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SRNS-TR-2017-00127

Savannah River Site

2016 Environmental Monitoring Program Data Report

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The SRS Environmental Monitoring Program consists of both nonradiological and radiological monitoring of the environment within the SRS boundary and a 2,000-square-mile area beyond the Site's boundary. The purpose of this monitoring is to determine impacts, if any, from SRS operations to the surrounding communities and the environment.

This document presents data from Savannah River Site (SRS) routine effluent monitoring, environmental surveillance and groundwater monitoring programs. Information in this document is summarized in the *Savannah River Site Environmental Report for 2016* (SRNS-RP-2017-00174), referred to hereafter as the ASER. Every effort has been made to present the data in this report in the same order in which it is discussed in the ASER.

The data provided in this report is used to:

- Meet requirements of multiple environmental permits under which SRS operates,
- Meet requirements of DOE Order 458.1, "Radiation Protection of the Public and the Environment," that established as annual public dose standard for the public and biota dose limits for plants and animals that are at levels that would provide protection of the public and environment from the effects of radiation resulting from DOE activities,
- Meet groundwater sampling requirements identified in the Federal Facility Agreement for the Savannah River Site approved monitoring plans and Resource Conservation and Recovery Act permits.

Tables 1 through 3 provide general information supporting the remaining tables present in this document.

Tables 4 through 12 present the raw data summarized in Chapter 4, *Nonradiological Environmental Monitoring Program*, of the *Savannah River Site Environmental Report for 2016*.

Tables 13 through 37 present the raw data summarized in Chapter 5, *Radiological Environmental Monitoring Program*, of the *Savannah River Site Environmental Report for 2016*.

Table 38 through 42 present the raw data summarized in Chapter 8, *Quality Assurance*, of the *Savannah River Site Environmental Report for 2016*.

This section contains sampling location abbreviations used in the text and on the sampling location maps. It also contains a list of sampling locations known by more than one name (see next page).

Location Abbreviations	Location Name/Other Applicable Information
4M	Fourmile
4MB	Fourmile Branch (Fourmile Creek)
4MC	Fourmile Creek
BDC	Beaver Dam Creek
BG	Burial Ground
BLTW	Burke and Screven Counties Wells (Georgia)
EAV	E-Area Vaults
FM	Four Mile
FMB	Fourmile Branch (Fourmile Creek)
GSTW	Burke and Screven Counties Wells (Georgia)
HP	HP (sampling location designation only; not an actual abbreviation)
HWY	Highway
JAX	SRS Boundary Wells
KP	Kennedy Pond
L3R	Lower Three Runs
MCQBR	McQueens Branch
MHTW	Burke and Screven Counties Wells (Georgia)
MPTW	Burke and Screven Counties Wells (Georgia)
MSB	SRS Boundary Wells
NSB L&D	New Savannah Bluff Lock & Dam (Augusta Lock and Dam)
PAR	"P" and "R" Pond
PB	Pen Branch
RM	River Mile
SC	Steel Creek
SWDF	Solid Waste Disposal Facility
TB	Tims Branch
TC	Tinker Creek
TNX	Multipurpose Pilot Plant Campus
TR	Burke and Screven Counties Wells (Georgia)
U3R	Upper Three Runs
VEGP	Vogtle Electric Generating Plan (Plant Vogtle)

Sampling Locations Known by More Than One Name
Augusta Lock and Dam; New Savannah River Lock & Dam
Beaver Dam Creek; 400-D
Fourmile Creek-2B; Fourmile Creek at Road C
Fourmile Creek-3A; Fourmile Creek at Road C
Lower Three Runs-2; Lower Three Runs at Patterson Mill Road
Lower Three Runs-3; Lower Three Runs at Highway 125
Pen Branch-3; Pen Branch at Road A-13-2
R Area downstream of R-1; 100-R
River Mile 118.8; U.S. Highway 301 Bridge Area; Highway 301, US 301, Georgia Welcome Center at Highway 301
River Mile 129.1; Lower Three Runs Mouth
River Mile 141.5; Steel Creek Boat Ramp
River Mile 150.4; Vogtle Discharge
River Mile 152.1; Beaver Dam Creek Mouth
River Mile 157.2; Upper Three Runs Mouth
River Mile 160.5; Demier Landing
Steel Creek at Road A; Steel Creek-4; Steel Creek-4 at Road A; Steel Creek at Highway 125
Tims Branch at Road C; Tims Branch-5
Tinker Creek at Kennedy Pond; Tinker Creek-1
Upper Three Runs-4; Upper Three Runs-4 at Road A; Upper Three Runs at Road A; Upper Three Runs at Hwy 125
Upper Three Runs-1A; Upper Three Runs-1A at Road 8-1
Upper Three Runs-3; Upper Three Runs-3 at Road C
Highway 17 Bridge; Houlihan Bridge

These tables present those radionuclides measured as part of the SRS Environmental Monitoring Program. The half-lives are from ICRP 107, *Nuclear Decay Data for Dosimetric Calculations* (2008).

Radionuclide	Symbol	Half-Life	Radionuclide	Symbol	Half-Life
Americium-241	Am-241	432 y	Praseodymium-144	Pr-144	17.3 m
Americium-243	Am-243	7370 y	Promethium-147	Pm-147	2.62 y
Antimony-125	Sb-125	2.76 y	Promethium-148m	Pm-148m	41.3 d
Antimony-126	Sb-126	12.4 d	Protactinium-233	Pa-233	27.0 d
Barium-133	Ba-133	10.5 y	Radium-226	Ra-226	1600 y
Cadmium-109	Cd-109	461 d	Radium-228	Ra-228	5.75 y
Carbon-14	C-14	5700 y	Rhodium-106	Rh-106	29.8 s
Cerium-139	Ce-139	138 d	Ruthenium-103	Ru-103	39.3 d
Cerium-141	Ce-141	32.5 d	Ruthenium-106	Ru-106	374 d
Cerium-144	Ce-144	285 d	Samarium-151	Sm-151	90 y
Cesium-134	Cs-134	2.06 y	Selenium-75	Se-75	120 d
Cesium-137	Cs-137	30.2 y	Selenium-79	Se-79	2.95E+05 y
Cobalt-57	Co-57	272 d	Silver-110	Ag-110m	250 d
Cobalt-60	Co-60	5.27 y	Strontium-85	Sr-85	64.8 d
Curium-244	Cm-244	18.1 y	Strontium-89	Sr-89	50.5 d
Europium-152	Eu-152	13.5 y	Strontium-90	Sr-90	28.8 y
Europium-154	Eu-154	8.59 y	Technetium-99	Tc-99	2.11E+05 y
Europium-155	Eu-155	4.76 y	Tellurium-127	Te-127	9.35 h
Fluorine-18	F-18	110 m	Tellurium-129	Te-129	69.6 m
Iodine-129	I-129	1.57E+07 y	Thallium-208	Tl-208	3.05 m
Iodine-131	I-131	8.02 d	Thorium-228	Th-228	1.91 y
Iron-55	Fe-55	2.74 y	Thorium-229	Th-229	7340 y
Krypton-85	Kr-85	10.8 y	Thorium-230	Th-230	7.54E+04 y
Lead-212	Pb-212	10.6 h	Thorium-231	Th-231	25.5 h
Manganese-54	Mn-54	312 d	Thorium-232	Th-232	1.41E+10 y
Mercury-203	Hg-203	46.6 d	Tritium	H-3	12.3 y
Neptunium-237	Np-237	2.14E+06 y	Uranium-232	U-232	68.9 y
Nickel-59	Ni-59	1.01E+05 y	Uranium-233	U-233	1.59E+05 y
Nickel-63	Ni-63	100 y	Uranium-234	U-234	2.46E+05 y
Niobium-94	Nb-94	2.03E+04 y	Uranium-235	U-235	7.04E+08 y
Niobium-95	Nb-95	35.0 d	Uranium-236	U-236	2.34E+07 y
Plutonium-236	Pu-236	2.86 y	Uranium-238	U-238	4.47E+09 y
Plutonium-238	Pu-238	87.7 y	Yttrium-88	Y-88	107 d
Plutonium-239	Pu-239	2.41E+04 y	Yttrium-90	Y-90	64.1 h
Plutonium-240	Pu-240	6560 y	Yttrium-91	Y-91	58.5 d
Plutonium-241	Pu-241	14.4 y	Zinc-65	Zn-65	244 d
Plutonium-242	Pu-242	3.75E+05 y	Zirconium-95	Zr-95	64.0 d

Note: Definitions in Half-life Column: m = minute; h = hour, y = year

Symbol	Name	Symbol	Name
Temperature		Concentration	
°C	degrees Celsius	ppb	parts per billion
°F	degrees Fahrenheit	ppm	parts per million
Time		Rate	
d	day	cfs	cubic feet per second
h	hour	gpm	gallons per minute
y	year	Conductivity	
Length		μmho	micromho
cm	centimeter	Radioactivity	
ft	foot	Ci	curie
in	inch	cpm	counts per minute
km	kilometer	mCi	millicurie
m	meter	μCi	microcurie
mm	millimeter	pCi	picocurie
μm	micrometer	Bq	becquerel
Mass		Radiation Dose	
g	gram	mrad	millirad
kg	kilogram	mrem	millirem
mg	milligram	Sv	sievert
μg	microgram	mSv	millisievert
Area		μSv	microsievert
mi ²	square mile	R	roentgen
ft ²	square foot	mR	milliroentgen
Volume		μR	microroentgen
gal	gallon	Gy	gray
L	liter		
mL	milliliter		

Fractions and Multiples of Units					
Multiple	Decimal Equivalent		Prefix	Symbol	Report Format
10^6		1,000,000	mega-	M	E+06
10^3		1,000	kilo-	k	E+03
10^2		100	hecto-	h	E+02
10		10	deka-	da	E+01
10^{-1}		0.1	deci-	d	E-01
10^{-2}		0.01	centi-	c	E-02
10^{-3}		0.001	milli-	m	E-03
10^{-6}		0.000001	micro-	μ	E-06
10^{-9}		0.000000001	nano-	n	E-09
10^{-12}		0.000000000001	pico-	p	E-12
10^{-15}		0.000000000000001	femto-	f	E-15
10^{-18}		0.000000000000000001	atto-	a	E-18

Conversion Table (Units of Radiation Measure)		
Current System	<i>Systeme International</i>	Conversion
curie (Ci)	becquerel (Bq)	1 Ci = 3.7×10^{10} Bq
rad (radiation absorbed dose)	gray (Gy)	1 rad = 0.01 Gy
rem (roentgen equivalent man)	sievert (Sv)	1 rem = 0.01 Sv

Conversion Table					
Multiply	By	To Obtain	Multiply	By	To Obtain
in	2.54	cm	cm	0.394	in
ft	0.305	m	m	3.28	ft
mi	1.61	km	km	0.621	mi
lb	0.4536	kg	kg	2.205	lb
liq qt-US	0.945	L	L	1.057	liq qt-US
ft ²	0.093	m ²	m ²	10.764	ft ²
mi ²	2.59	km ²	km ²	0.386	mi ²
ft ³	0.028	m ³	m ³	35.31	ft ³
d/m	0.450	pCi	pCi	2.22	d/m
pCi	10^{-6}	μ Ci	μ Ci	10^6	pCi
pCi/L (water)	10^{-9}	μ Ci/mL (water)	μ Ci/mL (water)	10^9	pCi/L (water)
pCi/m ³ (air)	10^{-12}	μ Ci/mL (air)	μ Ci/mL (air)	10^{12}	pCi/m ³ (air)

The locations sampled for the various media types are shown on the following maps. Due to the large number of groundwater sample locations on SRS, a map is not provided as it would not be possible to discern useful information. A map is provided of the monitoring well locations in Burke and Screven counties from which groundwater samples are collected.

