	0.00E+00	4.19E+01
		K-40	8.73E+01	6.19E+01	8.97E+01
H3GW	<2.82E+01	0.00E+00	1.76E+02		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548883	8/17/2021 - 8/17/2021	Mn-54	<8.14E+00	0.00E+00	8.14E+00
		Co-58	<6.87E+00	0.00E+00	6.87E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<5.93E+00	0.00E+00	5.93E+00
		Zn-65	<1.55E+01	0.00E+00	1.55E+01
		Zr-95	<1.14E+01	0.00E+00	1.14E+01
		Nb-95	<7.76E+00	0.00E+00	7.76E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<7.10E+00	0.00E+00	7.10E+00
		Cs-137	<6.50E+00	0.00E+00	6.50E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 69 [INDICATOR - NNE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548883	8/17/2021 - 8/17/2021	BaLa-140	<8.32E+00	0.00E+00	8.32E+00
		Be-7	<4.28E+01	0.00E+00	4.28E+01
		K-40	2.57E+02	8.51E+01	9.37E+01
		H3GW	<-3.1E+01	0.00E+00	1.93E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554541	11/15/2021 - 11/15/2021	Mn-54	<7.16E+00	0.00E+00	7.16E+00
		Co-58	<6.96E+00	0.00E+00	6.96E+00
		Fe-59	<1.34E+01	0.00E+00	1.34E+01
		Co-60	<4.87E+00	0.00E+00	4.87E+00
		Zn-65	<1.19E+01	0.00E+00	1.19E+01
		Zr-95	<8.77E+00	0.00E+00	8.77E+00
		Nb-95	<6.21E+00	0.00E+00	6.21E+00
		I-131	<6.83E+00	0.00E+00	6.83E+00
		Cs-134	<5.99E+00	0.00E+00	5.99E+00
		Cs-137	<6.68E+00	0.00E+00	6.68E+00
		BaLa-140	<7.79E+00	0.00E+00	7.79E+00
		Be-7	<4.82E+01	0.00E+00	4.82E+01
		K-40	1.54E+02	7.97E+01	1.08E+02
		H3GW	<-5.6E+01	0.00E+00	1.76E+02

Sample Point 70 [INDICATOR - E @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538251	2/22/2021 - 2/22/2021	Mn-54	<5.03E+00	0.00E+00	5.03E+00
		Co-58	<4.96E+00	0.00E+00	4.96E+00
		Fe-59	<7.79E+00	0.00E+00	7.79E+00
		Co-60	<5.09E+00	0.00E+00	5.09E+00
		Zn-65	<1.37E+01	0.00E+00	1.37E+01
		Zr-95	<9.91E+00	0.00E+00	9.91E+00
		Nb-95	<6.64E+00	0.00E+00	6.64E+00
		I-131	<9.32E+00	0.00E+00	9.32E+00
		Cs-134	<6.35E+00	0.00E+00	6.35E+00
		Cs-137	<6.39E+00	0.00E+00	6.39E+00
		BaLa-140	<7.95E+00	0.00E+00	7.95E+00
		Be-7	<4.22E+01	0.00E+00	4.22E+01
		K-40	7.65E+01	5.61E+01	8.16E+01
		H3GW	<2.27E+00	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544226	5/24/2021 - 5/24/2021	Mn-54	<6.11E+00	0.00E+00	6.11E+00
		Co-58	<3.53E+00	0.00E+00	3.53E+00
		Fe-59	<9.92E+00	0.00E+00	9.92E+00
		Co-60	<5.93E+00	0.00E+00	5.93E+00
		Zn-65	<7.94E+00	0.00E+00	7.94E+00
		Zr-95	<9.27E+00	0.00E+00	9.27E+00
		Nb-95	<4.76E+00	0.00E+00	4.76E+00
		I-131	<5.65E+00	0.00E+00	5.65E+00
		Cs-134	<6.25E+00	0.00E+00	6.25E+00
		Cs-137	<6.00E+00	0.00E+00	6.00E+00
		BaLa-140	<4.06E+00	0.00E+00	4.06E+00
		Be-7	<3.94E+01	0.00E+00	3.94E+01
		K-40	1.47E+02	5.55E+01	4.75E+01
		H3GW	<7.75E+01	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548884	8/17/2021 - 8/17/2021	Mn-54	<5.88E+00	0.00E+00	5.88E+00
		Co-58	<3.73E+00	0.00E+00	3.73E+00
		Fe-59	<1.07E+01	0.00E+00	1.07E+01
		Co-60	<6.40E+00	0.00E+00	6.40E+00
		Zn-65	<1.42E+01	0.00E+00	1.42E+01
		Zr-95	<8.14E+00	0.00E+00	8.14E+00
		Nb-95	<5.48E+00	0.00E+00	5.48E+00
		I-131	<8.35E+00	0.00E+00	8.35E+00
		Cs-134	<6.12E+00	0.00E+00	6.12E+00
		Cs-137	<5.12E+00	0.00E+00	5.12E+00
		BaLa-140	<9.94E+00	0.00E+00	9.94E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 70 [INDICATOR - E @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548884	8/17/2021 - 8/17/2021	Be-7	<4.12E+01	0.00E+00	4.12E+01
		K-40	5.94E+01	5.10E+01	7.68E+01
		H3GW	<-6.3E+01	0.00E+00	1.94E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554542	11/15/2021 - 11/15/2021	Mn-54	<6.83E+00	0.00E+00	6.83E+00
		Co-58	<6.00E+00	0.00E+00	6.00E+00
		Fe-59	<1.35E+01	0.00E+00	1.35E+01
		Co-60	<7.19E+00	0.00E+00	7.19E+00
		Zn-65	<1.36E+01	0.00E+00	1.36E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<5.47E+00	0.00E+00	5.47E+00
		I-131	<7.37E+00	0.00E+00	7.37E+00
		Cs-134	<5.69E+00	0.00E+00	5.69E+00
		Cs-137	<6.98E+00	0.00E+00	6.98E+00
		BaLa-140	<6.52E+00	0.00E+00	6.52E+00
		Be-7	<4.84E+01	0.00E+00	4.84E+01
		K-40	2.01E+02	8.08E+01	1.00E+02
		H3GW	<2.57E+01	0.00E+00	1.76E+02

Sample Point 71 [INDICATOR - SE @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538252	2/22/2021 - 2/22/2021	Mn-54	<5.08E+00	0.00E+00	5.08E+00
		Co-58	<4.92E+00	0.00E+00	4.92E+00
		Fe-59	<1.01E+01	0.00E+00	1.01E+01
		Co-60	<4.96E+00	0.00E+00	4.96E+00
		Zn-65	<1.42E+01	0.00E+00	1.42E+01
		Zr-95	<8.16E+00	0.00E+00	8.16E+00
		Nb-95	<5.89E+00	0.00E+00	5.89E+00
		I-131	<7.69E+00	0.00E+00	7.69E+00
		Cs-134	<4.92E+00	0.00E+00	4.92E+00
		Cs-137	<5.55E+00	0.00E+00	5.55E+00
		BaLa-140	<6.55E+00	0.00E+00	6.55E+00
		Be-7	<4.88E+01	0.00E+00	4.88E+01
		K-40	1.56E+02	6.45E+01	7.34E+01
		H3GW	<-6.0E+01	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544227	5/24/2021 - 5/24/2021	Mn-54	<5.20E+00	0.00E+00	5.20E+00
		Co-58	<5.40E+00	0.00E+00	5.40E+00
		Fe-59	<1.16E+01	0.00E+00	1.16E+01
		Co-60	<5.55E+00	0.00E+00	5.55E+00
		Zn-65	<1.54E+01	0.00E+00	1.54E+01
		Zr-95	<9.74E+00	0.00E+00	9.74E+00
		Nb-95	<5.82E+00	0.00E+00	5.82E+00
		I-131	<6.52E+00	0.00E+00	6.52E+00
		Cs-134	<5.59E+00	0.00E+00	5.59E+00
		Cs-137	<6.05E+00	0.00E+00	6.05E+00
		BaLa-140	<7.34E+00	0.00E+00	7.34E+00
		Be-7	<4.58E+01	0.00E+00	4.58E+01
		K-40	1.43E+02	6.63E+01	8.22E+01
		H3GW	<1.06E+02	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548885	8/16/2021 - 8/16/2021	Mn-54	<5.36E+00	0.00E+00	5.36E+00
		Co-58	<5.67E+00	0.00E+00	5.67E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<3.93E+00	0.00E+00	3.93E+00
		Zn-65	<9.71E+00	0.00E+00	9.71E+00
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<5.91E+00	0.00E+00	5.91E+00
		I-131	<9.08E+00	0.00E+00	9.08E+00
		Cs-134	<5.85E+00	0.00E+00	5.85E+00
		Cs-137	<6.08E+00	0.00E+00	6.08E+00
		BaLa-140	<1.02E+01	0.00E+00	1.02E+01
		Be-7	<4.89E+01	0.00E+00	4.89E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 71 [INDICATOR - SE @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548885	8/16/2021 - 8/16/2021	K-40	1.21E+02	6.35E+01	8.84E+01
		H3GW	<9.64E+00	0.00E+00	1.93E+02
554543	11/15/2021 - 11/15/2021	Mn-54	<5.27E+00	0.00E+00	5.27E+00
		Co-58	<3.47E+00	0.00E+00	3.47E+00
		Fe-59	<1.03E+01	0.00E+00	1.03E+01
		Co-60	<6.20E+00	0.00E+00	6.20E+00
		Zn-65	<1.26E+01	0.00E+00	1.26E+01
		Zr-95	<8.37E+00	0.00E+00	8.37E+00
		Nb-95	<4.45E+00	0.00E+00	4.45E+00
		I-131	<5.68E+00	0.00E+00	5.68E+00
		Cs-134	<6.36E+00	0.00E+00	6.36E+00
		Cs-137	<6.07E+00	0.00E+00	6.07E+00
		BaLa-140	<8.57E+00	0.00E+00	8.57E+00
		Be-7	<4.74E+01	0.00E+00	4.74E+01
		K-40	1.19E+02	6.93E+01	9.75E+01
H3GW	<5.15E+01	0.00E+00	1.76E+02		

Sample Point 72 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538253	2/22/2021 - 2/22/2021	Mn-54	<5.35E+00	0.00E+00	5.35E+00
		Co-58	<6.74E+00	0.00E+00	6.74E+00
		Fe-59	<1.23E+01	0.00E+00	1.23E+01
		Co-60	<6.43E+00	0.00E+00	6.43E+00
		Zn-65	<1.46E+01	0.00E+00	1.46E+01
		Zr-95	<1.17E+01	0.00E+00	1.17E+01
		Nb-95	<7.15E+00	0.00E+00	7.15E+00
		I-131	<8.66E+00	0.00E+00	8.66E+00
		Cs-134	<7.79E+00	0.00E+00	7.79E+00
		Cs-137	<7.13E+00	0.00E+00	7.13E+00
		BaLa-140	<8.44E+00	0.00E+00	8.44E+00
		Be-7	<5.47E+01	0.00E+00	5.47E+01
		K-40	1.40E+02	7.37E+01	1.06E+02
H3GW	<8.3E+01	0.00E+00	1.83E+02		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544228	5/24/2021 - 5/24/2021	Mn-54	<7.81E+00	0.00E+00	7.81E+00
		Co-58	<7.11E+00	0.00E+00	7.11E+00
		Fe-59	<1.39E+01	0.00E+00	1.39E+01
		Co-60	<6.20E+00	0.00E+00	6.20E+00
		Zn-65	<1.55E+01	0.00E+00	1.55E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<6.77E+00	0.00E+00	6.77E+00
		I-131	<8.58E+00	0.00E+00	8.58E+00
		Cs-134	<7.33E+00	0.00E+00	7.33E+00
		Cs-137	<7.39E+00	0.00E+00	7.39E+00
		BaLa-140	<1.03E+01	0.00E+00	1.03E+01
		Be-7	<5.64E+01	0.00E+00	5.64E+01
		K-40	2.65E+02	8.96E+01	1.04E+02
H3GW	<1.17E+01	0.00E+00	1.76E+02		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548886	8/18/2021 - 8/18/2021	Mn-54	<6.71E+00	0.00E+00	6.71E+00
		Co-58	<6.85E+00	0.00E+00	6.85E+00
		Fe-59	<1.40E+01	0.00E+00	1.40E+01
		Co-60	<7.14E+00	0.00E+00	7.14E+00
		Zn-65	<1.43E+01	0.00E+00	1.43E+01
		Zr-95	<1.12E+01	0.00E+00	1.12E+01
		Nb-95	<7.12E+00	0.00E+00	7.12E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<5.01E+00	0.00E+00	5.01E+00
		Cs-137	<6.66E+00	0.00E+00	6.66E+00
		BaLa-140	<1.19E+01	0.00E+00	1.19E+01
		Be-7	<6.16E+01	0.00E+00	6.16E+01
		K-40	1.93E+02	7.66E+01	9.57E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 72 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548886	8/18/2021 - 8/18/2021	H3GW	<-2.4E+01	0.00E+00	1.93E+02
554544	11/15/2021 - 11/15/2021	Mn-54	<7.09E+00	0.00E+00	7.09E+00
		Co-58	<6.14E+00	0.00E+00	6.14E+00
		Fe-59	<1.20E+01	0.00E+00	1.20E+01
		Co-60	<7.94E+00	0.00E+00	7.94E+00
		Zn-65	<1.59E+01	0.00E+00	1.59E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<7.65E+00	0.00E+00	7.65E+00
		I-131	<7.40E+00	0.00E+00	7.40E+00
		Cs-134	<7.65E+00	0.00E+00	7.65E+00
		Cs-137	<6.85E+00	0.00E+00	6.85E+00
		BaLa-140	<1.09E+01	0.00E+00	1.09E+01
		Be-7	<6.39E+01	0.00E+00	6.39E+01
		K-40	2.43E+02	7.90E+01	1.02E+02
		H3GW	<-2.8E+01	0.00E+00	1.76E+02

Sample Point 73 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538254	2/24/2021 - 2/24/2021	Mn-54	<4.99E+00	0.00E+00	4.99E+00
		Co-58	<4.57E+00	0.00E+00	4.57E+00
		Fe-59	<1.07E+01	0.00E+00	1.07E+01
		Co-60	<5.50E+00	0.00E+00	5.50E+00
		Zn-65	<1.14E+01	0.00E+00	1.14E+01
		Zr-95	<1.19E+01	0.00E+00	1.19E+01
		Nb-95	<6.27E+00	0.00E+00	6.27E+00
		I-131	<6.25E+00	0.00E+00	6.25E+00
		Cs-134	<6.78E+00	0.00E+00	6.78E+00
		Cs-137	<5.25E+00	0.00E+00	5.25E+00
		BaLa-140	<7.73E+00	0.00E+00	7.73E+00
		Be-7	<4.39E+01	0.00E+00	4.39E+01
		K-40	1.44E+02	5.91E+01	6.55E+01
		H3GW	<-5.9E+01	0.00E+00	1.84E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544229	5/24/2021 - 5/24/2021	Mn-54	<5.32E+00	0.00E+00	5.32E+00
		Co-58	<4.75E+00	0.00E+00	4.75E+00
		Fe-59	<1.19E+01	0.00E+00	1.19E+01
		Co-60	<5.60E+00	0.00E+00	5.60E+00
		Zn-65	<1.07E+01	0.00E+00	1.07E+01
		Zr-95	<1.19E+01	0.00E+00	1.19E+01
		Nb-95	<6.57E+00	0.00E+00	6.57E+00
		I-131	<6.39E+00	0.00E+00	6.39E+00
		Cs-134	<6.13E+00	0.00E+00	6.13E+00
		Cs-137	<5.57E+00	0.00E+00	5.57E+00
		BaLa-140	<5.34E+00	0.00E+00	5.34E+00
		Be-7	<4.22E+01	0.00E+00	4.22E+01
		K-40	2.13E+02	7.93E+01	1.01E+02
		H3GW	<1.08E+02	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548887	8/18/2021 - 8/18/2021	Mn-54	<6.31E+00	0.00E+00	6.31E+00
		Co-58	<7.10E+00	0.00E+00	7.10E+00
		Fe-59	<1.15E+01	0.00E+00	1.15E+01
		Co-60	<4.51E+00	0.00E+00	4.51E+00
		Zn-65	<1.44E+01	0.00E+00	1.44E+01
		Zr-95	<1.09E+01	0.00E+00	1.09E+01
		Nb-95	<5.90E+00	0.00E+00	5.90E+00
		I-131	<8.90E+00	0.00E+00	8.90E+00
		Cs-134	<6.24E+00	0.00E+00	6.24E+00
		Cs-137	<6.15E+00	0.00E+00	6.15E+00
		BaLa-140	<7.84E+00	0.00E+00	7.84E+00
		Be-7	<4.95E+01	0.00E+00	4.95E+01
		K-40	1.60E+02	6.79E+01	8.05E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 73 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548887	8/18/2021 - 8/18/2021	H3GW	<-1.2E+02	0.00E+00	1.95E+02
554545	11/15/2021 - 11/15/2021	Mn-54	<6.70E+00	0.00E+00	6.70E+00
		Co-58	<7.00E+00	0.00E+00	7.00E+00
		Fe-59	<1.21E+01	0.00E+00	1.21E+01
		Co-60	<7.37E+00	0.00E+00	7.37E+00
		Zn-65	<1.30E+01	0.00E+00	1.30E+01
		Zr-95	<1.10E+01	0.00E+00	1.10E+01
		Nb-95	<6.66E+00	0.00E+00	6.66E+00
		I-131	<7.53E+00	0.00E+00	7.53E+00
		Cs-134	<7.16E+00	0.00E+00	7.16E+00
		Cs-137	<6.71E+00	0.00E+00	6.71E+00
		BaLa-140	<6.04E+00	0.00E+00	6.04E+00
		Be-7	<4.48E+01	0.00E+00	4.48E+01
		K-40	1.33E+02	6.58E+01	8.46E+01
		H3GW	<-3.0E+01	0.00E+00	1.76E+02

Sample Point 74 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538255	2/23/2021 - 2/23/2021	Mn-54	<5.92E+00	0.00E+00	5.92E+00
		Co-58	<5.56E+00	0.00E+00	5.56E+00
		Fe-59	<1.16E+01	0.00E+00	1.16E+01
		Co-60	<5.49E+00	0.00E+00	5.49E+00
		Zn-65	<1.04E+01	0.00E+00	1.04E+01
		Zr-95	<8.96E+00	0.00E+00	8.96E+00
		Nb-95	<6.01E+00	0.00E+00	6.01E+00
		I-131	<7.25E+00	0.00E+00	7.25E+00
		Cs-134	<7.43E+00	0.00E+00	7.43E+00
		Cs-137	<7.75E+00	0.00E+00	7.75E+00
		BaLa-140	<8.69E+00	0.00E+00	8.69E+00
		Be-7	<4.42E+01	0.00E+00	4.42E+01
		K-40	1.87E+02	6.28E+01	5.11E+01
		H3GW	<-1.0E+02	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544230	5/24/2021 - 5/24/2021	Mn-54	<5.91E+00	0.00E+00	5.91E+00
		Co-58	<4.88E+00	0.00E+00	4.88E+00
		Fe-59	<1.16E+01	0.00E+00	1.16E+01
		Co-60	<7.59E+00	0.00E+00	7.59E+00
		Zn-65	<1.22E+01	0.00E+00	1.22E+01
		Zr-95	<1.20E+01	0.00E+00	1.20E+01
		Nb-95	<6.69E+00	0.00E+00	6.69E+00
		I-131	<7.33E+00	0.00E+00	7.33E+00
		Cs-134	<6.00E+00	0.00E+00	6.00E+00
		Cs-137	<5.80E+00	0.00E+00	5.80E+00
		BaLa-140	<4.05E+00	0.00E+00	4.05E+00
		Be-7	<4.66E+01	0.00E+00	4.66E+01
		K-40	1.94E+02	6.51E+01	5.60E+01
		H3GW	<1.89E+01	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548888	8/18/2021 - 8/18/2021	Mn-54	<5.23E+00	0.00E+00	5.23E+00
		Co-58	<6.88E+00	0.00E+00	6.88E+00
		Fe-59	<1.22E+01	0.00E+00	1.22E+01
		Co-60	<5.55E+00	0.00E+00	5.55E+00
		Zn-65	<1.25E+01	0.00E+00	1.25E+01
		Zr-95	<1.04E+01	0.00E+00	1.04E+01
		Nb-95	<6.37E+00	0.00E+00	6.37E+00
		I-131	<8.58E+00	0.00E+00	8.58E+00
		Cs-134	<5.34E+00	0.00E+00	5.34E+00
		Cs-137	<7.02E+00	0.00E+00	7.02E+00
		BaLa-140	<8.65E+00	0.00E+00	8.65E+00
		Be-7	1.44E+01	3.03E+01	3.21E+01
		K-40	<1.31E+02	0.00E+00	1.31E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 74 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548888	8/18/2021 - 8/18/2021	H3GW	<2.41E+00	0.00E+00	1.93E+02
554546	11/15/2021 - 11/15/2021	Mn-54	<5.77E+00	0.00E+00	5.77E+00
		Co-58	<7.38E+00	0.00E+00	7.38E+00
		Fe-59	<9.32E+00	0.00E+00	9.32E+00
		Co-60	<5.92E+00	0.00E+00	5.92E+00
		Zn-65	<1.34E+01	0.00E+00	1.34E+01
		Zr-95	<9.30E+00	0.00E+00	9.30E+00
		Nb-95	<7.03E+00	0.00E+00	7.03E+00
		I-131	<7.51E+00	0.00E+00	7.51E+00
		Cs-134	<7.66E+00	0.00E+00	7.66E+00
		Cs-137	<6.83E+00	0.00E+00	6.83E+00
		BaLa-140	<9.15E+00	0.00E+00	9.15E+00
		Be-7	<5.44E+01	0.00E+00	5.44E+01
		K-40	1.99E+02	7.25E+01	7.86E+01
		H3GW	<-7.9E+01	0.00E+00	1.76E+02

Sample Point 75 [INDICATOR - ESE @ 0.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538256	2/23/2021 - 2/23/2021	Mn-54	<6.72E+00	0.00E+00	6.72E+00
		Co-58	<5.45E+00	0.00E+00	5.45E+00
		Fe-59	<1.18E+01	0.00E+00	1.18E+01
		Co-60	<6.00E+00	0.00E+00	6.00E+00
		Zn-65	<1.19E+01	0.00E+00	1.19E+01
		Zr-95	<8.30E+00	0.00E+00	8.30E+00
		Nb-95	<5.35E+00	0.00E+00	5.35E+00
		I-131	<6.41E+00	0.00E+00	6.41E+00
		Cs-134	<5.34E+00	0.00E+00	5.34E+00
		Cs-137	<5.12E+00	0.00E+00	5.12E+00
		BaLa-140	<7.08E+00	0.00E+00	7.08E+00
		Be-7	<3.82E+01	0.00E+00	3.82E+01
		K-40	6.48E+01	5.52E+01	8.37E+01
		H3GW	<-9.4E+01	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544231	5/24/2021 - 5/24/2021	Mn-54	<6.13E+00	0.00E+00	6.13E+00
		Co-58	<7.37E+00	0.00E+00	7.37E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<6.29E+00	0.00E+00	6.29E+00
		Zn-65	<1.24E+01	0.00E+00	1.24E+01
		Zr-95	<1.06E+01	0.00E+00	1.06E+01
		Nb-95	<6.31E+00	0.00E+00	6.31E+00
		I-131	<6.11E+00	0.00E+00	6.11E+00
		Cs-134	<6.42E+00	0.00E+00	6.42E+00
		Cs-137	<6.40E+00	0.00E+00	6.40E+00
		BaLa-140	<8.27E+00	0.00E+00	8.27E+00
		Be-7	<5.06E+01	0.00E+00	5.06E+01
		K-40	1.73E+02	6.93E+01	7.62E+01
		H3GW	<2.11E+01	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548889	8/18/2021 - 8/18/2021	Mn-54	<4.92E+00	0.00E+00	4.92E+00
		Co-58	<6.94E+00	0.00E+00	6.94E+00
		Fe-59	<1.09E+01	0.00E+00	1.09E+01
		Co-60	<5.73E+00	0.00E+00	5.73E+00
		Zn-65	<1.46E+01	0.00E+00	1.46E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<7.96E+00	0.00E+00	7.96E+00
		I-131	<8.22E+00	0.00E+00	8.22E+00
		Cs-134	<7.41E+00	0.00E+00	7.41E+00
		Cs-137	<4.26E+00	0.00E+00	4.26E+00
		BaLa-140	<8.25E+00	0.00E+00	8.25E+00
		Be-7	<4.85E+01	0.00E+00	4.85E+01
		K-40	1.91E+02	6.47E+01	5.13E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 75 [INDICATOR - ESE @ 0.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548889	8/18/2021 - 8/18/2021	H3GW	<7.29E+01	0.00E+00	1.95E+02
554547	11/15/2021 - 11/15/2021	Mn-54	<5.79E+00	0.00E+00	5.79E+00
		Co-58	<6.78E+00	0.00E+00	6.78E+00
		Fe-59	<1.24E+01	0.00E+00	1.24E+01
		Co-60	<6.80E+00	0.00E+00	6.80E+00
		Zn-65	<1.65E+01	0.00E+00	1.65E+01
		Zr-95	<1.11E+01	0.00E+00	1.11E+01
		Nb-95	<6.76E+00	0.00E+00	6.76E+00
		I-131	<7.64E+00	0.00E+00	7.64E+00
		Cs-134	<7.86E+00	0.00E+00	7.86E+00
		Cs-137	<6.86E+00	0.00E+00	6.86E+00
		BaLa-140	<8.38E+00	0.00E+00	8.38E+00
		Be-7	<4.12E+01	0.00E+00	4.12E+01
		K-40	1.92E+02	6.80E+01	6.11E+01
		H3GW	<-7.2E+01	0.00E+00	1.76E+02

Sample Point 77 [INDICATOR - S @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538258	2/23/2021 - 2/23/2021	Mn-54	<5.46E+00	0.00E+00	5.46E+00
		Co-58	<5.84E+00	0.00E+00	5.84E+00
		Fe-59	<9.36E+00	0.00E+00	9.36E+00
		Co-60	<5.55E+00	0.00E+00	5.55E+00
		Zn-65	<9.96E+00	0.00E+00	9.96E+00
		Zr-95	<7.64E+00	0.00E+00	7.64E+00
		Nb-95	<6.34E+00	0.00E+00	6.34E+00
		I-131	<9.56E+00	0.00E+00	9.56E+00
		Cs-134	<6.34E+00	0.00E+00	6.34E+00
		Cs-137	<6.56E+00	0.00E+00	6.56E+00
		BaLa-140	<9.26E+00	0.00E+00	9.26E+00
		Be-7	<5.32E+01	0.00E+00	5.32E+01
		K-40	1.37E+02	6.65E+01	8.49E+01
		H3GW	<3.19E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544232	5/24/2021 - 5/24/2021	Mn-54	<5.35E+00	0.00E+00	5.35E+00
		Co-58	<6.27E+00	0.00E+00	6.27E+00
		Fe-59	<1.10E+01	0.00E+00	1.10E+01
		Co-60	<6.31E+00	0.00E+00	6.31E+00
		Zn-65	<1.39E+01	0.00E+00	1.39E+01
		Zr-95	<1.12E+01	0.00E+00	1.12E+01
		Nb-95	<6.57E+00	0.00E+00	6.57E+00
		I-131	<5.34E+00	0.00E+00	5.34E+00
		Cs-134	<6.88E+00	0.00E+00	6.88E+00
		Cs-137	<6.33E+00	0.00E+00	6.33E+00
		BaLa-140	<7.27E+00	0.00E+00	7.27E+00
		Be-7	<4.06E+01	0.00E+00	4.06E+01
		K-40	<1.01E+02	0.00E+00	1.01E+02
		H3GW	<1.24E+02	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548891	8/18/2021 - 8/18/2021	Mn-54	<5.46E+00	0.00E+00	5.46E+00
		Co-58	<5.57E+00	0.00E+00	5.57E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<5.12E+00	0.00E+00	5.12E+00
		Zn-65	<1.13E+01	0.00E+00	1.13E+01
		Zr-95	<1.17E+01	0.00E+00	1.17E+01
		Nb-95	<5.59E+00	0.00E+00	5.59E+00
		I-131	<6.61E+00	0.00E+00	6.61E+00
		Cs-134	<5.62E+00	0.00E+00	5.62E+00
		Cs-137	<4.41E+00	0.00E+00	4.41E+00
		BaLa-140	<7.98E+00	0.00E+00	7.98E+00
		Be-7	<3.80E+01	0.00E+00	3.80E+01
		K-40	<9.58E+01	0.00E+00	9.58E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 77 [INDICATOR - S @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548891	8/18/2021 - 8/18/2021	H3GW	<1.23E+02	0.00E+00	1.94E+02
554548	11/15/2021 - 11/15/2021	Mn-54	<5.42E+00	0.00E+00	5.42E+00
		Co-58	<5.20E+00	0.00E+00	5.20E+00
		Fe-59	<1.01E+01	0.00E+00	1.01E+01
		Co-60	<6.39E+00	0.00E+00	6.39E+00
		Zn-65	<9.79E+00	0.00E+00	9.79E+00
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<4.61E+00	0.00E+00	4.61E+00
		I-131	<4.95E+00	0.00E+00	4.95E+00
		Cs-134	<4.74E+00	0.00E+00	4.74E+00
		Cs-137	<4.89E+00	0.00E+00	4.89E+00
		BaLa-140	<5.24E+00	0.00E+00	5.24E+00
		Be-7	<4.47E+01	0.00E+00	4.47E+01
		K-40	<8.84E+01	0.00E+00	8.84E+01
		H3GW	<1.86E+01	0.00E+00	1.76E+02

Sample Point 78 [INDICATOR - S @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538259	2/23/2021 - 2/23/2021	Mn-54	<5.59E+00	0.00E+00	5.59E+00
		Co-58	<7.19E+00	0.00E+00	7.19E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<5.50E+00	0.00E+00	5.50E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<5.84E+00	0.00E+00	5.84E+00
		I-131	<1.03E+01	0.00E+00	1.03E+01
		Cs-134	<7.98E+00	0.00E+00	7.98E+00
		Cs-137	<6.15E+00	0.00E+00	6.15E+00
		BaLa-140	<7.51E+00	0.00E+00	7.51E+00
		Be-7	<4.83E+01	0.00E+00	4.83E+01
		K-40	9.73E+01	6.71E+01	9.86E+01
		H3GW	<6.06E+01	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544233	5/24/2021 - 5/24/2021	Mn-54	<5.33E+00	0.00E+00	5.33E+00
		Co-58	<6.08E+00	0.00E+00	6.08E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<5.90E+00	0.00E+00	5.90E+00
		Zn-65	<1.22E+01	0.00E+00	1.22E+01
		Zr-95	<1.12E+01	0.00E+00	1.12E+01
		Nb-95	<6.09E+00	0.00E+00	6.09E+00
		I-131	<6.19E+00	0.00E+00	6.19E+00
		Cs-134	<7.24E+00	0.00E+00	7.24E+00
		Cs-137	<5.98E+00	0.00E+00	5.98E+00
		BaLa-140	<6.67E+00	0.00E+00	6.67E+00
		Be-7	<4.85E+01	0.00E+00	4.85E+01
		K-40	2.07E+02	7.15E+01	7.22E+01
		H3GW	3.06E+02	1.13E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548892	8/18/2021 - 8/18/2021	Mn-54	<7.18E+00	0.00E+00	7.18E+00
		Co-58	<6.01E+00	0.00E+00	6.01E+00
		Fe-59	<1.09E+01	0.00E+00	1.09E+01
		Co-60	<6.89E+00	0.00E+00	6.89E+00
		Zn-65	<1.10E+01	0.00E+00	1.10E+01
		Zr-95	<9.46E+00	0.00E+00	9.46E+00
		Nb-95	<5.00E+00	0.00E+00	5.00E+00
		I-131	<7.79E+00	0.00E+00	7.79E+00
		Cs-134	<6.99E+00	0.00E+00	6.99E+00
		Cs-137	<6.70E+00	0.00E+00	6.70E+00
		BaLa-140	<9.78E+00	0.00E+00	9.78E+00
		Be-7	<4.15E+01	0.00E+00	4.15E+01
		K-40	1.15E+02	7.29E+01	1.06E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 78 [INDICATOR - S @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548892	8/18/2021 - 8/18/2021	H3GW	<1.69E+02	0.00E+00	1.94E+02
554549	11/15/2021 - 11/15/2021	Mn-54	<8.22E+00	0.00E+00	8.22E+00
		Co-58	<6.30E+00	0.00E+00	6.30E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<5.92E+00	0.00E+00	5.92E+00
		Zn-65	<1.04E+01	0.00E+00	1.04E+01
		Zr-95	<1.12E+01	0.00E+00	1.12E+01
		Nb-95	<6.29E+00	0.00E+00	6.29E+00
		I-131	<7.62E+00	0.00E+00	7.62E+00
		Cs-134	<6.49E+00	0.00E+00	6.49E+00
		Cs-137	<7.25E+00	0.00E+00	7.25E+00
		BaLa-140	<9.27E+00	0.00E+00	9.27E+00
		Be-7	<6.31E+01	0.00E+00	6.31E+01
		K-40	2.60E+02	8.80E+01	1.01E+02
		H3GW	2.07E+02	1.09E+02	1.76E+02

Sample Point 79 [INDICATOR - S @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538260	2/23/2021 - 2/23/2021	Mn-54	<3.25E+00	0.00E+00	3.25E+00
		Co-58	<4.66E+00	0.00E+00	4.66E+00
		Fe-59	<9.37E+00	0.00E+00	9.37E+00
		Co-60	<4.59E+00	0.00E+00	4.59E+00
		Zn-65	<9.91E+00	0.00E+00	9.91E+00
		Zr-95	<9.84E+00	0.00E+00	9.84E+00
		Nb-95	<6.52E+00	0.00E+00	6.52E+00
		I-131	<7.99E+00	0.00E+00	7.99E+00
		Cs-134	<7.00E+00	0.00E+00	7.00E+00
		Cs-137	<5.33E+00	0.00E+00	5.33E+00
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		Be-7	<4.48E+01	0.00E+00	4.48E+01
		K-40	<8.03E+01	0.00E+00	8.03E+01
		H3GW	<8.53E+01	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544234	5/24/2021 - 5/24/2021	Mn-54	<5.20E+00	0.00E+00	5.20E+00
		Co-58	<4.72E+00	0.00E+00	4.72E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<6.71E+00	0.00E+00	6.71E+00
		Zn-65	<1.40E+01	0.00E+00	1.40E+01
		Zr-95	<1.10E+01	0.00E+00	1.10E+01
		Nb-95	<7.39E+00	0.00E+00	7.39E+00
		I-131	<6.02E+00	0.00E+00	6.02E+00
		Cs-134	<8.07E+00	0.00E+00	8.07E+00
		Cs-137	<6.55E+00	0.00E+00	6.55E+00
		BaLa-140	<8.42E+00	0.00E+00	8.42E+00
		Be-7	<4.17E+01	0.00E+00	4.17E+01
		K-40	9.94E+01	6.67E+01	9.72E+01
		H3GW	2.39E+02	1.10E+02	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548893	8/18/2021 - 8/18/2021	Mn-54	<5.10E+00	0.00E+00	5.10E+00
		Co-58	<6.39E+00	0.00E+00	6.39E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<4.21E+00	0.00E+00	4.21E+00
		Zn-65	<1.46E+01	0.00E+00	1.46E+01
		Zr-95	<1.15E+01	0.00E+00	1.15E+01
		Nb-95	<7.56E+00	0.00E+00	7.56E+00
		I-131	<8.71E+00	0.00E+00	8.71E+00
		Cs-134	<7.47E+00	0.00E+00	7.47E+00
		Cs-137	<6.49E+00	0.00E+00	6.49E+00
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		Be-7	<4.79E+01	0.00E+00	4.79E+01
		K-40	1.32E+02	7.38E+01	1.01E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 79 [INDICATOR - S @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548893	8/18/2021 - 8/18/2021	H3GW	<1.46E+02	0.00E+00	1.95E+02
554550	11/15/2021 - 11/15/2021	Mn-54	<6.19E+00	0.00E+00	6.19E+00
		Co-58	<5.26E+00	0.00E+00	5.26E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<4.44E+00	0.00E+00	4.44E+00
		Zn-65	<1.41E+01	0.00E+00	1.41E+01
		Zr-95	<8.00E+00	0.00E+00	8.00E+00
		Nb-95	<5.85E+00	0.00E+00	5.85E+00
		I-131	<6.54E+00	0.00E+00	6.54E+00
		Cs-134	<5.19E+00	0.00E+00	5.19E+00
		Cs-137	<5.73E+00	0.00E+00	5.73E+00
		BaLa-140	<8.71E+00	0.00E+00	8.71E+00
		Be-7	<4.94E+01	0.00E+00	4.94E+01
		K-40	1.96E+02	7.37E+01	8.38E+01
		H3GW	<1.54E+02	0.00E+00	1.76E+02

Sample Point 80 [INDICATOR - S @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538261	2/22/2021 - 2/22/2021	Mn-54	<5.60E+00	0.00E+00	5.60E+00
		Co-58	<6.74E+00	0.00E+00	6.74E+00
		Fe-59	<9.35E+00	0.00E+00	9.35E+00
		Co-60	<6.65E+00	0.00E+00	6.65E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<1.15E+01	0.00E+00	1.15E+01
		Nb-95	<5.71E+00	0.00E+00	5.71E+00
		I-131	<9.82E+00	0.00E+00	9.82E+00
		Cs-134	<6.47E+00	0.00E+00	6.47E+00
		Cs-137	<5.62E+00	0.00E+00	5.62E+00
		BaLa-140	<5.35E+00	0.00E+00	5.35E+00
		Be-7	<4.55E+01	0.00E+00	4.55E+01
		K-40	1.49E+02	6.72E+01	8.25E+01
		H3GW	<1.79E+02	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544235	5/24/2021 - 5/24/2021	Mn-54	<5.27E+00	0.00E+00	5.27E+00
		Co-58	<4.83E+00	0.00E+00	4.83E+00
		Fe-59	<1.43E+01	0.00E+00	1.43E+01
		Co-60	<6.20E+00	0.00E+00	6.20E+00
		Zn-65	<1.21E+01	0.00E+00	1.21E+01
		Zr-95	<9.14E+00	0.00E+00	9.14E+00
		Nb-95	<5.49E+00	0.00E+00	5.49E+00
		I-131	<6.22E+00	0.00E+00	6.22E+00
		Cs-134	<5.18E+00	0.00E+00	5.18E+00
		Cs-137	<5.55E+00	0.00E+00	5.55E+00
		BaLa-140	<6.58E+00	0.00E+00	6.58E+00
		Be-7	<4.19E+01	0.00E+00	4.19E+01
		K-40	1.22E+02	6.25E+01	8.10E+01
		H3GW	3.49E+02	1.14E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548894	8/18/2021 - 8/18/2021	Mn-54	<5.24E+00	0.00E+00	5.24E+00
		Co-58	<4.34E+00	0.00E+00	4.34E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<7.42E+00	0.00E+00	7.42E+00
		Zn-65	<9.88E+00	0.00E+00	9.88E+00
		Zr-95	<8.52E+00	0.00E+00	8.52E+00
		Nb-95	<5.61E+00	0.00E+00	5.61E+00
		I-131	<7.25E+00	0.00E+00	7.25E+00
		Cs-134	<7.19E+00	0.00E+00	7.19E+00
		Cs-137	<4.41E+00	0.00E+00	4.41E+00
		BaLa-140	<9.47E+00	0.00E+00	9.47E+00
		Be-7	<4.55E+01	0.00E+00	4.55E+01
		K-40	<8.58E+01	0.00E+00	8.58E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 80 [INDICATOR - S @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548894	8/18/2021 - 8/18/2021	H3GW	<1.33E+02	0.00E+00	1.94E+02
554551	11/15/2021 - 11/15/2021	Mn-54	<6.70E+00	0.00E+00	6.70E+00
		Co-58	<6.69E+00	0.00E+00	6.69E+00
		Fe-59	<1.30E+01	0.00E+00	1.30E+01
		Co-60	<5.97E+00	0.00E+00	5.97E+00
		Zn-65	<1.05E+01	0.00E+00	1.05E+01
		Zr-95	<9.75E+00	0.00E+00	9.75E+00
		Nb-95	<7.11E+00	0.00E+00	7.11E+00
		I-131	<7.41E+00	0.00E+00	7.41E+00
		Cs-134	<6.96E+00	0.00E+00	6.96E+00
		Cs-137	<7.45E+00	0.00E+00	7.45E+00
		BaLa-140	<8.45E+00	0.00E+00	8.45E+00
		Be-7	<4.68E+01	0.00E+00	4.68E+01
		K-40	1.52E+02	7.29E+01	9.52E+01
		H3GW	<1.72E+02	0.00E+00	1.76E+02

Sample Point 81 [INDICATOR - S @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538262	2/22/2021 - 2/22/2021	Mn-54	<4.52E+00	0.00E+00	4.52E+00
		Co-58	<4.04E+00	0.00E+00	4.04E+00
		Fe-59	<8.17E+00	0.00E+00	8.17E+00
		Co-60	<5.16E+00	0.00E+00	5.16E+00
		Zn-65	<8.53E+00	0.00E+00	8.53E+00
		Zr-95	<7.07E+00	0.00E+00	7.07E+00
		Nb-95	<5.54E+00	0.00E+00	5.54E+00
		I-131	<8.69E+00	0.00E+00	8.69E+00
		Cs-134	<5.05E+00	0.00E+00	5.05E+00
		Cs-137	<4.20E+00	0.00E+00	4.20E+00
		BaLa-140	<1.11E+01	0.00E+00	1.11E+01
		Be-7	<4.19E+01	0.00E+00	4.19E+01
		K-40	9.87E+01	4.99E+01	6.15E+01
		H3GW	2.82E+02	1.11E+02	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544236	5/24/2021 - 5/24/2021	Mn-54	<5.48E+00	0.00E+00	5.48E+00
		Co-58	<4.71E+00	0.00E+00	4.71E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<5.36E+00	0.00E+00	5.36E+00
		Zn-65	<1.03E+01	0.00E+00	1.03E+01
		Zr-95	<1.20E+01	0.00E+00	1.20E+01
		Nb-95	<6.15E+00	0.00E+00	6.15E+00
		I-131	<7.28E+00	0.00E+00	7.28E+00
		Cs-134	<7.34E+00	0.00E+00	7.34E+00
		Cs-137	<7.72E+00	0.00E+00	7.72E+00
		BaLa-140	<8.87E+00	0.00E+00	8.87E+00
		Be-7	<4.43E+01	0.00E+00	4.43E+01
		K-40	1.83E+02	6.29E+01	4.81E+01
		H3GW	2.85E+02	1.12E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548895	8/18/2021 - 8/18/2021	Mn-54	<6.86E+00	0.00E+00	6.86E+00
		Co-58	<7.29E+00	0.00E+00	7.29E+00
		Fe-59	<1.16E+01	0.00E+00	1.16E+01
		Co-60	<6.07E+00	0.00E+00	6.07E+00
		Zn-65	<1.44E+01	0.00E+00	1.44E+01
		Zr-95	<1.20E+01	0.00E+00	1.20E+01
		Nb-95	<6.40E+00	0.00E+00	6.40E+00
		I-131	<9.87E+00	0.00E+00	9.87E+00
		Cs-134	<8.31E+00	0.00E+00	8.31E+00
		Cs-137	<7.10E+00	0.00E+00	7.10E+00
		BaLa-140	<1.19E+01	0.00E+00	1.19E+01
		Be-7	<4.86E+01	0.00E+00	4.86E+01
		K-40	2.34E+02	7.35E+01	6.97E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 81 [INDICATOR - S @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548895	8/18/2021 - 8/18/2021	H3GW	2.14E+02	1.19E+02	1.93E+02
554552	11/15/2021 - 11/15/2021	Mn-54	<6.97E+00	0.00E+00	6.97E+00
		Co-58	<4.93E+00	0.00E+00	4.93E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<6.30E+00	0.00E+00	6.30E+00
		Zn-65	<1.49E+01	0.00E+00	1.49E+01
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<8.35E+00	0.00E+00	8.35E+00
		I-131	<6.57E+00	0.00E+00	6.57E+00
		Cs-134	<6.91E+00	0.00E+00	6.91E+00
		Cs-137	<5.84E+00	0.00E+00	5.84E+00
		BaLa-140	<7.29E+00	0.00E+00	7.29E+00
		Be-7	<4.38E+01	0.00E+00	4.38E+01
		K-40	1.73E+02	8.62E+01	1.20E+02
		H3GW	<1.42E+02	0.00E+00	1.76E+02

Sample Point 82 [INDICATOR - S @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538263	2/22/2021 - 2/22/2021	Mn-54	<5.72E+00	0.00E+00	5.72E+00
		Co-58	<4.83E+00	0.00E+00	4.83E+00
		Fe-59	<1.33E+01	0.00E+00	1.33E+01
		Co-60	<7.20E+00	0.00E+00	7.20E+00
		Zn-65	<1.48E+01	0.00E+00	1.48E+01
		Zr-95	<6.40E+00	0.00E+00	6.40E+00
		Nb-95	<5.20E+00	0.00E+00	5.20E+00
		I-131	<9.67E+00	0.00E+00	9.67E+00
		Cs-134	<5.96E+00	0.00E+00	5.95E+00
		Cs-137	<5.36E+00	0.00E+00	5.36E+00
		BaLa-140	<9.48E+00	0.00E+00	9.48E+00
		Be-7	<4.37E+01	0.00E+00	4.37E+01
		K-40	<1.30E+02	0.00E+00	1.30E+02
		H3GW	<1.59E+02	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544237	5/24/2021 - 5/24/2021	Mn-54	<5.94E+00	0.00E+00	5.94E+00
		Co-58	<7.78E+00	0.00E+00	7.78E+00
		Fe-59	<1.05E+01	0.00E+00	1.05E+01
		Co-60	<5.51E+00	0.00E+00	5.51E+00
		Zn-65	<1.23E+01	0.00E+00	1.23E+01
		Zr-95	<1.09E+01	0.00E+00	1.09E+01
		Nb-95	<7.02E+00	0.00E+00	7.02E+00
		I-131	<7.41E+00	0.00E+00	7.41E+00
		Cs-134	<7.81E+00	0.00E+00	7.81E+00
		Cs-137	<7.65E+00	0.00E+00	7.65E+00
		BaLa-140	<9.26E+00	0.00E+00	9.26E+00
		Be-7	<4.48E+01	0.00E+00	4.48E+01
		K-40	1.35E+02	7.01E+01	9.41E+01
		H3GW	<1.27E+02	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548896	8/17/2021 - 8/17/2021	Mn-54	<6.80E+00	0.00E+00	6.80E+00
		Co-58	<6.18E+00	0.00E+00	6.18E+00
		Fe-59	<1.20E+01	0.00E+00	1.20E+01
		Co-60	<7.41E+00	0.00E+00	7.41E+00
		Zn-65	<1.15E+01	0.00E+00	1.15E+01
		Zr-95	<9.44E+00	0.00E+00	9.44E+00
		Nb-95	<6.45E+00	0.00E+00	6.45E+00
		I-131	<1.03E+01	0.00E+00	1.03E+01
		Cs-134	<7.27E+00	0.00E+00	7.27E+00
		Cs-137	<7.30E+00	0.00E+00	7.30E+00
		BaLa-140	<1.18E+01	0.00E+00	1.18E+01
		Be-7	<5.27E+01	0.00E+00	5.27E+01
		K-40	1.76E+02	6.51E+01	6.69E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 82 [INDICATOR - S @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548896	8/17/2021 - 8/17/2021	H3GW	<1.49E+02	0.00E+00	1.81E+02
554553	11/15/2021 - 11/15/2021	Mn-54	<6.45E+00	0.00E+00	6.45E+00
		Co-58	<6.25E+00	0.00E+00	6.25E+00
		Fe-59	<1.09E+01	0.00E+00	1.09E+01
		Co-60	<5.25E+00	0.00E+00	5.25E+00
		Zn-65	<1.11E+01	0.00E+00	1.11E+01
		Zr-95	<1.13E+01	0.00E+00	1.13E+01
		Nb-95	<7.24E+00	0.00E+00	7.24E+00
		I-131	<6.80E+00	0.00E+00	6.80E+00
		Cs-134	<6.83E+00	0.00E+00	6.83E+00
		Cs-137	<6.59E+00	0.00E+00	6.59E+00
		BaLa-140	<8.15E+00	0.00E+00	8.15E+00
		Be-7	<4.59E+01	0.00E+00	4.59E+01
		K-40	1.87E+02	7.48E+01	9.84E+01
		H3GW	<3.49E+01	0.00E+00	1.76E+02

Sample Point 83 [INDICATOR - SSW @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538264	2/22/2021 - 2/22/2021	Mn-54	<5.60E+00	0.00E+00	5.60E+00
		Co-58	<6.76E+00	0.00E+00	6.76E+00
		Fe-59	<1.14E+01	0.00E+00	1.14E+01
		Co-60	<5.50E+00	0.00E+00	5.50E+00
		Zn-65	<1.12E+01	0.00E+00	1.12E+01
		Zr-95	<9.79E+00	0.00E+00	9.79E+00
		Nb-95	<6.37E+00	0.00E+00	6.37E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<7.98E+00	0.00E+00	7.98E+00
		Cs-137	<6.63E+00	0.00E+00	6.63E+00
		BaLa-140	<8.86E+00	0.00E+00	8.86E+00
		Be-7	<4.89E+01	0.00E+00	4.89E+01
		K-40	1.36E+02	7.06E+01	9.51E+01
		H3GW	8.42E+02	1.28E+02	1.75E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544238	5/24/2021 - 5/24/2021	Mn-54	<7.94E+00	0.00E+00	7.94E+00
		Co-58	<7.53E+00	0.00E+00	7.53E+00
		Fe-59	<1.18E+01	0.00E+00	1.18E+01
		Co-60	<8.04E+00	0.00E+00	8.04E+00
		Zn-65	<1.37E+01	0.00E+00	1.37E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<5.85E+00	0.00E+00	5.85E+00
		I-131	<7.00E+00	0.00E+00	7.00E+00
		Cs-134	<5.93E+00	0.00E+00	5.93E+00
		Cs-137	<6.98E+00	0.00E+00	6.98E+00
		BaLa-140	<9.96E+00	0.00E+00	9.96E+00
		Be-7	<5.02E+01	0.00E+00	5.02E+01
		K-40	7.65E+01	7.24E+01	1.15E+02
		H3GW	8.80E+02	1.30E+02	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548897	8/18/2021 - 8/18/2021	Mn-54	<6.41E+00	0.00E+00	6.41E+00
		Co-58	<6.54E+00	0.00E+00	6.54E+00
		Fe-59	<1.41E+01	0.00E+00	1.41E+01
		Co-60	<5.09E+00	0.00E+00	5.09E+00
		Zn-65	<1.36E+01	0.00E+00	1.36E+01
		Zr-95	<1.01E+01	0.00E+00	1.01E+01
		Nb-95	<6.00E+00	0.00E+00	6.00E+00
		I-131	<9.03E+00	0.00E+00	9.03E+00
		Cs-134	<7.07E+00	0.00E+00	7.07E+00
		Cs-137	<6.87E+00	0.00E+00	6.87E+00
		BaLa-140	<9.36E+00	0.00E+00	9.36E+00
		Be-7	<4.96E+01	0.00E+00	4.96E+01
		K-40	9.85E+01	7.31E+01	1.11E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 83 [INDICATOR - SSW @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548897	8/18/2021 - 8/18/2021	H3GW	8.81E+02	1.32E+02	1.81E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554554	11/15/2021 - 11/15/2021	Mn-54	<7.33E+00	0.00E+00	7.33E+00
		Co-58	<7.89E+00	0.00E+00	7.89E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<8.29E+00	0.00E+00	8.29E+00
		Zn-65	<1.72E+01	0.00E+00	1.72E+01
		Zr-95	<1.11E+01	0.00E+00	1.11E+01
		Nb-95	<7.94E+00	0.00E+00	7.94E+00
		I-131	<8.38E+00	0.00E+00	8.38E+00
		Cs-134	<8.25E+00	0.00E+00	8.25E+00
		Cs-137	<6.43E+00	0.00E+00	6.43E+00
		BaLa-140	<8.49E+00	0.00E+00	8.49E+00
		Be-7	<4.86E+01	0.00E+00	4.86E+01
		K-40	<7.65E+01	0.00E+00	7.65E+01
		H3GW	7.25E+02	1.25E+02	1.76E+02

Sample Point 84 [GWPI - SSW @ 0.24 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538265	2/24/2021 - 2/24/2021	Mn-54	<5.25E+00	0.00E+00	5.25E+00
		Co-58	<5.37E+00	0.00E+00	5.37E+00
		Fe-59	<7.60E+00	0.00E+00	7.60E+00
		Co-60	<6.40E+00	0.00E+00	6.40E+00
		Zn-65	<1.13E+01	0.00E+00	1.13E+01
		Zr-95	<1.01E+01	0.00E+00	1.01E+01
		Nb-95	<6.23E+00	0.00E+00	6.23E+00
		I-131	<7.93E+00	0.00E+00	7.93E+00
		Cs-134	<4.76E+00	0.00E+00	4.76E+00
		Cs-137	<3.53E+00	0.00E+00	3.53E+00
		BaLa-140	<9.50E+00	0.00E+00	9.50E+00
		Be-7	<4.20E+01	0.00E+00	4.20E+01
		K-40	1.13E+02	4.77E+01	3.83E+01
		H3GW	<3.17E+01	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544239	5/24/2021 - 5/24/2021	Mn-54	<6.52E+00	0.00E+00	6.52E+00
		Co-58	<5.47E+00	0.00E+00	5.47E+00
		Fe-59	<1.18E+01	0.00E+00	1.18E+01
		Co-60	<5.36E+00	0.00E+00	5.36E+00
		Zn-65	<1.18E+01	0.00E+00	1.18E+01
		Zr-95	<9.52E+00	0.00E+00	9.52E+00
		Nb-95	<7.04E+00	0.00E+00	7.04E+00
		I-131	<6.12E+00	0.00E+00	6.12E+00
		Cs-134	<5.62E+00	0.00E+00	5.62E+00
		Cs-137	<5.14E+00	0.00E+00	5.14E+00
		BaLa-140	<8.92E+00	0.00E+00	8.92E+00
		Be-7	<4.55E+01	0.00E+00	4.55E+01
		K-40	1.07E+02	7.10E+01	1.03E+02
		H3GW	<1.04E+02	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548898	8/18/2021 - 8/18/2021	Mn-54	<6.99E+00	0.00E+00	6.99E+00
		Co-58	<5.71E+00	0.00E+00	5.71E+00
		Fe-59	<1.26E+01	0.00E+00	1.26E+01
		Co-60	<7.01E+00	0.00E+00	7.01E+00
		Zn-65	<1.30E+01	0.00E+00	1.30E+01
		Zr-95	<1.16E+01	0.00E+00	1.16E+01
		Nb-95	<6.31E+00	0.00E+00	6.31E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<6.04E+00	0.00E+00	6.04E+00
		Cs-137	<7.38E+00	0.00E+00	7.38E+00
		BaLa-140	<8.63E+00	0.00E+00	8.63E+00
		Be-7	<5.24E+01	0.00E+00	5.24E+01
		K-40	1.87E+02	7.57E+01	9.12E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 84 [GWPI - SSW @ 0.24 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548898	8/18/2021 - 8/18/2021	H3GW	<-9.4E+00	0.00E+00	1.81E+02
554555	11/15/2021 - 11/15/2021	Mn-54	<6.36E+00	0.00E+00	6.36E+00
		Co-58	<7.87E+00	0.00E+00	7.87E+00
		Fe-59	<1.30E+01	0.00E+00	1.30E+01
		Co-60	<6.71E+00	0.00E+00	6.71E+00
		Zn-65	<1.30E+01	0.00E+00	1.30E+01
		Zr-95	<1.13E+01	0.00E+00	1.13E+01
		Nb-95	<8.17E+00	0.00E+00	8.17E+00
		I-131	<7.89E+00	0.00E+00	7.89E+00
		Cs-134	<7.72E+00	0.00E+00	7.72E+00
		Cs-137	<7.02E+00	0.00E+00	7.02E+00
		BaLa-140	<8.92E+00	0.00E+00	8.92E+00
		Be-7	<6.13E+01	0.00E+00	6.13E+01
		K-40	1.38E+02	5.57E+01	5.31E+01
		H3GW	<5.80E+01	0.00E+00	1.77E+02

Sample Point 85 [GWPI - SSW @ 0.22 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538266	2/24/2021 - 2/24/2021	Mn-54	<5.88E+00	0.00E+00	5.88E+00
		Co-58	<5.81E+00	0.00E+00	5.81E+00
		Fe-59	<1.19E+01	0.00E+00	1.19E+01
		Co-60	<3.84E+00	0.00E+00	3.84E+00
		Zn-65	<1.33E+01	0.00E+00	1.33E+01
		Zr-95	<1.05E+01	0.00E+00	1.05E+01
		Nb-95	<5.63E+00	0.00E+00	5.63E+00
		I-131	<9.70E+00	0.00E+00	9.70E+00
		Cs-134	<5.94E+00	0.00E+00	5.94E+00
		Cs-137	<6.54E+00	0.00E+00	6.54E+00
		BaLa-140	<5.99E+00	0.00E+00	5.99E+00
		Be-7	<5.13E+01	0.00E+00	5.13E+01
		K-40	<1.25E+02	0.00E+00	1.25E+02
		H3GW	<-1.1E+01	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544240	5/24/2021 - 5/24/2021	Mn-54	<5.35E+00	0.00E+00	5.35E+00
		Co-58	<6.11E+00	0.00E+00	6.11E+00
		Fe-59	<1.16E+01	0.00E+00	1.16E+01
		Co-60	<5.51E+00	0.00E+00	5.51E+00
		Zn-65	<1.23E+01	0.00E+00	1.23E+01
		Zr-95	<8.54E+00	0.00E+00	8.54E+00
		Nb-95	<6.44E+00	0.00E+00	6.44E+00
		I-131	<5.88E+00	0.00E+00	5.88E+00
		Cs-134	<6.47E+00	0.00E+00	6.47E+00
		Cs-137	<5.82E+00	0.00E+00	5.82E+00
		BaLa-140	<6.71E+00	0.00E+00	6.71E+00
		Be-7	<3.95E+01	0.00E+00	3.95E+01
		K-40	1.09E+02	5.72E+01	7.23E+01
		H3GW	<-4.6E+01	0.00E+00	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548899	8/18/2021 - 8/18/2021	Mn-54	<5.01E+00	0.00E+00	5.01E+00
		Co-58	<6.17E+00	0.00E+00	6.17E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<6.72E+00	0.00E+00	6.72E+00
		Zn-65	<1.25E+01	0.00E+00	1.25E+01
		Zr-95	<1.01E+01	0.00E+00	1.01E+01
		Nb-95	<6.38E+00	0.00E+00	6.38E+00
		I-131	<8.29E+00	0.00E+00	8.29E+00
		Cs-134	<7.18E+00	0.00E+00	7.18E+00
		Cs-137	<6.05E+00	0.00E+00	6.05E+00
		BaLa-140	<8.71E+00	0.00E+00	8.71E+00
		Be-7	<4.56E+01	0.00E+00	4.56E+01
		K-40	1.19E+02	6.10E+01	7.79E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 85 [GWPI - SSW @ 0.22 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548899	8/18/2021 - 8/18/2021	H3GW	<-5.2E+01	0.00E+00	1.81E+02
554556	11/15/2021 - 11/15/2021	Mn-54	<6.36E+00	0.00E+00	6.36E+00
		Co-58	<6.01E+00	0.00E+00	6.01E+00
		Fe-59	<1.27E+01	0.00E+00	1.27E+01
		Co-60	<4.96E+00	0.00E+00	4.96E+00
		Zn-65	<1.37E+01	0.00E+00	1.37E+01
		Zr-95	<9.49E+00	0.00E+00	9.49E+00
		Nb-95	<4.91E+00	0.00E+00	4.91E+00
		I-131	<7.90E+00	0.00E+00	7.90E+00
		Cs-134	<6.57E+00	0.00E+00	6.57E+00
		Cs-137	<5.55E+00	0.00E+00	5.55E+00
		BaLa-140	<5.91E+00	0.00E+00	5.91E+00
		Be-7	<3.87E+01	0.00E+00	3.87E+01
		K-40	1.22E+02	7.46E+01	1.08E+02
		H3GW	<5.34E+01	0.00E+00	1.77E+02

Sample Point 86 [GWPI - SW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538267	2/24/2021 - 2/24/2021	Mn-54	<5.45E+00	0.00E+00	5.45E+00
		Co-58	<6.71E+00	0.00E+00	6.71E+00
		Fe-59	<1.27E+01	0.00E+00	1.27E+01
		Co-60	<7.06E+00	0.00E+00	7.06E+00
		Zn-65	<5.52E+00	0.00E+00	5.52E+00
		Zr-95	<1.07E+01	0.00E+00	1.07E+01
		Nb-95	<6.36E+00	0.00E+00	6.36E+00
		I-131	<8.30E+00	0.00E+00	8.30E+00
		Cs-134	<5.34E+00	0.00E+00	5.34E+00
		Cs-137	<6.22E+00	0.00E+00	6.22E+00
		BaLa-140	<7.91E+00	0.00E+00	7.91E+00
		Be-7	<3.73E+01	0.00E+00	3.73E+01
		K-40	<1.26E+02	0.00E+00	1.26E+02
		H3GW	<5.66E+01	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544241	5/24/2021 - 5/24/2021	Mn-54	<4.97E+00	0.00E+00	4.97E+00
		Co-58	<6.69E+00	0.00E+00	6.69E+00
		Fe-59	<1.06E+01	0.00E+00	1.06E+01
		Co-60	<4.55E+00	0.00E+00	4.55E+00
		Zn-65	<1.24E+01	0.00E+00	1.24E+01
		Zr-95	<6.79E+00	0.00E+00	6.79E+00
		Nb-95	<5.46E+00	0.00E+00	5.46E+00
		I-131	<5.25E+00	0.00E+00	5.25E+00
		Cs-134	<6.54E+00	0.00E+00	6.54E+00
		Cs-137	<6.71E+00	0.00E+00	6.71E+00
		BaLa-140	<6.07E+00	0.00E+00	6.07E+00
		Be-7	<4.07E+01	0.00E+00	4.07E+01
		K-40	1.55E+02	6.15E+01	6.34E+01
		H3GW	<7.19E+01	0.00E+00	1.93E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548900	8/18/2021 - 8/18/2021	Mn-54	<5.46E+00	0.00E+00	5.46E+00
		Co-58	<5.36E+00	0.00E+00	5.36E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<6.76E+00	0.00E+00	6.76E+00
		Zn-65	<1.26E+01	0.00E+00	1.26E+01
		Zr-95	<8.94E+00	0.00E+00	8.94E+00
		Nb-95	<5.60E+00	0.00E+00	5.60E+00
		I-131	<7.97E+00	0.00E+00	7.97E+00
		Cs-134	<6.99E+00	0.00E+00	6.99E+00
		Cs-137	<3.85E+00	0.00E+00	3.85E+00
		BaLa-140	<7.19E+00	0.00E+00	7.19E+00
		Be-7	<3.67E+01	0.00E+00	3.67E+01
		K-40	<1.00E+02	0.00E+00	1.00E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 86 [GWPI - SW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548900	8/18/2021 - 8/18/2021	H3GW	<5.90E+01	0.00E+00	1.81E+02
554557	11/15/2021 - 11/15/2021	Mn-54	<5.82E+00	0.00E+00	5.82E+00
		Co-58	<6.11E+00	0.00E+00	6.11E+00
		Fe-59	<1.11E+01	0.00E+00	1.11E+01
		Co-60	<7.55E+00	0.00E+00	7.55E+00
		Zn-65	<1.24E+01	0.00E+00	1.24E+01
		Zr-95	<1.18E+01	0.00E+00	1.18E+01
		Nb-95	<6.37E+00	0.00E+00	6.37E+00
		I-131	<7.53E+00	0.00E+00	7.53E+00
		Cs-134	<6.89E+00	0.00E+00	6.89E+00
		Cs-137	<6.00E+00	0.00E+00	6.00E+00
		BaLa-140	<8.93E+00	0.00E+00	8.93E+00
		Be-7	<5.75E+01	0.00E+00	5.75E+01
		K-40	1.28E+02	7.38E+01	1.06E+02
		H3GW	<1.13E+02	0.00E+00	1.76E+02

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
534056	1/5/2021 - 1/5/2021	LLI-131	<6.27E-01	0.00E+00	6.27E-01
		I-131	<7.29E+00	0.00E+00	7.29E+00
		Cs-134	<8.80E+00	0.00E+00	8.80E+00
		Cs-137	<8.91E+00	0.00E+00	8.91E+00
		BaLa-140	<7.70E+00	0.00E+00	7.70E+00
		Be-7	<3.92E+01	0.00E+00	3.92E+01
		K-40	1.41E+03	2.26E+02	7.57E+01
532033	2/1/2021 - 2/1/2021	LLI-131	<6.28E-01	0.00E+00	6.28E-01
		I-131	<8.41E+00	0.00E+00	8.41E+00
		Cs-134	<7.69E+00	0.00E+00	7.69E+00
		Cs-137	<8.42E+00	0.00E+00	8.42E+00
		BaLa-140	<2.22E+00	0.00E+00	2.22E+00
		Be-7	<5.38E+01	0.00E+00	5.38E+01
		K-40	1.48E+03	2.41E+02	1.39E+02
533710	3/1/2021 - 3/1/2021	LLI-131	<6.50E-01	0.00E+00	6.50E-01
		I-131	<7.84E+00	0.00E+00	7.84E+00
		Cs-134	<7.22E+00	0.00E+00	7.22E+00
		Cs-137	<7.73E+00	0.00E+00	7.73E+00
		BaLa-140	<7.60E+00	0.00E+00	7.60E+00
		Be-7	<5.36E+01	0.00E+00	5.36E+01
		K-40	1.33E+03	2.20E+02	1.02E+02
538739	3/29/2021 - 3/29/2021	LLI-131	<5.43E-01	0.00E+00	5.43E-01
		I-131	<7.24E+00	0.00E+00	7.24E+00
		Cs-134	<9.50E+00	0.00E+00	9.50E+00
		Cs-137	<7.67E+00	0.00E+00	7.67E+00
		BaLa-140	<7.57E+00	0.00E+00	7.57E+00
		Be-7	<3.87E+01	0.00E+00	3.87E+01
		K-40	1.30E+03	2.27E+02	1.54E+02
541355	4/26/2021 - 4/26/2021	LLI-131	<5.53E-01	0.00E+00	5.53E-01
		I-131	<9.65E+00	0.00E+00	9.65E+00
		Cs-134	<7.15E+00	0.00E+00	7.15E+00
		Cs-137	<8.06E+00	0.00E+00	8.06E+00
		BaLa-140	<2.21E+00	0.00E+00	2.21E+00
		Be-7	<4.54E+01	0.00E+00	4.54E+01
		K-40	1.29E+03	2.18E+02	1.08E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542168	5/10/2021 - 5/10/2021	LLI-131	<6.32E-01	0.00E+00	6.32E-01
		I-131	<3.47E+00	0.00E+00	3.47E+00
		Cs-134	<7.82E+00	0.00E+00	7.82E+00
		Cs-137	<7.80E+00	0.00E+00	7.80E+00
		BaLa-140	<6.09E+00	0.00E+00	6.09E+00
		Be-7	<6.15E+01	0.00E+00	6.15E+01
		K-40	1.32E+03	2.21E+02	1.03E+02
543165	5/24/2021 - 5/24/2021	LLI-131	<5.71E-01	0.00E+00	5.71E-01
		I-131	<7.43E+00	0.00E+00	7.43E+00
		Cs-134	<8.80E+00	0.00E+00	8.80E+00
		Cs-137	<9.89E+00	0.00E+00	9.89E+00
		BaLa-140	<6.18E+00	0.00E+00	6.18E+00
		Be-7	<5.46E+01	0.00E+00	5.46E+01
		K-40	1.38E+03	2.23E+02	7.10E+01
544243	6/7/2021 - 6/7/2021	LLI-131	<5.82E-01	0.00E+00	5.82E-01
		I-131	<6.36E+00	0.00E+00	6.36E+00
		Cs-134	<6.61E+00	0.00E+00	6.61E+00
		Cs-137	<7.32E+00	0.00E+00	7.32E+00
		BaLa-140	<5.99E+00	0.00E+00	5.99E+00
		Be-7	<5.59E+01	0.00E+00	5.59E+01
		K-40	1.52E+03	2.39E+02	1.09E+02
544892	6/21/2021 - 6/21/2021	LLI-131	<6.12E-01	0.00E+00	6.12E-01
		I-131	<7.56E+00	0.00E+00	7.56E+00
		Cs-134	<6.61E+00	0.00E+00	6.61E+00
		Cs-137	<7.73E+00	0.00E+00	7.73E+00
		BaLa-140	<7.56E+00	0.00E+00	7.56E+00
		Be-7	<3.86E+01	0.00E+00	3.86E+01
		K-40	1.39E+03	2.24E+02	8.87E+01
545438	7/6/2021 - 7/6/2021	LLI-131	<6.30E-01	0.00E+00	6.30E-01
		I-131	<7.53E+00	0.00E+00	7.53E+00
		Cs-134	<7.82E+00	0.00E+00	7.82E+00
		Cs-137	<7.38E+00	0.00E+00	7.38E+00
		BaLa-140	<6.10E+00	0.00E+00	6.10E+00
		Be-7	<5.44E+01	0.00E+00	5.44E+01
		K-40	1.45E+03	2.30E+02	7.19E+01
545961	7/19/2021 - 7/19/2021	LLI-131	<6.31E-01	0.00E+00	6.31E-01
		I-131	<7.88E+00	0.00E+00	7.88E+00
		Cs-134	<7.03E+00	0.00E+00	7.03E+00
		Cs-137	<7.77E+00	0.00E+00	7.77E+00
		BaLa-140	<8.13E+00	0.00E+00	8.13E+00
		Be-7	<6.90E+01	0.00E+00	6.90E+01
		K-40	1.47E+03	2.44E+02	1.30E+02
547119	8/2/2021 - 8/2/2021	LLI-131	<5.69E-01	0.00E+00	5.69E-01
		I-131	<6.41E+00	0.00E+00	6.41E+00
		Cs-134	<9.99E+00	0.00E+00	9.99E+00
		Cs-137	<8.12E+00	0.00E+00	8.12E+00
		BaLa-140	<6.03E+00	0.00E+00	6.03E+00
		Be-7	<5.36E+01	0.00E+00	5.36E+01
		K-40	1.47E+03	2.37E+02	1.28E+02
547639	8/16/2021 - 8/16/2021	LLI-131	<6.42E-01	0.00E+00	6.42E-01
		I-131	<7.74E+00	0.00E+00	7.74E+00
		Cs-134	<9.99E+00	0.00E+00	9.99E+00
		Cs-137	<7.32E+00	0.00E+00	7.32E+00
		BaLa-140	<7.54E+00	0.00E+00	7.54E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 5 [CONTROL - WNW @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547639	8/16/2021 - 8/16/2021	Be-7	<5.09E+01	0.00E+00	5.09E+01
		K-40	1.67E+03	2.47E+02	1.78E+01
548460	8/30/2021 - 8/30/2021	LLI-131	<6.07E-01	0.00E+00	6.07E-01
		I-131	<7.47E+00	0.00E+00	7.47E+00
		Cs-134	<8.11E+00	0.00E+00	8.11E+00
		Cs-137	<7.61E+00	0.00E+00	7.61E+00
		BaLa-140	<9.72E+00	0.00E+00	9.72E+00
		Be-7	<6.47E+01	0.00E+00	6.47E+01
		K-40	1.46E+03	2.30E+02	7.25E+01
548877	9/13/2021 - 9/13/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<6.50E+00	0.00E+00	6.50E+00
		Cs-134	<9.26E+00	0.00E+00	9.26E+00
		Cs-137	<6.93E+00	0.00E+00	6.93E+00
		BaLa-140	<7.78E+00	0.00E+00	7.78E+00
		Be-7	<3.91E+01	0.00E+00	3.91E+01
		K-40	1.50E+03	2.43E+02	1.24E+02
549630	9/27/2021 - 9/27/2021	LLI-131	<6.43E-01	0.00E+00	6.43E-01
		I-131	<7.79E+00	0.00E+00	7.79E+00
		Cs-134	<1.05E+01	0.00E+00	1.05E+01
		Cs-137	<7.38E+00	0.00E+00	7.38E+00
		BaLa-140	<7.82E+00	0.00E+00	7.82E+00
		Be-7	<5.17E+01	0.00E+00	5.17E+01
		K-40	1.50E+03	2.42E+02	1.20E+02
549977	10/11/2021 - 10/11/2021	LLI-131	<6.25E-01	0.00E+00	6.25E-01
		I-131	<7.88E+00	0.00E+00	7.88E+00
		Cs-134	<8.82E+00	0.00E+00	8.82E+00
		Cs-137	<5.29E+00	0.00E+00	5.29E+00
		BaLa-140	<1.00E+01	0.00E+00	1.00E+01
		Be-7	<4.59E+01	0.00E+00	4.59E+01
		K-40	1.42E+03	2.33E+02	1.11E+02
550970	10/25/2021 - 10/25/2021	LLI-131	<5.97E-01	0.00E+00	5.97E-01
		I-131	<7.59E+00	0.00E+00	7.59E+00
		Cs-134	<6.49E+00	0.00E+00	6.49E+00
		Cs-137	<5.76E+00	0.00E+00	5.76E+00
		BaLa-140	<6.02E+00	0.00E+00	6.02E+00
		Be-7	<3.87E+01	0.00E+00	3.87E+01
		K-40	1.54E+03	2.41E+02	1.03E+02
552188	11/8/2021 - 11/8/2021	LLI-131	<6.14E-01	0.00E+00	6.14E-01
		I-131	<8.19E+00	0.00E+00	8.19E+00
		Cs-134	<7.23E+00	0.00E+00	7.23E+00
		Cs-137	<9.51E+00	0.00E+00	9.51E+00
		BaLa-140	<6.08E+00	0.00E+00	6.08E+00
		Be-7	<5.64E+01	0.00E+00	5.64E+01
		K-40	1.75E+03	2.61E+02	1.09E+02
552701	12/6/2021 - 12/6/2021	LLI-131	<5.85E-01	0.00E+00	5.85E-01
		I-131	<7.91E+00	0.00E+00	7.91E+00
		Cs-134	<8.28E+00	0.00E+00	8.28E+00
		Cs-137	<7.74E+00	0.00E+00	7.74E+00
		BaLa-140	<6.05E+00	0.00E+00	6.05E+00
		Be-7	<5.86E+01	0.00E+00	5.86E+01
		K-40	1.60E+03	2.49E+02	1.15E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 102 [INDICATOR - W @ 2.82 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542167	5/10/2021 - 5/10/2021	LLI-131	<6.48E-01	0.00E+00	6.48E-01
		I-131	<7.21E+00	0.00E+00	7.21E+00
		Cs-134	<1.04E+01	0.00E+00	1.04E+01
		Cs-137	<8.84E+00	0.00E+00	8.84E+00
		BaLa-140	<8.84E+00	0.00E+00	8.84E+00
		Be-7	<4.83E+01	0.00E+00	4.83E+01
		K-40	1.73E+03	2.53E+02	1.78E+01
543164	5/24/2021 - 5/24/2021	LLI-131	<6.45E-01	0.00E+00	6.45E-01
		I-131	<8.47E+00	0.00E+00	8.47E+00
		Cs-134	<1.04E+01	0.00E+00	1.04E+01
		Cs-137	<9.17E+00	0.00E+00	9.17E+00
		BaLa-140	<6.12E+00	0.00E+00	6.12E+00
		Be-7	<5.12E+01	0.00E+00	5.12E+01
		K-40	1.81E+03	2.65E+02	1.07E+02
544242	6/7/2021 - 6/7/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<8.38E+00	0.00E+00	8.38E+00
		Cs-134	<8.19E+00	0.00E+00	8.19E+00
		Cs-137	<7.26E+00	0.00E+00	7.26E+00
		BaLa-140	<2.21E+00	0.00E+00	2.21E+00
		Be-7	<5.37E+01	0.00E+00	5.37E+01
		K-40	1.87E+03	2.71E+02	9.94E+01
544891	6/21/2021 - 6/21/2021	LLI-131	<5.81E-01	0.00E+00	5.81E-01
		I-131	<7.97E+00	0.00E+00	7.97E+00
		Cs-134	<8.65E+00	0.00E+00	8.65E+00
		Cs-137	<8.42E+00	0.00E+00	8.42E+00
		BaLa-140	<6.03E+00	0.00E+00	6.03E+00
		Be-7	<6.28E+01	0.00E+00	6.28E+01
		K-40	2.02E+03	2.83E+02	8.81E+01
545437	7/6/2021 - 7/6/2021	LLI-131	<5.83E-01	0.00E+00	5.83E-01
		I-131	<7.46E+00	0.00E+00	7.46E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<1.01E+01	0.00E+00	1.01E+01
		BaLa-140	<7.64E+00	0.00E+00	7.64E+00
		Be-7	<5.36E+01	0.00E+00	5.36E+01
		K-40	1.94E+03	2.78E+02	1.11E+02
545960	7/19/2021 - 7/19/2021	LLI-131	<6.29E-01	0.00E+00	6.29E-01
		I-131	<8.01E+00	0.00E+00	8.01E+00
		Cs-134	<7.80E+00	0.00E+00	7.80E+00
		Cs-137	<5.28E+00	0.00E+00	5.28E+00
		BaLa-140	<7.66E+00	0.00E+00	7.66E+00
		Be-7	<3.92E+01	0.00E+00	3.92E+01
		K-40	2.11E+03	3.00E+02	1.55E+02
547118	8/2/2021 - 8/2/2021	LLI-131	<6.32E-01	0.00E+00	6.32E-01
		I-131	<7.33E+00	0.00E+00	7.33E+00
		Cs-134	<7.69E+00	0.00E+00	7.69E+00
		Cs-137	<9.73E+00	0.00E+00	9.73E+00
		BaLa-140	<6.05E+00	0.00E+00	6.05E+00
		Be-7	<5.62E+01	0.00E+00	5.62E+01
		K-40	2.07E+03	2.96E+02	1.48E+02
547638	8/16/2021 - 8/16/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<5.65E+00	0.00E+00	5.65E+00
		Cs-134	<5.15E+00	0.00E+00	5.15E+00
		Cs-137	<9.25E+00	0.00E+00	9.25E+00
		BaLa-140	<6.12E+00	0.00E+00	6.12E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 102 [INDICATOR - W @ 2.82 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547638	8/16/2021 - 8/16/2021	Be-7	<4.61E+01	0.00E+00	4.61E+01
		K-40	1.89E+03	2.72E+02	7.47E+01
548459	8/30/2021 - 8/30/2021	LLI-131	<6.44E-01	0.00E+00	6.44E-01
		I-131	<5.97E+00	0.00E+00	5.97E+00
		Cs-134	<6.64E+00	0.00E+00	6.64E+00
		Cs-137	<5.28E+00	0.00E+00	5.28E+00
		BaLa-140	<2.24E+00	0.00E+00	2.24E+00
		Be-7	<4.90E+01	0.00E+00	4.90E+01
		K-40	1.98E+03	2.79E+02	7.57E+01
548876	9/13/2021 - 9/13/2021	LLI-131	<6.29E-01	0.00E+00	6.29E-01
		I-131	<7.10E+00	0.00E+00	7.10E+00
		Cs-134	<6.49E+00	0.00E+00	6.49E+00
		Cs-137	<8.70E+00	0.00E+00	8.70E+00
		BaLa-140	<8.80E+00	0.00E+00	8.80E+00
		Be-7	<3.47E+01	0.00E+00	3.47E+01
		K-40	1.96E+03	2.75E+02	1.77E+01
549629	9/27/2021 - 9/27/2021	LLI-131	<6.34E-01	0.00E+00	6.34E-01
		I-131	<6.51E+00	0.00E+00	6.51E+00
		Cs-134	<9.18E+00	0.00E+00	9.18E+00
		Cs-137	<1.15E+01	0.00E+00	1.15E+01
		BaLa-140	<8.90E+00	0.00E+00	8.90E+00
		Be-7	<4.55E+01	0.00E+00	4.55E+01
		K-40	1.90E+03	2.79E+02	1.41E+02
549976	10/11/2021 - 10/11/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<7.15E+00	0.00E+00	7.15E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<7.73E+00	0.00E+00	7.73E+00
		BaLa-140	<7.59E+00	0.00E+00	7.59E+00
		Be-7	<6.26E+01	0.00E+00	6.26E+01
		K-40	2.09E+03	2.92E+02	1.20E+02
550969	10/25/2021 - 10/25/2021	LLI-131	<5.85E-01	0.00E+00	5.85E-01
		I-131	<6.94E+00	0.00E+00	6.94E+00
		Cs-134	<8.35E+00	0.00E+00	8.35E+00
		Cs-137	<9.25E+00	0.00E+00	9.25E+00
		BaLa-140	<2.30E+00	0.00E+00	2.30E+00
		Be-7	<4.61E+01	0.00E+00	4.61E+01
		K-40	1.95E+03	2.88E+02	1.41E+02

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

Sample Point 52 [INDICATOR - S @ 3.8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537672	1/21/2021 - 1/21/2021	Mn-54	<3.09E+01	0.00E+00	3.09E+01
		Co-58	<5.09E+01	0.00E+00	5.09E+01
		Fe-59	<6.34E+01	0.00E+00	6.34E+01
		Co-60	<3.39E+01	0.00E+00	3.39E+01
		Zn-65	<1.18E+02	0.00E+00	1.18E+02
		Zr-95	<8.33E+01	0.00E+00	8.33E+01
		Nb-95	<5.89E+01	0.00E+00	5.89E+01
		I-131	<1.35E+02	0.00E+00	1.35E+02
		Cs-134	<4.84E+01	0.00E+00	4.84E+01
		Cs-137	<6.81E+01	0.00E+00	6.81E+01
		Be-7	<2.62E+02	0.00E+00	2.62E+02
		K-40	<1.39E+03	0.00E+00	1.39E+03
		Co-57	<3.48E+01	0.00E+00	3.48E+01
		Mo-99	<8.96E+03	0.00E+00	8.96E+03
		Ag-110M	<3.52E+01	0.00E+00	3.52E+01

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

Sample Point 52 [INDICATOR - S @ 3.8 miles]

Sample ID:	537672	Sample Dates:	1/21/2021 - 1/21/2021	Nuclide	Activity	2 Sigma Error	MDA
				Sb-122	<1.31E+03	0.00E+00	1.31E+03
				Sb-125	<8.89E+01	0.00E+00	8.89E+01

Sample ID:	548521	Sample Dates:	7/15/2021 - 7/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<6.58E+01	0.00E+00	6.58E+01
				Co-58	<6.83E+01	0.00E+00	6.83E+01
				Fe-59	<1.12E+02	0.00E+00	1.12E+02
				Co-60	6.40E+01	5.69E+01	8.84E+01
				Zn-65	<1.22E+02	0.00E+00	1.22E+02
				Zr-95	<1.07E+02	0.00E+00	1.07E+02
				Nb-95	<6.70E+01	0.00E+00	6.70E+01
				I-131	<7.88E+01	0.00E+00	7.88E+01
				Cs-134	<8.71E+01	0.00E+00	8.71E+01
				Cs-137	2.23E+02	7.18E+01	8.72E+01
				Be-7	<5.99E+02	0.00E+00	5.99E+02
				K-40	9.89E+03	1.57E+03	1.06E+03
				Co-57	<3.98E+01	0.00E+00	3.98E+01
				Mo-99	<2.10E+03	0.00E+00	2.10E+03
				Ag-110M	<5.16E+01	0.00E+00	5.16E+01
				Sb-122	<3.47E+02	0.00E+00	3.47E+02
				Sb-125	<1.71E+02	0.00E+00	1.71E+02

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

Sample Point 26 [INDICATOR - S @ 4.6 miles]

Sample ID:	537673	Sample Dates:	1/21/2021 - 1/21/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.05E+01	0.00E+00	5.05E+01
				Co-58	<5.09E+01	0.00E+00	5.09E+01
				Fe-59	<1.22E+02	0.00E+00	1.22E+02
				Co-60	<3.65E+01	0.00E+00	3.65E+01
				Zn-65	<1.18E+02	0.00E+00	1.18E+02
				Zr-95	<9.65E+01	0.00E+00	9.65E+01
				Nb-95	<5.96E+01	0.00E+00	5.96E+01
				I-131	<1.32E+02	0.00E+00	1.32E+02
				Cs-134	<6.92E+01	0.00E+00	6.92E+01
				Cs-137	<5.17E+01	0.00E+00	5.17E+01
				Be-7	<6.46E+02	0.00E+00	6.46E+02
				K-40	9.66E+03	1.60E+03	5.08E+02
				Co-57	<3.89E+01	0.00E+00	3.89E+01
				Mo-99	<1.03E+04	0.00E+00	1.03E+04
				Ag-110M	<5.02E+01	0.00E+00	5.02E+01
				Sb-122	<1.21E+03	0.00E+00	1.21E+03
				Sb-125	<1.33E+02	0.00E+00	1.33E+02

Sample ID:	548522	Sample Dates:	7/15/2021 - 7/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<6.06E+01	0.00E+00	6.06E+01
				Co-58	<3.88E+01	0.00E+00	3.88E+01
				Fe-59	<1.17E+02	0.00E+00	1.17E+02
				Co-60	<4.48E+01	0.00E+00	4.48E+01
				Zn-65	<1.30E+02	0.00E+00	1.30E+02
				Zr-95	<8.27E+01	0.00E+00	8.27E+01
				Nb-95	<5.54E+01	0.00E+00	5.54E+01
				I-131	<8.35E+01	0.00E+00	8.35E+01
				Cs-134	<6.48E+01	0.00E+00	6.48E+01
				Cs-137	<5.07E+01	0.00E+00	5.07E+01
				Be-7	<6.13E+02	0.00E+00	6.13E+02
				K-40	9.95E+03	1.65E+03	8.06E+02
				Co-57	<4.01E+01	0.00E+00	4.01E+01
				Mo-99	<2.24E+03	0.00E+00	2.24E+03
				Ag-110M	<4.00E+01	0.00E+00	4.00E+01
				Sb-122	<3.73E+02	0.00E+00	3.73E+02
				Sb-125	<1.28E+02	0.00E+00	1.28E+02

Sample Point 41 [INDICATOR - S @ 3.8 miles]

Sample ID:	537674	Sample Dates:	1/21/2021 - 1/21/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<4.76E+01	0.00E+00	4.76E+01

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

Sample Point 41 [INDICATOR - S @ 3.8 miles]

Sample ID:	537674	Sample Dates:	1/21/2021 - 1/21/2021	Nuclide	Activity	2 Sigma Error	MDA
				Co-58	<5.17E+01	0.00E+00	5.17E+01
				Fe-59	<1.54E+02	0.00E+00	1.54E+02
				Co-60	<6.54E+01	0.00E+00	6.54E+01
				Zn-65	<1.19E+02	0.00E+00	1.19E+02
				Zr-95	<7.94E+01	0.00E+00	7.94E+01
				Nb-95	<5.62E+01	0.00E+00	5.62E+01
				I-131	<1.09E+02	0.00E+00	1.09E+02
				Cs-134	<6.62E+01	0.00E+00	6.62E+01
				Cs-137	<3.99E+01	0.00E+00	3.99E+01
				Be-7	<5.86E+02	0.00E+00	5.86E+02
				K-40	9.51E+03	1.54E+03	7.40E+02
				Co-57	<3.16E+01	0.00E+00	3.16E+01
				Mo-99	<1.10E+04	0.00E+00	1.10E+04
				Ag-110M	<3.94E+01	0.00E+00	3.94E+01
				Sb-122	<1.33E+03	0.00E+00	1.33E+03
				Sb-125	<1.11E+02	0.00E+00	1.11E+02

Sample ID:	548523	Sample Dates:	7/15/2021 - 7/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<5.27E+01	0.00E+00	5.27E+01
				Co-58	<5.46E+01	0.00E+00	5.46E+01
				Fe-59	<9.07E+01	0.00E+00	9.07E+01
				Co-60	<4.11E+01	0.00E+00	4.11E+01
				Zn-65	<1.03E+02	0.00E+00	1.03E+02
				Zr-95	<5.33E+01	0.00E+00	5.33E+01
				Nb-95	<5.33E+01	0.00E+00	5.33E+01
				I-131	<9.01E+01	0.00E+00	9.01E+01
				Cs-134	<4.64E+01	0.00E+00	4.64E+01
				Cs-137	<5.13E+01	0.00E+00	5.13E+01
				Be-7	4.60E+02	3.05E+02	4.33E+02
				K-40	9.41E+03	1.56E+03	8.59E+02
				Co-57	<3.82E+01	0.00E+00	3.82E+01
				Mo-99	<1.62E+03	0.00E+00	1.62E+03
				Ag-110M	<3.64E+01	0.00E+00	3.64E+01
				Sb-122	<2.56E+02	0.00E+00	2.56E+02
				Sb-125	<4.77E+01	0.00E+00	4.77E+01

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	537702	Sample Dates:	12/21/2020 - 1/11/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.65E+00	0.00E+00	3.65E+00
				Co-58	<2.96E+00	0.00E+00	2.96E+00
				Fe-59	<6.93E+00	0.00E+00	6.93E+00
				Co-60	<4.15E+00	0.00E+00	4.15E+00
				Zn-65	<8.96E+00	0.00E+00	8.96E+00
				Zr-95	<4.97E+00	0.00E+00	4.97E+00
				Nb-95	<4.12E+00	0.00E+00	4.12E+00
				I-131	<1.17E+01	0.00E+00	1.17E+01
				Cs-134	<2.29E+00	0.00E+00	2.29E+00
				Cs-137	<3.03E+00	0.00E+00	3.03E+00
				BaLa-140	<6.68E+00	0.00E+00	6.68E+00
				Be-7	<3.57E+01	0.00E+00	3.57E+01
				K-40	7.87E+01	3.53E+01	4.27E+01
				H3SW	4.29E+03	2.12E+02	1.88E+02

Sample ID:	537342	Sample Dates:	1/11/2021 - 1/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Mn-54	<3.72E+00	0.00E+00	3.72E+00
				Co-58	<3.42E+00	0.00E+00	3.42E+00
				Fe-59	<8.91E+00	0.00E+00	8.91E+00
				Co-60	<4.36E+00	0.00E+00	4.36E+00
				Zn-65	<9.58E+00	0.00E+00	9.58E+00
				Zr-95	<6.49E+00	0.00E+00	6.49E+00
				Nb-95	<4.76E+00	0.00E+00	4.76E+00
				I-131	<8.01E+00	0.00E+00	8.01E+00
				Cs-134	<4.62E+00	0.00E+00	4.62E+00
				Cs-137	<4.90E+00	0.00E+00	4.90E+00

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537342	1/11/2021 - 1/25/2021	BaLa-140	<5.86E+00	0.00E+00	5.86E+00
		Be-7	<3.36E+01	0.00E+00	3.36E+01
		K-40	<8.71E+01	0.00E+00	8.71E+01
		H3SW	6.42E+03	2.40E+02	1.82E+02
539077	1/25/2021 - 2/22/2021	Mn-54	<1.96E+00	0.00E+00	1.96E+00
		Co-58	<2.37E+00	0.00E+00	2.37E+00
		Fe-59	<6.47E+00	0.00E+00	6.47E+00
		Co-60	<2.41E+00	0.00E+00	2.41E+00
		Zn-65	<5.59E+00	0.00E+00	5.59E+00
		Zr-95	<5.88E+00	0.00E+00	5.88E+00
		Nb-95	<3.07E+00	0.00E+00	3.07E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<3.15E+00	0.00E+00	3.15E+00
		Cs-137	<3.17E+00	0.00E+00	3.17E+00
		BaLa-140	<7.33E+00	0.00E+00	7.33E+00
		Be-7	<2.41E+01	0.00E+00	2.41E+01
		K-40	1.02E+02	3.04E+01	3.25E+01
		H3SW	5.32E+03	2.25E+02	1.86E+02
541452	2/22/2021 - 3/22/2021	Mn-54	<2.51E+00	0.00E+00	2.51E+00
		Co-58	<4.38E+00	0.00E+00	4.38E+00
		Fe-59	<6.62E+00	0.00E+00	6.62E+00
		Co-60	<2.67E+00	0.00E+00	2.67E+00
		Zn-65	<7.72E+00	0.00E+00	7.72E+00
		Zr-95	<7.42E+00	0.00E+00	7.42E+00
		Nb-95	<3.49E+00	0.00E+00	3.49E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<3.74E+00	0.00E+00	3.74E+00
		Cs-137	<3.27E+00	0.00E+00	3.27E+00
		BaLa-140	<8.14E+00	0.00E+00	8.14E+00
		Be-7	<3.02E+01	0.00E+00	3.02E+01
		K-40	<5.50E+01	0.00E+00	5.50E+01
		H3SW	3.78E+03	1.99E+02	1.83E+02
543279	3/22/2021 - 4/19/2021	Mn-54	<2.55E+00	0.00E+00	2.55E+00
		Co-58	<3.91E+00	0.00E+00	3.91E+00
		Fe-59	<6.06E+00	0.00E+00	6.06E+00
		Co-60	<2.87E+00	0.00E+00	2.87E+00
		Zn-65	<6.82E+00	0.00E+00	6.82E+00
		Zr-95	<7.10E+00	0.00E+00	7.10E+00
		Nb-95	<4.29E+00	0.00E+00	4.29E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.62E+00	0.00E+00	3.62E+00
		Cs-137	<3.65E+00	0.00E+00	3.65E+00
		BaLa-140	<8.99E+00	0.00E+00	8.99E+00
		Be-7	<3.07E+01	0.00E+00	3.07E+01
		K-40	8.74E+01	3.17E+01	3.17E+01
		H3SW	2.87E+03	1.85E+02	1.92E+02
545041	4/19/2021 - 5/17/2021	Mn-54	<2.00E+00	0.00E+00	2.00E+00
		Co-58	<3.24E+00	0.00E+00	3.24E+00
		Fe-59	<5.08E+00	0.00E+00	5.08E+00
		Co-60	<2.33E+00	0.00E+00	2.33E+00
		Zn-65	<4.73E+00	0.00E+00	4.73E+00
		Zr-95	<5.12E+00	0.00E+00	5.12E+00
		Nb-95	<3.32E+00	0.00E+00	3.32E+00
		I-131	<1.01E+01	0.00E+00	1.01E+01
		Cs-134	<3.00E+00	0.00E+00	3.00E+00
		Cs-137	<2.83E+00	0.00E+00	2.83E+00
		BaLa-140	<6.46E+00	0.00E+00	6.46E+00
		Be-7	<2.37E+01	0.00E+00	2.37E+01
		K-40	9.26E+01	3.13E+01	3.65E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545041	4/19/2021 - 5/17/2021	H3SW	4.33E+03	2.08E+02	1.77E+02
546936	5/17/2021 - 6/14/2021	Mn-54	<3.01E+00	0.00E+00	3.01E+00
		Co-58	<3.14E+00	0.00E+00	3.14E+00
		Fe-59	<6.18E+00	0.00E+00	6.18E+00
		Co-60	<3.12E+00	0.00E+00	3.12E+00
		Zn-65	<5.36E+00	0.00E+00	5.36E+00
		Zr-95	<5.93E+00	0.00E+00	5.93E+00
		Nb-95	<3.53E+00	0.00E+00	3.53E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<2.68E+00	0.00E+00	2.68E+00
		Cs-137	<2.49E+00	0.00E+00	2.49E+00
		BaLa-140	<6.68E+00	0.00E+00	6.68E+00
		Be-7	<2.93E+01	0.00E+00	2.93E+01
		K-40	6.83E+01	3.67E+01	5.33E+01
		H3SW	3.83E+03	2.02E+02	1.88E+02
548138	6/14/2021 - 7/12/2021	Mn-54	<4.19E+00	0.00E+00	4.19E+00
		Co-58	<5.01E+00	0.00E+00	5.01E+00
		Fe-59	<9.15E+00	0.00E+00	9.15E+00
		Co-60	<3.70E+00	0.00E+00	3.70E+00
		Zn-65	<9.47E+00	0.00E+00	9.47E+00
		Zr-95	<7.60E+00	0.00E+00	7.60E+00
		Nb-95	<4.34E+00	0.00E+00	4.34E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<4.28E+00	0.00E+00	4.28E+00
		Cs-137	<4.07E+00	0.00E+00	4.07E+00
		BaLa-140	<9.21E+00	0.00E+00	9.21E+00
		Be-7	<4.18E+01	0.00E+00	4.18E+01
		K-40	1.12E+02	4.18E+01	3.73E+01
		H3SW	3.65E+03	2.00E+02	1.90E+02
549301	7/12/2021 - 8/9/2021	Mn-54	<3.34E+00	0.00E+00	3.34E+00
		Co-58	<3.95E+00	0.00E+00	3.95E+00
		Fe-59	<8.16E+00	0.00E+00	8.16E+00
		Co-60	<8.50E-01	0.00E+00	8.50E-01
		Zn-65	<6.25E+00	0.00E+00	6.25E+00
		Zr-95	<6.59E+00	0.00E+00	6.59E+00
		Nb-95	<5.76E+00	0.00E+00	5.76E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.95E+00	0.00E+00	3.95E+00
		Cs-137	<4.17E+00	0.00E+00	4.17E+00
		BaLa-140	<8.09E+00	0.00E+00	8.09E+00
		Be-7	5.90E+00	2.00E+01	3.61E+01
		K-40	<4.94E+01	0.00E+00	4.94E+01
		H3SW	2.99E+03	1.85E+02	1.86E+02
551067	8/9/2021 - 9/7/2021	Mn-54	<3.11E+00	0.00E+00	3.11E+00
		Co-58	<3.96E+00	0.00E+00	3.96E+00
		Fe-59	<7.14E+00	0.00E+00	7.14E+00
		Co-60	<2.70E+00	0.00E+00	2.70E+00
		Zn-65	<4.09E+00	0.00E+00	4.09E+00
		Zr-95	<5.76E+00	0.00E+00	5.76E+00
		Nb-95	<4.47E+00	0.00E+00	4.47E+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	<3.28E+00	0.00E+00	3.28E+00
		BaLa-140	<7.05E+00	0.00E+00	7.05E+00
		Be-7	<2.86E+01	0.00E+00	2.86E+01
		K-40	9.17E+01	3.97E+01	5.15E+01
		H3SW	2.94E+03	1.83E+02	1.83E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 26 [INDICATOR - S @ 4.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552836	9/7/2021 - 10/4/2021	Mn-54	<2.41E+00	0.00E+00	2.41E+00
		Co-58	<2.33E+00	0.00E+00	2.33E+00
		Fe-59	<4.43E+00	0.00E+00	4.43E+00
		Co-60	<1.99E+00	0.00E+00	1.99E+00
		Zn-65	<4.16E+00	0.00E+00	4.16E+00
		Zr-95	<5.08E+00	0.00E+00	5.08E+00
		Nb-95	<3.20E+00	0.00E+00	3.20E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<2.25E+00	0.00E+00	2.25E+00
		Cs-137	<2.68E+00	0.00E+00	2.68E+00
		BaLa-140	<4.27E+00	0.00E+00	4.27E+00
		Be-7	<2.52E+01	0.00E+00	2.52E+01
		K-40	9.65E+01	2.82E+01	3.29E+01
		H3SW	3.11E+03	1.84E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554630	10/4/2021 - 11/1/2021	Mn-54	<2.58E+00	0.00E+00	2.58E+00
		Co-58	<2.94E+00	0.00E+00	2.94E+00
		Fe-59	<5.46E+00	0.00E+00	5.46E+00
		Co-60	<2.49E+00	0.00E+00	2.49E+00
		Zn-65	<6.85E+00	0.00E+00	6.85E+00
		Zr-95	<5.50E+00	0.00E+00	5.50E+00
		Nb-95	<3.31E+00	0.00E+00	3.31E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.31E+00	0.00E+00	3.31E+00
		Cs-137	<3.08E+00	0.00E+00	3.08E+00
		BaLa-140	<6.51E+00	0.00E+00	6.51E+00
		Be-7	<2.53E+01	0.00E+00	2.53E+01
		K-40	8.87E+01	3.26E+01	3.88E+01
		H3SW	3.56E+03	1.95E+02	1.78E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557094	11/1/2021 - 11/29/2021	Mn-54	<3.15E+00	0.00E+00	3.15E+00
		Co-58	<3.18E+00	0.00E+00	3.18E+00
		Fe-59	<5.31E+00	0.00E+00	5.31E+00
		Co-60	<2.96E+00	0.00E+00	2.96E+00
		Zn-65	<5.96E+00	0.00E+00	5.96E+00
		Zr-95	<7.68E+00	0.00E+00	7.68E+00
		Nb-95	<3.58E+00	0.00E+00	3.58E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.25E+00	0.00E+00	3.25E+00
		Cs-137	<3.31E+00	0.00E+00	3.31E+00
		BaLa-140	<5.98E+00	0.00E+00	5.98E+00
		Be-7	<3.08E+01	0.00E+00	3.08E+01
		K-40	9.20E+01	3.39E+01	3.96E+01
		H3SW	3.75E+03	1.97E+02	1.80E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558642	11/29/2021 - 12/27/2021	Mn-54	<2.68E+00	0.00E+00	2.68E+00
		Co-58	<2.55E+00	0.00E+00	2.55E+00
		Fe-59	<5.75E+00	0.00E+00	5.75E+00
		Co-60	<3.31E+00	0.00E+00	3.31E+00
		Zn-65	<6.99E+00	0.00E+00	6.99E+00
		Zr-95	<6.80E+00	0.00E+00	6.80E+00
		Nb-95	<4.31E+00	0.00E+00	4.31E+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	<2.92E+00	0.00E+00	2.92E+00
		BaLa-140	<5.47E+00	0.00E+00	5.47E+00
		Be-7	<2.68E+01	0.00E+00	2.68E+01
		K-40	8.38E+01	3.44E+01	4.31E+01
		H3SW	3.62E+03	1.93E+02	1.75E+02

Sample Point 40 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537703	12/21/2020 - 1/11/2021	Mn-54	<3.03E+00	0.00E+00	3.03E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 40 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA		
537703	12/21/2020 - 1/11/2021	Co-58	<4.39E+00	0.00E+00	4.39E+00		
		Fe-59	<8.31E+00	0.00E+00	8.31E+00		
		Co-60	<2.86E+00	0.00E+00	2.86E+00		
		Zn-65	<8.97E+00	0.00E+00	8.97E+00		
		Zr-95	<5.86E+00	0.00E+00	5.86E+00		
		Nb-95	<5.02E+00	0.00E+00	5.02E+00		
		I-131	<1.18E+01	0.00E+00	1.18E+01		
		Cs-134	<3.86E+00	0.00E+00	3.86E+00		
		Cs-137	<3.39E+00	0.00E+00	3.39E+00		
		BaLa-140	<5.54E+00	0.00E+00	5.54E+00		
		Be-7	<3.08E+01	0.00E+00	3.08E+01		
		K-40	<7.02E+01	0.00E+00	7.02E+01		
		538360	1/11/2021 - 1/25/2021	Mn-54	<2.68E+00	0.00E+00	2.68E+00
				Co-58	<4.16E+00	0.00E+00	4.16E+00
Fe-59	<8.96E+00			0.00E+00	8.96E+00		
Co-60	<3.10E+00			0.00E+00	3.10E+00		
Zn-65	<7.29E+00			0.00E+00	7.29E+00		
Zr-95	<8.06E+00			0.00E+00	8.06E+00		
Nb-95	<3.88E+00			0.00E+00	3.88E+00		
I-131	<8.03E+00			0.00E+00	8.03E+00		
Cs-134	<4.18E+00			0.00E+00	4.18E+00		
Cs-137	<2.95E+00			0.00E+00	2.95E+00		
BaLa-140	<6.88E+00			0.00E+00	6.88E+00		
Be-7	<3.15E+01			0.00E+00	3.15E+01		
K-40	<6.25E+01			0.00E+00	6.25E+01		
538640	12/21/2020 - 1/25/2021			Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<1.29E+02	0.00E+00	1.74E+02		
539078	1/25/2021 - 2/22/2021	Mn-54	<5.08E+00	0.00E+00	5.08E+00		
		Co-58	<4.90E+00	0.00E+00	4.90E+00		
		Fe-59	<8.02E+00	0.00E+00	8.02E+00		
		Co-60	<3.61E+00	0.00E+00	3.61E+00		
		Zn-65	<6.67E+00	0.00E+00	6.67E+00		
		Zr-95	<7.05E+00	0.00E+00	7.05E+00		
		Nb-95	<2.95E+00	0.00E+00	2.95E+00		
		I-131	<1.17E+01	0.00E+00	1.17E+01		
		Cs-134	<4.21E+00	0.00E+00	4.21E+00		
		Cs-137	<3.89E+00	0.00E+00	3.89E+00		
		BaLa-140	<2.56E+00	0.00E+00	2.56E+00		
		Be-7	<3.74E+01	0.00E+00	3.74E+01		
		K-40	2.50E+01	2.57E+01	3.87E+01		
		541453	2/22/2021 - 3/22/2021	Mn-54	<3.94E+00	0.00E+00	3.94E+00
Co-58	<4.77E+00			0.00E+00	4.77E+00		
Fe-59	<7.30E+00			0.00E+00	7.30E+00		
Co-60	<2.81E+00			0.00E+00	2.81E+00		
Zn-65	<7.22E+00			0.00E+00	7.22E+00		
Zr-95	<7.28E+00			0.00E+00	7.28E+00		
Nb-95	<3.22E+00			0.00E+00	3.22E+00		
I-131	<1.12E+01			0.00E+00	1.12E+01		
Cs-134	<3.44E+00			0.00E+00	3.44E+00		
Cs-137	<3.94E+00			0.00E+00	3.94E+00		
BaLa-140	<9.64E+00			0.00E+00	9.64E+00		
Be-7	1.02E+00			1.89E+01	3.50E+01		
K-40	8.30E+01			4.11E+01	5.33E+01		
539263	1/25/2021 - 4/19/2021			Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<1.65E+01	0.00E+00	1.92E+02		
543280	3/22/2021 - 4/19/2021	Nuclide	Activity	2 Sigma Error	MDA		
		Mn-54	<2.40E+00	0.00E+00	2.40E+00		
		Co-58	<3.67E+00	0.00E+00	3.67E+00		

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 40 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543280	3/22/2021 - 4/19/2021	Fe-59	<6.61E+00	0.00E+00	6.61E+00
		Co-60	<4.24E+00	0.00E+00	4.24E+00
		Zn-65	<5.10E+00	0.00E+00	5.10E+00
		Zr-95	<5.94E+00	0.00E+00	5.94E+00
		Nb-95	<4.78E+00	0.00E+00	4.78E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<3.07E+00	0.00E+00	3.07E+00
		Cs-137	<3.33E+00	0.00E+00	3.33E+00
		BaLa-140	<7.26E+00	0.00E+00	7.26E+00
		Be-7	<2.36E+01	0.00E+00	2.36E+01
		K-40	1.21E+02	3.81E+01	4.10E+01
545042	4/19/2021 - 5/17/2021	Mn-54	<3.30E+00	0.00E+00	3.30E+00
		Co-58	<4.32E+00	0.00E+00	4.32E+00
		Fe-59	<6.76E+00	0.00E+00	6.76E+00
		Co-60	<3.16E+00	0.00E+00	3.16E+00
		Zn-65	<5.36E+00	0.00E+00	5.36E+00
		Zr-95	<6.77E+00	0.00E+00	6.77E+00
		Nb-95	<3.62E+00	0.00E+00	3.62E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.37E+00	0.00E+00	3.37E+00
		Cs-137	<3.07E+00	0.00E+00	3.07E+00
		BaLa-140	<8.84E+00	0.00E+00	8.84E+00
		Be-7	<3.47E+01	0.00E+00	3.47E+01
		K-40	9.29E+01	4.33E+01	5.68E+01
		546937	5/17/2021 - 6/14/2021	Mn-54	<2.39E+00
Co-58	<3.76E+00			0.00E+00	3.76E+00
Fe-59	<9.12E+00			0.00E+00	9.12E+00
Co-60	<2.81E+00			0.00E+00	2.81E+00
Zn-65	<5.21E+00			0.00E+00	5.21E+00
Zr-95	<6.68E+00			0.00E+00	6.68E+00
Nb-95	<4.43E+00			0.00E+00	4.43E+00
I-131	<1.19E+01			0.00E+00	1.19E+01
Cs-134	<3.66E+00			0.00E+00	3.66E+00
Cs-137	<3.51E+00			0.00E+00	3.51E+00
BaLa-140	<7.29E+00			0.00E+00	7.29E+00
Be-7	<2.75E+01			0.00E+00	2.75E+01
K-40	1.01E+02			3.36E+01	3.25E+01
545874	4/19/2021 - 7/12/2021			Nuclide	Activity
		H3SW	<1.16E+02	0.00E+00	1.91E+02
548139	6/14/2021 - 7/12/2021	Mn-54	<2.97E+00	0.00E+00	2.97E+00
		Co-58	<3.65E+00	0.00E+00	3.65E+00
		Fe-59	<6.12E+00	0.00E+00	6.12E+00
		Co-60	<3.35E+00	0.00E+00	3.35E+00
		Zn-65	<7.08E+00	0.00E+00	7.08E+00
		Zr-95	<6.33E+00	0.00E+00	6.33E+00
		Nb-95	<3.17E+00	0.00E+00	3.17E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.30E+00	0.00E+00	3.30E+00
		Cs-137	<3.63E+00	0.00E+00	3.63E+00
		BaLa-140	<6.75E+00	0.00E+00	6.75E+00
		Be-7	<3.10E+01	0.00E+00	3.10E+01
		K-40	7.17E+01	3.75E+01	5.29E+01
		549302	7/12/2021 - 8/9/2021	Nuclide	Activity
Mn-54	<3.24E+00			0.00E+00	3.24E+00
Co-58	<3.27E+00			0.00E+00	3.27E+00
Fe-59	<6.18E+00			0.00E+00	6.18E+00
Co-60	<3.30E+00			0.00E+00	3.30E+00
Zn-65	<7.20E+00			0.00E+00	7.20E+00
Zr-95	<7.86E+00			0.00E+00	7.86E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 40 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549302	7/12/2021 - 8/9/2021	Nb-95	<4.89E+00	0.00E+00	4.89E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.98E+00	0.00E+00	3.98E+00
		Cs-137	<3.22E+00	0.00E+00	3.22E+00
		BaLa-140	<8.68E+00	0.00E+00	8.68E+00
		Be-7	<3.04E+01	0.00E+00	3.04E+01
		K-40	9.99E+01	3.61E+01	3.97E+01
551068	8/9/2021 - 9/7/2021	Mn-54	<2.66E+00	0.00E+00	2.66E+00
		Co-58	<2.63E+00	0.00E+00	2.63E+00
		Fe-59	<5.60E+00	0.00E+00	5.60E+00
		Co-60	<2.87E+00	0.00E+00	2.87E+00
		Zn-65	<5.55E+00	0.00E+00	5.55E+00
		Zr-95	<4.38E+00	0.00E+00	4.38E+00
		Nb-95	<3.21E+00	0.00E+00	3.21E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<2.86E+00	0.00E+00	2.86E+00
		Cs-137	<2.58E+00	0.00E+00	2.58E+00
		BaLa-140	<6.46E+00	0.00E+00	6.46E+00
		Be-7	5.32E+00	1.89E+01	3.25E+01
		K-40	8.09E+01	2.82E+01	3.40E+01
550925	7/12/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-2.4E+00	0.00E+00	1.78E+02
552837	9/7/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.76E+00	0.00E+00	2.76E+00
		Co-58	<2.63E+00	0.00E+00	2.63E+00
		Fe-59	<4.48E+00	0.00E+00	4.48E+00
		Co-60	<2.56E+00	0.00E+00	2.56E+00
		Zn-65	<5.88E+00	0.00E+00	5.88E+00
		Zr-95	<4.66E+00	0.00E+00	4.66E+00
		Nb-95	<3.81E+00	0.00E+00	3.81E+00
		I-131	<1.07E+01	0.00E+00	1.07E+01
		Cs-134	<2.93E+00	0.00E+00	2.93E+00
		Cs-137	<2.79E+00	0.00E+00	2.79E+00
		BaLa-140	<6.16E+00	0.00E+00	6.16E+00
		Be-7	<2.95E+01	0.00E+00	2.95E+01
K-40	5.14E+01	2.78E+01	3.52E+01		
554631	10/4/2021 - 11/1/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.81E+00	0.00E+00	2.81E+00
		Co-58	<2.56E+00	0.00E+00	2.56E+00
		Fe-59	<5.79E+00	0.00E+00	5.79E+00
		Co-60	<2.91E+00	0.00E+00	2.91E+00
		Zn-65	<4.85E+00	0.00E+00	4.85E+00
		Zr-95	<4.90E+00	0.00E+00	4.90E+00
		Nb-95	<4.05E+00	0.00E+00	4.05E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.80E+00	0.00E+00	3.80E+00
		Cs-137	<3.07E+00	0.00E+00	3.07E+00
		BaLa-140	<6.87E+00	0.00E+00	6.87E+00
		Be-7	<2.80E+01	0.00E+00	2.80E+01
K-40	1.36E+02	3.56E+01	2.86E+01		
557095	11/1/2021 - 11/29/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.76E+00	0.00E+00	2.76E+00
		Co-58	<3.14E+00	0.00E+00	3.14E+00
		Fe-59	<5.94E+00	0.00E+00	5.94E+00
		Co-60	<2.43E+00	0.00E+00	2.43E+00
		Zn-65	<4.92E+00	0.00E+00	4.92E+00
		Zr-95	<5.80E+00	0.00E+00	5.80E+00
		Nb-95	<3.32E+00	0.00E+00	3.32E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<2.64E+00	0.00E+00	2.64E+00
		Cs-137	<2.79E+00	0.00E+00	2.79E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 40 [INDICATOR - SSE @ 17.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557095	11/1/2021 - 11/29/2021	BaLa-140	<6.53E+00	0.00E+00	6.53E+00
		Be-7	<2.70E+01	0.00E+00	2.70E+01
		K-40	1.11E+02	3.33E+01	3.55E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557415	10/4/2021 - 12/27/2021	H3SW	<-5.9E+01	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558643	11/29/2021 - 12/27/2021	Mn-54	<3.11E+00	0.00E+00	3.11E+00
		Co-58	<2.50E+00	0.00E+00	2.50E+00
		Fe-59	<6.72E+00	0.00E+00	6.72E+00
		Co-60	<3.40E+00	0.00E+00	3.40E+00
		Zn-65	<6.25E+00	0.00E+00	6.25E+00
		Zr-95	<6.13E+00	0.00E+00	6.13E+00
		Nb-95	<4.02E+00	0.00E+00	4.02E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<2.95E+00	0.00E+00	2.95E+00
		Cs-137	<3.71E+00	0.00E+00	3.71E+00
		BaLa-140	<6.47E+00	0.00E+00	6.47E+00
		K-40	4.74E+01	3.47E+01	5.19E+01

Sample Point 43 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537704	12/21/2020 - 1/11/2021	Mn-54	<3.86E+00	0.00E+00	3.86E+00
		Co-58	<3.55E+00	0.00E+00	3.55E+00
		Fe-59	<7.88E+00	0.00E+00	7.88E+00
		Co-60	<3.62E+00	0.00E+00	3.62E+00
		Zn-65	<5.44E+00	0.00E+00	5.44E+00
		Zr-95	<8.19E+00	0.00E+00	8.19E+00
		Nb-95	<4.77E+00	0.00E+00	4.77E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<4.44E+00	0.00E+00	4.44E+00
		Cs-137	<4.90E+00	0.00E+00	4.90E+00
		BaLa-140	<1.00E+01	0.00E+00	1.00E+01
		Be-7	<3.41E+01	0.00E+00	3.41E+01
		K-40	6.88E+01	3.80E+01	4.99E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538361	1/11/2021 - 1/25/2021	Mn-54	<4.16E+00	0.00E+00	4.16E+00
		Co-58	<3.94E+00	0.00E+00	3.95E+00
		Fe-59	<7.85E+00	0.00E+00	7.85E+00
		Co-60	<4.75E+00	0.00E+00	4.75E+00
		Zn-65	<6.57E+00	0.00E+00	6.57E+00
		Zr-95	<7.71E+00	0.00E+00	7.71E+00
		Nb-95	<4.79E+00	0.00E+00	4.79E+00
		I-131	<8.17E+00	0.00E+00	8.17E+00
		Cs-134	<3.94E+00	0.00E+00	3.94E+00
		Cs-137	<3.47E+00	0.00E+00	3.47E+00
		BaLa-140	<6.89E+00	0.00E+00	6.89E+00
		Be-7	<4.07E+01	0.00E+00	4.07E+01
		K-40	5.35E+01	3.96E+01	5.68E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538641	12/21/2020 - 1/25/2021	H3SW	<6.38E+01	0.00E+00	1.75E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539079	1/25/2021 - 2/22/2021	Mn-54	<3.59E+00	0.00E+00	3.59E+00
		Co-58	<3.83E+00	0.00E+00	3.83E+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	<7.59E+00	0.00E+00	7.59E+00
		Zr-95	<5.35E+00	0.00E+00	5.35E+00
		Nb-95	<4.11E+00	0.00E+00	4.11E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
Cs-134	<3.00E+00	0.00E+00	3.00E+00		

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 43 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539079	1/25/2021 - 2/22/2021	Cs-137	<3.18E+00	0.00E+00	3.18E+00
		BaLa-140	<1.15E+01	0.00E+00	1.15E+01
		Be-7	<3.36E+01	0.00E+00	3.36E+01
		K-40	2.51E+01	3.47E+01	5.75E+01
541454	2/22/2021 - 3/22/2021	Mn-54	<2.83E+00	0.00E+00	2.83E+00
		Co-58	<2.92E+00	0.00E+00	2.92E+00
		Fe-59	<4.76E+00	0.00E+00	4.76E+00
		Co-60	<3.17E+00	0.00E+00	3.17E+00
		Zn-65	<5.85E+00	0.00E+00	5.85E+00
		Zr-95	<4.72E+00	0.00E+00	4.72E+00
		Nb-95	<3.67E+00	0.00E+00	3.67E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.14E+00	0.00E+00	3.14E+00
		Cs-137	<2.19E+00	0.00E+00	2.19E+00
		BaLa-140	<8.86E+00	0.00E+00	8.86E+00
		Be-7	<2.38E+01	0.00E+00	2.38E+01
		K-40	<3.72E+01	0.00E+00	3.72E+01
539264	1/25/2021 - 4/19/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	<-3.6E+01	0.00E+00	1.93E+02
543281	3/22/2021 - 4/19/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.64E+00	0.00E+00	2.64E+00
		Co-58	<3.84E+00	0.00E+00	3.84E+00
		Fe-59	<7.00E+00	0.00E+00	7.00E+00
		Co-60	<3.54E+00	0.00E+00	3.54E+00
		Zn-65	<6.94E+00	0.00E+00	6.94E+00
		Zr-95	<5.70E+00	0.00E+00	5.70E+00
		Nb-95	<4.32E+00	0.00E+00	4.32E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.77E+00	0.00E+00	3.77E+00
		Cs-137	<2.80E+00	0.00E+00	2.80E+00
		BaLa-140	<6.06E+00	0.00E+00	6.06E+00
		Be-7	<2.95E+01	0.00E+00	2.95E+01
K-40	7.88E+01	2.80E+01	2.68E+01		
545043	4/19/2021 - 5/17/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<2.41E+00	0.00E+00	2.41E+00
		Co-58	<3.01E+00	0.00E+00	3.01E+00
		Fe-59	<7.32E+00	0.00E+00	7.32E+00
		Co-60	<2.61E+00	0.00E+00	2.61E+00
		Zn-65	<3.98E+00	0.00E+00	3.98E+00
		Zr-95	<5.34E+00	0.00E+00	5.34E+00
		Nb-95	<4.08E+00	0.00E+00	4.08E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<2.76E+00	0.00E+00	2.76E+00
		Cs-137	<2.82E+00	0.00E+00	2.82E+00
		BaLa-140	<7.28E+00	0.00E+00	7.28E+00
		Be-7	<2.38E+01	0.00E+00	2.38E+01
K-40	7.31E+01	3.07E+01	3.86E+01		
546938	5/17/2021 - 6/14/2021	Nuclide	Activity	2 Sigma Error	MDA
		Mn-54	<3.51E+00	0.00E+00	3.51E+00
		Co-58	<3.75E+00	0.00E+00	3.75E+00
		Fe-59	<8.50E+00	0.00E+00	8.50E+00
		Co-60	<3.39E+00	0.00E+00	3.39E+00
		Zn-65	<8.96E+00	0.00E+00	8.96E+00
		Zr-95	<6.92E+00	0.00E+00	6.92E+00
		Nb-95	<5.68E+00	0.00E+00	5.68E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<2.00E+00	0.00E+00	2.00E+00
		Cs-137	<3.28E+00	0.00E+00	3.28E+00
		BaLa-140	<8.60E+00	0.00E+00	8.60E+00
		Be-7	<3.65E+01	0.00E+00	3.65E+01
K-40	5.07E+01	3.56E+01	5.15E+01		

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 43 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545875	4/19/2021 - 7/12/2021	H3SW	<-1.9E+01	0.00E+00	1.90E+02
548140	6/14/2021 - 7/12/2021	Mn-54	<2.36E+00	0.00E+00	2.36E+00
		Co-58	<2.13E+00	0.00E+00	2.13E+00
		Fe-59	<5.22E+00	0.00E+00	5.22E+00
		Co-60	<2.38E+00	0.00E+00	2.38E+00
		Zn-65	<4.21E+00	0.00E+00	4.21E+00
		Zr-95	<4.95E+00	0.00E+00	4.95E+00
		Nb-95	<3.41E+00	0.00E+00	3.41E+00
		I-131	<9.98E+00	0.00E+00	9.98E+00
		Cs-134	<2.26E+00	0.00E+00	2.26E+00
		Cs-137	<3.00E+00	0.00E+00	3.00E+00
		BaLa-140	<6.07E+00	0.00E+00	6.07E+00
		Be-7	<2.07E+01	0.00E+00	2.07E+01
		K-40	6.27E+01	2.59E+01	3.29E+01
549303	7/12/2021 - 8/9/2021	Mn-54	<2.55E+00	0.00E+00	2.55E+00
		Co-58	<3.17E+00	0.00E+00	3.17E+00
		Fe-59	<5.06E+00	0.00E+00	5.06E+00
		Co-60	<2.10E+00	0.00E+00	2.10E+00
		Zn-65	<5.07E+00	0.00E+00	5.07E+00
		Zr-95	<6.94E+00	0.00E+00	6.94E+00
		Nb-95	<4.01E+00	0.00E+00	4.01E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<2.95E+00	0.00E+00	2.95E+00
		Cs-137	<3.03E+00	0.00E+00	3.03E+00
		BaLa-140	<7.66E+00	0.00E+00	7.66E+00
		Be-7	<2.76E+01	0.00E+00	2.76E+01
		K-40	7.77E+01	3.00E+01	3.18E+01
551069	8/9/2021 - 9/7/2021	Mn-54	<3.77E+00	0.00E+00	3.77E+00
		Co-58	<4.05E+00	0.00E+00	4.05E+00
		Fe-59	<6.63E+00	0.00E+00	6.63E+00
		Co-60	<3.88E+00	0.00E+00	3.88E+00
		Zn-65	<7.19E+00	0.00E+00	7.19E+00
		Zr-95	<7.19E+00	0.00E+00	7.19E+00
		Nb-95	<4.96E+00	0.00E+00	4.96E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.66E+00	0.00E+00	3.66E+00
		Cs-137	<2.17E+00	0.00E+00	2.17E+00
		BaLa-140	<5.86E+00	0.00E+00	5.86E+00
		Be-7	<3.31E+01	0.00E+00	3.31E+01
		K-40	<5.31E+01	0.00E+00	5.31E+01
550926	7/12/2021 - 10/4/2021	H3SW	<1.42E+01	0.00E+00	1.78E+02
552838	9/7/2021 - 10/4/2021	Mn-54	<3.59E+00	0.00E+00	3.59E+00
		Co-58	<2.74E+00	0.00E+00	2.74E+00
		Fe-59	<8.13E+00	0.00E+00	8.13E+00
		Co-60	<3.62E+00	0.00E+00	3.62E+00
		Zn-65	<7.63E+00	0.00E+00	7.63E+00
		Zr-95	<8.40E+00	0.00E+00	8.40E+00
		Nb-95	<4.45E+00	0.00E+00	4.45E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.99E+00	0.00E+00	3.99E+00
		Cs-137	<3.02E+00	0.00E+00	3.02E+00
		BaLa-140	<8.98E+00	0.00E+00	8.98E+00
		Be-7	<3.17E+01	0.00E+00	3.17E+01
		K-40	1.34E+02	3.98E+01	7.42E+00
554632	10/4/2021 - 11/1/2021	Mn-54	<2.94E+00	0.00E+00	2.94E+00

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 43 [CONTROL - SW @ 8.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554632	10/4/2021 - 11/1/2021	Co-58	<2.43E+00	0.00E+00	2.43E+00
		Fe-59	<7.52E+00	0.00E+00	7.52E+00
		Co-60	<2.58E+00	0.00E+00	2.58E+00
		Zn-65	<4.43E+00	0.00E+00	4.43E+00
		Zr-95	<5.95E+00	0.00E+00	5.95E+00
		Nb-95	<4.71E+00	0.00E+00	4.71E+00
		I-131	<1.00E+01	0.00E+00	1.00E+01
		Cs-134	<3.35E+00	0.00E+00	3.35E+00
		Cs-137	<3.21E+00	0.00E+00	3.21E+00
		BaLa-140	<9.93E+00	0.00E+00	9.93E+00
		Be-7	<3.17E+01	0.00E+00	3.17E+01
		K-40	7.44E+01	3.46E+01	4.61E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557096	11/1/2021 - 11/29/2021	Mn-54	<3.13E+00	0.00E+00	3.13E+00
		Co-58	<2.84E+00	0.00E+00	2.84E+00
		Fe-59	<6.73E+00	0.00E+00	6.73E+00
		Co-60	<2.33E+00	0.00E+00	2.33E+00
		Zn-65	<6.10E+00	0.00E+00	6.10E+00
		Zr-95	<4.77E+00	0.00E+00	4.77E+00
		Nb-95	<2.93E+00	0.00E+00	2.93E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<2.52E+00	0.00E+00	2.52E+00
		Cs-137	<2.83E+00	0.00E+00	2.83E+00
		BaLa-140	<7.87E+00	0.00E+00	7.87E+00
		Be-7	<2.87E+01	0.00E+00	2.87E+01
		K-40	8.82E+01	3.46E+01	4.48E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557416	10/4/2021 - 12/27/2021	H3SW	<-2.4E+01	0.00E+00	1.85E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558644	11/29/2021 - 12/27/2021	Mn-54	<3.40E+00	0.00E+00	3.40E+00
		Co-58	<3.54E+00	0.00E+00	3.54E+00
		Fe-59	<6.28E+00	0.00E+00	6.28E+00
		Co-60	<2.69E+00	0.00E+00	2.69E+00
		Zn-65	<6.57E+00	0.00E+00	6.57E+00
		Zr-95	<6.28E+00	0.00E+00	6.28E+00
		Nb-95	<4.25E+00	0.00E+00	4.25E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.53E+00	0.00E+00	3.53E+00
		Cs-137	<3.30E+00	0.00E+00	3.30E+00
		BaLa-140	<8.19E+00	0.00E+00	8.19E+00
		Be-7	<2.50E+01	0.00E+00	2.50E+01
		K-40	1.92E+01	2.81E+01	4.69E+01

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 1 [INDICATOR - N @ 2.6 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539791	1/13/2021 - 4/14/2021	mR/Std Qtr	14.26
546218	4/14/2021 - 7/15/2021	mR/Std Qtr	13.04
551337	7/15/2021 - 10/14/2021	mR/Std Qtr	13.09
557676	10/13/2021 - 1/13/2022	mR/Std Qtr	17.47

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539799	1/13/2021 - 4/14/2021	mR/Std Qtr	15.22
546226	4/14/2021 - 7/15/2021	mR/Std Qtr	13.51

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 2 [INDICATOR - NNE @ 1.4 miles]

TLD RING TLD_INNER

Sample ID:	551345	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.48

Sample ID:	557684	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	15.58

Sample Point 3 [INDICATOR - ENE @ 1.9 miles]

TLD RING TLD_SPEC

Sample ID:	539810	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	13.36

Sample ID:	546237	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.91

Sample ID:	551356	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	12.21

Sample ID:	557695	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.04

Sample Point 4 [INDICATOR - NNE @ 3.1 miles]

TLD RING TLD_SPEC

Sample ID:	539814	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	14.34

Sample ID:	546241	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	12.02

Sample ID:	551360	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	11.52

Sample ID:	557699	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.49

Sample Point 5 [CONTROL - WNW @ 12 miles]

TLD RING TLD_CTRL

Sample ID:	539817	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	16.56

Sample ID:	546244	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	15.01

Sample ID:	551363	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	14.67

Sample ID:	557702	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	18.26

Sample Point 6 [INDICATOR - ENE @ 0.8 miles]

TLD RING TLD_INNER

Sample ID:	539820	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	15.24

Sample ID:	546247	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	14.01

Sample ID:	551366	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	11.94

Sample ID:	557705	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	16.82

Sample Point 7 [INDICATOR - E @ 0.7 miles]

TLD RING TLD_INNER

Sample ID:	539822	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	16.17

Sample ID:	546249	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.54

Sample ID:	551368	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.32

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 7 [INDICATOR - E @ 0.7 miles]

TLD RING TLD_INNER

Sample ID:	557707	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	18.20

Sample Point 8 [INDICATOR - ESE @ 0.6 miles]

TLD RING TLD_INNER

Sample ID:	539827	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	13.86

Sample ID:	546254	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	12.59

Sample ID:	551373	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	12.03

Sample ID:	557712	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	15.43

Sample Point 9 [INDICATOR - SE @ 2.2 miles]

TLD RING TLD_INNER

Sample ID:	539828	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	11.39

Sample ID:	546255	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.36

Sample ID:	551374	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	10.54

Sample ID:	557713	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.95

Sample Point 10 [INDICATOR - SSE @ 2.2 miles]

TLD RING TLD_INNER

Sample ID:	539792	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	13.74

Sample ID:	546219	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.85

Sample ID:	551338	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	11.14

Sample ID:	557677	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	15.35

Sample Point 11 [INDICATOR - S @ 0.6 miles]

TLD RING TLD_INNER

Sample ID:	539793	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	12.89

Sample ID:	546220	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.78

Sample ID:	551339	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	9.83

Sample ID:	557678	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	14.91

Sample Point 12 [INDICATOR - SSW @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	539794	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	12.51

Sample ID:	546221	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.84

Sample ID:	551340	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	10.59

Sample ID:	557679	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	14.22

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 13 [INDICATOR - WSW @ 0.7 miles]

TLD RING TLD_INNER

Sample ID:	539795	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	13.14
Sample ID:	546222	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	12.23
Sample ID:	551341	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	12.25
Sample ID:	557680	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	15.08

Sample Point 14 [INDICATOR - W @ 1.5 miles]

TLD RING TLD_INNER

Sample ID:	539796	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	15.81
Sample ID:	546223	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.64
Sample ID:	551342	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	14
Sample ID:	557681	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	17.44

Sample Point 15 [INDICATOR - W @ 2 miles]

TLD RING TLD_INNER

Sample ID:	539797	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	12.86
Sample ID:	546224	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	9.84
Sample ID:	551343	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	9.94
Sample ID:	557682	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.57

Sample Point 19 [INDICATOR - NNE @ 4.95 miles]

TLD RING TLD_OUTER

Sample ID:	539798	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	16.36
Sample ID:	546225	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.88
Sample ID:	551344	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.64
Sample ID:	557683	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	17.01

Sample Point 20 [INDICATOR - NE @ 4.5 miles]

TLD RING TLD_OUTER

Sample ID:	539800	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	17.48
Sample ID:	546227	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	15.84
Sample ID:	551346	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	14.28
Sample ID:	557685	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	17.50

Sample Point 21 [INDICATOR - ENE @ 4.8 miles]

TLD RING TLD_OUTER

Sample ID:	539801	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	15.18

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 21 [INDICATOR - ENE @ 4.8 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
546228	4/14/2021 - 7/15/2021	mR/Std Qtr	12.74
551347	7/15/2021 - 10/14/2021	mR/Std Qtr	12.03
557686	10/13/2021 - 1/13/2022	mR/Std Qtr	15.58

Sample Point 22 [INDICATOR - E @ 4.3 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539802	1/13/2021 - 4/14/2021	mR/Std Qtr	13.93
546229	4/14/2021 - 7/15/2021	mR/Std Qtr	11.48
551348	7/15/2021 - 10/14/2021	mR/Std Qtr	10.24
557687	10/13/2021 - 1/13/2022	mR/Std Qtr	14.49

Sample Point 23 [INDICATOR - ESE @ 4.8 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539803	1/13/2021 - 4/14/2021	mR/Std Qtr	14.24
546230	4/14/2021 - 7/15/2021	mR/Std Qtr	11.83
551349	7/15/2021 - 10/14/2021	mR/Std Qtr	12.63

Sample Point 24 [INDICATOR - SE @ 4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539804	1/13/2021 - 4/14/2021	mR/Std Qtr	13.18
546231	4/14/2021 - 7/15/2021	mR/Std Qtr	10.95
551350	7/15/2021 - 10/14/2021	mR/Std Qtr	11.61
557689	10/13/2021 - 1/13/2022	mR/Std Qtr	14.94

Sample Point 25 [INDICATOR - SSE @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539805	1/13/2021 - 4/14/2021	mR/Std Qtr	15.54
546232	4/14/2021 - 7/15/2021	mR/Std Qtr	12.78
551351	7/15/2021 - 10/14/2021	mR/Std Qtr	13.28
557690	10/13/2021 - 1/13/2022	mR/Std Qtr	16.56

Sample Point 26 [INDICATOR - S @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539806	1/13/2021 - 4/15/2021	mR/Std Qtr	12.29
546233	4/15/2021 - 7/15/2021	mR/Std Qtr	11.93
551352	7/15/2021 - 10/14/2021	mR/Std Qtr	10.9

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 26 [INDICATOR - S @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	557691	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.87

Sample Point 27 [INDICATOR - SSW @ 4.8 miles]

TLD RING TLD_OUTER

Sample ID:	539807	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	11.32

Sample ID:	546234	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.61

Sample ID:	551353	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	10.05

Sample ID:	557692	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	12.67

Sample Point 28 [INDICATOR - SW @ 4.8 miles]

TLD RING TLD_OUTER

Sample ID:	539808	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	12.18

Sample ID:	546235	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.92

Sample ID:	551354	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	9.73

Sample ID:	557693	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.59

Sample Point 29 [INDICATOR - WSW @ 5.7 miles]

TLD RING TLD_OUTER

Sample ID:	539809	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	17.32

Sample ID:	546236	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	14.99

Sample ID:	551355	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.76

Sample ID:	557694	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	16.94

Sample Point 31 [INDICATOR - WNW @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	539811	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	12.33

Sample ID:	546238	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.42

Sample ID:	551357	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	10.25

Sample ID:	557696	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	12.46

Sample Point 32 [INDICATOR - NNW @ 6.4 miles]

TLD RING TLD_SPEC

Sample ID:	539812	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	15.96

Sample ID:	546239	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.45

Sample ID:	551358	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	12.16

Sample ID:	557697	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	16.67

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 33 [INDICATOR - NNW @ 4.5 miles]

TLD RING TLD_OUTER

Sample ID:	539813	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	12.65
Sample ID:	546240	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	10.75
Sample ID:	551359	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	10.53
Sample ID:	557698	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.66

Sample Point 48 [INDICATOR - N @ 4.5 miles]

TLD RING TLD_OUTER

Sample ID:	539815	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	14.77
Sample ID:	546242	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.72
Sample ID:	551361	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.48
Sample ID:	557700	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	18.40

Sample Point 49 [INDICATOR - NE @ 2.5 miles]

TLD RING TLD_INNER

Sample ID:	539816	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	17.52
Sample ID:	546243	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	14.86
Sample ID:	551362	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	16.16
Sample ID:	557701	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	19.36

Sample Point 50 [INDICATOR - ESE @ 2.6 miles]

TLD RING TLD_SPEC

Sample ID:	539818	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	12.70
Sample ID:	546245	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	11.78
Sample ID:	551364	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	10.25
Sample ID:	557703	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.49

Sample Point 56 [INDICATOR - WSW @ 3 miles]

TLD RING TLD_INNER

Sample ID:	539819	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	13.80
Sample ID:	546246	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	12.44
Sample ID:	551365	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	11.15
Sample ID:	557704	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	14.68

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

TLD RING TLD_INNER

Sample ID:	539821	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	17.64

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

TLD RING TLD_INNER

Sample ID:	546248	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	14.63

Sample ID:	551367	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.98

Sample ID:	557706	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	19.65

Sample Point 93 [INDICATOR - WNW @ 2.2 miles]

TLD RING TLD_INNER

Sample ID:	539829	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	15.47

Sample ID:	546256	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.87

Sample ID:	551375	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.38

Sample ID:	557714	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	18.01

Sample Point 94 [INDICATOR - NW @ 2 miles]

TLD RING TLD_INNER

Sample ID:	539830	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	16.15

Sample ID:	546257	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	17.47

Sample ID:	551376	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.95

Sample ID:	557715	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	17.56

Sample Point 95 [INDICATOR - NNW @ 2 miles]

TLD RING TLD_INNER

Sample ID:	539831	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	16.30

Sample ID:	546258	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.60

Sample ID:	551377	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.18

Sample ID:	557716	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	16.32

Sample Point 98 [INDICATOR - E @ 5.9 miles]

TLD RING TLD_SPEC

Sample ID:	539832	Sample Dates:	1/13/2021 - 4/14/2021	Nuclide	Activity
				mR/Std Qtr	15.33

Sample ID:	546259	Sample Dates:	4/14/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.03

Sample ID:	551378	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	12.82

Sample ID:	557717	Sample Dates:	10/13/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	15.95

Sample Point 99 [INDICATOR - NNE @ 5.47 miles]

TLD RING TLD_SPEC

Sample ID:	539833	Sample Dates:	1/13/2021 - 4/15/2021	Nuclide	Activity
				mR/Std Qtr	14.53

Sample ID:	546260	Sample Dates:	4/15/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	13.23

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 99 [INDICATOR - NNE @ 5.47 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
551379	7/15/2021 - 10/14/2021	mR/Std Qtr	11.69

Sample ID:	Sample Dates:	Nuclide	Activity
557718	10/13/2021 - 1/13/2022	mR/Std Qtr	14.38

Sample Point 130 [INDICATOR - W @ 3.85 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539834	1/13/2021 - 4/15/2021	mR/Std Qtr	13.57

Sample ID:	Sample Dates:	Nuclide	Activity
546261	4/15/2021 - 7/15/2021	mR/Std Qtr	11.85

Sample ID:	Sample Dates:	Nuclide	Activity
551380	7/15/2021 - 10/14/2021	mR/Std Qtr	9.54

Sample ID:	Sample Dates:	Nuclide	Activity
557719	10/13/2021 - 1/13/2022	mR/Std Qtr	14.14

Sample Point 153 [INDICATOR - NW @ 4.51 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539835	1/13/2021 - 4/15/2021	mR/Std Qtr	14.19

Sample ID:	Sample Dates:	Nuclide	Activity
546262	4/15/2021 - 7/15/2021	mR/Std Qtr	11.83

Sample ID:	Sample Dates:	Nuclide	Activity
551381	7/15/2021 - 10/14/2021	mR/Std Qtr	12.51

Sample ID:	Sample Dates:	Nuclide	Activity
557720	10/13/2021 - 1/13/2022	mR/Std Qtr	14.59

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

Sample Point 5 [CONTROL - NNW @ 12 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
544635	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54	<1.87E+01	0.00E+00	1.87E+01
			Co-58	<1.75E+01	0.00E+00	1.75E+01
			Fe-59	<4.77E+01	0.00E+00	4.77E+01
			Co-60	<1.82E+01	0.00E+00	1.82E+01
			Zn-65	<5.58E+01	0.00E+00	5.58E+01
			Zr-95	<3.21E+01	0.00E+00	3.21E+01
			Nb-95	<1.47E+01	0.00E+00	1.47E+01
			I-131	<2.36E+01	0.00E+00	2.36E+01
			Cs-134	<2.58E+01	0.00E+00	2.58E+01
			Cs-137	<1.73E+01	0.00E+00	1.73E+01
			BaLa-140	<2.30E+01	0.00E+00	2.30E+01
			Be-7	6.57E+02	1.60E+02	1.78E+02
			K-40	3.32E+03	5.75E+02	3.46E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
546900	6/7/2021 - 6/7/2021	MIXEDBLV	Mn-54	<1.25E+01	0.00E+00	1.25E+01
			Co-58	<1.01E+01	0.00E+00	1.01E+01
			Fe-59	<2.66E+01	0.00E+00	2.66E+01
			Co-60	<1.47E+01	0.00E+00	1.47E+01
			Zn-65	<3.98E+01	0.00E+00	3.98E+01
			Zr-95	<2.37E+01	0.00E+00	2.37E+01
			Nb-95	<1.03E+01	0.00E+00	1.03E+01
			I-131	<1.73E+01	0.00E+00	1.73E+01
			Cs-134	<1.37E+01	0.00E+00	1.37E+01
			Cs-137	<1.45E+01	0.00E+00	1.45E+01
			BaLa-140	<2.04E+01	0.00E+00	2.04E+01
			Be-7	9.74E+02	1.74E+02	1.70E+02
			K-40	4.06E+03	5.03E+02	1.71E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
548102	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54	<1.96E+01	0.00E+00	1.96E+01
			Co-58	<1.59E+01	0.00E+00	1.59E+01

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

Sample Point 5 [CONTROL - NNW @ 12 miles]

Sample ID:	548102	Sample Dates:	7/6/2021 - 7/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Fe-59	<3.80E+01	0.00E+00	3.80E+01
					Co-60	<2.04E+01	0.00E+00	2.04E+01
					Zn-65	<4.37E+01	0.00E+00	4.37E+01
					Zr-95	<3.25E+01	0.00E+00	3.25E+01
					Nb-95	<1.57E+01	0.00E+00	1.57E+01
					I-131	<1.70E+01	0.00E+00	1.70E+01
					Cs-134	<2.02E+01	0.00E+00	2.02E+01
					Cs-137	<1.74E+01	0.00E+00	1.74E+01
					BaLa-140	<1.74E+01	0.00E+00	1.74E+01
					Be-7	7.99E+02	1.77E+02	1.94E+02
					K-40	4.43E+03	5.93E+02	3.18E+02

Sample ID:	549265	Sample Dates:	8/2/2021 - 8/2/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.57E+01	0.00E+00	1.57E+01
					Co-58	<1.17E+01	0.00E+00	1.17E+01
					Fe-59	<2.84E+01	0.00E+00	2.84E+01
					Co-60	<1.46E+01	0.00E+00	1.46E+01
					Zn-65	<3.26E+01	0.00E+00	3.26E+01
					Zr-95	<2.99E+01	0.00E+00	2.99E+01
					Nb-95	<1.65E+01	0.00E+00	1.65E+01
					I-131	<1.41E+01	0.00E+00	1.41E+01
					Cs-134	<2.05E+01	0.00E+00	2.05E+01
					Cs-137	<1.41E+01	0.00E+00	1.41E+01
					BaLa-140	<1.51E+01	0.00E+00	1.51E+01
					Be-7	1.41E+03	2.17E+02	1.77E+02
					K-40	4.80E+03	5.70E+02	1.77E+02

Sample ID:	551666	Sample Dates:	9/7/2021 - 9/7/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.01E+01	0.00E+00	3.01E+01
					Co-58	<2.02E+01	0.00E+00	2.02E+01
					Fe-59	<5.54E+01	0.00E+00	5.54E+01
					Co-60	<2.61E+01	0.00E+00	2.61E+01
					Zn-65	<5.55E+01	0.00E+00	5.55E+01
					Zr-95	<4.13E+01	0.00E+00	4.13E+01
					Nb-95	<2.97E+01	0.00E+00	2.97E+01
					I-131	<3.62E+01	0.00E+00	3.62E+01
					Cs-134	<2.44E+01	0.00E+00	2.44E+01
					Cs-137	<2.34E+01	0.00E+00	2.34E+01
					BaLa-140	<3.36E+01	0.00E+00	3.36E+01
					Be-7	7.72E+02	4.10E+02	2.06E+02
					K-40	4.09E+03	6.57E+02	4.46E+02

Sample ID:	553255	Sample Dates:	10/4/2021 - 10/4/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.46E+01	0.00E+00	1.46E+01
					Co-58	<1.69E+01	0.00E+00	1.69E+01
					Fe-59	<2.85E+01	0.00E+00	2.85E+01
					Co-60	<1.76E+01	0.00E+00	1.76E+01
					Zn-65	<3.39E+01	0.00E+00	3.39E+01
					Zr-95	<3.14E+01	0.00E+00	3.14E+01
					Nb-95	<1.51E+01	0.00E+00	1.51E+01
					I-131	<1.70E+01	0.00E+00	1.70E+01
					Cs-134	<1.79E+01	0.00E+00	1.79E+01
					Cs-137	<1.67E+01	0.00E+00	1.67E+01
					BaLa-140	<1.39E+01	0.00E+00	1.39E+01
					Be-7	2.10E+03	2.90E+02	1.94E+02
					K-40	4.60E+03	5.90E+02	3.28E+02

Sample Point 12 [INDICATOR - SSW @ 0.9 miles]

Sample ID:	544634	Sample Dates:	5/3/2021 - 5/3/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.48E+01	0.00E+00	1.48E+01
					Co-58	<1.17E+01	0.00E+00	1.17E+01
					Fe-59	<3.34E+01	0.00E+00	3.34E+01
					Co-60	<1.66E+01	0.00E+00	1.66E+01
					Zn-65	<3.67E+01	0.00E+00	3.67E+01
					Zr-95	<2.60E+01	0.00E+00	2.60E+01
					Nb-95	<1.17E+01	0.00E+00	1.17E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 12 [INDICATOR - SSW @ 0.9 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
544634	5/3/2021 - 5/3/2021	MIXEDBLV	I-131	<1.40E+01	0.00E+00	1.40E+01
			Cs-134	<1.84E+01	0.00E+00	1.84E+01
			Cs-137	<1.67E+01	0.00E+00	1.67E+01
			BaLa-140	<1.54E+01	0.00E+00	1.54E+01
			Be-7	4.33E+02	1.40E+02	1.86E+02
			K-40	3.03E+03	4.36E+02	2.34E+02
546899	6/7/2021 - 6/7/2021	MIXEDBLV	Mn-54	<1.62E+01	0.00E+00	1.62E+01
			Co-58	<1.72E+01	0.00E+00	1.72E+01
			Fe-59	<3.50E+01	0.00E+00	3.50E+01
			Co-60	<1.88E+01	0.00E+00	1.88E+01
			Zn-65	<4.65E+01	0.00E+00	4.65E+01
			Zr-95	<3.26E+01	0.00E+00	3.26E+01
			Nb-95	<1.68E+01	0.00E+00	1.68E+01
			I-131	<1.70E+01	0.00E+00	1.70E+01
			Cs-134	<2.15E+01	0.00E+00	2.15E+01
			Cs-137	<2.06E+01	0.00E+00	2.06E+01
			BaLa-140	<1.44E+01	0.00E+00	1.44E+01
			Be-7	8.59E+02	1.82E+02	1.82E+02
			K-40	2.57E+03	2.38E+02	2.13E+02
			548101	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54
Co-58	<1.71E+01	0.00E+00				1.71E+01
Fe-59	<3.25E+01	0.00E+00				3.25E+01
Co-60	<1.65E+01	0.00E+00				1.65E+01
Zn-65	<3.53E+01	0.00E+00				3.53E+01
Zr-95	<2.76E+01	0.00E+00				2.76E+01
Nb-95	<1.71E+01	0.00E+00				1.71E+01
I-131	<1.61E+01	0.00E+00				1.61E+01
Cs-134	<1.76E+01	0.00E+00				1.76E+01
Cs-137	<1.74E+01	0.00E+00				1.74E+01
BaLa-140	<1.24E+01	0.00E+00				1.24E+01
Be-7	1.35E+03	2.29E+02				2.05E+02
K-40	2.41E+03	3.80E+02				1.61E+02
549264	8/2/2021 - 8/2/2021	MIXEDBLV				Mn-54
			Co-58	<1.01E+01	0.00E+00	1.01E+01
			Fe-59	<1.91E+01	0.00E+00	1.91E+01
			Co-60	<1.22E+01	0.00E+00	1.22E+01
			Zn-65	<1.68E+01	0.00E+00	1.68E+01
			Zr-95	<1.70E+01	0.00E+00	1.70E+01
			Nb-95	<1.20E+01	0.00E+00	1.20E+01
			I-131	<1.38E+01	0.00E+00	1.38E+01
			Cs-134	<1.14E+01	0.00E+00	1.14E+01
			Cs-137	<1.20E+01	0.00E+00	1.20E+01
			BaLa-140	<9.13E+00	0.00E+00	9.13E+00
			Be-7	1.22E+03	1.87E+02	1.55E+02
			K-40	1.77E+03	2.86E+02	1.82E+02
			551665	9/7/2021 - 9/7/2021	MIXEDBLV	Mn-54
Co-58	<1.26E+01	0.00E+00				1.26E+01
Fe-59	<4.27E+01	0.00E+00				4.27E+01
Co-60	<2.67E+01	0.00E+00				2.67E+01
Zn-65	<4.32E+01	0.00E+00				4.32E+01
Zr-95	<3.90E+01	0.00E+00				3.90E+01
Nb-95	<2.14E+01	0.00E+00				2.14E+01
I-131	<2.65E+01	0.00E+00				2.65E+01
Cs-134	<2.44E+01	0.00E+00				2.44E+01
Cs-137	<1.98E+01	0.00E+00				1.98E+01
BaLa-140	<2.91E+01	0.00E+00				2.91E+01
Be-7	2.38E+03	3.59E+02				2.58E+02
K-40	2.53E+03	4.70E+02				3.31E+02

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 12 [INDICATOR - SSW @ 0.9 miles]

Sample ID:	553254	Sample Dates:	10/4/2021 - 10/4/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.73E+01	0.00E+00	1.73E+01
					Co-58	<1.93E+01	0.00E+00	1.93E+01
					Fe-59	<3.19E+01	0.00E+00	3.19E+01
					Co-60	<1.89E+01	0.00E+00	1.89E+01
					Zn-65	<3.30E+01	0.00E+00	3.30E+01
					Zr-95	<2.86E+01	0.00E+00	2.86E+01
					Nb-95	<1.78E+01	0.00E+00	1.78E+01
					I-131	<1.77E+01	0.00E+00	1.77E+01
					Cs-134	<1.72E+01	0.00E+00	1.72E+01
					Cs-137	<1.90E+01	0.00E+00	1.90E+01
					BaLa-140	<1.83E+01	0.00E+00	1.83E+01
					Be-7	2.25E+03	2.24E+02	1.58E+02
					K-40	2.74E+03	4.23E+02	2.43E+02

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	544636	Sample Dates:	5/3/2021 - 5/3/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.69E+01	0.00E+00	1.69E+01
					Co-58	<1.47E+01	0.00E+00	1.47E+01
					Fe-59	<2.65E+01	0.00E+00	2.65E+01
					Co-60	<1.78E+01	0.00E+00	1.78E+01
					Zn-65	<3.10E+01	0.00E+00	3.10E+01
					Zr-95	<2.85E+01	0.00E+00	2.85E+01
					Nb-95	<1.52E+01	0.00E+00	1.52E+01
					I-131	<1.65E+01	0.00E+00	1.65E+01
					Cs-134	<1.66E+01	0.00E+00	1.66E+01
					Cs-137	<1.58E+01	0.00E+00	1.58E+01
					BaLa-140	<1.90E+01	0.00E+00	1.90E+01
					Be-7	5.99E+02	1.45E+02	1.59E+02
					K-40	3.29E+03	4.70E+02	2.67E+02

Sample ID:	546901	Sample Dates:	6/7/2021 - 6/7/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.04E+01	0.00E+00	2.04E+01
					Co-58	<1.87E+01	0.00E+00	1.87E+01
					Fe-59	<3.84E+01	0.00E+00	3.84E+01
					Co-60	<1.69E+01	0.00E+00	1.69E+01
					Zn-65	<3.96E+01	0.00E+00	3.96E+01
					Zr-95	<3.00E+01	0.00E+00	3.00E+01
					Nb-95	<1.70E+01	0.00E+00	1.70E+01
					I-131	<1.83E+01	0.00E+00	1.83E+01
					Cs-134	<1.93E+01	0.00E+00	1.93E+01
					Cs-137	<1.14E+01	0.00E+00	1.14E+01
					BaLa-140	<2.37E+01	0.00E+00	2.37E+01
					Be-7	1.01E+03	2.12E+02	2.21E+02
					K-40	2.82E+03	4.72E+02	3.49E+02

Sample ID:	548103	Sample Dates:	7/6/2021 - 7/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.19E+01	0.00E+00	1.19E+01
					Co-58	<1.18E+01	0.00E+00	1.18E+01
					Fe-59	<2.69E+01	0.00E+00	2.69E+01
					Co-60	<1.73E+01	0.00E+00	1.73E+01
					Zn-65	<3.56E+01	0.00E+00	3.56E+01
					Zr-95	<2.24E+01	0.00E+00	2.24E+01
					Nb-95	<1.38E+01	0.00E+00	1.38E+01
					I-131	<1.25E+01	0.00E+00	1.25E+01
					Cs-134	<1.51E+01	0.00E+00	1.51E+01
					Cs-137	<9.46E+00	0.00E+00	9.46E+00
					BaLa-140	<1.49E+01	0.00E+00	1.49E+01
					Be-7	7.04E+02	1.48E+02	1.52E+02
					K-40	2.15E+03	3.54E+02	2.54E+02

Sample ID:	549266	Sample Dates:	8/2/2021 - 8/2/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.51E+01	0.00E+00	1.51E+01
					Co-58	<1.38E+01	0.00E+00	1.38E+01
					Fe-59	<3.08E+01	0.00E+00	3.08E+01
					Co-60	<1.31E+01	0.00E+00	1.31E+01
					Zn-65	<3.51E+01	0.00E+00	3.51E+01

HARRIS Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 63 [INDICATOR - SW @ 0.6 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
549266	8/2/2021 - 8/2/2021	MIXEDBLV	Zr-95	<2.15E+01	0.00E+00	2.15E+01
			Nb-95	<1.27E+01	0.00E+00	1.27E+01
			I-131	<1.51E+01	0.00E+00	1.51E+01
			Cs-134	<1.48E+01	0.00E+00	1.48E+01
			Cs-137	<1.21E+01	0.00E+00	1.21E+01
			BaLa-140	<1.53E+01	0.00E+00	1.53E+01
			Be-7	1.20E+03	1.91E+02	1.52E+02
			K-40	2.80E+03	4.03E+02	1.91E+02
			551667	9/7/2021 - 9/7/2021	MIXEDBLV	Mn-54
Co-58	<3.07E+01	0.00E+00				3.07E+01
Fe-59	<7.16E+01	0.00E+00				7.16E+01
Co-60	<2.95E+01	0.00E+00				2.95E+01
Zn-65	<6.97E+01	0.00E+00				6.97E+01
Zr-95	<6.11E+01	0.00E+00				6.11E+01
Nb-95	<3.88E+01	0.00E+00				3.88E+01
I-131	<4.79E+01	0.00E+00				4.79E+01
Cs-134	<3.34E+01	0.00E+00				3.34E+01
Cs-137	<3.29E+01	0.00E+00				3.29E+01
BaLa-140	<3.89E+01	0.00E+00				3.89E+01
Be-7	1.59E+03	3.52E+02				3.80E+02
K-40	3.55E+03	6.21E+02				3.09E+02
553256	10/4/2021 - 10/4/2021	MIXEDBLV				Mn-54
			Co-58	<1.43E+01	0.00E+00	1.43E+01
			Fe-59	<2.67E+01	0.00E+00	2.67E+01
			Co-60	<1.62E+01	0.00E+00	1.62E+01
			Zn-65	<3.43E+01	0.00E+00	3.43E+01
			Zr-95	<2.27E+01	0.00E+00	2.27E+01
			Nb-95	<1.64E+01	0.00E+00	1.64E+01
			I-131	<1.48E+01	0.00E+00	1.48E+01
			Cs-134	<1.61E+01	0.00E+00	1.61E+01
			Cs-137	<1.23E+01	0.00E+00	1.23E+01
			BaLa-140	<1.71E+01	0.00E+00	1.71E+01
			Be-7	1.67E+03	2.43E+02	1.70E+02
			K-40	2.58E+03	4.01E+02	2.40E+02

APPENDIX F

ERRATA TO
PREVIOUS REPORTS

2021

There are no errata to the 2021 HNP Radiological Environmental Monitoring Program.