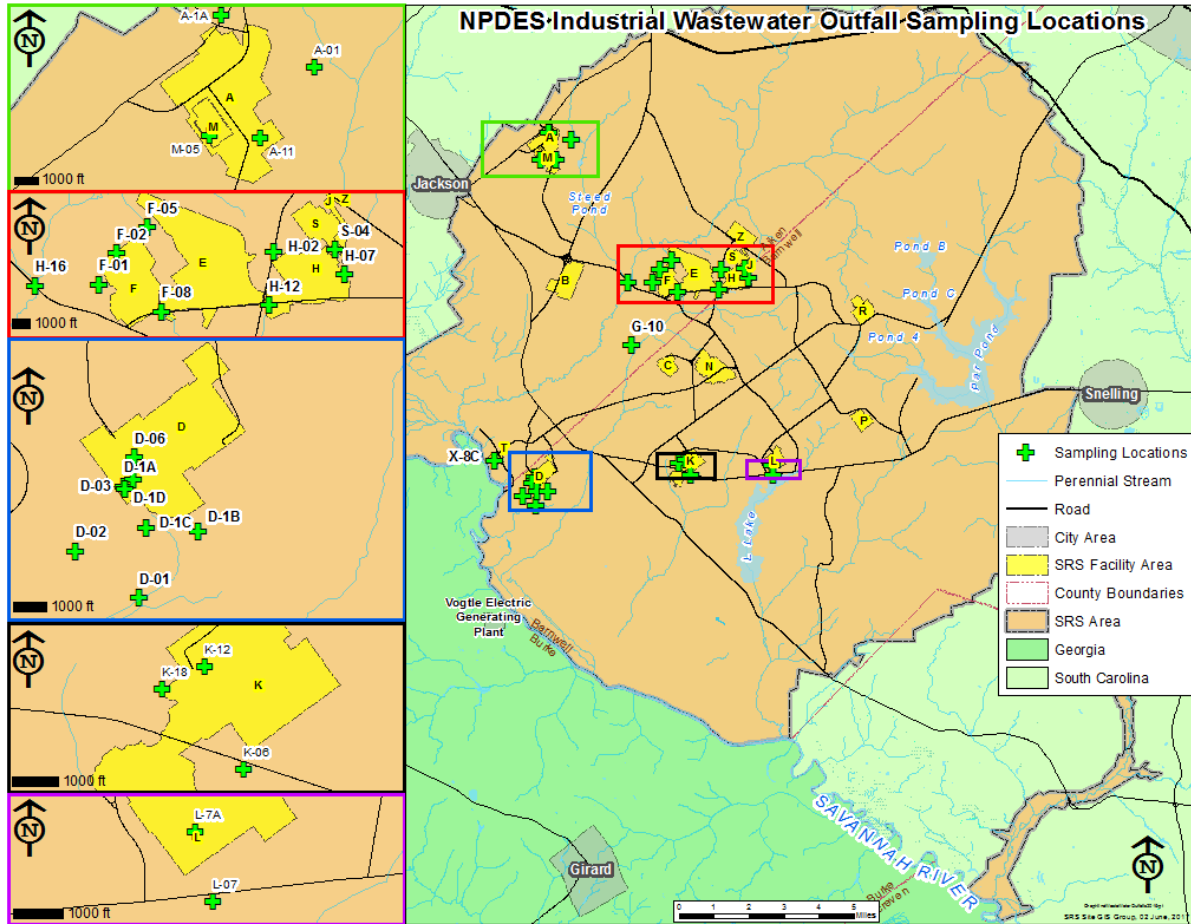


Figure 1 NPDES Industrial Wastewater Outfall Sampling Locations

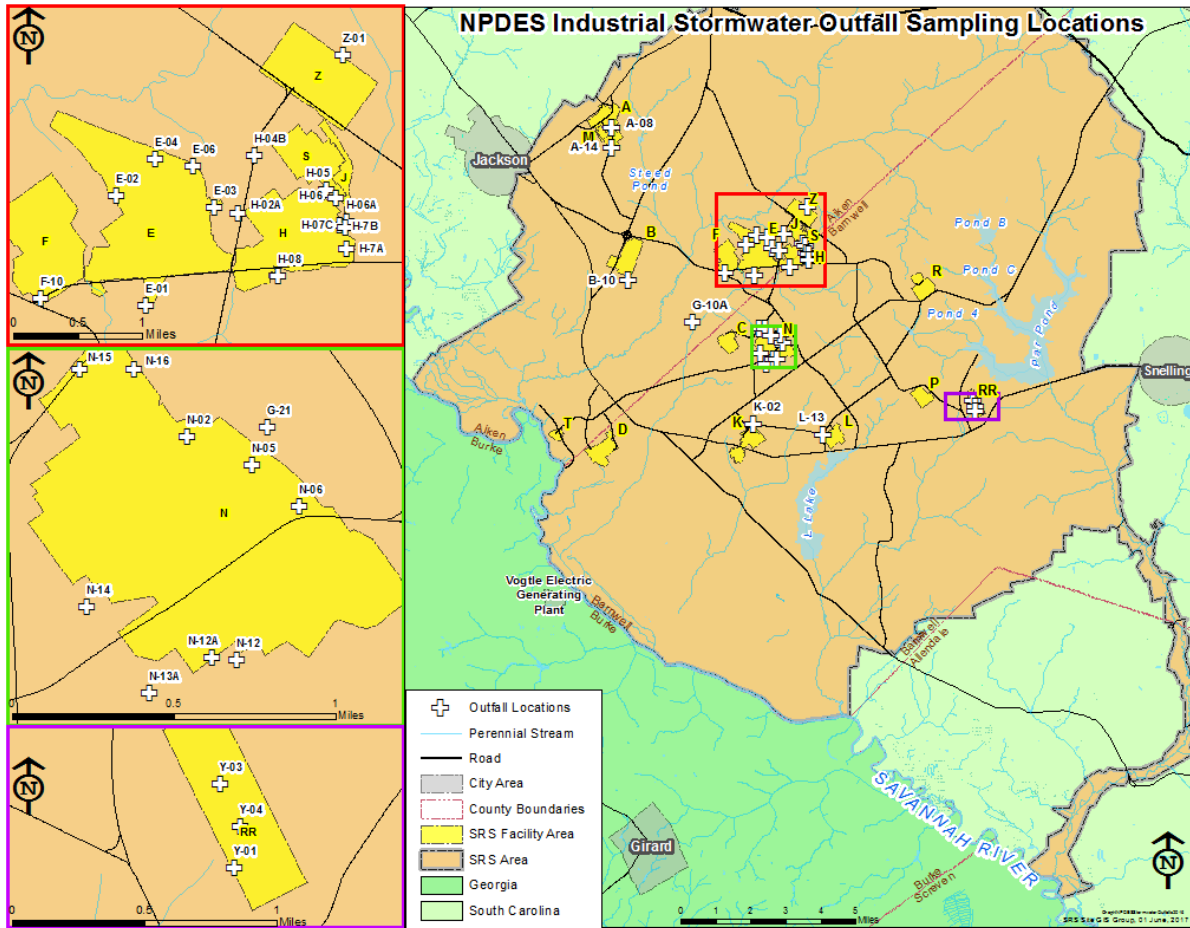


Figure 2 NPDES Industrial Stormwater Outfall Sampling Locations

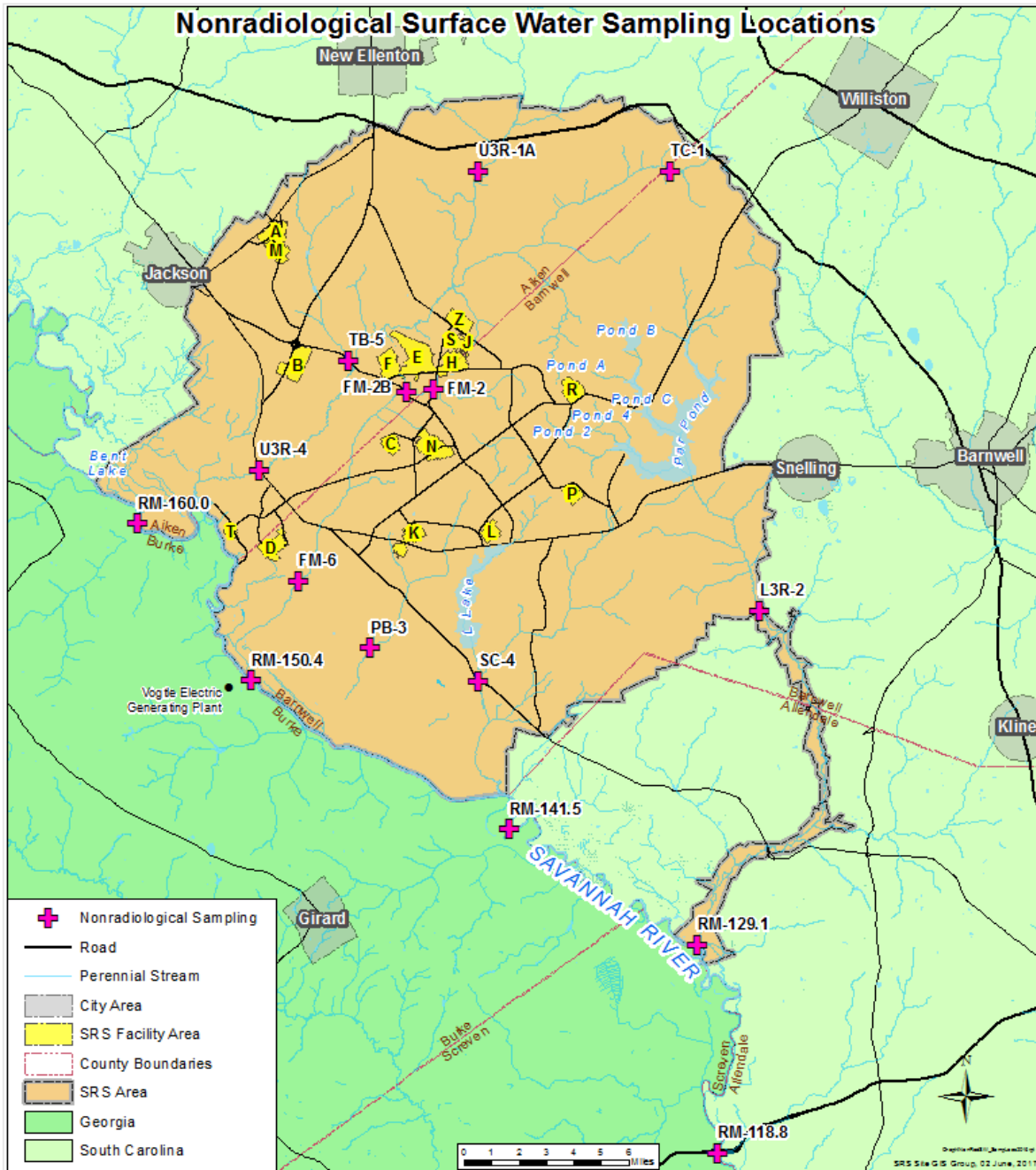


Figure 3 Nonradiological Surface Water Sampling Locations

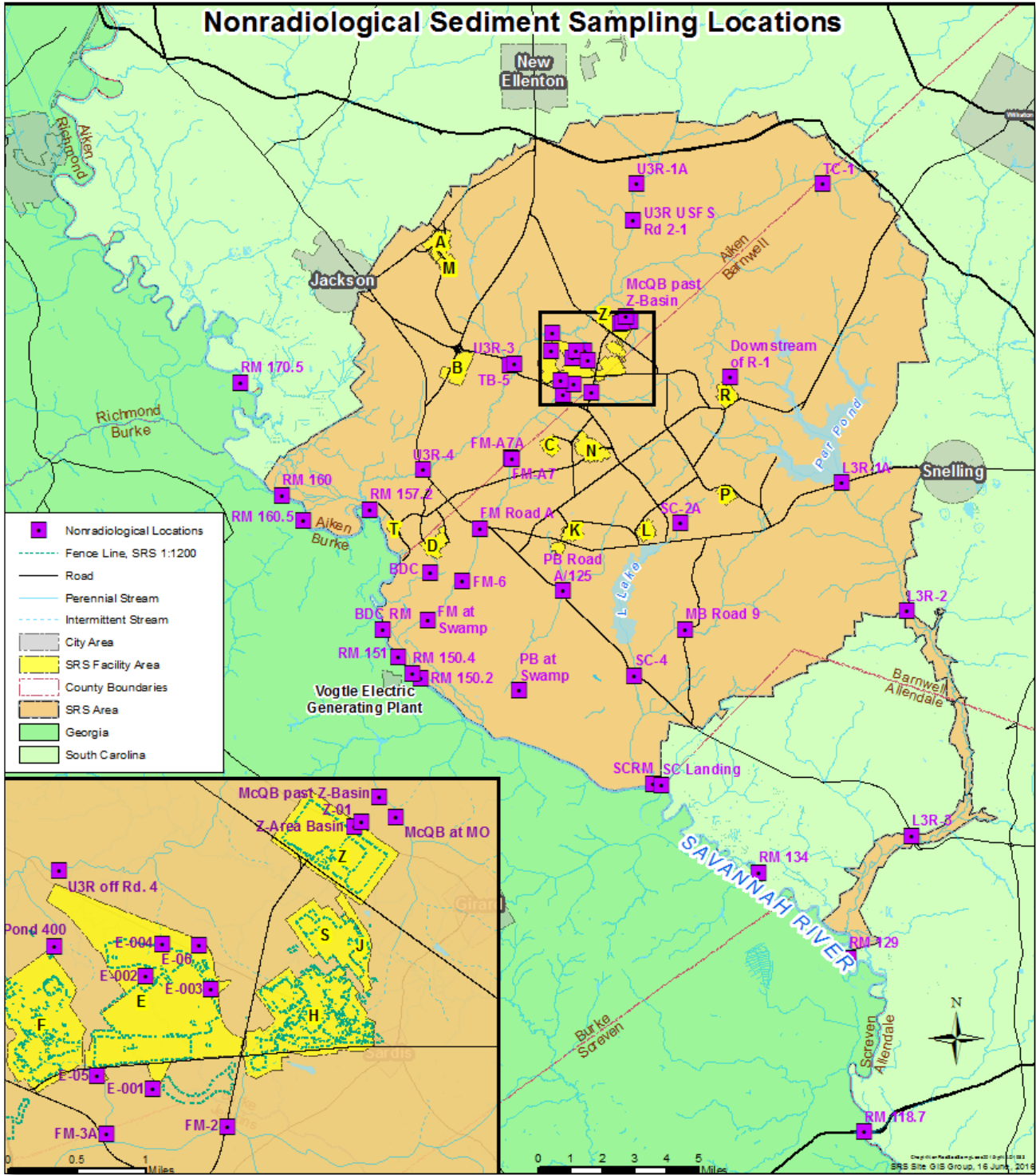


Figure 4 Nonradiological Sediment Sampling Locations

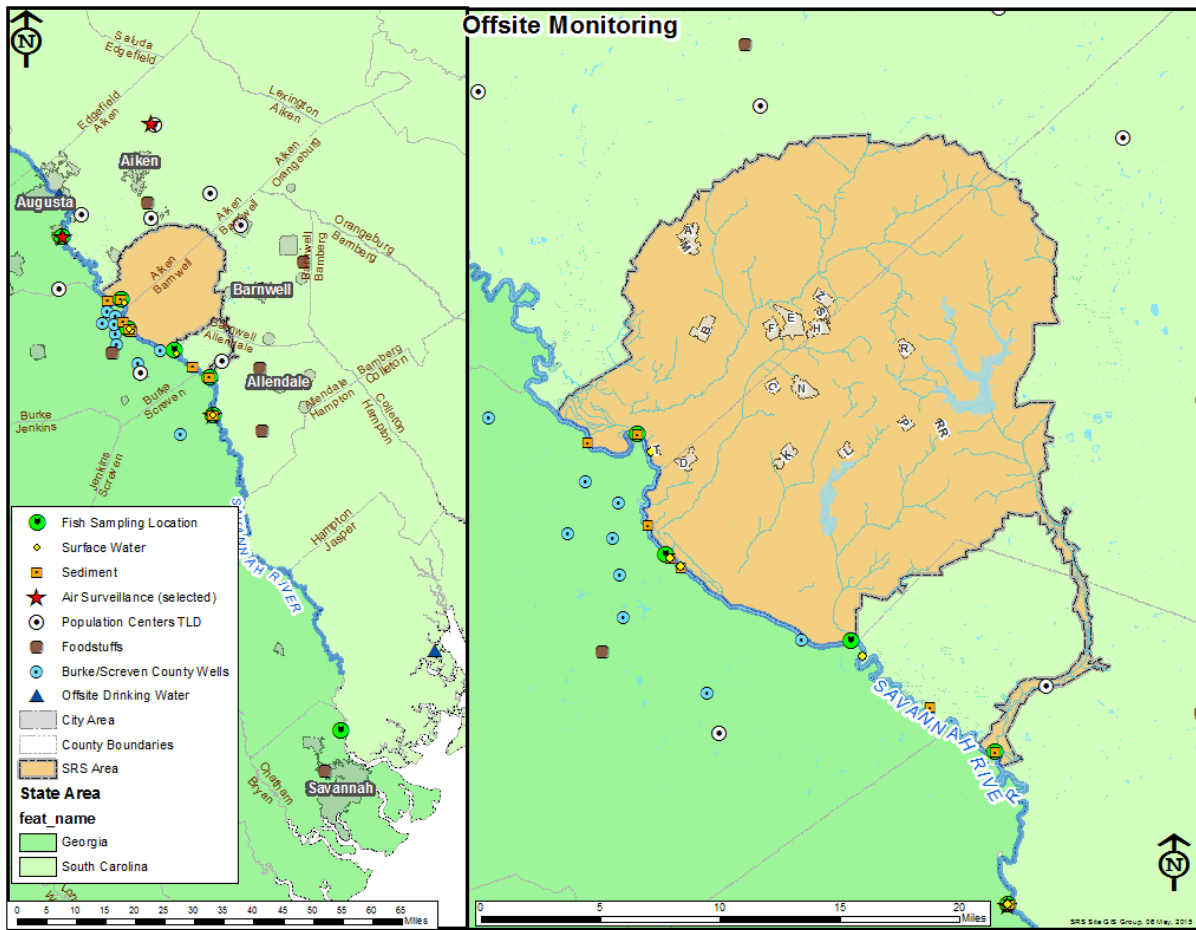


Figure 5 SRS Offsite Sampling Media Locations for Georgia and South Carolina

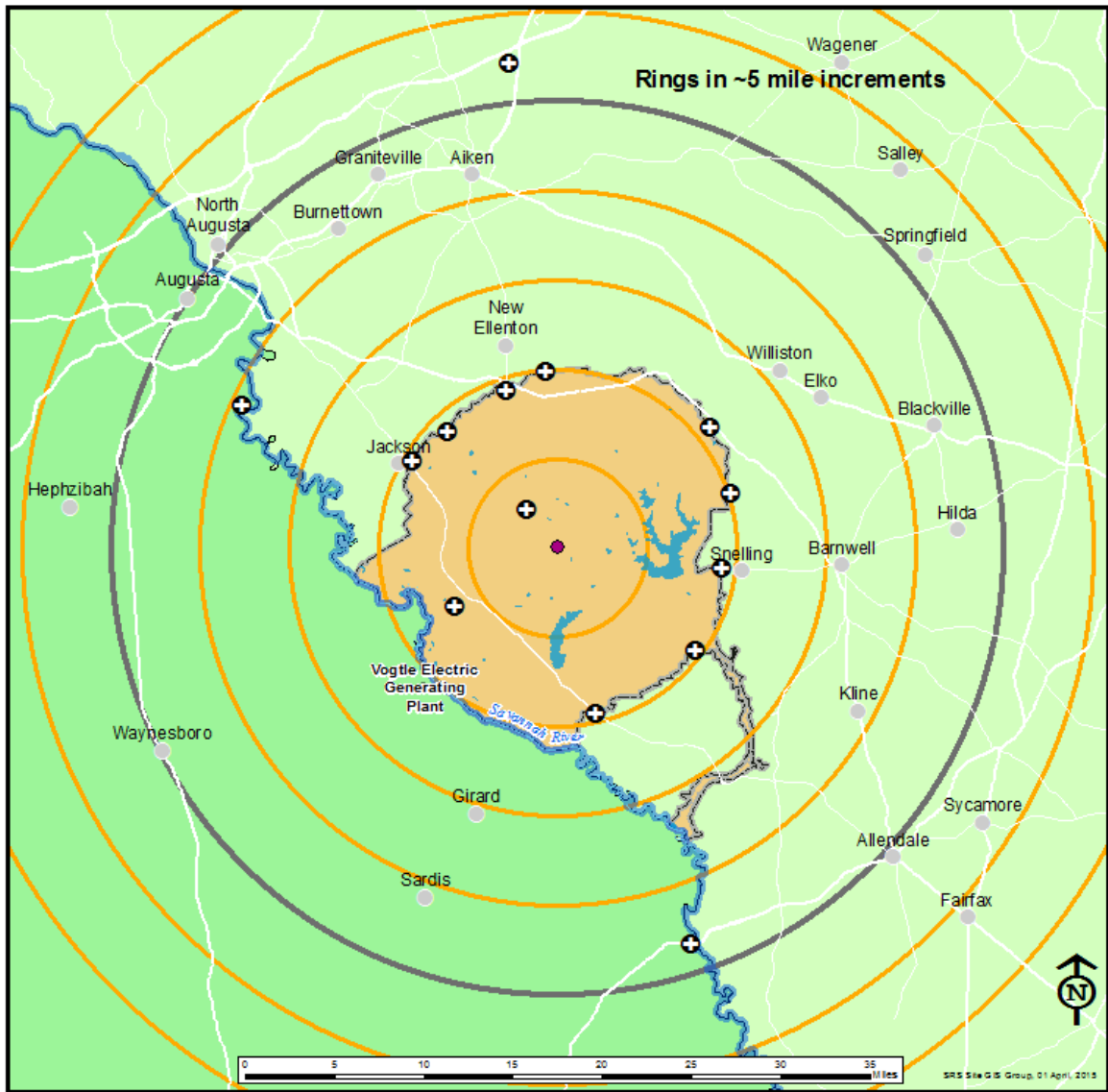


Figure 6 Air Sampling Locations Surround SRS up to 25 Miles

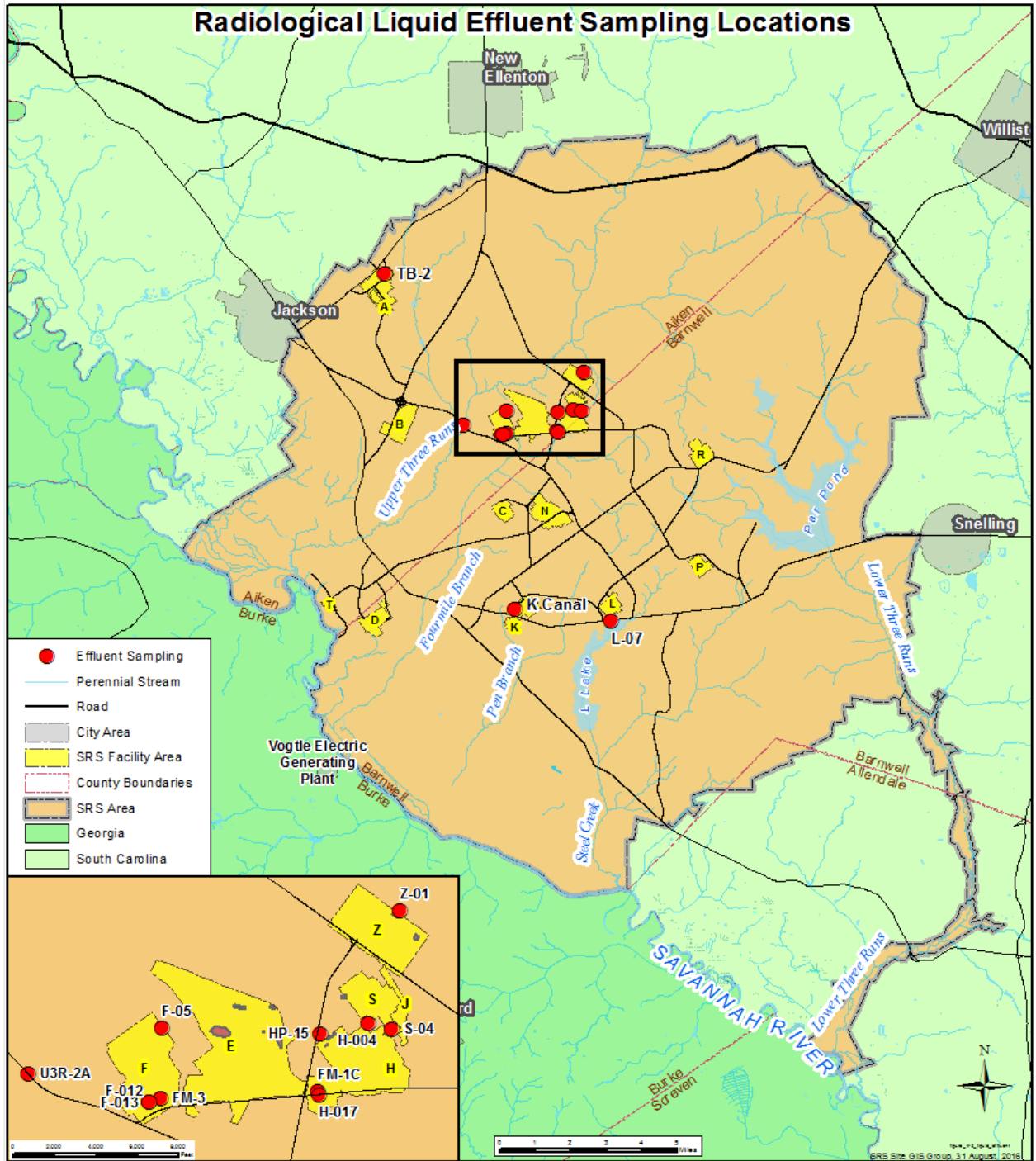


Figure 7 Radiological Liquid Effluent Sampling Locations

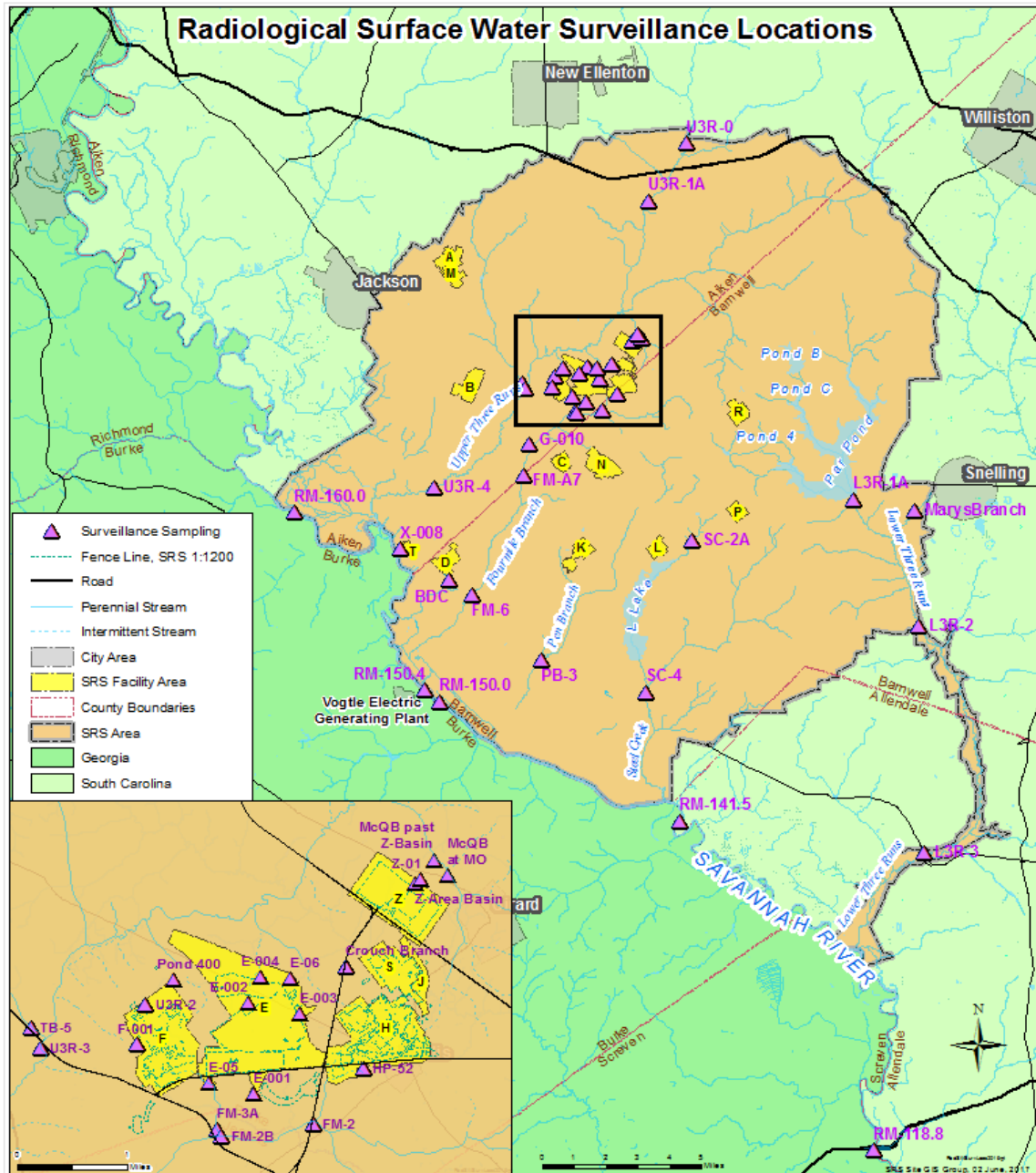


Figure 8 Radiological Surface Water Sampling Locations

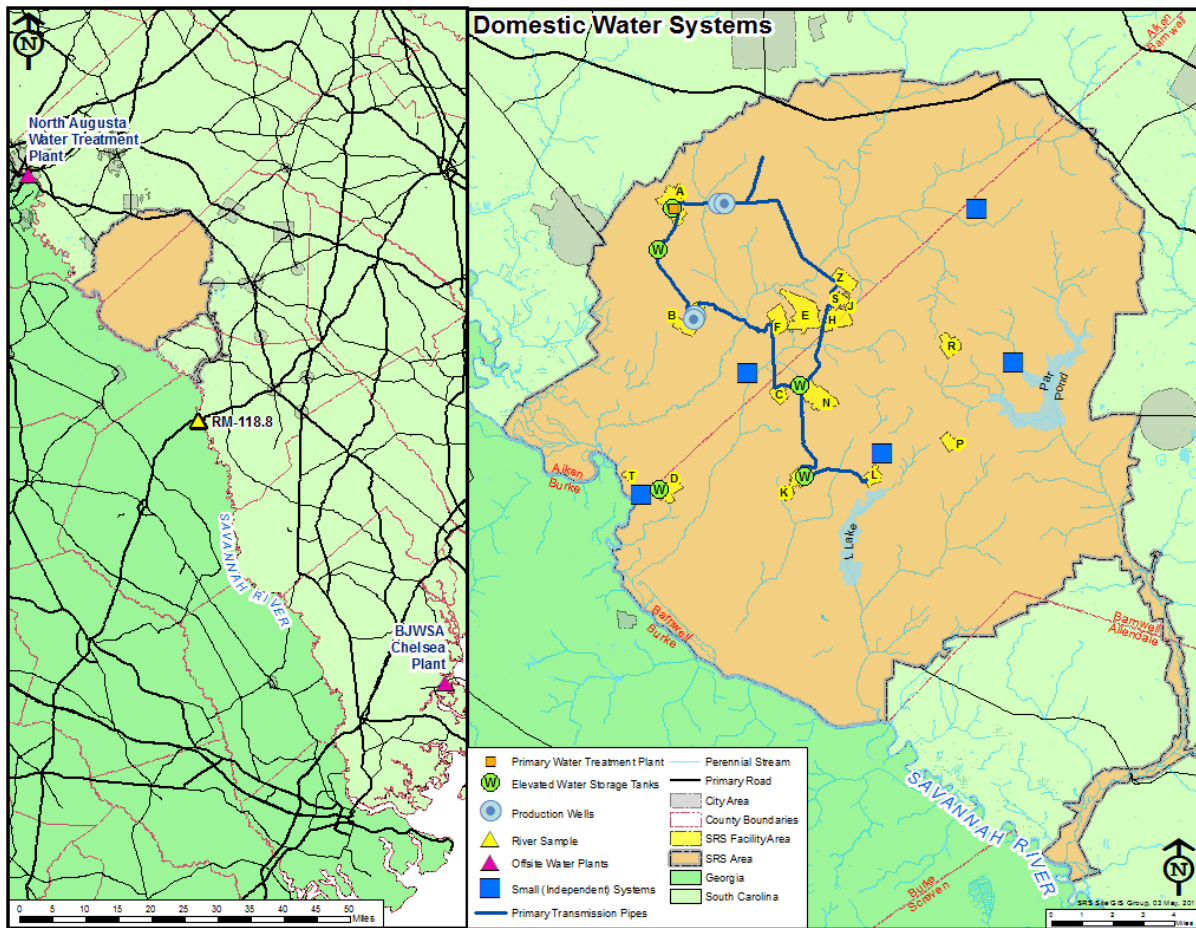


Figure 9 Drinking Water Sampling Locations

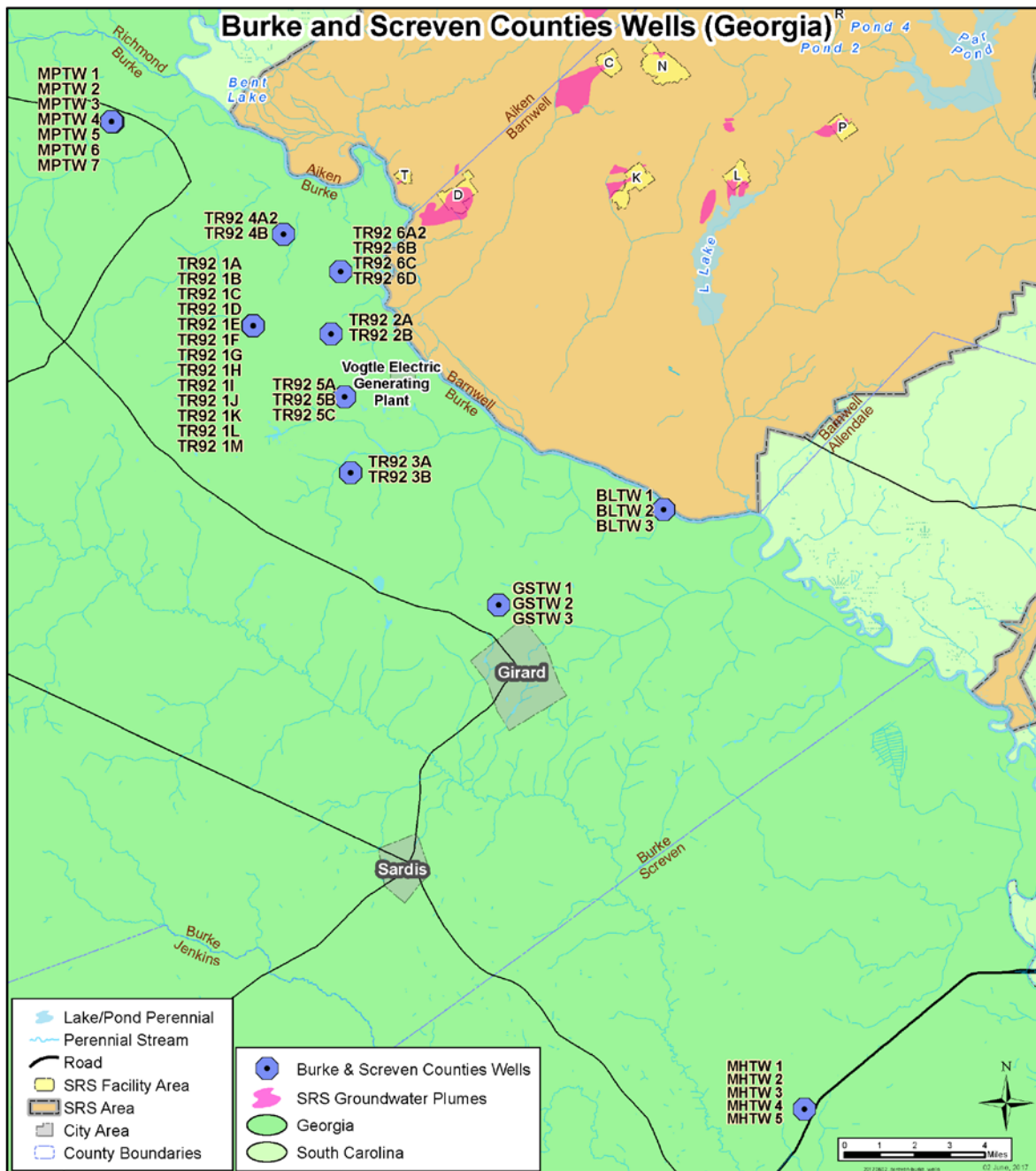


Figure 10 Location of Tritium Wells Sampled in Burke and Screven Counties, Georgia

Tables 1 through 3 provide information related to volumes of sample media needed for various analyses and the lower detection limits for the various media and analytes.

Table 1 Sample Media Information

Matrix	Analytical Parameter	Representative Aliquot	Analytical Method
Surveillance/Effluent Air			
	Gamma, I-129	1400 m3	Gamma Spectroscopy
	Gross alpha-beta	1400 m3	Gas-Flow Proportional Counting
	Tritium	3 m3	Liquid Scintillation Counting
	Strontium-89,90	1400 m3	Gas-Flow Proportional Counting
	Actinides	1400 m3	Alpha Spectroscopy
Effluent Water			
	Gamma, I-129	1 L	Gamma Spectroscopy
	Gross alpha-beta	1 L	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Carbon-14	150 mL	Liquid Scintillation Counting
	Strontium-89,90	1 L	Gas-Flow Proportional Counting
	Actinides	1 L	Alpha Spectroscopy
	Technetium-99	500 mL	Liquid Scintillation Counting
Stream Water			
	Gamma	1 L	Gamma Spectroscopy
	I-129	1500 mL	Gamma Spectroscopy
	Gross alpha-beta	1 L	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	1 L	Gas-Flow Proportional Counting
	Actinides	1 L	Alpha Spectroscopy
	Technetium-99	500 mL	Liquid Scintillation Counting
River Water			
	Gamma	7.0 L	Gamma Spectroscopy
	Gross alpha-beta	1000 mL	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	1000 mL	Gas-Flow Proportional Counting
	Actinides	1000 mL	Alpha Spectroscopy
	Technetium-99	1000 mL	Liquid Scintillation Counting
Drinking Water			
	Gamma	1 L	Gamma Spectroscopy
	Gross alpha-beta	1 L	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	1 L	Gas-Flow Proportional Counting
	Actinides	1 L	Alpha Spectroscopy
Wet/Dry Deposition (Rainwater)			
	Gamma	0.37 m ²	Gamma Spectroscopy
	Gross alpha-beta	0.093 m ² (1/4 sample)	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	0.139 m ² (3/8 sample)	Gas-Flow Proportional Counting
	Actinides	0.031 m ² (1/12 sample)	Alpha Spectroscopy

Matrix	Analytical Parameter	Representative Aliquot	Analytical Method
Soil			
	Gamma	250 g	Gamma Spectroscopy
	Gross alpha-beta	0.2 g	Gas-Flow Proportional Counting
	Strontium-89,90	5 g	Gas-Flow Proportional Counting
	Actinides - Uranium	1 g	Alpha Spectroscopy
	Plutonium	10 g	Alpha Spectroscopy
	Plutonium/Neptunium	8 g	Alpha Spectroscopy
	Americium/Curium	8 g	Alpha Spectroscopy
Sediment			
	Gamma	250g	Gamma Spectroscopy
	Gross alpha-beta	0.2 g	Gas-Flow Proportional Counting
	Strontium-89,90	5 g	Gas-Flow Proportional Counting
	Actinides - Uranium	1 g	Alpha Spectroscopy
	Plutonium	10 g	Alpha Spectroscopy
	Plutonium/Neptunium	8 g	Alpha Spectroscopy
	Americium/Curium	8 g	Alpha Spectroscopy
Vegetation			
	Gamma	200 g	Gamma Spectroscopy
	Gross alpha-beta	0.5 g	Gas-Flow Proportional Counting
	Tritium	100 g	Liquid Scintillation Counting
	Neptunium-237	20 g	Alpha Spectroscopy
	Strontium-89,90	20 g	Gas-Flow Proportional Counting
	Actinides	20 g	Alpha Spectroscopy
	Technetium-99	10 g	Liquid Scintillation Counting
Fish—edible			
	Gamma	500 g (a)	Gamma Spectroscopy
	Iodine-129	500 g (a)	Gamma Spectroscopy
	Gross alpha-beta	10 g	Gas-Flow Proportional Counting
	Tritium	60 g	Liquid Scintillation Counting
	Strontium-89,90	200 g (b)	Gas-Flow Proportional Counting
	Technetium-99	25 g	Liquid Scintillation Counting
Note: a—400 g for panfish; b—100 g for panfish			
Fish—nonedible			
	Strontium-89,90	10 g	Gas-Flow Proportional Counting
Oysters/Crabs/Shrimp			
	Gamma	500 g	Gamma Spectroscopy
	Iodine-129	500 g	Gamma Spectroscopy
	Gross alpha-beta	10 g	Gas-Flow Proportional Counting
	Strontium-89,90	100 g	Gas-Flow Proportional Counting
	Technetium-99	25 g	Liquid Scintillation Counting
Deer/Hogs—muscle			
	Gamma	400 g	Gamma Spectroscopy
	Strontium-89,90	100 g	Gas-Flow Proportional Counting
	Gross alpha-beta	15 g	Gas-Flow Proportional Counting
Deer/Hogs—bone			
	Strontium-89,90	10 g	Gas-Flow Proportional Counting

Matrix	Analytical Parameter	Representative Aliquot	Analytical Method
Foods–watermelon			
	Gamma	1000 g	Gamma Spectroscopy
	Strontium-89,90	100 g	Gas-Flow Proportional Counting
	Gross alpha-beta	15 g	Gas-Flow Proportional Counting
	Tritium	100 g	Liquid Scintillation Counting
	Neptunium-237	100 g	Alpha Spectroscopy
	Technetium-99	50 g	Liquid Scintillation Counting
	Actinides	100 g	Alpha Spectroscopy
Foods–rotational crops			
	Gamma	750 g	Gamma Spectroscopy
	Strontium-89,90	20 g	Gas-Flow Proportional Counting
	Gross alpha-beta	3 g	Gas-Flow Proportional Counting
	Neptunium-237	20 g	Alpha Spectroscopy
	Tritium	100 g	Liquid Scintillation Counting
	Technetium-99	10 g	Liquid Scintillation Counting
	Actinides	20 g	Alpha Spectroscopy
Foods–collards			
	Gamma	500 g	Gamma Spectroscopy
	Strontium-89,90	20 g	Gas-Flow Proportional Counting
	Neptunium-237	20 g	Alpha Spectroscopy
	Gross alpha-beta	0.5 g	Gas-Flow Proportional Counting
	Tritium	100 g	Liquid Scintillation Counting
	Technetium-99	10 g	Liquid Scintillation Counting
	Actinides	20 g	Alpha Spectroscopy
Milk			
	Gamma	1 L	Gamma Spectroscopy
	Tritium	5 mL	Liquid Scintillation Counting
	Strontium-90	500 mL	Gas-Flow Proportional Counting
Beef			
	Gamma	400 g	Gamma Spectroscopy
	Strontium-89,90	200 g	Gas-Flow Proportional Counting
	Tritium	60 g	Liquid Scintillation Counting
	Technetium-99	25 g	Liquid Scintillation Counting
	Neptunium-237	200 g	Alpha Spectroscopy
	Actinides	200 g	Alpha Spectroscopy
	Gross alpha-beta	15 g	Gas-Flow Proportional Counting

Table 2 Representative Minimum Detectable Concentrations for Radiological Analyses

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units
GAS	Environmental Air	ALPHA SPEC: Am/Cm	Am-241	2.57E-05	pCi/m ³
			Cm-244	2.83E-05	
		ALPHA SPEC: Pu	Pu-238	2.88E-05	
			Pu-239	2.87E-05	
		ALPHA SPEC: Th	Th-228	1.13E-04	
			Th-230	2.84E-05	
			Th-232	2.52E-05	
		ALPHA SPEC: TU	U-234	2.92E-05	
			U-235	2.87E-05	
			U-238	2.45E-05	
		GFPC: GROSS A/B	Gross A	2.79E-04	
			Gross B	6.62E-04	
		GFPC: Sr-89/90	Sr-89/90	1.90E-03	
		HPGE SPEC:	Co-60	5.15E-03	
			Cs-137	5.01E-03	
K-40	8.72E-02				
HPGE: I-129	I-129	1.52E-03			
LSC: H-3	H-3	1.35E+01			
LIQUID	Effluent Water	ALPHA SPEC: Am/Cm	Am-241	2.81E-05	pCi/mL
			Cm-244	2.77E-05	
		ALPHA SPEC: Pu	Pu-238	2.76E-05	
			Pu-239	2.83E-05	
		ALPHA SPEC: Pu/Np	Np-237	3.59E-05	
			Pu-238	3.13E-05	
			Pu-239	3.19E-05	
		ALPHA SPEC: TU	U-234	3.13E-05	
			U-235	3.25E-05	
			U-238	2.82E-05	
		GFPC: GROSS A/B	Gross A	9.52E-01	pCi/L
			Gross B	1.51E+00	
		GFPC: Sr-89/90	Sr-89/90	1.89E+00	
		HPGE SPEC:	Co-60	7.41E-03	pCi/mL
	Cs-137		7.81E-03		
K-40	1.37E-01				
HPGE: I-129	I-129	9.06E-04			
LSC: C-14	C-14	1.37E-02			
LSC: H-3	H-3	4.67E-01			
LSC: Tc-99	Tc-99	2.57E-03			
Finished Drinking	GFPC: GROSS A/B	Gross A	2.75E-01	pCi/L	

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units
Water			Gross B	4.26E-01	
		HPGE SPEC:	Co-60	7.33E-03	pCi/mL
		Cs-137	7.58E-03		
		K-40	1.40E-01		
		LSC: H-3	H-3	2.12E-01	
	Milk	GFPC: Sr-90	Sr-90	1.27E+00	pCi/L
		HPGE SPEC:	Co-60	3.46E-03	pCi/mL
			Cs-137	3.20E-03	
			K-40	2.56E-02	
	LSC: H-3	H-3	2.62E-01		
Potable Drinking Water	ALPHA SPEC: Am/Cm	Am-241	9.76E-06	pCi/mL	
		Cm-244	1.20E-05		
	ALPHA SPEC: Pu	Pu-238	1.06E-05		
		Pu-239	1.08E-05		
	ALPHA SPEC: TU	U-234	9.84E-06		
		U-235	1.13E-05		
		U-238	9.13E-06		
	GFPC: GROSS A/B	Gross A	2.83E-01	pCi/L	
		Gross B	4.85E-01		
	GFPC: Sr-89/90	Sr-89/90	6.51E-01		
	HPGE SPEC:	Co-60	7.19E-03	pCi/mL	
		Cs-137	7.29E-03		
		K-40	1.33E-01		
LSC: H-3	H-3	1.70E-01			
Process Sewer Water	ALPHA SPEC: Am/Cm	Am-241	8.78E-06	pCi/mL	
		Cm-244	7.72E-06		
	ALPHA SPEC: Pu/Np	Np-237	9.86E-06		
		Pu-238	8.91E-06		
		Pu-239	1.14E-05		
	ALPHA SPEC: Th	Th-228	1.37E-04		
		Th-230	2.64E-05		
		Th-232	2.46E-05		
	ALPHA SPEC: TU	U-234	1.00E-05		
		U-235	1.01E-05		
		U-238	7.88E-06		
	GFPC: GROSS A/B	Gross A	1.67E+01	pCi/L	
		Gross B	2.80E+01		
GFPC: Sr-89/90	Sr-89/90	6.43E-01			
HPGE SPEC:	Co-60	2.89E-03	pCi/mL		
	Cs-137	3.43E-03			

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units
			K-40	5.03E-02	
		HPGE: I-129	I-129	7.74E-03	
		LSC: C-14	C-14	1.15E-02	
		LSC: H-3	H-3	5.04E-01	
		LSC: Tc-99	Tc-99	3.07E-03	
	Rainwater	LSC: H-3	H-3	4.67E-01	pCi/mL
	River Water - Radiological	ALPHA SPEC: Am/Cm	Am-241	7.83E-06	pCi/mL
			Cm-244	8.06E-06	
		ALPHA SPEC: Pu	Pu-238	8.82E-06	
			Pu-239	9.56E-06	
		ALPHA SPEC: TU	U-234	9.90E-06	
			U-235	1.09E-05	
			U-238	9.09E-06	
		GFPC: GROSS A/B	Gross A	2.58E-01	pCi/L
			Gross B	4.39E-01	
		GFPC: Sr-89/90	Sr-89/90	6.48E-01	
		HPGE SPEC:	Co-60	1.07E-03	pCi/mL
			Cs-137	1.12E-03	
	K-40		1.79E-02		
	LSC: H-3	H-3	1.80E-01		
	LSC: Tc-99	Tc-99	2.63E-03		
	Seepage Basin Water	ALPHA SPEC: Am/Cm	Am-241	1.80E-05	pCi/mL
			Cm-244	1.73E-05	
		ALPHA SPEC: Pu/Np	Np-237	2.15E-05	
			Pu-238	1.85E-05	
			Pu-239	1.91E-05	
		ALPHA SPEC: Th	Th-228	1.12E-04	
Th-230			3.62E-05		
Th-232			3.29E-05		
ALPHA SPEC: TU		U-234	1.82E-05		
		U-235	1.72E-05		
		U-238	1.58E-05		
GFPC: GROSS A/B		Gross A	9.30E-01	pCi/L	
		Gross B	1.61E+00		
GFPC: Sr-89/90		Sr-89/90	1.20E+00		
HPGE SPEC:		Co-60	7.22E-03	pCi/mL	
	Cs-137	7.62E-03			
	K-40	1.38E-01			
HPGE: I-129	I-129	9.00E-04			
LSC: H-3	H-3	4.91E-01			
LSC: Tc-99	Tc-99	2.63E-03			