Enclosure 4
RA-22-0030

ENCLOSURE 4: [MNS Annual Radiological Environmental Operating Report](#)



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

**DUKE ENERGY CORPORATION
MCGUIRE NUCLEAR STATION
Units 1 and 2**

2021



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

AREOR	Annual Radiological Environmental Operating Report
ARERR	Annual Radiological Effluent Release Report
BW	BiWeekly
C	Control
CM	Community
CR	Condition Report (analogous to Nuclear Condition Report (NCR))
EZA	Eckert & Ziegler Analytics
GEL	General Engineering Laboratory, LLC
GPS	Global Positioning System
I	Indicator
IR	Inner Ring
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
LLI	Low Level Iodine
LUC	Land Use Census
M	Monthly
MAPEP	Department of Energy Mixed Analyte Performance Evaluation Program
MDA	Minimum Detectable Activity
MNS	McGuire Nuclear Station
mrem	Millirem
mR/Std Qtr	milliroentgen per standard quarter
MWe	Megawatt (electrical)
NIST	National Institute of Standards and Technology
NCR	Nuclear Condition Report (analogous to Condition Report (CR))
NRC	Nuclear Regulatory Commission
ODCM	Offsite Dose Calculation Manual
OR	Outer Ring
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SB	Site Boundary
SI	Special Interest
SLCs	Selected Licensee Commitments
SM	Semimonthly
TECH SPECS	Technical Specifications
TLD	Thermoluminescent Dosimeter
UFSAR	Updated Final Safety Analysis Report
W	Weekly

1.0 EXECUTIVE SUMMARY

This Annual Radiological Environmental Operating Report describes the McGuire Nuclear Station Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2021.

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, analysis of trends in environmental radiological data as potentially affected by station operations, and a summary of environmental radiological sampling results. Quality assurance practices, sampling deviations, unavailable samples, and program changes are also discussed.

Sampling activities were conducted as prescribed by the McGuire Offsite Dose Calculation Manual (ODCM) and Selected Licensee Commitments (SLCs). Twelve-hundred forty-nine samples were analyzed comprising 1,340 test results to compile data for the 2021 report. Based on the annual land use census, the current number of sampling sites for McGuire Nuclear Station is sufficient.

Concentrations observed in the environment in 2021 for station related radionuclides were within the ranges of concentrations observed in the past. Inspection of data showed that radioactivity concentrations in drinking water and surface water are higher than the activities reported for samples collected prior to the operation of the station. Measured concentrations were not higher than expected, and all positively identified measurements attributable to station operation were within limits as specified in the ODCM and SLCs, thus presenting no significant impact on the environment or public health and safety.

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

McGuire Nuclear Station (MNS) is located geographically near the center of a highly industrialized region of the Carolinas. The land is predominantly rural non-farm with a small amount of land being used for farming. The McGuire site is in northwestern Mecklenburg County, North Carolina, 17 miles north-northwest of Charlotte, North Carolina. The site is bounded to the west by the Catawba River channel and to the north by 32,510 acre Lake Norman. Lake Norman is impounded by Duke Energy Corporation's Cowans Ford Dam Hydroelectric Station. The tailwater of Cowans Ford Dam is the upper limit of Mountain Island Reservoir. Mountain Island Dam is located 15 miles downstream from the site. Lookout Shoals Hydroelectric Station is at the upper reaches of Lake Norman. Marshall Steam Station is located on the western shore of Lake Norman, approximately 16 miles upstream from the site.

MNS consists of two pressurized water reactors. Each reactor unit is essentially a mirror image of the other joined by an auxiliary building housing both separate and common equipment. Each unit was designed to produce approximately 1200 gross MWe. Unit 1 achieved criticality August 8, 1981 and Unit 2 on May 8, 1983.

Sampling locations are chosen based upon meteorological factors, preoperational monitoring, and results of the land use surveys. 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 0.5 mile radius of MNS. Figure 2.1-2 comprises all sample locations within a ten-mile radius of MNS.

The McGuire site centerline used for GPS measurements was referenced from the McGuire Nuclear Station Updated Final Safety Analysis Report (UFSAR), section 2.1.1, Site Location. Waypoint coordinates used for MNS GPS measurements were latitude 35°-25'-59"N and longitude 80°-56'-55"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 two significant figures.

2.2 SCOPE AND REQUIREMENTS OF THE REMP

An environmental monitoring program has been in effect at McGuire Nuclear Station since 1977, four years prior to operation of Unit 1 in 1981. 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 McGuire Nuclear Station. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10CFR50 and provides surveillance of all appropriate critical exposure pathways to man and protects vital interests of the company, public, and state and federal agencies concerned with the environment. Reporting levels for 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 3.10.

Participation in an interlaboratory comparison program as required by Selected Licensee Commitments provides for independent checks on the precision and accuracy of measurements of radioactive material in REMP sample matrices. Such checks are performed as part of the quality assurance program for environmental monitoring in order to demonstrate that the results are valid for the purposes of Section IV.B.2 of Appendix I to 10CFR50. A summary of the results obtained as part of this comparison program are in Section 4 of this annual report.

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

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

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

Where:

\bar{x} = estimate of the mean,

i = individual sample,
 N = total number of samples with a net activity (or concentration),
 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* (before the fact) lower limit of detection. The actual LLD is dependent upon the standard deviation of the background counting rate, the counting efficiency, the sample size (mass or volume), the radiochemical yield, and the radioactive decay of the sample between sample collection and counting. The "required" LLDs for each sample medium and selected radionuclides are given in the Selected Licensee Commitments and are listed in Table 2.2-C.

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

2.3.3 TREND IDENTIFICATION

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

Substantial increases or decreases in the amount of a particular radionuclide's release from the nuclear plant will greatly affect the resulting environmental levels; therefore, a knowledge of the release of a radionuclide from the nuclear plant is necessary to completely interpret the trends, or lack of trends, determined from the environmental data. 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 1986 Chernobyl accident and

the 2011 Japan earthquake and tsunami, which triggered the Fukushima Dai-ichi Nuclear Power Plant incident). Some of these factors may be obvious while others are sometimes unknown. Therefore, how trends are identified will include some judgment by plant personnel.

Figure 2.1-1

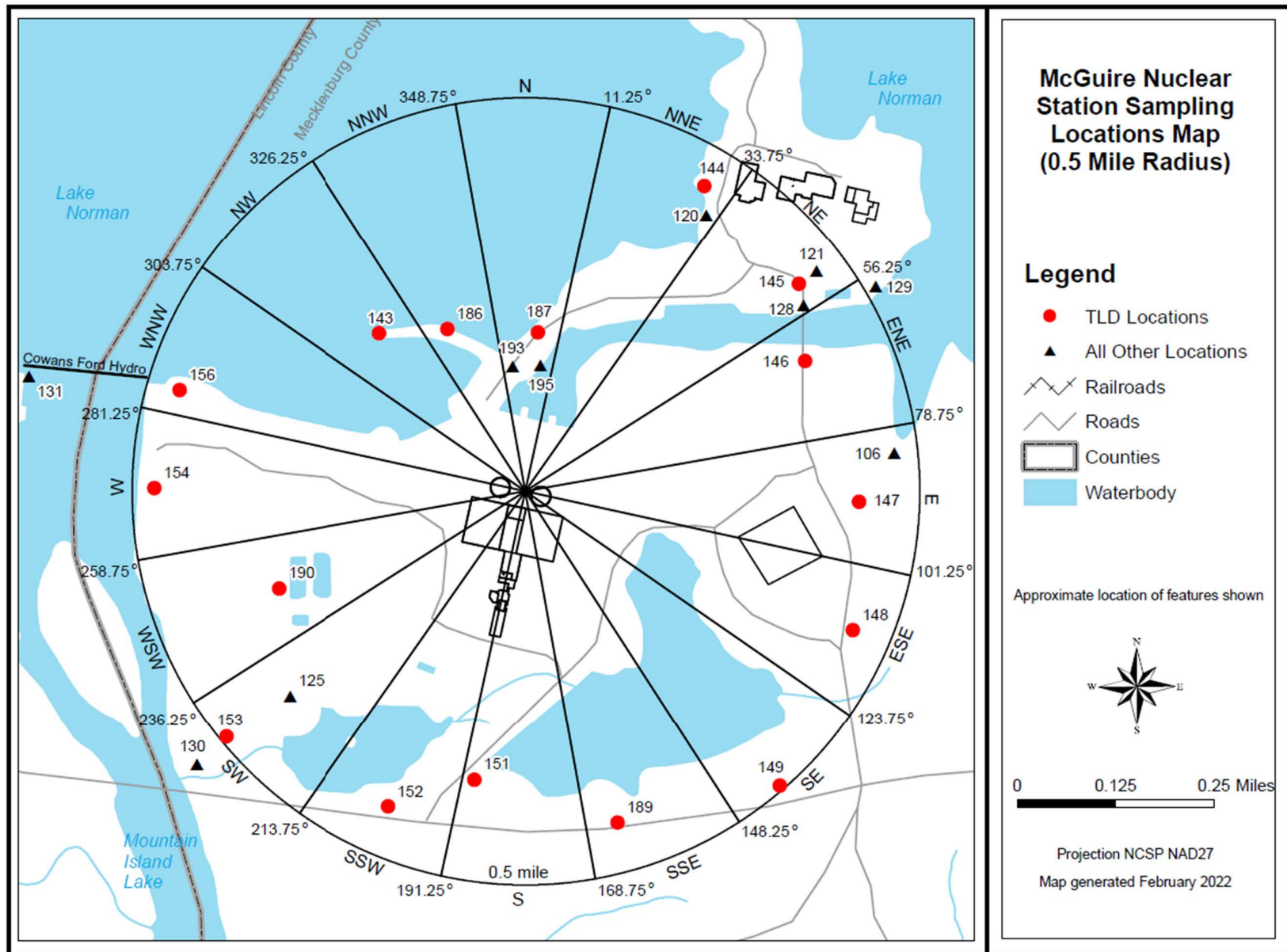


Figure 2.1-2

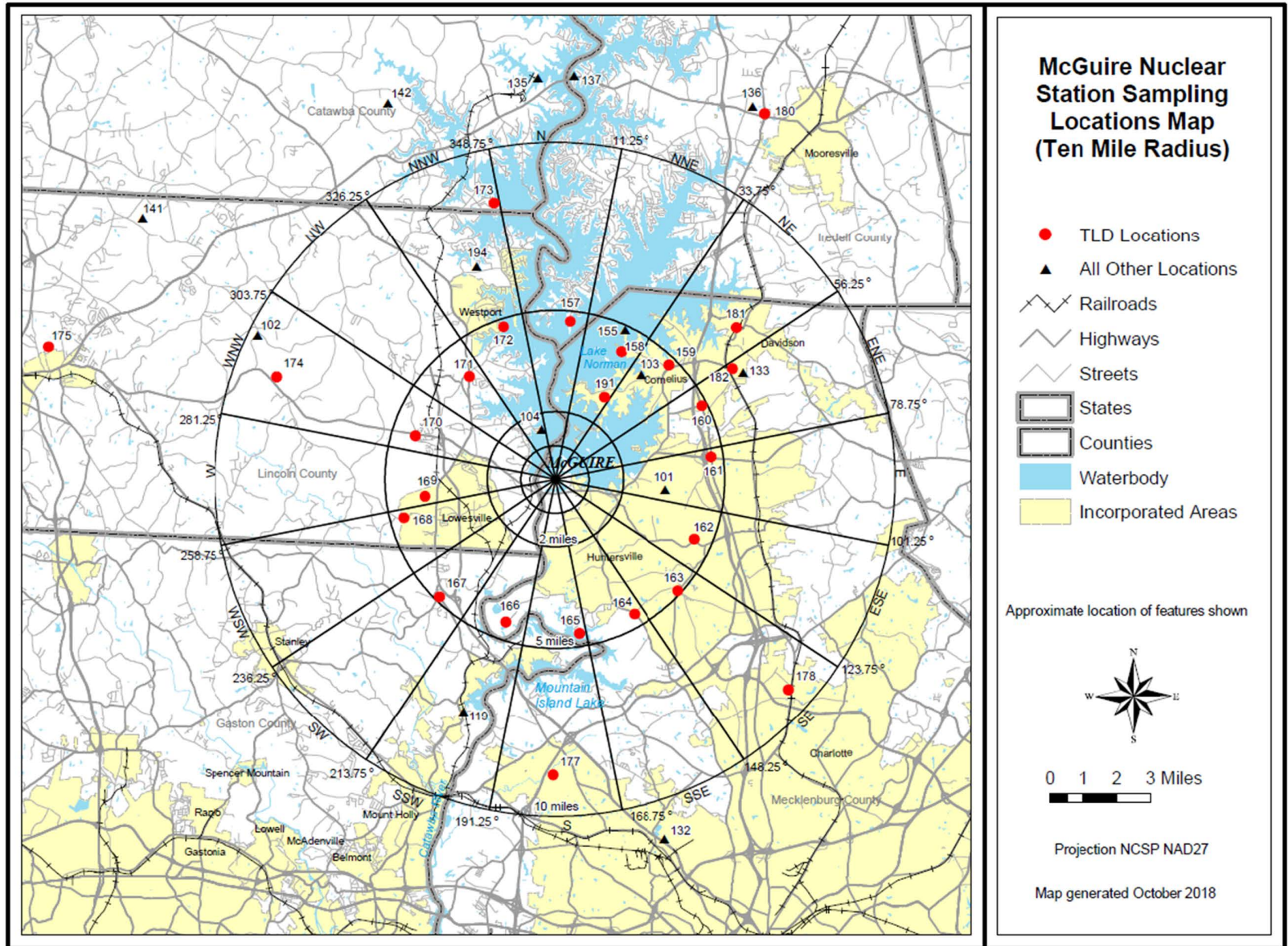


TABLE 2.1-A

**MCGUIRE RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS**

Table 2.1-A Codes			
C	Control ^(c)	SA	Semiannually
CM	Community	SB	Site Boundary
I	Indicator	W	Weekly
M	Monthly		

Site #	Measure Type	Location Description ^(e)	Air Rad. & Part.	Surface Water ^(d)	Drinking Water	Shoreline Sediment	Food Products	Fish	Milk	Broad Leaf Veg.
101	I	North Mecklenburg Water Treatment Facility (3.31 mi E)			M					
102	C	Amity Church Road (9.89 mi WNW)	W							M (b)
103	I	Cottonwood Substation (4.20 mi NE)	W, CM ^(f)							
106	I	Maintenance & Training Facility (0.47 mi E)	W, CM ^(f)							
119	I	Mt. Holly Municipal Water Supply (7.40 mi SSW)			M					
120	I	HP Boathouse-Site Boundary (0.46 mi NNE)	W, SB							M (b)
121	I	Guardhouse-Site Boundary (0.47 mi NE)	W, SB							
125	I	Settling Ponds - Site Boundary (0.38 mi SW)	W, SB							M (b)
128	I	Discharge Canal Bridge (0.45 mi NE)		M						
129	I	Discharge Canal Entrance to Lake Norman (0.51 mi ENE)				SA		SA		
130	I	Hwy 73 Bridge Downstream (0.52 mi SW)				SA				
131	I	Cowans Ford Dam (0.64 mi WNW)		M						
132	I	Charlotte Municipal Water Supply (11.1 mi SSE)			M					
133	I	Cornelius (6.23 mi ENE)	W							
135	C	Plant Marshall Intake Canal (11.9 mi N)		M						
136	C	Mooresville Municipal Water Supply (12.7 mi NNE)			M					
137	C	Pinnacle Access Area (12.0 mi N)				SA		SA		
142	C	Lowman Farms-Cows (12.2 mi NNW)							SM	
155	I	Island Forest Drive (4.87 mi NNE)					M (a)			
193	I	Site Boundary (0.19 mi N)								M (b)
194	I	East Lincoln County Water Supply (6.73 mi NNW)			M					
195	I	Fishing Access Road (0.19 mi N)	W							

- (a) During Harvest Season
- (b) When Available
- (c) The purpose of this sample is to obtain background information. If it is not practical to establish control locations in accordance with the distance and wind direction criteria, other sites that provide valid background data may be substituted.
- (d) The "upstream sample" shall be taken at a distance beyond significant influence of the discharge. The "downstream" sample shall be taken in an area beyond but near the mixing zone. "Upstream" samples in an estuary must be taken far enough upstream to be beyond the plant influence. Saltwater shall be sampled only when the receiving water is utilized for recreational activities.
- (e) GPS data reflect approximate accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.
- (f) Community air sampling replacement in progress, NCR # 02335752

TABLE 2.1-B

**MCGUIRE RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS (TLD SITES) ^(b)**

Table 2.1-B Codes			
C	Control ^(a)	OR	Outer Ring
IR	Inner Ring	SI	Special Interest

Site #	Measure Type	Location	Distance ^(c) (miles)	Sector	Site #	Measure Type	Location	Distance ^(c) (miles)	Sector
143	IR	SITE BOUNDARY	0.27	NW	164	OR	HAMBRIGHT & BEATTIES FORD ROAD	4.64	SSE
144	IR	SITE BOUNDARY	0.46	NNE	165	OR	ARTHER AUTEN ROAD	4.57	S
145	IR	SITE BOUNDARY	0.47	NE	166	OR	NECK ROAD REFUGE BOUNDARY	4.44	SSW
146	IR	SITE BOUNDARY	0.42	ENE	167	OR	LUCIA RIVERBEND HWY/OLD FIREHOUSE	4.87	SW
147	IR	SITE BOUNDARY	0.44	E	168	OR	OLD PLANK ROAD BRIDGE	4.60	WSW
148	IR	SITE BOUNDARY	0.46	ESE	169	OR	GLOVER LANE	4.03	W
149	IR	SITE BOUNDARY	0.50	SE	170	OR	LITTLE EGYPT ROAD	4.32	WNW
151	IR	SITE BOUNDARY	0.37	S	171	OR	TRIANGLE ACE HARDWARE	3.95	NW
152	IR	SITE BOUNDARY	0.44	SSW	172	OR	LAKESHORE S RD ISLAND VIEW COURT	4.69	NNW
153	IR	SITE BOUNDARY	0.47	SW	173	SI	KEISTLER STORE / GLENWOOD ROAD	8.39	NNW
154	IR	SITE BOUNDARY	0.45	W	174	SI	EAST LINCOLN JR. HIGH SCHOOL	8.85	WNW
156	IR	SITE BOUNDARY	0.44	WNW	175	C	BOGER CITY	15.5	WNW
189	IR	SITE BOUNDARY	0.43	SSE	177	SI	BELMARR RD / COULWOOD	8.77	S
190	IR	SITE BOUNDARY	0.37	WSW	178	SI	FLORIDA STEEL CORPORATION	9.36	SE
157	OR	THE POINTE/ MOORESVILLE	4.69	N	180	SI	MOORESVILLE WATER TREATMENT FACILITY	12.7	NNE
158	OR	BETHEL CHURCH RD	4.33	NNE	181	SI	OLD DAVIDSON WATER FACILITY	7.02	NE
159	OR	HENDERSON ROAD	4.77	NE	182	SI	CORNELIUS AIR SITE # 133	6.23	ENE
160	OR	ANCHORAGE MARINE SHOWROOM	4.89	ENE	186	SI	MCGUIRE FISHING ACCESS ROAD ON PENINSULA	0.24	NNW
161	OR	SAM FURR ROAD & HWY 21	4.70	E	187	SI	ENERGY EXPLORIUM / AIR SITE # 195	0.19	N
162	OR	RANSON ROAD	4.53	ESE	191	SI	PENINSULA DEV. / JOHN CONNOR ROAD	2.84	NNE
163	OR	MCCOY ROAD	4.94	SE					

- (a) The purpose of this sample is to obtain background information. If it is not practical to establish control locations in accordance with the distance and wind direction criteria, other sites that provide valid background data may be substituted.
- (b) One or more instruments, such as a pressurized ion chamber, for measuring and recording dose rate continuously may be used in place of, or in addition to, integrating dosimeters. For the purposes of this table, a thermoluminescent dosimeter (TLD) is considered to be one phosphor; two or more phosphors in a packet are considered as two or more dosimeters. Film badges shall not be used as dosimeters for measuring direct radiation. The forty stations is not an absolute number. The number of direct radiation monitoring stations may be reduced according to geographical limitations; e.g., at an ocean site, some sections will be over water so that the number of dosimeters may be reduced accordingly. The frequency of analysis or readout for TLD systems will depend upon the characteristics of the specific system used and should be selected to obtain optimum dose information with minimal fading.
- (c) GPS data reflect approximate accuracy to within 2-5 meters. GPS field measurements were taken as close as possible to the item of interest.

TABLE 2.2-A

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

Analysis	Water (pCi/liter)	Air Particulates or Gases (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	BroadLeaf Vegetation (pCi/kg-wet)
H-3	20,000 ^{(a)(b)}				
Mn-54	1,000		30,000		
Fe-59	400		10,000		
Co-58	1,000		30,000		
Co-60	300		10,000		
Zn-65	300		20,000		
Zr-Nb-95	400				
I-131	2	0.9		3	100
Cs-134	30	10	1,000	60	1,000
Cs-137	50	20	2,000	70	2,000
Ba-La-140	200			300	

- (a) For drinking water samples. This is 40CFR Part 141 value. If no drinking water pathway exists, a value of 30,000 pCi/liter may be used.
(b) H-3 Reporting level not applicable to surface water

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

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

- (a) Low-level I-131 analysis will be performed if the dose calculated for the consumption of drinking water is > 1 mrem per year. An LLD of 1 pCi/liter will be required for this analysis.
- (b) When Available
- (c) Airborne particulate sample filters shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than ten times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.
- (d) Gamma isotopic analysis means the identification and quantification of gamma-emitting radionuclides that may be attributable to the effluents from the facility.
- (e) A composite sample is one in which the quantity (aliquot) of liquid sampled is proportional to the quantity of flowing liquid and in which the method of sampling employed results in a specimen that is representative of the liquid flow. In this program composite sample aliquots shall be collected at time intervals that are very short (e.g., hourly) relative to the compositing period (e.g., monthly) in order to assure obtaining a representative sample.
- (f) If harvest occurs more than once a year, sampling shall be performed during each discrete harvest. If harvest occurs continuously, sampling shall be monthly. Attention shall be paid to including samples of tuberous and root food products.

TABLE 2.2-C

MAXIMUM VALUES FOR THE *A PRIORI* LOWER LIMITS OF DETECTION ^{(c)(d)}

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	2,000 ^(a)					
Mn-54	15		130			
Fe-59	30		260			
Co-58, 60	15		130			
Zn-65	30		260			
Zr-Nb-95	15					
I-131	1 ^(b)	0.07		1	60	
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15			15		

(a) If no drinking water pathway exists, a value of 3,000 pCi/liter may be used.

(b) If no drinking water pathway exists, the LLD of gamma isotopic analysis may be used.

(c) Lower Limit of Detection is defined in Section 2.3.2

(d) This list does not mean that only these nuclides are to be considered. Other peaks that are identifiable, together with those of the above nuclides, shall also be analyzed and reported in the Annual Radiological Environmental Operating Report.

3.0 INTERPRETATION OF RESULTS

Review of 2021 REMP analysis results was performed to detect and identify changes in environmental levels as a result of station operation. The radionuclides with Selected Licensee Commitments reporting levels that indicate consistent detectable activity have been historically trended from preoperation to present. Analyses from 1977 - 1978 have been excluded since these results were much higher than the other preoperational years due to outside influences such as weapons testing. The preoperational analyses from 1981 were combined with the operational analyses from the latter part of 1981 and averaged to give one concentration for each radionuclide for that year. Summary tables containing 2021 information required by Technical Specification Administrative Control 5.6.2 are located in Appendix B. McGuire 2021 REMP results are located in Appendix E.

The highest annual mean concentration of applicable Selected Licensee Commitments radionuclides from the indicator locations for each media type was used for trending purposes. Trending was performed by comparing annual mean concentrations 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 attributable to MNS plant operation were well below the 100% action level. The highest value attributable to MNS plant operations during 2021 was 2.56% for drinking water tritium at the North Mecklenburg Water Treatment Facility (Location 101). Only Selected Licensee Commitments radionuclides were detected in 2021.

Ground water monitoring wells located on the MNS site are part of the Nuclear Energy Institute (NEI) 07-07 radiological groundwater monitoring wells and are reported in the MNS Annual Radioactive Effluent Release Report (ARERR). NEI 07-07 was developed to describe the industry's Ground Water Protection Initiative. NEI 07-07 radiological groundwater monitoring wells are used to assure timely detection and effective response to situations involving inadvertent radiological releases to ground water to prevent migration of licensed radioactive material off-site and to quantify impacts on decommissioning. These monitoring wells are not used for Radiological Environmental Monitoring Program (REMP), because they do not monitor water supply for drinking or irrigation purposes. These are not REMP wells because there is no dose associated with this pathway. The McGuire site is bounded to the west by the Catawba River channel and the hydraulic gradient for McGuire flows toward the Catawba River. Sentinel wells are installed and monitored at regular intervals for early detection purposes (NCR # 02035750).

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. All negative values were replaced with a zero for calculational and graphical purposes to properly represent environmental conditions. 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 possible that the method the previous system used to estimate net activity may have been vulnerable to false-positive results.

This section includes tables and graphs containing the highest annual mean concentrations of any effluent related radionuclide detected since the change in analysis systems in 1987. Any zero concentrations used in tables or graphs represent activity measurements less than detectable levels. Only the specific radionuclides that represent the highest dose contributors or demonstrate consistent detectable activity are shown graphically.

Data presented in Sections 3.1 through 3.9 support the conclusion that there was no significant increase in radioactivity in the environment around McGuire Nuclear Station due to station operations in 2021. Similarly, there was no significant increase in ambient background radiation levels in the surrounding areas. The 2021 land use census data, shown in Section 3.10, indicates that no program changes are required as a result of the census.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

Airborne particulate and radioiodine samples at each of seven ODCM locations were composited continuously by means of continuous air samplers. Additionally, location 106 (0.47 miles E, indicator) was added to the REMP as a future community location during 2021.

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.

In 2021, 403 radioiodine and particulate samples were analyzed, 350 from 7 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). The radioiodine samples received a weekly gamma analysis. K-40 and Be-7 observed in air samples are naturally occurring radionuclides.

Gross beta analyses indicated $2.54\text{E-}2$ pCi/m³ at the location with the highest annual mean and $2.39\text{E-}2$ pCi/m³ at the control location. No detectable gamma activity attributable to MNS plant operation was detected in any air samples in 2021 and has not been detected since 2004. Figure 3.1 shows gross beta highest annual mean indicator and control location concentrations since 1985. There is no reporting level for gross beta. Table 3.1-A shows indicator and control location highest annual means for Cs-137 and gross beta.

Table 3.1-B gives indicator location highest annual means and control means since 1979 for I-131. No I-131 activity due to MNS plant operation has been detected since 1989. Since no activity was detected in 2021, no reporting levels were approached.

In 2020, Nuclear Oversight (NOS) determined that air sampling location 103 (Cottonwood Substation, 4.20 miles NE) was not the most appropriate community location based on MNS SLC 16.11.13 requirements. The geography and population demographics have changed considerably since Location 103 was initially deemed the community air sampler. Location 103 does not have a higher D/Q value than many other newer communities closer to the McGuire site. Location 106 (0.47 miles E, indicator) was added to the REMP as a future community location effective 24MAY2021 (NCR # 02335752).

Figure 3.1

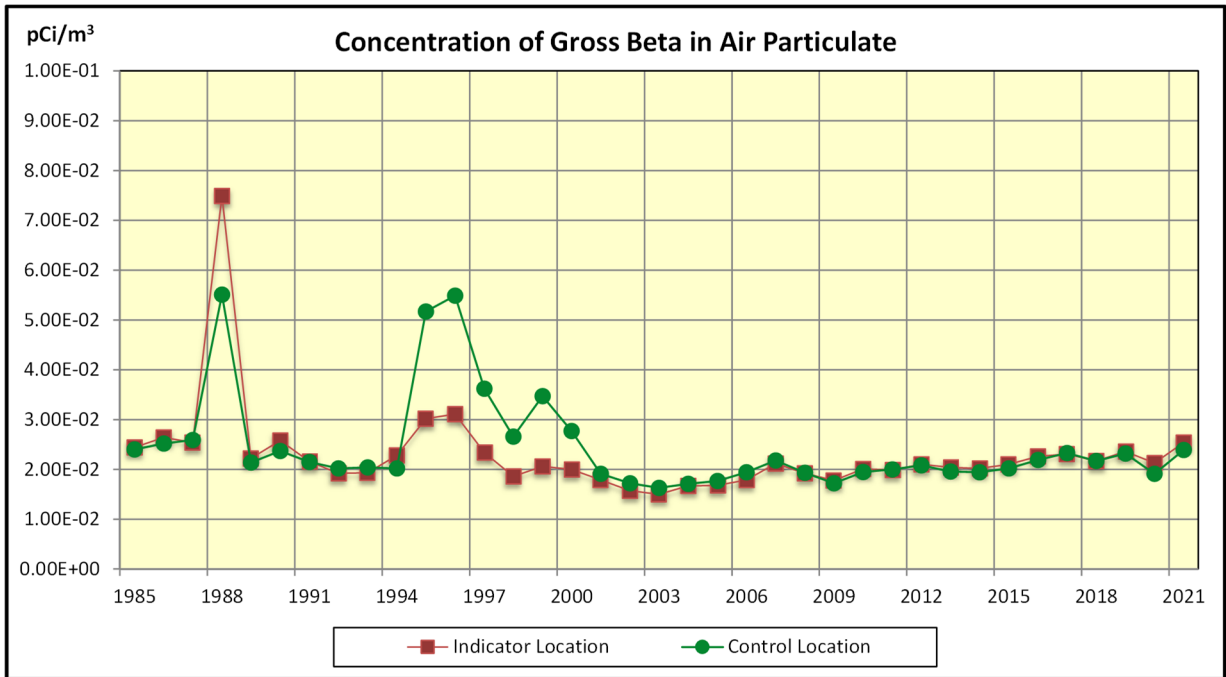


Table 3.1-A Mean Concentrations of Radionuclides in Air Particulate

YEAR	Cs-137 Indicator (pCi/m ³)	Cs-137 Control (pCi/m ³)	Beta Indicator (pCi/m ³)	Beta Control (pCi/m ³)
1979*	4.40E-3	1.47E-3	Not Performed	Not Performed
1980*	6.70E-3	4.53E-3	Not Performed	Not Performed
1981*	6.16E-3	5.32E-3	Not Performed	Not Performed
1982*	3.82E-3	2.29E-3	Not Performed	Not Performed
1983*	2.93E-3	3.21E-3	Not Performed	Not Performed
1984	1.74E-3	8.29E-4	Not Performed	Not Performed
1985	1.86E-3	1.32E-3	2.44E-2	2.40E-2
1986	4.98E-3	3.03E-3	2.64E-2	2.52E-2
1987 ⁽¹⁾	1.07E-2	7.91E-3	2.54E-2	2.59E-2
1988	0.00E0	0.00E0	7.49E-2	5.51E-2
1989	0.00E0	0.00E0	2.22E-2	2.14E-2
1990	0.00E0	0.00E0	2.58E-2	2.37E-2
1991	0.00E0	0.00E0	2.16E-2	2.15E-2
1992	0.00E0	0.00E0	1.92E-2	2.02E-2
1993	0.00E0	0.00E0	1.93E-2	2.04E-2
1994	0.00E0	0.00E0	2.28E-2	2.02E-2
1995	0.00E0	0.00E0	3.02E-2	5.17E-2
1996	0.00E0	0.00E0	3.11E-2	5.49E-2
1997	0.00E0	0.00E0	2.34E-2	3.62E-2
1998	0.00E0	0.00E0	1.86E-2	2.66E-2
1999	0.00E0	0.00E0	2.06E-2	3.47E-2
2000	0.00E0	0.00E0	2.00E-2	2.77E-2
2001	0.00E0	0.00E0	1.79E-2	1.91E-2
2002	0.00E0	0.00E0	1.57E-2	1.72E-2
2003	0.00E0	0.00E0	1.50E-2	1.63E-2
2004 ⁽²⁾	0.00E0	0.00E0	1.67E-2	1.71E-2
2005	0.00E0	0.00E0	1.68E-2	1.77E-2
2006	0.00E0	0.00E0	1.79E-2	1.94E-2
2007	0.00E0	0.00E0	2.12E-2	2.18E-2
2008	0.00E0	0.00E0	1.92E-2	1.93E-2
2009	0.00E0	0.00E0	1.79E-2	1.76E-2
2010	0.00E0	0.00E0	2.01E-2	1.95E-2
2011 ⁽³⁾	7.06E-3	0.00E0	1.99E-2	2.00E-2
2012	0.00E0	0.00E0	2.10E-2	2.08E-2
2013	0.00E0	0.00E0	2.04E-2	1.96E-2
2014 ⁽⁴⁾	0.00E0	0.00E0	2.02E-2	1.94E-2
2015	0.00E0	0.00E0	2.10E-2	2.02E-2
2016	0.00E0	0.00E0	2.26E-2	2.19E-2
2017	0.00E0	0.00E0	2.31E-2	2.33E-2
2018	0.00E0	0.00E0	2.17E-2	2.17E-2
2019	0.00E0	0.00E0	2.36E-2	2.32E-2
2020	0.00E0	0.00E0	2.13E-2	1.91E-2
2021	0.00E0	0.00E0	2.54E-2	2.39E-2

0.00E0 indicates no detectable measurements

* Radioiodine and Particulates analyzed together

(1) 1987 – Gamma spectroscopy system change

(2) 2004 – Gamma Activity observed, NCR # 01552730

(3) 2011 – Concentration affected by Fukushima Daiichi

(4) 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.

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

Year	Indicator Location (pCi/m³)	Control Location (pCi/m³)
1979*	3.28E-3	1.04E-3
1980*	2.01E-3	1.10E-3
1981*	4.17E-3	6.27E-4
1982*	1.42E-3	2.48E-3
1983*	1.99E-3	2.01E-4
1984	3.17E-3	0.00E0
1985	3.15E-3	1.04E-3
1986	1.27E-2	6.10E-3
1987 ⁽¹⁾	1.07E-2	6.60E-3
1988	0.00E0	0.00E0
1989	2.18E-2	0.00E0
1990	0.00E0	0.00E0
1991	0.00E0	0.00E0
1992	0.00E0	0.00E0
1993	0.00E0	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	0.00E0
2005	0.00E0	0.00E0
2006	0.00E0	0.00E0
2007	0.00E0	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011 ⁽²⁾	6.00E-2	5.46E-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
2018	0.00E0	0.00E0
2019	0.00E0	0.00E0
2020	0.00E0	0.00E0
2021	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

* Radioiodine and Particulate analyzed together.

(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.

3.2 DRINKING WATER

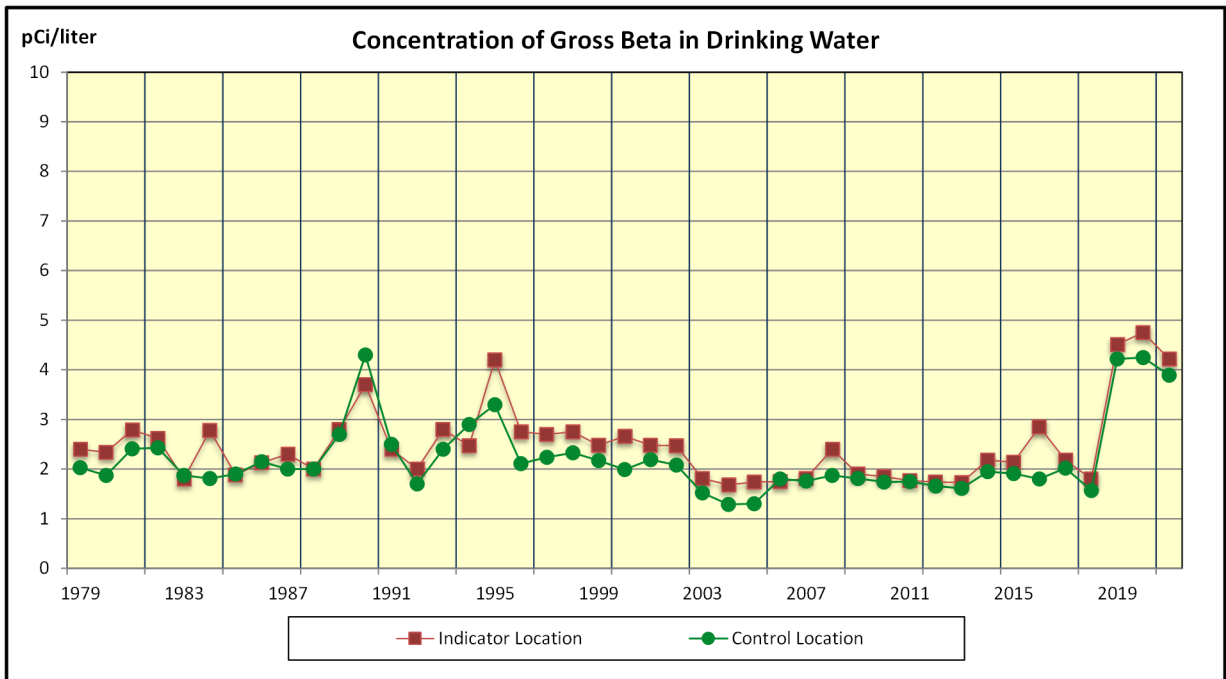
In 2021, 65 drinking water samples were analyzed for gross beta and gamma emitting radionuclides. Fifty-two samples were collected from the 4 indicator locations and 13 from the control location. Monthly composite samples were collected and received a gross beta and gamma analysis. These samples were composited to create 20 quarterly composite period samples for tritium analysis.

No detectable gamma activity attributable to MNS plant operation was found in drinking water samples in 2021 and has not been detected since 1987. K-40 and Be-7 observed in some drinking water samples are naturally occurring radionuclides.

Figure 3.2-1 and Table 3.2 shows highest annual mean gross beta concentrations for the indicator location and control location since preoperation. Gross beta analyses indicated 4.22 pCi/l at the location with the highest annual mean and 3.89 pCi/l at the control location. The gross beta mean indicator activity and mean control activity increased in 2019 due to an analytical method change affecting analytical sensitivities (NCR # 02303031).

Tritium was detected in 11 of the 16 indicator composite samples taken in 2021. The 2021 highest mean indicator tritium concentration from location 101 was 512 pCi/liter, which is 2.56% of the 20,000 pCi/l tritium reporting level. Tritium was not detected in any of the four control location samples. The dose for consumption of water was less than one mrem per year, historically and for 2021; therefore, low-level iodine analysis is not required. Figure 3.2-2 shows tritium highest annual mean indicator and control location concentrations with comparisons to the 20% reporting level. Table 3.2 gives indicator location highest annual means and control means since 1979 for tritium and gross beta. There is no reporting level for gross beta.

Figure 3.2-1



Analytical method change implemented in 2019.

Figure 3.2-2

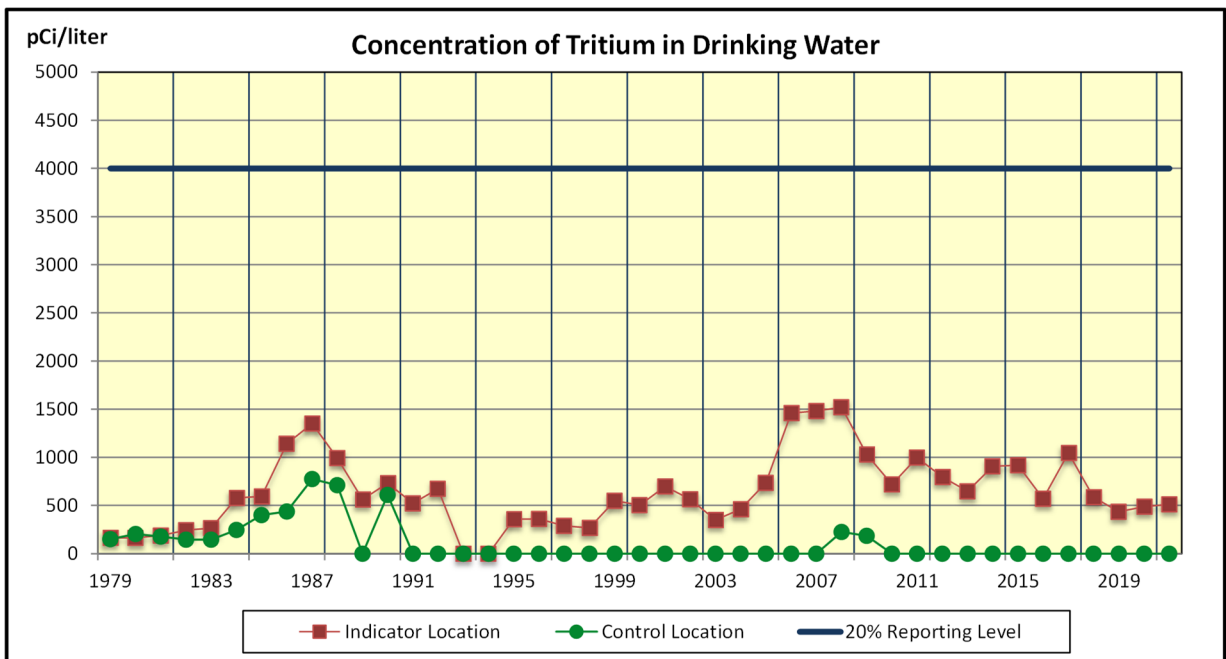


Table 3.2 Mean Concentrations of Radionuclides in Drinking Water

YEAR	Gross Beta (pCi/l)		Tritium (pCi/l)	
	Indicator Location	Control Location	Indicator Location	Control Location
1979	2.40E0	2.03E0	1.65E2	1.50E2
1980	2.34E0	1.87E0	1.63E2	2.05E2
1981	2.79E0	2.41E0	1.88E2	1.78E2
1982	2.62E0	2.43E0	2.43E2	1.45E2
1983	1.80E0	1.87E0	2.65E2	1.45E2
1984	2.78E0	1.81E0	5.77E2	2.45E2
1985	1.88E0	1.90E0	5.93E2	4.00E2
1986	2.13E0	2.15E0	1.14E3	4.37E2
1987	2.30E0	2.00E0	1.35E3	7.75E2
1988	2.00E0	2.00E0	9.92E2	7.11E2
1989	2.80E0	2.70E0	5.62E2	0.00E0
1990	3.70E0	4.30E0	7.32E2	6.11E2
1991	2.40E0	2.50E0	5.22E2	0.00E0
1992	2.00E0	1.70E0	6.73E2	0.00E0
1993	2.80E0	2.40E0	0.00E0	0.00E0
1994	2.47E0	2.90E0	0.00E0	0.00E0
1995	4.20E0	3.30E0	3.58E2	0.00E0
1996	2.75E0	2.11E0	3.60E2	0.00E0
1997	2.70E0	2.24E0	2.90E2	0.00E0
1998	2.75E0	2.33E0	2.68E2	0.00E0
1999 ⁽¹⁾	2.48E0	2.17E0	5.49E2	0.00E0
2000	2.66E0	1.99E0	5.04E2	0.00E0
2001	2.48E0	2.19E0	6.98E2	0.00E0
2002	2.47E0	2.08E0	5.64E2	0.00E0
2003	1.81E0	1.52E0	3.51E2	0.00E0
2004	1.68E0	1.29E0	4.61E2	0.00E0
2005	1.74E0	1.30E0	7.35E2	0.00E0
2006 ⁽²⁾	1.75E0	1.80E0	1.46E3	0.00E0
2007 ⁽³⁾	1.81E0	1.76E0	1.48E3	0.00E0
2008 ⁽³⁾	2.40E0	1.87E0	1.52E3	2.26E2
2009	1.90E0	1.81E0	1.03E3	1.86E2
2010	1.85E0	1.74E0	7.20E2	0.00E0
2011	1.77E0	1.75E0	9.97E2	0.00E0
2012	1.74E0	1.66E0	7.95E2	0.00E0
2013	1.73E0	1.61E0	6.47E2	0.00E0
2014	2.18E0	1.95E0	9.07E2	0.00E0
2015	2.14E0	1.91E0	9.19E2	0.00E0
2016	2.85E0	1.80E0	5.69E2	0.00E0
2017	2.18E0	2.02E0	1.05E3	0.00E0
2018	1.80E0	1.57E0	5.85E2	0.00E0
2019 ⁽⁴⁾	4.51E0	4.22E0	4.36E2	0.00E0
2020	4.75E0	4.25E0	4.87E2	0.00E0
2021	4.22E0	3.89E0	5.12E2	0.00E0

0.00E0 indicates no detectable measurements

(1) Location 101 added to the REMP

(2) Increase in tritium releases due to silica removal from spent fuel pools resulting in additional water volume release.

(3) Extreme drought conditions affecting the Catawba River Basin resulting in less dilution volume

(4) Gross beta preparation/analysis methodology change (NCR # 02303031)

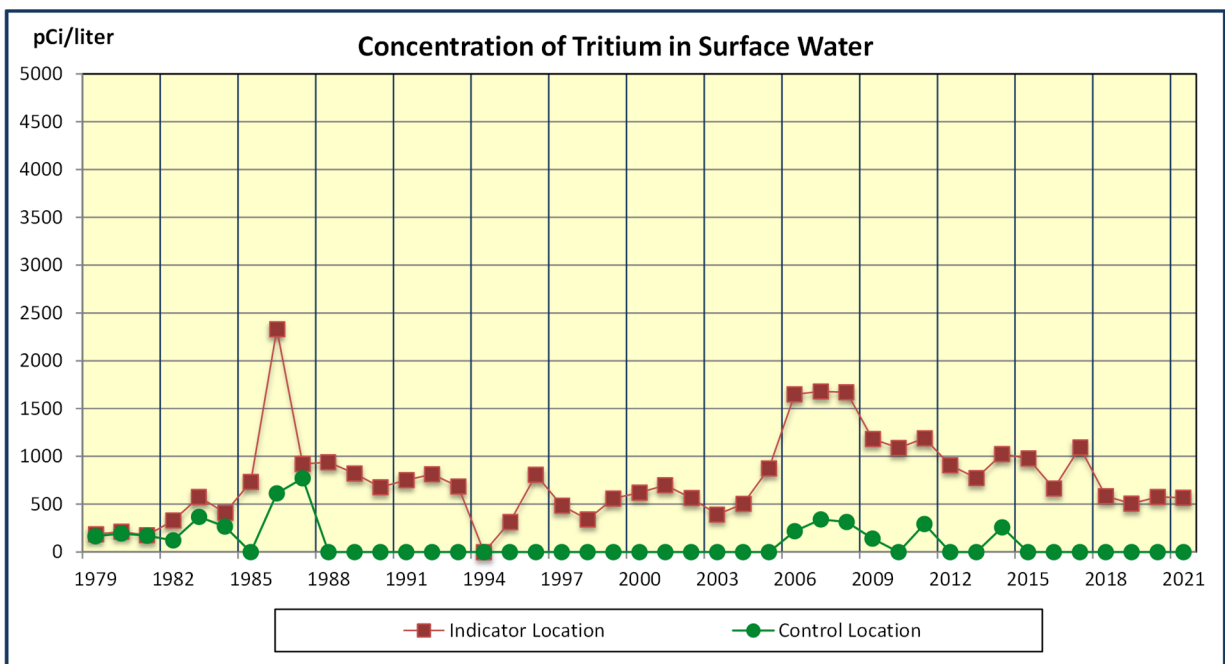
3.3 SURFACE WATER

In 2021, 39 surface water samples were analyzed for gamma emitting radionuclides, 26 at the 2 indicator locations and 13 at the control location. Monthly composite samples were collected and received a gamma analysis. The samples were composited to create 12 quarterly composite period samples for tritium analysis.

No detectable gamma activity attributable to MNS plant operation was found in surface water samples in 2021 and has not been detected since 1988. K-40 and Be-7 observed in some surface water samples are naturally occurring radionuclides. Tritium was detected in 6 of 8 indicator composite samples taken in 2021. Tritium was not detected in any of the 4 control location composite samples in 2021.

Figure 3.3 shows tritium highest annual mean indicator and control location concentrations. Table 3.3 gives indicator and control location highest annual means since 1979 for tritium.

Figure 3.3



There is no reporting level for tritium in surface water

Table 3.3 Mean Concentrations of Tritium in Surface Water

YEAR	H-3 Indicator (pCi/l)	H-3 Control (pCi/l)
1979	1.85E2	1.66E2
1980	2.13E2	1.93E2
1981	1.75E2	1.70E2
1982	3.30E2	1.23E2
1983	5.75E2	3.67E2
1984	4.10E2	2.65E2
1985	7.33E2	0.00E0
1986	2.33E3	6.13E2
1987	9.20E2	7.70E2
1988	9.40E2	0.00E0
1989	8.22E2	0.00E0
1990	6.77E2	0.00E0
1991	7.53E2	0.00E0
1992	8.13E2	0.00E0
1993	6.85E2	0.00E0
1994	0.00E0	0.00E0
1995	3.15E2	0.00E0
1996	8.08E2	0.00E0
1997	4.85E2	0.00E0
1998	3.40E2	0.00E0
1999	5.60E2	0.00E0
2000	6.22E2	0.00E0
2001	6.98E2	0.00E0
2002	5.65E2	0.00E0
2003	3.91E2	0.00E0
2004	5.04E2	0.00E0
2005	8.74E2	0.00E0
2006 ⁽¹⁾	1.65E3	2.19E2
2007 ⁽²⁾	1.68E3	3.42E2
2008 ⁽²⁾	1.67E3	3.13E2
2009	1.18E3	1.41E2
2010	1.09E3	0.00E0
2011	1.19E3	2.94E2
2012	9.06E2	0.00E0
2013	7.73E2	0.00E0
2014	1.03E3	2.57E2
2015	9.79E2	0.00E0
2016	6.63E2	0.00E0
2017	1.09E3	0.00E0
2018	6.85E2	0.00E0
2019	5.07E2	0.00E0
2020	5.76E2	0.00E0
2021	5.67E2	0.00E0

0.00E0 indicates no detectable measurements

(1) Increase in tritium releases due to silica removal from spent fuel pools resulting in additional water volume release.

(2) Extreme drought conditions affecting the Catawba River Basin resulting in less dilution volume

3.4 MILK

In 2021, 26 milk samples from the control location were analyzed for low level I-131 and other gamma emitting radionuclides. Biweekly grab samples were collected at one location and each received a gamma and low-level Iodine-131 (LLI-131) analysis. No indicator dairies were sampled during 2021 and none were identified by the 2021 land use census.

There were no gamma emitting radionuclides due to MNS plant operations identified in milk samples in 2021. Cs-137 is the only radionuclide, other than naturally occurring, reported in milk samples since 1990 (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 gives indicator location highest annual means and control means since 1979 for Cs-137. Since no Cs-137 was detected in 2021, no reporting levels were approached.

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

Table 3.4 Mean Concentrations of Cs-137 in Milk

YEAR	Cs-137 Indicator (pCi/l)	Cs-137 Control (pCi/l)
1979	2.48E1	6.04E0
1980	1.72E1	4.13E0
1981	2.04E1	4.15E0
1982	1.21E1	5.20E0
1983	2.01E1	2.82E0
1984	1.48E1	2.56E0
1985	1.42E1	2.72E0
1986	3.74E0	3.45E0
1987 ⁽¹⁾	5.20E0	8.60E0
1988	3.40E0	2.90E0
1989	6.00E0	5.60E0
1990	5.30E0	2.60E0
1991	0.00E0	0.00E0
1992	0.00E0	0.00E0
1993	0.00E0	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	No Indicator Location	0.00E0
2003	No Indicator Location	0.00E0
2004	No Indicator Location	0.00E0
2005	No Indicator Location	0.00E0
2006	No Indicator Location	0.00E0
2007	No Indicator Location	0.00E0
2008	No Indicator Location	0.00E0
2009	No Indicator Location	0.00E0
2010	No Indicator Location	0.00E0
2011	No Indicator Location	0.00E0
2012	No Indicator Location	0.00E0
2013	No Indicator Location	0.00E0
2014 ⁽²⁾	No Indicator Location	0.00E0
2015	No Indicator Location	0.00E0
2016	No Indicator Location	0.00E0
2017	No Indicator Location	0.00E0
2018	No Indicator Location	0.00E0
2019	No Indicator Location	0.00E0
2020	No Indicator Location	0.00E0
2021	No Indicator Location	0.00E0

0.00E0 indicates no detectable measurements

(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.

3.5 BROADLEAF VEGETATION

In 2021, 48 broadleaf vegetation samples were analyzed, 36 at the three indicator locations and 12 at the control location. Monthly samples were collected as available and each received a gamma analysis.

There were no gamma emitting radionuclides attributable to MNS plant operation identified in any indicator or control location broadleaf vegetation samples in 2021. Cs-137 is the only radionuclide, other than naturally occurring, reported in vegetation samples since the change in gamma spectroscopy analysis systems in 1987. No airborne Cs-137 has been released from the plant since 1998.

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.

Table 3.5 Mean Concentrations of Cs-137 in Broadleaf Vegetation

YEAR	Cs-137 Indicator (pCi/kg)	Cs-137 Control (pCi/kg)
1979	2.19E1	1.93E1
1980	2.30E1	1.92E1
1981	3.04E1	2.02E1
1982	2.46E1	1.22E1
1983	9.07E0	7.85E0
1984	1.02E1	1.05E1
1985	8.05E0	2.37E-2
1986	4.03E1	1.27E1
1987 ⁽¹⁾	2.20E1	1.70E1
1988	3.90E1	3.40E1
1989	9.60E1	0.00E0
1990	4.00E1	0.00E0
1991	3.30E1	0.00E0
1992	4.90E1	0.00E0
1993	1.60E1	0.00E0
1994	0.00E0	0.00E0
1995	0.00E0	0.00E0
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	2.69E1
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	2.98E1	0.00E0
2007	1.34E1	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011 ⁽²⁾	2.29E1	0.00E0
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0
2014 ⁽³⁾	0.00E0	0.00E0
2015	0.00E0	0.00E0
2016	1.22E1	0.00E0
2017	3.03E1	0.00E0
2018	0.00E0	0.00E0
2019	0.00E0	0.00E0
2020	0.00E0	0.00E0
2021	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

(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.

3.6 FOOD PRODUCTS

In 2021, 12 food products (crops) samples were analyzed from 1 indicator irrigated garden location. Monthly samples were collected as available and each received a gamma analysis. There is no control location for this media.

No detectable activity attributable to MNS station operation has been detected in this media since 1987. Table 3.6 shows Cs-137 indicator highest annual means with preoperational data. Since no activity was detected in 2021, no reporting levels were approached.

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

Table 3.6 Mean Concentrations of Cs-137 in Food Products

YEAR	Cs-137 Indicator (pCi/kg)
1979	2.19E1
1980	2.30E1
1981	3.04E1
1982	2.46E1
1983	9.07E0
1984	8.45E0
1985	7.99E0
1986	2.15E1
1987 ⁽¹⁾	2.90E1
1988	0.00E0
1989	0.00E0
1990	0.00E0
1991	0.00E0
1992	0.00E0
1993	0.00E0
1994	0.00E0
1995	0.00E0
1996	0.00E0
1997	0.00E0
1998	0.00E0
1999	0.00E0
2000	0.00E0
2001	0.00E0
2002	0.00E0
2003	0.00E0
2004	0.00E0
2005	0.00E0
2006	0.00E0
2007	0.00E0
2008	0.00E0
2009	0.00E0
2010	0.00E0
2011 ⁽²⁾	3.06E1
2012	0.00E0
2013	0.00E0
2014 ⁽³⁾	0.00E0
2015	0.00E0
2016	0.00E0
2017	0.00E0
2018	0.00E0
2019	0.00E0
2020	0.00E0
2021	0.00E0

0.00E0 indicates no detectable measurements

(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.

3.7 FISH

In 2021, 12 fish samples were analyzed for gamma emitting radionuclides, 6 at the indicator location and 6 at the control location. Semiannual samples were collected, and a gamma analysis was performed on the edible portions of each sample. Boney fish (i.e. Sunfish) were prepared for analysis whole minus the head and tail portions.

Gamma spectroscopy analysis indicated no gamma emitting radionuclides attributable to MNS plant operation identified in any indicator or control location fish samples in 2021.

Figure 3.7 shows Cs-137 highest annual mean indicator and control location concentrations with comparisons to 5% of the reporting level. Table 3.7 gives indicator location highest annual means since 1980 for all radionuclides detected since the analysis change in 1988. All other radionuclides not shown in the table have demonstrated no detectable activity since 1986.

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

Figure 3.7

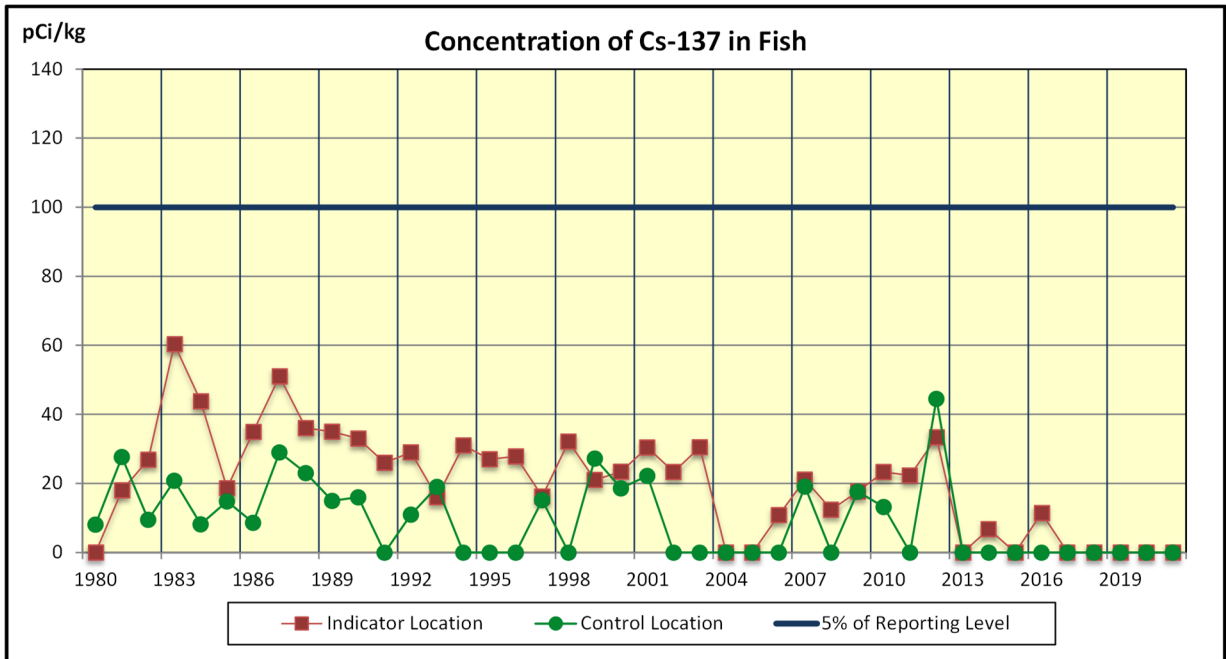


Table 3.7 Mean Concentrations of Radionuclides in Fish (pCi/kg)

YEAR	Mn-54 Indicator	Co-58 Indicator	Co-60 Indicator	Cs-134 Indicator	Cs-137 Indicator
1980	-1.97E1	8.36E0	-2.25E1	-2.70E1	-4.13E0
1981	-2.71E0	-2.98E0	-2.65E0	-1.99E0	1.80E1
1982	-3.83E0	8.16E0	-4.34E-1	-8.22E-1	2.69E1
1983	-2.60E0	2.60E1	1.11E1	-1.32E0	6.03E1
1984	3.61E0	1.45E2	2.82E1	3.11E1	4.38E1
1985	2.53E-1	7.19E0	1.72E1	-1.56E0	1.86E1
1986	1.03E0	3.17E1	2.96E1	1.67E1	3.49E1
1987 ⁽¹⁾	0.00E0	2.71E2	1.25E2	2.60E1	5.10E1
1988	1.20E1	7.70E1	0.00E0	2.70E1	3.60E1
1989	9.00E1	4.05E2	2.99E2	1.10E1	3.50E1
1990	0.00E0	5.60E1	4.10E1	0.00E0	3.30E1
1991	6.20E0	1.40E1	6.50E1	5.90E0	2.60E1
1992	0.00E0	0.00E0	0.00E0	0.00E0	2.90E1
1993	0.00E0	8.20E1	1.30E1	0.00E0	1.60E1
1994	0.00E0	0.00E0	0.00E0	0.00E0	3.10E1
1995	0.00E0	0.00E0	0.00E0	0.00E0	2.70E1
1996	0.00E0	0.00E0	0.00E0	0.00E0	2.78E1
1997	0.00E0	0.00E0	0.00E0	0.00E0	1.62E1
1998	0.00E0	0.00E0	0.00E0	0.00E0	3.21E1
1999	0.00E0	3.53E1	0.00E0	0.00E0	2.10E1
2000	0.00E0	4.28E1	0.00E0	0.00E0	2.34E1
2001	0.00E0	1.32E1	0.00E0	0.00E0	3.04E1
2002	0.00E0	0.00E0	0.00E0	0.00E0	2.33E1
2003	0.00E0	0.00E0	0.00E0	0.00E0	3.05E1
2004	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2005	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2006	0.00E0	0.00E0	0.00E0	0.00E0	1.08E1
2007	0.00E0	0.00E0	0.00E0	0.00E0	2.11E1
2008	0.00E0	0.00E0	0.00E0	0.00E0	1.24E1
2009	0.00E0	0.00E0	0.00E0	0.00E0	1.76E1
2010	0.00E0	0.00E0	0.00E0	0.00E0	2.33E1
2011	0.00E0	0.00E0	0.00E0	0.00E0	2.23E1
2012	0.00E0	0.00E0	0.00E0	0.00E0	3.34E1
2013	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2014 ⁽²⁾	0.00E0	0.00E0	0.00E0	0.00E0	6.75E0
2015	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2016	0.00E0	0.00E0	0.00E0	0.00E0	1.14E1
2017	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2018	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2019	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2020	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2021	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

(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 SHORELINE SEDIMENT

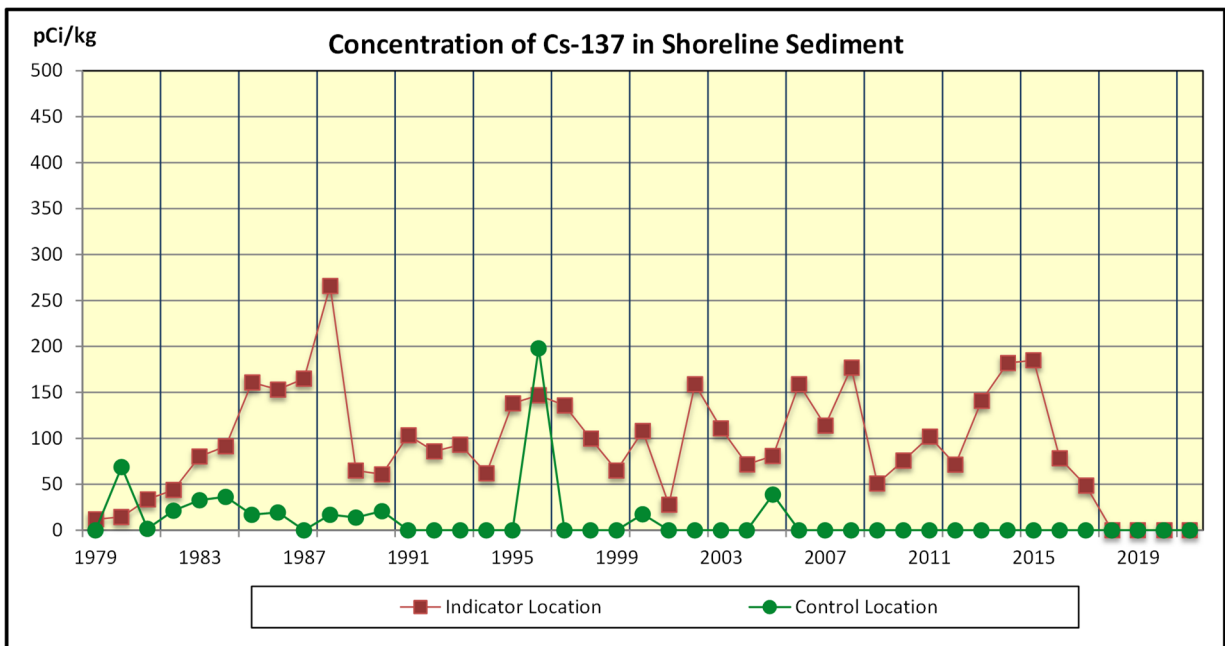
In 2021, 6 shoreline sediment samples were analyzed, 4 from 2 indicator locations and 2 at the control location. Semiannual samples were collected, and a gamma analysis was performed on each following the drying and removal of rocks and clams.

Gamma spectroscopy analysis indicated no gamma emitting radionuclides attributable to MNS plant operation identified in any indicator or control location shoreline sediment samples in 2021.

Figure 3.8 shows Cs-137 highest annual mean indicator and control location concentrations since 1979. Table 3.8 gives indicator location highest annual means since 1979 for all radionuclides detected since the analysis change in 1988. There is no reporting level for shoreline sediment.

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

Figure 3.8



There is no reporting level for Cs-137 in shoreline sediment

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

YEAR	Mn-54 Indicator	Co-58 Indicator	Co-60 Indicator	Cs-134 Indicator	Cs-137 Indicator
1979	-1.07E1	2.25E1	-6.50E0	0.00E0	1.20E1
1980	1.06E1	-8.74E0	2.36E1	-3.53E0	1.44E1
1981	2.13E1	1.20E1	8.21E0	3.97E1	3.36E1
1982	5.38E1	1.66E1	-1.69E0	7.67E1	4.40E1
1983	4.40E0	3.43E1	2.12E1	7.65E1	8.02E1
1984	1.19E1	7.11E1	3.04E1	3.34E1	9.13E1
1985	4.77E0	1.46E1	9.20E0	2.02E1	1.61E2
1986	1.37E1	1.02E1	1.16E1	6.35E1	1.53E2
1987 ⁽¹⁾	0.00E0	1.06E2	2.10E1	4.20E1	1.65E2
1988	6.50E0	9.20E1	1.20E1	9.10E0	2.66E2
1989	2.90E1	3.80E1	2.90E1	5.30E1	6.50E1
1990	3.80E1	2.70E1	1.68E2	0.00E0	6.10E1
1991	2.80E1	5.30E1	1.31E2	0.00E0	1.03E2
1992	9.40E0	0.00E0	5.10E1	9.20E0	8.60E1
1993	0.00E0	2.20E1	8.60E1	0.00E0	9.30E1
1994	4.10E1	0.00E0	0.00E0	0.00E0	8.00E1
1995	1.70E1	0.00E0	2.30E1	0.00E0	1.38E2
1996	2.90E1	1.78E1	3.50E1	0.00E0	1.47E2
1997	0.00E0	0.00E0	1.11E2	3.10E1	1.36E2
1998	0.00E0	0.00E0	5.21E1	0.00E0	9.97E1
1999	0.00E0	2.47E1	8.49E1	0.00E0	6.51E1
2000	0.00E0	3.04E1	0.00E0	0.00E0	1.08E2
2001	0.00E0	0.00E0	0.00E0	0.00E0	2.77E1
2002	2.24E1	0.00E0	0.00E0	0.00E0	1.59E2
2003	0.00E0	0.00E0	0.00E0	0.00E0	1.11E2
2004	0.00E0	0.00E0	0.00E0	0.00E0	7.17E1
2005	0.00E0	0.00E0	0.00E0	0.00E0	8.08E1
2006	0.00E0	0.00E0	0.00E0	0.00E0	1.59E2
2007	0.00E0	0.00E0	0.00E0	0.00E0	1.14E2
2008	0.00E0	0.00E0	0.00E0	0.00E0	1.77E2
2009	0.00E0	0.00E0	0.00E0	0.00E0	5.08E1
2010	0.00E0	0.00E0	0.00E0	0.00E0	7.58E1
2011	0.00E0	0.00E0	0.00E0	0.00E0	1.02E2
2012	0.00E0	0.00E0	0.00E0	0.00E0	7.13E1
2013	0.00E0	0.00E0	0.00E0	0.00E0	1.41E2
2014 ⁽²⁾	0.00E0	0.00E0	0.00E0	0.00E0	1.82E2
2015	0.00E0	0.00E0	0.00E0	0.00E0	1.85E2
2016	0.00E0	0.00E0	0.00E0	0.00E0	7.84E1
2017	0.00E0	0.00E0	0.00E0	0.00E0	4.87E1
2018	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2019	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2020	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2021	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

(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.

3.9 DIRECT GAMMA RADIATION

3.9.1 ENVIRONMENTAL TLD

McGuire is licensed with an exclusion area boundary defined by UFSAR Section 2.1.2.1 as a 2500-foot radius from station center. This is the same boundary established for determining radioactive effluent release limits. No permanent public access is permitted within the exclusion area. TLD locations designated as "inner ring" are within a 0.5-mile radius from station center near the site boundary and all are used as indicators. Due to close proximity with McGuire, and most being within the exclusion area boundary, 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 0.5 mile "inner ring" (6 to 8 kilometer range) but within a 5-mile radius of station center. All outer ring TLD locations are used as indicators. A subset of TLD locations are designated as "special interest." The nearest "special interest" locations are within the Owner Control Area approximately 0.2 miles from station center. They are located near public access areas for fishing and the Energy Explorium. The remaining "special interest" locations are within a 3 to 13 mile radius from station center. The one "control" location is greater than 15 miles from station center. This location was chosen to reduce the probability of influence from McGuire operation on data. The control location is not used as background subtraction in the TLD analysis. Its purpose is to provide a comparison to indicator locations.

In 2021, 164 Thermoluminescent Dosimeters (TLDs) were analyzed, 160 at indicator locations and 4 at the control location. A gamma exposure rate was determined for each TLD. Transit TLDs and laboratory background TLDs were used for determining transit and laboratory background dose and were subtracted from gross field readings as required by ANSI N545-1975. TLD locations are listed in Table 2.1-B.

The environmental data on external radiation exposure for 2021 was essentially unchanged, with an average exposure for all of 2021 indicator locations of 16.5 mR per std. quarter. The TLD location with the highest annual mean of 24.4 mR per std. quarter was location 173, located 8.39 miles NNW of the station. Control TLD location 175 had an annual mean of 22.3 mR per std. quarter.

Figure 3.9 and Table 3.9 show TLD inner ring, outer ring, and control location annual averages in mR/std. quarter. Data is provided from 1979 to show preoperational values. As shown in the graph, exposures measured by environmental TLDs show little or no change since the current TLD system was implemented. 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 location.

Quarterly, environmental ODCM TLD results are compared by location to its historical data to evaluate any significant changes. The comparison utilizes the location's average exposure history to determine if quarterly results fall within expected low and high ranges and provides a reliable indication of potential changes occurring at a specific TLD location. The low and high ranges are determined by the historical average \pm two standard

deviations. The quarterly TLD evaluation implements portions of American National Standard ANSI/HPS N13.37-2014, “Environmental Dosimetry – Criteria for System Design and Implementation, for environmental Thermoluminescent Dosimeters (TLD).” The CSD-RP-ALL-0030 – Updated Radiological Environmental Monitoring Program TLD Analytical Method, describes the process implemented in late 2018 for the fleet TLD programs. TLD values identified as < Low Range or > High Range are evaluated in consideration of factors including possible TLD damage, sampling deviations, glow curve irregularities, and any known environmental location changes which may affect results. TLD results are found in Appendix E.

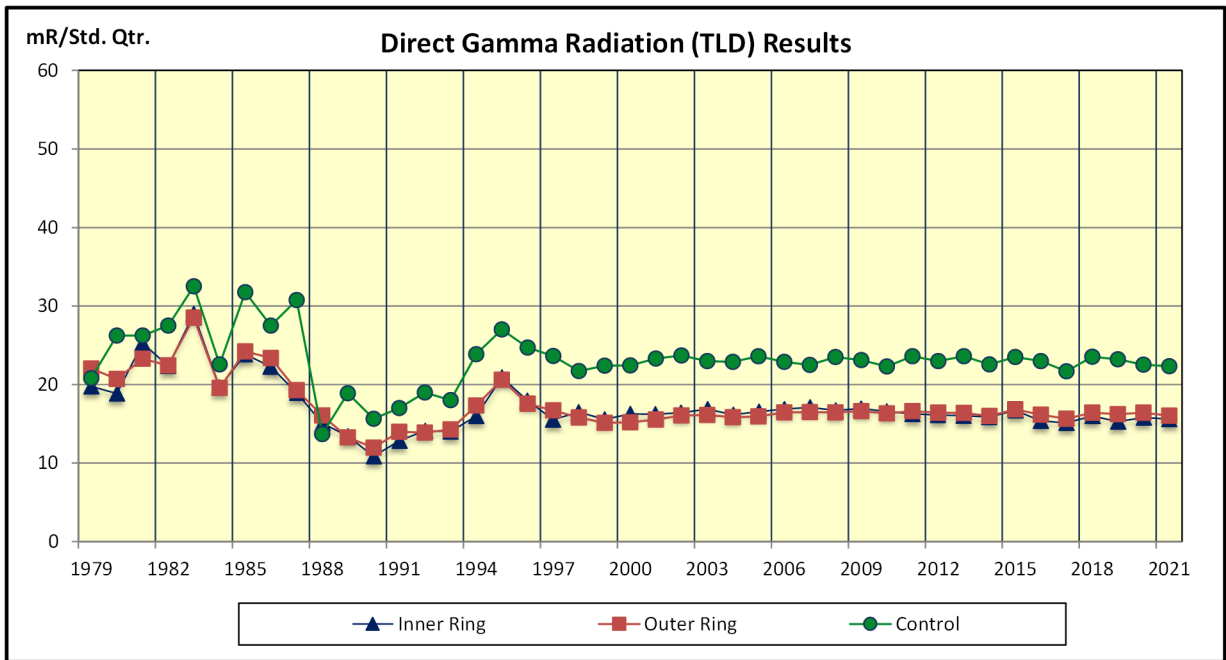
A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in section 4.7.

3.9.2 ISFSI

The McGuire ISFSI began operation in 2000. It is located approximately 0.15 miles west of station center in a secured area specifically constructed to provide dry storage for spent nuclear fuel. The ISFSI is situated at a lower elevation compared to other structures in the protected area. Exposure from direct radiation north of the ISFSI is shielded by the berm on the south boundary of Lake Norman. Exposure from direct radiation at the exclusion area boundary west of the ISFSI is shielded by the decrease in elevation at the ISFSI to the riverbank below Cowan's Ford Dam. These geographic features lessen the potential dose to a member of the public in accessible areas within the exclusion area boundary. The ISFSI employs the multiple vertical storage designs. Irradiated fuel assemblies are confined, protected, and shielded by reinforced concrete modules. All designs used are completely passive and designed to provide radiation shielding and safe confinement for a range of accident conditions and natural events. They each use a passive natural circulation ventilation system to remove decay heat from the modules. No radiological liquid or gaseous effluents are expected from the passive storage provided by the ISFSI. Therefore, any dose to offsite locations would be from direct and scattered gamma radiation.

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

Figure 3.9



There is no reporting level for Direct Radiation (TLD)

Table 3.9 Direct Gamma Radiation (TLD) Results¹

YEAR	Inner Ring Average (mR/Std. Qtr.)	Outer Ring Average (mR/Std. Qtr.)	Control (mR/Std. Qtr.)
1979	1.98E1	2.21E1	2.08E1
1980	1.89E1 [†]	2.07E1 [†]	2.63E1 [†]
1981	2.53E1	2.33E1	2.63E1
1982	2.24E1	2.24E1	2.75E1
1983	2.90E1	2.85E1	3.25E1
1984	1.96E1	1.96E1	2.26E1
1985	2.39E1	2.42E1	3.18E1
1986	2.23E1	2.34E1	2.75E1
1987	1.90E1	1.93E1	3.08E1
1988	1.51E1	1.61E1	1.37E1
1989	1.34E1	1.33E1	1.89E1
1990	1.09E1	1.20E1	1.56E1
1991	1.29E1	1.40E1	1.70E1
1992	1.41E1	1.39E1	1.90E1
1993	1.40E1	1.43E1	1.80E1
1994	1.60E1	1.73E1	2.39E1
1995	2.09E1	2.06E1	2.70E1
1996	1.80E1	1.76E1	2.47E1
1997	1.56E1	1.67E1	2.36E1
1998	1.65E1	1.58E1	2.17E1
1999	1.56E1	1.51E1	2.24E1
2000	1.63E1	1.52E1	2.24E1
2001	1.62E1	1.56E1	2.33E1
2002	1.64E1	1.61E1	2.37E1
2003	1.69E1	1.61E1	2.30E1
2004	1.62E1	1.58E1	2.29E1
2005	1.65E1	1.59E1	2.36E1
2006	1.69E1	1.65E1	2.29E1
2007	1.71E1	1.65E1	2.25E1
2008	1.67E1	1.65E1	2.35E1
2009	1.69E1	1.66E1	2.31E1
2010	1.66E1	1.63E1	2.23E1
2011	1.63E1	1.66E1	2.36E1
2012	1.61E1	1.64E1	2.30E1
2013	1.60E1	1.64E1	2.36E1
2014	1.59E1	1.60E1	2.26E1
2015	1.67E1	1.68E1	2.35E1
2016	1.54E1	1.62E1	2.30E1
2017	1.51E1	1.56E1	2.17E1
2018	1.60E1	1.64E1	2.35E1
2019	1.53E1	1.62E1	2.32E1
2020	1.58E1	1.64E1	2.25E1
2021	1.56E1	1.60E1	2.23E1

[†] Values are based on two quarters due to change in TLD locations.

(1) Table converted to Average mR/Std. Qtr. effective with the 2021 report.

3.10 LAND USE CENSUS

The 2021 MNS Land Use Census (LUC) was conducted on 5/26/2021 and 5/27/2021 during the growing season as required by SLC 16.11.14 to identify within 8 kilometers (5.0 miles) from the plant the nearest location from the site boundary in each of the sixteen meteorological sectors, the following: nearest residence, nearest garden greater than 50 square meters or 500 square feet, and the nearest milk-giving animal (cow, goat, etc.).

The primary method of performing the land use census is visual inspection from the roadside within the five (5) mile radius. This information may be supplemented with data from aerial photographs and a Global Positioning System (GPS) to determine distance and direction from the plant. Distances from the plant are accurate to within one tenth of a mile.

Table 3.10 summarizes the land use census results that was conducted within five miles of MNS. A map indicating identified locations is shown in Figure 3.10.

During the 2021 census, no new irrigated gardens (superior to existing gardens) or milk locations were identified. The nearest residence is in the East sector at 0.50 miles. No environmental program changes were required as a result of the 2021 land use census.

The fleet Land Use Procedure AD-CP-ALL-0014 (Revision 4), Land Use Census Evaluation, was revised in 2020 to standardize the approach for the evaluation of Land Use Dose Calculations (NCR # 02343171).

Table 3.10 McGuire 2021 Land Use Census Results

**Performed 5/26 – 5/27/2021
Nearest Pathways (Miles)**

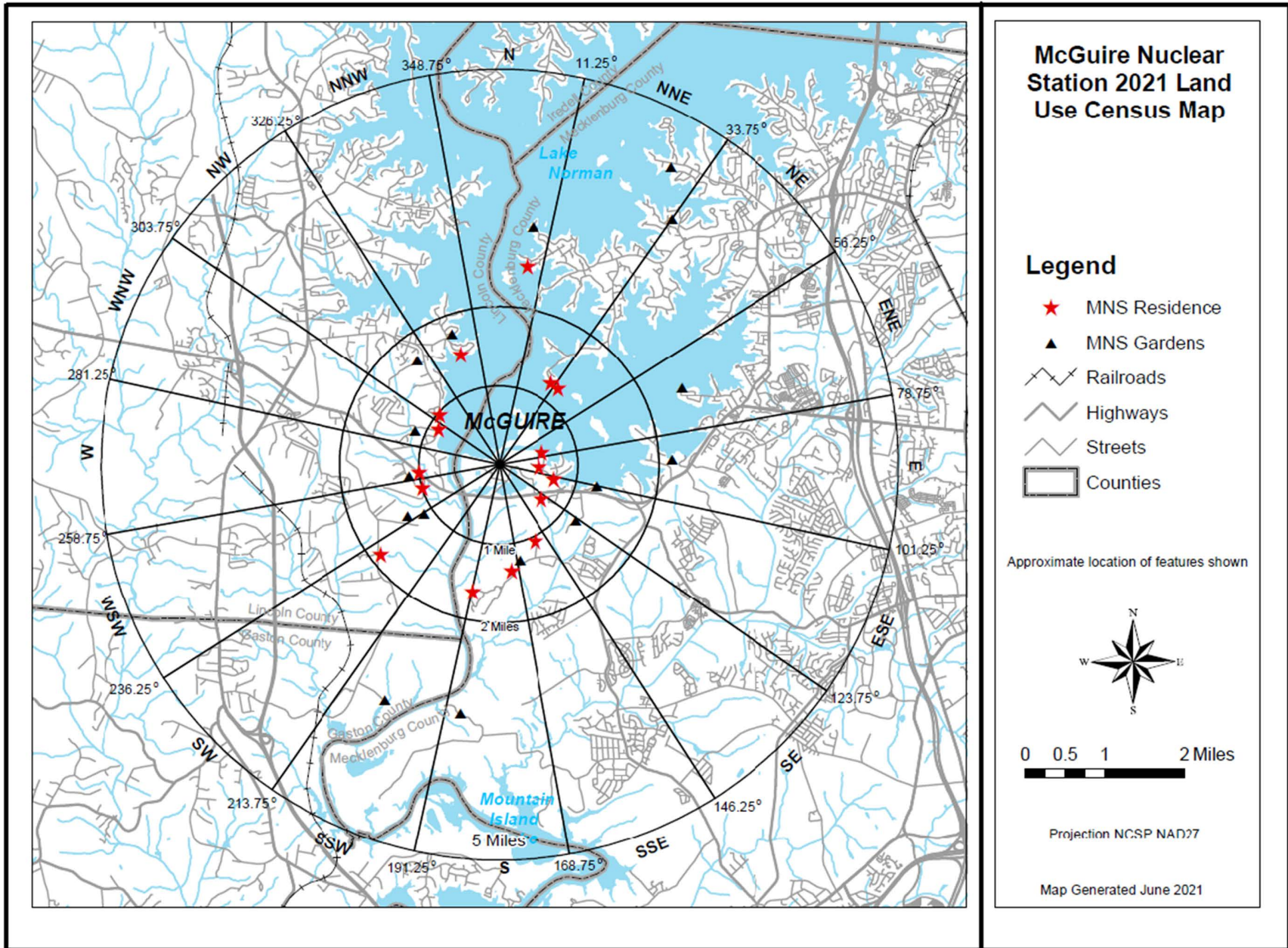
SECTOR	RESIDENCE		GARDEN		MILK ANIMAL	
	2020	2021	2020	2021	2020	2021
North	2.53	2.53	3.03	3.03	---	---
North-Northeast	1.23	1.23	4.34	4.34	---	---
Northeast	1.21	1.21	3.80	3.80	---	---
East-Northeast	0.56	0.56	2.50	2.50	---	---
East	0.50	0.50	2.11	2.11	---	---
East-Southeast	0.71	0.71	1.10	1.26*	---	---
Southeast	0.67	0.67	1.20	1.20	---	---
South-Southeast	1.06	1.06	1.06	1.22*	---	---
South	1.35	1.35	3.11	3.17*	---	---
South-Southwest	1.64	1.64	3.02	3.30*	---	---
Southwest	1.88	1.88	2.31	1.14*	---	---
West-Southwest	1.01	1.01	1.10	1.33*	---	---
West	1.15	1.15	1.15	1.15	---	---
West-Northwest	0.88	0.88	1.15	1.15	---	---
Northwest	0.95	0.95	1.68	1.68	---	---
North-Northwest	1.48	1.48	1.76	1.76	---	---

Sector and distances were determined by Global Positioning System.

“---” indicates no occurrences within the 5-mile radius

* Represents a change from the previous year.

Figure 3.10



4.0 QUALITY ASSURANCE

4.1 SAMPLE COLLECTION

EnRad Laboratories and the Environmental Services Group performed the environmental sample collections as specified by approved sample collection procedures.

4.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.3 DOSIMETRY ANALYSIS

The Dosimetry and Records group performed the environmental dosimetry measurements as specified by approved dosimetry analysis procedures. The Dosimetry and Records Laboratory is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

4.4.1 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.

4.4.2 CALIBRATION VERIFICATION

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

4.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. These include gross beta in water, low-level Iodine-131 in milk, and tritium analyses in drinking water, surface water, and ground water samples.

4.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2021 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.

EnRad Laboratory participated in an interlaboratory program with Eckert & Ziegler Analytics (EZA) in 2021. 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.

4.5.1 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EZA mixed gamma in liquid, mixed gamma in vegetation, mixed gamma in soil, low-level I-131 in liquid, mixed gamma air filter composites, I-131 air cartridges, gross beta in water, gross beta in filters, and tritium in water were analyzed at various times of the year at EnRad Laboratories. A summary of the applicable REMP EnRad Laboratory program results for 2021 is documented in Table 4.0-A.

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

4.6 STATE OF NORTH CAROLINA INTERCOMPARISON PROGRAM

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

4.7 TLD INTERCOMPARISON PROGRAM (INTERNAL 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 using the NIST-traceable Hopewell and submits them for analysis of the unknown estimated delivered exposure. A summary of the 2021 Internal Cross Check (Duke Energy) Program is documented in Table 4.0-B.

4.8 GENERAL ENGINEERING LABORATORY, LLC (GEL)

General Engineering Laboratory, LLC (GEL) participated in various Quality Assurance Programs for Inter-laboratory, Intra-laboratory, Third Party Cross Check programs, and a number of proficiency testing programs during 2021. A summary of the GEL quality assurance program results for the sample media types sent to GEL during 2021 is documented in Table 4.0-C. Table 4.0-C may not be applicable to all plants or stations.

TABLE 4.0-A

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2021 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter in Planchet	E13430A	Cs-137	2	pCi	126	126	1.00	Agreement
I-131 in Charcoal Cartridge	E13428	I-131	2	pCi	95.5	92.8	1.03	Agreement
Gamma in Soil	E13429	Ce-141	2	pCi/g	0.158	0.163	0.97	Agreement
		Co-58	2	pCi/g	0.155	0.162	0.96	Agreement
		Co-60	2	pCi/g	0.176	0.195	0.90	Agreement
		Cr-51	2	pCi/g	0.430	0.482	0.89	Agreement
		Cs-134	2	pCi/g	0.202	0.193	1.05	Agreement
		Cs-137	2	pCi/g	0.222	0.242	0.92	Agreement
		Fe-59	2	pCi/g	0.168	0.166	1.01	Agreement
		Mn-54	2	pCi/g	0.226	0.226	1.00	Agreement
		Zn-65	2	pCi/g	0.267	0.272	0.98	Agreement
Gamma in Simulated Vegetation	E13437	Ce-141	3	pCi/g	0.194	0.194	1.00	Agreement
		Co-58	3	pCi/g	0.208	0.200	1.04	Agreement
		Co-60	3	pCi/g	0.258	0.246	1.05	Agreement
		Cr-51	3	pCi/g	0.373	0.401	0.93	Agreement
		Cs-134	3	pCi/g	0.141	0.158	0.89	Agreement
		Cs-137	3	pCi/g	0.193	0.190	1.02	Agreement
		Fe-59	3	pCi/g	0.183	0.173	1.06	Agreement
		Mn-54	3	pCi/g	0.226	0.218	1.04	Agreement
		Zn-65	3	pCi/g	0.274	0.260	1.05	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E13435B	Ce-141	3	pCi	121	116	1.04	Agreement
		Co-58	3	pCi	123	120	1.03	Agreement
		Co-60	3	pCi	153	147	1.04	Agreement
		Cr-51	3	pCi	241	240	1.00	Agreement
		Cs-134	3	pCi	90.1	94.8	0.95	Agreement
		Cs-137	3	pCi	118	114	1.04	Agreement
		Fe-59	3	pCi	114	104	1.10	Agreement
		Mn-54	3	pCi	139	131	1.06	Agreement
		Zn-65	3	pCi	171	156	1.10	Agreement
Gamma in Water	E13436	Ce-141	3	pCi/L	161	151	1.07	Agreement
		Co-58	3	pCi/L	165	155	1.06	Agreement
		Co-60	3	pCi/L	196	191	1.03	Agreement
		Cr-51	3	pCi/L	330	311	1.06	Agreement
		Cs-134	3	pCi/L	118	123	0.96	Agreement
		Cs-137	3	pCi/L	154	147	1.04	Agreement
		Fe-59	3	pCi/L	149	134	1.11	Agreement
		I-131	3	pCi/L	261	243	1.07	Agreement
		Mn-54	3	pCi/L	185	169	1.09	Agreement
Zn-65	3	pCi/L	227	202	1.12	Agreement		
Milk LLI-131	E13431	I-131	2	pCi/L	96.8	90.1	1.07	Agreement
Gross Beta in Water	E13433	Cs-137	2	pCi/L	243	258	0.94	Agreement
Tritium in Water	E13438	H-3	3	pCi/L	11600	11700	0.99	Agreement

TABLE 4.0-B

2021 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 2021						2nd Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103087	62.75	59.56	5.36	<+/-15%	Pass	102970	17.06	17.74	-3.83	<+/-15%	Pass
103742	62.37	59.56	4.72	<+/-15%	Pass	103199	18.11	17.74	2.09	<+/-15%	Pass
100029	55.52	59.56	-6.78	<+/-15%	Pass	100154	17.12	17.74	-3.49	<+/-15%	Pass
102931	61.41	59.56	3.11	<+/-15%	Pass	102770	18.79	17.74	5.92	<+/-15%	Pass
100033	56.41	59.56	-5.29	<+/-15%	Pass	102058	17.15	17.74	-3.33	<+/-15%	Pass
100038	57.37	59.56	-3.68	<+/-15%	Pass	103295	18.58	17.74	4.74	<+/-15%	Pass
103615	61.40	59.56	3.09	<+/-15%	Pass	103602	18.57	17.74	4.68	<+/-15%	Pass
102442	57.43	59.56	-3.58	<+/-15%	Pass	100180	17.26	17.74	-2.71	<+/-15%	Pass
102407	59.65	59.56	0.15	<+/-15%	Pass	102741	18.31	17.74	3.21	<+/-15%	Pass
100245	56.51	59.56	-5.12	<+/-15%	Pass	103557	18.80	17.74	5.98	<+/-15%	Pass
Average Bias (B)			-0.80			Average Bias (B)			1.32		
Standard Deviation (S)			4.60			Standard Deviation (S)			4.18		
Measure Performance B +S			5.40	<15%	Pass	Measure Performance B +S			5.51	<15%	Pass
3rd Quarter 2021						4th Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
104637	36.05	39.31	-8.29	<+/-15%	Pass	104816	45.83	49.95	-8.25	<+/-15%	Pass
104499	37.40	39.31	-4.86	<+/-15%	Pass	104381	44.88	49.95	-10.15	<+/-15%	Pass
104449	36.14	39.31	-8.06	<+/-15%	Pass	104676	46.19	49.95	-7.53	<+/-15%	Pass
104466	36.49	39.31	-7.17	<+/-15%	Pass	104817	46.03	49.95	-7.85	<+/-15%	Pass
104639	36.13	39.31	-8.09	<+/-15%	Pass	104383	46.24	49.95	-7.43	<+/-15%	Pass
104634	36.71	39.31	-6.61	<+/-15%	Pass	104550	45.88	49.95	-8.15	<+/-15%	Pass
104638	36.58	39.31	-6.94	<+/-15%	Pass	104818	45.55	49.95	-8.81	<+/-15%	Pass
104498	36.08	39.31	-8.22	<+/-15%	Pass	104804	45.46	49.95	-8.99	<+/-15%	Pass
104453	36.42	39.31	-7.35	<+/-15%	Pass	104584	46.88	49.95	-6.15	<+/-15%	Pass
104465	35.76	39.31	-9.03	<+/-15%	Pass	104677	47.28	49.95	-5.35	<+/-15%	Pass
Average Bias (B)			-7.46			Average Bias (B)			-7.86		
Standard Deviation (S)			1.17			Standard Deviation (S)			1.38		
Measure Performance B +S			8.63	<15%	Pass	Measure Performance B +S			9.25	<15%	Pass

TABLE 4.0-C

2021 GEL Laboratories, LLC QA Results

Interlaboratory cross check samples from Eckert & Ziegler Analytics (EZA) were received and analyzed by GEL during 2021. Table 4.0-C lists the performance for specific samples. Table 4.0-C may not be applicable to all plants/stations.

Sample	Sample ID	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
I-131 in Milk with EZA	E13358	I-131	1	pCi/L	83.9	86.9	0.97	Agreement
	E13362	I-131	2	pCi/L	80.4	83.8	0.96	Agreement
	E13366	I-131	3	pCi/L	90.8	85.6	1.06	Agreement
	E13370	I-131	4	pCi/L	92.8	90.3	1.03	Agreement

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 McGuire Nuclear Station was required to ensure compliance with Station Selected Licensee Commitments. Analytical procedures were employed to ensure that Selected Licensee Commitments detection capabilities were achieved.

Environmental sampling and analyses were performed by EnRad Laboratories, Dosimetry and Records, and Environmental Services.

This appendix provides a description of the specific analyses performed on samples collected in the field. Changes to the sampling procedures and analyses procedures are also discussed in the section.

I. CHANGE OF SAMPLING PROCEDURES

Future “Community” ODCM air monitoring location 106 (Indicator, E sector 0.47 miles) was placed into operation 24MAY2021 as a potential replacement location for existing air monitoring location 103 (Indicator, NE sector 4.20 miles) (NCR # 02335752).

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.) and then transferred to appropriate counting geometry.

Low-level iodine analyses are performed by passing a designated sample aliquot through a pre-determined amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried and mixed thoroughly, 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 4910TR liquid scintillation system or a Perkin-Elmer 3110TR 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, sample preparation technique are acceptable, and sample contamination has not occurred.

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

Gross beta analysis of liquid samples is performed by concentrating a designated aliquot of sample and analyzing by Perkin-Elmer 4910TR liquid scintillation system. Samples are batch processed with a laboratory fortified blank and blank to verify instrument performance and ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

Acquisition times for charcoal cartridge gamma spectroscopy analyses were reduced in early May 2021 as a result of fleet air sampling equipment standardization.

The procedure for preparing milk samples for Low-Level Iodine-131 (LLI-131) analysis was modified to allow incremental sample additions for milk samples with higher fat content (NCR # 02393159).

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

**MCGUIRE NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

McGuire Nuclear Station
Mecklenburg County, North Carolina

Docket Numbers 50-369, 370
Calendar Year 2021

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 403	See Table 2.2-C	2.34E-2 (350/350) 8.84E-3 – 5.87E-2	195 (0.19 mi N)	2.54E-2 (53/53) 1.16E-2 – 5.80E-2	102 (9.89 mi WNW) 2.39E-2 (53/53) 1.04E-2 – 5.26E-2	0
	Gamma 39	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Air Radioiodine (pCi/m ³)	Gamma 403	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Drinking Water (pCi/l)	Gross Beta 65	See Table 2.2-C	3.97E+00 (6/52) 3.32E+00 – 5.04E+00	101 (3.31 mi E)	4.22E+00 (2/13) 3.40E+00 – 5.04E+00	136 (12.7 mi NNE) 3.89E+00 (4/13) 3.24E+00 – 5.20E+00	0
	Gamma 65	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium ⁽⁶⁾ 20	See Table 2.2-C	4.16E+2 (11/16) 2.02E+02 – 6.33E+02	101 (3.31 mi E)	5.12E+02 (4/4) 2.92E+02 – 6.33E+02	All less than LLD	0
Surface Water (pCi/l)	Gamma 39 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium ⁽⁴⁾⁽⁶⁾ 12	See Table 2.2-C	5.00E+2 (6/8) 2.48E+02 – 8.35E+02	128 (0.45 mi NE)	5.67E+2 (4/4) 3.71E+02 – 8.35E+02	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

**MCGUIRE NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

McGuire Nuclear Station
Mecklenburg County, North Carolina

Docket Numbers 50-369, 370
Calendar Year 2021

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	All less than LLD	-----	-----	All less than LLD	0
Food Products (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	-----	-----	No Control Location	0
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Sediments--Shoreline (pCi/kg, dry)	Gamma 6	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Direct Gamma Radiation (TLD) (mR/Std Qtr)	TLD Readout 164 ⁽⁵⁾	-----	1.65E+01 (160/160) 9.53E+00 – 2.61E+01	173 (8.39 mi NNW)	2.44E+01 (4/4) 2.41E+01 – 2.47E+01	175 (15.5 mi WNW) 2.23E+01 (4/4) 2.08E+01 – 2.38E+01	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 Analytical Procedures Section/Gamma Spectrometry 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).
6. Quarterly tritium composites determined using quarter days (92 days +/- 25% (23 days)).

APPENDIX C

**SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES**

APPENDIX C

MCGUIRE 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	Incllement 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 100% availability in 2021.

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 99.29% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
131	7/12 – 8/9/2021 8/9 – 9/7/2021	PO/PI	Power outage to sampling equipment caused by motor control center changeout at Cowans Ford Dam which resulted in 21.1 days of total downtime.	NCR # 02392960 NCR # 02396835
135	2/22 – 3/22/2021	OT	Sample line was damaged/severed by wildlife bite. Sample line replaced and normal sampling resumed.	NCR # 02375137

C.2 UNAVAILABLE ANALYSES

There were no unavailable analyses for the 2021 McGuire REMP.

APPENDIX D

ANALYTICAL DEVIATIONS

APPENDIX D

MCGUIRE NUCLEAR STATION ANALYTICAL DEVIATIONS

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

D.1 ANALYTICAL DEVIATIONS

TLDs

McGuire environmental Alpha (A) and Bravo (B) TLDs are co-located TLDs at each TLD location adjacently placed to comply with ANSI/HPS N13.37-2014 Section 7.1 Paragraph 7. The 2Q2021 TLD collection indicated vandalism with one of the two co-located location 153 TLDs. The Alpha (A) TLD was found on the ground. The Bravo (B) TLD was intact and collected and did not appear to have experienced any tampering or vandalism.

Location	Scheduled		Code	Description & Action to Prevent Recurrence	Corrective Action
	Collection Dates				
153	3/15 – 6/16/2021		VN	Alpha TLD vandalized, unusable, 1 TLD reported.	NCR # 02386296

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2021

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2021.

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536562	12/28/2020 - 1/5/2021	Beta	2.04E-02	2.80E-03	2.78E-03
536768	1/5/2021 - 1/11/2021	Beta	2.62E-02	3.74E-03	3.81E-03
537310	1/11/2021 - 1/19/2021	Beta	2.28E-02	2.97E-03	3.07E-03
537675	1/19/2021 - 1/25/2021	Beta	1.98E-02	3.37E-03	3.65E-03
538065	1/25/2021 - 2/1/2021	Beta	1.64E-02	2.78E-03	3.01E-03
538312	2/1/2021 - 2/8/2021	Beta	1.61E-02	2.46E-03	2.57E-03
538538	2/8/2021 - 2/15/2021	Beta	1.33E-02	2.72E-03	3.32E-03
538809	2/15/2021 - 2/22/2021	Beta	2.02E-02	3.07E-03	3.31E-03
539050	2/22/2021 - 3/1/2021	Beta	1.71E-02	2.85E-03	3.15E-03
539265	3/1/2021 - 3/8/2021	Beta	2.61E-02	2.92E-03	2.57E-03
540053	3/8/2021 - 3/15/2021	Beta	2.01E-02	2.65E-03	2.55E-03
540712	3/15/2021 - 3/22/2021	Beta	1.81E-02	2.75E-03	2.67E-03
541425	3/22/2021 - 3/29/2021	Beta	1.23E-02	2.68E-03	3.36E-03
541947	12/28/2020 - 3/29/2021	Cs-134	<1.01E-03	0.00E+00	1.01E-03
		Cs-137	<3.08E-04	0.00E+00	3.08E-04
		Be-7	1.39E-01	3.50E-02	3.13E-02
		K-40	<1.84E-02	0.00E+00	1.84E-02
541940	3/29/2021 - 4/5/2021	Beta	2.55E-02	3.25E-03	3.04E-03
542238	4/5/2021 - 4/12/2021	Beta	2.79E-02	3.41E-03	3.24E-03
542865	4/12/2021 - 4/19/2021	Beta	2.71E-02	3.37E-03	3.09E-03
543252	4/19/2021 - 4/26/2021	Beta	2.28E-02	3.09E-03	3.03E-03
544109	4/26/2021 - 5/3/2021	Beta	2.58E-02	3.27E-03	3.08E-03
544311	5/3/2021 - 5/10/2021	Beta	1.63E-02	2.76E-03	3.01E-03
544638	5/10/2021 - 5/17/2021	Beta	1.71E-02	3.07E-03	3.66E-03
545014	5/17/2021 - 5/24/2021	Beta	2.98E-02	3.44E-03	3.16E-03
545498	5/24/2021 - 6/1/2021	Beta	2.04E-02	2.56E-03	2.57E-03
545796	6/1/2021 - 6/7/2021	Beta	1.89E-02	2.97E-03	3.28E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
546027	6/7/2021 - 6/14/2021	Beta	1.04E-02	2.57E-03	3.31E-03
546903	6/14/2021 - 6/21/2021	Beta	2.12E-02	3.11E-03	3.31E-03
547189	6/21/2021 - 6/28/2021	Beta	1.89E-02	2.88E-03	2.86E-03
547728	3/29/2021 - 6/28/2021	Cs-134	<2.03E-03	0.00E+00	2.03E-03
		Cs-137	<1.20E-03	0.00E+00	1.20E-03
		Be-7	1.53E-01	3.47E-02	2.52E-02
		K-40	<2.53E-02	0.00E+00	2.53E-02
547473	6/28/2021 - 7/6/2021	Beta	1.53E-02	2.22E-03	2.27E-03
547720	7/6/2021 - 7/12/2021	Beta	2.19E-02	3.51E-03	3.84E-03
548105	7/12/2021 - 7/19/2021	Beta	1.60E-02	2.88E-03	3.35E-03
548524	7/19/2021 - 7/26/2021	Beta	3.03E-02	3.58E-03	3.43E-03
548740	7/26/2021 - 8/2/2021	Beta	3.22E-02	3.63E-03	3.28E-03
548972	8/2/2021 - 8/9/2021	Beta	2.82E-02	3.30E-03	2.77E-03
549268	8/9/2021 - 8/16/2021	Beta	2.38E-02	2.82E-03	2.58E-03
549762	8/16/2021 - 8/23/2021	Beta	1.37E-02	2.33E-03	2.54E-03
550046	8/23/2021 - 8/30/2021	Beta	3.44E-02	3.68E-03	3.13E-03
550668	8/30/2021 - 9/7/2021	Beta	2.48E-02	2.64E-03	2.22E-03
551032	9/7/2021 - 9/13/2021	Beta	3.16E-02	3.92E-03	3.79E-03
551669	9/13/2021 - 9/20/2021	Beta	3.38E-02	3.32E-03	2.89E-03
552297	9/20/2021 - 9/27/2021	Beta	2.30E-02	3.21E-03	3.27E-03
552789	6/28/2021 - 9/27/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.72E-01	4.05E-02	3.68E-02
		K-40	<3.37E-02	0.00E+00	3.37E-02
552457	9/27/2021 - 10/4/2021	Beta	5.26E-02	3.93E-03	2.62E-03
552781	10/4/2021 - 10/11/2021	Beta	2.11E-02	3.03E-03	3.08E-03
553258	10/11/2021 - 10/18/2021	Beta	2.74E-02	3.56E-03	3.66E-03
553856	10/18/2021 - 10/25/2021	Beta	3.99E-02	3.87E-03	3.03E-03
554287	10/25/2021 - 11/1/2021	Beta	1.16E-02	2.72E-03	3.49E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
554598	11/1/2021 - 11/8/2021	Beta	2.69E-02	3.25E-03	2.95E-03
555088	11/8/2021 - 11/15/2021	Beta	2.88E-02	3.54E-03	3.42E-03
555953	11/15/2021 - 11/22/2021	Beta	2.75E-02	3.40E-03	3.14E-03
556749	11/22/2021 - 11/29/2021	Beta	2.93E-02	3.38E-03	3.01E-03
557066	11/29/2021 - 12/6/2021	Beta	4.22E-02	3.65E-03	2.96E-03
557490	12/6/2021 - 12/13/2021	Beta	2.93E-02	3.22E-03	3.07E-03
557966	12/13/2021 - 12/20/2021	Beta	2.65E-02	2.92E-03	2.51E-03
558398	12/20/2021 - 12/27/2021	Beta	3.12E-02	3.21E-03	2.79E-03
559163	9/27/2021 - 12/27/2021	Cs-134	<1.66E-03	0.00E+00	1.66E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.53E-01	3.74E-02	3.31E-02
		K-40	<3.01E-02	0.00E+00	3.01E-02
558614	12/27/2021 - 1/4/2022	Beta	1.66E-02	2.59E-03	2.79E-03
559972	12/27/2021 - 1/4/2022	Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	1.36E-01	1.10E-01	0.00E+00
		K-40	2.77E-01	1.68E-01	2.44E-01

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536563	12/28/2020 - 1/5/2021	Beta	1.85E-02	2.72E-03	2.82E-03
536769	1/5/2021 - 1/11/2021	Beta	2.81E-02	3.82E-03	3.79E-03
537311	1/11/2021 - 1/19/2021	Beta	2.30E-02	2.99E-03	3.08E-03
537676	1/19/2021 - 1/25/2021	Beta	1.83E-02	3.25E-03	3.59E-03
538066	1/25/2021 - 2/1/2021	Beta	1.81E-02	2.90E-03	3.04E-03
538313	2/1/2021 - 2/8/2021	Beta	1.58E-02	2.44E-03	2.57E-03
538539	2/8/2021 - 2/15/2021	Beta	1.25E-02	2.68E-03	3.32E-03
538810	2/15/2021 - 2/22/2021	Beta	2.06E-02	3.07E-03	3.28E-03
539051	2/22/2021 - 3/1/2021	Beta	1.77E-02	2.90E-03	3.19E-03
539266	3/1/2021 - 3/8/2021	Beta	2.13E-02	2.71E-03	2.56E-03
540054	3/8/2021 - 3/15/2021	Beta	2.01E-02	2.66E-03	2.57E-03

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540713	3/15/2021 - 3/22/2021	Beta	2.18E-02	2.92E-03	2.63E-03
541426	3/22/2021 - 3/29/2021	Beta	1.55E-02	2.87E-03	3.39E-03
541948	12/28/2020 - 3/29/2021	Cs-134	<1.58E-03	0.00E+00	1.58E-03
		Cs-137	<1.82E-03	0.00E+00	1.82E-03
		Be-7	1.58E-01	3.79E-02	3.17E-02
		K-40	2.55E-02	1.38E-02	4.93E-03
541941	3/29/2021 - 4/5/2021	Beta	2.09E-02	3.05E-03	3.06E-03
542239	4/5/2021 - 4/12/2021	Beta	2.66E-02	3.34E-03	3.22E-03
542866	4/12/2021 - 4/19/2021	Beta	2.55E-02	3.26E-03	3.05E-03
543253	4/19/2021 - 4/26/2021	Beta	2.34E-02	3.14E-03	3.06E-03
544110	4/26/2021 - 5/3/2021	Beta	2.39E-02	3.16E-03	3.05E-03
544312	5/3/2021 - 5/10/2021	Beta	1.85E-02	2.90E-03	3.05E-03
544639	5/10/2021 - 5/17/2021	Beta	1.64E-02	3.00E-03	3.62E-03
545015	5/17/2021 - 5/24/2021	Beta	2.90E-02	3.43E-03	3.20E-03
545499	5/24/2021 - 6/1/2021	Beta	2.18E-02	2.63E-03	2.57E-03
545797	6/1/2021 - 6/7/2021	Beta	1.59E-02	2.83E-03	3.30E-03
546028	6/7/2021 - 6/14/2021	Beta	8.84E-03	2.45E-03	3.27E-03
546904	6/14/2021 - 6/21/2021	Beta	1.96E-02	3.05E-03	3.34E-03
547190	6/21/2021 - 6/28/2021	Beta	1.58E-02	2.71E-03	2.85E-03
547729	3/29/2021 - 6/28/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.66E-03	0.00E+00	1.66E-03
		Be-7	1.68E-01	3.96E-02	3.72E-02
		K-40	1.35E-02	1.36E-02	2.05E-02
547474	6/28/2021 - 7/6/2021	Beta	1.48E-02	2.19E-03	2.28E-03
547721	7/6/2021 - 7/12/2021	Beta	2.33E-02	3.55E-03	3.78E-03
548106	7/12/2021 - 7/19/2021	Beta	1.81E-02	3.02E-03	3.38E-03
548525	7/19/2021 - 7/26/2021	Beta	2.68E-02	3.43E-03	3.43E-03
548741	7/26/2021 - 8/2/2021	Beta	3.25E-02	3.65E-03	3.29E-03
548973	8/2/2021 - 8/9/2021	Beta	2.80E-02	3.27E-03	2.74E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
549269	8/9/2021 - 8/16/2021	Beta	2.08E-02	2.71E-03	2.63E-03
549763	8/16/2021 - 8/23/2021	Beta	1.03E-02	2.13E-03	2.52E-03
550047	8/23/2021 - 8/30/2021	Beta	3.37E-02	3.67E-03	3.15E-03
550669	8/30/2021 - 9/7/2021	Beta	2.76E-02	2.74E-03	2.19E-03
551033	9/7/2021 - 9/13/2021	Beta	2.74E-02	3.77E-03	3.85E-03
551670	9/13/2021 - 9/20/2021	Beta	2.96E-02	3.16E-03	2.87E-03
552298	9/20/2021 - 9/27/2021	Beta	2.28E-02	3.22E-03	3.30E-03
552790	6/28/2021 - 9/27/2021	Cs-134	<1.82E-03	0.00E+00	1.82E-03
		Cs-137	<1.23E-03	0.00E+00	1.23E-03
		Be-7	1.82E-01	4.01E-02	3.00E-02
		K-40	<3.22E-02	0.00E+00	3.22E-02
552458	9/27/2021 - 10/4/2021	Beta	5.29E-02	3.89E-03	2.57E-03
552782	10/4/2021 - 10/11/2021	Beta	2.31E-02	3.16E-03	3.14E-03
553259	10/11/2021 - 10/18/2021	Beta	2.61E-02	3.49E-03	3.64E-03
553857	10/18/2021 - 10/25/2021	Beta	4.14E-02	3.95E-03	3.05E-03
554288	10/25/2021 - 11/1/2021	Beta	1.73E-02	2.99E-03	3.43E-03
554599	11/1/2021 - 11/8/2021	Beta	2.77E-02	3.31E-03	2.98E-03
555089	11/8/2021 - 11/15/2021	Beta	3.20E-02	3.67E-03	3.42E-03
555954	11/15/2021 - 11/22/2021	Beta	3.01E-02	3.51E-03	3.15E-03
556750	11/22/2021 - 11/29/2021	Beta	2.65E-02	3.25E-03	3.00E-03
557067	11/29/2021 - 12/6/2021	Beta	4.13E-02	3.64E-03	3.00E-03
557491	12/6/2021 - 12/13/2021	Beta	2.74E-02	3.12E-03	3.03E-03
557967	12/13/2021 - 12/20/2021	Beta	2.53E-02	2.87E-03	2.52E-03
558399	12/20/2021 - 12/27/2021	Beta	3.02E-02	3.13E-03	2.75E-03
559164	9/27/2021 - 12/27/2021	Cs-134	<1.28E-03	0.00E+00	1.28E-03
		Cs-137	<1.49E-03	0.00E+00	1.49E-03
		Be-7	1.78E-01	3.94E-02	3.13E-02
		K-40	<2.24E-02	0.00E+00	2.24E-02
558615	12/27/2021 - 1/4/2022	Beta	1.52E-02	2.55E-03	2.83E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	559973	Sample Dates:	12/27/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.14E-02	0.00E+00	1.14E-02
				Cs-137	<1.15E-02	0.00E+00	1.15E-02
				Be-7	1.31E-01	1.02E-01	0.00E+00
				K-40	4.71E-01	1.47E-01	1.31E-01

Sample Point 106 [INDICATOR - E @ 0.47 miles]

Sample ID:	546101	Sample Dates:	5/24/2021 - 6/1/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.87E-02	2.47E-03	2.54E-03
Sample ID:	546103	Sample Dates:	6/1/2021 - 6/7/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.35E-02	2.72E-03	3.33E-03
Sample ID:	547218	Sample Dates:	6/7/2021 - 6/14/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	9.77E-03	2.49E-03	3.23E-03
Sample ID:	546905	Sample Dates:	6/14/2021 - 6/21/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.84E-02	3.02E-03	3.38E-03
Sample ID:	547191	Sample Dates:	6/21/2021 - 6/28/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.63E-02	2.73E-03	2.85E-03
Sample ID:	548640	Sample Dates:	5/24/2021 - 6/28/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<4.66E-03	0.00E+00	4.66E-03
				Cs-137	<3.24E-03	0.00E+00	3.24E-03
				Be-7	1.50E-01	3.89E-02	2.81E-02
				K-40	<8.46E-02	0.00E+00	8.46E-02
Sample ID:	547475	Sample Dates:	6/28/2021 - 7/6/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.54E-02	2.23E-03	2.28E-03
Sample ID:	547722	Sample Dates:	7/6/2021 - 7/12/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.05E-02	3.37E-03	3.73E-03
Sample ID:	548107	Sample Dates:	7/12/2021 - 7/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.60E-02	2.92E-03	3.42E-03
Sample ID:	548526	Sample Dates:	7/19/2021 - 7/26/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.83E-02	3.49E-03	3.43E-03
Sample ID:	548742	Sample Dates:	7/26/2021 - 8/2/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.13E-02	3.60E-03	3.30E-03
Sample ID:	548974	Sample Dates:	8/2/2021 - 8/9/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.54E-02	3.12E-03	2.70E-03
Sample ID:	549270	Sample Dates:	8/9/2021 - 8/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.02E-02	2.68E-03	2.63E-03
Sample ID:	549764	Sample Dates:	8/16/2021 - 8/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.18E-02	2.21E-03	2.51E-03
Sample ID:	550048	Sample Dates:	8/23/2021 - 8/30/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.44E-02	3.71E-03	3.17E-03
Sample ID:	550670	Sample Dates:	8/30/2021 - 9/7/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.62E-02	2.67E-03	2.18E-03
Sample ID:	551034	Sample Dates:	9/7/2021 - 9/13/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.90E-02	3.86E-03	3.88E-03
Sample ID:	551671	Sample Dates:	9/13/2021 - 9/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.11E-02	3.20E-03	2.85E-03
Sample ID:	552299	Sample Dates:	9/20/2021 - 9/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.00E-02	3.10E-03	3.32E-03
Sample ID:	554060	Sample Dates:	6/28/2021 - 9/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<2.23E-03	0.00E+00	2.23E-03
				Cs-137	<1.46E-03	0.00E+00	1.46E-03
				Be-7	2.13E-01	4.59E-02	3.45E-02
				K-40	<2.36E-02	0.00E+00	2.36E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 106 [INDICATOR - E @ 0.47 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
552459	9/27/2021 - 10/4/2021	Beta	4.81E-02	3.73E-03	2.56E-03
552783	10/4/2021 - 10/11/2021	Beta	1.94E-02	2.98E-03	3.14E-03
553260	10/11/2021 - 10/18/2021	Beta	2.60E-02	3.47E-03	3.63E-03
553858	10/18/2021 - 10/25/2021	Beta	3.88E-02	3.86E-03	3.07E-03
554289	10/25/2021 - 11/1/2021	Beta	1.30E-02	2.76E-03	3.42E-03
554600	11/1/2021 - 11/8/2021	Beta	2.60E-02	3.25E-03	3.02E-03
555090	11/8/2021 - 11/15/2021	Beta	2.88E-02	3.54E-03	3.42E-03
555955	11/15/2021 - 11/22/2021	Beta	2.75E-02	3.37E-03	3.12E-03
556751	11/22/2021 - 11/29/2021	Beta	2.64E-02	3.26E-03	3.02E-03
557068	11/29/2021 - 12/6/2021	Beta	3.98E-02	3.56E-03	2.95E-03
557492	12/6/2021 - 12/13/2021	Beta	2.68E-02	3.09E-03	3.03E-03
557968	12/13/2021 - 12/20/2021	Beta	2.23E-02	2.75E-03	2.53E-03
558400	12/20/2021 - 12/27/2021	Beta	3.02E-02	3.14E-03	2.74E-03
559165	9/27/2021 - 12/27/2021	Cs-134	<1.52E-03	0.00E+00	1.52E-03
		Cs-137	<1.89E-03	0.00E+00	1.89E-03
		Be-7	1.48E-01	3.80E-02	3.50E-02
		K-40	3.98E-02	1.83E-02	1.68E-02
558616	12/27/2021 - 1/4/2022	Beta	1.32E-02	2.43E-03	2.83E-03
559974	12/27/2021 - 1/4/2022	Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	1.97E-01	1.34E-01	0.00E+00
		K-40	3.03E-01	1.55E-01	5.14E-02

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536564	12/28/2020 - 1/5/2021	Beta	1.78E-02	2.72E-03	2.86E-03
536770	1/5/2021 - 1/11/2021	Beta	2.47E-02	3.60E-03	3.71E-03
537312	1/11/2021 - 1/19/2021	Beta	2.17E-02	2.97E-03	3.13E-03
537677	1/19/2021 - 1/25/2021	Beta	1.99E-02	3.28E-03	3.51E-03
538067	1/25/2021 - 2/1/2021	Beta	1.97E-02	3.02E-03	3.11E-03
538314	2/1/2021 - 2/8/2021	Beta	1.73E-02	2.51E-03	2.56E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
538540	2/8/2021 - 2/15/2021	Beta	1.65E-02	2.89E-03	3.32E-03
538811	2/15/2021 - 2/22/2021	Beta	2.01E-02	3.01E-03	3.22E-03
539052	2/22/2021 - 3/1/2021	Beta	1.93E-02	3.03E-03	3.25E-03
539267	3/1/2021 - 3/8/2021	Beta	2.31E-02	2.79E-03	2.55E-03
540055	3/8/2021 - 3/15/2021	Beta	2.09E-02	2.67E-03	2.53E-03
540714	3/15/2021 - 3/22/2021	Beta	1.82E-02	2.73E-03	2.62E-03
541427	3/22/2021 - 3/29/2021	Beta	1.63E-02	2.95E-03	3.45E-03
541949	12/28/2020 - 3/29/2021	Cs-134	<9.85E-04	0.00E+00	9.85E-04
		Cs-137	<1.65E-03	0.00E+00	1.65E-03
		Be-7	1.71E-01	3.83E-02	3.22E-02
		K-40	<3.76E-02	0.00E+00	3.76E-02
541942	3/29/2021 - 4/5/2021	Beta	2.47E-02	3.24E-03	3.07E-03
542240	4/5/2021 - 4/12/2021	Beta	3.28E-02	3.60E-03	3.20E-03
542867	4/12/2021 - 4/19/2021	Beta	2.56E-02	3.23E-03	2.99E-03
543254	4/19/2021 - 4/26/2021	Beta	2.39E-02	3.21E-03	3.13E-03
544111	4/26/2021 - 5/3/2021	Beta	2.62E-02	3.27E-03	3.06E-03
544313	5/3/2021 - 5/10/2021	Beta	1.85E-02	2.89E-03	3.04E-03
544640	5/10/2021 - 5/17/2021	Beta	1.56E-02	2.93E-03	3.55E-03
545016	5/17/2021 - 5/24/2021	Beta	3.09E-02	3.57E-03	3.27E-03
545500	5/24/2021 - 6/1/2021	Beta	2.02E-02	2.55E-03	2.56E-03
545798	6/1/2021 - 6/7/2021	Beta	1.46E-02	2.78E-03	3.31E-03
546029	6/7/2021 - 6/14/2021	Beta	1.03E-02	2.51E-03	3.21E-03
546906	6/14/2021 - 6/21/2021	Beta	1.99E-02	3.10E-03	3.40E-03
547192	6/21/2021 - 6/28/2021	Beta	1.28E-02	2.53E-03	2.85E-03
547730	3/29/2021 - 6/28/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.37E-03	0.00E+00	1.37E-03
		Be-7	2.04E-01	4.12E-02	2.70E-02
		K-40	<2.57E-02	0.00E+00	2.57E-02
547476	6/28/2021 - 7/6/2021	Beta	1.56E-02	2.24E-03	2.29E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547723	7/6/2021 - 7/12/2021	Beta	2.00E-02	3.32E-03	3.69E-03
548108	7/12/2021 - 7/19/2021	Beta	1.40E-02	2.83E-03	3.44E-03
548527	7/19/2021 - 7/26/2021	Beta	2.39E-02	3.30E-03	3.44E-03
548743	7/26/2021 - 8/2/2021	Beta	3.51E-02	3.76E-03	3.30E-03
548975	8/2/2021 - 8/9/2021	Beta	2.48E-02	3.08E-03	2.69E-03
549271	8/9/2021 - 8/16/2021	Beta	2.16E-02	2.74E-03	2.62E-03
549765	8/16/2021 - 8/23/2021	Beta	1.18E-02	2.20E-03	2.51E-03
550049	8/23/2021 - 8/30/2021	Beta	3.83E-02	3.85E-03	3.15E-03
550671	8/30/2021 - 9/7/2021	Beta	2.59E-02	2.67E-03	2.19E-03
551035	9/7/2021 - 9/13/2021	Beta	2.97E-02	3.90E-03	3.89E-03
551672	9/13/2021 - 9/20/2021	Beta	2.81E-02	3.08E-03	2.85E-03
552300	9/20/2021 - 9/27/2021	Beta	1.85E-02	3.02E-03	3.31E-03
552791	6/28/2021 - 9/27/2021	Cs-134	<2.01E-03	0.00E+00	2.01E-03
		Cs-137	<1.55E-03	0.00E+00	1.55E-03
		Be-7	1.50E-01	3.90E-02	3.98E-02
		K-40	1.57E-02	1.24E-02	1.58E-02
552460	9/27/2021 - 10/4/2021	Beta	4.88E-02	3.76E-03	2.56E-03
552784	10/4/2021 - 10/11/2021	Beta	1.87E-02	2.95E-03	3.16E-03
553261	10/11/2021 - 10/18/2021	Beta	2.18E-02	3.29E-03	3.62E-03
553859	10/18/2021 - 10/25/2021	Beta	3.81E-02	3.82E-03	3.06E-03
554290	10/25/2021 - 11/1/2021	Beta	1.14E-02	2.66E-03	3.41E-03
554601	11/1/2021 - 11/8/2021	Beta	2.53E-02	3.24E-03	3.05E-03
555091	11/8/2021 - 11/15/2021	Beta	2.75E-02	3.48E-03	3.42E-03
555956	11/15/2021 - 11/22/2021	Beta	2.51E-02	3.25E-03	3.10E-03
556752	11/22/2021 - 11/29/2021	Beta	2.54E-02	3.23E-03	3.05E-03
557069	11/29/2021 - 12/6/2021	Beta	3.70E-02	3.43E-03	2.93E-03
557493	12/6/2021 - 12/13/2021	Beta	2.47E-02	3.01E-03	3.03E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557969	12/13/2021 - 12/20/2021	Beta	2.26E-02	2.77E-03	2.54E-03
558401	12/20/2021 - 12/27/2021	Beta	3.20E-02	3.19E-03	2.73E-03
559166	9/27/2021 - 12/27/2021	Cs-134	<1.75E-03	0.00E+00	1.75E-03
		Cs-137	<1.18E-03	0.00E+00	1.18E-03
		Be-7	1.82E-01	3.77E-02	2.36E-02
		K-40	<3.25E-02	0.00E+00	3.25E-02
558617	12/27/2021 - 1/4/2022	Beta	1.54E-02	2.56E-03	2.84E-03
559975	12/27/2021 - 1/4/2022	Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	3.11E-01	1.58E-01	5.27E-02

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536565	12/28/2020 - 1/5/2021	Beta	2.09E-02	2.86E-03	2.85E-03
536771	1/5/2021 - 1/11/2021	Beta	2.26E-02	3.51E-03	3.73E-03
537313	1/11/2021 - 1/19/2021	Beta	2.18E-02	2.96E-03	3.12E-03
537678	1/19/2021 - 1/25/2021	Beta	1.64E-02	3.11E-03	3.54E-03
538068	1/25/2021 - 2/1/2021	Beta	1.70E-02	2.86E-03	3.08E-03
538315	2/1/2021 - 2/8/2021	Beta	1.61E-02	2.46E-03	2.57E-03
538541	2/8/2021 - 2/15/2021	Beta	1.39E-02	2.75E-03	3.32E-03
538812	2/15/2021 - 2/22/2021	Beta	1.78E-02	2.91E-03	3.24E-03
539053	2/22/2021 - 3/1/2021	Beta	1.65E-02	2.86E-03	3.23E-03
539268	3/1/2021 - 3/8/2021	Beta	2.09E-02	2.69E-03	2.56E-03
540056	3/8/2021 - 3/15/2021	Beta	2.31E-02	2.78E-03	2.53E-03
540715	3/15/2021 - 3/22/2021	Beta	1.93E-02	2.79E-03	2.63E-03
541428	3/22/2021 - 3/29/2021	Beta	1.38E-02	2.81E-03	3.43E-03
541950	12/28/2020 - 3/29/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.34E-03	0.00E+00	1.34E-03
		Be-7	1.41E-01	3.44E-02	2.88E-02
		K-40	<2.93E-02	0.00E+00	2.93E-02
541943	3/29/2021 - 4/5/2021	Beta	2.60E-02	3.30E-03	3.07E-03
542241	4/5/2021 - 4/12/2021	Beta	2.64E-02	3.33E-03	3.21E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542868	4/12/2021 - 4/19/2021	Beta	2.53E-02	3.23E-03	3.01E-03
543255	4/19/2021 - 4/26/2021	Beta	2.05E-02	3.03E-03	3.10E-03
544112	4/26/2021 - 5/3/2021	Beta	2.29E-02	3.11E-03	3.06E-03
544314	5/3/2021 - 5/10/2021	Beta	1.53E-02	2.72E-03	3.04E-03
544641	5/10/2021 - 5/17/2021	Beta	1.30E-02	2.80E-03	3.57E-03
545017	5/17/2021 - 5/24/2021	Beta	2.40E-02	3.24E-03	3.25E-03
545501	5/24/2021 - 6/1/2021	Beta	1.93E-02	2.50E-03	2.56E-03
545799	6/1/2021 - 6/7/2021	Beta	1.52E-02	2.80E-03	3.31E-03
546030	6/7/2021 - 6/14/2021	Beta	1.09E-02	2.55E-03	3.23E-03
546907	6/14/2021 - 6/21/2021	Beta	1.57E-02	2.88E-03	3.38E-03
547193	6/21/2021 - 6/28/2021	Beta	1.48E-02	2.65E-03	2.85E-03
547731	3/29/2021 - 6/28/2021	Cs-134	<1.44E-03	0.00E+00	1.44E-03
		Cs-137	<1.83E-03	0.00E+00	1.83E-03
		Be-7	1.59E-01	3.82E-02	3.61E-02
		K-40	1.96E-02	1.30E-02	1.44E-02
547477	6/28/2021 - 7/6/2021	Beta	1.15E-02	2.03E-03	2.28E-03
547724	7/6/2021 - 7/12/2021	Beta	2.02E-02	3.36E-03	3.73E-03
548109	7/12/2021 - 7/19/2021	Beta	1.36E-02	2.81E-03	3.42E-03
548528	7/19/2021 - 7/26/2021	Beta	2.51E-02	3.35E-03	3.43E-03
548744	7/26/2021 - 8/2/2021	Beta	3.30E-02	3.67E-03	3.30E-03
548976	8/2/2021 - 8/9/2021	Beta	2.78E-02	3.23E-03	2.69E-03
549272	8/9/2021 - 8/16/2021	Beta	2.12E-02	2.74E-03	2.63E-03
549766	8/16/2021 - 8/23/2021	Beta	1.37E-02	2.31E-03	2.51E-03
550050	8/23/2021 - 8/30/2021	Beta	3.58E-02	3.76E-03	3.17E-03
550672	8/30/2021 - 9/7/2021	Beta	2.54E-02	2.64E-03	2.18E-03
551036	9/7/2021 - 9/13/2021	Beta	2.91E-02	3.87E-03	3.88E-03
551673	9/13/2021 - 9/20/2021	Beta	3.28E-02	3.26E-03	2.85E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552301	9/20/2021 - 9/27/2021	Beta	2.09E-02	3.13E-03	3.32E-03
552792	6/28/2021 - 9/27/2021	Cs-134	<1.82E-03	0.00E+00	1.82E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.72E-01	4.09E-02	3.66E-02
		K-40	<2.74E-02	0.00E+00	2.74E-02
552461	9/27/2021 - 10/4/2021	Beta	5.30E-02	3.90E-03	2.56E-03
552785	10/4/2021 - 10/11/2021	Beta	2.17E-02	3.09E-03	3.14E-03
553262	10/11/2021 - 10/18/2021	Beta	3.05E-02	3.66E-03	3.63E-03
553860	10/18/2021 - 10/25/2021	Beta	3.98E-02	3.89E-03	3.07E-03
554291	10/25/2021 - 11/1/2021	Beta	1.44E-02	2.84E-03	3.42E-03
554602	11/1/2021 - 11/8/2021	Beta	2.70E-02	3.31E-03	3.03E-03
555092	11/8/2021 - 11/15/2021	Beta	3.12E-02	3.64E-03	3.42E-03
555957	11/15/2021 - 11/22/2021	Beta	2.84E-02	3.42E-03	3.11E-03
556753	11/22/2021 - 11/29/2021	Beta	2.83E-02	3.36E-03	3.03E-03
557070	11/29/2021 - 12/6/2021	Beta	3.78E-02	3.48E-03	2.94E-03
557494	12/6/2021 - 12/13/2021	Beta	3.29E-02	3.33E-03	3.03E-03
557970	12/13/2021 - 12/20/2021	Beta	2.42E-02	2.84E-03	2.53E-03
558402	12/20/2021 - 12/27/2021	Beta	2.86E-02	3.07E-03	2.74E-03
559167	9/27/2021 - 12/27/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	2.01E-01	4.08E-02	2.48E-02
		K-40	<3.13E-02	0.00E+00	3.13E-02
558618	12/27/2021 - 1/4/2022	Beta	1.56E-02	2.56E-03	2.83E-03
559976	12/27/2021 - 1/4/2022	Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<9.49E-03	0.00E+00	9.49E-03
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	1.77E-01	1.19E-01	5.32E-02

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536566	12/28/2020 - 1/5/2021	Beta	1.86E-02	2.74E-03	2.84E-03
536772	1/5/2021 - 1/11/2021	Beta	2.58E-02	3.67E-03	3.74E-03
537314	1/11/2021 - 1/19/2021	Beta	2.40E-02	3.06E-03	3.12E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
537679	1/19/2021 - 1/25/2021	Beta	2.00E-02	3.31E-03	3.55E-03
538069	1/25/2021 - 2/1/2021	Beta	1.95E-02	2.99E-03	3.07E-03
538316	2/1/2021 - 2/8/2021	Beta	1.54E-02	2.42E-03	2.57E-03
538542	2/8/2021 - 2/15/2021	Beta	1.51E-02	2.82E-03	3.32E-03
538813	2/15/2021 - 2/22/2021	Beta	2.20E-02	3.13E-03	3.25E-03
539054	2/22/2021 - 3/1/2021	Beta	1.90E-02	2.98E-03	3.22E-03
539269	3/1/2021 - 3/8/2021	Beta	2.32E-02	2.79E-03	2.56E-03
540057	3/8/2021 - 3/15/2021	Beta	2.19E-02	2.73E-03	2.54E-03
540716	3/15/2021 - 3/22/2021	Beta	1.72E-02	2.68E-03	2.63E-03
541429	3/22/2021 - 3/29/2021	Beta	1.47E-02	2.85E-03	3.42E-03
541951	12/28/2020 - 3/29/2021	Cs-134	<2.02E-03	0.00E+00	2.02E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.64E-01	3.55E-02	2.25E-02
		K-40	2.49E-02	1.76E-02	2.39E-02
541944	3/29/2021 - 4/5/2021	Beta	2.44E-02	3.21E-03	3.06E-03
542242	4/5/2021 - 4/12/2021	Beta	3.36E-02	3.64E-03	3.21E-03
542869	4/12/2021 - 4/19/2021	Beta	2.67E-02	3.31E-03	3.03E-03
543256	4/19/2021 - 4/26/2021	Beta	2.13E-02	3.06E-03	3.09E-03
544113	4/26/2021 - 5/3/2021	Beta	2.51E-02	3.22E-03	3.06E-03
544315	5/3/2021 - 5/10/2021	Beta	1.74E-02	2.83E-03	3.04E-03
544642	5/10/2021 - 5/17/2021	Beta	1.82E-02	3.07E-03	3.58E-03
545018	5/17/2021 - 5/24/2021	Beta	3.05E-02	3.52E-03	3.23E-03
545502	5/24/2021 - 6/1/2021	Beta	1.91E-02	2.50E-03	2.56E-03
545800	6/1/2021 - 6/7/2021	Beta	1.33E-02	2.69E-03	3.30E-03
546031	6/7/2021 - 6/14/2021	Beta	9.57E-03	2.48E-03	3.24E-03
546908	6/14/2021 - 6/21/2021	Beta	1.82E-02	3.00E-03	3.37E-03
547194	6/21/2021 - 6/28/2021	Beta	1.10E-02	2.42E-03	2.85E-03

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
547732	3/29/2021 - 6/28/2021	Cs-134	<3.65E-04	0.00E+00	3.65E-04
		Cs-137	<1.46E-03	0.00E+00	1.46E-03
		Be-7	1.47E-01	3.63E-02	3.34E-02
		K-40	2.69E-02	1.36E-02	4.55E-03
547478	6/28/2021 - 7/6/2021	Beta	1.22E-02	2.06E-03	2.28E-03
547725	7/6/2021 - 7/12/2021	Beta	2.21E-02	3.47E-03	3.75E-03
548110	7/12/2021 - 7/19/2021	Beta	1.54E-02	2.90E-03	3.41E-03
548529	7/19/2021 - 7/26/2021	Beta	2.42E-02	3.31E-03	3.44E-03
548745	7/26/2021 - 8/2/2021	Beta	3.46E-02	3.74E-03	3.29E-03
548977	8/2/2021 - 8/9/2021	Beta	2.68E-02	3.19E-03	2.71E-03
549273	8/9/2021 - 8/16/2021	Beta	2.38E-02	2.84E-03	2.63E-03
549767	8/16/2021 - 8/23/2021	Beta	1.07E-02	2.14E-03	2.51E-03
550051	8/23/2021 - 8/30/2021	Beta	2.26E-02	3.48E-03	3.63E-03
550673	8/30/2021 - 9/7/2021	Beta	2.70E-02	2.70E-03	2.18E-03
551037	9/7/2021 - 9/13/2021	Beta	2.64E-02	3.74E-03	3.88E-03
551674	9/13/2021 - 9/20/2021	Beta	2.75E-02	3.06E-03	2.85E-03
552302	9/20/2021 - 9/27/2021	Beta	2.27E-02	3.22E-03	3.32E-03
552793	6/28/2021 - 9/27/2021	Cs-134	<1.26E-03	0.00E+00	1.26E-03
		Cs-137	<1.20E-03	0.00E+00	1.20E-03
		Be-7	1.69E-01	3.98E-02	3.53E-02
		K-40	3.25E-02	1.95E-02	2.51E-02
552462	9/27/2021 - 10/4/2021	Beta	5.81E-02	4.05E-03	2.56E-03
552786	10/4/2021 - 10/11/2021	Beta	1.72E-02	2.86E-03	3.14E-03
553263	10/11/2021 - 10/18/2021	Beta	2.47E-02	3.42E-03	3.62E-03
553861	10/18/2021 - 10/25/2021	Beta	4.13E-02	3.95E-03	3.07E-03
554292	10/25/2021 - 11/1/2021	Beta	1.55E-02	2.90E-03	3.42E-03
554603	11/1/2021 - 11/8/2021	Beta	2.51E-02	3.21E-03	3.01E-03
555093	11/8/2021 - 11/15/2021	Beta	3.03E-02	3.60E-03	3.42E-03
555958	11/15/2021 - 11/22/2021	Beta	2.69E-02	3.36E-03	3.12E-03

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
556754	11/22/2021 - 11/29/2021	Beta	2.53E-02	3.21E-03	3.01E-03
557071	11/29/2021 - 12/6/2021	Beta	4.53E-02	3.75E-03	2.97E-03
557495	12/6/2021 - 12/13/2021	Beta	2.78E-02	3.13E-03	3.03E-03
557971	12/13/2021 - 12/20/2021	Beta	2.50E-02	2.87E-03	2.53E-03
558403	12/20/2021 - 12/27/2021	Beta	3.12E-02	3.17E-03	2.74E-03
559168	9/27/2021 - 12/27/2021	Cs-134	<1.81E-03	0.00E+00	1.81E-03
		Cs-137	<1.06E-03	0.00E+00	1.06E-03
		Be-7	1.38E-01	3.47E-02	2.99E-02
		K-40	1.91E-02	1.40E-02	1.77E-02
558619	12/27/2021 - 1/4/2022	Beta	1.17E-02	2.36E-03	2.84E-03
559977	12/27/2021 - 1/4/2022	Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	2.15E-01	1.44E-01	0.00E+00
		K-40	<3.72E-01	0.00E+00	3.72E-01

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536567	12/28/2020 - 1/5/2021	Beta	1.90E-02	2.74E-03	2.81E-03
536773	1/5/2021 - 1/11/2021	Beta	2.21E-02	3.53E-03	3.80E-03
537315	1/11/2021 - 1/19/2021	Beta	2.30E-02	2.98E-03	3.06E-03
537680	1/19/2021 - 1/25/2021	Beta	1.65E-02	3.16E-03	3.61E-03
538070	1/25/2021 - 2/1/2021	Beta	1.68E-02	2.82E-03	3.05E-03
538317	2/1/2021 - 2/8/2021	Beta	1.63E-02	2.47E-03	2.57E-03
538543	2/8/2021 - 2/15/2021	Beta	1.45E-02	2.78E-03	3.32E-03
538814	2/15/2021 - 2/22/2021	Beta	1.72E-02	2.91E-03	3.28E-03
539055	2/22/2021 - 3/1/2021	Beta	1.69E-02	2.86E-03	3.19E-03
539270	3/1/2021 - 3/8/2021	Beta	2.34E-02	2.81E-03	2.56E-03
540058	3/8/2021 - 3/15/2021	Beta	2.04E-02	2.68E-03	2.58E-03
540717	3/15/2021 - 3/22/2021	Beta	1.86E-02	2.74E-03	2.62E-03
541430	3/22/2021 - 3/29/2021	Beta	1.43E-02	2.81E-03	3.39E-03
541952	12/28/2020 - 3/29/2021	Cs-134	<1.66E-03	0.00E+00	1.66E-03
		Cs-137	<1.37E-03	0.00E+00	1.37E-03
		Be-7	1.57E-01	3.76E-02	3.30E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541952	12/28/2020 - 3/29/2021	K-40	<2.85E-02	0.00E+00	2.85E-02
541945	3/29/2021 - 4/5/2021	Beta	2.21E-02	3.09E-03	3.05E-03
542243	4/5/2021 - 4/12/2021	Beta	2.72E-02	3.38E-03	3.22E-03
542870	4/12/2021 - 4/19/2021	Beta	2.67E-02	3.32E-03	3.05E-03
543257	4/19/2021 - 4/26/2021	Beta	2.23E-02	3.09E-03	3.06E-03
544114	4/26/2021 - 5/3/2021	Beta	2.35E-02	3.13E-03	3.05E-03
544316	5/3/2021 - 5/10/2021	Beta	1.74E-02	2.84E-03	3.05E-03
544643	5/10/2021 - 5/17/2021	Beta	1.73E-02	3.05E-03	3.62E-03
545019	5/17/2021 - 5/24/2021	Beta	3.21E-02	3.56E-03	3.20E-03
545503	5/24/2021 - 6/1/2021	Beta	1.88E-02	2.50E-03	2.57E-03
545801	6/1/2021 - 6/7/2021	Beta	1.45E-02	2.75E-03	3.29E-03
546032	6/7/2021 - 6/14/2021	Beta	1.07E-02	2.57E-03	3.28E-03
546909	6/14/2021 - 6/21/2021	Beta	1.96E-02	3.05E-03	3.34E-03
547195	6/21/2021 - 6/28/2021	Beta	1.74E-02	2.79E-03	2.85E-03
547733	3/29/2021 - 6/28/2021	Cs-134	<1.61E-03	0.00E+00	1.61E-03
		Cs-137	<1.03E-03	0.00E+00	1.03E-03
		Be-7	1.92E-01	4.03E-02	3.04E-02
		K-40	<3.16E-02	0.00E+00	3.16E-02
547479	6/28/2021 - 7/6/2021	Beta	1.46E-02	2.18E-03	2.28E-03
547726	7/6/2021 - 7/12/2021	Beta	2.10E-02	3.43E-03	3.79E-03
548111	7/12/2021 - 7/19/2021	Beta	1.22E-02	2.71E-03	3.38E-03
548530	7/19/2021 - 7/26/2021	Beta	2.68E-02	3.43E-03	3.43E-03
548746	7/26/2021 - 8/2/2021	Beta	3.53E-02	3.76E-03	3.29E-03
548978	8/2/2021 - 8/9/2021	Beta	2.79E-02	3.26E-03	2.74E-03
549274	8/9/2021 - 8/16/2021	Beta	2.22E-02	2.77E-03	2.63E-03
549768	8/16/2021 - 8/23/2021	Beta	1.13E-02	2.19E-03	2.52E-03
550052	8/23/2021 - 8/30/2021	Beta	3.74E-02	3.81E-03	3.15E-03

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
550674	8/30/2021 - 9/7/2021	Beta	2.65E-02	2.68E-03	2.18E-03
551038	9/7/2021 - 9/13/2021	Beta	2.61E-02	3.72E-03	3.87E-03
551675	9/13/2021 - 9/20/2021	Beta	2.76E-02	3.07E-03	2.87E-03
552303	9/20/2021 - 9/27/2021	Beta	2.04E-02	3.10E-03	3.31E-03
552794	6/28/2021 - 9/27/2021	Cs-134	<1.02E-03	0.00E+00	1.02E-03
		Cs-137	<8.38E-04	0.00E+00	8.38E-04
		Be-7	1.67E-01	3.75E-02	2.61E-02
		K-40	<3.11E-02	0.00E+00	3.11E-02
552463	9/27/2021 - 10/4/2021	Beta	4.82E-02	3.73E-03	2.55E-03
552787	10/4/2021 - 10/11/2021	Beta	1.99E-02	3.01E-03	3.16E-03
553264	10/11/2021 - 10/18/2021	Beta	2.44E-02	3.41E-03	3.64E-03
553862	10/18/2021 - 10/25/2021	Beta	3.66E-02	3.75E-03	3.05E-03
554293	10/25/2021 - 11/1/2021	Beta	1.13E-02	2.66E-03	3.42E-03
554604	11/1/2021 - 11/8/2021	Beta	2.32E-02	3.10E-03	2.98E-03
555094	11/8/2021 - 11/15/2021	Beta	2.67E-02	3.44E-03	3.42E-03
555959	11/15/2021 - 11/22/2021	Beta	2.85E-02	3.44E-03	3.16E-03
556755	11/22/2021 - 11/29/2021	Beta	2.30E-02	3.08E-03	2.98E-03
557072	11/29/2021 - 12/6/2021	Beta	3.44E-02	3.39E-03	3.00E-03
557496	12/6/2021 - 12/13/2021	Beta	2.55E-02	3.05E-03	3.04E-03
557972	12/13/2021 - 12/20/2021	Beta	2.25E-02	2.75E-03	2.52E-03
558404	12/20/2021 - 12/27/2021	Beta	2.82E-02	3.06E-03	2.74E-03
559169	9/27/2021 - 12/27/2021	Cs-134	<2.51E-03	0.00E+00	2.51E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.82E-01	4.01E-02	2.79E-02
		K-40	4.11E-02	2.26E-02	2.92E-02
558620	12/27/2021 - 1/4/2022	Beta	1.35E-02	2.46E-03	2.85E-03
559978	12/27/2021 - 1/4/2022	Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	1.57E-01	1.13E-01	0.00E+00
		K-40	<3.41E-01	0.00E+00	3.41E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536568	12/28/2020 - 1/5/2021	Beta	2.28E-02	2.97E-03	2.86E-03
536774	1/5/2021 - 1/11/2021	Beta	2.60E-02	3.67E-03	3.72E-03
537316	1/11/2021 - 1/19/2021	Beta	2.46E-02	3.09E-03	3.13E-03
537681	1/19/2021 - 1/25/2021	Beta	1.93E-02	3.25E-03	3.52E-03
538071	1/25/2021 - 2/1/2021	Beta	1.90E-02	2.98E-03	3.10E-03
538318	2/1/2021 - 2/8/2021	Beta	1.70E-02	2.51E-03	2.56E-03
538544	2/8/2021 - 2/15/2021	Beta	1.45E-02	2.78E-03	3.32E-03
538815	2/15/2021 - 2/22/2021	Beta	2.05E-02	3.04E-03	3.22E-03
539056	2/22/2021 - 3/1/2021	Beta	1.81E-02	2.96E-03	3.25E-03
539271	3/1/2021 - 3/8/2021	Beta	2.17E-02	2.73E-03	2.56E-03
540059	3/8/2021 - 3/15/2021	Beta	2.37E-02	2.79E-03	2.53E-03
540718	3/15/2021 - 3/22/2021	Beta	2.06E-02	2.86E-03	2.62E-03
541431	3/22/2021 - 3/29/2021	Beta	1.33E-02	2.78E-03	3.45E-03
541953	12/28/2020 - 3/29/2021	Cs-134	<1.37E-03	0.00E+00	1.37E-03
		Cs-137	<1.46E-03	0.00E+00	1.46E-03
		Be-7	1.31E-01	3.90E-02	4.41E-02
		K-40	1.98E-02	1.67E-02	2.40E-02
541946	3/29/2021 - 4/5/2021	Beta	2.59E-02	3.29E-03	3.07E-03
542244	4/5/2021 - 4/12/2021	Beta	3.16E-02	3.55E-03	3.20E-03
542871	4/12/2021 - 4/19/2021	Beta	2.69E-02	3.30E-03	2.99E-03
543258	4/19/2021 - 4/26/2021	Beta	2.47E-02	3.24E-03	3.12E-03
544115	4/26/2021 - 5/3/2021	Beta	3.07E-02	3.47E-03	3.06E-03
544317	5/3/2021 - 5/10/2021	Beta	2.00E-02	2.97E-03	3.04E-03
544644	5/10/2021 - 5/17/2021	Beta	2.16E-02	3.21E-03	3.56E-03
545020	5/17/2021 - 5/24/2021	Beta	3.18E-02	3.60E-03	3.26E-03
545504	5/24/2021 - 6/1/2021	Beta	2.18E-02	2.61E-03	2.56E-03
545802	6/1/2021 - 6/7/2021	Beta	1.77E-02	2.93E-03	3.31E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
546033	6/7/2021 - 6/14/2021	Beta	1.16E-02	2.59E-03	3.21E-03
546910	6/14/2021 - 6/21/2021	Beta	2.06E-02	3.14E-03	3.39E-03
547196	6/21/2021 - 6/28/2021	Beta	1.84E-02	2.85E-03	2.85E-03
547734	3/29/2021 - 6/28/2021	Cs-134	<1.28E-03	0.00E+00	1.28E-03
		Cs-137	<8.38E-04	0.00E+00	8.38E-04
		Be-7	1.88E-01	3.91E-02	2.58E-02
		K-40	<2.57E-02	0.00E+00	2.57E-02
547480	6/28/2021 - 7/6/2021	Beta	1.81E-02	2.36E-03	2.29E-03
547727	7/6/2021 - 7/12/2021	Beta	2.45E-02	3.56E-03	3.70E-03
548112	7/12/2021 - 7/19/2021	Beta	1.58E-02	2.93E-03	3.43E-03
548531	7/19/2021 - 7/26/2021	Beta	2.96E-02	3.56E-03	3.44E-03
548747	7/26/2021 - 8/2/2021	Beta	3.48E-02	3.75E-03	3.30E-03
548979	8/2/2021 - 8/9/2021	Beta	2.65E-02	3.17E-03	2.69E-03
549275	8/9/2021 - 8/16/2021	Beta	2.24E-02	2.78E-03	2.62E-03
549769	8/16/2021 - 8/23/2021	Beta	1.53E-02	2.40E-03	2.51E-03
550053	8/23/2021 - 8/30/2021	Beta	3.96E-02	3.92E-03	3.17E-03
550675	8/30/2021 - 9/7/2021	Beta	2.87E-02	2.77E-03	2.18E-03
551039	9/7/2021 - 9/13/2021	Beta	3.13E-02	3.97E-03	3.89E-03
551676	9/13/2021 - 9/20/2021	Beta	3.31E-02	3.27E-03	2.85E-03
552304	9/20/2021 - 9/27/2021	Beta	2.35E-02	3.27E-03	3.32E-03
552795	6/28/2021 - 9/27/2021	Cs-134	<1.60E-03	0.00E+00	1.60E-03
		Cs-137	<1.31E-03	0.00E+00	1.31E-03
		Be-7	1.68E-01	3.92E-02	2.75E-02
		K-40	<3.78E-02	0.00E+00	3.78E-02
552464	9/27/2021 - 10/4/2021	Beta	5.87E-02	4.07E-03	2.56E-03
552788	10/4/2021 - 10/11/2021	Beta	2.20E-02	3.12E-03	3.15E-03
553265	10/11/2021 - 10/18/2021	Beta	2.82E-02	3.57E-03	3.63E-03
553863	10/18/2021 - 10/25/2021	Beta	4.31E-02	4.03E-03	3.07E-03
554294	10/25/2021 - 11/1/2021	Beta	1.53E-02	2.88E-03	3.41E-03

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
554605	11/1/2021 - 11/8/2021	Beta	2.57E-02	3.26E-03	3.04E-03
555095	11/8/2021 - 11/15/2021	Beta	3.43E-02	3.76E-03	3.42E-03
555960	11/15/2021 - 11/22/2021	Beta	3.11E-02	3.53E-03	3.11E-03
556756	11/22/2021 - 11/29/2021	Beta	2.88E-02	3.38E-03	3.04E-03
557073	11/29/2021 - 12/6/2021	Beta	4.41E-02	3.69E-03	2.93E-03
557497	12/6/2021 - 12/13/2021	Beta	2.91E-02	3.18E-03	3.03E-03
557973	12/13/2021 - 12/20/2021	Beta	2.62E-02	2.92E-03	2.53E-03
558405	12/20/2021 - 12/27/2021	Beta	3.54E-02	3.32E-03	2.73E-03
559170	9/27/2021 - 12/27/2021	Cs-134	<9.87E-04	0.00E+00	9.87E-04
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.59E-01	3.78E-02	3.41E-02
		K-40	3.85E-02	1.64E-02	4.54E-03
558621	12/27/2021 - 1/4/2022	Beta	1.56E-02	2.57E-03	2.84E-03
559979	12/27/2021 - 1/4/2022	Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	2.12E-01	1.39E-01	0.00E+00
		K-40	2.46E-01	1.62E-01	1.75E-01

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
536569	12/28/2020 - 1/5/2021	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.56E-01	1.90E-01	2.33E-01
536782	1/5/2021 - 1/11/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<9.35E-02	0.00E+00	9.35E-02
		K-40	5.32E-01	2.59E-01	3.43E-01
537317	1/11/2021 - 1/19/2021	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.27E-02	0.00E+00	1.27E-02
		Be-7	<9.12E-02	0.00E+00	9.12E-02
		K-40	1.58E-01	1.08E-01	1.42E-01
537682	1/19/2021 - 1/25/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	4.99E-01	2.07E-01	2.14E-01
538072	1/25/2021 - 2/1/2021	I-131	<1.86E-02	0.00E+00	1.86E-02

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538072	1/25/2021 - 2/1/2021	Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	5.64E-01	2.03E-01	2.05E-01
538319	2/1/2021 - 2/8/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.03E-01	2.07E-01	2.40E-01
538545	2/8/2021 - 2/15/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	3.93E-01	1.71E-01	1.88E-01
538816	2/15/2021 - 2/22/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	4.78E-01	1.88E-01	1.94E-01
539057	2/22/2021 - 3/1/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<9.89E-02	0.00E+00	9.89E-02
		K-40	5.45E-01	1.90E-01	1.69E-01
539272	3/1/2021 - 3/8/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	6.91E-01	2.15E-01	1.82E-01
540060	3/8/2021 - 3/15/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	4.41E-01	1.81E-01	1.90E-01
540719	3/15/2021 - 3/22/2021	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	6.75E-01	2.10E-01	1.67E-01
541432	3/22/2021 - 3/29/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-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	6.08E-01	1.92E-01	1.35E-01
541954	3/29/2021 - 4/5/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.34E-01	1.87E-01	1.65E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542245	4/5/2021 - 4/12/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	5.40E-01	1.86E-01	1.48E-01
542872	4/12/2021 - 4/19/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	4.86E-01	1.78E-01	1.51E-01
543259	4/19/2021 - 4/26/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<9.36E-02	0.00E+00	9.36E-02
		K-40	6.32E-01	1.82E-01	3.29E-02
544116	4/26/2021 - 5/3/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	5.48E-01	2.93E-01	3.43E-01
544318	5/3/2021 - 5/10/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<6.46E-01	0.00E+00	6.46E-01
544645	5/10/2021 - 5/17/2021	I-131	<3.57E-02	0.00E+00	3.57E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<2.30E-01	0.00E+00	2.30E-01
		K-40	<5.80E-01	0.00E+00	5.80E-01
545021	5/17/2021 - 5/24/2021	I-131	<3.26E-02	0.00E+00	3.26E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	6.07E-01	2.61E-01	1.97E-01
545505	5/24/2021 - 6/1/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	6.60E-01	3.27E-01	4.09E-01
545803	6/1/2021 - 6/7/2021	I-131	<3.54E-02	0.00E+00	3.54E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	8.60E-01	3.52E-01	3.02E-01
546034	6/7/2021 - 6/14/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	6.01E-01	2.80E-01	2.62E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546911	6/14/2021 - 6/21/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	5.12E-01	3.11E-01	4.11E-01
547197	6/21/2021 - 6/28/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<2.14E-01	0.00E+00	2.14E-01
		K-40	5.19E-01	2.86E-01	3.42E-01
547481	6/28/2021 - 7/6/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	4.50E-01	2.97E-01	4.17E-01
547735	7/6/2021 - 7/12/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<3.43E-02	0.00E+00	3.43E-02
		Cs-137	<2.93E-02	0.00E+00	2.93E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<6.63E-01	0.00E+00	6.63E-01
548113	7/12/2021 - 7/19/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<2.05E-01	0.00E+00	2.05E-01
		K-40	<5.65E-01	0.00E+00	5.65E-01
548532	7/19/2021 - 7/26/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<3.43E-02	0.00E+00	3.43E-02
		Cs-137	<3.09E-02	0.00E+00	3.09E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	3.70E-01	2.75E-01	3.82E-01
548748	7/26/2021 - 8/2/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.96E-01	0.00E+00	1.96E-01
		K-40	2.69E-01	2.51E-01	3.79E-01
548980	8/2/2021 - 8/9/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.92E-02	0.00E+00	2.92E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
549276	8/9/2021 - 8/16/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	5.80E-01	2.46E-01	6.84E-02
549770	8/16/2021 - 8/23/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<4.84E-01	0.00E+00	4.84E-01