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units
Storm Sewer Water		ALPHA SPEC: Am/Cm	Am-241	9.22E-06	pCi/mL
			Cm-244	8.53E-06	
		ALPHA SPEC: Pu/Np	Np-237	1.07E-05	
			Pu-238	8.83E-06	
			Pu-239	9.85E-06	
		ALPHA SPEC: TU	U-234	9.73E-06	
			U-235	1.09E-05	
			U-238	8.77E-06	
		GFPC: GROSS A/B	Gross A	8.13E-01	pCi/L
			Gross B	1.48E+00	
		GFPC: Sr-89/90	Sr-89/90	5.97E-01	
		HPGE SPEC:	Co-60	6.95E-03	pCi/mL
			Cs-137	7.50E-03	
			K-40	1.45E-01	
		HPGE: I-129	I-129	8.88E-04	
		LSC: C-14	C-14	1.36E-02	
		LSC: H-3	H-3	4.74E-01	
		LSC: Tc-99	Tc-99	2.55E-03	
Stream Water– Radiological		ALPHA SPEC: Am/Cm	Am-241	8.67E-06	pCi/mL
			Cm-244	9.20E-06	
		ALPHA SPEC: Pu	Pu-238	1.15E-05	
			Pu-239	1.08E-05	
		ALPHA SPEC: Pu/Np	Np-237	1.19E-05	
			Pu-238	9.27E-06	
			Pu-239	1.01E-05	
		ALPHA SPEC: Th	Th-228	1.12E-04	
			Th-230	4.37E-05	
			Th-232	3.62E-05	
		ALPHA SPEC: TU	U-234	1.34E-05	
			U-235	1.37E-05	
			U-238	1.16E-05	
		GFPC: GROSS A/B	Gross A	3.27E-01	pCi/L
			Gross B	6.19E-01	
		GFPC: Sr-89/90	Sr-89/90	6.23E-01	
		HPGE SPEC:	Co-60	7.28E-03	pCi/mL
			Cs-137	7.63E-03	
K-40	1.40E-01				
HPGE: I-129	I-129	8.77E-04			
LSC: C-14	C-14	1.25E-02			
LSC: H-3	H-3	4.85E-01			
LSC: Tc-99	Tc-99	2.59E-03			

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units
SOLID	Beef	ALPHA SPEC: Am/Cm	Am-241	1.40E-03	pCi/g
			Cm-244	1.16E-03	
		ALPHA SPEC: Pu/Np	Np-237	5.71E-05	
			Pu-238	4.82E-05	
			Pu-239	5.40E-05	
		ALPHA SPEC: TU	U-234	5.53E-05	
			U-235	5.67E-05	
			U-238	5.08E-05	
		GFPC: GROSS A/B	Gross A	1.57E-01	
			Gross B	1.96E-01	
		GFPC: Sr-89/90	Sr-89/90	3.36E-03	
		HPGE SPEC:	Co-60	1.26E-02	
			Cs-137	1.17E-02	
	K-40		8.90E-02		
	LSC: H-3	H-3	6.78E-02		
	LSC: Tc-99	Tc-99	8.52E-02		
	Deer Bone	GFPC: Sr-89/90	Sr-89/90	3.07E-01	pCi/g
	Deer Flesh	GFPC: GROSS A/B	Gross A	1.41E-01	pCi/g
			Gross B	1.79E-01	
		GFPC: Sr-89/90	Sr-89/90	6.40E-03	
HPGE SPEC:		Co-60	5.76E-02		
		Cs-137	6.15E-02		
K-40	4.51E-01				
Freshwater Fish/Bass	GFPC: GROSS A/B	Gross A	1.77E-01	pCi/g	
		Gross B	2.61E-01		
	GFPC: Sr-89/90	Sr-89/90	1.61E-01		
	HPGE SPEC:	Co-60	1.41E-02		
		Cs-137	1.30E-02		
		K-40	1.04E-01		
	HPGE: I-129	I-129	2.96E-02		
LSC: H-3	H-3	8.84E-02			
LSC: Tc-99	Tc-99	8.43E-02			
Freshwater Fish/Freshwater Catfish	GFPC: GROSS A/B	Gross A	1.78E-01	pCi/g	
		Gross B	2.59E-01		
	GFPC: Sr-89/90	Sr-89/90	1.60E-01		
	HPGE SPEC:	Co-60	1.46E-02		
		Cs-137	1.28E-02		
		K-40	1.03E-01		
	HPGE: I-129	I-129	2.67E-02		
LSC: H-3	H-3	8.70E-02			
LSC: Tc-99	Tc-99	8.43E-02			

Onsite Environmental Bioassay Laboratory							
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units		
Freshwater Fish/Panfish		GFPC: GROSS A/B	Gross A	1.75E-01	pCi/g		
			Gross B	2.59E-01			
		HPGE SPEC:	Co-60	1.78E-02			
			Cs-137	1.62E-02			
			K-40	1.26E-01			
		HPGE: I-129	I-129	3.38E-02			
		LSC: H-3	H-3	8.95E-02			
		LSC: Tc-99	Tc-99	8.42E-02			
		Freshwater Sediment/Detritus		ALPHA SPEC: Am/Cm	Am-241	1.04E-03	pCi/g
					Cm-244	9.58E-04	
				ALPHA SPEC: Pu/Np	Np-237	1.64E-03	
					Pu-238	1.39E-03	
Pu-239	1.44E-03						
ALPHA SPEC: TU	U-234			1.43E-02			
	U-235			1.42E-02			
	U-238			1.20E-02			
GFPC: GROSS A/B	Gross A			2.43E+00			
	Gross B			3.89E+00			
GFPC: Sr-89/90	Sr-89/90			1.20E-01			
HPGE SPEC:	Co-60			5.05E-02			
	Cs-137	5.62E-02					
	K-40	4.55E-01					
Fruit/Watermelon		ALPHA SPEC: Am/Cm	Am-241	8.95E-05	pCi/g		
			Cm-244	7.30E-05			
		ALPHA SPEC: Pu/Np	Np-237	1.24E-04			
			Pu-238	1.09E-04			
			Pu-239	1.03E-04			
		ALPHA SPEC: TU	U-234	9.41E-05			
			U-235	8.86E-05			
			U-238	8.81E-05			
		GFPC: GROSS A/B	Gross A	3.89E-02			
			Gross B	5.13E-02			
		GFPC: Sr-89/90	Sr-89/90	6.71E-03			
		HPGE SPEC:	Co-60	3.96E-03			
Cs-137	3.77E-03						
K-40	3.11E-02						
LSC: H-3	H-3	7.72E-02					
LSC: Tc-99	Tc-99	3.90E-02					
Fruit/Wheat		ALPHA SPEC: Am/Cm	Am-241	7.42E-04	pCi/g		
			Cm-244	5.95E-04			

Onsite Environmental Bioassay Laboratory						
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units	
		ALPHA SPEC: Pu/Np	Np-237	5.92E-04		
			Pu-238	5.03E-04		
			Pu-239	5.20E-04		
		ALPHA SPEC: TU	U-234	6.72E-04		
			U-235	6.43E-04		
			U-238	5.54E-04		
		GFPC: GROSS A/B	Gross A	2.01E-01		
			Gross B	2.79E-01		
		GFPC: Sr-89/90	Sr-89/90	3.36E-02		
		HPGE SPEC:	Co-60	6.61E-03		
			Cs-137	5.57E-03		
			K-40	4.28E-02		
		LSC: H-3	H-3	4.79E-02		
		LSC: Tc-99	Tc-99	2.82E-01		
		Greens/Cabbage	ALPHA SPEC: Am/Cm	Am-241	4.24E-04	pCi/g
				Cm-244	3.76E-04	
			ALPHA SPEC: Pu/Np	Np-237	7.86E-04	
				Pu-238	7.41E-04	
				Pu-239	7.65E-04	
ALPHA SPEC: TU	U-234		8.14E-04			
	U-235		8.45E-04			
	U-238		7.41E-04			
GFPC: GROSS A/B	Gross A		8.45E-01			
	Gross B		1.15E+00			
GFPC: Sr-89/90	Sr-89/90		3.11E-02			
HPGE SPEC:	Co-60		1.82E-02			
	Cs-137		1.15E-02			
	K-40	9.12E-02				
LSC: H-3	H-3	7.51E-02				
LSC: Tc-99	Tc-99	2.16E-01				
Greens/Collards	ALPHA SPEC: Am/Cm	Am-241	3.91E-04	pCi/g		
		Cm-244	3.87E-04			
	ALPHA SPEC: Pu/Np	Np-237	8.16E-04			
		Pu-238	6.15E-04			
		Pu-239	6.64E-04			
	ALPHA SPEC: TU	U-234	6.90E-04			
		U-235	7.42E-04			
		U-238	6.18E-04			
	GFPC: GROSS A/B	Gross A	1.61E+00			
		Gross B	1.71E+00			
GFPC: Sr-89/90	Sr-89/90	3.27E-02				

Onsite Environmental Bioassay Laboratory						
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units	
		HPGE SPEC:	Co-60	1.88E-02		
			Cs-137	1.13E-02		
			K-40	8.40E-02		
		LSC: H-3	H-3	6.14E-02		
		LSC: Tc-99	Tc-99	2.67E-01		
	Hog Bone	GFPC: Sr-89/90	Sr-89/90	3.07E-01	pCi/g	
	Hog Flesh	GFPC: GROSS A/B	Gross A	1.27E-01	pCi/g	
			Gross B	1.69E-01		
		GFPC: Sr-89/90	Sr-89/90	6.37E-03		
		HPGE SPEC:	Co-60	6.57E-02		
			Cs-137	6.39E-02		
		K-40	4.82E-01			
	Marine Fish/Marine Mullet	GFPC: GROSS A/B	Gross A	1.91E-01	pCi/g	
			Gross B	2.59E-01		
		GFPC: Sr-89/90	Sr-89/90	1.62E-01		
		HPGE SPEC:	Co-60	3.69E-02		
			Cs-137	3.97E-02		
				K-40	3.22E-01	
		HPGE: I-129	I-129	2.97E-02		
LSC: H-3	H-3	9.70E-02				
LSC: Tc-99	Tc-99	8.83E-02				
	Marine Fish/Red Fish (drum)	GFPC: GROSS A/B	Gross A	1.82E-01	pCi/g	
			Gross B	2.87E-01		
		GFPC: Sr-89/90	Sr-89/90	1.48E-01		
		HPGE SPEC:	Co-60	1.46E-02		
			Cs-137	1.54E-02		
				K-40	1.22E-01	
		HPGE: I-129	I-129	2.40E-02		
LSC: H-3	H-3	8.15E-02				
LSC: Tc-99	Tc-99	8.72E-02				
	Marine Fish/Sea Trout	GFPC: GROSS A/B	Gross A	1.86E-01	pCi/g	
			Gross B	2.88E-01		
		GFPC: Sr-89/90	Sr-89/90	1.48E-01		
		HPGE SPEC:	Co-60	1.51E-02		
			Cs-137	1.48E-02		
				K-40	1.22E-01	
		HPGE: I-129	I-129	3.20E-02		
LSC: H-3	H-3	8.47E-02				
LSC: Tc-99	Tc-99	8.72E-02				
	Marine Invertebrate	GFPC: GROSS A/B	Gross A	1.98E-01	pCi/g	
			Gross B	2.95E-01		

Onsite Environmental Bioassay Laboratory						
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units	
		GFPC: Sr-89/90	Sr-89/90	6.34E-03		
		HPGE SPEC:	Co-60	1.57E-02		
			Cs-137	1.60E-02		
			K-40	1.32E-01		
		HPGE: I-129	I-129	1.71E-02		
		LSC: Tc-99	Tc-99	8.50E-02		
		Terrestrial Soil/Detritus	ALPHA SPEC: Am/Cm	Am-241	1.22E-03	pCi/g
				Cm-244	1.15E-03	
			ALPHA SPEC: Pu/Np	Np-237	1.97E-03	
				Pu-238	1.63E-03	
	Pu-239			1.68E-03		
	ALPHA SPEC: TU		U-234	1.42E-02		
			U-235	1.45E-02		
			U-238	1.23E-02		
	GFPC: GROSS A/B		Gross A	1.99E+00		
			Gross B	3.23E+00		
	GFPC: Sr-89/90	Sr-89/90	1.25E-01			
	HPGE SPEC:	Co-60	4.08E-02			
		Cs-137	4.80E-02			
		K-40	3.81E-01			
	Terrestrial Vegetation	ALPHA SPEC: Am/Cm	Am-241	4.38E-04	pCi/g	
			Cm-244	3.95E-04		
		ALPHA SPEC: Pu/Np	Np-237	6.54E-04		
			Pu-238	4.91E-04		
			Pu-239	5.18E-04		
		ALPHA SPEC: TU	U-234	6.97E-04		
			U-235	7.52E-04		
U-238			5.96E-04			
GFPC: GROSS A/B		Gross A	1.12E+00			
		Gross B	1.65E+00			
GFPC: Sr-89/90	Sr-89/90	3.35E-02				
HPGE SPEC:	Co-60	6.30E-02				
	Cs-137	5.56E-02				
	K-40	4.49E-01				
LSC: H-3	H-3	6.50E-02				
LSC: Tc-99	Tc-99	2.32E-01				

Offsite Analytical Laboratories					
Material Type	Type of Media	Method	Analyte	CY 2016 Average MDC	Units
Solids	Soil/Sediment	GFPC: GROSS A/B	Gross A	4	pCi/g
			Gross B	10	
		ALPHA SPEC: Am/Cm	Am-241	1	pCi/g
			Cm-244	1	
		ALPHA SPEC: Pu/Np	Np-237	1	pCi/g
			Pu-238	1	
			Pu-239	1	
		HPGE SPEC: (Note: Gamma Spec detection limits are based on Cs-137)	Co-60	0.1	pCi/g
			Cs-137		
			K-40		
		ALPHA SPEC: Th	Th-228	1	pCi/g
			Th-230	1	
			Th-232	1	
		ALPHA SPEC: TU	U-234	1	pCi/g
			U-235	1	
U-238	1				
GFPC: Sr-89/90	Sr-89/90	2	pCi/g		

Table 3 Nonradiological Environmental Surveillance Practical Quantitation Limits (PQLs)

Parameter/Laboratory	2016 PQL	Units
SRNS Environmental Monitoring Field Laboratory		
pH	as recorded	SU
Total Residual Chlorine	0.05	mg/L
SRNS Environmental Bioassay Laboratory		
Total Suspended Solids (TSS)	1.0	mg/L
Aluminum (Al)	0.05	mg/L
Arsenic (As)	0.005	mg/L
Barium (Ba)	0.05	mg/L
Beryllium (Be)	0.001	mg/L
Cadmium (Cd)	0.0001	mg/L
Chromium (Cr)	0.005	mg/L
Copper (Cu)	0.005	mg/L
Iron (Fe)	0.02	mg/L
Lead (Pb)	0.002	mg/L
Manganese (Mn)	0.01	mg/L
Mercury (Hg), Total	0.02	ug/L
Nickel (Ni)	0.01	mg/L
Nitrate (NO ₃)	0.02	mg/L
Nitrite (NO ₂)	0.02	mg/L
Selenium (Se)	0.005	mg/L
Silver (Ag)	0.005	mg/L
Zinc (Zn)	0.01	mg/L
SRNS Central Sanitary Wastewater Treatment Facility Laboratory		
Biological Oxygen Demand (BOD)	2.0	mg/L
pH	as recorded	SU
Offsite Analytical Laboratories		
Ammonia-N	0.10	mg/L
Biological Oxygen Demand (BOD)	2.0	mg/L
Chemical Oxygen Demand (COD)	10.0	mg/L
Cyanide (Cn)-aqueous	0.010	mg/L
Cyanide (Cn)-solid	0.50	mg/kg
Fecal Coliform	2.000	N/A
Hardness	10.0	mg/L
Nitrate (NO ₃)	0.020	mg/L
Nitrite (NO ₂)	0.020	mg/L
Nitrate-Nitrite-N	0.020	mg/L

Parameter/Laboratory	2016 PQL	Units
Phenol	0.0050	mg/L
Sulfate	1.0	mg/L
Total Dissolved Solids (TDS)	10.0	mg/L
Total Suspended Solids (TSS)	1.0	mg/L
Total Kjeldahl Nitrogen (TKN)	0.10	mg/L
Phosphorus	0.010	mg/L
Total Organic carbon (TOC)	4.00 ^a	mg/L
% Solids	N/A	
Aluminum (Al)	40.0	mg/L
Aluminum (Al)	20.0	mg/kg (solid)
Arsenic (As)	1.000	mg/L
Arsenic (As)	0.75	mg/kg (solid)
Barium (Ba)	5.0	mg/L
Barium (Ba)	1.3	mg/kg (solid)
Boron (B)	25.0	mg/L
Cadmium (Cd)	0.10	mg/L
Cadmium (Cd)	0.25	mg/kg (solid)
Chromium (Cr)	5.0	mg/L
Chromium (Cr)	0.5	mg/kg (solid)
Copper (Cu)	1.0	mg/L
Copper (Cu)	0.5	mg/kg (solid)
Iron (Fe)	20.0	mg/L
Iron (Fe)	5.0	mg/kg (solid)
Lead (Pb)	1.0	mg/L
Lead (Pb)	0.50	mg/kg (solid)
Magnesium	250	mg/kg (solid)
Manganese (Mn)	5.00	mg/L
Manganese (Mn)	0.75	mg/kg (solid)
Mercury (Hg), Total	0.002	mg/L
Mercury (Hg), Low Level	0.50	ng/L
Mercury (Hg)	0.083	mg/kg (solid)
Molybdenum (Mo)	2.0	mg/kg (solid)
Nickel (Ni)	5.0	mg/L
Nickel (Ni)	2.0	mg/kg (solid)
Potassium (K)	250.00	mg/kg (solid)
Selenium (Se)	1.0	mg/L
Selenium (Se)	1.0	mg/kg (solid)
Silver (Ag)	1.0	mg/L
Silver (Ag)	0.50	mg/kg (solid)
Sodium (Na)	200.00	mg/L
Uranium (U)	N/A	mg/L
Uranium (U)	25.00	mg/kg (solid)
Zinc (Zn)	10.0	mg/L
Zinc (Zn)	2.5	mg/kg (solid)
Aldrin	0.040	mg/L

Parameter/Laboratory	2016 PQL	Units
Alpha-BHC	0.040	mg/L
Aroclor 1016	0.40	mg/L
Aroclor 1221	0.40	mg/L
Aroclor 1232	0.40	mg/L
Aroclor 1242	0.40	mg/L
Aroclor 1248	0.40	mg/L
Aroclor 1254	0.40	mg/L
Aroclor 1260	0.40	mg/L
Beta-BHC	0.040	mg/L
Delta-BHC	0.040	mg/L
Gamma-BHC	0.040	mg/L
Chlordane	0.40	mg/L
4,4'-DDD	0.040	mg/L
4,4'-DDE	0.040	mg/L
4,4'-DDT	0.040	mg/L
Dieldrin	0.040	mg/L
Endosulfan I	0.040	mg/L
Endosulfan II	0.040	mg/L
Endosulfan sulfate	0.040	mg/L
Endrin	0.040	mg/L
Endrin aldehyde	0.040	mg/L
Heptachlor	0.040	mg/L
Lindane	0.040	mg/L
Heptachlor epoxide	0.040	mg/L
Toxaphene	0.040	mg/L
Benzene	1.0	mg/L
Tetrachloroethylene (Tetrachloroethene)	1.0	mg/L
Trichloroethylene (Trichloroethene)	1.0	mg/L
Ethylene Glycol	50.0	mg/L
2,4-D	2.0 ^a	mg/L
2,4,5-TP (Silvex)	0.5 ^a	mg/L

Note:

^a The PQL will vary slightly depending on the dilution factor.

This section presents the raw data that Chapter 4 of the Savannah River Site 2016 Annual Environmental Report summarizes and discusses.

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data

During 2016, no flow measurements were recorded due to lack of flow in the following outfalls: D-1B, F-01, F-02, F-05, H-07, and K-06.

The following outfalls no longer discharge. The date on which discharge ceased is provided in parentheses after the name of the outfall: D-03 (April 2009), D-06 (June 2012), D-Area sanitary wastewater treatment plant (2013), D-01D (November 2013), S-04 (July 2007), and X-8C (November 2013).

Outfall: A-01

Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)
1/1/2016	Holiday	2/11/2016	562,147	3/24/2016	499,704
1/4/2016	1,060,911	2/12/2016	546,874	3/25/2016	Holiday
1/5/2016	391,290	2/15/2016	Holiday	3/28/2016	843,076
1/6/2016	378,720	2/16/2016	602,389	3/29/2016	641,052
1/7/2016	378,200	2/17/2016	982,168	3/30/2016	534,436
1/8/2016	422,966	2/18/2016	681,459	3/31/2016	500,583
1/11/2016	430,778	2/19/2016	541,510	4/1/2016	1,102,796
1/12/2016	362,980	2/23/2016	500,701	4/4/2016	1,823,495
1/13/2016	370,362	2/24/2016	735,568	4/5/2016	1,394,178
1/14/2016	359,704	2/25/2016	1,196,235	4/6/2016	1,284,818
1/15/2016	349,328	2/26/2016	945,265	4/7/2016	804,613
1/18/2016	Holiday	2/29/2016	598,339	4/8/2016	821,424
1/19/2016	504,957	3/1/2016	557,607	4/11/2016	526,653
1/20/2016	362,870	3/2/2016	644,297	4/12/2016	613,349
1/21/2016	376,120	3/3/2016	879,580	4/13/2016	646,888
1/22/2016	428,562	3/4/2016	1,182,563	4/14/2016	533,467
1/25/2016	524,611	3/7/2016	888,000	4/15/2016	523,741
1/26/2016	510,861	3/8/2016	476,788	4/18/2016	494,337
1/27/2016	565,592	3/9/2016	458,982	4/19/2016	476,973
1/28/2016	563,930	3/10/2016	470,393	4/20/2016	447,843
1/29/2016	825,006	3/11/2016	531,103	4/21/2016	472,919
2/1/2016	509,341	3/14/2016	511,432	4/22/2016	535,932
2/2/2016	522,120	3/15/2016	521,476	4/25/2016	495,958
2/3/2016	614,464	3/16/2016	461,683	4/26/2016	542,785
2/4/2016	1,538,258	3/17/2016	515,728	4/27/2016	467,381
2/5/2016	1,555,882	3/18/2016	655,511	4/28/2016	516,418
2/8/2016	1,224,977	3/21/2016	518,211	4/29/2016	489,012
2/9/2016	738,408	3/22/2016	488,390	5/2/2016	523,468
2/10/2016	593,333	3/23/2016	460,723	5/3/2016	733,928

Collection Date	Flow Result (gallons per day)
5/4/2016	579,709
5/5/2016	498,157
5/6/2016	453,765
5/9/2016	431,028
5/10/2016	468,592
5/11/2016	476,663
5/12/2016	405,955
5/13/2016	423,929
5/16/2016	445,032
5/17/2016	565,320
5/18/2016	1,186,411
5/19/2016	753,895
5/20/2016	784,890
5/23/2016	526,959
5/24/2016	693,326
5/25/2016	470,787
5/26/2016	438,974
5/27/2016	535,385
5/30/2016	Holiday
5/31/2016	1,084,655
6/1/2016	1,310,962
6/2/2016	1,075,577
6/3/2016	631,320
6/6/2016	641,916
6/7/2016	1,077,194
6/8/2016	1,151,578
6/9/2016	907,630
6/10/2016	651,767
6/13/2016	551,089
6/14/2016	558,666
6/15/2016	670,573
6/16/2016	786,270
6/17/2016	757,910
6/20/2016	580,644
6/21/2016	628,386
6/22/2016	586,757
6/23/2016	573,752
6/24/2016	534,164
6/27/2016	527,273
6/28/2016	673,397
6/29/2016	625,760
6/30/2016	682,278
7/1/2016	581,615

Collection Date	Flow Result (gallons per day)
7/4/2016	Holiday
7/5/2016	488,174
7/6/2016	544,743
7/7/2016	609,470
7/8/2016	514,800
7/11/2016	421,460
7/12/2016	575,990
7/13/2016	465,834
7/14/2016	444,266
7/15/2016	591,004
7/18/2016	985,990
7/19/2016	1,227,037
7/20/2016	1,243,555
7/21/2016	1,133,957
7/22/2016	696,984
7/25/2016	526,447
7/26/2016	823,131
7/27/2016	781,614
7/28/2016	579,898
7/29/2016	557,541
8/1/2016	545,583
8/2/2016	773,528
8/3/2016	826,592
8/4/2016	847,953
8/5/2016	1,292,560
8/8/2016	1,003,822
8/9/2016	652,346
8/10/2016	622,329
8/11/2016	704,595
8/12/2016	930,958
8/15/2016	713,173
8/16/2016	656,443
8/17/2016	603,840
8/18/2016	624,949
8/19/2016	625,424
8/22/2016	811,196
8/23/2016	649,215
8/24/2016	579,559
8/25/2016	623,021
8/26/2016	591,846
8/29/2016	577,641
8/30/2016	883,833
8/31/2016	733,252

Collection Date	Flow Result (gallons per day)
9/1/2016	636,989
9/6/2016	1,982,816
9/7/2016	1,658,022
9/8/2016	1,494,433
9/9/2016	1,352,644
9/12/2016	817,056
9/13/2016	775,787
9/14/2016	1,086,943
9/15/2016	970,560
9/16/2016	641,465
9/19/2016	575,909
9/20/2016	753,347
9/21/2016	645,634
9/22/2016	554,240
9/23/2016	595,506
9/26/2016	569,638
9/27/2016	582,307
9/28/2016	579,220
9/29/2016	609,495
9/30/2016	626,444
10/3/2016	561,532
10/4/2016	625,653
10/5/2016	576,924
10/6/2016	603,222
10/7/2016	581,623
10/10/2016	1,686,470
10/11/2016	1,452,548
10/12/2016	1,334,461
10/13/2016	1,246,665
10/14/2016	1,132,183
10/17/2016	610,466
10/18/2016	595,502
10/19/2016	572,527
10/20/2016	604,089
10/21/2016	606,727
10/24/2016	551,835
10/25/2016	566,502
10/26/2016	576,354
10/27/2016	566,810
10/28/2016	578,658
10/31/2016	545,682
11/1/2016	598,603
11/2/2016	607,434

Collection Date	Flow Result (gallons per day)
11/3/2016	581,310
11/4/2016	585,567
11/7/2016	569,737
11/8/2016	974,284
11/9/2016	179,562
11/10/2016	561,613
11/11/2016	554,635
11/14/2016	723,644
11/15/2016	708,126
11/16/2016	574,038
11/17/2016	550,865
11/18/2016	566,615
11/21/2016	542,505
11/22/2016	602,529
11/23/2016	572,957
11/24/2016	Holiday
11/25/2016	Holiday
11/28/2016	568,437
11/29/2016	622,382
11/30/2016	632,647
12/1/2016	949,826
12/2/2016	918,170
12/5/2016	800,254
12/6/2016	1,666,800
12/7/2016	1,469,255
12/8/2016	1,263,702
12/9/2016	1,212,774
12/12/2016	698,046
12/13/2016	746,330
12/14/2016	1,158,499
12/15/2016	1,082,072
12/16/2016	791,583
12/19/2016	761,485
12/20/2016	1,132,175
12/21/2016	994,274
12/22/2016	679,007
12/23/2016	Holiday
12/26/2016	Holiday
12/27/2016	625,036
12/28/2016	640,078
12/29/2016	640,220
12/30/2016	616,141

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: A-11

Collection Date	Flow Result (gallons per minute)
1/5/2016	292
2/2/2016	216
3/2/2016	238
4/5/2016	221
5/10/2016	206
6/8/2016	231
7/19/2016	150
8/9/2016	150
9/13/2016	196
9/20/2016	232
10/4/2016	192
11/8/2016	184
12/13/2016	294

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: A-1A

Collection Date	Flow Result (gallons per minute)
1/4/2016	0
1/5/2016	0
1/6/2016	0
1/7/2016	161
1/11/2016	0
1/12/2016	0
1/13/2016	0
1/14/2016	0
1/18/2016	0
1/19/2016	0
1/20/2016	0
1/21/2016	0
1/25/2016	0
1/26/2016	0
1/27/2016	0
1/28/2016	0
2/1/2016	0
2/2/2016	0
2/3/2016	0
2/4/2016	0
2/8/2016	0
2/9/2016	0
2/10/2016	0
2/11/2016	0
2/15/2016	0
2/16/2016	0
2/17/2016	0
2/18/2016	0
2/19/2016	0
2/22/2016	0
2/23/2016	0
2/24/2016	0
2/25/2016	0
2/29/2016	0
3/1/2016	0
3/2/2016	0
3/3/2016	230
3/7/2016	0
3/8/2016	0

Collection Date	Flow Result (gallons per minute)
3/9/2016	0
3/10/2016	0
3/14/2016	0
3/15/2016	0
3/16/2016	0
3/17/2016	0
3/21/2016	0
3/22/2016	0
3/23/2016	0
3/24/2016	0
3/28/2016	0
3/29/2016	0
3/30/2016	0
3/31/2016	0
4/4/2016	0
4/5/2016	0
4/6/2016	0
4/7/2016	0
4/11/2016	0
4/12/2016	0
4/13/2016	0
4/14/2016	0
4/18/2016	0
4/19/2016	0
4/20/2016	0
4/21/2016	0
4/25/2016	0
4/26/2016	0
4/27/2016	0
4/28/2016	0
5/2/2016	0
5/3/2016	0
5/4/2016	0
5/5/2016	0
5/9/2016	0
5/10/2016	0
5/11/2016	0
5/12/2016	0
5/16/2016	0

Collection Date	Flow Result (gallons per minute)
5/17/2016	0
5/18/2016	0
5/19/2016	0
5/23/2016	0
5/24/2016	0
5/25/2016	0
5/26/2016	229
5/30/2016	0
5/31/2016	0
6/1/2016	0
6/2/2016	0
6/6/2016	0
6/7/2016	0
6/8/2016	0
6/9/2016	0
6/13/2016	0
6/14/2016	0
6/15/2016	226
6/16/2016	228
6/20/2016	0
6/21/2016	0
6/22/2016	0
6/23/2016	0
6/27/2016	0
6/28/2016	0
6/29/2016	0
6/30/2016	0
7/4/2016	0
7/5/2016	0
7/6/2016	0
7/7/2016	0
7/11/2016	0
7/12/2016	0
7/13/2016	0
7/14/2016	0
7/18/2016	0
7/19/2016	0
7/20/2016	0
7/21/2016	0

Collection Date	Flow Result (gallons per minute)
7/25/2016	185
7/26/2016	145
7/27/2016	0
7/28/2016	0
8/1/2016	0
8/2/2016	0
8/3/2016	0
8/4/2016	0
8/8/2016	0
8/9/2016	0
8/10/2016	223
8/11/2016	229
8/15/2016	0
8/16/2016	0
8/17/2016	0
8/18/2016	0
8/22/2016	0
8/23/2016	0
8/24/2016	0
8/25/2016	0
8/29/2016	0
8/30/2016	0
8/31/2016	0
9/1/2016	0
9/5/2016	0
9/6/2016	0
9/7/2016	0
9/8/2016	0
9/12/2016	0
9/13/2016	0
9/14/2016	0
9/15/2016	0
9/19/2016	0
9/20/2016	227
9/21/2016	0
9/22/2016	0
9/26/2016	0
9/27/2016	0
9/28/2016	0
9/29/2016	0
10/3/2016	0
10/4/2016	0
10/5/2016	0