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550054	8/23/2021 - 8/30/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	4.58E-01	2.84E-01	3.67E-01
550676	8/30/2021 - 9/7/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	5.41E-01	2.25E-01	6.11E-02
551040	9/7/2021 - 9/13/2021	I-131	<3.19E-02	0.00E+00	3.19E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<2.04E-01	0.00E+00	2.04E-01
		K-40	7.00E-01	3.35E-01	3.47E-01
551677	9/13/2021 - 9/20/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.47E-01	0.00E+00	5.47E-01
552305	9/20/2021 - 9/27/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	2.90E-01	1.94E-01	2.18E-01
552465	9/27/2021 - 10/4/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<2.93E-02	0.00E+00	2.93E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	6.12E-01	2.75E-01	2.32E-01
552796	10/4/2021 - 10/11/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.62E-02	0.00E+00	2.62E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
553266	10/11/2021 - 10/18/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	4.46E-01	2.43E-01	2.49E-01
553864	10/18/2021 - 10/25/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<5.58E-01	0.00E+00	5.58E-01
554295	10/25/2021 - 11/1/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	5.95E-01	2.75E-01	2.66E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554606	11/1/2021 - 11/8/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.84E-02	0.00E+00	2.84E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<6.54E-01	0.00E+00	6.54E-01
555096	11/8/2021 - 11/15/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<3.21E-02	0.00E+00	3.21E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.75E-01	0.00E+00	5.75E-01
555961	11/15/2021 - 11/22/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<5.62E-01	0.00E+00	5.62E-01
556757	11/22/2021 - 11/29/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	4.41E-01	2.27E-01	2.17E-01
557074	11/29/2021 - 12/6/2021	I-131	<3.27E-02	0.00E+00	3.27E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	2.81E-01	2.63E-01	3.98E-01
557498	12/6/2021 - 12/13/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<3.24E-02	0.00E+00	3.24E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	<5.66E-01	0.00E+00	5.66E-01
557974	12/13/2021 - 12/20/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	5.74E-01	2.64E-01	2.25E-01
558406	12/20/2021 - 12/27/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<2.23E-01	0.00E+00	2.23E-01
		K-40	<5.35E-01	0.00E+00	5.35E-01
558622	12/27/2021 - 1/4/2022	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	6.17E-01	2.38E-01	5.97E-02

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536570	12/28/2020 - 1/5/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<8.77E-02	0.00E+00	8.77E-02

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536570	12/28/2020 - 1/5/2021	K-40	6.13E-01	1.86E-01	1.55E-01
536783	1/5/2021 - 1/11/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	6.67E-01	2.34E-01	2.20E-01
537318	1/11/2021 - 1/19/2021	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.18E-02	0.00E+00	1.18E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<9.19E-02	0.00E+00	9.19E-02
		K-40	2.73E-01	1.11E-01	2.95E-02
537683	1/19/2021 - 1/25/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	<4.21E-01	0.00E+00	4.21E-01
538073	1/25/2021 - 2/1/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	5.63E-01	2.23E-01	2.66E-01
538320	2/1/2021 - 2/8/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<8.80E-02	0.00E+00	8.80E-02
		K-40	4.97E-01	1.88E-01	1.89E-01
538546	2/8/2021 - 2/15/2021	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	6.25E-01	2.11E-01	2.10E-01
538817	2/15/2021 - 2/22/2021	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	3.79E-01	1.77E-01	2.11E-01
539058	2/22/2021 - 3/1/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	4.12E-01	1.58E-01	1.21E-01
539273	3/1/2021 - 3/8/2021	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	5.51E-01	1.99E-01	2.02E-01
540061	3/8/2021 - 3/15/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540061	3/8/2021 - 3/15/2021	Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.53E-01	2.05E-01	2.55E-01
540720	3/15/2021 - 3/22/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	3.54E-01	1.42E-01	1.04E-01
541433	3/22/2021 - 3/29/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	6.80E-01	2.08E-01	1.70E-01
541955	3/29/2021 - 4/5/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.87E-01	1.79E-01	2.16E-01
542246	4/5/2021 - 4/12/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	6.07E-01	1.80E-01	3.36E-02
542873	4/12/2021 - 4/19/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.80E-01	1.64E-01	1.74E-01
543260	4/19/2021 - 4/26/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	4.55E-01	1.75E-01	1.67E-01
544117	4/26/2021 - 5/3/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<4.83E-01	0.00E+00	4.83E-01
544319	5/3/2021 - 5/10/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	4.26E-01	2.76E-01	3.65E-01
544646	5/10/2021 - 5/17/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.08E-01	2.49E-01	2.33E-01
545022	5/17/2021 - 5/24/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545022	5/17/2021 - 5/24/2021	Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	6.12E-01	2.80E-01	2.65E-01
545506	5/24/2021 - 6/1/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	4.60E-01	2.04E-01	5.94E-02
545804	6/1/2021 - 6/7/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<3.33E-02	0.00E+00	3.33E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	7.69E-01	3.02E-01	7.72E-02
546035	6/7/2021 - 6/14/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<3.23E-02	0.00E+00	3.23E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	<4.86E-01	0.00E+00	4.86E-01
546912	6/14/2021 - 6/21/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.78E-02	0.00E+00	2.78E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<5.30E-01	0.00E+00	5.30E-01
547198	6/21/2021 - 6/28/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	3.49E-01	2.71E-01	3.87E-01
547482	6/28/2021 - 7/6/2021	I-131	<1.31E-02	0.00E+00	1.31E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	3.47E-01	1.91E-01	1.91E-01
547736	7/6/2021 - 7/12/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	<5.07E-01	0.00E+00	5.07E-01
548114	7/12/2021 - 7/19/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<3.02E-02	0.00E+00	3.02E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	5.76E-01	2.60E-01	2.25E-01
548533	7/19/2021 - 7/26/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<4.22E-01	0.00E+00	4.22E-01
548749	7/26/2021 - 8/2/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<2.82E-02	0.00E+00	2.82E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548749	7/26/2021 - 8/2/2021	Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.90E-02	0.00E+00	2.90E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	3.17E-01	1.97E-01	2.03E-01
548981	8/2/2021 - 8/9/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<5.16E-01	0.00E+00	5.16E-01
549277	8/9/2021 - 8/16/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.89E-02	0.00E+00	2.89E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<4.66E-01	0.00E+00	4.66E-01
549771	8/16/2021 - 8/23/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<3.36E-02	0.00E+00	3.36E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	4.82E-01	2.44E-01	2.35E-01
550055	8/23/2021 - 8/30/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.00E-01	0.00E+00	5.00E-01
550677	8/30/2021 - 9/7/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<4.31E-01	0.00E+00	4.31E-01
551041	9/7/2021 - 9/13/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<3.39E-02	0.00E+00	3.39E-02
		Cs-137	<2.90E-02	0.00E+00	2.90E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	<7.07E-01	0.00E+00	7.07E-01
551678	9/13/2021 - 9/20/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<2.29E-01	0.00E+00	2.29E-01
		K-40	<4.07E-01	0.00E+00	4.07E-01
552306	9/20/2021 - 9/27/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<3.05E-02	0.00E+00	3.05E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<6.44E-01	0.00E+00	6.44E-01
552466	9/27/2021 - 10/4/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	<4.24E-01	0.00E+00	4.24E-01

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552797	10/4/2021 - 10/11/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<8.99E-02	0.00E+00	8.99E-02
		K-40	4.88E-01	1.66E-01	1.14E-01
553267	10/11/2021 - 10/18/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	3.66E-01	2.33E-01	2.87E-01
553865	10/18/2021 - 10/25/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<5.16E-03	0.00E+00	5.16E-03
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<7.99E-02	0.00E+00	7.99E-02
		K-40	<4.79E-01	0.00E+00	4.79E-01
554296	10/25/2021 - 11/1/2021	I-131	<2.98E-02	0.00E+00	2.98E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.87E-02	0.00E+00	2.87E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	6.22E-01	2.98E-01	3.28E-01
554607	11/1/2021 - 11/8/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<4.62E-01	0.00E+00	4.62E-01
555097	11/8/2021 - 11/15/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	6.60E-01	2.59E-01	6.62E-02
555962	11/15/2021 - 11/22/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	<3.53E-01	0.00E+00	3.53E-01
556758	11/22/2021 - 11/29/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<4.15E-01	0.00E+00	4.15E-01
557075	11/29/2021 - 12/6/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<3.47E-02	0.00E+00	3.47E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	<4.66E-01	0.00E+00	4.66E-01
557499	12/6/2021 - 12/13/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	6.68E-01	3.05E-01	3.28E-01

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

Sample Point 103 [INDICATOR - NE @ 4.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557975	12/13/2021 - 12/20/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<4.47E-01	0.00E+00	4.47E-01
558407	12/20/2021 - 12/27/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<4.42E-01	0.00E+00	4.42E-01
558623	12/27/2021 - 1/4/2022	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<2.75E-02	0.00E+00	2.75E-02
		Cs-137	<2.26E-02	0.00E+00	2.26E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	3.56E-01	2.64E-01	3.81E-01

Sample Point 106 [INDICATOR - E @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546102	5/24/2021 - 6/1/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	2.32E-01	1.79E-01	2.34E-01
546104	6/1/2021 - 6/7/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<3.58E-02	0.00E+00	3.58E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	5.63E-01	3.47E-01	4.53E-01
546119	6/7/2021 - 6/14/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	<5.21E-01	0.00E+00	5.21E-01
546913	6/14/2021 - 6/21/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	6.30E-01	3.02E-01	3.33E-01
547199	6/21/2021 - 6/28/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<4.79E-01	0.00E+00	4.79E-01
547483	6/28/2021 - 7/6/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<4.15E-01	0.00E+00	4.15E-01
547737	7/6/2021 - 7/12/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01

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

Sample Point 106 [INDICATOR - E @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547737	7/6/2021 - 7/12/2021	K-40	<4.11E-01	0.00E+00	4.11E-01
548115	7/12/2021 - 7/19/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	<5.52E-01	0.00E+00	5.52E-01
548534	7/19/2021 - 7/26/2021	I-131	<1.05E-02	0.00E+00	1.05E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<5.28E-01	0.00E+00	5.28E-01
548750	7/26/2021 - 8/2/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<3.20E-02	0.00E+00	3.20E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	3.74E-01	2.18E-01	2.20E-01
548982	8/2/2021 - 8/9/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	4.73E-01	2.46E-01	2.50E-01
549278	8/9/2021 - 8/16/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	4.31E-01	2.22E-01	1.98E-01
549772	8/16/2021 - 8/23/2021	I-131	<2.94E-02	0.00E+00	2.94E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	2.91E-01	2.02E-01	2.39E-01
550056	8/23/2021 - 8/30/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<4.48E-01	0.00E+00	4.48E-01
550678	8/30/2021 - 9/7/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<4.41E-03	0.00E+00	4.41E-03
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	3.58E-01	2.00E-01	2.14E-01
551042	9/7/2021 - 9/13/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<3.72E-02	0.00E+00	3.72E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<2.38E-01	0.00E+00	2.38E-01
		K-40	6.06E-01	2.69E-01	7.82E-02
551679	9/13/2021 - 9/20/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 106 [INDICATOR - E @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551679	9/13/2021 - 9/20/2021	Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	4.88E-01	2.21E-01	6.61E-02
552307	9/20/2021 - 9/27/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.16E-01	0.00E+00	5.16E-01
552467	9/27/2021 - 10/4/2021	I-131	<1.36E-02	0.00E+00	1.36E-02
		Cs-134	<3.44E-02	0.00E+00	3.44E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	5.41E-01	2.60E-01	2.55E-01
552798	10/4/2021 - 10/11/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	<5.63E-01	0.00E+00	5.63E-01
553268	10/11/2021 - 10/18/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	5.11E-01	2.69E-01	3.02E-01
553866	10/18/2021 - 10/25/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<5.61E-01	0.00E+00	5.61E-01
554297	10/25/2021 - 11/1/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	<4.66E-01	0.00E+00	4.66E-01
554608	11/1/2021 - 11/8/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<3.93E-01	0.00E+00	3.93E-01
555098	11/8/2021 - 11/15/2021	I-131	<2.98E-02	0.00E+00	2.98E-02
		Cs-134	<3.60E-02	0.00E+00	3.60E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	8.13E-01	2.90E-01	6.68E-02
555963	11/15/2021 - 11/22/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	5.09E-01	2.56E-01	2.69E-01
556759	11/22/2021 - 11/29/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02

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

Sample Point 106 [INDICATOR - E @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556759	11/22/2021 - 11/29/2021	Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.96E-01	0.00E+00	1.96E-01
		K-40	<4.30E-01	0.00E+00	4.30E-01
557076	11/29/2021 - 12/6/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
557500	12/6/2021 - 12/13/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<5.09E-01	0.00E+00	5.09E-01
557976	12/13/2021 - 12/20/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<4.36E-01	0.00E+00	4.36E-01
558408	12/20/2021 - 12/27/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<3.01E-02	0.00E+00	3.01E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	5.62E-01	2.39E-01	6.62E-02
558624	12/27/2021 - 1/4/2022	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<3.85E-01	0.00E+00	3.85E-01
Sample Point 120 [INDICATOR - NNE @ 0.46 miles]					
536571	12/28/2020 - 1/5/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.29E-02	0.00E+00	1.29E-02
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	4.48E-01	1.73E-01	1.82E-01
536784	1/5/2021 - 1/11/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	5.19E-01	2.40E-01	3.03E-01
537319	1/11/2021 - 1/19/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<9.43E-02	0.00E+00	9.43E-02
		K-40	4.34E-01	1.52E-01	1.20E-01
537684	1/19/2021 - 1/25/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	5.27E-01	2.28E-01	2.70E-01

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538074	1/25/2021 - 2/1/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<8.78E-02	0.00E+00	8.78E-02
		K-40	5.69E-01	2.08E-01	2.21E-01
538321	2/1/2021 - 2/8/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.81E-01	1.99E-01	2.27E-01
538547	2/8/2021 - 2/15/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	5.35E-01	1.71E-01	3.45E-02
538818	2/15/2021 - 2/22/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<9.12E-02	0.00E+00	9.12E-02
		K-40	3.59E-01	2.13E-01	3.05E-01
539059	2/22/2021 - 3/1/2021	I-131	<1.91E-02	0.00E+00	1.91E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	5.00E-01	1.95E-01	2.03E-01
539274	3/1/2021 - 3/8/2021	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	4.46E-01	2.12E-01	2.76E-01
540062	3/8/2021 - 3/15/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<9.18E-02	0.00E+00	9.18E-02
		K-40	4.81E-01	2.02E-01	2.36E-01
540721	3/15/2021 - 3/22/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	4.36E-01	1.64E-01	1.41E-01
541434	3/22/2021 - 3/29/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<9.89E-02	0.00E+00	9.89E-02
		K-40	2.51E-01	1.52E-01	1.99E-01
541956	3/29/2021 - 4/5/2021	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.42E-01	1.61E-01	1.20E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542247	4/5/2021 - 4/12/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<9.29E-02	0.00E+00	9.29E-02
		K-40	4.57E-01	1.64E-01	1.18E-01
542874	4/12/2021 - 4/19/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	5.74E-01	2.30E-01	2.78E-01
543261	4/19/2021 - 4/26/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	3.89E-01	2.02E-01	2.69E-01
544118	4/26/2021 - 5/3/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<3.03E-02	0.00E+00	3.03E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<4.29E-01	0.00E+00	4.29E-01
544320	5/3/2021 - 5/10/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	4.37E-01	2.89E-01	3.94E-01
544647	5/10/2021 - 5/17/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<2.64E-02	0.00E+00	2.64E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<4.21E-01	0.00E+00	4.21E-01
545023	5/17/2021 - 5/24/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<4.55E-01	0.00E+00	4.55E-01
545507	5/24/2021 - 6/1/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<4.43E-01	0.00E+00	4.43E-01
545805	6/1/2021 - 6/7/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<6.00E-03	0.00E+00	6.00E-03
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<6.29E-01	0.00E+00	6.29E-01
546036	6/7/2021 - 6/14/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<9.93E-02	0.00E+00	9.93E-02
		K-40	<5.69E-01	0.00E+00	5.69E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546914	6/14/2021 - 6/21/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<4.62E-01	0.00E+00	4.62E-01
547200	6/21/2021 - 6/28/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	<5.34E-01	0.00E+00	5.34E-01
547484	6/28/2021 - 7/6/2021	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	<4.39E-01	0.00E+00	4.39E-01
547738	7/6/2021 - 7/12/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<7.31E-01	0.00E+00	7.31E-01
548116	7/12/2021 - 7/19/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.35E-01	0.00E+00	5.35E-01
548535	7/19/2021 - 7/26/2021	I-131	<2.98E-02	0.00E+00	2.98E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<4.53E-03	0.00E+00	4.53E-03
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<4.74E-01	0.00E+00	4.74E-01
548751	7/26/2021 - 8/2/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	4.83E-01	2.61E-01	2.74E-01
548983	8/2/2021 - 8/9/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<5.06E-01	0.00E+00	5.06E-01
549279	8/9/2021 - 8/16/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<4.02E-01	0.00E+00	4.02E-01
549773	8/16/2021 - 8/23/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<3.24E-02	0.00E+00	3.24E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	<5.27E-01	0.00E+00	5.27E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550057	8/23/2021 - 8/30/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	4.33E-01	2.07E-01	6.52E-02
550679	8/30/2021 - 9/7/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<3.82E-01	0.00E+00	3.82E-01
551043	9/7/2021 - 9/13/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<2.99E-02	0.00E+00	2.99E-02
		Cs-137	<3.25E-02	0.00E+00	3.25E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	5.82E-01	3.03E-01	3.10E-01
551680	9/13/2021 - 9/20/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	3.61E-01	2.41E-01	3.09E-01
552308	9/20/2021 - 9/27/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.26E-01	0.00E+00	5.26E-01
552468	9/27/2021 - 10/4/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
552799	10/4/2021 - 10/11/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	<5.54E-01	0.00E+00	5.54E-01
553269	10/11/2021 - 10/18/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01
553867	10/18/2021 - 10/25/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	<4.21E-01	0.00E+00	4.21E-01
554298	10/25/2021 - 11/1/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.24E-02	0.00E+00	2.24E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	3.99E-01	2.45E-01	3.04E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554609	11/1/2021 - 11/8/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	<5.01E-01	0.00E+00	5.01E-01
555099	11/8/2021 - 11/15/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	4.48E-01	2.14E-01	6.74E-02
555964	11/15/2021 - 11/22/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-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	4.75E-01	2.21E-01	6.78E-02
556760	11/22/2021 - 11/29/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	4.63E-01	2.64E-01	3.08E-01
557077	11/29/2021 - 12/6/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<6.63E-01	0.00E+00	6.63E-01
557501	12/6/2021 - 12/13/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<3.03E-02	0.00E+00	3.03E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	3.97E-01	2.01E-01	6.72E-02
557977	12/13/2021 - 12/20/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
558409	12/20/2021 - 12/27/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<3.90E-01	0.00E+00	3.90E-01
558625	12/27/2021 - 1/4/2022	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<2.93E-02	0.00E+00	2.93E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	4.09E-01	2.53E-01	3.32E-01

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536572	12/28/2020 - 1/5/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.11E-02	0.00E+00	1.11E-02
		Cs-137	<1.28E-02	0.00E+00	1.28E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536572	12/28/2020 - 1/5/2021	K-40	5.11E-01	1.79E-01	1.80E-01
536785	1/5/2021 - 1/11/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	7.61E-01	2.50E-01	2.42E-01
537320	1/11/2021 - 1/19/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<8.25E-02	0.00E+00	8.25E-02
		K-40	5.47E-01	1.83E-01	1.68E-01
537685	1/19/2021 - 1/25/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	4.37E-01	1.83E-01	1.80E-01
538075	1/25/2021 - 2/1/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.25E-01	1.69E-01	1.60E-01
538322	2/1/2021 - 2/8/2021	I-131	<1.27E-02	0.00E+00	1.27E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.01E-02	0.00E+00	1.01E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<2.77E-01	0.00E+00	2.77E-01
538548	2/8/2021 - 2/15/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<9.91E-02	0.00E+00	9.91E-02
		K-40	5.22E-01	1.91E-01	1.91E-01
538819	2/15/2021 - 2/22/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	5.72E-01	2.00E-01	2.00E-01
539060	2/22/2021 - 3/1/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	3.93E-01	1.65E-01	1.67E-01
539275	3/1/2021 - 3/8/2021	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<8.83E-02	0.00E+00	8.83E-02
		K-40	4.59E-01	1.74E-01	1.59E-01
540063	3/8/2021 - 3/15/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540063	3/8/2021 - 3/15/2021	Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	4.74E-01	1.93E-01	2.16E-01
540722	3/15/2021 - 3/22/2021	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	3.25E-04	7.09E-02	1.32E-01
		K-40	5.77E-01	1.94E-01	1.68E-01
541435	3/22/2021 - 3/29/2021	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	4.24E-01	1.49E-01	3.38E-02
541957	3/29/2021 - 4/5/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<6.07E-03	0.00E+00	6.07E-03
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	4.30E-01	1.86E-01	2.16E-01
542248	4/5/2021 - 4/12/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	4.28E-01	1.55E-01	3.63E-02
542875	4/12/2021 - 4/19/2021	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	2.27E-01	1.58E-01	2.25E-01
543262	4/19/2021 - 4/26/2021	I-131	<1.56E-02	0.00E+00	1.56E-02
		Cs-134	<1.47E-02	0.00E+00	1.47E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	5.54E-01	1.78E-01	3.66E-02
544119	4/26/2021 - 5/3/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<3.20E-02	0.00E+00	3.20E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<3.53E-01	0.00E+00	3.53E-01
544321	5/3/2021 - 5/10/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<4.88E-01	0.00E+00	4.88E-01
544648	5/10/2021 - 5/17/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<3.16E-02	0.00E+00	3.16E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	3.46E-01	1.87E-01	6.70E-02
545024	5/17/2021 - 5/24/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545024	5/17/2021 - 5/24/2021	Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	3.77E-01	2.04E-01	7.30E-02
545508	5/24/2021 - 6/1/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<2.20E-02	0.00E+00	2.20E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<1.75E-01	0.00E+00	1.75E-01
		K-40	6.04E-01	2.33E-01	5.85E-02
545806	6/1/2021 - 6/7/2021	I-131	<3.32E-02	0.00E+00	3.32E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<3.19E-02	0.00E+00	3.19E-02
		Be-7	<2.15E-01	0.00E+00	2.15E-01
		K-40	2.33E-01	3.08E-01	5.06E-01
546037	6/7/2021 - 6/14/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<4.50E-01	0.00E+00	4.50E-01
546915	6/14/2021 - 6/21/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	<4.69E-01	0.00E+00	4.69E-01
547201	6/21/2021 - 6/28/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<5.26E-03	0.00E+00	5.26E-03
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	1.64E-01	1.61E-01	2.26E-01
547485	6/28/2021 - 7/6/2021	I-131	<2.75E-02	0.00E+00	2.75E-02
		Cs-134	<2.21E-02	0.00E+00	2.21E-02
		Cs-137	<2.40E-02	0.00E+00	2.40E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<4.62E-01	0.00E+00	4.62E-01
547739	7/6/2021 - 7/12/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	4.32E-01	2.26E-01	7.81E-02
548117	7/12/2021 - 7/19/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	1.51E-01	1.47E-01	1.97E-01
548536	7/19/2021 - 7/26/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	2.89E-01	2.35E-01	3.33E-01
548752	7/26/2021 - 8/2/2021	I-131	<2.40E-02	0.00E+00	2.40E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548752	7/26/2021 - 8/2/2021	Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<4.38E-01	0.00E+00	4.38E-01
548984	8/2/2021 - 8/9/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.17E-02	0.00E+00	2.18E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<3.95E-01	0.00E+00	3.95E-01
549280	8/9/2021 - 8/16/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	4.97E-01	2.63E-01	2.82E-01
549774	8/16/2021 - 8/23/2021	I-131	<3.19E-02	0.00E+00	3.19E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<3.40E-02	0.00E+00	3.40E-02
		Be-7	<2.13E-01	0.00E+00	2.13E-01
		K-40	<5.27E-01	0.00E+00	5.27E-01
550058	8/23/2021 - 8/30/2021	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<2.57E-02	0.00E+00	2.57E-02
		Cs-137	<2.22E-02	0.00E+00	2.22E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<4.43E-01	0.00E+00	4.43E-01
550680	8/30/2021 - 9/7/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<2.80E-02	0.00E+00	2.80E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<7.46E-02	0.00E+00	7.46E-02
		K-40	3.55E-01	2.36E-01	3.09E-01
551044	9/7/2021 - 9/13/2021	I-131	<3.13E-02	0.00E+00	3.13E-02
		Cs-134	<3.72E-02	0.00E+00	3.72E-02
		Cs-137	<2.53E-02	0.00E+00	2.53E-02
		Be-7	<2.01E-01	0.00E+00	2.01E-01
		K-40	4.25E-01	2.64E-01	3.08E-01
551681	9/13/2021 - 9/20/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<2.44E-02	0.00E+00	2.44E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<4.95E-01	0.00E+00	4.95E-01
552309	9/20/2021 - 9/27/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<5.89E-01	0.00E+00	5.89E-01
552469	9/27/2021 - 10/4/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.24E-02	0.00E+00	2.24E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.16E-01	2.43E-01	2.15E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552800	10/4/2021 - 10/11/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	<5.56E-01	0.00E+00	5.56E-01
553270	10/11/2021 - 10/18/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<9.81E-02	0.00E+00	9.81E-02
		K-40	<5.25E-01	0.00E+00	5.25E-01
553868	10/18/2021 - 10/25/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	2.29E-01	1.86E-01	2.42E-01
554299	10/25/2021 - 11/1/2021	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	3.01E-01	2.23E-01	2.94E-01
554610	11/1/2021 - 11/8/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<3.06E-02	0.00E+00	3.06E-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	4.39E-01	2.60E-01	3.15E-01
555100	11/8/2021 - 11/15/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	3.85E-01	1.95E-01	6.53E-02
555965	11/15/2021 - 11/22/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	<5.73E-01	0.00E+00	5.73E-01
556761	11/22/2021 - 11/29/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	<5.20E-01	0.00E+00	5.20E-01
557078	11/29/2021 - 12/6/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<6.40E-01	0.00E+00	6.40E-01
557502	12/6/2021 - 12/13/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<5.12E-01	0.00E+00	5.12E-01

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

Sample Point 121 [INDICATOR - NE @ 0.47 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557978	12/13/2021 - 12/20/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<4.78E-01	0.00E+00	4.78E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558410	12/20/2021 - 12/27/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558626	12/27/2021 - 1/4/2022	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	2.44E-01	1.65E-01	1.77E-01

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536573	12/28/2020 - 1/5/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<9.25E-03	0.00E+00	9.25E-03
		Cs-137	<9.72E-03	0.00E+00	9.72E-03
		Be-7	<8.67E-02	0.00E+00	8.67E-02
		K-40	<2.99E-01	0.00E+00	2.99E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536786	1/5/2021 - 1/11/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	6.65E-01	2.54E-01	2.87E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537321	1/11/2021 - 1/19/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	2.45E-01	1.21E-01	1.28E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537686	1/19/2021 - 1/25/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	5.00E-01	1.76E-01	3.99E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538076	1/25/2021 - 2/1/2021	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	7.00E-01	2.17E-01	1.93E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538323	2/1/2021 - 2/8/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<2.93E-01	0.00E+00	2.93E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538549	2/8/2021 - 2/15/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<9.04E-03	0.00E+00	9.04E-03
		Be-7	<8.34E-02	0.00E+00	8.34E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538549	2/8/2021 - 2/15/2021	K-40	<3.33E-01	0.00E+00	3.33E-01
538820	2/15/2021 - 2/22/2021	I-131	<1.27E-02	0.00E+00	1.27E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<8.75E-02	0.00E+00	8.75E-02
		K-40	<3.36E-01	0.00E+00	3.36E-01
539061	2/22/2021 - 3/1/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-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	4.37E-01	1.99E-01	2.43E-01
539276	3/1/2021 - 3/8/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	3.83E-01	1.87E-01	2.37E-01
540064	3/8/2021 - 3/15/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<9.64E-02	0.00E+00	9.64E-02
		K-40	<3.17E-01	0.00E+00	3.17E-01
540723	3/15/2021 - 3/22/2021	I-131	<1.58E-02	0.00E+00	1.58E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	5.03E-01	1.82E-01	1.70E-01
541436	3/22/2021 - 3/29/2021	I-131	<1.21E-02	0.00E+00	1.21E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.28E-02	0.00E+00	1.28E-02
		Be-7	<8.91E-02	0.00E+00	8.91E-02
		K-40	<2.65E-01	0.00E+00	2.65E-01
541958	3/29/2021 - 4/5/2021	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	<2.81E-01	0.00E+00	2.81E-01
542249	4/5/2021 - 4/12/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	6.36E-01	1.96E-01	1.39E-01
542876	4/12/2021 - 4/19/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<9.20E-02	0.00E+00	9.20E-02
		K-40	4.71E-01	1.57E-01	3.36E-02
543263	4/19/2021 - 4/26/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543263	4/19/2021 - 4/26/2021	Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	5.41E-01	2.32E-01	2.90E-01
544120	4/26/2021 - 5/3/2021	I-131	<2.36E-02	0.00E+00	2.36E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<5.91E-01	0.00E+00	5.91E-01
544322	5/3/2021 - 5/10/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<5.24E-01	0.00E+00	5.24E-01
544649	5/10/2021 - 5/17/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	5.20E-01	3.01E-01	3.89E-01
545025	5/17/2021 - 5/24/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	5.61E-01	2.76E-01	2.93E-01
545509	5/24/2021 - 6/1/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<2.55E-02	0.00E+00	2.55E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	2.82E-01	1.64E-01	6.37E-02
545807	6/1/2021 - 6/7/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<3.65E-02	0.00E+00	3.65E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	3.77E-01	3.13E-01	4.60E-01
546038	6/7/2021 - 6/14/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	2.93E-01	2.17E-01	2.87E-01
546916	6/14/2021 - 6/21/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	2.09E-01	1.60E-01	1.75E-01
547202	6/21/2021 - 6/28/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.21E-02	0.00E+00	2.21E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	3.36E-01	2.16E-01	2.39E-01
547486	6/28/2021 - 7/6/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547486	6/28/2021 - 7/6/2021	Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	4.12E-01	1.92E-01	5.87E-02
547740	7/6/2021 - 7/12/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<3.35E-02	0.00E+00	3.35E-02
		Cs-137	<3.02E-02	0.00E+00	3.02E-02
		Be-7	<2.31E-01	0.00E+00	2.31E-01
		K-40	<6.80E-01	0.00E+00	6.80E-01
548118	7/12/2021 - 7/19/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<3.09E-02	0.00E+00	3.09E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<2.04E-01	0.00E+00	2.04E-01
		K-40	3.30E-01	2.32E-01	2.94E-01
548537	7/19/2021 - 7/26/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	4.41E-01	2.60E-01	3.14E-01
548753	7/26/2021 - 8/2/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<5.06E-03	0.00E+00	5.06E-03
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<9.82E-02	0.00E+00	9.82E-02
		K-40	3.59E-01	1.88E-01	6.49E-02
548985	8/2/2021 - 8/9/2021	I-131	<3.28E-02	0.00E+00	3.28E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	<5.56E-01	0.00E+00	5.56E-01
549281	8/9/2021 - 8/16/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	4.51E-01	2.80E-01	3.65E-01
549775	8/16/2021 - 8/23/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<5.11E-01	0.00E+00	5.11E-01
550059	8/23/2021 - 8/30/2021	I-131	<3.51E-02	0.00E+00	3.51E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.67E-02	0.00E+00	2.67E-02
		Be-7	<2.14E-01	0.00E+00	2.14E-01
		K-40	6.76E-01	2.87E-01	7.96E-02
550681	8/30/2021 - 9/7/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<4.45E-01	0.00E+00	4.45E-01
551045	9/7/2021 - 9/13/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<3.24E-02	0.00E+00	3.24E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551045	9/7/2021 - 9/13/2021	Cs-134	<2.98E-02	0.00E+00	2.98E-02
		Cs-137	<3.38E-02	0.00E+00	3.38E-02
		Be-7	<2.51E-01	0.00E+00	2.51E-01
		K-40	5.49E-01	2.95E-01	3.09E-01
551682	9/13/2021 - 9/20/2021	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	<3.76E-01	0.00E+00	3.76E-01
552310	9/20/2021 - 9/27/2021	I-131	<3.12E-02	0.00E+00	3.12E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	<5.00E-01	0.00E+00	5.00E-01
552470	9/27/2021 - 10/4/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<4.37E-01	0.00E+00	4.37E-01
552801	10/4/2021 - 10/11/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	<4.03E-01	0.00E+00	4.03E-01
553271	10/11/2021 - 10/18/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<3.77E-01	0.00E+00	3.77E-01
553869	10/18/2021 - 10/25/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<3.41E-02	0.00E+00	3.41E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<6.07E-01	0.00E+00	6.07E-01
554300	10/25/2021 - 11/1/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	2.85E-01	2.59E-01	3.88E-01
554611	11/1/2021 - 11/8/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<3.23E-02	0.00E+00	3.23E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<2.22E-01	0.00E+00	2.22E-01
		K-40	<4.85E-01	0.00E+00	4.85E-01
555101	11/8/2021 - 11/15/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<2.93E-02	0.00E+00	2.93E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	2.18E-01	1.93E-01	2.69E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555966	11/15/2021 - 11/22/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<5.70E-01	0.00E+00	5.70E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556762	11/22/2021 - 11/29/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	4.75E-01	2.39E-01	2.26E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557079	11/29/2021 - 12/6/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<3.10E-02	0.00E+00	3.10E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<6.29E-01	0.00E+00	6.29E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557503	12/6/2021 - 12/13/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<8.17E-02	0.00E+00	8.17E-02
		K-40	<3.55E-01	0.00E+00	3.55E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557979	12/13/2021 - 12/20/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<3.36E-02	0.00E+00	3.36E-02
		Cs-137	<2.90E-02	0.00E+00	2.90E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	5.98E-01	2.49E-01	6.75E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558411	12/20/2021 - 12/27/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<3.54E-01	0.00E+00	3.54E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558627	12/27/2021 - 1/4/2022	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<2.33E-01	0.00E+00	2.33E-01
		K-40	<4.44E-01	0.00E+00	4.44E-01

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536574	12/28/2020 - 1/5/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<8.21E-02	0.00E+00	8.21E-02
		K-40	4.82E-01	1.62E-01	1.11E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536787	1/5/2021 - 1/11/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	7.08E-01	2.21E-01	1.46E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537322	1/11/2021 - 1/19/2021	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<9.22E-02	0.00E+00	9.22E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537322	1/11/2021 - 1/19/2021	K-40	4.69E-01	1.55E-01	1.13E-01
537687	1/19/2021 - 1/25/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	6.09E-01	2.14E-01	1.77E-01
538077	1/25/2021 - 2/1/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<9.66E-02	0.00E+00	9.66E-02
		K-40	3.44E-01	1.80E-01	2.32E-01
538324	2/1/2021 - 2/8/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	3.61E-01	1.73E-01	2.08E-01
538550	2/8/2021 - 2/15/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	5.46E-01	1.76E-01	3.61E-02
538821	2/15/2021 - 2/22/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	5.04E-01	1.83E-01	1.51E-01
539062	2/22/2021 - 3/1/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	3.85E-01	1.53E-01	1.31E-01
539277	3/1/2021 - 3/8/2021	I-131	<1.25E-02	0.00E+00	1.25E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	<2.90E-01	0.00E+00	2.90E-01
540065	3/8/2021 - 3/15/2021	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.80E-02	0.00E+00	9.80E-02
		K-40	5.22E-01	2.20E-01	2.61E-01
540724	3/15/2021 - 3/22/2021	I-131	<1.32E-02	0.00E+00	1.32E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<6.13E-03	0.00E+00	6.13E-03
		Be-7	<9.60E-02	0.00E+00	9.60E-02
		K-40	4.46E-01	1.68E-01	1.48E-01
541437	3/22/2021 - 3/29/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541437	3/22/2021 - 3/29/2021	Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	3.99E-01	1.56E-01	1.08E-01
541959	3/29/2021 - 4/5/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.68E-01	1.70E-01	1.25E-01
542250	4/5/2021 - 4/12/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	6.31E-01	1.87E-01	3.49E-02
542877	4/12/2021 - 4/19/2021	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<9.92E-02	0.00E+00	9.92E-02
		K-40	4.04E-01	1.84E-01	2.20E-01
543264	4/19/2021 - 4/26/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	5.75E-01	1.82E-01	1.18E-01
544121	4/26/2021 - 5/3/2021	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	3.98E-01	2.08E-01	7.19E-02
544323	5/3/2021 - 5/10/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
		Cs-137	<2.96E-02	0.00E+00	2.96E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<6.02E-01	0.00E+00	6.02E-01
544650	5/10/2021 - 5/17/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<2.81E-02	0.00E+00	2.81E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	1.96E-01	1.97E-01	2.91E-01
545026	5/17/2021 - 5/24/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<5.55E-01	0.00E+00	5.55E-01
545510	5/24/2021 - 6/1/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<4.54E-01	0.00E+00	4.54E-01
545808	6/1/2021 - 6/7/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545808	6/1/2021 - 6/7/2021	Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<6.54E-01	0.00E+00	6.54E-01
546039	6/7/2021 - 6/14/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<2.21E-02	0.00E+00	2.21E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	1.54E-01	1.65E-01	2.45E-01
546917	6/14/2021 - 6/21/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<2.19E-01	0.00E+00	2.19E-01
		K-40	<5.02E-01	0.00E+00	5.02E-01
547203	6/21/2021 - 6/28/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	4.00E-01	2.67E-01	3.56E-01
547487	6/28/2021 - 7/6/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	5.57E-01	2.23E-01	5.80E-02
547741	7/6/2021 - 7/12/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<3.19E-02	0.00E+00	3.19E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	3.26E-01	2.87E-01	4.24E-01
548119	7/12/2021 - 7/19/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	5.40E-01	2.91E-01	3.51E-01
548538	7/19/2021 - 7/26/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.87E-02	0.00E+00	2.87E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<4.97E-01	0.00E+00	4.97E-01
548754	7/26/2021 - 8/2/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<5.56E-01	0.00E+00	5.56E-01
548986	8/2/2021 - 8/9/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<5.82E-01	0.00E+00	5.82E-01
549282	8/9/2021 - 8/16/2021	I-131	<2.32E-02	0.00E+00	2.32E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549282	8/9/2021 - 8/16/2021	Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<6.19E-01	0.00E+00	6.19E-01
549776	8/16/2021 - 8/23/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<5.50E-03	0.00E+00	5.50E-03
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<4.38E-01	0.00E+00	4.38E-01
550060	8/23/2021 - 8/30/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<9.89E-02	0.00E+00	9.89E-02
		K-40	3.27E-01	2.01E-01	2.17E-01
550682	8/30/2021 - 9/7/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	<3.28E-01	0.00E+00	3.28E-01
551046	9/7/2021 - 9/13/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<5.24E-01	0.00E+00	5.24E-01
551683	9/13/2021 - 9/20/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<3.39E-02	0.00E+00	3.39E-02
		Cs-137	<3.41E-02	0.00E+00	3.41E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	<5.44E-01	0.00E+00	5.44E-01
552311	9/20/2021 - 9/27/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<4.01E-01	0.00E+00	4.01E-01
552471	9/27/2021 - 10/4/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	5.73E-01	2.79E-01	2.80E-01
552802	10/4/2021 - 10/11/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	5.69E-01	3.02E-01	3.52E-01
553272	10/11/2021 - 10/18/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<5.74E-01	0.00E+00	5.74E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553870	10/18/2021 - 10/25/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<1.20E-02	0.00E+00	1.20E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	3.15E-01	2.54E-01	3.67E-01
554301	10/25/2021 - 11/1/2021	I-131	<3.73E-02	0.00E+00	3.73E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.72E-02	0.00E+00	2.72E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<5.42E-01	0.00E+00	5.42E-01
554612	11/1/2021 - 11/8/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<6.44E-01	0.00E+00	6.44E-01
555102	11/8/2021 - 11/15/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<3.06E-02	0.00E+00	3.06E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	<6.18E-01	0.00E+00	6.18E-01
555967	11/15/2021 - 11/22/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<3.01E-02	0.00E+00	3.01E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	<4.69E-01	0.00E+00	4.69E-01
556763	11/22/2021 - 11/29/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<2.01E-01	0.00E+00	2.01E-01
		K-40	5.37E-01	2.33E-01	6.61E-02
557080	11/29/2021 - 12/6/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.78E-02	0.00E+00	2.78E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<5.32E-01	0.00E+00	5.32E-01
557504	12/6/2021 - 12/13/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	6.12E-01	2.91E-01	3.11E-01
557980	12/13/2021 - 12/20/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	4.01E-01	2.58E-01	3.28E-01
558412	12/20/2021 - 12/27/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	7.42E-01	3.00E-01	2.57E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 133 [INDICATOR - ENE @ 6.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558628	12/27/2021 - 1/4/2022	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.41E-02	0.00E+00	2.41E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<9.15E-02	0.00E+00	9.15E-02
		K-40	<3.52E-01	0.00E+00	3.52E-01

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536575	12/28/2020 - 1/5/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.49E-02	0.00E+00	1.49E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	5.32E-01	1.61E-01	3.07E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536788	1/5/2021 - 1/11/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	6.87E-01	2.35E-01	2.20E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537323	1/11/2021 - 1/19/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.23E-02	0.00E+00	9.23E-02
		K-40	4.18E-01	1.51E-01	1.20E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537688	1/19/2021 - 1/25/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	6.31E-01	2.50E-01	2.92E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538078	1/25/2021 - 2/1/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	6.18E-01	2.04E-01	1.62E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538325	2/1/2021 - 2/8/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	4.37E-01	1.90E-01	2.19E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538551	2/8/2021 - 2/15/2021	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<9.27E-02	0.00E+00	9.27E-02
		K-40	3.25E-01	1.57E-01	1.80E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538822	2/15/2021 - 2/22/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	4.32E-01	1.75E-01	1.78E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539063	2/22/2021 - 3/1/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539063	2/22/2021 - 3/1/2021	K-40	5.08E-01	1.89E-01	1.80E-01
539278	3/1/2021 - 3/8/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	6.29E-01	2.10E-01	1.84E-01
540066	3/8/2021 - 3/15/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	5.77E-01	2.18E-01	2.46E-01
540725	3/15/2021 - 3/22/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.39E-01	2.18E-01	2.52E-01
541438	3/22/2021 - 3/29/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	<3.83E-01	0.00E+00	3.83E-01
541960	3/29/2021 - 4/5/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	5.40E-01	2.09E-01	2.33E-01
542251	4/5/2021 - 4/12/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.60E-01	1.83E-01	1.94E-01
542878	4/12/2021 - 4/19/2021	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	5.22E-01	1.83E-01	1.44E-01
543265	4/19/2021 - 4/26/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	6.01E-01	2.13E-01	2.13E-01
544122	4/26/2021 - 5/3/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<4.11E-01	0.00E+00	4.11E-01
544324	5/3/2021 - 5/10/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544324	5/3/2021 - 5/10/2021	Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<4.30E-01	0.00E+00	4.30E-01
544651	5/10/2021 - 5/17/2021	I-131	<3.11E-02	0.00E+00	3.11E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
545027	5/17/2021 - 5/24/2021	I-131	<3.93E-02	0.00E+00	3.93E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	4.14E-01	2.54E-01	3.06E-01
545511	5/24/2021 - 6/1/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	4.14E-01	1.93E-01	5.91E-02
545809	6/1/2021 - 6/7/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.12E-01	0.00E+00	5.12E-01
546040	6/7/2021 - 6/14/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	4.35E-01	2.39E-01	2.38E-01
546918	6/14/2021 - 6/21/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.12E-01	2.29E-01	2.34E-01
547204	6/21/2021 - 6/28/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<4.98E-01	0.00E+00	4.98E-01
547488	6/28/2021 - 7/6/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	<5.27E-01	0.00E+00	5.27E-01
547742	7/6/2021 - 7/12/2021	I-131	<3.14E-02	0.00E+00	3.14E-02
		Cs-134	<6.02E-03	0.00E+00	6.02E-03
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<4.81E-01	0.00E+00	4.81E-01
548120	7/12/2021 - 7/19/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
548120	7/12/2021 - 7/19/2021	Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	<4.60E-01	0.00E+00	4.60E-01
548539	7/19/2021 - 7/26/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	<5.61E-01	0.00E+00	5.61E-01
548755	7/26/2021 - 8/2/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<3.09E-02	0.00E+00	3.09E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	<5.57E-01	0.00E+00	5.57E-01
548987	8/2/2021 - 8/9/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	4.56E-01	2.38E-01	2.35E-01
549283	8/9/2021 - 8/16/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<3.63E-01	0.00E+00	3.63E-01
549777	8/16/2021 - 8/23/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<9.85E-02	0.00E+00	9.85E-02
		K-40	<4.78E-01	0.00E+00	4.78E-01
550061	8/23/2021 - 8/30/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<4.58E-03	0.00E+00	4.58E-03
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.23E-01	0.00E+00	4.23E-01
550683	8/30/2021 - 9/7/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	4.26E-01	2.30E-01	2.55E-01
551047	9/7/2021 - 9/13/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<3.36E-02	0.00E+00	3.36E-02
		Cs-137	<2.53E-02	0.00E+00	2.53E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	7.19E-01	3.42E-01	3.65E-01
551684	9/13/2021 - 9/20/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	5.82E-01	2.47E-01	6.86E-02
552312	9/20/2021 - 9/27/2021	I-131	<2.93E-02	0.00E+00	2.93E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552312	9/20/2021 - 9/27/2021	Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	3.07E-01	2.40E-01	3.30E-01
552472	9/27/2021 - 10/4/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	4.18E-01	2.31E-01	2.35E-01
552803	10/4/2021 - 10/11/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	<4.68E-01	0.00E+00	4.68E-01
553273	10/11/2021 - 10/18/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<3.19E-02	0.00E+00	3.19E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	3.68E-01	2.21E-01	2.39E-01
553871	10/18/2021 - 10/25/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	4.20E-01	2.06E-01	6.69E-02
554302	10/25/2021 - 11/1/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<3.18E-02	0.00E+00	3.18E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	5.83E-01	2.47E-01	6.86E-02
554613	11/1/2021 - 11/8/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<2.74E-02	0.00E+00	2.74E-02
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	3.50E-01	1.89E-01	6.77E-02
555103	11/8/2021 - 11/15/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	<6.46E-01	0.00E+00	6.46E-01
555968	11/15/2021 - 11/22/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	5.30E-01	2.99E-01	3.79E-01
556764	11/22/2021 - 11/29/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	5.29E-01	2.29E-01	6.52E-02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 195 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
557081	11/29/2021 - 12/6/2021		I-131	<2.34E-02	0.00E+00	2.34E-02
			Cs-134	<2.49E-02	0.00E+00	2.49E-02
			Cs-137	<2.72E-02	0.00E+00	2.72E-02
			Be-7	<1.41E-01	0.00E+00	1.41E-01
			K-40	3.22E-01	2.16E-01	2.65E-01
557505	12/6/2021 - 12/13/2021		I-131	<2.80E-02	0.00E+00	2.80E-02
			Cs-134	<2.52E-02	0.00E+00	2.52E-02
			Cs-137	<2.86E-02	0.00E+00	2.86E-02
			Be-7	<1.60E-01	0.00E+00	1.60E-01
			K-40	<4.81E-01	0.00E+00	4.81E-01
557981	12/13/2021 - 12/20/2021		I-131	<2.08E-02	0.00E+00	2.08E-02
			Cs-134	<2.28E-02	0.00E+00	2.28E-02
			Cs-137	<2.46E-02	0.00E+00	2.46E-02
			Be-7	<1.80E-01	0.00E+00	1.80E-01
			K-40	<4.28E-01	0.00E+00	4.28E-01
558413	12/20/2021 - 12/27/2021		I-131	<2.66E-02	0.00E+00	2.66E-02
			Cs-134	<2.68E-02	0.00E+00	2.68E-02
			Cs-137	<3.06E-02	0.00E+00	3.06E-02
			Be-7	<1.48E-01	0.00E+00	1.48E-01
			K-40	5.22E-01	2.78E-01	3.17E-01
558629	12/27/2021 - 1/4/2022		I-131	<2.97E-02	0.00E+00	2.97E-02
			Cs-134	<2.21E-02	0.00E+00	2.21E-02
			Cs-137	<2.18E-02	0.00E+00	2.18E-02
			Be-7	<1.68E-01	0.00E+00	1.68E-01
			K-40	4.52E-01	2.40E-01	2.75E-01

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

Sample Point 155 [INDICATOR - NNE @ 4.87 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
537328	1/5/2021 - 1/5/2021	MIXEDCROPS	Co-58	<1.06E+01	0.00E+00	1.06E+01
			Fe-59	<3.20E+01	0.00E+00	3.20E+01
			Co-60	<1.64E+01	0.00E+00	1.64E+01
			Zn-65	<2.71E+01	0.00E+00	2.71E+01
			Zr-95	<1.97E+01	0.00E+00	1.97E+01
			Nb-95	<9.94E+00	0.00E+00	9.94E+00
			I-131	<1.22E+01	0.00E+00	1.22E+01
			Cs-134	<1.37E+01	0.00E+00	1.37E+01
			Cs-137	<1.32E+01	0.00E+00	1.32E+01
			BaLa-140	<1.58E+01	0.00E+00	1.58E+01
			Be-7	2.45E+03	2.90E+02	1.63E+02
			K-40	5.36E+03	5.98E+02	1.64E+02
			538556	2/1/2021 - 2/1/2021	MIXEDCROPS	Co-58
Fe-59	<2.36E+01	0.00E+00				2.36E+01
Co-60	<1.49E+01	0.00E+00				1.49E+01
Zn-65	<2.95E+01	0.00E+00				2.95E+01
Zr-95	<2.30E+01	0.00E+00				2.30E+01
Nb-95	<1.53E+01	0.00E+00				1.53E+01
I-131	<1.29E+01	0.00E+00				1.29E+01
Cs-134	<1.64E+01	0.00E+00				1.64E+01
Cs-137	<1.26E+01	0.00E+00				1.26E+01
BaLa-140	<1.20E+01	0.00E+00				1.20E+01
Be-7	1.43E+03	2.04E+02				1.30E+02
K-40	4.76E+03	7.72E+02				1.52E+02
540071	3/1/2021 - 3/1/2021	MIXEDCROPS				Co-58
			Fe-59	<2.21E+01	0.00E+00	2.21E+01

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

Sample Point 155 [INDICATOR - NNE @ 4.87 miles]

Sample ID:	Sample Dates:	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA			
540071	3/1/2021 - 3/1/2021	MIXEDCROPS	Co-60	<1.49E+01	0.00E+00	1.49E+01			
			Zn-65	<2.75E+01	0.00E+00	2.75E+01			
			Zr-95	<1.75E+01	0.00E+00	1.75E+01			
			Nb-95	<8.69E+00	0.00E+00	8.69E+00			
			I-131	<1.05E+01	0.00E+00	1.05E+01			
			Cs-134	<1.05E+01	0.00E+00	1.05E+01			
			Cs-137	<9.73E+00	0.00E+00	9.73E+00			
			BaLa-140	<8.29E+00	0.00E+00	8.29E+00			
			Be-7	7.20E+02	1.20E+02	9.78E+01			
			K-40	5.31E+03	5.76E+02	1.68E+02			
			542883	4/5/2021 - 4/5/2021	MIXEDCROPS	Co-58	<1.09E+01	0.00E+00	1.09E+01
						Fe-59	<2.53E+01	0.00E+00	2.53E+01
Co-60	<1.15E+01	0.00E+00				1.15E+01			
Zn-65	<2.52E+01	0.00E+00				2.52E+01			
Zr-95	<2.04E+01	0.00E+00				2.04E+01			
Nb-95	<1.03E+01	0.00E+00				1.03E+01			
I-131	<9.37E+00	0.00E+00				9.37E+00			
Cs-134	<1.16E+01	0.00E+00				1.16E+01			
Cs-137	<1.11E+01	0.00E+00				1.11E+01			
BaLa-140	<8.43E+00	0.00E+00				8.43E+00			
Be-7	4.81E+02	1.09E+02				1.28E+02			
K-40	6.15E+03	6.27E+02				2.14E+02			
544656	5/3/2021 - 5/3/2021	MIXEDCROPS	Co-58	<8.87E+00	0.00E+00	8.87E+00			
			Fe-59	<1.97E+01	0.00E+00	1.97E+01			
			Co-60	<8.80E+00	0.00E+00	8.80E+00			
			Zn-65	<2.22E+01	0.00E+00	2.22E+01			
			Zr-95	<1.63E+01	0.00E+00	1.63E+01			
			Nb-95	<1.01E+01	0.00E+00	1.01E+01			
			I-131	<8.42E+00	0.00E+00	8.42E+00			
			Cs-134	<1.11E+01	0.00E+00	1.11E+01			
			Cs-137	<1.04E+01	0.00E+00	1.04E+01			
			BaLa-140	<9.85E+00	0.00E+00	9.85E+00			
			Be-7	<8.25E+01	0.00E+00	8.25E+01			
			K-40	2.96E+03	3.58E+02	1.37E+02			
546923	6/7/2021 - 6/7/2021	MIXEDCROPS	Co-58	<7.74E+00	0.00E+00	7.74E+00			
			Fe-59	<2.00E+01	0.00E+00	2.00E+01			
			Co-60	<1.49E+01	0.00E+00	1.49E+01			
			Zn-65	<2.36E+01	0.00E+00	2.36E+01			
			Zr-95	<1.49E+01	0.00E+00	1.49E+01			
			Nb-95	<9.59E+00	0.00E+00	9.59E+00			
			I-131	<8.77E+00	0.00E+00	8.77E+00			
			Cs-134	<1.03E+01	0.00E+00	1.03E+01			
			Cs-137	<9.98E+00	0.00E+00	9.98E+00			
			BaLa-140	<1.18E+01	0.00E+00	1.18E+01			
			Be-7	1.21E+02	6.28E+01	9.16E+01			
			K-40	3.91E+03	4.42E+02	1.77E+02			
548125	7/6/2021 - 7/6/2021	MIXEDCROPS	Co-58	<1.06E+01	0.00E+00	1.06E+01			
			Fe-59	<2.04E+01	0.00E+00	2.04E+01			
			Co-60	<1.41E+01	0.00E+00	1.41E+01			
			Zn-65	<2.85E+01	0.00E+00	2.85E+01			
			Zr-95	<2.09E+01	0.00E+00	2.09E+01			
			Nb-95	<9.04E+00	0.00E+00	9.04E+00			
			I-131	<1.16E+01	0.00E+00	1.16E+01			
			Cs-134	<1.33E+01	0.00E+00	1.33E+01			
			Cs-137	<1.20E+01	0.00E+00	1.20E+01			
			BaLa-140	<1.21E+01	0.00E+00	1.21E+01			
			Be-7	1.03E+02	6.56E+01	9.73E+01			
			K-40	4.04E+03	4.87E+02	1.98E+02			

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 155 [INDICATOR - NNE @ 4.87 miles]

Sample ID:	Sample Dates:	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
549288	8/2/2021 - 8/2/2021	MIXEDCROPS	Co-58	<7.14E+00	0.00E+00	7.14E+00
			Fe-59	<1.77E+01	0.00E+00	1.77E+01
			Co-60	<1.05E+01	0.00E+00	1.05E+01
			Zn-65	<2.39E+01	0.00E+00	2.39E+01
			Zr-95	<1.73E+01	0.00E+00	1.73E+01
			Nb-95	<8.98E+00	0.00E+00	8.98E+00
			I-131	<8.22E+00	0.00E+00	8.22E+00
			Cs-134	<1.10E+01	0.00E+00	1.10E+01
			Cs-137	<8.81E+00	0.00E+00	8.81E+00
			BaLa-140	<1.37E+01	0.00E+00	1.37E+01
			Be-7	<8.09E+01	0.00E+00	8.09E+01
			K-40	4.00E+03	4.42E+02	1.39E+02
			551689	9/7/2021 - 9/7/2021	MIXEDCROPS	Co-58
Fe-59	<2.16E+01	0.00E+00				2.16E+01
Co-60	<1.06E+01	0.00E+00				1.06E+01
Zn-65	<2.65E+01	0.00E+00				2.65E+01
Zr-95	<1.80E+01	0.00E+00				1.80E+01
Nb-95	<1.19E+01	0.00E+00				1.19E+01
I-131	<1.08E+01	0.00E+00				1.08E+01
Cs-134	<1.20E+01	0.00E+00				1.20E+01
Cs-137	<1.16E+01	0.00E+00				1.16E+01
BaLa-140	<1.01E+01	0.00E+00				1.01E+01
Be-7	<7.89E+01	0.00E+00				7.89E+01
K-40	3.70E+03	4.35E+02				1.68E+02
553278	10/4/2021 - 10/4/2021	MIXEDCROPS				Co-58
			Fe-59	<1.80E+01	0.00E+00	1.80E+01
			Co-60	<9.75E+00	0.00E+00	9.75E+00
			Zn-65	<2.43E+01	0.00E+00	2.43E+01
			Zr-95	<1.61E+01	0.00E+00	1.61E+01
			Nb-95	<8.53E+00	0.00E+00	8.53E+00
			I-131	<8.25E+00	0.00E+00	8.25E+00
			Cs-134	<8.88E+00	0.00E+00	8.88E+00
			Cs-137	<9.36E+00	0.00E+00	9.36E+00
			BaLa-140	<8.57E+00	0.00E+00	8.57E+00
			Be-7	1.12E+02	6.45E+01	9.70E+01
			K-40	3.67E+03	4.22E+02	1.78E+02
			555108	11/1/2021 - 11/1/2021	MIXEDCROPS	Co-58
Fe-59	<2.08E+01	0.00E+00				2.08E+01
Co-60	<9.41E+00	0.00E+00				9.41E+00
Zn-65	<2.31E+01	0.00E+00				2.31E+01
Zr-95	<1.84E+01	0.00E+00				1.84E+01
Nb-95	<8.41E+00	0.00E+00				8.41E+00
I-131	<8.35E+00	0.00E+00				8.35E+00
Cs-134	<9.32E+00	0.00E+00				9.32E+00
Cs-137	<1.00E+01	0.00E+00				1.00E+01
BaLa-140	<1.04E+01	0.00E+00				1.04E+01
Be-7	2.24E+02	8.00E+01				1.09E+02
K-40	3.36E+03	3.95E+02				1.36E+02
557986	12/6/2021 - 12/6/2021	MIXEDCROPS				Co-58
			Fe-59	<1.35E+01	0.00E+00	1.35E+01
			Co-60	<5.95E+00	0.00E+00	5.95E+00
			Zn-65	<1.27E+01	0.00E+00	1.27E+01
			Zr-95	<1.05E+01	0.00E+00	1.05E+01
			Nb-95	<6.14E+00	0.00E+00	6.14E+00
			I-131	<9.17E+00	0.00E+00	9.17E+00
			Cs-134	<6.69E+00	0.00E+00	6.69E+00
			Cs-137	<4.56E+00	0.00E+00	4.56E+00
			BaLa-140	<8.20E+00	0.00E+00	8.20E+00
			Be-7	<4.45E+01	0.00E+00	4.45E+01

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Duke Energy Annual Report - Appendix E

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 155 [INDICATOR - NNE @ 4.87 miles]

Sample ID:	Sample Dates:	MIXEDCROPS	Nuclide	Activity	2 Sigma Error	MDA
557986	12/6/2021 - 12/6/2021		K-40	3.86E+03	3.71E+02	8.93E+01

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

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537773	12/28/2020 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<2.96E+00	0.00E+00	2.96E+00
		Co-58	<3.05E+00	0.00E+00	3.05E+00
		Fe-59	<8.36E+00	0.00E+00	8.36E+00
		Co-60	<2.91E+00	0.00E+00	2.91E+00
		Zn-65	<5.80E+00	0.00E+00	5.80E+00
		Zr-95	<6.29E+00	0.00E+00	6.29E+00
		Nb-95	<4.10E+00	0.00E+00	4.10E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.29E+00	0.00E+00	3.29E+00
		Cs-137	<3.00E+00	0.00E+00	3.00E+00
		BaLa-140	<5.82E+00	0.00E+00	5.82E+00
		Be-7	<2.69E+01	0.00E+00	2.69E+01
		K-40	8.42E+01	3.49E+01	4.54E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538878	1/25/2021 - 2/22/2021	Beta	3.40E+00	4.34E+00	3.19E+00
		Mn-54	<3.30E+00	0.00E+00	3.30E+00
		Co-58	<3.65E+00	0.00E+00	3.65E+00
		Fe-59	<6.57E+00	0.00E+00	6.57E+00
		Co-60	<4.94E+00	0.00E+00	4.94E+00
		Zn-65	<8.09E+00	0.00E+00	8.09E+00
		Zr-95	<7.29E+00	0.00E+00	7.29E+00
		Nb-95	<4.58E+00	0.00E+00	4.58E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.41E+00	0.00E+00	3.41E+00
		Cs-137	<3.80E+00	0.00E+00	3.80E+00
		BaLa-140	<6.10E+00	0.00E+00	6.10E+00
		Be-7	<3.55E+01	0.00E+00	3.55E+01
		K-40	<6.39E+01	0.00E+00	6.39E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541050	2/22/2021 - 3/22/2021	Beta	<3.29E+00	0.00E+00	3.29E+00
		Mn-54	<2.65E+00	0.00E+00	2.65E+00
		Co-58	<3.79E+00	0.00E+00	3.79E+00
		Fe-59	<6.89E+00	0.00E+00	6.89E+00
		Co-60	<2.75E+00	0.00E+00	2.75E+00
		Zn-65	<5.68E+00	0.00E+00	5.68E+00
		Zr-95	<6.09E+00	0.00E+00	6.09E+00
		Nb-95	<4.40E+00	0.00E+00	4.40E+00
		I-131	<1.07E+01	0.00E+00	1.07E+01
		Cs-134	<3.81E+00	0.00E+00	3.81E+00
		Cs-137	<3.11E+00	0.00E+00	3.11E+00
		BaLa-140	<8.16E+00	0.00E+00	8.16E+00
		Be-7	<3.30E+01	0.00E+00	3.30E+01
		K-40	9.39E+01	3.16E+01	2.97E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538557	12/28/2020 - 4/19/2021	H3DW	2.92E+02	1.23E+02	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542945	3/22/2021 - 4/19/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.25E+00	0.00E+00	3.25E+00
		Co-58	<3.31E+00	0.00E+00	3.31E+00
		Fe-59	<7.82E+00	0.00E+00	7.82E+00
		Co-60	<2.09E+00	0.00E+00	2.09E+00
		Zn-65	<6.20E+00	0.00E+00	6.20E+00
		Zr-95	<4.94E+00	0.00E+00	4.94E+00
		Nb-95	<4.00E+00	0.00E+00	4.00E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<4.25E+00	0.00E+00	4.25E+00

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542945	3/22/2021 - 4/19/2021	Cs-137	<3.46E+00	0.00E+00	3.46E+00
		BaLa-140	<6.13E+00	0.00E+00	6.13E+00
		Be-7	<3.41E+01	0.00E+00	3.41E+01
		K-40	5.68E+01	3.49E+01	5.07E+01
544840	4/19/2021 - 5/17/2021	Beta	5.04E+00	4.38E+00	3.19E+00
		Mn-54	<3.00E+00	0.00E+00	3.00E+00
		Co-58	<2.89E+00	0.00E+00	2.89E+00
		Fe-59	<6.28E+00	0.00E+00	6.28E+00
		Co-60	<2.90E+00	0.00E+00	2.90E+00
		Zn-65	<5.91E+00	0.00E+00	5.91E+00
		Zr-95	<6.65E+00	0.00E+00	6.65E+00
		Nb-95	<3.69E+00	0.00E+00	3.69E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.42E+00	0.00E+00	3.42E+00
		Cs-137	<3.59E+00	0.00E+00	3.59E+00
		BaLa-140	<9.27E+00	0.00E+00	9.27E+00
		Be-7	<2.98E+01	0.00E+00	2.98E+01
		K-40	9.29E+01	3.49E+01	4.03E+01
546771	5/17/2021 - 6/14/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.54E+00	0.00E+00	3.54E+00
		Co-58	<3.62E+00	0.00E+00	3.62E+00
		Fe-59	<7.78E+00	0.00E+00	7.78E+00
		Co-60	<2.70E+00	0.00E+00	2.70E+00
		Zn-65	<8.69E+00	0.00E+00	8.69E+00
		Zr-95	<7.63E+00	0.00E+00	7.63E+00
		Nb-95	<5.79E+00	0.00E+00	5.79E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<5.23E+00	0.00E+00	5.23E+00
		Cs-137	<3.57E+00	0.00E+00	3.57E+00
		BaLa-140	<6.18E+00	0.00E+00	6.18E+00
		Be-7	<3.94E+01	0.00E+00	3.94E+01
		K-40	8.86E+01	3.80E+01	4.42E+01
544462	4/19/2021 - 7/12/2021	H3DW	5.50E+02	1.28E+02	1.90E+02
547905	6/14/2021 - 7/12/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.36E+00	0.00E+00	3.36E+00
		Co-58	<3.41E+00	0.00E+00	3.41E+00
		Fe-59	<8.05E+00	0.00E+00	8.05E+00
		Co-60	<3.72E+00	0.00E+00	3.72E+00
		Zn-65	<7.23E+00	0.00E+00	7.23E+00
		Zr-95	<7.30E+00	0.00E+00	7.30E+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	<3.09E+00	0.00E+00	3.09E+00
		Cs-137	<3.95E+00	0.00E+00	3.95E+00
		BaLa-140	<6.08E+00	0.00E+00	6.08E+00
		Be-7	<3.54E+01	0.00E+00	3.54E+01
		K-40	<7.70E+01	0.00E+00	7.70E+01
549088	7/12/2021 - 8/9/2021	Beta	<3.33E+00	0.00E+00	3.33E+00
		Mn-54	<4.01E+00	0.00E+00	4.01E+00
		Co-58	<3.93E+00	0.00E+00	3.93E+00
		Fe-59	<9.89E+00	0.00E+00	9.89E+00
		Co-60	<3.63E+00	0.00E+00	3.63E+00
		Zn-65	<7.46E+00	0.00E+00	7.46E+00
		Zr-95	<1.05E+01	0.00E+00	1.05E+01
		Nb-95	<4.07E+00	0.00E+00	4.07E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<4.22E+00	0.00E+00	4.22E+00

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA	
549088	7/12/2021 - 8/9/2021	Cs-137	<4.46E+00	0.00E+00	4.46E+00	
		BaLa-140	<1.17E+01	0.00E+00	1.17E+01	
		Be-7	<3.56E+01	0.00E+00	3.56E+01	
		K-40	5.66E+01	3.82E+01	5.20E+01	
550927	8/9/2021 - 9/7/2021	Beta	<3.30E+00	0.00E+00	3.30E+00	
		Mn-54	<2.69E+00	0.00E+00	2.69E+00	
		Co-58	<2.79E+00	0.00E+00	2.79E+00	
		Fe-59	<7.05E+00	0.00E+00	7.05E+00	
		Co-60	<3.41E+00	0.00E+00	3.41E+00	
		Zn-65	<6.31E+00	0.00E+00	6.31E+00	
		Zr-95	<6.30E+00	0.00E+00	6.30E+00	
		Nb-95	<4.09E+00	0.00E+00	4.09E+00	
		I-131	<1.20E+01	0.00E+00	1.20E+01	
		Cs-134	<3.56E+00	0.00E+00	3.56E+00	
		Cs-137	<3.60E+00	0.00E+00	3.60E+00	
		BaLa-140	<6.01E+00	0.00E+00	6.01E+00	
		Be-7	<2.55E+01	0.00E+00	2.55E+01	
		K-40	1.11E+02	2.89E+01	3.29E+01	
549195	7/12/2021 - 10/4/2021	H3DW	5.72E+02	1.22E+02	1.77E+02	
552524	9/7/2021 - 10/4/2021	Beta	<3.19E+00	0.00E+00	3.19E+00	
		Mn-54	<3.98E+00	0.00E+00	3.98E+00	
		Co-58	<3.94E+00	0.00E+00	3.94E+00	
		Fe-59	<9.77E+00	0.00E+00	9.77E+00	
		Co-60	<3.41E+00	0.00E+00	3.41E+00	
		Zn-65	<4.30E+00	0.00E+00	4.30E+00	
		Zr-95	<8.43E+00	0.00E+00	8.43E+00	
		Nb-95	<5.47E+00	0.00E+00	5.47E+00	
		I-131	<1.17E+01	0.00E+00	1.17E+01	
		Cs-134	<4.21E+00	0.00E+00	4.21E+00	
		Cs-137	<4.04E+00	0.00E+00	4.04E+00	
		BaLa-140	<7.56E+00	0.00E+00	7.56E+00	
		Be-7	<3.56E+01	0.00E+00	3.56E+01	
		K-40	1.15E+02	4.84E+01	5.57E+01	
554402	10/4/2021 - 11/1/2021	Beta	<3.25E+00	0.00E+00	3.25E+00	
		Mn-54	<3.07E+00	0.00E+00	3.07E+00	
		Co-58	<3.40E+00	0.00E+00	3.40E+00	
		Fe-59	<5.79E+00	0.00E+00	5.79E+00	
		Co-60	<3.65E+00	0.00E+00	3.65E+00	
		Zn-65	<5.81E+00	0.00E+00	5.81E+00	
		Zr-95	<6.94E+00	0.00E+00	6.94E+00	
		Nb-95	<4.36E+00	0.00E+00	4.36E+00	
		I-131	<1.13E+01	0.00E+00	1.13E+01	
		Cs-134	<3.18E+00	0.00E+00	3.18E+00	
		Cs-137	<3.76E+00	0.00E+00	3.76E+00	
		BaLa-140	<8.85E+00	0.00E+00	8.85E+00	
		Be-7	<3.39E+01	0.00E+00	3.39E+01	
		K-40	1.21E+02	3.73E+01	3.41E+01	
556834	11/1/2021 - 11/29/2021	Beta	<3.23E+00	0.00E+00	3.23E+00	
		Mn-54	<3.36E+00	0.00E+00	3.36E+00	
		Co-58	<3.95E+00	0.00E+00	3.95E+00	
		Fe-59	<8.49E+00	0.00E+00	8.49E+00	
		Co-60	<4.51E+00	0.00E+00	4.51E+00	
		Zn-65	<5.99E+00	0.00E+00	5.99E+00	
		Zr-95	<6.80E+00	0.00E+00	6.80E+00	
		Nb-95	<4.14E+00	0.00E+00	4.14E+00	
		I-131	<1.16E+01	0.00E+00	1.16E+01	
		Cs-134	<3.19E+00	0.00E+00	3.19E+00	

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 101 [INDICATOR - E @ 3.31 miles]

Sample ID:	556834	Sample Dates:	11/1/2021 - 11/29/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-137	<3.16E+00	0.00E+00	3.16E+00
				BaLa-140	<4.54E+00	0.00E+00	4.54E+00
				Be-7	<3.77E+01	0.00E+00	3.77E+01
				K-40	5.69E+01	3.25E+01	4.36E+01

Sample ID:	555109	Sample Dates:	10/4/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3DW	6.33E+02	1.23E+02	1.76E+02

Sample ID:	558505	Sample Dates:	11/29/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.25E+00	0.00E+00	3.25E+00
				Mn-54	<3.24E+00	0.00E+00	3.24E+00
				Co-58	<3.39E+00	0.00E+00	3.39E+00
				Fe-59	<7.51E+00	0.00E+00	7.51E+00
				Co-60	<3.12E+00	0.00E+00	3.12E+00
				Zn-65	<5.76E+00	0.00E+00	5.76E+00
				Zr-95	<6.51E+00	0.00E+00	6.51E+00
				Nb-95	<4.28E+00	0.00E+00	4.28E+00
				I-131	<1.10E+01	0.00E+00	1.10E+01
				Cs-134	<3.41E+00	0.00E+00	3.41E+00
				Cs-137	<3.31E+00	0.00E+00	3.31E+00
				BaLa-140	<7.36E+00	0.00E+00	7.36E+00
				Be-7	<3.63E+01	0.00E+00	3.63E+01
				K-40	7.52E+01	3.34E+01	4.20E+01

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	537774	Sample Dates:	12/28/2020 - 1/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.19E+00	0.00E+00	3.19E+00
				Mn-54	<2.82E+00	0.00E+00	2.82E+00
				Co-58	<3.54E+00	0.00E+00	3.54E+00
				Fe-59	<5.24E+00	0.00E+00	5.24E+00
				Co-60	<3.24E+00	0.00E+00	3.24E+00
				Zn-65	<5.01E+00	0.00E+00	5.01E+00
				Zr-95	<4.90E+00	0.00E+00	4.90E+00
				Nb-95	<3.95E+00	0.00E+00	3.95E+00
				I-131	<1.11E+01	0.00E+00	1.11E+01
				Cs-134	<3.19E+00	0.00E+00	3.19E+00
				Cs-137	<2.85E+00	0.00E+00	2.85E+00
				BaLa-140	<6.29E+00	0.00E+00	6.29E+00
				Be-7	<2.50E+01	0.00E+00	2.50E+01
				K-40	7.40E+01	3.42E+01	4.72E+01

Sample ID:	538879	Sample Dates:	1/25/2021 - 2/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.19E+00	0.00E+00	3.19E+00
				Mn-54	<4.07E+00	0.00E+00	4.07E+00
				Co-58	<4.50E+00	0.00E+00	4.50E+00
				Fe-59	<8.98E+00	0.00E+00	8.98E+00
				Co-60	<3.01E+00	0.00E+00	3.01E+00
				Zn-65	<7.84E+00	0.00E+00	7.84E+00
				Zr-95	<7.60E+00	0.00E+00	7.60E+00
				Nb-95	<4.79E+00	0.00E+00	4.79E+00
				I-131	<1.18E+01	0.00E+00	1.18E+01
				Cs-134	<3.55E+00	0.00E+00	3.55E+00
				Cs-137	<3.35E+00	0.00E+00	3.35E+00
				BaLa-140	<8.08E+00	0.00E+00	8.08E+00
				Be-7	<3.31E+01	0.00E+00	3.31E+01
				K-40	<5.60E+01	0.00E+00	5.60E+01

Sample ID:	541051	Sample Dates:	2/22/2021 - 3/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.29E+00	0.00E+00	3.29E+00
				Mn-54	<3.05E+00	0.00E+00	3.05E+00
				Co-58	<3.86E+00	0.00E+00	3.86E+00
				Fe-59	<6.60E+00	0.00E+00	6.60E+00
				Co-60	<3.91E+00	0.00E+00	3.91E+00
				Zn-65	<5.83E+00	0.00E+00	5.83E+00
				Zr-95	<7.22E+00	0.00E+00	7.22E+00
				Nb-95	<4.99E+00	0.00E+00	4.99E+00

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA		
541051	2/22/2021 - 3/22/2021	I-131	<1.16E+01	0.00E+00	1.16E+01		
		Cs-134	<4.40E+00	0.00E+00	4.40E+00		
		Cs-137	<3.94E+00	0.00E+00	3.94E+00		
		BaLa-140	<7.84E+00	0.00E+00	7.84E+00		
		Be-7	<3.29E+01	0.00E+00	3.29E+01		
		K-40	9.97E+01	4.14E+01	5.17E+01		
538558	12/28/2020 - 4/19/2021	H3DW	2.02E+02	1.23E+02	2.01E+02		
542946	3/22/2021 - 4/19/2021	Beta	<3.25E+00	0.00E+00	3.25E+00		
		Mn-54	<3.58E+00	0.00E+00	3.58E+00		
		Co-58	<3.71E+00	0.00E+00	3.71E+00		
		Fe-59	<6.93E+00	0.00E+00	6.93E+00		
		Co-60	<3.44E+00	0.00E+00	3.44E+00		
		Zn-65	<6.87E+00	0.00E+00	6.87E+00		
		Zr-95	<6.24E+00	0.00E+00	6.24E+00		
		Nb-95	<4.47E+00	0.00E+00	4.47E+00		
		I-131	<1.15E+01	0.00E+00	1.15E+01		
		Cs-134	<3.80E+00	0.00E+00	3.80E+00		
		Cs-137	<3.21E+00	0.00E+00	3.21E+00		
		BaLa-140	<4.73E+00	0.00E+00	4.73E+00		
		Be-7	<3.20E+01	0.00E+00	3.20E+01		
		K-40	1.03E+02	3.63E+01	4.41E+01		
		544841	4/19/2021 - 5/17/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
				Mn-54	<3.15E+00	0.00E+00	3.15E+00
Co-58	<2.91E+00			0.00E+00	2.91E+00		
Fe-59	<5.83E+00			0.00E+00	5.83E+00		
Co-60	<2.97E+00			0.00E+00	2.97E+00		
Zn-65	<5.48E+00			0.00E+00	5.48E+00		
Zr-95	<6.05E+00			0.00E+00	6.05E+00		
Nb-95	<4.09E+00			0.00E+00	4.09E+00		
I-131	<1.07E+01			0.00E+00	1.07E+01		
Cs-134	<2.67E+00			0.00E+00	2.67E+00		
Cs-137	<2.94E+00			0.00E+00	2.94E+00		
BaLa-140	<7.59E+00			0.00E+00	7.59E+00		
Be-7	<2.56E+01			0.00E+00	2.56E+01		
K-40	9.86E+01			3.43E+01	4.04E+01		
546772	5/17/2021 - 6/14/2021			Beta	<3.19E+00	0.00E+00	3.19E+00
				Mn-54	<3.32E+00	0.00E+00	3.32E+00
		Co-58	<2.73E+00	0.00E+00	2.73E+00		
		Fe-59	<5.31E+00	0.00E+00	5.31E+00		
		Co-60	<3.74E+00	0.00E+00	3.74E+00		
		Zn-65	<7.43E+00	0.00E+00	7.43E+00		
		Zr-95	<6.50E+00	0.00E+00	6.50E+00		
		Nb-95	<3.34E+00	0.00E+00	3.34E+00		
		I-131	<1.19E+01	0.00E+00	1.19E+01		
		Cs-134	<3.79E+00	0.00E+00	3.79E+00		
		Cs-137	<3.47E+00	0.00E+00	3.47E+00		
		BaLa-140	<5.10E+00	0.00E+00	5.10E+00		
		Be-7	<3.06E+01	0.00E+00	3.06E+01		
		K-40	<7.41E+01	0.00E+00	7.41E+01		
		544463	4/19/2021 - 7/12/2021	H3DW	3.00E+02	1.20E+02	1.90E+02
		547906	6/14/2021 - 7/12/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
Mn-54	<3.07E+00			0.00E+00	3.07E+00		
Co-58	<3.53E+00			0.00E+00	3.53E+00		
Fe-59	<7.98E+00			0.00E+00	7.98E+00		
Co-60	<2.81E+00			0.00E+00	2.81E+00		

EnRad Laboratories

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547906	6/14/2021 - 7/12/2021	Zn-65	<6.48E+00	0.00E+00	6.48E+00
		Zr-95	<7.15E+00	0.00E+00	7.15E+00
		Nb-95	<5.10E+00	0.00E+00	5.10E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<4.17E+00	0.00E+00	4.17E+00
		Cs-137	<3.84E+00	0.00E+00	3.84E+00
		BaLa-140	<7.44E+00	0.00E+00	7.44E+00
		Be-7	<3.26E+01	0.00E+00	3.26E+01
		K-40	9.47E+01	3.44E+01	3.26E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549089	7/12/2021 - 8/9/2021	Beta	<3.33E+00	0.00E+00	3.33E+00
		Mn-54	<3.73E+00	0.00E+00	3.73E+00
		Co-58	<2.65E+00	0.00E+00	2.65E+00
		Fe-59	<6.66E+00	0.00E+00	6.66E+00
		Co-60	<2.73E+00	0.00E+00	2.73E+00
		Zn-65	<5.89E+00	0.00E+00	5.89E+00
		Zr-95	<5.55E+00	0.00E+00	5.55E+00
		Nb-95	<3.65E+00	0.00E+00	3.65E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.68E+00	0.00E+00	3.68E+00
		Cs-137	<3.00E+00	0.00E+00	3.00E+00
		BaLa-140	<6.48E+00	0.00E+00	6.48E+00
		Be-7	<2.67E+01	0.00E+00	2.67E+01
		K-40	1.02E+02	3.64E+01	3.66E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550928	8/9/2021 - 9/7/2021	Beta	<3.30E+00	0.00E+00	3.30E+00
		Mn-54	<2.76E+00	0.00E+00	2.76E+00
		Co-58	<2.57E+00	0.00E+00	2.57E+00
		Fe-59	<7.46E+00	0.00E+00	7.46E+00
		Co-60	<2.67E+00	0.00E+00	2.67E+00
		Zn-65	<5.94E+00	0.00E+00	5.94E+00
		Zr-95	<5.73E+00	0.00E+00	5.73E+00
		Nb-95	<3.33E+00	0.00E+00	3.33E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<2.46E+00	0.00E+00	2.46E+00
		Cs-137	<2.90E+00	0.00E+00	2.90E+00
		BaLa-140	<6.40E+00	0.00E+00	6.40E+00
		Be-7	<2.53E+01	0.00E+00	2.53E+01
		K-40	1.03E+02	3.29E+01	3.31E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549196	7/12/2021 - 10/4/2021	H3DW	2.97E+02	1.13E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552525	9/7/2021 - 10/4/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<4.22E+00	0.00E+00	4.22E+00
		Co-58	<4.18E+00	0.00E+00	4.18E+00
		Fe-59	<1.20E+01	0.00E+00	1.20E+01
		Co-60	<2.51E+00	0.00E+00	2.51E+00
		Zn-65	<1.09E+01	0.00E+00	1.09E+01
		Zr-95	<7.82E+00	0.00E+00	7.82E+00
		Nb-95	<4.90E+00	0.00E+00	4.90E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<5.10E+00	0.00E+00	5.10E+00
		Cs-137	<4.10E+00	0.00E+00	4.10E+00
		BaLa-140	<8.19E+00	0.00E+00	8.19E+00
		Be-7	<3.09E+01	0.00E+00	3.09E+01
		K-40	7.08E+01	4.02E+01	5.03E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554403	10/4/2021 - 11/1/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.17E+00	0.00E+00	3.17E+00
		Co-58	<3.53E+00	0.00E+00	3.53E+00
		Fe-59	<4.76E+00	0.00E+00	4.76E+00
		Co-60	<2.42E+00	0.00E+00	2.42E+00

EnRad Laboratories

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 119 [INDICATOR - SSW @ 7.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554403	10/4/2021 - 11/1/2021	Zn-65	<4.91E+00	0.00E+00	4.91E+00
		Zr-95	<6.26E+00	0.00E+00	6.26E+00
		Nb-95	<3.62E+00	0.00E+00	3.62E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<2.80E+00	0.00E+00	2.80E+00
		Cs-137	<3.00E+00	0.00E+00	3.00E+00
		BaLa-140	<6.46E+00	0.00E+00	6.46E+00
		Be-7	<2.82E+01	0.00E+00	2.82E+01
		K-40	7.76E+01	3.31E+01	4.42E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556835	11/1/2021 - 11/29/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.02E+00	0.00E+00	3.02E+00
		Co-58	<3.09E+00	0.00E+00	3.09E+00
		Fe-59	<5.86E+00	0.00E+00	5.86E+00
		Co-60	<2.98E+00	0.00E+00	2.98E+00
		Zn-65	<6.43E+00	0.00E+00	6.43E+00
		Zr-95	<5.47E+00	0.00E+00	5.47E+00
		Nb-95	<3.74E+00	0.00E+00	3.74E+00
		I-131	<1.07E+01	0.00E+00	1.07E+01
		Cs-134	<3.74E+00	0.00E+00	3.74E+00
		Cs-137	<3.45E+00	0.00E+00	3.45E+00
		BaLa-140	<6.79E+00	0.00E+00	6.79E+00
		Be-7	<2.94E+01	0.00E+00	2.94E+01
		K-40	9.61E+01	3.63E+01	4.45E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555110	10/4/2021 - 12/27/2021	H3DW	5.61E+02	1.21E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558506	11/29/2021 - 12/27/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<1.93E+00	0.00E+00	1.93E+00
		Co-58	<2.13E+00	0.00E+00	2.13E+00
		Fe-59	<4.42E+00	0.00E+00	4.42E+00
		Co-60	<2.01E+00	0.00E+00	2.01E+00
		Zn-65	<4.84E+00	0.00E+00	4.84E+00
		Zr-95	<4.28E+00	0.00E+00	4.28E+00
		Nb-95	<2.75E+00	0.00E+00	2.75E+00
		I-131	<6.83E+00	0.00E+00	6.83E+00
		Cs-134	<2.51E+00	0.00E+00	2.51E+00
		Cs-137	<1.87E+00	0.00E+00	1.87E+00
		BaLa-140	<5.09E+00	0.00E+00	5.09E+00
		Be-7	<2.13E+01	0.00E+00	2.13E+01
		K-40	1.12E+02	2.57E+01	2.63E+01

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537775	12/28/2020 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<4.17E+00	0.00E+00	4.17E+00
		Co-58	<3.77E+00	0.00E+00	3.77E+00
		Fe-59	<8.10E+00	0.00E+00	8.10E+00
		Co-60	<5.09E+00	0.00E+00	5.09E+00
		Zn-65	<8.72E+00	0.00E+00	8.72E+00
		Zr-95	<7.47E+00	0.00E+00	7.47E+00
		Nb-95	<4.02E+00	0.00E+00	4.02E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<4.63E+00	0.00E+00	4.63E+00
		Cs-137	<4.58E+00	0.00E+00	4.58E+00
		BaLa-140	<8.35E+00	0.00E+00	8.35E+00
		Be-7	<3.07E+01	0.00E+00	3.07E+01
		K-40	9.99E+01	3.87E+01	4.02E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538880	1/25/2021 - 2/22/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.26E+00	0.00E+00	3.26E+00
		Co-58	<3.41E+00	0.00E+00	3.41E+00

EnRad Laboratories

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA		
538880	1/25/2021 - 2/22/2021	Fe-59	<8.05E+00	0.00E+00	8.05E+00		
		Co-60	<2.39E+00	0.00E+00	2.39E+00		
		Zn-65	<6.37E+00	0.00E+00	6.37E+00		
		Zr-95	<5.87E+00	0.00E+00	5.87E+00		
		Nb-95	<3.91E+00	0.00E+00	3.91E+00		
		I-131	<1.19E+01	0.00E+00	1.19E+01		
		Cs-134	<3.62E+00	0.00E+00	3.62E+00		
		Cs-137	<3.25E+00	0.00E+00	3.25E+00		
		BaLa-140	<5.71E+00	0.00E+00	5.71E+00		
		Be-7	<2.95E+01	0.00E+00	2.95E+01		
		K-40	5.20E+01	3.22E+01	4.59E+01		
		541052	2/22/2021 - 3/22/2021	Beta	<3.29E+00	0.00E+00	3.29E+00
				Mn-54	<3.03E+00	0.00E+00	3.03E+00
Co-58	<4.85E+00			0.00E+00	4.85E+00		
Fe-59	<7.07E+00			0.00E+00	7.07E+00		
Co-60	<5.32E+00			0.00E+00	5.32E+00		
Zn-65	<4.54E+00			0.00E+00	4.54E+00		
Zr-95	<8.24E+00			0.00E+00	8.24E+00		
Nb-95	<5.85E+00			0.00E+00	5.85E+00		
I-131	<1.11E+01			0.00E+00	1.11E+01		
Cs-134	<5.08E+00			0.00E+00	5.08E+00		
Cs-137	<2.95E+00			0.00E+00	2.95E+00		
BaLa-140	<9.60E+00			0.00E+00	9.60E+00		
Be-7	<3.69E+01			0.00E+00	3.69E+01		
K-40	<4.98E+01	0.00E+00	4.98E+01				
538559	12/28/2020 - 4/19/2021	H3DW	<1.32E+02	0.00E+00	2.00E+02		
542947	3/22/2021 - 4/19/2021	Beta	<3.25E+00	0.00E+00	3.25E+00		
		Mn-54	<2.87E+00	0.00E+00	2.87E+00		
		Co-58	<4.00E+00	0.00E+00	4.00E+00		
		Fe-59	<7.06E+00	0.00E+00	7.06E+00		
		Co-60	<3.00E+00	0.00E+00	3.00E+00		
		Zn-65	<7.05E+00	0.00E+00	7.05E+00		
		Zr-95	<6.06E+00	0.00E+00	6.06E+00		
		Nb-95	<4.30E+00	0.00E+00	4.30E+00		
		I-131	<1.16E+01	0.00E+00	1.16E+01		
		Cs-134	<3.59E+00	0.00E+00	3.59E+00		
		Cs-137	<3.58E+00	0.00E+00	3.58E+00		
		BaLa-140	<6.25E+00	0.00E+00	6.25E+00		
		Be-7	<3.16E+01	0.00E+00	3.16E+01		
K-40	1.03E+02	3.25E+01	3.12E+01				
544842	4/19/2021 - 5/17/2021	Beta	3.79E+00	4.36E+00	3.19E+00		
		Mn-54	<2.49E+00	0.00E+00	2.49E+00		
		Co-58	<3.54E+00	0.00E+00	3.54E+00		
		Fe-59	<8.36E+00	0.00E+00	8.36E+00		
		Co-60	<3.33E+00	0.00E+00	3.33E+00		
		Zn-65	<5.69E+00	0.00E+00	5.69E+00		
		Zr-95	<5.77E+00	0.00E+00	5.77E+00		
		Nb-95	<4.64E+00	0.00E+00	4.64E+00		
		I-131	<1.14E+01	0.00E+00	1.14E+01		
		Cs-134	<4.18E+00	0.00E+00	4.18E+00		
		Cs-137	<3.46E+00	0.00E+00	3.46E+00		
		BaLa-140	<5.83E+00	0.00E+00	5.83E+00		
		Be-7	<2.68E+01	0.00E+00	2.68E+01		
K-40	4.74E+01	3.06E+01	4.24E+01				
546773	5/17/2021 - 6/14/2021	Beta	<3.19E+00	0.00E+00	3.19E+00		
		Mn-54	<2.83E+00	0.00E+00	2.83E+00		
		Co-58	<3.13E+00	0.00E+00	3.13E+00		

EnRad Laboratories

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Report Generated @ 3/3/2022 06:59:09

Duke Energy Annual Report - Appendix E

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546773	5/17/2021 - 6/14/2021	Fe-59	<6.70E+00	0.00E+00	6.70E+00
		Co-60	<2.57E+00	0.00E+00	2.57E+00
		Zn-65	<5.58E+00	0.00E+00	5.58E+00
		Zr-95	<5.85E+00	0.00E+00	5.85E+00
		Nb-95	<3.95E+00	0.00E+00	3.95E+00
		I-131	<1.03E+01	0.00E+00	1.03E+01
		Cs-134	<3.23E+00	0.00E+00	3.23E+00
		Cs-137	<2.98E+00	0.00E+00	2.98E+00
		BaLa-140	<8.46E+00	0.00E+00	8.46E+00
		Be-7	<2.50E+01	0.00E+00	2.50E+01
		K-40	5.43E+01	3.73E+01	5.65E+01
		544464	4/19/2021 - 7/12/2021	H3DW	2.55E+02
547907	6/14/2021 - 7/12/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<2.79E+00	0.00E+00	2.79E+00
		Co-58	<3.64E+00	0.00E+00	3.64E+00
		Fe-59	<6.19E+00	0.00E+00	6.19E+00
		Co-60	<3.46E+00	0.00E+00	3.46E+00
		Zn-65	<5.22E+00	0.00E+00	5.22E+00
		Zr-95	<5.07E+00	0.00E+00	5.07E+00
		Nb-95	<5.32E+00	0.00E+00	5.32E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.48E+00	0.00E+00	3.48E+00
		Cs-137	<3.87E+00	0.00E+00	3.87E+00
		BaLa-140	<9.88E+00	0.00E+00	9.88E+00
		Be-7	<3.27E+01	0.00E+00	3.27E+01
		K-40	4.26E+01	2.98E+01	4.13E+01
		549090	7/12/2021 - 8/9/2021	Beta	<3.33E+00
Mn-54	<2.54E+00			0.00E+00	2.54E+00
Co-58	<2.67E+00			0.00E+00	2.67E+00
Fe-59	<7.50E+00			0.00E+00	7.50E+00
Co-60	<2.68E+00			0.00E+00	2.68E+00
Zn-65	<6.26E+00			0.00E+00	6.26E+00
Zr-95	<4.74E+00			0.00E+00	4.74E+00
Nb-95	<3.53E+00			0.00E+00	3.53E+00
I-131	<1.09E+01			0.00E+00	1.09E+01
Cs-134	<3.51E+00			0.00E+00	3.51E+00
Cs-137	<3.17E+00			0.00E+00	3.17E+00
BaLa-140	<1.06E+01			0.00E+00	1.06E+01
Be-7	<2.62E+01			0.00E+00	2.62E+01
K-40	7.88E+01			2.86E+01	2.49E+01
550929	8/9/2021 - 9/7/2021			Beta	<3.30E+00
		Mn-54	<3.00E+00	0.00E+00	3.00E+00
		Co-58	<3.00E+00	0.00E+00	3.00E+00
		Fe-59	<6.19E+00	0.00E+00	6.19E+00
		Co-60	<3.37E+00	0.00E+00	3.37E+00
		Zn-65	<5.78E+00	0.00E+00	5.78E+00
		Zr-95	<7.13E+00	0.00E+00	7.13E+00
		Nb-95	<3.90E+00	0.00E+00	3.90E+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	<3.05E+00	0.00E+00	3.05E+00
		BaLa-140	<7.03E+00	0.00E+00	7.03E+00
		Be-7	<2.92E+01	0.00E+00	2.92E+01
		K-40	<4.91E+01	0.00E+00	4.91E+01
		549197	7/12/2021 - 10/4/2021	H3DW	3.30E+02

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

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Duke Energy Annual Report - Appendix E

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 132 [INDICATOR - SSE @ 11.1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552526	9/7/2021 - 10/4/2021	Beta	4.40E+00	4.37E+00	3.19E+00
		Mn-54	<3.00E+00	0.00E+00	3.00E+00
		Co-58	<2.95E+00	0.00E+00	2.95E+00
		Fe-59	<5.63E+00	0.00E+00	5.63E+00
		Co-60	<3.89E+00	0.00E+00	3.89E+00
		Zn-65	<6.87E+00	0.00E+00	6.87E+00
		Zr-95	<6.57E+00	0.00E+00	6.57E+00
		Nb-95	<4.00E+00	0.00E+00	4.00E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<3.10E+00	0.00E+00	3.10E+00
		Cs-137	<2.83E+00	0.00E+00	2.83E+00
		BaLa-140	<6.41E+00	0.00E+00	6.41E+00
		Be-7	<3.12E+01	0.00E+00	3.12E+01
		K-40	9.63E+01	4.04E+01	5.17E+01
		554404	10/4/2021 - 11/1/2021	Beta	<3.25E+00
Mn-54	<3.29E+00			0.00E+00	3.29E+00
Co-58	<3.22E+00			0.00E+00	3.22E+00
Fe-59	<8.60E+00			0.00E+00	8.60E+00
Co-60	<3.07E+00			0.00E+00	3.07E+00
Zn-65	<8.65E+00			0.00E+00	8.65E+00
Zr-95	<5.71E+00			0.00E+00	5.71E+00
Nb-95	<4.20E+00			0.00E+00	4.20E+00
I-131	<1.20E+01			0.00E+00	1.20E+01
Cs-134	<4.02E+00			0.00E+00	4.02E+00
Cs-137	<3.09E+00			0.00E+00	3.09E+00
BaLa-140	<7.51E+00			0.00E+00	7.51E+00
Be-7	<3.30E+01			0.00E+00	3.30E+01
K-40	9.10E+01			3.56E+01	3.80E+01
556836	11/1/2021 - 11/29/2021			Beta	<3.23E+00
		Mn-54	<2.95E+00	0.00E+00	2.95E+00
		Co-58	<2.96E+00	0.00E+00	2.96E+00
		Fe-59	<5.22E+00	0.00E+00	5.22E+00
		Co-60	<2.81E+00	0.00E+00	2.81E+00
		Zn-65	<4.90E+00	0.00E+00	4.90E+00
		Zr-95	<5.53E+00	0.00E+00	5.53E+00
		Nb-95	<3.65E+00	0.00E+00	3.65E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<2.62E+00	0.00E+00	2.62E+00
		Cs-137	<2.81E+00	0.00E+00	2.81E+00
		BaLa-140	<5.94E+00	0.00E+00	5.94E+00
		Be-7	<2.91E+01	0.00E+00	2.91E+01
		K-40	1.19E+02	3.72E+01	4.14E+01
		555111	10/4/2021 - 12/27/2021	H3DW	5.86E+02
558507	11/29/2021 - 12/27/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<4.70E+00	0.00E+00	4.70E+00
		Co-58	<2.97E+00	0.00E+00	2.97E+00
		Fe-59	<4.82E+00	0.00E+00	4.82E+00
		Co-60	<4.03E+00	0.00E+00	4.03E+00
		Zn-65	<1.07E+01	0.00E+00	1.07E+01
		Zr-95	<7.75E+00	0.00E+00	7.75E+00
		Nb-95	<6.73E+00	0.00E+00	6.73E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<4.62E+00	0.00E+00	4.62E+00
		Cs-137	<4.87E+00	0.00E+00	4.87E+00
		BaLa-140	<8.34E+00	0.00E+00	8.34E+00
		Be-7	<3.76E+01	0.00E+00	3.76E+01
		K-40	6.58E+01	4.56E+01	6.54E+01

EnRad Laboratories

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537776	12/28/2020 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<4.39E+00	0.00E+00	4.39E+00
		Co-58	<5.24E+00	0.00E+00	5.24E+00
		Fe-59	<8.61E+00	0.00E+00	8.61E+00
		Co-60	<5.05E+00	0.00E+00	5.05E+00
		Zn-65	<9.82E+00	0.00E+00	9.82E+00
		Zr-95	<6.96E+00	0.00E+00	6.96E+00
		Nb-95	<4.92E+00	0.00E+00	4.92E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<4.87E+00	0.00E+00	4.87E+00
		Cs-137	<4.61E+00	0.00E+00	4.61E+00
		BaLa-140	<9.62E+00	0.00E+00	9.62E+00
		Be-7	<4.29E+01	0.00E+00	4.29E+01
		K-40	5.55E+01	4.13E+01	5.96E+01
538881	1/25/2021 - 2/22/2021	Beta	3.24E+00	4.34E+00	3.19E+00
		Mn-54	<2.46E+00	0.00E+00	2.46E+00
		Co-58	<2.72E+00	0.00E+00	2.72E+00
		Fe-59	<6.12E+00	0.00E+00	6.12E+00
		Co-60	<2.96E+00	0.00E+00	2.96E+00
		Zn-65	<5.76E+00	0.00E+00	5.76E+00
		Zr-95	<6.50E+00	0.00E+00	6.50E+00
		Nb-95	<4.09E+00	0.00E+00	4.09E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.30E+00	0.00E+00	3.30E+00
		Cs-137	<3.53E+00	0.00E+00	3.53E+00
		BaLa-140	<6.92E+00	0.00E+00	6.92E+00
		Be-7	<2.45E+01	0.00E+00	2.45E+01
		K-40	7.71E+01	3.29E+01	3.99E+01
541053	2/22/2021 - 3/22/2021	Beta	<3.29E+00	0.00E+00	3.29E+00
		Mn-54	<3.18E+00	0.00E+00	3.18E+00
		Co-58	<4.08E+00	0.00E+00	4.08E+00
		Fe-59	<8.83E+00	0.00E+00	8.83E+00
		Co-60	<3.73E+00	0.00E+00	3.73E+00
		Zn-65	<8.05E+00	0.00E+00	8.05E+00
		Zr-95	<6.22E+00	0.00E+00	6.22E+00
		Nb-95	<4.30E+00	0.00E+00	4.30E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.77E+00	0.00E+00	3.77E+00
		Cs-137	<3.68E+00	0.00E+00	3.68E+00
		BaLa-140	<9.88E+00	0.00E+00	9.88E+00
		Be-7	<2.45E+01	0.00E+00	2.45E+01
		K-40	8.20E+01	4.12E+01	5.61E+01
538560	12/28/2020 - 4/19/2021	H3DW	<1.21E+01	0.00E+00	1.98E+02
542948	3/22/2021 - 4/19/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.01E+00	0.00E+00	3.01E+00
		Co-58	<3.43E+00	0.00E+00	3.43E+00
		Fe-59	<8.81E+00	0.00E+00	8.81E+00
		Co-60	<3.88E+00	0.00E+00	3.88E+00
		Zn-65	<8.31E+00	0.00E+00	8.31E+00
		Zr-95	<5.48E+00	0.00E+00	5.48E+00
		Nb-95	<4.15E+00	0.00E+00	4.15E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.23E+00	0.00E+00	3.23E+00
		Cs-137	<2.93E+00	0.00E+00	2.93E+00
		BaLa-140	<8.14E+00	0.00E+00	8.14E+00
		Be-7	<3.32E+01	0.00E+00	3.32E+01
		K-40	9.29E+01	3.57E+01	4.09E+01

EnRad Laboratories

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544843	4/19/2021 - 5/17/2021	Beta	3.80E+00	4.36E+00	3.19E+00
		Mn-54	<2.64E+00	0.00E+00	2.64E+00
		Co-58	<3.00E+00	0.00E+00	3.00E+00
		Fe-59	<5.26E+00	0.00E+00	5.26E+00
		Co-60	<3.08E+00	0.00E+00	3.08E+00
		Zn-65	<5.88E+00	0.00E+00	5.88E+00
		Zr-95	<4.69E+00	0.00E+00	4.69E+00
		Nb-95	<3.76E+00	0.00E+00	3.76E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<2.84E+00	0.00E+00	2.84E+00
		Cs-137	<2.64E+00	0.00E+00	2.64E+00
		BaLa-140	<8.44E+00	0.00E+00	8.44E+00
		Be-7	<3.02E+01	0.00E+00	3.02E+01
		K-40	9.46E+01	3.21E+01	3.48E+01
546774	5/17/2021 - 6/14/2021	Beta	3.30E+00	4.34E+00	3.19E+00
		Mn-54	<3.01E+00	0.00E+00	3.01E+00
		Co-58	<3.39E+00	0.00E+00	3.39E+00
		Fe-59	<6.02E+00	0.00E+00	6.02E+00
		Co-60	<3.39E+00	0.00E+00	3.39E+00
		Zn-65	<5.87E+00	0.00E+00	5.87E+00
		Zr-95	<4.98E+00	0.00E+00	4.98E+00
		Nb-95	<3.30E+00	0.00E+00	3.30E+00
		I-131	<1.06E+01	0.00E+00	1.06E+01
		Cs-134	<2.74E+00	0.00E+00	2.74E+00
		Cs-137	<2.61E+00	0.00E+00	2.61E+00
		BaLa-140	<8.43E+00	0.00E+00	8.43E+00
		Be-7	<2.51E+01	0.00E+00	2.51E+01
		K-40	7.01E+01	3.60E+01	5.12E+01
544465	4/19/2021 - 7/12/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3DW	<-4.8E+00	0.00E+00	1.91E+02
547908	6/14/2021 - 7/12/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.47E+00	0.00E+00	3.47E+00
		Co-58	<2.58E+00	0.00E+00	2.58E+00
		Fe-59	<8.75E+00	0.00E+00	8.75E+00
		Co-60	<2.22E+00	0.00E+00	2.22E+00
		Zn-65	<5.27E+00	0.00E+00	5.27E+00
		Zr-95	<5.81E+00	0.00E+00	5.81E+00
		Nb-95	<5.11E+00	0.00E+00	5.11E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<4.22E+00	0.00E+00	4.22E+00
		Cs-137	<3.80E+00	0.00E+00	3.80E+00
		BaLa-140	<8.91E+00	0.00E+00	8.91E+00
		Be-7	<3.43E+01	0.00E+00	3.43E+01
		K-40	9.00E+01	3.43E+01	3.35E+01
549091	7/12/2021 - 8/9/2021	Beta	<3.33E+00	0.00E+00	3.33E+00
		Mn-54	<3.91E+00	0.00E+00	3.91E+00
		Co-58	<4.05E+00	0.00E+00	4.05E+00
		Fe-59	<6.90E+00	0.00E+00	6.90E+00
		Co-60	<3.00E+00	0.00E+00	3.00E+00
		Zn-65	<6.93E+00	0.00E+00	6.93E+00
		Zr-95	<7.86E+00	0.00E+00	7.86E+00
		Nb-95	<4.66E+00	0.00E+00	4.66E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<4.08E+00	0.00E+00	4.08E+00
		Cs-137	<4.01E+00	0.00E+00	4.01E+00
		BaLa-140	<4.85E+00	0.00E+00	4.85E+00
		Be-7	<3.25E+01	0.00E+00	3.25E+01
		K-40	9.07E+01	4.13E+01	5.22E+01

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550930	8/9/2021 - 9/7/2021	Beta	<3.30E+00	0.00E+00	3.30E+00
		Mn-54	<3.73E+00	0.00E+00	3.73E+00
		Co-58	<4.29E+00	0.00E+00	4.29E+00
		Fe-59	<8.56E+00	0.00E+00	8.56E+00
		Co-60	<2.95E+00	0.00E+00	2.95E+00
		Zn-65	<8.02E+00	0.00E+00	8.02E+00
		Zr-95	<8.62E+00	0.00E+00	8.62E+00
		Nb-95	<4.45E+00	0.00E+00	4.45E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<4.30E+00	0.00E+00	4.30E+00
		Cs-137	<4.14E+00	0.00E+00	4.14E+00
		BaLa-140	<1.12E+01	0.00E+00	1.12E+01
		Be-7	<3.42E+01	0.00E+00	3.42E+01
		K-40	6.55E+01	4.70E+01	7.04E+01
		549198	7/12/2021 - 10/4/2021	H3DW	<5.70E+01
552527	9/7/2021 - 10/4/2021	Beta	5.20E+00	4.39E+00	3.19E+00
		Mn-54	<3.02E+00	0.00E+00	3.02E+00
		Co-58	<4.82E+00	0.00E+00	4.82E+00
		Fe-59	<7.80E+00	0.00E+00	7.80E+00
		Co-60	<3.61E+00	0.00E+00	3.61E+00
		Zn-65	<8.08E+00	0.00E+00	8.08E+00
		Zr-95	<7.37E+00	0.00E+00	7.37E+00
		Nb-95	<6.36E+00	0.00E+00	6.36E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<5.08E+00	0.00E+00	5.08E+00
		Cs-137	<3.46E+00	0.00E+00	3.46E+00
		BaLa-140	<1.03E+01	0.00E+00	1.03E+01
		Be-7	<3.91E+01	0.00E+00	3.91E+01
		K-40	<4.98E+01	0.00E+00	4.98E+01
		554405	10/4/2021 - 11/1/2021	Beta	<3.25E+00
Mn-54	<3.94E+00			0.00E+00	3.94E+00
Co-58	<3.72E+00			0.00E+00	3.72E+00
Fe-59	<7.27E+00			0.00E+00	7.27E+00
Co-60	<2.68E+00			0.00E+00	2.68E+00
Zn-65	<8.52E+00			0.00E+00	8.52E+00
Zr-95	<6.99E+00			0.00E+00	6.99E+00
Nb-95	<3.88E+00			0.00E+00	3.88E+00
I-131	<1.17E+01			0.00E+00	1.17E+01
Cs-134	<4.17E+00			0.00E+00	4.17E+00
Cs-137	<3.47E+00			0.00E+00	3.47E+00
BaLa-140	<4.37E+00			0.00E+00	4.37E+00
Be-7	<3.31E+01			0.00E+00	3.31E+01
K-40	8.71E+01			3.87E+01	4.90E+01
556837	11/1/2021 - 11/29/2021			Beta	<3.23E+00
		Mn-54	<3.63E+00	0.00E+00	3.63E+00
		Co-58	<3.88E+00	0.00E+00	3.88E+00
		Fe-59	<8.18E+00	0.00E+00	8.18E+00
		Co-60	<3.60E+00	0.00E+00	3.60E+00
		Zn-65	<6.23E+00	0.00E+00	6.23E+00
		Zr-95	<7.73E+00	0.00E+00	7.73E+00
		Nb-95	<4.60E+00	0.00E+00	4.60E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.34E+00	0.00E+00	3.34E+00
		Cs-137	<4.47E+00	0.00E+00	4.47E+00
		BaLa-140	<6.86E+00	0.00E+00	6.86E+00
		Be-7	<4.21E+01	0.00E+00	4.21E+01
		K-40	1.07E+02	3.49E+01	2.58E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 136 [CONTROL - NNE @ 12.7 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555112	10/4/2021 - 12/27/2021	H3DW	<1.07E+02	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558508	11/29/2021 - 12/27/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.33E+00	0.00E+00	3.33E+00
		Co-58	<2.75E+00	0.00E+00	2.75E+00
		Fe-59	<4.55E+00	0.00E+00	4.55E+00
		Co-60	<3.31E+00	0.00E+00	3.31E+00
		Zn-65	<5.29E+00	0.00E+00	5.29E+00
		Zr-95	<6.19E+00	0.00E+00	6.19E+00
		Nb-95	<3.97E+00	0.00E+00	3.97E+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	<2.56E+00	0.00E+00	2.56E+00
		BaLa-140	<6.99E+00	0.00E+00	6.99E+00
		Be-7	1.60E+00	2.22E+01	3.89E+01
		K-40	8.05E+01	3.31E+01	4.24E+01

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537777	12/28/2020 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<2.95E+00	0.00E+00	2.95E+00
		Co-58	<3.72E+00	0.00E+00	3.72E+00
		Fe-59	<6.72E+00	0.00E+00	6.72E+00
		Co-60	<2.85E+00	0.00E+00	2.85E+00
		Zn-65	<6.65E+00	0.00E+00	6.65E+00
		Zr-95	<6.59E+00	0.00E+00	6.59E+00
		Nb-95	<4.26E+00	0.00E+00	4.26E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.01E+00	0.00E+00	3.01E+00
		Cs-137	<3.28E+00	0.00E+00	3.28E+00
		BaLa-140	<8.65E+00	0.00E+00	8.65E+00
		Be-7	<2.54E+01	0.00E+00	2.54E+01
		K-40	7.10E+01	3.46E+01	4.46E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538882	1/25/2021 - 2/22/2021	Beta	3.32E+00	4.34E+00	3.19E+00
		Mn-54	<3.25E+00	0.00E+00	3.25E+00
		Co-58	<4.33E+00	0.00E+00	4.33E+00
		Fe-59	<9.06E+00	0.00E+00	9.06E+00
		Co-60	<3.77E+00	0.00E+00	3.77E+00
		Zn-65	<8.25E+00	0.00E+00	8.25E+00
		Zr-95	<7.05E+00	0.00E+00	7.05E+00
		Nb-95	<4.82E+00	0.00E+00	4.82E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<4.68E+00	0.00E+00	4.68E+00
		Cs-137	<4.00E+00	0.00E+00	4.00E+00
		BaLa-140	<6.74E+00	0.00E+00	6.74E+00
		Be-7	<3.58E+01	0.00E+00	3.58E+01
		K-40	6.73E+01	4.20E+01	6.12E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541054	2/22/2021 - 3/22/2021	Beta	<3.29E+00	0.00E+00	3.29E+00
		Mn-54	<3.40E+00	0.00E+00	3.40E+00
		Co-58	<2.70E+00	0.00E+00	2.70E+00
		Fe-59	<8.85E+00	0.00E+00	8.85E+00
		Co-60	<3.57E+00	0.00E+00	3.57E+00
		Zn-65	<8.73E+00	0.00E+00	8.73E+00
		Zr-95	<7.78E+00	0.00E+00	7.78E+00
		Nb-95	<3.76E+00	0.00E+00	3.76E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.60E+00	0.00E+00	3.60E+00
		Cs-137	<3.74E+00	0.00E+00	3.74E+00
		BaLa-140	<6.65E+00	0.00E+00	6.65E+00
		Be-7	<3.55E+01	0.00E+00	3.55E+01
		K-40	8.44E+01	4.26E+01	5.56E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538561	12/28/2020 - 4/19/2021	H3DW	<-1.7E+01	0.00E+00	1.99E+02
542949	3/22/2021 - 4/19/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<2.76E+00	0.00E+00	2.76E+00
		Co-58	<2.71E+00	0.00E+00	2.71E+00
		Fe-59	<7.02E+00	0.00E+00	7.02E+00
		Co-60	<3.30E+00	0.00E+00	3.30E+00
		Zn-65	<6.98E+00	0.00E+00	6.98E+00
		Zr-95	<6.73E+00	0.00E+00	6.73E+00
		Nb-95	<4.09E+00	0.00E+00	4.09E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<3.44E+00	0.00E+00	3.44E+00
		Cs-137	<3.60E+00	0.00E+00	3.60E+00
		BaLa-140	<8.38E+00	0.00E+00	8.38E+00
		Be-7	<3.37E+01	0.00E+00	3.37E+01
		K-40	8.02E+01	3.45E+01	4.53E+01
544844	4/19/2021 - 5/17/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.07E+00	0.00E+00	3.07E+00
		Co-58	<2.80E+00	0.00E+00	2.80E+00
		Fe-59	<5.17E+00	0.00E+00	5.17E+00
		Co-60	<3.42E+00	0.00E+00	3.42E+00
		Zn-65	<5.76E+00	0.00E+00	5.76E+00
		Zr-95	<5.34E+00	0.00E+00	5.34E+00
		Nb-95	<4.30E+00	0.00E+00	4.30E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.58E+00	0.00E+00	3.58E+00
		Cs-137	<2.74E+00	0.00E+00	2.74E+00
		BaLa-140	<7.44E+00	0.00E+00	7.44E+00
		Be-7	<2.76E+01	0.00E+00	2.76E+01
		K-40	5.69E+01	3.21E+01	4.49E+01
546775	5/17/2021 - 6/14/2021	Beta	3.87E+00	4.35E+00	3.19E+00
		Mn-54	<3.34E+00	0.00E+00	3.34E+00
		Co-58	<4.28E+00	0.00E+00	4.28E+00
		Fe-59	<6.22E+00	0.00E+00	6.22E+00
		Co-60	<2.75E+00	0.00E+00	2.75E+00
		Zn-65	<1.03E+01	0.00E+00	1.03E+01
		Zr-95	<7.26E+00	0.00E+00	7.26E+00
		Nb-95	<5.33E+00	0.00E+00	5.33E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<4.31E+00	0.00E+00	4.31E+00
		Cs-137	<4.08E+00	0.00E+00	4.08E+00
		BaLa-140	<8.38E+00	0.00E+00	8.38E+00
		Be-7	<3.58E+01	0.00E+00	3.58E+01
		K-40	4.10E+01	2.21E+01	7.93E+00
544466	4/19/2021 - 7/12/2021	H3DW	<7.72E+01	0.00E+00	1.91E+02
547909	6/14/2021 - 7/12/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<3.60E+00	0.00E+00	3.60E+00
		Co-58	<4.15E+00	0.00E+00	4.15E+00
		Fe-59	<6.74E+00	0.00E+00	6.74E+00
		Co-60	<4.79E+00	0.00E+00	4.79E+00
		Zn-65	<6.94E+00	0.00E+00	6.94E+00
		Zr-95	<6.71E+00	0.00E+00	6.71E+00
		Nb-95	<5.34E+00	0.00E+00	5.34E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<3.81E+00	0.00E+00	3.81E+00
		Cs-137	<1.96E+00	0.00E+00	1.96E+00
		BaLa-140	<7.01E+00	0.00E+00	7.01E+00
		Be-7	<2.92E+01	0.00E+00	2.92E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547909	6/14/2021 - 7/12/2021	K-40	<5.17E+01	0.00E+00	5.17E+01
549092	7/12/2021 - 8/9/2021	Beta	<3.33E+00	0.00E+00	3.33E+00
		Mn-54	<2.79E+00	0.00E+00	2.79E+00
		Co-58	<3.23E+00	0.00E+00	3.23E+00
		Fe-59	<8.26E+00	0.00E+00	8.26E+00
		Co-60	<2.51E+00	0.00E+00	2.51E+00
		Zn-65	<6.82E+00	0.00E+00	6.82E+00
		Zr-95	<5.16E+00	0.00E+00	5.16E+00
		Nb-95	<3.91E+00	0.00E+00	3.91E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.67E+00	0.00E+00	3.67E+00
		Cs-137	<2.85E+00	0.00E+00	2.85E+00
		BaLa-140	<7.36E+00	0.00E+00	7.36E+00
		Be-7	<2.90E+01	0.00E+00	2.90E+01
		K-40	5.39E+01	2.72E+01	3.09E+01
550931	8/9/2021 - 9/7/2021	Beta	<3.30E+00	0.00E+00	3.30E+00
		Mn-54	<2.56E+00	0.00E+00	2.56E+00
		Co-58	<3.65E+00	0.00E+00	3.65E+00
		Fe-59	<4.52E+00	0.00E+00	4.52E+00
		Co-60	<3.05E+00	0.00E+00	3.05E+00
		Zn-65	<5.86E+00	0.00E+00	5.86E+00
		Zr-95	<5.04E+00	0.00E+00	5.04E+00
		Nb-95	<3.84E+00	0.00E+00	3.84E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<3.43E+00	0.00E+00	3.43E+00
		Cs-137	<3.26E+00	0.00E+00	3.26E+00
		BaLa-140	<6.26E+00	0.00E+00	6.26E+00
		Be-7	<2.36E+01	0.00E+00	2.36E+01
		K-40	5.86E+01	3.35E+01	4.81E+01
549199	7/12/2021 - 10/4/2021	H3DW	<7.33E+01	0.00E+00	1.77E+02
552528	9/7/2021 - 10/4/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<4.06E+00	0.00E+00	4.06E+00
		Co-58	<4.21E+00	0.00E+00	4.21E+00
		Fe-59	<7.80E+00	0.00E+00	7.80E+00
		Co-60	<3.33E+00	0.00E+00	3.33E+00
		Zn-65	<6.12E+00	0.00E+00	6.12E+00
		Zr-95	<9.09E+00	0.00E+00	9.09E+00
		Nb-95	<5.44E+00	0.00E+00	5.44E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.98E+00	0.00E+00	3.98E+00
		Cs-137	<3.23E+00	0.00E+00	3.23E+00
		BaLa-140	<7.82E+00	0.00E+00	7.82E+00
		Be-7	<2.95E+01	0.00E+00	2.95E+01
		K-40	8.17E+01	3.74E+01	4.49E+01
554406	10/4/2021 - 11/1/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.09E+00	0.00E+00	3.09E+00
		Co-58	<4.05E+00	0.00E+00	4.05E+00
		Fe-59	<7.30E+00	0.00E+00	7.30E+00
		Co-60	<2.53E+00	0.00E+00	2.53E+00
		Zn-65	<6.52E+00	0.00E+00	6.52E+00
		Zr-95	<5.78E+00	0.00E+00	5.78E+00
		Nb-95	<3.07E+00	0.00E+00	3.07E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.12E+00	0.00E+00	3.12E+00
		Cs-137	<2.43E+00	0.00E+00	2.43E+00
		BaLa-140	<8.15E+00	0.00E+00	8.15E+00
		Be-7	<2.85E+01	0.00E+00	2.85E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 194 [INDICATOR - NNW @ 6.73 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
554406	10/4/2021 - 11/1/2021		K-40	3.64E+01	2.42E+01	3.16E+01

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
556838	11/1/2021 - 11/29/2021		Beta	<3.23E+00	0.00E+00	3.23E+00
			Mn-54	<4.20E+00	0.00E+00	4.20E+00
			Co-58	<3.00E+00	0.00E+00	3.00E+00
			Fe-59	<1.09E+01	0.00E+00	1.09E+01
			Co-60	<4.02E+00	0.00E+00	4.02E+00
			Zn-65	<7.42E+00	0.00E+00	7.42E+00
			Zr-95	<6.47E+00	0.00E+00	6.47E+00
			Nb-95	<6.04E+00	0.00E+00	6.04E+00
			I-131	<1.15E+01	0.00E+00	1.15E+01
			Cs-134	<3.95E+00	0.00E+00	3.95E+00
			Cs-137	<3.69E+00	0.00E+00	3.69E+00
			BaLa-140	<1.07E+01	0.00E+00	1.07E+01
			Be-7	<3.55E+01	0.00E+00	3.55E+01
			K-40	<5.27E+01	0.00E+00	5.27E+01

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
555113	10/4/2021 - 12/27/2021		H3DW	<1.01E+02	0.00E+00	1.77E+02

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
558509	11/29/2021 - 12/27/2021		Beta	<3.25E+00	0.00E+00	3.25E+00
			Mn-54	<2.73E+00	0.00E+00	2.73E+00
			Co-58	<3.02E+00	0.00E+00	3.02E+00
			Fe-59	<7.69E+00	0.00E+00	7.69E+00
			Co-60	<2.91E+00	0.00E+00	2.91E+00
			Zn-65	<5.11E+00	0.00E+00	5.11E+00
			Zr-95	<5.65E+00	0.00E+00	5.65E+00
			Nb-95	<3.06E+00	0.00E+00	3.06E+00
			I-131	<1.16E+01	0.00E+00	1.16E+01
			Cs-134	<3.12E+00	0.00E+00	3.12E+00
			Cs-137	<3.32E+00	0.00E+00	3.32E+00
			BaLa-140	<5.00E+00	0.00E+00	5.00E+00
			Be-7	8.72E+00	1.59E+01	2.74E+01
			K-40	7.48E+01	3.35E+01	4.42E+01

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

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
542711	4/19/2021 - 4/19/2021	FREESWIM	Mn-54	<7.13E+01	0.00E+00	7.13E+01
			Co-58	<6.18E+01	0.00E+00	6.18E+01
			Fe-59	<1.38E+02	0.00E+00	1.38E+02
			Co-60	<8.83E+01	0.00E+00	8.83E+01
			Zn-65	<1.97E+02	0.00E+00	1.97E+02
			Nb-95	<8.87E+01	0.00E+00	8.87E+01
			I-131	<7.57E+01	0.00E+00	7.57E+01
			Cs-134	<9.71E+01	0.00E+00	9.71E+01
			Cs-137	<1.02E+02	0.00E+00	1.02E+02
			Be-7	<4.32E+02	0.00E+00	4.32E+02
			K-40	6.06E+03	1.58E+03	1.49E+03
			Ag-110M	<7.55E+01	0.00E+00	7.55E+01
			Sb-122	<1.27E+02	0.00E+00	1.27E+02
			Sb-125	<1.65E+02	0.00E+00	1.65E+02

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
542713	4/19/2021 - 4/19/2021	BOTMFEEDER	Mn-54	<6.81E+01	0.00E+00	6.81E+01
			Co-58	<7.10E+01	0.00E+00	7.10E+01
			Fe-59	<1.02E+02	0.00E+00	1.02E+02
			Co-60	<9.11E+01	0.00E+00	9.11E+01
			Zn-65	<1.60E+02	0.00E+00	1.60E+02
			Nb-95	<8.77E+01	0.00E+00	8.77E+01
			I-131	<5.99E+01	0.00E+00	5.99E+01
			Cs-134	<8.06E+01	0.00E+00	8.06E+01
			Cs-137	<7.96E+01	0.00E+00	7.96E+01
			Be-7	<5.55E+02	0.00E+00	5.55E+02

EnRad Laboratories

13339 Hagers Ferry Road

Huntersville, North Carolina 28078

MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:	Location:	Nuclide	Activity	2 Sigma Error	MDA
542713	4/19/2021 - 4/19/2021	BOTMFEEDER	K-40	5.14E+03	1.31E+03	1.04E+03
			Ag-110M	<6.26E+01	0.00E+00	6.26E+01
			Sb-122	<7.31E+01	0.00E+00	7.31E+01
			Sb-125	<1.89E+02	0.00E+00	1.89E+02
542712	4/19/2021 - 4/20/2021	FREESWIM	Mn-54	<8.56E+01	0.00E+00	8.56E+01
			Co-58	<7.57E+01	0.00E+00	7.57E+01
			Fe-59	<1.36E+02	0.00E+00	1.36E+02
			Co-60	<8.17E+01	0.00E+00	8.17E+01
			Zn-65	<1.31E+02	0.00E+00	1.31E+02
			Nb-95	<5.48E+01	0.00E+00	5.48E+01
			I-131	<7.74E+01	0.00E+00	7.74E+01
			Cs-134	<7.86E+01	0.00E+00	7.86E+01
			Cs-137	<8.16E+01	0.00E+00	8.16E+01
			Be-7	<5.67E+02	0.00E+00	5.67E+02
			K-40	4.25E+03	1.16E+03	8.54E+02
			Ag-110M	<6.98E+01	0.00E+00	6.98E+01
			Sb-122	<9.31E+01	0.00E+00	9.31E+01
			Sb-125	<1.37E+02	0.00E+00	1.37E+02
553183	10/6/2021 - 10/6/2021	FREESWIM	Mn-54	<4.85E+01	0.00E+00	4.85E+01
			Co-58	<5.64E+01	0.00E+00	5.64E+01
			Fe-59	<1.14E+02	0.00E+00	1.14E+02
			Co-60	<4.09E+01	0.00E+00	4.09E+01
			Zn-65	<1.09E+02	0.00E+00	1.09E+02
			Nb-95	<4.66E+01	0.00E+00	4.66E+01
			I-131	<6.74E+01	0.00E+00	6.74E+01
			Cs-134	<5.13E+01	0.00E+00	5.13E+01
			Cs-137	<6.92E+01	0.00E+00	6.92E+01
			Be-7	<4.32E+02	0.00E+00	4.32E+02
			K-40	3.86E+03	9.72E+02	7.93E+02
			Ag-110M	<4.19E+01	0.00E+00	4.19E+01
			Sb-122	<2.26E+02	0.00E+00	2.26E+02
			Sb-125	<1.29E+02	0.00E+00	1.29E+02
553184	10/6/2021 - 10/6/2021	FREESWIM	Mn-54	<5.51E+01	0.00E+00	5.51E+01
			Co-58	<5.62E+01	0.00E+00	5.62E+01
			Fe-59	<1.28E+02	0.00E+00	1.28E+02
			Co-60	<4.77E+01	0.00E+00	4.77E+01
			Zn-65	<1.37E+02	0.00E+00	1.37E+02
			Nb-95	<6.81E+01	0.00E+00	6.81E+01
			I-131	<8.27E+01	0.00E+00	8.27E+01
			Cs-134	<6.18E+01	0.00E+00	6.18E+01
			Cs-137	<7.44E+01	0.00E+00	7.44E+01
			Be-7	<4.77E+02	0.00E+00	4.77E+02
			K-40	5.05E+03	1.24E+03	1.09E+03
			Ag-110M	<5.11E+01	0.00E+00	5.11E+01
			Sb-122	<2.18E+02	0.00E+00	2.18E+02
			Sb-125	<1.42E+02	0.00E+00	1.42E+02
553185	10/7/2021 - 10/7/2021	BOTMFEEDER	Mn-54	<8.10E+01	0.00E+00	8.10E+01
			Co-58	<6.11E+01	0.00E+00	6.11E+01
			Fe-59	<1.13E+02	0.00E+00	1.13E+02
			Co-60	<1.43E+01	0.00E+00	1.43E+01
			Zn-65	<1.23E+02	0.00E+00	1.23E+02
			Nb-95	<4.59E+01	0.00E+00	4.59E+01
			I-131	<7.30E+01	0.00E+00	7.30E+01
			Cs-134	<7.74E+01	0.00E+00	7.74E+01
			Cs-137	<7.50E+01	0.00E+00	7.50E+01
			Be-7	<3.54E+02	0.00E+00	3.54E+02
			K-40	4.43E+03	1.06E+03	5.36E+02
			Ag-110M	<5.56E+01	0.00E+00	5.56E+01
			Sb-122	<1.79E+02	0.00E+00	1.79E+02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
553185	10/7/2021 - 10/7/2021		Sb-125	<1.57E+02	0.00E+00	1.57E+02

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542714	4/19/2021 - 4/19/2021		Mn-54	<5.69E+01	0.00E+00	5.69E+01
			Co-58	<7.36E+01	0.00E+00	7.36E+01
			Fe-59	<1.27E+02	0.00E+00	1.27E+02
			Co-60	<6.43E+01	0.00E+00	6.43E+01
			Zn-65	<1.50E+02	0.00E+00	1.50E+02
			Nb-95	<7.16E+01	0.00E+00	7.16E+01
			I-131	<6.89E+01	0.00E+00	6.89E+01
			Cs-134	<8.02E+01	0.00E+00	8.02E+01
			Cs-137	<7.50E+01	0.00E+00	7.50E+01
			Be-7	<4.10E+02	0.00E+00	4.10E+02
			K-40	4.87E+03	1.18E+03	8.83E+02
			Ag-110M	<7.08E+01	0.00E+00	7.08E+01
			Sb-122	<1.17E+02	0.00E+00	1.17E+02
			Sb-125	<1.37E+02	0.00E+00	1.37E+02

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542715	4/19/2021 - 4/19/2021		Mn-54	<5.82E+01	0.00E+00	5.82E+01
			Co-58	<6.98E+01	0.00E+00	6.98E+01
			Fe-59	<2.65E+01	0.00E+00	2.65E+01
			Co-60	<8.19E+01	0.00E+00	8.19E+01
			Zn-65	<1.44E+02	0.00E+00	1.44E+02
			Nb-95	<6.38E+01	0.00E+00	6.38E+01
			I-131	<5.92E+01	0.00E+00	5.92E+01
			Cs-134	<8.33E+01	0.00E+00	8.33E+01
			Cs-137	<6.56E+01	0.00E+00	6.56E+01
			Be-7	<5.15E+02	0.00E+00	5.15E+02
			K-40	4.50E+03	1.16E+03	6.60E+02
			Ag-110M	<6.47E+01	0.00E+00	6.47E+01
			Sb-122	<1.09E+02	0.00E+00	1.09E+02
			Sb-125	<1.83E+02	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
542716	4/19/2021 - 4/19/2021		Mn-54	<8.97E+01	0.00E+00	8.97E+01
			Co-58	<7.66E+01	0.00E+00	7.66E+01
			Fe-59	<1.24E+02	0.00E+00	1.24E+02
			Co-60	<6.05E+01	0.00E+00	6.05E+01
			Zn-65	<1.62E+02	0.00E+00	1.62E+02
			Nb-95	<6.71E+01	0.00E+00	6.71E+01
			I-131	<5.17E+01	0.00E+00	5.17E+01
			Cs-134	<9.40E+01	0.00E+00	9.40E+01
			Cs-137	<9.12E+01	0.00E+00	9.12E+01
			Be-7	<7.05E+02	0.00E+00	7.05E+02
			K-40	5.17E+03	1.30E+03	8.76E+02
			Ag-110M	<7.32E+01	0.00E+00	7.32E+01
			Sb-122	<1.81E+02	0.00E+00	1.81E+02
			Sb-125	<2.09E+02	0.00E+00	2.09E+02

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
553186	10/6/2021 - 10/6/2021		Mn-54	<5.71E+01	0.00E+00	5.71E+01
			Co-58	<5.83E+01	0.00E+00	5.83E+01
			Fe-59	<1.24E+02	0.00E+00	1.24E+02
			Co-60	<5.71E+01	0.00E+00	5.71E+01
			Zn-65	<1.24E+02	0.00E+00	1.24E+02
			Nb-95	<6.17E+01	0.00E+00	6.17E+01
			I-131	<6.59E+01	0.00E+00	6.59E+01
			Cs-134	<6.77E+01	0.00E+00	6.77E+01
			Cs-137	<5.89E+01	0.00E+00	5.89E+01
			Be-7	<4.40E+02	0.00E+00	4.40E+02
			K-40	4.33E+03	1.02E+03	1.43E+02
			Ag-110M	<3.59E+01	0.00E+00	3.59E+01
			Sb-122	<2.15E+02	0.00E+00	2.15E+02
			Sb-125	<1.29E+02	0.00E+00	1.29E+02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	553187	Sample Dates:	10/6/2021 - 10/6/2021	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<5.63E+01	0.00E+00	5.63E+01
					Co-58	<5.73E+01	0.00E+00	5.73E+01
					Fe-59	<9.16E+01	0.00E+00	9.16E+01
					Co-60	<4.33E+01	0.00E+00	4.33E+01
					Zn-65	<1.43E+02	0.00E+00	1.43E+02
					Nb-95	<6.19E+01	0.00E+00	6.19E+01
					I-131	<7.15E+01	0.00E+00	7.15E+01
					Cs-134	<6.56E+01	0.00E+00	6.56E+01
					Cs-137	<5.19E+01	0.00E+00	5.19E+01
					Be-7	<3.32E+02	0.00E+00	3.32E+02
					K-40	2.43E+03	7.41E+02	5.22E+02
					Ag-110M	<5.26E+01	0.00E+00	5.26E+01
					Sb-122	<2.21E+02	0.00E+00	2.21E+02
					Sb-125	<1.16E+02	0.00E+00	1.16E+02

Sample ID:	553188	Sample Dates:	10/6/2021 - 10/6/2021	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<7.19E+01	0.00E+00	7.19E+01
					Co-58	<5.97E+01	0.00E+00	5.97E+01
					Fe-59	<1.03E+02	0.00E+00	1.03E+02
					Co-60	<5.55E+01	0.00E+00	5.55E+01
					Zn-65	<1.10E+02	0.00E+00	1.10E+02
					Nb-95	<5.67E+01	0.00E+00	5.67E+01
					I-131	<6.74E+01	0.00E+00	6.74E+01
					Cs-134	<6.22E+01	0.00E+00	6.22E+01
					Cs-137	<5.42E+01	0.00E+00	5.42E+01
					Be-7	<4.80E+02	0.00E+00	4.80E+02
					K-40	4.11E+03	9.78E+02	1.39E+02
					Ag-110M	<4.86E+01	0.00E+00	4.86E+01
					Sb-122	<2.31E+02	0.00E+00	2.31E+02
					Sb-125	<1.26E+02	0.00E+00	1.26E+02

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

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	540073	Sample Dates:	4/5/2021 - 4/5/2021		Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.88E+01	0.00E+00	3.88E+01
					Co-58	<5.32E+01	0.00E+00	5.32E+01
					Fe-59	<9.30E+01	0.00E+00	9.30E+01
					Co-60	<3.33E+01	0.00E+00	3.33E+01
					Zn-65	<1.06E+02	0.00E+00	1.06E+02
					Zr-95	<7.69E+01	0.00E+00	7.69E+01
					Nb-95	<6.23E+01	0.00E+00	6.23E+01
					I-131	<8.47E+01	0.00E+00	8.47E+01
					Cs-134	<6.80E+01	0.00E+00	6.80E+01
					Cs-137	<2.92E+01	0.00E+00	2.92E+01
					Be-7	4.08E+02	2.75E+02	3.83E+02
					K-40	9.09E+02	5.25E+02	6.58E+02
					Co-57	<3.23E+01	0.00E+00	3.23E+01
					Mo-99	<2.24E+03	0.00E+00	2.24E+03
					Ag-110M	<4.50E+01	0.00E+00	4.50E+01
					Sb-122	<3.40E+02	0.00E+00	3.40E+02
					Sb-125	<1.11E+02	0.00E+00	1.11E+02

Sample ID:	551690	Sample Dates:	10/11/2021 - 10/11/2021		Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.41E+01	0.00E+00	3.41E+01
					Co-58	<3.82E+01	0.00E+00	3.82E+01
					Fe-59	<5.38E+01	0.00E+00	5.38E+01
					Co-60	<4.25E+01	0.00E+00	4.25E+01
					Zn-65	<8.63E+01	0.00E+00	8.63E+01
					Zr-95	<7.79E+01	0.00E+00	7.79E+01
					Nb-95	<4.70E+01	0.00E+00	4.70E+01
					I-131	<4.20E+01	0.00E+00	4.20E+01
					Cs-134	<3.82E+01	0.00E+00	3.82E+01
					Cs-137	<3.68E+01	0.00E+00	3.68E+01
					Be-7	<2.64E+02	0.00E+00	2.64E+02
					K-40	1.52E+03	5.87E+02	4.95E+02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 129 [INDICATOR - ENE @ 0.51 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551690	10/11/2021 - 10/11/2021	Co-57	<2.94E+01	0.00E+00	2.94E+01
		Mo-99	<5.57E+02	0.00E+00	5.57E+02
		Ag-110M	<4.34E+01	0.00E+00	4.34E+01
		Sb-122	<1.27E+02	0.00E+00	1.27E+02
		Sb-125	<8.83E+01	0.00E+00	8.83E+01

Sample Point 130 [INDICATOR - SW @ 0.52 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540074	4/5/2021 - 4/5/2021	Mn-54	<8.58E+01	0.00E+00	8.58E+01
		Co-58	<8.31E+01	0.00E+00	8.31E+01
		Fe-59	<1.28E+02	0.00E+00	1.28E+02
		Co-60	<5.38E+01	0.00E+00	5.38E+01
		Zn-65	<1.26E+02	0.00E+00	1.26E+02
		Zr-95	<1.13E+02	0.00E+00	1.13E+02
		Nb-95	<8.92E+01	0.00E+00	8.92E+01
		I-131	<1.03E+02	0.00E+00	1.03E+02
		Cs-134	<1.02E+02	0.00E+00	1.02E+02
		Cs-137	<7.20E+01	0.00E+00	7.20E+01
		Be-7	<5.37E+02	0.00E+00	5.37E+02
		K-40	1.57E+04	2.26E+03	1.13E+03
		Co-57	<5.29E+01	0.00E+00	5.29E+01
		Mo-99	<3.47E+03	0.00E+00	3.47E+03
		Ag-110M	<5.69E+01	0.00E+00	5.69E+01
		Sb-122	<5.03E+02	0.00E+00	5.03E+02
		Sb-125	<1.69E+02	0.00E+00	1.69E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551691	10/11/2021 - 10/11/2021	Mn-54	<6.22E+01	0.00E+00	6.22E+01
		Co-58	<6.74E+01	0.00E+00	6.74E+01
		Fe-59	<1.35E+02	0.00E+00	1.35E+02
		Co-60	<7.23E+01	0.00E+00	7.23E+01
		Zn-65	<1.48E+02	0.00E+00	1.48E+02
		Zr-95	<1.54E+02	0.00E+00	1.54E+02
		Nb-95	<7.46E+01	0.00E+00	7.46E+01
		I-131	<7.07E+01	0.00E+00	7.07E+01
		Cs-134	<9.65E+01	0.00E+00	9.65E+01
		Cs-137	<8.26E+01	0.00E+00	8.26E+01
		Be-7	<5.18E+02	0.00E+00	5.18E+02
		K-40	1.25E+04	1.95E+03	1.13E+03
		Co-57	<6.15E+01	0.00E+00	6.15E+01
		Mo-99	<1.11E+03	0.00E+00	1.11E+03
		Ag-110M	<8.23E+01	0.00E+00	8.23E+01
		Sb-122	<1.73E+02	0.00E+00	1.73E+02
		Sb-125	<1.76E+02	0.00E+00	1.76E+02

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540075	4/5/2021 - 4/5/2021	Mn-54	<6.45E+01	0.00E+00	6.45E+01
		Co-58	<6.33E+01	0.00E+00	6.33E+01
		Fe-59	<1.19E+02	0.00E+00	1.19E+02
		Co-60	<5.97E+01	0.00E+00	5.97E+01
		Zn-65	<1.31E+02	0.00E+00	1.31E+02
		Zr-95	<1.30E+02	0.00E+00	1.30E+02
		Nb-95	<6.92E+01	0.00E+00	6.92E+01
		I-131	<6.75E+01	0.00E+00	6.75E+01
		Cs-134	<9.44E+01	0.00E+00	9.44E+01
		Cs-137	<5.38E+01	0.00E+00	5.38E+01
		Be-7	<5.13E+02	0.00E+00	5.13E+02
		K-40	9.64E+03	1.51E+03	5.32E+02
		Co-57	<5.66E+01	0.00E+00	5.66E+01
		Mo-99	<1.21E+03	0.00E+00	1.21E+03
		Ag-110M	<4.62E+01	0.00E+00	4.62E+01
		Sb-122	<1.69E+02	0.00E+00	1.69E+02
		Sb-125	<1.76E+02	0.00E+00	1.76E+02

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13339 Hagers Ferry Road

Huntersville, North Carolina 28078

Report Generated @ 3/3/2022 06:59:09

Duke Energy Annual Report - Appendix E

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 137 [CONTROL - N @ 12 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551692	10/11/2021 - 10/11/2021	Mn-54	<3.58E+01	0.00E+00	3.58E+01
		Co-58	<4.78E+01	0.00E+00	4.78E+01
		Fe-59	<8.88E+01	0.00E+00	8.88E+01
		Co-60	<5.17E+01	0.00E+00	5.17E+01
		Zn-65	<1.25E+02	0.00E+00	1.25E+02
		Zr-95	<8.63E+01	0.00E+00	8.63E+01
		Nb-95	<4.89E+01	0.00E+00	4.89E+01
		I-131	<4.87E+01	0.00E+00	4.87E+01
		Cs-134	<5.54E+01	0.00E+00	5.54E+01
		Cs-137	<5.14E+01	0.00E+00	5.14E+01
		Be-7	<3.26E+02	0.00E+00	3.26E+02
		K-40	1.89E+04	2.33E+03	8.02E+02
		Co-57	<2.62E+01	0.00E+00	2.62E+01
		Mo-99	<8.72E+02	0.00E+00	8.72E+02
		Ag-110M	<4.59E+01	0.00E+00	4.59E+01
		Sb-122	<1.45E+02	0.00E+00	1.45E+02
		Sb-125	<9.40E+01	0.00E+00	9.40E+01

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

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537779	12/28/2020 - 1/25/2021	Mn-54	<2.81E+00	0.00E+00	2.81E+00
		Co-58	<2.74E+00	0.00E+00	2.74E+00
		Fe-59	<5.74E+00	0.00E+00	5.74E+00
		Co-60	<1.29E+00	0.00E+00	1.29E+00
		Zn-65	<6.51E+00	0.00E+00	6.51E+00
		Zr-95	<5.35E+00	0.00E+00	5.35E+00
		Nb-95	<3.06E+00	0.00E+00	3.06E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<2.85E+00	0.00E+00	2.85E+00
		Cs-137	<2.94E+00	0.00E+00	2.94E+00
		BaLa-140	<5.63E+00	0.00E+00	5.63E+00
		Be-7	<2.75E+01	0.00E+00	2.75E+01
		K-40	8.69E+01	3.55E+01	4.54E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538884	1/25/2021 - 2/22/2021	Mn-54	<3.09E+00	0.00E+00	3.09E+00
		Co-58	<3.08E+00	0.00E+00	3.08E+00
		Fe-59	<6.12E+00	0.00E+00	6.12E+00
		Co-60	<3.38E+00	0.00E+00	3.38E+00
		Zn-65	<6.44E+00	0.00E+00	6.44E+00
		Zr-95	<6.06E+00	0.00E+00	6.06E+00
		Nb-95	<3.33E+00	0.00E+00	3.33E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.52E+00	0.00E+00	3.52E+00
		Cs-137	<3.46E+00	0.00E+00	3.46E+00
		BaLa-140	<5.73E+00	0.00E+00	5.73E+00
		Be-7	<2.77E+01	0.00E+00	2.77E+01
		K-40	8.18E+01	3.49E+01	4.49E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541056	2/22/2021 - 3/22/2021	Mn-54	<3.87E+00	0.00E+00	3.87E+00
		Co-58	<3.42E+00	0.00E+00	3.42E+00
		Fe-59	<7.48E+00	0.00E+00	7.48E+00
		Co-60	<2.64E+00	0.00E+00	2.64E+00
		Zn-65	<5.30E+00	0.00E+00	5.30E+00
		Zr-95	<6.07E+00	0.00E+00	6.07E+00
		Nb-95	<4.55E+00	0.00E+00	4.55E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<4.00E+00	0.00E+00	4.00E+00
		Cs-137	<3.12E+00	0.00E+00	3.12E+00
		BaLa-140	<5.42E+00	0.00E+00	5.42E+00
		Be-7	<2.74E+01	0.00E+00	2.74E+01
		K-40	1.06E+02	3.34E+01	2.41E+01

EnRad Laboratories

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538563	12/28/2020 - 4/19/2021	H3SW	3.71E+02	1.26E+02	1.96E+02
542951	3/22/2021 - 4/19/2021	Mn-54	<2.88E+00	0.00E+00	2.88E+00
		Co-58	<3.72E+00	0.00E+00	3.72E+00
		Fe-59	<8.15E+00	0.00E+00	8.15E+00
		Co-60	<3.58E+00	0.00E+00	3.58E+00
		Zn-65	<7.05E+00	0.00E+00	7.05E+00
		Zr-95	<5.98E+00	0.00E+00	5.98E+00
		Nb-95	<3.96E+00	0.00E+00	3.96E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.39E+00	0.00E+00	3.39E+00
		Cs-137	<3.68E+00	0.00E+00	3.68E+00
		BaLa-140	<7.99E+00	0.00E+00	7.99E+00
		Be-7	4.31E+01	2.97E+01	4.59E+01
		K-40	6.57E+01	3.47E+01	4.81E+01
544846	4/19/2021 - 5/17/2021	Mn-54	<2.70E+00	0.00E+00	2.70E+00
		Co-58	<2.87E+00	0.00E+00	2.87E+00
		Fe-59	<6.22E+00	0.00E+00	6.22E+00
		Co-60	<3.73E+00	0.00E+00	3.73E+00
		Zn-65	<6.13E+00	0.00E+00	6.13E+00
		Zr-95	<5.64E+00	0.00E+00	5.64E+00
		Nb-95	<4.05E+00	0.00E+00	4.05E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<3.30E+00	0.00E+00	3.30E+00
		Cs-137	<2.72E+00	0.00E+00	2.72E+00
		BaLa-140	<7.63E+00	0.00E+00	7.63E+00
		Be-7	<2.99E+01	0.00E+00	2.99E+01
		K-40	5.56E+01	3.22E+01	4.54E+01
546777	5/17/2021 - 6/14/2021	Mn-54	<3.48E+00	0.00E+00	3.48E+00
		Co-58	<3.70E+00	0.00E+00	3.70E+00
		Fe-59	<7.66E+00	0.00E+00	7.66E+00
		Co-60	<4.13E+00	0.00E+00	4.13E+00
		Zn-65	<8.26E+00	0.00E+00	8.26E+00
		Zr-95	<6.80E+00	0.00E+00	6.80E+00
		Nb-95	<4.11E+00	0.00E+00	4.11E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.42E+00	0.00E+00	3.42E+00
		Cs-137	<3.12E+00	0.00E+00	3.12E+00
		BaLa-140	<7.88E+00	0.00E+00	7.88E+00
		Be-7	<3.29E+01	0.00E+00	3.29E+01
		K-40	6.43E+01	2.80E+01	2.50E+01
544467	4/19/2021 - 7/12/2021	H3SW	3.91E+02	1.21E+02	1.86E+02
547911	6/14/2021 - 7/12/2021	Mn-54	<3.06E+00	0.00E+00	3.06E+00
		Co-58	<3.49E+00	0.00E+00	3.49E+00
		Fe-59	<6.15E+00	0.00E+00	6.15E+00
		Co-60	<3.49E+00	0.00E+00	3.49E+00
		Zn-65	<5.79E+00	0.00E+00	5.79E+00
		Zr-95	<6.73E+00	0.00E+00	6.73E+00
		Nb-95	<5.02E+00	0.00E+00	5.02E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<4.28E+00	0.00E+00	4.28E+00
		Cs-137	<3.43E+00	0.00E+00	3.43E+00
		BaLa-140	<7.83E+00	0.00E+00	7.83E+00
		Be-7	<3.00E+01	0.00E+00	3.00E+01
		K-40	8.60E+01	3.73E+01	4.70E+01
549094	7/12/2021 - 8/9/2021	Mn-54	<2.96E+00	0.00E+00	2.96E+00

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549094	7/12/2021 - 8/9/2021	Co-58	<3.68E+00	0.00E+00	3.68E+00
		Fe-59	<7.15E+00	0.00E+00	7.15E+00
		Co-60	<2.59E+00	0.00E+00	2.59E+00
		Zn-65	<7.25E+00	0.00E+00	7.25E+00
		Zr-95	<6.52E+00	0.00E+00	6.52E+00
		Nb-95	<4.10E+00	0.00E+00	4.10E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<4.23E+00	0.00E+00	4.23E+00
		Cs-137	<2.20E+00	0.00E+00	2.20E+00
		BaLa-140	<9.68E+00	0.00E+00	9.68E+00
		Be-7	<2.30E+01	0.00E+00	2.30E+01
		K-40	<4.38E+01	0.00E+00	4.38E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550933	8/9/2021 - 9/7/2021	Mn-54	<2.92E+00	0.00E+00	2.92E+00
		Co-58	<2.79E+00	0.00E+00	2.79E+00
		Fe-59	<6.23E+00	0.00E+00	6.23E+00
		Co-60	<2.95E+00	0.00E+00	2.95E+00
		Zn-65	<6.20E+00	0.00E+00	6.20E+00
		Zr-95	<5.50E+00	0.00E+00	5.50E+00
		Nb-95	<4.06E+00	0.00E+00	4.06E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.51E+00	0.00E+00	3.51E+00
		Cs-137	<3.48E+00	0.00E+00	3.48E+00
		BaLa-140	<8.06E+00	0.00E+00	8.06E+00
		Be-7	<3.25E+01	0.00E+00	3.25E+01
		K-40	5.65E+01	3.18E+01	4.24E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549200	7/12/2021 - 10/4/2021	H3SW	6.71E+02	1.24E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552530	9/7/2021 - 10/4/2021	Mn-54	<3.40E+00	0.00E+00	3.40E+00
		Co-58	<3.73E+00	0.00E+00	3.73E+00
		Fe-59	<5.83E+00	0.00E+00	5.83E+00
		Co-60	<3.50E+00	0.00E+00	3.50E+00
		Zn-65	<7.98E+00	0.00E+00	7.98E+00
		Zr-95	<7.34E+00	0.00E+00	7.34E+00
		Nb-95	<5.48E+00	0.00E+00	5.48E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<2.73E+00	0.00E+00	2.73E+00
		Cs-137	<3.88E+00	0.00E+00	3.88E+00
		BaLa-140	<6.88E+00	0.00E+00	6.88E+00
		Be-7	<3.51E+01	0.00E+00	3.51E+01
		K-40	9.55E+01	4.17E+01	5.16E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554408	10/4/2021 - 11/1/2021	Mn-54	<3.52E+00	0.00E+00	3.52E+00
		Co-58	<4.78E+00	0.00E+00	4.78E+00
		Fe-59	<6.99E+00	0.00E+00	6.99E+00
		Co-60	<4.74E+00	0.00E+00	4.74E+00
		Zn-65	<6.58E+00	0.00E+00	6.58E+00
		Zr-95	<7.57E+00	0.00E+00	7.57E+00
		Nb-95	<4.96E+00	0.00E+00	4.96E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<4.47E+00	0.00E+00	4.47E+00
		Cs-137	<3.42E+00	0.00E+00	3.42E+00
		BaLa-140	<1.04E+01	0.00E+00	1.04E+01
		Be-7	<4.03E+01	0.00E+00	4.03E+01
		K-40	<7.96E+01	0.00E+00	7.96E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556840	11/1/2021 - 11/29/2021	Mn-54	<3.11E+00	0.00E+00	3.11E+00
		Co-58	<3.44E+00	0.00E+00	3.44E+00
		Fe-59	<5.88E+00	0.00E+00	5.88E+00
		Co-60	<2.39E+00	0.00E+00	2.39E+00
		Zn-65	<6.13E+00	0.00E+00	6.13E+00

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 128 [INDICATOR - NE @ 0.45 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556840	11/1/2021 - 11/29/2021	Zr-95	<6.61E+00	0.00E+00	6.61E+00
		Nb-95	<4.06E+00	0.00E+00	4.06E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.46E+00	0.00E+00	3.46E+00
		Cs-137	<2.74E+00	0.00E+00	2.74E+00
		BaLa-140	<5.74E+00	0.00E+00	5.74E+00
		Be-7	<2.60E+01	0.00E+00	2.60E+01
		K-40	8.33E+01	4.20E+01	5.91E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555114	10/4/2021 - 12/27/2021	H3SW	8.35E+02	1.29E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558511	11/29/2021 - 12/27/2021	Mn-54	<2.63E+00	0.00E+00	2.63E+00
		Co-58	<2.60E+00	0.00E+00	2.60E+00
		Fe-59	<5.90E+00	0.00E+00	5.90E+00
		Co-60	<2.43E+00	0.00E+00	2.43E+00
		Zn-65	<3.99E+00	0.00E+00	3.99E+00
		Zr-95	<4.42E+00	0.00E+00	4.42E+00
		Nb-95	<3.25E+00	0.00E+00	3.25E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.11E+00	0.00E+00	3.11E+00
		Cs-137	<2.56E+00	0.00E+00	2.56E+00
		BaLa-140	<7.29E+00	0.00E+00	7.29E+00
		Be-7	<2.71E+01	0.00E+00	2.71E+01
		K-40	6.94E+01	3.35E+01	4.51E+01

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537780	12/28/2020 - 1/25/2021	Mn-54	<3.16E+00	0.00E+00	3.16E+00
		Co-58	<3.95E+00	0.00E+00	3.95E+00
		Fe-59	<7.85E+00	0.00E+00	7.85E+00
		Co-60	<3.55E+00	0.00E+00	3.55E+00
		Zn-65	<8.43E+00	0.00E+00	8.43E+00
		Zr-95	<6.21E+00	0.00E+00	6.21E+00
		Nb-95	<4.57E+00	0.00E+00	4.57E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.16E+00	0.00E+00	3.16E+00
		Cs-137	<3.08E+00	0.00E+00	3.08E+00
		BaLa-140	<9.55E+00	0.00E+00	9.55E+00
		Be-7	<3.32E+01	0.00E+00	3.32E+01
		K-40	<4.35E+01	0.00E+00	4.35E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538885	1/25/2021 - 2/22/2021	Mn-54	<3.19E+00	0.00E+00	3.19E+00
		Co-58	<2.31E+00	0.00E+00	2.31E+00
		Fe-59	<6.84E+00	0.00E+00	6.84E+00
		Co-60	<2.43E+00	0.00E+00	2.43E+00
		Zn-65	<7.07E+00	0.00E+00	7.07E+00
		Zr-95	<4.54E+00	0.00E+00	4.54E+00
		Nb-95	<3.76E+00	0.00E+00	3.76E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.38E+00	0.00E+00	3.38E+00
		Cs-137	<3.03E+00	0.00E+00	3.03E+00
		BaLa-140	<5.97E+00	0.00E+00	5.97E+00
		Be-7	<2.60E+01	0.00E+00	2.60E+01
		K-40	1.01E+02	3.57E+01	4.08E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541057	2/22/2021 - 3/22/2021	Mn-54	<2.76E+00	0.00E+00	2.76E+00
		Co-58	<3.87E+00	0.00E+00	3.87E+00
		Fe-59	<6.82E+00	0.00E+00	6.82E+00
		Co-60	<3.69E+00	0.00E+00	3.69E+00
		Zn-65	<7.75E+00	0.00E+00	7.75E+00
		Zr-95	<6.19E+00	0.00E+00	6.19E+00
		Nb-95	<3.89E+00	0.00E+00	3.89E+00

EnRad Laboratories

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541057	2/22/2021 - 3/22/2021	I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.77E+00	0.00E+00	3.77E+00
		Cs-137	<3.19E+00	0.00E+00	3.19E+00
		BaLa-140	<6.69E+00	0.00E+00	6.69E+00
		Be-7	<3.19E+01	0.00E+00	3.19E+01
538564	12/28/2020 - 4/19/2021	K-40	4.73E+01	3.31E+01	4.82E+01
		H3SW	<1.84E+02	0.00E+00	1.97E+02
542952	3/22/2021 - 4/19/2021	Mn-54	<2.52E+00	0.00E+00	2.52E+00
		Co-58	<2.59E+00	0.00E+00	2.59E+00
		Fe-59	<5.63E+00	0.00E+00	5.63E+00
		Co-60	<2.49E+00	0.00E+00	2.49E+00
		Zn-65	<6.46E+00	0.00E+00	6.46E+00
		Zr-95	<6.43E+00	0.00E+00	6.43E+00
		Nb-95	<3.18E+00	0.00E+00	3.18E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<2.74E+00	0.00E+00	2.74E+00
		Cs-137	<2.80E+00	0.00E+00	2.80E+00
		BaLa-140	<7.21E+00	0.00E+00	7.21E+00
		Be-7	<2.32E+01	0.00E+00	2.32E+01
		K-40	5.37E+01	2.64E+01	3.57E+01
544847	4/19/2021 - 5/17/2021	Mn-54	<2.77E+00	0.00E+00	2.77E+00
		Co-58	<3.19E+00	0.00E+00	3.19E+00
		Fe-59	<6.59E+00	0.00E+00	6.59E+00
		Co-60	<2.78E+00	0.00E+00	2.78E+00
		Zn-65	<5.12E+00	0.00E+00	5.12E+00
		Zr-95	<7.16E+00	0.00E+00	7.16E+00
		Nb-95	<4.40E+00	0.00E+00	4.40E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.20E+00	0.00E+00	3.20E+00
		Cs-137	<4.16E+00	0.00E+00	4.16E+00
		BaLa-140	<7.43E+00	0.00E+00	7.43E+00
		Be-7	<2.34E+01	0.00E+00	2.34E+01
		K-40	1.23E+02	4.37E+01	5.19E+01
546778	5/17/2021 - 6/14/2021	Mn-54	<3.10E+00	0.00E+00	3.10E+00
		Co-58	<3.75E+00	0.00E+00	3.75E+00
		Fe-59	<5.68E+00	0.00E+00	5.68E+00
		Co-60	<2.09E+00	0.00E+00	2.09E+00
		Zn-65	<6.03E+00	0.00E+00	6.03E+00
		Zr-95	<6.40E+00	0.00E+00	6.40E+00
		Nb-95	<3.79E+00	0.00E+00	3.79E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<2.82E+00	0.00E+00	2.82E+00
		Cs-137	<2.85E+00	0.00E+00	2.85E+00
		BaLa-140	<7.38E+00	0.00E+00	7.38E+00
		Be-7	<2.69E+01	0.00E+00	2.69E+01
		K-40	6.93E+01	3.79E+01	5.48E+01
544468	4/19/2021 - 7/12/2021	H3SW	<2.84E+01	0.00E+00	1.87E+02
		Mn-54	<2.91E+00	0.00E+00	2.91E+00
547912	6/14/2021 - 7/12/2021	Co-58	<3.60E+00	0.00E+00	3.60E+00
		Fe-59	<6.15E+00	0.00E+00	6.15E+00
		Co-60	<2.68E+00	0.00E+00	2.68E+00
		Zn-65	<7.73E+00	0.00E+00	7.73E+00
		Zr-95	<6.17E+00	0.00E+00	6.17E+00
		Nb-95	<3.88E+00	0.00E+00	3.88E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547912	6/14/2021 - 7/12/2021	Cs-134	<4.06E+00	0.00E+00	4.06E+00
		Cs-137	<3.06E+00	0.00E+00	3.06E+00
		BaLa-140	<6.41E+00	0.00E+00	6.41E+00
		Be-7	<2.85E+01	0.00E+00	2.85E+01
		K-40	3.42E+01	3.02E+01	4.64E+01
549095	7/12/2021 - 8/9/2021	Mn-54	<2.94E+00	0.00E+00	2.94E+00
		Co-58	<3.04E+00	0.00E+00	3.04E+00
		Fe-59	<5.73E+00	0.00E+00	5.73E+00
		Co-60	<3.67E+00	0.00E+00	3.67E+00
		Zn-65	<6.51E+00	0.00E+00	6.51E+00
		Zr-95	<6.43E+00	0.00E+00	6.43E+00
		Nb-95	<4.51E+00	0.00E+00	4.51E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<3.16E+00	0.00E+00	3.16E+00
		Cs-137	<2.95E+00	0.00E+00	2.95E+00
		BaLa-140	<9.08E+00	0.00E+00	9.08E+00
		Be-7	<2.55E+01	0.00E+00	2.55E+01
		K-40	6.84E+01	3.15E+01	3.95E+01
550934	8/9/2021 - 9/7/2021	Mn-54	<3.31E+00	0.00E+00	3.31E+00
		Co-58	<3.95E+00	0.00E+00	3.95E+00
		Fe-59	<9.35E+00	0.00E+00	9.35E+00
		Co-60	<3.61E+00	0.00E+00	3.61E+00
		Zn-65	<7.43E+00	0.00E+00	7.43E+00
		Zr-95	<5.36E+00	0.00E+00	5.36E+00
		Nb-95	<4.44E+00	0.00E+00	4.44E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.37E+00	0.00E+00	3.37E+00
		Cs-137	<2.64E+00	0.00E+00	2.64E+00
		BaLa-140	<6.78E+00	0.00E+00	6.78E+00
		Be-7	<3.59E+01	0.00E+00	3.59E+01
		K-40	<6.68E+01	0.00E+00	6.68E+01
549201	7/12/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3SW	2.48E+02	1.11E+02	1.77E+02
552531	9/7/2021 - 10/4/2021	Mn-54	<3.80E+00	0.00E+00	3.80E+00
		Co-58	<3.35E+00	0.00E+00	3.35E+00
		Fe-59	<7.92E+00	0.00E+00	7.92E+00
		Co-60	<3.16E+00	0.00E+00	3.16E+00
		Zn-65	<8.81E+00	0.00E+00	8.81E+00
		Zr-95	<7.83E+00	0.00E+00	7.83E+00
		Nb-95	<4.90E+00	0.00E+00	4.90E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.69E+00	0.00E+00	3.69E+00
		Cs-137	<3.90E+00	0.00E+00	3.90E+00
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		Be-7	<3.79E+01	0.00E+00	3.79E+01
		K-40	<7.77E+01	0.00E+00	7.77E+01
554409	10/4/2021 - 11/1/2021	Mn-54	<3.36E+00	0.00E+00	3.36E+00
		Co-58	<3.37E+00	0.00E+00	3.37E+00
		Fe-59	<7.98E+00	0.00E+00	7.98E+00
		Co-60	<3.78E+00	0.00E+00	3.78E+00
		Zn-65	<6.64E+00	0.00E+00	6.64E+00
		Zr-95	<5.53E+00	0.00E+00	5.53E+00
		Nb-95	<4.14E+00	0.00E+00	4.14E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<2.85E+00	0.00E+00	2.85E+00
		Cs-137	<2.86E+00	0.00E+00	2.86E+00
		BaLa-140	<5.41E+00	0.00E+00	5.41E+00
		Be-7	<3.19E+01	0.00E+00	3.19E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 131 [INDICATOR - WNW @ 0.64 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554409	10/4/2021 - 11/1/2021	K-40	8.81E+01	3.73E+01	4.57E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556841	11/1/2021 - 11/29/2021	Mn-54	<3.63E+00	0.00E+00	3.63E+00
		Co-58	<2.26E+00	0.00E+00	2.26E+00
		Fe-59	<6.72E+00	0.00E+00	6.72E+00
		Co-60	<3.82E+00	0.00E+00	3.82E+00
		Zn-65	<7.92E+00	0.00E+00	7.92E+00
		Zr-95	<7.12E+00	0.00E+00	7.12E+00
		Nb-95	<4.23E+00	0.00E+00	4.23E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.56E+00	0.00E+00	3.56E+00
		Cs-137	<3.32E+00	0.00E+00	3.32E+00
		BaLa-140	<7.38E+00	0.00E+00	7.38E+00
		Be-7	<2.39E+01	0.00E+00	2.39E+01
		K-40	4.94E+01	4.04E+01	6.25E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555115	10/4/2021 - 12/27/2021	H3SW	4.86E+02	1.19E+02	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558512	11/29/2021 - 12/27/2021	Mn-54	<3.56E+00	0.00E+00	3.56E+00
		Co-58	<3.66E+00	0.00E+00	3.66E+00
		Fe-59	<9.28E+00	0.00E+00	9.28E+00
		Co-60	<9.07E-01	0.00E+00	9.07E-01
		Zn-65	<9.80E+00	0.00E+00	9.80E+00
		Zr-95	<6.98E+00	0.00E+00	6.98E+00
		Nb-95	<4.68E+00	0.00E+00	4.68E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<4.67E+00	0.00E+00	4.67E+00
		Cs-137	<4.09E+00	0.00E+00	4.09E+00
		BaLa-140	<8.36E+00	0.00E+00	8.36E+00
		Be-7	<4.07E+01	0.00E+00	4.07E+01
		K-40	<7.45E+01	0.00E+00	7.45E+01

Sample Point 135 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537781	12/28/2020 - 1/25/2021	Mn-54	<3.03E+00	0.00E+00	3.03E+00
		Co-58	<3.63E+00	0.00E+00	3.63E+00
		Fe-59	<5.75E+00	0.00E+00	5.75E+00
		Co-60	<2.36E+00	0.00E+00	2.36E+00
		Zn-65	<6.01E+00	0.00E+00	6.01E+00
		Zr-95	<4.77E+00	0.00E+00	4.77E+00
		Nb-95	<3.84E+00	0.00E+00	3.84E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.06E+00	0.00E+00	3.06E+00
		Cs-137	<3.34E+00	0.00E+00	3.34E+00
		BaLa-140	<4.85E+00	0.00E+00	4.85E+00
		Be-7	<3.05E+01	0.00E+00	3.05E+01
		K-40	7.44E+01	3.36E+01	4.26E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538886	1/25/2021 - 2/22/2021	Mn-54	<2.82E+00	0.00E+00	2.82E+00
		Co-58	<3.11E+00	0.00E+00	3.11E+00
		Fe-59	<6.36E+00	0.00E+00	6.36E+00
		Co-60	<3.52E+00	0.00E+00	3.52E+00
		Zn-65	<5.46E+00	0.00E+00	5.46E+00
		Zr-95	<5.34E+00	0.00E+00	5.34E+00
		Nb-95	<3.57E+00	0.00E+00	3.57E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<2.47E+00	0.00E+00	2.47E+00
		Cs-137	<2.98E+00	0.00E+00	2.98E+00
		BaLa-140	<5.32E+00	0.00E+00	5.32E+00
		Be-7	<2.72E+01	0.00E+00	2.72E+01
		K-40	6.74E+01	2.91E+01	3.45E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 135 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541058	2/22/2021 - 3/22/2021	Mn-54	<3.00E+00	0.00E+00	3.00E+00
		Co-58	<4.38E+00	0.00E+00	4.38E+00
		Fe-59	<9.20E+00	0.00E+00	9.20E+00
		Co-60	<4.70E+00	0.00E+00	4.70E+00
		Zn-65	<1.02E+01	0.00E+00	1.02E+01
		Zr-95	<8.53E+00	0.00E+00	8.53E+00
		Nb-95	<4.62E+00	0.00E+00	4.62E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<5.23E+00	0.00E+00	5.23E+00
		Cs-137	<3.43E+00	0.00E+00	3.43E+00
		BaLa-140	<1.06E+01	0.00E+00	1.06E+01
		Be-7	<4.46E+01	0.00E+00	4.46E+01
		K-40	1.20E+02	4.62E+01	4.44E+01
		538565	12/28/2020 - 4/19/2021	H3SW	<2.43E+00
542953	3/22/2021 - 4/19/2021	Mn-54	<3.38E+00	0.00E+00	3.38E+00
		Co-58	<3.19E+00	0.00E+00	3.19E+00
		Fe-59	<7.87E+00	0.00E+00	7.87E+00
		Co-60	<3.26E+00	0.00E+00	3.26E+00
		Zn-65	<7.10E+00	0.00E+00	7.10E+00
		Zr-95	<5.91E+00	0.00E+00	5.91E+00
		Nb-95	<4.39E+00	0.00E+00	4.39E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.21E+00	0.00E+00	3.21E+00
		Cs-137	<3.17E+00	0.00E+00	3.17E+00
		BaLa-140	<8.01E+00	0.00E+00	8.01E+00
		Be-7	<3.30E+01	0.00E+00	3.30E+01
		K-40	9.38E+01	3.42E+01	3.27E+01
		544848	4/19/2021 - 5/17/2021	Mn-54	<3.36E+00
Co-58	<2.93E+00			0.00E+00	2.93E+00
Fe-59	<6.04E+00			0.00E+00	6.04E+00
Co-60	<3.09E+00			0.00E+00	3.09E+00
Zn-65	<6.25E+00			0.00E+00	6.25E+00
Zr-95	<6.73E+00			0.00E+00	6.73E+00
Nb-95	<3.73E+00			0.00E+00	3.73E+00
I-131	<1.11E+01			0.00E+00	1.11E+01
Cs-134	<2.44E+00			0.00E+00	2.44E+00
Cs-137	<3.03E+00			0.00E+00	3.03E+00
BaLa-140	<7.27E+00			0.00E+00	7.27E+00
Be-7	<2.28E+01			0.00E+00	2.28E+01
K-40	4.66E+01			3.20E+01	4.72E+01
546779	5/17/2021 - 6/14/2021			Mn-54	<3.34E+00
		Co-58	<4.38E+00	0.00E+00	4.38E+00
		Fe-59	<6.58E+00	0.00E+00	6.58E+00
		Co-60	<4.44E+00	0.00E+00	4.44E+00
		Zn-65	<7.28E+00	0.00E+00	7.28E+00
		Zr-95	<6.87E+00	0.00E+00	6.87E+00
		Nb-95	<4.11E+00	0.00E+00	4.11E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.30E+00	0.00E+00	3.30E+00
		Cs-137	<3.25E+00	0.00E+00	3.25E+00
		BaLa-140	<7.97E+00	0.00E+00	7.97E+00
		Be-7	<2.97E+01	0.00E+00	2.97E+01
		K-40	<5.03E+01	0.00E+00	5.03E+01
		544469	4/19/2021 - 7/12/2021	H3SW	<-1.0E+02
547913	6/14/2021 - 7/12/2021	Mn-54	<4.31E+00	0.00E+00	4.31E+00

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 135 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547913	6/14/2021 - 7/12/2021	Co-58	<4.00E+00	0.00E+00	4.00E+00
		Fe-59	<6.52E+00	0.00E+00	6.52E+00
		Co-60	<4.43E+00	0.00E+00	4.43E+00
		Zn-65	<6.71E+00	0.00E+00	6.71E+00
		Zr-95	<6.79E+00	0.00E+00	6.79E+00
		Nb-95	<4.98E+00	0.00E+00	4.98E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.47E+00	0.00E+00	3.47E+00
		Cs-137	<3.53E+00	0.00E+00	3.53E+00
		BaLa-140	<8.87E+00	0.00E+00	8.87E+00
		Be-7	<3.76E+01	0.00E+00	3.76E+01
		K-40	<7.92E+01	0.00E+00	7.92E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549096	7/12/2021 - 8/9/2021	Mn-54	<3.43E+00	0.00E+00	3.43E+00
		Co-58	<2.93E+00	0.00E+00	2.93E+00
		Fe-59	<8.02E+00	0.00E+00	8.02E+00
		Co-60	<2.89E+00	0.00E+00	2.89E+00
		Zn-65	<4.51E+00	0.00E+00	4.51E+00
		Zr-95	<6.37E+00	0.00E+00	6.37E+00
		Nb-95	<4.21E+00	0.00E+00	4.21E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.41E+00	0.00E+00	3.41E+00
		Cs-137	<3.17E+00	0.00E+00	3.17E+00
		BaLa-140	<7.11E+00	0.00E+00	7.11E+00
		Be-7	<2.76E+01	0.00E+00	2.76E+01
		K-40	1.17E+02	3.42E+01	2.49E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550935	8/9/2021 - 9/7/2021	Mn-54	<2.66E+00	0.00E+00	2.66E+00
		Co-58	<3.57E+00	0.00E+00	3.57E+00
		Fe-59	<7.01E+00	0.00E+00	7.01E+00
		Co-60	<3.94E+00	0.00E+00	3.94E+00
		Zn-65	<5.23E+00	0.00E+00	5.23E+00
		Zr-95	<8.39E+00	0.00E+00	8.39E+00
		Nb-95	<4.16E+00	0.00E+00	4.16E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<4.73E+00	0.00E+00	4.73E+00
		Cs-137	<3.47E+00	0.00E+00	3.47E+00
		BaLa-140	<9.78E+00	0.00E+00	9.78E+00
		Be-7	<3.19E+01	0.00E+00	3.19E+01
		K-40	7.24E+01	3.44E+01	4.22E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549202	7/12/2021 - 10/4/2021	H3SW	<1.66E+01	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552532	9/7/2021 - 10/4/2021	Mn-54	<3.05E+00	0.00E+00	3.05E+00
		Co-58	<4.26E+00	0.00E+00	4.26E+00
		Fe-59	<8.28E+00	0.00E+00	8.28E+00
		Co-60	<2.38E+00	0.00E+00	2.38E+00
		Zn-65	<5.66E+00	0.00E+00	5.66E+00
		Zr-95	<7.55E+00	0.00E+00	7.55E+00
		Nb-95	<2.82E+00	0.00E+00	2.82E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.21E+00	0.00E+00	3.21E+00
		Cs-137	<3.40E+00	0.00E+00	3.40E+00
		BaLa-140	<6.11E+00	0.00E+00	6.11E+00
		Be-7	<2.70E+01	0.00E+00	2.70E+01
		K-40	<4.78E+01	0.00E+00	4.78E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554410	10/4/2021 - 11/1/2021	Mn-54	<2.26E+00	0.00E+00	2.26E+00
		Co-58	<2.83E+00	0.00E+00	2.83E+00
		Fe-59	<4.86E+00	0.00E+00	4.86E+00
		Co-60	<2.31E+00	0.00E+00	2.31E+00
		Zn-65	<4.39E+00	0.00E+00	4.39E+00

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

Sample Point 135 [CONTROL - N @ 11.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554410	10/4/2021 - 11/1/2021	Zr-95	<4.68E+00	0.00E+00	4.68E+00
		Nb-95	<2.53E+00	0.00E+00	2.53E+00
		I-131	<8.07E+00	0.00E+00	8.07E+00
		Cs-134	<2.22E+00	0.00E+00	2.22E+00
		Cs-137	<2.19E+00	0.00E+00	2.19E+00
		BaLa-140	<7.22E+00	0.00E+00	7.22E+00
		Be-7	<2.45E+01	0.00E+00	2.45E+01
		K-40	9.17E+01	2.67E+01	2.92E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556842	11/1/2021 - 11/29/2021	Mn-54	<3.28E+00	0.00E+00	3.28E+00
		Co-58	<3.90E+00	0.00E+00	3.90E+00
		Fe-59	<5.28E+00	0.00E+00	5.28E+00
		Co-60	<3.44E+00	0.00E+00	3.44E+00
		Zn-65	<5.35E+00	0.00E+00	5.35E+00
		Zr-95	<6.05E+00	0.00E+00	6.05E+00
		Nb-95	<4.25E+00	0.00E+00	4.25E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<4.58E+00	0.00E+00	4.58E+00
		Cs-137	<3.58E+00	0.00E+00	3.58E+00
		BaLa-140	<6.64E+00	0.00E+00	6.64E+00
		Be-7	<2.73E+01	0.00E+00	2.73E+01
		K-40	7.91E+01	3.48E+01	4.33E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555116	10/4/2021 - 12/27/2021	H3SW	<1.64E+02	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558513	11/29/2021 - 12/27/2021	Mn-54	<3.14E+00	0.00E+00	3.14E+00
		Co-58	<3.39E+00	0.00E+00	3.39E+00
		Fe-59	<7.78E+00	0.00E+00	7.78E+00
		Co-60	<3.27E+00	0.00E+00	3.27E+00
		Zn-65	<6.06E+00	0.00E+00	6.06E+00
		Zr-95	<6.83E+00	0.00E+00	6.83E+00
		Nb-95	<4.05E+00	0.00E+00	4.05E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<4.08E+00	0.00E+00	4.08E+00
		Cs-137	<3.56E+00	0.00E+00	3.56E+00
		BaLa-140	<8.72E+00	0.00E+00	8.72E+00
		Be-7	<3.19E+01	0.00E+00	3.19E+01
		K-40	1.08E+02	3.66E+01	4.17E+01

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 143 [INDICATOR - NW @ 0.27 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539836	12/15/2020 - 3/16/2021	mR/Std Qtr	18.71
546263	3/16/2021 - 6/16/2021	mR/Std Qtr	17.20
551382	6/16/2021 - 9/15/2021	mR/Std Qtr	14.45
557721	9/15/2021 - 12/15/2021	mR/Std Qtr	15.82

Sample Point 144 [INDICATOR - NNE @ 0.46 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539837	12/14/2020 - 3/15/2021	mR/Std Qtr	17.26
546264	3/15/2021 - 6/16/2021	mR/Std Qtr	15.44
551383	6/16/2021 - 9/15/2021	mR/Std Qtr	12.48

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 144 [INDICATOR - NNE @ 0.46 miles]

TLD RING TLD_INNER

Sample ID: 557722	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 13.66
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Sample Point 145 [INDICATOR - NE @ 0.47 miles]

TLD RING TLD_INNER

Sample ID: 539838	Sample Dates: 12/14/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 16.35
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Sample ID: 546265	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 15.78
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Sample ID: 551384	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 13.46
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Sample ID: 557723	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 15.84
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Sample Point 146 [INDICATOR - ENE @ 0.42 miles]

TLD RING TLD_INNER

Sample ID: 539839	Sample Dates: 12/14/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 16.09
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Sample ID: 546266	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 15.10
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Sample ID: 551385	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 13.40
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Sample ID: 557724	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 14.06
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Sample Point 147 [INDICATOR - E @ 0.44 miles]

TLD RING TLD_INNER

Sample ID: 539840	Sample Dates: 12/14/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 15.88
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Sample ID: 546267	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 15.68
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Sample ID: 551386	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 14.11
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Sample ID: 557725	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 15.52
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Sample Point 148 [INDICATOR - ESE @ 0.46 miles]

TLD RING TLD_INNER

Sample ID: 539841	Sample Dates: 12/14/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 13.84
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Sample ID: 546268	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 13.90
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Sample ID: 551387	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 10.35
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Sample ID: 557726	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 11.54
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Sample Point 149 [INDICATOR - SE @ 0.5 miles]

TLD RING TLD_INNER

Sample ID: 539842	Sample Dates: 12/14/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 13.21
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Sample ID: 546269	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 13.68
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Sample ID: 551388	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 10.91
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Sample ID: 557727	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 13.46
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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 151 [INDICATOR - S @ 0.37 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539843	12/14/2020 - 3/15/2021	mR/Std Qtr	15.55
546270	3/15/2021 - 6/16/2021	mR/Std Qtr	15.24
551389	6/16/2021 - 9/15/2021	mR/Std Qtr	12.80
557728	9/15/2021 - 12/15/2021	mR/Std Qtr	14.95

Sample Point 152 [INDICATOR - SSW @ 0.44 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539844	12/14/2020 - 3/15/2021	mR/Std Qtr	14.96
546271	3/15/2021 - 6/16/2021	mR/Std Qtr	15.12
551390	6/16/2021 - 9/15/2021	mR/Std Qtr	12.64
557729	9/15/2021 - 12/15/2021	mR/Std Qtr	13.74

Sample Point 153 [INDICATOR - SW @ 0.47 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539845	12/14/2020 - 3/15/2021	mR/Std Qtr	19.94
546272	3/15/2021 - 6/16/2021	mR/Std Qtr	18.91
551391	6/16/2021 - 9/15/2021	mR/Std Qtr	17.85
557730	9/15/2021 - 12/15/2021	mR/Std Qtr	18.78

Sample Point 154 [INDICATOR - W @ 0.45 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539846	12/15/2020 - 3/16/2021	mR/Std Qtr	20.04
546273	3/16/2021 - 6/16/2021	mR/Std Qtr	18.08
551392	6/16/2021 - 9/15/2021	mR/Std Qtr	13.93
557731	9/15/2021 - 12/15/2021	mR/Std Qtr	17.98

Sample Point 156 [INDICATOR - WNW @ 0.44 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539847	12/15/2020 - 3/16/2021	mR/Std Qtr	19.86
546274	3/16/2021 - 6/16/2021	mR/Std Qtr	17.48
551393	6/16/2021 - 9/15/2021	mR/Std Qtr	15.02
557732	9/15/2021 - 12/15/2021	mR/Std Qtr	17.06

Sample Point 157 [INDICATOR - N @ 4.69 miles]

TLD RING TLD_OUTER

Sample ID	Sample Dates	Nuclide	Activity
539848	12/15/2020 - 3/16/2021	mR/Std Qtr	18.27
546275	3/16/2021 - 6/16/2021	mR/Std Qtr	15.37

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 157 [INDICATOR - N @ 4.69 miles]

TLD RING TLD_OUTER

Sample ID:	551394	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	14.03
Sample ID:	557733	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	14.86

Sample Point 158 [INDICATOR - NNE @ 4.33 miles]

TLD RING TLD_OUTER

Sample ID:	539849	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	16.98
Sample ID:	546276	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	15.48
Sample ID:	551395	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	13.34
Sample ID:	557734	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	14.76

Sample Point 159 [INDICATOR - NE @ 4.77 miles]

TLD RING TLD_OUTER

Sample ID:	539850	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	18.34
Sample ID:	546277	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	18.03
Sample ID:	551396	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	14.75
Sample ID:	557735	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	15.33

Sample Point 160 [INDICATOR - ENE @ 4.89 miles]

TLD RING TLD_OUTER

Sample ID:	539851	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	16.29
Sample ID:	546278	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	15.61
Sample ID:	551397	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	12.74
Sample ID:	557736	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	11.83

Sample Point 161 [INDICATOR - E @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	539852	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	15.63
Sample ID:	546279	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	15.38
Sample ID:	551398	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	13.02
Sample ID:	557737	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	15.02

Sample Point 162 [INDICATOR - ESE @ 4.53 miles]

TLD RING TLD_OUTER

Sample ID:	539853	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	13.93
Sample ID:	546280	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	11.30
Sample ID:	551399	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	9.99
Sample ID:	557738	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	12.13

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 163 [INDICATOR - SE @ 4.94 miles]

TLD RING TLD_OUTER

Sample ID:	539854	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	12.33
Sample ID:	546281	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	12.05
Sample ID:	551400	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	10.53
Sample ID:	557739	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	10.28

Sample Point 164 [INDICATOR - SSE @ 4.64 miles]

TLD RING TLD_OUTER

Sample ID:	539855	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	12.64
Sample ID:	546282	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	12.53
Sample ID:	551401	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	9.53
Sample ID:	557740	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	11.01

Sample Point 165 [INDICATOR - S @ 4.57 miles]

TLD RING TLD_OUTER

Sample ID:	539856	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	21.64
Sample ID:	546283	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	20.90
Sample ID:	551402	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	19.19
Sample ID:	557741	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	19.32

Sample Point 166 [INDICATOR - SSW @ 4.44 miles]

TLD RING TLD_OUTER

Sample ID:	539857	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	19.47
Sample ID:	546284	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	18.13
Sample ID:	551403	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	14.86
Sample ID:	557742	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	17.32

Sample Point 167 [INDICATOR - SW @ 4.87 miles]

TLD RING TLD_OUTER

Sample ID:	539858	Sample Dates:	12/15/2020 - 3/15/2021	Nuclide	Activity
				mR/Std Qtr	19.50
Sample ID:	546285	Sample Dates:	3/15/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	19.09
Sample ID:	551404	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	16.05
Sample ID:	557743	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	19.51

Sample Point 168 [INDICATOR - WSW @ 4.6 miles]

TLD RING TLD_OUTER

Sample ID:	539859	Sample Dates:	12/15/2020 - 3/15/2021	Nuclide	Activity
				mR/Std Qtr	18.51
Sample ID:	546286	Sample Dates:	3/15/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	17.83

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 168 [INDICATOR - WSW @ 4.6 miles]

TLD RING TLD_OUTER

Sample ID:	551405	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	15.75
Sample ID:	557744	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	16.99

Sample Point 169 [INDICATOR - W @ 4.03 miles]

TLD RING TLD_OUTER

Sample ID:	539860	Sample Dates:	12/15/2020 - 3/15/2021	Nuclide	Activity
				mR/Std Qtr	15.43
Sample ID:	546287	Sample Dates:	3/15/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	13.56
Sample ID:	551406	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	12.58
Sample ID:	557745	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	12.66

Sample Point 170 [INDICATOR - WNW @ 4.32 miles]

TLD RING TLD_OUTER

Sample ID:	539861	Sample Dates:	12/15/2020 - 3/15/2021	Nuclide	Activity
				mR/Std Qtr	24.58
Sample ID:	546288	Sample Dates:	3/15/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	26.08
Sample ID:	551407	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	22.59
Sample ID:	557746	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	23.71

Sample Point 171 [INDICATOR - NW @ 3.95 miles]

TLD RING TLD_OUTER

Sample ID:	539862	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	23.50
Sample ID:	546289	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	18.23
Sample ID:	551408	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	17.20
Sample ID:	557747	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	19.99

Sample Point 172 [INDICATOR - NNW @ 4.69 miles]

TLD RING TLD_OUTER

Sample ID:	539863	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	17.21
Sample ID:	546290	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	14.35
Sample ID:	551409	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	12.91
Sample ID:	557748	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	13.81

Sample Point 173 [INDICATOR - NNW @ 8.39 miles]

TLD RING TLD_SPEC

Sample ID:	539864	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	24.30
Sample ID:	546291	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	24.54
Sample ID:	551410	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	24.70
Sample ID:	557749	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	24.10

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 174 [INDICATOR - WNW @ 8.85 miles]

TLD RING TLD_SPEC

Sample ID: 539865	Sample Dates: 12/15/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 24.91
Sample ID: 546292	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 25.42
Sample ID: 551411	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 22.48
Sample ID: 557750	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 23.83

Sample Point 175 [CONTROL - WNW @ 15.5 miles]

TLD RING TLD_CTRL

Sample ID: 539866	Sample Dates: 12/15/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 23.80
Sample ID: 546293	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 21.60
Sample ID: 551412	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 20.81
Sample ID: 557751	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 23.11

Sample Point 177 [INDICATOR - S @ 8.77 miles]

TLD RING TLD_SPEC

Sample ID: 539867	Sample Dates: 12/15/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 14.69
Sample ID: 546294	Sample Dates: 3/15/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 12.90
Sample ID: 551413	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 11.51
Sample ID: 557752	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 12.36

Sample Point 178 [INDICATOR - SE @ 9.36 miles]

TLD RING TLD_SPEC

Sample ID: 539868	Sample Dates: 12/15/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 15.29
Sample ID: 546295	Sample Dates: 3/16/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 13.88
Sample ID: 551414	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 12.06
Sample ID: 557753	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 12.11

Sample Point 180 [INDICATOR - NNE @ 12.7 miles]

TLD RING TLD_SPEC

Sample ID: 539869	Sample Dates: 12/15/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 24.89
Sample ID: 546296	Sample Dates: 3/16/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 25.13
Sample ID: 551415	Sample Dates: 6/16/2021 - 9/15/2021	Nuclide mR/Std Qtr	Activity 23.18
Sample ID: 557754	Sample Dates: 9/15/2021 - 12/15/2021	Nuclide mR/Std Qtr	Activity 23.98

Sample Point 181 [INDICATOR - NE @ 7.02 miles]

TLD RING TLD_SPEC

Sample ID: 539870	Sample Dates: 12/15/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 16.63
Sample ID: 546297	Sample Dates: 3/16/2021 - 6/16/2021	Nuclide mR/Std Qtr	Activity 16.88

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 181 [INDICATOR - NE @ 7.02 miles]

TLD RING TLD_SPEC

Sample ID:	551416	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	15.50
Sample ID:	557755	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	16.69

Sample Point 182 [INDICATOR - ENE @ 6.23 miles]

TLD RING TLD_SPEC

Sample ID:	539871	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	19.79
Sample ID:	546298	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	18.87
Sample ID:	551417	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	16.84
Sample ID:	557756	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	18.13

Sample Point 186 [INDICATOR - NNW @ 0.24 miles]

TLD RING TLD_SPEC

Sample ID:	539872	Sample Dates:	12/15/2020 - 3/16/2021	Nuclide	Activity
				mR/Std Qtr	20.41
Sample ID:	546299	Sample Dates:	3/16/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	17.02
Sample ID:	551418	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	13.97
Sample ID:	557757	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	14.09

Sample Point 187 [INDICATOR - N @ 0.19 miles]

TLD RING TLD_SPEC

Sample ID:	539873	Sample Dates:	12/14/2020 - 3/15/2021	Nuclide	Activity
				mR/Std Qtr	18.81
Sample ID:	546300	Sample Dates:	3/15/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	18.06
Sample ID:	551419	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	15.15
Sample ID:	557758	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	16.05

Sample Point 189 [INDICATOR - SSE @ 0.43 miles]

TLD RING TLD_INNER

Sample ID:	539874	Sample Dates:	12/14/2020 - 3/15/2021	Nuclide	Activity
				mR/Std Qtr	15.45
Sample ID:	546301	Sample Dates:	3/15/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	16.47
Sample ID:	551420	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	13.93
Sample ID:	557759	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	14.53

Sample Point 190 [INDICATOR - WSW @ 0.37 miles]

TLD RING TLD_INNER

Sample ID:	539875	Sample Dates:	12/14/2020 - 3/15/2021	Nuclide	Activity
				mR/Std Qtr	19.06
Sample ID:	546302	Sample Dates:	3/15/2021 - 6/16/2021	Nuclide	Activity
				mR/Std Qtr	19.71
Sample ID:	551421	Sample Dates:	6/16/2021 - 9/15/2021	Nuclide	Activity
				mR/Std Qtr	17.48
Sample ID:	557760	Sample Dates:	9/15/2021 - 12/15/2021	Nuclide	Activity
				mR/Std Qtr	19.72

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 191 [INDICATOR - NNE @ 2.84 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
539876	12/15/2020 - 3/16/2021	mR/Std Qtr	19.38
546303	3/16/2021 - 6/16/2021	mR/Std Qtr	17.80
551422	6/16/2021 - 9/15/2021	mR/Std Qtr	15.61
557761	9/15/2021 - 12/15/2021	mR/Std Qtr	17.86

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
537324	1/5/2021 - 1/5/2021	MIXEDBLV	Mn-54	<1.58E+01	0.00E+00	1.58E+01
			Co-58	<1.31E+01	0.00E+00	1.31E+01
			Fe-59	<3.32E+01	0.00E+00	3.32E+01
			Co-60	<1.59E+01	0.00E+00	1.59E+01
			Zn-65	<4.12E+01	0.00E+00	4.12E+01
			Zr-95	<2.01E+01	0.00E+00	2.01E+01
			Nb-95	<1.89E+01	0.00E+00	1.89E+01
			I-131	<1.62E+01	0.00E+00	1.62E+01
			Cs-134	<1.82E+01	0.00E+00	1.82E+01
			Cs-137	<1.53E+01	0.00E+00	1.53E+01
			BaLa-140	<1.55E+01	0.00E+00	1.55E+01
			Be-7	1.56E+03	2.23E+02	1.70E+02
			K-40	6.80E+03	7.48E+02	2.58E+02
538552	2/1/2021 - 2/1/2021	MIXEDBLV	Mn-54	<2.12E+01	0.00E+00	2.12E+01
			Co-58	<2.09E+01	0.00E+00	2.09E+01
			Fe-59	<4.33E+01	0.00E+00	4.33E+01
			Co-60	<1.73E+01	0.00E+00	1.73E+01
			Zn-65	<4.56E+01	0.00E+00	4.56E+01
			Zr-95	<3.09E+01	0.00E+00	3.09E+01
			Nb-95	<2.07E+01	0.00E+00	2.07E+01
			I-131	<1.81E+01	0.00E+00	1.81E+01
			Cs-134	<2.65E+01	0.00E+00	2.65E+01
			Cs-137	<2.14E+01	0.00E+00	2.14E+01
			BaLa-140	<2.11E+01	0.00E+00	2.11E+01
			Be-7	1.37E+03	2.58E+02	2.61E+02
			K-40	4.07E+03	5.93E+02	3.84E+02
540067	3/1/2021 - 3/1/2021	MIXEDBLV	Mn-54	<1.27E+01	0.00E+00	1.27E+01
			Co-58	<1.11E+01	0.00E+00	1.11E+01
			Fe-59	<2.52E+01	0.00E+00	2.52E+01
			Co-60	<1.30E+01	0.00E+00	1.30E+01
			Zn-65	<2.52E+01	0.00E+00	2.52E+01
			Zr-95	<1.65E+01	0.00E+00	1.65E+01
			Nb-95	<1.18E+01	0.00E+00	1.18E+01
			I-131	<9.61E+00	0.00E+00	9.61E+00
			Cs-134	<1.43E+01	0.00E+00	1.43E+01
			Cs-137	<1.14E+01	0.00E+00	1.14E+01
			BaLa-140	<1.25E+01	0.00E+00	1.25E+01
			Be-7	1.17E+03	1.73E+02	1.39E+02
			K-40	4.60E+03	5.16E+02	1.82E+02
542879	4/5/2021 - 4/5/2021	MIXEDBLV	Mn-54	<1.72E+01	0.00E+00	1.72E+01
			Co-58	<1.30E+01	0.00E+00	1.30E+01
			Fe-59	<3.14E+01	0.00E+00	3.14E+01
			Co-60	<1.64E+01	0.00E+00	1.64E+01
			Zn-65	<3.18E+01	0.00E+00	3.18E+01
			Zr-95	<2.44E+01	0.00E+00	2.44E+01
			Nb-95	<1.65E+01	0.00E+00	1.65E+01
			I-131	<1.41E+01	0.00E+00	1.41E+01

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
542879	4/5/2021 - 4/5/2021	MIXEDBLV	Cs-134	<1.90E+01	0.00E+00	1.90E+01
			Cs-137	<1.75E+01	0.00E+00	1.75E+01
			BaLa-140	<1.54E+01	0.00E+00	1.54E+01
			Be-7	4.48E+02	1.33E+02	1.73E+02
			K-40	5.73E+03	6.48E+02	2.61E+02
544652	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54	<1.27E+01	0.00E+00	1.27E+01
			Co-58	<1.04E+01	0.00E+00	1.04E+01
			Fe-59	<2.06E+01	0.00E+00	2.06E+01
			Co-60	<1.41E+01	0.00E+00	1.41E+01
			Zn-65	<2.17E+01	0.00E+00	2.17E+01
			Zr-95	<2.24E+01	0.00E+00	2.24E+01
			Nb-95	<1.18E+01	0.00E+00	1.18E+01
			I-131	<1.17E+01	0.00E+00	1.17E+01
			Cs-134	<1.39E+01	0.00E+00	1.39E+01
			Cs-137	<1.15E+01	0.00E+00	1.15E+01
			BaLa-140	<1.32E+01	0.00E+00	1.32E+01
			Be-7	1.98E+02	9.82E+01	1.46E+02
			K-40	2.46E+03	3.44E+02	2.17E+02
546919	6/7/2021 - 6/7/2021	MIXEDBLV	Mn-54	<1.65E+01	0.00E+00	1.65E+01
			Co-58	<1.63E+01	0.00E+00	1.63E+01
			Fe-59	<3.91E+01	0.00E+00	3.91E+01
			Co-60	<1.57E+01	0.00E+00	1.57E+01
			Zn-65	<3.59E+01	0.00E+00	3.59E+01
			Zr-95	<3.35E+01	0.00E+00	3.35E+01
			Nb-95	<1.51E+01	0.00E+00	1.51E+01
			I-131	<1.39E+01	0.00E+00	1.39E+01
			Cs-134	<2.20E+01	0.00E+00	2.20E+01
			Cs-137	<1.83E+01	0.00E+00	1.83E+01
			BaLa-140	<1.55E+01	0.00E+00	1.55E+01
			Be-7	5.55E+02	1.52E+02	1.90E+02
			K-40	4.97E+03	6.15E+02	3.13E+02
548121	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54	<1.51E+01	0.00E+00	1.51E+01
			Co-58	<1.67E+01	0.00E+00	1.67E+01
			Fe-59	<2.71E+01	0.00E+00	2.71E+01
			Co-60	<1.51E+01	0.00E+00	1.51E+01
			Zn-65	<4.06E+01	0.00E+00	4.06E+01
			Zr-95	<2.76E+01	0.00E+00	2.76E+01
			Nb-95	<1.80E+01	0.00E+00	1.80E+01
			I-131	<1.56E+01	0.00E+00	1.56E+01
			Cs-134	<2.52E+01	0.00E+00	2.52E+01
			Cs-137	<1.71E+01	0.00E+00	1.71E+01
			BaLa-140	<1.77E+01	0.00E+00	1.77E+01
			Be-7	1.13E+03	1.93E+02	1.75E+02
			K-40	5.17E+03	6.15E+02	2.97E+02
549284	8/2/2021 - 8/2/2021	MIXEDBLV	Mn-54	<2.78E+01	0.00E+00	2.78E+01
			Co-58	<1.52E+01	0.00E+00	1.52E+01
			Fe-59	<3.18E+01	0.00E+00	3.18E+01
			Co-60	<1.87E+01	0.00E+00	1.87E+01
			Zn-65	<3.48E+01	0.00E+00	3.48E+01
			Zr-95	<3.09E+01	0.00E+00	3.09E+01
			Nb-95	<1.93E+01	0.00E+00	1.93E+01
			I-131	<1.81E+01	0.00E+00	1.81E+01
			Cs-134	<3.34E+01	0.00E+00	3.34E+01
			Cs-137	<1.81E+01	0.00E+00	1.81E+01
			BaLa-140	<2.19E+01	0.00E+00	2.19E+01
			Be-7	1.28E+03	2.26E+02	2.27E+02
			K-40	4.57E+03	5.84E+02	2.33E+02

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

Sample Point 102 [CONTROL - WNW @ 9.89 miles]

Sample ID:	551685	Sample Dates:	9/7/2021 - 9/7/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.81E+01	0.00E+00	2.81E+01
					Co-58	<2.53E+01	0.00E+00	2.53E+01
					Fe-59	<5.49E+01	0.00E+00	5.49E+01
					Co-60	<2.57E+01	0.00E+00	2.57E+01
					Zn-65	<4.48E+01	0.00E+00	4.48E+01
					Zr-95	<4.20E+01	0.00E+00	4.20E+01
					Nb-95	<2.44E+01	0.00E+00	2.44E+01
					I-131	<2.41E+01	0.00E+00	2.41E+01
					Cs-134	<3.70E+01	0.00E+00	3.70E+01
					Cs-137	<2.08E+01	0.00E+00	2.08E+01
					BaLa-140	<2.77E+01	0.00E+00	2.77E+01
					Be-7	1.09E+03	2.54E+02	2.85E+02
					K-40	3.18E+03	5.43E+02	3.44E+02

Sample ID:	553274	Sample Dates:	10/4/2021 - 10/4/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.42E+01	0.00E+00	2.42E+01
					Co-58	<1.50E+01	0.00E+00	1.50E+01
					Fe-59	<4.50E+01	0.00E+00	4.50E+01
					Co-60	<2.00E+01	0.00E+00	2.00E+01
					Zn-65	<4.43E+01	0.00E+00	4.43E+01
					Zr-95	<4.52E+01	0.00E+00	4.52E+01
					Nb-95	<2.38E+01	0.00E+00	2.38E+01
					I-131	<2.09E+01	0.00E+00	2.09E+01
					Cs-134	<3.58E+01	0.00E+00	3.58E+01
					Cs-137	<2.31E+01	0.00E+00	2.31E+01
					BaLa-140	<2.27E+01	0.00E+00	2.27E+01
					Be-7	1.72E+03	2.91E+02	2.67E+02
					K-40	3.83E+03	5.62E+02	3.11E+02

Sample ID:	555104	Sample Dates:	11/1/2021 - 11/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.71E+01	0.00E+00	1.71E+01
					Co-58	<1.47E+01	0.00E+00	1.47E+01
					Fe-59	<3.57E+01	0.00E+00	3.57E+01
					Co-60	<1.43E+01	0.00E+00	1.43E+01
					Zn-65	<3.55E+01	0.00E+00	3.55E+01
					Zr-95	<3.26E+01	0.00E+00	3.26E+01
					Nb-95	<1.68E+01	0.00E+00	1.68E+01
					I-131	<1.71E+01	0.00E+00	1.71E+01
					Cs-134	<2.11E+01	0.00E+00	2.11E+01
					Cs-137	<1.64E+01	0.00E+00	1.64E+01
					BaLa-140	<1.63E+01	0.00E+00	1.63E+01
					Be-7	1.99E+03	2.89E+02	2.36E+02
					K-40	2.95E+03	4.50E+02	2.97E+02

Sample ID:	557982	Sample Dates:	12/6/2021 - 12/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.41E+01	0.00E+00	2.41E+01
					Co-58	<2.17E+01	0.00E+00	2.17E+01
					Fe-59	<4.75E+01	0.00E+00	4.75E+01
					Co-60	<3.19E+01	0.00E+00	3.19E+01
					Zn-65	<5.31E+01	0.00E+00	5.31E+01
					Zr-95	<4.47E+01	0.00E+00	4.47E+01
					Nb-95	<2.40E+01	0.00E+00	2.40E+01
					I-131	<3.15E+01	0.00E+00	3.15E+01
					Cs-134	<2.64E+01	0.00E+00	2.64E+01
					Cs-137	<2.46E+01	0.00E+00	2.46E+01
					BaLa-140	<2.96E+01	0.00E+00	2.96E+01
					Be-7	1.09E+03	2.44E+02	2.68E+02
					K-40	5.20E+03	7.34E+02	4.35E+02

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	537325	Sample Dates:	1/5/2021 - 1/5/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.21E+01	0.00E+00	2.21E+01
					Co-58	<2.00E+01	0.00E+00	2.00E+01
					Fe-59	<5.14E+01	0.00E+00	5.14E+01
					Co-60	<2.15E+01	0.00E+00	2.15E+01
					Zn-65	<4.77E+01	0.00E+00	4.77E+01

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
537325	1/5/2021 - 1/5/2021	MIXEDBLV	Zr-95	<3.35E+01	0.00E+00	3.35E+01
			Nb-95	<2.24E+01	0.00E+00	2.24E+01
			I-131	<2.22E+01	0.00E+00	2.22E+01
			Cs-134	<2.69E+01	0.00E+00	2.69E+01
			Cs-137	<1.71E+01	0.00E+00	1.71E+01
			BaLa-140	<4.97E+00	0.00E+00	4.97E+00
			Be-7	7.94E+02	2.10E+02	2.50E+02
			K-40	3.96E+03	5.87E+02	3.11E+02
538553	2/1/2021 - 2/1/2021	MIXEDBLV	Mn-54	<2.32E+01	0.00E+00	2.32E+01
			Co-58	<2.04E+01	0.00E+00	2.04E+01
			Fe-59	<4.37E+01	0.00E+00	4.37E+01
			Co-60	<2.07E+01	0.00E+00	2.07E+01
			Zn-65	<5.63E+01	0.00E+00	5.63E+01
			Zr-95	<4.26E+01	0.00E+00	4.26E+01
			Nb-95	<2.15E+01	0.00E+00	2.15E+01
			I-131	<2.02E+01	0.00E+00	2.02E+01
			Cs-134	<2.86E+01	0.00E+00	2.86E+01
			Cs-137	<2.47E+01	0.00E+00	2.47E+01
			BaLa-140	<2.53E+01	0.00E+00	2.53E+01
			Be-7	9.30E+02	2.28E+02	2.69E+02
			K-40	5.37E+03	7.09E+02	2.73E+02
540068	3/1/2021 - 3/1/2021	MIXEDBLV	Mn-54	<1.88E+01	0.00E+00	1.88E+01
			Co-58	<1.66E+01	0.00E+00	1.66E+01
			Fe-59	<3.76E+01	0.00E+00	3.76E+01
			Co-60	<1.75E+01	0.00E+00	1.75E+01
			Zn-65	<4.10E+01	0.00E+00	4.10E+01
			Zr-95	<3.45E+01	0.00E+00	3.45E+01
			Nb-95	<1.38E+01	0.00E+00	1.38E+01
			I-131	<1.67E+01	0.00E+00	1.67E+01
			Cs-134	<1.78E+01	0.00E+00	1.78E+01
			Cs-137	<1.50E+01	0.00E+00	1.50E+01
			BaLa-140	<2.14E+01	0.00E+00	2.14E+01
			Be-7	8.68E+02	1.79E+02	1.89E+02
			K-40	4.67E+03	6.05E+02	3.03E+02
			542880	4/5/2021 - 4/5/2021	MIXEDBLV	Mn-54
Co-58	<1.46E+01	0.00E+00				1.46E+01
Fe-59	<2.68E+01	0.00E+00				2.68E+01
Co-60	<1.86E+01	0.00E+00				1.86E+01
Zn-65	<4.55E+01	0.00E+00				4.55E+01
Zr-95	<2.52E+01	0.00E+00				2.52E+01
Nb-95	<1.59E+01	0.00E+00				1.59E+01
I-131	<1.61E+01	0.00E+00				1.61E+01
Cs-134	<1.81E+01	0.00E+00				1.81E+01
Cs-137	<1.50E+01	0.00E+00				1.50E+01
BaLa-140	<1.71E+01	0.00E+00				1.71E+01
Be-7	2.70E+02	1.26E+02				1.83E+02
K-40	5.42E+03	6.57E+02				2.73E+02
544653	5/3/2021 - 5/3/2021	MIXEDBLV				Mn-54
			Co-58	<8.72E+00	0.00E+00	8.72E+00
			Fe-59	<2.30E+01	0.00E+00	2.30E+01
			Co-60	<1.24E+01	0.00E+00	1.24E+01
			Zn-65	<2.54E+01	0.00E+00	2.54E+01
			Zr-95	<1.84E+01	0.00E+00	1.84E+01
			Nb-95	<9.92E+00	0.00E+00	9.92E+00
			I-131	<1.06E+01	0.00E+00	1.06E+01
			Cs-134	<1.27E+01	0.00E+00	1.27E+01
			Cs-137	<1.07E+01	0.00E+00	1.07E+01
			BaLa-140	<1.10E+01	0.00E+00	1.10E+01
			Be-7	<1.39E+02	0.00E+00	1.39E+02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
544653	5/3/2021 - 5/3/2021		K-40	3.58E+03	4.43E+02	1.84E+02
546920	6/7/2021 - 6/7/2021		Mn-54	<1.95E+01	0.00E+00	1.95E+01
			Co-58	<1.61E+01	0.00E+00	1.61E+01
			Fe-59	<3.89E+01	0.00E+00	3.89E+01
			Co-60	<2.45E+01	0.00E+00	2.45E+01
			Zn-65	<4.00E+01	0.00E+00	4.00E+01
			Zr-95	<3.04E+01	0.00E+00	3.04E+01
			Nb-95	<1.55E+01	0.00E+00	1.55E+01
			I-131	<1.89E+01	0.00E+00	1.89E+01
			Cs-134	<2.37E+01	0.00E+00	2.37E+01
			Cs-137	<1.63E+01	0.00E+00	1.63E+01
			BaLa-140	<1.80E+01	0.00E+00	1.80E+01
			Be-7	4.17E+02	1.61E+02	2.23E+02
			K-40	2.65E+03	4.34E+02	2.33E+02
548122	7/6/2021 - 7/6/2021		Mn-54	<1.66E+01	0.00E+00	1.66E+01
			Co-58	<1.74E+01	0.00E+00	1.74E+01
			Fe-59	<3.85E+01	0.00E+00	3.85E+01
			Co-60	<1.64E+01	0.00E+00	1.64E+01
			Zn-65	<4.32E+01	0.00E+00	4.32E+01
			Zr-95	<3.57E+01	0.00E+00	3.57E+01
			Nb-95	<1.80E+01	0.00E+00	1.80E+01
			I-131	<2.42E+01	0.00E+00	2.42E+01
			Cs-134	<2.49E+01	0.00E+00	2.49E+01
			Cs-137	<1.90E+01	0.00E+00	1.90E+01
			BaLa-140	<2.12E+01	0.00E+00	2.12E+01
			Be-7	7.67E+02	1.80E+02	1.98E+02
			K-40	3.53E+03	5.25E+02	3.22E+02
549285	8/2/2021 - 8/2/2021		Mn-54	<1.53E+01	0.00E+00	1.53E+01
			Co-58	<1.88E+01	0.00E+00	1.88E+01
			Fe-59	<2.96E+01	0.00E+00	2.96E+01
			Co-60	<1.99E+01	0.00E+00	1.99E+01
			Zn-65	<4.30E+01	0.00E+00	4.30E+01
			Zr-95	<3.78E+01	0.00E+00	3.78E+01
			Nb-95	<1.54E+01	0.00E+00	1.54E+01
			I-131	<1.68E+01	0.00E+00	1.68E+01
			Cs-134	<2.54E+01	0.00E+00	2.54E+01
			Cs-137	<1.74E+01	0.00E+00	1.74E+01
			BaLa-140	<1.97E+01	0.00E+00	1.97E+01
			Be-7	1.17E+03	2.19E+02	2.18E+02
			K-40	3.40E+03	4.86E+02	2.15E+02
551686	9/7/2021 - 9/7/2021		Mn-54	<2.88E+01	0.00E+00	2.88E+01
			Co-58	<2.47E+01	0.00E+00	2.47E+01
			Fe-59	<5.96E+01	0.00E+00	5.96E+01
			Co-60	<2.23E+01	0.00E+00	2.23E+01
			Zn-65	<7.26E+01	0.00E+00	7.26E+01
			Zr-95	<5.80E+01	0.00E+00	5.80E+01
			Nb-95	<3.33E+01	0.00E+00	3.33E+01
			I-131	<2.83E+01	0.00E+00	2.83E+01
			Cs-134	<3.15E+01	0.00E+00	3.15E+01
			Cs-137	<3.40E+01	0.00E+00	3.40E+01
			BaLa-140	<2.19E+01	0.00E+00	2.19E+01
			Be-7	1.12E+03	2.90E+02	3.43E+02
			K-40	5.08E+03	7.83E+02	4.89E+02
553275	10/4/2021 - 10/4/2021		Mn-54	<2.13E+01	0.00E+00	2.13E+01
			Co-58	<2.14E+01	0.00E+00	2.14E+01
			Fe-59	<3.81E+01	0.00E+00	3.81E+01
			Co-60	<2.41E+01	0.00E+00	2.41E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 120 [INDICATOR - NNE @ 0.46 miles]

Sample ID:	553275	Sample Dates:	10/4/2021 - 10/4/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Zn-65	<4.50E+01	0.00E+00	4.50E+01
					Zr-95	<3.80E+01	0.00E+00	3.80E+01
					Nb-95	<1.49E+01	0.00E+00	1.49E+01
					I-131	<1.75E+01	0.00E+00	1.75E+01
					Cs-134	<2.28E+01	0.00E+00	2.28E+01
					Cs-137	<2.27E+01	0.00E+00	2.27E+01
					BaLa-140	<1.83E+01	0.00E+00	1.83E+01
					Be-7	1.56E+03	2.62E+02	2.39E+02
					K-40	4.10E+03	5.68E+02	3.30E+02

Sample ID:	555105	Sample Dates:	11/1/2021 - 11/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.98E+01	0.00E+00	1.98E+01
					Co-58	<2.31E+01	0.00E+00	2.31E+01
					Fe-59	<5.05E+01	0.00E+00	5.05E+01
					Co-60	<2.51E+01	0.00E+00	2.51E+01
					Zn-65	<4.63E+01	0.00E+00	4.63E+01
					Zr-95	<3.81E+01	0.00E+00	3.81E+01
					Nb-95	<2.35E+01	0.00E+00	2.35E+01
					I-131	<1.62E+01	0.00E+00	1.62E+01
					Cs-134	<2.56E+01	0.00E+00	2.56E+01
					Cs-137	<2.56E+01	0.00E+00	2.56E+01
					BaLa-140	<2.28E+01	0.00E+00	2.28E+01
					Be-7	7.82E+02	1.99E+02	2.36E+02
					K-40	5.39E+03	6.88E+02	2.62E+02

Sample ID:	557983	Sample Dates:	12/6/2021 - 12/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.80E+01	0.00E+00	2.80E+01
					Co-58	<2.22E+01	0.00E+00	2.22E+01
					Fe-59	<4.98E+01	0.00E+00	4.98E+01
					Co-60	<2.44E+01	0.00E+00	2.44E+01
					Zn-65	<5.90E+01	0.00E+00	5.90E+01
					Zr-95	<4.07E+01	0.00E+00	4.07E+01
					Nb-95	<2.49E+01	0.00E+00	2.49E+01
					I-131	<3.06E+01	0.00E+00	3.06E+01
					Cs-134	<2.60E+01	0.00E+00	2.60E+01
					Cs-137	<2.40E+01	0.00E+00	2.40E+01
					BaLa-140	<2.45E+01	0.00E+00	2.45E+01
					Be-7	5.81E+02	2.17E+02	2.97E+02
					K-40	4.98E+03	7.06E+02	3.36E+02

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	537326	Sample Dates:	1/5/2021 - 1/5/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.70E+01	0.00E+00	2.70E+01
					Co-58	<2.64E+01	0.00E+00	2.64E+01
					Fe-59	<5.68E+01	0.00E+00	5.68E+01
					Co-60	<3.45E+01	0.00E+00	3.45E+01
					Zn-65	<5.55E+01	0.00E+00	5.55E+01
					Zr-95	<5.16E+01	0.00E+00	5.16E+01
					Nb-95	<2.67E+01	0.00E+00	2.67E+01
					I-131	<2.62E+01	0.00E+00	2.62E+01
					Cs-134	<3.68E+01	0.00E+00	3.68E+01
					Cs-137	<2.52E+01	0.00E+00	2.52E+01
					BaLa-140	<3.78E+01	0.00E+00	3.78E+01
					Be-7	2.11E+03	3.71E+02	3.73E+02
					K-40	3.13E+03	5.49E+02	3.92E+02

Sample ID:	538554	Sample Dates:	2/1/2021 - 2/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.99E+01	0.00E+00	2.99E+01
					Co-58	<2.80E+01	0.00E+00	2.80E+01
					Fe-59	<5.03E+01	0.00E+00	5.03E+01
					Co-60	<3.11E+01	0.00E+00	3.11E+01
					Zn-65	<5.49E+01	0.00E+00	5.49E+01
					Zr-95	<3.84E+01	0.00E+00	3.84E+01
					Nb-95	<2.54E+01	0.00E+00	2.54E+01
					I-131	<2.49E+01	0.00E+00	2.49E+01
					Cs-134	<3.53E+01	0.00E+00	3.53E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538554	2/1/2021 - 2/1/2021	MIXEDBLV	Cs-137	<2.67E+01	0.00E+00	2.67E+01
			BaLa-140	<1.75E+01	0.00E+00	1.75E+01
			Be-7	2.11E+03	3.63E+02	3.60E+02
			K-40	4.04E+03	6.19E+02	2.78E+02
540069	3/1/2021 - 3/1/2021	MIXEDBLV	Mn-54	<1.50E+01	0.00E+00	1.50E+01
			Co-58	<1.33E+01	0.00E+00	1.33E+01
			Fe-59	<2.48E+01	0.00E+00	2.48E+01
			Co-60	<1.46E+01	0.00E+00	1.46E+01
			Zn-65	<3.29E+01	0.00E+00	3.29E+01
			Zr-95	<2.68E+01	0.00E+00	2.68E+01
			Nb-95	<1.45E+01	0.00E+00	1.45E+01
			I-131	<1.25E+01	0.00E+00	1.25E+01
			Cs-134	<2.09E+01	0.00E+00	2.09E+01
			Cs-137	<1.14E+01	0.00E+00	1.14E+01
			BaLa-140	<1.28E+01	0.00E+00	1.28E+01
			Be-7	1.90E+03	2.65E+02	1.83E+02
			K-40	1.86E+03	3.29E+02	2.19E+02
542881	4/5/2021 - 4/5/2021	MIXEDBLV	Mn-54	<1.89E+01	0.00E+00	1.89E+01
			Co-58	<1.31E+01	0.00E+00	1.31E+01
			Fe-59	<2.87E+01	0.00E+00	2.87E+01
			Co-60	<1.39E+01	0.00E+00	1.39E+01
			Zn-65	<3.35E+01	0.00E+00	3.35E+01
			Zr-95	<2.62E+01	0.00E+00	2.62E+01
			Nb-95	<1.77E+01	0.00E+00	1.77E+01
			I-131	<1.48E+01	0.00E+00	1.48E+01
			Cs-134	<1.91E+01	0.00E+00	1.91E+01
			Cs-137	<1.29E+01	0.00E+00	1.29E+01
			BaLa-140	<1.63E+01	0.00E+00	1.63E+01
			Be-7	1.47E+03	2.25E+02	1.70E+02
			K-40	2.34E+03	3.70E+02	1.80E+02
544654	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54	<1.36E+01	0.00E+00	1.36E+01
			Co-58	<1.29E+01	0.00E+00	1.29E+01
			Fe-59	<2.30E+01	0.00E+00	2.30E+01
			Co-60	<1.56E+01	0.00E+00	1.56E+01
			Zn-65	<2.78E+01	0.00E+00	2.78E+01
			Zr-95	<2.11E+01	0.00E+00	2.11E+01
			Nb-95	<1.30E+01	0.00E+00	1.30E+01
			I-131	<1.12E+01	0.00E+00	1.12E+01
			Cs-134	<1.53E+01	0.00E+00	1.53E+01
			Cs-137	<1.28E+01	0.00E+00	1.28E+01
			BaLa-140	<1.29E+01	0.00E+00	1.29E+01
			Be-7	1.84E+02	1.09E+02	1.68E+02
			K-40	3.55E+03	4.48E+02	2.10E+02
546921	6/7/2021 - 6/7/2021	MIXEDBLV	Mn-54	<1.77E+01	0.00E+00	1.77E+01
			Co-58	<1.86E+01	0.00E+00	1.86E+01
			Fe-59	<3.57E+01	0.00E+00	3.57E+01
			Co-60	<2.31E+01	0.00E+00	2.31E+01
			Zn-65	<3.65E+01	0.00E+00	3.65E+01
			Zr-95	<3.48E+01	0.00E+00	3.48E+01
			Nb-95	<1.93E+01	0.00E+00	1.93E+01
			I-131	<1.75E+01	0.00E+00	1.75E+01
			Cs-134	<1.99E+01	0.00E+00	1.99E+01
			Cs-137	<1.36E+01	0.00E+00	1.36E+01
			BaLa-140	<1.03E+01	0.00E+00	1.03E+01
			Be-7	4.19E+02	1.55E+02	2.13E+02
			K-40	5.34E+03	6.59E+02	2.15E+02
548123	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54	<1.74E+01	0.00E+00	1.74E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
548123	7/6/2021 - 7/6/2021	MIXEDBLV	Co-58	<1.45E+01	0.00E+00	1.45E+01
			Fe-59	<3.52E+01	0.00E+00	3.52E+01
			Co-60	<2.12E+01	0.00E+00	2.12E+01
			Zn-65	<4.41E+01	0.00E+00	4.41E+01
			Zr-95	<2.59E+01	0.00E+00	2.59E+01
			Nb-95	<1.70E+01	0.00E+00	1.70E+01
			I-131	<1.83E+01	0.00E+00	1.83E+01
			Cs-134	<2.09E+01	0.00E+00	2.09E+01
			Cs-137	<1.88E+01	0.00E+00	1.88E+01
			BaLa-140	<2.19E+01	0.00E+00	2.19E+01
			Be-7	1.02E+03	2.12E+02	2.30E+02
			K-40	3.64E+03	5.27E+02	2.76E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
549286	8/2/2021 - 8/2/2021	MIXEDBLV	Mn-54	<2.14E+01	0.00E+00	2.14E+01
			Co-58	<2.24E+01	0.00E+00	2.24E+01
			Fe-59	<3.74E+01	0.00E+00	3.74E+01
			Co-60	<1.63E+01	0.00E+00	1.63E+01
			Zn-65	<5.91E+01	0.00E+00	5.91E+01
			Zr-95	<4.07E+01	0.00E+00	4.07E+01
			Nb-95	<2.33E+01	0.00E+00	2.33E+01
			I-131	<2.00E+01	0.00E+00	2.00E+01
			Cs-134	<2.67E+01	0.00E+00	2.67E+01
			Cs-137	<2.24E+01	0.00E+00	2.24E+01
			BaLa-140	<2.38E+01	0.00E+00	2.38E+01
			Be-7	1.60E+03	2.79E+02	2.69E+02
			K-40	4.38E+03	6.03E+02	2.78E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
551687	9/7/2021 - 9/7/2021	MIXEDBLV	Mn-54	<2.92E+01	0.00E+00	2.92E+01
			Co-58	<2.34E+01	0.00E+00	2.34E+01
			Fe-59	<4.76E+01	0.00E+00	4.76E+01
			Co-60	<2.80E+01	0.00E+00	2.80E+01
			Zn-65	<6.74E+01	0.00E+00	6.74E+01
			Zr-95	<3.30E+01	0.00E+00	3.30E+01
			Nb-95	<2.53E+01	0.00E+00	2.53E+01
			I-131	<3.08E+01	0.00E+00	3.08E+01
			Cs-134	<3.54E+01	0.00E+00	3.54E+01
			Cs-137	<2.77E+01	0.00E+00	2.77E+01
			BaLa-140	<2.71E+01	0.00E+00	2.71E+01
			Be-7	1.19E+03	2.94E+02	3.50E+02
			K-40	3.64E+03	6.62E+02	5.40E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
553276	10/4/2021 - 10/4/2021	MIXEDBLV	Mn-54	<1.69E+01	0.00E+00	1.69E+01
			Co-58	<1.26E+01	0.00E+00	1.26E+01
			Fe-59	<2.87E+01	0.00E+00	2.87E+01
			Co-60	<1.86E+01	0.00E+00	1.86E+01
			Zn-65	<2.64E+01	0.00E+00	2.64E+01
			Zr-95	<2.18E+01	0.00E+00	2.18E+01
			Nb-95	<1.60E+01	0.00E+00	1.60E+01
			I-131	<1.44E+01	0.00E+00	1.44E+01
			Cs-134	<1.61E+01	0.00E+00	1.61E+01
			Cs-137	<1.66E+01	0.00E+00	1.66E+01
			BaLa-140	<1.66E+01	0.00E+00	1.66E+01
			Be-7	1.42E+03	2.21E+02	1.94E+02
			K-40	2.82E+03	4.01E+02	1.70E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
555106	11/1/2021 - 11/1/2021	MIXEDBLV	Mn-54	<3.13E+01	0.00E+00	3.13E+01
			Co-58	<3.23E+01	0.00E+00	3.23E+01
			Fe-59	<6.79E+01	0.00E+00	6.79E+01
			Co-60	<3.31E+01	0.00E+00	3.31E+01
			Zn-65	<5.74E+01	0.00E+00	5.74E+01
			Zr-95	<6.31E+01	0.00E+00	6.31E+01
			Nb-95	<3.48E+01	0.00E+00	3.48E+01
			I-131	<3.17E+01	0.00E+00	3.17E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 125 [INDICATOR - SW @ 0.38 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
555106	11/1/2021 - 11/1/2021		Cs-134	<3.77E+01	0.00E+00	3.77E+01
			Cs-137	<3.11E+01	0.00E+00	3.11E+01
			BaLa-140	<3.06E+01	0.00E+00	3.06E+01
			Be-7	1.71E+03	3.67E+02	3.93E+02
			K-40	3.76E+03	6.95E+02	5.13E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
557984	12/6/2021 - 12/6/2021		Mn-54	<2.97E+01	0.00E+00	2.97E+01
			Co-58	<2.36E+01	0.00E+00	2.36E+01
			Fe-59	<4.73E+01	0.00E+00	4.73E+01
			Co-60	<2.74E+01	0.00E+00	2.74E+01
			Zn-65	<6.07E+01	0.00E+00	6.07E+01
			Zr-95	<5.45E+01	0.00E+00	5.45E+01
			Nb-95	<3.67E+01	0.00E+00	3.67E+01
			I-131	<3.23E+01	0.00E+00	3.23E+01
			Cs-134	<3.52E+01	0.00E+00	3.52E+01
			Cs-137	<3.12E+01	0.00E+00	3.12E+01
			BaLa-140	<2.93E+01	0.00E+00	2.93E+01
			Be-7	1.04E+03	2.72E+02	3.39E+02
			K-40	4.98E+03	7.04E+02	3.28E+02

Sample Point 193 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
537327	1/5/2021 - 1/5/2021		Mn-54	<2.25E+01	0.00E+00	2.25E+01
			Co-58	<2.64E+01	0.00E+00	2.64E+01
			Fe-59	<5.27E+01	0.00E+00	5.27E+01
			Co-60	<2.66E+01	0.00E+00	2.66E+01
			Zn-65	<5.21E+01	0.00E+00	5.21E+01
			Zr-95	<3.79E+01	0.00E+00	3.79E+01
			Nb-95	<2.71E+01	0.00E+00	2.71E+01
			I-131	<2.32E+01	0.00E+00	2.32E+01
			Cs-134	<3.23E+01	0.00E+00	3.23E+01
			Cs-137	<2.74E+01	0.00E+00	2.74E+01
			BaLa-140	<2.49E+01	0.00E+00	2.49E+01
			Be-7	2.90E+03	4.29E+02	3.50E+02
			K-40	5.28E+03	7.39E+02	3.78E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538555	2/1/2021 - 2/1/2021		Mn-54	<2.88E+01	0.00E+00	2.88E+01
			Co-58	<2.75E+01	0.00E+00	2.75E+01
			Fe-59	<5.99E+01	0.00E+00	5.99E+01
			Co-60	<3.12E+01	0.00E+00	3.12E+01
			Zn-65	<6.03E+01	0.00E+00	6.03E+01
			Zr-95	<5.06E+01	0.00E+00	5.06E+01
			Nb-95	<4.23E+01	0.00E+00	4.23E+01
			I-131	<2.80E+01	0.00E+00	2.80E+01
			Cs-134	<3.53E+01	0.00E+00	3.53E+01
			Cs-137	<2.72E+01	0.00E+00	2.72E+01
			BaLa-140	<3.33E+01	0.00E+00	3.33E+01
			Be-7	2.69E+03	4.53E+02	4.06E+02
			K-40	4.15E+03	6.81E+02	1.98E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
540070	3/1/2021 - 3/1/2021		Mn-54	<1.37E+01	0.00E+00	1.37E+01
			Co-58	<1.26E+01	0.00E+00	1.26E+01
			Fe-59	<2.14E+01	0.00E+00	2.14E+01
			Co-60	<1.49E+01	0.00E+00	1.49E+01
			Zn-65	<2.83E+01	0.00E+00	2.83E+01
			Zr-95	<2.51E+01	0.00E+00	2.51E+01
			Nb-95	<1.43E+01	0.00E+00	1.43E+01
			I-131	<1.35E+01	0.00E+00	1.35E+01
			Cs-134	<1.60E+01	0.00E+00	1.60E+01
			Cs-137	<1.44E+01	0.00E+00	1.44E+01
			BaLa-140	<1.13E+01	0.00E+00	1.13E+01
			Be-7	2.17E+03	2.99E+02	2.87E+02
			K-40	3.87E+03	4.49E+02	2.26E+02

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 193 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
542882	4/5/2021 - 4/5/2021	MIXEDBLV	Mn-54	<1.28E+01	0.00E+00	1.28E+01
			Co-58	<1.33E+01	0.00E+00	1.33E+01
			Fe-59	<3.29E+01	0.00E+00	3.29E+01
			Co-60	<1.87E+01	0.00E+00	1.87E+01
			Zn-65	<3.07E+01	0.00E+00	3.07E+01
			Zr-95	<2.83E+01	0.00E+00	2.83E+01
			Nb-95	<1.57E+01	0.00E+00	1.57E+01
			I-131	<1.37E+01	0.00E+00	1.37E+01
			Cs-134	<1.91E+01	0.00E+00	1.91E+01
			Cs-137	<1.51E+01	0.00E+00	1.51E+01
			BaLa-140	<1.42E+01	0.00E+00	1.42E+01
			Be-7	6.97E+02	1.58E+02	1.82E+02
			K-40	4.87E+03	5.76E+02	2.09E+02
			544655	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54
Co-58	<1.21E+01	0.00E+00				1.21E+01
Fe-59	<2.28E+01	0.00E+00				2.28E+01
Co-60	<1.49E+01	0.00E+00				1.49E+01
Zn-65	<3.35E+01	0.00E+00				3.35E+01
Zr-95	<2.01E+01	0.00E+00				2.01E+01
Nb-95	<1.26E+01	0.00E+00				1.26E+01
I-131	<1.16E+01	0.00E+00				1.16E+01
Cs-134	<1.68E+01	0.00E+00				1.68E+01
Cs-137	<1.04E+01	0.00E+00				1.04E+01
BaLa-140	<1.27E+01	0.00E+00				1.27E+01
Be-7	8.59E+02	1.62E+02				1.65E+02
K-40	5.68E+03	6.22E+02				1.74E+02
546922	6/7/2021 - 6/7/2021	MIXEDBLV				Mn-54
			Co-58	<1.90E+01	0.00E+00	1.90E+01
			Fe-59	<5.47E+01	0.00E+00	5.47E+01
			Co-60	<2.69E+01	0.00E+00	2.69E+01
			Zn-65	<4.68E+01	0.00E+00	4.68E+01
			Zr-95	<4.46E+01	0.00E+00	4.46E+01
			Nb-95	<2.21E+01	0.00E+00	2.21E+01
			I-131	<2.50E+01	0.00E+00	2.50E+01
			Cs-134	<2.40E+01	0.00E+00	2.40E+01
			Cs-137	<2.77E+01	0.00E+00	2.77E+01
			BaLa-140	<3.11E+01	0.00E+00	3.11E+01
			Be-7	6.89E+02	1.59E+02	2.09E+02
			K-40	5.48E+03	7.49E+02	3.15E+02
			548124	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54
Co-58	<1.50E+01	0.00E+00				1.50E+01
Fe-59	<4.02E+01	0.00E+00				4.02E+01
Co-60	<1.58E+01	0.00E+00				1.58E+01
Zn-65	<4.32E+01	0.00E+00				4.32E+01
Zr-95	<2.81E+01	0.00E+00				2.81E+01
Nb-95	<1.68E+01	0.00E+00				1.68E+01
I-131	<1.89E+01	0.00E+00				1.89E+01
Cs-134	<2.12E+01	0.00E+00				2.12E+01
Cs-137	<1.63E+01	0.00E+00				1.63E+01
BaLa-140	<2.16E+01	0.00E+00				2.16E+01
Be-7	8.44E+02	1.75E+02				1.74E+02
K-40	5.61E+03	6.76E+02				2.50E+02
549287	8/2/2021 - 8/2/2021	MIXEDBLV				Mn-54
			Co-58	<1.68E+01	0.00E+00	1.68E+01
			Fe-59	<2.46E+01	0.00E+00	2.46E+01
			Co-60	<1.88E+01	0.00E+00	1.88E+01
			Zn-65	<2.40E+01	0.00E+00	2.40E+01
			Zr-95	<2.75E+01	0.00E+00	2.75E+01
			Nb-95	<1.85E+01	0.00E+00	1.85E+01

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MCGUIRE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 193 [INDICATOR - N @ 0.19 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
549287	8/2/2021 - 8/2/2021	MIXEDBLV	I-131	<1.89E+01	0.00E+00	1.89E+01
			Cs-134	<2.22E+01	0.00E+00	2.22E+01
			Cs-137	<1.92E+01	0.00E+00	1.92E+01
			BaLa-140	<1.89E+01	0.00E+00	1.89E+01
			Be-7	1.26E+03	2.34E+02	2.33E+02
			K-40	5.21E+03	6.50E+02	2.15E+02
551688	9/7/2021 - 9/7/2021	MIXEDBLV	Mn-54	<2.20E+01	0.00E+00	2.20E+01
			Co-58	<2.13E+01	0.00E+00	2.13E+01
			Fe-59	<4.45E+01	0.00E+00	4.45E+01
			Co-60	<2.20E+01	0.00E+00	2.20E+01
			Zn-65	<4.21E+01	0.00E+00	4.21E+01
			Zr-95	<4.56E+01	0.00E+00	4.56E+01
			Nb-95	<2.15E+01	0.00E+00	2.15E+01
			I-131	<2.05E+01	0.00E+00	2.05E+01
			Cs-134	<2.53E+01	0.00E+00	2.53E+01
			Cs-137	<1.48E+01	0.00E+00	1.48E+01
			BaLa-140	<1.90E+01	0.00E+00	1.90E+01
			Be-7	1.19E+03	2.41E+02	2.41E+02
			K-40	5.16E+03	6.89E+02	2.55E+02
			553277	10/4/2021 - 10/4/2021	MIXEDBLV	Mn-54
Co-58	<1.59E+01	0.00E+00				1.59E+01
Fe-59	<3.26E+01	0.00E+00				3.26E+01
Co-60	<2.41E+01	0.00E+00				2.41E+01
Zn-65	<4.19E+01	0.00E+00				4.19E+01
Zr-95	<3.23E+01	0.00E+00				3.23E+01
Nb-95	<1.83E+01	0.00E+00				1.83E+01
I-131	<1.61E+01	0.00E+00				1.61E+01
Cs-134	<2.21E+01	0.00E+00				2.21E+01
Cs-137	<1.47E+01	0.00E+00				1.47E+01
BaLa-140	<1.93E+01	0.00E+00				1.93E+01
Be-7	1.11E+03	2.09E+02				1.94E+02
K-40	4.39E+03	5.88E+02				2.55E+02
555107	11/1/2021 - 11/1/2021	MIXEDBLV				Mn-54
			Co-58	<2.55E+01	0.00E+00	2.55E+01
			Fe-59	<6.30E+01	0.00E+00	6.30E+01
			Co-60	<4.04E+01	0.00E+00	4.04E+01
			Zn-65	<6.40E+01	0.00E+00	6.40E+01
			Zr-95	<3.27E+01	0.00E+00	3.27E+01
			Nb-95	<2.55E+01	0.00E+00	2.55E+01
			I-131	<2.70E+01	0.00E+00	2.70E+01
			Cs-134	<3.49E+01	0.00E+00	3.49E+01
			Cs-137	<2.39E+01	0.00E+00	2.39E+01
			BaLa-140	<3.08E+01	0.00E+00	3.08E+01
			Be-7	1.70E+03	3.41E+02	3.73E+02
			K-40	5.89E+03	8.15E+02	3.26E+02
			557985	12/6/2021 - 12/6/2021	MIXEDBLV	Mn-54
Co-58	<2.39E+01	0.00E+00				2.39E+01
Fe-59	<5.88E+01	0.00E+00				5.88E+01
Co-60	<2.72E+01	0.00E+00				2.72E+01
Zn-65	<5.54E+01	0.00E+00				5.54E+01
Zr-95	<4.57E+01	0.00E+00				4.57E+01
Nb-95	<3.44E+01	0.00E+00				3.44E+01
I-131	<3.35E+01	0.00E+00				3.35E+01
Cs-134	<3.59E+01	0.00E+00				3.59E+01
Cs-137	<2.79E+01	0.00E+00				2.79E+01
BaLa-140	<4.01E+01	0.00E+00				4.01E+01
Be-7	1.26E+03	3.06E+02				3.53E+02
K-40	6.06E+03	8.48E+02				3.96E+02

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Duke Energy Annual Report - Appendix E

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APPENDIX F

**ERRATA TO
PREVIOUS REPORTS**

There are no errata to be appended to the
2021 McGuire Nuclear Station AREOR.

Enclosure 5
RA-22-0030

ENCLOSURE 5: [ONS Annual Radiological Environmental Operating Report](#)



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

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

2021



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

A	Annually
AP	Air Particulate
AR	Air Radioiodine/ Air Cartridge
AREOR	Annual Radiological Environmental Operating Report
BLV	Broadleaf Vegetation
C	Control
CM	Community
CR	Condition Report (analogous to Nuclear Condition Report (NCR))
EZA	Eckert & Ziegler Analytics
FI	Fish
FP	Food Product
GEL	General Engineering Laboratories, LLC
GPS	Global Positioning System
GW	Ground Water
I	Indicator
IR	Inner Ring - TLDs
ISFSI	Independent Spent Fuel Storage Installation
LLD	Lower Limit of Detection
M	Monthly
MAPEP	Department of Energy Mixed Analyte Performance Evaluation Program
MDA	Minimum Detectable Activity
mR	milliroentgen
mR/Std Qtr	milliroentgen per standard quarter
MWe	Megawatt (electrical)
NCR	Nuclear Condition Report (analogous to Condition Report (CR))
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
ODCM	Off-Site Dose Calculation Manual
OR	Outer Ring - TLDs
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
PI	Power Interrupt
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SB	Site Boundary
SS	Sediment – Shoreline
SI	Special Interest - TLDs
SW	Surface Water
TECH SPECS	Technical Specifications
TLD	Thermoluminescent Dosimeter
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 2021.

Included in the report are the identification of sampling locations, descriptions of environmental sampling and analysis procedures, comparisons of present environmental radioactivity levels and pre-operational environmental data, analysis of trends in environmental radiological data as potentially affected by 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 Offsite Dose Calculations Manual (ODCM) and Selected Licensee Commitments (SLCs). Required analyses were performed and detection capabilities were met for all collected samples as required by SLCs, except for one low-level Iodine-131 milk sample. One-thousand sixty-seven samples were analyzed comprising 1,106 test results in order to compile data for the 2021 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 2021 for station related radionuclides were within the ranges of concentrations observed in the past. Inspection of data showed that radioactivity concentrations in drinking water and surface water 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 SLCs.

The continued operation of ONS has not contributed measurable radiation or the presence of gamma radioactivity in the environmental media monitored. The surface water and drinking water samples revealed tritium concentrations that are well within the applicable regulatory limits. The radiological environmental data for 2021 indicates that radioactivity concentrations were not higher than expected and all positively identified measurements attributable to ONS operations in 2021 were within limits as specified in the ONS ODCM, thus presenting no significant impact on the environment or public safety.

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.

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.

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

A Radiological Environmental Monitoring Program (REMP) 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 4 of this annual report.

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

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

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

Where:

\bar{x} = estimate of the mean,

i = individual sample,

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

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

2.3.2 LOWER LIMIT OF DETECTION AND MINIMUM DETECTABLE ACTIVITY

The Lower Limit of Detection (LLD) and Minimum Detectable Activity (MDA) are used throughout the 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* (before the fact) lower limit of detection. The actual LLD is dependent upon the standard deviation of the background counting rate, the counting efficiency, the sample size (mass or volume), the radiochemical yield, and the radioactive decay of the sample between sample collection and counting. The "required" LLDs for each sample medium and selected radionuclides are given in the Selected Licensee Commitments and are listed in Table 2.2-C.

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

2.3.3 TREND IDENTIFICATION

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

Substantial increases or decreases in the amount of a particular radionuclide's release from the nuclear plant will greatly affect the resulting environmental levels; therefore, a knowledge of the release of a radionuclide from the nuclear plant is necessary to completely interpret the trends, or lack of trends, determined from the environmental data. 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 1986 Chernobyl accident and the 2011 Japan earthquake and tsunami, which triggered the Fukushima Dai-ichi nuclear power plant incident). Some of these factors may be

obvious while others are sometimes unknown. Therefore, how trends are identified will include some judgment by plant personnel.

Figure 2.1-1

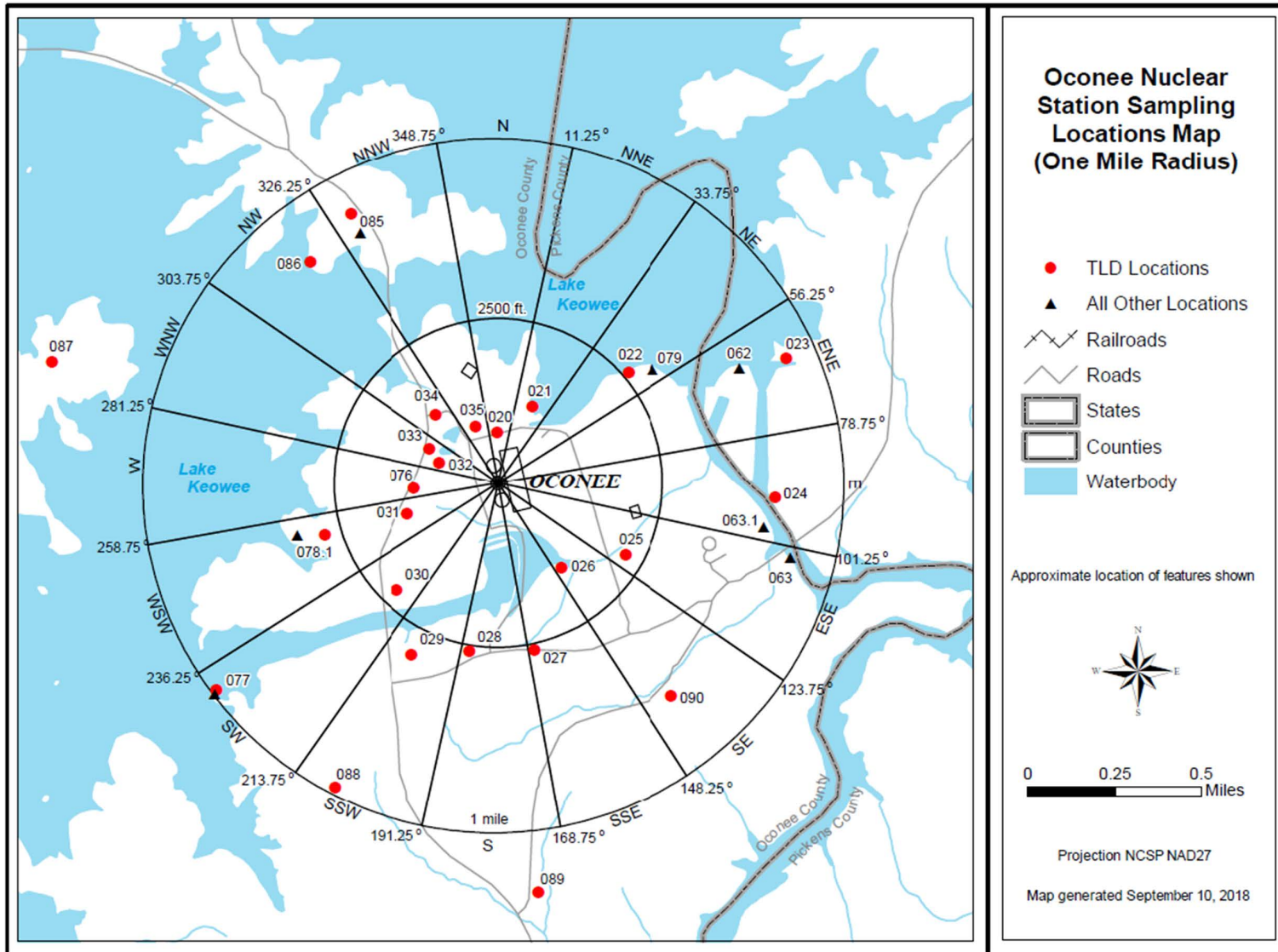


Figure 2.1-2

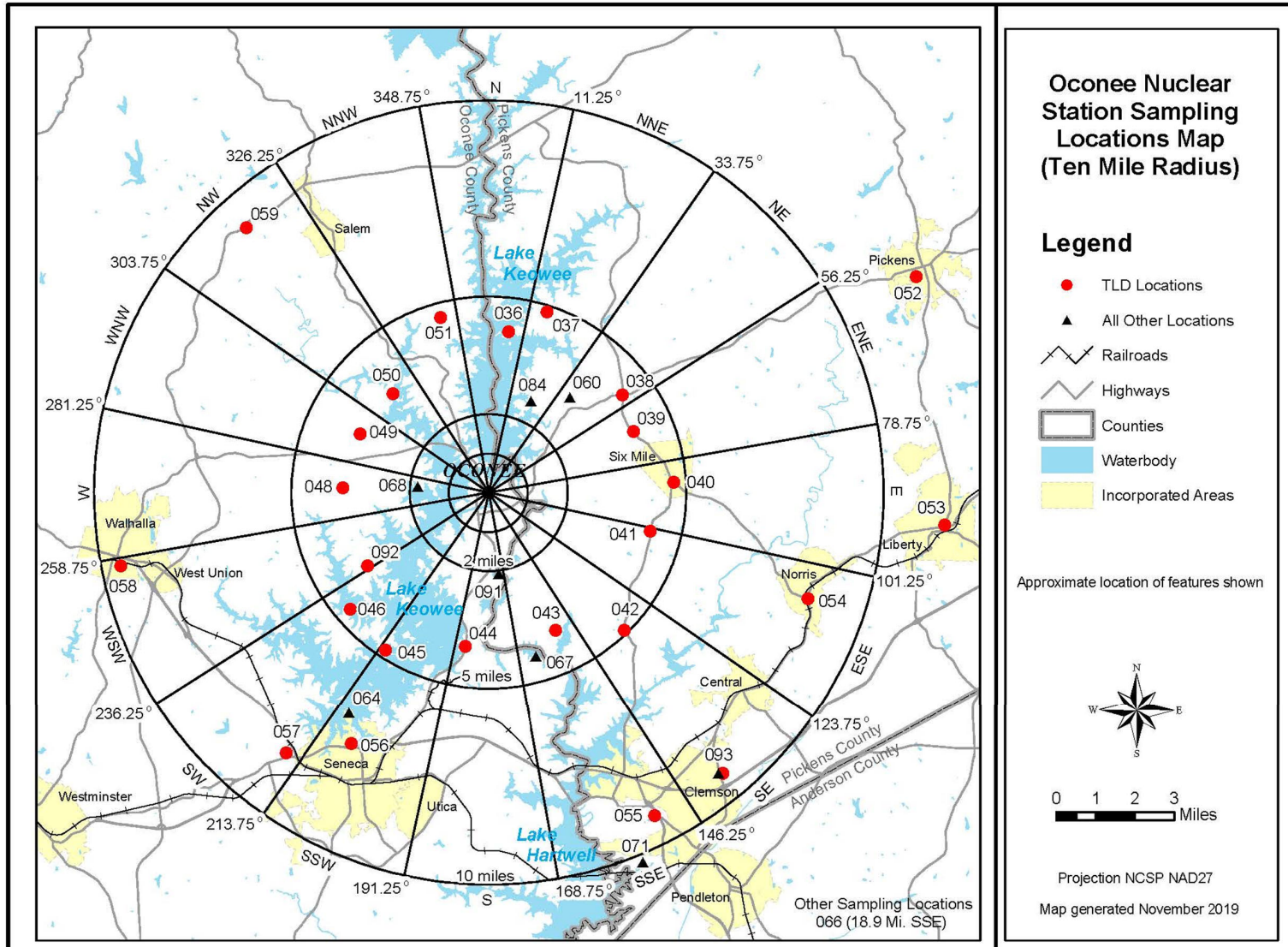


TABLE 2.1-A

**OCONEE RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS^(a)**

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

Site #	Measure Type	Location Description*	Air Rad. & Particulate	Surface Water	Drinking Water	Shoreline Sediment	Fish	Milk ^(b)	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,SB						M,SB
078.1	I	Recreation Site (0.53 mi WSW)	W,SB						
079	I	Keowee Dam (0.56 mi NE)	W,SB						M, SB
084	I	Sue Craig Road (2.58 mi NNE)	W						M
085	I	Lake Services / Building B9125 (0.88 mi NNW)	W,CM						
091	I	Holder's Landing Road (2.09 miles S)				SA			
093	C	Clemson Operations Center (9.33 mi SE)	W						M

- (a) Sample locations are identified in the ODCM.
- (b) Samples from milking animals in three locations within 5 km distance having the highest dose potential. If there are none, then one sample from milking animals in each of the three areas between 5 to 8 km distant where doses are calculated to be greater than 1 mrem per year. One sample from milking animals at a control location, as for example 15-30 km distant and in the least prevalent wind direction.
- * 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 RADIOLOGICAL MONITORING PROGRAM
SAMPLING LOCATIONS (TLD SITES)^(a)**

Table 2.1-B Codes			
C	Control	OR	Outer Ring
IR	Inner Ring	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	048	OR	JCT HWY 175 & 188	3.64	W
024	IR	Site Boundary	0.81	E	049	OR	JCT HWY 201 & 92	3.60	WNW
025	IR	Site Boundary	0.42	ESE	050	OR	Stamp Creek Landing, End of HWY 92	3.53	NW
026	IR	Site Boundary	0.34	SE	051	OR	HWY 128, 1 mile N OF HWY 130	4.64	NNW
027	IR	Site Boundary	0.49	SSE	052	SI	DPC Branch Office Site, Pickens	12.4	ENE
028	IR	Site Boundary	0.46	S	053	SI	DPC Branch Office Site, Liberty	11.7	E
029	IR	Site Boundary	0.56	SSW	054	SI	Post Office - HWY 93 Norris	8.60	ESE
030	IR	Site Boundary	0.42	SW	055	SI	Clemson Meteorology Plot	9.27	SSE
031	IR	Site Boundary	0.27	WSW	056	SI	Water Tower - Seneca	7.30	SSW
076	IR	Site Boundary	0.19	W	057	SI	Oconee Memorial Hospital	8.42	SW
032	IR	Site Boundary	0.19	WNW	058	C	Branch Rd Substation, Walhalla	9.39	WSW
033	IR	Site Boundary	0.21	WNW	059	SI	Tamassee Dar School	9.20	NW
034	IR	Site Boundary	0.22	NW	077	IR	Skimmer wall shared with air monitoring station	1.00	SW
035	IR	Site Boundary	0.17	NNW	078.1	IR	ONS Recreation Site shared with air monitoring station	0.53	WSW
036	OR	Mile Creek Landing	4.18	N	085	IR	Lake Services Bldg 9125 shared with air monitoring location	0.88	NNW
037	OR	Keowee Church, HWY 327	4.85	NNE	086	IR	Lake Keowee Service Rd at Boat Landing	0.83	NW
038	OR	Convenience Mart, JCT HWY 183 & 133	4.24	NE	087	IR	End of Waterfall Rd	1.33	WNW
039	OR	HWY 133, 1 mile East of JCT HWY 183 & 133	4.02	ENE	088	IR	Doug Hollow Rd / Transmission Tower	1.00	SSW
040	OR	Microwave Tower, Six Mile	4.74	E	089	IR	Intersection Hwy 130 & Keowee River Rd	1.19	S
041	OR	JCT HWY 101 & 133	4.25	ESE	090	IR	Crescent Resources, Keowee River Rd at Beaver Dam	0.79	SE
042	OR	Lawrence Chapel Church, HWY 133	4.93	SE	092	OR	Hilton Circle stop sign HWY 188	3.62	WSW
043	OR	HWY 291 at Issaqueena Park	4.09	SSE	093	C	Clemson Operations Center	9.34	SE

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

a) Sample locations are identified in the ODCM.

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	---	---	---	(b)	---
	Quarterly Composite	X	---	---	---	---
Direct Radiation	Quarterly	---	---	---	---	X
Surface Water	Monthly ^(c)	X	---	---	---	---
	Quarterly Composite ^(c)	---	X	---	---	---
Drinking Water	Monthly ^(c)	X	---	(a)	X	---
	Quarterly Composite ^(c)	---	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.
 (b) Airborne particulate sample filters shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than 10 times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.
 (c) Composite samples shall be collected by collecting an aliquot at intervals not exceeding 2 hours.

TABLE 2.2-C

MAXIMUM VALUES FOR THE *A PRIORI* LOWER LIMITS OF DETECTION^(a)

Analysis ^(c)	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 ^(b)	0.07	---	1	60	---
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15	---	---	15	---	---

(a) LLD is defined in Section 2.3.2.

(b) LLD for gamma isotopic analysis for I-131 in drinking water samples. Low level I-131 analysis on drinking water will not be routinely performed because the calculated dose from I-131 in drinking water at all locations is less than 1 mrem per year. Low level I-131 analyses will be performed if abnormal releases occur which could reasonably result in > 1 pCi/liter of I-131 in drinking water. For low level analyses of I-131 an LLD of 1 pCi/liter will be achieved.

(c) Other peaks which are measurable and identifiable, together with the radionuclides in Table 2.2-C, shall be identified and reported.

3.0 INTERPRETATION OF RESULTS

Review of 2021 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 2021 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 change in the analysis methods or changes in the reporting of the results. Summary tables containing 2021 information required by Technical Specification Administrative Control 5.6.2 are located in Appendix B. REMP results for 2021 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 2021.

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.

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.

Review of the 2021 data presented in this section supports the conclusion that there were no significant changes in environmental sample radionuclide concentrations of samples collected and analyzed from ONS and surrounding areas that were attributable to plant operations. The radiological environmental data for 2021 indicates that radioactivity concentrations were not higher than expected and all positively identified measurements attributable to ONS operations in 2021 were within limits as specified in the ONS SLC, thus presenting no significant impact on the environment or public safety.

Data presented in Sections 3.1 - 3.8 support the conclusion that there was no significant increase in radioactivity in the environment around ONS due to station operations in 2021. Similarly, there was no significant increase in ambient background radiation levels in the surrounding

areas. The 2021 land use census data, shown in Section 3.9, indicates that no program changes are required as a result of the census.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

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. In 2021, 318 continuously composited radioiodine and particulate samples were collected and 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). Radioiodine samples received a weekly gamma analysis.

There was no detectable I-131 in air samples in 2021. Table 3.1-A and Table 3.1-B give the highest indicator location annual mean and control location annual mean for I-131 since the preoperational period. The tables show 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 2021 due to ONS plant operations. No gamma emitting particulates due to ONS 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. Table 3.1-C gives the Gross Beta concentration in air particulate filters since 1996. 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/m³.

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

Table 3.1-A Mean Concentration of Air Radioiodine (I-131) (Preoperational-1995)

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

0.00E0 indicates no detectable measurements

1979 - 1986 mean based on all net activity

(1) 1987 – Gamma spectroscopy system change

Table 3.1-B Mean Concentration of Air Radioiodine (I-131) (1996-2021)

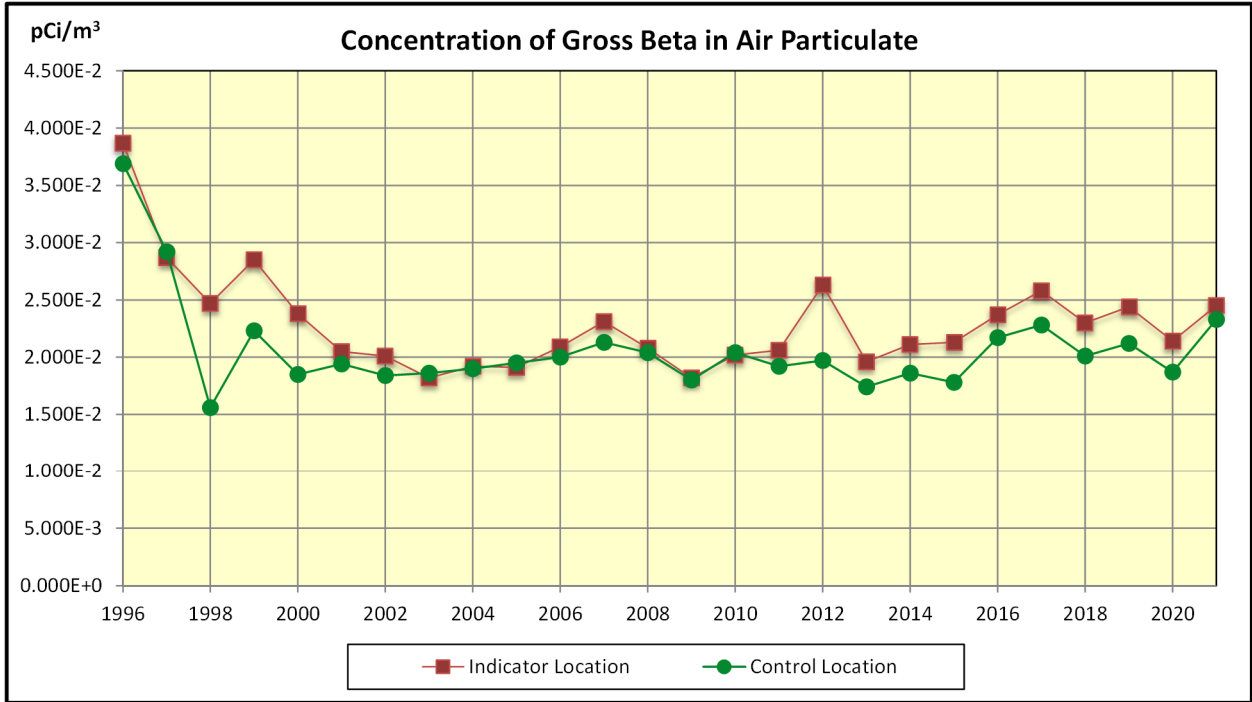
Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1996	0.00E0	0.00E0
1997	0.00E0	0.00E0
1998	0.00E0	0.00E0
1999	0.00E0	0.00E0
2000	0.00E0	0.00E0
2001	0.00E0	0.00E0
2002	0.00E0	0.00E0
2003	0.00E0	0.00E0
2004	0.00E0	0.00E0
2005	0.00E0	0.00E0
2006	0.00E0	0.00E0
2007	0.00E0	0.00E0
2008	0.00E0	0.00E0
2009	0.00E0	0.00E0
2010	0.00E0	0.00E0
2011 ⁽¹⁾	5.05E-2	4.13E-2
2012	0.00E0	0.00E0
2013	0.00E0	0.00E0
2014 ⁽²⁾	0.00E0	0.00E0
2015	0.00E0	0.00E0
2016	0.00E0	0.00E0
2017	0.00E0	0.00E0
2018	0.00E0	0.00E0
2019	0.00E0	0.00E0
2020	0.00E0	0.00E0
2021	0.00E0	0.00E0

0.00E0 indicates no detectable measurements

(1) 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.

Figure 3.1



There is no reporting level for gross beta in air particulate

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

Monitoring Period	Indicator Location (pCi/m³)	Control Location (pCi/m³)
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
2018	2.30E-2	2.01E-2
2019	2.44E-2	2.12E-2
2020	2.14E-2	1.87E-2
2021	2.45E-2	2.33E-2

3.2 DRINKING WATER

Gross beta analysis and gamma spectroscopy were performed on 39 monthly drinking water samples that were composited using water samplers that collected an aliquot every two hours. These samples were composited to form 12 quarterly composite period samples for Tritium analysis. 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-A lists the highest indicator location annual mean and control location annual mean for gross beta results since the preoperational period through 1995. Table 3.2-B lists the highest indicator location annual mean and control location annual mean for gross beta results from 1996 through 2021. There was no activity seen in any indicator locations in 2021, and the control location had a concentration of 3.38 pCi/liter. The difference between the mean indicator and the mean control activities for 2021 are out of trend with the previous year's differences, but the indicator activity was less than the control activity. Figure 3.2-1 shows the highest indicator and control location annual means for gross beta. The tables show that 2021 gross beta levels in drinking water are lower than preoperational concentrations.

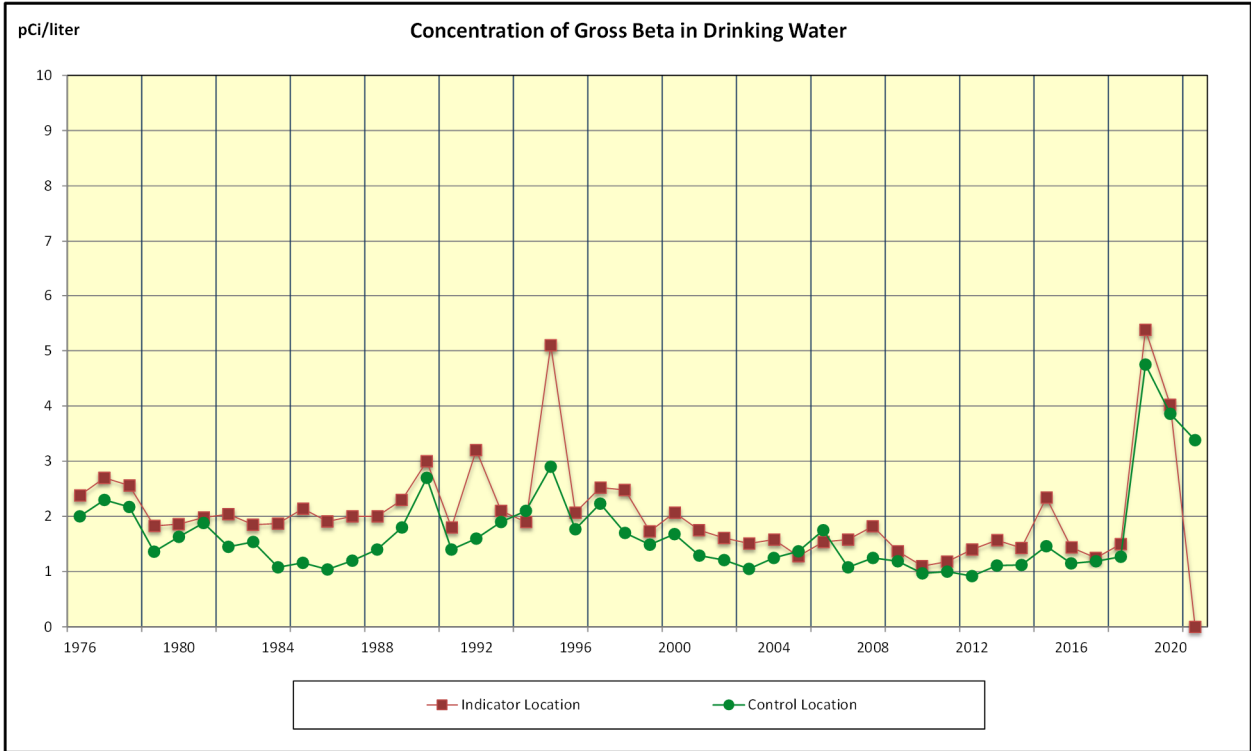
Tritium was not detected in any of the twelve composite samples during 2021. Table 3.2-A, Table 3.2-B and Figure 3.2-2 show the highest indicator and control location annual means for Tritium since analysis was initiated early in the operational period. Tritium concentrations have decreased at both the 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 2021. 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 2021; therefore, low-level iodine analysis is not required.

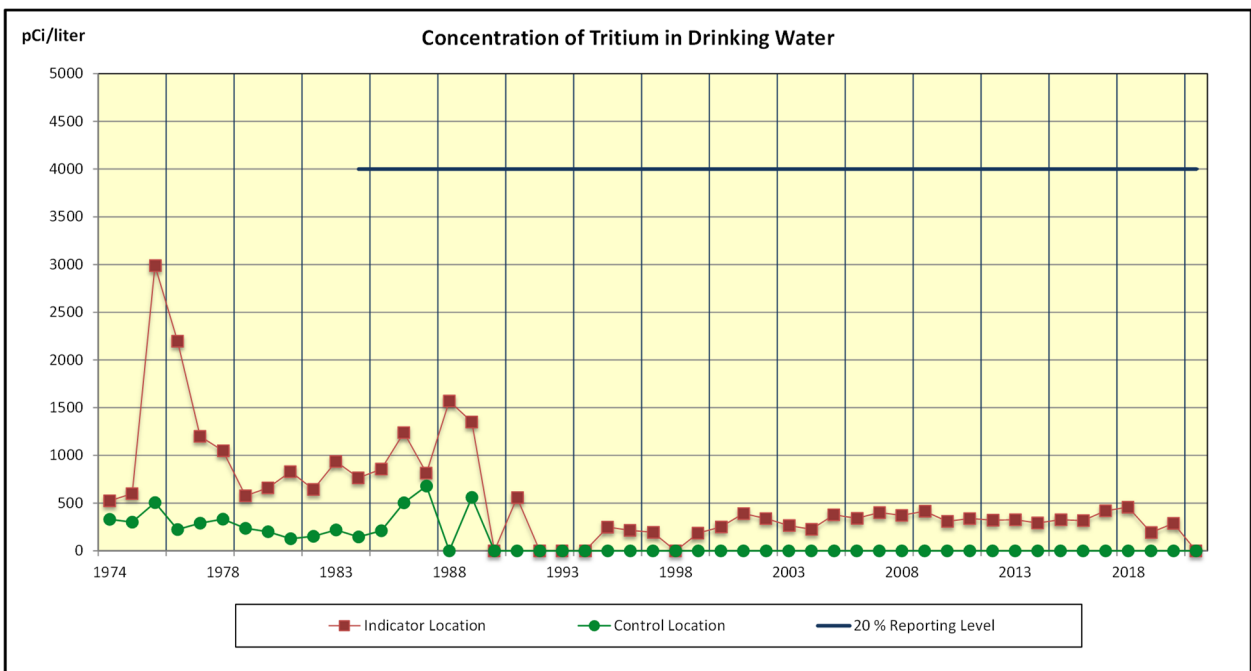
K-40 observed in drinking water samples is a naturally occurring radionuclide.

Figure 3.2-1



Analytical method changes implemented in 2019

Figure 3.2-2



Current reporting level implemented 1984

Table 3.2-A Mean Concentrations of Radionuclides in Drinking Water (1971-1995)

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

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

Table 3.2-B Mean Concentrations of Radionuclides in Drinking Water (1996-2021)

Year	Gross Beta (pCi/l)		Tritium (pCi/l)	
	Indicator Location	Control Location	Indicator Location	Control Location
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	325	0.00
2017	1.25	1.19	419	0.00
2018	1.50	1.27	356	0.00
2019 ⁽¹⁾	5.38	4.75	192	0.00
2020	4.02	3.86	289	0.00
2021	0.00	3.38	0.00	0.00

0.00 indicates no detectable measurements

(1) Analytical method changes were implemented in 2019 for Gross Beta analysis.

3.3 SURFACE WATER

Gamma spectroscopy was performed on 26 monthly surface water samples that were composited using water samplers that collected an aliquot every two hours. These samples were composited to form eight quarterly composite period samples for Tritium analysis. One indicator and one control location were sampled. The indicator location is near the liquid effluent release point.

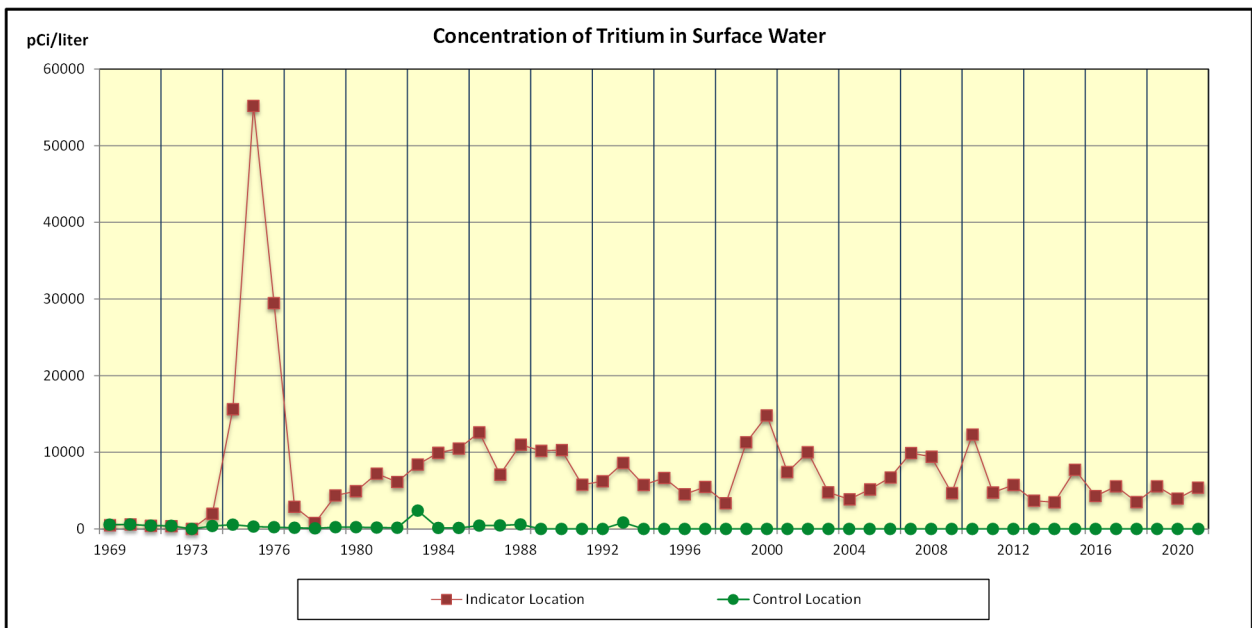
Tritium was detected in the four indicator location samples. The 2021 average concentration was 5,378 pCi/liter. The individual samples ranged from 1,610 to 9,540 pCi/liter. For comparison purposes, the 2020 mean concentration was 3,970 pCi/liter. Tritium was not detected in any control surface water samples.

Figure 3.3 shows the indicator and control annual means for Tritium since the preoperational period. Table 3.3-A lists the indicator annual means since preoperational through 1995. Table 3.3-B lists the indicator annual means from 1996 through 2021.

Gamma spectroscopy analysis did not detect any station related gamma activity during 2021. No gamma emitting radionuclides attributable to station operation have been detected in surface water samples since 1999. Table 3.3-A and Table 3.3-B summarize 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 2021 did not reveal any increasing trends.

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

Figure 3.3



There is no reporting level for Tritium in surface water

Table 3.3-A Mean Concentrations of Radionuclides in Surface Water (1969-1995)

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

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

Table 3.3-B Mean Concentrations of Radionuclides in Surface Water (1996-2021)

Year	Co-58 (pCi/l)	Co-60 (pCi/l)	Nb-95 (pCi/l)	Cs-137 (pCi/l)	H-3 pCi/l)
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 ⁽¹⁾	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
2018	0.00E0	0.00E0	0.00E0	0.00E0	3.52E3
2019	0.00E0	0.00E0	0.00E0	0.00E0	5.56E3
2020	0.00E0	0.00E0	0.00E0	0.00E0	3.97E3
2021	0.00E0	0.00E0	0.00E0	0.00E0	5.38E3

0.00E0 indicates no detectable measurements

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were noted due to the 2014 gamma spectroscopy system change.

3.4 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. Gamma spectroscopy analyses were performed on 26 milk samples collected biweekly from the control location in 2021, and low level iodine analyses were performed on 26 of those samples. No indicator dairies were sampled during 2021 and none were identified by the 2021 land use census.

There were no gamma emitting radionuclides due to ONS plant operations identified in milk samples in 2021. 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-A lists the highest indicator location annual mean and control location annual mean for Cs-137 since the preoperational period through 1995. Table 3.4-B lists the highest indicator location annual mean and control location annual mean for Cs-137 from 1996 through 2021. The tables show similar concentrations for both indicator and control locations through 2005, and Cs-137 was not detected in the control location since 1996.

Milk samples collected 7/6/2021 were analyzed by a vendor laboratory for low level I-131 but did not meet the low level I-131 detection limit, because there was a two week delay in the analysis (NCR# 02393159). Additional information is included in Appendix D.

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

Table 3.4-A Mean Concentration of Radionuclides in Milk (Preoperational-1995)

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

0.00E0 indicates no detectable measurements

1979 - 1986 mean based on all net activity results

(1) 1987 – Gamma spectroscopy system change

Table 3.4-B Mean Concentration of Radionuclides in Milk (1996-2021)

Year	Cs-137 Indicator (pCi/l)	Cs-137 Control (pCi/l)
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 ⁽¹⁾	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 ⁽²⁾	No Indicator Location	0.00E0
2015	No Indicator Location	0.00E0
2016	No Indicator Location	0.00E0
2017	No Indicator Location	0.00E0
2018	No Indicator Location	0.00E0
2019	No Indicator Location	0.00E0
2020	No Indicator Location	0.00E0
2021	No Indicator Location	0.00E0

0.00E0 indicates no detectable measurements

(1) 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.

(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.

3.5 BROADLEAF VEGETATION

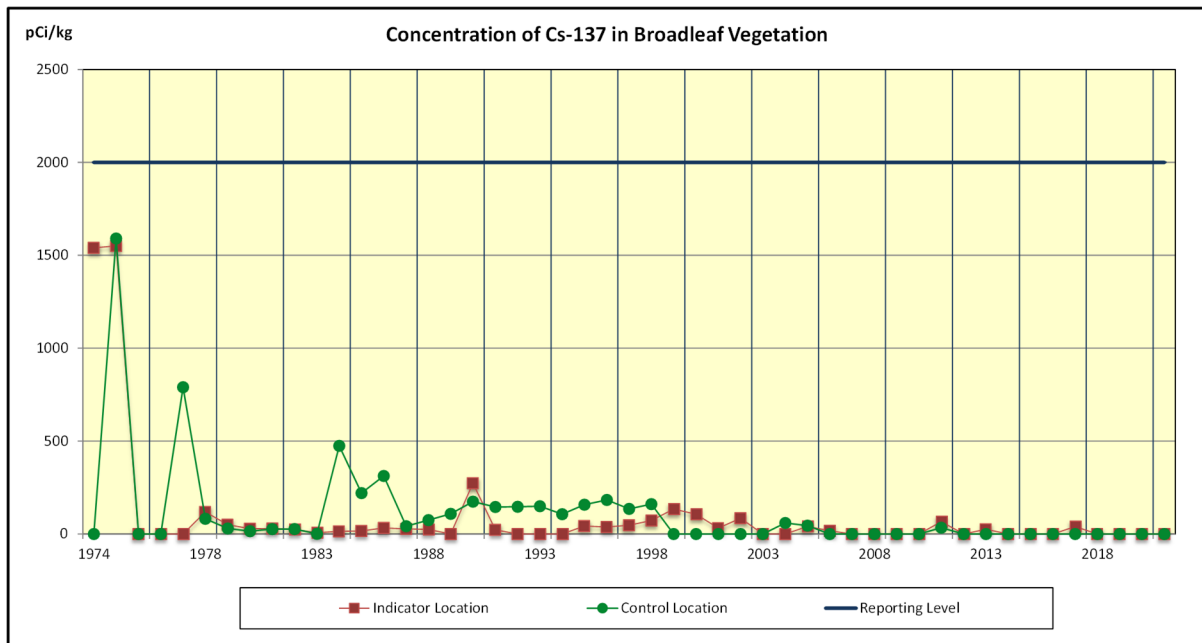
Monthly samples were collected and a gamma analysis was performed on each of the 48 samples during 2021. Three indicator locations and one control location were sampled. There were no gamma emitting radionuclides due to ONS plant operations identified in vegetation samples in 2021.

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
2018	0.00E0	0.00E0
2019	0.00E0	0.00E0
2020	0.00E0	0.00E0
2021	0.00E0	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

(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.

† 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

3.6 FISH

In 2021, gamma spectroscopy was performed on the edible portions of 12 semiannual fish samples. Two downstream indicator locations and one control location were sampled. There were no gamma emitting radionuclides due to ONS plant operations identified in fish samples in 2021.

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-A lists the highest indicator location annual means for radionuclides detected from the Preoperational period through 2014. Table 3.6-B list the highest indicator location annual means for radionuclides detected from 2015-2021. 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

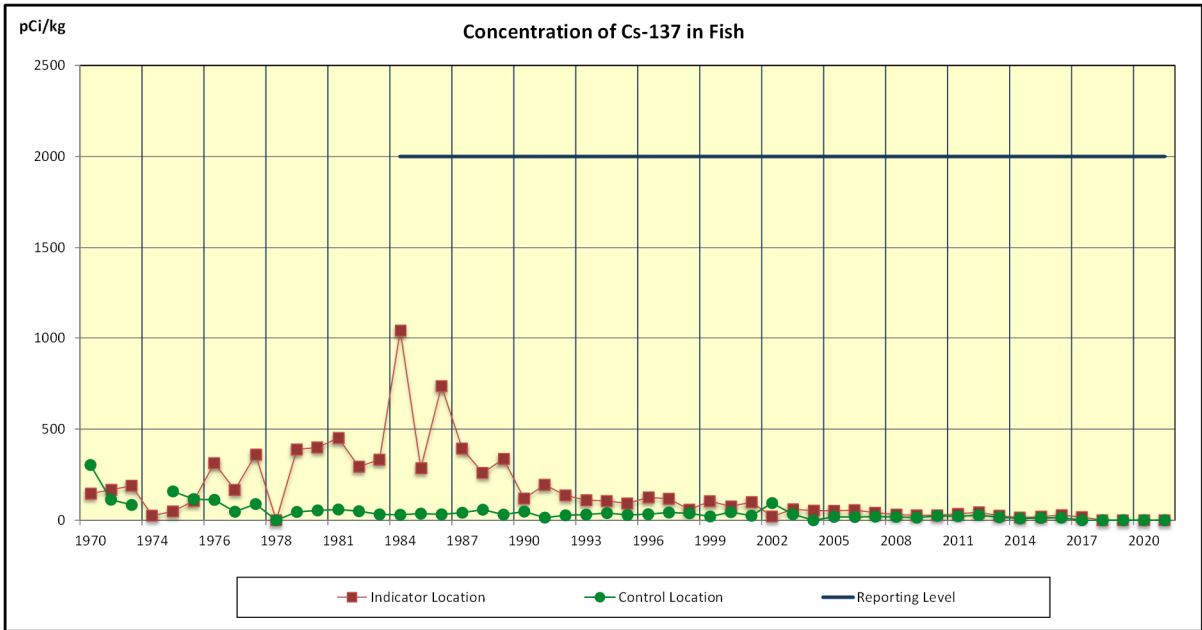
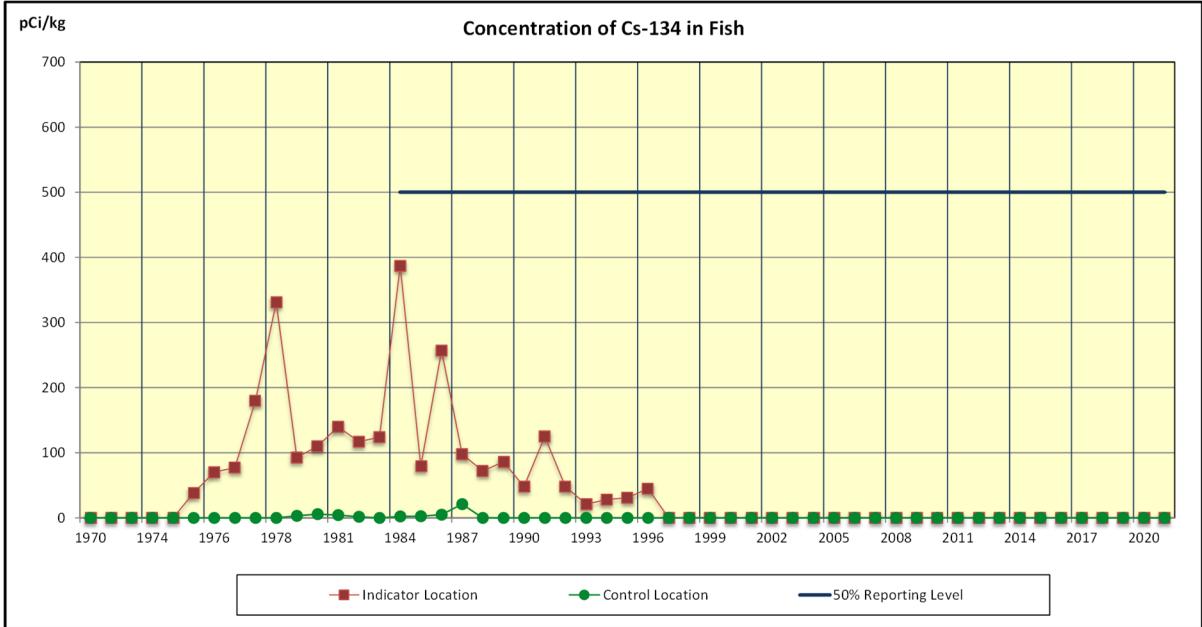


Figure 3.6-2



Current reporting levels implemented 1984

Table 3.6-A Mean Concentrations of Radionuclides in Fish (Preop-2014)

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

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.

Table 3.6-B Mean Concentrations of Radionuclides in Fish (2015-2021)

Year	Co-58 (pCi/kg)	Co-60 (pCi/kg)	Cs-134 (pCi/kg)	Cs-137 (pCi/kg)
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
2018	0.00E0	0.00E0	0.00E0	0.00E0
2019	0.00E0	0.00E0	0.00E0	0.00E0
2020	0.00E0	0.00E0	0.00E0	0.00E0
2021	0.00E0	0.00E0	0.00E0	0.00E0

0.00 indicates no detectable measurements

3.7 SHORELINE SEDIMENT

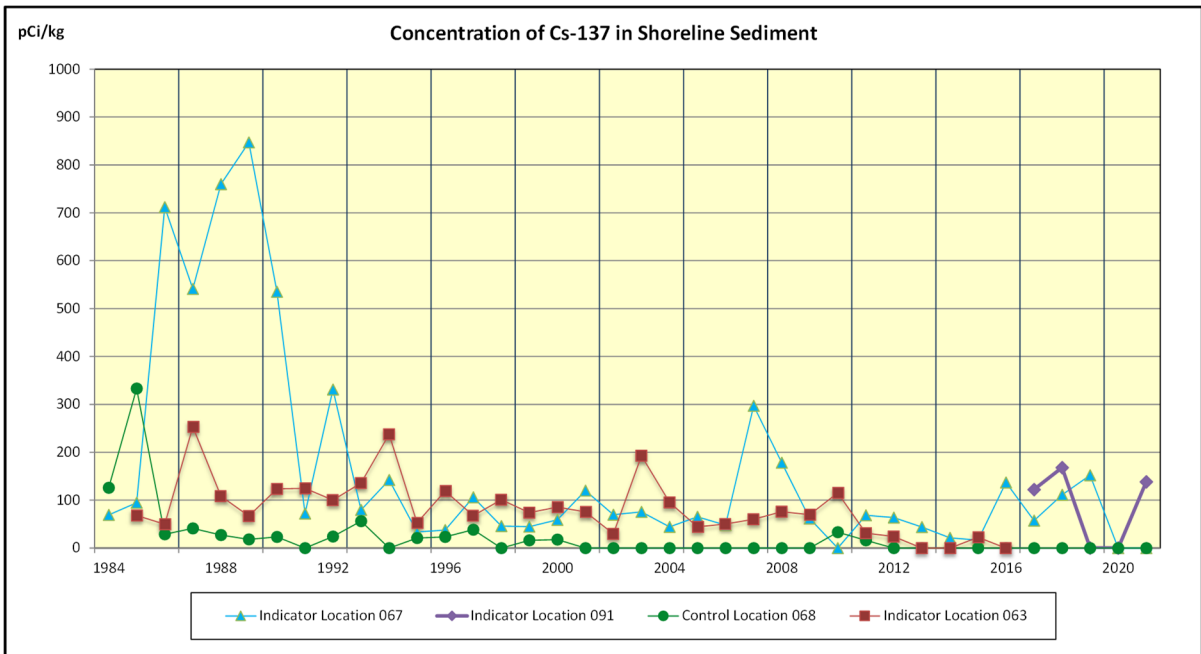
Gamma spectroscopy was performed on six semiannual sediment samples following the drying and removal of rocks and clams. Two downstream indicator locations and one control location were sampled. Four samples were taken from indicator locations and two from the control location.

Cs-137 activity was detected at 138 pCi/kg in the one indicator sample for 2021. There was no activity detected in any of the control location samples in 2021. 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 observed in shoreline samples is a naturally occurring radionuclide.

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
2018	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.68E2	0.00E0	0.00E0
2019	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.52E2	0.00E0	0.00E0
2020	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0
2021	0.00E0	0.00E0	0.00E0	0.00E0	0.00E0	1.38E2	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.

Thermoluminescent dosimeters (TLD) were placed and collected quarterly at the fifty locations indicated in Section 2 Table 2.1-B. There are 25 TLD locations, one or more in each meteorological sector, designated as "inner ring" and 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. There were 16 TLD locations, one in each meteorological sector, 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. The remaining TLDs were placed in special interest areas such as population centers, residential areas, schools, and control locations within a 7 to 13 mile radius from station center. 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.

A gamma exposure rate was determined for each TLD. In 2021, 198 total TLDs were collected and analyzed quarterly, 190 at indicator locations and 8 at control locations. Transit and laboratory background exposure are determined and subtracted from gross field readings as required by ANSI N545-1975. Based on Appendix B TLD data, the highest annual exposure was 29.1 mR/Std-Qtr at indicator location 024, 0.81 miles E of station center. Figure 3.8 and Table 3.8 show TLD inner ring, outer ring, and control location annual averages in mR/Std-Qtr. 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.

Quarterly, environmental ODCM TLD results are compared by location to its historical data to evaluate any significant changes. The comparison utilizes the location's average exposure history to determine if quarterly results fall within expected low and high ranges and provides a reliable indication of potential changes occurring at a specific TLD location. The low and high ranges are determined by the historical average \pm two standard deviations. The quarterly TLD evaluation implements portions of American National Standard ANSI/HPS N13.37-2014, "Environmental Dosimetry – Criteria for System Design and Implementation, for

environmental Thermoluminescent Dosimeters (TLD)”. The CSD-RP-ALL-0030 – Updated Radiological Environmental Monitoring Program TLD Analytical Method, describes the process implemented in late 2018 for fleet TLD programs. TLD values identified as < Low Range or > High Range are evaluated in consideration of factors including possible TLD damage, sampling deviations, glow curve irregularities, and any known environmental location changes which may affect results. TLD results are found in Appendix E.

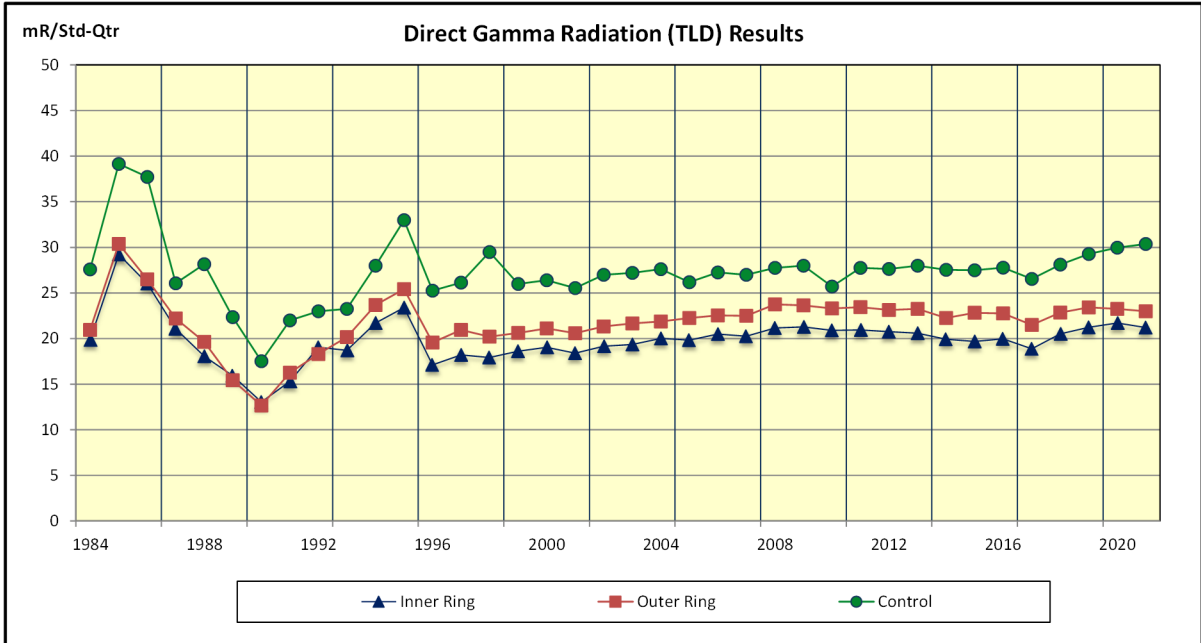
A TLD intercomparison program is conducted as part of the quality assurance program. Results of this program are included in section 4.7.

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 exposure 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, exposure 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 exposure at the ISFSI fence, which is not accessible to the public, was 511 mR/Std-Qtr. This is consistent with previous measurements.

Figure 3.8



There is no reporting level for Direct Radiation (TLD)

Table 3.8 Direct Gamma Radiation (TLD) Results⁽¹⁾

Year	Inner Ring Average (mR/Std-Qtr)	Outer Ring Average (mR/Std-Qtr)	Control Average (mR/Std-Qtr)
Preoperational	2.82E1	3.11E1	3.72E1
1984	1.99E1	2.10E1	2.71E1
1985	2.92E1	3.04E1	3.92E1
1986	2.61E1	2.65E1	3.77E1
1987	2.11E1	2.22E1	2.61E1
1988	1.81E1	1.97E1	2.82E1
1989	1.59E1	1.54E1	2.24E1
1990	1.31E1	1.27E1	1.75E1
1991	1.53E1	1.63E1	2.22E1
1992	1.91E1	1.83E1	2.30E1
1993	1.87E1	2.02E1	2.33E1
1994	2.17E1	2.37E1	2.80E1
1995	2.34E1	2.54E1	3.30E1
1996	1.71E1	1.96E1	2.53E1
1997	1.82E1	2.10E1	2.61E1
1998	1.79E1	2.02E1	2.95E1
1999	1.86E1	2.06E1	2.60E1
2000	1.91E1	2.11E1	2.64E1
2001	1.84E1	2.06E1	2.56E1
2002	1.92E1	2.13E1	2.70E1
2003	1.94E1	2.17E1	2.72E1
2004	2.00E1	2.19E1	2.76E1
2005	1.98E1	2.23E1	2.62E1
2006	2.05E1	2.26E1	2.73E1
2007	2.03E1	2.25E1	2.70E1
2008	2.12E1	2.38E1	2.78E1
2009	2.13E1	2.36E1	2.80E1
2010	2.09E1	2.33E1	2.57E1
2011	2.10E1	2.35E1	2.78E1
2012	2.08E1	2.31E1	2.76E1
2013	2.06E1	2.33E1	2.80E1
2014	1.99E1	2.23E1	2.75E1
2015	1.97E1	2.28E1	2.75E1
2016	2.00E1	2.28E1	2.78E1
2017	1.89E1	2.15E1	2.65E1
2018	2.05E1	2.28E1	2.81E1
2019	2.12E1	2.34E1	2.93E1
2020	2.17E1	2.33E1	3.30E1
2021	2.12E1	2.30E1	3.04E1

(1) Table converted to Average mR/Std-Qtr effective with the 2021 report.

3.9 LAND USE CENSUS

The Land Use Census was conducted during the growing season (5/16 – 5/17/2021) as required by SLC 16.11.6. The nearest Residence and milk-giving animal (cow, goat, etc.), where milk is used for human consumption, were identified within a distance of 8 kilometers (5.0 miles) from the station and in each of the sixteen meteorological sectors.

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, and there were no milk locations identified during the performance of the land use census. No program changes were required based on the results of the census.

The fleet Land Use Census Procedure AD-CP-ALL-0014 (Revision 4), Land Use Census Evaluation, was revised in 2020 to standardize the approach for the evaluation of the land use census dose calculations (NCR# 02343171).

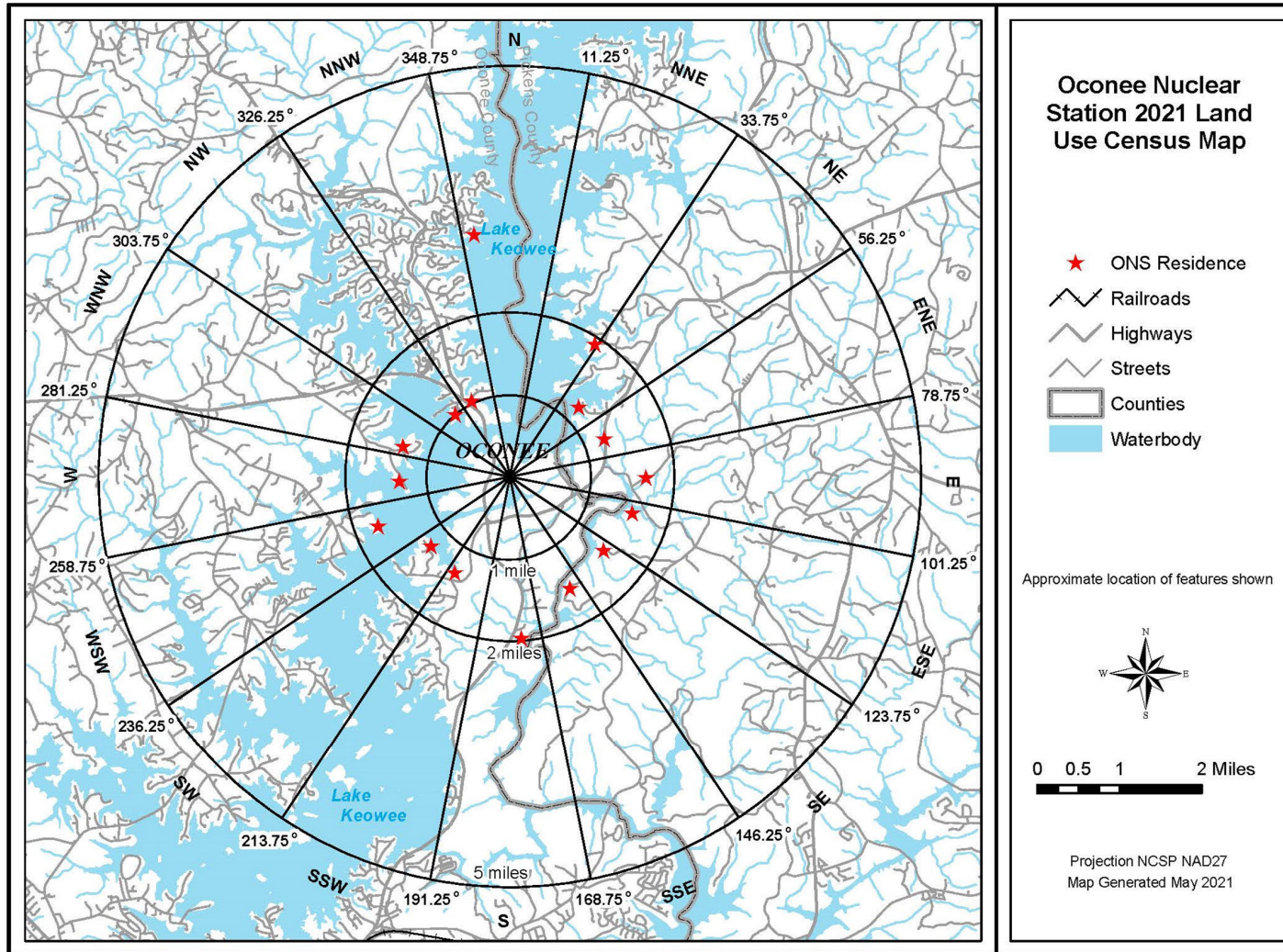
Table 3.9 Oconee 2021 Land Use Census Results

Nearest Pathways (Miles)

SECTOR	RESIDENCE		MILK ANIMAL	
	2020	2021	2020	2021
North	2.98	2.98	---	---
North-Northeast	1.84	1.84	---	---
Northeast	1.20	1.20	---	---
East-Northeast	1.24	1.24	---	---
East	1.64	1.64	---	---
East-Southeast	1.57	1.57	---	---
Southeast	1.46	1.46	---	---
South-Southeast	1.54	1.54	---	---
South	1.96	1.96	---	---
South-Southwest	1.34	1.34	---	---
Southwest	1.27	1.27	---	---
West-Southwest	1.73	1.73	---	---
West	1.35	1.35	---	---
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

Figure 3.9



4.0 QUALITY ASSURANCE

4.1 SAMPLE COLLECTION

EnRad Laboratories and the Environmental Services Group performed the environmental sample collections as specified by approved sample collection procedures.

4.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is in Huntersville, North Carolina, at Duke Energy's Environmental Center. During 2021, a vendor laboratory, General Engineering Laboratory, LLC (GEL), performed some environmental sample analyses as specified by approved analysis procedures.

4.3 DOSIMETRY ANALYSIS

The Dosimetry and Records group performed the environmental dosimetry measurements as specified by approved dosimetry analysis procedures. The Dosimetry and Records Laboratory is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

4.4.1 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.

4.4.2 CALIBRATION VERIFICATION

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

4.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. These include tritium analyses in drinking water, surface water, gross beta analyses in drinking water samples, and low-level I-131 in milk samples.

4.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2021 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.

EnRad Laboratory participated in an interlaboratory program with Eckert & Ziegler Analytics (EZA) in 2021. 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.

4.5.1 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EZA mixed gamma in liquid, mixed gamma in vegetation, mixed gamma in soil, low-level I-131 in liquid, mixed gamma air filter composites, I-131 air cartridges, gross beta in water, gross beta in filters, and tritium in water were analyzed at various times of the year at EnRad Laboratories. A summary of the applicable REMP EnRad Laboratory program results for 2021 is documented in Table 4.0-A.

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Table 4.0-A lists the performance for specific samples. forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

4.6 SPLIT COMPARISON PROGRAM

Oconee Nuclear Station routinely participates in an environmental sample intercomparison program. Program elements include sampling frequency and analysis 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.

4.7 TLD INTERCOMPARISON PROGRAM

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 using the NIST-traceable Hopewell and submits them for analysis of the unknown estimated delivered exposure. A summary of the 2021 Internal Cross Check (Duke Energy) Program is documented in Table 4.0-B.

4.8 GENERAL ENGINEERING LABORATORY, LLC (GEL)

General Engineering Laboratory, LLC (GEL) participated in various Quality Assurance Programs for Inter-laboratory, Intra-laboratory, Third Party Cross Check programs, and a number of proficiency testing programs during 2021. A summary of the GEL quality

assurance program results for the sample media types sent to GEL during 2021 is documented in Table 4.0-C. Table 4.0-C may not be applicable to all plants or stations.

TABLE 4.0-A

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2021 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter in Planchet	E13430A	Cs-137	2	pCi	126	126	1.00	Agreement
I-131 in Charcoal Cartridge	E13428	I-131	2	pCi	95.5	92.8	1.03	Agreement
Gamma in Soil	E13429	Ce-141	2	pCi/g	0.158	0.163	0.97	Agreement
		Co-58	2	pCi/g	0.155	0.162	0.96	Agreement
		Co-60	2	pCi/g	0.176	0.195	0.90	Agreement
		Cr-51	2	pCi/g	0.430	0.482	0.89	Agreement
		Cs-134	2	pCi/g	0.202	0.193	1.05	Agreement
		Cs-137	2	pCi/g	0.222	0.242	0.92	Agreement
		Fe-59	2	pCi/g	0.168	0.166	1.01	Agreement
		Mn-54	2	pCi/g	0.226	0.226	1.00	Agreement
		Zn-65	2	pCi/g	0.267	0.272	0.98	Agreement
Gamma in Simulated Vegetation	E13437	Ce-141	3	pCi/g	0.194	0.194	1.00	Agreement
		Co-58	3	pCi/g	0.208	0.200	1.04	Agreement
		Co-60	3	pCi/g	0.258	0.246	1.05	Agreement
		Cr-51	3	pCi/g	0.373	0.401	0.93	Agreement
		Cs-134	3	pCi/g	0.141	0.158	0.89	Agreement
		Cs-137	3	pCi/g	0.193	0.190	1.02	Agreement
		Fe-59	3	pCi/g	0.183	0.173	1.06	Agreement
		Mn-54	3	pCi/g	0.226	0.218	1.04	Agreement
		Zn-65	3	pCi/g	0.274	0.260	1.05	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E13435B	Ce-141	3	pCi	121	116	1.04	Agreement
		Co-58	3	pCi	123	120	1.03	Agreement
		Co-60	3	pCi	153	147	1.04	Agreement
		Cr-51	3	pCi	241	240	1.00	Agreement
		Cs-134	3	pCi	90.1	94.8	0.95	Agreement
		Cs-137	3	pCi	118	114	1.04	Agreement
		Fe-59	3	pCi	114	104	1.10	Agreement
		Mn-54	3	pCi	139	131	1.06	Agreement
		Zn-65	3	pCi	171	156	1.10	Agreement
Gamma in Water	E13436	Ce-141	3	pCi/L	161	151	1.07	Agreement
		Co-58	3	pCi/L	165	155	1.06	Agreement
		Co-60	3	pCi/L	196	191	1.03	Agreement
		Cr-51	3	pCi/L	330	311	1.06	Agreement
		Cs-134	3	pCi/L	118	123	0.96	Agreement
		Cs-137	3	pCi/L	154	147	1.04	Agreement
		Fe-59	3	pCi/L	149	134	1.11	Agreement
		I-131	3	pCi/L	261	243	1.07	Agreement
		Mn-54	3	pCi/L	185	169	1.09	Agreement
Zn-65	3	pCi/L	227	202	1.12	Agreement		
Milk LLI-131	E13431	I-131	2	pCi/L	96.8	90.1	1.07	Agreement
Gross Beta in Water	E13433	Cs-137	2	pCi/L	243	258	0.94	Agreement
Tritium in Water	E13438	H-3	3	pCi/L	11600	11700	0.99	Agreement

TABLE 4.0-B

2021 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 2021						2nd Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103087	62.75	59.56	5.36	<+/-15%	Pass	102970	17.06	17.74	-3.83	<+/-15%	Pass
103742	62.37	59.56	4.72	<+/-15%	Pass	103199	18.11	17.74	2.09	<+/-15%	Pass
100029	55.52	59.56	-6.78	<+/-15%	Pass	100154	17.12	17.74	-3.49	<+/-15%	Pass
102931	61.41	59.56	3.11	<+/-15%	Pass	102770	18.79	17.74	5.92	<+/-15%	Pass
100033	56.41	59.56	-5.29	<+/-15%	Pass	102058	17.15	17.74	-3.33	<+/-15%	Pass
100038	57.37	59.56	-3.68	<+/-15%	Pass	103295	18.58	17.74	4.74	<+/-15%	Pass
103615	61.40	59.56	3.09	<+/-15%	Pass	103602	18.57	17.74	4.68	<+/-15%	Pass
102442	57.43	59.56	-3.58	<+/-15%	Pass	100180	17.26	17.74	-2.71	<+/-15%	Pass
102407	59.65	59.56	0.15	<+/-15%	Pass	102741	18.31	17.74	3.21	<+/-15%	Pass
100245	56.51	59.56	-5.12	<+/-15%	Pass	103557	18.80	17.74	5.98	<+/-15%	Pass
Average Bias (B)			-0.80			Average Bias (B)			1.32		
Standard Deviation (S)			4.60			Standard Deviation (S)			4.18		
Measure Performance B +S			5.40	<15%	Pass	Measure Performance B +S			5.51	<15%	Pass
3rd Quarter 2021						4th Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
104637	36.05	39.31	-8.29	<+/-15%	Pass	104816	45.83	49.95	-8.25	<+/-15%	Pass
104499	37.40	39.31	-4.86	<+/-15%	Pass	104381	44.88	49.95	-10.15	<+/-15%	Pass
104449	36.14	39.31	-8.06	<+/-15%	Pass	104676	46.19	49.95	-7.53	<+/-15%	Pass
104466	36.49	39.31	-7.17	<+/-15%	Pass	104817	46.03	49.95	-7.85	<+/-15%	Pass
104639	36.13	39.31	-8.09	<+/-15%	Pass	104383	46.24	49.95	-7.43	<+/-15%	Pass
104634	36.71	39.31	-6.61	<+/-15%	Pass	104550	45.88	49.95	-8.15	<+/-15%	Pass
104638	36.58	39.31	-6.94	<+/-15%	Pass	104818	45.55	49.95	-8.81	<+/-15%	Pass
104498	36.08	39.31	-8.22	<+/-15%	Pass	104804	45.46	49.95	-8.99	<+/-15%	Pass
104453	36.42	39.31	-7.35	<+/-15%	Pass	104584	46.88	49.95	-6.15	<+/-15%	Pass
104465	35.76	39.31	-9.03	<+/-15%	Pass	104677	47.28	49.95	-5.35	<+/-15%	Pass
Average Bias (B)			-7.46			Average Bias (B)			-7.86		
Standard Deviation (S)			1.17			Standard Deviation (S)			1.38		
Measure Performance B +S			8.63	<15%	Pass	Measure Performance B +S			9.25	<15%	Pass

TABLE 4.0-C

2021 GEL Laboratories, LLC QA Results

Interlaboratory cross check samples from Eckert & Ziegler Analytics (EZA) were received and analyzed by GEL during 2021. Table 4.0-C lists the performance for specific samples. Table 4.0-C may not be applicable to all plants/stations.

Sample	Sample ID	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
I-131 in Milk with EZA	E13358	I-131	1	pCi/L	83.9	86.9	0.97	Agreement
	E13362	I-131	2	pCi/L	80.4	83.8	0.96	Agreement
	E13366	I-131	3	pCi/L	90.8	85.6	1.06	Agreement
	E13370	I-131	4	pCi/L	92.8	90.3	1.03	Agreement

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, Environmental Services, and General Engineering Laboratories, LLC.

This appendix provides a description of the specific analyses performed on samples collected in the field. Changes to the sampling procedures and analyses procedures are also discussed in the section.

I. CHANGE OF SAMPLING PROCEDURES

There were no changes to Oconee Nuclear Station sampling procedures implemented during 2021.

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.) and then transferred to appropriate counting geometry.

Low-level iodine analyses are performed by passing a designated sample aliquot through a pre-determined amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried and mixed thoroughly, 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 4910TR liquid scintillation system or a Perkin-Elmer 3110TR 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, sample preparation technique are acceptable, and sample contamination has not occurred.

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

Gross beta analysis of liquid samples is performed by concentrating a designated aliquot of sample and analyzing by Perkin-Elmer 4910TR liquid scintillation system. Samples are batch processed with a laboratory fortified blank and blank to verify instrument performance and ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

Acquisition times for charcoal cartridge gamma spectroscopy analyses were reduced in early May 2021 as a result of fleet air sampling equipment standardization.

The procedure for preparing milk samples for Low-Level Iodine-131 (LLI-131) analysis was modified to allow incremental sample additions for milk samples with higher fat content (NCR # 02393159).

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

2021

**OCONEE NUCLEAR STATION
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

Oconee Nuclear Station
Oconee County, South Carolina

Docket Numbers 50-269, 270, 287
Calendar Year 2021

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⁾	See Table 2.2-C	2.35E-02 (265/265) 9.80E-03 – 4.92E-02	078.1 (0.53 mi WSW)	2.45E-02 (53/53) 1.15E-02 – 4.92E-02	093 (9.34 mi SE) 2.33E-02 (53/53) 1.03E-02 – 5.39E-02	0
	Gamma 30 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Air Radioiodine (pCi/m ³)	Gamma 318 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Drinking Water (pCi/l)	Gross Beta 39	4	All less than LLD	-----	-----	064 (6.67 mi SSW) 3.38E+00 (1/13) 3.38E+00 – 3.38E+00	0
	Gamma 39	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
	Tritium 12 ⁽⁶⁾	2000	All less than LLD	-----	-----	All less than LLD	0
Surface Water (pCi/l)	Gamma 26 ⁽⁴⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
	Tritium 8 ⁽⁴⁾⁽⁶⁾	2000	5.38E+03 (4/4) 1.61E+03 – 9.54E+03	063.1 (0.79 mi E)	5.38E+03 (4/4) 1.61E+03 – 9.54E+03	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 ⁽⁷⁾	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 2021

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	All less than LLD	-----	-----	All less than LLD	0
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
Sediments--Shoreline (pCi/kg, dry)	Gamma 6	See Table 2.2-C	1.38E+02 (1/4) 1.38E+02 – 1.38E+02	091 (2.09 mi S)	1.38E+02 (1/2) 1.38E+02 – 1.38E+02	All less than LLD	0
TLD (mR per STD-quarter) ⁽⁵⁾	TLD Readout 198 ⁽⁴⁾	-----	2.20E+01 (190/190) 1.39E+01 – 3.36E+01	024 (0.81 mi E)	2.91E+01 (4/4) 2.65E+01 – 3.36E+01	058 (9.39 mi WSW) 093 (9.34 mi SE) 3.04E+01 (8/8) 2.62E+01 – 3.74E+01	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).
6. Quarterly tritium composites determined using quarter days (92 days +/- 25% (23 days)).
7. Required Low Level I-131 detection limit not met on one sample (NCR # 02393159).

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 99.99% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
077	2/8-2/15/2021	TF	Filter gouge/tear was noted upon receipt of sample.	NCR # 02370163
084	5/17-5/24/2021	PI	4.95 hours downtime, power interruption due to construction.	NCR # 02383880
085	6/14-6/21/2021	PI	2.66 hours downtime, power interruption due to weather.	NCR # 02386994

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 99.25% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
063.1	2/22-3/22/2021	PS	24 hours downtime, submersible pump was out of service.	NCR # 02372767 NCR # 02375301
062	9/7-10/4/2021	PS	6.96 days downtime, submersible pump, foot valve, and suction lines were replaced.	NCR # 02400457
063.1	11/1-11/29/2021	PS	410.40 hours downtime due to submersible pump out of service. Pump was repaired and service was restored.	NCR # 02407324

C.2 UNAVAILABLE ANALYSES

Direct Gamma Radiation (TLD)

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
059	3/16-6/15/2021	VN	Alpha and Bravo TLDs were missing due to vandalism.	NCR # 02386271
089	6/15-9/14/2021	OT	Alpha and Bravo TLDs were found on the ground, due to sign being removed.	NCR # 02397825

APPENDIX D

ANALYTICAL DEVIATIONS

APPENDIX D

OCONEE NUCLEAR STATION ANALYTICAL DEVIATIONS

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

D.1 ANALYTICAL DEVIATIONS

Oconee REMP location 071 milk collected on 7/6/2021 Low Level-I-131 detection limit of 1.0 pCi/L was not met by the vendor laboratory. The sample turn-around time was reduced to prevent recurrence.