Collection Date	Flow Result (gallons per minute)
10/6/2016	0
10/10/2016	0
10/11/2016	0
10/12/2016	0
10/13/2016	0
10/17/2016	0
10/18/2016	0
10/19/2016	0
10/20/2016	0
10/24/2016	0
10/25/2016	0
10/26/2016	0
10/27/2016	0
10/31/2016	0
11/1/2016	0
11/2/2016	0
11/3/2016	0
11/7/2016	0
11/8/2016	0
11/9/2016	0
11/10/2016	0
11/14/2016	0
11/15/2016	0
11/16/2016	0
11/17/2016	0
11/21/2016	0
11/22/2016	0
11/23/2016	0
11/24/2016	0
11/28/2016	0
11/29/2016	0
11/30/2016	0
12/1/2016	0
12/5/2016	0
12/6/2016	0
12/7/2016	0
12/8/2016	0
12/12/2016	0
12/13/2016	0
12/14/2016	186
12/15/2016	0
12/19/2016	0
12/20/2016	0

Collection Date	Flow Result (gallons per minute)
12/21/2016	0
12/22/2016	0
12/26/2016	0
12/27/2016	0
12/28/2016	0
12/29/2016	0
1/4/2016	0
1/5/2016	0
1/6/2016	0
1/7/2016	161
1/11/2016	0
1/12/2016	0
1/13/2016	0
1/14/2016	0
1/18/2016	0
1/19/2016	0
1/20/2016	0
1/21/2016	0
1/25/2016	0
1/26/2016	0
12/27/2016	0
12/28/2016	0
12/29/2016	0

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: D-01

Collection Date	Flow Result (gallons per day)
1/7/2016	0
2/10/2016	0.72
3/3/2016	0.72
4/7/2016	0
5/2/2016	0.72
6/2/2016	0.36
7/7/2016	0
8/4/2016	0.36
9/1/2016	0
10/10/2016	0
11/3/2016	0
12/1/2016	0

Outfall: D-02

Collection Date	Flow Result (gallons per minute)
1/7/2016	4
4/7/2016	50
7/7/2016	0
10/11/2016	100

Outfall: D-1C

Collection Date	Flow Result (gallons per day)
1/7/2016	0
2/10/2016	0.72
3/3/2016	0.72
4/7/2016	0
5/2/2016	0.72
6/2/2016	0.36
7/7/2016	0
8/4/2016	0.36
9/1/2016	0
10/10/2016	0
11/3/2016	0
12/1/2016	0

Outfall: F-08

Collection Date	Flow Result (gallons per minute)
1/20/2016	20.07
2/9/2016	11.49
3/8/2016	15.42
4/19/2016	11.49
5/9/2016	0
6/14/2016	397.10
7/12/2016	0
8/2/2016	15.42
9/12/2016	0
10/17/2016	0
11/15/2016	0
12/13/2016	208.40

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: G-10

Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)
1/1/2016	0.264	2/8/2016	0.207	3/17/2016	0.199
1/2/2016	0.247	2/9/2016	0.277	3/18/2016	0.148
1/3/2016	0.233	2/10/2016	0.182	3/19/2016	0.110
1/4/2016	0.210	2/11/2016	0.274	3/20/2016	0.115
1/5/2016	0.222	2/12/2016	0.122	3/21/2016	0.211
1/6/2016	0.224	2/13/2016	0.136	3/22/2016	0.203
1/7/2016	0.242	2/14/2016	0.130	3/23/2016	0.167
1/8/2016	0.223	2/15/2016	0.154	3/24/2016	0.145
1/9/2016	0.106	2/16/2016	0.224	3/25/2016	0.103
1/10/2016	0.166	2/17/2016	0.206	3/26/2016	0.146
1/11/2016	0.165	2/18/2016	0.198	3/27/2016	0.159
1/12/2016	0.210	2/19/2016	0.142	3/28/2016	0.185
1/13/2016	0.204	2/20/2016	0.121	3/29/2016	0.168
1/14/2016	0.201	2/21/2016	0.150	3/30/2016	0.205
1/15/2016	0.179	2/22/2016	0.151	3/31/2016	0.002
1/16/2016	0.130	2/23/2016	0.212	4/1/2016	0.357
1/17/2016	0.135	2/24/2016	0.231	4/2/2016	0.244
1/18/2016	0.138	2/25/2016	0.232	4/3/2016	0.207
1/19/2016	0.222	2/26/2016	0.177	4/4/2016	0.215
1/20/2016	0.206	2/27/2016	0.132	4/5/2016	0.211
1/21/2016	0.228	2/28/2016	0.110	4/6/2016	0.208
1/22/2016	0.168	2/29/2016	0.224	4/7/2016	0.208
1/23/2016	0.130	3/1/2016	0.204	4/8/2016	0.172
1/24/2016	0.132	3/2/2016	0.212	4/9/2016	0.130
1/25/2016	0.200	3/3/2016	0.338	4/10/2016	0.132
1/26/2016	0.212	3/4/2016	0.170	4/11/2016	0.190
1/27/2016	0.200	3/5/2016	0.144	4/12/2016	0.187
1/28/2016	0.217	3/6/2016	0.128	4/13/2016	0.198
1/29/2016	0.133	3/7/2016	0.196	4/14/2016	0.200
1/30/2016	0.127	3/8/2016	0.201	4/15/2016	0.199
1/31/2016	0.157	3/9/2016	0.203	4/16/2016	0.093
2/1/2016	0.131	3/10/2016	0.207	4/17/2016	0.096
2/2/2016	0.192	3/11/2016	0.132	4/18/2016	0.185
2/3/2016	0.295	3/12/2016	0.111	4/19/2016	0.177
2/4/2016	0.388	3/13/2016	0.128	4/20/2016	0.181
2/5/2016	0.244	3/14/2016	0.187	4/21/2016	0.194
2/6/2016	0.257	3/15/2016	0.208	4/22/2016	0.166
2/7/2016	0.143	3/16/2016	0.193	4/23/2016	0.115

Collection Date	Flow Result (gallons per day)
4/24/2016	0.148
4/25/2016	0.146
4/26/2016	0.181
4/27/2016	0.161
4/28/2016	0.153
4/29/2016	0.109
4/30/2016	0.057
5/1/2016	0.101
5/2/2016	0.171
5/3/2016	0.174
5/4/2016	0.162
5/5/2016	0.149
5/6/2016	0.097
5/7/2016	0.071
5/8/2016	0.085
5/9/2016	0.127
5/10/2016	0.154
5/11/2016	0.152
5/12/2016	0.196
5/13/2016	0.091
5/14/2016	0.062
5/15/2016	0.056
5/16/2016	0.175
5/17/2016	0.191
5/18/2016	0.199
5/19/2016	0.199
5/20/2016	0.200
5/21/2016	0.160
5/22/2016	0.064
5/23/2016	0.133
5/24/2016	0.131
5/25/2016	0.150
5/26/2016	0.130
5/27/2016	0.070
5/28/2016	0.074
5/29/2016	0.243
5/30/2016	0.138
5/31/2016	0.229
6/1/2016	0.174
6/2/2016	0.152
6/3/2016	0.105
6/4/2016	0.105
6/5/2016	0.168

Collection Date	Flow Result (gallons per day)
6/6/2016	0.241
6/7/2016	0.304
6/8/2016	0.193
6/9/2016	0.210
6/10/2016	0.223
6/11/2016	0.088
6/12/2016	0.065
6/13/2016	0.136
6/14/2016	0.177
6/15/2016	0.153
6/16/2016	0.150
6/17/2016	0.096
6/18/2016	0.056
6/19/2016	0.044
6/20/2016	0.159
6/21/2016	0.125
6/22/2016	0.191
6/23/2016	0.127
6/24/2016	0.098
6/25/2016	0.070
6/26/2016	0.104
6/27/2016	0.127
6/28/2016	0.152
6/29/2016	0.169
6/30/2016	0.113
7/1/2016	0.075
7/2/2016	0.037
7/3/2016	0.047
7/4/2016	0.044
7/5/2016	0.122
7/6/2016	0.130
7/7/2016	0.142
7/8/2016	0.090
7/9/2016	0.056
7/10/2016	0.045
7/11/2016	0.138
7/12/2016	0.128
7/13/2016	0.142
7/14/2016	0.135
7/15/2016	0.108
7/16/2016	0.110
7/17/2016	0.109
7/18/2016	0.205

Collection Date	Flow Result (gallons per day)
7/19/2016	0.202
7/20/2016	0.127
7/21/2016	0.142
7/22/2016	0.073
7/23/2016	0.058
7/24/2016	0.075
7/25/2016	0.133
7/26/2016	0.149
7/27/2016	0.133
7/28/2016	0.150
7/29/2016	0.076
7/30/2016	0.065
7/31/2016	0.070
8/1/2016	0.137
8/2/2016	0.167
8/3/2016	0.152
8/4/2016	0.186
8/5/2016	0.207
8/6/2016	0.091
8/7/2016	0.058
8/8/2016	0.147
8/9/2016	0.140
8/10/2016	0.150
8/11/2016	0.180
8/12/2016	0.142
8/13/2016	0.067
8/14/2016	0.076
8/15/2016	0.139
8/16/2016	0.156
8/17/2016	0.157
8/18/2016	0.139
8/19/2016	0.072
8/20/2016	0.078
8/21/2016	0.058
8/22/2016	0.128
8/23/2016	0.147
8/24/2016	0.141
8/25/2016	0.149
8/26/2016	0.092
8/27/2016	0.079
8/28/2016	0.066
8/29/2016	0.145
8/30/2016	0.163

Collection Date	Flow Result (gallons per day)
8/31/2016	0.146
9/1/2016	0.131
9/2/2016	0.593
9/3/2016	0.233
9/4/2016	0.179
9/5/2016	0.077
9/6/2016	0.152
9/7/2016	0.178
9/8/2016	0.181
9/9/2016	0.162
9/10/2016	0.111
9/11/2016	0.136
9/12/2016	0.229
9/13/2016	0.295
9/14/2016	0.296
9/15/2016	0.295
9/16/2016	0.236
9/17/2016	0.175
9/18/2016	0.154
9/19/2016	0.261
9/20/2016	0.250
9/21/2016	0.210
9/22/2016	0.277
9/23/2016	0.180
9/24/2016	0.135
9/25/2016	0.189
9/26/2016	0.234
9/27/2016	0.281
9/28/2016	0.260
9/29/2016	0.183
9/30/2016	0.238
10/1/2016	0.148
10/2/2016	0.190
10/3/2016	0.244
10/4/2016	0.202
10/5/2016	0.198
10/6/2016	0.127
10/7/2016	0.246
10/8/2016	0.520
10/9/2016	0.303
10/10/2016	0.299
10/11/2016	0.297
10/12/2016	0.313

Collection Date	Flow Result (gallons per day)
10/13/2016	0.311
10/14/2016	0.197
10/15/2016	0.217
10/16/2016	0.137
10/17/2016	0.262
10/18/2016	0.249
10/19/2016	0.226
10/20/2016	0.266
10/21/2016	0.178
10/22/2016	0.140
10/23/2016	0.163
10/24/2016	0.239
10/25/2016	0.249
10/26/2016	0.245
10/27/2016	0.219
10/28/2016	0.216
10/29/2016	0.163
10/30/2016	0.141
10/31/2016	0.242
11/1/2016	0.259
11/2/2016	0.230
11/3/2016	0.233
11/4/2016	0.178
11/5/2016	0.140
11/6/2016	0.139
11/7/2016	0.239
11/8/2016	0.231
11/9/2016	0.245
11/10/2016	0.251
11/11/2016	0.152
11/12/2016	0.149
11/13/2016	0.155
11/14/2016	0.240
11/15/2016	0.232
11/16/2016	0.229
11/17/2016	0.244
11/18/2016	0.217
11/19/2016	0.106
11/20/2016	0.155
11/21/2016	0.208
11/22/2016	0.222
11/23/2016	0.241
11/24/2016	0.103

Collection Date	Flow Result (gallons per day)
11/25/2016	0.154
11/26/2016	0.145
11/27/2016	0.148
11/28/2016	0.219
11/29/2016	0.234
11/30/2016	0.177
12/1/2016	0.270
12/2/2016	0.239
12/3/2016	0.146
12/4/2016	0.198
12/5/2016	0.267
12/6/2016	0.395
12/7/2016	0.292
12/8/2016	0.281
12/9/2016	0.284
12/10/2016	0.167
12/11/2016	0.139
12/12/2016	0.245
12/13/2016	0.264
12/14/2016	0.276
12/15/2016	0.277
12/16/2016	0.262
12/17/2016	0.153
12/18/2016	0.184
12/19/2016	0.259
12/20/2016	0.249
12/21/2016	0.286
12/22/2016	0.267
12/23/2016	0.169
12/24/2016	0.162
12/25/2016	0.172
12/26/2016	0.212
12/27/2016	0.244
12/28/2016	0.224
12/29/2016	0.187
12/30/2016	0.208
12/31/2016	0.170

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: H-02

Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)
1/1/2016	1,018,500	2/29/2016	192,633	4/22/2016	89,600
1/4/2016	408,633	3/1/2016	135,700	4/25/2016	109,633
1/5/2016	263,900	3/2/2016	164,500	4/26/2016	94,300
1/6/2016	237,200	3/3/2016	158,100	4/27/2016	73,763
1/7/2016	165,300	3/4/2016	660,900	4/28/2016	82,300
1/8/2016	150,000	3/7/2016	314,900	4/29/2016	91,609
1/11/2016	143,467	3/8/2016	198,100	5/2/2016	118,100
1/12/2016	150,300	3/9/2016	122,200	5/3/2016	336,100
1/13/2016	122,300	3/10/2016	116,800	5/4/2016	238,900
1/14/2016	122,500	3/11/2016	120,500	5/5/2016	125,100
1/15/2016	128,000	3/14/2016	113,867	5/6/2016	108,500
1/19/2016	170,000	3/15/2016	107,900	5/9/2016	91,433
1/20/2016	230,000	3/16/2016	93,300	5/10/2016	73,500
1/21/2016	180,300	3/17/2016	154,400	5/11/2016	88,200
1/22/2016	167,400	3/18/2016	158,800	5/12/2016	80,400
1/25/2016	188,833	3/21/2016	175,267	5/13/2016	124,300
1/26/2016	122,800	3/22/2016	82,300	5/16/2016	79,633
1/27/2016	140,200	3/23/2016	58,400	5/17/2016	99,600
1/28/2016	138,200	3/24/2016	54,100	5/18/2016	539,200
1/29/2016	217,300	3/25/2016	81,100	5/19/2016	297,500
2/1/2016	135,200	3/28/2016	322,500	5/20/2016	1,118,200
2/2/2016	135,900	3/29/2016	350,100	5/23/2016	545,333
2/3/2016	81,100	3/30/2016	257,800	5/24/2016	293,900
2/4/2016	1,336,600	3/31/2016	164,800	5/25/2016	168,800
2/5/2016	638,100	4/1/2016	338,000	5/26/2016	101,800
2/8/2016	485,100	4/4/2016	753,400	5/27/2016	110,100
2/9/2016	356,500	4/5/2016	294,300	5/31/2016	538,725
2/10/2016	280,400	4/6/2016	213,300	6/1/2016	403,019
2/11/2016	147,300	4/7/2016	206,500	6/2/2016	247,702
2/12/2016	128,000	4/8/2016	183,000	6/3/2016	150,230
2/16/2016	165,625	4/11/2016	110,500	6/6/2016	384,800
2/17/2016	202,800	4/12/2016	112,400	6/7/2016	904,000
2/18/2016	183,300	4/13/2016	152,500	6/8/2016	417,900
2/19/2016	173,300	4/14/2016	116,600	6/9/2016	275,200
2/22/2016	137,333	4/15/2016	99,200	6/10/2016	379,200
2/23/2016	138,800	4/18/2016	104,200	6/13/2016	203,211
2/24/2016	379,100	4/19/2016	82,700	6/14/2016	170,300
2/25/2016	287,100	4/20/2016	74,351	6/15/2016	386,300
2/26/2016	258,300	4/21/2016	81,294	6/16/2016	244,400

Collection Date	Flow Result (gallons per day)
6/17/2016	203,600
6/20/2016	158,467
6/21/2016	99,800
6/22/2016	93,826
6/23/2016	85,284
6/24/2016	82,000
6/27/2016	103,067
6/28/2016	129,800
6/29/2016	116,000
6/30/2016	129,600
7/1/2016	115,600
7/5/2016	105,000
7/6/2016	110,400
7/7/2016	144,102
7/8/2016	118,041
7/11/2016	136,633
7/12/2016	143,200
7/13/2016	120,300
7/14/2016	88,500
7/15/2016	94,300
7/18/2016	303,133
7/19/2016	276,100
7/20/2016	156,800
7/21/2016	122,500
7/22/2016	132,400
7/25/2016	110,700
7/26/2016	119,100
7/27/2016	123,700
7/28/2016	130,400
7/29/2016	82,100
8/1/2016	81,433
8/2/2016	248,600
8/3/2016	178,100
8/4/2016	144,500
8/5/2016	473,400
8/8/2016	194,233
8/9/2016	148,600
8/10/2016	135,200
8/11/2016	137,100
8/12/2016	554,600
8/13/2016	27,400
8/14/2016	27,400
8/15/2016	92,200

Collection Date	Flow Result (gallons per day)
8/16/2016	116,800
8/17/2016	119,500
8/18/2016	111,800
8/19/2016	256,100
8/22/2016	137,033
8/23/2016	144,000
8/24/2016	115,711
8/25/2016	103,200
8/26/2016	102,600
8/29/2016	171,167
8/30/2016	156,900
8/31/2016	111,600
9/1/2016	94,600
9/2/2016	210,200
9/3/2016	3,333,600
9/6/2016	577,939
9/7/2016	308,528
9/8/2016	187,200
9/9/2016	139,500
9/13/2016	174,900
9/14/2016	166,900
9/15/2016	150,500
9/16/2016	131,100
9/21/2016	106,000
9/22/2016	106,800
9/23/2016	128,700
10/3/2016	86,700
10/4/2016	96,900
10/5/2016	87,300
10/6/2016	99,800
10/7/2016	100,900
10/8/2016	1,901,300
10/10/2016	817,488
10/11/2016	524,727
10/12/2016	450,000
10/13/2016	302,100
10/19/2016	78,800
10/20/2016	99,744
10/21/2016	80,243
10/24/2016	78,667
10/25/2016	61,800
10/26/2016	49,800
10/27/2016	52,600

Collection Date	Flow Result (gallons per day)
10/28/2016	50,600
10/31/2016	42,000
11/1/2016	51,300
11/2/2016	68,139
11/3/2016	58,656
11/4/2016	51,100
11/9/2016	67,000
11/10/2016	52,600
11/11/2016	48,600
11/14/2016	61,500
11/15/2016	63,300
11/18/2016	49,400
11/21/2016	39,267
11/22/2016	42,200
11/30/2016	85,878
12/1/2016	137,856
12/2/2016	108,200
12/8/2016	392,000
12/13/2016	159,026
12/14/2016	370,519
12/15/2016	226,188
12/16/2016	146,962
12/19/2016	188,954
12/20/2016	409,900
12/23/2016	147,600
12/27/2016	145,550
12/28/2016	165,700
12/29/2016	155,300
12/30/2016	139,400

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: H-12

Collection Date	Flow Result (gallons per minute)
1/20/2016	46.0
2/10/2016	376.1
3/8/2016	51.2
4/19/2016	97.8
5/10/2016	114.4
6/14/2016	61.9
7/13/2016	1,411.9
8/2/2016	63.7
9/14/2016	41.7
10/18/2016	71.4
11/15/2016	722.6
12/13/2016	224.0

Outfall: H-16

Collection Date	Flow Result (gallons per minute)
1/4/2016	182
1/11/2016	180
1/19/2016	112
1/25/2016	182
2/1/2016	180
2/8/2016	180
2/22/2016	179
3/1/2016	180
3/8/2016	180
3/15/2016	180
3/22/2016	180
4/4/2016	180
4/11/2016	183
4/26/2016	180
5/2/2016	180
5/10/2016	181
6/1/2016	180
6/8/2016	180
6/15/2016	180
6/22/2016	180
7/18/2016	180

Collection Date	Flow Result (gallons per minute)
7/25/2016	179
8/1/2016	181
8/8/2016	180
8/15/2016	180
8/22/2016	181
9/6/2016	182
9/12/2016	183
9/19/2016	182
9/26/2016	182
10/3/2016	180
10/10/2016	183
10/17/2016	182
10/24/2016	183
11/1/2016	182
11/9/2016	180
11/15/2016	184
11/22/2016	183
12/5/2016	179
12/12/2016	183
12/20/2016	183
12/27/2016	182

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: K-12

Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)	Collection Date	Flow Result (gallons per day)
1/1/2016	2,956	2/9/2016	1,232	3/19/2016	33
1/2/2016	0	2/10/2016	1,651	3/20/2016	1,006
1/3/2016	0	2/11/2016	875	3/21/2016	3,490
1/4/2016	1,805	2/12/2016	53	3/22/2016	1,335
1/5/2016	2,477	2/13/2016	932	3/23/2016	826
1/6/2016	3,685	2/14/2016	706	3/24/2016	763
1/7/2016	3,297	2/15/2016	3,374	3/25/2016	968
1/8/2016	1,078	2/16/2016	1,870	3/26/2016	0
1/9/2016	884	2/17/2016	1,101	3/27/2016	3,768
1/10/2016	975	2/18/2016	1,177	3/28/2016	1,229
1/11/2016	1,000	2/19/2016	549	3/29/2016	1,505
1/12/2016	941	2/20/2016	743	3/30/2016	1,495
1/13/2016	1,868	2/21/2016	1,065	3/31/2016	1,700
1/14/2016	1,213	2/22/2016	979	4/1/2016	10,761
1/15/2016	991	2/23/2016	3,538	4/2/2016	6,050
1/16/2016	891	2/24/2016	2,789	4/3/2016	3,448
1/17/2016	2	2/25/2016	1,434	4/4/2016	1,156
1/18/2016	949	2/26/2016	1,282	4/5/2016	1,526
1/19/2016	1,229	2/27/2016	1	4/6/2016	1,856
1/20/2016	2,528	2/28/2016	1,053	4/7/2016	834
1/21/2016	933	2/29/2016	1,696	4/8/2016	758
1/22/2016	989	3/1/2016	1,691	4/9/2016	1,569
1/23/2016	1,008	3/2/2016	1,614	4/10/2016	3,840
1/24/2016	865	3/3/2016	6,517	4/11/2016	1,796
1/25/2016	1,316	3/4/2016	2,055	4/12/2016	1,865
1/26/2016	3,044	3/5/2016	883	4/13/2016	1,952
1/27/2016	1,365	3/6/2016	909	4/14/2016	1,038
1/28/2016	1,883	3/7/2016	2,414	4/15/2016	5
1/29/2016	816	3/8/2016	1,167	4/16/2016	1,696
1/30/2016	266	3/9/2016	2,269	4/17/2016	761
1/31/2016	796	3/10/2016	1,239	4/18/2016	2,794
2/1/2016	2,030	3/11/2016	1,399	4/19/2016	4,014
2/2/2016	1,169	3/12/2016	882	4/20/2016	2,970
2/3/2016	17,833	3/13/2016	2,126	4/21/2016	1,801
2/4/2016	12,954	3/14/2016	2,721	4/22/2016	919
2/5/2016	934	3/15/2016	1,560	4/23/2016	920
2/6/2016	1,028	3/16/2016	3,031	4/24/2016	929
2/7/2016	720	3/17/2016	1,094	4/25/2016	926
2/8/2016	2,224	3/18/2016	1,350	4/26/2016	1,714

Collection Date	Flow Result (gallons per day)
4/27/2016	1,261
4/28/2016	1,639
4/29/2016	548
4/30/2016	865
5/1/2016	696
5/2/2016	1,574
5/3/2016	1,190
5/4/2016	1,498
5/5/2016	1,056
5/6/2016	775
5/7/2016	0
5/8/2016	655
5/9/2016	1,154
5/10/2016	1,389
5/11/2016	724
5/12/2016	4,634
5/13/2016	3,333
5/14/2016	1,077
5/15/2016	816
5/16/2016	1,935
5/17/2016	2,600
5/18/2016	1,291
5/19/2016	1,340
5/20/2016	946
5/21/2016	0
5/22/2016	2,238
5/23/2016	1,262
5/24/2016	2,037
5/25/2016	894
5/26/2016	893
5/27/2016	775
5/28/2016	2,129
5/29/2016	11,954
5/30/2016	3,457
5/31/2016	1,371
6/1/2016	1,845
6/2/2016	2,833
6/3/2016	0
6/4/2016	1,935
6/5/2016	7,440
6/6/2016	11,780
6/7/2016	3,225
6/8/2016	2,300

Collection Date	Flow Result (gallons per day)
6/9/2016	1,986
6/10/2016	961
6/11/2016	1,002
6/12/2016	822
6/13/2016	938
6/14/2016	2,176
6/15/2016	4,043
6/16/2016	1,236
6/17/2016	988
6/18/2016	873
6/19/2016	0
6/20/2016	1,607
6/21/2016	2,311
6/22/2016	1,293
6/23/2016	760
6/24/2016	2,075
6/25/2016	920
6/26/2016	5
6/27/2016	1,967
6/28/2016	2,417
6/29/2016	1,630
6/30/2016	1,965
7/1/2016	569
7/2/2016	962
7/3/2016	898
7/4/2016	22
7/5/2016	1,620
7/6/2016	995
7/7/2016	1,449
7/8/2016	141
7/9/2016	865
7/10/2016	871
7/11/2016	2,454
7/12/2016	1,707
7/13/2016	2,906
7/14/2016	2,075
7/15/2016	738
7/16/2016	5,919
7/17/2016	2,693
7/18/2016	1,149
7/19/2016	999
7/20/2016	1,585
7/21/2016	1,639

Collection Date	Flow Result (gallons per day)
7/22/2016	0
7/23/2016	909
7/24/2016	916
7/25/2016	1,390
7/26/2016	1,887
7/27/2016	1,997
7/28/2016	1,296
7/29/2016	790
7/30/2016	0
7/31/2016	970
8/1/2016	1,876
8/2/2016	1,773
8/3/2016	1,135
8/4/2016	8,345
8/5/2016	3,320
8/6/2016	981
8/7/2016	867
8/8/2016	1,831
8/9/2016	905
8/10/2016	1,715
8/11/2016	835
8/12/2016	892
8/13/2016	0
8/14/2016	744
8/15/2016	1,448
8/16/2016	1,281
8/17/2016	871
8/18/2016	1,733
8/19/2016	810
8/20/2016	821
8/21/2016	827
8/22/2016	889
8/23/2016	1,640
8/24/2016	934
8/25/2016	842
8/26/2016	908
8/27/2016	772
8/28/2016	171
8/29/2016	1,501
8/30/2016	915
8/31/2016	1,816
9/1/2016	2,663
9/2/2016	39,686

Collection Date	Flow Result (gallons per day)
9/3/2016	8,274
9/4/2016	2,471
9/5/2016	2,601
9/6/2016	3,739
9/7/2016	3,607
9/8/2016	3,592
9/9/2016	2,156
9/10/2016	3,453
9/11/2016	2,920
9/12/2016	5,218
9/13/2016	2,176
9/14/2016	1,406
9/15/2016	1,017
9/16/2016	822
9/17/2016	791
9/18/2016	938
9/19/2016	934
9/20/2016	1,539
9/21/2016	1,209
9/22/2016	847
9/23/2016	1,756
9/24/2016	0
9/25/2016	708
9/26/2016	1,430
9/27/2016	1,122
9/28/2016	1,689
9/29/2016	860
9/30/2016	995
10/1/2016	0
10/2/2016	694
10/3/2016	1,612
10/4/2016	1,745
10/5/2016	840
10/6/2016	0
10/7/2016	13,921
10/8/2016	15,837
10/9/2016	1,341
10/10/2016	1,605
10/11/2016	958
10/12/2016	1,686
10/13/2016	923
10/14/2016	820
10/15/2016	797

Collection Date	Flow Result (gallons per day)
10/16/2016	762
10/17/2016	942
10/18/2016	1,723
10/19/2016	864
10/20/2016	1,569
10/21/2016	622
10/22/2016	207
10/23/2016	680
10/24/2016	1,741
10/25/2016	1,777
10/26/2016	1,035
10/27/2016	1,425
10/28/2016	6
10/29/2016	843
10/30/2016	844
10/31/2016	2,170
11/1/2016	3,613
11/2/2016	1,013
11/3/2016	1,958
11/4/2016	997
11/5/2016	0
11/6/2016	673
11/7/2016	2,456
11/8/2016	1,618
11/9/2016	1,210
11/10/2016	1,403
11/11/2016	1,022
11/12/2016	1,843
11/13/2016	1,774
11/14/2016	2,028
11/15/2016	1,964
11/16/2016	1,943
11/17/2016	1,966
11/18/2016	1,162
11/19/2016	882
11/20/2016	977
11/21/2016	2,056
11/22/2016	1,849
11/23/2016	1,067
11/24/2016	1,031
11/25/2016	939
11/26/2016	848
11/27/2016	1,851

Collection Date	Flow Result (gallons per day)
11/28/2016	1,979
11/29/2016	1,247
11/30/2016	2,039
12/1/2016	1,749
12/2/2016	1,169
12/3/2016	1,923
12/4/2016	198
12/5/2016	10,180
12/6/2016	8,856
12/7/2016	2,259
12/8/2016	2,221
12/9/2016	1,000
12/10/2016	1,001
12/11/2016	1,167
12/12/2016	2,712
12/13/2016	2,469
12/14/2016	1,186
12/15/2016	2,150
12/16/2016	1,068
12/17/2016	935
12/18/2016	1,179
12/19/2016	3,705
12/20/2016	1,184
12/21/2016	2,028
12/22/2016	1,057
12/23/2016	0
12/24/2016	1,023
12/25/2016	1,401
12/26/2016	924
12/27/2016	2,007
12/28/2016	2,154
12/29/2016	1,147
12/30/2016	884
12/31/2016	3,046

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: K-18

Collection Date	Flow Result (gallons per minute)
3/15/2016	511
4/26/2016	308
9/13/2016	222
9/20/2016	221
10/19/2016	230

Outfall: L-07

Collection Date	Flow Result (gallons per minute)
1/4/2016	6,357.00
1/11/2016	6,121.39
1/19/2016	6,365.63
1/25/2016	6,609.88
2/1/2016	6,365.63
2/8/2016	6,472.49
2/16/2016	5,922.94
2/22/2016	6,869.39
2/29/2016	N/A
3/7/2016	7,006.78
3/14/2016	6,564.08
3/21/2016	6,472.49
3/28/2016	6,869.39
4/11/2016	6,472.49
4/18/2016	6,609.88
4/25/2016	6,564.08
5/9/2016	6,762.53
5/16/2016	6,915.18
5/23/2016	6,365.63
5/31/2016	6,365.63
6/13/2016	6,869.39
6/27/2016	6,869.39
7/11/2016	6,121.39
7/18/2016	6,869.39
8/1/2016	6,869.39
8/8/2016	6,609.88
8/15/2016	6,609.88