Milk

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
071	7/6/2021	AD	Low Level I-131 analysis did not meet detection limit.	NCR # 02393159

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2021

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2021

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
536577	12/28/2020 - 1/5/2021	Beta	2.46E-02	2.61E-03	2.21E-03
536789	1/5/2021 - 1/11/2021	Beta	2.16E-02	3.55E-03	4.02E-03
537330	1/11/2021 - 1/19/2021	Beta	2.65E-02	3.00E-03	2.53E-03
537689	1/19/2021 - 1/25/2021	Beta	1.91E-02	3.04E-03	3.42E-03
538080	1/25/2021 - 2/1/2021	Beta	2.07E-02	3.13E-03	3.39E-03
538326	2/1/2021 - 2/8/2021	Beta	1.46E-02	2.84E-03	3.39E-03
538566	2/8/2021 - 2/15/2021	Beta	1.63E-02	2.85E-03	3.18E-03
538823	2/15/2021 - 2/22/2021	Beta	1.86E-02	3.06E-03	3.41E-03
539065	2/22/2021 - 3/1/2021	Beta	1.90E-02	2.71E-03	2.89E-03
539279	3/1/2021 - 3/8/2021	Beta	2.38E-02	2.85E-03	2.65E-03
540078	3/8/2021 - 3/15/2021	Beta	1.97E-02	3.02E-03	3.23E-03
540726	3/15/2021 - 3/22/2021	Beta	1.60E-02	2.76E-03	3.04E-03
541440	3/22/2021 - 3/29/2021	Beta	1.59E-02	2.91E-03	3.41E-03
541967	12/28/2020 - 3/29/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.20E-01	3.54E-02	3.89E-02
		K-40	<3.38E-02	0.00E+00	3.38E-02
541961	3/29/2021 - 4/5/2021	Beta	2.39E-02	2.82E-03	2.54E-03
542253	4/5/2021 - 4/12/2021	Beta	3.05E-02	3.49E-03	3.16E-03
542884	4/12/2021 - 4/19/2021	Beta	2.52E-02	3.28E-03	3.12E-03
543267	4/19/2021 - 4/26/2021	Beta	2.31E-02	3.12E-03	3.02E-03
544123	4/26/2021 - 5/3/2021	Beta	2.51E-02	3.40E-03	3.54E-03
544326	5/3/2021 - 5/10/2021	Beta	1.65E-02	2.87E-03	3.23E-03
544657	5/10/2021 - 5/17/2021	Beta	1.73E-02	2.99E-03	3.47E-03
545029	5/17/2021 - 5/24/2021	Beta	2.81E-02	3.38E-03	3.14E-03
545512	5/24/2021 - 6/1/2021	Beta	2.12E-02	2.89E-03	3.01E-03
545811	6/1/2021 - 6/7/2021	Beta	2.40E-02	3.42E-03	3.21E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
546041	6/7/2021 - 6/14/2021	Beta	1.14E-02	2.50E-03	3.05E-03
546924	6/14/2021 - 6/21/2021	Beta	2.01E-02	2.89E-03	2.79E-03
547205	6/21/2021 - 6/28/2021	Beta	1.65E-02	2.46E-03	2.51E-03
547749	3/29/2021 - 6/28/2021	Cs-134	<1.89E-03	0.00E+00	1.89E-03
		Cs-137	<1.55E-03	0.00E+00	1.55E-03
		Be-7	1.66E-01	3.99E-02	3.94E-02
		K-40	<2.79E-02	0.00E+00	2.79E-02
547489	6/28/2021 - 7/6/2021	Beta	1.38E-02	2.24E-03	2.52E-03
547743	7/6/2021 - 7/12/2021	Beta	1.98E-02	3.29E-03	3.58E-03
548126	7/12/2021 - 7/19/2021	Beta	1.56E-02	2.84E-03	3.23E-03
548540	7/19/2021 - 7/26/2021	Beta	2.18E-02	3.11E-03	3.17E-03
548756	7/26/2021 - 8/2/2021	Beta	3.21E-02	3.73E-03	3.61E-03
548988	8/2/2021 - 8/9/2021	Beta	2.48E-02	3.27E-03	3.26E-03
549289	8/9/2021 - 8/16/2021	Beta	2.40E-02	3.24E-03	3.22E-03
549778	8/16/2021 - 8/23/2021	Beta	1.06E-02	2.30E-03	2.88E-03
550062	8/23/2021 - 8/30/2021	Beta	3.34E-02	3.60E-03	3.13E-03
550684	8/30/2021 - 9/7/2021	Beta	2.27E-02	2.92E-03	2.85E-03
551048	9/7/2021 - 9/13/2021	Beta	2.45E-02	3.83E-03	4.37E-03
551695	9/13/2021 - 9/20/2021	Beta	2.84E-02	3.09E-03	2.78E-03
552313	9/20/2021 - 9/27/2021	Beta	1.89E-02	2.92E-03	3.07E-03
552810	6/28/2021 - 9/27/2021	Cs-134	<2.23E-03	0.00E+00	2.23E-03
		Cs-137	<1.83E-03	0.00E+00	1.83E-03
		Be-7	1.95E-01	4.11E-02	3.07E-02
		K-40	2.93E-02	1.87E-02	2.46E-02
552473	9/27/2021 - 10/4/2021	Beta	4.79E-02	3.82E-03	2.97E-03
552804	10/4/2021 - 10/11/2021	Beta	1.37E-02	2.34E-03	2.58E-03
553279	10/11/2021 - 10/18/2021	Beta	2.41E-02	3.27E-03	3.32E-03
553872	10/18/2021 - 10/25/2021	Beta	3.60E-02	3.38E-03	2.82E-03
554303	10/25/2021 - 11/1/2021	Beta	1.54E-02	2.50E-03	2.76E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	554614	Sample Dates:	11/1/2021 - 11/8/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.59E-02	3.29E-03	3.08E-03
Sample ID:	555117	Sample Dates:	11/8/2021 - 11/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.68E-02	3.36E-03	3.25E-03
Sample ID:	555969	Sample Dates:	11/15/2021 - 11/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.66E-02	3.51E-03	3.66E-03
Sample ID:	556765	Sample Dates:	11/22/2021 - 11/29/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.23E-02	3.16E-03	3.15E-03
Sample ID:	557082	Sample Dates:	11/29/2021 - 12/6/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	4.25E-02	3.53E-03	2.54E-03
Sample ID:	557506	Sample Dates:	12/6/2021 - 12/13/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.86E-02	3.54E-03	3.47E-03
Sample ID:	557987	Sample Dates:	12/13/2021 - 12/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.49E-02	2.85E-03	2.50E-03
Sample ID:	558414	Sample Dates:	12/20/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.69E-02	2.97E-03	2.62E-03
Sample ID:	559176	Sample Dates:	9/27/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<2.09E-03	0.00E+00	2.09E-03
				Cs-137	<1.80E-03	0.00E+00	1.80E-03
				Be-7	1.76E-01	4.20E-02	3.63E-02
				K-40	<4.02E-02	0.00E+00	4.02E-02
Sample ID:	558630	Sample Dates:	12/27/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.18E-02	2.32E-03	2.67E-03
Sample ID:	559980	Sample Dates:	12/27/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.33E-02	0.00E+00	1.33E-02
				Cs-137	<1.35E-02	0.00E+00	1.35E-02
				Be-7	<0.00E+00	0.00E+00	0.00E+00
				K-40	1.78E-01	1.33E-01	1.96E-01

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	536578	Sample Dates:	12/28/2020 - 1/5/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.52E-02	2.64E-03	2.21E-03
Sample ID:	536790	Sample Dates:	1/5/2021 - 1/11/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.43E-02	3.68E-03	4.02E-03
Sample ID:	537331	Sample Dates:	1/11/2021 - 1/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.80E-02	3.07E-03	2.53E-03
Sample ID:	537690	Sample Dates:	1/19/2021 - 1/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.84E-02	3.00E-03	3.42E-03
Sample ID:	538081	Sample Dates:	1/25/2021 - 2/1/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.06E-02	3.12E-03	3.39E-03
Sample ID:	538327	Sample Dates:	2/1/2021 - 2/8/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.57E-02	2.90E-03	3.39E-03
Sample ID:	538567	Sample Dates:	2/8/2021 - 2/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.63E-02	2.85E-03	3.18E-03
Sample ID:	538824	Sample Dates:	2/15/2021 - 2/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.10E-02	3.18E-03	3.41E-03
Sample ID:	539066	Sample Dates:	2/22/2021 - 3/1/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.98E-02	2.75E-03	2.89E-03
Sample ID:	539280	Sample Dates:	3/1/2021 - 3/8/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.69E-02	2.98E-03	2.65E-03
Sample ID:	540079	Sample Dates:	3/8/2021 - 3/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.55E-02	3.29E-03	3.23E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
540727	3/15/2021 - 3/22/2021	Beta	1.71E-02	2.82E-03	3.04E-03
541441	3/22/2021 - 3/29/2021	Beta	1.47E-02	2.85E-03	3.41E-03
541968	12/28/2020 - 3/29/2021	Cs-134	<1.61E-03	0.00E+00	1.61E-03
		Cs-137	<1.75E-03	0.00E+00	1.75E-03
		Be-7	1.57E-01	3.74E-02	3.34E-02
		K-40	<3.57E-02	0.00E+00	3.57E-02
541962	3/29/2021 - 4/5/2021	Beta	2.62E-02	2.91E-03	2.54E-03
542254	4/5/2021 - 4/12/2021	Beta	3.35E-02	3.63E-03	3.16E-03
542885	4/12/2021 - 4/19/2021	Beta	2.63E-02	3.33E-03	3.12E-03
543268	4/19/2021 - 4/26/2021	Beta	2.46E-02	3.20E-03	3.02E-03
544124	4/26/2021 - 5/3/2021	Beta	2.85E-02	3.55E-03	3.54E-03
544327	5/3/2021 - 5/10/2021	Beta	1.88E-02	3.00E-03	3.23E-03
544658	5/10/2021 - 5/17/2021	Beta	2.27E-02	3.24E-03	3.47E-03
545030	5/17/2021 - 5/24/2021	Beta	3.70E-02	3.75E-03	3.14E-03
545513	5/24/2021 - 6/1/2021	Beta	2.50E-02	3.07E-03	3.01E-03
545812	6/1/2021 - 6/7/2021	Beta	2.53E-02	3.48E-03	3.21E-03
546042	6/7/2021 - 6/14/2021	Beta	1.22E-02	2.55E-03	3.05E-03
546925	6/14/2021 - 6/21/2021	Beta	2.55E-02	3.15E-03	2.79E-03
547206	6/21/2021 - 6/28/2021	Beta	1.98E-02	2.62E-03	2.51E-03
547750	3/29/2021 - 6/28/2021	Cs-134	<1.45E-03	0.00E+00	1.45E-03
		Cs-137	<1.20E-03	0.00E+00	1.20E-03
		Be-7	2.08E-01	4.03E-02	2.22E-02
		K-40	2.52E-02	1.32E-02	4.55E-03
547490	6/28/2021 - 7/6/2021	Beta	1.35E-02	2.22E-03	2.52E-03
547744	7/6/2021 - 7/12/2021	Beta	1.87E-02	3.25E-03	3.58E-03
548127	7/12/2021 - 7/19/2021	Beta	2.03E-02	3.07E-03	3.23E-03
548541	7/19/2021 - 7/26/2021	Beta	2.44E-02	3.24E-03	3.17E-03
548757	7/26/2021 - 8/2/2021	Beta	3.03E-02	3.65E-03	3.61E-03
548989	8/2/2021 - 8/9/2021	Beta	2.82E-02	3.42E-03	3.26E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
549290	8/9/2021 - 8/16/2021	Beta	2.41E-02	3.25E-03	3.22E-03
549779	8/16/2021 - 8/23/2021	Beta	1.15E-02	2.35E-03	2.88E-03
550063	8/23/2021 - 8/30/2021	Beta	3.27E-02	3.57E-03	3.13E-03
550685	8/30/2021 - 9/7/2021	Beta	2.47E-02	3.01E-03	2.85E-03
551049	9/7/2021 - 9/13/2021	Beta	2.44E-02	3.82E-03	4.37E-03
551696	9/13/2021 - 9/20/2021	Beta	2.78E-02	3.07E-03	2.78E-03
552314	9/20/2021 - 9/27/2021	Beta	2.14E-02	3.04E-03	3.07E-03
552811	6/28/2021 - 9/27/2021	Cs-134	<2.08E-03	0.00E+00	2.08E-03
		Cs-137	<1.49E-03	0.00E+00	1.49E-03
		Be-7	1.76E-01	3.86E-02	2.54E-02
		K-40	<2.88E-02	0.00E+00	2.88E-02
552474	9/27/2021 - 10/4/2021	Beta	4.92E-02	3.87E-03	2.97E-03
552805	10/4/2021 - 10/11/2021	Beta	1.25E-02	2.27E-03	2.59E-03
553280	10/11/2021 - 10/18/2021	Beta	2.57E-02	3.34E-03	3.32E-03
553873	10/18/2021 - 10/25/2021	Beta	3.77E-02	3.44E-03	2.82E-03
554304	10/25/2021 - 11/1/2021	Beta	1.43E-02	2.44E-03	2.76E-03
554615	11/1/2021 - 11/8/2021	Beta	3.16E-02	3.54E-03	3.08E-03
555118	11/8/2021 - 11/15/2021	Beta	2.61E-02	3.34E-03	3.25E-03
555970	11/15/2021 - 11/22/2021	Beta	2.56E-02	3.47E-03	3.66E-03
556766	11/22/2021 - 11/29/2021	Beta	2.79E-02	3.42E-03	3.15E-03
557083	11/29/2021 - 12/6/2021	Beta	4.65E-02	3.67E-03	2.54E-03
557507	12/6/2021 - 12/13/2021	Beta	3.00E-02	3.60E-03	3.47E-03
557988	12/13/2021 - 12/20/2021	Beta	2.63E-02	2.91E-03	2.50E-03
558415	12/20/2021 - 12/27/2021	Beta	3.07E-02	3.13E-03	2.62E-03
559177	9/27/2021 - 12/27/2021	Cs-134	<1.05E-03	0.00E+00	1.05E-03
		Cs-137	<1.55E-03	0.00E+00	1.55E-03
		Be-7	1.71E-01	3.92E-02	3.34E-02
		K-40	<2.91E-02	0.00E+00	2.91E-02
558631	12/27/2021 - 1/4/2022	Beta	1.30E-02	2.39E-03	2.67E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
559981	12/27/2021 - 1/4/2022	Cs-134	<7.96E-03	0.00E+00	7.96E-03
		Cs-137	<7.58E-03	0.00E+00	7.58E-03
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	2.63E-01	1.33E-01	1.65E-01

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536579	12/28/2020 - 1/5/2021	Beta	2.48E-02	2.63E-03	2.22E-03
536791	1/5/2021 - 1/11/2021	Beta	2.16E-02	3.56E-03	4.01E-03
537332	1/11/2021 - 1/19/2021	Beta	2.50E-02	2.94E-03	2.53E-03
537691	1/19/2021 - 1/25/2021	Beta	2.18E-02	3.16E-03	3.41E-03
538082	1/25/2021 - 2/1/2021	Beta	2.29E-02	3.24E-03	3.40E-03
538328	2/1/2021 - 2/8/2021	Beta	1.47E-02	2.85E-03	3.39E-03
538568	2/8/2021 - 2/15/2021	Beta	1.70E-02	2.89E-03	3.18E-03
538825	2/15/2021 - 2/22/2021	Beta	1.93E-02	3.09E-03	3.40E-03
539067	2/22/2021 - 3/1/2021	Beta	1.82E-02	2.68E-03	2.90E-03
539281	3/1/2021 - 3/8/2021	Beta	2.20E-02	2.77E-03	2.65E-03
540080	3/8/2021 - 3/15/2021	Beta	2.36E-02	3.20E-03	3.22E-03
540728	3/15/2021 - 3/22/2021	Beta	1.58E-02	2.75E-03	3.05E-03
541442	3/22/2021 - 3/29/2021	Beta	1.49E-02	2.87E-03	3.41E-03
541969	12/28/2020 - 3/29/2021	Cs-134	<2.21E-03	0.00E+00	2.21E-03
		Cs-137	<1.59E-03	0.00E+00	1.59E-03
		Be-7	1.55E-01	3.92E-02	3.66E-02
		K-40	<4.28E-02	0.00E+00	4.28E-02
541963	3/29/2021 - 4/5/2021	Beta	2.51E-02	2.86E-03	2.53E-03
542255	4/5/2021 - 4/12/2021	Beta	3.13E-02	3.54E-03	3.17E-03
542886	4/12/2021 - 4/19/2021	Beta	2.35E-02	3.19E-03	3.11E-03
543269	4/19/2021 - 4/26/2021	Beta	2.39E-02	3.17E-03	3.03E-03
544125	4/26/2021 - 5/3/2021	Beta	2.37E-02	3.34E-03	3.54E-03
544328	5/3/2021 - 5/10/2021	Beta	2.01E-02	3.06E-03	3.23E-03
544659	5/10/2021 - 5/17/2021	Beta	1.89E-02	3.04E-03	3.42E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
545031	5/17/2021 - 5/24/2021	Beta	3.20E-02	3.58E-03	3.18E-03
545514	5/24/2021 - 6/1/2021	Beta	2.14E-02	2.90E-03	3.01E-03
545813	6/1/2021 - 6/7/2021	Beta	2.22E-02	3.31E-03	3.21E-03
546043	6/7/2021 - 6/14/2021	Beta	1.09E-02	2.45E-03	3.01E-03
546926	6/14/2021 - 6/21/2021	Beta	2.01E-02	2.92E-03	2.83E-03
547207	6/21/2021 - 6/28/2021	Beta	1.69E-02	2.48E-03	2.51E-03
547751	3/29/2021 - 6/28/2021	Cs-134	<1.61E-03	0.00E+00	1.61E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.66E-01	3.84E-02	3.37E-02
		K-40	2.72E-02	1.64E-02	1.94E-02
547491	6/28/2021 - 7/6/2021	Beta	1.37E-02	2.23E-03	2.52E-03
547745	7/6/2021 - 7/12/2021	Beta	2.10E-02	3.34E-03	3.55E-03
548128	7/12/2021 - 7/19/2021	Beta	1.66E-02	2.89E-03	3.25E-03
548542	7/19/2021 - 7/26/2021	Beta	2.64E-02	3.33E-03	3.17E-03
548758	7/26/2021 - 8/2/2021	Beta	3.15E-02	3.70E-03	3.61E-03
548990	8/2/2021 - 8/9/2021	Beta	2.76E-02	3.39E-03	3.25E-03
549291	8/9/2021 - 8/16/2021	Beta	2.45E-02	3.27E-03	3.24E-03
549780	8/16/2021 - 8/23/2021	Beta	1.05E-02	2.29E-03	2.88E-03
550064	8/23/2021 - 8/30/2021	Beta	3.05E-02	3.48E-03	3.13E-03
550686	8/30/2021 - 9/7/2021	Beta	2.36E-02	2.95E-03	2.83E-03
551050	9/7/2021 - 9/13/2021	Beta	2.23E-02	3.73E-03	4.38E-03
551697	9/13/2021 - 9/20/2021	Beta	3.10E-02	3.21E-03	2.79E-03
552315	9/20/2021 - 9/27/2021	Beta	2.07E-02	3.01E-03	3.07E-03
552812	6/28/2021 - 9/27/2021	Cs-134	<9.91E-04	0.00E+00	9.91E-04
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.43E-01	3.90E-02	4.15E-02
		K-40	2.68E-02	1.88E-02	2.60E-02
552475	9/27/2021 - 10/4/2021	Beta	4.50E-02	3.71E-03	2.95E-03
552806	10/4/2021 - 10/11/2021	Beta	1.49E-02	2.42E-03	2.60E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID: 553281	Sample Dates: 10/11/2021 - 10/18/2021	Nuclide Beta	Activity 2.45E-02	2 Sigma Error 3.28E-03	MDA 3.31E-03
Sample ID: 553874	Sample Dates: 10/18/2021 - 10/25/2021	Nuclide Beta	Activity 3.37E-02	2 Sigma Error 3.29E-03	MDA 2.83E-03
Sample ID: 554305	Sample Dates: 10/25/2021 - 11/1/2021	Nuclide Beta	Activity 1.51E-02	2 Sigma Error 2.47E-03	MDA 2.75E-03
Sample ID: 554616	Sample Dates: 11/1/2021 - 11/8/2021	Nuclide Beta	Activity 2.44E-02	2 Sigma Error 3.22E-03	MDA 3.09E-03
Sample ID: 555119	Sample Dates: 11/8/2021 - 11/15/2021	Nuclide Beta	Activity 2.46E-02	2 Sigma Error 3.26E-03	MDA 3.25E-03
Sample ID: 555971	Sample Dates: 11/15/2021 - 11/22/2021	Nuclide Beta	Activity 2.57E-02	2 Sigma Error 3.47E-03	MDA 3.66E-03
Sample ID: 556767	Sample Dates: 11/22/2021 - 11/29/2021	Nuclide Beta	Activity 2.24E-02	2 Sigma Error 3.14E-03	MDA 3.12E-03
Sample ID: 557084	Sample Dates: 11/29/2021 - 12/6/2021	Nuclide Beta	Activity 4.55E-02	2 Sigma Error 3.66E-03	MDA 2.56E-03
Sample ID: 557508	Sample Dates: 12/6/2021 - 12/13/2021	Nuclide Beta	Activity 2.90E-02	2 Sigma Error 3.54E-03	MDA 3.46E-03
Sample ID: 557989	Sample Dates: 12/13/2021 - 12/20/2021	Nuclide Beta	Activity 2.38E-02	2 Sigma Error 2.80E-03	MDA 2.51E-03
Sample ID: 558416	Sample Dates: 12/20/2021 - 12/27/2021	Nuclide Beta	Activity 2.86E-02	2 Sigma Error 3.03E-03	MDA 2.60E-03
Sample ID: 559178	Sample Dates: 9/27/2021 - 12/27/2021	Nuclide Cs-134 Cs-137 Be-7 K-40	Activity <2.08E-03 <1.22E-03 1.31E-01 2.41E-02	2 Sigma Error 0.00E+00 0.00E+00 3.57E-02 1.91E-02	MDA 2.08E-03 1.22E-03 3.43E-02 2.76E-02
Sample ID: 558632	Sample Dates: 12/27/2021 - 1/4/2022	Nuclide Beta	Activity 1.24E-02	2 Sigma Error 2.36E-03	MDA 2.68E-03
Sample ID: 559982	Sample Dates: 12/27/2021 - 1/4/2022	Nuclide Cs-134 Cs-137 Be-7 K-40	Activity <1.33E-02 <8.56E-03 1.01E-01 <2.36E-01	2 Sigma Error 0.00E+00 0.00E+00 8.12E-02 0.00E+00	MDA 1.33E-02 8.56E-03 1.24E-01 2.36E-01

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID: 536580	Sample Dates: 12/28/2020 - 1/5/2021	Nuclide Beta	Activity 2.42E-02	2 Sigma Error 2.60E-03	MDA 2.21E-03
Sample ID: 536792	Sample Dates: 1/5/2021 - 1/11/2021	Nuclide Beta	Activity 1.94E-02	2 Sigma Error 3.44E-03	MDA 4.02E-03
Sample ID: 537333	Sample Dates: 1/11/2021 - 1/19/2021	Nuclide Beta	Activity 2.43E-02	2 Sigma Error 2.90E-03	MDA 2.53E-03
Sample ID: 537692	Sample Dates: 1/19/2021 - 1/25/2021	Nuclide Beta	Activity 1.81E-02	2 Sigma Error 2.99E-03	MDA 3.43E-03
Sample ID: 538083	Sample Dates: 1/25/2021 - 2/1/2021	Nuclide Beta	Activity 1.90E-02	2 Sigma Error 3.04E-03	MDA 3.38E-03
Sample ID: 538329	Sample Dates: 2/1/2021 - 2/8/2021	Nuclide Beta	Activity 1.41E-02	2 Sigma Error 2.82E-03	MDA 3.39E-03
Sample ID: 538569	Sample Dates: 2/8/2021 - 2/15/2021	Nuclide Beta	Activity 1.72E-02	2 Sigma Error 2.91E-03	MDA 3.18E-03
Sample ID: 538826	Sample Dates: 2/15/2021 - 2/22/2021	Nuclide Beta	Activity 2.11E-02	2 Sigma Error 3.18E-03	MDA 3.40E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
539068	2/22/2021 - 3/1/2021	Beta	1.84E-02	2.68E-03	2.89E-03
539282	3/1/2021 - 3/8/2021	Beta	2.47E-02	2.89E-03	2.65E-03
540081	3/8/2021 - 3/15/2021	Beta	2.18E-02	3.13E-03	3.23E-03
540729	3/15/2021 - 3/22/2021	Beta	1.53E-02	2.73E-03	3.04E-03
541443	3/22/2021 - 3/29/2021	Beta	1.38E-02	2.80E-03	3.40E-03
541970	12/28/2020 - 3/29/2021	Cs-134	<1.75E-03	0.00E+00	1.75E-03
		Cs-137	<1.65E-03	0.00E+00	1.65E-03
		Be-7	1.28E-01	3.20E-02	2.60E-02
		K-40	3.70E-02	1.77E-02	1.72E-02
541964	3/29/2021 - 4/5/2021	Beta	2.21E-02	2.74E-03	2.54E-03
542256	4/5/2021 - 4/12/2021	Beta	3.03E-02	3.48E-03	3.15E-03
542887	4/12/2021 - 4/19/2021	Beta	2.22E-02	3.13E-03	3.11E-03
543270	4/19/2021 - 4/26/2021	Beta	2.25E-02	3.10E-03	3.02E-03
544126	4/26/2021 - 5/3/2021	Beta	2.56E-02	3.42E-03	3.54E-03
544329	5/3/2021 - 5/10/2021	Beta	1.96E-02	3.04E-03	3.23E-03
544660	5/10/2021 - 5/17/2021	Beta	2.05E-02	3.14E-03	3.47E-03
545032	5/17/2021 - 5/24/2021	Beta	3.01E-02	3.53E-03	3.24E-03
545515	5/24/2021 - 6/1/2021	Beta	1.98E-02	2.84E-03	3.01E-03
545814	6/1/2021 - 6/7/2021	Beta	1.91E-02	3.14E-03	3.22E-03
546044	6/7/2021 - 6/14/2021	Beta	1.01E-02	2.43E-03	3.05E-03
546927	6/14/2021 - 6/21/2021	Beta	2.08E-02	2.93E-03	2.79E-03
547208	6/21/2021 - 6/28/2021	Beta	1.62E-02	2.45E-03	2.51E-03
547752	3/29/2021 - 6/28/2021	Cs-134	<1.28E-03	0.00E+00	1.28E-03
		Cs-137	<8.40E-04	0.00E+00	8.40E-04
		Be-7	1.72E-01	3.75E-02	2.61E-02
		K-40	<2.25E-02	0.00E+00	2.25E-02
547492	6/28/2021 - 7/6/2021	Beta	1.60E-02	2.34E-03	2.52E-03
547746	7/6/2021 - 7/12/2021	Beta	1.84E-02	3.22E-03	3.58E-03
548129	7/12/2021 - 7/19/2021	Beta	1.80E-02	2.96E-03	3.23E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
548543	7/19/2021 - 7/26/2021	Beta	2.39E-02	3.21E-03	3.17E-03
548759	7/26/2021 - 8/2/2021	Beta	3.57E-02	3.88E-03	3.61E-03
548991	8/2/2021 - 8/9/2021	Beta	3.15E-02	3.57E-03	3.27E-03
549292	8/9/2021 - 8/16/2021	Beta	2.47E-02	3.27E-03	3.21E-03
549781	8/16/2021 - 8/23/2021	Beta	9.80E-03	2.25E-03	2.88E-03
550065	8/23/2021 - 8/30/2021	Beta	3.43E-02	3.64E-03	3.13E-03
550687	8/30/2021 - 9/7/2021	Beta	2.36E-02	2.97E-03	2.85E-03
551051	9/7/2021 - 9/13/2021	Beta	2.81E-02	3.98E-03	4.37E-03
551698	9/13/2021 - 9/20/2021	Beta	3.23E-02	3.24E-03	2.78E-03
552316	9/20/2021 - 9/27/2021	Beta	2.10E-02	3.02E-03	3.07E-03
552813	6/28/2021 - 9/27/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.37E-03	0.00E+00	1.37E-03
		Be-7	1.38E-01	3.43E-02	2.70E-02
		K-40	1.71E-02	1.19E-02	1.27E-02
552476	9/27/2021 - 10/4/2021	Beta	4.68E-02	3.79E-03	2.97E-03
552807	10/4/2021 - 10/11/2021	Beta	1.35E-02	2.34E-03	2.59E-03
553282	10/11/2021 - 10/18/2021	Beta	2.85E-02	3.46E-03	3.31E-03
553875	10/18/2021 - 10/25/2021	Beta	3.64E-02	3.39E-03	2.82E-03
554306	10/25/2021 - 11/1/2021	Beta	1.49E-02	2.48E-03	2.77E-03
554617	11/1/2021 - 11/8/2021	Beta	2.96E-02	3.45E-03	3.07E-03
555120	11/8/2021 - 11/15/2021	Beta	2.64E-02	3.35E-03	3.25E-03
555972	11/15/2021 - 11/22/2021	Beta	2.33E-02	3.37E-03	3.66E-03
556768	11/22/2021 - 11/29/2021	Beta	2.64E-02	3.35E-03	3.15E-03
557085	11/29/2021 - 12/6/2021	Beta	4.45E-02	3.61E-03	2.54E-03
557509	12/6/2021 - 12/13/2021	Beta	3.15E-02	3.66E-03	3.47E-03
557990	12/13/2021 - 12/20/2021	Beta	2.38E-02	2.80E-03	2.49E-03
558417	12/20/2021 - 12/27/2021	Beta	2.88E-02	3.05E-03	2.62E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
559179	9/27/2021 - 12/27/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<1.02E-03	0.00E+00	1.02E-03
		Be-7	1.72E-01	3.85E-02	2.97E-02
		K-40	2.07E-02	1.63E-02	2.30E-02
558633	12/27/2021 - 1/4/2022	Beta	1.53E-02	2.52E-03	2.67E-03
559983	12/27/2021 - 1/4/2022	Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	1.96E-01	1.42E-01	2.06E-01

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536581	12/28/2020 - 1/5/2021	Beta	2.21E-02	2.51E-03	2.21E-03
536793	1/5/2021 - 1/11/2021	Beta	2.48E-02	3.71E-03	4.02E-03
537334	1/11/2021 - 1/19/2021	Beta	2.55E-02	2.96E-03	2.53E-03
537693	1/19/2021 - 1/25/2021	Beta	1.65E-02	2.92E-03	3.42E-03
538084	1/25/2021 - 2/1/2021	Beta	1.92E-02	3.06E-03	3.39E-03
538330	2/1/2021 - 2/8/2021	Beta	1.26E-02	2.73E-03	3.39E-03
538570	2/8/2021 - 2/15/2021	Beta	1.77E-02	2.93E-03	3.18E-03
538827	2/15/2021 - 2/22/2021	Beta	2.39E-02	3.31E-03	3.41E-03
539069	2/22/2021 - 3/1/2021	Beta	1.77E-02	2.65E-03	2.89E-03
539283	3/1/2021 - 3/8/2021	Beta	2.30E-02	2.82E-03	2.65E-03
540082	3/8/2021 - 3/15/2021	Beta	2.48E-02	3.26E-03	3.23E-03
540730	3/15/2021 - 3/22/2021	Beta	1.63E-02	2.78E-03	3.04E-03
541444	3/22/2021 - 3/29/2021	Beta	1.44E-02	2.84E-03	3.41E-03
541971	12/28/2020 - 3/29/2021	Cs-134	<1.45E-03	0.00E+00	1.45E-03
		Cs-137	<8.16E-04	0.00E+00	8.16E-04
		Be-7	1.46E-01	3.56E-02	3.07E-02
		K-40	<2.67E-02	0.00E+00	2.67E-02
541965	3/29/2021 - 4/5/2021	Beta	2.56E-02	2.89E-03	2.54E-03
542257	4/5/2021 - 4/12/2021	Beta	3.49E-02	3.68E-03	3.16E-03
542888	4/12/2021 - 4/19/2021	Beta	2.63E-02	3.33E-03	3.12E-03
543271	4/19/2021 - 4/26/2021	Beta	2.18E-02	3.06E-03	3.02E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (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
544127	4/26/2021 - 5/3/2021	Beta	2.64E-02	3.46E-03	3.54E-03
544330	5/3/2021 - 5/10/2021	Beta	1.88E-02	3.00E-03	3.23E-03
544661	5/10/2021 - 5/17/2021	Beta	2.05E-02	3.14E-03	3.47E-03
545033	5/17/2021 - 5/24/2021	Beta	3.02E-02	3.47E-03	3.14E-03
545516	5/24/2021 - 6/1/2021	Beta	2.20E-02	2.94E-03	3.01E-03
545815	6/1/2021 - 6/7/2021	Beta	2.24E-02	3.33E-03	3.21E-03
546045	6/7/2021 - 6/14/2021	Beta	1.01E-02	2.43E-03	3.04E-03
546928	6/14/2021 - 6/21/2021	Beta	2.20E-02	3.02E-03	2.84E-03
547209	6/21/2021 - 6/28/2021	Beta	1.83E-02	2.55E-03	2.51E-03
547753	3/29/2021 - 6/28/2021	Cs-134	<1.58E-03	0.00E+00	1.58E-03
		Cs-137	<1.46E-03	0.00E+00	1.46E-03
		Be-7	1.76E-01	4.12E-02	3.62E-02
		K-40	<3.89E-02	0.00E+00	3.89E-02
547493	6/28/2021 - 7/6/2021	Beta	1.46E-02	2.28E-03	2.52E-03
547747	7/6/2021 - 7/12/2021	Beta	2.19E-02	3.40E-03	3.58E-03
548130	7/12/2021 - 7/19/2021	Beta	1.58E-02	2.84E-03	3.23E-03
548544	7/19/2021 - 7/26/2021	Beta	2.73E-02	3.36E-03	3.17E-03
548760	7/26/2021 - 8/2/2021	Beta	3.18E-02	3.71E-03	3.61E-03
548992	8/2/2021 - 8/9/2021	Beta	2.89E-02	3.46E-03	3.26E-03
549293	8/9/2021 - 8/16/2021	Beta	2.48E-02	3.28E-03	3.22E-03
549782	8/16/2021 - 8/23/2021	Beta	1.33E-02	2.44E-03	2.88E-03
550066	8/23/2021 - 8/30/2021	Beta	3.29E-02	3.58E-03	3.13E-03
550688	8/30/2021 - 9/7/2021	Beta	2.78E-02	3.15E-03	2.85E-03
551052	9/7/2021 - 9/13/2021	Beta	2.90E-02	4.03E-03	4.37E-03
551699	9/13/2021 - 9/20/2021	Beta	3.29E-02	3.27E-03	2.78E-03
552317	9/20/2021 - 9/27/2021	Beta	2.08E-02	3.01E-03	3.07E-03
552814	6/28/2021 - 9/27/2021	Cs-134	<1.38E-03	0.00E+00	1.38E-03
		Cs-137	<1.31E-03	0.00E+00	1.31E-03
		Be-7	2.01E-01	4.45E-02	3.39E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	552814	Sample Dates:	6/28/2021 - 9/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				K-40	<3.44E-02	0.00E+00	3.44E-02
Sample ID:	552477	Sample Dates:	9/27/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	4.90E-02	3.86E-03	2.96E-03
Sample ID:	552808	Sample Dates:	10/4/2021 - 10/11/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.45E-02	2.39E-03	2.59E-03
Sample ID:	553283	Sample Dates:	10/11/2021 - 10/18/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.52E-02	3.31E-03	3.32E-03
Sample ID:	553876	Sample Dates:	10/18/2021 - 10/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.44E-02	3.32E-03	2.82E-03
Sample ID:	554307	Sample Dates:	10/25/2021 - 11/1/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.51E-02	2.48E-03	2.76E-03
Sample ID:	554618	Sample Dates:	11/1/2021 - 11/8/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.72E-02	3.34E-03	3.08E-03
Sample ID:	555121	Sample Dates:	11/8/2021 - 11/15/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.89E-02	3.46E-03	3.25E-03
Sample ID:	555973	Sample Dates:	11/15/2021 - 11/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.41E-02	3.39E-03	3.66E-03
Sample ID:	556769	Sample Dates:	11/22/2021 - 11/29/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.80E-02	3.43E-03	3.15E-03
Sample ID:	557086	Sample Dates:	11/29/2021 - 12/6/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	4.88E-02	3.75E-03	2.54E-03
Sample ID:	557510	Sample Dates:	12/6/2021 - 12/13/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.98E-02	3.59E-03	3.47E-03
Sample ID:	557991	Sample Dates:	12/13/2021 - 12/20/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.57E-02	2.89E-03	2.50E-03
Sample ID:	558418	Sample Dates:	12/20/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.92E-02	3.06E-03	2.62E-03
Sample ID:	559180	Sample Dates:	9/27/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.28E-03	0.00E+00	1.28E-03
				Cs-137	<1.61E-03	0.00E+00	1.61E-03
				Be-7	1.66E-01	3.88E-02	3.22E-02
				K-40	<2.85E-02	0.00E+00	2.85E-02
Sample ID:	558634	Sample Dates:	12/27/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.12E-02	2.29E-03	2.67E-03
Sample ID:	559984	Sample Dates:	12/27/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.49E-02	0.00E+00	1.49E-02
				Cs-137	<1.31E-02	0.00E+00	1.31E-02
				Be-7	<0.00E+00	0.00E+00	0.00E+00
				K-40	5.41E-01	1.71E-01	1.59E-01

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	536582	Sample Dates:	12/28/2020 - 1/5/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.09E-02	2.45E-03	2.20E-03
Sample ID:	536794	Sample Dates:	1/5/2021 - 1/11/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.07E-02	3.51E-03	4.02E-03
Sample ID:	537335	Sample Dates:	1/11/2021 - 1/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.48E-02	2.93E-03	2.53E-03
Sample ID:	537694	Sample Dates:	1/19/2021 - 1/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.79E-02	2.99E-03	3.44E-03
Sample ID:	538085	Sample Dates:	1/25/2021 - 2/1/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.06E-02	3.10E-03	3.36E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
538331	2/1/2021 - 2/8/2021	Beta	1.53E-02	2.89E-03	3.42E-03
538571	2/8/2021 - 2/15/2021	Beta	1.54E-02	2.80E-03	3.17E-03
538828	2/15/2021 - 2/22/2021	Beta	1.92E-02	3.09E-03	3.42E-03
539070	2/22/2021 - 3/1/2021	Beta	1.68E-02	2.61E-03	2.89E-03
539284	3/1/2021 - 3/8/2021	Beta	2.19E-02	2.77E-03	2.65E-03
540083	3/8/2021 - 3/15/2021	Beta	1.90E-02	2.99E-03	3.23E-03
540731	3/15/2021 - 3/22/2021	Beta	1.44E-02	2.68E-03	3.05E-03
541445	3/22/2021 - 3/29/2021	Beta	1.34E-02	2.77E-03	3.39E-03
541972	12/28/2020 - 3/29/2021	Cs-134	<2.01E-03	0.00E+00	2.01E-03
		Cs-137	<1.02E-03	0.00E+00	1.02E-03
		Be-7	9.84E-02	3.20E-02	3.62E-02
		K-40	3.52E-02	1.56E-02	4.54E-03
541966	3/29/2021 - 4/5/2021	Beta	1.98E-02	2.64E-03	2.56E-03
542258	4/5/2021 - 4/12/2021	Beta	2.92E-02	3.43E-03	3.14E-03
542889	4/12/2021 - 4/19/2021	Beta	2.44E-02	3.26E-03	3.12E-03
543272	4/19/2021 - 4/26/2021	Beta	2.16E-02	3.04E-03	3.00E-03
544128	4/26/2021 - 5/3/2021	Beta	2.59E-02	3.44E-03	3.56E-03
544331	5/3/2021 - 5/10/2021	Beta	1.95E-02	3.04E-03	3.23E-03
544662	5/10/2021 - 5/17/2021	Beta	1.88E-02	3.07E-03	3.47E-03
545034	5/17/2021 - 5/24/2021	Beta	3.31E-02	3.59E-03	3.13E-03
545517	5/24/2021 - 6/1/2021	Beta	2.12E-02	2.90E-03	3.00E-03
545816	6/1/2021 - 6/7/2021	Beta	2.08E-02	3.25E-03	3.23E-03
546046	6/7/2021 - 6/14/2021	Beta	1.16E-02	2.52E-03	3.05E-03
546929	6/14/2021 - 6/21/2021	Beta	2.37E-02	3.06E-03	2.78E-03
547210	6/21/2021 - 6/28/2021	Beta	1.64E-02	2.46E-03	2.51E-03
547754	3/29/2021 - 6/28/2021	Cs-134	<2.33E-03	0.00E+00	2.33E-03
		Cs-137	<1.83E-03	0.00E+00	1.83E-03
		Be-7	1.55E-01	3.68E-02	3.27E-02
		K-40	<3.75E-02	0.00E+00	3.75E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
547494	6/28/2021 - 7/6/2021	Beta	1.27E-02	2.18E-03	2.52E-03
547748	7/6/2021 - 7/12/2021	Beta	1.96E-02	3.30E-03	3.60E-03
548131	7/12/2021 - 7/19/2021	Beta	1.57E-02	2.82E-03	3.22E-03
548545	7/19/2021 - 7/26/2021	Beta	2.31E-02	3.18E-03	3.16E-03
548761	7/26/2021 - 8/2/2021	Beta	3.41E-02	3.82E-03	3.61E-03
548993	8/2/2021 - 8/9/2021	Beta	2.93E-02	3.48E-03	3.28E-03
549294	8/9/2021 - 8/16/2021	Beta	2.44E-02	3.25E-03	3.20E-03
549783	8/16/2021 - 8/23/2021	Beta	1.03E-02	2.28E-03	2.88E-03
550067	8/23/2021 - 8/30/2021	Beta	3.08E-02	3.49E-03	3.14E-03
550689	8/30/2021 - 9/7/2021	Beta	2.17E-02	2.89E-03	2.85E-03
551053	9/7/2021 - 9/13/2021	Beta	2.89E-02	4.02E-03	4.37E-03
551700	9/13/2021 - 9/20/2021	Beta	2.98E-02	3.14E-03	2.77E-03
552318	9/20/2021 - 9/27/2021	Beta	1.95E-02	2.95E-03	3.07E-03
552815	6/28/2021 - 9/27/2021	Cs-134	<1.78E-03	0.00E+00	1.78E-03
		Cs-137	<1.93E-03	0.00E+00	1.93E-03
		Be-7	1.57E-01	4.08E-02	3.86E-02
		K-40	2.74E-02	1.43E-02	4.95E-03
552478	9/27/2021 - 10/4/2021	Beta	4.93E-02	3.90E-03	3.01E-03
552809	10/4/2021 - 10/11/2021	Beta	1.47E-02	2.38E-03	2.55E-03
553284	10/11/2021 - 10/18/2021	Beta	2.66E-02	3.37E-03	3.31E-03
553877	10/18/2021 - 10/25/2021	Beta	3.64E-02	3.40E-03	2.83E-03
554308	10/25/2021 - 11/1/2021	Beta	1.52E-02	2.49E-03	2.77E-03
554619	11/1/2021 - 11/8/2021	Beta	2.46E-02	3.22E-03	3.07E-03
555122	11/8/2021 - 11/15/2021	Beta	2.99E-02	3.50E-03	3.25E-03
555974	11/15/2021 - 11/22/2021	Beta	2.49E-02	3.44E-03	3.67E-03
556770	11/22/2021 - 11/29/2021	Beta	3.19E-02	3.61E-03	3.15E-03
557087	11/29/2021 - 12/6/2021	Beta	5.39E-02	3.93E-03	2.54E-03

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557511	12/6/2021 - 12/13/2021	Beta	2.53E-02	3.40E-03	3.48E-03
557992	12/13/2021 - 12/20/2021	Beta	2.57E-02	2.88E-03	2.50E-03
558419	12/20/2021 - 12/27/2021	Beta	3.61E-02	3.34E-03	2.61E-03
559181	9/27/2021 - 12/27/2021	Cs-134	<2.52E-03	0.00E+00	2.52E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.71E-01	4.16E-02	3.66E-02
		K-40	<4.52E-02	0.00E+00	4.52E-02
558635	12/27/2021 - 1/4/2022	Beta	1.51E-02	2.51E-03	2.67E-03
559985	12/27/2021 - 1/4/2022	Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	2.05E-01	1.22E-01	1.62E-01

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536583	12/28/2020 - 1/5/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	3.08E-01	1.75E-01	2.42E-01
536801	1/5/2021 - 1/11/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.04E-02	0.00E+00	1.04E-02
		Cs-137	<1.27E-02	0.00E+00	1.27E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	6.85E-01	2.49E-01	2.71E-01
537336	1/11/2021 - 1/19/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	4.89E-01	1.80E-01	1.94E-01
537695	1/19/2021 - 1/25/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	5.38E-01	2.20E-01	2.38E-01
538086	1/25/2021 - 2/1/2021	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<9.40E-02	0.00E+00	9.40E-02
		K-40	2.99E-01	1.71E-01	2.26E-01
538332	2/1/2021 - 2/8/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	6.75E-01	2.12E-01	1.80E-01
538572	2/8/2021 - 2/15/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538572	2/8/2021 - 2/15/2021	Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	4.85E-01	1.78E-01	1.64E-01
538829	2/15/2021 - 2/22/2021	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	4.02E-01	1.70E-01	1.79E-01
539071	2/22/2021 - 3/1/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	5.33E-01	1.90E-01	1.83E-01
539285	3/1/2021 - 3/8/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	6.91E-03	9.75E-02	9.01E-02
		K-40	5.87E-01	1.79E-01	3.46E-02
540084	3/8/2021 - 3/15/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	4.62E-01	2.22E-01	2.93E-01
540732	3/15/2021 - 3/22/2021	I-131	<1.06E-02	0.00E+00	1.06E-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	<1.04E-01	0.00E+00	1.04E-01
		K-40	3.18E-01	1.46E-01	1.49E-01
541446	3/22/2021 - 3/29/2021	I-131	<1.68E-02	0.00E+00	1.68E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	3.49E-01	1.90E-01	2.55E-01
541973	3/29/2021 - 4/5/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	4.82E-01	1.89E-01	2.03E-01
542259	4/5/2021 - 4/12/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	<3.55E-01	0.00E+00	3.55E-01
542890	4/12/2021 - 4/19/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.59E-01	1.70E-01	1.44E-01
543273	4/19/2021 - 4/26/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543273	4/19/2021 - 4/26/2021	Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	5.67E-01	2.46E-01	6.98E-02
544129	4/26/2021 - 5/3/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	6.05E-01	2.80E-01	2.72E-01
544332	5/3/2021 - 5/10/2021	I-131	<3.00E-02	0.00E+00	3.00E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<6.84E-01	0.00E+00	6.84E-01
544663	5/10/2021 - 5/17/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.74E-01	0.00E+00	5.74E-01
545035	5/17/2021 - 5/24/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	<5.18E-01	0.00E+00	5.18E-01
545518	5/24/2021 - 6/1/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<2.37E-02	0.00E+00	2.37E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<4.86E-01	0.00E+00	4.86E-01
545817	6/1/2021 - 6/7/2021	I-131	<3.75E-02	0.00E+00	3.75E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<4.69E-01	0.00E+00	4.69E-01
546047	6/7/2021 - 6/14/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<3.32E-02	0.00E+00	3.32E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<5.61E-01	0.00E+00	5.61E-01
546930	6/14/2021 - 6/21/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.99E-01	0.00E+00	5.99E-01
547211	6/21/2021 - 6/28/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	3.13E-01	2.50E-01	3.55E-01
547495	6/28/2021 - 7/6/2021	I-131	<2.36E-02	0.00E+00	2.36E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547495	6/28/2021 - 7/6/2021	Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	1.50E-01	2.55E-01	4.36E-01
547755	7/6/2021 - 7/12/2021	I-131	<3.22E-02	0.00E+00	3.22E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	2.97E-01	2.06E-01	2.16E-01
548132	7/12/2021 - 7/19/2021	I-131	<3.55E-02	0.00E+00	3.55E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	3.47E-01	2.83E-01	4.15E-01
548546	7/19/2021 - 7/26/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	4.77E-01	2.45E-01	2.29E-01
548762	7/26/2021 - 8/2/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<5.85E-01	0.00E+00	5.85E-01
548994	8/2/2021 - 8/9/2021	I-131	<3.31E-02	0.00E+00	3.31E-02
		Cs-134	<3.22E-02	0.00E+00	3.22E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	2.93E-01	2.02E-01	2.38E-01
549295	8/9/2021 - 8/16/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<3.29E-01	0.00E+00	3.29E-01
549784	8/16/2021 - 8/23/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<3.38E-02	0.00E+00	3.38E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<5.02E-01	0.00E+00	5.02E-01
550068	8/23/2021 - 8/30/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<2.56E-02	0.00E+00	2.56E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	3.35E-01	2.45E-01	3.38E-01
550690	8/30/2021 - 9/7/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	4.60E-01	2.66E-01	3.38E-01
551054	9/7/2021 - 9/13/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551054	9/7/2021 - 9/13/2021	Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	4.45E-01	2.33E-01	8.05E-02
551701	9/13/2021 - 9/20/2021	I-131	<2.75E-02	0.00E+00	2.75E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	2.99E-01	1.97E-01	2.14E-01
552319	9/20/2021 - 9/27/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<4.89E-01	0.00E+00	4.89E-01
552479	9/27/2021 - 10/4/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<5.05E-03	0.00E+00	5.05E-03
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<5.09E-01	0.00E+00	5.09E-01
552816	10/4/2021 - 10/11/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<4.41E-01	0.00E+00	4.41E-01
553285	10/11/2021 - 10/18/2021	I-131	<3.37E-02	0.00E+00	3.37E-02
		Cs-134	<2.33E-02	0.00E+00	2.33E-02
		Cs-137	<3.43E-02	0.00E+00	3.43E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<6.31E-01	0.00E+00	6.31E-01
553878	10/18/2021 - 10/25/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<4.38E-03	0.00E+00	4.38E-03
		Be-7	<2.06E-01	0.00E+00	2.06E-01
		K-40	2.75E-01	2.28E-01	3.25E-01
554309	10/25/2021 - 11/1/2021	I-131	<3.57E-02	0.00E+00	3.57E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<2.18E-01	0.00E+00	2.18E-01
		K-40	6.08E-01	2.72E-01	2.27E-01
554620	11/1/2021 - 11/8/2021	I-131	<3.40E-02	0.00E+00	3.40E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	5.36E-01	2.65E-01	2.64E-01
555123	11/8/2021 - 11/15/2021	I-131	<3.62E-02	0.00E+00	3.62E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.48E-01	0.00E+00	5.48E-01
555975	11/15/2021 - 11/22/2021	I-131	<3.55E-02	0.00E+00	3.55E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555975	11/15/2021 - 11/22/2021	Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	3.04E-01	1.77E-01	6.87E-02
556771	11/22/2021 - 11/29/2021	I-131	<3.22E-02	0.00E+00	3.22E-02
		Cs-134	<3.38E-02	0.00E+00	3.38E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<5.50E-01	0.00E+00	5.50E-01
557088	11/29/2021 - 12/6/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.97E-01	0.00E+00	5.97E-01
557512	12/6/2021 - 12/13/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<3.35E-02	0.00E+00	3.35E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.73E-01	0.00E+00	5.73E-01
557993	12/13/2021 - 12/20/2021	I-131	<3.31E-02	0.00E+00	3.31E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	2.14E-02	1.10E-01	2.03E-01
		K-40	5.35E-01	2.38E-01	6.91E-02
558420	12/20/2021 - 12/27/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<3.99E-01	0.00E+00	3.99E-01
558636	12/27/2021 - 1/4/2022	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.23E-02	0.00E+00	2.23E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.11E-01	2.33E-01	1.94E-01
Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]					
536584	12/28/2020 - 1/5/2021	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.32E-02	0.00E+00	1.32E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	2.92E-01	1.43E-01	1.72E-01
536802	1/5/2021 - 1/11/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	<3.49E-01	0.00E+00	3.49E-01
537337	1/11/2021 - 1/19/2021	I-131	<2.22E-02	0.00E+00	2.22E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	5.85E-01	1.96E-01	1.98E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537696	1/19/2021 - 1/25/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	6.74E-01	2.44E-01	2.60E-01
538087	1/25/2021 - 2/1/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	4.02E-01	1.59E-01	1.44E-01
538333	2/1/2021 - 2/8/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<9.31E-02	0.00E+00	9.31E-02
		K-40	5.72E-01	2.21E-01	2.58E-01
538573	2/8/2021 - 2/15/2021	I-131	<1.38E-02	0.00E+00	1.38E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<9.40E-02	0.00E+00	9.40E-02
		K-40	4.39E-01	1.64E-01	1.34E-01
538830	2/15/2021 - 2/22/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	4.76E-01	1.93E-01	2.16E-01
539072	2/22/2021 - 3/1/2021	I-131	<1.36E-02	0.00E+00	1.36E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	2.38E-01	1.44E-01	1.85E-01
539286	3/1/2021 - 3/8/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<9.75E-02	0.00E+00	9.75E-02
		K-40	6.25E-01	2.08E-01	1.95E-01
540085	3/8/2021 - 3/15/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	5.13E-01	1.90E-01	1.74E-01
540733	3/15/2021 - 3/22/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<5.23E-02	0.00E+00	5.23E-02
		K-40	2.44E-01	1.25E-01	1.23E-01
541447	3/22/2021 - 3/29/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<9.14E-02	0.00E+00	9.14E-02
		K-40	4.21E-01	1.92E-01	2.35E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541974	3/29/2021 - 4/5/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<8.93E-02	0.00E+00	8.93E-02
		K-40	3.57E-01	1.60E-01	1.71E-01
542260	4/5/2021 - 4/12/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<8.94E-02	0.00E+00	8.94E-02
		K-40	2.94E-01	1.59E-01	1.99E-01
542891	4/12/2021 - 4/19/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	4.11E-01	1.74E-01	1.84E-01
543274	4/19/2021 - 4/26/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<2.93E-02	0.00E+00	2.93E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	4.71E-01	2.66E-01	3.15E-01
544130	4/26/2021 - 5/3/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<5.10E-01	0.00E+00	5.10E-01
544333	5/3/2021 - 5/10/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	4.61E-01	2.39E-01	2.31E-01
544664	5/10/2021 - 5/17/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	3.97E-01	2.31E-01	2.57E-01
545036	5/17/2021 - 5/24/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<2.87E-02	0.00E+00	2.87E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	5.39E-01	2.72E-01	2.96E-01
545519	5/24/2021 - 6/1/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.20E-02	0.00E+00	2.20E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<9.10E-02	0.00E+00	9.10E-02
		K-40	<4.23E-01	0.00E+00	4.23E-01
545818	6/1/2021 - 6/7/2021	I-131	<3.27E-02	0.00E+00	3.27E-02
		Cs-134	<2.41E-02	0.00E+00	2.41E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<2.78E-01	0.00E+00	2.78E-01
		K-40	<5.97E-01	0.00E+00	5.97E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546048	6/7/2021 - 6/14/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	4.79E-01	2.49E-01	2.52E-01
546931	6/14/2021 - 6/21/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	2.50E-01	1.59E-01	6.76E-02
547212	6/21/2021 - 6/28/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<2.91E-02	0.00E+00	2.91E-02
		Cs-137	<2.80E-02	0.00E+00	2.80E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<5.46E-01	0.00E+00	5.46E-01
547496	6/28/2021 - 7/6/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.37E-02	0.00E+00	2.37E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	4.24E-01	2.55E-01	3.28E-01
547756	7/6/2021 - 7/12/2021	I-131	<3.50E-02	0.00E+00	3.50E-02
		Cs-134	<3.58E-02	0.00E+00	3.58E-02
		Cs-137	<3.06E-02	0.00E+00	3.06E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	<6.19E-01	0.00E+00	6.19E-01
548133	7/12/2021 - 7/19/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	3.21E-01	2.32E-01	3.07E-01
548547	7/19/2021 - 7/26/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	3.93E-01	2.19E-01	2.15E-01
548763	7/26/2021 - 8/2/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	6.28E-01	2.94E-01	3.13E-01
548995	8/2/2021 - 8/9/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	5.22E-01	2.88E-01	3.54E-01
549296	8/9/2021 - 8/16/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	<4.73E-01	0.00E+00	4.73E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549785	8/16/2021 - 8/23/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<5.96E-01	0.00E+00	5.96E-01
550069	8/23/2021 - 8/30/2021	I-131	<3.07E-02	0.00E+00	3.07E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<5.12E-01	0.00E+00	5.12E-01
550691	8/30/2021 - 9/7/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	4.60E-01	2.19E-01	1.85E-01
551055	9/7/2021 - 9/13/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<2.37E-01	0.00E+00	2.37E-01
		K-40	4.55E-01	2.68E-01	3.05E-01
551702	9/13/2021 - 9/20/2021	I-131	<2.22E-02	0.00E+00	2.22E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	4.69E-01	3.02E-01	4.02E-01
552320	9/20/2021 - 9/27/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	5.38E-01	2.33E-01	6.63E-02
552480	9/27/2021 - 10/4/2021	I-131	<2.51E-02	0.00E+00	2.51E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<1.94E-02	0.00E+00	1.94E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	3.88E-01	1.96E-01	6.56E-02
552817	10/4/2021 - 10/11/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	3.81E-01	2.28E-01	2.45E-01
553286	10/11/2021 - 10/18/2021	I-131	<3.38E-02	0.00E+00	3.38E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<6.18E-01	0.00E+00	6.18E-01
553879	10/18/2021 - 10/25/2021	I-131	<3.53E-02	0.00E+00	3.53E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	2.87E-01	2.32E-01	3.28E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554310	10/25/2021 - 11/1/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	4.13E-01	2.83E-01	3.89E-01
554621	11/1/2021 - 11/8/2021	I-131	<3.22E-02	0.00E+00	3.22E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	3.48E-01	2.12E-01	2.34E-01
555124	11/8/2021 - 11/15/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	4.83E-01	2.38E-01	2.13E-01
555976	11/15/2021 - 11/22/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	3.32E-01	2.01E-01	2.08E-01
556772	11/22/2021 - 11/29/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	2.34E-01	2.17E-01	3.19E-01
557089	11/29/2021 - 12/6/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<4.48E-01	0.00E+00	4.48E-01
557513	12/6/2021 - 12/13/2021	I-131	<2.36E-02	0.00E+00	2.36E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	<5.20E-01	0.00E+00	5.20E-01
557994	12/13/2021 - 12/20/2021	I-131	<3.32E-02	0.00E+00	3.32E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<4.60E-01	0.00E+00	4.60E-01
558421	12/20/2021 - 12/27/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	5.31E-01	2.78E-01	3.19E-01
558637	12/27/2021 - 1/4/2022	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	<4.34E-01	0.00E+00	4.34E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536585	12/28/2020 - 1/5/2021	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<1.10E-02	0.00E+00	1.10E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<7.42E-02	0.00E+00	7.42E-02
		K-40	3.26E-01	1.55E-01	1.87E-01
536803	1/5/2021 - 1/11/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.78E-01	2.24E-01	2.21E-01
537338	1/11/2021 - 1/19/2021	I-131	<1.92E-02	0.00E+00	1.92E-02
		Cs-134	<1.10E-02	0.00E+00	1.10E-02
		Cs-137	<1.26E-02	0.00E+00	1.26E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	5.10E-01	1.67E-01	1.38E-01
537697	1/19/2021 - 1/25/2021	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	4.02E-01	2.17E-01	2.86E-01
538088	1/25/2021 - 2/1/2021	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<1.18E-02	0.00E+00	1.18E-02
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	<2.21E-01	0.00E+00	2.21E-01
538334	2/1/2021 - 2/8/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<9.96E-02	0.00E+00	9.96E-02
		K-40	8.23E-01	2.11E-01	3.33E-02
538574	2/8/2021 - 2/15/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	3.52E-01	2.26E-01	3.32E-01
538831	2/15/2021 - 2/22/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	4.55E-01	1.89E-01	2.07E-01
539073	2/22/2021 - 3/1/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.94E-01	2.01E-01	2.61E-01
539287	3/1/2021 - 3/8/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-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	4.70E-01	1.66E-01	1.23E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540086	3/8/2021 - 3/15/2021	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	2.44E-01	1.43E-01	1.82E-01
540734	3/15/2021 - 3/22/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	5.38E-01	1.71E-01	3.47E-02
541448	3/22/2021 - 3/29/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-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	3.28E-01	1.67E-01	2.04E-01
541975	3/29/2021 - 4/5/2021	I-131	<1.72E-02	0.00E+00	1.72E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	5.35E-01	1.83E-01	1.29E-01
542261	4/5/2021 - 4/12/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	4.32E-01	2.20E-01	2.99E-01
542892	4/12/2021 - 4/19/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	3.80E-01	1.63E-01	1.67E-01
543275	4/19/2021 - 4/26/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	5.73E-01	2.99E-01	3.55E-01
544131	4/26/2021 - 5/3/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	8.97E-01	3.29E-01	2.73E-01
544334	5/3/2021 - 5/10/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.87E-02	0.00E+00	2.87E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	5.63E-01	3.06E-01	3.81E-01
544665	5/10/2021 - 5/17/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	5.61E-01	2.73E-01	2.61E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545037	5/17/2021 - 5/24/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<2.93E-02	0.00E+00	2.93E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	5.18E-01	3.07E-01	3.89E-01
545520	5/24/2021 - 6/1/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	3.52E-01	2.32E-01	3.02E-01
545819	6/1/2021 - 6/7/2021	I-131	<3.15E-02	0.00E+00	3.15E-02
		Cs-134	<3.15E-02	0.00E+00	3.15E-02
		Cs-137	<2.86E-02	0.00E+00	2.86E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<6.64E-01	0.00E+00	6.64E-01
546049	6/7/2021 - 6/14/2021	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	4.71E-01	2.41E-01	2.37E-01
546932	6/14/2021 - 6/21/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<2.36E-02	0.00E+00	2.36E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<3.83E-01	0.00E+00	3.83E-01
547213	6/21/2021 - 6/28/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<6.06E-01	0.00E+00	6.06E-01
547497	6/28/2021 - 7/6/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	3.83E-01	2.26E-01	2.73E-01
547757	7/6/2021 - 7/12/2021	I-131	<3.53E-02	0.00E+00	3.53E-02
		Cs-134	<3.36E-02	0.00E+00	3.36E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<2.15E-01	0.00E+00	2.15E-01
		K-40	7.13E-01	3.31E-01	3.35E-01
548134	7/12/2021 - 7/19/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<3.61E-02	0.00E+00	3.61E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	5.18E-01	2.30E-01	6.69E-02
548548	7/19/2021 - 7/26/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.79E-01	1.82E-01	1.73E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548764	7/26/2021 - 8/2/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<5.46E-01	0.00E+00	5.46E-01
548996	8/2/2021 - 8/9/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<8.24E-02	0.00E+00	8.24E-02
		K-40	2.10E-01	1.57E-01	1.62E-01
549297	8/9/2021 - 8/16/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<4.80E-01	0.00E+00	4.80E-01
549786	8/16/2021 - 8/23/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<5.25E-03	0.00E+00	5.25E-03
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<5.38E-01	0.00E+00	5.38E-01
550070	8/23/2021 - 8/30/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<4.92E-01	0.00E+00	4.92E-01
550692	8/30/2021 - 9/7/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	<4.31E-01	0.00E+00	4.31E-01
551056	9/7/2021 - 9/13/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.55E-02	0.00E+00	2.55E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	4.98E-01	2.45E-01	7.94E-02
551703	9/13/2021 - 9/20/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<2.75E-02	0.00E+00	2.75E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	5.72E-01	2.77E-01	2.74E-01
552321	9/20/2021 - 9/27/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<3.20E-02	0.00E+00	3.20E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	2.38E-01	1.80E-01	2.18E-01
552481	9/27/2021 - 10/4/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	2.48E-01	2.33E-01	3.49E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552818	10/4/2021 - 10/11/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<6.21E-01	0.00E+00	6.21E-01
553287	10/11/2021 - 10/18/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<4.86E-01	0.00E+00	4.86E-01
553880	10/18/2021 - 10/25/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	2.79E-01	2.22E-01	3.07E-01
554311	10/25/2021 - 11/1/2021	I-131	<3.49E-02	0.00E+00	3.49E-02
		Cs-134	<3.34E-02	0.00E+00	3.34E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.75E-01	0.00E+00	1.75E-01
		K-40	<4.30E-01	0.00E+00	4.30E-01
554622	11/1/2021 - 11/8/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<4.62E-01	0.00E+00	4.62E-01
555125	11/8/2021 - 11/15/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<3.34E-02	0.00E+00	3.34E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<4.48E-01	0.00E+00	4.48E-01
555977	11/15/2021 - 11/22/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<5.76E-01	0.00E+00	5.76E-01
556773	11/22/2021 - 11/29/2021	I-131	<3.30E-02	0.00E+00	3.30E-02
		Cs-134	<3.48E-02	0.00E+00	3.48E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	6.68E-01	2.91E-01	2.72E-01
557090	11/29/2021 - 12/6/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<3.28E-02	0.00E+00	3.28E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
557514	12/6/2021 - 12/13/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	2.31E-01	1.97E-01	2.74E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557995	12/13/2021 - 12/20/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<5.12E-01	0.00E+00	5.12E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558422	12/20/2021 - 12/27/2021	I-131	<3.62E-02	0.00E+00	3.62E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<4.32E-01	0.00E+00	4.32E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558638	12/27/2021 - 1/4/2022	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	<4.38E-01	0.00E+00	4.38E-01

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536586	12/28/2020 - 1/5/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<7.64E-02	0.00E+00	7.64E-02
		K-40	3.54E-01	1.68E-01	2.11E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536804	1/5/2021 - 1/11/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	6.50E-01	2.34E-01	2.39E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537339	1/11/2021 - 1/19/2021	I-131	<1.40E-02	0.00E+00	1.40E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.03E-02	0.00E+00	1.03E-02
		Be-7	<9.05E-02	0.00E+00	9.05E-02
		K-40	2.15E-01	1.07E-01	9.77E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537698	1/19/2021 - 1/25/2021	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<1.87E-02	0.00E+00	1.87E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	6.27E-01	2.44E-01	2.73E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538089	1/25/2021 - 2/1/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	4.89E-01	1.93E-01	1.99E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538335	2/1/2021 - 2/8/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	5.78E-01	1.94E-01	1.73E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538575	2/8/2021 - 2/15/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	4.94E-01	1.98E-01	2.21E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538832	2/15/2021 - 2/22/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.46E-02	0.00E+00	1.46E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	5.93E-01	2.01E-01	1.86E-01
539074	2/22/2021 - 3/1/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<8.23E-02	0.00E+00	8.23E-02
		K-40	5.12E-01	1.95E-01	2.08E-01
539288	3/1/2021 - 3/8/2021	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<3.48E-01	0.00E+00	3.48E-01
540087	3/8/2021 - 3/15/2021	I-131	<1.81E-02	0.00E+00	1.81E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<6.75E-02	0.00E+00	6.75E-02
		K-40	<3.01E-01	0.00E+00	3.01E-01
540735	3/15/2021 - 3/22/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	4.85E-01	1.83E-01	1.80E-01
541449	3/22/2021 - 3/29/2021	I-131	<1.19E-02	0.00E+00	1.19E-02
		Cs-134	<1.31E-02	0.00E+00	1.31E-02
		Cs-137	<9.53E-03	0.00E+00	9.53E-03
		Be-7	<6.59E-02	0.00E+00	6.59E-02
		K-40	4.42E-01	1.28E-01	1.23E-01
541976	3/29/2021 - 4/5/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	3.96E-01	1.97E-01	2.54E-01
542262	4/5/2021 - 4/12/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<9.84E-02	0.00E+00	9.84E-02
		K-40	4.36E-01	1.91E-01	2.16E-01
542893	4/12/2021 - 4/19/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.84E-01	1.97E-01	2.24E-01
543276	4/19/2021 - 4/26/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<2.06E-01	0.00E+00	2.06E-01
		K-40	1.77E-01	1.69E-01	2.37E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544132	4/26/2021 - 5/3/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<3.02E-02	0.00E+00	3.02E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	6.27E-01	3.00E-01	3.30E-01
544335	5/3/2021 - 5/10/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<2.79E-02	0.00E+00	2.79E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	8.18E-01	3.33E-01	3.06E-01
544666	5/10/2021 - 5/17/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.92E-02	0.00E+00	2.92E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<5.72E-01	0.00E+00	5.72E-01
545038	5/17/2021 - 5/24/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<3.81E-01	0.00E+00	3.81E-01
545521	5/24/2021 - 6/1/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.96E-02	0.00E+00	2.96E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	4.70E-01	2.33E-01	2.37E-01
545820	6/1/2021 - 6/7/2021	I-131	<3.66E-02	0.00E+00	3.66E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	7.75E-01	3.69E-01	4.19E-01
546050	6/7/2021 - 6/14/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	3.98E-01	2.34E-01	2.61E-01
546933	6/14/2021 - 6/21/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	<4.82E-01	0.00E+00	4.82E-01
547214	6/21/2021 - 6/28/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<4.90E-01	0.00E+00	4.90E-01
547498	6/28/2021 - 7/6/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	4.41E-01	2.06E-01	6.30E-02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547758	7/6/2021 - 7/12/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	4.70E-01	2.65E-01	2.80E-01
548135	7/12/2021 - 7/19/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<8.27E-02	0.00E+00	8.27E-02
		K-40	<4.70E-01	0.00E+00	4.70E-01
548549	7/19/2021 - 7/26/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	<4.39E-01	0.00E+00	4.39E-01
548765	7/26/2021 - 8/2/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<4.32E-01	0.00E+00	4.32E-01
548997	8/2/2021 - 8/9/2021	I-131	<3.40E-02	0.00E+00	3.40E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	<5.46E-01	0.00E+00	5.46E-01
549298	8/9/2021 - 8/16/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	3.48E-01	2.31E-01	2.90E-01
549787	8/16/2021 - 8/23/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<5.31E-01	0.00E+00	5.31E-01
550071	8/23/2021 - 8/30/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<2.64E-02	0.00E+00	2.64E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	6.36E-01	3.31E-01	4.19E-01
550693	8/30/2021 - 9/7/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	4.10E-01	1.91E-01	5.85E-02
551057	9/7/2021 - 9/13/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<2.14E-01	0.00E+00	2.14E-01
		K-40	2.46E-01	2.25E-01	3.21E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551704	9/13/2021 - 9/20/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.28E-02	0.00E+00	2.29E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	4.19E-01	2.38E-01	2.65E-01
552322	9/20/2021 - 9/27/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.11E-01	0.00E+00	5.11E-01
552482	9/27/2021 - 10/4/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<2.27E-02	0.00E+00	2.27E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	3.92E-01	2.46E-01	3.09E-01
552819	10/4/2021 - 10/11/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<3.01E-02	0.00E+00	3.01E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	6.14E-01	2.78E-01	2.66E-01
553288	10/11/2021 - 10/18/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<2.75E-02	0.00E+00	2.75E-02
		Cs-137	<4.56E-03	0.00E+00	4.56E-03
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<4.59E-01	0.00E+00	4.59E-01
553881	10/18/2021 - 10/25/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<2.68E-02	0.00E+00	2.68E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<5.62E-01	0.00E+00	5.62E-01
554312	10/25/2021 - 11/1/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	4.33E-01	2.51E-01	2.92E-01
554623	11/1/2021 - 11/8/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	5.03E-01	2.50E-01	2.51E-01
555126	11/8/2021 - 11/15/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	2.43E-01	1.95E-01	2.59E-01
555978	11/15/2021 - 11/22/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<5.12E-01	0.00E+00	5.12E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556774	11/22/2021 - 11/29/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	6.42E-01	2.74E-01	2.02E-01
557091	11/29/2021 - 12/6/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<8.24E-02	0.00E+00	8.24E-02
		K-40	4.01E-01	2.03E-01	6.79E-02
557515	12/6/2021 - 12/13/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
557996	12/13/2021 - 12/20/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<5.28E-01	0.00E+00	5.28E-01
558423	12/20/2021 - 12/27/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	4.86E-01	2.68E-01	3.13E-01
558639	12/27/2021 - 1/4/2022	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	1.49E-01	1.56E-01	2.34E-01
Sample Point 085 [INDICATOR - NNW @ 0.88 miles]					
536587	12/28/2020 - 1/5/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	3.97E-01	1.47E-01	1.25E-01
536805	1/5/2021 - 1/11/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	6.45E-01	2.20E-01	1.77E-01
537340	1/11/2021 - 1/19/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.34E-02	0.00E+00	1.34E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	3.42E-01	1.69E-01	2.12E-01
537699	1/19/2021 - 1/25/2021	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.87E-02	0.00E+00	1.87E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	6.14E-01	2.07E-01	1.58E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538090	1/25/2021 - 2/1/2021	I-131	<2.39E-02	0.00E+00	2.39E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	4.88E-01	2.32E-01	3.07E-01
538336	2/1/2021 - 2/8/2021	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<9.35E-02	0.00E+00	9.35E-02
		K-40	4.01E-01	1.62E-01	1.40E-01
538576	2/8/2021 - 2/15/2021	I-131	<1.55E-02	0.00E+00	1.55E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<9.82E-02	0.00E+00	9.82E-02
		K-40	2.94E-01	1.49E-01	1.71E-01
538833	2/15/2021 - 2/22/2021	I-131	<1.47E-02	0.00E+00	1.47E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<8.78E-02	0.00E+00	8.78E-02
		K-40	5.28E-01	1.99E-01	2.14E-01
539075	2/22/2021 - 3/1/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	5.56E-01	1.95E-01	1.86E-01
539289	3/1/2021 - 3/8/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	4.09E-01	1.66E-01	1.64E-01
540088	3/8/2021 - 3/15/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.03E-02	0.00E+00	1.03E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	3.83E-01	1.54E-01	1.39E-01
540736	3/15/2021 - 3/22/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	3.57E-01	1.61E-01	1.78E-01
541450	3/22/2021 - 3/29/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.89E-02	0.00E+00	1.89E-02
		Cs-137	<9.02E-03	0.00E+00	9.02E-03
		Be-7	<7.91E-02	0.00E+00	7.91E-02
		K-40	2.04E-01	1.40E-01	1.92E-01
541977	3/29/2021 - 4/5/2021	I-131	<1.50E-02	0.00E+00	1.50E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	5.75E-01	2.02E-01	2.01E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542263	4/5/2021 - 4/12/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	6.64E-01	2.12E-01	1.85E-01
542894	4/12/2021 - 4/19/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	4.29E-01	1.56E-01	3.64E-02
543277	4/19/2021 - 4/26/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<5.96E-01	0.00E+00	5.96E-01
544133	4/26/2021 - 5/3/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<2.85E-02	0.00E+00	2.85E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	<5.96E-01	0.00E+00	5.96E-01
544336	5/3/2021 - 5/10/2021	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	2.86E-01	2.02E-01	2.50E-01
544667	5/10/2021 - 5/17/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	<4.47E-01	0.00E+00	4.47E-01
545039	5/17/2021 - 5/24/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<3.09E-02	0.00E+00	3.09E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	3.04E-01	2.11E-01	2.58E-01
545522	5/24/2021 - 6/1/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	3.67E-01	1.80E-01	5.85E-02
545821	6/1/2021 - 6/7/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<3.36E-02	0.00E+00	3.36E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<1.96E-01	0.00E+00	1.96E-01
		K-40	5.48E-01	2.85E-01	2.59E-01
546051	6/7/2021 - 6/14/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	3.61E-01	2.50E-01	3.33E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546934	6/14/2021 - 6/21/2021	I-131	<3.05E-02	0.00E+00	3.05E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.91E-02	0.00E+00	2.91E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<4.17E-01	0.00E+00	4.17E-01
547215	6/21/2021 - 6/28/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<5.29E-03	0.00E+00	5.29E-03
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<4.41E-01	0.00E+00	4.41E-01
547499	6/28/2021 - 7/6/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.00E-01	0.00E+00	5.00E-01
547759	7/6/2021 - 7/12/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.56E-02	0.00E+00	2.56E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	4.39E-01	2.29E-01	7.93E-02
548136	7/12/2021 - 7/19/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<9.96E-02	0.00E+00	9.96E-02
		K-40	5.66E-01	2.54E-01	2.13E-01
548550	7/19/2021 - 7/26/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	<5.30E-01	0.00E+00	5.30E-01
548766	7/26/2021 - 8/2/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	3.53E-01	2.35E-01	3.02E-01
548998	8/2/2021 - 8/9/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<5.16E-01	0.00E+00	5.16E-01
549299	8/9/2021 - 8/16/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	<4.92E-01	0.00E+00	4.92E-01
549788	8/16/2021 - 8/23/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.57E-02	0.00E+00	2.57E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<4.79E-01	0.00E+00	4.79E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550072	8/23/2021 - 8/30/2021	I-131	<3.27E-02	0.00E+00	3.27E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<3.98E-01	0.00E+00	3.98E-01
550694	8/30/2021 - 9/7/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<3.69E-01	0.00E+00	3.69E-01
551058	9/7/2021 - 9/13/2021	I-131	<3.35E-02	0.00E+00	3.35E-02
		Cs-134	<3.52E-02	0.00E+00	3.52E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	7.47E-01	2.99E-01	7.78E-02
551705	9/13/2021 - 9/20/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.32E-01	2.12E-01	2.42E-01
552323	9/20/2021 - 9/27/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<3.77E-01	0.00E+00	3.77E-01
552483	9/27/2021 - 10/4/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	4.37E-01	2.39E-01	2.58E-01
552820	10/4/2021 - 10/11/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	3.26E-01	2.15E-01	2.56E-01
553289	10/11/2021 - 10/18/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	4.34E-01	2.42E-01	2.48E-01
553882	10/18/2021 - 10/25/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<4.18E-01	0.00E+00	4.18E-01
554313	10/25/2021 - 11/1/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<2.49E-02	0.00E+00	2.49E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	4.15E-01	2.34E-01	2.57E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554624	11/1/2021 - 11/8/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<3.76E-01	0.00E+00	3.76E-01
555127	11/8/2021 - 11/15/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<4.87E-01	0.00E+00	4.87E-01
555979	11/15/2021 - 11/22/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.93E-02	0.00E+00	1.93E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	3.58E-01	1.87E-01	6.47E-02
556775	11/22/2021 - 11/29/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	1.53E-01	1.63E-01	2.40E-01
557092	11/29/2021 - 12/6/2021	I-131	<2.20E-02	0.00E+00	2.20E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.71E-01	0.00E+00	5.71E-01
557516	12/6/2021 - 12/13/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	5.93E-01	2.47E-01	6.70E-02
557997	12/13/2021 - 12/20/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	4.49E-01	2.55E-01	3.03E-01
558424	12/20/2021 - 12/27/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	<6.25E-01	0.00E+00	6.25E-01
558640	12/27/2021 - 1/4/2022	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.22E-02	0.00E+00	1.22E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	4.03E-01	2.20E-01	2.49E-01
Sample Point 093 [CONTROL - SE @ 9.34 miles]					
536588	12/28/2020 - 1/5/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	3.69E-01	1.59E-01	1.80E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536806	1/5/2021 - 1/11/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<2.41E-02	0.00E+00	2.41E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	5.15E-01	2.16E-01	2.37E-01
537341	1/11/2021 - 1/19/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	3.84E-01	1.67E-01	1.98E-01
537700	1/19/2021 - 1/25/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	7.07E-01	2.76E-01	3.30E-01
538091	1/25/2021 - 2/1/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	4.87E-01	1.87E-01	1.92E-01
538337	2/1/2021 - 2/8/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	6.14E-01	2.34E-01	2.73E-01
538577	2/8/2021 - 2/15/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<8.87E-02	0.00E+00	8.87E-02
		K-40	3.80E-01	1.54E-01	1.21E-01
538834	2/15/2021 - 2/22/2021	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<9.46E-02	0.00E+00	9.46E-02
		K-40	1.65E-01	1.35E-01	1.96E-01
539076	2/22/2021 - 3/1/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	5.79E-01	2.10E-01	2.18E-01
539290	3/1/2021 - 3/8/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<8.46E-02	0.00E+00	8.46E-02
		K-40	<3.22E-01	0.00E+00	3.22E-01
540089	3/8/2021 - 3/15/2021	I-131	<1.49E-02	0.00E+00	1.49E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<6.17E-03	0.00E+00	6.17E-03
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	<2.90E-01	0.00E+00	2.90E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540737	3/15/2021 - 3/22/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	4.27E-01	1.50E-01	3.40E-02
541451	3/22/2021 - 3/29/2021	I-131	<1.82E-02	0.00E+00	1.82E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.59E-02	0.00E+00	1.59E-02
		Be-7	<9.29E-02	0.00E+00	9.29E-02
		K-40	4.12E-01	1.68E-01	1.56E-01
541978	3/29/2021 - 4/5/2021	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	4.74E-01	2.04E-01	2.48E-01
542264	4/5/2021 - 4/12/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<8.39E-02	0.00E+00	8.39E-02
		K-40	6.57E-01	2.06E-01	1.75E-01
542895	4/12/2021 - 4/19/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	<6.72E-02	0.00E+00	6.72E-02
		K-40	2.98E-01	1.74E-01	2.35E-01
543278	4/19/2021 - 4/26/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<2.82E-02	0.00E+00	2.82E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	6.67E-01	3.39E-01	4.06E-01
544134	4/26/2021 - 5/3/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.11E-02	0.00E+00	2.11E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	3.44E-01	2.42E-01	3.11E-01
544337	5/3/2021 - 5/10/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<2.03E-01	0.00E+00	2.03E-01
		K-40	<6.73E-01	0.00E+00	6.73E-01
544668	5/10/2021 - 5/17/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	<4.73E-01	0.00E+00	4.73E-01
545040	5/17/2021 - 5/24/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.64E-02	0.00E+00	2.64E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	3.67E-01	2.67E-01	3.72E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545523	5/24/2021 - 6/1/2021	I-131	<1.96E-02	0.00E+00	1.96E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	3.12E-01	2.12E-01	2.75E-01
545822	6/1/2021 - 6/7/2021	I-131	<3.45E-02	0.00E+00	3.45E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<2.16E-01	0.00E+00	2.16E-01
		K-40	<5.59E-01	0.00E+00	5.59E-01
546052	6/7/2021 - 6/14/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<2.76E-02	0.00E+00	2.76E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<4.94E-01	0.00E+00	4.94E-01
546935	6/14/2021 - 6/21/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<3.20E-02	0.00E+00	3.20E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	5.08E-01	2.72E-01	3.07E-01
547216	6/21/2021 - 6/28/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	<5.22E-01	0.00E+00	5.22E-01
547500	6/28/2021 - 7/6/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<1.93E-02	0.00E+00	1.93E-02
		Cs-137	<1.66E-02	0.00E+00	1.66E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<4.54E-01	0.00E+00	4.54E-01
547760	7/6/2021 - 7/12/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	4.05E-01	2.48E-01	2.77E-01
548137	7/12/2021 - 7/19/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<3.98E-01	0.00E+00	3.98E-01
548551	7/19/2021 - 7/26/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<2.76E-02	0.00E+00	2.76E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<5.10E-01	0.00E+00	5.10E-01
548767	7/26/2021 - 8/2/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<3.78E-01	0.00E+00	3.78E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548999	8/2/2021 - 8/9/2021	I-131	<3.50E-02	0.00E+00	3.50E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	<5.47E-01	0.00E+00	5.47E-01
549300	8/9/2021 - 8/16/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<5.28E-01	0.00E+00	5.28E-01
549789	8/16/2021 - 8/23/2021	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<3.52E-02	0.00E+00	3.52E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	4.33E-01	2.30E-01	2.08E-01
550073	8/23/2021 - 8/30/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.43E-01	0.00E+00	5.43E-01
550695	8/30/2021 - 9/7/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	<4.41E-01	0.00E+00	4.41E-01
551059	9/7/2021 - 9/13/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<2.73E-02	0.00E+00	2.73E-02
		Be-7	<2.53E-01	0.00E+00	2.53E-01
		K-40	<7.08E-01	0.00E+00	7.08E-01
551706	9/13/2021 - 9/20/2021	I-131	<2.31E-02	0.00E+00	2.31E-02
		Cs-134	<1.42E-02	0.00E+00	1.42E-02
		Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<5.18E-01	0.00E+00	5.18E-01
552324	9/20/2021 - 9/27/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<3.34E-02	0.00E+00	3.34E-02
		Cs-137	<2.85E-02	0.00E+00	2.85E-02
		Be-7	<1.87E-01	0.00E+00	1.87E-01
		K-40	<5.86E-01	0.00E+00	5.86E-01
552484	9/27/2021 - 10/4/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<6.30E-01	0.00E+00	6.30E-01
552821	10/4/2021 - 10/11/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	2.44E-01	1.79E-01	2.08E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553290	10/11/2021 - 10/18/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<3.22E-02	0.00E+00	3.22E-02
		Cs-137	<2.99E-02	0.00E+00	2.99E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	<5.62E-01	0.00E+00	5.62E-01
553883	10/18/2021 - 10/25/2021	I-131	<3.29E-02	0.00E+00	3.29E-02
		Cs-134	<2.44E-02	0.00E+00	2.44E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	2.85E-01	2.52E-01	3.72E-01
554314	10/25/2021 - 11/1/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<2.58E-02	0.00E+00	2.58E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	<4.45E-01	0.00E+00	4.45E-01
554625	11/1/2021 - 11/8/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<3.03E-02	0.00E+00	3.03E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	<5.39E-01	0.00E+00	5.39E-01
555128	11/8/2021 - 11/15/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.48E-01	0.00E+00	1.48E-01
		K-40	<3.81E-01	0.00E+00	3.81E-01
555980	11/15/2021 - 11/22/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<3.99E-01	0.00E+00	3.99E-01
556776	11/22/2021 - 11/29/2021	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	4.80E-01	2.89E-01	3.71E-01
557093	11/29/2021 - 12/6/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	7.70E-01	3.02E-01	2.47E-01
557517	12/6/2021 - 12/13/2021	I-131	<2.81E-02	0.00E+00	2.81E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	5.14E-01	2.62E-01	2.66E-01
557998	12/13/2021 - 12/20/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<3.79E-01	0.00E+00	3.79E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	558425	Sample Dates:	12/20/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<1.93E-02	0.00E+00	1.93E-02
				Cs-134	<1.76E-02	0.00E+00	1.76E-02
				Cs-137	<2.14E-02	0.00E+00	2.14E-02
				Be-7	<1.54E-01	0.00E+00	1.54E-01
				K-40	<5.54E-01	0.00E+00	5.54E-01

Sample ID:	558641	Sample Dates:	12/27/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				I-131	<2.52E-02	0.00E+00	2.52E-02
				Cs-134	<1.26E-02	0.00E+00	1.26E-02
				Cs-137	<1.78E-02	0.00E+00	1.78E-02
				Be-7	<1.31E-01	0.00E+00	1.31E-01
				K-40	<3.87E-01	0.00E+00	3.87E-01

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID:	537782	Sample Dates:	12/28/2020 - 1/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.19E+00	0.00E+00	3.19E+00
				Mn-54	<3.10E+00	0.00E+00	3.10E+00
				Co-58	<3.33E+00	0.00E+00	3.33E+00
				Fe-59	<5.95E+00	0.00E+00	5.95E+00
				Co-60	<3.20E+00	0.00E+00	3.20E+00
				Zn-65	<5.90E+00	0.00E+00	5.90E+00
				Zr-95	<7.05E+00	0.00E+00	7.05E+00
				Nb-95	<4.13E+00	0.00E+00	4.13E+00
				I-131	<1.17E+01	0.00E+00	1.17E+01
				Cs-134	<3.55E+00	0.00E+00	3.55E+00
				Cs-137	<3.29E+00	0.00E+00	3.29E+00
				BaLa-140	<7.16E+00	0.00E+00	7.16E+00
				Be-7	<2.99E+01	0.00E+00	2.99E+01
				K-40	<5.39E+01	0.00E+00	5.39E+01

Sample ID:	538887	Sample Dates:	1/25/2021 - 2/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.24E+00	0.00E+00	3.24E+00
				Mn-54	<2.63E+00	0.00E+00	2.63E+00
				Co-58	<2.83E+00	0.00E+00	2.83E+00
				Fe-59	<6.72E+00	0.00E+00	6.72E+00
				Co-60	<2.95E+00	0.00E+00	2.95E+00
				Zn-65	<6.47E+00	0.00E+00	6.47E+00
				Zr-95	<5.57E+00	0.00E+00	5.57E+00
				Nb-95	<4.13E+00	0.00E+00	4.13E+00
				I-131	<1.12E+01	0.00E+00	1.12E+01
				Cs-134	<3.12E+00	0.00E+00	3.12E+00
				Cs-137	<2.81E+00	0.00E+00	2.81E+00
				BaLa-140	<7.91E+00	0.00E+00	7.91E+00
				Be-7	<2.75E+01	0.00E+00	2.75E+01
				K-40	1.09E+02	3.54E+01	3.68E+01

Sample ID:	541059	Sample Dates:	2/22/2021 - 3/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.26E+00	0.00E+00	3.26E+00
				Mn-54	<2.21E+00	0.00E+00	2.21E+00
				Co-58	<3.66E+00	0.00E+00	3.66E+00
				Fe-59	<9.33E+00	0.00E+00	9.33E+00
				Co-60	<3.18E+00	0.00E+00	3.18E+00
				Zn-65	<7.92E+00	0.00E+00	7.92E+00
				Zr-95	<6.74E+00	0.00E+00	6.74E+00
				Nb-95	<3.51E+00	0.00E+00	3.51E+00
				I-131	<1.18E+01	0.00E+00	1.18E+01
				Cs-134	<3.02E+00	0.00E+00	3.02E+00
				Cs-137	<2.80E+00	0.00E+00	2.80E+00
				BaLa-140	<5.26E+00	0.00E+00	5.26E+00
				Be-7	<2.43E+01	0.00E+00	2.43E+01
				K-40	9.07E+01	3.18E+01	3.47E+01

Sample ID:	542717	Sample Dates:	12/28/2020 - 4/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3DW	<-5.6E+01	0.00E+00	1.99E+02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID:	542954	Sample Dates:	3/22/2021 - 4/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.26E+00	0.00E+00	3.26E+00
				Mn-54	<2.66E+00	0.00E+00	2.66E+00
				Co-58	<3.30E+00	0.00E+00	3.30E+00
				Fe-59	<5.55E+00	0.00E+00	5.55E+00
				Co-60	<2.79E+00	0.00E+00	2.79E+00
				Zn-65	<5.66E+00	0.00E+00	5.66E+00
				Zr-95	<5.25E+00	0.00E+00	5.25E+00
				Nb-95	<3.53E+00	0.00E+00	3.53E+00
				I-131	<1.19E+01	0.00E+00	1.19E+01
				Cs-134	<3.04E+00	0.00E+00	3.04E+00
				Cs-137	<3.08E+00	0.00E+00	3.08E+00
				BaLa-140	<6.95E+00	0.00E+00	6.95E+00
				Be-7	<3.37E+01	0.00E+00	3.37E+01
				K-40	6.10E+01	3.53E+01	5.12E+01

Sample ID:	544849	Sample Dates:	4/19/2021 - 5/17/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.26E+00	0.00E+00	3.26E+00
				Mn-54	<2.24E+00	0.00E+00	2.24E+00
				Co-58	<3.23E+00	0.00E+00	3.23E+00
				Fe-59	<6.84E+00	0.00E+00	6.84E+00
				Co-60	<4.19E+00	0.00E+00	4.19E+00
				Zn-65	<7.76E+00	0.00E+00	7.76E+00
				Zr-95	<7.94E+00	0.00E+00	7.94E+00
				Nb-95	<6.08E+00	0.00E+00	6.08E+00
				I-131	<1.18E+01	0.00E+00	1.18E+01
				Cs-134	<3.22E+00	0.00E+00	3.22E+00
				Cs-137	<4.25E+00	0.00E+00	4.25E+00
				BaLa-140	<9.59E+00	0.00E+00	9.59E+00
				Be-7	<3.78E+01	0.00E+00	3.78E+01
				K-40	6.82E+01	4.22E+01	5.77E+01

Sample ID:	546780	Sample Dates:	5/17/2021 - 6/14/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.20E+00	0.00E+00	3.20E+00
				Mn-54	<2.82E+00	0.00E+00	2.82E+00
				Co-58	<3.80E+00	0.00E+00	3.80E+00
				Fe-59	<8.00E+00	0.00E+00	8.00E+00
				Co-60	<3.74E+00	0.00E+00	3.74E+00
				Zn-65	<9.93E+00	0.00E+00	9.93E+00
				Zr-95	<9.06E+00	0.00E+00	9.06E+00
				Nb-95	<5.07E+00	0.00E+00	5.07E+00
				I-131	<1.11E+01	0.00E+00	1.11E+01
				Cs-134	<5.49E+00	0.00E+00	5.49E+00
				Cs-137	<3.32E+00	0.00E+00	3.32E+00
				BaLa-140	<8.59E+00	0.00E+00	8.59E+00
				Be-7	<3.79E+01	0.00E+00	3.79E+01
				K-40	2.57E+01	2.67E+01	4.13E+01

Sample ID:	547914	Sample Dates:	6/14/2021 - 7/12/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.18E+00	0.00E+00	3.18E+00
				Mn-54	<2.39E+00	0.00E+00	2.39E+00
				Co-58	<3.56E+00	0.00E+00	3.56E+00
				Fe-59	<6.65E+00	0.00E+00	6.65E+00
				Co-60	<2.27E+00	0.00E+00	2.27E+00
				Zn-65	<7.07E+00	0.00E+00	7.07E+00
				Zr-95	<6.51E+00	0.00E+00	6.51E+00
				Nb-95	<3.32E+00	0.00E+00	3.32E+00
				I-131	<1.19E+01	0.00E+00	1.19E+01
				Cs-134	<3.44E+00	0.00E+00	3.44E+00
				Cs-137	<2.32E+00	0.00E+00	2.32E+00
				BaLa-140	<7.08E+00	0.00E+00	7.08E+00
				Be-7	<2.43E+01	0.00E+00	2.43E+01
				K-40	3.09E+01	2.46E+01	3.62E+01

Sample ID:	548012	Sample Dates:	4/19/2021 - 7/12/2021	Nuclide	Activity	2 Sigma Error	MDA
				H3DW	<9.38E+00	0.00E+00	1.72E+02

Sample ID:	549097	Sample Dates:	7/12/2021 - 8/9/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	<3.25E+00	0.00E+00	3.25E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549097	7/12/2021 - 8/9/2021	Mn-54	<3.40E+00	0.00E+00	3.40E+00
		Co-58	<3.31E+00	0.00E+00	3.31E+00
		Fe-59	<7.64E+00	0.00E+00	7.64E+00
		Co-60	<2.98E+00	0.00E+00	2.98E+00
		Zn-65	<5.47E+00	0.00E+00	5.47E+00
		Zr-95	<4.39E+00	0.00E+00	4.39E+00
		Nb-95	<3.95E+00	0.00E+00	3.95E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<2.74E+00	0.00E+00	2.74E+00
		Cs-137	<2.51E+00	0.00E+00	2.51E+00
		BaLa-140	<7.29E+00	0.00E+00	7.29E+00
		Be-7	<3.11E+01	0.00E+00	3.11E+01
		K-40	9.14E+01	3.56E+01	4.21E+01
		550936	8/9/2021 - 9/7/2021	Beta	<3.18E+00
Mn-54	<2.90E+00			0.00E+00	2.90E+00
Co-58	<3.73E+00			0.00E+00	3.73E+00
Fe-59	<7.09E+00			0.00E+00	7.09E+00
Co-60	<2.19E+00			0.00E+00	2.19E+00
Zn-65	<6.32E+00			0.00E+00	6.32E+00
Zr-95	<4.89E+00			0.00E+00	4.89E+00
Nb-95	<3.67E+00			0.00E+00	3.67E+00
I-131	<1.14E+01			0.00E+00	1.14E+01
Cs-134	<3.12E+00			0.00E+00	3.12E+00
Cs-137	<2.72E+00			0.00E+00	2.72E+00
BaLa-140	<8.82E+00			0.00E+00	8.82E+00
Be-7	<2.51E+01			0.00E+00	2.51E+01
K-40	4.56E+01			2.75E+01	3.84E+01
552533	9/7/2021 - 10/4/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<2.67E+00	0.00E+00	2.67E+00
		Co-58	<3.44E+00	0.00E+00	3.44E+00
		Fe-59	<4.49E+00	0.00E+00	4.49E+00
		Co-60	<3.72E+00	0.00E+00	3.72E+00
		Zn-65	<4.60E+00	0.00E+00	4.60E+00
		Zr-95	<5.43E+00	0.00E+00	5.43E+00
		Nb-95	<3.94E+00	0.00E+00	3.94E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.94E+00	0.00E+00	3.94E+00
		Cs-137	<2.93E+00	0.00E+00	2.93E+00
		BaLa-140	<7.76E+00	0.00E+00	7.76E+00
		Be-7	<2.35E+01	0.00E+00	2.35E+01
		K-40	<5.42E+01	0.00E+00	5.42E+01
553189	7/12/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA
		H3DW	<2.37E+01	0.00E+00	1.77E+02
554411	10/4/2021 - 11/1/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.26E+00	0.00E+00	3.26E+00
		Co-58	<3.22E+00	0.00E+00	3.22E+00
		Fe-59	<4.92E+00	0.00E+00	4.92E+00
		Co-60	<2.13E+00	0.00E+00	2.13E+00
		Zn-65	<6.74E+00	0.00E+00	6.74E+00
		Zr-95	<5.44E+00	0.00E+00	5.44E+00
		Nb-95	<3.79E+00	0.00E+00	3.79E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.35E+00	0.00E+00	3.35E+00
		Cs-137	<2.93E+00	0.00E+00	2.93E+00
		BaLa-140	<9.12E+00	0.00E+00	9.12E+00
		Be-7	<3.20E+01	0.00E+00	3.20E+01
		K-40	<4.98E+01	0.00E+00	4.98E+01
556843	11/1/2021 - 11/29/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	<3.29E+00	0.00E+00	3.29E+00
		Mn-54	<3.18E+00	0.00E+00	3.18E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 060 [INDICATOR - NE @ 3.23 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556843	11/1/2021 - 11/29/2021	Co-58	<2.88E+00	0.00E+00	2.88E+00
		Fe-59	<7.04E+00	0.00E+00	7.04E+00
		Co-60	<2.30E+00	0.00E+00	2.30E+00
		Zn-65	<5.41E+00	0.00E+00	5.41E+00
		Zr-95	<5.59E+00	0.00E+00	5.59E+00
		Nb-95	<3.98E+00	0.00E+00	3.98E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<2.56E+00	0.00E+00	2.56E+00
		Cs-137	<2.67E+00	0.00E+00	2.67E+00
		BaLa-140	<8.66E+00	0.00E+00	8.66E+00
		Be-7	<2.71E+01	0.00E+00	2.71E+01
		K-40	<4.18E+01	0.00E+00	4.18E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558514	11/29/2021 - 12/27/2021	Beta	<3.24E+00	0.00E+00	3.24E+00
		Mn-54	<3.78E+00	0.00E+00	3.78E+00
		Co-58	<3.40E+00	0.00E+00	3.40E+00
		Fe-59	<9.52E+00	0.00E+00	9.52E+00
		Co-60	<4.32E+00	0.00E+00	4.32E+00
		Zn-65	<7.99E+00	0.00E+00	7.99E+00
		Zr-95	<8.35E+00	0.00E+00	8.35E+00
		Nb-95	<3.26E+00	0.00E+00	3.26E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.82E+00	0.00E+00	3.82E+00
		Cs-137	<2.77E+00	0.00E+00	2.77E+00
		BaLa-140	<1.05E+01	0.00E+00	1.05E+01
		Be-7	<3.73E+01	0.00E+00	3.73E+01
		K-40	<6.71E+01	0.00E+00	6.71E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558932	10/4/2021 - 12/27/2021	H3DW	<-8.9E+01	0.00E+00	1.85E+02

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537783	12/28/2020 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<2.86E+00	0.00E+00	2.86E+00
		Co-58	<3.07E+00	0.00E+00	3.07E+00
		Fe-59	<6.69E+00	0.00E+00	6.69E+00
		Co-60	<2.64E+00	0.00E+00	2.64E+00
		Zn-65	<5.26E+00	0.00E+00	5.26E+00
		Zr-95	<6.05E+00	0.00E+00	6.05E+00
		Nb-95	<3.59E+00	0.00E+00	3.59E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.50E+00	0.00E+00	3.50E+00
		Cs-137	<2.34E+00	0.00E+00	2.34E+00
		BaLa-140	<7.44E+00	0.00E+00	7.44E+00
		Be-7	<2.62E+01	0.00E+00	2.62E+01
		K-40	2.10E+01	2.40E+01	3.85E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538888	1/25/2021 - 2/22/2021	Beta	<3.24E+00	0.00E+00	3.24E+00
		Mn-54	<3.69E+00	0.00E+00	3.69E+00
		Co-58	<3.18E+00	0.00E+00	3.18E+00
		Fe-59	<5.47E+00	0.00E+00	5.47E+00
		Co-60	<3.48E+00	0.00E+00	3.48E+00
		Zn-65	<8.00E+00	0.00E+00	8.00E+00
		Zr-95	<6.06E+00	0.00E+00	6.06E+00
		Nb-95	<4.55E+00	0.00E+00	4.55E+00
		I-131	<1.14E+01	0.00E+00	1.14E+01
		Cs-134	<3.71E+00	0.00E+00	3.71E+00
		Cs-137	<2.97E+00	0.00E+00	2.97E+00
		BaLa-140	<9.95E+00	0.00E+00	9.95E+00
		Be-7	<2.92E+01	0.00E+00	2.92E+01
		K-40	9.49E+01	3.97E+01	5.04E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541060	2/22/2021 - 3/22/2021	Beta	<3.26E+00	0.00E+00	3.26E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541060	2/22/2021 - 3/22/2021	Mn-54	<2.93E+00	0.00E+00	2.93E+00
		Co-58	<2.41E+00	0.00E+00	2.41E+00
		Fe-59	<7.36E+00	0.00E+00	7.36E+00
		Co-60	<3.41E+00	0.00E+00	3.41E+00
		Zn-65	<5.53E+00	0.00E+00	5.53E+00
		Zr-95	<5.52E+00	0.00E+00	5.52E+00
		Nb-95	<3.14E+00	0.00E+00	3.14E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<3.65E+00	0.00E+00	3.65E+00
		Cs-137	<3.29E+00	0.00E+00	3.29E+00
		BaLa-140	<6.94E+00	0.00E+00	6.94E+00
		Be-7	<2.42E+01	0.00E+00	2.42E+01
		K-40	7.47E+01	3.13E+01	3.97E+01
		542718	12/28/2020 - 4/19/2021	H3DW	<-2.2E+01
542955	3/22/2021 - 4/19/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<2.89E+00	0.00E+00	2.89E+00
		Co-58	<3.22E+00	0.00E+00	3.22E+00
		Fe-59	<6.29E+00	0.00E+00	6.29E+00
		Co-60	<1.81E+00	0.00E+00	1.81E+00
		Zn-65	<3.34E+00	0.00E+00	3.34E+00
		Zr-95	<5.00E+00	0.00E+00	5.00E+00
		Nb-95	<4.31E+00	0.00E+00	4.31E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.49E+00	0.00E+00	3.49E+00
		Cs-137	<3.68E+00	0.00E+00	3.68E+00
		BaLa-140	<7.55E+00	0.00E+00	7.55E+00
		Be-7	<2.78E+01	0.00E+00	2.78E+01
		K-40	7.81E+01	3.01E+01	3.50E+01
544850	4/19/2021 - 5/17/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.93E+00	0.00E+00	3.93E+00
		Co-58	<3.10E+00	0.00E+00	3.10E+00
		Fe-59	<7.01E+00	0.00E+00	7.01E+00
		Co-60	<2.92E+00	0.00E+00	2.92E+00
		Zn-65	<6.17E+00	0.00E+00	6.17E+00
		Zr-95	<5.50E+00	0.00E+00	5.50E+00
		Nb-95	<3.80E+00	0.00E+00	3.80E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.95E+00	0.00E+00	3.95E+00
		Cs-137	<3.55E+00	0.00E+00	3.55E+00
		BaLa-140	<8.22E+00	0.00E+00	8.22E+00
		Be-7	<3.35E+01	0.00E+00	3.35E+01
		K-40	6.70E+01	3.44E+01	4.51E+01
546781	5/17/2021 - 6/14/2021	Beta	<3.20E+00	0.00E+00	3.20E+00
		Mn-54	<3.20E+00	0.00E+00	3.20E+00
		Co-58	<3.24E+00	0.00E+00	3.24E+00
		Fe-59	<9.14E+00	0.00E+00	9.14E+00
		Co-60	<3.21E+00	0.00E+00	3.21E+00
		Zn-65	<6.36E+00	0.00E+00	6.36E+00
		Zr-95	<7.07E+00	0.00E+00	7.07E+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	<4.34E+00	0.00E+00	4.34E+00
		Cs-137	<3.47E+00	0.00E+00	3.47E+00
		BaLa-140	<7.42E+00	0.00E+00	7.42E+00
		Be-7	<2.90E+01	0.00E+00	2.90E+01
		K-40	7.86E+01	5.05E+01	6.56E+01
547915	6/14/2021 - 7/12/2021	Beta	<3.18E+00	0.00E+00	3.18E+00
		Mn-54	<3.43E+00	0.00E+00	3.43E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547915	6/14/2021 - 7/12/2021	Co-58	<3.05E+00	0.00E+00	3.05E+00
		Fe-59	<6.82E+00	0.00E+00	6.82E+00
		Co-60	<2.65E+00	0.00E+00	2.65E+00
		Zn-65	<6.12E+00	0.00E+00	6.12E+00
		Zr-95	<5.57E+00	0.00E+00	5.57E+00
		Nb-95	<3.72E+00	0.00E+00	3.72E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.37E+00	0.00E+00	3.37E+00
		Cs-137	<3.09E+00	0.00E+00	3.09E+00
		BaLa-140	<6.47E+00	0.00E+00	6.47E+00
		Be-7	<2.30E+01	0.00E+00	2.30E+01
		K-40	<6.36E+01	0.00E+00	6.36E+01
		548013	4/19/2021 - 7/12/2021	H3DW	<-6.8E+01
549098	7/12/2021 - 8/9/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<3.51E+00	0.00E+00	3.51E+00
		Co-58	<3.59E+00	0.00E+00	3.59E+00
		Fe-59	<8.52E+00	0.00E+00	8.52E+00
		Co-60	<2.76E+00	0.00E+00	2.76E+00
		Zn-65	<7.52E+00	0.00E+00	7.52E+00
		Zr-95	<8.16E+00	0.00E+00	8.16E+00
		Nb-95	<3.86E+00	0.00E+00	3.86E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.89E+00	0.00E+00	3.89E+00
		Cs-137	<3.41E+00	0.00E+00	3.41E+00
		BaLa-140	<8.71E+00	0.00E+00	8.71E+00
		Be-7	<3.25E+01	0.00E+00	3.25E+01
		K-40	3.20E+01	3.29E+01	5.21E+01
		550937	8/9/2021 - 9/7/2021	Beta	<3.18E+00
Mn-54	<2.44E+00			0.00E+00	2.44E+00
Co-58	<2.85E+00			0.00E+00	2.85E+00
Fe-59	<5.89E+00			0.00E+00	5.89E+00
Co-60	<2.76E+00			0.00E+00	2.76E+00
Zn-65	<4.96E+00			0.00E+00	4.96E+00
Zr-95	<5.36E+00			0.00E+00	5.36E+00
Nb-95	<3.23E+00			0.00E+00	3.23E+00
I-131	<1.18E+01			0.00E+00	1.18E+01
Cs-134	<2.76E+00			0.00E+00	2.76E+00
Cs-137	<2.51E+00			0.00E+00	2.51E+00
BaLa-140	<6.35E+00			0.00E+00	6.35E+00
Be-7	<2.15E+01			0.00E+00	2.15E+01
K-40	8.74E+01			2.86E+01	3.21E+01
552534	9/7/2021 - 10/4/2021			Beta	3.38E+00
		Mn-54	<3.33E+00	0.00E+00	3.33E+00
		Co-58	<2.08E+00	0.00E+00	2.08E+00
		Fe-59	<7.69E+00	0.00E+00	7.69E+00
		Co-60	<2.92E+00	0.00E+00	2.92E+00
		Zn-65	<6.66E+00	0.00E+00	6.66E+00
		Zr-95	<4.87E+00	0.00E+00	4.87E+00
		Nb-95	<4.45E+00	0.00E+00	4.45E+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	<2.95E+00	0.00E+00	2.95E+00
		BaLa-140	<6.06E+00	0.00E+00	6.06E+00
		Be-7	<2.84E+01	0.00E+00	2.84E+01
		K-40	7.65E+01	3.93E+01	5.46E+01
		553190	7/12/2021 - 10/4/2021	H3DW	<-6.2E+01
554412	10/4/2021 - 11/1/2021	Beta	<3.26E+00	0.00E+00	3.26E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 064 [CONTROL - SSW @ 6.67 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554412	10/4/2021 - 11/1/2021	Mn-54	<3.39E+00	0.00E+00	3.39E+00
		Co-58	<3.31E+00	0.00E+00	3.31E+00
		Fe-59	<6.91E+00	0.00E+00	6.91E+00
		Co-60	<3.48E+00	0.00E+00	3.48E+00
		Zn-65	<6.40E+00	0.00E+00	6.40E+00
		Zr-95	<5.41E+00	0.00E+00	5.41E+00
		Nb-95	<3.60E+00	0.00E+00	3.60E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.29E+00	0.00E+00	3.29E+00
		Cs-137	<3.00E+00	0.00E+00	3.00E+00
		BaLa-140	<6.73E+00	0.00E+00	6.73E+00
		Be-7	<2.78E+01	0.00E+00	2.78E+01
		K-40	7.83E+01	3.93E+01	5.32E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556844	11/1/2021 - 11/29/2021	Beta	<3.29E+00	0.00E+00	3.29E+00
		Mn-54	<2.95E+00	0.00E+00	2.95E+00
		Co-58	<2.68E+00	0.00E+00	2.68E+00
		Fe-59	<6.21E+00	0.00E+00	6.21E+00
		Co-60	<2.33E+00	0.00E+00	2.33E+00
		Zn-65	<5.75E+00	0.00E+00	5.75E+00
		Zr-95	<4.88E+00	0.00E+00	4.88E+00
		Nb-95	<3.92E+00	0.00E+00	3.92E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.02E+00	0.00E+00	3.02E+00
		Cs-137	<2.85E+00	0.00E+00	2.85E+00
		BaLa-140	<6.65E+00	0.00E+00	6.65E+00
		Be-7	<2.27E+01	0.00E+00	2.27E+01
		K-40	6.95E+01	3.03E+01	3.94E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558515	11/29/2021 - 12/27/2021	Beta	<3.24E+00	0.00E+00	3.24E+00
		Mn-54	<2.26E+00	0.00E+00	2.26E+00
		Co-58	<2.36E+00	0.00E+00	2.36E+00
		Fe-59	<5.81E+00	0.00E+00	5.81E+00
		Co-60	<2.43E+00	0.00E+00	2.43E+00
		Zn-65	<4.67E+00	0.00E+00	4.67E+00
		Zr-95	<4.46E+00	0.00E+00	4.46E+00
		Nb-95	<3.55E+00	0.00E+00	3.55E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<2.96E+00	0.00E+00	2.96E+00
		Cs-137	<2.49E+00	0.00E+00	2.49E+00
		BaLa-140	<5.38E+00	0.00E+00	5.38E+00
		Be-7	<2.62E+01	0.00E+00	2.62E+01
		K-40	9.99E+01	3.29E+01	3.85E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558933	10/4/2021 - 12/27/2021	H3DW	<-4.9E+01	0.00E+00	1.85E+02

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537784	12/28/2020 - 1/25/2021	Beta	<3.19E+00	0.00E+00	3.19E+00
		Mn-54	<3.67E+00	0.00E+00	3.67E+00
		Co-58	<4.08E+00	0.00E+00	4.08E+00
		Fe-59	<7.02E+00	0.00E+00	7.02E+00
		Co-60	<3.32E+00	0.00E+00	3.32E+00
		Zn-65	<9.99E+00	0.00E+00	9.99E+00
		Zr-95	<4.93E+00	0.00E+00	4.93E+00
		Nb-95	<4.02E+00	0.00E+00	4.02E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<4.18E+00	0.00E+00	4.18E+00
		Cs-137	<3.45E+00	0.00E+00	3.45E+00
		BaLa-140	<6.13E+00	0.00E+00	6.13E+00
		Be-7	<2.88E+01	0.00E+00	2.88E+01
		K-40	7.56E+01	3.97E+01	5.40E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538889	1/25/2021 - 2/22/2021	Beta	<3.24E+00	0.00E+00	3.24E+00
		Mn-54	<2.73E+00	0.00E+00	2.73E+00
		Co-58	<2.97E+00	0.00E+00	2.97E+00
		Fe-59	<6.11E+00	0.00E+00	6.11E+00
		Co-60	<3.15E+00	0.00E+00	3.15E+00
		Zn-65	<6.36E+00	0.00E+00	6.36E+00
		Zr-95	<5.52E+00	0.00E+00	5.52E+00
		Nb-95	<4.08E+00	0.00E+00	4.08E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.22E+00	0.00E+00	3.22E+00
		Cs-137	<2.45E+00	0.00E+00	2.45E+00
		BaLa-140	<5.37E+00	0.00E+00	5.37E+00
		Be-7	<2.87E+01	0.00E+00	2.87E+01
		K-40	6.51E+01	3.35E+01	4.75E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541061	2/22/2021 - 3/22/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<2.70E+00	0.00E+00	2.70E+00
		Co-58	<3.70E+00	0.00E+00	3.70E+00
		Fe-59	<6.25E+00	0.00E+00	6.25E+00
		Co-60	<3.03E+00	0.00E+00	3.03E+00
		Zn-65	<2.98E+00	0.00E+00	2.98E+00
		Zr-95	<5.64E+00	0.00E+00	5.64E+00
		Nb-95	<3.76E+00	0.00E+00	3.76E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<3.82E+00	0.00E+00	3.82E+00
		Cs-137	<2.91E+00	0.00E+00	2.91E+00
		BaLa-140	<7.33E+00	0.00E+00	7.33E+00
		Be-7	<2.61E+01	0.00E+00	2.61E+01
		K-40	4.49E+01	3.15E+01	4.74E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542719	12/28/2020 - 4/19/2021	H3DW	<1.18E+02	0.00E+00	1.97E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542956	3/22/2021 - 4/19/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.47E+00	0.00E+00	3.47E+00
		Co-58	<3.31E+00	0.00E+00	3.31E+00
		Fe-59	<6.83E+00	0.00E+00	6.83E+00
		Co-60	<3.59E+00	0.00E+00	3.59E+00
		Zn-65	<7.55E+00	0.00E+00	7.55E+00
		Zr-95	<5.86E+00	0.00E+00	5.86E+00
		Nb-95	<4.26E+00	0.00E+00	4.26E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<4.02E+00	0.00E+00	4.02E+00
		Cs-137	<3.29E+00	0.00E+00	3.29E+00
		BaLa-140	<1.05E+01	0.00E+00	1.05E+01
		Be-7	<2.78E+01	0.00E+00	2.78E+01
		K-40	9.49E+01	3.74E+01	4.58E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544851	4/19/2021 - 5/17/2021	Beta	<3.26E+00	0.00E+00	3.26E+00
		Mn-54	<3.84E+00	0.00E+00	3.84E+00
		Co-58	<3.45E+00	0.00E+00	3.45E+00
		Fe-59	<8.51E+00	0.00E+00	8.51E+00
		Co-60	<2.73E+00	0.00E+00	2.73E+00
		Zn-65	<7.32E+00	0.00E+00	7.32E+00
		Zr-95	<6.13E+00	0.00E+00	6.13E+00
		Nb-95	<4.81E+00	0.00E+00	4.81E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.68E+00	0.00E+00	2.68E+00
		Cs-137	<3.12E+00	0.00E+00	3.12E+00
		BaLa-140	<8.36E+00	0.00E+00	8.36E+00
		Be-7	<3.36E+01	0.00E+00	3.36E+01
		K-40	<6.64E+01	0.00E+00	6.64E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546782	5/17/2021 - 6/14/2021	Beta	<3.20E+00	0.00E+00	3.20E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546782	5/17/2021 - 6/14/2021	Mn-54	<2.88E+00	0.00E+00	2.88E+00
		Co-58	<3.07E+00	0.00E+00	3.07E+00
		Fe-59	<4.37E+00	0.00E+00	4.37E+00
		Co-60	<1.44E+00	0.00E+00	1.44E+00
		Zn-65	<4.79E+00	0.00E+00	4.79E+00
		Zr-95	<5.91E+00	0.00E+00	5.91E+00
		Nb-95	<4.02E+00	0.00E+00	4.02E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<2.92E+00	0.00E+00	2.92E+00
		Cs-137	<3.00E+00	0.00E+00	3.00E+00
		BaLa-140	<6.55E+00	0.00E+00	6.55E+00
		Be-7	<2.42E+01	0.00E+00	2.42E+01
		K-40	7.67E+01	3.63E+01	5.11E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547916	6/14/2021 - 7/12/2021	Beta	<3.18E+00	0.00E+00	3.18E+00
		Mn-54	<2.89E+00	0.00E+00	2.89E+00
		Co-58	<2.97E+00	0.00E+00	2.97E+00
		Fe-59	<6.83E+00	0.00E+00	6.83E+00
		Co-60	<2.70E+00	0.00E+00	2.70E+00
		Zn-65	<5.72E+00	0.00E+00	5.72E+00
		Zr-95	<4.66E+00	0.00E+00	4.66E+00
		Nb-95	<3.53E+00	0.00E+00	3.53E+00
		I-131	<1.11E+01	0.00E+00	1.11E+01
		Cs-134	<3.28E+00	0.00E+00	3.28E+00
		Cs-137	<2.51E+00	0.00E+00	2.51E+00
		BaLa-140	<3.52E+00	0.00E+00	3.52E+00
		Be-7	<2.56E+01	0.00E+00	2.56E+01
		K-40	9.88E+01	3.79E+01	4.86E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548014	4/19/2021 - 7/12/2021	H3DW	<9.38E+01	0.00E+00	1.72E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549099	7/12/2021 - 8/9/2021	Beta	<3.25E+00	0.00E+00	3.25E+00
		Mn-54	<2.52E+00	0.00E+00	2.52E+00
		Co-58	<3.09E+00	0.00E+00	3.09E+00
		Fe-59	<5.67E+00	0.00E+00	5.67E+00
		Co-60	<2.22E+00	0.00E+00	2.22E+00
		Zn-65	<6.97E+00	0.00E+00	6.97E+00
		Zr-95	<5.95E+00	0.00E+00	5.95E+00
		Nb-95	<3.49E+00	0.00E+00	3.49E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.94E+00	0.00E+00	2.94E+00
		Cs-137	<3.23E+00	0.00E+00	3.23E+00
		BaLa-140	<8.06E+00	0.00E+00	8.06E+00
		Be-7	<2.70E+01	0.00E+00	2.70E+01
		K-40	1.08E+02	3.06E+01	2.69E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550938	8/9/2021 - 9/7/2021	Beta	<3.18E+00	0.00E+00	3.18E+00
		Mn-54	<2.59E+00	0.00E+00	2.59E+00
		Co-58	<2.34E+00	0.00E+00	2.34E+00
		Fe-59	<5.99E+00	0.00E+00	5.99E+00
		Co-60	<3.08E+00	0.00E+00	3.08E+00
		Zn-65	<4.93E+00	0.00E+00	4.93E+00
		Zr-95	<5.01E+00	0.00E+00	5.01E+00
		Nb-95	<4.00E+00	0.00E+00	4.00E+00
		I-131	<1.05E+01	0.00E+00	1.05E+01
		Cs-134	<3.26E+00	0.00E+00	3.26E+00
		Cs-137	<3.10E+00	0.00E+00	3.10E+00
		BaLa-140	<5.37E+00	0.00E+00	5.37E+00
		Be-7	<2.57E+01	0.00E+00	2.57E+01
		K-40	1.03E+02	3.45E+01	4.10E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552535	9/7/2021 - 10/4/2021	Beta	<3.23E+00	0.00E+00	3.23E+00
		Mn-54	<2.46E+00	0.00E+00	2.46E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 066 [INDICATOR - SSE @ 18.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552535	9/7/2021 - 10/4/2021	Co-58	<2.93E+00	0.00E+00	2.93E+00
		Fe-59	<5.33E+00	0.00E+00	5.33E+00
		Co-60	<2.86E+00	0.00E+00	2.86E+00
		Zn-65	<6.89E+00	0.00E+00	6.89E+00
		Zr-95	<5.99E+00	0.00E+00	5.99E+00
		Nb-95	<4.13E+00	0.00E+00	4.13E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<4.05E+00	0.00E+00	4.05E+00
		Cs-137	<2.81E+00	0.00E+00	2.81E+00
		BaLa-140	<9.23E+00	0.00E+00	9.23E+00
		Be-7	<3.61E+01	0.00E+00	3.61E+01
		K-40	5.92E+01	3.08E+01	4.18E+01
		553191	7/12/2021 - 10/4/2021	H3DW	<1.18E+02
554413	10/4/2021 - 11/1/2021			Beta	<3.26E+00
		Mn-54	<3.37E+00	0.00E+00	3.37E+00
		Co-58	<3.61E+00	0.00E+00	3.61E+00
		Fe-59	<8.97E+00	0.00E+00	8.97E+00
		Co-60	<2.58E+00	0.00E+00	2.58E+00
		Zn-65	<5.30E+00	0.00E+00	5.30E+00
		Zr-95	<6.16E+00	0.00E+00	6.16E+00
		Nb-95	<4.66E+00	0.00E+00	4.66E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.59E+00	0.00E+00	3.59E+00
		Cs-137	<3.78E+00	0.00E+00	3.78E+00
		BaLa-140	<7.34E+00	0.00E+00	7.34E+00
		Be-7	<3.63E+01	0.00E+00	3.63E+01
		K-40	6.44E+01	3.05E+01	3.47E+01
		556845	11/1/2021 - 11/29/2021	Beta	<3.29E+00
Mn-54	<2.41E+00			0.00E+00	2.41E+00
Co-58	<3.71E+00			0.00E+00	3.71E+00
Fe-59	<7.20E+00			0.00E+00	7.20E+00
Co-60	<3.47E+00			0.00E+00	3.47E+00
Zn-65	<7.13E+00			0.00E+00	7.13E+00
Zr-95	<7.30E+00			0.00E+00	7.30E+00
Nb-95	<4.47E+00			0.00E+00	4.47E+00
I-131	<1.19E+01			0.00E+00	1.19E+01
Cs-134	<3.02E+00			0.00E+00	3.02E+00
Cs-137	<2.82E+00			0.00E+00	2.82E+00
BaLa-140	<7.13E+00			0.00E+00	7.13E+00
Be-7	<2.41E+01			0.00E+00	2.41E+01
K-40	1.05E+02			3.88E+01	4.70E+01
558516	11/29/2021 - 12/27/2021			Beta	<3.24E+00
		Mn-54	<2.95E+00	0.00E+00	2.95E+00
		Co-58	<2.92E+00	0.00E+00	2.92E+00
		Fe-59	<5.89E+00	0.00E+00	5.89E+00
		Co-60	<3.70E+00	0.00E+00	3.70E+00
		Zn-65	<5.47E+00	0.00E+00	5.47E+00
		Zr-95	<7.61E+00	0.00E+00	7.61E+00
		Nb-95	<3.70E+00	0.00E+00	3.70E+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	<3.63E+00	0.00E+00	3.63E+00
		BaLa-140	<9.07E+00	0.00E+00	9.07E+00
		Be-7	<3.36E+01	0.00E+00	3.36E+01
		K-40	<4.90E+01	0.00E+00	4.90E+01
		558934	10/4/2021 - 12/27/2021	H3DW	<1.62E+02

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 060 [CONTROL FISH / INDICATOR - NE @ 3.23 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542629	4/12/2021 - 4/12/2021		Mn-54	<7.57E+01	0.00E+00	7.57E+01
			Co-58	<5.69E+01	0.00E+00	5.69E+01
			Fe-59	<1.22E+02	0.00E+00	1.22E+02
			Co-60	<8.18E+01	0.00E+00	8.18E+01
			Zn-65	<1.62E+02	0.00E+00	1.62E+02
			Nb-95	<8.33E+01	0.00E+00	8.33E+01
			I-131	<1.21E+02	0.00E+00	1.21E+02
			Cs-134	<8.74E+01	0.00E+00	8.74E+01
			Cs-137	<8.49E+01	0.00E+00	8.49E+01
			Be-7	<4.86E+02	0.00E+00	4.86E+02
			K-40	4.53E+03	1.28E+03	1.34E+03
			Ag-110M	<7.08E+01	0.00E+00	7.08E+01
			Sb-122	<4.74E+02	0.00E+00	4.74E+02
			Sb-125	<1.56E+02	0.00E+00	1.56E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
542630	4/13/2021 - 4/13/2021		Mn-54	<5.86E+01	0.00E+00	5.86E+01
			Co-58	<6.04E+01	0.00E+00	6.04E+01
			Fe-59	<1.51E+02	0.00E+00	1.51E+02
			Co-60	<8.22E+01	0.00E+00	8.22E+01
			Zn-65	<1.60E+02	0.00E+00	1.60E+02
			Nb-95	<1.06E+02	0.00E+00	1.06E+02
			I-131	<1.28E+02	0.00E+00	1.28E+02
			Cs-134	<1.03E+02	0.00E+00	1.03E+02
			Cs-137	<1.19E+02	0.00E+00	1.19E+02
			Be-7	<6.68E+02	0.00E+00	6.68E+02
			K-40	4.55E+03	1.28E+03	1.02E+03
			Ag-110M	<6.80E+01	0.00E+00	6.80E+01
			Sb-122	<4.09E+02	0.00E+00	4.09E+02
			Sb-125	<2.26E+02	0.00E+00	2.26E+02

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
553101	10/13/2021 - 10/13/2021		Mn-54	<6.47E+01	0.00E+00	6.47E+01
			Co-58	<6.42E+01	0.00E+00	6.42E+01
			Fe-59	<1.07E+02	0.00E+00	1.07E+02
			Co-60	<3.85E+01	0.00E+00	3.85E+01
			Zn-65	<1.21E+02	0.00E+00	1.21E+02
			Nb-95	<5.02E+01	0.00E+00	5.02E+01
			I-131	<6.46E+01	0.00E+00	6.46E+01
			Cs-134	<8.42E+01	0.00E+00	8.42E+01
			Cs-137	<8.80E+01	0.00E+00	8.80E+01
			Be-7	<4.32E+02	0.00E+00	4.32E+02
			K-40	4.75E+03	1.07E+03	1.41E+02
			Ag-110M	<6.13E+01	0.00E+00	6.13E+01
			Sb-122	<8.41E+01	0.00E+00	8.41E+01
			Sb-125	<1.76E+02	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
553102	10/13/2021 - 10/13/2021		Mn-54	<7.43E+01	0.00E+00	7.43E+01
			Co-58	<6.24E+01	0.00E+00	6.24E+01
			Fe-59	<1.38E+02	0.00E+00	1.38E+02
			Co-60	<7.51E+01	0.00E+00	7.51E+01
			Zn-65	<1.45E+02	0.00E+00	1.45E+02
			Nb-95	<8.86E+01	0.00E+00	8.86E+01
			I-131	<5.44E+01	0.00E+00	5.44E+01
			Cs-134	<5.41E+01	0.00E+00	5.41E+01
			Cs-137	<9.35E+01	0.00E+00	9.35E+01
			Be-7	<4.01E+02	0.00E+00	4.01E+02
			K-40	3.30E+03	1.14E+03	1.21E+03
			Ag-110M	<7.10E+01	0.00E+00	7.10E+01
			Sb-122	<1.06E+02	0.00E+00	1.06E+02
			Sb-125	<1.77E+02	0.00E+00	1.77E+02

Sample Point 063 [INDICATOR - ESE @ 0.8 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542631	4/13/2021 - 4/13/2021		Mn-54	<7.21E+01	0.00E+00	7.21E+01
			Co-58	<6.60E+01	0.00E+00	6.60E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 063 [INDICATOR - ESE @ 0.8 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542631	4/13/2021 - 4/13/2021	FREESWIM	Fe-59	<1.41E+02	0.00E+00	1.41E+02
			Co-60	<7.64E+01	0.00E+00	7.64E+01
			Zn-65	<1.05E+02	0.00E+00	1.05E+02
			Nb-95	<7.54E+01	0.00E+00	7.54E+01
			I-131	<1.15E+02	0.00E+00	1.15E+02
			Cs-134	<8.47E+01	0.00E+00	8.47E+01
			Cs-137	<7.02E+01	0.00E+00	7.02E+01
			Be-7	<5.59E+02	0.00E+00	5.59E+02
			K-40	5.39E+03	1.39E+03	1.20E+03
			Ag-110M	<8.27E+01	0.00E+00	8.27E+01
			Sb-122	<3.62E+02	0.00E+00	3.62E+02
			Sb-125	<1.69E+02	0.00E+00	1.69E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
542632	4/13/2021 - 4/13/2021	BOTMFEEDER	Mn-54	<6.82E+01	0.00E+00	6.82E+01
			Co-58	<7.03E+01	0.00E+00	7.03E+01
			Fe-59	<1.16E+02	0.00E+00	1.16E+02
			Co-60	<7.49E+01	0.00E+00	7.49E+01
			Zn-65	<1.53E+02	0.00E+00	1.53E+02
			Nb-95	<7.14E+01	0.00E+00	7.14E+01
			I-131	<1.03E+02	0.00E+00	1.03E+02
			Cs-134	<8.31E+01	0.00E+00	8.31E+01
			Cs-137	<7.23E+01	0.00E+00	7.23E+01
			Be-7	<2.98E+02	0.00E+00	2.98E+02
			K-40	4.86E+03	1.24E+03	1.02E+03
			Ag-110M	<6.76E+01	0.00E+00	6.76E+01
			Sb-122	<3.08E+02	0.00E+00	3.08E+02
			Sb-125	<1.78E+02	0.00E+00	1.78E+02

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
553103	10/12/2021 - 10/12/2021	FREESWIM	Mn-54	<6.72E+01	0.00E+00	6.72E+01
			Co-58	<6.06E+01	0.00E+00	6.06E+01
			Fe-59	<6.60E+01	0.00E+00	6.60E+01
			Co-60	<5.22E+01	0.00E+00	5.22E+01
			Zn-65	<1.58E+02	0.00E+00	1.58E+02
			Nb-95	<6.25E+01	0.00E+00	6.25E+01
			I-131	<7.94E+01	0.00E+00	7.94E+01
			Cs-134	<8.85E+01	0.00E+00	8.85E+01
			Cs-137	<8.92E+01	0.00E+00	8.92E+01
			Be-7	<4.75E+02	0.00E+00	4.75E+02
			K-40	4.50E+03	1.22E+03	1.13E+03
			Ag-110M	<6.67E+01	0.00E+00	6.67E+01
			Sb-122	<1.54E+02	0.00E+00	1.54E+02
			Sb-125	<1.62E+02	0.00E+00	1.62E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
553104	10/12/2021 - 10/13/2021	BOTMFEEDER	Mn-54	<7.02E+01	0.00E+00	7.02E+01
			Co-58	<6.06E+01	0.00E+00	6.06E+01
			Fe-59	<1.18E+02	0.00E+00	1.18E+02
			Co-60	<5.24E+01	0.00E+00	5.24E+01
			Zn-65	<1.20E+02	0.00E+00	1.20E+02
			Nb-95	<6.57E+01	0.00E+00	6.57E+01
			I-131	<6.52E+01	0.00E+00	6.52E+01
			Cs-134	<7.20E+01	0.00E+00	7.20E+01
			Cs-137	<6.28E+01	0.00E+00	6.28E+01
			Be-7	<4.34E+02	0.00E+00	4.34E+02
			K-40	3.17E+03	1.07E+03	1.15E+03
			Ag-110M	<6.15E+01	0.00E+00	6.15E+01
			Sb-122	<1.21E+02	0.00E+00	1.21E+02
			Sb-125	<1.23E+02	0.00E+00	1.23E+02

Sample Point 067 [INDICATOR - SSE @ 4.34 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542633	4/13/2021 - 4/13/2021	FREESWIM	Mn-54	<8.25E+01	0.00E+00	8.25E+01
			Co-58	<7.85E+01	0.00E+00	7.85E+01
			Fe-59	<1.89E+02	0.00E+00	1.89E+02
			Co-60	<9.55E+01	0.00E+00	9.55E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 067 [INDICATOR - SSE @ 4.34 miles]

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
542633	4/13/2021 - 4/13/2021		Zn-65	<1.70E+02	0.00E+00	1.70E+02
			Nb-95	<8.73E+01	0.00E+00	8.73E+01
			I-131	<1.19E+02	0.00E+00	1.19E+02
			Cs-134	<9.91E+01	0.00E+00	9.91E+01
			Cs-137	<7.02E+01	0.00E+00	7.02E+01
			Be-7	<6.44E+02	0.00E+00	6.44E+02
			K-40	5.60E+03	1.37E+03	1.00E+03
			Ag-110M	<6.00E+01	0.00E+00	6.00E+01
			Sb-122	<4.01E+02	0.00E+00	4.01E+02
			Sb-125	<2.14E+02	0.00E+00	2.14E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
542634	4/13/2021 - 4/13/2021		Mn-54	<9.90E+01	0.00E+00	9.90E+01
			Co-58	<5.94E+01	0.00E+00	5.94E+01
			Fe-59	<1.98E+02	0.00E+00	1.98E+02
			Co-60	<8.00E+01	0.00E+00	8.00E+01
			Zn-65	<1.43E+02	0.00E+00	1.43E+02
			Nb-95	<9.85E+01	0.00E+00	9.85E+01
			I-131	<1.27E+02	0.00E+00	1.27E+02
			Cs-134	<7.01E+01	0.00E+00	7.01E+01
			Cs-137	<1.07E+02	0.00E+00	1.07E+02
			Be-7	<6.54E+02	0.00E+00	6.54E+02
			K-40	4.52E+03	1.32E+03	1.23E+03
			Ag-110M	<7.30E+01	0.00E+00	7.30E+01
			Sb-122	<3.94E+02	0.00E+00	3.94E+02
			Sb-125	<1.54E+02	0.00E+00	1.54E+02

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
553105	10/12/2021 - 10/12/2021		Mn-54	<8.48E+01	0.00E+00	8.48E+01
			Co-58	<7.24E+01	0.00E+00	7.24E+01
			Fe-59	<1.73E+02	0.00E+00	1.73E+02
			Co-60	<9.47E+01	0.00E+00	9.47E+01
			Zn-65	<1.65E+02	0.00E+00	1.65E+02
			Nb-95	<6.70E+01	0.00E+00	6.70E+01
			I-131	<8.54E+01	0.00E+00	8.54E+01
			Cs-134	<7.75E+01	0.00E+00	7.75E+01
			Cs-137	<8.99E+01	0.00E+00	8.99E+01
			Be-7	<5.33E+02	0.00E+00	5.33E+02
			K-40	5.25E+03	1.34E+03	1.06E+03
			Ag-110M	<6.82E+01	0.00E+00	6.82E+01
			Sb-122	<1.52E+02	0.00E+00	1.52E+02
			Sb-125	<1.79E+02	0.00E+00	1.79E+02

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
553106	10/12/2021 - 10/13/2021		Mn-54	<5.50E+01	0.00E+00	5.50E+01
			Co-58	<7.15E+01	0.00E+00	7.15E+01
			Fe-59	<8.79E+01	0.00E+00	8.79E+01
			Co-60	<7.67E+01	0.00E+00	7.67E+01
			Zn-65	<1.36E+02	0.00E+00	1.36E+02
			Nb-95	<5.98E+01	0.00E+00	5.98E+01
			I-131	<7.14E+01	0.00E+00	7.14E+01
			Cs-134	<5.82E+01	0.00E+00	5.82E+01
			Cs-137	<6.55E+01	0.00E+00	6.55E+01
			Be-7	<4.94E+02	0.00E+00	4.94E+02
			K-40	3.78E+03	1.10E+03	1.12E+03
			Ag-110M	<4.54E+01	0.00E+00	4.54E+01
			Sb-122	<1.35E+02	0.00E+00	1.35E+02
			Sb-125	<1.25E+02	0.00E+00	1.25E+02

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536807	1/5/2021 - 1/5/2021	I-131	<6.08E+00	0.00E+00	6.08E+00
		Cs-134	<6.55E+00	0.00E+00	6.55E+00
		Cs-137	<8.06E+00	0.00E+00	8.06E+00
		BaLa-140	<7.72E+00	0.00E+00	7.72E+00
		Be-7	<4.57E+01	0.00E+00	4.57E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536807	1/5/2021 - 1/5/2021	K-40	1.68E+03	2.48E+02	1.78E+01
		LLI-131	<6.83E-01	0.00E+00	6.83E-01
537701	1/19/2021 - 1/19/2021	I-131	<7.95E+00	0.00E+00	7.95E+00
		Cs-134	<8.66E+00	0.00E+00	8.66E+00
		Cs-137	<8.77E+00	0.00E+00	8.77E+00
		BaLa-140	<6.37E+00	0.00E+00	6.37E+00
		Be-7	<5.19E+01	0.00E+00	5.19E+01
		K-40	1.49E+03	2.36E+02	1.08E+02
		LLI-131	<6.21E-01	0.00E+00	6.21E-01
538342	2/1/2021 - 2/1/2021	I-131	<8.40E+00	0.00E+00	8.40E+00
		Cs-134	<9.89E+00	0.00E+00	9.89E+00
		Cs-137	<5.21E+00	0.00E+00	5.21E+00
		BaLa-140	<7.73E+00	0.00E+00	7.73E+00
		Be-7	<6.31E+01	0.00E+00	6.31E+01
		K-40	1.18E+03	2.10E+02	1.27E+02
		LLI-131	<5.94E-01	0.00E+00	5.94E-01
538835	2/15/2021 - 2/15/2021	I-131	<5.83E+00	0.00E+00	5.83E+00
		Cs-134	<8.33E+00	0.00E+00	8.33E+00
		Cs-137	<6.93E+00	0.00E+00	6.93E+00
		BaLa-140	<9.13E+00	0.00E+00	9.13E+00
		Be-7	<3.95E+01	0.00E+00	3.95E+01
		K-40	1.50E+03	2.36E+02	8.21E+01
		LLI-131	<6.23E-01	0.00E+00	6.23E-01
539295	3/1/2021 - 3/1/2021	I-131	<7.40E+00	0.00E+00	7.40E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<7.73E+00	0.00E+00	7.73E+00
		BaLa-140	<6.15E+00	0.00E+00	6.15E+00
		Be-7	<5.39E+01	0.00E+00	5.39E+01
		K-40	1.68E+03	2.59E+02	1.39E+02
		LLI-131	<5.41E-01	0.00E+00	5.41E-01
540738	3/15/2021 - 3/15/2021	I-131	<7.25E+00	0.00E+00	7.25E+00
		Cs-134	<7.25E+00	0.00E+00	7.25E+00
		Cs-137	<4.55E+00	0.00E+00	4.55E+00
		BaLa-140	<2.27E+00	0.00E+00	2.27E+00
		Be-7	<3.93E+01	0.00E+00	3.93E+01
		K-40	1.33E+03	2.22E+02	1.06E+02
		LLI-131	<6.15E-01	0.00E+00	6.15E-01
541979	3/29/2021 - 3/29/2021	I-131	<5.02E+00	0.00E+00	5.02E+00
		Cs-134	<5.87E+00	0.00E+00	5.87E+00
		Cs-137	<9.73E+00	0.00E+00	9.73E+00
		BaLa-140	<6.11E+00	0.00E+00	6.11E+00
		Be-7	<6.09E+01	0.00E+00	6.09E+01
		K-40	1.46E+03	2.31E+02	8.42E+01
		LLI-131	<4.27E-01	0.00E+00	4.27E-01
542896	4/12/2021 - 4/12/2021	I-131	<7.79E+00	0.00E+00	7.79E+00
		Cs-134	<7.77E+00	0.00E+00	7.77E+00
		Cs-137	<9.17E+00	0.00E+00	9.17E+00
		BaLa-140	<2.25E+00	0.00E+00	2.25E+00
		Be-7	<5.12E+01	0.00E+00	5.12E+01
		K-40	1.48E+03	2.37E+02	1.18E+02
		LLI-131	<5.86E-01	0.00E+00	5.86E-01
544135	4/26/2021 - 4/26/2021	I-131	<7.65E+00	0.00E+00	7.65E+00
		Cs-134	<7.64E+00	0.00E+00	7.64E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544135	4/26/2021 - 4/26/2021	Cs-137	<7.60E+00	0.00E+00	7.60E+00
		BaLa-140	<6.15E+00	0.00E+00	6.15E+00
		Be-7	<3.85E+01	0.00E+00	3.85E+01
		K-40	1.17E+03	2.05E+02	1.02E+02
		LLI-131	<7.08E-01	0.00E+00	7.08E-01
544669	5/10/2021 - 5/10/2021	I-131	<6.31E+00	0.00E+00	6.31E+00
		Cs-134	<8.74E+00	0.00E+00	8.74E+00
		Cs-137	<1.04E+01	0.00E+00	1.04E+01
		BaLa-140	<2.26E+00	0.00E+00	2.26E+00
		Be-7	<5.63E+01	0.00E+00	5.63E+01
		K-40	1.39E+03	2.26E+02	1.01E+02
545524	5/24/2021 - 5/24/2021	LLI-131	<6.17E-01	0.00E+00	6.17E-01
		I-131	<8.58E+00	0.00E+00	8.58E+00
		Cs-134	<7.19E+00	0.00E+00	7.19E+00
		Cs-137	<9.77E+00	0.00E+00	9.77E+00
		BaLa-140	<1.00E+01	0.00E+00	1.00E+01
		Be-7	<5.88E+01	0.00E+00	5.88E+01
546057	6/7/2021 - 6/7/2021	K-40	1.51E+03	2.42E+02	1.25E+02
		LLI-131	<8.69E-01	0.00E+00	8.69E-01
		I-131	<7.72E+00	0.00E+00	7.72E+00
		Cs-134	<6.50E+00	0.00E+00	6.50E+00
		Cs-137	<9.02E+00	0.00E+00	9.02E+00
		BaLa-140	<1.19E+01	0.00E+00	1.19E+01
547217	6/21/2021 - 6/21/2021	Be-7	<4.93E+01	0.00E+00	4.93E+01
		K-40	1.51E+03	2.38E+02	1.09E+02
		LLI-131	<8.27E-01	0.00E+00	8.27E-01
		I-131	<7.41E+00	0.00E+00	7.41E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<8.12E+00	0.00E+00	8.12E+00
54765	7/6/2021 - 7/6/2021	BaLa-140	<6.15E+00	0.00E+00	6.15E+00
		Be-7	<5.63E+01	0.00E+00	5.63E+01
		K-40	1.50E+03	2.31E+02	1.78E+01
		LLI-131	<6.03E-01	0.00E+00	6.03E-01
		I-131	<7.97E+00	0.00E+00	7.97E+00
		Cs-134	<9.51E+00	0.00E+00	9.51E+00
548552	7/19/2021 - 7/19/2021	Cs-137	<9.73E+00	0.00E+00	9.73E+00
		BaLa-140	<2.35E+00	0.00E+00	2.35E+00
		Be-7	<6.16E+01	0.00E+00	6.16E+01
		K-40	1.53E+03	2.39E+02	9.97E+01
		LLI-131	<1.10E+00	0.00E+00	1.10E+00
		I-131	<6.46E+00	0.00E+00	6.46E+00
549004	8/2/2021 - 8/2/2021	Cs-134	<9.75E+00	0.00E+00	9.75E+00
		Cs-137	<6.79E+00	0.00E+00	6.79E+00
		BaLa-140	<6.60E+00	0.00E+00	6.60E+00
		Be-7	<5.18E+01	0.00E+00	5.18E+01
		K-40	1.36E+03	2.33E+02	1.29E+02
		LLI-131	<8.23E-01	0.00E+00	8.23E-01
549004	8/2/2021 - 8/2/2021	I-131	<8.22E+00	0.00E+00	8.22E+00
		Cs-134	<6.66E+00	0.00E+00	6.66E+00
		Cs-137	<7.80E+00	0.00E+00	7.80E+00
		BaLa-140	<6.22E+00	0.00E+00	6.22E+00
		Be-7	<3.05E+01	0.00E+00	3.05E+01
		K-40	1.68E+03	2.53E+02	8.67E+01
549004	8/2/2021 - 8/2/2021	LLI-131	<6.20E-01	0.00E+00	6.20E-01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549790	8/16/2021 - 8/16/2021	LLI-131	<5.82E-01	0.00E+00	5.82E-01
		I-131	<9.09E+00	0.00E+00	9.09E+00
		Cs-134	<8.33E+00	0.00E+00	8.33E+00
		Cs-137	<9.58E+00	0.00E+00	9.58E+00
		BaLa-140	<6.51E+00	0.00E+00	6.51E+00
		Be-7	<4.35E+01	0.00E+00	4.35E+01
		K-40	1.60E+03	2.45E+02	8.01E+01
550696	8/30/2021 - 8/30/2021	LLI-131	<6.04E-01	0.00E+00	6.04E-01
		I-131	<8.01E+00	0.00E+00	8.01E+00
		Cs-134	<7.77E+00	0.00E+00	7.77E+00
		Cs-137	<8.84E+00	0.00E+00	8.84E+00
		BaLa-140	<2.24E+00	0.00E+00	2.24E+00
		Be-7	<4.55E+01	0.00E+00	4.55E+01
		K-40	1.61E+03	2.47E+02	1.09E+02
551707	9/13/2021 - 9/13/2021	LLI-131	<6.42E-01	0.00E+00	6.42E-01
		I-131	<7.64E+00	0.00E+00	7.64E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<8.49E+00	0.00E+00	8.49E+00
		BaLa-140	<7.76E+00	0.00E+00	7.76E+00
		Be-7	<6.30E+01	0.00E+00	6.30E+01
		K-40	1.59E+03	2.41E+02	7.14E+01
552485	9/27/2021 - 9/27/2021	LLI-131	<6.21E-01	0.00E+00	6.21E-01
		I-131	<7.66E+00	0.00E+00	7.66E+00
		Cs-134	<5.93E+00	0.00E+00	5.93E+00
		Cs-137	<7.74E+00	0.00E+00	7.74E+00
		BaLa-140	<6.15E+00	0.00E+00	6.15E+00
		Be-7	<6.92E+01	0.00E+00	6.92E+01
		K-40	1.73E+03	2.60E+02	1.10E+02
553291	10/11/2021 - 10/11/2021	LLI-131	<6.36E-01	0.00E+00	6.36E-01
		I-131	<7.75E+00	0.00E+00	7.75E+00
		Cs-134	<9.41E+00	0.00E+00	9.41E+00
		Cs-137	<6.76E+00	0.00E+00	6.76E+00
		BaLa-140	<6.10E+00	0.00E+00	6.10E+00
		Be-7	<4.56E+01	0.00E+00	4.56E+01
		K-40	1.52E+03	2.36E+02	7.71E+01
554315	10/25/2021 - 10/25/2021	LLI-131	<5.86E-01	0.00E+00	5.86E-01
		I-131	<7.06E+00	0.00E+00	7.06E+00
		Cs-134	<8.24E+00	0.00E+00	8.24E+00
		Cs-137	<9.02E+00	0.00E+00	9.02E+00
		BaLa-140	<8.27E+00	0.00E+00	8.27E+00
		Be-7	<5.19E+01	0.00E+00	5.19E+01
		K-40	1.22E+03	2.19E+02	1.26E+02
555129	11/8/2021 - 11/8/2021	LLI-131	<6.05E-01	0.00E+00	6.05E-01
		I-131	<8.17E+00	0.00E+00	8.17E+00
		Cs-134	<8.27E+00	0.00E+00	8.27E+00
		Cs-137	<8.84E+00	0.00E+00	8.84E+00
		BaLa-140	<7.80E+00	0.00E+00	7.80E+00
		Be-7	<5.64E+01	0.00E+00	5.64E+01
		K-40	1.47E+03	2.31E+02	8.25E+01
556777	11/22/2021 - 11/22/2021	LLI-131	<5.87E-01	0.00E+00	5.87E-01
		I-131	<6.29E+00	0.00E+00	6.29E+00
		Cs-134	<5.92E+00	0.00E+00	5.92E+00
		Cs-137	<1.01E+01	0.00E+00	1.01E+01
		BaLa-140	<2.13E+00	0.00E+00	2.13E+00
		Be-7	<4.49E+01	0.00E+00	4.49E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: MILK Concentration (Activity): pCi/l

Sample Point 071 [CONTROL - SSE @ 10.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556777	11/22/2021 - 11/22/2021	K-40	1.73E+03	2.55E+02	7.30E+01
557522	12/6/2021 - 12/6/2021	LLI-131	<6.49E-01	0.00E+00	6.49E-01
		I-131	<7.71E+00	0.00E+00	7.71E+00
		Cs-134	<7.23E+00	0.00E+00	7.23E+00
		Cs-137	<8.13E+00	0.00E+00	8.13E+00
		BaLa-140	<9.03E+00	0.00E+00	9.03E+00
		Be-7	<6.53E+01	0.00E+00	6.53E+01
		K-40	1.61E+03	2.46E+02	9.28E+01
558426	12/20/2021 - 12/20/2021	LLI-131	<6.43E-01	0.00E+00	6.43E-01
		I-131	<5.53E+00	0.00E+00	5.53E+00
		Cs-134	<7.76E+00	0.00E+00	7.76E+00
		Cs-137	<8.49E+00	0.00E+00	8.49E+00
		BaLa-140	<5.82E+00	0.00E+00	5.82E+00
		Be-7	<4.18E+01	0.00E+00	4.18E+01
		K-40	1.39E+03	2.20E+02	1.78E+01

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

Sample Point 067 [INDICATOR - SSE @ 4.34 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540090	4/5/2021 - 4/5/2021	Mn-54	<6.42E+01	0.00E+00	6.42E+01
		Co-58	<4.59E+01	0.00E+00	4.59E+01
		Fe-59	<8.60E+01	0.00E+00	8.60E+01
		Co-60	<4.66E+01	0.00E+00	4.66E+01
		Zn-65	<1.03E+02	0.00E+00	1.03E+02
		Zr-95	<1.01E+02	0.00E+00	1.01E+02
		Nb-95	<6.60E+01	0.00E+00	6.60E+01
		I-131	<8.57E+01	0.00E+00	8.57E+01
		Cs-134	<7.64E+01	0.00E+00	7.64E+01
		Cs-137	<6.19E+01	0.00E+00	6.19E+01
		Be-7	2.50E+02	3.62E+02	6.00E+02
		K-40	1.00E+04	1.36E+03	7.62E+02
		Co-57	<4.66E+01	0.00E+00	4.66E+01
		Mo-99	<2.59E+03	0.00E+00	2.59E+03
		Ag-110M	<5.19E+01	0.00E+00	5.19E+01
		Sb-122	<4.56E+02	0.00E+00	4.56E+02
		Sb-125	<1.28E+02	0.00E+00	1.28E+02
551708	10/11/2021 - 10/11/2021	Mn-54	<8.27E+01	0.00E+00	8.27E+01
		Co-58	<6.76E+01	0.00E+00	6.76E+01
		Fe-59	<1.73E+02	0.00E+00	1.73E+02
		Co-60	<8.52E+01	0.00E+00	8.52E+01
		Zn-65	<1.64E+02	0.00E+00	1.64E+02
		Zr-95	<1.56E+02	0.00E+00	1.56E+02
		Nb-95	<1.12E+02	0.00E+00	1.12E+02
		I-131	<2.93E+02	0.00E+00	2.93E+02
		Cs-134	<9.12E+01	0.00E+00	9.12E+01
		Cs-137	<9.50E+01	0.00E+00	9.50E+01
		Be-7	<7.13E+02	0.00E+00	7.13E+02
		K-40	7.60E+03	1.41E+03	5.61E+02
		Co-57	<6.03E+01	0.00E+00	6.03E+01
		Mo-99	<4.42E+04	0.00E+00	4.42E+04
		Ag-110M	<7.51E+01	0.00E+00	7.51E+01
		Sb-122	<6.54E+03	0.00E+00	6.54E+03
		Sb-125	<1.52E+02	0.00E+00	1.52E+02

Sample Point 068 [CONTROL - W @ 1.82 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540091	4/5/2021 - 4/5/2021	Mn-54	<2.52E+01	0.00E+00	2.52E+01
		Co-58	<5.33E+01	0.00E+00	5.33E+01
		Fe-59	<8.83E+01	0.00E+00	8.83E+01
		Co-60	<6.28E+01	0.00E+00	6.28E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 068 [CONTROL - W @ 1.82 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540091	4/5/2021 - 4/5/2021	Zn-65	<1.21E+02	0.00E+00	1.21E+02
		Zr-95	<5.77E+01	0.00E+00	5.77E+01
		Nb-95	<7.33E+01	0.00E+00	7.33E+01
		I-131	<6.72E+01	0.00E+00	6.72E+01
		Cs-134	<6.66E+01	0.00E+00	6.66E+01
		Cs-137	<4.69E+01	0.00E+00	4.69E+01
		Be-7	<5.78E+02	0.00E+00	5.78E+02
		K-40	9.23E+03	1.54E+03	4.87E+02
		Co-57	<3.80E+01	0.00E+00	3.80E+01
		Mo-99	<2.02E+03	0.00E+00	2.02E+03
		Ag-110M	<5.24E+01	0.00E+00	5.24E+01
		Sb-122	<3.71E+02	0.00E+00	3.71E+02
		Sb-125	<1.17E+02	0.00E+00	1.17E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551709	10/11/2021 - 10/11/2021	Mn-54	<5.13E+01	0.00E+00	5.13E+01
		Co-58	<3.38E+01	0.00E+00	3.38E+01
		Fe-59	<1.17E+02	0.00E+00	1.17E+02
		Co-60	<4.08E+01	0.00E+00	4.08E+01
		Zn-65	<1.28E+02	0.00E+00	1.28E+02
		Zr-95	<7.74E+01	0.00E+00	7.74E+01
		Nb-95	<5.87E+01	0.00E+00	5.87E+01
		I-131	<1.69E+02	0.00E+00	1.69E+02
		Cs-134	<5.03E+01	0.00E+00	5.03E+01
		Cs-137	<4.61E+01	0.00E+00	4.61E+01
		Be-7	<4.30E+02	0.00E+00	4.30E+02
		K-40	4.74E+03	1.04E+03	6.60E+02
		Co-57	<3.35E+01	0.00E+00	3.35E+01
		Mo-99	<3.00E+04	0.00E+00	3.00E+04
		Ag-110M	<3.07E+01	0.00E+00	3.07E+01
		Sb-122	<5.47E+03	0.00E+00	5.47E+03
		Sb-125	<9.67E+01	0.00E+00	9.67E+01

Sample Point 091 [INDICATOR - S @ 2.09 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540092	4/5/2021 - 4/5/2021	Mn-54	<5.76E+01	0.00E+00	5.76E+01
		Co-58	<6.15E+01	0.00E+00	6.15E+01
		Fe-59	<1.50E+02	0.00E+00	1.50E+02
		Co-60	<6.77E+01	0.00E+00	6.77E+01
		Zn-65	<1.52E+02	0.00E+00	1.52E+02
		Zr-95	<1.38E+02	0.00E+00	1.38E+02
		Nb-95	<7.56E+01	0.00E+00	7.56E+01
		I-131	<1.04E+02	0.00E+00	1.04E+02
		Cs-134	<8.87E+01	0.00E+00	8.87E+01
		Cs-137	1.38E+02	7.89E+01	1.19E+02
		Be-7	<5.62E+02	0.00E+00	5.62E+02
		K-40	2.69E+04	3.01E+03	6.69E+02
		Co-57	<5.80E+01	0.00E+00	5.80E+01
		Mo-99	<2.90E+03	0.00E+00	2.90E+03
		Ag-110M	<6.34E+01	0.00E+00	6.34E+01
		Sb-122	<4.28E+02	0.00E+00	4.28E+02
		Sb-125	<1.58E+02	0.00E+00	1.58E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551710	10/11/2021 - 10/11/2021	Mn-54	<5.16E+01	0.00E+00	5.16E+01
		Co-58	<6.28E+01	0.00E+00	6.28E+01
		Fe-59	<8.98E+01	0.00E+00	8.98E+01
		Co-60	<7.56E+01	0.00E+00	7.56E+01
		Zn-65	<1.26E+02	0.00E+00	1.26E+02
		Zr-95	<1.11E+02	0.00E+00	1.11E+02
		Nb-95	<6.62E+01	0.00E+00	6.62E+01
		I-131	<1.94E+02	0.00E+00	1.94E+02
		Cs-134	<7.66E+01	0.00E+00	7.66E+01
		Cs-137	<6.38E+01	0.00E+00	6.38E+01
		Be-7	<4.84E+02	0.00E+00	4.84E+02
		K-40	1.70E+04	2.17E+03	4.83E+02
		Co-57	<3.16E+01	0.00E+00	3.16E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 091 [INDICATOR - S @ 2.09 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551710	10/11/2021 - 10/11/2021	Mo-99	<3.30E+04	0.00E+00	3.30E+04
		Ag-110M	<4.10E+01	0.00E+00	4.10E+01
		Sb-122	<4.81E+03	0.00E+00	4.81E+03
		Sb-125	<1.19E+02	0.00E+00	1.19E+02