Collection Date	Flow Result (gallons per minute)
8/22/2016	6,365.63
8/29/2016	6,365.63
9/6/2016	6,121.39
9/12/2016	6,365.63
9/19/2016	6,365.63
9/26/2016	7,266.29
10/3/2016	6,762.53
10/10/2016	6,365.63
10/17/2016	6,869.39
10/24/2016	7,266.29
10/31/2016	6,365.63
11/7/2016	6,121.39
11/14/2016	4,976.49
11/21/2016	5,968.73
11/28/2016	6,258.78
12/5/2016	4,472.73
12/12/2016	5,968.73
12/19/2016	5,770.29
12/27/2016	5,861.88

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: L-7A

Collection Date	Flow Result (gallons per day)
1/1/2016	6,904
1/2/2016	4,849
1/3/2016	556
1/4/2016	8,239
1/5/2016	771
1/6/2016	159
1/7/2016	3,294
1/8/2016	44
1/9/2016	20
1/10/2016	80
1/11/2016	29
1/12/2016	28
1/13/2016	3,444
1/14/2016	128
1/15/2016	772
1/16/2016	0
1/17/2016	16
1/18/2016	152
1/19/2016	190
1/20/2016	2,596
1/21/2016	0
1/22/2016	13
1/23/2016	1
1/24/2016	1,435
1/25/2016	40
1/26/2016	4
1/27/2016	1,447
1/28/2016	2,334
1/29/2016	170
1/30/2016	21
1/31/2016	37
2/1/2016	493
2/2/2016	4,166
2/3/2016	20,358
2/4/2016	11,475
2/5/2016	6,125
2/6/2016	6,377
2/7/2016	4,557
2/8/2016	2,780

Collection Date	Flow Result (gallons per day)
2/9/2016	2,350
2/10/2016	6,411
2/11/2016	7
2/12/2016	76
2/13/2016	248
2/14/2016	37
2/15/2016	3,978
2/16/2016	4,501
2/17/2016	8
2/18/2016	6
2/19/2016	1
2/20/2016	0
2/21/2016	3,016
2/22/2016	195
2/23/2016	810
2/24/2016	1,418
2/25/2016	0
2/26/2016	48
2/27/2016	5
2/28/2016	2,170
2/29/2016	121
3/1/2016	815
3/2/2016	1,743
3/3/2016	3,425
3/4/2016	2,523
3/5/2016	1
3/6/2016	0
3/7/2016	1,691
3/8/2016	0
3/9/2016	0
3/10/2016	0
3/11/2016	0
3/12/2016	0
3/13/2016	1,422
3/14/2016	0
3/15/2016	0
3/16/2016	1,497
3/17/2016	0
3/18/2016	0

Collection Date	Flow Result (gallons per day)
3/19/2016	0
3/20/2016	0
3/21/2016	273
3/22/2016	1,495
3/23/2016	0
3/24/2016	157
3/25/2016	0
3/26/2016	0
3/27/2016	2,203
3/28/2016	1,637
3/29/2016	0
3/30/2016	2,365
3/31/2016	0
4/1/2016	40
4/2/2016	1
4/3/2016	2,716
4/4/2016	8,608
4/5/2016	1,765
4/6/2016	3,261
4/7/2016	3,215
4/8/2016	69
4/9/2016	5
4/10/2016	1
4/11/2016	2,897
4/12/2016	31
4/13/2016	3,266
4/14/2016	2
4/15/2016	58
4/16/2016	5
4/17/2016	2,368
4/18/2016	3
4/19/2016	2,701
4/20/2016	3,124
4/21/2016	38
4/22/2016	187
4/23/2016	19
4/24/2016	3
4/25/2016	0
4/26/2016	3,558

Collection Date	Flow Result (gallons per day)
4/27/2016	249
4/28/2016	93
4/29/2016	198
4/30/2016	320
5/1/2016	377
5/2/2016	8,904
5/3/2016	1,041
5/4/2016	0
5/5/2016	0
5/6/2016	476
5/7/2016	0
5/8/2016	0
5/9/2016	0
5/10/2016	283
5/11/2016	407
5/12/2016	333
5/13/2016	0
5/14/2016	0
5/15/2016	242
5/16/2016	455
5/17/2016	820
5/18/2016	3,026
5/19/2016	42
5/20/2016	45
5/21/2016	1
5/22/2016	0
5/23/2016	1,397
5/24/2016	1,714
5/25/2016	676
5/26/2016	703
5/27/2016	502
5/28/2016	3,410
5/29/2016	6,303
5/30/2016	332
5/31/2016	7,325
6/1/2016	6,897
6/2/2016	5,791
6/3/2016	934
6/4/2016	3,462
6/5/2016	5,338
6/6/2016	15,628
6/7/2016	7,031
6/8/2016	2,517
6/9/2016	4,555
6/10/2016	1,338
6/11/2016	1,094
6/12/2016	2,932

Collection Date	Flow Result (gallons per day)
6/13/2016	401
6/14/2016	4,094
6/15/2016	0
6/16/2016	2,358
6/17/2016	430
6/18/2016	281
6/19/2016	290
6/20/2016	303
6/21/2016	3,084
6/22/2016	719
6/23/2016	3,519
6/24/2016	890
6/25/2016	810
6/26/2016	813
6/27/2016	882
6/28/2016	966
6/29/2016	4,155
6/30/2016	1,723
7/1/2016	900
7/2/2016	891
7/3/2016	984
7/4/2016	1,109
7/5/2016	2,996
7/6/2016	670
7/7/2016	185
7/8/2016	274
7/9/2016	207
7/10/2016	197
7/11/2016	2,205
7/12/2016	2,952
7/13/2016	2,739
7/14/2016	547
7/15/2016	724
7/16/2016	3,162
7/17/2016	564
7/18/2016	863
7/19/2016	2,944
7/20/2016	953
7/21/2016	4,060
7/22/2016	922
7/23/2016	951
7/24/2016	990
7/25/2016	1,006

Collection Date	Flow Result (gallons per day)
7/26/2016	3,836
7/27/2016	3,509
7/28/2016	3,752
7/29/2016	2,099
7/30/2016	1,978
7/31/2016	2,067
8/1/2016	5,748
8/2/2016	2,701
8/3/2016	3,516
8/4/2016	3,696
8/5/2016	4,777
8/6/2016	2,509
8/7/2016	2,369
8/8/2016	4,764
8/9/2016	2,769
8/10/2016	3,443
8/11/2016	8,625
8/12/2016	2,466
8/13/2016	2,814
8/14/2016	5,862
8/15/2016	4,406
8/16/2016	3,488
8/17/2016	11,295
8/18/2016	2,080
8/19/2016	1,786
8/20/2016	3,732
8/21/2016	650
8/22/2016	1,336
8/23/2016	2,702
8/24/2016	900
8/25/2016	3,914
8/26/2016	1,014
8/27/2016	1,005
8/28/2016	1,206
8/29/2016	1,300
8/30/2016	4,625
8/31/2016	1,464
9/1/2016	3,879
9/2/2016	26,025
9/3/2016	3,854
9/4/2016	4,967
9/5/2016	3,295
9/6/2016	3,298

Collection Date	Flow Result (gallons per day)
9/7/2016	1,597
9/8/2016	4,029
9/9/2016	598
9/10/2016	703
9/11/2016	3,973
9/12/2016	4,172
9/13/2016	821
9/14/2016	2,861
9/15/2016	399
9/16/2016	395
9/17/2016	437
9/18/2016	501
9/19/2016	3,997
9/20/2016	597
9/21/2016	916
9/22/2016	3,333
9/23/2016	494
9/24/2016	429
9/25/2016	416
9/26/2016	1,290
9/27/2016	3,419
9/28/2016	871
9/29/2016	155
9/30/2016	226
10/1/2016	2,819
10/2/2016	256
10/3/2016	1,018
10/4/2016	3,653
10/5/2016	1,127
10/6/2016	1,207
10/7/2016	6,595
10/8/2016	15,960
10/9/2016	4,679
10/10/2016	5,120
10/11/2016	1,999
10/12/2016	2,598
10/13/2016	5,371
10/14/2016	2,496
10/15/2016	1,666
10/16/2016	1,554
10/17/2016	4,942
10/18/2016	1,012
10/19/2016	2,954

Collection Date	Flow Result (gallons per day)
10/20/2016	560
10/21/2016	297
10/22/2016	175
10/23/2016	32
10/24/2016	1,240
10/25/2016	967
10/26/2016	0
10/27/2016	0
10/28/2016	710
10/29/2016	3,462
10/30/2016	705
10/31/2016	4,840
11/1/2016	2,468
11/2/2016	3,150
11/3/2016	8,042
11/4/2016	344
11/5/2016	0
11/6/2016	0
11/7/2016	0
11/8/2016	3,735
11/9/2016	1,393
11/10/2016	873
11/11/2016	1,272
11/12/2016	869
11/13/2016	2,916
11/14/2016	916
11/15/2016	917
11/16/2016	3,032
11/17/2016	1
11/18/2016	0
11/19/2016	0
11/20/2016	1
11/21/2016	3,477
11/22/2016	2,275
11/23/2016	1,949
11/24/2016	1,048
11/25/2016	1,014
11/26/2016	3,221
11/27/2016	5,942
11/28/2016	2,116
11/29/2016	3,484
11/30/2016	6,842
12/1/2016	23

Collection Date	Flow Result (gallons per day)
12/2/2016	1,363
12/3/2016	805
12/4/2016	957
12/5/2016	10,189
12/6/2016	4,769
12/7/2016	2,358
12/8/2016	2,006
12/9/2016	6,031
12/10/2016	3,461
12/11/2016	4,946
12/12/2016	3,385
12/13/2016	9,298
12/14/2016	5,806
12/15/2016	1,824
12/16/2016	2,299
12/17/2016	6,644
12/18/2016	6,184
12/19/2016	4,102
12/20/2016	2,588
12/21/2016	78
12/22/2016	71
12/23/2016	3,425
12/24/2016	84
12/25/2016	222
12/26/2016	111
12/27/2016	106
12/28/2016	107
12/29/2016	62
12/30/2016	51
12/31/2016	182

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data (continued)

Outfall: M-05

Collection Date	Flow Result (gallons per minute)
1/4/2016	420
1/5/2016	0
1/6/2016	500
1/7/2016	420
1/11/2016	420
1/12/2016	420
1/13/2016	420
1/14/2016	420
1/18/2016	420
1/19/2016	420
1/20/2016	420
1/21/2016	420
1/25/2016	420
1/26/2016	420
1/27/2016	420
1/28/2016	420
2/1/2016	380
2/2/2016	380
2/3/2016	380
2/4/2016	379
2/8/2016	378
2/9/2016	378
2/10/2016	378
2/11/2016	378
2/15/2016	378
2/16/2016	265
2/17/2016	305
2/18/2016	405
2/19/2016	365
2/22/2016	385
2/23/2016	426
2/24/2016	428
2/25/2016	427
2/29/2016	424
3/1/2016	460
3/2/2016	420
3/3/2016	420
3/7/2016	420
3/8/2016	420

Collection Date	Flow Result (gallons per minute)
3/9/2016	420
3/10/2016	420
3/14/2016	420
3/15/2016	420
3/16/2016	420
3/17/2016	400
3/21/2016	447
3/22/2016	446
3/23/2016	445
3/24/2016	448
3/28/2016	440
3/29/2016	440
3/30/2016	440
3/31/2016	440
4/4/2016	448
4/5/2016	448
4/6/2016	450
4/7/2016	448
4/11/2016	487
4/12/2016	488
4/13/2016	486
4/14/2016	487
4/18/2016	486
4/19/2016	486
4/20/2016	485
4/21/2016	486
4/25/2016	488
4/26/2016	488
4/27/2016	489
4/28/2016	489
5/2/2016	0
5/3/2016	0
5/4/2016	0
5/5/2016	0
5/9/2016	469
5/10/2016	468
5/11/2016	469
5/12/2016	471
5/16/2016	470

Collection Date	Flow Result (gallons per minute)
5/17/2016	469
5/18/2016	469
5/19/2016	470
5/23/2016	469
5/24/2016	468
5/25/2016	471
5/26/2016	468
5/30/2016	468
5/31/2016	469
6/1/2016	469
6/2/2016	468
6/6/2016	467
6/7/2016	473
6/8/2016	471
6/9/2016	472
6/13/2016	471
6/14/2016	469
6/15/2016	467
6/16/2016	470
6/20/2016	487
6/21/2016	485
6/22/2016	485
6/23/2016	489
6/27/2016	489
6/28/2016	488
6/29/2016	488
6/30/2016	488
7/4/2016	391
7/5/2016	438
7/6/2016	488
7/7/2016	490
7/11/2016	477
7/12/2016	488
7/13/2016	486
7/14/2016	488
7/18/2016	484
7/19/2016	486
7/20/2016	485
7/21/2016	485

Collection Date	Flow Result (gallons per minute)
7/25/2016	490
7/26/2016	487
7/27/2016	484
7/28/2016	484
8/1/2016	484
8/2/2016	486
8/3/2016	486
8/4/2016	488
8/8/2016	448
8/9/2016	484
8/10/2016	487
8/11/2016	487
8/15/2016	480
8/16/2016	485
8/17/2016	484
8/18/2016	484
8/22/2016	0
8/23/2016	0
8/24/2016	443
8/25/2016	487
8/29/2016	484
8/30/2016	486
8/31/2016	485
9/1/2016	484
9/5/2016	368
9/6/2016	409
9/7/2016	404
9/8/2016	487
9/9/2016	482
9/10/2016	489
9/11/2016	487
9/12/2016	487
9/13/2016	484
9/14/2016	489
9/15/2016	490
9/16/2016	488
9/17/2016	447
9/18/2016	448
9/19/2016	448
9/20/2016	448
10/3/2016	446
10/4/2016	446
10/5/2016	449

Collection Date	Flow Result (gallons per minute)
10/6/2016	408
10/10/2016	437
10/11/2016	440
10/12/2016	443
10/13/2016	442
10/17/2016	400
10/18/2016	396
10/19/2016	407
10/20/2016	446
10/24/2016	402
10/25/2016	402
10/26/2016	406
10/27/2016	451
10/31/2016	440
11/1/2016	450
11/2/2016	440
11/3/2016	440
11/7/2016	433
11/8/2016	444
11/9/2016	0
11/10/2016	0
11/14/2016	0
11/15/2016	0
11/16/2016	0
11/17/2016	0
11/21/2016	0
11/22/2016	0
11/23/2016	0
11/24/2016	0
11/28/2016	0
11/29/2016	440
11/30/2016	428
12/1/2016	396
12/5/2016	420
12/6/2016	412
12/7/2016	415
12/8/2016	430
12/12/2016	420
12/13/2016	420
12/14/2016	457
12/15/2016	0
12/19/2016	418
12/20/2016	457

Collection Date	Flow Result (gallons per minute)
12/21/2016	452
12/22/2016	452
12/26/2016	452
12/27/2016	454
12/28/2016	454
12/29/2016	482

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data

Samples are either collected using the grab method or as a 24-hour composite.

Outfall: A-01

Collection Date	Biochemical Oxygen Demand (mg/L)	Iron (mg/L)	Oil & Grease (mg/L)	pH	Total Suspended Solids (mg/L)
1/5/2016	< 2.0	0.2030	< 5	7.9	1
2/2/2016	< 2.0	0.1280	< 5	7.7	1
3/2/2016	< 2.0	0.1560	< 5	7.5	1
4/5/2016	< 2.0	0.2530	< 5	7.8	1
5/10/2016	< 2.0	0.2670	< 5	7.8	3
6/8/2016	< 2.0	0.5750	< 5	7.5	2
7/19/2016	2.3	0.6370	< 5	7.4	2
8/9/2016	< 2.0	0.3630	< 5	8.2	2
9/14/2016	< 2.0	0.2620	< 5	7.6	2
10/4/2016	2.1	0.1830	< 5	7.5	2
11/8/2016	< 2.0	0.0718	< 5	7.4	1
12/13/2016	< 2.0	0.1010	< 5	7.6	1

Outfall: A-11

Collection Date	Biochemical Oxygen Demand (mg/L)	pH	Total Suspended Solids (mg/L)
1/5/2016	< 2.0	7.5	1
2/2/2016	< 2.0	7.5	< 1
3/2/2016	< 2.0	7.6	1
4/5/2016	< 2.0	7.6	< 1
5/10/2016	< 2.0	7.5	< 1
6/8/2016	< 2.0	7.8	1
7/19/2016	< 2.0	7.7	2
8/9/2016	< 2.0	7.8	< 1
9/13/2016		6.9	
9/14/2016		6.8	
9/20/2016	< 2.0	7.2	1
10/4/2016	< 2.0	7.6	< 1
11/8/2016	< 2.0	7.1	< 1
12/13/2016	< 2.0	6.2	1

Collection Date	Low Level Mercury (µg/L)
1/5/2016	0.00274
2/1/2016	0.06490
2/11/2016	0.08720
2/22/2016	0.01580
2/26/2016	0.01220
2/29/2016	0.01420
3/3/2016	0.01500
4/6/2016	0.00392
5/10/2016	0.00733
6/8/2016	0.00480
7/19/2016	0.01190
8/8/2016	0.00229
9/7/2016	0.00304
10/20/2016	0.00164
11/2/2016	0.00173
12/21/2016	0.00977

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: A-1A

Collection Date	Tetrachloroethylene (µg/L)	Trichloroethylene (µg/L)
1/7/2016	< 2	< 2
2/29/2016	NF	NF
3/3/2016	< 2	< 2
4/6/2016	NF	NF
5/26/2016	< 2	< 2
6/15/2016	< 2	< 2
7/25/2016	< 2	< 2
8/10/2016	< 2	< 2
9/20/2016	< 2	< 2
10/31/2016	NF	NF
11/30/2016	NF	NF
12/14/2016	< 2.0	< 2.0

Note:
 NF = no flow, thus no sample collected

Outfall: D-01

Collection Date	Aluminum (mg/L)	Manganese (mg/L)	pH
1/7/2016	NF	NF	NF
2/10/2016	0.0855	0.0129	6.8
3/3/2016	< 0.0500	0.0436	6.8
4/7/2016	NF	NF	NF
5/2/2016	< 0.0500	< 0.0100	7.3
6/2/2016	0.1560	0.3970	6.6
7/7/2016	NF	NF	NF
8/4/2016	3.4400	0.1400	7.6
9/1/2016	NF	NF	NF
10/10/2016	NF	NF	NF
11/3/2016	NF	NF	NF
12/1/2016	NF	NF	NF

Note:
 NF = no flow, thus no sample collected

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: D-01 (continued)

Collection Date	Toxicity (mg/L)	Unit
1/26/2016	0	Predicted % Survival Effect
1/26/2016	0	Predicted % Reproduction Effect
4/11/2016	10	Predicted % Survival Effect
4/11/2016	24	Predicted % Reproduction Effect
7/11/2016	0	Predicted % Survival Effect
7/11/2016	15	Predicted % Reproduction Effect
10/10/2016	NF	Predicted % Survival Effect
10/10/2016	NF	Predicted % Reproduction Effect

Note:
 NF = no flow, thus no sample collected

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: D-02

Collection Date	Copper (mg/L)	Nickel (mg/L)	Oil & Grease (mg/L)	pH	Total Suspended Solids (mg/L)	Zinc (mg/L)
1/7/2016	< 0.0100	< 0.0100	< 5	7.8	2	< 0.0100
4/7/2016	< 0.0100	< 0.0100	< 5	6.6	14	< 0.0100
7/7/2016	NF	NF	NF	NF	NF	NF
10/11/2016	< 0.0100	< 0.0100	< 5	7.7	27	< 0.0100

Note:
 NF = no flow, thus no sample collected

Outfall: D-1C

Collection Date	Oil & Grease (mg/L)	Total Suspended Solids (mg/L)
1/7/2016	NF	NF
2/10/2016	< 5	3
3/3/2016	< 5	1
4/7/2016	NF	NF
5/2/2016	< 5	< 1
6/2/2016	< 5	13
7/7/2016	NF	NF
8/4/2016	< 5	55
9/1/2016	NF	NF
10/10/2016	NF	NF
11/3/2016	NF	NF
12/1/2016	NF	NF

Note:
 NF = no flow, thus no sample collected

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)**Outfall: F-08**

Collection Date	Lead (mg/L)	pH	Zinc (mg/L)
1/20/2016	< 0.0020	7.7	0.1010
2/9/2016	< 0.0020	7.7	0.0837
3/8/2016	< 0.0020	7.6	0.0590
4/19/2016	< 0.0020	7.2	0.0417
5/9/2016	NF	NF	NF
6/14/2016	< 0.0020	7.8	0.0735
7/12/2016	NF	NF	NF
8/2/2016	< 0.0020	7.4	0.0486
9/12/2016	NF	NF	NF
10/17/2016	NF	NF	NF
11/15/2016	NF	NF	NF
12/13/2016	< 0.0020	6.9	0.0549

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: G-10

Collection Date	Ammonia-Nitrogen (mg/L)	Biological Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)
1/5/2016	0.25	2.17	6.9
1/12/2016	< 0.10	4.59	9.4
2/2/2016	< 0.10	2.20	2.8
2/9/2016	< 0.10	< 2.00	7.6
3/2/2016	< 0.10	2.77	12.0
3/8/2016	< 0.10	< 2.00	6.3
4/5/2016	< 0.10	2.88	6.4
4/12/2016	< 0.10	2.97	4.3
5/3/2016	0.11	2.40	4.7
5/10/2016	< 0.10	< 2.00	3.2
6/7/2016	< 0.10	2.50	3.1
6/14/2016	< 0.10	< 2.00	2.1
7/6/2016	< 0.10	< 2.00	1.8
7/12/2016	< 0.10	2.16	3.5
8/9/2016	0.11	3.03	2.9
8/16/2016	< 0.10	< 2.00	3.2
9/13/2016	< 0.10	2.10	3.5
9/14/2016	< 0.10	< 2.00	3.5
10/4/2016	0.40	< 2.00	4.4
10/11/2016	0.11	2.20	2.7
11/2/2016	< 0.10	2.81	3.9
11/8/2016	< 0.10	2.24	7.0
12/6/2016	2.20	2.78	7.1
12/13/2016	< 0.10	< 2.00	9.1

Collection Date	Dissolved Oxygen (mg/L)
1/7/2016	9.69
1/15/2016	9.63
2/4/2016	8.83
2/15/2016	10.21
3/3/2016	9.18
3/8/2016	9.35
4/7/2016	8.76
4/13/2016	8.27
5/3/2016	7.45

Collection Date	Dissolved Oxygen (mg/L)
5/12/2016	7.86
6/7/2016	7.53
6/14/2016	8.30
7/7/2016	6.78
7/12/2016	5.90
8/9/2016	9.40
8/16/2016	7.82
9/13/2016	8.90
9/20/2016	7.59

Collection Date	Dissolved Oxygen (mg/L)
10/6/2016	7.43
10/13/2016	7.21
11/3/2016	7.61
11/10/2016	7.66
12/8/2016	8.52
12/15/2016	9.20

Collection Date	Fecal Coliform (col/100 mL)	pH
1/4/2016	< 2	7.2
1/11/2016	< 2	7.3
2/1/2016	< 2	7.3
2/9/2016	5	7.7
3/1/2016	< 2	7.3
3/8/2016	2	7.2
4/4/2016	< 2	7.2
4/11/2016	2	7.2
5/2/2016	< 2	7.4
5/9/2016	< 2	7.6

Collection Date	Fecal Coliform (col/100 mL)	pH
6/6/2016	< 2	7.2
6/13/2016	< 2	7.8
7/5/2016	< 2	6.8
7/11/2016	< 2	7.6
8/8/2016	< 2	7.7
8/22/2016	< 2	7.8
9/12/2016	5	7.7
9/13/2016	2	7.4
10/3/2016	< 2	7.0
10/10/2016	2	7.2

Collection Date	Fecal Coliform (col/100 mL)	pH
11/1/2016	< 2	6.8
11/7/2016	< 2	6.5
12/5/2016	5	7.2
12/12/2016	5	7.1

Outfall: H-02

Collection Date	Copper (mg/L)	Lead (mg/L)	pH	Zinc (mg/L)
1/20/2016	< 0.0050	< 0.0020	7.9	0.0123
2/9/2016	0.0062	< 0.0020	7.6	0.0125
3/8/2016	0.0064	< 0.0020	7.2	< 0.0100
4/19/2016	0.0054	< 0.0020	7.5	< 0.0100
5/10/2016	0.0078	< 0.0020	7.7	< 0.0100
6/14/2016	0.0059	< 0.0020	6.7	< 0.0100
7/13/2016	0.0071	< 0.0020	7.3	< 0.0100
8/2/2016	0.0092	< 0.0020	7.6	0.0115
9/15/2016	< 0.0050	< 0.0020	6.5	< 0.0100
10/20/2016	< 0.0050	< 0.0020	6.6	< 0.0100
11/15/2016	0.0124	< 0.0020	7.2	0.0357
12/13/2016	0.0055	< 0.0020	6.6	< 0.0100

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)**Outfall: H-12**

Collection Date	Copper (mg/L)	pH	Zinc (mg/L)
1/20/2016	0.0053	7.5	0.0249
2/9/2016	0.0080	7.6	0.0282
3/8/2016	0.0090	7.7	0.0255
4/19/2016	0.0128	7.4	0.0219
5/10/2016	0.0114	7.4	0.0243
6/14/2016	0.0110	6.4	0.0378
7/13/2016	0.0051	7.4	0.1050
8/2/2016	0.0113	7.4	0.0621
9/14/2016	0.0159	7.0	0.0522
10/18/2016	0.0116	6.9	0.0341
11/15/2016	0.0110	7.1	0.0325
12/13/2016	0.0140	6.6	0.0297

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: H-16

Collection Date	Biochemical Oxygen Demand (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)
1/4/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
1/11/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
1/19/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
1/25/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
2/1/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
2/8/2016	< 2.0	0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
2/22/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	0.00002010
3/1/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
3/8/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
3/15/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
3/22/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
4/4/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
4/11/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
4/26/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
5/2/2016	< 2.0	0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
5/10/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
6/1/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
6/8/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
6/15/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
6/22/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
7/18/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	0.00004230
7/25/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
8/1/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
8/8/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
8/15/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
8/22/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
9/6/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
9/12/2016	< 2.0	0.0001	0.0059	< 0.0050	< 0.0020	< 0.00002000
9/19/2016	< 2.0	0.0002	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
9/26/2016	< 2.0	0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
10/3/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
10/10/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
10/17/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
10/24/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
11/1/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
11/9/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
11/15/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000

Collection Date	Biochemical Oxygen Demand (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)
11/22/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
12/5/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
12/12/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
12/20/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000
12/27/2016	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.00002000

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: H-16

Collection Date	Nickel (mg/L)	pH	Silver (mg/L)	Total Suspended Solids (mg/L)	Zinc (mg/L)
1/4/2016	< 0.0100	7.9	< 0.0050	< 1	< 0.0100
1/11/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
1/19/2016	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
1/25/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
2/1/2016	< 0.0100	8.1	< 0.0050	< 1	< 0.0100
2/8/2016	< 0.0100	7.8	< 0.0050	< 1	< 0.0100
2/22/2016	< 0.0100	7.2	< 0.0050	< 1	< 0.0100
3/1/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
3/8/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
3/15/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
3/22/2016	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
4/4/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
4/11/2016	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
4/26/2016	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
5/2/2016	< 0.0100	7.8	< 0.0050	< 1	< 0.0100
5/10/2016	< 0.0100	7.4	< 0.0050	< 1	< 0.0100
6/1/2016	< 0.0100	8.0	< 0.0050	< 1	< 0.0100
6/8/2016	< 0.0100	6.9	< 0.0050	< 1	< 0.0100
6/15/2016	< 0.0100	7.9	< 0.0050	< 1	< 0.0100
6/22/2016	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
7/18/2016	< 0.0100	7.9	< 0.0050	< 1	< 0.0100
7/25/2016	< 0.0100	8.0	< 0.0050	< 1	0.0118
8/1/2016	< 0.0100	8.0	< 0.0050	< 1	< 0.0100
8/8/2016	< 0.0100	7.4	< 0.0050	< 1	0.0218
8/15/2016	< 0.0100	7.9	< 0.0050	< 1	< 0.0100
8/22/2016	< 0.0100	7.9	< 0.0050	< 1	< 0.0100
9/6/2016	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
9/12/2016	< 0.0100	7.3	< 0.0050	< 1	0.0146
9/19/2016	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
9/26/2016	< 0.0100	7.4	< 0.0050	< 1	< 0.0100
10/3/2016	< 0.0100	7.4	< 0.0050	< 1	< 0.0100
10/10/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
10/17/2016	< 0.0100	7.4	< 0.0050	< 1	< 0.0100
10/24/2016	< 0.0100	7.2	< 0.0050	< 1	< 0.0100
11/1/2016	< 0.0100	7.2	< 0.0050	< 1	< 0.0100
11/9/2016	< 0.0100	7.3	< 0.0050	< 1	< 0.0100
11/15/2016	< 0.0100	7.3	< 0.0050	1	< 0.0100
11/22/2016	< 0.0100	7.4	< 0.0050	< 1	0.0111

Collection Date	Nickel (mg/L)	pH	Silver (mg/L)	Total Suspended Solids (mg/L)	Zinc (mg/L)
12/5/2016	< 0.0100	7.5	< 0.0050	< 1	0.0123
12/12/2016	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
12/20/2016	< 0.0100	7.5	< 0.0050	< 1	< 0.0100

Outfall: K-12

Collection Date	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)
1/5/2016	< 2.00	2.4
2/9/2016	< 2.00	2.4
3/2/2016	2.36	3.3
4/5/2016	< 2.00	5.8
5/3/2016	2.67	2.1
6/7/2016	< 2.00	< 1.0
7/12/2016	< 2.00	1.1
8/9/2016	< 2.00	1.0
9/13/2016	< 2.00	1.5
10/4/2016	< 2.00	2.2
11/2/2016	< 2.00	1.9
12/20/2016	< 2.00	< 1.0

Collection Date	Dissolved Oxygen (mg/L)	pH
1/19/2016	2.96	7.3
2/22/2016	3.84	7.1
3/30/2016	3.57	7.2
4/27/2016	4.47	7.3
5/17/2016	3.00	7.8
6/30/2016	3.89	7.9
7/18/2016	3.66	7.8
8/11/2016	4.42	7.8
9/21/2016	4.91	8.0
10/11/2016	4.57	8.0
11/11/2016	6.11	7.9
12/22/2016	4.96	7.7

Collection Date	Fecal Coliform (Col/100mL)
1/4/2016	< 2
2/1/2016	< 2
3/1/2016	79
4/4/2016	< 2
5/2/2016	< 2
6/6/2016	< 2
7/11/2016	2
8/8/2016	49
9/12/2016	79
10/3/2016	< 2
11/1/2016	11
12/12/2016	< 2

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: K-18

Collection Date	pH
3/15/2016	7.1
4/26/2016	7.7
9/13/2016	7.3
9/20/2016	6.8
10/19/2016	6.3

Collection Date	Total Suspended Solids (mg/L)
3/15/2016	3.0
4/26/2016	2.0
9/21/2016	2.0
10/19/2016	2.0

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: L-7A

Collection Date	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)
1/5/2016	< 2.0	10.3
2/9/2016	< 2.0	7.7
3/2/2016	< 2.0	3.6
4/5/2016	< 2.0	4.3
5/3/2016	< 2.0	6.4
6/7/2016	< 2.0	3.2
7/12/2016	< 2.0	3.9
8/23/2016	3.5	6.0
9/13/2016	2.2	8.0
10/4/2016	2.3	14.2
11/2/2016	6.2	11.8
12/13/2016	2.0	10.8

Collection Date	Dissolved Oxygen (mg/L)	pH
1/19/2016	9.16	7.2
2/22/2016	5.96	7.0
3/30/2016	5.69	7.2
4/27/2016	3.27	7.1
5/17/2016	4.31	7.4
6/30/2016	4.17	7.7
7/18/2016	2.99	7.7
8/11/2016	4.39	7.8
9/21/2016	4.29	7.5
10/11/2016	4.99	7.8
11/11/2016	6.85	7.7
12/22/2016	5.89	7.9

Collection Date	Fecal Coliform (Col/100mL)
1/4/2016	< 2
2/1/2016	< 2
3/1/2016	< 2
4/4/2016	< 2
5/2/2016	< 2
6/6/2016	8
7/11/2016	< 2
8/8/2016	< 2
9/12/2016	22
10/3/2016	5
11/1/2016	< 2
12/12/2016	5

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)**Outfall: M-05**

Collection Date	Tetrachloroethylene (µg/L)	Trichloroethylene (µg/L)
1/7/2016	< 2	< 2
2/2/2016	< 2	< 2
3/2/2016	< 2	< 2
4/6/2016	< 2	< 2
5/10/2016	< 2	< 2
6/8/2016	< 2	< 2
7/19/2016	< 2	< 2
8/9/2016	< 2	< 2
9/14/2016	< 2	< 2
9/15/2016	< 2	< 2
10/4/2016	< 2	< 2
11/2/2016	< 2	< 2
12/19/2016	< 2	< 2

National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater Monitoring

Sampling is performed to collect benchmark samples, impaired water samples, and effluent samples. Also visual inspections are performed as part of the industrial stormwater monitoring efforts. The results of the sampling and inspections are presented in Tables 6, 7, and 8. In 2016, no effluent sampling from industrial stormwater locations were collected.