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

Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537785	12/28/2020 - 1/25/2021	Mn-54	<1.87E+00	0.00E+00	1.87E+00
		Co-58	<2.02E+00	0.00E+00	2.02E+00
		Fe-59	<4.52E+00	0.00E+00	4.52E+00
		Co-60	<1.58E+00	0.00E+00	1.58E+00
		Zn-65	<3.67E+00	0.00E+00	3.67E+00
		Zr-95	<4.25E+00	0.00E+00	4.25E+00
		Nb-95	<2.79E+00	0.00E+00	2.79E+00
		I-131	<8.32E+00	0.00E+00	8.32E+00
		Cs-134	<2.39E+00	0.00E+00	2.39E+00
		Cs-137	<2.01E+00	0.00E+00	2.01E+00
		BaLa-140	<4.78E+00	0.00E+00	4.78E+00
		Be-7	<2.03E+01	0.00E+00	2.03E+01
		K-40	9.72E+01	2.65E+01	3.08E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538890	1/25/2021 - 2/22/2021	Mn-54	<2.90E+00	0.00E+00	2.90E+00
		Co-58	<3.54E+00	0.00E+00	3.54E+00
		Fe-59	<6.72E+00	0.00E+00	6.72E+00
		Co-60	<2.31E+00	0.00E+00	2.31E+00
		Zn-65	<4.65E+00	0.00E+00	4.65E+00
		Zr-95	<6.45E+00	0.00E+00	6.45E+00
		Nb-95	<4.60E+00	0.00E+00	4.60E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.59E+00	0.00E+00	3.59E+00
		Cs-137	<3.63E+00	0.00E+00	3.63E+00
		BaLa-140	<9.83E+00	0.00E+00	9.83E+00
		Be-7	<2.58E+01	0.00E+00	2.58E+01
		K-40	1.07E+02	3.75E+01	4.29E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541062	2/22/2021 - 3/22/2021	Mn-54	<3.07E+00	0.00E+00	3.07E+00
		Co-58	<3.26E+00	0.00E+00	3.26E+00
		Fe-59	<6.49E+00	0.00E+00	6.49E+00
		Co-60	<3.03E+00	0.00E+00	3.03E+00
		Zn-65	<6.26E+00	0.00E+00	6.26E+00
		Zr-95	<5.49E+00	0.00E+00	5.49E+00
		Nb-95	<2.45E+00	0.00E+00	2.45E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<2.82E+00	0.00E+00	2.82E+00
		Cs-137	<2.21E+00	0.00E+00	2.21E+00
		BaLa-140	<5.20E+00	0.00E+00	5.20E+00
		Be-7	<2.51E+01	0.00E+00	2.51E+01
		K-40	7.82E+01	3.34E+01	4.30E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542720	12/28/2020 - 4/19/2021	H3SW	<-1.3E+02	0.00E+00	2.01E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542957	3/22/2021 - 4/19/2021	Mn-54	<2.41E+00	0.00E+00	2.41E+00
		Co-58	<3.31E+00	0.00E+00	3.31E+00
		Fe-59	<5.80E+00	0.00E+00	5.80E+00
		Co-60	<2.19E+00	0.00E+00	2.19E+00
		Zn-65	<6.11E+00	0.00E+00	6.11E+00
		Zr-95	<5.98E+00	0.00E+00	5.98E+00
		Nb-95	<3.86E+00	0.00E+00	3.86E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<2.97E+00	0.00E+00	2.97E+00
		Cs-137	<2.99E+00	0.00E+00	2.99E+00
		BaLa-140	<6.91E+00	0.00E+00	6.91E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542957	3/22/2021 - 4/19/2021	Be-7	<2.81E+01	0.00E+00	2.81E+01
		K-40	8.00E+01	3.56E+01	4.88E+01
544852	4/19/2021 - 5/17/2021	Mn-54	<3.37E+00	0.00E+00	3.37E+00
		Co-58	<3.10E+00	0.00E+00	3.10E+00
		Fe-59	<6.25E+00	0.00E+00	6.25E+00
		Co-60	<3.56E+00	0.00E+00	3.56E+00
		Zn-65	<6.88E+00	0.00E+00	6.88E+00
		Zr-95	<6.84E+00	0.00E+00	6.84E+00
		Nb-95	<4.33E+00	0.00E+00	4.33E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<3.37E+00	0.00E+00	3.37E+00
		Cs-137	<3.81E+00	0.00E+00	3.81E+00
		BaLa-140	<4.59E+00	0.00E+00	4.59E+00
		Be-7	<3.21E+01	0.00E+00	3.21E+01
		K-40	6.67E+01	3.94E+01	5.64E+01
546783	5/17/2021 - 6/14/2021	Mn-54	<2.53E+00	0.00E+00	2.53E+00
		Co-58	<3.16E+00	0.00E+00	3.16E+00
		Fe-59	<7.11E+00	0.00E+00	7.11E+00
		Co-60	<3.14E+00	0.00E+00	3.14E+00
		Zn-65	<5.32E+00	0.00E+00	5.32E+00
		Zr-95	<5.75E+00	0.00E+00	5.75E+00
		Nb-95	<3.37E+00	0.00E+00	3.37E+00
		I-131	<1.09E+01	0.00E+00	1.09E+01
		Cs-134	<3.46E+00	0.00E+00	3.46E+00
		Cs-137	<2.61E+00	0.00E+00	2.61E+00
		BaLa-140	<8.38E+00	0.00E+00	8.38E+00
		Be-7	<2.50E+01	0.00E+00	2.50E+01
		K-40	1.03E+02	3.55E+01	4.11E+01
547917	6/14/2021 - 7/12/2021	Mn-54	<2.43E+00	0.00E+00	2.43E+00
		Co-58	<2.94E+00	0.00E+00	2.94E+00
		Fe-59	<5.44E+00	0.00E+00	5.44E+00
		Co-60	<3.25E+00	0.00E+00	3.25E+00
		Zn-65	<6.26E+00	0.00E+00	6.26E+00
		Zr-95	<6.60E+00	0.00E+00	6.60E+00
		Nb-95	<3.88E+00	0.00E+00	3.88E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<3.44E+00	0.00E+00	3.44E+00
		Cs-137	<2.92E+00	0.00E+00	2.92E+00
		BaLa-140	<7.66E+00	0.00E+00	7.66E+00
		Be-7	<2.49E+01	0.00E+00	2.49E+01
		K-40	6.93E+01	3.47E+01	4.70E+01
548015	4/19/2021 - 7/12/2021	H3SW	<-1.4E+01	0.00E+00	1.72E+02
549100	7/12/2021 - 8/9/2021	Mn-54	<2.74E+00	0.00E+00	2.74E+00
		Co-58	<2.40E+00	0.00E+00	2.40E+00
		Fe-59	<7.02E+00	0.00E+00	7.02E+00
		Co-60	<2.89E+00	0.00E+00	2.89E+00
		Zn-65	<5.84E+00	0.00E+00	5.84E+00
		Zr-95	<4.88E+00	0.00E+00	4.88E+00
		Nb-95	<3.43E+00	0.00E+00	3.43E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.94E+00	0.00E+00	2.94E+00
		Cs-137	<3.18E+00	0.00E+00	3.18E+00
		BaLa-140	<8.51E+00	0.00E+00	8.51E+00
		Be-7	<2.76E+01	0.00E+00	2.76E+01
		K-40	1.05E+02	3.58E+01	4.01E+01
550939	8/9/2021 - 9/7/2021	Mn-54	<2.82E+00	0.00E+00	2.82E+00
		Co-58	<3.09E+00	0.00E+00	3.09E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA		
550939	8/9/2021 - 9/7/2021	Fe-59	<6.28E+00	0.00E+00	6.28E+00		
		Co-60	<3.00E+00	0.00E+00	3.00E+00		
		Zn-65	<5.54E+00	0.00E+00	5.54E+00		
		Zr-95	<5.99E+00	0.00E+00	5.99E+00		
		Nb-95	<3.61E+00	0.00E+00	3.61E+00		
		I-131	<1.14E+01	0.00E+00	1.14E+01		
		Cs-134	<3.44E+00	0.00E+00	3.44E+00		
		Cs-137	<3.27E+00	0.00E+00	3.27E+00		
		BaLa-140	<7.62E+00	0.00E+00	7.62E+00		
		Be-7	<2.56E+01	0.00E+00	2.56E+01		
		K-40	8.50E+01	3.06E+01	3.55E+01		
		552536	9/7/2021 - 10/4/2021	Mn-54	<2.97E+00	0.00E+00	2.97E+00
				Co-58	<3.54E+00	0.00E+00	3.54E+00
Fe-59	<8.08E+00			0.00E+00	8.08E+00		
Co-60	<3.44E+00			0.00E+00	3.44E+00		
Zn-65	<6.99E+00			0.00E+00	6.99E+00		
Zr-95	<5.85E+00			0.00E+00	5.85E+00		
Nb-95	<5.39E+00			0.00E+00	5.39E+00		
I-131	<1.19E+01			0.00E+00	1.19E+01		
Cs-134	<3.88E+00			0.00E+00	3.88E+00		
Cs-137	<3.48E+00			0.00E+00	3.48E+00		
BaLa-140	<6.40E+00			0.00E+00	6.40E+00		
Be-7	<3.05E+01			0.00E+00	3.05E+01		
K-40	7.93E+01			3.76E+01	4.94E+01		
553192	7/12/2021 - 10/4/2021	Nuclide	Activity	2 Sigma Error	MDA		
		H3SW	<-8.6E+01	0.00E+00	1.77E+02		
554414	10/4/2021 - 11/1/2021	Mn-54	<3.40E+00	0.00E+00	3.40E+00		
		Co-58	<3.79E+00	0.00E+00	3.79E+00		
		Fe-59	<7.35E+00	0.00E+00	7.35E+00		
		Co-60	<3.11E+00	0.00E+00	3.11E+00		
		Zn-65	<5.45E+00	0.00E+00	5.45E+00		
		Zr-95	<6.57E+00	0.00E+00	6.57E+00		
		Nb-95	<3.96E+00	0.00E+00	3.96E+00		
		I-131	<1.10E+01	0.00E+00	1.10E+01		
		Cs-134	<3.09E+00	0.00E+00	3.09E+00		
		Cs-137	<2.50E+00	0.00E+00	2.50E+00		
		BaLa-140	<7.79E+00	0.00E+00	7.79E+00		
		Be-7	<2.03E+01	0.00E+00	2.03E+01		
		K-40	<3.66E+01	0.00E+00	3.66E+01		
556846	11/1/2021 - 11/29/2021	Mn-54	<2.54E+00	0.00E+00	2.54E+00		
		Co-58	<2.30E+00	0.00E+00	2.30E+00		
		Fe-59	<5.00E+00	0.00E+00	5.00E+00		
		Co-60	<2.10E+00	0.00E+00	2.10E+00		
		Zn-65	<5.16E+00	0.00E+00	5.16E+00		
		Zr-95	<4.40E+00	0.00E+00	4.40E+00		
		Nb-95	<2.89E+00	0.00E+00	2.89E+00		
		I-131	<8.52E+00	0.00E+00	8.52E+00		
		Cs-134	<2.82E+00	0.00E+00	2.82E+00		
		Cs-137	<2.30E+00	0.00E+00	2.30E+00		
		BaLa-140	<5.53E+00	0.00E+00	5.53E+00		
		Be-7	<2.78E+01	0.00E+00	2.78E+01		
		K-40	9.41E+01	2.89E+01	3.44E+01		
558517	11/29/2021 - 12/27/2021	Nuclide	Activity	2 Sigma Error	MDA		
		Mn-54	<3.61E+00	0.00E+00	3.61E+00		
		Co-58	<2.91E+00	0.00E+00	2.91E+00		
		Fe-59	<5.94E+00	0.00E+00	5.94E+00		
		Co-60	<3.17E+00	0.00E+00	3.17E+00		
		Zn-65	<6.14E+00	0.00E+00	6.14E+00		
		Zr-95	<5.58E+00	0.00E+00	5.58E+00		
		Nb-95	<4.32E+00	0.00E+00	4.32E+00		

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 062 [CONTROL - ENE @ 0.85 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558517	11/29/2021 - 12/27/2021	I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.46E+00	0.00E+00	3.46E+00
		Cs-137	<3.43E+00	0.00E+00	3.43E+00
		BaLa-140	<8.81E+00	0.00E+00	8.81E+00
		Be-7	<3.55E+01	0.00E+00	3.55E+01
		K-40	6.77E+01	3.38E+01	4.50E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558935	10/4/2021 - 12/27/2021	H3SW	<-1.1E+02	0.00E+00	1.85E+02

Sample Point 063.1 [INDICATOR - E @ 0.79 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537786	12/28/2020 - 1/25/2021	Mn-54	<3.27E+00	0.00E+00	3.27E+00
		Co-58	<2.08E+00	0.00E+00	2.08E+00
		Fe-59	<5.97E+00	0.00E+00	5.97E+00
		Co-60	<3.44E+00	0.00E+00	3.44E+00
		Zn-65	<5.26E+00	0.00E+00	5.26E+00
		Zr-95	<6.32E+00	0.00E+00	6.32E+00
		Nb-95	<4.47E+00	0.00E+00	4.47E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.08E+00	0.00E+00	3.08E+00
		Cs-137	<3.25E+00	0.00E+00	3.25E+00
		BaLa-140	<8.88E+00	0.00E+00	8.88E+00
		Be-7	<2.25E+01	0.00E+00	2.25E+01
		K-40	6.25E+01	2.84E+01	3.43E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538891	1/25/2021 - 2/22/2021	Mn-54	<2.94E+00	0.00E+00	2.94E+00
		Co-58	<2.91E+00	0.00E+00	2.91E+00
		Fe-59	<6.91E+00	0.00E+00	6.91E+00
		Co-60	<2.59E+00	0.00E+00	2.59E+00
		Zn-65	<6.05E+00	0.00E+00	6.05E+00
		Zr-95	<6.72E+00	0.00E+00	6.72E+00
		Nb-95	<4.27E+00	0.00E+00	4.27E+00
		I-131	<1.07E+01	0.00E+00	1.07E+01
		Cs-134	<3.05E+00	0.00E+00	3.05E+00
		Cs-137	<2.60E+00	0.00E+00	2.60E+00
		BaLa-140	<7.32E+00	0.00E+00	7.32E+00
		Be-7	<2.59E+01	0.00E+00	2.59E+01
		K-40	5.76E+01	2.94E+01	4.02E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541063	2/22/2021 - 3/22/2021	Mn-54	<2.06E+00	0.00E+00	2.06E+00
		Co-58	<2.35E+00	0.00E+00	2.35E+00
		Fe-59	<5.01E+00	0.00E+00	5.01E+00
		Co-60	<2.12E+00	0.00E+00	2.12E+00
		Zn-65	<4.66E+00	0.00E+00	4.66E+00
		Zr-95	<4.07E+00	0.00E+00	4.07E+00
		Nb-95	<3.19E+00	0.00E+00	3.19E+00
		I-131	<9.12E+00	0.00E+00	9.12E+00
		Cs-134	<2.69E+00	0.00E+00	2.69E+00
		Cs-137	<1.95E+00	0.00E+00	1.95E+00
		BaLa-140	<5.65E+00	0.00E+00	5.65E+00
		Be-7	<1.84E+01	0.00E+00	1.84E+01
		K-40	<3.30E+01	0.00E+00	3.30E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542721	12/28/2020 - 4/19/2021	H3SW	1.61E+03	1.59E+02	1.96E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542958	3/22/2021 - 4/19/2021	Mn-54	<3.00E+00	0.00E+00	3.00E+00
		Co-58	<3.98E+00	0.00E+00	3.98E+00
		Fe-59	<7.57E+00	0.00E+00	7.57E+00
		Co-60	<3.98E+00	0.00E+00	3.98E+00
		Zn-65	<6.70E+00	0.00E+00	6.70E+00
		Zr-95	<6.18E+00	0.00E+00	6.18E+00
		Nb-95	<3.92E+00	0.00E+00	3.92E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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
542958	3/22/2021 - 4/19/2021	Cs-134	<3.47E+00	0.00E+00	3.47E+00
		Cs-137	<3.15E+00	0.00E+00	3.15E+00
		BaLa-140	<7.67E+00	0.00E+00	7.67E+00
		Be-7	<3.42E+01	0.00E+00	3.42E+01
		K-40	7.67E+01	3.69E+01	4.76E+01
544853	4/19/2021 - 5/17/2021	Mn-54	<2.66E+00	0.00E+00	2.66E+00
		Co-58	<4.59E+00	0.00E+00	4.59E+00
		Fe-59	<6.00E+00	0.00E+00	6.00E+00
		Co-60	<3.04E+00	0.00E+00	3.04E+00
		Zn-65	<7.75E+00	0.00E+00	7.75E+00
		Zr-95	<7.00E+00	0.00E+00	7.00E+00
		Nb-95	<5.02E+00	0.00E+00	5.02E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<3.64E+00	0.00E+00	3.64E+00
		Cs-137	<4.00E+00	0.00E+00	4.00E+00
		BaLa-140	<8.43E+00	0.00E+00	8.43E+00
		Be-7	<2.97E+01	0.00E+00	2.97E+01
		K-40	6.79E+01	3.62E+01	4.71E+01
546784	5/17/2021 - 6/14/2021	Mn-54	<3.79E+00	0.00E+00	3.79E+00
		Co-58	<1.93E+00	0.00E+00	1.93E+00
		Fe-59	<8.04E+00	0.00E+00	8.04E+00
		Co-60	<2.83E+00	0.00E+00	2.83E+00
		Zn-65	<6.93E+00	0.00E+00	6.93E+00
		Zr-95	<5.30E+00	0.00E+00	5.30E+00
		Nb-95	<3.79E+00	0.00E+00	3.79E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<3.48E+00	0.00E+00	3.48E+00
		Cs-137	<3.14E+00	0.00E+00	3.14E+00
		BaLa-140	<6.47E+00	0.00E+00	6.47E+00
		Be-7	<3.03E+01	0.00E+00	3.03E+01
		K-40	6.60E+01	3.11E+01	3.77E+01
547918	6/14/2021 - 7/12/2021	Mn-54	<3.13E+00	0.00E+00	3.13E+00
		Co-58	<3.34E+00	0.00E+00	3.34E+00
		Fe-59	<7.92E+00	0.00E+00	7.92E+00
		Co-60	<2.70E+00	0.00E+00	2.70E+00
		Zn-65	<4.97E+00	0.00E+00	4.97E+00
		Zr-95	<6.77E+00	0.00E+00	6.77E+00
		Nb-95	<4.22E+00	0.00E+00	4.22E+00
		I-131	<1.16E+01	0.00E+00	1.16E+01
		Cs-134	<3.74E+00	0.00E+00	3.74E+00
		Cs-137	<2.98E+00	0.00E+00	2.98E+00
		BaLa-140	<7.13E+00	0.00E+00	7.13E+00
		Be-7	<2.79E+01	0.00E+00	2.79E+01
		K-40	1.06E+02	3.40E+01	3.66E+01
548016	4/19/2021 - 7/12/2021	H3SW	2.73E+03	1.74E+02	1.72E+02
549101	7/12/2021 - 8/9/2021	Mn-54	<3.02E+00	0.00E+00	3.02E+00
		Co-58	<2.72E+00	0.00E+00	2.72E+00
		Fe-59	<6.86E+00	0.00E+00	6.86E+00
		Co-60	<3.24E+00	0.00E+00	3.24E+00
		Zn-65	<7.69E+00	0.00E+00	7.69E+00
		Zr-95	<6.21E+00	0.00E+00	6.21E+00
		Nb-95	<4.63E+00	0.00E+00	4.63E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<2.71E+00	0.00E+00	2.71E+00
		Cs-137	<2.67E+00	0.00E+00	2.67E+00
		BaLa-140	<7.74E+00	0.00E+00	7.74E+00
		Be-7	<2.74E+01	0.00E+00	2.74E+01
		K-40	<4.43E+01	0.00E+00	4.43E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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
550940	8/9/2021 - 9/7/2021	Mn-54	<2.98E+00	0.00E+00	2.98E+00
		Co-58	<3.47E+00	0.00E+00	3.47E+00
		Fe-59	<7.09E+00	0.00E+00	7.09E+00
		Co-60	<2.96E+00	0.00E+00	2.96E+00
		Zn-65	<5.84E+00	0.00E+00	5.84E+00
		Zr-95	<7.45E+00	0.00E+00	7.45E+00
		Nb-95	<4.34E+00	0.00E+00	4.34E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.84E+00	0.00E+00	3.84E+00
		Cs-137	<3.27E+00	0.00E+00	3.27E+00
		BaLa-140	<6.80E+00	0.00E+00	6.80E+00
		Be-7	<2.46E+01	0.00E+00	2.46E+01
		K-40	<4.30E+01	0.00E+00	4.30E+01
		552537	9/7/2021 - 10/4/2021	Mn-54	<1.92E+00
Co-58	<2.33E+00			0.00E+00	2.33E+00
Fe-59	<5.33E+00			0.00E+00	5.33E+00
Co-60	<2.33E+00			0.00E+00	2.33E+00
Zn-65	<4.51E+00			0.00E+00	4.51E+00
Zr-95	<4.14E+00			0.00E+00	4.14E+00
Nb-95	<3.09E+00			0.00E+00	3.09E+00
I-131	<7.83E+00			0.00E+00	7.83E+00
Cs-134	<2.45E+00			0.00E+00	2.45E+00
Cs-137	<2.14E+00			0.00E+00	2.14E+00
BaLa-140	<4.98E+00			0.00E+00	4.98E+00
Be-7	<2.38E+01			0.00E+00	2.38E+01
K-40	8.67E+01			2.98E+01	3.91E+01
553193	7/12/2021 - 10/4/2021			H3SW	9.54E+03
554415	10/4/2021 - 11/1/2021	Mn-54	<1.99E+00	0.00E+00	1.99E+00
		Co-58	<3.05E+00	0.00E+00	3.05E+00
		Fe-59	<5.65E+00	0.00E+00	5.65E+00
		Co-60	<2.85E+00	0.00E+00	2.85E+00
		Zn-65	<5.25E+00	0.00E+00	5.25E+00
		Zr-95	<5.42E+00	0.00E+00	5.42E+00
		Nb-95	<3.70E+00	0.00E+00	3.70E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<3.10E+00	0.00E+00	3.10E+00
		Cs-137	<2.50E+00	0.00E+00	2.50E+00
		BaLa-140	<5.80E+00	0.00E+00	5.80E+00
		Be-7	<2.43E+01	0.00E+00	2.43E+01
		K-40	8.05E+01	3.11E+01	3.92E+01
		556847	11/1/2021 - 11/29/2021	Mn-54	<3.15E+00
Co-58	<3.51E+00			0.00E+00	3.51E+00
Fe-59	<5.77E+00			0.00E+00	5.77E+00
Co-60	<3.27E+00			0.00E+00	3.27E+00
Zn-65	<6.05E+00			0.00E+00	6.05E+00
Zr-95	<6.97E+00			0.00E+00	6.97E+00
Nb-95	<3.69E+00			0.00E+00	3.69E+00
I-131	<1.20E+01			0.00E+00	1.20E+01
Cs-134	<3.01E+00			0.00E+00	3.01E+00
Cs-137	<3.05E+00			0.00E+00	3.05E+00
BaLa-140	<7.78E+00			0.00E+00	7.78E+00
Be-7	<3.41E+01			0.00E+00	3.41E+01
K-40	1.09E+02			3.04E+01	2.79E+01
558518	11/29/2021 - 12/27/2021			Mn-54	<1.90E+00
		Co-58	<2.05E+00	0.00E+00	2.05E+00
		Fe-59	<3.72E+00	0.00E+00	3.72E+00
		Co-60	<2.01E+00	0.00E+00	2.01E+00
		Zn-65	<3.89E+00	0.00E+00	3.89E+00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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
558518	11/29/2021 - 12/27/2021	Zr-95	<4.08E+00	0.00E+00	4.08E+00
		Nb-95	<2.76E+00	0.00E+00	2.76E+00
		I-131	<8.12E+00	0.00E+00	8.12E+00
		Cs-134	<2.27E+00	0.00E+00	2.27E+00
		Cs-137	<2.19E+00	0.00E+00	2.19E+00
		BaLa-140	<4.72E+00	0.00E+00	4.72E+00
		Be-7	<2.08E+01	0.00E+00	2.08E+01
		K-40	1.15E+02	3.54E+01	2.69E+01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558936	10/4/2021 - 12/27/2021	H3SW	7.63E+03	2.62E+02	1.85E+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
539890	12/14/2020 - 3/15/2021	mR/Std Qtr	22.51
546317	3/15/2021 - 6/15/2021	mR/Std Qtr	20.86
551436	6/15/2021 - 9/14/2021	mR/Std Qtr	19.32
557775	9/14/2021 - 12/14/2021	mR/Std Qtr	19.02

Sample Point 021 [INDICATOR - NNE @ 0.25 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539891	12/14/2020 - 3/15/2021	mR/Std Qtr	18.61
546318	3/15/2021 - 6/15/2021	mR/Std Qtr	13.92
551437	6/15/2021 - 9/14/2021	mR/Std Qtr	15.97
557776	9/14/2021 - 12/14/2021	mR/Std Qtr	16.06

Sample Point 022 [INDICATOR - NE @ 0.53 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539892	12/14/2020 - 3/16/2021	mR/Std Qtr	26.84
546319	3/16/2021 - 6/15/2021	mR/Std Qtr	22.27
551438	6/15/2021 - 9/14/2021	mR/Std Qtr	22.12
557777	9/14/2021 - 12/14/2021	mR/Std Qtr	23.52

Sample Point 023 [INDICATOR - ENE @ 0.93 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539893	12/14/2020 - 3/16/2021	mR/Std Qtr	27.33
546320	3/16/2021 - 6/15/2021	mR/Std Qtr	22.94
551439	6/15/2021 - 9/14/2021	mR/Std Qtr	22.46
557778	9/14/2021 - 12/14/2021	mR/Std Qtr	22.66

Sample Point 024 [INDICATOR - E @ 0.81 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539894	12/15/2020 - 3/16/2021	mR/Std Qtr	33.59

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 024 [INDICATOR - E @ 0.81 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
546321	3/16/2021 - 6/15/2021	mR/Std Qtr	27.75
551440	6/15/2021 - 9/14/2021	mR/Std Qtr	26.47
557779	9/14/2021 - 12/14/2021	mR/Std Qtr	28.39

Sample Point 025 [INDICATOR - ESE @ 0.42 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539895	12/14/2020 - 3/16/2021	mR/Std Qtr	22.69
546322	3/16/2021 - 6/15/2021	mR/Std Qtr	19.22
551441	6/15/2021 - 9/14/2021	mR/Std Qtr	18.56
557780	9/14/2021 - 12/14/2021	mR/Std Qtr	19.38

Sample Point 026 [INDICATOR - SE @ 0.34 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539896	12/14/2020 - 3/16/2021	mR/Std Qtr	21.25
546323	3/16/2021 - 6/15/2021	mR/Std Qtr	17.42
551442	6/15/2021 - 9/14/2021	mR/Std Qtr	17.52
557781	9/14/2021 - 12/14/2021	mR/Std Qtr	18.00

Sample Point 027 [INDICATOR - SSE @ 0.49 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539897	12/14/2020 - 3/15/2021	mR/Std Qtr	22.48
546324	3/15/2021 - 6/15/2021	mR/Std Qtr	19.75
551443	6/15/2021 - 9/14/2021	mR/Std Qtr	18.29
557782	9/14/2021 - 12/14/2021	mR/Std Qtr	19.38

Sample Point 028 [INDICATOR - S @ 0.46 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539898	12/14/2020 - 3/15/2021	mR/Std Qtr	20.27
546325	3/15/2021 - 6/15/2021	mR/Std Qtr	16.63
551444	6/15/2021 - 9/14/2021	mR/Std Qtr	17.81
557783	9/14/2021 - 12/14/2021	mR/Std Qtr	18.61

Sample Point 029 [INDICATOR - SSW @ 0.56 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539899	12/14/2020 - 3/15/2021	mR/Std Qtr	18.94
546326	3/15/2021 - 6/15/2021	mR/Std Qtr	16.37
551445	6/15/2021 - 9/14/2021	mR/Std Qtr	16.47

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 029 [INDICATOR - SSW @ 0.56 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
557784	9/14/2021 - 12/14/2021	mR/Std Qtr	17.72

Sample Point 030 [INDICATOR - SW @ 0.42 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539900	12/14/2020 - 3/15/2021	mR/Std Qtr	22.90

Sample ID:	Sample Dates:	Nuclide	Activity
546327	3/15/2021 - 6/15/2021	mR/Std Qtr	18.64

Sample ID:	Sample Dates:	Nuclide	Activity
551446	6/15/2021 - 9/14/2021	mR/Std Qtr	18.10

Sample ID:	Sample Dates:	Nuclide	Activity
557785	9/14/2021 - 12/14/2021	mR/Std Qtr	18.32

Sample Point 031 [INDICATOR - WSW @ 0.27 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539901	12/14/2020 - 3/15/2021	mR/Std Qtr	20.72

Sample ID:	Sample Dates:	Nuclide	Activity
546328	3/15/2021 - 6/15/2021	mR/Std Qtr	17.67

Sample ID:	Sample Dates:	Nuclide	Activity
551447	6/15/2021 - 9/14/2021	mR/Std Qtr	17.02

Sample ID:	Sample Dates:	Nuclide	Activity
557786	9/14/2021 - 12/14/2021	mR/Std Qtr	18.83

Sample Point 032 [INDICATOR - WNW @ 0.19 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539902	12/14/2020 - 3/15/2021	mR/Std Qtr	25.40

Sample ID:	Sample Dates:	Nuclide	Activity
546329	3/15/2021 - 6/15/2021	mR/Std Qtr	17.98

Sample ID:	Sample Dates:	Nuclide	Activity
551448	6/15/2021 - 9/14/2021	mR/Std Qtr	20.51

Sample ID:	Sample Dates:	Nuclide	Activity
557787	9/14/2021 - 12/14/2021	mR/Std Qtr	21.26

Sample Point 033 [INDICATOR - WNW @ 0.21 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539903	12/14/2020 - 3/15/2021	mR/Std Qtr	23.19

Sample ID:	Sample Dates:	Nuclide	Activity
546330	3/15/2021 - 6/15/2021	mR/Std Qtr	15.73

Sample ID:	Sample Dates:	Nuclide	Activity
551449	6/15/2021 - 9/14/2021	mR/Std Qtr	17.56

Sample ID:	Sample Dates:	Nuclide	Activity
557788	9/14/2021 - 12/14/2021	mR/Std Qtr	19.04

Sample Point 034 [INDICATOR - NW @ 0.22 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539904	12/14/2020 - 3/15/2021	mR/Std Qtr	23.67

Sample ID:	Sample Dates:	Nuclide	Activity
546331	3/15/2021 - 6/15/2021	mR/Std Qtr	17.06

Sample ID:	Sample Dates:	Nuclide	Activity
551450	6/15/2021 - 9/14/2021	mR/Std Qtr	16.59

Sample ID:	Sample Dates:	Nuclide	Activity
557789	9/14/2021 - 12/14/2021	mR/Std Qtr	19.62

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 035 [INDICATOR - NNW @ 0.17 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
539905	12/14/2020 - 3/15/2021	mR/Std Qtr	30.51
546332	3/15/2021 - 6/15/2021	mR/Std Qtr	25.67
551451	6/15/2021 - 9/14/2021	mR/Std Qtr	23.11
557790	9/14/2021 - 12/14/2021	mR/Std Qtr	25.16

Sample Point 036 [INDICATOR - N @ 4.18 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539906	12/15/2020 - 3/16/2021	mR/Std Qtr	29.84
546333	3/16/2021 - 6/15/2021	mR/Std Qtr	26.30
551452	6/15/2021 - 9/14/2021	mR/Std Qtr	26.80
557791	9/14/2021 - 12/14/2021	mR/Std Qtr	28.16

Sample Point 037 [INDICATOR - NNE @ 4.85 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539907	12/15/2020 - 3/16/2021	mR/Std Qtr	22.28
546334	3/16/2021 - 6/15/2021	mR/Std Qtr	19.29
551453	6/15/2021 - 9/14/2021	mR/Std Qtr	17.88
557792	9/14/2021 - 12/14/2021	mR/Std Qtr	19.44

Sample Point 038 [INDICATOR - NE @ 4.24 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539908	12/15/2020 - 3/16/2021	mR/Std Qtr	24.84
546335	3/16/2021 - 6/15/2021	mR/Std Qtr	22.63
551454	6/15/2021 - 9/14/2021	mR/Std Qtr	19.92
557793	9/14/2021 - 12/14/2021	mR/Std Qtr	23.41

Sample Point 039 [INDICATOR - ENE @ 4.02 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539909	12/15/2020 - 3/16/2021	mR/Std Qtr	29.58
546336	3/16/2021 - 6/15/2021	mR/Std Qtr	23.91
551455	6/15/2021 - 9/14/2021	mR/Std Qtr	23.76
557794	9/14/2021 - 12/14/2021	mR/Std Qtr	23.95

Sample Point 040 [INDICATOR - E @ 4.74 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539910	12/15/2020 - 3/16/2021	mR/Std Qtr	31.09
546337	3/16/2021 - 6/15/2021	mR/Std Qtr	25.00

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 040 [INDICATOR - E @ 4.74 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
551456	6/15/2021 - 9/14/2021	mR/Std Qtr	27.63
557795	9/14/2021 - 12/14/2021	mR/Std Qtr	27.26

Sample Point 041 [INDICATOR - ESE @ 4.25 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539911	12/15/2020 - 3/16/2021	mR/Std Qtr	20.05
546338	3/16/2021 - 6/15/2021	mR/Std Qtr	16.04
551457	6/15/2021 - 9/14/2021	mR/Std Qtr	17.11
557796	9/14/2021 - 12/14/2021	mR/Std Qtr	18.03

Sample Point 042 [INDICATOR - SE @ 4.93 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539912	12/15/2020 - 3/16/2021	mR/Std Qtr	28.42
546339	3/16/2021 - 6/15/2021	mR/Std Qtr	24.12
551458	6/15/2021 - 9/14/2021	mR/Std Qtr	27.09
557797	9/14/2021 - 12/14/2021	mR/Std Qtr	26.94

Sample Point 043 [INDICATOR - SSE @ 4.09 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539913	12/15/2020 - 3/16/2021	mR/Std Qtr	28.00
546340	3/16/2021 - 6/15/2021	mR/Std Qtr	23.41
551459	6/15/2021 - 9/14/2021	mR/Std Qtr	23.87
557798	9/14/2021 - 12/14/2021	mR/Std Qtr	24.25

Sample Point 044 [INDICATOR - S @ 3.96 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539914	12/15/2020 - 3/16/2021	mR/Std Qtr	22.62
546341	3/16/2021 - 6/15/2021	mR/Std Qtr	20.30
551460	6/15/2021 - 9/14/2021	mR/Std Qtr	20.01
557799	9/14/2021 - 12/14/2021	mR/Std Qtr	19.71

Sample Point 045 [INDICATOR - SSW @ 4.78 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539915	12/15/2020 - 3/16/2021	mR/Std Qtr	21.80
546342	3/16/2021 - 6/15/2021	mR/Std Qtr	17.55
551461	6/15/2021 - 9/14/2021	mR/Std Qtr	17.67
557800	9/14/2021 - 12/14/2021	mR/Std Qtr	18.04

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 046 [INDICATOR - SW @ 4.61 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539916	12/15/2020 - 3/16/2021	mR/Std Qtr	27.58
546343	3/16/2021 - 6/15/2021	mR/Std Qtr	21.68
551462	6/15/2021 - 9/14/2021	mR/Std Qtr	21.45
557801	9/14/2021 - 12/14/2021	mR/Std Qtr	22.26

Sample Point 048 [INDICATOR - W @ 3.64 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539917	12/15/2020 - 3/16/2021	mR/Std Qtr	31.26
546344	3/16/2021 - 6/15/2021	mR/Std Qtr	26.76
551463	6/15/2021 - 9/14/2021	mR/Std Qtr	25.78
557802	9/14/2021 - 12/14/2021	mR/Std Qtr	25.86

Sample Point 049 [INDICATOR - WNW @ 3.6 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539918	12/15/2020 - 3/16/2021	mR/Std Qtr	24.93
546345	3/16/2021 - 6/15/2021	mR/Std Qtr	22.45
551464	6/15/2021 - 9/14/2021	mR/Std Qtr	20.51
557803	9/14/2021 - 12/14/2021	mR/Std Qtr	21.66

Sample Point 050 [INDICATOR - NW @ 3.53 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539919	12/15/2020 - 3/16/2021	mR/Std Qtr	21.06
546346	3/16/2021 - 6/15/2021	mR/Std Qtr	18.22
551465	6/15/2021 - 9/14/2021	mR/Std Qtr	16.02
557804	9/14/2021 - 12/14/2021	mR/Std Qtr	18.89

Sample Point 051 [INDICATOR - NNW @ 4.64 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
539920	12/15/2020 - 3/16/2021	mR/Std Qtr	21.89
546347	3/16/2021 - 6/15/2021	mR/Std Qtr	19.56
551466	6/15/2021 - 9/14/2021	mR/Std Qtr	19.74
557805	9/14/2021 - 12/14/2021	mR/Std Qtr	21.18

Sample Point 052 [INDICATOR - ENE @ 12.4 miles]

TLD RING TLD_SPEC

Sample ID:	Sample Dates:	Nuclide	Activity
539921	12/15/2020 - 3/16/2021	mR/Std Qtr	28.19
546348	3/16/2021 - 6/15/2021	mR/Std Qtr	23.46

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 052 [INDICATOR - ENE @ 12.4 miles]

TLD RING TLD_SPEC

Sample ID	Sample Dates	Nuclide	Activity
551467	6/15/2021 - 9/14/2021	mR/Std Qtr	23.57
557806	9/14/2021 - 12/14/2021	mR/Std Qtr	23.23

Sample Point 053 [INDICATOR - E @ 11.7 miles]

TLD RING TLD_SPEC

Sample ID	Sample Dates	Nuclide	Activity
539922	12/15/2020 - 3/16/2021	mR/Std Qtr	31.72
546349	3/16/2021 - 6/15/2021	mR/Std Qtr	24.58
551468	6/15/2021 - 9/14/2021	mR/Std Qtr	24.71
557807	9/14/2021 - 12/14/2021	mR/Std Qtr	26.97

Sample Point 054 [INDICATOR - ESE @ 8.6 miles]

TLD RING TLD_SPEC

Sample ID	Sample Dates	Nuclide	Activity
539923	12/15/2020 - 3/16/2021	mR/Std Qtr	24.02
546350	3/16/2021 - 6/15/2021	mR/Std Qtr	20.68
551469	6/15/2021 - 9/14/2021	mR/Std Qtr	19.66
557808	9/14/2021 - 12/14/2021	mR/Std Qtr	19.61

Sample Point 055 [INDICATOR - SSE @ 9.27 miles]

TLD RING TLD_SPEC

Sample ID	Sample Dates	Nuclide	Activity
539924	12/15/2020 - 3/16/2021	mR/Std Qtr	18.08
546351	3/16/2021 - 6/15/2021	mR/Std Qtr	15.12
551470	6/15/2021 - 9/14/2021	mR/Std Qtr	14.44
557809	9/14/2021 - 12/14/2021	mR/Std Qtr	15.93

Sample Point 056 [INDICATOR - SSW @ 7.3 miles]

TLD RING TLD_SPEC

Sample ID	Sample Dates	Nuclide	Activity
539925	12/15/2020 - 3/16/2021	mR/Std Qtr	28.68
546352	3/16/2021 - 6/15/2021	mR/Std Qtr	25.21
551471	6/15/2021 - 9/14/2021	mR/Std Qtr	23.75
557810	9/14/2021 - 12/14/2021	mR/Std Qtr	23.57

Sample Point 057 [INDICATOR - SW @ 8.42 miles]

TLD RING TLD_SPEC

Sample ID	Sample Dates	Nuclide	Activity
539926	12/15/2020 - 3/16/2021	mR/Std Qtr	23.96
546353	3/16/2021 - 6/15/2021	mR/Std Qtr	19.54
551472	6/15/2021 - 9/14/2021	mR/Std Qtr	17.11
557811	9/14/2021 - 12/14/2021	mR/Std Qtr	20.88

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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
539927	12/15/2020 - 3/16/2021	mR/Std Qtr	37.40
546354	3/16/2021 - 6/15/2021	mR/Std Qtr	31.06
551473	6/15/2021 - 9/14/2021	mR/Std Qtr	30.94
557812	9/14/2021 - 12/14/2021	mR/Std Qtr	32.82

Sample Point 059 [INDICATOR - NW @ 9.2 miles]

TLD RING TLD_SPEC

Sample ID	Sample Dates	Nuclide	Activity
539928	12/15/2020 - 3/16/2021	mR/Std Qtr	27.27
551474	6/15/2021 - 9/14/2021	mR/Std Qtr	22.31
557813	9/14/2021 - 12/14/2021	mR/Std Qtr	25.29

Sample Point 076 [INDICATOR - W @ 0.19 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539929	12/14/2020 - 3/15/2021	mR/Std Qtr	29.82
546356	3/15/2021 - 6/15/2021	mR/Std Qtr	24.68
551475	6/15/2021 - 9/14/2021	mR/Std Qtr	24.15
557814	9/14/2021 - 12/14/2021	mR/Std Qtr	23.49

Sample Point 077 [INDICATOR - SW @ 1 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539930	12/14/2020 - 3/15/2021	mR/Std Qtr	22.18
546357	3/15/2021 - 6/15/2021	mR/Std Qtr	18.28
551476	6/15/2021 - 9/14/2021	mR/Std Qtr	18.92
557815	9/14/2021 - 12/14/2021	mR/Std Qtr	19.18

Sample Point 078.1 [INDICATOR - WSW @ 0.53 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539931	12/14/2020 - 3/15/2021	mR/Std Qtr	33.23
546358	3/15/2021 - 6/15/2021	mR/Std Qtr	26.99
551477	6/15/2021 - 9/14/2021	mR/Std Qtr	25.14
557816	9/14/2021 - 12/14/2021	mR/Std Qtr	26.63

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

TLD RING TLD_INNER

Sample ID	Sample Dates	Nuclide	Activity
539932	12/14/2020 - 3/15/2021	mR/Std Qtr	23.41
546359	3/15/2021 - 6/15/2021	mR/Std Qtr	19.84
551478	6/15/2021 - 9/14/2021	mR/Std Qtr	20.63

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 085 [INDICATOR - NNW @ 0.88 miles]

TLD RING TLD_INNER

Sample ID: 557817	Sample Dates: 9/14/2021 - 12/14/2021	Nuclide mR/Std Qtr	Activity 20.18
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Sample Point 086 [INDICATOR - NW @ 0.83 miles]

TLD RING TLD_INNER

Sample ID: 539933	Sample Dates: 12/14/2020 - 3/15/2021	Nuclide mR/Std Qtr	Activity 21.53
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Sample ID: 546360	Sample Dates: 3/15/2021 - 6/15/2021	Nuclide mR/Std Qtr	Activity 15.80
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Sample ID: 551479	Sample Dates: 6/15/2021 - 9/14/2021	Nuclide mR/Std Qtr	Activity 16.70
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Sample ID: 557818	Sample Dates: 9/14/2021 - 12/14/2021	Nuclide mR/Std Qtr	Activity 15.40
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Sample Point 087 [INDICATOR - WNW @ 1.33 miles]

TLD RING TLD_INNER

Sample ID: 539934	Sample Dates: 12/14/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 20.66
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Sample ID: 546361	Sample Dates: 3/16/2021 - 6/15/2021	Nuclide mR/Std Qtr	Activity 17.01
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Sample ID: 551480	Sample Dates: 6/15/2021 - 9/14/2021	Nuclide mR/Std Qtr	Activity 17.26
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Sample ID: 557819	Sample Dates: 9/14/2021 - 12/14/2021	Nuclide mR/Std Qtr	Activity 17.34
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Sample Point 088 [INDICATOR - SSW @ 1 miles]

TLD RING TLD_INNER

Sample ID: 539935	Sample Dates: 12/14/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 24.78
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Sample ID: 546362	Sample Dates: 3/16/2021 - 6/15/2021	Nuclide mR/Std Qtr	Activity 21.36
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Sample ID: 551481	Sample Dates: 6/15/2021 - 9/14/2021	Nuclide mR/Std Qtr	Activity 19.75
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Sample ID: 557820	Sample Dates: 9/14/2021 - 12/14/2021	Nuclide mR/Std Qtr	Activity 21.93
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Sample Point 089 [INDICATOR - S @ 1.19 miles]

TLD RING TLD_INNER

Sample ID: 539936	Sample Dates: 12/15/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 26.13
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Sample ID: 546363	Sample Dates: 3/16/2021 - 6/15/2021	Nuclide mR/Std Qtr	Activity 20.60
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Sample ID: 557821	Sample Dates: 9/14/2021 - 12/14/2021	Nuclide mR/Std Qtr	Activity 22.41
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Sample Point 090 [INDICATOR - SE @ 0.79 miles]

TLD RING TLD_INNER

Sample ID: 539937	Sample Dates: 12/15/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 28.31
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Sample ID: 546364	Sample Dates: 3/16/2021 - 6/15/2021	Nuclide mR/Std Qtr	Activity 23.47
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Sample ID: 551483	Sample Dates: 6/15/2021 - 9/14/2021	Nuclide mR/Std Qtr	Activity 24.84
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Sample ID: 557822	Sample Dates: 9/14/2021 - 12/14/2021	Nuclide mR/Std Qtr	Activity 23.51
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Sample Point 092 [INDICATOR - WSW @ 3.62 miles]

TLD RING TLD_OUTER

Sample ID: 539938	Sample Dates: 12/15/2020 - 3/16/2021	Nuclide mR/Std Qtr	Activity 26.58
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OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 092 [INDICATOR - WSW @ 3.62 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
546365	3/16/2021 - 6/15/2021	mR/Std Qtr	22.26
551484	6/15/2021 - 9/14/2021	mR/Std Qtr	21.73
557823	9/14/2021 - 12/14/2021	mR/Std Qtr	22.04

Sample Point 093 [CONTROL - SE @ 9.34 miles]

TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
539939	12/14/2020 - 3/15/2021	mR/Std Qtr	31.32
546366	3/15/2021 - 6/15/2021	mR/Std Qtr	26.23
551485	6/15/2021 - 9/14/2021	mR/Std Qtr	27.11
557824	9/14/2021 - 12/14/2021	mR/Std Qtr	26.15

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
536819	1/5/2021 - 1/5/2021	MIXEDBLV	Mn-54	<4.78E+01	0.00E+00	4.78E+01
			Co-58	<5.03E+01	0.00E+00	5.03E+01
			Fe-59	<9.87E+01	0.00E+00	9.87E+01
			Co-60	<5.57E+01	0.00E+00	5.57E+01
			Zn-65	<1.07E+02	0.00E+00	1.07E+02
			Zr-95	<7.79E+01	0.00E+00	7.79E+01
			Nb-95	<4.49E+01	0.00E+00	4.49E+01
			I-131	<4.63E+01	0.00E+00	4.63E+01
			Cs-134	<5.94E+01	0.00E+00	5.94E+01
			Cs-137	<4.24E+01	0.00E+00	4.24E+01
			BaLa-140	<4.60E+01	0.00E+00	4.60E+01
			Be-7	1.96E+03	4.87E+02	6.06E+02
			K-40	4.77E+03	8.78E+02	6.55E+02
			538338	2/1/2021 - 2/1/2021	MIXEDBLV	Mn-54
Co-58	<1.89E+01	0.00E+00				1.89E+01
Fe-59	<3.79E+01	0.00E+00				3.79E+01
Co-60	<2.08E+01	0.00E+00				2.08E+01
Zn-65	<4.33E+01	0.00E+00				4.33E+01
Zr-95	<3.79E+01	0.00E+00				3.79E+01
Nb-95	<2.10E+01	0.00E+00				2.10E+01
I-131	<2.39E+01	0.00E+00				2.39E+01
Cs-134	<2.17E+01	0.00E+00				2.17E+01
Cs-137	<1.92E+01	0.00E+00				1.92E+01
BaLa-140	<1.98E+01	0.00E+00				1.98E+01
Be-7	3.27E+03	4.28E+02				2.69E+02
K-40	2.68E+03	4.48E+02				2.23E+02
539291	3/1/2021 - 3/1/2021	MIXEDBLV				Mn-54
			Co-58	<2.37E+01	0.00E+00	2.37E+01
			Fe-59	<4.52E+01	0.00E+00	4.52E+01
			Co-60	<2.51E+01	0.00E+00	2.51E+01
			Zn-65	<5.49E+01	0.00E+00	5.49E+01
			Zr-95	<4.94E+01	0.00E+00	4.94E+01
			Nb-95	<2.53E+01	0.00E+00	2.53E+01
			I-131	<2.65E+01	0.00E+00	2.65E+01
			Cs-134	<3.53E+01	0.00E+00	3.53E+01
			Cs-137	<2.74E+01	0.00E+00	2.74E+01
			BaLa-140	<2.31E+01	0.00E+00	2.31E+01
			Be-7	3.78E+03	5.12E+02	3.51E+02
			K-40	3.83E+03	6.39E+02	4.37E+02

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
542265	4/5/2021 - 4/5/2021	MIXEDBLV	Mn-54	<1.75E+01	0.00E+00	1.75E+01
			Co-58	<1.27E+01	0.00E+00	1.27E+01
			Fe-59	<3.53E+01	0.00E+00	3.53E+01
			Co-60	<1.61E+01	0.00E+00	1.61E+01
			Zn-65	<3.40E+01	0.00E+00	3.40E+01
			Zr-95	<1.60E+01	0.00E+00	1.60E+01
			Nb-95	<1.17E+01	0.00E+00	1.17E+01
			I-131	<1.73E+01	0.00E+00	1.73E+01
			Cs-134	<1.93E+01	0.00E+00	1.93E+01
			Cs-137	<1.48E+01	0.00E+00	1.48E+01
			BaLa-140	<2.08E+01	0.00E+00	2.08E+01
			Be-7	2.43E+03	3.05E+02	1.75E+02
			K-40	2.78E+03	4.01E+02	1.79E+02
			544338	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54
Co-58	<1.18E+01	0.00E+00				1.18E+01
Fe-59	<2.68E+01	0.00E+00				2.68E+01
Co-60	<1.18E+01	0.00E+00				1.18E+01
Zn-65	<2.98E+01	0.00E+00				2.98E+01
Zr-95	<1.73E+01	0.00E+00				1.73E+01
Nb-95	<1.34E+01	0.00E+00				1.34E+01
I-131	<1.28E+01	0.00E+00				1.28E+01
Cs-134	<1.66E+01	0.00E+00				1.66E+01
Cs-137	<1.27E+01	0.00E+00				1.27E+01
BaLa-140	<1.49E+01	0.00E+00				1.49E+01
Be-7	3.54E+02	1.17E+02				1.57E+02
K-40	2.97E+03	3.96E+02				2.01E+02
546053	6/7/2021 - 6/7/2021	MIXEDBLV				Mn-54
			Co-58	<8.13E+00	0.00E+00	8.13E+00
			Fe-59	<2.44E+01	0.00E+00	2.44E+01
			Co-60	<1.53E+01	0.00E+00	1.53E+01
			Zn-65	<3.04E+01	0.00E+00	3.04E+01
			Zr-95	<1.61E+01	0.00E+00	1.61E+01
			Nb-95	<1.21E+01	0.00E+00	1.21E+01
			I-131	<1.42E+01	0.00E+00	1.42E+01
			Cs-134	<1.59E+01	0.00E+00	1.59E+01
			Cs-137	<1.47E+01	0.00E+00	1.47E+01
			BaLa-140	<7.66E+00	0.00E+00	7.66E+00
			Be-7	2.38E+02	1.03E+02	1.47E+02
			K-40	4.01E+03	4.81E+02	1.74E+02
			547761	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54
Co-58	<1.42E+01	0.00E+00				1.42E+01
Fe-59	<3.36E+01	0.00E+00				3.36E+01
Co-60	<1.53E+01	0.00E+00				1.53E+01
Zn-65	<3.70E+01	0.00E+00				3.70E+01
Zr-95	<2.54E+01	0.00E+00				2.54E+01
Nb-95	<1.59E+01	0.00E+00				1.59E+01
I-131	<1.72E+01	0.00E+00				1.72E+01
Cs-134	<1.77E+01	0.00E+00				1.77E+01
Cs-137	<1.70E+01	0.00E+00				1.70E+01
BaLa-140	<1.53E+01	0.00E+00				1.53E+01
Be-7	9.36E+02	2.04E+02				2.33E+02
K-40	2.75E+03	4.18E+02				2.20E+02
549000	8/2/2021 - 8/2/2021	MIXEDBLV				Mn-54
			Co-58	<9.80E+00	0.00E+00	9.80E+00
			Fe-59	<2.62E+01	0.00E+00	2.62E+01
			Co-60	<1.56E+01	0.00E+00	1.56E+01
			Zn-65	<3.10E+01	0.00E+00	3.10E+01
			Zr-95	<1.70E+01	0.00E+00	1.70E+01
			Nb-95	<1.09E+01	0.00E+00	1.09E+01
			I-131	<1.30E+01	0.00E+00	1.30E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 077 [INDICATOR - SW @ 1 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA		
549000	8/2/2021 - 8/2/2021	MIXEDBLV	Cs-134	<1.37E+01	0.00E+00	1.37E+01		
			Cs-137	<1.27E+01	0.00E+00	1.27E+01		
			BaLa-140	<1.25E+01	0.00E+00	1.25E+01		
			Be-7	2.82E+03	3.16E+02	1.24E+02		
			K-40	5.04E+03	5.76E+02	2.13E+02		
551060	9/7/2021 - 9/7/2021	MIXEDBLV	Mn-54	<2.05E+01	0.00E+00	2.05E+01		
			Co-58	<2.41E+01	0.00E+00	2.41E+01		
			Fe-59	<4.69E+01	0.00E+00	4.69E+01		
			Co-60	<1.98E+01	0.00E+00	1.98E+01		
			Zn-65	<4.01E+01	0.00E+00	4.01E+01		
			Zr-95	<4.71E+01	0.00E+00	4.71E+01		
			Nb-95	<2.63E+01	0.00E+00	2.63E+01		
			I-131	<3.43E+01	0.00E+00	3.43E+01		
			Cs-134	<2.70E+01	0.00E+00	2.70E+01		
			Cs-137	<1.83E+01	0.00E+00	1.83E+01		
			BaLa-140	<1.92E+01	0.00E+00	1.92E+01		
			Be-7	3.60E+03	4.60E+02	2.64E+02		
			K-40	5.56E+03	7.16E+02	3.52E+02		
552822	10/4/2021 - 10/4/2021	MIXEDBLV	Mn-54	<3.04E+01	0.00E+00	3.04E+01		
			Co-58	<2.85E+01	0.00E+00	2.85E+01		
			Fe-59	<5.79E+01	0.00E+00	5.79E+01		
			Co-60	<2.60E+01	0.00E+00	2.60E+01		
			Zn-65	<7.10E+01	0.00E+00	7.10E+01		
			Zr-95	<3.73E+01	0.00E+00	3.73E+01		
			Nb-95	<2.77E+01	0.00E+00	2.77E+01		
			I-131	<2.81E+01	0.00E+00	2.81E+01		
			Cs-134	<2.51E+01	0.00E+00	2.51E+01		
			Cs-137	<3.10E+01	0.00E+00	3.10E+01		
			BaLa-140	<2.50E+01	0.00E+00	2.50E+01		
			Be-7	3.41E+03	4.68E+02	3.00E+02		
			K-40	3.79E+03	9.03E+02	3.32E+02		
554626	11/1/2021 - 11/1/2021	MIXEDBLV	Mn-54	<1.05E+01	0.00E+00	1.05E+01		
			Co-58	<6.78E+00	0.00E+00	6.78E+00		
			Fe-59	<1.74E+01	0.00E+00	1.74E+01		
			Co-60	<8.86E+00	0.00E+00	8.86E+00		
			Zn-65	<2.59E+01	0.00E+00	2.59E+01		
			Zr-95	<1.59E+01	0.00E+00	1.59E+01		
			Nb-95	<1.11E+01	0.00E+00	1.11E+01		
			I-131	<1.32E+01	0.00E+00	1.32E+01		
			Cs-134	<1.32E+01	0.00E+00	1.32E+01		
			Cs-137	<1.08E+01	0.00E+00	1.08E+01		
			BaLa-140	<1.07E+01	0.00E+00	1.07E+01		
			Be-7	9.30E+03	8.95E+02	1.65E+02		
			K-40	2.98E+03	5.11E+02	1.06E+02		
557518	12/6/2021 - 12/6/2021	MIXEDBLV	Co-58	<2.61E+01	0.00E+00	2.61E+01		
			Fe-59	<5.33E+01	0.00E+00	5.33E+01		
			Co-60	<2.83E+01	0.00E+00	2.83E+01		
			Zn-65	<5.27E+01	0.00E+00	5.27E+01		
			Zr-95	<4.84E+01	0.00E+00	4.84E+01		
			Nb-95	<3.54E+01	0.00E+00	3.54E+01		
			I-131	<3.19E+01	0.00E+00	3.19E+01		
			Cs-134	<3.47E+01	0.00E+00	3.47E+01		
			Cs-137	<3.70E+01	0.00E+00	3.70E+01		
			BaLa-140	<3.74E+01	0.00E+00	3.74E+01		
			Be-7	5.76E+02	2.79E+02	4.09E+02		
			K-40	3.58E+03	6.68E+02	5.07E+02		

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
536820	1/5/2021 - 1/5/2021	MIXEDBLV	Mn-54	<3.17E+01	0.00E+00	3.17E+01
			Co-58	<2.93E+01	0.00E+00	2.93E+01
			Fe-59	<4.45E+01	0.00E+00	4.45E+01
			Co-60	<2.87E+01	0.00E+00	2.87E+01
			Zn-65	<7.84E+01	0.00E+00	7.84E+01
			Zr-95	<5.76E+01	0.00E+00	5.76E+01
			Nb-95	<3.14E+01	0.00E+00	3.14E+01
			I-131	<2.83E+01	0.00E+00	2.83E+01
			Cs-134	<3.05E+01	0.00E+00	3.05E+01
			Cs-137	<2.83E+01	0.00E+00	2.83E+01
			BaLa-140	<2.63E+01	0.00E+00	2.63E+01
			Be-7	4.68E+03	6.18E+02	4.09E+02
			K-40	4.92E+03	7.74E+02	4.72E+02
			538339	2/1/2021 - 2/1/2021	MIXEDBLV	Mn-54
Co-58	<1.95E+01	0.00E+00				1.95E+01
Fe-59	<3.64E+01	0.00E+00				3.64E+01
Co-60	<2.82E+01	0.00E+00				2.82E+01
Zn-65	<4.76E+01	0.00E+00				4.76E+01
Zr-95	<3.14E+01	0.00E+00				3.14E+01
Nb-95	<2.30E+01	0.00E+00				2.30E+01
I-131	<2.99E+01	0.00E+00				2.99E+01
Cs-134	<2.38E+01	0.00E+00				2.38E+01
Cs-137	<2.05E+01	0.00E+00				2.05E+01
BaLa-140	<2.85E+01	0.00E+00				2.85E+01
Be-7	4.28E+03	5.30E+02				3.24E+02
K-40	2.47E+03	4.67E+02				3.40E+02
539292	3/1/2021 - 3/1/2021	MIXEDBLV				Mn-54
			Co-58	<2.45E+01	0.00E+00	2.45E+01
			Fe-59	<5.16E+01	0.00E+00	5.16E+01
			Co-60	<2.41E+01	0.00E+00	2.41E+01
			Zn-65	<7.00E+01	0.00E+00	7.00E+01
			Zr-95	<4.45E+01	0.00E+00	4.45E+01
			Nb-95	<2.25E+01	0.00E+00	2.25E+01
			I-131	<2.72E+01	0.00E+00	2.72E+01
			Cs-134	<2.41E+01	0.00E+00	2.41E+01
			Cs-137	<2.51E+01	0.00E+00	2.51E+01
			BaLa-140	<3.10E+01	0.00E+00	3.10E+01
			Be-7	4.36E+03	5.42E+02	3.00E+02
			K-40	3.77E+03	6.35E+02	4.55E+02
			542266	4/5/2021 - 4/5/2021	MIXEDBLV	Mn-54
Co-58	<1.29E+01	0.00E+00				1.29E+01
Fe-59	<2.95E+01	0.00E+00				2.95E+01
Co-60	<2.16E+01	0.00E+00				2.16E+01
Zn-65	<3.37E+01	0.00E+00				3.37E+01
Zr-95	<2.32E+01	0.00E+00				2.32E+01
Nb-95	<1.39E+01	0.00E+00				1.39E+01
I-131	<1.90E+01	0.00E+00				1.90E+01
Cs-134	<1.88E+01	0.00E+00				1.88E+01
Cs-137	<1.59E+01	0.00E+00				1.59E+01
BaLa-140	<1.94E+01	0.00E+00				1.94E+01
Be-7	3.64E+03	4.17E+02				1.65E+02
K-40	3.68E+03	5.00E+02				2.42E+02
544339	5/3/2021 - 5/3/2021	MIXEDBLV				Mn-54
			Co-58	<1.06E+01	0.00E+00	1.06E+01
			Fe-59	<1.84E+01	0.00E+00	1.84E+01
			Co-60	<9.91E+00	0.00E+00	9.91E+00
			Zn-65	<1.84E+01	0.00E+00	1.84E+01
			Zr-95	<1.58E+01	0.00E+00	1.58E+01
			Nb-95	<9.43E+00	0.00E+00	9.43E+00
			I-131	<1.05E+01	0.00E+00	1.05E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
544339	5/3/2021 - 5/3/2021	MIXEDBLV	Cs-134	<1.22E+01	0.00E+00	1.22E+01
			Cs-137	<1.17E+01	0.00E+00	1.17E+01
			BaLa-140	<1.32E+01	0.00E+00	1.32E+01
			Be-7	2.42E+02	9.20E+01	1.25E+02
			K-40	2.19E+03	3.16E+02	1.60E+02
546054	6/7/2021 - 6/7/2021	MIXEDBLV	Mn-54	<2.20E+01	0.00E+00	2.20E+01
			Co-58	<2.14E+01	0.00E+00	2.14E+01
			Fe-59	<4.76E+01	0.00E+00	4.76E+01
			Co-60	<2.30E+01	0.00E+00	2.30E+01
			Zn-65	<5.40E+01	0.00E+00	5.40E+01
			Zr-95	<4.63E+01	0.00E+00	4.63E+01
			Nb-95	<2.51E+01	0.00E+00	2.51E+01
			I-131	<2.44E+01	0.00E+00	2.44E+01
			Cs-134	<2.32E+01	0.00E+00	2.32E+01
			Cs-137	<1.54E+01	0.00E+00	1.54E+01
			BaLa-140	<2.59E+01	0.00E+00	2.59E+01
			Be-7	4.59E+02	1.87E+02	2.56E+02
			K-40	2.62E+03	5.06E+02	4.15E+02
547762	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54	<2.17E+01	0.00E+00	2.17E+01
			Co-58	<1.68E+01	0.00E+00	1.68E+01
			Fe-59	<3.96E+01	0.00E+00	3.96E+01
			Co-60	<1.96E+01	0.00E+00	1.96E+01
			Zn-65	<4.92E+01	0.00E+00	4.92E+01
			Zr-95	<3.31E+01	0.00E+00	3.31E+01
			Nb-95	<1.83E+01	0.00E+00	1.83E+01
			I-131	<2.36E+01	0.00E+00	2.36E+01
			Cs-134	<2.55E+01	0.00E+00	2.55E+01
			Cs-137	<2.21E+01	0.00E+00	2.21E+01
			BaLa-140	<2.61E+01	0.00E+00	2.61E+01
			Be-7	2.64E+03	3.54E+02	2.26E+02
			K-40	5.31E+03	5.82E+02	2.29E+02
549001	8/2/2021 - 8/2/2021	MIXEDBLV	Mn-54	<1.96E+01	0.00E+00	1.96E+01
			Co-58	<1.80E+01	0.00E+00	1.80E+01
			Fe-59	<4.03E+01	0.00E+00	4.03E+01
			Co-60	<2.25E+01	0.00E+00	2.25E+01
			Zn-65	<4.68E+01	0.00E+00	4.68E+01
			Zr-95	<3.13E+01	0.00E+00	3.13E+01
			Nb-95	<2.07E+01	0.00E+00	2.07E+01
			I-131	<1.83E+01	0.00E+00	1.83E+01
			Cs-134	<2.13E+01	0.00E+00	2.13E+01
			Cs-137	<2.32E+01	0.00E+00	2.32E+01
			BaLa-140	<1.62E+01	0.00E+00	1.62E+01
			Be-7	4.66E+03	5.29E+02	2.38E+02
			K-40	6.23E+03	7.57E+02	3.77E+02
551061	9/7/2021 - 9/7/2021	MIXEDBLV	Mn-54	<3.12E+01	0.00E+00	3.12E+01
			Co-58	<3.20E+01	0.00E+00	3.20E+01
			Fe-59	<5.94E+01	0.00E+00	5.94E+01
			Co-60	<3.06E+01	0.00E+00	3.06E+01
			Zn-65	<6.50E+01	0.00E+00	6.50E+01
			Zr-95	<5.56E+01	0.00E+00	5.56E+01
			Nb-95	<3.29E+01	0.00E+00	3.29E+01
			I-131	<4.05E+01	0.00E+00	4.05E+01
			Cs-134	<3.61E+01	0.00E+00	3.61E+01
			Cs-137	<3.11E+01	0.00E+00	3.11E+01
			BaLa-140	<3.64E+01	0.00E+00	3.64E+01
			Be-7	2.57E+03	4.31E+02	3.72E+02
			K-40	5.81E+03	8.46E+02	4.91E+02
552823	10/4/2021 - 10/4/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
			Mn-54	<1.94E+01	0.00E+00	1.94E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 079 [INDICATOR - NE @ 0.56 miles]

Sample ID:	552823	Sample Dates:	10/4/2021 - 10/4/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<1.71E+01	0.00E+00	1.71E+01
					Fe-59	<4.32E+01	0.00E+00	4.32E+01
					Co-60	<2.61E+01	0.00E+00	2.61E+01
					Zn-65	<4.13E+01	0.00E+00	4.13E+01
					Zr-95	<3.35E+01	0.00E+00	3.35E+01
					Nb-95	<2.06E+01	0.00E+00	2.06E+01
					I-131	<2.05E+01	0.00E+00	2.05E+01
					Cs-134	<2.38E+01	0.00E+00	2.38E+01
					Cs-137	<2.25E+01	0.00E+00	2.25E+01
					BaLa-140	<2.22E+01	0.00E+00	2.22E+01
					Be-7	1.66E+03	2.91E+02	2.77E+02
					K-40	3.93E+03	5.61E+02	2.54E+02

Sample ID:	554627	Sample Dates:	11/1/2021 - 11/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.41E+01	0.00E+00	2.41E+01
					Co-58	<2.59E+01	0.00E+00	2.59E+01
					Fe-59	<3.94E+01	0.00E+00	3.94E+01
					Co-60	<2.27E+01	0.00E+00	2.27E+01
					Zn-65	<5.36E+01	0.00E+00	5.36E+01
					Zr-95	<3.60E+01	0.00E+00	3.60E+01
					Nb-95	<2.50E+01	0.00E+00	2.50E+01
					I-131	<2.35E+01	0.00E+00	2.35E+01
					Cs-134	<2.38E+01	0.00E+00	2.38E+01
					Cs-137	<2.42E+01	0.00E+00	2.42E+01
					BaLa-140	<1.78E+01	0.00E+00	1.78E+01
					Be-7	3.17E+03	4.23E+02	2.56E+02
					K-40	4.22E+03	6.12E+02	3.04E+02

Sample ID:	557519	Sample Dates:	12/6/2021 - 12/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<2.46E+01	0.00E+00	2.46E+01
					Fe-59	<5.02E+01	0.00E+00	5.02E+01
					Co-60	<2.04E+01	0.00E+00	2.04E+01
					Zn-65	<4.62E+01	0.00E+00	4.62E+01
					Zr-95	<4.89E+01	0.00E+00	4.89E+01
					Nb-95	<2.74E+01	0.00E+00	2.74E+01
					I-131	<2.62E+01	0.00E+00	2.62E+01
					Cs-134	<2.72E+01	0.00E+00	2.72E+01
					Cs-137	<2.59E+01	0.00E+00	2.59E+01
					BaLa-140	<2.76E+01	0.00E+00	2.76E+01
					Be-7	2.65E+03	3.82E+02	2.96E+02
					K-40	5.07E+03	6.96E+02	3.57E+02

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	536821	Sample Dates:	1/5/2021 - 1/5/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.58E+01	0.00E+00	2.58E+01
					Co-58	<2.33E+01	0.00E+00	2.33E+01
					Fe-59	<4.37E+01	0.00E+00	4.37E+01
					Co-60	<3.02E+01	0.00E+00	3.02E+01
					Zn-65	<5.78E+01	0.00E+00	5.78E+01
					Zr-95	<4.33E+01	0.00E+00	4.33E+01
					Nb-95	<2.84E+01	0.00E+00	2.84E+01
					I-131	<2.51E+01	0.00E+00	2.51E+01
					Cs-134	<2.27E+01	0.00E+00	2.27E+01
					Cs-137	<2.34E+01	0.00E+00	2.34E+01
					BaLa-140	<2.39E+01	0.00E+00	2.39E+01
					Be-7	6.60E+03	7.59E+02	3.48E+02
					K-40	5.15E+03	7.43E+02	4.50E+02

Sample ID:	538340	Sample Dates:	2/1/2021 - 2/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.43E+01	0.00E+00	1.43E+01
					Co-58	<1.55E+01	0.00E+00	1.55E+01
					Fe-59	<3.10E+01	0.00E+00	3.10E+01
					Co-60	<1.69E+01	0.00E+00	1.69E+01
					Zn-65	<3.71E+01	0.00E+00	3.71E+01
					Zr-95	<3.14E+01	0.00E+00	3.14E+01
					Nb-95	<1.44E+01	0.00E+00	1.44E+01
					I-131	<1.75E+01	0.00E+00	1.75E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538340	2/1/2021 - 2/1/2021	MIXEDBLV	Cs-134	<1.46E+01	0.00E+00	1.46E+01
			Cs-137	<1.27E+01	0.00E+00	1.27E+01
			BaLa-140	<1.91E+01	0.00E+00	1.91E+01
			Be-7	6.62E+03	6.81E+02	2.08E+02
			K-40	3.04E+03	4.37E+02	2.16E+02
539293	3/1/2021 - 3/1/2021	MIXEDBLV	Mn-54	<1.99E+01	0.00E+00	1.99E+01
			Co-58	<2.38E+01	0.00E+00	2.38E+01
			Fe-59	<4.32E+01	0.00E+00	4.32E+01
			Co-60	<2.22E+01	0.00E+00	2.22E+01
			Zn-65	<4.85E+01	0.00E+00	4.85E+01
			Zr-95	<3.52E+01	0.00E+00	3.52E+01
			Nb-95	<1.63E+01	0.00E+00	1.63E+01
			I-131	<1.86E+01	0.00E+00	1.86E+01
			Cs-134	<2.23E+01	0.00E+00	2.23E+01
			Cs-137	<2.17E+01	0.00E+00	2.17E+01
			BaLa-140	<3.16E+01	0.00E+00	3.16E+01
			Be-7	5.13E+03	5.91E+02	2.21E+02
			K-40	3.16E+03	5.33E+02	3.35E+02
542267	4/5/2021 - 4/5/2021	MIXEDBLV	Mn-54	<1.63E+01	0.00E+00	1.63E+01
			Co-58	<1.88E+01	0.00E+00	1.88E+01
			Fe-59	<3.07E+01	0.00E+00	3.07E+01
			Co-60	<1.71E+01	0.00E+00	1.71E+01
			Zn-65	<2.99E+01	0.00E+00	2.99E+01
			Zr-95	<2.96E+01	0.00E+00	2.96E+01
			Nb-95	<1.74E+01	0.00E+00	1.74E+01
			I-131	<2.26E+01	0.00E+00	2.26E+01
			Cs-134	<1.82E+01	0.00E+00	1.82E+01
			Cs-137	<1.96E+01	0.00E+00	1.96E+01
			BaLa-140	<2.17E+01	0.00E+00	2.17E+01
			Be-7	6.91E+03	7.17E+02	2.13E+02
			K-40	4.30E+03	5.63E+02	2.66E+02
544340	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54	<1.22E+01	0.00E+00	1.22E+01
			Co-58	<8.30E+00	0.00E+00	8.30E+00
			Fe-59	<2.19E+01	0.00E+00	2.19E+01
			Co-60	<1.16E+01	0.00E+00	1.16E+01
			Zn-65	<2.72E+01	0.00E+00	2.72E+01
			Zr-95	<1.94E+01	0.00E+00	1.94E+01
			Nb-95	<1.01E+01	0.00E+00	1.01E+01
			I-131	<1.05E+01	0.00E+00	1.05E+01
			Cs-134	<1.08E+01	0.00E+00	1.08E+01
			Cs-137	<1.04E+01	0.00E+00	1.04E+01
			BaLa-140	<1.31E+01	0.00E+00	1.31E+01
			Be-7	5.61E+02	1.26E+02	1.45E+02
			K-40	3.37E+03	4.22E+02	1.48E+02
546055	6/7/2021 - 6/7/2021	MIXEDBLV	Mn-54	<2.36E+01	0.00E+00	2.36E+01
			Co-58	<2.01E+01	0.00E+00	2.01E+01
			Fe-59	<4.33E+01	0.00E+00	4.33E+01
			Co-60	<2.22E+01	0.00E+00	2.22E+01
			Zn-65	<4.43E+01	0.00E+00	4.43E+01
			Zr-95	<4.12E+01	0.00E+00	4.12E+01
			Nb-95	<2.47E+01	0.00E+00	2.47E+01
			I-131	<2.73E+01	0.00E+00	2.73E+01
			Cs-134	<2.59E+01	0.00E+00	2.59E+01
			Cs-137	<2.34E+01	0.00E+00	2.34E+01
			BaLa-140	<2.60E+01	0.00E+00	2.60E+01
			Be-7	5.14E+02	1.93E+02	2.63E+02
			K-40	4.74E+03	6.74E+02	3.87E+02
547763	7/6/2021 - 7/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
			Mn-54	<1.49E+01	0.00E+00	1.49E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA			
547763	7/6/2021 - 7/6/2021	MIXEDBLV	Co-58	<1.47E+01	0.00E+00	1.47E+01			
			Fe-59	<2.75E+01	0.00E+00	2.75E+01			
			Co-60	<1.88E+01	0.00E+00	1.88E+01			
			Zn-65	<3.84E+01	0.00E+00	3.84E+01			
			Zr-95	<2.38E+01	0.00E+00	2.38E+01			
			Nb-95	<1.38E+01	0.00E+00	1.38E+01			
			I-131	<1.77E+01	0.00E+00	1.77E+01			
			Cs-134	<1.82E+01	0.00E+00	1.82E+01			
			Cs-137	<1.50E+01	0.00E+00	1.50E+01			
			BaLa-140	<1.12E+01	0.00E+00	1.12E+01			
			Be-7	7.38E+02	1.67E+02	1.92E+02			
			K-40	3.80E+03	4.77E+02	1.28E+02			
			549002	8/2/2021 - 8/2/2021	MIXEDBLV	Mn-54	<1.57E+01	0.00E+00	1.57E+01
						Co-58	<1.50E+01	0.00E+00	1.50E+01
Fe-59	<3.24E+01	0.00E+00				3.24E+01			
Co-60	<1.88E+01	0.00E+00				1.88E+01			
Zn-65	<3.18E+01	0.00E+00				3.18E+01			
Zr-95	<2.78E+01	0.00E+00				2.78E+01			
Nb-95	<1.69E+01	0.00E+00				1.69E+01			
I-131	<1.49E+01	0.00E+00				1.49E+01			
Cs-134	<1.56E+01	0.00E+00				1.56E+01			
Cs-137	<1.69E+01	0.00E+00				1.69E+01			
BaLa-140	<1.70E+01	0.00E+00				1.70E+01			
Be-7	2.48E+03	3.19E+02				1.97E+02			
K-40	4.38E+03	5.52E+02				1.99E+02			
551062	9/7/2021 - 9/7/2021	MIXEDBLV				Mn-54	<2.28E+01	0.00E+00	2.28E+01
			Co-58	<1.40E+01	0.00E+00	1.40E+01			
			Fe-59	<5.47E+01	0.00E+00	5.47E+01			
			Co-60	<2.72E+01	0.00E+00	2.72E+01			
			Zn-65	<4.92E+01	0.00E+00	4.92E+01			
			Zr-95	<3.37E+01	0.00E+00	3.37E+01			
			Nb-95	<2.06E+01	0.00E+00	2.06E+01			
			I-131	<2.97E+01	0.00E+00	2.97E+01			
			Cs-134	<2.26E+01	0.00E+00	2.26E+01			
			Cs-137	<2.22E+01	0.00E+00	2.22E+01			
			BaLa-140	<2.91E+01	0.00E+00	2.91E+01			
			Be-7	1.93E+03	2.73E+02	2.02E+02			
			K-40	4.10E+03	5.84E+02	2.78E+02			
			552824	10/4/2021 - 10/4/2021	MIXEDBLV	Mn-54	<1.71E+01	0.00E+00	1.71E+01
Co-58	<1.72E+01	0.00E+00				1.72E+01			
Fe-59	<3.67E+01	0.00E+00				3.67E+01			
Co-60	<1.71E+01	0.00E+00				1.71E+01			
Zn-65	<3.39E+01	0.00E+00				3.39E+01			
Zr-95	<3.39E+01	0.00E+00				3.39E+01			
Nb-95	<2.09E+01	0.00E+00				2.09E+01			
I-131	<1.95E+01	0.00E+00				1.95E+01			
Cs-134	<2.64E+01	0.00E+00				2.64E+01			
Cs-137	<1.73E+01	0.00E+00				1.73E+01			
BaLa-140	<2.40E+01	0.00E+00				2.40E+01			
Be-7	1.66E+03	2.62E+02				2.31E+02			
K-40	2.82E+03	4.13E+02				1.25E+02			
554628	11/1/2021 - 11/1/2021	MIXEDBLV				Mn-54	<2.58E+01	0.00E+00	2.58E+01
			Co-58	<2.68E+01	0.00E+00	2.68E+01			
			Fe-59	<5.23E+01	0.00E+00	5.23E+01			
			Co-60	<2.33E+01	0.00E+00	2.33E+01			
			Zn-65	<3.87E+01	0.00E+00	3.87E+01			
			Zr-95	<4.03E+01	0.00E+00	4.03E+01			
			Nb-95	<2.28E+01	0.00E+00	2.28E+01			
			I-131	<2.64E+01	0.00E+00	2.64E+01			
			Cs-134	<2.85E+01	0.00E+00	2.85E+01			

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 084 [INDICATOR - NNE @ 2.58 miles]

Sample ID:	554628	Sample Dates:	11/1/2021 - 11/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Cs-137	<2.92E+01	0.00E+00	2.92E+01
					BaLa-140	<2.79E+01	0.00E+00	2.79E+01
					Be-7	5.54E+03	6.43E+02	3.37E+02
					K-40	3.67E+03	5.70E+02	3.26E+02
Sample ID:	557520	Sample Dates:	12/6/2021 - 12/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<2.31E+01	0.00E+00	2.31E+01
					Fe-59	<4.48E+01	0.00E+00	4.48E+01
					Co-60	<2.35E+01	0.00E+00	2.35E+01
					Zn-65	<5.45E+01	0.00E+00	5.45E+01
					Zr-95	<4.09E+01	0.00E+00	4.09E+01
					Nb-95	<2.32E+01	0.00E+00	2.32E+01
					I-131	<2.41E+01	0.00E+00	2.41E+01
					Cs-134	<2.68E+01	0.00E+00	2.68E+01
					Cs-137	<2.39E+01	0.00E+00	2.39E+01
					BaLa-140	<2.71E+01	0.00E+00	2.71E+01
					Be-7	2.77E+03	3.96E+02	2.88E+02
					K-40	4.97E+03	6.75E+02	3.16E+02

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	536822	Sample Dates:	1/5/2021 - 1/5/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.45E+01	0.00E+00	2.45E+01
					Co-58	<2.63E+01	0.00E+00	2.63E+01
					Fe-59	<5.00E+01	0.00E+00	5.00E+01
					Co-60	<2.98E+01	0.00E+00	2.98E+01
					Zn-65	<6.36E+01	0.00E+00	6.36E+01
					Zr-95	<4.55E+01	0.00E+00	4.55E+01
					Nb-95	<2.88E+01	0.00E+00	2.88E+01
					I-131	<2.42E+01	0.00E+00	2.42E+01
					Cs-134	<3.50E+01	0.00E+00	3.50E+01
					Cs-137	<2.58E+01	0.00E+00	2.58E+01
					BaLa-140	<2.87E+01	0.00E+00	2.87E+01
					Be-7	2.59E+03	3.97E+02	3.03E+02
					K-40	4.25E+03	6.64E+02	3.49E+02
Sample ID:	538341	Sample Dates:	2/1/2021 - 2/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.37E+01	0.00E+00	1.37E+01
					Co-58	<1.58E+01	0.00E+00	1.58E+01
					Fe-59	<3.80E+01	0.00E+00	3.80E+01
					Co-60	<1.62E+01	0.00E+00	1.62E+01
					Zn-65	<3.23E+01	0.00E+00	3.23E+01
					Zr-95	<3.23E+01	0.00E+00	3.23E+01
					Nb-95	<1.86E+01	0.00E+00	1.86E+01
					I-131	<2.09E+01	0.00E+00	2.09E+01
					Cs-134	<2.11E+01	0.00E+00	2.11E+01
					Cs-137	<1.97E+01	0.00E+00	1.97E+01
					BaLa-140	<2.15E+01	0.00E+00	2.15E+01
					Be-7	2.81E+03	3.57E+02	2.16E+02
					K-40	4.37E+03	5.62E+02	2.31E+02

Sample ID:	539294	Sample Dates:	3/1/2021 - 3/1/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.59E+01	0.00E+00	2.59E+01
					Co-58	<2.73E+01	0.00E+00	2.73E+01
					Fe-59	<5.71E+01	0.00E+00	5.71E+01
					Co-60	<2.54E+01	0.00E+00	2.54E+01
					Zn-65	<5.78E+01	0.00E+00	5.78E+01
					Zr-95	<5.41E+01	0.00E+00	5.41E+01
					Nb-95	<3.19E+01	0.00E+00	3.19E+01
					I-131	<2.71E+01	0.00E+00	2.71E+01
					Cs-134	<3.48E+01	0.00E+00	3.48E+01
					Cs-137	<2.34E+01	0.00E+00	2.34E+01
					BaLa-140	<1.93E+01	0.00E+00	1.93E+01
					Be-7	2.76E+03	4.14E+02	3.28E+02
					K-40	4.76E+03	7.08E+02	4.12E+02

Sample ID:	542268	Sample Dates:	4/5/2021 - 4/5/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.93E+01	0.00E+00	1.93E+01

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA			
542268	4/5/2021 - 4/5/2021	MIXEDBLV	Co-58	<1.82E+01	0.00E+00	1.82E+01			
			Fe-59	<4.37E+01	0.00E+00	4.37E+01			
			Co-60	<2.06E+01	0.00E+00	2.06E+01			
			Zn-65	<4.47E+01	0.00E+00	4.47E+01			
			Zr-95	<3.44E+01	0.00E+00	3.44E+01			
			Nb-95	<2.06E+01	0.00E+00	2.06E+01			
			I-131	<2.40E+01	0.00E+00	2.40E+01			
			Cs-134	<2.45E+01	0.00E+00	2.45E+01			
			Cs-137	<2.39E+01	0.00E+00	2.39E+01			
			BaLa-140	<2.29E+01	0.00E+00	2.29E+01			
			Be-7	2.11E+03	3.20E+02	2.66E+02			
			K-40	4.10E+03	5.75E+02	3.50E+02			
			544341	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54	<1.81E+01	0.00E+00	1.81E+01
						Co-58	<1.59E+01	0.00E+00	1.59E+01
Fe-59	<4.55E+01	0.00E+00				4.55E+01			
Co-60	<1.20E+01	0.00E+00				1.20E+01			
Zn-65	<3.80E+01	0.00E+00				3.80E+01			
Zr-95	<2.68E+01	0.00E+00				2.68E+01			
Nb-95	<1.90E+01	0.00E+00				1.90E+01			
I-131	<1.73E+01	0.00E+00				1.73E+01			
Cs-134	<1.68E+01	0.00E+00				1.68E+01			
Cs-137	<1.97E+01	0.00E+00				1.97E+01			
BaLa-140	<1.40E+01	0.00E+00				1.40E+01			
Be-7	4.48E+02	1.42E+02				1.78E+02			
K-40	4.16E+03	5.55E+02				1.94E+02			
546056	6/7/2021 - 6/7/2021	MIXEDBLV				Mn-54	<1.53E+01	0.00E+00	1.53E+01
			Co-58	<1.57E+01	0.00E+00	1.57E+01			
			Fe-59	<3.42E+01	0.00E+00	3.42E+01			
			Co-60	<2.02E+01	0.00E+00	2.02E+01			
			Zn-65	<3.34E+01	0.00E+00	3.34E+01			
			Zr-95	<3.14E+01	0.00E+00	3.14E+01			
			Nb-95	<1.51E+01	0.00E+00	1.51E+01			
			I-131	<1.46E+01	0.00E+00	1.46E+01			
			Cs-134	<1.83E+01	0.00E+00	1.83E+01			
			Cs-137	<1.65E+01	0.00E+00	1.65E+01			
			BaLa-140	<1.65E+01	0.00E+00	1.65E+01			
			Be-7	4.96E+02	1.45E+02	1.80E+02			
			K-40	4.31E+03	5.56E+02	2.62E+02			
			547764	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54	<1.38E+01	0.00E+00	1.38E+01
Co-58	<1.64E+01	0.00E+00				1.64E+01			
Fe-59	<2.30E+01	0.00E+00				2.30E+01			
Co-60	<1.60E+01	0.00E+00				1.60E+01			
Zn-65	<3.49E+01	0.00E+00				3.49E+01			
Zr-95	<2.47E+01	0.00E+00				2.47E+01			
Nb-95	<1.43E+01	0.00E+00				1.43E+01			
I-131	<1.49E+01	0.00E+00				1.49E+01			
Cs-134	<1.79E+01	0.00E+00				1.79E+01			
Cs-137	<1.45E+01	0.00E+00				1.45E+01			
BaLa-140	<2.13E+01	0.00E+00				2.13E+01			
Be-7	7.07E+02	1.63E+02				1.83E+02			
K-40	3.88E+03	5.05E+02				1.81E+02			
549003	8/2/2021 - 8/2/2021	MIXEDBLV				Mn-54	<1.48E+01	0.00E+00	1.48E+01
			Co-58	<1.16E+01	0.00E+00	1.16E+01			
			Fe-59	<2.87E+01	0.00E+00	2.87E+01			
			Co-60	<1.42E+01	0.00E+00	1.42E+01			
			Zn-65	<2.86E+01	0.00E+00	2.86E+01			
			Zr-95	<2.43E+01	0.00E+00	2.43E+01			
			Nb-95	<1.46E+01	0.00E+00	1.46E+01			
			I-131	<1.27E+01	0.00E+00	1.27E+01			
			Cs-134	<1.69E+01	0.00E+00	1.69E+01			

OCONEE Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 093 [CONTROL - SE @ 9.34 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
549003	8/2/2021 - 8/2/2021	MIXEDBLV	Cs-137	<1.39E+01	0.00E+00	1.39E+01
			BaLa-140	<1.18E+01	0.00E+00	1.18E+01
			Be-7	1.59E+03	2.25E+02	1.59E+02
			K-40	4.14E+03	5.09E+02	2.11E+02
551063	9/7/2021 - 9/7/2021	MIXEDBLV	Mn-54	<2.14E+01	0.00E+00	2.14E+01
			Co-58	<2.35E+01	0.00E+00	2.35E+01
			Fe-59	<5.01E+01	0.00E+00	5.01E+01
			Co-60	<2.33E+01	0.00E+00	2.33E+01
			Zn-65	<5.30E+01	0.00E+00	5.30E+01
			Zr-95	<4.25E+01	0.00E+00	4.25E+01
			Nb-95	<2.61E+01	0.00E+00	2.61E+01
			I-131	<2.86E+01	0.00E+00	2.86E+01
			Cs-134	<2.80E+01	0.00E+00	2.80E+01
			Cs-137	<1.86E+01	0.00E+00	1.86E+01
			BaLa-140	<3.34E+01	0.00E+00	3.34E+01
			Be-7	1.58E+03	2.72E+02	2.24E+02
			K-40	5.80E+03	7.41E+02	2.82E+02
552825	10/4/2021 - 10/4/2021	MIXEDBLV	Mn-54	<1.33E+01	0.00E+00	1.33E+01
			Co-58	<1.58E+01	0.00E+00	1.58E+01
			Fe-59	<3.14E+01	0.00E+00	3.14E+01
			Co-60	<1.61E+01	0.00E+00	1.61E+01
			Zn-65	<3.45E+01	0.00E+00	3.45E+01
			Zr-95	<2.79E+01	0.00E+00	2.79E+01
			Nb-95	<1.70E+01	0.00E+00	1.70E+01
			I-131	<1.56E+01	0.00E+00	1.56E+01
			Cs-134	<1.93E+01	0.00E+00	1.93E+01
			Cs-137	<1.42E+01	0.00E+00	1.42E+01
			BaLa-140	<1.57E+01	0.00E+00	1.57E+01
			Be-7	1.07E+03	1.90E+02	1.71E+02
			K-40	4.33E+03	5.55E+02	2.76E+02
554629	11/1/2021 - 11/1/2021	MIXEDBLV	Mn-54	<1.95E+01	0.00E+00	1.95E+01
			Co-58	<1.65E+01	0.00E+00	1.65E+01
			Fe-59	<3.89E+01	0.00E+00	3.89E+01
			Co-60	<2.04E+01	0.00E+00	2.04E+01
			Zn-65	<4.26E+01	0.00E+00	4.26E+01
			Zr-95	<3.34E+01	0.00E+00	3.34E+01
			Nb-95	<2.09E+01	0.00E+00	2.09E+01
			I-131	<2.54E+01	0.00E+00	2.54E+01
			Cs-134	<2.14E+01	0.00E+00	2.14E+01
			Cs-137	<2.25E+01	0.00E+00	2.25E+01
			BaLa-140	<2.19E+01	0.00E+00	2.19E+01
			Be-7	1.49E+03	2.65E+02	2.53E+02
			K-40	3.08E+03	4.94E+02	3.56E+02
557521	12/6/2021 - 12/6/2021	MIXEDBLV	Co-58	<1.72E+01	0.00E+00	1.72E+01
			Fe-59	<3.84E+01	0.00E+00	3.84E+01
			Co-60	<2.41E+01	0.00E+00	2.41E+01
			Zn-65	<4.61E+01	0.00E+00	4.61E+01
			Zr-95	<2.99E+01	0.00E+00	2.99E+01
			Nb-95	<1.75E+01	0.00E+00	1.75E+01
			I-131	<2.40E+01	0.00E+00	2.40E+01
			Cs-134	<1.80E+01	0.00E+00	1.80E+01
			Cs-137	<2.02E+01	0.00E+00	2.02E+01
			BaLa-140	<4.78E+00	0.00E+00	4.78E+00
			Be-7	9.01E+02	2.22E+02	2.68E+02
			K-40	3.80E+03	5.60E+02	3.03E+02

APPENDIX F

ERRATA TO PREVIOUS REPORTS

There are no errata to be appended to the
2021 Oconee Nuclear Station AREOR.

Enclosure 6
RA-22-0030

ENCLOSURE 6: [RNP Annual Radiological Environmental Operating Report](#)



ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

DUKE ENERGY PROGRESS, LLC

**H. B. ROBINSON STEAM ELECTRIC PLANT
Unit No. 2**

2021



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

A	Annually
AP	Air Particulate
AR	Air Radioiodine/ Air Cartridge
AREOR	Annual Radiological Environmental Operating Report
BLV	Broadleaf Vegetation
C	Control
CM	Community
CR	Condition Report (analogous to Nuclear Condition Report (NCR))
EZA	Eckert & Ziegler Analytics
FI	Fish
FP	Food Product
GEL	General Engineering Laboratories, LLC
GPS	Global Positioning System
GW	Ground Water
I	Indicator
IR	Inner Ring - TLDs
ISFSI	Independent Spent Fuel Storage Installation
HBRSEP or RNP	H. B. Robinson Steam Electric Plant, Unit No. 2
LLD	Lower Limit of Detection
M	Monthly
MAPEP	Department of Energy Mixed Analyte Performance Evaluation Program
MDA	Minimum Detectable Activity
mR	milliroentgen
mR/Std-Qtr	milliroentgen per standard quarter
MWe	Megawatt (electrical)
NCR	Nuclear Condition Report (analogous to Condition Report (CR))
NIST	National Institute of Standards and Technology
NRC	Nuclear Regulatory Commission
ODCM	Off-Site Dose Calculation Manual
OR	Outer Ring - TLDs
pCi/kg	picocurie per kilogram
pCi/l	picocurie per liter
pCi/m ³	picocurie per cubic meter
PI	Power Interrupt
Q	Quarterly
REMP	Radiological Environmental Monitoring Program
SA	Semiannually
SB	Site Boundary
SS	Sediment – Shoreline
SI	Special Interest - TLDs
SW	Surface Water
TECH SPECS	Technical Specifications
TLD	Thermoluminescent Dosimeter
UFSAR	Updated Final Safety Analysis Report
W	Weekly

1.0 EXECUTIVE SUMMARY

This Annual Radiological Environmental Operating Report describes the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP or Robinson Nuclear Plant) Radiological Environmental Monitoring Program (REMP), and the program results for the calendar year 2021.

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

Sampling activities were conducted as prescribed by the HBRSEP ODCM. Required analyses were performed and detection capabilities were met for the collected samples required by the ODCM. One-thousand-three-hundred-ninety-six samples were analyzed comprising 1,396 test results in order to compile data for the 2021 HBRSEP Annual Radiological Environmental Operating Report (AREOR). No new sampling locations were added to the HBRSEP REMP as a result of the 2021 land use census.

Concentrations observed in the environment in 2021 for plant related radionuclides were within the ranges of concentrations observed in the past. Inspection of data showed that radioactivity concentrations in surface water are higher than the activities reported for samples collected at control locations. The radioactivity concentrations of the control location samples of broadleaf vegetation were higher than those samples collected at the indicator locations. All positively identified measurements attributable to plant operation were within limits as specified in ODCM.

The continued operation of HBRSEP has not contributed measurable radiation or the presence of gamma radioactivity in the environmental media monitored. The Lake Robinson surface water samples revealed tritium concentrations that are well within the applicable regulatory limits. The radiological environmental data for 2021 indicates that radioactivity concentrations were not higher than expected and all positively identified measurements attributable to HBRSEP operations in 2021 were within limits as specified in the HBRSEP ODCM, thus presenting no significant impact on the environment or public safety.

2.0 INTRODUCTION

2.1 SITE DESCRIPTION AND SAMPLE LOCATIONS

The H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP) is located in Darlington County, South Carolina, approximately five (5) miles northwest of Hartsville, and approximately twenty five (25) miles northwest of Florence, South Carolina. Lake Robinson is adjacent to the plant and is the source of cooling water. The lake was impounded during the construction of Robinson Unit No.1 (coal fired). The lake is fed by Black Creek and is approximately 2,250 acres in area. The plant intake is at the southern portion of the lake near the dam. The discharge is to a canal which conveys the cooling water to a point 4.2 miles north of the plant, where it returns to Lake Robinson.

HBRSEP consists of a pressurized water reactor (Unit No. 2) that is designed to produce 2339 Megawatts thermal (MWt). The site was shared with a pulverized coal unit (Unit No.1), which established commercial operation in 1960. Unit 1 is now offline and has been decommissioned since October 2012. Commercial production was initiated by Unit No. 2 on March 7, 1971.

The H. B. Robinson Steam Electric Plant site centerline used for GPS measurements was referenced from the H. B. Robinson Steam Electric Plant (HBSEP) Updated Final Safety Analysis Report (UFSAR). Waypoint coordinates used for HBSEP GPS measurements were latitude 34° 24' 02" N and longitude 80° 09' 05" W. Maps and tables were generated using North American Datum (NAD) 27. Data normally reflect accuracy to within 2 to 5 meters from point of measurement. All GPS field measurements were taken as close as possible to the item of interest. Distances for the locations are displayed using two significant figures.

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

2.2 SCOPE AND REQUIREMENTS OF THE REMP

The Radiological Environmental Monitoring Program (REMP) has been in effect at HBRSEP since 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 plant. 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 HBRSEP Off-Site Dose Calculation Manual (ODCM), with regards to sample media, sampling locations, sampling frequency and analytical sensitivity requirements. Indicator and control locations were

established for comparison purposes to distinguish radioactivity of plant origin from natural or other “man-made” environmental radioactivity. The environmental monitoring program also verifies projected and anticipated radionuclide concentrations in the environment and related exposures from releases of radionuclides from HBRSEP. This program satisfies the requirements of Section IV.B.2 of Appendix I to 10 CFR 50 and provides surveillance of all appropriate critical exposure pathways to man and protects vital interests of the company, public and state and federal agencies concerned with the environment. Reporting levels for activity found in environmental samples are listed in Table 2.2-A. Table 2.2-B lists the REMP analysis and frequency schedule.

The Annual Land Use Census, required by the HBRSEP Off-Site Dose Calculation Manual (ODCM), is performed to ensure that changes in the use of areas at or beyond the site boundary are identified and that modifications to the REMP are made if required by changes in land use. This census satisfies the requirements of Section IV.B.3 of Appendix I to 10 CFR 50. Results are shown in Table 3.10.

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

2.3 STATISTICAL AND CALCULATIONAL METHODOLOGY

2.3.1 ESTIMATION OF THE MEAN VALUE

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

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

Where:

\bar{x} = estimate of the mean,
i = individual sample,

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

LLD - The LLD, as defined in the ODCM as 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* (before the fact) 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 ODCM and are listed in Table 2.2-C.

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

2.3.3 TREND IDENTIFICATION

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

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

1986 Chernobyl accident and the 2011 Japan earthquake and tsunami, which triggered the Fukushima Dai-ichi nuclear power plant incident). Some of these factors may be obvious while others are sometimes unknown. Therefore, how trends are identified will include some judgment by plant personnel.

Figure 2.1-1

Radiological Environmental Sampling Locations
(Near Plant)

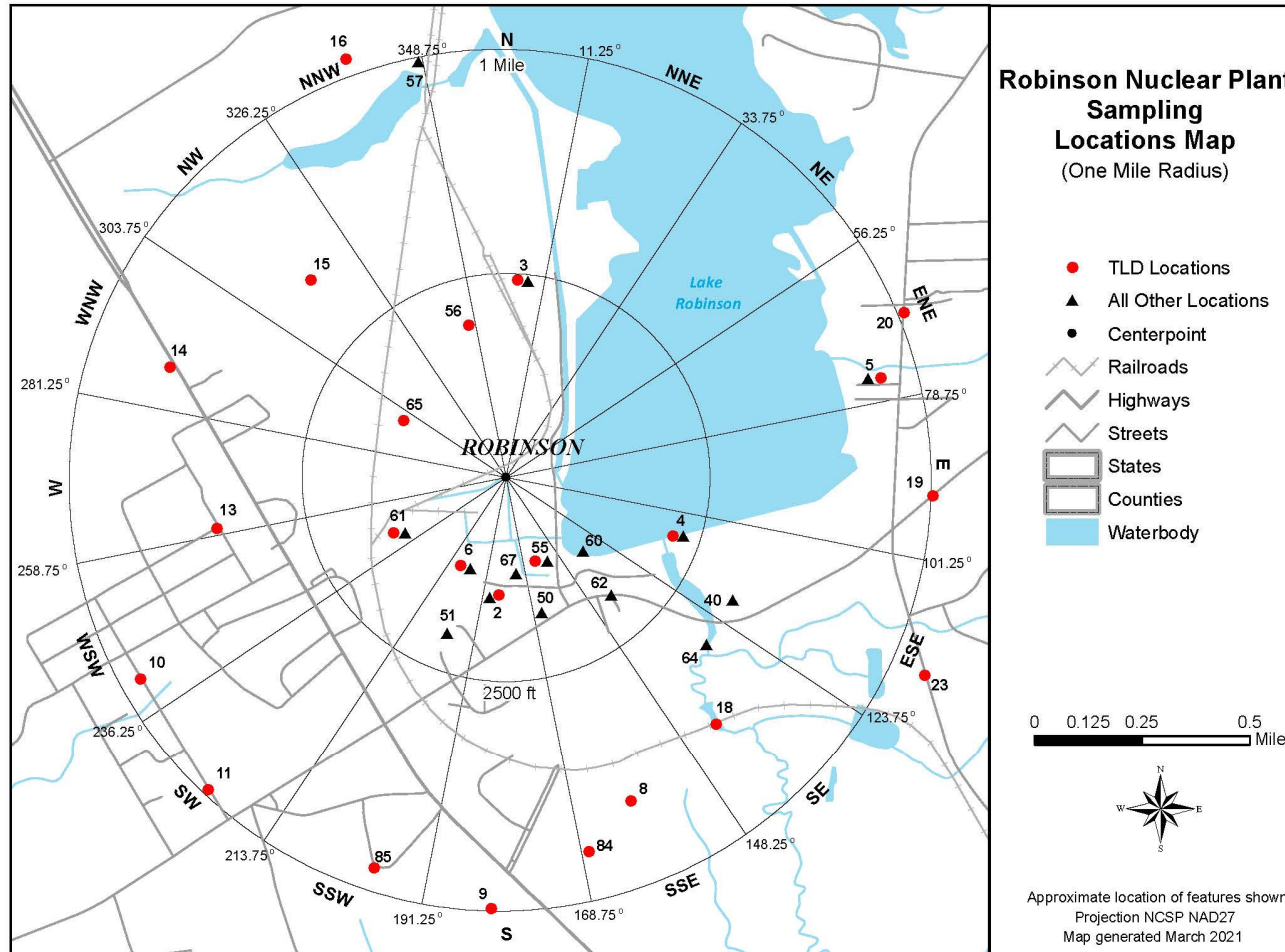


Figure 2.1-2

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

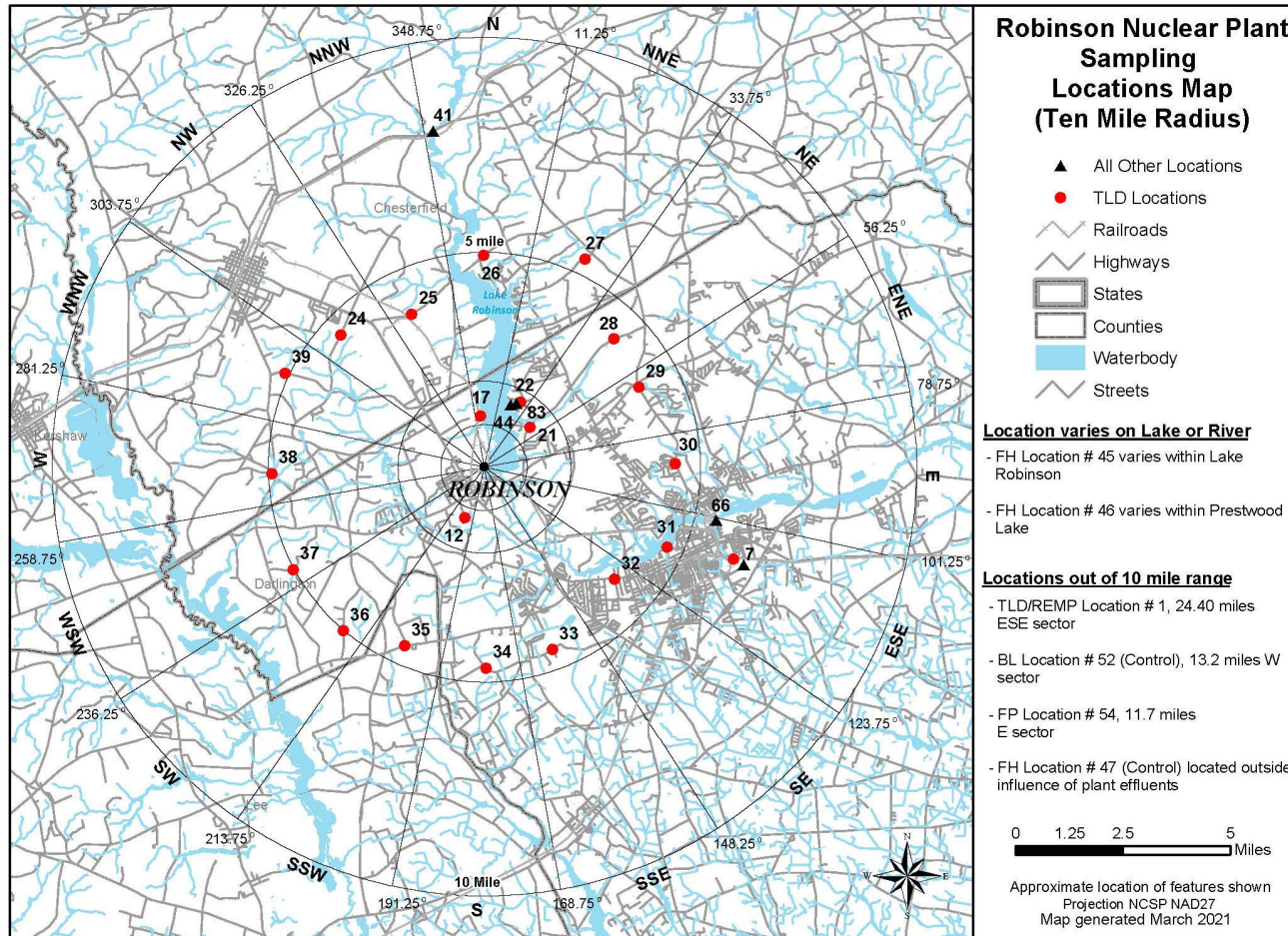


TABLE 2.1-A

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 (HBRSEP)
RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS**

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

Site #	Measure Type*	Location Description**	Air Rad. & Particulate*	Surface Water ^{(e)*}	Shoreline Sediment*	Food Product ^{(a)*}	Fish*	Broadleaf Vegetation ^{(b)*}	Ground Water*
1	C ^(d)	24.4 miles ESE Florence, S.C.	W/Q						
2	I	0.2 miles S Information Center	W/Q						
3	I	0.5 miles N Microwave Tower	W/Q, SB						
4	I	0.4 miles ESE Spillway	W/Q						
5	I	0.9 miles ENE East shore of lake near Johnson's Landing	W/Q, CM						
6	I	0.2 miles SSW Information Center	W/Q, SB						
7	I	6.4 miles ESE CP&L facility on RR Avenue, Hartsville	W/Q						
40	I	0.6 miles ESE Black Creek at Old Camden Road (S-16-23) – Lake Robinson		M					
41	C ^(d)	8.0 miles N Black Creek at US Hwy 1		M					
44	I	1.6 miles NNE East Shore of Lake, Shady Rest Club			SA				
45	I	Site varies within Lake Robinson					SA		
46	I	Site varies within Prestwood Lake					SA		
47	C ^(d)	Control station, any lake not influenced by plant discharge					SA		
50	I	SSE Close to Site Boundary						M, SB	
51	I	SSW Close to Site Boundary						M, SB	
52	C ^(d)	10 miles W near Bethune						M	
54	I	10.1 miles E Auburndale Plantation (if irrigating from Black Creek)				A			
55	I	0.2 miles SSE South of West Settling Pond	W/Q, SB						
60	I	0.2 miles SE Robinson Picnic Area	W/Q						
61	I	0.3 miles WSW West Parking lot near RR tracks	W/Q						
62	I	SE Close to Site Boundary						M, SB	
64	I	0.6 miles SE Artesian Well							Q
67	I	S Close to Site Boundary						M, SB	
83 ^(e)	I	1.60 miles NNE						M	

(a) During Harvest/Growing Season

(b) When Available

(c) The "upstream sample" shall be taken at a distance beyond significant influence of the discharge. The "downstream" sample shall be taken in an area beyond but near mixing zone.

(d) The purpose of this sample is to obtain background information.

(e) Location will be added to a future ODCM revision.

* Refer to List of Acronyms Used in this Text in Table of Contents

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

TABLE 2.1-B

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 (HBRSEP)

RADIOLOGICAL MONITORING PROGRAM SAMPLING LOCATIONS (TLD SITES)^(a)

Table 2.1-B Codes	
C	Control ^(b)
IR	Inner Ring
OR	Outer Ring

Site #	Measure Type	Location*	Distance (miles) [*]	Sector	Site #	Measure Type	Location*	Distance (miles) [*]	Sector
1	C ^(b)	Florence, SC	24.4	ESE	24	OR	Sowell Road (#S-13-711)	4.6	NW
2	IR	Information Center ^{(c)(d)}	0.2	S	25	OR	Lake Robinson Road (#S-13-346)	4.0	NNW
3	IR	Microwave Tower	0.5	N	26	OR	Lake Robinson Road (#S-13-346)	5.0	N
4	IR	Spillway	0.4	ESE	27	OR	Prospect Church Road (#S-13-763)	5.4	NNE
5	IR	East shore of lake near Johnson's Landing	0.9	ENE	28	OR	New Market Road (#S-13-39)	4.3	NE
6	IR	Information Center ^{(c)(d)}	0.2	SSW	29	OR	Ruby Road (#S-16-20)	4.0	ENE
7	OR	CP&L Facility on RR Avenue, Hartsville	6.4	ESE	30	OR	Ruby Road (#S-16-20)	4.4	E
8 ^(f)	IR	Transmission right-of-way	0.8	SSE	31	OR	Lakeshore Drive	4.6	ESE
9	IR	Transmission right-of-way	1.0	S	32	OR	Transmission right-of-way	4.0	SE
10	IR	Clyde Church of God	1.0	WSW	33	OR	Bay Road (#S-16-493)	4.5	SSE
11	IR	Old Camden Road	1.0	SW	34	OR	Kellybell Road (#S-16-772)	4.7	S
12 ^(f)	IR	Off of Old Camden Road	1.2	SSW	35	OR	Kelly Bridge Road (#S-31-51)	4.5	SSW
13	IR	Corner of Saluda and Sandpit Roads	0.7	W	36	OR	Kingston Drive	5.0	SW
14	IR	First Baptist Church of Pine Ridge	0.8	WNW	37	OR	Pine Cone Road	5.0	WSW
15	IR	Transmission right-of-way	0.7	NW	38	OR	Union Church Road	4.9	W
16	IR	South side of Darlington Co. I.C. Turbine Plant	1.0	NNW	39	OR	King's Pond Road	5.1	WNW
17	IR	Darlington Co. Plant emergency fire pump	1.2	N	55	IR	South of the West Settling Pond	0.2	SSE
18	IR	Old Black Creek RR trestle	0.7	SE	56	IR	North of the center of the 7P-ISFSI ^{(c)(d)}	0.4	NNW
19	IR	Old Camden Road (#S-16-23)	1.0	E	61	IR	West Parking lot near RR tracks ^(d)	0.3	WSW
20	IR	New Market Road (#S-16-39)	1.0	ENE	65	IR	Northwest of the 24P-ISFSI ^(d)	0.3	WNW
21	IR	New Market Road (#S-16-39)	1.4	NE	84 ^(e)	IR	Greater Heights Baptist Church	0.9	SSE
22	IR	Shady Rest entrance off of Cloverdale Drive	1.7	NNE	85 ^(e)	IR	Off Hayden Lane	0.9	SSW
23	IR	New Market Road (#S-16-39)	1.0	ESE					

(a) One or more instruments, such as a pressurized ion chamber, for measuring and recording dose rate continuously may be used in place of, or in addition to, integrating, dosimeters. For the purpose of this table, a thermoluminescent dosimeter (TLD) is considered to be one phosphor; two or more phosphors in a packet are considered as two or more dosimeters. Film badges shall not be used as dosimeters for measuring direct radiation.

(b) The purpose of this sample is to obtain background information.

(c) Required for monitoring of the 7P-ISFSI.

(d) Required for monitoring of the 24P-ISFSI.

(e) Location will be added to a future ODCM revision.

(f) Location will be removed in a future ODCM revision.

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

TABLE 2.2-A

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

Analysis	Water (pCi/liter)	Airborne (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (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. This is 40 CFR Part 141 value. If no drinking water pathway exists, a value of 30,000 pCi/liter may be used.
 (b) If no drinking water pathway exists, a value of 20 pCi/liter may be used.

TABLE 2.2-B

REMP ANALYSIS FREQUENCY

Sample Medium	Analysis Schedule	Gamma Isotopic ^(b)	Tritium	Low Level I-131	Gross Beta	TLD
Air Radioiodine	Weekly	X				
Air Particulate	Weekly				X ^(a)	
	Quarterly	X				
Direct Radiation	Quarterly					X
Surface Water	Monthly Composite ^(c)	X	X			
Ground Water	Quarterly ^(d)	X	X			
Shoreline Sediment	Semiannually	X				
Fish	Semiannually	X				
Broadleaf Vegetation	Monthly ^(f)	X				
Food Products	Annually ^(e)	X				

- (a) Airborne particulate sample filters shall be analyzed for gross beta radioactivity 24 hours or more after sampling to allow for radon and thoron daughter decay. If gross beta activity in air particulate samples is greater than ten times the yearly mean of control samples, gamma isotopic analysis shall be performed on the individual samples.
 (b) Gamma isotopic analysis means the identification and quantification of gamma-emitting radionuclides that may be attributable to the effluents from the facility.
 (c) A composite sample is one which the quantity (aliquot) of liquid sampled is proportional to the quantity of flowing liquid and in which the method of sampling employed results in a specimen that is representative of the liquid flow. In this program composite sample aliquots shall be collected at time intervals that very short (e.g., hourly) relative to the compositing period (e.g., monthly) in order to assure obtaining a representative sample.
 (d) Ground water samples shall be taken when this source is tapped for drinking or irrigation purposes in areas where the hydraulic gradient or recharge properties are suitable for contamination.
 (e) If harvest occurs more than once a year, sampling shall be performed during each discrete harvest. If harvest occurs continuously, sampling shall be monthly. Attention shall be paid to including samples of tuberous and root food products.
 (f) When Available

TABLE 2.2-C***A PRIORI LOWER LIMITS OF DETECTION (LLD)^(a)***

Analysis	Water (pCi/liter)	Airborne (pCi/m ³)	Fish (pCi/kg-wet)	Milk (pCi/liter)	Food Products (pCi/kg-wet)	Sediment (pCi/kg-dry)
Gross Beta		0.01				
H-3	2000 ^(c)					
Mn-54	15		130			
Fe-59	30		260			
Co-58, 60	15		130			
Zn-65	30		260			
Zr-Nb-95 ^(b)	15					
I-131	1 ^(d)	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 ^(b)	15			15		

(a) The LLD is defined in Section 2.3.2.

(b) The specified LLD applies to the daughter nuclide of an equilibrium mixture of the parent and daughter nuclides.

(c) If no drinking water pathway exists, a value of 3000 pCi/liter may be used.

(d) If no drinking water pathway exists, a value of 15 pCi/liter may be used.

3.0 INTERPRETATION OF RESULTS

Review of the 2021 analysis results was performed to identify changes in environmental levels as a results of plant operations. The review is summarized in this section. Data from 2021 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 2021 information required by Technical Specifications Administrative Control 5.6.2 are located in Appendix B. REMP results for 2021 are located in Appendix E.

Evaluation for significant trends was performed for the radionuclides listed as required LLDs within the HBRSEP ODCM. The radionuclides include: H-3, Mn-54, Fe-59, Co-58, Co-60, Zn-65, Zr-95, Nb-95, I-131, Cs-134, Cs-137, Ba-140 and La-140. Trending of air particulate gross beta results is being performed. Trending is also performed for other radionuclides that are detected and could have been the result of station effluents. Only ODCM required radionuclides were detected in 2021.

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 terms of the percent of the radionuclide's ODCM 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 2021 due to HBRSEP operation was 6,810 pCi/liter which is 22.70% of the reporting level for H-3 in surface water sample collected at location 40.

Review of the 2021 data presented in this section supports the conclusion that there were no significant changes in environmental sample radionuclide concentrations of samples collected and analyzed from HBRSEP and surrounding areas that were attributable to plant operations. The radiological environmental data for 2021 indicates that radioactivity concentrations were not higher than expected and all positively identified measurements attributable to HBRSEP operations in 2021 were within limits as specified in the HBRSEP ODCM, thus presenting no significant impact on the environment or public safety.

Data presented in Sections 3.1 – 3.9 support the conclusion that there were no significant increases in radionuclides in the environment around HBRSEP due to plant operations in 2021. Similarly, there was no significant increase in ambient background radiation levels in the surrounding areas. The 2021 land use census data, shown in Section 3.10, indicates that no program changes are required as a result of the census.

3.1 AIRBORNE RADIOIODINE AND PARTICULATES

Airborne particulate and radioiodine samples at each of ten 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. In 2021, 527 continuously composited radioiodine and particulate samples were collected and analyzed, 474 from nine 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). Radioiodine samples received a weekly gamma analysis. During the collection period of 28SEP2021-5OCT2021, the filter sample at location 4 had a gouge in it upon receipt (NCR# 02400627). There was no discernible effect on the analysis results due to the gouge in the filter.

There was no detectable I-131 in air samples in 2021. Table 3.1-B gives the highest indicator location annual mean and control location annual mean for I-131 since 1999. The tables show similar historical concentrations for both the indicator and control locations.

There were no detectable gamma emitting radionuclides detected in air particulate samples in 2021 due to HBRSEP operations. No gamma emitting particulate due to HBRSEP operations have been detected in indicator location samples from 1999-2021.

Gross beta analyses indicated $2.19\text{E-}2$ pCi/m³ at the location with the highest annual mean and $2.07\text{E-}2$ pCi/m³ at the control location. Figure 3.1 and Table 3.1-A provide individual sample gross beta results for the highest annual mean indicator location and the control location concentrations since 1999 to 2021. The two sample locations' results are similar in concentration and have negligible variance. The gross beta activities decreased following the retirement of the coal steam unit in October 2012.

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

Figure 3.1

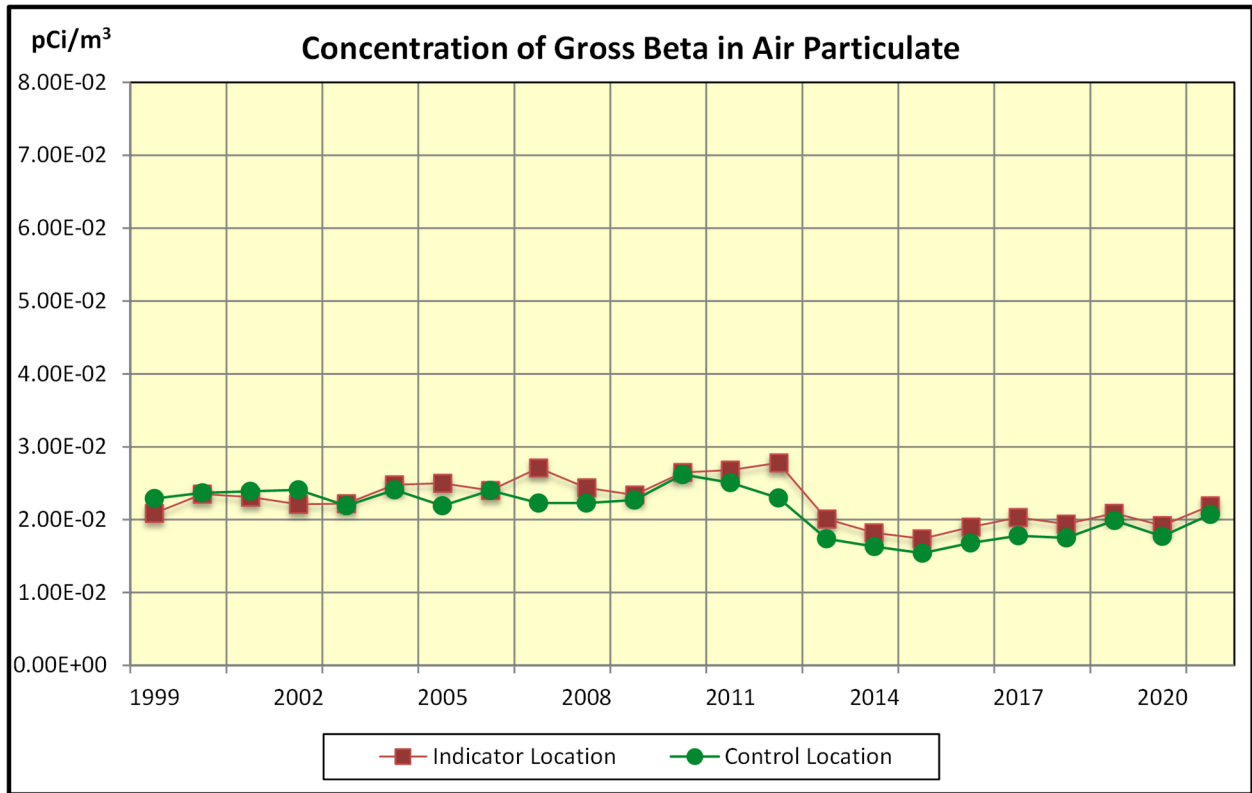


Table 3.1-A Mean Concentration of Gross Beta in Air Particulate

Year	Indicator Location (pCi/m³)	Control Location (pCi/m³)
1999	2.09E-2	2.29E-2
2000	2.35E-2	2.37E-2
2001	2.31E-2	2.39E-2
2002	2.21E-2	2.41E-2
2003	2.22E-2	2.19E-2
2004	2.48E-2	2.41E-2
2005	2.50E-2	2.19E-2
2006	2.40E-2	2.40E-2
2007	2.71E-2	2.23E-2
2008	2.44E-2	2.23E-2
2009	2.34E-2	2.27E-2
2010	2.65E-2	2.62E-2
2011	2.68E-2	2.51E-2
2012	2.78E-2	2.30E-2
2013	2.01E-2	1.74E-2
2014	1.82E-2	1.63E-2
2015	1.74E-2	1.54E-2
2016	1.90E-2	1.68E-2
2017	2.03E-2	1.78E-2
2018	1.94E-2	1.75E-2
2019	2.09E-2	1.99E-2
2020	1.92E-2	1.77E-2
2021	2.19E-2	2.07E-2

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

Year	Indicator Location (pCi/m ³)	Control Location (pCi/m ³)
1999	0.00E+0	0.00E+0
2000	0.00E+0	0.00E+0
2001	0.00E+0	0.00E+0
2002	0.00E+0	0.00E+0
2003	0.00E+0	0.00E+0
2004	0.00E+0	0.00E+0
2005	0.00E+0	0.00E+0
2006	0.00E+0	0.00E+0
2007	0.00E+0	0.00E+0
2008	0.00E+0	0.00E+0
2009	0.00E+0	0.00E+0
2010	0.00E+0	0.00E+0
2011 ⁽¹⁾	8.23E-2	8.10E-2
2012	0.00E+0	0.00E+0
2013	0.00E+0	0.00E+0
2014 ⁽²⁾	0.00E+0	0.00E+0
2015	0.00E+0	0.00E+0
2016	0.00E+0	0.00E+0
2017	0.00E+0	0.00E+0
2018	0.00E+0	0.00E+0
2019	0.00E+0	0.00E+0
2020	0.00E+0	0.00E+0
2021	0.00E+0	0.00E+0

0.00E+0 indicates no detectable measurements

(1) 2011 concentrations affected by Fukushima Dai-ichi

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

3.2 SURFACE WATER

Gamma spectroscopy and Tritium analyses were performed on 24 monthly surface water samples that were composited using water samplers that collected an aliquot every two hours. One indicator and one control location were sampled. The indicator is downstream of the liquid effluent release point.

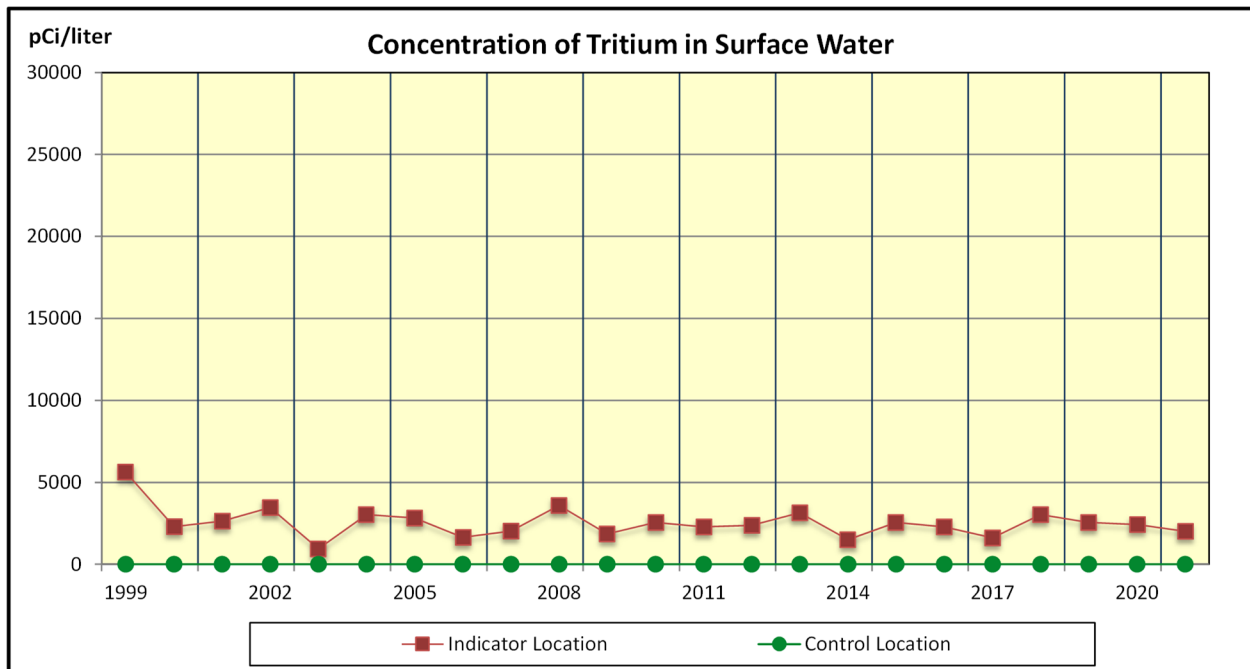
Tritium was detected in the 10 of the 12 indicator samples. The 2021 surface water highest annual mean tritium concentration was 2,019 pCi/liter. The individual samples ranged from 1,920 to 6,810 pCi/liter. For comparison purposes, the 2020 mean concentration was 2,430 pCi/liter. Tritium was not detected in any of the control surface water samples.

Figure 3.2 shows the indicator and control annual means for Tritium since 1999. Table 3.2 lists the indicator and control annual means since 1999.

Gamma spectroscopy analysis did not detect any station related gamma activity during 2021. No gamma emitting radionuclides attributable to plant operations have been detected in surface water samples since 1999.

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

Figure 3.2



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

Table 3.2 Mean Concentration of Tritium in Surface Water

Year	Indicator Location (pCi/l)	Control Location (pCi/l)
1999	5.64E+3	0.00E+0
2000	2.30E+3	0.00E+0
2001	2.64E+3	0.00E+0
2002	3.47E+3	0.00E+0
2003	9.53E+2	0.00E+0
2004	3.03E+3	0.00E+0
2005	2.83E+3	0.00E+0
2006	1.65E+3	0.00E+0
2007	2.03E+3	0.00E+0
2008	3.59E+3	0.00E+0
2009	1.86E+3	0.00E+0
2010	2.55E+3	0.00E+0
2011	2.29E+3	0.00E+0
2012	2.38E+3	0.00E+0
2013	3.14E+3	0.00E+0
2014	1.50E+3	0.00E+0
2015	2.56E+3	0.00E+0
2016	2.28E+3	0.00E+0
2017	1.62E+3	0.00E+0
2018	3.03E+3	0.00E+0
2019	2.56E+3	0.00E+0
2020	2.43E+3	0.00E+0
2021	2.02E+3	0.00E+0

0.00E+0 indicates no detectable measurements

3.3 GROUND WATER

Gamma spectroscopy and tritium analyses were performed on 4 quarterly ground water grab samples collected at one indicator location during 2021. There is no control ground water location.

Tritium analysis did not detect Tritium in any of the indicator samples in 2021.

Gamma spectroscopy analyses did not detect any gamma emitting radionuclides attributable to plant operations during 2021.

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

3.4 MILK

Milk monitoring has not been conducted due to the unavailability of milk samples in the area since July 17, 1998, when the dairy ceased operation. The 2021 Land use Census did not identify any milk animals within the 5 mile radius of the plant. Broadleaf sampling is conducted and is used to calculate dose to an individual via the vegetation-milk-man pathway.

3.5 BROADLEAF VEGETATION

Monthly samples were collected and a gamma spectroscopy was performed on 48 broadleaf vegetation samples during 2021. Five indicator locations and one control location were sampled.

During 2021, 24 of the 40 samples taken from the indicator locations identified Cs-137 activity with the highest annual mean concentration of 106 pCi/kg. Cs-137 was detected in 5 of the 8 samples taken from the control location with an annual mean concentration of 251 pCi/kg.

It is not unusual for Cs-137 to be present in vegetation. It is a constituent of nuclear weapons test fallout, nuclear plant accidents and has been observed in samples from indicator and control locations since 1999. Figure 3.5 displays the highest annual mean indicator and control location concentrations for Cs-137 in broadleaf vegetation from 1999 to 2021 and Table 3.5 lists these values. Visual inspection of the tabular data reveals a slight increasing trend in Cs-137 activity, but is well below the 50 percent reporting limit.

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

Figure 3.5

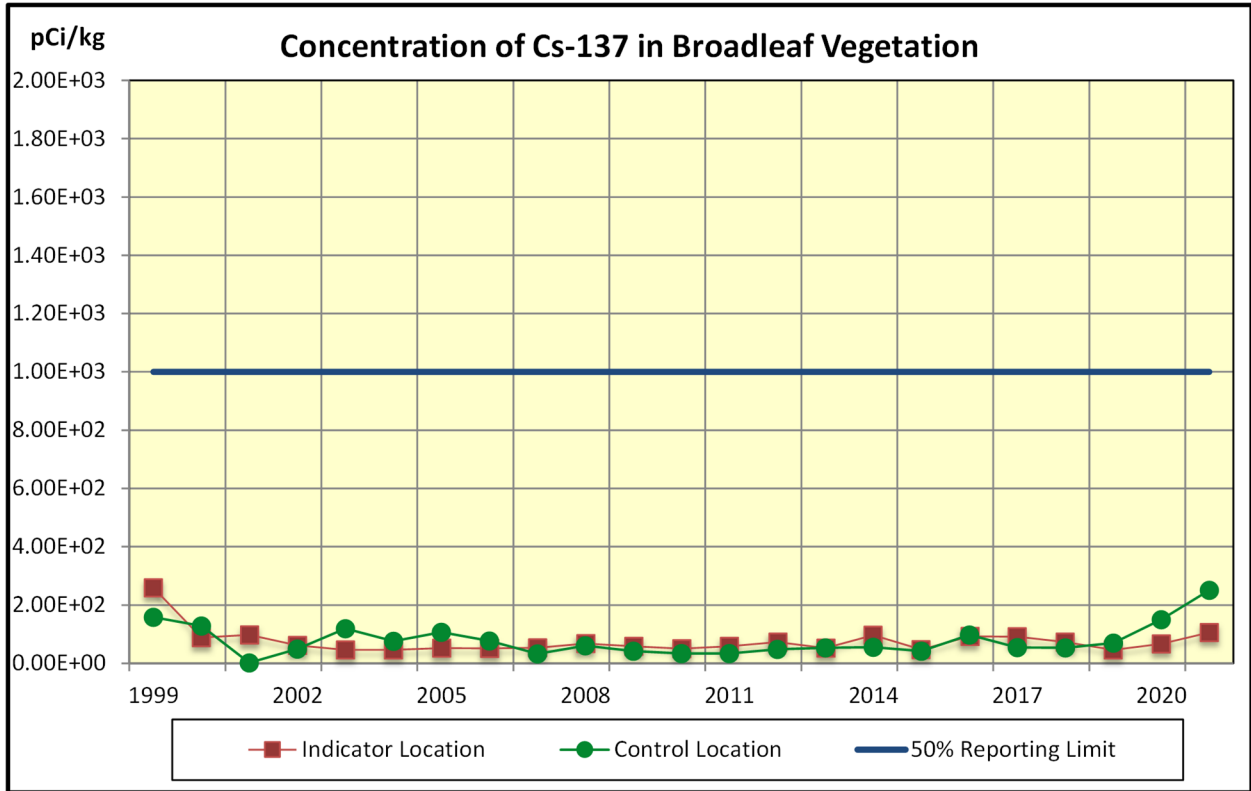


Table 3.5 Mean Concentrations of Radionuclides in Broadleaf Vegetation (pCi/kg)

Year	Cs-137 Indicator Location	Cs-137 Control Location
1999	2.59E+2	1.58E+2
2000	8.86E+1	1.29E+2
2001	9.72E+1	1.53E+0
2002	6.15E+1	4.96E+1
2003	4.66E+1	1.19E+2
2004	4.66E+1	7.64E+1
2005	5.27E+1	1.07E+2
2006	5.11E+1	7.76E+1
2007	5.38E+1	3.25E+1
2008	6.76E+1	6.06E+1
2009	5.84E+1	4.22E+1
2010	8.02E+1	3.38E+1
2011	5.84E+1	3.41E+1
2012	7.32E+1	4.83E+1
2013	5.27E+1	5.31E+1
2014 ⁽¹⁾	9.62E+1	5.51E+1
2015	4.68E+1	4.21E+1
2016	9.23E+1	9.72E+1
2017	9.12E+1	5.40E+1
2018	7.29E+1	5.34E+1
2019	4.60E+1	6.98E+1
2020	6.66E+1	1.50E+2
2021	1.06E+2	2.51E+2

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were observed due to the 2014 gamma spectroscopy system change.

3.6 FOOD PRODUCTS

Gamma spectroscopy was performed on 3 food products samples collected during the harvest season of 2021. One indicator location was sampled. There were no gamma emitting radionuclides due to RNP plant operations identified in food product samples in 2021.

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

3.7 FISH

Gamma spectroscopy was performed on the edible portions of 12 fish samples during 2021. Two indicator locations and one control location were sampled. During 2021, Cs-137 was identified in the 5/17/2021 fish sample from location 45. There were no other gamma emitting radionuclides due to RNP plant operations identified in fish samples in 2021.

Figure 3.7 is a graph displaying the high annual means for Cs-137 from 1999 to 2021. Table 3.7 displays the highest annual mean indicator and control location concentrations for Cs-137 in fish from 1999 to 2021.

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

Figure 3.7

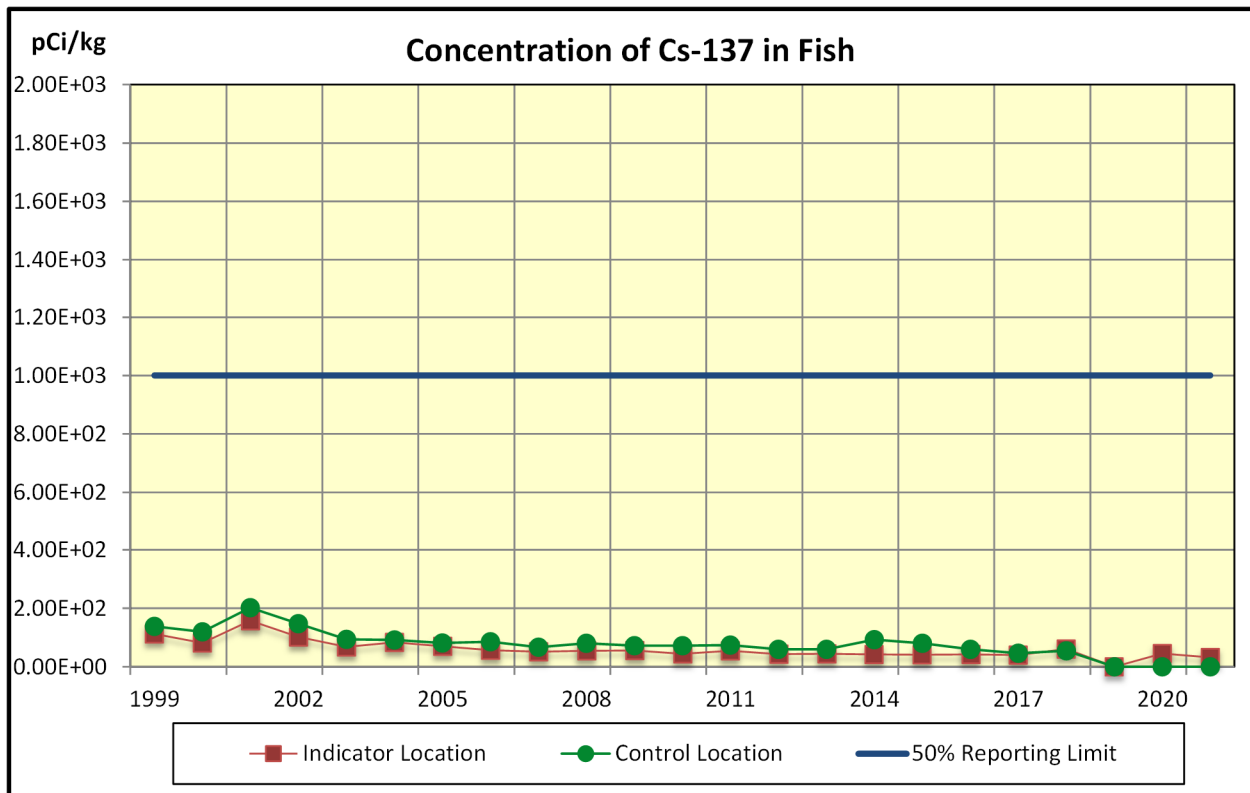


Table 3.7 Mean Concentrations of Radionuclides in Fish (pCi/kg)

Year	Cs-137 Indicator Location	Cs-137 Control Location
1999	1.13E+2	1.38E+2
2000	8.14E+1	1.20E+2
2001	1.58E+2	2.02E+2
2002	1.02E+2	1.48E+2
2003	6.87E+1	9.40E+1
2004	8.35E+1	9.16E+1
2005	7.00E+1	8.21E+1
2006	5.74E+1	8.56E+1
2007	5.15E+1	6.74E+1
2008	5.47E+1	8.04E+1
2009	5.59E+1	7.26E+1
2010	4.47E+1	7.28E+1
2011	5.52E+1	7.48E+1
2012	4.36E+1	5.97E+1
2013	4.47E+1	5.97E+1
2014 ⁽¹⁾	4.24E+1	9.32E+1
2015	4.16E+1	8.04E+1
2016	4.24E+1	6.06E+1
2017	4.09E+1	4.70E+1
2018	6.07E+1	5.53E+1
2019	0.00E+0	0.00E+0
2020	4.58E+1	0.00E+0
2021	3.23E+1	0.00E+0

0.00E+0 indicates no detectable measurements

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were observed due to the 2014 gamma spectroscopy system change.

3.8 SHORELINE SEDIMENT

Gamma spectroscopy was performed on 1 sediment sample following the drying and removal of rocks and clams from the one indicator location during 2021. The sediment sample that was collected on 7/6/2021 was lost during shipment to the lab for analysis (NCR# 02416282). There were no gamma emitting radionuclides due to RNP plant operations identified in the sediment sample in 2021. There is no control shoreline sediment location.

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

3.9 DIRECT GAMMA RADIATION

3.9.1 ENVIRONMENTAL TLD

Robinson is licensed with an exclusion area boundary and low population distance defined by UFSAR Section 1.2.1 as 1400 ft and 4.5 miles respectively. The exclusion distance is the distance from the reactor to the closest point on the boundary of the exclusion area defined in 10CFR100. The low population distance is the distance from the reactor to the boundary of the low population zone defined in 10CFR100. No permanent public access is permitted within the exclusion area.

Thermoluminescent dosimeters (TLD) were collected quarterly at forty-three locations, and Environmental TLD (Alpha & Bravo) dual placement was implemented for all RNP ODCM TLD locations effective first quarter 2020. There are 25 locations, one or more in each meteorological sector, designated as "inner ring" are placed at distances within one mile from the site and in the general area of the site boundary. Due to close proximity with HBRSEP, and most being within the exclusion area boundary, 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. There are 17 TLD locations, one or more in each meteorological sector, designated as "outer ring" are placed at distances of 6 to 8 kilometers from the site as is reasonably accessible and practical. All outer ring TLD locations are used as indicators. The one "control" location is 24.4 miles ESE from station center. This location was chosen to reduce the probability of influence from HBRSEP operation on data. The control location is not used as background subtraction in the TLD analysis. Its purpose is to provide a comparison to indicator locations.

A gamma exposure rate was determined for each TLD. In 2021, 172 TLDs were analyzed, 168 at indicator locations and 4 at the control location. TLDs are collected and analyzed quarterly. Transit TLDs and laboratory background TLDs were used for determining transit and laboratory background dose and were subtracted from gross field readings as required by ANSI N545-1975. Figure 3.9 and Table 3.9 show TLD inner ring, outer ring, and control location annual averages in mR/Standard Quarter. Data is provided from 1999. As shown in the graph, historical inner and outer ring averages compare similarly, while control data is somewhat higher since the resurfacing of the parking lot at this location in 2018. Other differences among these locations are attributed to variations in soils, local geology, and are not the result of plant operations.

Quarterly, environmental ODCM TLD results are compared by location to its historical data to evaluate any significant changes. The comparison utilizes the location's average exposure history to determine if quarterly results fall within expected low and high ranges and provides a reliable indication of potential changes occurring at a specific TLD location. The low and high ranges are determined by the historical average + two standard deviations. The quarterly TLD evaluation implements portions of American National Standard ANSI/HPS N13.37-2014, "Environmental Dosimetry – Criteria for System Design and Implementation, for environmental Thermoluminescent Dosimeters (TLD)". The CSD-RP-

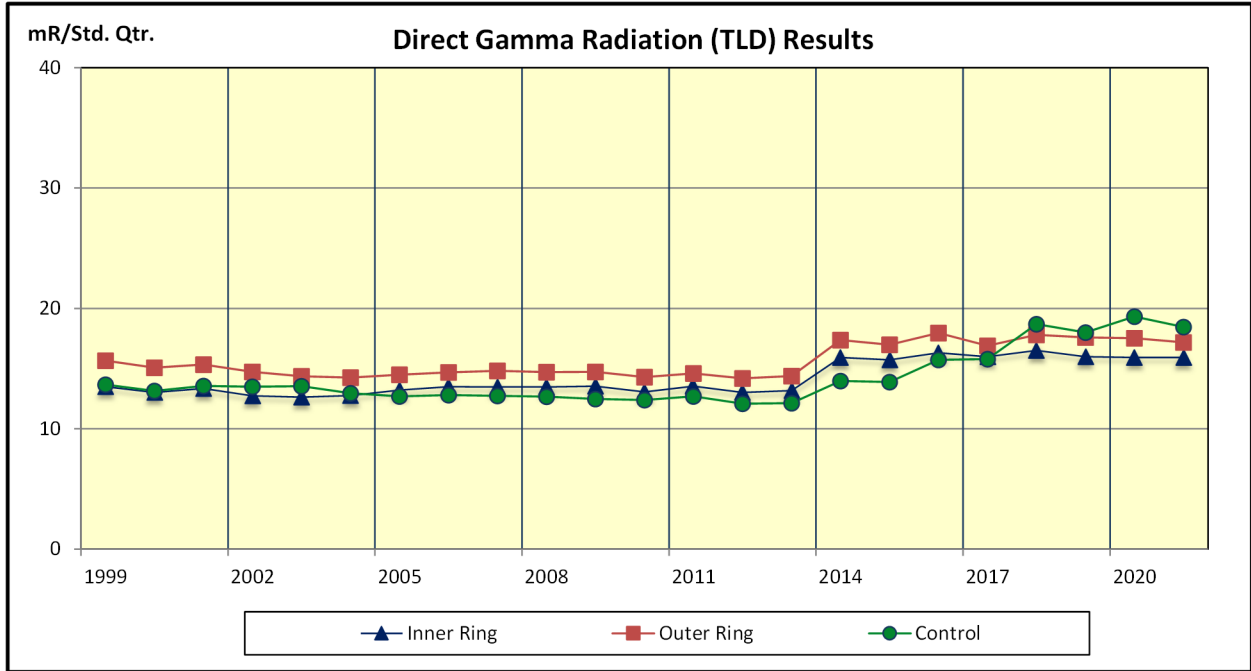
ALL-0030 – Updated Radiological Environmental Monitoring Program TLD Analytical Method, describes the process implemented in late 2018 for the fleet TLD programs. TLD values identified as < Low Range or > High Range are evaluated in consideration of factors including possible TLD damage, sampling deviations, glow curve irregularities, and any known environmental location changes which may affect results. TLD results are found in Appendix E.

The environmental data on external radiation exposure for 2021 was essentially unchanged from 1999-2021, with an average exposure for all of 2021 indicator locations of 16.4 mR per standard quarter. The TLD location with the highest annual mean of 22.5 mR per standard quarter was location 37, which is located 5.00 miles WSW of the plant. Control TLD location 1 had an annual mean of 18.47 mR per std. quarter.

During 2021, TLDs from locations 56 and 85 indicated some results exceeding the location acceptance range. The investigation of location 56 yielded no issues with the glow curve or the TLD. The investigation of location 85 yielded no issues with the glow curve or the TLD, but this was due to insufficient data being accrued as these are relatively new locations.

A TLD Intercomparison Program is conducted as part of the quality assurance program. Results of this program are included in Section 4.7.

Figure 3.9



There is no reporting level for Direct Radiation (TLD)

Table 3.9 Direct Gamma Radiation (TLD) Results

Year	Inner Ring Average (mR/Std. Qtr.)	Outer Ring Average (mR/Std. Qtr.)	Control Average (mR/Std. Qtr.)
1999	1.35E+1	1.57E+1	1.37E+1
2000	1.30E+1	1.51E+1	1.32E+1
2001	1.34E+1	1.53E+1	1.36E+1
2002	1.27E+1	1.47E+1	1.35E+1
2003	1.26E+1	1.44E+1	1.36E+1
2004	1.28E+1	1.43E+1	1.30E+1
2005	1.32E+1	1.45E+1	1.27E+1
2006	1.35E+1	1.47E+1	1.28E+1
2007	1.35E+1	1.48E+1	1.27E+1
2008	1.35E+1	1.47E+1	1.27E+1
2009	1.36E+1	1.47E+1	1.25E+1
2010	1.31E+1	1.43E+1	1.24E+1
2011	1.35E+1	1.46E+1	1.27E+1
2012	1.30E+1	1.42E+1	1.21E+1
2013	1.32E+1	1.44E+1	1.21E+1
2014 ⁽¹⁾	1.59E+1	1.74E+1	1.40E+1
2015	1.57E+1	1.70E+1	1.39E+1
2016	1.63E+1	1.80E+1	1.57E+1
2017	1.60E+1	1.69E+1	1.58E+1
2018	1.65E+1	1.78E+1	1.87E+1
2019	1.60E+1	1.76E+1	1.80E+1
2020	1.59E+1	1.75E+1	1.93E+1
2021	1.59E+1	1.72E+1	1.85E+1

(1) As of first quarter 2014, the environmental TLDs utilized for the HBRSEP REMP were Harshaw TLDs, replacing Panasonic TLDs which were utilized prior to 2014 (NCR # 01982479).

3.10 LAND USE CENSUS

The 2021 HBRSEP Annual Land Use Census was conducted during the growing season on 6/29-7/1/2021 to meet the requirements of the HBRSEP ODCM 4.4.1. An Annual Land Use Census was conducted to identify within a distance of 8 kilometers (5.0 miles) from the plant and in each of the 16 meteorological sectors, the nearest residence, the nearest garden greater than 500 square feet or 50 square meters, producing broadleaf vegetables (fresh leafy vegetables), the nearest Milk-giving Animal (cow, goat, etc.), and the nearest meat animal (beef, hogs, etc.) was only identified at the nearest garden or closer in each sector. Poultry and egg laying animals were not classified as meat animals for the 2021 census.

Table 3.10 summarizes the HBRSEP 2021 census results. A map indicating identified locations is shown in Figure 3.10. The nearest residence is located in the SSE sector at 0.33 miles, and there were no milk locations identified during the performance of the land use census. No program changes were required based on the results of the census

The fleet Land Use Census Procedure AD-CP-ALL-0014 (Revision 4), Land Use Census Evaluation, was revised in 2020 to standardize the approach for the evaluation of the Land Use Dose Calculations (NCR# 02343171).

Table 3.10 HBRSEP Land Use Census Comparison (2020 – 2021)

Nearest Pathway (Miles)

SECTOR	RESIDENCE		GARDEN		MEAT ANIMAL ⁽¹⁾		MILK ANIMAL	
	2020	2021	2020	2021	2020	2021	2020	2021
North	2.83	2.51*	3.27	4.34*	---	---	----	----
North-Northeast	1.53	1.53	2.13	2.13	---	---	----	----
Northeast	1.11	1.11	2.57	2.57	2.57	2.57	----	----
East-Northeast	0.85	0.85	1.08	1.08	---	---	----	----
East	0.90	0.90	2.94	2.94	---	---	----	----
East-Southeast	0.62	0.62	1.28	1.28	---	---	----	----
Southeast	0.38	0.38	3.63	3.63	---	1.96*	----	----
South-Southeast	0.33	0.33	2.56	2.91*	---	---	----	----
South	0.44	0.44	0.74	2.26*	---	---	----	----
South-Southwest	0.42	0.43*	3.13	2.49*	---	---	----	----
Southwest	0.44	0.44	2.35	2.11*	---	---	----	----
West-Southwest	0.44	0.44	0.86	0.86	---	---	----	----
West	0.56	0.56	0.70	0.70	---	---	----	----
West-Northwest	0.57	0.57	0.66	4.54*	---	---	----	----
Northwest	1.56	1.56	1.87	1.60*	---	---	----	----
North-Northwest	2.00	2.00	2.85	2.85	---	---	----	----

NOTE: Sector and distance determined by Global Positioning System.

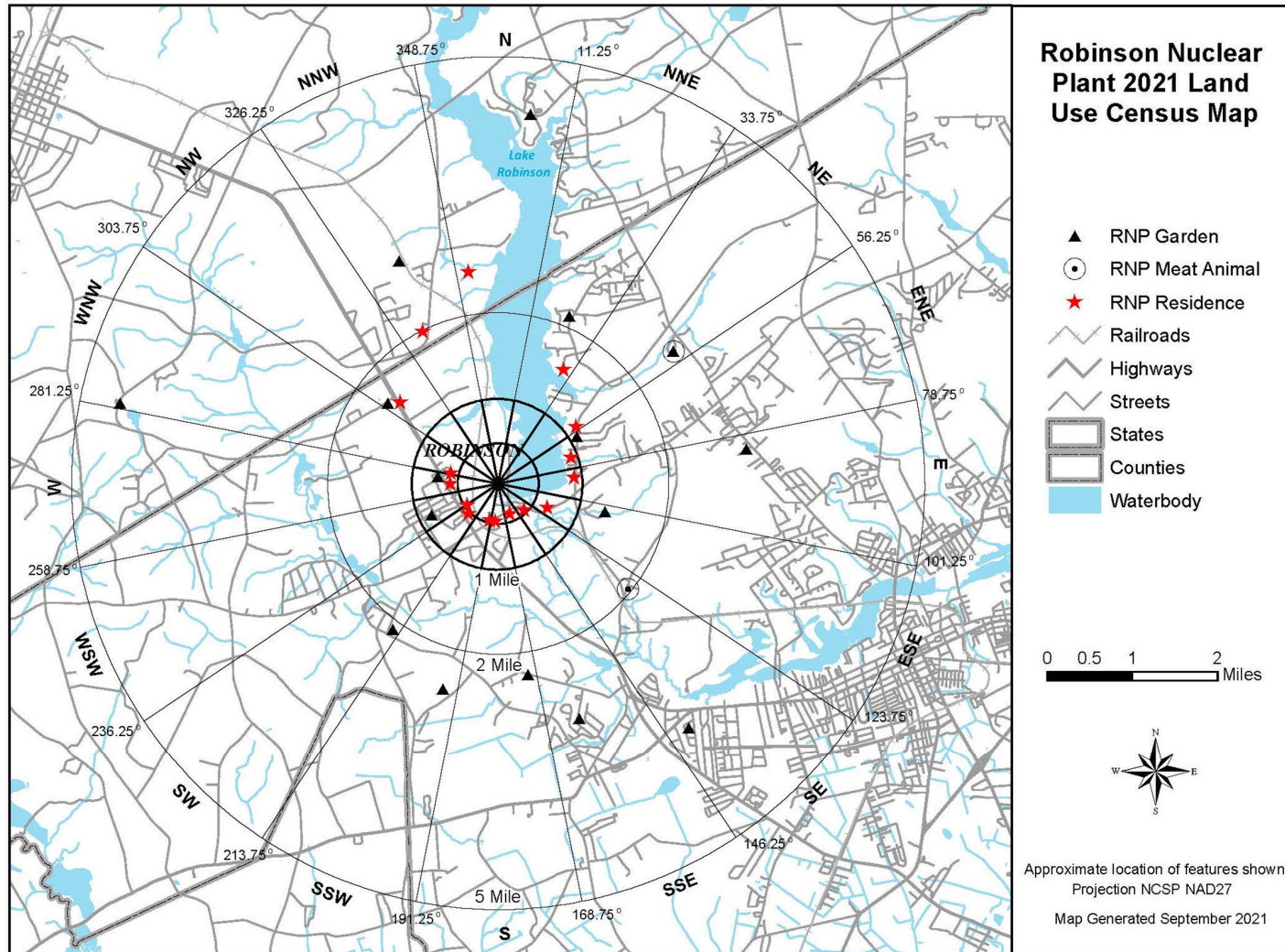
* Represents a change from the previous year.

** Represents a change from the previous year – different address, same mileage

“----” indicates no occurrences within the 5 mile radius

(1) Meat animal was only identified at the nearest garden or closer in each sector.

Figure 3.10



4.0 QUALITY ASSURANCE

4.1 SAMPLE COLLECTION

HBRSEP Chemistry and the Environmental Services performed the environmental sample collections as specified by approved sample collection procedures.

4.2 SAMPLE ANALYSIS

EnRad Laboratories performed the environmental sample analyses as specified by approved analysis procedures. EnRad Laboratories is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.3 DOSIMETRY ANALYSIS

The Dosimetry and Records group performed the environmental dosimetry measurements as specified by approved dosimetry analysis procedures. The Dosimetry and Records Laboratory is in Huntersville, North Carolina, at Duke Energy's Environmental Center.

4.4 LABORATORY EQUIPMENT QUALITY ASSURANCE

4.4.1 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.

4.4.2 CALIBRATION VERIFICATION

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

4.4.3 BATCH PROCESSING

Method quality control samples are analyzed with sample analyses that are processed in batches. This includes tritium analyses in surface water samples.

4.5 DUKE ENERGY INTERLABORATORY COMPARISON PROGRAM

In 2021 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.

EnRad Laboratory participated in an interlaboratory program with Eckert & Ziegler Analytics (EZA) in 2021. 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.

4.5.1 ECKERT & ZIEGLER ANALYTICS CROSS CHECK PROGRAM

EZA mixed gamma in liquid, mixed gamma in vegetation, mixed gamma in soil, low-level I-131 in liquid, mixed gamma air filter composites, I-131 air cartridges, gross beta in water, gross beta in filters, and tritium in water were analyzed at various times of the year at EnRad Laboratories. A summary of the applicable REMP EnRad Laboratory program results for 2021 is documented in Table 4.0-A.

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Table 4.0-A lists the performance for specific samples. forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

4.6 SPLIT COMPARISON PROGRAM

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

4.7 TLD INTERCOMPARISON PROGRAM

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 using the NIST-traceable Hopewell and submits them for analysis of the unknown estimated delivered exposure. A summary of the 2021 Internal Cross Check (Duke Energy) Program is documented in Table 4.0-B.

4.8 GENERAL ENGINEERING LABORATORY, LLC (GEL)

General Engineering Laboratory, LLC (GEL) participated in various Quality Assurance Programs for Inter-laboratory, Intra-laboratory, Third Party Cross Check programs, and a number of proficiency testing programs during 2021. A summary of the GEL quality assurance program results for the sample media types sent to GEL during 2021 is documented in Table 4.0-C. Table 4.0-C may not be applicable to all plants or stations.

TABLE 4.0-A

ECKERT & ZIEGLER ANALYTICS

CROSS CHECK PROGRAM

2021 Cross Check Results for EnRad Laboratories

Interlaboratory cross check samples from EZA were received and analyzed in two of the four quarters of 2021. Results are reported directly to Eckert & Ziegler Analytics. Environmental cross check samples were analyzed in replicate, and the result closest to the mean is reported to Eckert & Ziegler Analytics. The acceptance criteria for the program was based on the NRC Inspection Manual Procedure 84750 (IP 84750). Table 4.0-A lists the performance for specific samples. Forty-two nuclide results were reported to EZA of which forty-two (100 %) met the acceptance criteria based on IP 84750.

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Beta Filter in Planchet	E13430A	Cs-137	2	pCi	126	126	1.00	Agreement
I-131 in Charcoal Cartridge	E13428	I-131	2	pCi	95.5	92.8	1.03	Agreement
Gamma in Soil	E13429	Ce-141	2	pCi/g	0.158	0.163	0.97	Agreement
		Co-58	2	pCi/g	0.155	0.162	0.96	Agreement
		Co-60	2	pCi/g	0.176	0.195	0.90	Agreement
		Cr-51	2	pCi/g	0.430	0.482	0.89	Agreement
		Cs-134	2	pCi/g	0.202	0.193	1.05	Agreement
		Cs-137	2	pCi/g	0.222	0.242	0.92	Agreement
		Fe-59	2	pCi/g	0.168	0.166	1.01	Agreement
		Mn-54	2	pCi/g	0.226	0.226	1.00	Agreement
		Zn-65	2	pCi/g	0.267	0.272	0.98	Agreement
Gamma in Simulated Vegetation	E13437	Ce-141	3	pCi/g	0.194	0.194	1.00	Agreement
		Co-58	3	pCi/g	0.208	0.200	1.04	Agreement
		Co-60	3	pCi/g	0.258	0.246	1.05	Agreement
		Cr-51	3	pCi/g	0.373	0.401	0.93	Agreement
		Cs-134	3	pCi/g	0.141	0.158	0.89	Agreement
		Cs-137	3	pCi/g	0.193	0.190	1.02	Agreement
		Fe-59	3	pCi/g	0.183	0.173	1.06	Agreement
		Mn-54	3	pCi/g	0.226	0.218	1.04	Agreement
		Zn-65	3	pCi/g	0.274	0.260	1.05	Agreement

TABLE 4.0-A (Cont.)

Sample	Sample ID	Nuclide	Quarter	Units	EnRad Value	EZA Value	EnRad/EZA Ratio	Evaluation
Gamma in Composite Filter	E13435B	Ce-141	3	pCi	121	116	1.04	Agreement
		Co-58	3	pCi	123	120	1.03	Agreement
		Co-60	3	pCi	153	147	1.04	Agreement
		Cr-51	3	pCi	241	240	1.00	Agreement
		Cs-134	3	pCi	90.1	94.8	0.95	Agreement
		Cs-137	3	pCi	118	114	1.04	Agreement
		Fe-59	3	pCi	114	104	1.10	Agreement
		Mn-54	3	pCi	139	131	1.06	Agreement
		Zn-65	3	pCi	171	156	1.10	Agreement
Gamma in Water	E13436	Ce-141	3	pCi/L	161	151	1.07	Agreement
		Co-58	3	pCi/L	165	155	1.06	Agreement
		Co-60	3	pCi/L	196	191	1.03	Agreement
		Cr-51	3	pCi/L	330	311	1.06	Agreement
		Cs-134	3	pCi/L	118	123	0.96	Agreement
		Cs-137	3	pCi/L	154	147	1.04	Agreement
		Fe-59	3	pCi/L	149	134	1.11	Agreement
		I-131	3	pCi/L	261	243	1.07	Agreement
		Mn-54	3	pCi/L	185	169	1.09	Agreement
Zn-65	3	pCi/L	227	202	1.12	Agreement		
Milk LLI-131	E13431	I-131	2	pCi/L	96.8	90.1	1.07	Agreement
Gross Beta in Water	E13433	Cs-137	2	pCi/L	243	258	0.94	Agreement
Tritium in Water	E13438	H-3	3	pCi/L	11600	11700	0.99	Agreement

TABLE 4.0-B

2021 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 2021						2nd Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
103087	62.75	59.56	5.36	<+/-15%	Pass	102970	17.06	17.74	-3.83	<+/-15%	Pass
103742	62.37	59.56	4.72	<+/-15%	Pass	103199	18.11	17.74	2.09	<+/-15%	Pass
100029	55.52	59.56	-6.78	<+/-15%	Pass	100154	17.12	17.74	-3.49	<+/-15%	Pass
102931	61.41	59.56	3.11	<+/-15%	Pass	102770	18.79	17.74	5.92	<+/-15%	Pass
100033	56.41	59.56	-5.29	<+/-15%	Pass	102058	17.15	17.74	-3.33	<+/-15%	Pass
100038	57.37	59.56	-3.68	<+/-15%	Pass	103295	18.58	17.74	4.74	<+/-15%	Pass
103615	61.40	59.56	3.09	<+/-15%	Pass	103602	18.57	17.74	4.68	<+/-15%	Pass
102442	57.43	59.56	-3.58	<+/-15%	Pass	100180	17.26	17.74	-2.71	<+/-15%	Pass
102407	59.65	59.56	0.15	<+/-15%	Pass	102741	18.31	17.74	3.21	<+/-15%	Pass
100245	56.51	59.56	-5.12	<+/-15%	Pass	103557	18.80	17.74	5.98	<+/-15%	Pass
Average Bias (B)			-0.80			Average Bias (B)			1.32		
Standard Deviation (S)			4.60			Standard Deviation (S)			4.18		
Measure Performance B +S			5.40	<15%	Pass	Measure Performance B +S			5.51	<15%	Pass
3rd Quarter 2021						4th Quarter 2021					
TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail	TLD Number	Reported (mR)	Delivered (mR)	Bias (% diff)	Pass/Fail Criteria	Pass/Fail
104637	36.05	39.31	-8.29	<+/-15%	Pass	104816	45.83	49.95	-8.25	<+/-15%	Pass
104499	37.40	39.31	-4.86	<+/-15%	Pass	104381	44.88	49.95	-10.15	<+/-15%	Pass
104449	36.14	39.31	-8.06	<+/-15%	Pass	104676	46.19	49.95	-7.53	<+/-15%	Pass
104466	36.49	39.31	-7.17	<+/-15%	Pass	104817	46.03	49.95	-7.85	<+/-15%	Pass
104639	36.13	39.31	-8.09	<+/-15%	Pass	104383	46.24	49.95	-7.43	<+/-15%	Pass
104634	36.71	39.31	-6.61	<+/-15%	Pass	104550	45.88	49.95	-8.15	<+/-15%	Pass
104638	36.58	39.31	-6.94	<+/-15%	Pass	104818	45.55	49.95	-8.81	<+/-15%	Pass
104498	36.08	39.31	-8.22	<+/-15%	Pass	104804	45.46	49.95	-8.99	<+/-15%	Pass
104453	36.42	39.31	-7.35	<+/-15%	Pass	104584	46.88	49.95	-6.15	<+/-15%	Pass
104465	35.76	39.31	-9.03	<+/-15%	Pass	104677	47.28	49.95	-5.35	<+/-15%	Pass
Average Bias (B)			-7.46			Average Bias (B)			-7.86		
Standard Deviation (S)			1.17			Standard Deviation (S)			1.38		
Measure Performance B +S			8.63	<15%	Pass	Measure Performance B +S			9.25	<15%	Pass

TABLE 4.0-C

2021 GEL Laboratories, LLC QA Results

Interlaboratory cross check samples from Eckert & Ziegler Analytics (EZA) were received and analyzed by GEL during 2021. Table 4.0-C lists the performance for specific samples. Table 4.0-C may not be applicable to all plants/stations.

Sample	Sample ID	Nuclide	Quarter	Units	GEL Value	Known Value	Acceptance Range/Ratio	Evaluation
I-131 in Milk with EZA	E13358	I-131	1	pCi/L	83.9	86.9	0.97	Agreement
	E13362	I-131	2	pCi/L	80.4	83.8	0.96	Agreement
	E13366	I-131	3	pCi/L	90.8	85.6	1.06	Agreement
	E13370	I-131	4	pCi/L	92.8	90.3	1.03	Agreement

APPENDIX A

ENVIRONMENTAL SAMPLING
&
ANALYSIS PROCEDURES

APPENDIX A

ENVIRONMENTAL SAMPLING AND ANALYSIS PROCEDURES

Adherence to established procedures for sampling and analysis of environmental media at the H. B. Robinson Steam Electric Plant, Unit No. 2 (HBRSEP) is required to ensure compliance with the HBRSEP Off-Site Dose Calculation Manual (ODCM). Analytical procedures were employed to ensure that the ODCM detection capabilities were achieved.

Environmental sampling were performed by HBRSEP Station Sciences and Environmental Services. Environmental analyses were performed by EnRad Laboratories and Dosimetry and Records.

This appendix provides a description of the specific analyses performed on samples collected in the field. Changes to the sampling procedures and analyses procedures are also discussed in the section. All analytical procedure listed in this section may not apply to the REMP.

I. CHANGE OF SAMPLING PROCEDURES

There were no changes to H. B. Robinson Steam Electric Plant sampling procedures implemented during 2021.

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.) and then transferred to appropriate counting geometry.

Low-level iodine analyses are performed by passing a designated sample aliquot through a pre-determined amount of ion exchange resin to remove and concentrate any iodine in the aqueous sample (milk). The resin is then dried and mixed thoroughly, 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 4910TR liquid scintillation system or a Perkin-Elmer 3110TR 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 of air filters is performed by analyzing filters on Tennelec XLB Series 5 gas-flow proportional counters. Samples are batch processed with a blank to ensure sample contamination has not occurred.

Gross beta analysis of liquid samples is performed by concentrating a designated aliquot of sample and analyzing by Perkin-Elmer 4910TR liquid scintillation system. Samples are batch processed with a laboratory fortified blank and a blank to verify instrument performance and to ensure sample contamination has not occurred.

III. CHANGE OF ANALYSIS PROCEDURES

Acquisition times for charcoal cartridge gamma spectroscopy analyses were reduced in early May 2021 as a result of fleet air sampling equipment standardization.

The procedure for preparing milk samples for Low-Level Iodine-131 (LLI-131) analysis was modified to allow incremental sample additions for milk samples with higher fat content (NCR # 02393159).

APPENDIX B

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM**

SUMMARY OF RESULTS

2021

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 (HBRSEP)
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

H. B. Robinson Steam Electric Plant, Unit No. 2
Darlington County, South Carolina

Docket Numbers: 50-261
Calendar Year: 2021

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 527 ⁽⁴⁾	See Table 2.2-C	2.00E-02 (474/474) 2.59E-03 – 4.54E-02	2 (0.20 mi S)	2.19E-02 (53/53) 1.01E-02 – 4.50E-02	1 (24.4 mi ESE) 2.07E-02 (53/53) 8.53E-03 – 4.33E-02	0
	Gamma 50 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Air Radioiodine (pCi/m ³)	Gamma 527 ⁽⁴⁾	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
Surface Water (pCi/l)	Gamma 24	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0
	Tritium 24	See Table 2.2-C	2.02E+03 (10/12) 1.92E+02 – 6.81E+03	40 (0.60 mi ESE)	2.02E+03 (10/12) 1.92E+02 – 6.81E+03	All less than LLD	0
Ground Water (pCi/l)	Gamma 4	See Table 2.2-C	All less than LLD	----	----	No Control	0
	Tritium 4	See Table 2.2-C	All less than LLD	----	----	No Control	0
Food Products (pCi/l)	Gamma 3	See Table 2.2-C	All less than LLD	----	----	All less than LLD	0

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2 (HBRSEP)
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DATA SUMMARY**

H. B. Robinson Steam Electric Plant, Unit No. 2
Darlington County, South Carolina

Docket Numbers: 50-261
Calendar Year: 2021

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 ⁽⁴⁾ (pCi/kg, wet)	Gamma 48 ⁽⁴⁾	See Table 2.2-C					0
	Cs-137 ⁽⁶⁾	See Table 2.2-C	5.66E+01 (24/40) 9.29E+00 – 2.23E+02	83 (1.6 mi NNE)	1.06E+02 (6/8) 4.74E+01 – 2.23E+02	52 (10 mi W) 2.51E+02 (5/8) 1.37E+02 – 4.45E+02	
Fish (pCi/kg, wet)	Gamma 12	See Table 2.2-C					0
	Cs-137	See Table 2.2-C	3.23E+01 (1/8) 3.23E+01 – 3.23E+01	45 (Lake Robinson)	3.23E+01 (1/4) 3.23E+01 – 3.23E+01	All less than LLD	
Sediments--Shoreline (pCi/kg, dry)	Gamma 1 ⁽⁴⁾⁽⁶⁾	See Table 2.2-C	All less than LLD	-----	-----	All less than LLD	0
TLD (mR per quarter) ⁽⁵⁾	TLD Readout 172 ⁽⁴⁾	-----	1.64E+01 (168/168) 1.05E+01 – 2.46E+01	37 (5.00 mi WSW)	2.25E+01 (4/4) 2.11E+01 – 2.38E+01	1 (24.4 mi ESE) 1.85E+01 (4/4) 1.58E+01 – 2.170E+01	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).
6. NCR# 2416282 – Sediment sample lost during shipment.

APPENDIX C

**SAMPLING DEVIATIONS
&
UNAVAILABLE ANALYSES**

APPENDIX C

H. B. ROBINSON NUCLEAR PLANT 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 99.26% availability in 2021.

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
3	1/5-1/12/2021	PI	0.45 hours downtime due to power interruption due to power outage.	NCR # 02365378
7	1/12-1/19/2021	PI	2.03 hours downtime due to power interruption due to power outage.	NCR # 02366419
61	3/9-3/16/2021	PS	Air flow was stuck on 3.0 CFM due to sampler malfunction.	NCR # 02374568
5	3/23-3/30/2021	PO	94.73 hours downtime due to power outage from storm.	NCR # 02377109
5	3/30-4/6/2021	PO	22.43 hours downtime due to power outage from storm.	NCR # 02377457
5	7/13-7/20/2021	PI	2.65 hours downtime due to power interruption from storm.	NCR # 02390366
5	7/27-8/3/2021	PI	2.66 hours downtime due to power interruption from storm.	NCR # 02392074
5	8/17-8/23/2021	PI	34.51 hours downtime due to power interruption from storm.	NCR # 02394597
3	9/28-10/5/2021	OT	49.58 hours downtime due to disconnected intake tubing.	NCR # 02399983
4	9/28-10/5/2021	TF	Filter gouge/tear was noted upon receipt of sample.	NCR # 02400627
5	12/28-1/4/2022	PI	0.91 hours downtime due to unknown power loss.	NCR # 02410422

Surface Water

REMP monthly surface water (SW) samples that experience any downtime during a surveillance period are reported as a Deviation and classified as a “Sampling Deviation.” 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 Robinson REMP water samplers operated for a total of 100% availability in 2021.

C.2 UNAVAILABLE ANALYSES

Air Particulate and Air Radioiodine

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
3	9/22-9/28/2021	OT	168 hours downtime due to collector error. Training was performed to prevent recurrence.	NCR # 02399983
4	12/14-12/21-2021	OT	168 hours downtime due to collector error. Training was performed to prevent recurrence.	NCR # 02410406
3	12/21-12/28/2021	OT	168 hours downtime due to collector error. Training was performed to prevent recurrence.	NCR # 02410406

Broadleaf Vegetation (BLV)

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
All BLV ⁽¹⁾	January 2021	SU	Broadleaf Vegetation was seasonally unavailable	NCR # 02363867
All BLV ⁽¹⁾	February 2021	SU	Broadleaf Vegetation was seasonally unavailable	NCR # 02368020
All BLV ⁽¹⁾	November 2021	SU	Broadleaf Vegetation was seasonally unavailable	NCR # 02404221
All BLV ⁽¹⁾	December 2021	SU	Broadleaf Vegetation was seasonally unavailable	NCR # 02408301

(1) All “BLV” represents HBRSEP Broadleaf Vegetation locations 50, 51, 52, 62, 67, and 83.

Shoreline Sediment

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
44	7/6/2021	OT	Sample lost during shipment. Procedure change was submitted to prevent recurrence.	NCR # 02416282

Direct Gamma Radiation (TLD)

Location	Scheduled Collection Dates	Code	Description & Action to Prevent Recurrence	Corrective Action
8	2021	OT	Location became inaccessible 7/15/2020 due to private property owner disallowing access. A replacement location was chosen and assigned location 84 (0.9 miles SSE), and is effective with ODCM, Revision 37, 2/24/2022. Location was sampled all four quarters of 2021.	NCR # 02340179
12	2021	OT	Location became inaccessible 7/15/2020 due to private property owner disallowing access. A replacement location was chosen and assigned location 85 (0.9 miles SSW), and is effective with ODCM, Revision 37, 2/24/2022. Location was sampled all four quarters of 2021.	NCR # 02340179

APPENDIX D

ANALYTICAL DEVIATIONS

No Analytical deviations were incurred for the
2021 Radiological Environmental Monitoring Program

APPENDIX E

**RADIOLOGICAL
ENVIRONMENTAL MONITORING
PROGRAM RESULTS**

2021

This appendix includes sample analysis report summaries and supportive data generated from each sample medium for 2021

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536500	12/29/2020 - 1/5/2021	Beta	1.33E-02	2.57E-03	2.92E-03
536689	1/5/2021 - 1/12/2021	Beta	2.41E-02	2.84E-03	2.61E-03
537242	1/12/2021 - 1/19/2021	Beta	1.97E-02	2.75E-03	2.85E-03
537613	1/19/2021 - 1/26/2021	Beta	1.81E-02	2.55E-03	2.57E-03
538005	1/26/2021 - 2/1/2021	Beta	1.59E-02	3.35E-03	4.18E-03
538226	2/1/2021 - 2/8/2021	Beta	1.63E-02	2.92E-03	3.43E-03
538453	2/8/2021 - 2/16/2021	Beta	1.06E-02	2.10E-03	2.60E-03
538740	2/16/2021 - 2/23/2021	Beta	2.28E-02	2.77E-03	2.54E-03
538990	2/23/2021 - 3/2/2021	Beta	1.79E-02	2.63E-03	2.82E-03
539201	3/2/2021 - 3/9/2021	Beta	2.26E-02	3.14E-03	3.09E-03
539681	3/9/2021 - 3/16/2021	Beta	2.15E-02	3.18E-03	3.37E-03
540643	3/16/2021 - 3/23/2021	Beta	1.52E-02	2.55E-03	2.94E-03
541365	3/23/2021 - 3/30/2021	Beta	1.69E-02	2.55E-03	2.70E-03
541980	12/29/2020 - 3/30/2021	Cs-134	<3.61E-04	0.00E+00	3.61E-04
		Cs-137	<1.32E-03	0.00E+00	1.32E-03
		Be-7	1.44E-01	3.51E-02	3.12E-02
		K-40	2.67E-02	1.64E-02	1.97E-02
541854	3/30/2021 - 4/6/2021	Beta	2.13E-02	3.29E-03	3.69E-03
542169	4/6/2021 - 4/13/2021	Beta	3.32E-02	3.60E-03	3.08E-03
542805	4/13/2021 - 4/20/2021	Beta	2.37E-02	2.87E-03	2.76E-03
543166	4/20/2021 - 4/27/2021	Beta	2.63E-02	2.93E-03	2.53E-03
544050	4/27/2021 - 5/3/2021	Beta	2.91E-02	3.30E-03	2.89E-03
544244	5/3/2021 - 5/11/2021	Beta	2.14E-02	2.59E-03	2.50E-03
544470	5/11/2021 - 5/19/2021	Beta	1.82E-02	2.71E-03	2.81E-03
544954	5/19/2021 - 5/25/2021	Beta	2.85E-02	3.43E-03	3.21E-03
545439	5/25/2021 - 6/1/2021	Beta	2.19E-02	3.00E-03	2.94E-03
545729	6/1/2021 - 6/8/2021	Beta	8.53E-03	2.47E-03	3.37E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545963	6/8/2021 - 6/14/2021	Beta	1.18E-02	2.93E-03	3.78E-03
546839	6/14/2021 - 6/22/2021	Beta	2.02E-02	2.78E-03	2.75E-03
547130	6/22/2021 - 6/29/2021	Beta	9.47E-03	2.60E-03	3.50E-03
547766	3/30/2021 - 6/29/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.46E-03	0.00E+00	1.46E-03
		Be-7	1.73E-01	3.98E-02	3.32E-02
		K-40	<3.56E-02	0.00E+00	3.56E-02
547406	6/29/2021 - 7/6/2021	Beta	1.21E-02	2.56E-03	3.13E-03
547641	7/6/2021 - 7/13/2021	Beta	1.60E-02	2.87E-03	3.30E-03
548038	7/13/2021 - 7/20/2021	Beta	1.25E-02	2.62E-03	3.17E-03
548462	7/20/2021 - 7/27/2021	Beta	1.94E-02	2.96E-03	3.14E-03
548673	7/27/2021 - 8/3/2021	Beta	2.21E-02	2.80E-03	2.73E-03
548913	8/3/2021 - 8/9/2021	Beta	1.13E-02	2.88E-03	3.73E-03
549203	8/9/2021 - 8/17/2021	Beta	1.04E-02	2.43E-03	3.18E-03
549642	8/17/2021 - 8/23/2021	Beta	9.58E-03	2.91E-03	4.03E-03
549979	8/23/2021 - 8/30/2021	Beta	2.56E-02	2.95E-03	2.66E-03
550486	8/30/2021 - 9/7/2021	Beta	1.99E-02	2.82E-03	2.90E-03
550972	9/7/2021 - 9/14/2021	Beta	2.50E-02	3.20E-03	2.94E-03
551603	9/14/2021 - 9/22/2021	Beta	1.87E-02	2.80E-03	3.08E-03
552194	9/22/2021 - 9/28/2021	Beta	2.36E-02	3.70E-03	4.15E-03
552826	6/29/2021 - 9/28/2021	Cs-134	<9.87E-04	0.00E+00	9.87E-04
		Cs-137	<8.10E-04	0.00E+00	8.10E-04
		Be-7	1.10E-01	3.17E-02	3.11E-02
		K-40	2.86E-02	1.61E-02	1.76E-02
552391	9/28/2021 - 10/5/2021	Beta	3.37E-02	3.67E-03	3.16E-03
552702	10/5/2021 - 10/12/2021	Beta	1.40E-02	2.78E-03	3.33E-03
553195	10/12/2021 - 10/19/2021	Beta	2.57E-02	2.95E-03	2.78E-03
553774	10/19/2021 - 10/25/2021	Beta	3.65E-02	4.38E-03	4.24E-03
554228	10/25/2021 - 11/2/2021	Beta	1.38E-02	2.44E-03	2.77E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554517	11/2/2021 - 11/8/2021	Beta	2.32E-02	3.05E-03	3.04E-03
554997	11/8/2021 - 11/16/2021	Beta	2.86E-02	3.15E-03	2.75E-03
555836	11/16/2021 - 11/23/2021	Beta	2.56E-02	2.88E-03	2.50E-03
556690	11/23/2021 - 11/30/2021	Beta	2.54E-02	3.32E-03	3.34E-03
557006	11/30/2021 - 12/7/2021	Beta	4.33E-02	4.09E-03	3.37E-03
557428	12/7/2021 - 12/14/2021	Beta	2.70E-02	3.28E-03	3.03E-03
557898	12/14/2021 - 12/21/2021	Beta	2.29E-02	3.17E-03	3.24E-03
558339	12/21/2021 - 12/28/2021	Beta	3.10E-02	3.42E-03	2.87E-03
559196	9/28/2021 - 12/28/2021	Cs-134	<1.24E-03	0.00E+00	1.24E-03
		Cs-137	<8.07E-04	0.00E+00	8.07E-04
		Be-7	1.67E-01	3.69E-02	2.85E-02
		K-40	<3.92E-02	0.00E+00	3.92E-02
558551	12/28/2021 - 1/4/2022	Beta	1.32E-02	2.41E-03	2.78E-03
559986	12/28/2021 - 1/4/2022	Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	4.31E-01	1.80E-01	2.10E-01

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536501	12/29/2020 - 1/5/2021	Beta	1.41E-02	2.59E-03	2.89E-03
536690	1/5/2021 - 1/12/2021	Beta	2.07E-02	2.71E-03	2.65E-03
537243	1/12/2021 - 1/19/2021	Beta	2.06E-02	2.76E-03	2.82E-03
537614	1/19/2021 - 1/26/2021	Beta	1.75E-02	2.55E-03	2.61E-03
538006	1/26/2021 - 2/1/2021	Beta	1.74E-02	3.38E-03	4.09E-03
538227	2/1/2021 - 2/8/2021	Beta	1.53E-02	2.88E-03	3.46E-03
538454	2/8/2021 - 2/16/2021	Beta	1.16E-02	2.16E-03	2.60E-03
538741	2/16/2021 - 2/23/2021	Beta	2.27E-02	2.76E-03	2.53E-03
538991	2/23/2021 - 3/2/2021	Beta	1.95E-02	2.69E-03	2.79E-03
539202	3/2/2021 - 3/9/2021	Beta	2.36E-02	3.21E-03	3.12E-03
539682	3/9/2021 - 3/16/2021	Beta	2.08E-02	3.13E-03	3.35E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540644	3/16/2021 - 3/23/2021	Beta	1.59E-02	2.59E-03	2.94E-03
541366	3/23/2021 - 3/30/2021	Beta	1.74E-02	2.58E-03	2.71E-03
541981	12/29/2020 - 3/30/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.55E-01	3.53E-02	2.68E-02
		K-40	<3.05E-02	0.00E+00	3.05E-02
541855	3/30/2021 - 4/6/2021	Beta	2.38E-02	3.32E-03	3.56E-03
542170	4/6/2021 - 4/13/2021	Beta	3.17E-02	3.61E-03	3.18E-03
542806	4/13/2021 - 4/20/2021	Beta	2.51E-02	2.91E-03	2.74E-03
543167	4/20/2021 - 4/27/2021	Beta	2.62E-02	2.95E-03	2.56E-03
544051	4/27/2021 - 5/3/2021	Beta	3.35E-02	3.52E-03	2.92E-03
544245	5/3/2021 - 5/11/2021	Beta	1.74E-02	2.39E-03	2.48E-03
544471	5/11/2021 - 5/19/2021	Beta	2.08E-02	2.82E-03	2.79E-03
544955	5/19/2021 - 5/25/2021	Beta	2.73E-02	3.31E-03	3.11E-03
545440	5/25/2021 - 6/1/2021	Beta	2.22E-02	3.07E-03	3.04E-03
545730	6/1/2021 - 6/8/2021	Beta	1.13E-02	2.65E-03	3.41E-03
545964	6/8/2021 - 6/14/2021	Beta	1.05E-02	2.83E-03	3.72E-03
546840	6/14/2021 - 6/22/2021	Beta	2.04E-02	2.79E-03	2.75E-03
547131	6/22/2021 - 6/29/2021	Beta	1.26E-02	2.71E-03	3.39E-03
547767	3/30/2021 - 6/29/2021	Cs-134	<2.13E-03	0.00E+00	2.13E-03
		Cs-137	<1.66E-03	0.00E+00	1.66E-03
		Be-7	1.51E-01	3.83E-02	3.88E-02
		K-40	3.79E-02	2.08E-02	2.61E-02
547407	6/29/2021 - 7/6/2021	Beta	1.13E-02	2.56E-03	3.20E-03
547642	7/6/2021 - 7/13/2021	Beta	1.76E-02	2.97E-03	3.32E-03
548039	7/13/2021 - 7/20/2021	Beta	1.36E-02	2.67E-03	3.14E-03
548463	7/20/2021 - 7/27/2021	Beta	2.25E-02	3.13E-03	3.16E-03
548674	7/27/2021 - 8/3/2021	Beta	2.55E-02	2.95E-03	2.75E-03
548914	8/3/2021 - 8/9/2021	Beta	1.67E-02	3.17E-03	3.70E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549204	8/9/2021 - 8/17/2021	Beta	1.58E-02	2.71E-03	3.18E-03
549643	8/17/2021 - 8/23/2021	Beta	1.01E-02	2.99E-03	4.10E-03
549980	8/23/2021 - 8/30/2021	Beta	2.94E-02	3.08E-03	2.63E-03
550487	8/30/2021 - 9/7/2021	Beta	2.52E-02	3.06E-03	2.89E-03
550973	9/7/2021 - 9/14/2021	Beta	2.83E-02	3.36E-03	2.94E-03
551604	9/14/2021 - 9/22/2021	Beta	1.86E-02	2.81E-03	3.10E-03
552195	9/22/2021 - 9/28/2021	Beta	2.61E-02	3.81E-03	4.16E-03
552827	6/29/2021 - 9/28/2021	Cs-134	<1.81E-03	0.00E+00	1.81E-03
		Cs-137	<1.49E-03	0.00E+00	1.49E-03
		Be-7	1.44E-01	3.59E-02	3.05E-02
		K-40	<2.06E-02	0.00E+00	2.06E-02
552392	9/28/2021 - 10/5/2021	Beta	3.75E-02	3.80E-03	3.13E-03
552703	10/5/2021 - 10/12/2021	Beta	1.41E-02	2.80E-03	3.36E-03
553196	10/12/2021 - 10/19/2021	Beta	3.12E-02	3.19E-03	2.80E-03
553775	10/19/2021 - 10/25/2021	Beta	3.99E-02	4.31E-03	3.94E-03
554229	10/25/2021 - 11/2/2021	Beta	1.53E-02	2.54E-03	2.81E-03
554518	11/2/2021 - 11/9/2021	Beta	2.68E-02	2.97E-03	2.68E-03
554998	11/9/2021 - 11/16/2021	Beta	3.13E-02	3.55E-03	3.16E-03
555837	11/16/2021 - 11/23/2021	Beta	2.58E-02	2.88E-03	2.51E-03
556691	11/23/2021 - 11/30/2021	Beta	2.49E-02	3.32E-03	3.37E-03
557007	11/30/2021 - 12/7/2021	Beta	4.54E-02	4.12E-03	3.31E-03
557429	12/7/2021 - 12/14/2021	Beta	3.12E-02	3.48E-03	3.06E-03
557899	12/14/2021 - 12/21/2021	Beta	1.84E-02	2.99E-03	3.29E-03
558340	12/21/2021 - 12/28/2021	Beta	2.65E-02	3.23E-03	2.90E-03
559197	9/28/2021 - 12/28/2021	Cs-134	<1.95E-03	0.00E+00	1.95E-03
		Cs-137	<1.36E-03	0.00E+00	1.36E-03
		Be-7	1.57E-01	3.75E-02	3.26E-02
		K-40	<3.78E-02	0.00E+00	3.78E-02
558552	12/28/2021 - 1/4/2022	Beta	1.26E-02	2.36E-03	2.76E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
559987	12/28/2021 - 1/4/2022	Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	7.33E-02	1.00E-01	0.00E+00
		K-40	1.26E-01	1.13E-01	1.70E-01

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536502	12/29/2020 - 1/5/2021	Beta	1.22E-02	2.51E-03	2.92E-03
536691	1/5/2021 - 1/12/2021	Beta	2.55E-02	2.92E-03	2.66E-03
537244	1/12/2021 - 1/19/2021	Beta	2.12E-02	2.79E-03	2.81E-03
537615	1/19/2021 - 1/26/2021	Beta	1.87E-02	2.60E-03	2.59E-03
538007	1/26/2021 - 2/1/2021	Beta	1.52E-02	3.27E-03	4.11E-03
538228	2/1/2021 - 2/8/2021	Beta	1.28E-02	2.75E-03	3.47E-03
538455	2/8/2021 - 2/16/2021	Beta	1.11E-02	2.13E-03	2.60E-03
538742	2/16/2021 - 2/23/2021	Beta	1.97E-02	2.62E-03	2.53E-03
538992	2/23/2021 - 3/2/2021	Beta	1.78E-02	2.62E-03	2.80E-03
539203	3/2/2021 - 3/9/2021	Beta	1.92E-02	3.01E-03	3.14E-03
539683	3/9/2021 - 3/16/2021	Beta	2.04E-02	3.10E-03	3.32E-03
540645	3/16/2021 - 3/23/2021	Beta	1.49E-02	2.54E-03	2.94E-03
541367	3/23/2021 - 3/30/2021	Beta	1.45E-02	2.42E-03	2.70E-03
541982	12/29/2020 - 3/30/2021	Cs-134	<9.87E-04	0.00E+00	9.87E-04
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.36E-01	3.50E-02	3.36E-02
		K-40	2.74E-02	1.61E-02	1.83E-02
541856	3/30/2021 - 4/6/2021	Beta	1.99E-02	3.17E-03	3.62E-03
542171	4/6/2021 - 4/13/2021	Beta	2.82E-02	3.41E-03	3.13E-03
542807	4/13/2021 - 4/20/2021	Beta	2.11E-02	2.79E-03	2.83E-03
543168	4/20/2021 - 4/27/2021	Beta	2.35E-02	2.79E-03	2.50E-03
544052	4/27/2021 - 5/3/2021	Beta	2.47E-02	3.11E-03	2.89E-03
544246	5/3/2021 - 5/11/2021	Beta	1.74E-02	2.40E-03	2.50E-03
544472	5/11/2021 - 5/19/2021	Beta	1.93E-02	2.76E-03	2.80E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544956	5/19/2021 - 5/25/2021	Beta	2.10E-02	3.02E-03	3.10E-03
545441	5/25/2021 - 6/1/2021	Beta	1.96E-02	2.95E-03	3.04E-03
545731	6/1/2021 - 6/8/2021	Beta	8.78E-03	2.51E-03	3.41E-03
545965	6/8/2021 - 6/14/2021	Beta	9.07E-03	2.74E-03	3.73E-03
546841	6/14/2021 - 6/22/2021	Beta	2.04E-02	2.79E-03	2.75E-03
547132	6/22/2021 - 6/29/2021	Beta	1.24E-02	2.69E-03	3.37E-03
547768	3/30/2021 - 6/29/2021	Cs-134	<1.81E-03	0.00E+00	1.81E-03
		Cs-137	<1.23E-03	0.00E+00	1.23E-03
		Be-7	1.77E-01	3.72E-02	2.28E-02
		K-40	<2.71E-02	0.00E+00	2.71E-02
547408	6/29/2021 - 7/6/2021	Beta	6.83E-03	2.30E-03	3.23E-03
547643	7/6/2021 - 7/13/2021	Beta	9.46E-03	2.51E-03	3.31E-03
548040	7/13/2021 - 7/20/2021	Beta	1.34E-02	2.67E-03	3.15E-03
548464	7/20/2021 - 7/27/2021	Beta	2.06E-02	3.04E-03	3.15E-03
548675	7/27/2021 - 8/3/2021	Beta	2.47E-02	2.92E-03	2.75E-03
548915	8/3/2021 - 8/9/2021	Beta	9.98E-03	2.78E-03	3.69E-03
549205	8/9/2021 - 8/17/2021	Beta	2.59E-03	1.98E-03	3.19E-03
549644	8/17/2021 - 8/23/2021	Beta	9.97E-03	2.96E-03	4.07E-03
549981	8/23/2021 - 8/30/2021	Beta	2.68E-02	2.98E-03	2.63E-03
550488	8/30/2021 - 9/7/2021	Beta	2.18E-02	2.91E-03	2.90E-03
550974	9/7/2021 - 9/14/2021	Beta	2.55E-02	3.23E-03	2.95E-03
551605	9/14/2021 - 9/22/2021	Beta	7.68E-03	2.24E-03	3.09E-03
552828	6/29/2021 - 9/22/2021	Cs-134	<2.09E-03	0.00E+00	2.09E-03
		Cs-137	<1.71E-03	0.00E+00	1.71E-03
		Be-7	1.22E-01	3.84E-02	4.04E-02
		K-40	<4.17E-02	0.00E+00	4.17E-02
552393	9/30/2021 - 10/5/2021	Beta	3.73E-02	4.73E-03	4.46E-03
552704	10/5/2021 - 10/12/2021	Beta	1.24E-02	2.70E-03	3.36E-03
553197	10/12/2021 - 10/19/2021	Beta	2.61E-02	2.99E-03	2.80E-03

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

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553776	10/19/2021 - 10/25/2021	Beta	3.33E-02	4.08E-03	3.99E-03
554230	10/25/2021 - 11/2/2021	Beta	1.37E-02	2.45E-03	2.81E-03
554519	11/2/2021 - 11/8/2021	Beta	2.43E-02	3.15E-03	3.10E-03
554999	11/8/2021 - 11/16/2021	Beta	2.86E-02	3.15E-03	2.76E-03
555838	11/16/2021 - 11/23/2021	Beta	2.63E-02	2.91E-03	2.51E-03
556692	11/23/2021 - 11/30/2021	Beta	2.51E-02	3.32E-03	3.35E-03
557008	11/30/2021 - 12/7/2021	Beta	4.01E-02	3.90E-03	3.27E-03
557430	12/7/2021 - 12/14/2021	Beta	2.69E-02	3.31E-03	3.07E-03
557900	12/14/2021 - 12/21/2021	Beta	1.76E-02	2.93E-03	3.27E-03
559198	9/30/2021 - 12/21/2021	Cs-134	<1.84E-03	0.00E+00	1.84E-03
		Cs-137	<1.36E-03	0.00E+00	1.36E-03
		Be-7	1.42E-01	3.60E-02	2.79E-02
		K-40	<2.85E-02	0.00E+00	2.85E-02
558553	12/28/2021 - 1/4/2022	Beta	1.23E-02	2.31E-03	2.70E-03
559988	12/28/2021 - 1/4/2022	Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<7.78E-03	0.00E+00	7.78E-03
		Be-7	1.75E-01	9.56E-02	0.00E+00
		K-40	2.60E-01	1.57E-01	2.16E-01

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536503	12/29/2020 - 1/5/2021	Beta	1.44E-02	2.61E-03	2.89E-03
536692	1/5/2021 - 1/12/2021	Beta	2.34E-02	2.83E-03	2.65E-03
537245	1/12/2021 - 1/19/2021	Beta	2.19E-02	2.81E-03	2.81E-03
537616	1/19/2021 - 1/26/2021	Beta	2.04E-02	2.62E-03	2.52E-03
538008	1/26/2021 - 2/1/2021	Beta	1.94E-02	3.59E-03	4.27E-03
538229	2/1/2021 - 2/8/2021	Beta	1.29E-02	2.76E-03	3.46E-03
538456	2/8/2021 - 2/16/2021	Beta	1.25E-02	2.20E-03	2.60E-03
538743	2/16/2021 - 2/23/2021	Beta	2.82E-02	2.99E-03	2.52E-03
538993	2/23/2021 - 3/2/2021	Beta	1.74E-02	2.60E-03	2.80E-03
539204	3/2/2021 - 3/9/2021	Beta	2.46E-02	3.25E-03	3.11E-03

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539684	3/9/2021 - 3/16/2021	Beta	2.46E-02	3.32E-03	3.35E-03
540646	3/16/2021 - 3/23/2021	Beta	1.55E-02	2.57E-03	2.94E-03
541368	3/23/2021 - 3/30/2021	Beta	1.78E-02	2.59E-03	2.71E-03
541983	12/29/2020 - 3/30/2021	Cs-134	<1.01E-03	0.00E+00	1.01E-03
		Cs-137	<1.23E-03	0.00E+00	1.23E-03
		Be-7	1.45E-01	3.31E-02	2.09E-02
		K-40	<2.41E-02	0.00E+00	2.41E-02
541857	3/30/2021 - 4/6/2021	Beta	2.25E-02	3.27E-03	3.56E-03
542172	4/6/2021 - 4/13/2021	Beta	3.02E-02	3.54E-03	3.18E-03
542808	4/13/2021 - 4/20/2021	Beta	2.57E-02	2.94E-03	2.74E-03
543169	4/20/2021 - 4/27/2021	Beta	2.51E-02	2.90E-03	2.56E-03
544053	4/27/2021 - 5/3/2021	Beta	2.68E-02	3.23E-03	2.92E-03
544247	5/3/2021 - 5/11/2021	Beta	1.78E-02	2.41E-03	2.48E-03
544473	5/11/2021 - 5/19/2021	Beta	2.16E-02	2.86E-03	2.79E-03
544957	5/19/2021 - 5/25/2021	Beta	2.84E-02	3.36E-03	3.11E-03
545442	5/25/2021 - 6/1/2021	Beta	1.85E-02	2.89E-03	3.04E-03
545732	6/1/2021 - 6/8/2021	Beta	7.75E-03	2.44E-03	3.41E-03
545966	6/8/2021 - 6/14/2021	Beta	1.10E-02	2.85E-03	3.72E-03
546842	6/14/2021 - 6/22/2021	Beta	1.78E-02	2.67E-03	2.75E-03
547133	6/22/2021 - 6/29/2021	Beta	1.28E-02	2.73E-03	3.39E-03
547769	3/30/2021 - 6/29/2021	Cs-134	<1.75E-03	0.00E+00	1.75E-03
		Cs-137	<1.44E-03	0.00E+00	1.44E-03
		Be-7	1.91E-01	4.00E-02	3.13E-02
		K-40	<2.78E-02	0.00E+00	2.78E-02
547409	6/29/2021 - 7/6/2021	Beta	1.22E-02	2.62E-03	3.20E-03
547644	7/6/2021 - 7/13/2021	Beta	2.05E-02	3.11E-03	3.32E-03
548041	7/13/2021 - 7/20/2021	Beta	1.10E-02	2.52E-03	3.14E-03
548465	7/20/2021 - 7/27/2021	Beta	2.54E-02	3.26E-03	3.16E-03
548676	7/27/2021 - 8/3/2021	Beta	2.76E-02	3.04E-03	2.75E-03

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548916	8/3/2021 - 8/9/2021	Beta	1.61E-02	3.13E-03	3.69E-03
549206	8/9/2021 - 8/17/2021	Beta	1.23E-02	2.53E-03	3.18E-03
549645	8/17/2021 - 8/23/2021	Beta	1.11E-02	3.04E-03	4.10E-03
549982	8/23/2021 - 8/30/2021	Beta	2.64E-02	2.96E-03	2.63E-03
550489	8/30/2021 - 9/7/2021	Beta	2.34E-02	2.98E-03	2.89E-03
550975	9/7/2021 - 9/14/2021	Beta	2.98E-02	3.43E-03	2.94E-03
551606	9/14/2021 - 9/22/2021	Beta	1.88E-02	2.82E-03	3.10E-03
552197	9/22/2021 - 9/28/2021	Beta	2.09E-02	3.57E-03	4.16E-03
552829	6/29/2021 - 9/28/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<1.18E-03	0.00E+00	1.18E-03
		Be-7	1.79E-01	4.12E-02	3.77E-02
		K-40	<4.02E-02	0.00E+00	4.02E-02
552394	9/28/2021 - 10/5/2021	Beta	4.19E-02	3.98E-03	3.13E-03
552705	10/5/2021 - 10/12/2021	Beta	1.23E-02	2.70E-03	3.36E-03
553198	10/12/2021 - 10/19/2021	Beta	2.76E-02	3.06E-03	2.80E-03
553777	10/19/2021 - 10/25/2021	Beta	3.38E-02	4.06E-03	3.94E-03
554231	10/25/2021 - 11/2/2021	Beta	1.50E-02	2.80E-03	3.26E-03
554520	11/2/2021 - 11/9/2021	Beta	2.07E-02	2.71E-03	2.68E-03
555000	11/9/2021 - 11/16/2021	Beta	2.84E-02	3.42E-03	3.16E-03
555839	11/16/2021 - 11/23/2021	Beta	2.32E-02	2.78E-03	2.51E-03
556693	11/23/2021 - 11/30/2021	Beta	2.20E-02	3.19E-03	3.37E-03
557009	11/30/2021 - 12/7/2021	Beta	4.04E-02	3.93E-03	3.30E-03
557431	12/7/2021 - 12/14/2021	Beta	2.47E-02	3.21E-03	3.07E-03
558342	12/21/2021 - 12/28/2021	Beta	2.90E-02	3.35E-03	2.91E-03
559199	9/28/2021 - 12/28/2021	Cs-134	<1.97E-03	0.00E+00	1.97E-03
		Cs-137	<1.61E-03	0.00E+00	1.61E-03
		Be-7	1.62E-01	7.55E-02	3.36E-02
		K-40	4.47E-02	2.33E-02	2.83E-02
558554	12/28/2021 - 1/4/2022	Beta	1.08E-02	2.25E-03	2.75E-03

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
559989	12/28/2021 - 1/4/2022	Cs-134	<1.30E-02	0.00E+00	1.30E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	1.28E-01	8.79E-02	0.00E+00
		K-40	<2.77E-01	0.00E+00	2.77E-01

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536504	12/29/2020 - 1/5/2021	Beta	1.51E-02	2.67E-03	2.93E-03
536693	1/5/2021 - 1/12/2021	Beta	2.22E-02	2.76E-03	2.62E-03
537246	1/12/2021 - 1/19/2021	Beta	2.07E-02	2.80E-03	2.88E-03
537617	1/19/2021 - 1/26/2021	Beta	1.86E-02	2.56E-03	2.55E-03
538009	1/26/2021 - 2/1/2021	Beta	1.42E-02	3.24E-03	4.13E-03
538230	2/1/2021 - 2/8/2021	Beta	1.22E-02	2.72E-03	3.46E-03
538457	2/8/2021 - 2/16/2021	Beta	1.04E-02	2.10E-03	2.60E-03
538744	2/16/2021 - 2/23/2021	Beta	2.18E-02	2.72E-03	2.53E-03
538994	2/23/2021 - 3/2/2021	Beta	1.56E-02	2.51E-03	2.80E-03
539205	3/2/2021 - 3/9/2021	Beta	2.39E-02	3.23E-03	3.12E-03
539685	3/9/2021 - 3/16/2021	Beta	2.24E-02	3.21E-03	3.34E-03
540647	3/16/2021 - 3/23/2021	Beta	1.51E-02	2.54E-03	2.93E-03
541369	3/23/2021 - 3/26/2021	Beta	1.80E-02	4.67E-03	6.14E-03
541984	12/29/2020 - 3/30/2021	Cs-134	<1.42E-03	0.00E+00	1.42E-03
		Cs-137	<1.36E-03	0.00E+00	1.36E-03
		Be-7	1.34E-01	3.54E-02	3.12E-02
		K-40	<3.58E-02	0.00E+00	3.58E-02
541858	3/31/2021 - 4/6/2021	Beta	2.03E-02	3.56E-03	4.20E-03
542173	4/6/2021 - 4/13/2021	Beta	2.94E-02	3.47E-03	3.14E-03
542809	4/13/2021 - 4/20/2021	Beta	2.28E-02	2.87E-03	2.82E-03
543170	4/20/2021 - 4/27/2021	Beta	2.60E-02	2.88E-03	2.48E-03
544054	4/27/2021 - 5/3/2021	Beta	2.79E-02	3.28E-03	2.93E-03
544248	5/3/2021 - 5/11/2021	Beta	1.97E-02	2.51E-03	2.49E-03
544474	5/11/2021 - 5/19/2021	Beta	1.95E-02	2.77E-03	2.80E-03

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544958	5/19/2021 - 5/25/2021	Beta	2.57E-02	3.24E-03	3.11E-03
545443	5/25/2021 - 6/1/2021	Beta	1.65E-02	2.78E-03	3.02E-03
545733	6/1/2021 - 6/8/2021	Beta	7.49E-03	2.43E-03	3.41E-03
545967	6/8/2021 - 6/14/2021	Beta	1.19E-02	2.90E-03	3.72E-03
546843	6/14/2021 - 6/22/2021	Beta	2.02E-02	2.79E-03	2.76E-03
547134	6/22/2021 - 6/29/2021	Beta	1.04E-02	2.57E-03	3.36E-03
547770	3/31/2021 - 6/29/2021	Nuclide	Activity	2 Sigma Error	MDA
		Cs-134	<1.94E-03	0.00E+00	1.94E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.59E-01	3.81E-02	3.22E-02
		K-40	2.04E-02	1.87E-02	2.82E-02
547410	6/29/2021 - 7/6/2021	Beta	1.40E-02	2.75E-03	3.25E-03
547645	7/6/2021 - 7/13/2021	Beta	1.66E-02	2.90E-03	3.30E-03
548042	7/13/2021 - 7/20/2021	Beta	1.28E-02	2.67E-03	3.22E-03
548466	7/20/2021 - 7/27/2021	Beta	1.83E-02	2.91E-03	3.14E-03
548677	7/27/2021 - 8/3/2021	Beta	2.26E-02	2.87E-03	2.81E-03
548917	8/3/2021 - 8/9/2021	Beta	9.59E-03	2.74E-03	3.67E-03
549207	8/9/2021 - 8/17/2021	Beta	1.19E-02	2.52E-03	3.19E-03
549646	8/17/2021 - 8/23/2021	Beta	1.17E-02	3.75E-03	5.27E-03
549983	8/23/2021 - 8/30/2021	Beta	2.24E-02	2.81E-03	2.67E-03
550490	8/30/2021 - 9/7/2021	Beta	2.15E-02	2.89E-03	2.88E-03
550976	9/7/2021 - 9/14/2021	Beta	2.22E-02	3.07E-03	2.95E-03
551607	9/14/2021 - 9/22/2021	Beta	1.49E-02	2.62E-03	3.09E-03
552198	9/22/2021 - 9/28/2021	Beta	2.00E-02	3.52E-03	4.16E-03
552830	6/29/2021 - 9/28/2021	Nuclide	Activity	2 Sigma Error	MDA
		Cs-134	<1.31E-03	0.00E+00	1.31E-03
		Cs-137	<1.63E-03	0.00E+00	1.63E-03
		Be-7	1.50E-01	3.93E-02	3.88E-02
		K-40	<3.43E-02	0.00E+00	3.43E-02
552395	9/28/2021 - 10/5/2021	Beta	3.24E-02	3.61E-03	3.16E-03
552706	10/5/2021 - 10/12/2021	Beta	1.01E-02	2.56E-03	3.33E-03

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553199	10/12/2021 - 10/19/2021	Beta	2.05E-02	2.75E-03	2.81E-03
553778	10/19/2021 - 10/25/2021	Beta	3.31E-02	4.09E-03	4.03E-03
554232	10/25/2021 - 11/2/2021	Beta	1.35E-02	2.44E-03	2.80E-03
554521	11/2/2021 - 11/8/2021	Beta	2.06E-02	2.98E-03	3.11E-03
555001	11/8/2021 - 11/16/2021	Beta	2.59E-02	3.03E-03	2.75E-03
555840	11/16/2021 - 11/23/2021	Beta	2.10E-02	2.68E-03	2.51E-03
556694	11/23/2021 - 11/30/2021	Beta	2.53E-02	3.32E-03	3.34E-03
557010	11/30/2021 - 12/7/2021	Beta	3.69E-02	3.79E-03	3.30E-03
557432	12/7/2021 - 12/14/2021	Beta	2.69E-02	3.31E-03	3.09E-03
557902	12/14/2021 - 12/21/2021	Beta	1.73E-02	2.94E-03	3.31E-03
558343	12/21/2021 - 12/28/2021	Beta	3.13E-02	3.43E-03	2.88E-03
559200	9/28/2021 - 12/28/2021	Cs-134	<1.61E-03	0.00E+00	1.61E-03
		Cs-137	<1.65E-03	0.00E+00	1.65E-03
		Be-7	1.59E-01	3.93E-02	3.96E-02
		K-40	3.34E-02	1.52E-02	4.52E-03
558555	12/28/2021 - 1/4/2022	Beta	1.28E-02	2.35E-03	2.74E-03
559990	12/28/2021 - 1/4/2022	Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	1.34E-01	9.04E-02	0.00E+00
		K-40	3.55E-01	1.53E-01	1.69E-01

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536506	12/29/2020 - 1/5/2021	Beta	1.57E-02	2.68E-03	2.89E-03
536695	1/5/2021 - 1/12/2021	Beta	2.20E-02	2.76E-03	2.65E-03
537248	1/12/2021 - 1/19/2021	Beta	1.95E-02	2.70E-03	2.80E-03
537619	1/19/2021 - 1/26/2021	Beta	1.90E-02	2.62E-03	2.62E-03
538011	1/26/2021 - 2/1/2021	Beta	1.65E-02	3.34E-03	4.09E-03
538232	2/1/2021 - 2/8/2021	Beta	1.51E-02	2.87E-03	3.46E-03
538459	2/8/2021 - 2/16/2021	Beta	1.12E-02	2.14E-03	2.60E-03
538746	2/16/2021 - 2/23/2021	Beta	2.03E-02	2.65E-03	2.53E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538996	2/23/2021 - 3/2/2021	Beta	1.86E-02	2.65E-03	2.79E-03
539207	3/2/2021 - 3/9/2021	Beta	2.47E-02	3.26E-03	3.12E-03
539687	3/9/2021 - 3/16/2021	Beta	2.56E-02	3.37E-03	3.38E-03
540649	3/16/2021 - 3/23/2021	Beta	1.43E-02	2.49E-03	2.91E-03
541371	3/23/2021 - 3/30/2021	Beta	1.77E-02	2.60E-03	2.71E-03
541986	12/29/2020 - 3/30/2021	Cs-134	<1.25E-03	0.00E+00	1.25E-03
		Cs-137	<1.45E-03	0.00E+00	1.45E-03
		Be-7	1.51E-01	3.75E-02	3.60E-02
		K-40	<3.95E-02	0.00E+00	3.95E-02
541860	3/30/2021 - 4/6/2021	Beta	2.23E-02	3.25E-03	3.56E-03
542175	4/6/2021 - 4/13/2021	Beta	2.70E-02	3.40E-03	3.19E-03
542811	4/13/2021 - 4/20/2021	Beta	2.28E-02	2.81E-03	2.74E-03
543172	4/20/2021 - 4/27/2021	Beta	2.49E-02	2.90E-03	2.56E-03
544056	4/27/2021 - 5/3/2021	Beta	2.58E-02	3.18E-03	2.92E-03
544250	5/3/2021 - 5/11/2021	Beta	2.03E-02	2.52E-03	2.48E-03
544476	5/11/2021 - 5/19/2021	Beta	2.13E-02	2.85E-03	2.79E-03
544960	5/19/2021 - 5/25/2021	Beta	2.84E-02	3.36E-03	3.11E-03
545445	5/25/2021 - 6/1/2021	Beta	2.10E-02	3.02E-03	3.04E-03
545735	6/1/2021 - 6/8/2021	Beta	1.01E-02	2.58E-03	3.41E-03
545969	6/8/2021 - 6/14/2021	Beta	1.20E-02	2.91E-03	3.72E-03
546845	6/14/2021 - 6/22/2021	Beta	1.93E-02	2.75E-03	2.75E-03
547136	6/22/2021 - 6/29/2021	Beta	1.10E-02	2.62E-03	3.39E-03
547772	3/30/2021 - 6/29/2021	Cs-134	<1.81E-03	0.00E+00	1.81E-03
		Cs-137	<1.49E-03	0.00E+00	1.49E-03
		Be-7	2.24E-01	4.22E-02	2.16E-02
		K-40	<2.72E-02	0.00E+00	2.72E-02
547412	6/29/2021 - 7/6/2021	Beta	9.66E-03	2.46E-03	3.20E-03
547647	7/6/2021 - 7/13/2021	Beta	1.37E-02	2.75E-03	3.32E-03
548044	7/13/2021 - 7/20/2021	Beta	7.93E-03	2.33E-03	3.14E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID	Sample Dates	Nuclide	Activity	2 Sigma Error	MDA
548468	7/20/2021 - 7/27/2021	Beta	1.63E-02	2.82E-03	3.16E-03
548679	7/27/2021 - 8/3/2021	Beta	1.99E-02	2.71E-03	2.75E-03
548919	8/3/2021 - 8/9/2021	Beta	1.19E-02	2.90E-03	3.70E-03
549209	8/9/2021 - 8/17/2021	Beta	8.47E-03	2.33E-03	3.18E-03
549648	8/17/2021 - 8/23/2021	Beta	6.00E-03	2.72E-03	4.10E-03
549985	8/23/2021 - 8/30/2021	Beta	1.97E-02	2.66E-03	2.63E-03
550492	8/30/2021 - 9/7/2021	Beta	1.53E-02	2.59E-03	2.89E-03
550978	9/7/2021 - 9/14/2021	Beta	2.10E-02	3.01E-03	2.94E-03
551609	9/14/2021 - 9/22/2021	Beta	1.28E-02	2.52E-03	3.10E-03
552200	9/22/2021 - 9/28/2021	Beta	1.53E-02	3.29E-03	4.16E-03
552832	6/29/2021 - 9/28/2021	Cs-134	<1.66E-03	0.00E+00	1.66E-03
		Cs-137	<3.08E-04	0.00E+00	3.08E-04
		Be-7	1.28E-01	3.43E-02	3.14E-02
		K-40	<2.98E-02	0.00E+00	2.98E-02
552397	9/28/2021 - 10/5/2021	Beta	2.70E-02	3.36E-03	3.13E-03
552708	10/5/2021 - 10/12/2021	Beta	7.55E-03	2.41E-03	3.36E-03
553201	10/12/2021 - 10/19/2021	Beta	1.76E-02	2.61E-03	2.80E-03
553780	10/19/2021 - 10/25/2021	Beta	2.53E-02	3.68E-03	3.94E-03
554234	10/25/2021 - 11/2/2021	Beta	8.72E-03	2.17E-03	2.81E-03
554523	11/2/2021 - 11/9/2021	Beta	1.64E-02	2.50E-03	2.68E-03
555003	11/9/2021 - 11/16/2021	Beta	1.68E-02	2.87E-03	3.17E-03
555842	11/16/2021 - 11/23/2021	Beta	1.78E-02	2.52E-03	2.51E-03
556696	11/23/2021 - 11/30/2021	Beta	1.68E-02	2.93E-03	3.38E-03
557012	11/30/2021 - 12/7/2021	Beta	2.45E-02	3.28E-03	3.31E-03
557434	12/7/2021 - 12/14/2021	Beta	1.83E-02	2.89E-03	3.06E-03
557904	12/14/2021 - 12/21/2021	Beta	1.39E-02	2.75E-03	3.29E-03
558345	12/21/2021 - 12/28/2021	Beta	2.02E-02	2.92E-03	2.90E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
559202	9/28/2021 - 12/28/2021	Cs-134	<1.61E-03	0.00E+00	1.61E-03
		Cs-137	<1.32E-03	0.00E+00	1.32E-03
		Be-7	1.08E-01	3.09E-02	3.02E-02
		K-40	4.17E-02	1.91E-02	1.87E-02
558557	12/28/2021 - 1/4/2022	Beta	9.59E-03	2.19E-03	2.77E-03
559992	12/28/2021 - 1/4/2022	Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	1.27E-01	1.10E-01	0.00E+00
		K-40	2.78E-01	1.43E-01	1.67E-01

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536509	12/29/2020 - 1/5/2021	Beta	1.49E-02	2.66E-03	2.92E-03
536698	1/5/2021 - 1/12/2021	Beta	2.37E-02	2.83E-03	2.62E-03
537251	1/12/2021 - 1/19/2021	Beta	1.97E-02	2.76E-03	2.88E-03
537622	1/19/2021 - 1/26/2021	Beta	1.65E-02	2.48E-03	2.57E-03
538014	1/26/2021 - 2/1/2021	Beta	1.56E-02	3.31E-03	4.13E-03
538235	2/1/2021 - 2/8/2021	Beta	1.57E-02	2.91E-03	3.47E-03
538462	2/8/2021 - 2/16/2021	Beta	1.46E-02	2.32E-03	2.60E-03
538749	2/16/2021 - 2/23/2021	Beta	2.16E-02	2.70E-03	2.52E-03
538999	2/23/2021 - 3/2/2021	Beta	1.69E-02	2.59E-03	2.82E-03
539210	3/2/2021 - 3/9/2021	Beta	1.37E-02	2.70E-03	3.12E-03
539690	3/9/2021 - 3/16/2021	Beta	1.94E-02	3.07E-03	3.35E-03
540652	3/16/2021 - 3/23/2021	Beta	1.08E-02	2.33E-03	2.93E-03
541374	3/23/2021 - 3/30/2021	Beta	1.96E-02	2.67E-03	2.68E-03
541989	12/29/2020 - 3/30/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<1.30E-03	0.00E+00	1.30E-03
		Be-7	1.13E-01	3.14E-02	2.76E-02
		K-40	4.00E-02	1.74E-02	4.93E-03
541863	3/30/2021 - 4/6/2021	Beta	2.13E-02	3.29E-03	3.68E-03
542178	4/6/2021 - 4/13/2021	Beta	2.94E-02	3.46E-03	3.11E-03
542814	4/13/2021 - 4/20/2021	Beta	2.41E-02	2.93E-03	2.81E-03
543175	4/20/2021 - 4/27/2021	Beta	2.62E-02	2.89E-03	2.47E-03

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

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544059	4/27/2021 - 5/3/2021	Beta	2.82E-02	3.29E-03	2.91E-03
544253	5/3/2021 - 5/11/2021	Beta	1.94E-02	2.51E-03	2.51E-03
544479	5/11/2021 - 5/19/2021	Beta	1.94E-02	2.75E-03	2.80E-03
544963	5/19/2021 - 5/25/2021	Beta	2.97E-02	3.41E-03	3.09E-03
545448	5/25/2021 - 6/1/2021	Beta	2.27E-02	3.08E-03	3.01E-03
545738	6/1/2021 - 6/8/2021	Beta	9.09E-03	2.54E-03	3.44E-03
545972	6/8/2021 - 6/14/2021	Beta	1.11E-02	2.85E-03	3.72E-03
546848	6/14/2021 - 6/22/2021	Beta	2.02E-02	2.79E-03	2.75E-03
547139	6/22/2021 - 6/29/2021	Beta	1.27E-02	2.69E-03	3.35E-03
547775	3/30/2021 - 6/29/2021	Cs-134	<1.77E-03	0.00E+00	1.77E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.47E-01	3.75E-02	3.78E-02
		K-40	1.94E-02	1.31E-02	1.48E-02
547415	6/29/2021 - 7/6/2021	Beta	1.16E-02	2.60E-03	3.24E-03
547650	7/6/2021 - 7/13/2021	Beta	1.70E-02	2.94E-03	3.32E-03
548047	7/13/2021 - 7/20/2021	Beta	1.13E-02	2.55E-03	3.17E-03
548471	7/20/2021 - 7/27/2021	Beta	2.08E-02	3.04E-03	3.14E-03
548682	7/27/2021 - 8/3/2021	Beta	2.58E-02	2.94E-03	2.71E-03
548922	8/3/2021 - 8/9/2021	Beta	1.40E-02	3.06E-03	3.77E-03
549212	8/9/2021 - 8/17/2021	Beta	1.50E-02	2.67E-03	3.19E-03
549651	8/17/2021 - 8/23/2021	Beta	1.13E-02	3.01E-03	4.03E-03
549988	8/23/2021 - 8/30/2021	Beta	2.69E-02	3.00E-03	2.66E-03
550495	8/30/2021 - 9/7/2021	Beta	2.00E-02	2.81E-03	2.88E-03
550981	9/7/2021 - 9/14/2021	Beta	2.93E-02	3.42E-03	2.96E-03
551612	9/14/2021 - 9/22/2021	Beta	1.51E-02	2.63E-03	3.08E-03
552203	9/22/2021 - 9/28/2021	Beta	2.01E-02	3.50E-03	4.12E-03
552835	6/29/2021 - 9/28/2021	Cs-134	<2.20E-03	0.00E+00	2.20E-03
		Cs-137	<1.06E-03	0.00E+00	1.06E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552835	6/29/2021 - 9/28/2021	Be-7	1.21E-01	3.59E-02	3.87E-02
		K-40	<3.01E-02	0.00E+00	3.01E-02
552400	9/28/2021 - 10/5/2021	Beta	3.80E-02	3.84E-03	3.16E-03
552711	10/5/2021 - 10/12/2021	Beta	1.43E-02	2.81E-03	3.35E-03
553204	10/12/2021 - 10/19/2021	Beta	2.49E-02	2.94E-03	2.81E-03
553783	10/19/2021 - 10/25/2021	Beta	3.12E-02	4.05E-03	4.07E-03
554237	10/25/2021 - 11/2/2021	Beta	1.16E-02	2.34E-03	2.80E-03
554526	11/2/2021 - 11/8/2021	Beta	2.42E-02	3.11E-03	3.06E-03
555006	11/8/2021 - 11/16/2021	Beta	2.41E-02	2.95E-03	2.75E-03
555845	11/16/2021 - 11/23/2021	Beta	2.23E-02	2.72E-03	2.48E-03
556699	11/23/2021 - 11/30/2021	Beta	2.50E-02	3.32E-03	3.36E-03
557015	11/30/2021 - 12/7/2021	Beta	4.14E-02	4.03E-03	3.37E-03
557437	12/7/2021 - 12/14/2021	Beta	2.55E-02	3.23E-03	3.04E-03
557907	12/14/2021 - 12/21/2021	Beta	2.01E-02	3.05E-03	3.27E-03
558348	12/21/2021 - 12/28/2021	Beta	3.22E-02	3.50E-03	2.91E-03
559205	9/28/2021 - 12/28/2021	Cs-134	<1.62E-03	0.00E+00	1.62E-03
		Cs-137	<1.19E-03	0.00E+00	1.19E-03
		Be-7	1.46E-01	3.47E-02	2.66E-02
		K-40	<3.58E-02	0.00E+00	3.58E-02
558560	12/28/2021 - 1/4/2022	Beta	1.25E-02	2.37E-03	2.78E-03
559995	12/28/2021 - 1/4/2022	Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<0.00E+00	0.00E+00	0.00E+00
		K-40	5.39E-01	1.61E-01	3.04E-02

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536505	12/29/2020 - 1/5/2021	Beta	1.29E-02	2.52E-03	2.88E-03
536694	1/5/2021 - 1/12/2021	Beta	2.36E-02	2.84E-03	2.65E-03
537247	1/12/2021 - 1/19/2021	Beta	1.96E-02	2.71E-03	2.82E-03
537618	1/19/2021 - 1/26/2021	Beta	1.89E-02	2.61E-03	2.59E-03
538010	1/26/2021 - 2/1/2021	Beta	1.76E-02	3.40E-03	4.10E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538231	2/1/2021 - 2/8/2021	Beta	1.30E-02	2.76E-03	3.46E-03
538458	2/8/2021 - 2/16/2021	Beta	1.27E-02	2.22E-03	2.60E-03
538745	2/16/2021 - 2/23/2021	Beta	2.40E-02	2.82E-03	2.53E-03
538995	2/23/2021 - 3/2/2021	Beta	1.98E-02	2.71E-03	2.81E-03
539206	3/2/2021 - 3/9/2021	Beta	2.79E-02	3.40E-03	3.10E-03
539686	3/9/2021 - 3/16/2021	Beta	2.47E-02	3.31E-03	3.35E-03
540648	3/16/2021 - 3/23/2021	Beta	1.47E-02	2.53E-03	2.94E-03
541370	3/23/2021 - 3/30/2021	Beta	1.66E-02	2.54E-03	2.71E-03
541985	12/29/2020 - 3/30/2021	Cs-134	<2.12E-03	0.00E+00	2.12E-03
		Cs-137	<1.18E-03	0.00E+00	1.18E-03
		Be-7	1.66E-01	3.75E-02	3.16E-02
		K-40	<3.14E-02	0.00E+00	3.14E-02
541859	3/30/2021 - 4/6/2021	Beta	2.21E-02	3.25E-03	3.56E-03
542174	4/6/2021 - 4/13/2021	Beta	2.88E-02	3.47E-03	3.17E-03
542810	4/13/2021 - 4/20/2021	Beta	2.37E-02	2.86E-03	2.76E-03
543171	4/20/2021 - 4/27/2021	Beta	2.38E-02	2.85E-03	2.56E-03
544055	4/27/2021 - 5/3/2021	Beta	3.05E-02	3.39E-03	2.92E-03
544249	5/3/2021 - 5/11/2021	Beta	2.06E-02	2.53E-03	2.47E-03
544475	5/11/2021 - 5/19/2021	Beta	2.09E-02	2.83E-03	2.79E-03
544959	5/19/2021 - 5/25/2021	Beta	2.79E-02	3.34E-03	3.11E-03
545444	5/25/2021 - 6/1/2021	Beta	2.10E-02	3.01E-03	3.03E-03
545734	6/1/2021 - 6/8/2021	Beta	8.82E-03	2.51E-03	3.41E-03
545968	6/8/2021 - 6/14/2021	Beta	1.23E-02	2.93E-03	3.72E-03
546844	6/14/2021 - 6/22/2021	Beta	1.96E-02	2.76E-03	2.75E-03
547135	6/22/2021 - 6/29/2021	Beta	1.14E-02	2.64E-03	3.37E-03
547771	3/30/2021 - 6/29/2021	Cs-134	<1.76E-03	0.00E+00	1.76E-03
		Cs-137	<1.33E-03	0.00E+00	1.33E-03
		Be-7	1.88E-01	3.83E-02	2.43E-02
		K-40	1.71E-02	1.47E-02	2.10E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547411	6/29/2021 - 7/6/2021	Beta	1.18E-02	2.60E-03	3.22E-03
547646	7/6/2021 - 7/13/2021	Beta	1.98E-02	3.07E-03	3.31E-03
548043	7/13/2021 - 7/20/2021	Beta	1.27E-02	2.62E-03	3.15E-03
548467	7/20/2021 - 7/27/2021	Beta	2.29E-02	3.15E-03	3.16E-03
548678	7/27/2021 - 8/3/2021	Beta	2.55E-02	2.96E-03	2.75E-03
548918	8/3/2021 - 8/9/2021	Beta	1.42E-02	3.03E-03	3.69E-03
549208	8/9/2021 - 8/17/2021	Beta	1.52E-02	2.68E-03	3.18E-03
549647	8/17/2021 - 8/23/2021	Beta	8.82E-03	2.90E-03	4.10E-03
549984	8/23/2021 - 8/30/2021	Beta	2.71E-02	2.99E-03	2.63E-03
550491	8/30/2021 - 9/7/2021	Beta	2.44E-02	3.02E-03	2.89E-03
550977	9/7/2021 - 9/14/2021	Beta	2.75E-02	3.32E-03	2.93E-03
551608	9/14/2021 - 9/22/2021	Beta	1.83E-02	2.79E-03	3.11E-03
552199	9/22/2021 - 9/28/2021	Beta	1.83E-02	3.44E-03	4.17E-03
552831	6/29/2021 - 9/28/2021	Cs-134	<1.45E-03	0.00E+00	1.45E-03
		Cs-137	<1.03E-03	0.00E+00	1.03E-03
		Be-7	1.50E-01	3.94E-02	4.07E-02
		K-40	2.77E-02	1.62E-02	1.85E-02
552396	9/28/2021 - 10/5/2021	Beta	3.72E-02	3.79E-03	3.14E-03
552707	10/5/2021 - 10/12/2021	Beta	1.44E-02	2.81E-03	3.35E-03
553200	10/12/2021 - 10/19/2021	Beta	2.48E-02	2.93E-03	2.80E-03
553779	10/19/2021 - 10/25/2021	Beta	3.29E-02	4.04E-03	3.96E-03
554233	10/25/2021 - 11/2/2021	Beta	1.37E-02	2.45E-03	2.80E-03
554522	11/2/2021 - 11/9/2021	Beta	2.33E-02	2.82E-03	2.68E-03
555002	11/9/2021 - 11/16/2021	Beta	2.40E-02	3.23E-03	3.16E-03
555841	11/16/2021 - 11/23/2021	Beta	2.67E-02	2.94E-03	2.53E-03
556695	11/23/2021 - 11/30/2021	Beta	2.48E-02	3.29E-03	3.33E-03
557011	11/30/2021 - 12/7/2021	Beta	4.29E-02	4.04E-03	3.33E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557433	12/7/2021 - 12/14/2021	Beta	2.63E-02	3.27E-03	3.06E-03
557903	12/14/2021 - 12/21/2021	Beta	1.81E-02	2.92E-03	3.21E-03
558344	12/21/2021 - 12/28/2021	Beta	2.97E-02	3.45E-03	2.99E-03
559201	9/28/2021 - 12/28/2021	Cs-134	<1.81E-03	0.00E+00	1.81E-03
		Cs-137	<1.49E-03	0.00E+00	1.49E-03
		Be-7	1.65E-01	3.79E-02	3.06E-02
		K-40	1.53E-02	1.38E-02	1.97E-02
558556	12/28/2021 - 1/4/2022	Beta	1.24E-02	2.34E-03	2.74E-03
559991	12/28/2021 - 1/4/2022	Cs-134	<1.04E-02	0.00E+00	1.04E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	1.26E-01	8.56E-02	0.00E+00
		K-40	<2.68E-01	0.00E+00	2.68E-01

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536507	12/29/2020 - 1/5/2021	Beta	1.19E-02	2.46E-03	2.88E-03
536696	1/5/2021 - 1/12/2021	Beta	2.21E-02	2.77E-03	2.66E-03
537249	1/12/2021 - 1/19/2021	Beta	1.86E-02	2.66E-03	2.81E-03
537620	1/19/2021 - 1/26/2021	Beta	1.63E-02	2.49E-03	2.60E-03
538012	1/26/2021 - 2/1/2021	Beta	1.61E-02	3.31E-03	4.09E-03
538233	2/1/2021 - 2/8/2021	Beta	1.03E-02	2.61E-03	3.46E-03
538460	2/8/2021 - 2/16/2021	Beta	1.13E-02	2.14E-03	2.60E-03
538747	2/16/2021 - 2/23/2021	Beta	2.15E-02	2.71E-03	2.53E-03
538997	2/23/2021 - 3/2/2021	Beta	1.99E-02	2.71E-03	2.79E-03
539208	3/2/2021 - 3/9/2021	Beta	2.85E-02	3.43E-03	3.11E-03
539688	3/9/2021 - 3/16/2021	Beta	2.63E-02	3.39E-03	3.35E-03
540650	3/16/2021 - 3/23/2021	Beta	1.47E-02	2.54E-03	2.94E-03
541372	3/23/2021 - 3/30/2021	Beta	1.58E-02	2.49E-03	2.71E-03
541987	12/29/2020 - 3/30/2021	Cs-134	<1.44E-03	0.00E+00	1.44E-03
		Cs-137	<1.66E-03	0.00E+00	1.66E-03
		Be-7	1.51E-01	3.60E-02	3.14E-02
		K-40	3.10E-02	1.61E-02	1.55E-02
541861	3/30/2021 - 4/6/2021	Beta	2.09E-02	3.19E-03	3.57E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542176	4/6/2021 - 4/13/2021	Beta	3.15E-02	3.60E-03	3.18E-03
542812	4/13/2021 - 4/20/2021	Beta	2.18E-02	2.77E-03	2.74E-03
543173	4/20/2021 - 4/27/2021	Beta	2.30E-02	2.81E-03	2.56E-03
544057	4/27/2021 - 5/3/2021	Beta	2.71E-02	3.24E-03	2.92E-03
544251	5/3/2021 - 5/11/2021	Beta	1.73E-02	2.39E-03	2.47E-03
544477	5/11/2021 - 5/19/2021	Beta	1.96E-02	2.77E-03	2.79E-03
544961	5/19/2021 - 5/25/2021	Beta	2.57E-02	3.24E-03	3.11E-03
545446	5/25/2021 - 6/1/2021	Beta	2.00E-02	2.97E-03	3.04E-03
545736	6/1/2021 - 6/8/2021	Beta	8.65E-03	2.50E-03	3.41E-03
545970	6/8/2021 - 6/14/2021	Beta	1.13E-02	2.87E-03	3.72E-03
546846	6/14/2021 - 6/22/2021	Beta	1.76E-02	2.66E-03	2.75E-03
547137	6/22/2021 - 6/29/2021	Beta	1.18E-02	2.67E-03	3.39E-03
547773	3/30/2021 - 6/29/2021	Cs-134	<1.88E-03	0.00E+00	1.88E-03
		Cs-137	<1.32E-03	0.00E+00	1.32E-03
		Be-7	1.56E-01	3.58E-02	2.90E-02
		K-40	<3.46E-02	0.00E+00	3.46E-02
547413	6/29/2021 - 7/6/2021	Beta	1.14E-02	2.57E-03	3.21E-03
547648	7/6/2021 - 7/13/2021	Beta	1.55E-02	2.85E-03	3.31E-03
548045	7/13/2021 - 7/20/2021	Beta	1.22E-02	2.59E-03	3.15E-03
548469	7/20/2021 - 7/27/2021	Beta	2.02E-02	3.02E-03	3.16E-03
548680	7/27/2021 - 8/3/2021	Beta	2.53E-02	2.94E-03	2.75E-03
548920	8/3/2021 - 8/9/2021	Beta	1.17E-02	2.89E-03	3.69E-03
549210	8/9/2021 - 8/17/2021	Beta	1.33E-02	2.58E-03	3.18E-03
549649	8/17/2021 - 8/23/2021	Beta	9.49E-03	2.95E-03	4.11E-03
549986	8/23/2021 - 8/30/2021	Beta	2.20E-02	2.77E-03	2.63E-03
550493	8/30/2021 - 9/7/2021	Beta	2.45E-02	3.03E-03	2.90E-03
550979	9/7/2021 - 9/14/2021	Beta	2.81E-02	3.35E-03	2.94E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	551610	Sample Dates:	9/14/2021 - 9/22/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.94E-02	2.84E-03	3.10E-03
Sample ID:	552201	Sample Dates:	9/22/2021 - 9/28/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.05E-02	3.55E-03	4.17E-03
Sample ID:	552833	Sample Dates:	6/29/2021 - 9/28/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.78E-03	0.00E+00	1.78E-03
				Cs-137	<1.83E-03	0.00E+00	1.83E-03
				Be-7	1.36E-01	3.70E-02	3.44E-02
				K-40	3.47E-02	1.61E-02	4.95E-03
Sample ID:	552398	Sample Dates:	9/28/2021 - 10/5/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.59E-02	3.75E-03	3.13E-03
Sample ID:	552709	Sample Dates:	10/5/2021 - 10/12/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.08E-02	2.62E-03	3.35E-03
Sample ID:	553202	Sample Dates:	10/12/2021 - 10/19/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.40E-02	2.90E-03	2.81E-03
Sample ID:	553781	Sample Dates:	10/19/2021 - 10/25/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.46E-02	4.09E-03	3.94E-03
Sample ID:	554235	Sample Dates:	10/25/2021 - 11/2/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.27E-02	2.40E-03	2.81E-03
Sample ID:	554524	Sample Dates:	11/2/2021 - 11/9/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.25E-02	2.78E-03	2.68E-03
Sample ID:	555004	Sample Dates:	11/9/2021 - 11/16/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.28E-02	3.17E-03	3.16E-03
Sample ID:	555843	Sample Dates:	11/16/2021 - 11/23/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.36E-02	2.79E-03	2.51E-03
Sample ID:	556697	Sample Dates:	11/23/2021 - 11/30/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.36E-02	3.27E-03	3.38E-03
Sample ID:	557013	Sample Dates:	11/30/2021 - 12/7/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.57E-02	3.75E-03	3.30E-03
Sample ID:	557435	Sample Dates:	12/7/2021 - 12/14/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.27E-02	3.11E-03	3.07E-03
Sample ID:	557905	Sample Dates:	12/14/2021 - 12/21/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.68E-02	2.91E-03	3.29E-03
Sample ID:	558346	Sample Dates:	12/21/2021 - 12/28/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	3.11E-02	3.44E-03	2.91E-03
Sample ID:	559203	Sample Dates:	9/28/2021 - 12/28/2021	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.66E-03	0.00E+00	1.66E-03
				Cs-137	<1.06E-03	0.00E+00	1.06E-03
				Be-7	1.29E-01	3.46E-02	3.34E-02
				K-40	<2.24E-02	0.00E+00	2.24E-02
Sample ID:	558558	Sample Dates:	12/28/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.20E-02	2.32E-03	2.75E-03
Sample ID:	559993	Sample Dates:	12/28/2021 - 1/4/2022	Nuclide	Activity	2 Sigma Error	MDA
				Cs-134	<1.38E-02	0.00E+00	1.38E-02
				Cs-137	<1.23E-02	0.00E+00	1.23E-02
				Be-7	<0.00E+00	0.00E+00	0.00E+00
				K-40	3.34E-01	1.77E-01	2.36E-01
Sample Point 61 [INDICATOR - WSW @ 0.3 miles]							
Sample ID:	536508	Sample Dates:	12/29/2020 - 1/5/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	1.37E-02	2.57E-03	2.89E-03
Sample ID:	536697	Sample Dates:	1/5/2021 - 1/12/2021	Nuclide	Activity	2 Sigma Error	MDA
				Beta	2.47E-02	2.89E-03	2.65E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537250	1/12/2021 - 1/19/2021	Beta	1.98E-02	2.66E-03	2.73E-03
537621	1/19/2021 - 1/26/2021	Beta	1.63E-02	2.54E-03	2.68E-03
538013	1/26/2021 - 2/1/2021	Beta	1.06E-02	3.00E-03	4.08E-03
538234	2/1/2021 - 2/8/2021	Beta	9.62E-03	2.58E-03	3.47E-03
538461	2/8/2021 - 2/16/2021	Beta	9.33E-03	2.04E-03	2.60E-03
538748	2/16/2021 - 2/23/2021	Beta	1.63E-02	2.45E-03	2.53E-03
538998	2/23/2021 - 3/2/2021	Beta	1.85E-02	2.64E-03	2.79E-03
539209	3/2/2021 - 3/9/2021	Beta	2.38E-02	2.81E-03	2.50E-03
539689	3/9/2021 - 3/16/2021	Beta	1.67E-02	2.94E-03	3.38E-03
540651	3/16/2021 - 3/23/2021	Beta	1.37E-02	2.46E-03	2.91E-03
541373	3/23/2021 - 3/30/2021	Beta	1.63E-02	2.52E-03	2.71E-03
541988	12/29/2020 - 3/30/2021	Cs-134	<1.26E-03	0.00E+00	1.26E-03
		Cs-137	<8.22E-04	0.00E+00	8.22E-04
		Be-7	1.18E-01	3.23E-02	3.11E-02
		K-40	<2.02E-02	0.00E+00	2.02E-02
541862	3/30/2021 - 4/6/2021	Beta	1.96E-02	3.13E-03	3.56E-03
542177	4/6/2021 - 4/13/2021	Beta	3.21E-02	3.62E-03	3.19E-03
542813	4/13/2021 - 4/20/2021	Beta	2.60E-02	2.94E-03	2.74E-03
543174	4/20/2021 - 4/27/2021	Beta	2.46E-02	2.88E-03	2.56E-03
544058	4/27/2021 - 5/3/2021	Beta	2.48E-02	3.13E-03	2.92E-03
544252	5/3/2021 - 5/11/2021	Beta	1.77E-02	2.40E-03	2.48E-03
544478	5/11/2021 - 5/19/2021	Beta	1.91E-02	2.75E-03	2.79E-03
544962	5/19/2021 - 5/25/2021	Beta	2.53E-02	3.22E-03	3.11E-03
545447	5/25/2021 - 6/1/2021	Beta	1.90E-02	2.91E-03	3.04E-03
545737	6/1/2021 - 6/8/2021	Beta	1.09E-02	2.63E-03	3.42E-03
545971	6/8/2021 - 6/14/2021	Beta	1.14E-02	2.88E-03	3.72E-03
546847	6/14/2021 - 6/22/2021	Beta	2.19E-02	2.87E-03	2.75E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547138	6/22/2021 - 6/29/2021	Beta	1.20E-02	2.69E-03	3.39E-03
547774	3/30/2021 - 6/29/2021	Nuclide	Activity	2 Sigma Error	MDA
		Cs-134	<2.28E-03	0.00E+00	2.28E-03
		Cs-137	<1.67E-03	0.00E+00	1.67E-03
		Be-7	1.50E-01	4.27E-02	4.95E-02
		K-40	2.66E-02	1.50E-02	1.39E-02
547414	6/29/2021 - 7/6/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.12E-02	2.56E-03	3.20E-03
547649	7/6/2021 - 7/13/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.64E-02	2.90E-03	3.32E-03
548046	7/13/2021 - 7/20/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.15E-02	2.55E-03	3.14E-03
548470	7/20/2021 - 7/27/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.98E-02	2.92E-03	3.04E-03
548681	7/27/2021 - 8/3/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.23E-02	2.89E-03	2.87E-03
548921	8/3/2021 - 8/9/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.25E-02	2.93E-03	3.69E-03
549211	8/9/2021 - 8/17/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.20E-02	2.52E-03	3.18E-03
549650	8/17/2021 - 8/23/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.06E-02	3.01E-03	4.10E-03
549987	8/23/2021 - 8/30/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.41E-02	2.86E-03	2.63E-03
550494	8/30/2021 - 9/7/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.08E-02	2.86E-03	2.89E-03
550980	9/7/2021 - 9/14/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.56E-02	3.24E-03	2.94E-03
551611	9/14/2021 - 9/22/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.72E-02	2.74E-03	3.11E-03
552202	9/22/2021 - 9/28/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.09E-02	3.56E-03	4.16E-03
552834	6/29/2021 - 9/28/2021	Nuclide	Activity	2 Sigma Error	MDA
		Cs-134	<2.01E-03	0.00E+00	2.01E-03
		Cs-137	<1.74E-03	0.00E+00	1.74E-03
		Be-7	1.52E-01	3.73E-02	3.39E-02
		K-40	2.20E-02	1.58E-02	2.10E-02
552399	9/28/2021 - 10/5/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	3.33E-02	3.64E-03	3.13E-03
552710	10/5/2021 - 10/12/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.18E-02	2.67E-03	3.36E-03
553203	10/12/2021 - 10/19/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.36E-02	2.89E-03	2.80E-03
553782	10/19/2021 - 10/25/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	3.30E-02	4.03E-03	3.93E-03
554236	10/25/2021 - 11/2/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	1.45E-02	2.49E-03	2.81E-03
554525	11/2/2021 - 11/9/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.04E-02	2.69E-03	2.68E-03
555005	11/9/2021 - 11/16/2021	Nuclide	Activity	2 Sigma Error	MDA
		Beta	2.55E-02	3.29E-03	3.17E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555844	11/16/2021 - 11/23/2021	Beta	2.38E-02	2.80E-03	2.51E-03
556698	11/23/2021 - 11/30/2021	Beta	2.04E-02	3.11E-03	3.37E-03
557014	11/30/2021 - 12/7/2021	Beta	3.42E-02	3.69E-03	3.31E-03
557436	12/7/2021 - 12/14/2021	Beta	2.54E-02	3.22E-03	3.06E-03
557906	12/14/2021 - 12/21/2021	Beta	1.92E-02	3.03E-03	3.29E-03
558347	12/21/2021 - 12/28/2021	Beta	3.17E-02	3.45E-03	2.89E-03
559204	9/28/2021 - 12/28/2021	Cs-134	<1.49E-03	0.00E+00	1.49E-03
		Cs-137	<1.60E-03	0.00E+00	1.60E-03
		Be-7	1.51E-01	3.75E-02	3.27E-02
		K-40	3.64E-02	2.00E-02	2.44E-02
558559	12/28/2021 - 1/4/2022	Beta	1.30E-02	2.38E-03	2.77E-03
559994	12/28/2021 - 1/4/2022	Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.31E-02	0.00E+00	1.31E-02
		Be-7	9.02E-02	9.46E-02	0.00E+00
		K-40	<3.32E-01	0.00E+00	3.32E-01

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536510	12/29/2020 - 1/5/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<9.39E-02	0.00E+00	9.39E-02
		K-40	4.08E-01	1.59E-01	1.38E-01
536699	1/5/2021 - 1/12/2021	I-131	<2.22E-02	0.00E+00	2.22E-02
		Cs-134	<1.85E-02	0.00E+00	1.85E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	5.77E-01	2.17E-01	2.41E-01
537252	1/12/2021 - 1/19/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	7.21E-01	2.11E-01	1.41E-01
537623	1/19/2021 - 1/26/2021	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<8.36E-02	0.00E+00	8.36E-02
		K-40	3.36E-01	1.47E-01	1.38E-01
538015	1/26/2021 - 2/1/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	7.70E-01	2.42E-01	1.87E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538236	2/1/2021 - 2/8/2021	I-131	<1.52E-02	0.00E+00	1.52E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.67E-02	0.00E+00	1.67E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	5.82E-01	1.83E-01	1.22E-01
538463	2/8/2021 - 2/16/2021	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<1.19E-02	0.00E+00	1.19E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	4.31E-01	1.62E-01	1.62E-01
538750	2/16/2021 - 2/23/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<1.61E-02	0.00E+00	1.61E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.12E-01	2.07E-01	2.37E-01
539000	2/23/2021 - 3/2/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	3.95E-01	1.77E-01	2.04E-01
539211	3/2/2021 - 3/9/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<9.82E-02	0.00E+00	9.82E-02
		K-40	6.32E-01	2.38E-01	2.79E-01
539691	3/9/2021 - 3/16/2021	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	3.25E-01	1.61E-01	1.89E-01
540653	3/16/2021 - 3/23/2021	I-131	<1.35E-02	0.00E+00	1.35E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	4.40E-01	1.75E-01	1.76E-01
541375	3/23/2021 - 3/30/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.71E-02	0.00E+00	1.71E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	3.85E-01	1.72E-01	1.95E-01
541864	3/30/2021 - 4/6/2021	I-131	<2.27E-02	0.00E+00	2.27E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	4.10E-01	1.73E-01	1.77E-01
542179	4/6/2021 - 4/13/2021	I-131	<2.09E-02	0.00E+00	2.09E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	5.79E-01	2.11E-01	2.25E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542815	4/13/2021 - 4/20/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	6.02E-01	2.80E-01	2.73E-01
543176	4/20/2021 - 4/27/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<3.25E-02	0.00E+00	3.25E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<5.66E-01	0.00E+00	5.66E-01
544060	4/27/2021 - 5/3/2021	I-131	<3.63E-02	0.00E+00	3.63E-02
		Cs-134	<2.40E-02	0.00E+00	2.40E-02
		Cs-137	<2.68E-02	0.00E+00	2.68E-02
		Be-7	<2.49E-01	0.00E+00	2.49E-01
		K-40	7.46E-01	3.29E-01	2.92E-01
544254	5/3/2021 - 5/11/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	<5.77E-01	0.00E+00	5.77E-01
544480	5/11/2021 - 5/19/2021	I-131	<2.56E-02	0.00E+00	2.56E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	3.92E-01	2.10E-01	2.08E-01
544964	5/19/2021 - 5/25/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<2.97E-02	0.00E+00	2.97E-02
		Be-7	<2.15E-01	0.00E+00	2.15E-01
		K-40	<5.98E-01	0.00E+00	5.98E-01
545449	5/25/2021 - 6/1/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<2.24E-02	0.00E+00	2.24E-02
		Cs-137	<2.78E-02	0.00E+00	2.78E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	2.65E-01	1.85E-01	2.12E-01
545739	6/1/2021 - 6/8/2021	I-131	<3.54E-02	0.00E+00	3.54E-02
		Cs-134	<3.18E-02	0.00E+00	3.18E-02
		Cs-137	<2.96E-02	0.00E+00	2.96E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	<5.25E-01	0.00E+00	5.25E-01
545973	6/8/2021 - 6/14/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.96E-02	0.00E+00	2.96E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	5.83E-01	2.65E-01	7.89E-02
546849	6/14/2021 - 6/22/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	4.97E-01	2.34E-01	2.17E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547140	6/22/2021 - 6/29/2021	I-131	<3.12E-02	0.00E+00	3.12E-02
		Cs-134	<2.80E-02	0.00E+00	2.80E-02
		Cs-137	<3.19E-02	0.00E+00	3.19E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	6.03E-01	2.56E-01	7.11E-02
547416	6/29/2021 - 7/6/2021	I-131	<3.11E-02	0.00E+00	3.11E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	<6.50E-01	0.00E+00	6.50E-01
547651	7/6/2021 - 7/13/2021	I-131	<3.14E-02	0.00E+00	3.14E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	3.79E-01	2.42E-01	2.97E-01
548048	7/13/2021 - 7/20/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<3.56E-02	0.00E+00	3.56E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	5.08E-01	3.32E-01	4.59E-01
548472	7/20/2021 - 7/27/2021	I-131	<3.14E-02	0.00E+00	3.14E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	4.67E-01	2.56E-01	2.89E-01
548683	7/27/2021 - 8/3/2021	I-131	<3.02E-02	0.00E+00	3.02E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	5.66E-01	2.40E-01	6.67E-02
548923	8/3/2021 - 8/9/2021	I-131	<3.99E-02	0.00E+00	3.99E-02
		Cs-134	<3.41E-02	0.00E+00	3.41E-02
		Cs-137	<2.91E-02	0.00E+00	2.91E-02
		Be-7	<2.13E-01	0.00E+00	2.13E-01
		K-40	<7.07E-01	0.00E+00	7.07E-01
549213	8/9/2021 - 8/17/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<9.21E-02	0.00E+00	9.21E-02
		K-40	<3.10E-01	0.00E+00	3.10E-01
549652	8/17/2021 - 8/23/2021	I-131	<2.57E-02	0.00E+00	2.57E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<5.98E-01	0.00E+00	5.98E-01
549989	8/23/2021 - 8/30/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<3.06E-02	0.00E+00	3.06E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	5.22E-01	2.31E-01	6.74E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550496	8/30/2021 - 9/7/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	<5.39E-01	0.00E+00	5.39E-01
550982	9/7/2021 - 9/14/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	3.91E-01	1.98E-01	6.63E-02
551613	9/14/2021 - 9/22/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<2.77E-02	0.00E+00	2.77E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<4.57E-01	0.00E+00	4.57E-01
552204	9/22/2021 - 9/28/2021	I-131	<3.83E-02	0.00E+00	3.83E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<2.37E-01	0.00E+00	2.37E-01
		K-40	4.19E-01	2.81E-01	3.56E-01
552401	9/28/2021 - 10/5/2021	I-131	<3.40E-02	0.00E+00	3.40E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	5.44E-01	2.67E-01	2.61E-01
552712	10/5/2021 - 10/12/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	5.43E-01	2.61E-01	2.43E-01
553205	10/12/2021 - 10/19/2021	I-131	<3.47E-02	0.00E+00	3.47E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	5.81E-01	2.47E-01	6.85E-02
553784	10/19/2021 - 10/25/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<4.09E-02	0.00E+00	4.09E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<2.14E-01	0.00E+00	2.14E-01
		K-40	7.30E-01	3.03E-01	8.24E-02
554238	10/25/2021 - 11/2/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	<4.91E-01	0.00E+00	4.91E-01
554527	11/2/2021 - 11/8/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<2.04E-01	0.00E+00	2.04E-01
		K-40	<5.92E-01	0.00E+00	5.92E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555007	11/8/2021 - 11/16/2021	I-131	<4.47E-02	0.00E+00	4.47E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	5.13E-01	2.58E-01	2.84E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555846	11/16/2021 - 11/23/2021	I-131	<4.97E-02	0.00E+00	4.97E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.96E-02	0.00E+00	1.96E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	6.48E-01	2.79E-01	2.27E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556700	11/23/2021 - 11/30/2021	I-131	<4.15E-02	0.00E+00	4.15E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	6.63E-01	2.66E-01	6.91E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557016	11/30/2021 - 12/7/2021	I-131	<3.50E-02	0.00E+00	3.50E-02
		Cs-134	<2.77E-02	0.00E+00	2.77E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	7.43E-01	3.04E-01	2.45E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557438	12/7/2021 - 12/14/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<3.15E-02	0.00E+00	3.15E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	3.77E-01	1.97E-01	6.80E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557908	12/14/2021 - 12/21/2021	I-131	<5.55E-02	0.00E+00	5.55E-02
		Cs-134	<2.87E-02	0.00E+00	2.87E-02
		Cs-137	<2.83E-02	0.00E+00	2.83E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	6.30E-01	3.20E-01	3.83E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558349	12/21/2021 - 12/28/2021	I-131	<4.71E-02	0.00E+00	4.71E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	7.10E-01	2.95E-01	2.52E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558561	12/28/2021 - 1/4/2022	I-131	<3.63E-02	0.00E+00	3.63E-02
		Cs-134	<2.76E-02	0.00E+00	2.76E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	<5.06E-01	0.00E+00	5.06E-01

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536511	12/29/2020 - 1/5/2021	I-131	<1.53E-02	0.00E+00	1.53E-02
		Cs-134	<1.27E-02	0.00E+00	1.27E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	1.88E-01	1.64E-01	2.50E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536700	1/5/2021 - 1/12/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.63E-02	0.00E+00	1.63E-02
		Be-7	<9.46E-02	0.00E+00	9.46E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536700	1/5/2021 - 1/12/2021	K-40	5.21E-01	1.66E-01	3.36E-02
537253	1/12/2021 - 1/19/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	6.75E-01	2.01E-01	1.42E-01
537624	1/19/2021 - 1/26/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<9.43E-02	0.00E+00	9.43E-02
		K-40	4.27E-01	1.95E-01	2.30E-01
538016	1/26/2021 - 2/1/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.48E-02	0.00E+00	1.48E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	5.16E-01	1.96E-01	1.76E-01
538237	2/1/2021 - 2/8/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.90E-01	1.72E-01	1.38E-01
538464	2/8/2021 - 2/16/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.08E-02	0.00E+00	1.08E-02
		Be-7	<9.75E-02	0.00E+00	9.75E-02
		K-40	4.52E-01	1.53E-01	1.17E-01
538751	2/16/2021 - 2/23/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	5.12E-01	1.72E-01	1.16E-01
539001	2/23/2021 - 3/2/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.25E-02	0.00E+00	1.25E-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	6.39E-01	2.03E-01	1.74E-01
539212	3/2/2021 - 3/9/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	5.08E-01	1.93E-01	2.00E-01
539692	3/9/2021 - 3/16/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<8.85E-03	0.00E+00	8.85E-03
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.61E-02	0.00E+00	9.61E-02
		K-40	4.65E-01	1.78E-01	1.76E-01
540654	3/16/2021 - 3/23/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540654	3/16/2021 - 3/23/2021	Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	4.16E-01	1.62E-01	1.41E-01
541376	3/23/2021 - 3/30/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<8.62E-02	0.00E+00	8.62E-02
		K-40	5.60E-01	1.46E-01	1.35E-01
541865	3/30/2021 - 4/6/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.96E-01	1.80E-01	1.64E-01
542180	4/6/2021 - 4/13/2021	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.17E-02	0.00E+00	1.17E-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	3.88E-01	1.84E-01	2.25E-01
542816	4/13/2021 - 4/20/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<2.84E-02	0.00E+00	2.84E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	7.36E-01	2.92E-01	2.35E-01
543177	4/20/2021 - 4/27/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	4.00E-01	2.23E-01	2.15E-01
544061	4/27/2021 - 5/3/2021	I-131	<3.46E-02	0.00E+00	3.46E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<2.56E-02	0.00E+00	2.56E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	8.69E-01	3.25E-01	7.85E-02
544255	5/3/2021 - 5/11/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<4.77E-01	0.00E+00	4.77E-01
544481	5/11/2021 - 5/19/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<9.14E-02	0.00E+00	9.14E-02
		K-40	6.18E-01	2.52E-01	2.03E-01
544965	5/19/2021 - 5/25/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<3.05E-02	0.00E+00	3.05E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	<6.35E-01	0.00E+00	6.35E-01
545450	5/25/2021 - 6/1/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545450	5/25/2021 - 6/1/2021	Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	5.54E-01	2.62E-01	2.45E-01
545740	6/1/2021 - 6/8/2021	I-131	<2.63E-02	0.00E+00	2.63E-02
		Cs-134	<3.38E-02	0.00E+00	3.38E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	<5.46E-01	0.00E+00	5.46E-01
545974	6/8/2021 - 6/14/2021	I-131	<3.91E-02	0.00E+00	3.91E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<3.20E-02	0.00E+00	3.20E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<7.15E-01	0.00E+00	7.15E-01
546850	6/14/2021 - 6/22/2021	I-131	<2.90E-02	0.00E+00	2.90E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	3.18E-01	2.28E-01	3.11E-01
547141	6/22/2021 - 6/29/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	4.49E-01	2.15E-01	6.76E-02
547417	6/29/2021 - 7/6/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<3.23E-02	0.00E+00	3.23E-02
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<2.55E-01	0.00E+00	2.55E-01
		K-40	<5.17E-01	0.00E+00	5.17E-01
547652	7/6/2021 - 7/13/2021	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	4.56E-01	2.50E-01	2.76E-01
548049	7/13/2021 - 7/20/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	5.37E-01	2.84E-01	3.28E-01
548473	7/20/2021 - 7/27/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<3.02E-02	0.00E+00	3.02E-02
		Cs-137	<2.86E-02	0.00E+00	2.86E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	7.56E-01	3.07E-01	2.77E-01
548684	7/27/2021 - 8/3/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	5.95E-01	2.69E-01	2.44E-01
548924	8/3/2021 - 8/9/2021	I-131	<3.41E-02	0.00E+00	3.41E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548924	8/3/2021 - 8/9/2021	Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<2.07E-02	0.00E+00	2.07E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	6.60E-01	3.16E-01	3.04E-01
549214	8/9/2021 - 8/17/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	3.58E-01	1.76E-01	5.70E-02
549653	8/17/2021 - 8/23/2021	I-131	<3.81E-02	0.00E+00	3.81E-02
		Cs-134	<6.11E-03	0.00E+00	6.11E-03
		Cs-137	<2.72E-02	0.00E+00	2.72E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	8.37E-01	3.23E-01	8.10E-02
549990	8/23/2021 - 8/30/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<5.09E-03	0.00E+00	5.09E-03
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	4.81E-01	2.18E-01	6.51E-02
550497	8/30/2021 - 9/7/2021	I-131	<3.65E-02	0.00E+00	3.65E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	4.07E-01	2.18E-01	2.26E-01
550983	9/7/2021 - 9/14/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.81E-02	0.00E+00	2.81E-02
		Cs-137	<2.56E-02	0.00E+00	2.56E-02
		Be-7	<1.15E-01	0.00E+00	1.15E-01
		K-40	<4.82E-01	0.00E+00	4.82E-01
551614	9/14/2021 - 9/22/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	3.26E-01	1.71E-01	5.90E-02
552205	9/22/2021 - 9/28/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<2.93E-02	0.00E+00	2.93E-02
		Cs-137	<2.72E-02	0.00E+00	2.72E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<6.46E-01	0.00E+00	6.46E-01
552402	9/28/2021 - 10/5/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	5.02E-01	2.67E-01	3.05E-01
552713	10/5/2021 - 10/12/2021	I-131	<3.32E-02	0.00E+00	3.32E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	4.33E-01	2.70E-01	3.49E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553206	10/12/2021 - 10/19/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	3.35E-01	2.01E-01	2.06E-01
553785	10/19/2021 - 10/25/2021	I-131	<3.33E-02	0.00E+00	3.33E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<5.73E-01	0.00E+00	5.73E-01
554239	10/25/2021 - 11/2/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.50E-01	0.00E+00	1.50E-01
		K-40	<4.89E-01	0.00E+00	4.89E-01
554528	11/2/2021 - 11/9/2021	I-131	<3.73E-02	0.00E+00	3.73E-02
		Cs-134	<2.63E-02	0.00E+00	2.63E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	3.53E-01	2.44E-01	3.26E-01
555008	11/9/2021 - 11/16/2021	I-131	<3.94E-02	0.00E+00	3.94E-02
		Cs-134	<2.57E-02	0.00E+00	2.57E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<2.40E-01	0.00E+00	2.40E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
555847	11/16/2021 - 11/23/2021	I-131	<3.87E-02	0.00E+00	3.87E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<2.10E-01	0.00E+00	2.10E-01
		K-40	5.16E-01	2.53E-01	2.47E-01
556701	11/23/2021 - 11/30/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	6.41E-01	2.56E-01	6.68E-02
557017	11/30/2021 - 12/7/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	3.13E-01	1.98E-01	2.14E-01
557439	12/7/2021 - 12/14/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	4.38E-01	2.40E-01	2.59E-01
557909	12/14/2021 - 12/21/2021	I-131	<4.71E-02	0.00E+00	4.71E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	4.35E-01	2.35E-01	2.36E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 2 [INDICATOR - S @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558350	12/21/2021 - 12/28/2021	I-131	<3.45E-02	0.00E+00	3.45E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<2.20E-01	0.00E+00	2.20E-01
		K-40	<4.05E-01	0.00E+00	4.05E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558562	12/28/2021 - 1/4/2022	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.86E-01	0.00E+00	1.86E-01
		K-40	<5.39E-01	0.00E+00	5.39E-01

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536512	12/29/2020 - 1/5/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<2.95E-01	0.00E+00	2.95E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536701	1/5/2021 - 1/12/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.01E-02	0.00E+00	1.01E-02
		Cs-137	<1.03E-02	0.00E+00	1.03E-02
		Be-7	<8.29E-02	0.00E+00	8.29E-02
		K-40	5.65E-01	1.53E-01	1.59E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537254	1/12/2021 - 1/19/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.46E-02	0.00E+00	1.46E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	2.78E-01	1.94E-01	2.84E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537625	1/19/2021 - 1/26/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	5.99E-01	1.81E-01	3.45E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538017	1/26/2021 - 2/1/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<4.15E-01	0.00E+00	4.15E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538238	2/1/2021 - 2/8/2021	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<1.03E-02	0.00E+00	1.03E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	7.00E-01	1.94E-01	3.33E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538465	2/8/2021 - 2/16/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<9.65E-02	0.00E+00	9.65E-02
		K-40	3.06E-01	1.41E-01	1.55E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538752	2/16/2021 - 2/23/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.25E-02	0.00E+00	1.25E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538752	2/16/2021 - 2/23/2021	K-40	4.11E-01	1.47E-01	3.38E-02
539002	2/23/2021 - 3/2/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<9.19E-02	0.00E+00	9.19E-02
		K-40	5.08E-01	2.16E-01	2.68E-01
539213	3/2/2021 - 3/9/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	2.62E-01	1.65E-01	2.26E-01
539693	3/9/2021 - 3/16/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	3.65E-01	1.70E-01	2.00E-01
540655	3/16/2021 - 3/23/2021	I-131	<1.44E-02	0.00E+00	1.44E-02
		Cs-134	<1.39E-02	0.00E+00	1.39E-02
		Cs-137	<1.11E-02	0.00E+00	1.11E-02
		Be-7	<8.52E-02	0.00E+00	8.52E-02
		K-40	<2.48E-01	0.00E+00	2.48E-01
541377	3/23/2021 - 3/30/2021	I-131	<2.86E-02	0.00E+00	2.86E-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	<1.37E-01	0.00E+00	1.37E-01
		K-40	5.26E-01	2.23E-01	2.78E-01
541866	3/30/2021 - 4/6/2021	I-131	<1.97E-02	0.00E+00	1.97E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	3.53E-02	5.67E-02	9.62E-02
		K-40	5.03E-01	1.99E-01	2.21E-01
542181	4/6/2021 - 4/13/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	5.68E-01	1.88E-01	1.58E-01
542817	4/13/2021 - 4/20/2021	I-131	<2.64E-02	0.00E+00	2.64E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	5.28E-01	2.82E-01	3.31E-01
543178	4/20/2021 - 4/27/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.05E-02	0.00E+00	2.05E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	6.95E-01	2.88E-01	2.43E-01
544062	4/27/2021 - 5/3/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<3.31E-02	0.00E+00	3.31E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544062	4/27/2021 - 5/3/2021	Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	4.82E-01	2.37E-01	7.69E-02
544256	5/3/2021 - 5/11/2021	I-131	<2.75E-02	0.00E+00	2.75E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.38E-01	0.00E+00	1.38E-01
		K-40	<5.03E-01	0.00E+00	5.03E-01
544482	5/11/2021 - 5/19/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	4.44E-01	2.14E-01	1.90E-01
544966	5/19/2021 - 5/25/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<3.17E-02	0.00E+00	3.17E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	3.77E-01	2.67E-01	3.48E-01
545451	5/25/2021 - 6/1/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	3.20E-01	2.24E-01	2.89E-01
545741	6/1/2021 - 6/8/2021	I-131	<4.12E-02	0.00E+00	4.12E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<5.85E-01	0.00E+00	5.85E-01
545975	6/8/2021 - 6/14/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.96E-02	0.00E+00	2.96E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	<5.05E-01	0.00E+00	5.05E-01
546851	6/14/2021 - 6/22/2021	I-131	<2.05E-02	0.00E+00	2.05E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.05E-01	0.00E+00	4.05E-01
547142	6/22/2021 - 6/29/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.48E-02	0.00E+00	2.48E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.58E-01	2.69E-01	2.75E-01
547418	6/29/2021 - 7/6/2021	I-131	<4.09E-02	0.00E+00	4.09E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	<5.20E-01	0.00E+00	5.20E-01
547653	7/6/2021 - 7/13/2021	I-131	<2.32E-02	0.00E+00	2.32E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547653	7/6/2021 - 7/13/2021	Cs-137	<2.49E-02	0.00E+00	2.49E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.86E-01	0.00E+00	4.86E-01
548050	7/13/2021 - 7/20/2021	I-131	<3.23E-02	0.00E+00	3.23E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<2.25E-01	0.00E+00	2.25E-01
		K-40	5.70E-01	2.42E-01	6.72E-02
548474	7/20/2021 - 7/27/2021	I-131	<3.30E-02	0.00E+00	3.30E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	<4.61E-01	0.00E+00	4.61E-01
548685	7/27/2021 - 8/3/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
548925	8/3/2021 - 8/9/2021	I-131	<3.13E-02	0.00E+00	3.13E-02
		Cs-134	<3.38E-02	0.00E+00	3.38E-02
		Cs-137	<3.08E-02	0.00E+00	3.08E-02
		Be-7	<1.41E-01	0.00E+00	1.41E-01
		K-40	6.40E-01	3.07E-01	2.99E-01
549215	8/9/2021 - 8/17/2021	I-131	<2.45E-02	0.00E+00	2.45E-02
		Cs-134	<2.14E-02	0.00E+00	2.14E-02
		Cs-137	<2.79E-02	0.00E+00	2.79E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	<4.63E-01	0.00E+00	4.63E-01
549654	8/17/2021 - 8/23/2021	I-131	<3.46E-02	0.00E+00	3.46E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	<5.91E-01	0.00E+00	5.91E-01
549991	8/23/2021 - 8/30/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<4.75E-01	0.00E+00	4.75E-01
550498	8/30/2021 - 9/7/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<2.04E-02	0.00E+00	2.03E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.15E-01	0.00E+00	5.15E-01
550984	9/7/2021 - 9/14/2021	I-131	<2.46E-02	0.00E+00	2.46E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<4.56E-01	0.00E+00	4.56E-01
551615	9/14/2021 - 9/22/2021	I-131	<1.85E-02	0.00E+00	1.85E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551615	9/14/2021 - 9/22/2021	Cs-134	<1.77E-02	0.00E+00	1.77E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	3.22E-01	1.97E-01	2.30E-01
552403	9/30/2021 - 10/5/2021	I-131	<3.73E-02	0.00E+00	3.73E-02
		Cs-134	<4.54E-02	0.00E+00	4.54E-02
		Cs-137	<3.88E-02	0.00E+00	3.88E-02
		Be-7	<2.76E-01	0.00E+00	2.76E-01
		K-40	4.68E-01	3.76E-01	5.42E-01
552714	10/5/2021 - 10/12/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<4.64E-01	0.00E+00	4.64E-01
553207	10/12/2021 - 10/19/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<2.06E-01	0.00E+00	2.06E-01
		K-40	3.80E-01	2.18E-01	2.25E-01
553786	10/19/2021 - 10/25/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<2.42E-02	0.00E+00	2.42E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	3.79E-01	2.67E-01	3.45E-01
554240	10/25/2021 - 11/2/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.50E-02	0.00E+00	2.50E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	5.36E-01	2.23E-01	6.05E-02
554529	11/2/2021 - 11/8/2021	I-131	<3.61E-02	0.00E+00	3.61E-02
		Cs-134	<1.60E-02	0.00E+00	1.60E-02
		Cs-137	<2.82E-02	0.00E+00	2.82E-02
		Be-7	<1.92E-01	0.00E+00	1.92E-01
		K-40	5.88E-01	2.61E-01	7.59E-02
555009	11/8/2021 - 11/16/2021	I-131	<3.66E-02	0.00E+00	3.66E-02
		Cs-134	<1.24E-02	0.00E+00	1.24E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	<4.56E-01	0.00E+00	4.56E-01
555848	11/16/2021 - 11/23/2021	I-131	<4.78E-02	0.00E+00	4.78E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	<5.23E-01	0.00E+00	5.23E-01
556702	11/23/2021 - 11/30/2021	I-131	<3.95E-02	0.00E+00	3.95E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	4.09E-01	2.01E-01	6.52E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 3 [INDICATOR - N @ 0.5 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557018	11/30/2021 - 12/7/2021	I-131	<2.21E-02	0.00E+00	2.21E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<3.08E-02	0.00E+00	3.08E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	<5.26E-01	0.00E+00	5.26E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557440	12/7/2021 - 12/14/2021	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	<5.23E-01	0.00E+00	5.23E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557910	12/14/2021 - 12/21/2021	I-131	<5.58E-02	0.00E+00	5.58E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.76E-02	0.00E+00	2.76E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<4.30E-01	0.00E+00	4.30E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558563	12/28/2021 - 1/4/2022	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<1.95E-02	0.00E+00	1.95E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<5.57E-01	0.00E+00	5.57E-01

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536513	12/29/2020 - 1/5/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.09E-01	0.00E+00	1.09E-01
		K-40	5.16E-01	1.92E-01	1.90E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536702	1/5/2021 - 1/12/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	5.24E-01	1.92E-01	1.90E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537255	1/12/2021 - 1/19/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	4.44E-01	1.98E-01	2.44E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537626	1/19/2021 - 1/26/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	3.61E-01	1.98E-01	2.71E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538018	1/26/2021 - 2/1/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.95E-02	0.00E+00	1.95E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	5.16E-01	2.04E-01	1.98E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538239	2/1/2021 - 2/8/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538239	2/1/2021 - 2/8/2021	K-40	6.53E-01	2.15E-01	1.88E-01
538466	2/8/2021 - 2/16/2021	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<1.02E-02	0.00E+00	1.02E-02
		Be-7	<9.80E-02	0.00E+00	9.80E-02
		K-40	3.30E-01	1.73E-01	2.32E-01
538753	2/16/2021 - 2/23/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.60E-02	0.00E+00	1.60E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	4.39E-01	1.51E-01	3.31E-02
539003	2/23/2021 - 3/2/2021	I-131	<2.00E-02	0.00E+00	2.00E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<9.85E-02	0.00E+00	9.85E-02
		K-40	5.99E-01	1.87E-01	1.25E-01
539214	3/2/2021 - 3/9/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<8.56E-02	0.00E+00	8.56E-02
		K-40	2.42E-01	1.40E-01	1.72E-01
539694	3/9/2021 - 3/16/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01
		K-40	<3.38E-01	0.00E+00	3.38E-01
540656	3/16/2021 - 3/23/2021	I-131	<2.07E-02	0.00E+00	2.07E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	5.38E-01	2.06E-01	2.22E-01
541378	3/23/2021 - 3/30/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<9.67E-02	0.00E+00	9.67E-02
		K-40	2.56E-01	1.55E-01	2.04E-01
541867	3/30/2021 - 4/6/2021	I-131	<1.65E-02	0.00E+00	1.65E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<9.38E-02	0.00E+00	9.38E-02
		K-40	2.94E-01	1.62E-01	2.08E-01
542182	4/6/2021 - 4/13/2021	I-131	<2.40E-02	0.00E+00	2.40E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.30E-01	1.85E-01	2.02E-01
542818	4/13/2021 - 4/20/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542818	4/13/2021 - 4/20/2021	Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.60E-01	0.00E+00	4.60E-01
		I-131	<3.28E-02	0.00E+00	3.28E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
543179	4/20/2021 - 4/27/2021	Cs-137	<4.62E-03	0.00E+00	4.62E-03
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<5.17E-01	0.00E+00	5.17E-01
		I-131	<3.75E-02	0.00E+00	3.75E-02
544063	4/27/2021 - 5/3/2021	Cs-134	<3.37E-02	0.00E+00	3.37E-02
		Cs-137	<2.55E-02	0.00E+00	2.55E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	<7.02E-01	0.00E+00	7.02E-01
544257	5/3/2021 - 5/11/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
544483	5/11/2021 - 5/19/2021	K-40	4.10E-01	1.91E-01	5.85E-02
		I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
544967	5/19/2021 - 5/25/2021	Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	<4.27E-01	0.00E+00	4.27E-01
		I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<3.17E-02	0.00E+00	3.17E-02
545452	5/25/2021 - 6/1/2021	Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	6.55E-01	3.19E-01	3.21E-01
		I-131	<2.57E-02	0.00E+00	2.57E-02
545742	6/1/2021 - 6/8/2021	Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<5.65E-01	0.00E+00	5.65E-01
545976	6/8/2021 - 6/14/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
545976	6/8/2021 - 6/14/2021	K-40	<4.98E-01	0.00E+00	4.98E-01
		I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.88E-02	0.00E+00	2.88E-02
546852	6/14/2021 - 6/22/2021	Be-7	<2.15E-01	0.00E+00	2.15E-01
		K-40	<5.59E-01	0.00E+00	5.59E-01
		I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
547143	6/22/2021 - 6/29/2021	Cs-137	<2.93E-02	0.00E+00	2.93E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<3.98E-01	0.00E+00	3.98E-01
		I-131	<2.60E-02	0.00E+00	2.60E-02
547143	6/22/2021 - 6/29/2021	Cs-134	<2.53E-02	0.00E+00	2.53E-02
		I-131	<2.60E-02	0.00E+00	2.60E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547143	6/22/2021 - 6/29/2021	Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	<5.29E-01	0.00E+00	5.29E-01
547419	6/29/2021 - 7/6/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<3.38E-02	0.00E+00	3.38E-02
		Cs-137	<3.04E-02	0.00E+00	3.04E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	<5.60E-01	0.00E+00	5.60E-01
547654	7/6/2021 - 7/13/2021	I-131	<2.03E-02	0.00E+00	2.03E-02
		Cs-134	<2.81E-02	0.00E+00	2.81E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	4.31E-01	2.44E-01	2.81E-01
548051	7/13/2021 - 7/20/2021	I-131	<3.46E-02	0.00E+00	3.46E-02
		Cs-134	<5.24E-03	0.00E+00	5.24E-03
		Cs-137	<2.36E-02	0.00E+00	2.36E-02
		Be-7	<8.41E-02	0.00E+00	8.41E-02
		K-40	<4.57E-01	0.00E+00	4.57E-01
548475	7/20/2021 - 7/27/2021	I-131	<3.36E-02	0.00E+00	3.36E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	4.25E-01	2.15E-01	7.20E-02
548686	7/27/2021 - 8/3/2021	I-131	<2.34E-02	0.00E+00	2.34E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	2.53E-01	2.32E-01	3.45E-01
548926	8/3/2021 - 8/9/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	4.66E-01	2.78E-01	3.21E-01
549216	8/9/2021 - 8/17/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	<4.62E-01	0.00E+00	4.62E-01
549655	8/17/2021 - 8/23/2021	I-131	<3.44E-02	0.00E+00	3.44E-02
		Cs-134	<3.58E-02	0.00E+00	3.58E-02
		Cs-137	<2.90E-02	0.00E+00	2.90E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	6.75E-01	3.11E-01	2.69E-01
549992	8/23/2021 - 8/30/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<5.60E-01	0.00E+00	5.60E-01
550499	8/30/2021 - 9/7/2021	I-131	<4.29E-02	0.00E+00	4.29E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550499	8/30/2021 - 9/7/2021	Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	3.80E-01	1.87E-01	6.05E-02
550985	9/7/2021 - 9/14/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	<4.56E-01	0.00E+00	4.56E-01
551616	9/14/2021 - 9/22/2021	I-131	<2.12E-02	0.00E+00	2.12E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<9.22E-02	0.00E+00	9.22E-02
		K-40	<4.45E-01	0.00E+00	4.45E-01
552207	9/22/2021 - 9/28/2021	I-131	<2.41E-02	0.00E+00	2.41E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<9.74E-02	0.00E+00	9.74E-02
		K-40	2.65E-01	2.15E-01	2.78E-01
552404	9/28/2021 - 10/5/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.98E-02	0.00E+00	2.98E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	3.32E-01	2.33E-01	3.06E-01
552715	10/5/2021 - 10/12/2021	I-131	<3.44E-02	0.00E+00	3.44E-02
		Cs-134	<3.04E-02	0.00E+00	3.04E-02
		Cs-137	<3.11E-02	0.00E+00	3.11E-02
		Be-7	<2.01E-01	0.00E+00	2.01E-01
		K-40	3.20E-01	2.30E-01	3.02E-01
553208	10/12/2021 - 10/19/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<5.17E-03	0.00E+00	5.17E-03
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
553787	10/19/2021 - 10/25/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<2.25E-02	0.00E+00	2.25E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	5.01E-01	2.39E-01	7.54E-02
554241	10/25/2021 - 11/2/2021	I-131	<2.88E-02	0.00E+00	2.88E-02
		Cs-134	<2.79E-02	0.00E+00	2.79E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	6.27E-01	2.38E-01	5.86E-02
554530	11/2/2021 - 11/9/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<8.07E-02	0.00E+00	8.07E-02
		K-40	<5.08E-01	0.00E+00	5.08E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 4 [INDICATOR - ESE @ 0.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555010	11/9/2021 - 11/16/2021	I-131	<4.44E-02	0.00E+00	4.44E-02
		Cs-134	<1.85E-02	0.00E+00	1.85E-02
		Cs-137	<1.84E-02	0.00E+00	1.84E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	<4.28E-01	0.00E+00	4.28E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555849	11/16/2021 - 11/23/2021	I-131	<2.94E-02	0.00E+00	2.94E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	3.37E-01	2.06E-01	2.18E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556703	11/23/2021 - 11/30/2021	I-131	<2.08E-02	0.00E+00	2.08E-02
		Cs-134	<3.28E-02	0.00E+00	3.28E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<4.25E-01	0.00E+00	4.25E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557019	11/30/2021 - 12/7/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<4.38E-03	0.00E+00	4.38E-03
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	<5.26E-01	0.00E+00	5.26E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557441	12/7/2021 - 12/14/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<3.93E-01	0.00E+00	3.93E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558352	12/21/2021 - 12/28/2021	I-131	<4.20E-02	0.00E+00	4.20E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<2.32E-02	0.00E+00	2.32E-02
		Be-7	<1.67E-01	0.00E+00	1.67E-01
		K-40	<5.22E-01	0.00E+00	5.22E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558564	12/28/2021 - 1/4/2022	I-131	<2.94E-02	0.00E+00	2.94E-02
		Cs-134	<3.06E-02	0.00E+00	3.06E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<5.33E-01	0.00E+00	5.33E-01

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536514	12/29/2020 - 1/5/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<1.41E-02	0.00E+00	1.41E-02
		Be-7	<7.97E-02	0.00E+00	7.97E-02
		K-40	5.89E-01	1.98E-01	1.77E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536703	1/5/2021 - 1/12/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.07E-02	0.00E+00	1.07E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	6.20E-01	2.09E-01	2.06E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537256	1/12/2021 - 1/19/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<1.90E-02	0.00E+00	1.90E-02
		Cs-137	<1.57E-02	0.00E+00	1.57E-02
		Be-7	<1.01E-01	0.00E+00	1.01E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537256	1/12/2021 - 1/19/2021	K-40	5.03E-01	1.95E-01	1.93E-01
537627	1/19/2021 - 1/26/2021	I-131	<1.64E-02	0.00E+00	1.64E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<1.00E-01	0.00E+00	1.00E-01
		K-40	3.32E-01	1.61E-01	1.89E-01
538019	1/26/2021 - 2/1/2021	I-131	<1.57E-02	0.00E+00	1.57E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<9.39E-02	0.00E+00	9.39E-02
		K-40	2.73E-01	1.66E-01	2.13E-01
538240	2/1/2021 - 2/8/2021	I-131	<2.04E-02	0.00E+00	2.04E-02
		Cs-134	<1.52E-02	0.00E+00	1.52E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	4.11E-01	2.04E-01	2.66E-01
538467	2/8/2021 - 2/16/2021	I-131	<1.12E-02	0.00E+00	1.12E-02
		Cs-134	<1.20E-02	0.00E+00	1.20E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<6.49E-02	0.00E+00	6.49E-02
		K-40	<2.36E-01	0.00E+00	2.36E-01
538754	2/16/2021 - 2/23/2021	I-131	<1.74E-02	0.00E+00	1.74E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<7.76E-03	0.00E+00	7.76E-03
		Be-7	<6.81E-02	0.00E+00	6.81E-02
		K-40	4.14E-01	1.48E-01	3.40E-02
539004	2/23/2021 - 3/2/2021	I-131	<1.88E-02	0.00E+00	1.88E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.16E-02	0.00E+00	1.16E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	5.28E-01	1.84E-01	1.63E-01
539215	3/2/2021 - 3/9/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.69E-02	0.00E+00	1.69E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	4.79E-01	1.67E-01	1.17E-01
539695	3/9/2021 - 3/16/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	5.10E-01	1.71E-01	1.23E-01
540657	3/16/2021 - 3/23/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.47E-02	0.00E+00	1.47E-02
		Be-7	<9.82E-02	0.00E+00	9.82E-02
		K-40	3.84E-01	1.58E-01	1.48E-01
541379	3/23/2021 - 3/26/2021	I-131	<6.18E-02	0.00E+00	6.18E-02
		Cs-134	<2.59E-02	0.00E+00	2.59E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541379	3/23/2021 - 3/26/2021	Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	1.38E+00	3.64E-01	4.00E-01
541868	3/31/2021 - 4/6/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	6.02E-01	2.38E-01	2.71E-01
542183	4/6/2021 - 4/13/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.30E-02	0.00E+00	1.30E-02
		Be-7	<9.74E-02	0.00E+00	9.74E-02
		K-40	5.96E-01	1.92E-01	1.43E-01
542819	4/13/2021 - 4/20/2021	I-131	<3.66E-02	0.00E+00	3.66E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	5.66E-01	2.79E-01	3.01E-01
543180	4/20/2021 - 4/27/2021	I-131	<2.98E-02	0.00E+00	2.98E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<6.44E-01	0.00E+00	6.44E-01
544064	4/27/2021 - 5/3/2021	I-131	<3.14E-02	0.00E+00	3.14E-02
		Cs-134	<3.16E-02	0.00E+00	3.16E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<6.62E-01	0.00E+00	6.62E-01
544258	5/3/2021 - 5/11/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.80E-01	0.00E+00	1.80E-01
		K-40	5.03E-01	2.87E-01	3.72E-01
544484	5/11/2021 - 5/19/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.04E-02	0.00E+00	2.04E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<3.42E-01	0.00E+00	3.42E-01
544968	5/19/2021 - 5/25/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	5.32E-01	3.22E-01	4.05E-01
545453	5/25/2021 - 6/1/2021	I-131	<2.65E-02	0.00E+00	2.65E-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	<1.43E-01	0.00E+00	1.43E-01
		K-40	<5.37E-01	0.00E+00	5.37E-01
545743	6/1/2021 - 6/8/2021	I-131	<2.75E-02	0.00E+00	2.75E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545743	6/1/2021 - 6/8/2021	Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	<4.26E-01	0.00E+00	4.26E-01
545977	6/8/2021 - 6/14/2021	I-131	<2.82E-02	0.00E+00	2.82E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	5.24E-01	2.51E-01	7.89E-02
546853	6/14/2021 - 6/22/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.59E-02	0.00E+00	1.59E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	2.86E-01	1.74E-01	1.70E-01
547144	6/22/2021 - 6/29/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	<5.14E-01	0.00E+00	5.14E-01
547420	6/29/2021 - 7/6/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<2.36E-02	0.00E+00	2.36E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	4.58E-01	2.74E-01	3.36E-01
547655	7/6/2021 - 7/13/2021	I-131	<2.43E-02	0.00E+00	2.43E-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	<1.20E-01	0.00E+00	1.20E-01
		K-40	1.68E-01	1.57E-01	2.11E-01
548052	7/13/2021 - 7/20/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<1.80E-02	0.00E+00	1.80E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	5.20E-01	2.31E-01	6.71E-02
548476	7/20/2021 - 7/27/2021	I-131	<2.29E-02	0.00E+00	2.29E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<3.01E-02	0.00E+00	3.01E-02
		K-40	3.37E-01	2.25E-01	2.78E-01
548687	7/27/2021 - 8/3/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<3.09E-02	0.00E+00	3.09E-02
		Cs-137	<2.37E-02	0.00E+00	2.37E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<5.35E-01	0.00E+00	5.35E-01
548927	8/3/2021 - 8/9/2021	I-131	<3.11E-02	0.00E+00	3.11E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<7.11E-01	0.00E+00	7.11E-01
549217	8/9/2021 - 8/17/2021	I-131	<2.81E-02	0.00E+00	2.81E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549217	8/9/2021 - 8/17/2021	Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	<3.96E-01	0.00E+00	3.96E-01
549656	8/17/2021 - 8/23/2021	I-131	<3.65E-02	0.00E+00	3.65E-02
		Cs-134	<3.80E-02	0.00E+00	3.80E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<2.23E-01	0.00E+00	2.23E-01
		K-40	<7.10E-01	0.00E+00	7.10E-01
549993	8/23/2021 - 8/30/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<3.03E-02	0.00E+00	3.03E-02
		Be-7	<1.94E-01	0.00E+00	1.94E-01
		K-40	5.23E-01	2.32E-01	6.75E-02
550500	8/30/2021 - 9/7/2021	I-131	<4.64E-02	0.00E+00	4.64E-02
		Cs-134	<2.38E-02	0.00E+00	2.38E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<2.26E-01	0.00E+00	2.26E-01
		K-40	<4.49E-01	0.00E+00	4.49E-01
550986	9/7/2021 - 9/14/2021	I-131	<3.27E-02	0.00E+00	3.27E-02
		Cs-134	<5.49E-03	0.00E+00	5.49E-03
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.64E-01	0.00E+00	1.64E-01
		K-40	3.14E-01	2.33E-01	3.08E-01
551617	9/14/2021 - 9/22/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<1.91E-02	0.00E+00	1.91E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	4.25E-01	2.40E-01	2.81E-01
552208	9/22/2021 - 9/28/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<3.97E-02	0.00E+00	3.97E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
		K-40	7.06E-01	3.44E-01	3.61E-01
552405	9/28/2021 - 10/5/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.89E-02	0.00E+00	2.89E-02
		Be-7	<1.46E-01	0.00E+00	1.46E-01
		K-40	2.85E-01	2.00E-01	2.39E-01
552716	10/5/2021 - 10/12/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<4.81E-01	0.00E+00	4.81E-01
553209	10/12/2021 - 10/19/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.74E-02	0.00E+00	1.74E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	3.28E-01	2.30E-01	3.02E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553788	10/19/2021 - 10/25/2021	I-131	<3.33E-02	0.00E+00	3.33E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<2.90E-02	0.00E+00	2.90E-02
		Be-7	<2.14E-01	0.00E+00	2.14E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
554242	10/25/2021 - 11/2/2021	I-131	<3.19E-02	0.00E+00	3.19E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<4.74E-01	0.00E+00	4.74E-01
554531	11/2/2021 - 11/8/2021	I-131	<4.07E-02	0.00E+00	4.07E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	8.53E-01	3.13E-01	7.45E-02
555011	11/8/2021 - 11/16/2021	I-131	<4.13E-02	0.00E+00	4.13E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	<4.83E-01	0.00E+00	4.83E-01
555850	11/16/2021 - 11/23/2021	I-131	<3.12E-02	0.00E+00	3.12E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	<4.83E-01	0.00E+00	4.83E-01
556704	11/23/2021 - 11/30/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<3.24E-02	0.00E+00	3.24E-02
		Cs-137	<1.29E-02	0.00E+00	1.29E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	4.46E-01	2.19E-01	7.11E-02
557020	11/30/2021 - 12/7/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<4.57E-01	0.00E+00	4.57E-01
557442	12/7/2021 - 12/14/2021	I-131	<3.14E-02	0.00E+00	3.14E-02
		Cs-134	<2.26E-02	0.00E+00	2.26E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	3.61E-01	2.31E-01	2.84E-01
557912	12/14/2021 - 12/21/2021	I-131	<4.18E-02	0.00E+00	4.18E-02
		Cs-134	<1.84E-02	0.00E+00	1.84E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<4.05E-01	0.00E+00	4.05E-01
558353	12/21/2021 - 12/28/2021	I-131	<4.35E-02	0.00E+00	4.35E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<4.62E-01	0.00E+00	4.62E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 5 [INDICATOR - ENE @ 0.9 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558565	12/28/2021 - 1/4/2022	I-131	<3.06E-02	0.00E+00	3.06E-02
		Cs-134	<1.38E-02	0.00E+00	1.38E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.97E-01	0.00E+00	1.97E-01
		K-40	4.39E-01	2.44E-01	2.74E-01

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536516	12/29/2020 - 1/5/2021	I-131	<1.85E-02	0.00E+00	1.85E-02
		Cs-134	<1.62E-02	0.00E+00	1.62E-02
		Cs-137	<1.88E-02	0.00E+00	1.88E-02
		Be-7	<7.72E-02	0.00E+00	7.72E-02
		K-40	3.87E-01	1.84E-01	2.19E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536705	1/5/2021 - 1/12/2021	I-131	<1.78E-02	0.00E+00	1.78E-02
		Cs-134	<1.71E-02	0.00E+00	1.71E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	4.68E-01	1.96E-01	2.16E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537258	1/12/2021 - 1/19/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	3.87E-01	1.60E-01	1.55E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537629	1/19/2021 - 1/26/2021	I-131	<1.39E-02	0.00E+00	1.39E-02
		Cs-134	<1.85E-02	0.00E+00	1.85E-02
		Cs-137	<1.27E-02	0.00E+00	1.27E-02
		Be-7	<9.88E-02	0.00E+00	9.88E-02
		K-40	3.43E-01	1.35E-01	3.44E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538021	1/26/2021 - 2/1/2021	I-131	<2.60E-02	0.00E+00	2.60E-02
		Cs-134	<1.96E-02	0.00E+00	1.96E-02
		Cs-137	<2.05E-02	0.00E+00	2.05E-02
		Be-7	<1.06E-01	0.00E+00	1.06E-01
		K-40	4.74E-01	2.04E-01	2.20E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538242	2/1/2021 - 2/8/2021	I-131	<1.66E-02	0.00E+00	1.66E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	5.55E-01	2.06E-01	2.20E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538469	2/8/2021 - 2/16/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	4.80E-01	1.51E-01	3.02E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538756	2/16/2021 - 2/23/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<1.88E-02	0.00E+00	1.88E-02
		Cs-137	<1.72E-02	0.00E+00	1.72E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	5.95E-01	1.87E-01	1.28E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539006	2/23/2021 - 3/2/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<9.83E-02	0.00E+00	9.83E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539006	2/23/2021 - 3/2/2021	K-40	4.69E-01	1.90E-01	2.01E-01
539217	3/2/2021 - 3/9/2021	I-131	<1.76E-02	0.00E+00	1.76E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	5.03E-01	1.81E-01	1.38E-01
539697	3/9/2021 - 3/16/2021	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.02E-01	0.00E+00	1.02E-01
		K-40	3.30E-01	1.91E-01	2.58E-01
540659	3/16/2021 - 3/23/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.15E-02	0.00E+00	1.15E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	3.76E-01	1.66E-01	1.83E-01
541381	3/23/2021 - 3/30/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<1.83E-02	0.00E+00	1.83E-02
		Cs-137	<1.44E-02	0.00E+00	1.44E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	5.69E-01	2.12E-01	2.30E-01
541870	3/30/2021 - 4/6/2021	I-131	<2.01E-02	0.00E+00	2.01E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.49E-01	1.83E-01	1.95E-01
542185	4/6/2021 - 4/13/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	<3.75E-01	0.00E+00	3.75E-01
542821	4/13/2021 - 4/20/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	3.51E-01	2.07E-01	2.16E-01
543182	4/20/2021 - 4/27/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<4.56E-03	0.00E+00	4.56E-03
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	2.25E-01	1.97E-01	2.75E-01
544066	4/27/2021 - 5/3/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	<5.97E-01	0.00E+00	5.97E-01
544260	5/3/2021 - 5/11/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.06E-02	0.00E+00	1.06E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544260	5/3/2021 - 5/11/2021	Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	<4.47E-01	0.00E+00	4.47E-01
544486	5/11/2021 - 5/19/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<2.00E-02	0.00E+00	2.00E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<8.96E-02	0.00E+00	8.96E-02
		K-40	3.87E-01	1.85E-01	5.83E-02
544970	5/19/2021 - 5/25/2021	I-131	<4.01E-02	0.00E+00	4.01E-02
		Cs-134	<2.95E-02	0.00E+00	2.95E-02
		Cs-137	<3.20E-02	0.00E+00	3.20E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	<6.35E-01	0.00E+00	6.35E-01
545455	5/25/2021 - 6/1/2021	I-131	<2.89E-02	0.00E+00	2.89E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.36E-01	0.00E+00	1.36E-01
		K-40	<5.00E-01	0.00E+00	5.00E-01
545745	6/1/2021 - 6/8/2021	I-131	<3.36E-02	0.00E+00	3.36E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02
		Cs-137	<2.96E-02	0.00E+00	2.96E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<5.22E-01	0.00E+00	5.22E-01
545979	6/8/2021 - 6/14/2021	I-131	<3.49E-02	0.00E+00	3.49E-02
		Cs-134	<2.97E-02	0.00E+00	2.97E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	<5.53E-01	0.00E+00	5.53E-01
546855	6/14/2021 - 6/22/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
547146	6/22/2021 - 6/29/2021	I-131	<2.49E-02	0.00E+00	2.49E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<5.47E-01	0.00E+00	5.47E-01
547422	6/29/2021 - 7/6/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.48E-02	0.00E+00	2.48E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	<4.99E-01	0.00E+00	4.99E-01
547657	7/6/2021 - 7/13/2021	I-131	<3.01E-02	0.00E+00	3.01E-02
		Cs-134	<3.48E-02	0.00E+00	3.48E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	5.59E-01	2.43E-01	6.89E-02
548054	7/13/2021 - 7/20/2021	I-131	<3.35E-02	0.00E+00	3.35E-02
		Cs-134	<1.92E-02	0.00E+00	1.92E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548054	7/13/2021 - 7/20/2021	Cs-137	<2.13E-02	0.00E+00	2.13E-02
		Be-7	<2.00E-01	0.00E+00	2.00E-01
		K-40	4.55E-01	2.24E-01	7.25E-02
548478	7/20/2021 - 7/27/2021	I-131	<2.50E-02	0.00E+00	2.50E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.58E-01	0.00E+00	1.58E-01
		K-40	2.05E-01	1.57E-01	1.71E-01
548689	7/27/2021 - 8/3/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<2.47E-02	0.00E+00	2.47E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	4.21E-01	2.32E-01	2.33E-01
548929	8/3/2021 - 8/9/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<3.38E-02	0.00E+00	3.38E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
549219	8/9/2021 - 8/17/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.91E-02	0.00E+00	1.91E-02
		Be-7	<9.21E-02	0.00E+00	9.21E-02
		K-40	<3.48E-01	0.00E+00	3.48E-01
549658	8/17/2021 - 8/23/2021	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<5.85E-01	0.00E+00	5.85E-01
549995	8/23/2021 - 8/30/2021	I-131	<3.11E-02	0.00E+00	3.11E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.81E-02	0.00E+00	1.81E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	1.78E-01	1.71E-01	2.41E-01
550502	8/30/2021 - 9/7/2021	I-131	<4.05E-02	0.00E+00	4.05E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	<4.77E-01	0.00E+00	4.77E-01
550988	9/7/2021 - 9/14/2021	I-131	<1.67E-02	0.00E+00	1.67E-02
		Cs-134	<2.45E-02	0.00E+00	2.45E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	6.95E-01	2.88E-01	2.56E-01
551619	9/14/2021 - 9/22/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<2.05E-01	0.00E+00	2.05E-01
		K-40	5.10E-01	2.41E-01	2.43E-01
552210	9/22/2021 - 9/28/2021	I-131	<2.94E-02	0.00E+00	2.94E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552210	9/22/2021 - 9/28/2021	Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.08E-02	0.00E+00	2.08E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<6.30E-01	0.00E+00	6.30E-01
552407	9/28/2021 - 10/5/2021	I-131	<3.33E-02	0.00E+00	3.33E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	4.93E-01	2.50E-01	2.41E-01
552718	10/5/2021 - 10/12/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<2.20E-02	0.00E+00	2.20E-02
		Cs-137	<2.79E-02	0.00E+00	2.79E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	<5.13E-01	0.00E+00	5.13E-01
553211	10/12/2021 - 10/19/2021	I-131	<3.20E-02	0.00E+00	3.20E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	2.97E-01	2.21E-01	2.87E-01
553790	10/19/2021 - 10/25/2021	I-131	<2.55E-02	0.00E+00	2.55E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<3.03E-02	0.00E+00	3.03E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.60E-01	0.00E+00	5.60E-01
554244	10/25/2021 - 11/2/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.78E-02	0.00E+00	2.78E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	3.72E-01	2.03E-01	2.09E-01
554533	11/2/2021 - 11/9/2021	I-131	<3.28E-02	0.00E+00	3.28E-02
		Cs-134	<1.86E-02	0.00E+00	1.86E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	<4.69E-01	0.00E+00	4.69E-01
555013	11/9/2021 - 11/16/2021	I-131	<4.31E-02	0.00E+00	4.31E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<2.06E-01	0.00E+00	2.06E-01
		K-40	6.75E-01	2.89E-01	2.61E-01
555852	11/16/2021 - 11/23/2021	I-131	<5.24E-02	0.00E+00	5.24E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<3.10E-02	0.00E+00	3.10E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	5.61E-01	2.54E-01	2.08E-01
556706	11/23/2021 - 11/30/2021	I-131	<3.17E-02	0.00E+00	3.17E-02
		Cs-134	<2.75E-02	0.00E+00	2.75E-02
		Cs-137	<2.89E-02	0.00E+00	2.89E-02
		Be-7	<2.02E-01	0.00E+00	2.02E-01
		K-40	6.95E-01	3.03E-01	2.85E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 6 [INDICATOR - SSW @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557022	11/30/2021 - 12/7/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	5.29E-01	2.57E-01	2.45E-01
557444	12/7/2021 - 12/14/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<2.46E-02	0.00E+00	2.46E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	5.43E-01	2.63E-01	2.61E-01
557914	12/14/2021 - 12/21/2021	I-131	<4.52E-02	0.00E+00	4.52E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.99E-01	0.00E+00	5.99E-01
558355	12/21/2021 - 12/28/2021	I-131	<3.82E-02	0.00E+00	3.82E-02
		Cs-134	<1.80E-02	0.00E+00	1.80E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<4.36E-01	0.00E+00	4.36E-01
558567	12/28/2021 - 1/4/2022	I-131	<2.96E-02	0.00E+00	2.96E-02
		Cs-134	<3.08E-02	0.00E+00	3.08E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	8.01E-01	2.90E-01	6.78E-02

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536519	12/29/2020 - 1/5/2021	I-131	<1.47E-02	0.00E+00	1.47E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	3.18E-01	1.68E-01	2.11E-01
536708	1/5/2021 - 1/12/2021	I-131	<1.83E-02	0.00E+00	1.83E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<8.26E-02	0.00E+00	8.26E-02
		K-40	4.58E-01	1.80E-01	1.87E-01
537261	1/12/2021 - 1/19/2021	I-131	<2.37E-02	0.00E+00	2.37E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.09E-01	1.99E-01	2.18E-01
537632	1/19/2021 - 1/26/2021	I-131	<2.28E-02	0.00E+00	2.28E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	4.60E-01	1.96E-01	2.26E-01
538024	1/26/2021 - 2/1/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538024	1/26/2021 - 2/1/2021	K-40	4.75E-01	2.47E-01	3.32E-01
538245	2/1/2021 - 2/8/2021	I-131	<1.62E-02	0.00E+00	1.62E-02
		Cs-134	<1.23E-02	0.00E+00	1.24E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.03E-01	0.00E+00	1.03E-01
		K-40	5.12E-01	1.91E-01	1.79E-01
538472	2/8/2021 - 2/16/2021	I-131	<1.30E-02	0.00E+00	1.30E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<8.82E-03	0.00E+00	8.82E-03
		Be-7	<7.85E-02	0.00E+00	7.85E-02
		K-40	2.31E-01	1.03E-01	2.98E-02
538759	2/16/2021 - 2/23/2021	I-131	<1.34E-02	0.00E+00	1.34E-02
		Cs-134	<1.45E-02	0.00E+00	1.45E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.14E-01	0.00E+00	1.14E-01
		K-40	1.50E-01	1.31E-01	1.94E-01
539009	2/23/2021 - 3/2/2021	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<1.18E-02	0.00E+00	1.18E-02
		Be-7	<9.45E-02	0.00E+00	9.45E-02
		K-40	3.39E-01	1.59E-01	1.77E-01
539220	3/2/2021 - 3/9/2021	I-131	<2.06E-02	0.00E+00	2.06E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	4.79E-01	1.67E-01	1.17E-01
539700	3/9/2021 - 3/16/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	3.76E-01	1.86E-01	2.37E-01
540662	3/16/2021 - 3/23/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.37E-02	0.00E+00	1.37E-02
		Cs-137	<1.40E-02	0.00E+00	1.40E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	4.02E-01	1.57E-01	1.32E-01
541384	3/23/2021 - 3/30/2021	I-131	<3.18E-02	0.00E+00	3.18E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	4.59E-01	1.91E-01	2.08E-01
541873	3/30/2021 - 4/6/2021	I-131	<1.70E-02	0.00E+00	1.70E-02
		Cs-134	<1.72E-02	0.00E+00	1.72E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	2.11E-01	1.42E-01	1.93E-01
542188	4/6/2021 - 4/13/2021	I-131	<1.79E-02	0.00E+00	1.79E-02
		Cs-134	<1.51E-02	0.00E+00	1.51E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542188	4/6/2021 - 4/13/2021	Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	6.36E-01	2.01E-01	1.59E-01
542824	4/13/2021 - 4/20/2021	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	4.95E-01	2.86E-01	3.60E-01
543185	4/20/2021 - 4/27/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<2.45E-02	0.00E+00	2.45E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<5.84E-01	0.00E+00	5.84E-01
544069	4/27/2021 - 5/3/2021	I-131	<2.66E-02	0.00E+00	2.66E-02
		Cs-134	<2.39E-02	0.00E+00	2.39E-02
		Cs-137	<3.05E-02	0.00E+00	3.05E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	7.30E-01	3.48E-01	3.82E-01
544263	5/3/2021 - 5/11/2021	I-131	<2.24E-02	0.00E+00	2.24E-02
		Cs-134	<2.19E-02	0.00E+00	2.19E-02
		Cs-137	<2.22E-02	0.00E+00	2.22E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	3.50E-01	2.15E-01	2.46E-01
544489	5/11/2021 - 5/19/2021	I-131	<2.44E-02	0.00E+00	2.44E-02
		Cs-134	<2.36E-02	0.00E+00	2.36E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	2.95E-01	2.26E-01	3.19E-01
544973	5/19/2021 - 5/25/2021	I-131	<4.10E-02	0.00E+00	4.10E-02
		Cs-134	<2.40E-02	0.00E+00	2.40E-02
		Cs-137	<2.69E-02	0.00E+00	2.69E-02
		Be-7	<2.36E-01	0.00E+00	2.36E-01
		K-40	<5.76E-01	0.00E+00	5.76E-01
545458	5/25/2021 - 6/1/2021	I-131	<2.52E-02	0.00E+00	2.52E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	<4.90E-01	0.00E+00	4.90E-01
545748	6/1/2021 - 6/8/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<3.09E-02	0.00E+00	3.09E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	3.54E-01	1.91E-01	6.85E-02
545982	6/8/2021 - 6/14/2021	I-131	<3.16E-02	0.00E+00	3.16E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<3.74E-02	0.00E+00	3.74E-02
		Be-7	<2.49E-01	0.00E+00	2.49E-01
		K-40	4.80E-01	2.79E-01	3.10E-01
546858	6/14/2021 - 6/22/2021	I-131	<2.94E-02	0.00E+00	2.94E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546858	6/14/2021 - 6/22/2021	Cs-137	<2.40E-02	0.00E+00	2.40E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	5.88E-01	2.68E-01	2.87E-01
547149	6/22/2021 - 6/29/2021	I-131	<2.74E-02	0.00E+00	2.74E-02
		Cs-134	<2.85E-02	0.00E+00	2.85E-02
		Cs-137	<3.26E-02	0.00E+00	3.26E-02
		Be-7	<2.07E-01	0.00E+00	2.07E-01
		K-40	3.76E-01	1.97E-01	6.80E-02
547425	6/29/2021 - 7/6/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<1.82E-02	0.00E+00	1.82E-02
		Cs-137	<1.82E-02	0.00E+00	1.82E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	7.56E-01	2.82E-01	6.83E-02
547660	7/6/2021 - 7/13/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<3.55E-01	0.00E+00	3.55E-01
548057	7/13/2021 - 7/20/2021	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<3.07E-02	0.00E+00	3.07E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	6.21E-01	2.83E-01	2.74E-01
548481	7/20/2021 - 7/27/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<2.96E-02	0.00E+00	2.96E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	2.53E-01	1.61E-01	6.85E-02
548692	7/27/2021 - 8/3/2021	I-131	<2.62E-02	0.00E+00	2.62E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.85E-01	0.00E+00	1.85E-01
		K-40	<4.73E-01	0.00E+00	4.73E-01
548932	8/3/2021 - 8/9/2021	I-131	<3.10E-02	0.00E+00	3.10E-02
		Cs-134	<3.20E-02	0.00E+00	3.20E-02
		Cs-137	<3.11E-02	0.00E+00	3.11E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	4.74E-01	2.72E-01	2.95E-01
549222	8/9/2021 - 8/17/2021	I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.92E-02	0.00E+00	1.92E-02
		Be-7	<1.19E-01	0.00E+00	1.19E-01
		K-40	2.96E-01	2.13E-01	2.85E-01
549661	8/17/2021 - 8/23/2021	I-131	<2.93E-02	0.00E+00	2.93E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.01E-02	0.00E+00	2.01E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	<5.74E-01	0.00E+00	5.74E-01
549998	8/23/2021 - 8/30/2021	I-131	<2.35E-02	0.00E+00	2.35E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549998	8/23/2021 - 8/30/2021	Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	3.72E-01	2.49E-01	3.26E-01
550505	8/30/2021 - 9/7/2021	I-131	<3.57E-02	0.00E+00	3.57E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<2.70E-02	0.00E+00	2.70E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	2.98E-01	1.90E-01	2.15E-01
550991	9/7/2021 - 9/14/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.90E-02	0.00E+00	2.90E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	4.26E-01	2.62E-01	3.24E-01
551622	9/14/2021 - 9/22/2021	I-131	<2.23E-02	0.00E+00	2.23E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<2.24E-02	0.00E+00	2.24E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	<3.80E-01	0.00E+00	3.80E-01
552213	9/22/2021 - 9/28/2021	I-131	<3.83E-02	0.00E+00	3.83E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.68E-02	0.00E+00	2.68E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	<7.12E-01	0.00E+00	7.12E-01
552410	9/28/2021 - 10/5/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	<6.16E-01	0.00E+00	6.16E-01
552721	10/5/2021 - 10/12/2021	I-131	<2.95E-02	0.00E+00	2.95E-02
		Cs-134	<2.87E-02	0.00E+00	2.87E-02
		Cs-137	<3.22E-02	0.00E+00	3.22E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	2.29E-01	2.30E-01	3.53E-01
553214	10/12/2021 - 10/19/2021	I-131	<3.21E-02	0.00E+00	3.21E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<4.82E-01	0.00E+00	4.82E-01
553793	10/19/2021 - 10/25/2021	I-131	<3.28E-02	0.00E+00	3.28E-02
		Cs-134	<3.66E-02	0.00E+00	3.66E-02
		Cs-137	<2.26E-02	0.00E+00	2.26E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	6.01E-01	3.15E-01	3.26E-01
554247	10/25/2021 - 11/2/2021	I-131	<2.42E-02	0.00E+00	2.42E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.58E-02	0.00E+00	1.58E-02
		Be-7	<9.26E-02	0.00E+00	9.26E-02
		K-40	<3.10E-01	0.00E+00	3.10E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554536	11/2/2021 - 11/8/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<2.84E-02	0.00E+00	2.84E-02
		Cs-137	<2.24E-02	0.00E+00	2.24E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	7.90E-01	3.53E-01	3.72E-01
555016	11/8/2021 - 11/16/2021	I-131	<3.75E-02	0.00E+00	3.75E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	4.28E-01	2.36E-01	2.74E-01
555855	11/16/2021 - 11/23/2021	I-131	<3.82E-02	0.00E+00	3.82E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	5.33E-01	2.31E-01	6.57E-02
556709	11/23/2021 - 11/30/2021	I-131	<3.44E-02	0.00E+00	3.44E-02
		Cs-134	<2.36E-02	0.00E+00	2.36E-02
		Cs-137	<2.39E-02	0.00E+00	2.39E-02
		Be-7	<1.39E-01	0.00E+00	1.39E-01
		K-40	<4.42E-01	0.00E+00	4.42E-01
557025	11/30/2021 - 12/7/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<2.38E-02	0.00E+00	2.38E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	<5.42E-01	0.00E+00	5.42E-01
557447	12/7/2021 - 12/14/2021	I-131	<2.25E-02	0.00E+00	2.25E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.43E-01	0.00E+00	1.43E-01
		K-40	4.13E-01	2.36E-01	2.64E-01
557917	12/14/2021 - 12/21/2021	I-131	<4.21E-02	0.00E+00	4.21E-02
		Cs-134	<2.28E-02	0.00E+00	2.28E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	5.20E-01	2.78E-01	3.25E-01
558358	12/21/2021 - 12/28/2021	I-131	<4.16E-02	0.00E+00	4.16E-02
		Cs-134	<2.27E-02	0.00E+00	2.27E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.95E-01	0.00E+00	1.95E-01
		K-40	2.76E-01	2.05E-01	2.67E-01
558570	12/28/2021 - 1/4/2022	I-131	<3.22E-02	0.00E+00	3.22E-02
		Cs-134	<2.91E-02	0.00E+00	2.91E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<3.75E-01	0.00E+00	3.75E-01

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536515	12/29/2020 - 1/5/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<2.10E-02	0.00E+00	2.10E-02
		Cs-137	<1.43E-02	0.00E+00	1.43E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536515	12/29/2020 - 1/5/2021	K-40	4.55E-01	1.70E-01	1.46E-01
536704	1/5/2021 - 1/12/2021	I-131	<1.43E-02	0.00E+00	1.43E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.10E-02	0.00E+00	1.10E-02
		Be-7	<8.06E-02	0.00E+00	8.06E-02
		K-40	3.14E-01	1.34E-01	9.96E-02
537257	1/12/2021 - 1/19/2021	I-131	<2.38E-02	0.00E+00	2.38E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.75E-02	0.00E+00	1.75E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	6.07E-01	2.05E-01	1.90E-01
537628	1/19/2021 - 1/26/2021	I-131	<1.90E-02	0.00E+00	1.90E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	3.61E-01	1.58E-01	1.65E-01
538020	1/26/2021 - 2/1/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<2.18E-02	0.00E+00	2.18E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	4.99E-01	2.28E-01	2.70E-01
538241	2/1/2021 - 2/8/2021	I-131	<2.03E-02	0.00E+00	2.03E-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	<1.33E-01	0.00E+00	1.33E-01
		K-40	5.57E-01	1.99E-01	1.93E-01
538468	2/8/2021 - 2/16/2021	I-131	<1.84E-02	0.00E+00	1.84E-02
		Cs-134	<1.50E-02	0.00E+00	1.50E-02
		Cs-137	<1.35E-02	0.00E+00	1.35E-02
		Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	<3.24E-01	0.00E+00	3.24E-01
538755	2/16/2021 - 2/23/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.37E-02	0.00E+00	1.37E-02
		Be-7	<9.09E-02	0.00E+00	9.09E-02
		K-40	5.11E-01	2.16E-01	2.61E-01
539005	2/23/2021 - 3/2/2021	I-131	<1.60E-02	0.00E+00	1.60E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
		Be-7	<8.49E-02	0.00E+00	8.49E-02
		K-40	3.49E-01	1.63E-01	1.84E-01
539216	3/2/2021 - 3/9/2021	I-131	<1.61E-02	0.00E+00	1.61E-02
		Cs-134	<1.14E-02	0.00E+00	1.14E-02
		Cs-137	<1.22E-02	0.00E+00	1.22E-02
		Be-7	<8.11E-02	0.00E+00	8.11E-02
		K-40	5.30E-01	1.44E-01	1.39E-01
539696	3/9/2021 - 3/16/2021	I-131	<1.22E-02	0.00E+00	1.22E-02
		Cs-134	<1.35E-02	0.00E+00	1.35E-02
		Cs-137	<9.96E-03	0.00E+00	9.96E-03