Table 6 NPDES Industrial Stormwater Benchmark Monitoring Data

Outfalls G-10A and Z-01 are no discharge outfalls from basins. In the unlikely event of a discharge, sampling is performed. In 2016, there were no discharges from either G-10A or Z-01 outfalls.

Outfall N-02	Sample Date	1/22/2016	1/28/2016	2/3/2016	2/24/2016	4/7/2016	7/13/2016	10/7/2016
Analyte	Units	Results						
Zn	mg/L	0.0338	0.0838	0.0377	0.1160	0.0260	0.0640	0.0318

Outfall N-12A	Sample Date	1/15/2016	1/22/2016	1/28/16	2/3/2016	2/16/2016	2/24/2016	5/29/2016	7/20/2016
Analyte	Units	Results							
Cu	mg/L	0.0050	0.0050	0.0050	0.0000	0.0281	0.0050	0.0050	0.0050

Table 7 NPDES Industrial Stormwater Impaired Water Monitoring Data

Outfall	Sample Date	Analyte	Result (MPN/100mL)
E-06	2/24/2016	Fecal Coliform	88,000
N-06	1/28/2016	Fecal Coliform	<100
H-06A	1/28/2016	Fecal Coliform	600
H-06A	2/24/2016	Fecal Coliform	11,600
L-13	2/24/2016	Fecal Coliform	600
A-08	2/3/2016	Fecal Coliform	3,200
N-02	1/28/2016	Fecal Coliform	700
N-02	2/24/2016	Fecal Coliform	2,500

Note:
MPN = most probable number

Table 8 NPDES Industrial Stormwater Visual Monitoring Data

Outfalls with identical effluents are grouped together. One outfall in each group is designated each April to represent the group and is sampled quarterly each year. All others are sampled individually.

Outfall	1Q 2016	2Q 2016	3Q 2016	4Q 2016
A-08	1/15/2016	N/A	N/A	N/A
L-13	N/A	5/27/2016	7/15/2016	Sampling not required ⁴
A-14	1/15/2016	5/17/2016	8/11/2016	Sampling not required ⁴
B-10	1/15/2016	5/17/2016	8/11/2016	Sampling not required ⁴
E-01	1/15/2016	N/A	N/A	N/A
E-02	N/A	5/19/2016	8/9/2016	10/7/2016
E-03	1/15/2016	N/A	N/A	N/A
E-04	N/A	4/7/2016	7/16/2016	Sampling not required ⁴
E-06 ¹	1/15/2016	4/7/2016	N/A	N/A
G-10A ²	N/A	N/A	N/A	N/A
G-21	2/3/2016	5/2/2016	7/9/2016	Sampling not required ⁴
H-04B	1/15/2016	5/17/2016	7/16/2016	10/6/2016
H-05	1/28/2016	N/A	N/A	N/A
H-06	N/A	N/A	N/A	N/A
H-07C	N/A	5/17/2016	7/16/2016	10/6/2016
H-06A	1/28/2016	5/17/2016	Outside business hours	Sampling not required ⁴
H-07A	1/15/2016	4/7/2016	7/16/2016	Sampling not required ⁴
H-07B ²	N/A	N/A	N/A	N/A
H-08	1/15/2016	5/17/2016	8/11/2016	Sampling not required ⁴
K-02	1/28/2016	5/17/2016	9/2/2016	Sampling not required ⁴
N-02	2/3/2016	4/12/2016	7/6/2016	10/7/2016
F-10	N/A	N/A	N/A	N/A
N-05	N/A	4/7/2016	7/16/2016	Sampling not required ⁴
N-14	2/3/2016	N/A	N/A	N/A
N-15 ³	N/A	N/A	N/A	N/A
N-16	N/A	N/A	N/A	N/A
H-02A	N/A	N/A	N/A	N/A
N-06	N/A	5/2/2016	7/16/2016	10/7/2016
N-12	2/3/2016	N/A	N/A	N/A
N-12A	1/15/2016	4/7/2016	7/9/2016	Sampling not required ⁴
N-13A	1/15/2016	4/7/2016	7/7/2016	Sampling not required ⁴
Y-01	N/A	N/A	N/A	N/A
Y-03	2/5/2016	N/A	N/A	N/A
Y-04	N/A	5/2/2016	7/16/2016	Sampling not required ⁴
Z-01 ²	N/A	N/A	N/A	N/A

Notes:

¹ Effective 6/1/16, Outfall E-06 is reclassified as ECA checkpoint.

² Outfalls G-10A, H-07B and Z-01 are no discharge outfalls from basins. In the unlikely event of a discharge, sampling is performed.

³ Effective 12/17/15, Outfall N-15 was added to the group containing substantially identical outfalls, F-10, N-05, N-14 and N-16.

⁴ Fourth quarter 2016 sampling was not required. The Industrial Stormwater Permit issued to SRS and effective 10/1/16 does not require sampling to begin until 1/1/17.

River and Stream Water Quality Surveillance

SRS samples 10 SRS stream and 5 Savannah River locations for various physical and chemical properties to identify any degradation that could be attributed to the water discharges regulated by Site NPDES permits and materials that may be released inadvertently from sources other than routine release points. Table 9 presents the analyzed surface water inorganic parameters. Samples are also collected for pesticides, herbicides, and PCBs at all locations four times per year (once per quarter). The list of analytes is the following: aldrin, alphas-BHC, beta-BHC, Delta, BHC, and gamma-BHC (Lindane), chlordane, Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan I, Endosulfan II, Endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, toxaphene, 2,4-D, and 2,4,5-TP (Silvex). Only Silvex was detected at the FM-2B location during the 4th quarter sampling at a concentration of 0.66µg/L. All other analytical results at all locations for calendar year 2016 were below the detection limits. Thus, no table is provided for the pesticides, herbicides, and PCBs.

**Table 9 SRS Stream and Savannah River Surface Water Inorganic Results
Location: FMC-2B**

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	11.92	10.61	6.15	7.50	6.38	4.94	4.88	5.24	6.92	7.56	9.90	8.20
pH	SU	6.90	7.11	6.92	6.46	5.82	6.56	6.64	6.40	6.53	6.90	7.22	7.58
Temperature	°C	4.3	6.9	16.7	17.4	20.1	25.0	24.5	24.2	25.6	15.0	9.8	12.1
Aluminum	µg/L	152.0	168.0	97.8	< 40.0	63.3	< 40.0	155.0	< 40.0	< 40.0	< 40.0	245.0	73.5
Beryllium	µg/L	0.193	< 0.100	1.020	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.500	< 0.100	< 0.100
Cadmium	µg/L	0.505	< 0.500	3.140	< 0.500	< 0.500	< 0.500	1.030	< 0.500	< 0.500	2.350	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	2.68	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	2.78	< 2.00	< 2.00	< 2.00	3.26	< 2.00	< 2.00
Hardness (total)	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	18	17	< 2	< 2	< 2
Iron	µg/L	653	530	1,350	838	1,540	2,470	8,990	3,770	2,690	1,110	2,370	978
Lead	µg/L	< 10.0	< 10.0	< 10.0	11.8	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	28.30	15.50	47.70	27.30	44.50	581.00	790.00	312.00	318.00	41.00	120.00	51.30
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	4.64	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1700	0.1400	0.0650	0.0680	0.0820	0.1300	0.0740	0.1200	0.2400	0.0567	0.1750	0.1690
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0027	< 0.0027	0.0044
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	3.7	4.8	6.4	5.7	6.2	7.6	8.3	7.9	6.8	7.1	3.6	6.1
Phosphorus	mg/L	0.097	0.039	0.130	0.130	0.032	0.060	0.052	0.049	0.033	0.049	0.069	0.065
Total Suspended Solids	mg/L	3	2	4	3	7	4	28	9	< 1	< 1	14	< 1
Zinc	µg/L	15.10	12.80	< 2.00	29.10	10.20	14.50	7.59	12.80	14.30	12.40	13.90	8.13

Note:
Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: FMC-6

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	11.92	11.55	8.45	8.74	8.41	7.88	7.63	7.77	8.19	9.52	9.82	9.55
pH	SU	6.40	5.81	7.60	7.16	6.04	6.82	6.92	6.50	6.94	6.59	6.80	7.39
Temperature	°C	7.2	7.7	19.0	17.7	20.1	24.1	24.0	24.6	24.5	15.9	13.3	14.1
Aluminum	µg/L	127.0	250.0	122.0	59.8	85.9	65.3	79.9	53.0	< 40.0	< 40.0	366.0	66.8
Beryllium	µg/L	< 0.100	0.108	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	2.86	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	3.13	< 2.00
Hardness (total)	mg/L	14	< 1	< 1	< 1	10	< 1	< 1	13	11	< 2	< 2	< 2
Iron	µg/L	628	674	977	994	860	1,120	1,010	1,140	984	1,030	800	878
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	29.40	33.60	52.50	50.10	42.60	48.30	72.60	87.90	46.70	54.70	28.50	47.70
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	5.60	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.4500	0.6000	0.4400	0.3000	0.1900	0.2300	0.2600	0.1400	0.3400	0.5080	0.9300	0.6870
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0038	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	3.3	4.6	5.3	5.0	4.1	5.1	3.7	4.8	4.2	7.2	3.8	4.2
Phosphorus	mg/L	0.068	0.053	0.160	0.100	0.087	0.100	0.110	0.210	0.096	0.084	0.092	0.072
Total Suspended Solids	mg/L	2	3	4	5	7	4	7	6	< 1	2	8	3
Zinc	µg/L	14.50	10.90	< 2.00	22.30	7.58	5.52	7.34	5.84	7.12	13.10	9.29	5.91

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: FM-2C

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	11.37	9.86	4.41	5.62	3.15	1.58	1.77	3.09	1.24	5.87	7.82	7.26
pH	SU	6.90	6.71	6.74	6.76	5.59	6.53	6.38	6.40	6.39	6.36	7.02	7.53
Temperature	°C	5.3	6.8	17.7	17.8	20.7	26.8	25.3	24.4	24.4	16.4	11.6	15.7
Aluminum	µg/L	119.0	131.0	183.0	78.7	178.0	115.0	68.0	278.0	106.0	46.8	753.0	219.0
Beryllium	µg/L	0.113	< 0.100	1.570	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.159	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	5.120	< 0.500	< 0.500	< 0.500	< 0.500	0.510	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	3.47	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	3.88	< 2.00	2.53	10.20	5.34
Hardness (total)	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	11	< 1	< 2	< 2	< 2	< 2
Iron	µg/L	637	578	2,000	1,840	5,740	4,980	4,010	6,970	5,560	937	951	676
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	32.70	42.00	141.00	138.00	419.00	460.00	349.00	170.00	409.00	28.30	25.00	26.00
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	0.0247	< 0.0200	0.0224	0.0330	0.0365
Nickel	µg/L	< 3.00	< 3.00	3.67	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	4.78	< 3.00
Nitrate-Nitrogen	mg/L	0.0300	0.0560	0.0440	0.0200	0.0310	0.0430	0.1000	0.2400	0.0870	0.2740	0.6540	0.3860
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0300	< 0.0034	0.0064	0.0043	0.0050
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	4.1	5.2	6.7	7.4	12.0	9.9	7.5	7.3	8.1	7.2	7.2	5.3
Phosphorus	mg/L	0.028	0.012	0.140	0.110	0.032	0.078	0.057	0.170	0.047	0.088	0.100	0.067
Total Suspended Solids	mg/L	3	2	8	6	13	14	10	32	6	9	1	5
Zinc	µg/L	12.20	6.10	< 2.00	15.00	7.34	7.32	8.79	25.10	23.00	25.30	30.30	32.90

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: L3R-2

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	10.70	11.64	8.48	8.23	7.79	7.21	7.17	7.50	NR	8.61	9.08	8.55
pH	SU	6.30	6.43	7.30	7.08	6.27	6.90	7.37	7.20	NR	6.95	6.80	7.58
Temperature	°C	9.1	8.2	21.5	19.7	21.9	25.7	25.0	24.1	NR	17.3	14.8	14.8
Aluminum	µg/L	144.0	106.0	56.7	< 40.0	139.0	< 40.0	112.0	562.0	169.0	< 40.0	320.0	67.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	30	24	< 1	15	24	11	45	46	27	11	12	11
Iron	µg/L	519	367	545	589	621	626	705	508	533	550	427	386
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	60.50	39.70	82.70	79.90	95.50	91.20	110.00	57.70	33.70	27.80	52.80	47.00
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.0890	0.0230	0.0370	0.0420	0.0440	0.0680	0.1100	0.0670	< 0.0013	0.0514	0.1060	0.0329
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0027	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	3.7	4.8	4.7	5.2	3.7	4.3	2.9	3.0	9.2	7.8	4.4	5.5
Phosphorus	mg/L	0.033	0.024	0.110	0.078	0.045	0.040	0.044	0.140	0.038	0.052	0.020	0.025
Total Suspended Solids	mg/L	4	2	3	4	11	6	10	3	1	< 1	2	< 1
Zinc	µg/L	12.50	12.40	< 2.00	18.40	9.00	5.69	10.10	8.59	169.0	8.17	10.20	3.21

Notes:

Estimated value: Lab QC outside limits are shaded blue.

NR = not recorded

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: PB-3

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	11.40	11.73	8.97	8.96	8.76	8.37	7.88	8.00	8.36	9.84	10.12	9.51
pH	SU	6.40	6.05	7.37	6.98	6.21	6.90	7.25	6.60	6.71	6.52	7.24	7.53
Temperature	°C	8.0	7.9	19.9	17.6	19.8	24.3	24.2	24.1	24.1	15.9	13.0	14.5
Aluminum	µg/L	260.0	339.0	186.0	178.0	157.0	181.0	102.0	1,280.0	381.0	113.0	64.1	180.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	2.80	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	21	17	19	< 1	< 1	< 1	< 1	20	24	16	< 2	< 2
Iron	µg/L	648	662	1,010	1,020	855	957	825	936	838	746	564	770
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	53.70	57.90	60.50	64.10	52.70	51.90	42.50	38.90	54.00	68.90	20.70	62.60
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1400	0.1800	0.1300	0.0970	0.1000	0.1400	0.2300	0.1200	0.0570	0.2520	0.1210	0.1140
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0045	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	5.9	8.1	7.6	7.6	3.9	4.8	3.4	4.4	6.4	9.3	3.8	7.0
Phosphorus	mg/L	0.023	0.024	0.120	0.110	0.039	0.084	0.039	0.180	0.032	0.028	0.058	0.033
Total Suspended Solids	mg/L	3	4	4	9	9	7	10	4	4	5	3	6
Zinc	µg/L	11.30	13.00	< 2.00	24.60	7.39	45.60	6.46	6.69	5.47	9.29	9.43	4.77

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: SC-4

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	10.89	11.44	9.38	8.80	8.30	7.95	7.52	7.34	7.86	8.97	9.33	9.01
pH	SU	6.20	6.22	7.60	7.13	6.55	7.16	7.21	7.00	6.88	6.78	6.95	7.66
Temperature	°C	9.6	8.7	20.7	18.2	20.4	26.3	25.0	27.1	27.3	19.5	15.4	14.8
Aluminum	µg/L	92.7	150.0	103.0	93.1	467.0	75.3	149.0	310.0	< 40.0	< 40.0	< 40.0	61.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	22	11	< 1	< 1	< 1	< 1	16	24	19	18	15	< 2
Iron	µg/L	444	453	488	643	1,300	357	608	244	273	262	317	543
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	41.10	41.10	45.60	57.40	169.00	30.00	52.00	19.70	20.20	21.80	22.70	48.50
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	0.0201	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1100	0.0970	0.0770	0.0710	0.0570	0.1100	0.1200	0.0910	0.0380	0.0835	0.1010	0.0421
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0027	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	15.7	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	3.8	5.4	4.8	5.5	4.1	4.3	3.5	4.0	4.3	6.1	3.3	5.5
Phosphorus	mg/L	0.014	0.016	0.170	0.140	0.057	0.023	0.100	0.110	0.025	0.020	0.018	0.021
Total Suspended Solids	mg/L	3	3	4	6	37	6	11	4	4	< 1	3	2
Zinc	µg/L	8.92	6.98	< 2.00	15.00	8.80	3.88	10.10	5.10	5.49	5.86	7.85	2.43

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: TB-5

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	11.85	10.42	7.96	8.33	8.25	7.49	7.37	7.54	7.84	9.05	9.88	9.39
pH	SU	4.48	6.72	7.00	7.25	6.70	6.83	7.17	6.98	7.73	7.27	7.75	7.70
Temperature	°C	6.1	9.4	16.9	17.2	19.5	23.2	23.5	28.0	22.2	15.4	10.7	13.4
Aluminum	µg/L	135.0	109.0	154.0	55.5	234.0	71.1	159.0	< 40.0	< 40.0	< 40.0	42.4	158.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.795	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	3.06	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2	< 2	< 2
Iron	µg/L	1,560	1,410	3,390	2,160	4,510	4,900	7,090	5,700	4,150	1,840	1,600	2,200
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	62.00	72.00	92.60	57.30	190.00	262.00	659.00	326.00	181.00	118.00	80.90	107.00
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	0.0314	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	4.58	6.99	4.99	11.60	9.04	5.58	5.82	7.34	< 3.00	3.32
Nitrate-Nitrogen	mg/L	0.0280	0.0590	0.0220	< 0.0013	< 0.0013	0.0460	< 0.0013	0.0220	0.0210	0.0918	0.0890	0.0702
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0027	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	2.9	4.0	6.4	6.1	5.5	6.8	5.3	6.0	6.2	6.4	2.9	4.4
Phosphorus	mg/L	0.033	0.024	0.048	0.077	0.088	0.094	0.097	0.058	0.052	0.047	0.170	0.037
Total Suspended Solids	mg/L	7	4	7	9	24	11	31	17	10	4	< 1	11
Zinc	µg/L	7.33	11.70	< 2.00	3.18	8.81	6.14	4.02	6.78	6.03	7.04	4.59	3.24

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: TC-1

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	12.65	11.20	8.78	8.52	8.13	7.70	7.43	7.25	7.88	9.37	10.20	8.74
pH	SU	6.50	5.67	7.00	6.89	6.23	6.87	6.57	7.00	6.70	7.06	7.12	7.60
Temperature	°C	5.5	8.2	17.0	17.4	19.9	23.9	23.5	25.1	24.3	17.1	10.8	13.8
Aluminum	µg/L	79.8	117.0	108.0	< 40.0	128.0	< 40.0	182.0	87.2	< 40.0	< 40.0	< 40.0	79.4
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	10	< 1	< 1	12	< 1	< 1	10	12	12	< 2	< 2	< 2
Iron	µg/L	287	297	384	481	741	842	786	677	497	350	260	331
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	10.50	9.64	16.50	20.10	28.60	24.50	55.90	37.50	16.80	10.10	8.77	19.80
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.0280	0.1300	0.0210	0.0230	0.0200	0.0550	0.3400	0.0900	0.0240	0.0870	0.0658	0.0810
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0027	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	3.7	4.4	4.2	5.4	4.1	4.5	3.3	4.7	4.9	6.4	4.2	6.4
Phosphorus	mg/L	0.083	0.038	0.130	0.120	0.079	0.110	0.080	0.086	0.054	0.057	0.150	0.200
Total Suspended Solids	mg/L	4	4	4	7	14	6	12	7	4	4	< 1	4
Zinc	µg/L	12.10	12.70	< 2.00	12.80	12.30	3.51	25.80	4.29	3.12	5.94	9.33	< 2.00

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: U3R-1A

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	11.30	10.59	8.28	8.69	8.08	7.82	7.46	7.74	8.07	9.35	9.53	8.85
pH	SU	6.90	7.07	7.10	7.10	6.73	6.80	6.38	6.13	6.50	6.44	7.20	7.90
Temperature	°C	8.8	10.7	17.0	18.6	18.8	21.6	21.8	22.5	22.2	15.1	12.9	15.3
Aluminum	µg/L	101.0	117.0	159.0	< 40.0	40.6	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	< 40.0	46.9
Beryllium	µg/L	0.121	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	8.63	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2	< 2	< 2
Iron	µg/L	228	240	336	322	374	390	384	391	429	402	279	301
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	7.53	8.82	8.73	8.91	7.69	8.42	7.73	7.61	9.10	13.30	7.83	10.10
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.0630	0.2900	< 0.0013	< 0.0013	< 0.0013	0.0390	0.0200	0.0230	0.0290	0.3740	0.3200	0.3050
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0030	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	1.6	2.3	2.0	2.6	1.8	2.0	1.5	2.1	2.3	3.8	1.7	2.4
Phosphorus	mg/L	0.023	0.028	0.071	0.110	0.016	0.024	0.014	0.017	0.014	0.013	0.040	0.052
Total Suspended Solids	mg/L	2	3	3	3	5	4	4	3	5	2	< 1	2
Zinc	µg/L	11.60	8.79	< 2.00	10.80	3.16	2.83	2.68	4.67	2.25	8.04	7.54	2.10

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: U3R-4

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	11.86	11.11	8.17	8.79	8.43	7.85	7.51	7.62	7.94	8.58	9.58	9.41
pH	SU	6.60	6.05	7.80	7.16	6.24	7.00	6.93	6.54	6.92	7.34	7.18	7.75
Temperature	°C	7.6	8.6	19.7	17.3	20.0	25.1	24.2	23.5	24.0	16.0	13.0	13.6
Aluminum	µg/L	175.0	220.0	267.0	174.0	183.0	191.0	49.3	152.0	41.9	121.0	134.0	125.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.128	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	0.567	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 2	< 2	< 2	< 2
Iron	µg/L	401	471	722	769	655	682	517	965	607	765	439	454
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	14.60	20.40	21.90	28.40	24.50	23.00	20.20	42.10	18.30	87.20	14.10	24.80
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	4.75	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1000	0.1400	0.0890	0.0620	0.0620	0.0950	0.0520	0.0620	0.0430	0.1380	0.1780	0.1230
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0046	< 0.0027	0.0029
Thallium	µg/L	< 15.0	16.6	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	3.8	5.6	4.9	4.7	3.0	3.3	2.2	3.4	5.4	17.0	3.9	5.7
Phosphorus	mg/L	0.0220	0.0310	0.1500	0.1300	0.0560	0.0580	0.0390	0.1200	0.0410	0.0360	< 0.0016	0.0680
Total Suspended Solids	mg/L	3	4	4	10	12	7	6	16	5	< 1	2	2
Zinc	µg/L	11.40	10.80	< 2.00	39.40	5.89	21.00	2.72	5.89	8.29	11.30	9.61	4.40

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: RM-118.8

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	9.90	9.76	8.70	8.80	7.91	7.09	7.94	7.63	7.25	7.95	9.04	9.80
pH	SU	6.90	7.16	6.60	6.50	6.93	6.84	6.55	6.30	6.80	6.85	7.43	6.72
Temperature	°C	9.1	9.4	22.0	16.4	21.6	27.1	27.2	28.0	25.8	20.3	15.1	13.0
Aluminum	µg/L	1,140.0	957.0	426.0	180.0	243.0	448.0	228.0	128.0	117.0	229.0	172.0	97.2
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	0.906	< 0.100	< 0.100	1.080	< 0.100	0.936	< 0.100	< 0.100	1.150
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	2.990	< 0.500	1.610	3.530	< 0.500	3.430	< 0.500	2.540	4.130
Chromium	µg/L	< 2.00	< 2.00	< 2.00	2.17	< 2.00	2.27	2.87	< 2.00	2.60	< 2.00	< 2.00	2.59
Copper	µg/L	< 2.00	< 2.00	< 2.00	2.91	< 2.00	3.56	2.29	< 2.00	2.20	< 2.00	< 2.00	2.32
Hardness (total)	mg/L	17	16	< 1	18	< 1	< 1	17	20	19	20	15	19
Iron	µg/L	1,210	1,060	750	795	666	1,010	420	460	518	831	439	549
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	20.70	53.80	80.50	74.70	77.80	110.00	65.10	80.50	85.50	80.50	79.40	72.40
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	4.89	< 3.00	< 3.00	4.05	< 3.00	< 3.00	3.42	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	1.1000	0.3400	0.2300	0.2000	0.3400	0.2700	0.2000	0.2600	0.2100	0.2430	0.1980	0.2240
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0083	< 0.0027	0.0037
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	5.3	5.0	3.9	4.6	4.4	3.7	3.1	3.7	3.3	7.3	3.2	4.7
Phosphorus	mg/L	0.041	0.071	0.100	0.140	0.140	0.110	0.110	0.210	0.200	0.110	0.150	0.420
Total Suspended Solids	mg/L	3	6	7	7	11	14	10	11	6	5	9	5
Zinc	µg/L	8.30	4.14	< 2.00	8.15	12.50	6.60	6.94	4.00	8.99	7.25	10.20	9.05

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: RM-129.1

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	10.00	10.10	6.10	8.46	7.92	7.02	6.87	7.20	7.30	8.05	8.72	8.86
pH	SU	7.10	7.15	6.45	6.45	6.85	6.61	6.62	6.34	6.92	6.45	7.19	7.08
Temperature	°C	9.5	9.2	19.6	16.6	21.4	26.7	26.4	28.0	25.0	20.0	11.0	12.0
Aluminum	µg/L	1,570.0	867.0	339.0	155.0	217.0	392.0	42.7	75.7	124.0	46.9	< 40.0	< 40.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	1.930	0.323	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	6.970	0.883	< 0.500	< 0.500	< 0.500	< 0.500	0.715	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	4.65	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	2.15	< 2.00	< 2.00	< 2.00	2.52	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	2.92	< 2.00
Hardness (total)	mg/L	16	16	19	23	< 1	< 1	< 1	20	19	20	28	19
Iron	µg/L	1,290	1,050	1,580	1,100	655	801	703	432	525	750	756	846
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	44.20	76.20	233.00	77.00	101.00	92.30	38.90	86.70	94.40	86.30	29.70	43.30
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	5.55	< 3.00	< 3.00	< 3.00	< 3.00	3.35	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.9300	0.3000	0.1100	0.1300	0.3000	0.2600	0.2500	0.2200	0.1400	0.2740	0.0917	0.0619
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0093	< 0.0027	< 0.0027
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	5.1	4.8	7.5	5.4	4.2	4.1	4.6	3.7	3.4	6.7	5.0	7.3
Phosphorus	mg/L	0.058	0.080	0.120	0.120	0.210	0.130	0.045	0.220	0.120	0.120	0.064	0.110
Total Suspended Solids	mg/L	4	7	13	8	11	9	3	8	4	1	3	5
Zinc	µg/L	16.10	5.97	< 2.00	3.04	11.50	7.76	9.70	3.84	6.35	6.31	13.50	4.33

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: RM-141.5

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	9.10	9.94	9.05	8.95	7.85	7.44	8.00	7.68	7.45	8.00	9.01	9.88
pH	SU	7.00	7.10	6.44	6.32	7.08	6.94	6.45	6.32	6.85	6.25	7.06	7.19
Temperature	°C	8.0	9.0	17.5	16.5	21.1	27.6	26.6	27.0	25.8	19.0	15.3	13.1
Aluminum	µg/L	496.0	897.0	262.0	147.0	207.0	375.0	169.0	< 40.0	76.6	< 40.0	112.0	59.2
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	1.300	< 0.100	< 0.100	< 0.100	< 0.100	0.551	< 0.100	1.390	0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	4.510	< 0.500	< 0.500	< 0.500	< 0.500	1.750	< 0.500	5.790	0.603
Chromium	µg/L	< 2.00	< 2.00	< 2.00	2.97	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	3.04	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	2.65	< 2.00	3.96	< 2.00	< 2.00	< 2.00	< 2.00	4.54	< 2.00
Hardness (total)	mg/L	19	10	< 1	< 1	< 1	13	< 1	18	18	21	< 2	< 2
Iron	µg/L	856	1,080	699	723	597	725	380	331	503	799	294	517
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	14.70	65.00	74.50	74.30	73.50	95.20	70.40	61.20	72.60	96.00	63.70	63.70
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	6.47	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	3.33	5.95	< 3.00
Nitrate-Nitrogen	mg/L	0.5200	0.3200	0.2200	0.1800	0.3100	0.2700	0.1800	0.2300	0.1200	0.2780	0.1700	0.1990
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0107	< 0.0027	0.0034
Thallium	µg/L	< 15.0	16.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	6.5	4.8	3.7	4.6	4.3	4.4	3.1	3.6	3.4	7.0	2.8	4.2
Phosphorus	mg/L	0.027	0.170	0.190	0.140	0.140	0.089	0.085	0.210	0.130	0.150	0.120	0.160
Total Suspended Solids	mg/L	2	6	5	8	9	11	7	5	5	< 1	7	5
Zinc	µg/L	11.90	3.05	< 2.00	8.24	9.60	24.10	6.35	5.48	9.47	8.48	15.30	8.78

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: RM-150.4

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	10.50	10.76	9.28	9.25	8.12	7.61	8.19	7.82	7.35	8.17	9.05	10.05
pH	SU	6.80	7.18	6.51	6.37	6.83	7.05	6.42	6.25	6.84	6.65	6.68	7.50
Temperature	°C	9.8	9.1	15.6	16.4	20.5	25.4	25.6	26.2	25.4	18.5	14.9	13.2
Aluminum	µg/L	1,580.0	783.0	242.0	149.0	189.0	304.0	98.2	< 40.0	125.0	< 40.0	89.6	56.1
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.853	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	2.03	4.56	3.34
Hardness (total)	mg/L	15	< 1	< 1	18	22	< 1	14	18	18	19	< 2	19
Iron	µg/L	1,180	899	622	625	570	506	269	294	345	519	260	299
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	44.90	85.80	88.40	74.70	84.50	67.90	52.20	52.60	53.00	65.20	57.90	62.20
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	3.93	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.2500	0.2900	0.3800	0.2300	0.3100	0.2900	0.1900	0.1800	0.1100	0.2790	0.1810	0.2080
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0200	< 0.0034	0.0102	0.0028	0.0046
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	5.1	4.4	3.6	4.5	4.4	3.4	3.2	3.8	3.4	6.3	3.0	4.0
Phosphorus	mg/L	0.064	0.079	0.130	0.170	0.140	0.089	0.081	0.210	0.180	0.150	0.170	0.190
Total Suspended Solids	mg/L	4	10	5	7	9	6	4	4	< 1	< 1	8	3
Zinc	µg/L	12.90	2.39	< 2.00	3.95	7.86	2.93	10.90	5.69	5.36	7.67	14.90	9.31

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 9 SRS Stream and Savannah River Surface Water Inorganic Results (continued)
Location: RM-160

Parameter	Unit	1/2016	2/2016	3/2016	4/2016	5/2016	6/2016	7/2016	8/2016	9/2016	10/2016	11/2016	12/2016
Dissolved Oxygen	mg/L	9.40	10.60	9.55	9.06	8.30	7.90	8.43	7.82	7.48	8.15	9.03	10.21
pH	SU	7.25	6.60	6.32	6.20	6.61	6.86	6.26	6.12	6.62	6.80	6.20	7.80
Temperature	°C	8.4	8.0	16.0	16.6	20.8	24.8	24.4	25.8	25.0	18.3	14.6	13.9
Aluminum	µg/L	1,690.0	890.0	217.0	97.6	235.0	241.0	92.4	< 40.0	< 40.0	< 40.0	59.9	67.2
Beryllium	µg/L	0.109	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	1.420	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	4.810	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	3.07	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	2.45	3.21	< 2.00	2.00	2.95	< 2.00	< 2.00	3.32	< 2.00	< 2.00	2.79	< 2.00
Hardness (total)	mg/L	16	15	< 1	16	< 1	< 1	< 1	19	19	20	< 2	< 2
Iron	µg/L	1,910	838	576	525	584	416	254	271	296	391	202	237
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	218.00	72.00	80.20	72.60	110.00	63.30	54.30	58.50	56.90	60.70	52.20	57.80
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	3.27	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	4.45	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1700	0.3100	0.2100	0.1900	0.5600	0.2600	0.1800	0.1600	0.1700	0.2790	0.1530	0.1890
Nitrite-Nitrogen	mg/L	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	< 0.0034	0.0210	0.0210	0.0120	0.0032	0.0038
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	9.0	4.4	3.7	4.9	4.7	3.4	3.3	3.8	3.7	4.5	4.4	4.3
Phosphorus	mg/L	0.160	0.280	0.260	0.160	0.160	0.082	0.110	0.240	0.180	0.190	0.230	0.190
Total Suspended Solids	mg/L	7	6	5	7	9	5	5	3	1	< 1	5	3
Zinc	µg/L	13.40	4.38	< 2.00	5.50	17.00	2.63	7.29	9.27	11.50	7.47	12.40	8.28

Note:

Estimated value: Lab QC outside limits are shaded blue.

Table 10 Nonradiological Sediment Sampling Results

Analyte: Mercury

Location	Collection Date	Result (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	< 0.0076	0.0076
BDC_SED	3/1/2016	< 0.0081	0.0081
E-001_SED	5/4/2016	< 0.012	0.012
E-002_SED	5/4/2016	< 0.0077	0.0077
E-003_SED	5/4/2016	< 0.0085	0.0085
FMC-ROAD-A	8/16/2016	0.0169	6.08
L3R-1A_SED	8/16/2016	0.0632	4.61
L3R-2_SED	8/16/2016	0.0125	5.73
MCQBR_DS_Z_BASIN	8/18/2016	< 0.0072	0.0072
MCQBR_MON_OWENS	5/4/2016	< 0.015	0.015
PB-ROAD-A	5/4/2016	< 0.012	0.012
RM-118.7_SED	5/5/2016	< 0.012	0.012
RM-129_L3RM-SED	5/5/2016	< 0.0085	0.0085
RM-150.2_SED	5/5/2016	< 0.0094	0.0094
RM-150.4(VOGTLE DISCHARGE)	5/2/2016	< 0.0082	0.0082
RM-157.2_SED	5/5/2016	< 0.011	0.011
RM-160.0_SED	5/2/2016	< 0.0085	0.0085
SC LANDING (RM-141)	5/5/2016	< 0.0093	0.0093
SC-4_SED	8/16/2016	0.0171	5.11
SC-RM	5/5/2016	< 0.012	0.012
TC-1_SED	2/29/2016	< 0.014	0.014
U3R-1A_SED	2/29/2016	< 0.031	0.031
U3R-4_SED	3/1/2016	< 0.013	0.013
U3R-ROAD-C	5/4/2016	< 0.014	0.014

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Aluminum and Arsenic

Location	Collection Date	Aluminum (mg/kg)	Detection Limit (mg/kg)	Arsenic (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	7500	9	1.9	0.31
BDC_SED	3/1/2016	11000	8.6	1.3	0.29
E-001_SED	5/4/2016	24000	14	4.5	0.47
E-002_SED	5/4/2016	4400	8.1	4.8	0.28
E-003_SED	5/4/2016	27000	9.6	4.2	0.33
FMC-ROAD-A	8/16/2016	818	9.9	0.82	0.73
L3R-1A_SED	8/16/2016	300	8.1	1.74	0.595
L3R-2_SED	8/16/2016	965	9.6	< 0.71	0.71
MCQBR_DS_Z_BASIN	8/18/16	1200	4.8	0.71	0.16
MCQBR_MON_OWENS	5/4/2016	8300	16	2.3	0.55
PB-ROAD-A	5/4/2016	3400	13	1.7	0.44
RM-118.7_SED	5/5/2016	18000	12	2.7	0.41
RM-129_L3RM-SED	5/5/2016	11000	9.6	1.9	0.33
RM-150.2_SED	5/5/2016	14000	11	2.7	0.39
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	17000	9.8	1.7	0.33
RM-157.2_SED	5/5/2016	22000	14	3.7	0.48
RM-160.0_SED	5/2/2016	3700	8.3	< 0.57	0.57
SC LANDING (RM-141)	5/5/2016	17000	9.9	2.9	0.34
SC-4_SED	8/16/2016	1080	9.7	< 0.71	0.71
SC-RM	5/5/2016	7500	13	< 0.49	0.49
TC-1_SED	2/29/2016	11000	14	< 1.1	1.1
U3R-1A_SED	2/29/2016	24000	32	< 0.49	0.49
U3R-4_SED	3/1/2016	4400	14	1.9	0.49
U3R-ROAD-C	5/4/2016	27000	15	1.9	0.31

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Barium and Cadmium

Location	Collection Date	Barium (mg/kg)	Detection Limit (mg/kg)	Cadmium (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	87	0.19	< 0.034	0.034
BDC_SED	3/1/2016	53	0.18	< 0.032	0.032
E-001_SED	5/4/2016	74	0.29	< 0.051	0.051
E-002_SED	5/4/2016	6.6	0.17	< 0.03	0.03
E-003_SED	5/4/2016	37	0.2	< 0.036	0.036
FMC-ROAD-A	8/16/2016	15.1	0.15	< 0.146	0.146
L3R-1A_SED	8/16/2016	4.49	0.12	< 0.119	0.119
L3R-2_SED	8/16/2016	17	0.14	< 0.141	0.141
MCQBR_DS_Z_BASIN	8/18/2016	6.6	0.1	< 0.018	0.018
MCQBR_MON_OWENS	5/4/2016	58	0.34	< 0.06	0.06
PB-ROAD-A	5/4/2016	31	0.28	< 0.048	0.048
RM-118.7_SED	5/5/2016	130	0.26	< 0.045	0.045
RM-129_L3RM-SED	5/5/2016	96	0.21	< 0.036	0.036
RM-150.2_SED	5/5/2016	120	0.24	< 0.042	0.042
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	110	0.21	< 0.036	0.036
RM-157.2_SED	5/5/2016	140	0.3	< 0.052	0.052
RM-160.0_SED	5/2/2016	73	0.18	< 0.031	0.031
SC LANDING (RM-141)	5/5/2016	130	0.21	< 0.037	0.037
SC-4_SED	8/16/2016	13	0.14	< 0.142	0.142
SC-RM	5/5/2016	110	0.27	< 0.047	0.047
TC-1_SED	2/29/2016	50	0.3	< 0.053	0.053
U3R-1A_SED	2/29/2016	89	0.68	< 0.12	0.12
U3R-4_SED	3/1/2016	39	0.3	< 0.053	0.053
U3R-ROAD-C	5/4/2016	91	0.31	< 0.054	0.054

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Chromium and Copper

Location	Collection Date	Chromium (mg/kg)	Detection Limit (mg/kg)	Copper (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	11	0.097	4.3	0.26
BDC_SED	3/1/2016	8	0.092	5.9	0.25
E-001_SED	5/4/2016	33	0.15	13	0.39
E-002_SED	5/4/2016	20	0.087	2.8	0.23
E-003_SED	5/4/2016	29	0.1	13	0.27
FMC-ROAD-A	8/16/2016	3.36	0.22	1.35	0.44
L3R-1A_SED	8/16/2016	1.27	0.18	0.42	0.36
L3R-2_SED	8/16/2016	5.29	0.21	0.66	0.42
MCQBR_DS_Z_BASIN	8/18/2016	3.9	0.051	1.1	0.14
MCQBR_MON_OWENS	5/4/2016	14	0.17	12	0.46
PB-ROAD-A	5/4/2016	6.5	0.14	2.1	0.37
RM-118.7_SED	5/5/2016	24	0.13	13	0.34
RM-129_L3RM-SED	5/5/2016	17	0.1	8.1	0.28
RM-150.2_SED	5/5/2016	17	0.12	10	0.33
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	21	0.1	11	0.28
RM-157.2_SED	5/5/2016	26	0.15	15	0.4
RM-160.0_SED	5/2/2016	13	0.18	2.5	0.24
SC LANDING (RM-141)	5/5/2016	25	0.11	14	0.28
SC-4_SED	8/16/2016	3.37	0.21	0.74	0.43
SC-RM	5/5/2016	22	0.14	12	0.36
TC-1_SED	2/29/2016	5.7	0.15	1.7	0.41
U3R-1A_SED	2/29/16	14	0.34	8.4	0.91
U3R-4_SED	3/1/2016	5.5	0.15	2.5	0.41
U3R-ROAD-C	5/4/2016	11	0.16	4.1	0.42

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Cyanide and Iron

Location	Collection Date	Cyanide (mg/kg)	Detection Limit (mg/kg)	Iron (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	< 0.084	0.084	10000	3.1
BDC_SED	3/1/2016	< 0.087	0.087	16000	2.9
E-001_SED	5/4/2016	< 0.13	0.13	23000	4.7
E-002_SED	5/4/2016	< 0.078	0.078	12000	2.7
E-003_SED	5/4/2016	< 0.097	0.097	27000	3.2
FMC-ROAD-A	8/16/2016	0.129	0.049	3790	11.7
L3R-1A_SED	8/16/2016	0.111	0.088	4990	9.53
L3R-2_SED	8/16/2016	< 0.074	0.074	1260	11.3
MCQBR_DS_Z_BASIN	8/18/2016	< 0.16	0.16	2200	1.6
MCQBR_MON_OWENS	5/4/2016	< 0.13	0.13	9300	5.4
PB-ROAD-A	5/4/2016	< 0.12	0.12	4000	4.4
RM-118.7_SED	5/5/2016	< 0.095	0.095	20000	4.1
RM-129_L3RM-SED	5/5/2016	< 0.11	0.11	14000	3.3
RM-150.2_SED	5/5/2016	< 0.094	0.094	15000	3.9
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	< 0.13	0.13	18000	3.3
RM-157.2_SED	5/5/2016	1.5	0.084	26000	4.7
RM-160.0_SED	5/2/2016	< 0.096	0.096	5700	2.8
SC LANDING (RM-141)	5/5/2016	< 0.099	0.099	22000	3.3
SC-4_SED	8/16/2016	< 0.13	0.13	1890	11.4
SC-RM	5/5/2016	< 0.14	0.14	21000	4.3
TC-1_SED	2/29/2016	< 0.32	0.32	3000	4.8
U3R-1A_SED	2/29/2016	< 0.14	0.14	7600	11
U3R-4_SED	3/1/2016	< 0.15	0.15	2000	4.8
U3R-ROAD-C	5/4/2016	< 0.084	0.084	6300	4.9

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Lead and Magnesium

Location	Collection Date	Lead (mg/kg)	Detection Limit (mg/kg)	Magnesium (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	5.1	0.29	880	26
BDC_SED	3/1/2016	8.8	0.28	< 25	25
E-001_SED	5/4/2016	13	0.45	1100	40
E-002_SED	5/4/2016	4.4	0.26	< 23	23
E-003_SED	5/4/2016	13	0.31	1400	28
FMC-ROAD-A	8/16/2016	1.51	0.48	45.8	12.4
L3R-1A_SED	8/16/2016	0.861	0.39	21.4	10.1
L3R-2_SED	8/16/2016	2.55	0.47	31.2	12
MCQBR_DS_Z_BASIN	8/18/2016	2.2	0.16	< 14	14
MCQBR_MON_OWENS	5/4/2016	7.4	0.52	< 46	46
PB-ROAD-A	5/4/2016	3.6	0.42	< 37	37
RM-118.7_SED	5/5/2016	8.9	0.39	2100	35
RM-129_L3RM-SED	5/5/2016	6.7	0.31	1600	28
RM-150.2_SED	5/5/2016	8.1	0.37	1300	33
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	9.3	0.32	2000	28
RM-157.2_SED	5/5/2016	15	0.45	2100	40
RM-160.0_SED	5/2/2016	3.5	0.27	460	24
SC LANDING (RM-141)	5/5/2016	12	0.32	2200	29
SC-4_SED	8/16/2016	2.82	0.47	40.9	12.1
SC-RM	5/5/2016	9.1	0.41	1600	37
TC-1_SED	2/29/2016	5.5	0.46	< 41	41
U3R-1A_SED	2/29/2016	17	1	< 92	92
U3R-4_SED	3/1/2016	5.8	0.46	< 41	41
U3R-ROAD-C	5/4/2016	7.8	0.47	< 42	42

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Manganese and Nickel

Location	Collection Date	Manganese (mg/kg)	Detection Limit (mg/kg)	Nickel (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	1200	0.4	4.7	0.7
BDC_SED	3/1/2016	40	0.38	< 0.67	0.67
E-001_SED	5/4/2016	110	0.61	7.1	1.1
E-002_SED	5/4/2016	19	0.36	< 0.63	0.63
E-003_SED	5/4/2016	160	0.42	8.3	0.75
FMC-ROAD-A	8/16/2016	92.7	0.29	1.23	0.22
L3R-1A_SED	8/16/2016	51.9	0.24	0.625	0.18
L3R-2_SED	8/16/2016	113	0.28	1.26	0.21
MCQBR_DS_Z_BASIN	8/18/2016	43	0.21	< 0.37	0.37
MCQBR_MON_OWENS	5/4/2016	120	0.71	5.7	1.3
PB-ROAD-A	5/4/2016	290	0.57	< 1	1
RM-118.7_SED	5/5/2016	1200	0.53	8.9	0.94
RM-129_L3RM-SED	5/5/2016	920	0.42	6.4	0.75
RM-150.2_SED	5/5/2016	1100	0.5	7.3	0.89
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	890	0.43	8.7	0.76
RM-157.2_SED	5/5/2016	1300	0.62	11	1.1
RM-160.0_SED	5/2/2016	1800	0.73	2.8	0.65
SC LANDING (RM-141)	5/5/2016	1300	0.44	9.6	0.77
SC-4_SED	8/16/2016	86.7	0.285	0.7	0.21
SC-RM	5/5/2016	490	0.56	7.8	0.99
TC-1_SED	2/29/2016	150	0.63	< 1.1	1.1
U3R-1A_SED	2/29/2016	28	1.4	< 2.5	2.5
U3R-4_SED	3/1/2016	44	0.63	6.5	1.1
U3R-ROAD-C	5/4/2016	130	0.64	7.1	1.1

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Selenium and Silver

Location	Collection Date	Selenium (mg/kg)	Detection Limit (mg/kg)	Silver (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	< 0.55	0.55	< 0.11	0.11
BDC_SED	3/1/2016	< 0.52	0.52	< 0.1	0.1
E-001_SED	5/4/2016	< 0.83	0.83	< 0.16	0.16
E-002_SED	5/4/2016	< 0.49	0.49	< 0.095	0.095
E-003_SED	5/4/2016	< 0.58	0.58	< 0.11	0.11
FMC-ROAD-A	8/16/2016	< 0.731	0.73	< 0.146	0.15
L3R-1A_SED	8/16/2016	< 0.595	0.595	0.16	0.12
L3R-2_SED	8/16/2016	1.16	0.71	< 0.141	0.14
MCQBR_DS_Z_BASIN	8/18/2016	< 0.29	0.29	< 0.056	0.056
MCQBR_MON_OWENS	5/4/2016	< 0.97	0.97	< 0.19	0.19
PB-ROAD-A	5/4/2016	< 0.78	0.78	< 0.15	0.15
RM-118.7_SED	5/5/2016	< 0.73	0.73	< 0.14	0.14
RM-129_L3RM-SED	5/5/2016	< 0.58	0.58	< 0.11	0.11
RM-150.2_SED	5/5/2016	< 0.69	0.69	< 0.13	0.13
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	< 0.59	0.59	< 0.12	0.12
RM-157.2_SED	5/5/2016	< 0.84	0.84	< 0.16	0.16
RM-160.0_SED	5/2/2016	< 0.5	0.5	< 0.098	0.098
SC LANDING (RM-141)	5/5/2016	< 0.6	0.6	< 0.12	0.12
SC-4_SED	8/16/2016	< 0.711	0.71	< 0.142	0.14
SC-RM	5/5/2016	< 0.77	0.77	< 0.15	0.15
TC-1_SED	2/29/2016	< 0.87	0.87	< 0.17	0.17
U3R-1A_SED	2/29/2016	< 1.9	1.9	< 0.37	0.37
U3R-4_SED	3/1/2016	< 0.86	0.86	< 0.17	0.17
U3R-ROAD-C	5/4/2016	< 0.88	0.88	< 0.17	0.17

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Uranium and Zinc

Location	Collection Date	Uranium (mg/kg)	Detection Limit (mg/kg)	Zinc (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	5/5/2016	< 3.4	3.4	26	0.58
BDC_SED	3/1/2016	< 3.2	3.2	8.9	0.56
E-001_SED	5/4/2016	< 5.1	5.1	130	0.89
E-002_SED	5/4/2016	< 3	3	4.4	0.52
E-003_SED	5/4/2016	< 3.6	3.6	82	0.62
FMC-ROAD-A	8/16/2016	< 1.46	1.46	12.4	0.585
L3R-1A_SED	8/16/2016	< 1.19	1.19	4.45	0.48
L3R-2_SED	8/16/2016	< 1.41	1.41	8.07	0.565
MCQBR_DS_Z_BASIN	8/18/2016	< 1.8	1.8	6.4	0.31
MCQBR_MON_OWENS	5/4/2016	< 6	6	67	1
PB-ROAD-A	5/4/2016	< 4.8	4.8	28	0.84
RM-118.7_SED	5/5/2016	< 4.5	4.5	50	0.78
RM-129_L3RM-SED	5/5/2016	< 3.6	3.6	37	0.62
RM-150.2_SED	5/5/2016	< 4.2	4.2	55	0.74
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	42	3.6	37	0.63
RM-157.2_SED	5/5/2016	< 5.2	5.2	59	0.9
RM-160.0_SED	5/2/2016	< 3.1	3.1	12	0.54
SC LANDING (RM-141)	5/5/2016	< 3.7	3.7	58	0.64
SC-4_SED	8/16/2016	< 1.42	1.42	5.76	0.57
SC-RM	5/5/2016	< 4.7	4.7	47	0.82
TC-1_SED	2/29/2016	< 5.3	5.3	12	0.92
U3R-1A_SED	2/29/2016	< 12	12	17	2.1
U3R-4_SED	3/1/2016	< 5.3	5.3	18	0.92
U3R-ROAD-C	5/4/2016	< 5.4	5.4	27	0.94

Table 10 Nonradiological Sediment Sampling Results (continued)

Analytes: Percent Solids

Percent Solids was not analyzed for the following locations FMC-ROAD-A, L3R-1A_SED, L3R-2_SED, and SC-4_SED.

Location	Collection Date	Percent Solids (%)
BDC_RM_SED	5/5/2016	73.8
BDC_SED	3/1/2016	71.1
E-001_SED	5/4/2016	46.4
E-002_SED	5/4/2016	79.6
E-003_SED	5/4/2016	63.9
MCQBR_DS_Z_BASIN	8/18/2016	83.4
MCQBR_MON_OWENS	5/4/2016	38.6
PB-ROAD-A	5/4/2016	47.3
RM-118.7_SED	5/5/2016	51.1
RM-129_L3RM-SED	5/5/2016	64.8
RM-150.2_SED	5/5/2016	58
RM-150.4 (VOGTLE DISCHARGE)	5/2/2016	65.8
RM-157.2_SED	5/5/2016	47.9
RM-160.0_SED	5/2/2016	73.6
SC LANDING (RM-141)	5/5/2016	64.4
SC-RM	5/5/2016	48.2
TC-1_SED	2/29/2016	43.3
U3R-1A_SED	2/29/2016	19.4
U3R-4_SED	3/1/2016	43.4
U3R-ROAD-C	5/4/2016	42.1

Table 11 Nonradiological Fish Sampling Results

Location: Fourmile Creek River Mouth

Fish Type	Collection Date	Antimony ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)	Arsenic ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)	Cadmium ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)
Bass	6/30/2016	< 0.953	0.953	< 0.636	0.636	< 0.0636	0.0636
Bass	7/6/2016	< 1.34	1.34	< 0.893	0.893	< 0.0893	0.0893
Bass	7/6/2016	< 1.23	1.23	< 0.821	0.821	< 0.0821	0.0821
Bass	7/6/2016	< 1	1	< 0.668	0.668	< 0.0668	0.0668
Bass	7/6/2016	< 1.33	1.33	< 0.887	0.887	< 0.0887	0.0887
Bass	7/6/2016	< 1.38	1.38	< 0.923	0.923	< 0.0923	0.0923
Bass	7/6/2016	< 0.786	0.786	< 0.524	0.524	< 0.0524	0.0524
Catfish	7/6/2016	< 0.853	0.853	< 0.568	0.568	< 0.0568	0.0568
Catfish	7/6/2016	< 1.31	1.31	< 0.876	0.876	< 0.0876	0.0876
Catfish	7/6/2016	< 1.02	1.02	< 0.678	0.678	< 0.0678	0.0678
Catfish	7/6/2016	< 1.05	1.05	< 0.699	0.699	< 0.0699	0.0699
Catfish	7/6/2016	< 1.58	1.58	< 1.05	1.05	< 0.105	0.105
Catfish	7/6/2016	< 0.867	0.867	< 0.578	0.578	< 0.0578	0.0578
Catfish	7/6/2016	< 0.971	0.971	< 0.648	0.648	< 0.0648	0.0648
Panfish	6/30/2016	< 1.14	1.14	< 0.759	0.759	< 0.0759	0.0759
Panfish	6/30/2016	< 0.847	0.847	< 0.564	0.564	< 0.0564	0.0564
Panfish	7/6/2016	< 0.966	0.966	< 0.644	0.644	< 0.0644	0.0644
Panfish	7/6/2016	< 1.59	1.59	< 1.06	1.06	< 0.106	0.106
Panfish	7/6/2016	< 0.966	0.966	< 0.644	0.644	< 0.0644	0.0644
Panfish	7/6/2016	< 0.965	0.965	< 0.643	0.643	< 0.0643	0.0643
Panfish	7/6/2016	< 0.821	0.821	< 0.547	0.547	< 0.0547	0.0547

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Fourmile Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	6/30/2016	0.0939	0.0636	0.249	0.127	< 0.636	0.636
Bass	7/6/2016	0.184	0.0893	0.227	0.179	< 0.893	0.893
Bass	7/6/2016	0.107	0.0821	< 0.164	0.164	< 0.821	0.821
Bass	7/6/2016	0.217	0.0668	0.149	0.134	< 0.668	0.668
Bass	7/6/2016	0.114	0.0887	0.366	0.177	< 0.887	0.887
Bass	7/6/2016	0.156	0.0923	< 0.185	0.185	< 0.923	0.923
Bass	7/6/2016	0.103	0.0524	0.191	0.105	< 0.524	0.524
Catfish	7/6/2016	0.057	0.0568	0.341	0.114	< 0.568	0.568
Catfish	7/6/2016	0.192	0.0876	0.199	0.175	< 0.876	0.876
Catfish	7/6/2016	0.125	0.0678	0.146	0.136	< 0.678	0.678
Catfish	7/6/2016	0.102	0.0699	0.189	0.14	< 0.699	0.699
Catfish	7/6/2016	0.167	0.105	0.35	0.211	< 1.05	1.05
Catfish	7/6/2016	0.112	0.0578	0.382	0.116	< 0.578	0.578
Catfish	7/6/2016	0.0989	0.0648	0.195	0.13	< 0.648	0.648
Panfish	6/30/2016	0.127	0.0759	0.297	0.152	< 0.759	0.759
Panfish	6/30/2016	0.0636	0.0564	0.21	0.113	< 0.564	0.564
Panfish	7/6/2016	0.0779	0.0644	0.209	0.129	< 0.644	0.644
Panfish	7/6/2016	0.166	0.106	< 0.212	0.212	< 1.06	1.06
Panfish	7/6/2016	0.221	0.0644	0.185	0.129	< 0.644	0.644
Panfish	7/6/2016	0.143	0.0643	0.151	0.129	< 0.643	0.643
Panfish	7/6/2016	0.136	0.0547	0.115	0.109	< 0.547	0.547

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Fourmile Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	6/30/2016	< 0.0636	0.0636	0.35	0.02	< 0.127	0.127
Bass	7/6/2016	< 0.0893	0.0893	0.78	0.02	< 0.179	0.179
Bass	7/6/2016	< 0.0821	0.0821	1.05	0.02	< 0.164	0.164
Bass	7/6/2016	0.0927	0.0668	0.582	0.02	< 0.134	0.134
Bass	7/6/2016	< 0.0887	0.0887	0.557	0.02	< 0.177	0.177
Bass	7/6/2016	0.105	0.0923	0.225	0.02	< 0.185	0.185
Bass	7/6/2016	0.0772	0.0524	0.306	0.02	< 0.105	0.105
Catfish	7/6/2016	0.124	0.0568	0.195	0.02	< 0.114	0.114
Catfish	7/6/2016	0.19	0.0876	0.156	0.02	< 0.175	0.175
Catfish	7/6/2016	0.154	0.0678	0.129	0.02	< 0.136	0.136
Catfish	7/6/2016	0.134	0.0699	0.198	0.02	< 0.14	0.14
Catfish	7/6/2016	0.15	0.105	0.229	0.02	< 0.211	0.211
Catfish	7/6/2016	0.118	0.0578	0.246	0.02	< 0.116	0.116
Catfish	7/6/2016	0.127	0.0648	0.377	0.02	< 0.13	0.13
Panfish	6/30/2016	0.0815	0.0759	0.421	0.02	< 0.152	0.152
Panfish	6/30/2016	< 0.0564	0.0564	0.154	0.02	< 0.113	0.113
Panfish	7/6/2016	< 0.0644	0.0644	0.313	0.02	< 0.129	0.129
Panfish	7/6/2016	< 0.106	0.106	0.206	0.02	< 0.212	0.212
Panfish	7/6/2016	3.05	0.0644	0.514	0.02	< 0.129	0.129
Panfish	7/6/2016	0.233	0.0643	0.215	0.02	0.14	0.129
Panfish	7/6/2016	0.898	0.0547	0.176	0.02	< 0.109	0.109

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Fourmile Creek River Mouth (continued)

Fish Type	Collection Date	Zinc ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)
Bass	6/30/2016	4.84	0.127
Bass	7/6/2016	3.84	0.179
Bass	7/6/2016	3.38	0.164
Bass	7/6/2016	3.49	0.134
Bass	7/6/2016	3.13	0.177
Bass	7/6/2016	3.98	0.185
Bass	7/6/2016	4.2	0.105
Catfish	7/6/2016	5.13	0.114
Catfish	7/6/2016	4.87	0.175
Catfish	7/6/2016	4.16	0.136
Catfish	7/6/2016	4.41	0.14
Catfish	7/6/2016	4.9	0.211
Catfish	7/6/2016	4.25	0.116
Catfish	7/6/2016	3.86	0.13
Panfish	6/30/2016	6.07	0.152
Panfish	6/30/2016	4.69	0.113
Panfish	7/6/2016	4.03	0.129
Panfish	7/6/2016	5.28	0.212
Panfish	7/6/2016	8.24	0.129
Panfish	7/6/2016	5.06	0.129
Panfish	7/6/2016	3.23	0.109

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	4/18/2016	< 1.02	1.02	< 0.678	0.678	< 0.0678	0.0678
Bass	4/18/2016	< 1.48	1.48	< 0.985	0.985	< 0.0985	0.0985
Bass	4/18/2016	< 1.4	1.4	< 0.933	0.933	< 0.0933	0.0933
Bass	4/18/2016	< 1.28	1.28	< 0.851	0.851	< 0.0851	0.0851
Bass	4/18/2016	< 0.998	0.998	< 0.665	0.665	< 0.0665	0.0665
Bass	4/18/2016	< 1.26	1.26	< 0.837	0.837	< 0.0837	0.0837
Bass	4/18/2016	< 1.45	1.45	< 0.97	0.97	< 0.097	0.097
Catfish	4/18/2016	< 1.13	1.13	< 0.751	0.751	< 0.0751	0.0751
Catfish	4/18/2016	< 0.951	0.951	< 0.634	0.634	< 0.0634	0.0634
Catfish	4/18/2016	< 1.3	1.3	< 0.869	0.869	< 0.0869	0.0869
Catfish	4/18/2016	< 1.27	1.27	< 0.85	0.85	< 0.085	0.085
Catfish	4/18/2016	< 1.26	1.26	< 0.843	0.843	< 0.0843	0.0843
Catfish	4/18/2016	< 1.39	1.39	< 0.924	0.924	< 0.0924	0.0924
Catfish	5/11/2016	< 1.39	1.39	< 0.93	0.93	< 0.093	0.093
Panfish	4/18/2016	< 1.16	1.16	< 0.774	0.774	0.108	0.0774
Panfish	4/18/2016	< 1.07	1.07	< 0.712	0.712	< 0.0712	0.0712
Panfish	4/18/2016	< 0.93	0.93	< 0.62	0.62	< 0.062	0.062
Panfish	4/18/2016	< 1.04	1.04	< 0.691	0.691	< 0.0691	0.0691
Panfish	4/18/2016	< 0.95	0.95	< 0.633	0.633	< 0.0633	0.0633
Panfish	4/18/2016	< 1.05	1.05	< 0.702	0.702	< 0.0702	0.0702
Panfish	4/18/2016	< 1.09	1.09	< 0.725	0.725	< 0.0725	0.0725