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
539696	3/9/2021 - 3/16/2021	Be-7	<1.04E-01	0.00E+00	1.04E-01
		K-40	3.63E-01	1.49E-01	1.27E-01
		I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
540658	3/16/2021 - 3/23/2021	Cs-137	<1.62E-02	0.00E+00	1.62E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	3.48E-01	2.09E-01	2.98E-01
		I-131	<3.40E-02	0.00E+00	3.40E-02
541380	3/23/2021 - 3/30/2021	Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<1.79E-02	0.00E+00	1.79E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	5.12E-01	1.80E-01	1.30E-01
541869	3/30/2021 - 4/6/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
542184	4/6/2021 - 4/13/2021	K-40	3.01E-01	1.38E-01	1.29E-01
		I-131	<1.41E-02	0.00E+00	1.41E-02
		Cs-134	<1.36E-02	0.00E+00	1.36E-02
		Cs-137	<1.32E-02	0.00E+00	1.32E-02
542820	4/13/2021 - 4/20/2021	Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	3.95E-01	1.86E-01	2.28E-01
		I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<2.17E-02	0.00E+00	2.17E-02
543181	4/20/2021 - 4/27/2021	Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.42E-01	0.00E+00	1.42E-01
		K-40	8.37E-01	3.03E-01	7.09E-02
		I-131	<2.62E-02	0.00E+00	2.62E-02
543811	4/27/2021 - 5/3/2021	Cs-134	<5.68E-03	0.00E+00	5.68E-03
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	4.49E-01	2.49E-01	2.53E-01
544065	4/27/2021 - 5/3/2021	I-131	<2.54E-02	0.00E+00	2.54E-02
		Cs-134	<3.60E-02	0.00E+00	3.60E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<1.93E-01	0.00E+00	1.93E-01
544259	5/3/2021 - 5/11/2021	K-40	7.26E-01	3.67E-01	4.17E-01
		I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<2.65E-02	0.00E+00	2.65E-02
544485	5/11/2021 - 5/19/2021	Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<4.89E-01	0.00E+00	4.89E-01
		I-131	<2.36E-02	0.00E+00	2.36E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
544969	5/19/2021 - 5/25/2021	Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.56E-01	0.00E+00	1.56E-01
		K-40	4.43E-01	2.06E-01	6.32E-02
		I-131	<3.78E-02	0.00E+00	3.78E-02
544969	5/19/2021 - 5/25/2021	Cs-134	<2.43E-02	0.00E+00	2.43E-02
		I-131	<3.78E-02	0.00E+00	3.78E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544969	5/19/2021 - 5/25/2021	Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.84E-01	0.00E+00	1.84E-01
		K-40	4.27E-01	3.23E-01	4.61E-01
545454	5/25/2021 - 6/1/2021	I-131	<3.95E-02	0.00E+00	3.95E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	<6.38E-01	0.00E+00	6.38E-01
545744	6/1/2021 - 6/8/2021	I-131	<3.41E-02	0.00E+00	3.41E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<2.79E-02	0.00E+00	2.79E-02
		Be-7	<2.06E-01	0.00E+00	2.06E-01
		K-40	4.62E-01	2.38E-01	2.27E-01
545978	6/8/2021 - 6/14/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<2.93E-02	0.00E+00	2.93E-02
		Cs-137	<2.72E-02	0.00E+00	2.72E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	<6.11E-01	0.00E+00	6.11E-01
546854	6/14/2021 - 6/22/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	2.48E-01	1.91E-01	2.51E-01
547145	6/22/2021 - 6/29/2021	I-131	<1.51E-02	0.00E+00	1.51E-02
		Cs-134	<1.79E-02	0.00E+00	1.79E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<3.53E-01	0.00E+00	3.53E-01
547421	6/29/2021 - 7/6/2021	I-131	<2.69E-02	0.00E+00	2.69E-02
		Cs-134	<2.35E-02	0.00E+00	2.35E-02
		Cs-137	<2.53E-02	0.00E+00	2.53E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	5.92E-01	2.65E-01	2.22E-01
547656	7/6/2021 - 7/13/2021	I-131	<3.48E-02	0.00E+00	3.48E-02
		Cs-134	<3.02E-02	0.00E+00	3.02E-02
		Cs-137	<2.60E-02	0.00E+00	2.60E-02
		Be-7	<1.82E-01	0.00E+00	1.82E-01
		K-40	<5.36E-01	0.00E+00	5.36E-01
548053	7/13/2021 - 7/20/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<4.79E-01	0.00E+00	4.79E-01
548477	7/20/2021 - 7/27/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<2.25E-02	0.00E+00	2.25E-02
		Cs-137	<2.42E-02	0.00E+00	2.42E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	<4.82E-01	0.00E+00	4.82E-01
548688	7/27/2021 - 8/3/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<2.96E-02	0.00E+00	2.96E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
548688	7/27/2021 - 8/3/2021	Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<2.19E-02	0.00E+00	2.19E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	4.89E-01	2.40E-01	2.10E-01
548928	8/3/2021 - 8/9/2021	I-131	<3.27E-02	0.00E+00	3.27E-02
		Cs-134	<3.56E-02	0.00E+00	3.56E-02
		Cs-137	<2.30E-02	0.00E+00	2.30E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<5.79E-01	0.00E+00	5.79E-01
549218	8/9/2021 - 8/17/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<1.55E-02	0.00E+00	1.55E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	3.45E-01	2.11E-01	2.54E-01
549657	8/17/2021 - 8/23/2021	I-131	<4.01E-02	0.00E+00	4.01E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<3.06E-02	0.00E+00	3.06E-02
		Be-7	<2.39E-01	0.00E+00	2.39E-01
		K-40	<6.55E-01	0.00E+00	6.55E-01
549994	8/23/2021 - 8/30/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.51E-02	0.00E+00	1.51E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	<6.14E-01	0.00E+00	6.14E-01
550501	8/30/2021 - 9/7/2021	I-131	<4.30E-02	0.00E+00	4.30E-02
		Cs-134	<2.68E-02	0.00E+00	2.68E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	<5.70E-01	0.00E+00	5.70E-01
550987	9/7/2021 - 9/14/2021	I-131	<2.59E-02	0.00E+00	2.59E-02
		Cs-134	<2.53E-02	0.00E+00	2.53E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	<5.48E-01	0.00E+00	5.48E-01
551618	9/14/2021 - 9/22/2021	I-131	<2.76E-02	0.00E+00	2.76E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<5.40E-01	0.00E+00	5.40E-01
552209	9/22/2021 - 9/28/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.43E-02	0.00E+00	2.43E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<2.47E-01	0.00E+00	2.47E-01
		K-40	5.58E-01	3.17E-01	3.76E-01
552406	9/28/2021 - 10/5/2021	I-131	<2.18E-02	0.00E+00	2.18E-02
		Cs-134	<2.02E-02	0.00E+00	2.02E-02
		Cs-137	<4.37E-03	0.00E+00	4.37E-03
		Be-7	<1.53E-01	0.00E+00	1.53E-01
		K-40	<4.67E-01	0.00E+00	4.67E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552717	10/5/2021 - 10/12/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<2.66E-02	0.00E+00	2.66E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	<4.00E-01	0.00E+00	4.00E-01
553210	10/12/2021 - 10/19/2021	I-131	<2.16E-02	0.00E+00	2.16E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<4.39E-01	0.00E+00	4.39E-01
553789	10/19/2021 - 10/25/2021	I-131	<2.72E-02	0.00E+00	2.72E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<3.48E-02	0.00E+00	3.48E-02
		Be-7	<1.91E-01	0.00E+00	1.91E-01
		K-40	6.57E-01	2.79E-01	7.75E-02
554243	10/25/2021 - 11/2/2021	I-131	<2.19E-02	0.00E+00	2.19E-02
		Cs-134	<1.98E-02	0.00E+00	1.98E-02
		Cs-137	<1.86E-02	0.00E+00	1.86E-02
		Be-7	<8.98E-02	0.00E+00	8.98E-02
		K-40	3.56E-01	2.39E-01	3.23E-01
554532	11/2/2021 - 11/9/2021	I-131	<2.30E-02	0.00E+00	2.30E-02
		Cs-134	<1.41E-02	0.00E+00	1.41E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.35E-01	0.00E+00	1.35E-01
		K-40	<3.94E-01	0.00E+00	3.94E-01
555012	11/9/2021 - 11/16/2021	I-131	<3.51E-02	0.00E+00	3.51E-02
		Cs-134	<2.57E-02	0.00E+00	2.57E-02
		Cs-137	<2.94E-02	0.00E+00	2.94E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	<5.81E-01	0.00E+00	5.81E-01
555851	11/16/2021 - 11/23/2021	I-131	<3.81E-02	0.00E+00	3.81E-02
		Cs-134	<2.11E-02	0.00E+00	2.11E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<1.70E-01	0.00E+00	1.70E-01
		K-40	<3.80E-01	0.00E+00	3.80E-01
556705	11/23/2021 - 11/30/2021	I-131	<3.23E-02	0.00E+00	3.23E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	6.93E-01	3.58E-01	2.97E-01
557021	11/30/2021 - 12/7/2021	I-131	<3.08E-02	0.00E+00	3.08E-02
		Cs-134	<2.47E-02	0.00E+00	2.47E-02
		Cs-137	<2.81E-02	0.00E+00	2.81E-02
		Be-7	<1.77E-01	0.00E+00	1.77E-01
		K-40	2.88E-01	2.46E-01	3.53E-01
557443	12/7/2021 - 12/14/2021	I-131	<2.73E-02	0.00E+00	2.73E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.34E-01	0.00E+00	1.34E-01
		K-40	<3.76E-01	0.00E+00	3.76E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 55 [INDICATOR - SSE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557913	12/14/2021 - 12/21/2021	I-131	<4.43E-02	0.00E+00	4.43E-02
		Cs-134	<1.99E-02	0.00E+00	1.99E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	5.41E-01	2.30E-01	6.38E-02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558354	12/21/2021 - 12/28/2021	I-131	<4.59E-02	0.00E+00	4.59E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<1.54E-02	0.00E+00	1.54E-02
		Be-7	<1.98E-01	0.00E+00	1.98E-01
		K-40	<6.63E-01	0.00E+00	6.63E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558566	12/28/2021 - 1/4/2022	I-131	<2.87E-02	0.00E+00	2.87E-02
		Cs-134	<2.56E-02	0.00E+00	2.56E-02
		Cs-137	<1.24E-02	0.00E+00	1.24E-02
		Be-7	<1.37E-01	0.00E+00	1.37E-01
		K-40	<4.40E-01	0.00E+00	4.40E-01

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536517	12/29/2020 - 1/5/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.65E-02	0.00E+00	1.65E-02
		Be-7	<9.83E-02	0.00E+00	9.83E-02
		K-40	4.70E-01	1.70E-01	1.33E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536706	1/5/2021 - 1/12/2021	I-131	<2.58E-02	0.00E+00	2.58E-02
		Cs-134	<1.61E-02	0.00E+00	1.61E-02
		Cs-137	<1.85E-02	0.00E+00	1.85E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01
		K-40	6.05E-01	2.00E-01	1.72E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537259	1/12/2021 - 1/19/2021	I-131	<2.26E-02	0.00E+00	2.26E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<1.39E-02	0.00E+00	1.39E-02
		Be-7	<1.13E-01	0.00E+00	1.13E-01
		K-40	6.87E-01	2.06E-01	1.57E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537630	1/19/2021 - 1/26/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.94E-02	0.00E+00	1.94E-02
		Cs-137	<1.33E-02	0.00E+00	1.33E-02
		Be-7	<1.08E-01	0.00E+00	1.08E-01
		K-40	4.35E-01	1.78E-01	1.76E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538022	1/26/2021 - 2/1/2021	I-131	<1.98E-02	0.00E+00	1.98E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<1.70E-02	0.00E+00	1.70E-02
		Be-7	<1.47E-01	0.00E+00	1.47E-01
		K-40	5.21E-01	1.93E-01	1.60E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538243	2/1/2021 - 2/8/2021	I-131	<1.86E-02	0.00E+00	1.86E-02
		Cs-134	<1.73E-02	0.00E+00	1.73E-02
		Cs-137	<1.89E-02	0.00E+00	1.89E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	5.75E-01	2.14E-01	2.38E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538470	2/8/2021 - 2/16/2021	I-131	<1.63E-02	0.00E+00	1.63E-02
		Cs-134	<1.64E-02	0.00E+00	1.64E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.23E-01	0.00E+00	1.23E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538470	2/8/2021 - 2/16/2021	K-40	4.28E-01	1.62E-01	1.59E-01
538757	2/16/2021 - 2/23/2021	I-131	<1.99E-02	0.00E+00	1.99E-02
		Cs-134	<1.67E-02	0.00E+00	1.67E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	3.29E-01	1.41E-01	1.21E-01
539007	2/23/2021 - 3/2/2021	I-131	<2.13E-02	0.00E+00	2.13E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.64E-02	0.00E+00	1.64E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	4.68E-01	2.10E-01	2.63E-01
539218	3/2/2021 - 3/9/2021	I-131	<2.35E-02	0.00E+00	2.35E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.07E-01	0.00E+00	1.07E-01
		K-40	5.88E-01	1.95E-01	1.58E-01
539698	3/9/2021 - 3/16/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<1.91E-02	0.00E+00	1.91E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<4.23E-01	0.00E+00	4.23E-01
540660	3/16/2021 - 3/23/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<1.68E-02	0.00E+00	1.68E-02
		Be-7	<1.12E-01	0.00E+00	1.12E-01
		K-40	3.95E-01	1.86E-01	2.19E-01
541382	3/23/2021 - 3/30/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<1.16E-02	0.00E+00	1.16E-02
		Cs-137	<1.17E-02	0.00E+00	1.17E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	5.80E-01	2.20E-01	2.53E-01
541871	3/30/2021 - 4/6/2021	I-131	<1.89E-02	0.00E+00	1.89E-02
		Cs-134	<1.26E-02	0.00E+00	1.26E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	<1.16E-01	0.00E+00	1.16E-01
		K-40	4.92E-01	1.82E-01	1.74E-01
542186	4/6/2021 - 4/13/2021	I-131	<2.17E-02	0.00E+00	2.17E-02
		Cs-134	<1.54E-02	0.00E+00	1.54E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.11E-01	0.00E+00	1.11E-01
		K-40	4.27E-01	1.79E-01	1.92E-01
542822	4/13/2021 - 4/20/2021	I-131	<3.85E-02	0.00E+00	3.85E-02
		Cs-134	<2.83E-02	0.00E+00	2.83E-02
		Cs-137	<2.55E-02	0.00E+00	2.55E-02
		Be-7	<1.71E-01	0.00E+00	1.71E-01
		K-40	5.37E-01	2.83E-01	3.28E-01
543183	4/20/2021 - 4/27/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<2.03E-02	0.00E+00	2.03E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
543183	4/20/2021 - 4/27/2021	Be-7	<1.66E-01	0.00E+00	1.66E-01
		K-40	<6.15E-01	0.00E+00	6.15E-01
544067	4/27/2021 - 5/3/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.70E-02	0.00E+00	2.70E-02
		Cs-137	<3.35E-02	0.00E+00	3.35E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	7.45E-01	3.04E-01	8.07E-02
544261	5/3/2021 - 5/11/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<2.21E-02	0.00E+00	2.21E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.30E-01	0.00E+00	1.30E-01
		K-40	1.88E-01	2.06E-01	3.24E-01
544487	5/11/2021 - 5/19/2021	I-131	<2.77E-02	0.00E+00	2.77E-02
		Cs-134	<2.03E-02	0.00E+00	2.03E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.51E-01	0.00E+00	1.51E-01
		K-40	5.13E-01	2.18E-01	6.05E-02
544971	5/19/2021 - 5/25/2021	I-131	<3.60E-02	0.00E+00	3.60E-02
		Cs-134	<3.74E-02	0.00E+00	3.74E-02
		Cs-137	<2.71E-02	0.00E+00	2.71E-02
		Be-7	<2.38E-01	0.00E+00	2.38E-01
		K-40	<7.00E-01	0.00E+00	7.00E-01
545456	5/25/2021 - 6/1/2021	I-131	<2.70E-02	0.00E+00	2.70E-02
		Cs-134	<2.06E-02	0.00E+00	2.06E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<2.09E-01	0.00E+00	2.09E-01
		K-40	3.68E-01	1.92E-01	6.66E-02
545746	6/1/2021 - 6/8/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.33E-01	0.00E+00	1.33E-01
		K-40	<4.12E-01	0.00E+00	4.12E-01
545980	6/8/2021 - 6/14/2021	I-131	<3.65E-02	0.00E+00	3.65E-02
		Cs-134	<2.88E-02	0.00E+00	2.88E-02
		Cs-137	<2.91E-02	0.00E+00	2.91E-02
		Be-7	<2.61E-01	0.00E+00	2.61E-01
		K-40	5.59E-01	2.67E-01	8.42E-02
546856	6/14/2021 - 6/22/2021	I-131	<2.97E-02	0.00E+00	2.97E-02
		Cs-134	<2.81E-02	0.00E+00	2.81E-02
		Cs-137	<2.51E-02	0.00E+00	2.51E-02
		Be-7	<1.60E-01	0.00E+00	1.60E-01
		K-40	3.60E-01	2.21E-01	2.67E-01
547147	6/22/2021 - 6/29/2021	I-131	<2.10E-02	0.00E+00	2.10E-02
		Cs-134	<2.29E-02	0.00E+00	2.29E-02
		Cs-137	<2.61E-02	0.00E+00	2.61E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	<4.62E-01	0.00E+00	4.62E-01
547423	6/29/2021 - 7/6/2021	I-131	<2.84E-02	0.00E+00	2.84E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547423	6/29/2021 - 7/6/2021	Cs-137	<1.23E-02	0.00E+00	1.23E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	3.86E-01	2.81E-01	3.95E-01
547658	7/6/2021 - 7/13/2021	I-131	<2.48E-02	0.00E+00	2.48E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<2.63E-02	0.00E+00	2.63E-02
		Be-7	<1.78E-01	0.00E+00	1.78E-01
		K-40	<3.74E-01	0.00E+00	3.74E-01
548055	7/13/2021 - 7/20/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<2.09E-02	0.00E+00	2.09E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<5.77E-01	0.00E+00	5.77E-01
548479	7/20/2021 - 7/27/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<2.50E-02	0.00E+00	2.50E-02
		Cs-137	<2.86E-02	0.00E+00	2.86E-02
		Be-7	<1.18E-01	0.00E+00	1.18E-01
		K-40	4.97E-01	2.48E-01	2.42E-01
548690	7/27/2021 - 8/3/2021	I-131	<2.53E-02	0.00E+00	2.53E-02
		Cs-134	<3.71E-02	0.00E+00	3.71E-02
		Cs-137	<2.86E-02	0.00E+00	2.86E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	2.52E-01	1.93E-01	2.47E-01
548930	8/3/2021 - 8/9/2021	I-131	<3.09E-02	0.00E+00	3.09E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	<6.11E-01	0.00E+00	6.11E-01
549220	8/9/2021 - 8/17/2021	I-131	<2.68E-02	0.00E+00	2.68E-02
		Cs-134	<2.16E-02	0.00E+00	2.16E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.24E-01	0.00E+00	1.24E-01
		K-40	<4.95E-01	0.00E+00	4.95E-01
549659	8/17/2021 - 8/23/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.96E-02	0.00E+00	2.96E-02
		Cs-137	<2.35E-02	0.00E+00	2.35E-02
		Be-7	<2.11E-01	0.00E+00	2.11E-01
		K-40	<6.10E-01	0.00E+00	6.10E-01
549996	8/23/2021 - 8/30/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.69E-02	0.00E+00	2.69E-02
		Cs-137	<1.77E-02	0.00E+00	1.77E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<5.38E-01	0.00E+00	5.38E-01
550503	8/30/2021 - 9/7/2021	I-131	<3.43E-02	0.00E+00	3.43E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.90E-01	0.00E+00	1.90E-01
		K-40	4.25E-01	1.98E-01	6.06E-02
550989	9/7/2021 - 9/14/2021	I-131	<3.31E-02	0.00E+00	3.31E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
550989	9/7/2021 - 9/14/2021	Cs-134	<3.31E-02	0.00E+00	3.31E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.31E-01	0.00E+00	1.31E-01
		K-40	2.69E-01	2.11E-01	2.87E-01
551620	9/14/2021 - 9/22/2021	I-131	<2.86E-02	0.00E+00	2.86E-02
		Cs-134	<2.01E-02	0.00E+00	2.01E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.54E-01	0.00E+00	1.54E-01
		K-40	2.95E-01	1.79E-01	1.86E-01
552211	9/22/2021 - 9/28/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<2.12E-02	0.00E+00	2.12E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.59E-01	0.00E+00	1.59E-01
		K-40	<4.92E-01	0.00E+00	4.92E-01
552408	9/28/2021 - 10/5/2021	I-131	<3.32E-02	0.00E+00	3.32E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	3.15E-01	1.92E-01	1.89E-01
552719	10/5/2021 - 10/12/2021	I-131	<3.32E-02	0.00E+00	3.32E-02
		Cs-134	<2.08E-02	0.00E+00	2.08E-02
		Cs-137	<2.16E-02	0.00E+00	2.16E-02
		Be-7	<1.63E-01	0.00E+00	1.63E-01
		K-40	4.43E-01	2.72E-01	3.41E-01
553212	10/12/2021 - 10/19/2021	I-131	<3.33E-02	0.00E+00	3.33E-02
		Cs-134	<3.05E-02	0.00E+00	3.05E-02
		Cs-137	<2.15E-02	0.00E+00	2.15E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	3.91E-01	2.39E-01	2.80E-01
553791	10/19/2021 - 10/25/2021	I-131	<3.42E-02	0.00E+00	3.42E-02
		Cs-134	<2.34E-02	0.00E+00	2.34E-02
		Cs-137	<2.02E-02	0.00E+00	2.02E-02
		Be-7	<1.62E-01	0.00E+00	1.62E-01
		K-40	6.12E-01	2.65E-01	7.54E-02
554245	10/25/2021 - 11/2/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.23E-02	0.00E+00	1.23E-02
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<1.17E-01	0.00E+00	1.17E-01
		K-40	<3.94E-01	0.00E+00	3.94E-01
554534	11/2/2021 - 11/9/2021	I-131	<3.64E-02	0.00E+00	3.64E-02
		Cs-134	<2.04E-02	0.00E+00	2.04E-02
		Cs-137	<3.15E-02	0.00E+00	3.15E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<6.77E-01	0.00E+00	6.77E-01
555014	11/9/2021 - 11/16/2021	I-131	<5.53E-02	0.00E+00	5.53E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<2.54E-02	0.00E+00	2.54E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.88E-01	0.00E+00	5.88E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 60 [INDICATOR - SE @ 0.2 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
555853	11/16/2021 - 11/23/2021	I-131	<5.33E-02	0.00E+00	5.33E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<2.31E-02	0.00E+00	2.31E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	4.17E-01	2.68E-01	3.45E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
556707	11/23/2021 - 11/30/2021	I-131	<2.02E-02	0.00E+00	2.02E-02
		Cs-134	<1.78E-02	0.00E+00	1.78E-02
		Cs-137	<1.53E-02	0.00E+00	1.53E-02
		Be-7	<1.79E-01	0.00E+00	1.79E-01
		K-40	<5.68E-01	0.00E+00	5.68E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557023	11/30/2021 - 12/7/2021	I-131	<3.57E-02	0.00E+00	3.57E-02
		Cs-134	<2.52E-02	0.00E+00	2.52E-02
		Cs-137	<1.97E-02	0.00E+00	1.97E-02
		Be-7	<2.23E-01	0.00E+00	2.23E-01
		K-40	4.52E-01	2.49E-01	2.69E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557445	12/7/2021 - 12/14/2021	I-131	<3.04E-02	0.00E+00	3.04E-02
		Cs-134	<2.51E-02	0.00E+00	2.51E-02
		Cs-137	<2.72E-02	0.00E+00	2.72E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<5.27E-01	0.00E+00	5.27E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557915	12/14/2021 - 12/21/2021	I-131	<4.51E-02	0.00E+00	4.51E-02
		Cs-134	<2.72E-02	0.00E+00	2.72E-02
		Cs-137	<1.99E-02	0.00E+00	1.99E-02
		Be-7	<1.68E-01	0.00E+00	1.68E-01
		K-40	3.37E-01	2.36E-01	3.10E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558356	12/21/2021 - 12/28/2021	I-131	<4.22E-02	0.00E+00	4.22E-02
		Cs-134	<2.31E-02	0.00E+00	2.31E-02
		Cs-137	<1.78E-02	0.00E+00	1.78E-02
		Be-7	<1.28E-01	0.00E+00	1.28E-01
		K-40	<5.82E-01	0.00E+00	5.82E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
558568	12/28/2021 - 1/4/2022	I-131	<2.85E-02	0.00E+00	2.85E-02
		Cs-134	<3.51E-02	0.00E+00	3.51E-02
		Cs-137	<2.62E-02	0.00E+00	2.62E-02
		Be-7	<1.44E-01	0.00E+00	1.44E-01
		K-40	7.44E-01	3.45E-01	3.95E-01

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536518	12/29/2020 - 1/5/2021	I-131	<1.80E-02	0.00E+00	1.80E-02
		Cs-134	<1.53E-02	0.00E+00	1.53E-02
		Cs-137	<1.73E-02	0.00E+00	1.73E-02
		Be-7	<1.26E-01	0.00E+00	1.26E-01
		K-40	4.90E-01	1.86E-01	1.90E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536707	1/5/2021 - 1/12/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.83E-02	0.00E+00	1.83E-02
		Be-7	2.27E-02	6.90E-02	1.23E-01
		K-40	4.47E-01	1.88E-01	2.15E-01

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537260	1/12/2021 - 1/19/2021	I-131	<1.59E-02	0.00E+00	1.59E-02
		Cs-134	<1.28E-02	0.00E+00	1.28E-02
		Cs-137	<1.09E-02	0.00E+00	1.09E-02
		Be-7	<8.58E-02	0.00E+00	8.58E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537260	1/12/2021 - 1/19/2021	K-40	4.67E-01	1.46E-01	1.70E-01
537631	1/19/2021 - 1/26/2021	I-131	<1.94E-02	0.00E+00	1.94E-02
		Cs-134	<1.65E-02	0.00E+00	1.65E-02
		Cs-137	<1.42E-02	0.00E+00	1.42E-02
		Be-7	<9.48E-02	0.00E+00	9.48E-02
		K-40	4.87E-01	1.82E-01	1.69E-01
538023	1/26/2021 - 2/1/2021	I-131	<2.80E-02	0.00E+00	2.80E-02
		Cs-134	<1.57E-02	0.00E+00	1.57E-02
		Cs-137	<2.20E-02	0.00E+00	2.20E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<3.03E-01	0.00E+00	3.03E-01
538244	2/1/2021 - 2/8/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.44E-02	0.00E+00	1.44E-02
		Cs-137	<1.50E-02	0.00E+00	1.50E-02
		Be-7	5.64E-02	8.37E-02	1.40E-01
		K-40	5.77E-01	1.85E-01	1.34E-01
538471	2/8/2021 - 2/16/2021	I-131	<1.46E-02	0.00E+00	1.46E-02
		Cs-134	<7.86E-03	0.00E+00	7.86E-03
		Cs-137	<1.38E-02	0.00E+00	1.38E-02
		Be-7	<9.92E-02	0.00E+00	9.92E-02
		K-40	3.94E-01	1.77E-01	2.20E-01
538758	2/16/2021 - 2/23/2021	I-131	<1.54E-02	0.00E+00	1.54E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.22E-01	0.00E+00	1.22E-01
		K-40	5.99E-01	1.77E-01	3.31E-02
539008	2/23/2021 - 3/2/2021	I-131	<1.69E-02	0.00E+00	1.69E-02
		Cs-134	<1.33E-02	0.00E+00	1.33E-02
		Cs-137	<1.48E-02	0.00E+00	1.48E-02
		Be-7	<9.63E-02	0.00E+00	9.63E-02
		K-40	5.04E-01	1.85E-01	1.81E-01
539219	3/2/2021 - 3/9/2021	I-131	<1.77E-02	0.00E+00	1.77E-02
		Cs-134	<1.43E-02	0.00E+00	1.43E-02
		Cs-137	<1.56E-02	0.00E+00	1.56E-02
		Be-7	<9.52E-02	0.00E+00	9.52E-02
		K-40	3.70E-01	1.56E-01	1.80E-01
539699	3/9/2021 - 3/16/2021	I-131	<1.75E-02	0.00E+00	1.75E-02
		Cs-134	<1.74E-02	0.00E+00	1.74E-02
		Cs-137	<1.45E-02	0.00E+00	1.45E-02
		Be-7	<1.05E-01	0.00E+00	1.05E-01
		K-40	4.12E-01	1.95E-01	2.47E-01
540661	3/16/2021 - 3/23/2021	I-131	<2.14E-02	0.00E+00	2.14E-02
		Cs-134	<1.68E-02	0.00E+00	1.68E-02
		Cs-137	<1.49E-02	0.00E+00	1.49E-02
		Be-7	<9.41E-02	0.00E+00	9.41E-02
		K-40	4.73E-01	2.01E-01	2.36E-01
541383	3/23/2021 - 3/30/2021	I-131	<2.61E-02	0.00E+00	2.61E-02
		Cs-134	<1.63E-02	0.00E+00	1.63E-02
		Cs-137	<1.19E-02	0.00E+00	1.19E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
541383	3/23/2021 - 3/30/2021	Be-7	<8.60E-02	0.00E+00	8.60E-02
		K-40	5.24E-01	1.75E-01	1.15E-01
541872	3/30/2021 - 4/6/2021	I-131	<1.95E-02	0.00E+00	1.95E-02
		Cs-134	<1.58E-02	0.00E+00	1.58E-02
		Cs-137	<1.36E-02	0.00E+00	1.36E-02
		Be-7	<9.59E-02	0.00E+00	9.59E-02
		K-40	4.80E-01	2.03E-01	2.43E-01
542187	4/6/2021 - 4/13/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<1.70E-02	0.00E+00	1.70E-02
		Cs-137	<2.00E-02	0.00E+00	2.00E-02
		Be-7	<1.10E-01	0.00E+00	1.10E-01
		K-40	5.12E-01	1.95E-01	2.00E-01
542823	4/13/2021 - 4/20/2021	I-131	<2.78E-02	0.00E+00	2.78E-02
		Cs-134	<2.66E-02	0.00E+00	2.66E-02
		Cs-137	<2.14E-02	0.00E+00	2.14E-02
		Be-7	<1.57E-01	0.00E+00	1.57E-01
		K-40	6.05E-01	2.47E-01	6.56E-02
543184	4/20/2021 - 4/27/2021	I-131	<3.24E-02	0.00E+00	3.24E-02
		Cs-134	<2.13E-02	0.00E+00	2.13E-02
		Cs-137	<2.85E-02	0.00E+00	2.85E-02
		Be-7	<1.61E-01	0.00E+00	1.61E-01
		K-40	<5.57E-01	0.00E+00	5.57E-01
544068	4/27/2021 - 5/3/2021	I-131	<3.34E-02	0.00E+00	3.34E-02
		Cs-134	<2.95E-02	0.00E+00	2.95E-02
		Cs-137	<2.34E-02	0.00E+00	2.34E-02
		Be-7	<2.06E-01	0.00E+00	2.06E-01
		K-40	5.22E-01	2.87E-01	3.13E-01
544262	5/3/2021 - 5/11/2021	I-131	<2.47E-02	0.00E+00	2.47E-02
		Cs-134	<1.81E-02	0.00E+00	1.81E-02
		Cs-137	<1.90E-02	0.00E+00	1.90E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	2.59E-01	1.85E-01	2.35E-01
544488	5/11/2021 - 5/19/2021	I-131	<2.82E-02	0.00E+00	2.82E-02
		Cs-134	<2.82E-02	0.00E+00	2.82E-02
		Cs-137	<2.55E-02	0.00E+00	2.55E-02
		Be-7	<9.15E-02	0.00E+00	9.15E-02
		K-40	3.97E-01	2.11E-01	2.15E-01
544972	5/19/2021 - 5/25/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<2.95E-02	0.00E+00	2.95E-02
		Cs-137	<2.75E-02	0.00E+00	2.75E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	<5.83E-01	0.00E+00	5.83E-01
545457	5/25/2021 - 6/1/2021	I-131	<2.65E-02	0.00E+00	2.65E-02
		Cs-134	<2.89E-02	0.00E+00	2.89E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.49E-01	0.00E+00	1.49E-01
		K-40	<4.54E-01	0.00E+00	4.54E-01
545747	6/1/2021 - 6/8/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
545747	6/1/2021 - 6/8/2021	Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.99E-01	0.00E+00	1.99E-01
		K-40	6.15E-01	2.56E-01	6.94E-02
545981	6/8/2021 - 6/14/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<2.07E-02	0.00E+00	2.07E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.69E-01	0.00E+00	1.69E-01
		K-40	<5.79E-01	0.00E+00	5.79E-01
546857	6/14/2021 - 6/22/2021	I-131	<2.67E-02	0.00E+00	2.67E-02
		Cs-134	<2.95E-02	0.00E+00	2.95E-02
		Cs-137	<2.06E-02	0.00E+00	2.06E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	<4.51E-01	0.00E+00	4.51E-01
547148	6/22/2021 - 6/29/2021	I-131	<1.76E-02	0.00E+00	1.76E-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	<1.86E-01	0.00E+00	1.86E-01
		K-40	4.30E-01	2.75E-01	3.61E-01
547424	6/29/2021 - 7/6/2021	I-131	<3.83E-02	0.00E+00	3.83E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<1.98E-02	0.00E+00	1.98E-02
		Be-7	<1.32E-01	0.00E+00	1.32E-01
		K-40	<5.31E-01	0.00E+00	5.31E-01
547659	7/6/2021 - 7/13/2021	I-131	<1.87E-02	0.00E+00	1.87E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<4.83E-01	0.00E+00	4.83E-01
548056	7/13/2021 - 7/20/2021	I-131	<2.11E-02	0.00E+00	2.11E-02
		Cs-134	<2.55E-02	0.00E+00	2.55E-02
		Cs-137	<2.52E-02	0.00E+00	2.52E-02
		Be-7	<1.89E-01	0.00E+00	1.89E-01
		K-40	5.49E-01	2.38E-01	6.76E-02
548480	7/20/2021 - 7/27/2021	I-131	<2.33E-02	0.00E+00	2.33E-02
		Cs-134	<2.22E-02	0.00E+00	2.22E-02
		Cs-137	<2.10E-02	0.00E+00	2.10E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	<4.32E-01	0.00E+00	4.32E-01
548691	7/27/2021 - 8/3/2021	I-131	<2.79E-02	0.00E+00	2.79E-02
		Cs-134	<3.35E-02	0.00E+00	3.35E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	<5.04E-01	0.00E+00	5.04E-01
548931	8/3/2021 - 8/9/2021	I-131	<3.03E-02	0.00E+00	3.03E-02
		Cs-134	<2.94E-02	0.00E+00	2.94E-02
		Cs-137	<3.08E-02	0.00E+00	3.08E-02
		Be-7	<2.30E-01	0.00E+00	2.30E-01
		K-40	<5.87E-01	0.00E+00	5.87E-01
549221	8/9/2021 - 8/17/2021	Nuclide	Activity	2 Sigma Error	MDA
		I-131	<2.33E-02	0.00E+00	2.33E-02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549221	8/9/2021 - 8/17/2021	Cs-134	<4.53E-03	0.00E+00	4.53E-03
		Cs-137	<1.55E-02	0.00E+00	1.55E-02
		Be-7	<9.01E-02	0.00E+00	9.01E-02
		K-40	<4.95E-01	0.00E+00	4.95E-01
549660	8/17/2021 - 8/23/2021	I-131	<2.83E-02	0.00E+00	2.83E-02
		Cs-134	<2.99E-02	0.00E+00	2.99E-02
		Cs-137	<2.12E-02	0.00E+00	2.12E-02
		Be-7	<1.74E-01	0.00E+00	1.74E-01
		K-40	<3.88E-01	0.00E+00	3.88E-01
549997	8/23/2021 - 8/30/2021	I-131	<2.71E-02	0.00E+00	2.71E-02
		Cs-134	<2.71E-02	0.00E+00	2.71E-02
		Cs-137	<2.74E-02	0.00E+00	2.74E-02
		Be-7	<1.29E-01	0.00E+00	1.29E-01
		K-40	5.38E-01	2.69E-01	2.73E-01
550504	8/30/2021 - 9/7/2021	I-131	<4.09E-02	0.00E+00	4.09E-02
		Cs-134	<2.54E-02	0.00E+00	2.54E-02
		Cs-137	<2.28E-02	0.00E+00	2.28E-02
		Be-7	<1.21E-01	0.00E+00	1.21E-01
		K-40	<4.50E-01	0.00E+00	4.50E-01
550990	9/7/2021 - 9/14/2021	I-131	<1.71E-02	0.00E+00	1.71E-02
		Cs-134	<2.65E-02	0.00E+00	2.65E-02
		Cs-137	<2.57E-02	0.00E+00	2.57E-02
		Be-7	<1.72E-01	0.00E+00	1.72E-01
		K-40	5.67E-01	2.86E-01	3.26E-01
551621	9/14/2021 - 9/22/2021	I-131	<1.93E-02	0.00E+00	1.93E-02
		Cs-134	<1.56E-02	0.00E+00	1.56E-02
		Cs-137	<2.17E-02	0.00E+00	2.17E-02
		Be-7	<1.27E-01	0.00E+00	1.27E-01
		K-40	3.70E-01	1.82E-01	5.90E-02
552212	9/22/2021 - 9/28/2021	I-131	<3.75E-02	0.00E+00	3.75E-02
		Cs-134	<2.86E-02	0.00E+00	2.86E-02
		Cs-137	<3.08E-02	0.00E+00	3.08E-02
		Be-7	<1.65E-01	0.00E+00	1.65E-01
		K-40	<7.67E-01	0.00E+00	7.67E-01
552409	9/28/2021 - 10/5/2021	I-131	<2.82E-02	0.00E+00	2.82E-02
		Cs-134	<2.98E-02	0.00E+00	2.98E-02
		Cs-137	<2.29E-02	0.00E+00	2.29E-02
		Be-7	<1.55E-01	0.00E+00	1.55E-01
		K-40	3.89E-01	1.97E-01	6.58E-02
552720	10/5/2021 - 10/12/2021	I-131	<2.98E-02	0.00E+00	2.98E-02
		Cs-134	<1.76E-02	0.00E+00	1.76E-02
		Cs-137	<2.59E-02	0.00E+00	2.59E-02
		Be-7	<2.08E-01	0.00E+00	2.08E-01
		K-40	<4.09E-01	0.00E+00	4.09E-01
553213	10/12/2021 - 10/19/2021	I-131	<2.92E-02	0.00E+00	2.92E-02
		Cs-134	<1.75E-02	0.00E+00	1.75E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.73E-01	0.00E+00	1.73E-01
		K-40	6.41E-01	3.00E-01	3.25E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553792	10/19/2021 - 10/25/2021	I-131	<2.43E-02	0.00E+00	2.43E-02
		Cs-134	<1.66E-02	0.00E+00	1.66E-02
		Cs-137	<2.09E-02	0.00E+00	2.09E-02
		Be-7	<1.40E-01	0.00E+00	1.40E-01
		K-40	<5.49E-01	0.00E+00	5.49E-01
554246	10/25/2021 - 11/2/2021	I-131	<2.15E-02	0.00E+00	2.15E-02
		Cs-134	<2.32E-02	0.00E+00	2.32E-02
		Cs-137	<1.52E-02	0.00E+00	1.52E-02
		Be-7	<1.25E-01	0.00E+00	1.25E-01
		K-40	2.51E-01	1.60E-01	1.61E-01
554535	11/2/2021 - 11/9/2021	I-131	<3.23E-02	0.00E+00	3.23E-02
		Cs-134	<3.38E-02	0.00E+00	3.38E-02
		Cs-137	<2.41E-02	0.00E+00	2.41E-02
		Be-7	<2.12E-01	0.00E+00	2.12E-01
		K-40	6.27E-01	2.76E-01	2.54E-01
555015	11/9/2021 - 11/16/2021	I-131	<4.84E-02	0.00E+00	4.84E-02
		Cs-134	<2.73E-02	0.00E+00	2.73E-02
		Cs-137	<2.18E-02	0.00E+00	2.18E-02
		Be-7	<1.88E-01	0.00E+00	1.88E-01
		K-40	4.07E-01	2.62E-01	3.40E-01
555854	11/16/2021 - 11/23/2021	I-131	<3.89E-02	0.00E+00	3.89E-02
		Cs-134	<2.67E-02	0.00E+00	2.67E-02
		Cs-137	<2.58E-02	0.00E+00	2.58E-02
		Be-7	<1.52E-01	0.00E+00	1.52E-01
		K-40	5.45E-01	2.55E-01	2.31E-01
556708	11/23/2021 - 11/30/2021	I-131	<2.91E-02	0.00E+00	2.91E-02
		Cs-134	<1.40E-02	0.00E+00	1.40E-02
		Cs-137	<1.76E-02	0.00E+00	1.76E-02
		Be-7	<1.20E-01	0.00E+00	1.20E-01
		K-40	2.60E-01	2.33E-01	3.44E-01
557024	11/30/2021 - 12/7/2021	I-131	<3.25E-02	0.00E+00	3.25E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.45E-01	0.00E+00	1.45E-01
		K-40	<4.96E-01	0.00E+00	4.96E-01
557446	12/7/2021 - 12/14/2021	I-131	<1.73E-02	0.00E+00	1.73E-02
		Cs-134	<2.46E-02	0.00E+00	2.46E-02
		Cs-137	<2.43E-02	0.00E+00	2.43E-02
		Be-7	<1.81E-01	0.00E+00	1.81E-01
		K-40	5.46E-01	2.52E-01	2.22E-01
557916	12/14/2021 - 12/21/2021	I-131	<5.58E-02	0.00E+00	5.58E-02
		Cs-134	<2.92E-02	0.00E+00	2.92E-02
		Cs-137	<2.33E-02	0.00E+00	2.33E-02
		Be-7	<1.76E-01	0.00E+00	1.76E-01
		K-40	4.49E-01	2.98E-01	4.04E-01
558357	12/21/2021 - 12/28/2021	I-131	<5.44E-02	0.00E+00	5.45E-02
		Cs-134	<2.30E-02	0.00E+00	2.30E-02
		Cs-137	<2.44E-02	0.00E+00	2.44E-02
		Be-7	<1.83E-01	0.00E+00	1.83E-01
		K-40	<4.93E-01	0.00E+00	4.93E-01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

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

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
558569	12/28/2021 - 1/4/2022		I-131	<2.33E-02	0.00E+00	2.33E-02
			Cs-134	<2.50E-02	0.00E+00	2.50E-02
			Cs-137	<1.77E-02	0.00E+00	1.77E-02
			Be-7	<1.77E-01	0.00E+00	1.77E-01
			K-40	4.77E-01	2.45E-01	2.43E-01

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

Sample Point 54 [INDICATOR - E @ 10.1 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
551897	8/31/2021 - 8/31/2021	CORN	Co-58	<5.70E+00	0.00E+00	5.70E+00
			Fe-59	<2.31E+01	0.00E+00	2.31E+01
			Co-60	<7.89E+00	0.00E+00	7.89E+00
			Zn-65	<1.84E+01	0.00E+00	1.84E+01
			Zr-95	<1.43E+01	0.00E+00	1.43E+01
			Nb-95	<7.99E+00	0.00E+00	7.99E+00
			I-131	<8.07E+00	0.00E+00	8.07E+00
			Cs-134	<9.73E+00	0.00E+00	9.73E+00
			Cs-137	<1.00E+01	0.00E+00	1.00E+01
			BaLa-140	<1.21E+01	0.00E+00	1.21E+01
			Be-7	<7.09E+01	0.00E+00	7.09E+01
			K-40	2.89E+03	3.49E+02	1.15E+02

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
551898	8/31/2021 - 8/31/2021	CUCUMBERS	Co-58	<6.35E+00	0.00E+00	6.35E+00
			Fe-59	<1.67E+01	0.00E+00	1.67E+01
			Co-60	<8.17E+00	0.00E+00	8.17E+00
			Zn-65	<1.49E+01	0.00E+00	1.49E+01
			Zr-95	<1.10E+01	0.00E+00	1.10E+01
			Nb-95	<8.01E+00	0.00E+00	8.01E+00
			I-131	<7.55E+00	0.00E+00	7.55E+00
			Cs-134	<9.14E+00	0.00E+00	9.14E+00
			Cs-137	<7.21E+00	0.00E+00	7.21E+00
			BaLa-140	<8.45E+00	0.00E+00	8.45E+00
			Be-7	<5.55E+01	0.00E+00	5.55E+01
			K-40	1.47E+03	2.19E+02	1.32E+02

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
558144	11/29/2021 - 11/29/2021	SOYBEANS	Co-58	<1.23E+01	0.00E+00	1.23E+01
			Fe-59	<2.74E+01	0.00E+00	2.74E+01
			Co-60	<1.66E+01	0.00E+00	1.66E+01
			Zn-65	<3.55E+01	0.00E+00	3.55E+01
			Zr-95	<2.37E+01	0.00E+00	2.37E+01
			Nb-95	<1.54E+01	0.00E+00	1.54E+01
			I-131	<1.20E+01	0.00E+00	1.20E+01
			Cs-134	<1.57E+01	0.00E+00	1.57E+01
			Cs-137	<1.49E+01	0.00E+00	1.49E+01
			BaLa-140	<1.00E+01	0.00E+00	1.00E+01
			Be-7	<1.02E+02	0.00E+00	1.02E+02
			K-40	1.60E+04	1.44E+03	2.07E+02

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

Sample Point 45 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:		Nuclide	Activity	2 Sigma Error	MDA
544439	5/17/2021 - 5/17/2021	BOTMFEEDER	Mn-54	<4.89E+01	0.00E+00	4.89E+01
			Co-58	<5.91E+01	0.00E+00	5.91E+01
			Fe-59	<1.15E+02	0.00E+00	1.15E+02
			Co-60	<3.17E+01	0.00E+00	3.17E+01
			Zn-65	<1.09E+02	0.00E+00	1.09E+02
			Nb-95	<6.89E+01	0.00E+00	6.89E+01
			I-131	<1.08E+02	0.00E+00	1.08E+02
			Cs-134	<5.73E+01	0.00E+00	5.73E+01
			Cs-137	<5.81E+01	0.00E+00	5.81E+01
			Be-7	<4.25E+02	0.00E+00	4.25E+02
			K-40	3.60E+03	9.84E+02	9.65E+02

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Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 45 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
544439	5/17/2021 - 5/17/2021		Ag-110M	<5.29E+01	0.00E+00	5.29E+01
			Sb-122	<8.03E+02	0.00E+00	8.03E+02
			Sb-125	<1.19E+02	0.00E+00	1.19E+02

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
544440	5/17/2021 - 5/17/2021		Mn-54	<3.22E+01	0.00E+00	3.22E+01
			Co-58	<3.60E+01	0.00E+00	3.60E+01
			Fe-59	<8.52E+01	0.00E+00	8.52E+01
			Co-60	<4.03E+01	0.00E+00	4.03E+01
			Zn-65	<8.30E+01	0.00E+00	8.30E+01
			Nb-95	<4.63E+01	0.00E+00	4.63E+01
			I-131	<1.02E+02	0.00E+00	1.02E+02
			Cs-134	<3.66E+01	0.00E+00	3.66E+01
			Cs-137	3.23E+01	2.78E+01	4.35E+01
			Be-7	<2.66E+02	0.00E+00	2.66E+02
			K-40	4.11E+03	7.03E+02	3.52E+02
			Ag-110M	<3.29E+01	0.00E+00	3.29E+01
			Sb-122	<1.63E+03	0.00E+00	1.63E+03
			Sb-125	<6.91E+01	0.00E+00	6.91E+01

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
555017	11/10/2021 - 11/10/2021		Mn-54	<2.85E+01	0.00E+00	2.85E+01
			Co-58	<3.03E+01	0.00E+00	3.03E+01
			Fe-59	<5.22E+01	0.00E+00	5.22E+01
			Co-60	<2.42E+01	0.00E+00	2.42E+01
			Zn-65	<5.75E+01	0.00E+00	5.75E+01
			Nb-95	<2.66E+01	0.00E+00	2.66E+01
			I-131	<3.88E+01	0.00E+00	3.88E+01
			Cs-134	<3.03E+01	0.00E+00	3.03E+01
			Cs-137	<2.93E+01	0.00E+00	2.93E+01
			Be-7	<1.79E+02	0.00E+00	1.79E+02
			K-40	3.03E+03	5.27E+02	3.79E+02
			Ag-110M	<2.43E+01	0.00E+00	2.43E+01
			Sb-122	<1.54E+02	0.00E+00	1.54E+02
			Sb-125	<6.60E+01	0.00E+00	6.60E+01

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
555018	11/9/2021 - 11/10/2021		Mn-54	<2.62E+01	0.00E+00	2.62E+01
			Co-58	<2.67E+01	0.00E+00	2.67E+01
			Fe-59	<4.90E+01	0.00E+00	4.90E+01
			Co-60	<2.78E+01	0.00E+00	2.78E+01
			Zn-65	<5.86E+01	0.00E+00	5.86E+01
			Nb-95	<2.69E+01	0.00E+00	2.69E+01
			I-131	<4.38E+01	0.00E+00	4.38E+01
			Cs-134	<2.92E+01	0.00E+00	2.92E+01
			Cs-137	<3.31E+01	0.00E+00	3.31E+01
			Be-7	<1.93E+02	0.00E+00	1.93E+02
			K-40	2.98E+03	5.24E+02	3.76E+02
			Ag-110M	<2.18E+01	0.00E+00	2.18E+01
			Sb-122	<2.39E+02	0.00E+00	2.39E+02
			Sb-125	<6.11E+01	0.00E+00	6.11E+01

Sample Point 46 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
544441	5/19/2021 - 5/19/2021		Mn-54	<5.68E+01	0.00E+00	5.68E+01
			Co-58	<5.24E+01	0.00E+00	5.24E+01
			Fe-59	<1.16E+02	0.00E+00	1.16E+02
			Co-60	<4.53E+01	0.00E+00	4.53E+01
			Zn-65	<1.06E+02	0.00E+00	1.06E+02
			Nb-95	<6.33E+01	0.00E+00	6.33E+01
			I-131	<8.38E+01	0.00E+00	8.38E+01
			Cs-134	<5.61E+01	0.00E+00	5.61E+01
			Cs-137	<6.73E+01	0.00E+00	6.73E+01
			Be-7	<4.32E+02	0.00E+00	4.32E+02
			K-40	3.99E+03	8.79E+02	1.14E+02
			Ag-110M	<4.99E+01	0.00E+00	4.99E+01

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Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 46 [INDICATOR - @ 0 miles]

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
544441	5/19/2021 - 5/19/2021		Sb-122	<4.36E+02	0.00E+00	4.36E+02
			Sb-125	<8.70E+01	0.00E+00	8.70E+01

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
544442	5/19/2021 - 5/19/2021		Mn-54	<5.14E+01	0.00E+00	5.14E+01
			Co-58	<5.37E+01	0.00E+00	5.37E+01
			Fe-59	<1.17E+02	0.00E+00	1.17E+02
			Co-60	<5.91E+01	0.00E+00	5.91E+01
			Zn-65	<1.14E+02	0.00E+00	1.14E+02
			Nb-95	<5.54E+01	0.00E+00	5.54E+01
			I-131	<9.18E+01	0.00E+00	9.18E+01
			Cs-134	<6.57E+01	0.00E+00	6.57E+01
			Cs-137	<7.23E+01	0.00E+00	7.23E+01
			Be-7	<4.04E+02	0.00E+00	4.04E+02
			K-40	4.30E+03	1.09E+03	1.03E+03
			Ag-110M	<5.16E+01	0.00E+00	5.16E+01
			Sb-122	<4.14E+02	0.00E+00	4.14E+02
Sb-125	<1.10E+02	0.00E+00	1.10E+02			

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
555019	11/10/2021 - 11/10/2021		Mn-54	<3.48E+01	0.00E+00	3.48E+01
			Co-58	<3.58E+01	0.00E+00	3.58E+01
			Fe-59	<8.34E+01	0.00E+00	8.34E+01
			Co-60	<3.94E+01	0.00E+00	3.94E+01
			Zn-65	<6.95E+01	0.00E+00	6.95E+01
			Nb-95	<3.61E+01	0.00E+00	3.61E+01
			I-131	<4.95E+01	0.00E+00	4.95E+01
			Cs-134	<3.89E+01	0.00E+00	3.89E+01
			Cs-137	<5.03E+01	0.00E+00	5.03E+01
			Be-7	<2.57E+02	0.00E+00	2.57E+02
			K-40	3.46E+03	7.65E+02	5.82E+02
			Ag-110M	<3.52E+01	0.00E+00	3.52E+01
			Sb-122	<1.61E+02	0.00E+00	1.61E+02
Sb-125	<8.02E+01	0.00E+00	8.02E+01			

Sample ID:	Sample Dates:	FREESWIM	Nuclide	Activity	2 Sigma Error	MDA
555020	11/10/2021 - 11/10/2021		Mn-54	<4.85E+01	0.00E+00	4.85E+01
			Co-58	<6.34E+01	0.00E+00	6.34E+01
			Fe-59	<1.14E+02	0.00E+00	1.14E+02
			Co-60	<7.28E+01	0.00E+00	7.28E+01
			Zn-65	<1.30E+02	0.00E+00	1.30E+02
			Nb-95	<7.26E+01	0.00E+00	7.26E+01
			I-131	<8.70E+01	0.00E+00	8.70E+01
			Cs-134	<7.22E+01	0.00E+00	7.22E+01
			Cs-137	<7.69E+01	0.00E+00	7.69E+01
			Be-7	<3.28E+02	0.00E+00	3.28E+02
			K-40	3.99E+03	1.07E+03	9.00E+02
			Ag-110M	<5.41E+01	0.00E+00	5.41E+01
			Sb-122	<3.29E+02	0.00E+00	3.29E+02
Sb-125	<1.14E+02	0.00E+00	1.14E+02			

Sample Point 47 [CONTROL - @ 0 miles]

Sample ID:	Sample Dates:	BOTMFEEDER	Nuclide	Activity	2 Sigma Error	MDA
544443	5/18/2021 - 5/18/2021		Mn-54	<5.07E+01	0.00E+00	5.07E+01
			Co-58	<4.19E+01	0.00E+00	4.19E+01
			Fe-59	<1.41E+02	0.00E+00	1.41E+02
			Co-60	<5.57E+01	0.00E+00	5.57E+01
			Zn-65	<1.33E+02	0.00E+00	1.33E+02
			Nb-95	<5.56E+01	0.00E+00	5.56E+01
			I-131	<9.55E+01	0.00E+00	9.55E+01
			Cs-134	<6.15E+01	0.00E+00	6.15E+01
			Cs-137	<6.11E+01	0.00E+00	6.11E+01
			Be-7	<5.13E+02	0.00E+00	5.13E+02
			K-40	4.47E+03	9.95E+02	6.39E+02
			Ag-110M	<5.21E+01	0.00E+00	5.21E+01
			Sb-122	<6.66E+02	0.00E+00	6.66E+02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: FISH Concentration (Activity): pCi/kg wet

Sample Point 47 [CONTROL - @ 0 miles]

Sample ID:	Sample Dates:	Location:	Nuclide	Activity	2 Sigma Error	MDA
544443	5/18/2021 - 5/18/2021	BOTMFEEDER	Sb-125	<1.44E+02	0.00E+00	1.44E+02
544444	5/18/2021 - 5/18/2021	FREESWIM	Mn-54	<3.10E+01	0.00E+00	3.10E+01
			Co-58	<4.04E+01	0.00E+00	4.04E+01
			Fe-59	<6.49E+01	0.00E+00	6.49E+01
			Co-60	<2.45E+01	0.00E+00	2.45E+01
			Zn-65	<7.49E+01	0.00E+00	7.49E+01
			Nb-95	<4.85E+01	0.00E+00	4.85E+01
			I-131	<1.10E+02	0.00E+00	1.10E+02
			Cs-134	<4.39E+01	0.00E+00	4.39E+01
			Cs-137	<5.52E+01	0.00E+00	5.52E+01
			Be-7	<2.86E+02	0.00E+00	2.86E+02
			K-40	3.54E+03	7.23E+02	6.30E+02
			Ag-110M	<3.34E+01	0.00E+00	3.34E+01
			Sb-122	<1.29E+03	0.00E+00	1.29E+03
			Sb-125	<8.03E+01	0.00E+00	8.03E+01
555021	11/10/2021 - 11/10/2021	BOTMFEEDER	Mn-54	<5.61E+01	0.00E+00	5.61E+01
			Co-58	<5.48E+01	0.00E+00	5.48E+01
			Fe-59	<1.34E+02	0.00E+00	1.34E+02
			Co-60	<7.27E+01	0.00E+00	7.27E+01
			Zn-65	<7.92E+01	0.00E+00	7.92E+01
			Nb-95	<6.81E+01	0.00E+00	6.81E+01
			I-131	<7.84E+01	0.00E+00	7.84E+01
			Cs-134	<8.43E+01	0.00E+00	8.43E+01
			Cs-137	<6.09E+01	0.00E+00	6.09E+01
			Be-7	<4.15E+02	0.00E+00	4.15E+02
			K-40	4.53E+03	1.12E+03	9.62E+02
			Ag-110M	<5.28E+01	0.00E+00	5.28E+01
			Sb-122	<3.75E+02	0.00E+00	3.75E+02
			Sb-125	<1.45E+02	0.00E+00	1.45E+02
555022	11/10/2021 - 11/10/2021	FREESWIM	Mn-54	<6.56E+01	0.00E+00	6.56E+01
			Co-58	<6.75E+01	0.00E+00	6.75E+01
			Fe-59	<1.61E+02	0.00E+00	1.61E+02
			Co-60	<7.44E+01	0.00E+00	7.44E+01
			Zn-65	<1.70E+02	0.00E+00	1.70E+02
			Nb-95	<7.40E+01	0.00E+00	7.40E+01
			I-131	<9.72E+01	0.00E+00	9.72E+01
			Cs-134	<7.94E+01	0.00E+00	7.94E+01
			Cs-137	<9.19E+01	0.00E+00	9.19E+01
			Be-7	<5.60E+02	0.00E+00	5.60E+02
			K-40	4.47E+03	1.29E+03	1.41E+03
			Ag-110M	<7.06E+01	0.00E+00	7.06E+01
			Sb-122	<4.44E+02	0.00E+00	4.44E+02
			Sb-125	<1.66E+02	0.00E+00	1.66E+02

Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 64 [INDICATOR - SE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536682	1/20/2021 - 1/20/2021	Mn-54	<5.16E+00	0.00E+00	5.16E+00
		Co-58	<5.74E+00	0.00E+00	5.74E+00
		Fe-59	<1.09E+01	0.00E+00	1.09E+01
		Co-60	<6.05E+00	0.00E+00	6.05E+00
		Zn-65	<1.33E+01	0.00E+00	1.33E+01
		Zr-95	<1.19E+01	0.00E+00	1.19E+01
		Nb-95	<6.85E+00	0.00E+00	6.85E+00
		I-131	<8.37E+00	0.00E+00	8.37E+00
		Cs-134	<6.90E+00	0.00E+00	6.90E+00
		Cs-137	<6.71E+00	0.00E+00	6.71E+00
		BaLa-140	<8.09E+00	0.00E+00	8.09E+00
		Be-7	<5.13E+01	0.00E+00	5.13E+01
		K-40	1.66E+02	6.94E+01	8.76E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: GROUND WATER Concentration (Activity): pCi/l

Sample Point 64 [INDICATOR - SE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
536682	1/20/2021 - 1/20/2021	H3GW	<-5.5E+01	0.00E+00	1.89E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542141	4/20/2021 - 4/20/2021	Mn-54	<5.73E+00	0.00E+00	5.73E+00
		Co-58	<6.26E+00	0.00E+00	6.26E+00
		Fe-59	<8.66E+00	0.00E+00	8.66E+00
		Co-60	<6.64E+00	0.00E+00	6.64E+00
		Zn-65	<1.38E+01	0.00E+00	1.38E+01
		Zr-95	<1.03E+01	0.00E+00	1.03E+01
		Nb-95	<5.92E+00	0.00E+00	5.92E+00
		I-131	<6.90E+00	0.00E+00	6.90E+00
		Cs-134	<7.05E+00	0.00E+00	7.05E+00
		Cs-137	<5.98E+00	0.00E+00	5.98E+00
		BaLa-140	<7.84E+00	0.00E+00	7.84E+00
		Be-7	<4.57E+01	0.00E+00	4.57E+01
		K-40	1.66E+02	6.67E+01	7.50E+01
		H3GW	<4.61E+01	0.00E+00	1.92E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
547619	7/14/2021 - 7/14/2021	Mn-54	<6.74E+00	0.00E+00	6.74E+00
		Co-58	<6.17E+00	0.00E+00	6.17E+00
		Fe-59	<1.22E+01	0.00E+00	1.22E+01
		Co-60	<5.09E+00	0.00E+00	5.09E+00
		Zn-65	<5.53E+00	0.00E+00	5.53E+00
		Zr-95	<8.03E+00	0.00E+00	8.03E+00
		Nb-95	<5.57E+00	0.00E+00	5.57E+00
		I-131	<8.83E+00	0.00E+00	8.83E+00
		Cs-134	<6.28E+00	0.00E+00	6.28E+00
		Cs-137	<6.55E+00	0.00E+00	6.55E+00
		BaLa-140	<8.65E+00	0.00E+00	8.65E+00
		Be-7	<4.55E+01	0.00E+00	4.55E+01
		K-40	1.41E+02	7.40E+01	1.01E+02
		H3GW	<-1.2E+02	0.00E+00	1.91E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
552688	10/5/2021 - 10/5/2021	Mn-54	<6.15E+00	0.00E+00	6.15E+00
		Co-58	<6.86E+00	0.00E+00	6.86E+00
		Fe-59	<1.12E+01	0.00E+00	1.12E+01
		Co-60	<6.30E+00	0.00E+00	6.30E+00
		Zn-65	<1.40E+01	0.00E+00	1.40E+01
		Zr-95	<8.89E+00	0.00E+00	8.89E+00
		Nb-95	<7.75E+00	0.00E+00	7.75E+00
		I-131	<9.69E+00	0.00E+00	9.69E+00
		Cs-134	<6.02E+00	0.00E+00	6.02E+00
		Cs-137	<6.78E+00	0.00E+00	6.78E+00
		BaLa-140	<6.45E+00	0.00E+00	6.45E+00
		Be-7	<4.39E+01	0.00E+00	4.39E+01
		K-40	2.06E+02	6.99E+01	6.71E+01
		H3GW	<4.60E+01	0.00E+00	1.83E+02

Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg dry

Sample Point 44 [INDICATOR - NNE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538578	1/19/2021 - 1/19/2021	Mn-54	<4.66E+01	0.00E+00	4.66E+01
		Co-58	<3.68E+01	0.00E+00	3.68E+01
		Fe-59	<7.68E+01	0.00E+00	7.68E+01
		Co-60	<3.15E+01	0.00E+00	3.15E+01
		Zn-65	<5.73E+01	0.00E+00	5.73E+01
		Zr-95	<9.06E+01	0.00E+00	9.06E+01
		Nb-95	<4.56E+01	0.00E+00	4.56E+01
		I-131	<1.12E+02	0.00E+00	1.12E+02
		Cs-134	<5.15E+01	0.00E+00	5.15E+01
		Cs-137	<5.58E+01	0.00E+00	5.58E+01
		Be-7	<3.28E+02	0.00E+00	3.28E+02
		K-40	<8.84E+02	0.00E+00	8.84E+02
		Co-57	<3.11E+01	0.00E+00	3.11E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: SEDIMENT_SHORE Concentration (Activity): pCi/kg dry

Sample Point 44 [INDICATOR - NNE @ 1.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538578	1/19/2021 - 1/19/2021	Mo-99	<1.31E+04	0.00E+00	1.31E+04
		Ag-110M	<4.35E+01	0.00E+00	4.35E+01
		Sb-122	<1.77E+03	0.00E+00	1.77E+03
		Sb-125	<1.10E+02	0.00E+00	1.10E+02

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 40 [INDICATOR - ESE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537239	12/29/2020 - 1/26/2021	Mn-54	<3.96E+00	0.00E+00	3.96E+00
		Co-58	<2.95E+00	0.00E+00	2.95E+00
		Fe-59	<7.49E+00	0.00E+00	7.49E+00
		Co-60	<3.25E+00	0.00E+00	3.25E+00
		Zn-65	<6.00E+00	0.00E+00	6.00E+00
		Zr-95	<6.64E+00	0.00E+00	6.64E+00
		Nb-95	<4.72E+00	0.00E+00	4.72E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<4.25E+00	0.00E+00	4.25E+00
		Cs-137	<3.85E+00	0.00E+00	3.85E+00
		BaLa-140	<8.71E+00	0.00E+00	8.71E+00
		Be-7	<3.46E+01	0.00E+00	3.46E+01
		K-40	<7.56E+01	0.00E+00	7.56E+01
		H3SW	1.22E+03	1.44E+02	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538579	1/26/2021 - 2/23/2021	Mn-54	<2.39E+00	0.00E+00	2.39E+00
		Co-58	<2.67E+00	0.00E+00	2.67E+00
		Fe-59	<6.22E+00	0.00E+00	6.22E+00
		Co-60	<2.26E+00	0.00E+00	2.26E+00
		Zn-65	<5.76E+00	0.00E+00	5.76E+00
		Zr-95	<5.01E+00	0.00E+00	5.01E+00
		Nb-95	<3.13E+00	0.00E+00	3.13E+00
		I-131	<1.06E+01	0.00E+00	1.06E+01
		Cs-134	<2.91E+00	0.00E+00	2.91E+00
		Cs-137	<2.94E+00	0.00E+00	2.94E+00
		BaLa-140	<6.15E+00	0.00E+00	6.15E+00
		Be-7	<2.27E+01	0.00E+00	2.27E+01
		K-40	1.16E+02	3.11E+01	3.14E+01
		H3SW	6.68E+02	1.24E+02	1.78E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540504	2/23/2021 - 3/30/2021	Mn-54	<1.28E+00	0.00E+00	1.28E+00
		Co-58	<1.61E+00	0.00E+00	1.61E+00
		Fe-59	<3.21E+00	0.00E+00	3.21E+00
		Co-60	<1.21E+00	0.00E+00	1.21E+00
		Zn-65	<2.71E+00	0.00E+00	2.71E+00
		Zr-95	<2.86E+00	0.00E+00	2.86E+00
		Nb-95	<2.02E+00	0.00E+00	2.02E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<1.52E+00	0.00E+00	1.52E+00
		Cs-137	<1.38E+00	0.00E+00	1.38E+00
		BaLa-140	<4.36E+00	0.00E+00	4.36E+00
		Be-7	<1.30E+01	0.00E+00	1.30E+01
		K-40	8.66E+01	1.77E+01	2.08E+01
		H3SW	2.71E+02	1.15E+02	1.82E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542802	3/30/2021 - 4/27/2021	Mn-54	<3.41E+00	0.00E+00	3.41E+00
		Co-58	<3.03E+00	0.00E+00	3.03E+00
		Fe-59	<8.37E+00	0.00E+00	8.37E+00
		Co-60	<2.88E+00	0.00E+00	2.88E+00
		Zn-65	<6.07E+00	0.00E+00	6.07E+00
		Zr-95	<7.91E+00	0.00E+00	7.91E+00
		Nb-95	<4.87E+00	0.00E+00	4.87E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<4.10E+00	0.00E+00	4.10E+00
		Cs-137	<3.50E+00	0.00E+00	3.50E+00

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 40 [INDICATOR - ESE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542802	3/30/2021 - 4/27/2021	BaLa-140	<8.25E+00	0.00E+00	8.25E+00
		Be-7	<2.81E+01	0.00E+00	2.81E+01
		K-40	7.63E+01	3.75E+01	4.97E+01
		H3SW	1.92E+02	1.17E+02	1.91E+02
544490	4/27/2021 - 5/25/2021	Mn-54	<2.19E+00	0.00E+00	2.19E+00
		Co-58	<2.31E+00	0.00E+00	2.31E+00
		Fe-59	<5.95E+00	0.00E+00	5.95E+00
		Co-60	<1.82E+00	0.00E+00	1.82E+00
		Zn-65	<5.37E+00	0.00E+00	5.37E+00
		Zr-95	<5.03E+00	0.00E+00	5.03E+00
		Nb-95	<3.26E+00	0.00E+00	3.26E+00
		I-131	<9.15E+00	0.00E+00	9.15E+00
		Cs-134	<2.43E+00	0.00E+00	2.43E+00
		Cs-137	<2.50E+00	0.00E+00	2.49E+00
		BaLa-140	<6.12E+00	0.00E+00	6.12E+00
		Be-7	<2.51E+01	0.00E+00	2.51E+01
		K-40	1.37E+02	3.42E+01	3.60E+01
		H3SW	<1.82E+02	0.00E+00	1.95E+02
546433	5/25/2021 - 6/29/2021	Mn-54	<2.04E+00	0.00E+00	2.04E+00
		Co-58	<2.51E+00	0.00E+00	2.51E+00
		Fe-59	<4.79E+00	0.00E+00	4.79E+00
		Co-60	<2.11E+00	0.00E+00	2.11E+00
		Zn-65	<4.66E+00	0.00E+00	4.66E+00
		Zr-95	<4.31E+00	0.00E+00	4.31E+00
		Nb-95	<2.89E+00	0.00E+00	2.89E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.67E+00	0.00E+00	2.67E+00
		Cs-137	<2.52E+00	0.00E+00	2.52E+00
		BaLa-140	<6.20E+00	0.00E+00	6.20E+00
		Be-7	<2.23E+01	0.00E+00	2.23E+01
		K-40	7.36E+01	2.18E+01	2.42E+01
		H3SW	<7.09E+01	0.00E+00	2.02E+02
549175	6/29/2021 - 7/27/2021	Mn-54	<3.29E+00	0.00E+00	3.29E+00
		Co-58	<2.99E+00	0.00E+00	2.99E+00
		Fe-59	<6.59E+00	0.00E+00	6.59E+00
		Co-60	<3.34E+00	0.00E+00	3.34E+00
		Zn-65	<6.39E+00	0.00E+00	6.39E+00
		Zr-95	<5.68E+00	0.00E+00	5.68E+00
		Nb-95	<3.71E+00	0.00E+00	3.71E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<3.65E+00	0.00E+00	3.65E+00
		Cs-137	<2.32E+00	0.00E+00	2.32E+00
		BaLa-140	<8.02E+00	0.00E+00	8.02E+00
		Be-7	1.53E+01	2.20E+01	3.66E+01
		K-40	8.55E+01	3.46E+01	4.21E+01
		H3SW	2.56E+02	1.18E+02	1.90E+02
551064	7/27/2021 - 8/30/2021	Mn-54	<2.89E+00	0.00E+00	2.89E+00
		Co-58	<3.09E+00	0.00E+00	3.09E+00
		Fe-59	<7.11E+00	0.00E+00	7.11E+00
		Co-60	<2.65E+00	0.00E+00	2.65E+00
		Zn-65	<5.34E+00	0.00E+00	5.34E+00
		Zr-95	<5.50E+00	0.00E+00	5.50E+00
		Nb-95	<4.16E+00	0.00E+00	4.16E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.20E+00	0.00E+00	3.20E+00
		Cs-137	<2.99E+00	0.00E+00	2.99E+00
		BaLa-140	<7.91E+00	0.00E+00	7.91E+00
		Be-7	<2.84E+01	0.00E+00	2.84E+01
		K-40	1.00E+02	3.24E+01	3.64E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 40 [INDICATOR - ESE @ 0.6 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551064	7/27/2021 - 8/30/2021	H3SW	1.24E+03	1.42E+02	1.80E+02
553016	8/30/2021 - 9/28/2021	Mn-54	<2.44E+00	0.00E+00	2.44E+00
		Co-58	<2.65E+00	0.00E+00	2.65E+00
		Fe-59	<6.87E+00	0.00E+00	6.87E+00
		Co-60	<2.88E+00	0.00E+00	2.88E+00
		Zn-65	<6.17E+00	0.00E+00	6.17E+00
		Zr-95	<4.98E+00	0.00E+00	4.98E+00
		Nb-95	<3.18E+00	0.00E+00	3.18E+00
		I-131	<1.12E+01	0.00E+00	1.12E+01
		Cs-134	<2.55E+00	0.00E+00	2.55E+00
		Cs-137	<2.84E+00	0.00E+00	2.84E+00
		BaLa-140	<8.09E+00	0.00E+00	8.09E+00
		Be-7	<2.77E+01	0.00E+00	2.77E+01
		K-40	9.69E+01	3.38E+01	4.07E+01
		H3SW	2.03E+03	1.61E+02	1.77E+02
554876	9/28/2021 - 10/26/2021	Mn-54	<4.08E+00	0.00E+00	4.08E+00
		Co-58	<4.09E+00	0.00E+00	4.09E+00
		Fe-59	<7.01E+00	0.00E+00	7.01E+00
		Co-60	<3.92E+00	0.00E+00	3.92E+00
		Zn-65	<6.13E+00	0.00E+00	6.13E+00
		Zr-95	<6.82E+00	0.00E+00	6.82E+00
		Nb-95	<4.73E+00	0.00E+00	4.73E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<4.31E+00	0.00E+00	4.31E+00
		Cs-137	<3.67E+00	0.00E+00	3.67E+00
		BaLa-140	<8.57E+00	0.00E+00	8.57E+00
		Be-7	<3.02E+01	0.00E+00	3.02E+01
		K-40	7.56E+01	3.50E+01	4.28E+01
		H3SW	1.93E+03	1.60E+02	1.78E+02
557448	10/26/2021 - 11/30/2021	Mn-54	<1.83E+00	0.00E+00	1.83E+00
		Co-58	<2.07E+00	0.00E+00	2.07E+00
		Fe-59	<5.24E+00	0.00E+00	5.24E+00
		Co-60	<2.07E+00	0.00E+00	2.07E+00
		Zn-65	<3.34E+00	0.00E+00	3.34E+00
		Zr-95	<3.93E+00	0.00E+00	3.93E+00
		Nb-95	<3.00E+00	0.00E+00	3.00E+00
		I-131	<1.13E+01	0.00E+00	1.13E+01
		Cs-134	<2.12E+00	0.00E+00	2.12E+00
		Cs-137	<2.29E+00	0.00E+00	2.29E+00
		BaLa-140	<3.52E+00	0.00E+00	3.52E+00
		Be-7	<1.84E+01	0.00E+00	1.84E+01
		K-40	5.85E+01	2.20E+01	2.84E+01
		H3SW	5.57E+03	2.29E+02	1.79E+02
559009	11/30/2021 - 12/28/2021	Mn-54	<2.04E+00	0.00E+00	2.04E+00
		Co-58	<2.39E+00	0.00E+00	2.39E+00
		Fe-59	<4.99E+00	0.00E+00	4.99E+00
		Co-60	<1.85E+00	0.00E+00	1.85E+00
		Zn-65	<4.61E+00	0.00E+00	4.61E+00
		Zr-95	<4.26E+00	0.00E+00	4.26E+00
		Nb-95	<3.10E+00	0.00E+00	3.10E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<2.50E+00	0.00E+00	2.50E+00
		Cs-137	<2.04E+00	0.00E+00	2.04E+00
		BaLa-140	<7.00E+00	0.00E+00	7.00E+00
		Be-7	<1.97E+01	0.00E+00	1.97E+01
		K-40	8.99E+01	2.50E+01	2.82E+01
		H3SW	6.81E+03	2.47E+02	1.75E+02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 41 [CONTROL - N @ 8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
537240	12/29/2020 - 1/26/2021	Mn-54	<2.75E+00	0.00E+00	2.75E+00
		Co-58	<2.90E+00	0.00E+00	2.90E+00
		Fe-59	<6.06E+00	0.00E+00	6.06E+00
		Co-60	<3.09E+00	0.00E+00	3.09E+00
		Zn-65	<6.41E+00	0.00E+00	6.41E+00
		Zr-95	<4.86E+00	0.00E+00	4.86E+00
		Nb-95	<4.22E+00	0.00E+00	4.22E+00
		I-131	<1.10E+01	0.00E+00	1.10E+01
		Cs-134	<4.01E+00	0.00E+00	4.01E+00
		Cs-137	<3.13E+00	0.00E+00	3.13E+00
		BaLa-140	<7.69E+00	0.00E+00	7.69E+00
		Be-7	<2.24E+01	0.00E+00	2.24E+01
		K-40	7.71E+00	2.22E+01	3.98E+01
		H3SW	<-6.1E+01	0.00E+00	1.86E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
538580	1/26/2021 - 2/23/2021	Mn-54	<2.16E+00	0.00E+00	2.16E+00
		Co-58	<2.64E+00	0.00E+00	2.64E+00
		Fe-59	<5.42E+00	0.00E+00	5.42E+00
		Co-60	<2.38E+00	0.00E+00	2.38E+00
		Zn-65	<6.06E+00	0.00E+00	6.06E+00
		Zr-95	<6.04E+00	0.00E+00	6.04E+00
		Nb-95	<3.94E+00	0.00E+00	3.94E+00
		I-131	<1.08E+01	0.00E+00	1.08E+01
		Cs-134	<2.84E+00	0.00E+00	2.84E+00
		Cs-137	<2.96E+00	0.00E+00	2.96E+00
		BaLa-140	<3.80E+00	0.00E+00	3.80E+00
		Be-7	<2.63E+01	0.00E+00	2.63E+01
		K-40	5.02E+01	3.26E+01	4.81E+01
		H3SW	<6.75E+00	0.00E+00	1.76E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
540505	2/23/2021 - 3/30/2021	Mn-54	<1.39E+00	0.00E+00	1.39E+00
		Co-58	<1.55E+00	0.00E+00	1.55E+00
		Fe-59	<3.15E+00	0.00E+00	3.15E+00
		Co-60	<1.18E+00	0.00E+00	1.18E+00
		Zn-65	<2.59E+00	0.00E+00	2.59E+00
		Zr-95	<3.08E+00	0.00E+00	3.08E+00
		Nb-95	<2.13E+00	0.00E+00	2.13E+00
		I-131	<1.04E+01	0.00E+00	1.04E+01
		Cs-134	<1.46E+00	0.00E+00	1.46E+00
		Cs-137	<1.50E+00	0.00E+00	1.50E+00
		BaLa-140	<4.21E+00	0.00E+00	4.21E+00
		Be-7	<1.43E+01	0.00E+00	1.43E+01
		K-40	8.15E+01	1.62E+01	1.69E+01
		H3SW	<-3.1E+01	0.00E+00	1.83E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
542803	3/30/2021 - 4/27/2021	Mn-54	<3.58E+00	0.00E+00	3.58E+00
		Co-58	<3.73E+00	0.00E+00	3.73E+00
		Fe-59	<6.56E+00	0.00E+00	6.56E+00
		Co-60	<2.92E+00	0.00E+00	2.92E+00
		Zn-65	<4.42E+00	0.00E+00	4.42E+00
		Zr-95	<6.61E+00	0.00E+00	6.61E+00
		Nb-95	<4.76E+00	0.00E+00	4.76E+00
		I-131	<1.15E+01	0.00E+00	1.15E+01
		Cs-134	<3.63E+00	0.00E+00	3.63E+00
		Cs-137	<3.74E+00	0.00E+00	3.74E+00
		BaLa-140	<7.78E+00	0.00E+00	7.78E+00
		Be-7	<3.42E+01	0.00E+00	3.42E+01
		K-40	9.74E+01	3.96E+01	4.81E+01
		H3SW	<-4.8E+00	0.00E+00	1.89E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544491	4/27/2021 - 5/25/2021	Mn-54	<3.06E+00	0.00E+00	3.06E+00
		Co-58	<3.87E+00	0.00E+00	3.87E+00
		Fe-59	<6.60E+00	0.00E+00	6.60E+00

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 41 [CONTROL - N @ 8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
544491	4/27/2021 - 5/25/2021	Co-60	<3.36E+00	0.00E+00	3.36E+00
		Zn-65	<5.70E+00	0.00E+00	5.70E+00
		Zr-95	<6.30E+00	0.00E+00	6.30E+00
		Nb-95	<3.25E+00	0.00E+00	3.25E+00
		I-131	<1.18E+01	0.00E+00	1.18E+01
		Cs-134	<2.82E+00	0.00E+00	2.82E+00
		Cs-137	<3.39E+00	0.00E+00	3.39E+00
		BaLa-140	<7.86E+00	0.00E+00	7.86E+00
		Be-7	<3.13E+01	0.00E+00	3.13E+01
		K-40	6.23E+01	3.59E+01	5.19E+01
		H3SW	<-3.9E+01	0.00E+00	1.95E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
546434	5/25/2021 - 6/29/2021	Mn-54	<2.60E+00	0.00E+00	2.60E+00
		Co-58	<2.86E+00	0.00E+00	2.86E+00
		Fe-59	<4.07E+00	0.00E+00	4.07E+00
		Co-60	<2.68E+00	0.00E+00	2.68E+00
		Zn-65	<4.70E+00	0.00E+00	4.70E+00
		Zr-95	<4.90E+00	0.00E+00	4.90E+00
		Nb-95	<3.20E+00	0.00E+00	3.20E+00
		I-131	<1.17E+01	0.00E+00	1.17E+01
		Cs-134	<2.71E+00	0.00E+00	2.71E+00
		Cs-137	<2.89E+00	0.00E+00	2.89E+00
		BaLa-140	<8.17E+00	0.00E+00	8.17E+00
		Be-7	<2.43E+01	0.00E+00	2.43E+01
		K-40	9.64E+01	2.82E+01	2.93E+01
H3SW	<-1.1E+02	0.00E+00	2.02E+02		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
549176	6/29/2021 - 7/27/2021	Mn-54	<2.02E+00	0.00E+00	2.02E+00
		Co-58	<3.65E+00	0.00E+00	3.65E+00
		Fe-59	<7.73E+00	0.00E+00	7.73E+00
		Co-60	<2.93E+00	0.00E+00	2.93E+00
		Zn-65	<6.55E+00	0.00E+00	6.55E+00
		Zr-95	<6.26E+00	0.00E+00	6.26E+00
		Nb-95	<3.67E+00	0.00E+00	3.67E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<3.98E+00	0.00E+00	3.98E+00
		Cs-137	<2.73E+00	0.00E+00	2.73E+00
		BaLa-140	<6.71E+00	0.00E+00	6.71E+00
		Be-7	<2.82E+01	0.00E+00	2.82E+01
		K-40	<5.09E+01	0.00E+00	5.09E+01
H3SW	<-7.3E+01	0.00E+00	1.91E+02		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
551065	7/27/2021 - 8/30/2021	Mn-54	<2.05E+00	0.00E+00	2.05E+00
		Co-58	<1.93E+00	0.00E+00	1.93E+00
		Fe-59	<5.44E+00	0.00E+00	5.44E+00
		Co-60	<2.14E+00	0.00E+00	2.14E+00
		Zn-65	<3.73E+00	0.00E+00	3.73E+00
		Zr-95	<3.61E+00	0.00E+00	3.61E+00
		Nb-95	<2.97E+00	0.00E+00	2.97E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<1.72E+00	0.00E+00	1.72E+00
		Cs-137	<2.35E+00	0.00E+00	2.35E+00
		BaLa-140	<6.82E+00	0.00E+00	6.82E+00
		Be-7	<2.28E+01	0.00E+00	2.28E+01
		K-40	8.84E+01	2.78E+01	3.41E+01
H3SW	<4.24E+01	0.00E+00	1.80E+02		

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553017	8/30/2021 - 9/28/2021	Mn-54	<2.44E+00	0.00E+00	2.44E+00
		Co-58	<4.44E+00	0.00E+00	4.44E+00
		Fe-59	<6.94E+00	0.00E+00	6.94E+00
		Co-60	<3.35E+00	0.00E+00	3.35E+00
		Zn-65	<5.77E+00	0.00E+00	5.77E+00
		Zr-95	<6.32E+00	0.00E+00	6.32E+00

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: SURFACE WATER Concentration (Activity): pCi/l

Sample Point 41 [CONTROL - N @ 8 miles]

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
553017	8/30/2021 - 9/28/2021	Nb-95	<3.78E+00	0.00E+00	3.78E+00
		I-131	<1.20E+01	0.00E+00	1.20E+01
		Cs-134	<2.89E+00	0.00E+00	2.89E+00
		Cs-137	<3.54E+00	0.00E+00	3.54E+00
		BaLa-140	<8.31E+00	0.00E+00	8.31E+00
		Be-7	<3.49E+01	0.00E+00	3.49E+01
		K-40	9.55E+01	3.32E+01	3.74E+01
		H3SW	<-4.7E+00	0.00E+00	1.77E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
554877	9/28/2021 - 10/26/2021	Mn-54	<2.77E+00	0.00E+00	2.77E+00
		Co-58	<2.96E+00	0.00E+00	2.96E+00
		Fe-59	<6.26E+00	0.00E+00	6.26E+00
		Co-60	<2.10E+00	0.00E+00	2.10E+00
		Zn-65	<5.15E+00	0.00E+00	5.15E+00
		Zr-95	<5.77E+00	0.00E+00	5.77E+00
		Nb-95	<3.72E+00	0.00E+00	3.72E+00
		I-131	<1.07E+01	0.00E+00	1.07E+01
		Cs-134	<2.95E+00	0.00E+00	2.95E+00
		Cs-137	<2.88E+00	0.00E+00	2.88E+00
		BaLa-140	<5.86E+00	0.00E+00	5.86E+00
		Be-7	<2.47E+01	0.00E+00	2.47E+01
		K-40	8.30E+01	2.81E+01	3.04E+01
		H3SW	<5.79E+01	0.00E+00	1.78E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
557449	10/26/2021 - 11/30/2021	Mn-54	<2.01E+00	0.00E+00	2.01E+00
		Co-58	<2.16E+00	0.00E+00	2.16E+00
		Fe-59	<4.31E+00	0.00E+00	4.31E+00
		Co-60	<1.79E+00	0.00E+00	1.79E+00
		Zn-65	<3.95E+00	0.00E+00	3.95E+00
		Zr-95	<4.32E+00	0.00E+00	4.32E+00
		Nb-95	<2.98E+00	0.00E+00	2.98E+00
		I-131	<1.19E+01	0.00E+00	1.19E+01
		Cs-134	<2.50E+00	0.00E+00	2.50E+00
		Cs-137	<2.16E+00	0.00E+00	2.16E+00
		BaLa-140	<5.76E+00	0.00E+00	5.76E+00
		Be-7	<2.35E+01	0.00E+00	2.35E+01
		K-40	8.10E+01	2.38E+01	2.83E+01
		H3SW	<2.35E+00	0.00E+00	1.79E+02

Sample ID:	Sample Dates:	Nuclide	Activity	2 Sigma Error	MDA
559018	11/30/2021 - 12/28/2021	Mn-54	<1.59E+00	0.00E+00	1.59E+00
		Co-58	<1.69E+00	0.00E+00	1.69E+00
		Fe-59	<3.90E+00	0.00E+00	3.90E+00
		Co-60	<1.59E+00	0.00E+00	1.59E+00
		Zn-65	<3.15E+00	0.00E+00	3.15E+00
		Zr-95	<3.23E+00	0.00E+00	3.23E+00
		Nb-95	<2.57E+00	0.00E+00	2.57E+00
		I-131	<9.23E+00	0.00E+00	9.23E+00
		Cs-134	<1.90E+00	0.00E+00	1.90E+00
		Cs-137	<1.68E+00	0.00E+00	1.68E+00
		BaLa-140	<5.58E+00	0.00E+00	5.58E+00
		Be-7	<1.61E+01	0.00E+00	1.61E+01
		K-40	6.46E+01	2.16E+01	2.86E+01
		H3SW	<1.40E+01	0.00E+00	1.76E+02

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

TLD RING TLD_CTRL

Sample ID:	Sample Dates:	Nuclide	Activity
537164	1/12/2021 - 4/13/2021	mR/Std Qtr	21.65

Sample ID:	Sample Dates:	Nuclide	Activity
542635	4/13/2021 - 7/15/2021	mR/Std Qtr	17.42

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 1 [CONTROL - ESE @ 24.4 miles]

TLD RING TLD_CTRL

Sample ID:	547942	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	15.84

Sample ID:	553107	Sample Dates:	10/14/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	18.98

Sample Point 2 [INDICATOR - S @ 0.2 miles] TLD RING TLD_INNER

Sample ID:	537174	Sample Dates:	1/12/2021 - 4/13/2021	Nuclide	Activity
				mR/Std Qtr	16.38

Sample ID:	542645	Sample Dates:	4/13/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	14.20

Sample ID:	547952	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.24

Sample ID:	553117	Sample Dates:	10/14/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	16.74

Sample Point 3 [INDICATOR - N @ 0.5 miles] TLD RING TLD_INNER

Sample ID:	537185	Sample Dates:	1/12/2021 - 4/13/2021	Nuclide	Activity
				mR/Std Qtr	16.86

Sample ID:	542656	Sample Dates:	4/13/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	14.90

Sample ID:	547963	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.17

Sample ID:	553128	Sample Dates:	10/14/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	16.17

Sample Point 4 [INDICATOR - ESE @ 0.4 miles] TLD RING TLD_INNER

Sample ID:	537196	Sample Dates:	1/12/2021 - 4/13/2021	Nuclide	Activity
				mR/Std Qtr	14.08

Sample ID:	542667	Sample Dates:	4/13/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	11.64

Sample ID:	547974	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	11.05

Sample ID:	553139	Sample Dates:	10/14/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	13.86

Sample Point 5 [INDICATOR - ENE @ 0.9 miles] TLD RING TLD_INNER

Sample ID:	537197	Sample Dates:	1/12/2021 - 4/13/2021	Nuclide	Activity
				mR/Std Qtr	16.38

Sample ID:	542668	Sample Dates:	4/13/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	14.20

Sample ID:	547975	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	13.05

Sample ID:	553140	Sample Dates:	10/14/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	15.72

Sample Point 6 [INDICATOR - SSW @ 0.2 miles] TLD RING TLD_INNER

Sample ID:	537200	Sample Dates:	1/12/2021 - 4/13/2021	Nuclide	Activity
				mR/Std Qtr	18.74

Sample ID:	542671	Sample Dates:	4/13/2021 - 7/15/2021	Nuclide	Activity
				mR/Std Qtr	15.85

Sample ID:	547978	Sample Dates:	7/15/2021 - 10/14/2021	Nuclide	Activity
				mR/Std Qtr	15.36

Sample ID:	553143	Sample Dates:	10/14/2021 - 1/13/2022	Nuclide	Activity
				mR/Std Qtr	17.16

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 7 [INDICATOR - ESE @ 6.4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537203	1/12/2021 - 4/13/2021	mR/Std Qtr	16.35
542674	4/13/2021 - 7/15/2021	mR/Std Qtr	14.82
547981	7/15/2021 - 10/14/2021	mR/Std Qtr	15.02
553146	10/14/2021 - 1/13/2022	mR/Std Qtr	17.59

Sample Point 9 [INDICATOR - S @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537206	1/12/2021 - 4/13/2021	mR/Std Qtr	13.84
542677	4/13/2021 - 7/15/2021	mR/Std Qtr	11.62
547984	7/15/2021 - 10/14/2021	mR/Std Qtr	11.92
553149	10/14/2021 - 1/13/2022	mR/Std Qtr	15.46

Sample Point 10 [INDICATOR - WSW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537165	1/12/2021 - 4/13/2021	mR/Std Qtr	15.26
542636	4/13/2021 - 7/15/2021	mR/Std Qtr	13.18
547943	7/15/2021 - 10/14/2021	mR/Std Qtr	12.03
553108	10/14/2021 - 1/13/2022	mR/Std Qtr	16.84

Sample Point 11 [INDICATOR - SW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537166	1/12/2021 - 4/13/2021	mR/Std Qtr	12.91
542637	4/13/2021 - 7/15/2021	mR/Std Qtr	12.72
547944	7/15/2021 - 10/14/2021	mR/Std Qtr	10.59
553109	10/14/2021 - 1/13/2022	mR/Std Qtr	14.77

Sample Point 13 [INDICATOR - W @ 0.7 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537167	1/12/2021 - 4/13/2021	mR/Std Qtr	16.25
542638	4/13/2021 - 7/15/2021	mR/Std Qtr	15.58
547945	7/15/2021 - 10/14/2021	mR/Std Qtr	14.82
553110	10/14/2021 - 1/13/2022	mR/Std Qtr	17.62

Sample Point 14 [INDICATOR - WNW @ 0.8 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537168	1/12/2021 - 4/13/2021	mR/Std Qtr	19.92
542639	4/13/2021 - 7/15/2021	mR/Std Qtr	17.32

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 14 [INDICATOR - WNW @ 0.8 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
547946	7/15/2021 - 10/14/2021	mR/Std Qtr	15.56
553111	10/14/2021 - 1/13/2022	mR/Std Qtr	20.06

Sample Point 15 [INDICATOR - NW @ 0.7 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537169	1/12/2021 - 4/13/2021	mR/Std Qtr	15.78
542640	4/13/2021 - 7/15/2021	mR/Std Qtr	13.45
547947	7/15/2021 - 10/14/2021	mR/Std Qtr	11.95
553112	10/14/2021 - 1/13/2022	mR/Std Qtr	15.13

Sample Point 16 [INDICATOR - NNW @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537170	1/12/2021 - 4/13/2021	mR/Std Qtr	17.41
542641	4/13/2021 - 7/15/2021	mR/Std Qtr	14.35
547948	7/15/2021 - 10/14/2021	mR/Std Qtr	12.32
553113	10/14/2021 - 1/13/2022	mR/Std Qtr	17.61

Sample Point 17 [INDICATOR - N @ 1.2 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537171	1/12/2021 - 4/13/2021	mR/Std Qtr	20.78
542642	4/13/2021 - 7/15/2021	mR/Std Qtr	18.48
547949	7/15/2021 - 10/14/2021	mR/Std Qtr	16.17
553114	10/14/2021 - 1/13/2022	mR/Std Qtr	19.23

Sample Point 18 [INDICATOR - SE @ 0.7 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537172	1/12/2021 - 4/13/2021	mR/Std Qtr	19.08
542643	4/13/2021 - 7/15/2021	mR/Std Qtr	17.07
547950	7/15/2021 - 10/14/2021	mR/Std Qtr	16.22
553115	10/14/2021 - 1/13/2022	mR/Std Qtr	19.31

Sample Point 19 [INDICATOR - E @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537173	1/12/2021 - 4/13/2021	mR/Std Qtr	16.56
542644	4/13/2021 - 7/15/2021	mR/Std Qtr	14.71
547951	7/15/2021 - 10/14/2021	mR/Std Qtr	14.09
553116	10/14/2021 - 1/13/2022	mR/Std Qtr	16.63

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 20 [INDICATOR - ENE @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537175	1/12/2021 - 4/13/2021	mR/Std Qtr	15.76
542646	4/13/2021 - 7/15/2021	mR/Std Qtr	14.16
547953	7/15/2021 - 10/14/2021	mR/Std Qtr	14.17
553118	10/14/2021 - 1/13/2022	mR/Std Qtr	16.53

Sample Point 21 [INDICATOR - NE @ 1.4 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537176	1/12/2021 - 4/13/2021	mR/Std Qtr	15.96
542647	4/13/2021 - 7/15/2021	mR/Std Qtr	12.66
547954	7/15/2021 - 10/14/2021	mR/Std Qtr	12.7
553119	10/14/2021 - 1/13/2022	mR/Std Qtr	15.03

Sample Point 22 [INDICATOR - NNE @ 1.7 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537177	1/12/2021 - 4/13/2021	mR/Std Qtr	17.82
542648	4/13/2021 - 7/15/2021	mR/Std Qtr	14.89
547955	7/15/2021 - 10/14/2021	mR/Std Qtr	14
553120	10/14/2021 - 1/13/2022	mR/Std Qtr	16.90

Sample Point 23 [INDICATOR - ESE @ 1 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537178	1/12/2021 - 4/13/2021	mR/Std Qtr	18.94
542649	4/13/2021 - 7/15/2021	mR/Std Qtr	16.64
547956	7/15/2021 - 10/14/2021	mR/Std Qtr	14.77
553121	10/14/2021 - 1/13/2022	mR/Std Qtr	19.39

Sample Point 24 [INDICATOR - NW @ 4.6 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537179	1/12/2021 - 4/13/2021	mR/Std Qtr	20.78
542650	4/13/2021 - 7/15/2021	mR/Std Qtr	17.75
547957	7/15/2021 - 10/14/2021	mR/Std Qtr	16.59
553122	10/14/2021 - 1/13/2022	mR/Std Qtr	19.61

Sample Point 25 [INDICATOR - NNW @ 4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537180	1/12/2021 - 4/13/2021	mR/Std Qtr	17.52
542651	4/13/2021 - 7/15/2021	mR/Std Qtr	14.82

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 25 [INDICATOR - NNW @ 4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
547958	7/15/2021 - 10/14/2021	mR/Std Qtr	15.7
553123	10/14/2021 - 1/13/2022	mR/Std Qtr	16.40

Sample Point 26 [INDICATOR - N @ 5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537181	1/12/2021 - 4/13/2021	mR/Std Qtr	18.19
542652	4/13/2021 - 7/15/2021	mR/Std Qtr	12.98
547959	7/15/2021 - 10/14/2021	mR/Std Qtr	13.5
553124	10/14/2021 - 1/13/2022	mR/Std Qtr	16.53

Sample Point 27 [INDICATOR - NNE @ 5.4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537182	1/12/2021 - 4/13/2021	mR/Std Qtr	14.83
542653	4/13/2021 - 7/15/2021	mR/Std Qtr	13.23
547960	7/15/2021 - 10/14/2021	mR/Std Qtr	12.5
553125	10/14/2021 - 1/13/2022	mR/Std Qtr	15.24

Sample Point 28 [INDICATOR - NE @ 4.3 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537183	1/12/2021 - 4/13/2021	mR/Std Qtr	19.86
542654	4/13/2021 - 7/15/2021	mR/Std Qtr	17.88
547961	7/15/2021 - 10/14/2021	mR/Std Qtr	15.86
553126	10/14/2021 - 1/13/2022	mR/Std Qtr	20.55

Sample Point 29 [INDICATOR - ENE @ 4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537184	1/12/2021 - 4/13/2021	mR/Std Qtr	14.17
542655	4/13/2021 - 7/15/2021	mR/Std Qtr	11.15
547962	7/15/2021 - 10/14/2021	mR/Std Qtr	11.65
553127	10/14/2021 - 1/13/2022	mR/Std Qtr	14.36

Sample Point 30 [INDICATOR - E @ 4.4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537186	1/12/2021 - 4/13/2021	mR/Std Qtr	19.27
542657	4/13/2021 - 7/15/2021	mR/Std Qtr	16.08
547964	7/15/2021 - 10/14/2021	mR/Std Qtr	15.58
553129	10/14/2021 - 1/13/2022	mR/Std Qtr	18.07

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 31 [INDICATOR - ESE @ 4.6 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537187	1/12/2021 - 4/13/2021	mR/Std Qtr	18.87
542658	4/13/2021 - 7/15/2021	mR/Std Qtr	16.24
547965	7/15/2021 - 10/14/2021	mR/Std Qtr	14.98
553130	10/14/2021 - 1/13/2022	mR/Std Qtr	17.47

Sample Point 32 [INDICATOR - SE @ 4 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537188	1/12/2021 - 4/13/2021	mR/Std Qtr	18.65
542659	4/13/2021 - 7/15/2021	mR/Std Qtr	17.36
547966	7/15/2021 - 10/14/2021	mR/Std Qtr	15.51
553131	10/14/2021 - 1/13/2022	mR/Std Qtr	19.01

Sample Point 33 [INDICATOR - SSE @ 4.5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537189	1/12/2021 - 4/13/2021	mR/Std Qtr	18.21
542660	4/13/2021 - 7/15/2021	mR/Std Qtr	16.82
547967	7/15/2021 - 10/14/2021	mR/Std Qtr	14.73
553132	10/14/2021 - 1/13/2022	mR/Std Qtr	19.34

Sample Point 34 [INDICATOR - S @ 4.7 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537190	1/12/2021 - 4/13/2021	mR/Std Qtr	12.95
542661	4/13/2021 - 7/15/2021	mR/Std Qtr	11.78
547968	7/15/2021 - 10/14/2021	mR/Std Qtr	11.38
553133	10/14/2021 - 1/13/2022	mR/Std Qtr	13.41

Sample Point 35 [INDICATOR - SSW @ 4.5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537191	1/12/2021 - 4/13/2021	mR/Std Qtr	22.30
542662	4/13/2021 - 7/15/2021	mR/Std Qtr	21.56
547969	7/15/2021 - 10/14/2021	mR/Std Qtr	20.69
553134	10/14/2021 - 1/13/2022	mR/Std Qtr	22.83

Sample Point 36 [INDICATOR - SW @ 5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537192	1/12/2021 - 4/13/2021	mR/Std Qtr	22.23
542663	4/13/2021 - 7/15/2021	mR/Std Qtr	20.14

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Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 36 [INDICATOR - SW @ 5 miles]

TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
547970	7/15/2021 - 10/14/2021	mR/Std Qtr	18.63

Sample ID:	Sample Dates:	Nuclide	Activity
553135	10/14/2021 - 1/13/2022	mR/Std Qtr	23.14

Sample Point 37 [INDICATOR - WSW @ 5 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537193	1/12/2021 - 4/13/2021	mR/Std Qtr	23.16

Sample ID:	Sample Dates:	Nuclide	Activity
542664	4/13/2021 - 7/15/2021	mR/Std Qtr	21.11

Sample ID:	Sample Dates:	Nuclide	Activity
547971	7/15/2021 - 10/14/2021	mR/Std Qtr	22.11

Sample ID:	Sample Dates:	Nuclide	Activity
553136	10/14/2021 - 1/13/2022	mR/Std Qtr	23.79

Sample Point 38 [INDICATOR - W @ 4.9 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537194	1/12/2021 - 4/13/2021	mR/Std Qtr	16.69

Sample ID:	Sample Dates:	Nuclide	Activity
542665	4/13/2021 - 7/15/2021	mR/Std Qtr	17.71

Sample ID:	Sample Dates:	Nuclide	Activity
547972	7/15/2021 - 10/14/2021	mR/Std Qtr	15.65

Sample ID:	Sample Dates:	Nuclide	Activity
553137	10/14/2021 - 1/13/2022	mR/Std Qtr	17.76

Sample Point 39 [INDICATOR - WNW @ 5.1 miles] TLD RING TLD_OUTER

Sample ID:	Sample Dates:	Nuclide	Activity
537195	1/12/2021 - 4/13/2021	mR/Std Qtr	18.16

Sample ID:	Sample Dates:	Nuclide	Activity
542666	4/13/2021 - 7/15/2021	mR/Std Qtr	15.55

Sample ID:	Sample Dates:	Nuclide	Activity
547973	7/15/2021 - 10/14/2021	mR/Std Qtr	16.08

Sample ID:	Sample Dates:	Nuclide	Activity
553138	10/14/2021 - 1/13/2022	mR/Std Qtr	18.24

Sample Point 55 [INDICATOR - SSE @ 0.2 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537198	1/12/2021 - 4/13/2021	mR/Std Qtr	20.27

Sample ID:	Sample Dates:	Nuclide	Activity
542669	4/13/2021 - 7/15/2021	mR/Std Qtr	16.10

Sample ID:	Sample Dates:	Nuclide	Activity
547976	7/15/2021 - 10/14/2021	mR/Std Qtr	15.96

Sample ID:	Sample Dates:	Nuclide	Activity
553141	10/14/2021 - 1/13/2022	mR/Std Qtr	18.39

Sample Point 56 [INDICATOR - NNW @ 0.4 miles] TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537199	1/12/2021 - 4/13/2021	mR/Std Qtr	17.75

Sample ID:	Sample Dates:	Nuclide	Activity
542670	4/13/2021 - 7/15/2021	mR/Std Qtr	16.99

Sample ID:	Sample Dates:	Nuclide	Activity
547977	7/15/2021 - 10/14/2021	mR/Std Qtr	16.46

Sample ID:	Sample Dates:	Nuclide	Activity
553142	10/14/2021 - 1/13/2022	mR/Std Qtr	24.59

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: TLD Concentration (Activity): mR/Standard Quarter

Sample Point 61 [INDICATOR - WSW @ 0.3 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537201	1/12/2021 - 4/13/2021	mR/Std Qtr	22.88
542672	4/13/2021 - 7/15/2021	mR/Std Qtr	19.73
547979	7/15/2021 - 10/14/2021	mR/Std Qtr	18.93
553144	10/14/2021 - 1/13/2022	mR/Std Qtr	22.88

Sample Point 65 [INDICATOR - WNW @ 0.3 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537202	1/12/2021 - 4/13/2021	mR/Std Qtr	22.95
542673	4/13/2021 - 7/15/2021	mR/Std Qtr	19.84
547980	7/15/2021 - 10/14/2021	mR/Std Qtr	18.93
553145	10/14/2021 - 1/13/2022	mR/Std Qtr	22.91

Sample Point 84 [INDICATOR - SSE @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537204	1/12/2021 - 4/13/2021	mR/Std Qtr	13.52
542675	4/13/2021 - 7/15/2021	mR/Std Qtr	12.34
547982	7/15/2021 - 10/14/2021	mR/Std Qtr	10.51
553147	10/14/2021 - 1/13/2022	mR/Std Qtr	14.37

Sample Point 85 [INDICATOR - SSW @ 0.9 miles]

TLD RING TLD_INNER

Sample ID:	Sample Dates:	Nuclide	Activity
537205	1/12/2021 - 4/13/2021	mR/Std Qtr	14.18
542676	4/13/2021 - 7/15/2021	mR/Std Qtr	11.55
547983	7/15/2021 - 10/14/2021	mR/Std Qtr	11.35
553148	10/14/2021 - 1/13/2022	mR/Std Qtr	14.94

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 50 [INDICATOR - SSE @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
540619	3/10/2021 - 3/10/2021		Mn-54	<3.36E+01	0.00E+00	3.36E+01
			Co-58	<3.02E+01	0.00E+00	3.02E+01
			Fe-59	<6.49E+01	0.00E+00	6.49E+01
			Co-60	<3.36E+01	0.00E+00	3.36E+01
			Zn-65	<7.36E+01	0.00E+00	7.36E+01
			Zr-95	<5.15E+01	0.00E+00	5.15E+01
			Nb-95	<2.67E+01	0.00E+00	2.67E+01
			I-131	<4.79E+01	0.00E+00	4.79E+01
			Cs-134	<2.52E+01	0.00E+00	2.52E+01
			Cs-137	<3.96E+01	0.00E+00	3.96E+01
			BaLa-140	<4.02E+01	0.00E+00	4.02E+01
			Be-7	2.40E+03	4.06E+02	3.86E+02
			K-40	6.33E+03	8.83E+02	5.13E+02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 50 [INDICATOR - SSE @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538672	4/6/2021 - 4/6/2021	MIXEDBLV	Mn-54	<2.36E+01	0.00E+00	2.36E+01
			Co-58	<2.72E+01	0.00E+00	2.72E+01
			Fe-59	<4.72E+01	0.00E+00	4.72E+01
			Co-60	<3.13E+01	0.00E+00	3.13E+01
			Zn-65	<6.15E+01	0.00E+00	6.15E+01
			Zr-95	<4.61E+01	0.00E+00	4.61E+01
			Nb-95	<2.99E+01	0.00E+00	2.99E+01
			I-131	<2.53E+01	0.00E+00	2.53E+01
			Cs-134	<2.99E+01	0.00E+00	2.99E+01
			Cs-137	<3.24E+01	0.00E+00	3.24E+01
			BaLa-140	<3.06E+01	0.00E+00	3.06E+01
			Be-7	1.15E+03	2.75E+02	3.19E+02
			K-40	2.65E+03	4.89E+02	2.95E+02
542722	5/3/2021 - 5/3/2021	MIXEDBLV	Mn-54	<2.04E+01	0.00E+00	2.04E+01
			Co-58	<1.96E+01	0.00E+00	1.96E+01
			Fe-59	<4.18E+01	0.00E+00	4.18E+01
			Co-60	<1.83E+01	0.00E+00	1.83E+01
			Zn-65	<5.06E+01	0.00E+00	5.06E+01
			Zr-95	<4.02E+01	0.00E+00	4.02E+01
			Nb-95	<1.90E+01	0.00E+00	1.90E+01
			I-131	<2.17E+01	0.00E+00	2.17E+01
			Cs-134	<2.75E+01	0.00E+00	2.75E+01
			Cs-137	<2.52E+01	0.00E+00	2.52E+01
			BaLa-140	<2.33E+01	0.00E+00	2.33E+01
			Be-7	4.13E+02	1.14E+02	1.82E+02
			K-40	5.73E+03	7.00E+02	2.37E+02
546818	6/9/2021 - 6/9/2021	MIXEDBLV	Mn-54	<2.64E+01	0.00E+00	2.64E+01
			Co-58	<2.69E+01	0.00E+00	2.69E+01
			Fe-59	<3.83E+01	0.00E+00	3.83E+01
			Co-60	<2.29E+01	0.00E+00	2.29E+01
			Zn-65	<4.95E+01	0.00E+00	4.95E+01
			Zr-95	<5.13E+01	0.00E+00	5.13E+01
			Nb-95	<2.77E+01	0.00E+00	2.77E+01
			I-131	<2.62E+01	0.00E+00	2.62E+01
			Cs-134	<3.86E+01	0.00E+00	3.86E+01
			Cs-137	<3.25E+01	0.00E+00	3.25E+01
			BaLa-140	<2.33E+01	0.00E+00	2.33E+01
			Be-7	4.82E+02	2.38E+02	3.52E+02
			K-40	5.39E+03	7.85E+02	5.09E+02
548017	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54	<1.00E+01	0.00E+00	1.00E+01
			Co-58	<9.63E+00	0.00E+00	9.63E+00
			Fe-59	<2.14E+01	0.00E+00	2.14E+01
			Co-60	<9.17E+00	0.00E+00	9.17E+00
			Zn-65	<2.21E+01	0.00E+00	2.21E+01
			Zr-95	<1.54E+01	0.00E+00	1.54E+01
			Nb-95	<1.12E+01	0.00E+00	1.12E+01
			I-131	<1.45E+01	0.00E+00	1.45E+01
			Cs-134	<1.27E+01	0.00E+00	1.27E+01
			Cs-137	9.29E+00	9.42E+00	1.53E+01
			BaLa-140	<1.43E+01	0.00E+00	1.43E+01
			Be-7	3.83E+02	1.38E+02	2.07E+02
			K-40	4.36E+03	4.51E+02	1.70E+02
549607	8/5/2021 - 8/5/2021	MIXEDBLV	Mn-54	<1.95E+01	0.00E+00	1.95E+01
			Co-58	<1.53E+01	0.00E+00	1.53E+01
			Fe-59	<3.12E+01	0.00E+00	3.12E+01
			Co-60	<1.90E+01	0.00E+00	1.90E+01
			Zn-65	<3.82E+01	0.00E+00	3.82E+01
			Zr-95	<2.74E+01	0.00E+00	2.74E+01
			Nb-95	<1.74E+01	0.00E+00	1.74E+01

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Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 50 [INDICATOR - SSE @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
549607	8/5/2021 - 8/5/2021		I-131	<2.65E+01	0.00E+00	2.65E+01
			Cs-134	<1.94E+01	0.00E+00	1.94E+01
			Cs-137	4.17E+01	2.03E+01	2.94E+01
			BaLa-140	<2.50E+01	0.00E+00	2.50E+01
			Be-7	1.60E+03	2.61E+02	2.38E+02
			K-40	3.07E+03	4.69E+02	2.95E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
551572	9/8/2021 - 9/8/2021		Mn-54	<2.26E+01	0.00E+00	2.26E+01
			Co-58	<2.50E+01	0.00E+00	2.50E+01
			Fe-59	<4.21E+01	0.00E+00	4.21E+01
			Co-60	<2.35E+01	0.00E+00	2.35E+01
			Zn-65	<4.84E+01	0.00E+00	4.84E+01
			Zr-95	<4.53E+01	0.00E+00	4.53E+01
			Nb-95	<2.22E+01	0.00E+00	2.22E+01
			I-131	<3.08E+01	0.00E+00	3.08E+01
			Cs-134	<2.53E+01	0.00E+00	2.53E+01
			Cs-137	6.32E+01	2.38E+01	3.15E+01
			BaLa-140	<2.73E+01	0.00E+00	2.73E+01
			Be-7	1.35E+03	2.74E+02	2.98E+02
			K-40	2.94E+03	4.92E+02	3.61E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
553572	10/6/2021 - 10/6/2021		Mn-54	<2.98E+01	0.00E+00	2.98E+01
			Co-58	<2.59E+01	0.00E+00	2.59E+01
			Fe-59	<5.41E+01	0.00E+00	5.41E+01
			Co-60	<2.12E+01	0.00E+00	2.12E+01
			Zn-65	<5.74E+01	0.00E+00	5.74E+01
			Zr-95	<4.72E+01	0.00E+00	4.72E+01
			Nb-95	<2.61E+01	0.00E+00	2.61E+01
			I-131	<3.65E+01	0.00E+00	3.65E+01
			Cs-134	<3.38E+01	0.00E+00	3.38E+01
			Cs-137	<3.09E+01	0.00E+00	3.09E+01
			BaLa-140	<2.45E+01	0.00E+00	2.45E+01
			Be-7	4.96E+02	2.14E+02	3.03E+02
			K-40	4.67E+03	7.17E+02	4.89E+02

Sample Point 51 [INDICATOR - SSW @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
540620	3/10/2021 - 3/10/2021		Mn-54	<3.60E+01	0.00E+00	3.60E+01
			Co-58	<3.96E+01	0.00E+00	3.96E+01
			Fe-59	<6.15E+01	0.00E+00	6.15E+01
			Co-60	<3.87E+01	0.00E+00	3.87E+01
			Zn-65	<7.30E+01	0.00E+00	7.30E+01
			Zr-95	<6.34E+01	0.00E+00	6.34E+01
			Nb-95	<3.87E+01	0.00E+00	3.87E+01
			I-131	<4.77E+01	0.00E+00	4.77E+01
			Cs-134	<4.40E+01	0.00E+00	4.40E+01
			Cs-137	5.84E+01	2.17E+01	3.58E+01
			BaLa-140	<5.40E+01	0.00E+00	5.40E+01
			Be-7	4.07E+03	5.74E+02	4.51E+02
			K-40	3.64E+03	6.66E+02	6.01E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538673	4/6/2021 - 4/6/2021		Mn-54	<1.67E+01	0.00E+00	1.67E+01
			Co-58	<1.39E+01	0.00E+00	1.39E+01
			Fe-59	<3.03E+01	0.00E+00	3.03E+01
			Co-60	<1.64E+01	0.00E+00	1.64E+01
			Zn-65	<4.51E+01	0.00E+00	4.51E+01
			Zr-95	<2.42E+01	0.00E+00	2.42E+01
			Nb-95	<1.57E+01	0.00E+00	1.57E+01
			I-131	<1.64E+01	0.00E+00	1.64E+01
			Cs-134	<1.97E+01	0.00E+00	1.97E+01
			Cs-137	1.70E+01	1.59E+01	2.55E+01
			BaLa-140	<1.72E+01	0.00E+00	1.72E+01
			Be-7	2.07E+02	1.03E+02	1.48E+02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 51 [INDICATOR - SSW @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
538673	4/6/2021 - 4/6/2021		K-40	5.93E+03	6.84E+02	2.05E+02
542723	5/3/2021 - 5/3/2021		Mn-54	<2.11E+01	0.00E+00	2.11E+01
			Co-58	<1.98E+01	0.00E+00	1.98E+01
			Fe-59	<3.21E+01	0.00E+00	3.21E+01
			Co-60	<2.04E+01	0.00E+00	2.04E+01
			Zn-65	<4.16E+01	0.00E+00	4.16E+01
			Zr-95	<3.65E+01	0.00E+00	3.65E+01
			Nb-95	<2.01E+01	0.00E+00	2.01E+01
			I-131	<1.99E+01	0.00E+00	1.99E+01
			Cs-134	<2.12E+01	0.00E+00	2.12E+01
			Cs-137	5.66E+01	2.16E+01	2.82E+01
			BaLa-140	<2.61E+01	0.00E+00	2.61E+01
			Be-7	3.47E+02	1.90E+02	2.08E+02
			K-40	3.89E+03	5.66E+02	3.26E+02
546819	6/9/2021 - 6/9/2021		Mn-54	<3.55E+01	0.00E+00	3.55E+01
			Co-58	<3.12E+01	0.00E+00	3.12E+01
			Fe-59	<6.60E+01	0.00E+00	6.60E+01
			Co-60	<2.60E+01	0.00E+00	2.60E+01
			Zn-65	<5.94E+01	0.00E+00	5.94E+01
			Zr-95	<5.95E+01	0.00E+00	5.95E+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	<4.39E+01	0.00E+00	4.39E+01
			Cs-137	4.22E+01	2.90E+01	4.31E+01
			BaLa-140	<3.47E+01	0.00E+00	3.47E+01
			Be-7	7.94E+02	3.12E+02	4.29E+02
			K-40	4.42E+03	7.55E+02	2.80E+02
548018	7/6/2021 - 7/6/2021		Mn-54	<2.13E+01	0.00E+00	2.13E+01
			Co-58	<2.01E+01	0.00E+00	2.01E+01
			Fe-59	<3.89E+01	0.00E+00	3.89E+01
			Co-60	<1.68E+01	0.00E+00	1.68E+01
			Zn-65	<4.66E+01	0.00E+00	4.66E+01
			Zr-95	<3.50E+01	0.00E+00	3.50E+01
			Nb-95	<2.03E+01	0.00E+00	2.03E+01
			I-131	<3.02E+01	0.00E+00	3.02E+01
			Cs-134	<2.50E+01	0.00E+00	2.50E+01
			Cs-137	5.88E+01	2.16E+01	2.64E+01
			BaLa-140	<3.85E+01	0.00E+00	3.85E+01
			Be-7	1.49E+03	2.65E+02	2.18E+02
			K-40	1.78E+03	3.75E+02	2.75E+02
549608	8/5/2021 - 8/5/2021		Mn-54	<1.89E+01	0.00E+00	1.89E+01
			Co-58	<2.19E+01	0.00E+00	2.19E+01
			Fe-59	<3.38E+01	0.00E+00	3.38E+01
			Co-60	<1.48E+01	0.00E+00	1.48E+01
			Zn-65	<3.75E+01	0.00E+00	3.75E+01
			Zr-95	<2.98E+01	0.00E+00	2.98E+01
			Nb-95	<1.81E+01	0.00E+00	1.81E+01
			I-131	<2.06E+01	0.00E+00	2.06E+01
			Cs-134	<1.77E+01	0.00E+00	1.77E+01
			Cs-137	5.48E+01	1.71E+01	1.83E+01
			BaLa-140	<2.15E+01	0.00E+00	2.15E+01
			Be-7	1.53E+03	2.58E+02	2.28E+02
			K-40	2.25E+03	3.80E+02	1.94E+02
551573	9/8/2021 - 9/8/2021		Mn-54	<2.01E+01	0.00E+00	2.01E+01
			Co-58	<2.11E+01	0.00E+00	2.11E+01
			Fe-59	<3.43E+01	0.00E+00	3.43E+01
			Co-60	<2.42E+01	0.00E+00	2.42E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 51 [INDICATOR - SSW @ 0 miles]

Sample ID:	551573	Sample Dates:	9/8/2021 - 9/8/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Zn-65	<3.63E+01	0.00E+00	3.63E+01
					Zr-95	<4.18E+01	0.00E+00	4.18E+01
					Nb-95	<2.27E+01	0.00E+00	2.27E+01
					I-131	<2.97E+01	0.00E+00	2.97E+01
					Cs-134	<2.57E+01	0.00E+00	2.57E+01
					Cs-137	2.71E+01	1.67E+01	2.45E+01
					BaLa-140	<3.43E+01	0.00E+00	3.43E+01
					Be-7	1.34E+03	2.75E+02	3.03E+02
					K-40	2.54E+03	4.39E+02	2.95E+02

Sample ID:	553573	Sample Dates:	10/5/2021 - 10/5/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.88E+01	0.00E+00	2.88E+01
					Co-58	<2.66E+01	0.00E+00	2.66E+01
					Fe-59	<5.85E+01	0.00E+00	5.85E+01
					Co-60	<2.42E+01	0.00E+00	2.42E+01
					Zn-65	<6.14E+01	0.00E+00	6.14E+01
					Zr-95	<5.29E+01	0.00E+00	5.29E+01
					Nb-95	<3.30E+01	0.00E+00	3.30E+01
					I-131	<4.50E+01	0.00E+00	4.51E+01
					Cs-134	<3.50E+01	0.00E+00	3.50E+01
					Cs-137	6.48E+01	3.09E+01	4.34E+01
					BaLa-140	<4.16E+01	0.00E+00	4.16E+01
					Be-7	1.43E+03	3.13E+02	3.21E+02
					K-40	3.20E+03	6.03E+02	4.56E+02

Sample Point 52 [CONTROL - W @ 10 miles]

Sample ID:	540621	Sample Dates:	3/10/2021 - 3/10/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.01E+01	0.00E+00	3.01E+01
					Co-58	<2.80E+01	0.00E+00	2.80E+01
					Fe-59	<5.51E+01	0.00E+00	5.51E+01
					Co-60	<3.03E+01	0.00E+00	3.03E+01
					Zn-65	<6.21E+01	0.00E+00	6.21E+01
					Zr-95	<6.00E+01	0.00E+00	6.00E+01
					Nb-95	<4.00E+01	0.00E+00	4.00E+01
					I-131	<4.57E+01	0.00E+00	4.57E+01
					Cs-134	<3.63E+01	0.00E+00	3.63E+01
					Cs-137	4.45E+02	6.81E+01	4.46E+01
					BaLa-140	<4.65E+01	0.00E+00	4.65E+01
					Be-7	5.17E+03	6.51E+02	4.30E+02
					K-40	4.31E+03	7.07E+02	5.67E+02

Sample ID:	538674	Sample Dates:	4/6/2021 - 4/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.52E+01	0.00E+00	1.52E+01
					Co-58	<1.16E+01	0.00E+00	1.16E+01
					Fe-59	<2.06E+01	0.00E+00	2.06E+01
					Co-60	<1.21E+01	0.00E+00	1.21E+01
					Zn-65	<2.94E+01	0.00E+00	2.94E+01
					Zr-95	<2.06E+01	0.00E+00	2.06E+01
					Nb-95	<1.40E+01	0.00E+00	1.40E+01
					I-131	<1.28E+01	0.00E+00	1.28E+01
					Cs-134	<3.60E+01	0.00E+00	3.60E+01
					Cs-137	<1.39E+01	0.00E+00	1.39E+01
					BaLa-140	<1.06E+01	0.00E+00	1.06E+01
					Be-7	3.09E+03	3.45E+02	1.73E+02
					K-40	3.13E+03	3.81E+02	2.07E+02

Sample ID:	542724	Sample Dates:	5/3/2021 - 5/3/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.72E+01	0.00E+00	1.72E+01
					Co-58	<1.51E+01	0.00E+00	1.51E+01
					Fe-59	<3.36E+01	0.00E+00	3.36E+01
					Co-60	<1.69E+01	0.00E+00	1.69E+01
					Zn-65	<3.49E+01	0.00E+00	3.49E+01
					Zr-95	<2.46E+01	0.00E+00	2.46E+01
					Nb-95	<1.59E+01	0.00E+00	1.59E+01
					I-131	<2.04E+01	0.00E+00	2.04E+01
					Cs-134	<1.84E+01	0.00E+00	1.84E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 52 [CONTROL - W @ 10 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
542724	5/3/2021 - 5/3/2021	MIXEDBLV	Cs-137	1.37E+02	3.06E+01	3.32E+01
			BaLa-140	<2.01E+01	0.00E+00	2.01E+01
			Be-7	3.39E+02	1.51E+02	2.20E+02
			K-40	3.38E+03	4.98E+02	2.89E+02
546820	6/9/2021 - 6/9/2021	MIXEDBLV	Mn-54	<3.03E+01	0.00E+00	3.03E+01
			Co-58	<2.24E+01	0.00E+00	2.24E+01
			Fe-59	<6.74E+01	0.00E+00	6.74E+01
			Co-60	<3.13E+01	0.00E+00	3.13E+01
			Zn-65	<6.58E+01	0.00E+00	6.58E+01
			Zr-95	<5.34E+01	0.00E+00	5.34E+01
			Nb-95	<3.05E+01	0.00E+00	3.05E+01
			I-131	<2.97E+01	0.00E+00	2.97E+01
			Cs-134	<2.91E+01	0.00E+00	2.91E+01
			Cs-137	<4.15E+01	0.00E+00	4.15E+01
			BaLa-140	<4.32E+01	0.00E+00	4.32E+01
			Be-7	4.07E+02	1.98E+02	2.81E+02
			K-40	2.99E+03	5.97E+02	4.86E+02
			548019	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54
Co-58	<1.10E+01	0.00E+00				1.10E+01
Fe-59	<2.38E+01	0.00E+00				2.38E+01
Co-60	<1.30E+01	0.00E+00				1.30E+01
Zn-65	<2.92E+01	0.00E+00				2.92E+01
Zr-95	<1.82E+01	0.00E+00				1.82E+01
Nb-95	<1.24E+01	0.00E+00				1.24E+01
I-131	<2.11E+01	0.00E+00				2.11E+01
Cs-134	<1.33E+01	0.00E+00				1.33E+01
Cs-137	<1.21E+01	0.00E+00				1.21E+01
BaLa-140	<1.81E+01	0.00E+00				1.81E+01
Be-7	9.48E+02	1.66E+02				1.64E+02
K-40	2.82E+03	3.74E+02				1.62E+02
549609	8/5/2021 - 8/5/2021	MIXEDBLV				Mn-54
			Co-58	<1.93E+01	0.00E+00	1.93E+01
			Fe-59	<3.67E+01	0.00E+00	3.67E+01
			Co-60	<1.67E+01	0.00E+00	1.67E+01
			Zn-65	<3.78E+01	0.00E+00	3.78E+01
			Zr-95	<3.43E+01	0.00E+00	3.43E+01
			Nb-95	<2.22E+01	0.00E+00	2.22E+01
			I-131	<2.39E+01	0.00E+00	2.39E+01
			Cs-134	<2.11E+01	0.00E+00	2.11E+01
			Cs-137	1.39E+02	3.02E+01	2.92E+01
			BaLa-140	<2.45E+01	0.00E+00	2.45E+01
			Be-7	2.25E+03	3.45E+02	1.86E+02
			K-40	3.91E+03	5.43E+02	1.98E+02
			551574	9/8/2021 - 9/8/2021	MIXEDBLV	Mn-54
Co-58	<2.17E+01	0.00E+00				2.17E+01
Fe-59	<4.56E+01	0.00E+00				4.56E+01
Co-60	<2.16E+01	0.00E+00				2.16E+01
Zn-65	<5.63E+01	0.00E+00				5.63E+01
Zr-95	<3.17E+01	0.00E+00				3.17E+01
Nb-95	<2.20E+01	0.00E+00				2.20E+01
I-131	<3.53E+01	0.00E+00				3.53E+01
Cs-134	<2.12E+01	0.00E+00				2.12E+01
Cs-137	1.97E+02	3.88E+01				3.51E+01
BaLa-140	<3.58E+01	0.00E+00				3.58E+01
Be-7	2.08E+03	3.18E+02				2.31E+02
K-40	3.08E+03	8.95E+02				1.93E+02
553574	10/5/2021 - 10/5/2021	MIXEDBLV				Mn-54

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 52 [CONTROL - W @ 10 miles]

Sample ID:	553574	Sample Dates:	10/5/2021 - 10/5/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Co-58	<2.27E+01	0.00E+00	2.27E+01
					Fe-59	<5.59E+01	0.00E+00	5.59E+01
					Co-60	<3.01E+01	0.00E+00	3.01E+01
					Zn-65	<6.12E+01	0.00E+00	6.12E+01
					Zr-95	<3.32E+01	0.00E+00	3.32E+01
					Nb-95	<3.19E+01	0.00E+00	3.19E+01
					I-131	<4.64E+01	0.00E+00	4.64E+01
					Cs-134	<2.79E+01	0.00E+00	2.79E+01
					Cs-137	3.38E+02	5.66E+01	4.80E+01
					BaLa-140	<3.65E+01	0.00E+00	3.65E+01
					Be-7	1.89E+03	3.41E+02	3.48E+02
					K-40	4.07E+03	6.21E+02	3.78E+02

Sample Point 62 [INDICATOR - SE @ 0 miles]

Sample ID:	540622	Sample Dates:	3/10/2021 - 3/10/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.02E+01	0.00E+00	3.02E+01
					Co-58	<3.28E+01	0.00E+00	3.28E+01
					Fe-59	<5.64E+01	0.00E+00	5.64E+01
					Co-60	<3.51E+01	0.00E+00	3.51E+01
					Zn-65	<5.35E+01	0.00E+00	5.35E+01
					Zr-95	<6.00E+01	0.00E+00	6.00E+01
					Nb-95	<3.19E+01	0.00E+00	3.19E+01
					I-131	<4.57E+01	0.00E+00	4.57E+01
					Cs-134	<4.29E+01	0.00E+00	4.29E+01
					Cs-137	5.11E+01	3.10E+01	4.66E+01
					BaLa-140	<3.46E+01	0.00E+00	3.46E+01
					Be-7	3.60E+03	5.38E+02	4.67E+02
					K-40	3.90E+03	6.71E+02	5.13E+02

Sample ID:	538675	Sample Dates:	4/6/2021 - 4/6/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<1.90E+01	0.00E+00	1.90E+01
					Co-58	<1.72E+01	0.00E+00	1.72E+01
					Fe-59	<3.93E+01	0.00E+00	3.93E+01
					Co-60	<2.21E+01	0.00E+00	2.21E+01
					Zn-65	<4.26E+01	0.00E+00	4.26E+01
					Zr-95	<3.57E+01	0.00E+00	3.57E+01
					Nb-95	<1.56E+01	0.00E+00	1.56E+01
					I-131	<1.74E+01	0.00E+00	1.74E+01
					Cs-134	<2.35E+01	0.00E+00	2.35E+01
					Cs-137	<2.31E+01	0.00E+00	2.31E+01
					BaLa-140	<1.06E+01	0.00E+00	1.06E+01
					Be-7	4.09E+02	1.44E+02	1.92E+02
					K-40	4.62E+03	6.02E+02	3.07E+02

Sample ID:	542725	Sample Dates:	5/3/2021 - 5/3/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<3.05E+01	0.00E+00	3.05E+01
					Co-58	<2.93E+01	0.00E+00	2.93E+01
					Fe-59	<5.49E+01	0.00E+00	5.49E+01
					Co-60	<3.16E+01	0.00E+00	3.16E+01
					Zn-65	<7.13E+01	0.00E+00	7.13E+01
					Zr-95	<4.87E+01	0.00E+00	4.87E+01
					Nb-95	<2.73E+01	0.00E+00	2.73E+01
					I-131	<2.75E+01	0.00E+00	2.75E+01
					Cs-134	<3.55E+01	0.00E+00	3.55E+01
					Cs-137	<3.73E+01	0.00E+00	3.73E+01
					BaLa-140	<1.73E+01	0.00E+00	1.73E+01
					Be-7	3.79E+02	1.92E+02	2.77E+02
					K-40	3.52E+03	6.51E+02	5.64E+02

Sample ID:	546821	Sample Dates:	6/9/2021 - 6/9/2021	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
					Mn-54	<2.92E+01	0.00E+00	2.92E+01
					Co-58	<3.28E+01	0.00E+00	3.28E+01
					Fe-59	<5.41E+01	0.00E+00	5.41E+01
					Co-60	<3.59E+01	0.00E+00	3.59E+01
					Zn-65	<6.28E+01	0.00E+00	6.28E+01
					Zr-95	<4.29E+01	0.00E+00	4.29E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 62 [INDICATOR - SE @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
546821	6/9/2021 - 6/9/2021	MIXEDBLV	Nb-95	<3.04E+01	0.00E+00	3.04E+01
			I-131	<2.63E+01	0.00E+00	2.63E+01
			Cs-134	<3.45E+01	0.00E+00	3.45E+01
			Cs-137	<3.63E+01	0.00E+00	3.63E+01
			BaLa-140	<3.45E+01	0.00E+00	3.45E+01
			Be-7	2.29E+02	2.20E+02	3.53E+02
			K-40	2.60E+03	5.69E+02	5.03E+02
548020	7/6/2021 - 7/6/2021	MIXEDBLV	Mn-54	<2.59E+01	0.00E+00	2.59E+01
			Co-58	<2.66E+01	0.00E+00	2.66E+01
			Fe-59	<4.95E+01	0.00E+00	4.95E+01
			Co-60	<3.10E+01	0.00E+00	3.10E+01
			Zn-65	<5.01E+01	0.00E+00	5.01E+01
			Zr-95	<4.64E+01	0.00E+00	4.64E+01
			Nb-95	<3.19E+01	0.00E+00	3.19E+01
			I-131	<3.87E+01	0.00E+00	3.87E+01
			Cs-134	<2.97E+01	0.00E+00	2.97E+01
			Cs-137	2.94E+01	1.84E+01	2.62E+01
			BaLa-140	<2.63E+01	0.00E+00	2.63E+01
			Be-7	1.00E+03	2.85E+02	3.60E+02
			K-40	2.98E+03	5.91E+02	5.35E+02
549610	8/5/2021 - 8/5/2021	MIXEDBLV	Mn-54	<1.48E+01	0.00E+00	1.48E+01
			Co-58	<1.86E+01	0.00E+00	1.86E+01
			Fe-59	<2.62E+01	0.00E+00	2.62E+01
			Co-60	<1.78E+01	0.00E+00	1.78E+01
			Zn-65	<3.95E+01	0.00E+00	3.95E+01
			Zr-95	<3.10E+01	0.00E+00	3.10E+01
			Nb-95	<1.75E+01	0.00E+00	1.75E+01
			I-131	<2.02E+01	0.00E+00	2.02E+01
			Cs-134	<2.14E+01	0.00E+00	2.14E+01
			Cs-137	5.80E+01	2.30E+01	3.19E+01
			BaLa-140	<1.74E+01	0.00E+00	1.74E+01
			Be-7	1.23E+03	2.37E+02	2.53E+02
			K-40	3.16E+03	4.52E+02	2.07E+02
551575	9/8/2021 - 9/8/2021	MIXEDBLV	Mn-54	<2.16E+01	0.00E+00	2.16E+01
			Co-58	<2.11E+01	0.00E+00	2.11E+01
			Fe-59	<3.30E+01	0.00E+00	3.30E+01
			Co-60	<1.49E+01	0.00E+00	1.49E+01
			Zn-65	<4.03E+01	0.00E+00	4.03E+01
			Zr-95	<2.67E+01	0.00E+00	2.67E+01
			Nb-95	<2.02E+01	0.00E+00	2.02E+01
			I-131	<2.39E+01	0.00E+00	2.39E+01
			Cs-134	<1.98E+01	0.00E+00	1.98E+01
			Cs-137	<2.48E+01	0.00E+00	2.48E+01
			BaLa-140	<2.83E+01	0.00E+00	2.83E+01
			Be-7	2.04E+03	2.93E+02	1.89E+02
			K-40	2.88E+03	4.65E+02	3.23E+02
553575	10/6/2021 - 10/6/2021	MIXEDBLV	Mn-54	<2.20E+01	0.00E+00	2.20E+01
			Co-58	<2.05E+01	0.00E+00	2.05E+01
			Fe-59	<3.73E+01	0.00E+00	3.73E+01
			Co-60	<2.13E+01	0.00E+00	2.13E+01
			Zn-65	<4.46E+01	0.00E+00	4.46E+01
			Zr-95	<4.10E+01	0.00E+00	4.10E+01
			Nb-95	<2.23E+01	0.00E+00	2.23E+01
			I-131	<2.76E+01	0.00E+00	2.76E+01
			Cs-134	<2.29E+01	0.00E+00	2.29E+01
			Cs-137	<1.76E+01	0.00E+00	1.76E+01
			BaLa-140	<3.49E+01	0.00E+00	3.49E+01
			Be-7	6.90E+02	2.04E+02	2.55E+02
			K-40	3.41E+03	5.33E+02	3.00E+02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 67 [INDICATOR - S @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
540623	3/10/2021 - 3/10/2021	MIXEDBLV	Mn-54	<3.63E+01	0.00E+00	3.63E+01
			Co-58	<3.23E+01	0.00E+00	3.23E+01
			Fe-59	<6.86E+01	0.00E+00	6.86E+01
			Co-60	<3.39E+01	0.00E+00	3.39E+01
			Zn-65	<5.30E+01	0.00E+00	5.30E+01
			Zr-95	<5.76E+01	0.00E+00	5.76E+01
			Nb-95	<2.85E+01	0.00E+00	2.85E+01
			I-131	<4.58E+01	0.00E+00	4.58E+01
			Cs-134	<3.53E+01	0.00E+00	3.53E+01
			Cs-137	<3.77E+01	0.00E+00	3.77E+01
			BaLa-140	<3.69E+01	0.00E+00	3.69E+01
			Be-7	1.97E+03	4.18E+02	4.55E+02
			K-40	4.47E+03	7.65E+02	5.05E+02
			538676	4/6/2021 - 4/6/2021	MIXEDBLV	Mn-54
Co-58	<2.87E+01	0.00E+00				2.87E+01
Fe-59	<3.50E+01	0.00E+00				3.50E+01
Co-60	<3.07E+01	0.00E+00				3.07E+01
Zn-65	<5.58E+01	0.00E+00				5.58E+01
Zr-95	<4.43E+01	0.00E+00				4.43E+01
Nb-95	<2.42E+01	0.00E+00				2.42E+01
I-131	<2.41E+01	0.00E+00				2.41E+01
Cs-134	<3.22E+01	0.00E+00				3.22E+01
Cs-137	3.19E+01	2.69E+01				4.24E+01
BaLa-140	<3.01E+01	0.00E+00				3.01E+01
Be-7	1.83E+03	3.28E+02				2.95E+02
K-40	3.16E+03	5.54E+02				3.23E+02
542726	5/3/2021 - 5/3/2021	MIXEDBLV				Mn-54
			Co-58	<1.84E+01	0.00E+00	1.84E+01
			Fe-59	<5.11E+01	0.00E+00	5.11E+01
			Co-60	<2.40E+01	0.00E+00	2.40E+01
			Zn-65	<4.44E+01	0.00E+00	4.44E+01
			Zr-95	<2.88E+01	0.00E+00	2.88E+01
			Nb-95	<1.96E+01	0.00E+00	1.96E+01
			I-131	<2.08E+01	0.00E+00	2.08E+01
			Cs-134	<2.32E+01	0.00E+00	2.32E+01
			Cs-137	<2.96E+01	0.00E+00	2.96E+01
			BaLa-140	<2.41E+01	0.00E+00	2.41E+01
			Be-7	7.64E+02	2.05E+02	2.28E+02
			K-40	3.02E+03	5.41E+02	3.57E+02
			546822	6/9/2021 - 6/9/2021	MIXEDBLV	Mn-54
Co-58	<3.21E+01	0.00E+00				3.21E+01
Fe-59	<5.68E+01	0.00E+00				5.68E+01
Co-60	<3.78E+01	0.00E+00				3.78E+01
Zn-65	<5.46E+01	0.00E+00				5.46E+01
Zr-95	<5.14E+01	0.00E+00				5.14E+01
Nb-95	<3.47E+01	0.00E+00				3.47E+01
I-131	<3.60E+01	0.00E+00				3.60E+01
Cs-134	<4.25E+01	0.00E+00				4.25E+01
Cs-137	<4.91E+01	0.00E+00				4.91E+01
BaLa-140	<3.66E+01	0.00E+00				3.66E+01
Be-7	1.23E+03	3.20E+02				3.78E+02
K-40	3.42E+03	6.66E+02				5.29E+02
548021	7/6/2021 - 7/6/2021	MIXEDBLV				Mn-54
			Co-58	<1.49E+01	0.00E+00	1.49E+01
			Fe-59	<4.34E+01	0.00E+00	4.34E+01
			Co-60	<2.19E+01	0.00E+00	2.19E+01
			Zn-65	<4.17E+01	0.00E+00	4.17E+01
			Zr-95	<3.41E+01	0.00E+00	3.41E+01
			Nb-95	<2.03E+01	0.00E+00	2.03E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 67 [INDICATOR - S @ 0 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
548021	7/6/2021 - 7/6/2021	MIXEDBLV	I-131	<3.14E+01	0.00E+00	3.14E+01
			Cs-134	<2.34E+01	0.00E+00	2.34E+01
			Cs-137	1.76E+01	1.71E+01	2.73E+01
			BaLa-140	<2.24E+01	0.00E+00	2.24E+01
			Be-7	2.04E+03	3.11E+02	2.33E+02
			K-40	2.14E+03	4.20E+02	3.58E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
549611	8/5/2021 - 8/5/2021	MIXEDBLV	Mn-54	<1.39E+01	0.00E+00	1.39E+01
			Co-58	<1.76E+01	0.00E+00	1.76E+01
			Fe-59	<1.93E+01	0.00E+00	1.93E+01
			Co-60	<1.36E+01	0.00E+00	1.36E+01
			Zn-65	<3.21E+01	0.00E+00	3.21E+01
			Zr-95	<2.56E+01	0.00E+00	2.56E+01
			Nb-95	<1.71E+01	0.00E+00	1.71E+01
			I-131	<2.30E+01	0.00E+00	2.30E+01
			Cs-134	<1.84E+01	0.00E+00	1.84E+01
			Cs-137	1.44E+01	1.39E+01	2.23E+01
			BaLa-140	<1.72E+01	0.00E+00	1.72E+01
			Be-7	3.04E+03	3.78E+02	2.03E+02
			K-40	3.12E+03	4.44E+02	2.25E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
551576	9/8/2021 - 9/8/2021	MIXEDBLV	Mn-54	<1.69E+01	0.00E+00	1.69E+01
			Co-58	<1.48E+01	0.00E+00	1.48E+01
			Fe-59	<2.99E+01	0.00E+00	2.99E+01
			Co-60	<1.53E+01	0.00E+00	1.53E+01
			Zn-65	<2.83E+01	0.00E+00	2.83E+01
			Zr-95	<2.92E+01	0.00E+00	2.92E+01
			Nb-95	<1.73E+01	0.00E+00	1.73E+01
			I-131	<2.42E+01	0.00E+00	2.42E+01
			Cs-134	<2.10E+01	0.00E+00	2.10E+01
			Cs-137	2.47E+01	1.26E+01	1.75E+01
			BaLa-140	<2.16E+01	0.00E+00	2.16E+01
			Be-7	2.85E+03	3.60E+02	2.21E+02
			K-40	2.02E+03	3.43E+02	2.34E+02

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
553576	10/6/2021 - 10/6/2021	MIXEDBLV	Mn-54	<2.43E+01	0.00E+00	2.43E+01
			Co-58	<2.55E+01	0.00E+00	2.55E+01
			Fe-59	<3.63E+01	0.00E+00	3.63E+01
			Co-60	<2.31E+01	0.00E+00	2.31E+01
			Zn-65	<5.16E+01	0.00E+00	5.16E+01
			Zr-95	<4.34E+01	0.00E+00	4.34E+01
			Nb-95	<2.41E+01	0.00E+00	2.41E+01
			I-131	<3.10E+01	0.00E+00	3.10E+01
			Cs-134	<3.14E+01	0.00E+00	3.14E+01
			Cs-137	<2.82E+01	0.00E+00	2.82E+01
			BaLa-140	<3.57E+01	0.00E+00	3.57E+01
			Be-7	1.87E+03	3.38E+02	3.33E+02
			K-40	3.39E+03	5.50E+02	3.23E+02

Sample Point 83 [INDICATOR - NNE @ 1.6 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
540624	3/10/2021 - 3/10/2021	MIXEDBLV	Mn-54	<3.37E+01	0.00E+00	3.37E+01
			Co-58	<4.20E+01	0.00E+00	4.20E+01
			Fe-59	<5.29E+01	0.00E+00	5.29E+01
			Co-60	<3.79E+01	0.00E+00	3.79E+01
			Zn-65	<7.27E+01	0.00E+00	7.27E+01
			Zr-95	<5.83E+01	0.00E+00	5.83E+01
			Nb-95	<3.16E+01	0.00E+00	3.16E+01
			I-131	<4.74E+01	0.00E+00	4.74E+01
			Cs-134	<3.63E+01	0.00E+00	3.63E+01
			Cs-137	7.63E+01	3.28E+01	4.29E+01
			BaLa-140	<5.43E+01	0.00E+00	5.43E+01
			Be-7	3.49E+03	5.56E+02	4.66E+02

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 83 [INDICATOR - NNE @ 1.6 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA
540624	3/10/2021 - 3/10/2021		K-40	3.14E+03	6.70E+02	5.80E+02
538677	4/6/2021 - 4/6/2021		Mn-54	<1.99E+01	0.00E+00	1.99E+01
			Co-58	<1.85E+01	0.00E+00	1.85E+01
			Fe-59	<4.77E+01	0.00E+00	4.77E+01
			Co-60	<2.29E+01	0.00E+00	2.29E+01
			Zn-65	<5.06E+01	0.00E+00	5.06E+01
			Zr-95	<3.20E+01	0.00E+00	3.20E+01
			Nb-95	<2.03E+01	0.00E+00	2.03E+01
			I-131	<1.95E+01	0.00E+00	1.95E+01
			Cs-134	<2.29E+01	0.00E+00	2.29E+01
			Cs-137	<2.57E+01	0.00E+00	2.57E+01
			BaLa-140	<2.57E+01	0.00E+00	2.57E+01
			Be-7	2.90E+03	3.84E+02	2.48E+02
			K-40	3.30E+03	5.21E+02	3.19E+02
542727	5/3/2021 - 5/3/2021		Mn-54	<1.37E+01	0.00E+00	1.37E+01
			Co-58	<1.33E+01	0.00E+00	1.33E+01
			Fe-59	<2.93E+01	0.00E+00	2.93E+01
			Co-60	<1.74E+01	0.00E+00	1.74E+01
			Zn-65	<2.85E+01	0.00E+00	2.85E+01
			Zr-95	<1.80E+01	0.00E+00	1.80E+01
			Nb-95	<1.71E+01	0.00E+00	1.71E+01
			I-131	<1.43E+01	0.00E+00	1.43E+01
			Cs-134	<1.57E+01	0.00E+00	1.57E+01
			Cs-137	5.53E+01	1.83E+01	2.30E+01
			BaLa-140	<1.99E+01	0.00E+00	1.99E+01
			Be-7	5.47E+02	1.51E+02	1.88E+02
			K-40	2.96E+03	4.30E+02	2.70E+02
546823	6/9/2021 - 6/9/2021		Mn-54	<3.33E+01	0.00E+00	3.33E+01
			Co-58	<2.65E+01	0.00E+00	2.65E+01
			Fe-59	<6.01E+01	0.00E+00	6.01E+01
			Co-60	<2.60E+01	0.00E+00	2.60E+01
			Zn-65	<5.63E+01	0.00E+00	5.63E+01
			Zr-95	<4.99E+01	0.00E+00	4.99E+01
			Nb-95	<2.58E+01	0.00E+00	2.58E+01
			I-131	<2.86E+01	0.00E+00	2.86E+01
			Cs-134	<3.46E+01	0.00E+00	3.46E+01
			Cs-137	5.91E+01	3.32E+01	4.91E+01
			BaLa-140	<3.44E+01	0.00E+00	3.44E+01
			Be-7	1.17E+03	3.20E+02	4.00E+02
			K-40	3.46E+03	6.38E+02	4.97E+02
548022	7/6/2021 - 7/6/2021		Mn-54	<2.13E+01	0.00E+00	2.13E+01
			Co-58	<1.95E+01	0.00E+00	1.95E+01
			Fe-59	<3.39E+01	0.00E+00	3.39E+01
			Co-60	<2.41E+01	0.00E+00	2.41E+01
			Zn-65	<4.25E+01	0.00E+00	4.25E+01
			Zr-95	<3.89E+01	0.00E+00	3.89E+01
			Nb-95	<2.31E+01	0.00E+00	2.31E+01
			I-131	<3.20E+01	0.00E+00	3.20E+01
			Cs-134	<2.38E+01	0.00E+00	2.38E+01
			Cs-137	2.23E+02	3.91E+01	2.90E+01
			BaLa-140	<2.56E+01	0.00E+00	2.56E+01
			Be-7	1.99E+03	3.24E+02	2.94E+02
			K-40	2.80E+03	4.72E+02	2.99E+02
549612	8/5/2021 - 8/5/2021		Mn-54	<1.43E+01	0.00E+00	1.43E+01
			Co-58	<1.90E+01	0.00E+00	1.90E+01
			Fe-59	<2.76E+01	0.00E+00	2.76E+01
			Co-60	<1.65E+01	0.00E+00	1.65E+01

ROBINSON Radiological Environmental Monitoring Analysis Report - 2021 (Appendix E)

Media Type: VEGETATION Concentration (Activity): pCi/kg wet

Sample Point 83 [INDICATOR - NNE @ 1.6 miles]

Sample ID:	Sample Dates:	MIXEDBLV	Nuclide	Activity	2 Sigma Error	MDA			
549612	8/5/2021 - 8/5/2021	MIXEDBLV	Zn-65	<3.63E+01	0.00E+00	3.63E+01			
			Zr-95	<2.83E+01	0.00E+00	2.83E+01			
			Nb-95	<1.86E+01	0.00E+00	1.86E+01			
			I-131	<2.38E+01	0.00E+00	2.38E+01			
			Cs-134	<2.30E+01	0.00E+00	2.30E+01			
			Cs-137	4.74E+01	1.77E+01	2.28E+01			
			BaLa-140	<1.97E+01	0.00E+00	1.97E+01			
			Be-7	1.72E+03	2.60E+02	2.01E+02			
			K-40	4.02E+03	5.33E+02	2.54E+02			
			551577	9/8/2021 - 9/8/2021	MIXEDBLV	Mn-54	<1.68E+01	0.00E+00	1.68E+01
Co-58	<1.73E+01	0.00E+00				1.73E+01			
Fe-59	<3.46E+01	0.00E+00				3.46E+01			
Co-60	<1.79E+01	0.00E+00				1.79E+01			
Zn-65	<3.87E+01	0.00E+00				3.87E+01			
Zr-95	<2.75E+01	0.00E+00				2.75E+01			
Nb-95	<1.59E+01	0.00E+00				1.59E+01			
I-131	<2.16E+01	0.00E+00				2.16E+01			
Cs-134	<2.24E+01	0.00E+00				2.24E+01			
Cs-137	1.76E+02	3.29E+01				3.03E+01			
BaLa-140	<2.06E+01	0.00E+00				2.06E+01			
Be-7	1.84E+03	2.87E+02				2.46E+02			
K-40	3.27E+03	4.58E+02				1.37E+02			
553577	10/5/2021 - 10/5/2021	MIXEDBLV				Mn-54	<3.21E+01	0.00E+00	3.21E+01
						Co-58	<3.55E+01	0.00E+00	3.55E+01
			Fe-59	<6.74E+01	0.00E+00	6.74E+01			
			Co-60	<3.57E+01	0.00E+00	3.57E+01			
			Zn-65	<7.72E+01	0.00E+00	7.72E+01			
			Zr-95	<6.68E+01	0.00E+00	6.68E+01			
			Nb-95	<3.91E+01	0.00E+00	3.91E+01			
			I-131	<4.55E+01	0.00E+00	4.55E+01			
			Cs-134	<4.21E+01	0.00E+00	4.21E+01			
			Cs-137	<3.29E+01	0.00E+00	3.29E+01			
			BaLa-140	<5.32E+01	0.00E+00	5.32E+01			
			Be-7	1.03E+03	3.18E+02	4.07E+02			
			K-40	5.16E+03	8.38E+02	5.83E+02			

APPENDIX F

**ERRATA TO
PREVIOUS REPORTS**

APPENDIX F

ERRATA TO THE 2016-2020 AREORs

Robinson AREOR: 2016, 2017

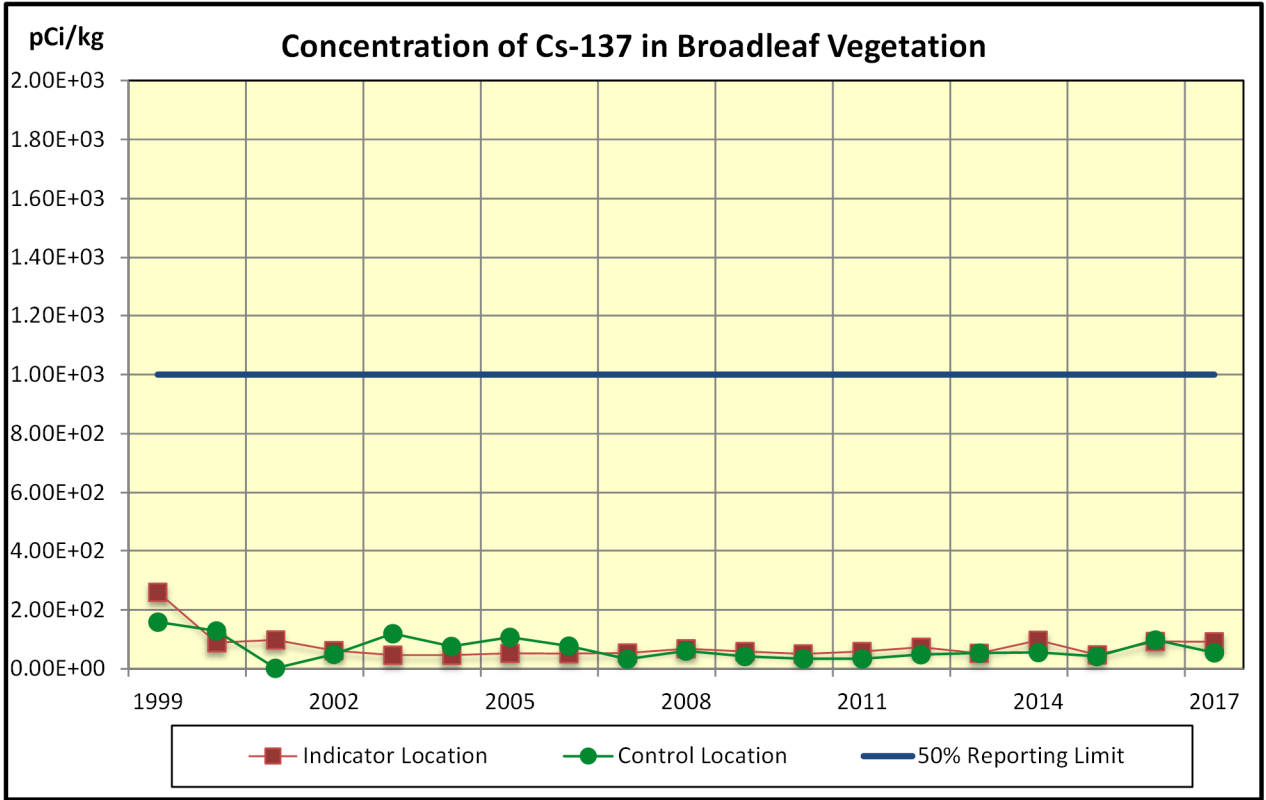
Table 3.4 and Figure 3.4 contained the incorrect Cs-137 values for the Indicator and Control Locations for the year 1999. The following Table 3.4 and Figure 3.4 contain all of the correct data points NCR# (02422952).

Table 3.4 Mean Concentrations of Radionuclides in Broadleaf Vegetation (pCi/kg)

Year	Cs-137 Indicator Location	Cs-137 Control Location
1999	2.59E+2	1.58E+2
2000	8.86E+1	1.29E+2
2001	9.72E+1	1.53E+0
2002	6.15E+1	4.96E+1
2003	4.66E+1	1.19E+2
2004	4.66E+1	7.64E+1
2005	5.27E+1	1.07E+2
2006	5.11E+1	7.76E+1
2007	5.38E+1	3.25E+1
2008	6.76E+1	6.06E+1
2009	5.84E+1	4.22E+1
2010	8.02E+1	3.38E+1
2011	5.84E+1	3.41E+1
2012	7.32E+1	4.83E+1
2013	5.27E+1	5.31E+1
2014 ⁽¹⁾	9.62E+1	5.51E+1
2015	4.68E+1	4.21E+1
2016	9.23E+1	9.72E+1
2017	9.12E+1	5.40E+1

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were observed due to the 2014 gamma spectroscopy system change

Figure 3.4



Robinson AREOR: 2018, 2019, 2020

Table 3.5 and Figure 3.5 contained the incorrect Cs-137 values for the Indicator and Control Locations for the year 1999. The following Table 3.4 and Figure 3.4 contain all of the correct data points NCR# (02422952).

Table 3.5 Mean Concentrations of Radionuclides in Broadleaf Vegetation (pCi/kg)

Year	Cs-137 Indicator Location	Cs-137 Control Location
1999	2.59E+2	1.58E+2
2000	8.86E+1	1.29E+2
2001	9.72E+1	1.53E+0
2002	6.15E+1	4.96E+1
2003	4.66E+1	1.19E+2
2004	4.66E+1	7.64E+1
2005	5.27E+1	1.07E+2
2006	5.11E+1	7.76E+1
2007	5.38E+1	3.25E+1
2008	6.76E+1	6.06E+1
2009	5.84E+1	4.22E+1
2010	8.02E+1	3.38E+1
2011	5.84E+1	3.41E+1
2012	7.32E+1	4.83E+1
2013	5.27E+1	5.31E+1
2014 ⁽¹⁾	9.62E+1	5.51E+1
2015	4.68E+1	4.21E+1
2016	9.23E+1	9.72E+1
2017	9.12E+1	5.40E+1
2018	7.29E+1	5.34E+1
2019	4.60E+1	6.98E+1
2020	6.66E+1	1.50E+2

(1) 2014 Gamma spectroscopy system was replaced 10JUL2014. Gamma spectroscopy system hardware, detector cooling apparatus, software, electronics, nuclide identification libraries, and analytical test matrix components for test matrices were modified (NCR # 0739995). No analytical changes were observed due to the 2014 gamma spectroscopy system change.

Figure 3.5