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	4/18/2016	0.139	0.0678	0.182	0.136	< 0.678	0.678
Bass	4/18/2016	0.126	0.0985	0.328	0.197	< 0.985	0.985
Bass	4/18/2016	0.135	0.0933	0.348	0.187	< 0.933	0.933
Bass	4/18/2016	0.134	0.0851	0.205	0.17	< 0.851	0.851
Bass	4/18/2016	0.0966	0.0665	0.336	0.133	< 0.665	0.665
Bass	4/18/2016	0.0893	0.0837	< 0.167	0.167	< 0.837	0.837
Bass	4/18/2016	0.109	0.097	0.268	0.194	< 0.97	0.97
Catfish	4/18/2016	0.121	0.0751	0.278	0.15	< 0.751	0.751
Catfish	4/18/2016	0.106	0.0634	0.179	0.127	< 0.634	0.634
Catfish	4/18/2016	0.123	0.0869	< 0.174	0.174	< 0.869	0.869
Catfish	4/18/2016	0.132	0.085	0.23	0.17	< 0.85	0.85
Catfish	4/18/2016	< 0.0843	0.0843	0.556	0.169	< 0.843	0.843
Catfish	4/18/2016	< 0.0924	0.0924	0.247	0.185	< 0.924	0.924
Catfish	5/11/2016	0.145	0.093	0.437	0.186	< 0.93	0.93
Panfish	4/18/2016	0.174	0.0774	0.294	0.155	< 0.774	0.774
Panfish	4/18/2016	0.0731	0.0712	0.203	0.142	< 0.712	0.712
Panfish	4/18/2016	0.088	0.062	0.2	0.124	< 0.62	0.62
Panfish	4/18/2016	0.0882	0.0691	0.218	0.138	< 0.691	0.691
Panfish	4/18/2016	0.0656	0.0633	0.224	0.127	< 0.633	0.633
Panfish	4/18/2016	0.0743	0.0702	0.155	0.14	< 0.702	0.702
Panfish	4/18/2016	0.0998	0.0725	0.354	0.145	< 0.725	0.725

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	4/18/2016	0.0769	0.0678	0.565	0.02	< 0.136	0.136
Bass	4/18/2016	0.126	0.0985	0.763	0.02	< 0.197	0.197
Bass	4/18/2016	0.118	0.0933	0.528	0.02	< 0.187	0.187
Bass	4/18/2016	< 0.0851	0.0851	0.748	0.02	< 0.17	0.17
Bass	4/18/2016	0.177	0.0665	0.767	0.02	< 0.133	0.133
Bass	4/18/2016	0.223	0.0837	0.527	0.02	< 0.167	0.167
Bass	4/18/2016	< 0.097	0.097	0.776	0.02	< 0.194	0.194
Catfish	4/18/2016	0.136	0.0751	0.274	0.02	< 0.15	0.15
Catfish	4/18/2016	0.163	0.0634	0.134	0.02	< 0.127	0.127
Catfish	4/18/2016	0.19	0.0869	0.163	0.02	< 0.174	0.174
Catfish	4/18/2016	0.238	0.085	0.124	0.02	< 0.17	0.17
Catfish	4/18/2016	0.191	0.0843	0.173	0.02	< 0.169	0.169
Catfish	4/18/2016	0.572	0.0924	0.258	0.02	< 0.185	0.185
Catfish	5/11/2016	0.159	0.093	0.349	0.02	< 0.186	0.186
Panfish	4/18/2016	0.198	0.0774	0.198	0.02	0.173	0.155
Panfish	4/18/2016	0.182	0.0712	0.109	0.02	< 0.142	0.142
Panfish	4/18/2016	0.101	0.062	0.123	0.02	0.137	0.124
Panfish	4/18/2016	0.117	0.0691	0.206	0.02	< 0.138	0.138
Panfish	4/18/2016	0.182	0.0633	0.199	0.02	< 0.127	0.127
Panfish	4/18/2016	0.106	0.0702	0.315	0.02	< 0.14	0.14
Panfish	4/18/2016	0.0935	0.0725	0.346	0.02	< 0.145	0.145

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge (continued)

Fish Type	Collection Date	Zinc ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)
Bass	4/18/2016	3.37	0.136
Bass	4/18/2016	3.73	0.197
Bass	4/18/2016	4.77	0.187
Bass	4/18/2016	3.93	0.17
Bass	4/18/2016	2.94	0.133
Bass	4/18/2016	3.22	0.167
Bass	4/18/2016	4.26	0.194
Catfish	4/18/2016	6.97	0.15
Catfish	4/18/2016	3.95	0.127
Catfish	4/18/2016	4.19	0.174
Catfish	4/18/2016	4.03	0.17
Catfish	4/18/2016	6.41	0.169
Catfish	4/18/2016	3.53	0.185
Catfish	5/11/2016	7.66	0.186
Panfish	4/18/2016	3.94	0.155
Panfish	4/18/2016	7.11	0.142
Panfish	4/18/2016	6.13	0.124
Panfish	4/18/2016	5	0.138
Panfish	4/18/2016	5.79	0.127
Panfish	4/18/2016	7.27	0.14
Panfish	4/18/2016	6.37	0.145

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	3/23/2016	< 0.95	0.95	< 0.633	0.633	< 0.0633	0.0633
Bass	3/23/2016	< 1.11	1.11	< 0.739	0.739	< 0.0739	0.0739
Bass	3/23/2016	< 1.28	1.28	< 0.852	0.852	< 0.0852	0.0852
Bass	3/23/2016	< 1.04	1.04	< 0.692	0.692	< 0.0692	0.0692
Bass	3/23/2016	< 1.19	1.19	< 0.79	0.79	< 0.079	0.079
Bass	3/23/2016	< 1.02	1.02	< 0.681	0.681	< 0.0681	0.0681
Bass	3/23/2016	< 1.4	1.4	< 0.931	0.931	< 0.0931	0.0931
Catfish	3/23/2016	< 1.56	1.56	< 1.04	1.04	< 0.104	0.104
Catfish	5/11/2016	< 1.02	1.02	< 0.683	0.683	< 0.0683	0.0683
Catfish	5/11/2016	< 1.44	1.44	< 0.962	0.962	< 0.0962	0.0962
Catfish	5/12/2016	< 1.21	1.21	< 0.804	0.804	0.132	0.0804
Catfish	5/12/2016	< 1.14	1.14	< 0.757	0.757	< 0.0757	0.0757
Catfish	5/12/2016	< 0.903	0.903	< 0.602	0.602	< 0.0602	0.0602
Catfish	5/12/2016	< 1.44	1.44	< 0.961	0.961	< 0.0961	0.0961
Panfish	3/23/2016	< 1.09	1.09	< 0.726	0.726	< 0.0726	0.0726
Panfish	3/23/2016	< 1.05	1.05	< 0.699	0.699	< 0.0699	0.0699
Panfish	3/23/2016	< 1.08	1.08	< 0.718	0.718	< 0.0718	0.0718
Panfish	3/23/2016	< 0.984	0.984	< 0.656	0.656	< 0.0656	0.0656
Panfish	3/23/2016	< 1.14	1.14	< 0.758	0.758	< 0.0758	0.0758
Panfish	3/23/2016	< 1.4	1.4	< 0.934	0.934	< 0.0934	0.0934
Panfish	3/23/2016	< 1.2	1.2	< 0.797	0.797	< 0.0797	0.0797

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	3/23/2016	0.0864	0.0633	0.156	0.127	< 0.633	0.633
Bass	3/23/2016	0.0934	0.0739	0.153	0.148	< 0.739	0.739
Bass	3/23/2016	0.112	0.0852	0.367	0.17	< 0.852	0.852
Bass	3/23/2016	0.184	0.0692	0.556	0.138	< 0.692	0.692
Bass	3/23/2016	0.116	0.079	0.227	0.158	< 0.79	0.79
Bass	3/23/2016	0.0891	0.0681	0.231	0.136	< 0.681	0.681
Bass	3/23/2016	0.149	0.0931	0.229	0.186	< 0.931	0.931
Catfish	3/23/2016	0.146	0.104	0.352	0.209	< 1.04	1.04
Catfish	5/11/2016	0.0758	0.0683	0.379	0.137	< 0.683	0.683
Catfish	5/11/2016	< 0.0962	0.0962	0.264	0.192	< 0.962	0.962
Catfish	5/12/2016	0.271	0.0804	0.422	0.161	< 0.804	0.804
Catfish	5/12/2016	0.0976	0.0757	0.307	0.151	< 0.757	0.757
Catfish	5/12/2016	0.11	0.0602	0.346	0.12	< 0.602	0.602
Catfish	5/12/2016	0.165	0.0961	0.313	0.192	< 0.961	0.961
Panfish	3/23/2016	0.205	0.0726	0.307	0.145	< 0.726	0.726
Panfish	3/23/2016	0.163	0.0699	0.272	0.14	< 0.699	0.699
Panfish	3/23/2016	0.24	0.0718	0.246	0.144	< 0.718	0.718
Panfish	3/23/2016	0.107	0.0656	0.236	0.131	< 0.656	0.656
Panfish	3/23/2016	0.144	0.0758	0.385	0.152	< 0.758	0.758
Panfish	3/23/2016	0.14	0.0934	0.297	0.187	< 0.934	0.934
Panfish	3/23/2016	0.114	0.0797	0.163	0.159	< 0.797	0.797

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	3/23/2016	0.0924	0.0633	0.695	0.02	< 0.127	0.127
Bass	3/23/2016	0.107	0.0739	0.584	0.02	< 0.148	0.148
Bass	3/23/2016	0.133	0.0852	0.45	0.02	0.424	0.17
Bass	3/23/2016	0.135	0.0692	0.756	0.02	< 0.138	0.138
Bass	3/23/2016	0.115	0.079	0.486	0.02	< 0.158	0.158
Bass	3/23/2016	0.0941	0.0681	0.875	0.02	< 0.136	0.136
Bass	3/23/2016	< 0.0931	0.0931	0.623	0.02	0.415	0.186
Catfish	3/23/2016	0.162	0.104	0.224	0.02	< 0.209	0.209
Catfish	5/11/2016	0.124	0.0683	0.212	0.02	< 0.137	0.137
Catfish	5/11/2016	0.173	0.0962	0.16	0.02	< 0.192	0.192
Catfish	5/12/2016	0.272	0.0804	0.156	0.02	0.287	0.161
Catfish	5/12/2016	0.139	0.0757	0.186	0.02	< 0.151	0.151
Catfish	5/12/2016	0.161	0.0602	0.154	0.02	< 0.12	0.12
Catfish	5/12/2016	0.183	0.0961	0.289	0.02	< 0.192	0.192
Panfish	3/23/2016	2.16	0.0726	0.321	0.02	< 0.145	0.145
Panfish	3/23/2016	0.115	0.0699	0.326	0.02	< 0.14	0.14
Panfish	3/23/2016	0.112	0.0718	0.699	0.02	< 0.144	0.144
Panfish	3/23/2016	0.191	0.0656	0.167	0.02	< 0.131	0.131
Panfish	3/23/2016	0.285	0.0758	0.144	0.02	< 0.152	0.152
Panfish	3/23/2016	0.177	0.0934	0.117	0.02	< 0.187	0.187
Panfish	3/23/2016	0.196	0.0797	0.168	0.02	< 0.159	0.159

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Bass	3/23/2016	3.39	0.127
Bass	3/23/2016	4.09	0.148
Bass	3/23/2016	5.44	0.17
Bass	3/23/2016	4.22	0.138
Bass	3/23/2016	3.74	0.158
Bass	3/23/2016	4.09	0.136
Bass	3/23/2016	3.72	0.186
Catfish	3/23/2016	5.11	0.209
Catfish	5/11/2016	6.85	0.137
Catfish	5/11/2016	5.18	0.192
Catfish	5/12/2016	6.67	0.161
Catfish	5/12/2016	6.41	0.151
Catfish	5/12/2016	5.7	0.12
Catfish	5/12/2016	5.03	0.192
Panfish	3/23/2016	4.3	0.145
Panfish	3/23/2016	3.77	0.14
Panfish	3/23/2016	5.59	0.144
Panfish	3/23/2016	5.53	0.131
Panfish	3/23/2016	5.43	0.152
Panfish	3/23/2016	5.65	0.187
Panfish	3/23/2016	6.75	0.159

Table 11 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	7/27/2016	< 1.13	1.13	< 0.753	0.753	< 0.0753	0.0753
Bass	7/27/2016	< 1.15	1.15	< 0.769	0.769	< 0.0769	0.0769
Bass	7/27/2016	< 1.18	1.18	< 0.789	0.789	< 0.0789	0.0789
Bass	7/27/2016	< 1.54	1.54	< 1.03	1.03	< 0.103	0.103
Bass	7/27/2016	< 1.11	1.11	< 0.742	0.742	< 0.0742	0.0742
Bass	7/27/2016	< 1.12	1.12	< 0.748	0.748	< 0.0748	0.0748
Bass	7/27/2016	< 0.908	0.908	< 0.605	0.605	< 0.0605	0.0605
Catfish	7/27/2016	< 1.1	1.1	< 0.732	0.732	< 0.0732	0.0732
Catfish	7/27/2016	< 0.936	0.936	< 0.624	0.624	< 0.0624	0.0624
Catfish	7/27/2016	< 1.4	1.4	< 0.931	0.931	< 0.0931	0.0931
Catfish	7/27/2016	< 0.879	0.879	< 0.586	0.586	< 0.0586	0.0586
Catfish	7/27/2016	< 1.16	1.16	< 0.774	0.774	< 0.0774	0.0774
Catfish	7/27/2016	< 1.21	1.21	< 0.808	0.808	< 0.0808	0.0808
Catfish	7/27/2016	< 1.08	1.08	< 0.722	0.722	0.137	0.0722
Panfish	7/27/2016	< 1.02	1.02	< 0.68	0.68	< 0.068	0.068
Panfish	7/27/2016	< 1.36	1.36	< 0.904	0.904	< 0.0904	0.0904
Panfish	7/27/2016	< 1.04	1.04	< 0.692	0.692	< 0.0692	0.0692
Panfish	7/27/2016	< 1.28	1.28	< 0.854	0.854	< 0.0854	0.0854
Panfish	7/27/2016	< 0.902	0.902	< 0.602	0.602	< 0.0602	0.0602
Panfish	7/27/2016	< 0.831	0.831	< 0.554	0.554	< 0.0554	0.0554
Panfish	7/27/2016	< 1.2	1.2	< 0.802	0.802	< 0.0802	0.0802

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	7/27/2016	0.272	0.0753	0.268	0.151	< 0.753	0.753
Bass	7/27/2016	0.0898	0.0769	0.209	0.154	< 0.769	0.769
Bass	7/27/2016	0.178	0.0789	0.193	0.158	< 0.789	0.789
Bass	7/27/2016	< 0.103	0.103	0.284	0.206	< 1.03	1.03
Bass	7/27/2016	< 0.0742	0.0742	0.18	0.148	< 0.742	0.742
Bass	7/27/2016	< 0.0748	0.0748	0.217	0.15	< 0.748	0.748
Bass	7/27/2016	0.063	0.0605	0.145	0.121	< 0.605	0.605
Catfish	7/27/2016	0.0972	0.0732	0.206	0.146	< 0.732	0.732
Catfish	7/27/2016	< 0.0624	0.0624	0.389	0.125	< 0.624	0.624
Catfish	7/27/2016	< 0.0931	0.0931	0.355	0.186	< 0.931	0.931
Catfish	7/27/2016	< 0.0586	0.0586	0.335	0.117	< 0.586	0.586
Catfish	7/27/2016	0.106	0.0774	0.502	0.155	< 0.774	0.774
Catfish	7/27/2016	0.143	0.0808	0.446	0.162	< 0.808	0.808
Catfish	7/27/2016	0.194	0.0722	0.477	0.144	< 0.722	0.722
Panfish	7/27/2016	0.147	0.068	0.228	0.136	< 0.68	0.68
Panfish	7/27/2016	0.138	0.0904	0.203	0.181	< 0.904	0.904
Panfish	7/27/2016	0.126	0.0692	< 0.138	0.138	< 0.692	0.692
Panfish	7/27/2016	0.194	0.0854	< 0.171	0.171	< 0.854	0.854
Panfish	7/27/2016	0.163	0.0602	0.241	0.12	< 0.602	0.602
Panfish	7/27/2016	0.118	0.0554	0.37	0.111	< 0.554	0.554
Panfish	7/27/2016	0.132	0.0802	0.185	0.16	< 0.802	0.802

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	7/27/2016	0.123	0.0753	0.11	0.02	< 0.151	0.151
Bass	7/27/2016	< 0.0769	0.0769	1.44	0.02	< 0.154	0.154
Bass	7/27/2016	0.134	0.0789	0.171	0.02	< 0.158	0.158
Bass	7/27/2016	< 0.103	0.103	0.242	0.02	< 0.206	0.206
Bass	7/27/2016	< 0.0742	0.0742	0.412	0.02	< 0.148	0.148
Bass	7/27/2016	< 0.0748	0.0748	0.524	0.02	< 0.15	0.15
Bass	7/27/2016	< 0.0605	0.0605	0.388	0.02	< 0.121	0.121
Catfish	7/27/2016	0.111	0.0732	0.0794	0.02	< 0.146	0.146
Catfish	7/27/2016	0.135	0.0624	0.0628	0.02	< 0.125	0.125
Catfish	7/27/2016	0.119	0.0931	0.218	0.02	< 0.186	0.186
Catfish	7/27/2016	0.13	0.0586	0.218	0.02	< 0.117	0.117
Catfish	7/27/2016	0.133	0.0774	0.0351	0.02	< 0.155	0.155
Catfish	7/27/2016	0.121	0.0808	0.0967	0.02	< 0.162	0.162
Catfish	7/27/2016	0.215	0.0722	0.137	0.02	0.204	0.144
Panfish	7/27/2016	0.149	0.068	0.178	0.02	< 0.136	0.136
Panfish	7/27/2016	0.0905	0.0904	0.227	0.02	< 0.181	0.181
Panfish	7/27/2016	< 0.0692	0.0692	0.133	0.02	< 0.138	0.138
Panfish	7/27/2016	0.171	0.0854	0.156	0.02	< 0.171	0.171
Panfish	7/27/2016	0.557	0.0602	0.0364	0.02	< 0.12	0.12
Panfish	7/27/2016	0.125	0.0554	0.143	0.02	< 0.111	0.111
Panfish	7/27/2016	0.13	0.0802	0.159	0.02	< 0.16	0.16

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam (continued)

Fish Type	Collection Date	Zinc ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)
Bass	7/27/2016	4.47	0.151
Bass	7/27/2016	3.46	0.154
Bass	7/27/2016	4.04	0.158
Bass	7/27/2016	4.46	0.206
Bass	7/27/2016	3.23	0.148
Bass	7/27/2016	3.64	0.15
Bass	7/27/2016	3.42	0.121
Catfish	7/27/2016	4.15	0.146
Catfish	7/27/2016	5.34	0.125
Catfish	7/27/2016	5.73	0.186
Catfish	7/27/2016	4.34	0.117
Catfish	7/27/2016	6.36	0.155
Catfish	7/27/2016	12.6	0.162
Catfish	7/27/2016	6.16	0.144
Panfish	7/27/2016	5.56	0.136
Panfish	7/27/2016	5.82	0.181
Panfish	7/27/2016	5.91	0.138
Panfish	7/27/2016	4.29	0.171
Panfish	7/27/2016	6.35	0.12
Panfish	7/27/2016	6.86	0.111
Panfish	7/27/2016	5.02	0.16

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	3/30/2016	< 1.03	1.03	< 0.687	0.687	< 0.0687	0.0687
Bass	3/30/2016	< 0.992	0.992	< 0.661	0.661	< 0.0661	0.0661
Bass	3/30/2016	< 1.27	1.27	< 0.849	0.849	0.143	0.0849
Bass	3/30/2016	< 1.3	1.3	< 0.865	0.865	< 0.0865	0.0865
Bass	3/30/2016	< 0.883	0.883	< 0.588	0.588	< 0.0588	0.0588
Bass	3/30/2016	< 0.994	0.994	< 0.662	0.662	< 0.0662	0.0662
Bass	3/30/2016	< 1.47	1.47	< 0.979	0.979	< 0.0979	0.0979
Catfish	3/30/2016	< 1.43	1.43	< 0.953	0.953	< 0.0953	0.0953
Catfish	3/30/2016	< 1.2	1.2	< 0.8	0.8	< 0.08	0.08
Catfish	3/30/2016	< 0.948	0.948	< 0.632	0.632	< 0.0632	0.0632
Catfish	4/13/2016	< 1.12	1.12	< 0.748	0.748	< 0.0748	0.0748
Catfish	4/13/2016	< 1.4	1.4	< 0.933	0.933	< 0.0933	0.0933
Catfish	4/28/2016	< 1.29	1.29	< 0.862	0.862	< 0.0862	0.0862
Catfish	4/28/2016	< 1.14	1.14	< 0.761	0.761	< 0.0761	0.0761
Panfish	3/30/2016	< 1.23	1.23	< 0.823	0.823	< 0.0823	0.0823
Panfish	4/13/2016	< 1.25	1.25	< 0.836	0.836	< 0.0836	0.0836
Panfish	4/13/2016	< 1.17	1.17	< 0.779	0.779	< 0.0779	0.0779
Panfish	4/13/2016	< 1.21	1.21	< 0.808	0.808	0.163	0.0808
Panfish	4/13/2016	< 1.42	1.42	< 0.948	0.948	< 0.0948	0.0948
Panfish	4/13/2016	< 1.14	1.14	< 0.763	0.763	< 0.0763	0.0763
Panfish	4/13/2016	< 1.31	1.31	< 0.876	0.876	< 0.0876	0.0876

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	3/30/2016	< 0.0687	0.0687	0.277	0.137	< 0.687	0.687
Bass	3/30/2016	< 0.0661	0.0661	0.558	0.132	< 0.661	0.661
Bass	3/30/2016	< 0.0849	0.0849	0.798	0.17	< 0.849	0.849
Bass	3/30/2016	< 0.0865	0.0865	0.546	0.173	< 0.865	0.865
Bass	3/30/2016	< 0.0588	0.0588	0.451	0.118	< 0.588	0.588
Bass	3/30/2016	< 0.0662	0.0662	0.485	0.132	< 0.662	0.662
Bass	3/30/2016	< 0.0979	0.0979	0.456	0.196	< 0.979	0.979
Catfish	3/30/2016	< 0.0953	0.0953	0.558	0.191	< 0.953	0.953
Catfish	3/30/2016	< 0.08	0.08	0.488	0.16	< 0.8	0.8
Catfish	3/30/2016	< 0.0632	0.0632	0.244	0.126	< 0.632	0.632
Catfish	4/13/2016	< 0.0748	0.0748	0.239	0.15	< 0.748	0.748
Catfish	4/13/2016	< 0.0933	0.0933	< 0.187	0.187	< 0.933	0.933
Catfish	4/28/2016	0.096	0.0862	0.226	0.172	< 0.862	0.862
Catfish	4/28/2016	0.0766	0.0761	0.216	0.152	< 0.761	0.761
Panfish	3/30/2016	< 0.0823	0.0823	0.326	0.165	< 0.823	0.823
Panfish	4/13/2016	0.23	0.0836	< 0.167	0.167	< 0.836	0.836
Panfish	4/13/2016	0.104	0.0779	0.499	0.156	< 0.779	0.779
Panfish	4/13/2016	0.233	0.0808	0.322	0.162	< 0.808	0.808
Panfish	4/13/2016	0.123	0.0948	0.282	0.19	< 0.948	0.948
Panfish	4/13/2016	0.108	0.0763	0.188	0.153	< 0.763	0.763
Panfish	4/13/2016	0.113	0.0876	0.229	0.175	< 0.876	0.876

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	3/30/2016	< 0.0687	0.0687	0.995	0.02	< 0.137	0.137
Bass	3/30/2016	0.213	0.0661	0.267	0.02	< 0.132	0.132
Bass	3/30/2016	0.372	0.0849	0.178	0.02	0.288	0.17
Bass	3/30/2016	0.256	0.0865	0.177	0.02	< 0.173	0.173
Bass	3/30/2016	0.243	0.0588	0.182	0.02	< 0.118	0.118
Bass	3/30/2016	0.23	0.0662	0.255	0.02	< 0.132	0.132
Bass	3/30/2016	0.132	0.0979	0.226	0.02	< 0.196	0.196
Catfish	3/30/2016	0.377	0.0953	0.248	0.02	< 0.191	0.191
Catfish	3/30/2016	0.272	0.08	0.315	0.02	< 0.16	0.16
Catfish	3/30/2016	0.129	0.0632	0.23	0.02	< 0.126	0.126
Catfish	4/13/2016	0.187	0.0748	0.258	0.02	0.261	0.15
Catfish	4/13/2016	0.137	0.0933	0.199	0.02	< 0.187	0.187
Catfish	4/28/2016	0.144	0.0862	0.295	0.02	< 0.172	0.172
Catfish	4/28/2016	0.218	0.0761	0.242	0.02	< 0.152	0.152
Panfish	3/30/2016	0.122	0.0823	0.105	0.02	< 0.165	0.165
Panfish	4/13/2016	0.193	0.0836	0.0752	0.02	< 0.167	0.167
Panfish	4/13/2016	0.227	0.0779	0.0973	0.02	< 0.156	0.156
Panfish	4/13/2016	0.282	0.0808	0.452	0.02	0.655	0.162
Panfish	4/13/2016	0.607	0.0948	0.0891	0.02	< 0.19	0.19
Panfish	4/13/2016	0.119	0.0763	0.0666	0.02	< 0.153	0.153
Panfish	4/13/2016	0.28	0.0876	0.114	0.02	< 0.175	0.175

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth (continued)

Fish Type	Collection Date	Zinc ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)
Bass	3/30/2016	3.64	0.137
Bass	3/30/2016	6.61	0.132
Bass	3/30/2016	5.18	0.17
Bass	3/30/2016	4.83	0.173
Bass	3/30/2016	5.01	0.118
Bass	3/30/2016	5.21	0.132
Bass	3/30/2016	4.5	0.196
Catfish	3/30/2016	4.92	0.191
Catfish	3/30/2016	4.2	0.16
Catfish	3/30/2016	3.96	0.126
Catfish	4/13/2016	4.11	0.15
Catfish	4/13/2016	3.94	0.187
Catfish	4/28/2016	4	0.172
Catfish	4/28/2016	4.04	0.152
Panfish	3/30/2016	5.9	0.165
Panfish	4/13/2016	8.03	0.167
Panfish	4/13/2016	7.39	0.156
Panfish	4/13/2016	5.22	0.162
Panfish	4/13/2016	4.51	0.19
Panfish	4/13/2016	5.32	0.153
Panfish	4/13/2016	5.64	0.175

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	3/16/2016	< 1.18	1.18	< 0.789	0.789	< 0.0789	0.0789
Bass	3/16/2016	< 1.38	1.38	< 0.919	0.919	< 0.0919	0.0919
Bass	3/16/2016	< 0.877	0.877	< 0.585	0.585	0.076	0.0585
Bass	3/16/2016	< 1.07	1.07	< 0.711	0.711	< 0.0711	0.0711
Bass	3/16/2016	< 0.789	0.789	0.628	0.526	< 0.0526	0.0526
Bass	3/16/2016	< 0.873	0.873	< 0.582	0.582	< 0.0582	0.0582
Bass	5/4/2016	< 0.785	0.785	< 0.523	0.523	< 0.0523	0.0523
Catfish	3/16/2016	< 0.803	0.803	< 0.536	0.536	< 0.0536	0.0536
Catfish	3/16/2016	< 0.899	0.899	< 0.599	0.599	< 0.0599	0.0599
Catfish	5/4/2016	< 0.982	0.982	< 0.655	0.655	< 0.0655	0.0655
Catfish	5/4/2016	< 1.25	1.25	< 0.836	0.836	< 0.0836	0.0836
Catfish	5/4/2016	< 0.955	0.955	< 0.637	0.637	< 0.0637	0.0637
Catfish	5/4/2016	< 1.44	1.44	< 0.961	0.961	< 0.0961	0.0961
Catfish	5/4/2016	< 1.27	1.27	< 0.846	0.846	< 0.0846	0.0846
Panfish	3/16/2016	< 1.18	1.18	< 0.789	0.789	< 0.0789	0.0789
Panfish	3/16/2016	< 1.05	1.05	< 0.701	0.701	< 0.0701	0.0701
Panfish	3/16/2016	< 0.829	0.829	< 0.553	0.553	< 0.0553	0.0553
Panfish	3/16/2016	< 0.863	0.863	< 0.576	0.576	< 0.0576	0.0576
Panfish	3/16/2016	< 1.18	1.18	< 0.785	0.785	< 0.0785	0.0785
Panfish	3/16/2016	< 1.02	1.02	< 0.678	0.678	< 0.0678	0.0678
Panfish	3/16/2016	< 1.23	1.23	< 0.819	0.819	< 0.0819	0.0819

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	3/16/2016	< 0.0789	0.0789	0.213	0.158	< 0.789	0.789
Bass	3/16/2016	< 0.0919	0.0919	0.34	0.184	< 0.919	0.919
Bass	3/16/2016	0.107	0.0585	0.387	0.117	< 0.585	0.585
Bass	3/16/2016	< 0.0711	0.0711	0.23	0.142	< 0.711	0.711
Bass	3/16/2016	< 0.0526	0.0526	0.372	0.105	< 0.526	0.526
Bass	3/16/2016	0.0681	0.0582	0.271	0.116	< 0.582	0.582
Bass	5/4/2016	0.112	0.0523	0.184	0.105	< 0.523	0.523
Catfish	3/16/2016	< 0.0536	0.0536	0.323	0.107	< 0.536	0.536
Catfish	3/16/2016	< 0.0599	0.0599	0.411	0.12	< 0.599	0.599
Catfish	5/4/2016	0.0956	0.0655	0.426	0.131	< 0.655	0.655
Catfish	5/4/2016	0.105	0.0836	0.374	0.167	< 0.836	0.836
Catfish	5/4/2016	0.105	0.0637	0.212	0.127	< 0.637	0.637
Catfish	5/4/2016	0.123	0.0961	0.499	0.192	< 0.961	0.961
Catfish	5/4/2016	0.118	0.0846	0.208	0.169	< 0.846	0.846
Panfish	3/16/2016	0.0896	0.0789	0.291	0.158	< 0.789	0.789
Panfish	3/16/2016	0.0881	0.0701	0.242	0.14	< 0.701	0.701
Panfish	3/16/2016	0.0648	0.0553	0.268	0.111	< 0.553	0.553
Panfish	3/16/2016	0.0661	0.0576	0.228	0.115	< 0.576	0.576
Panfish	3/16/2016	< 0.0785	0.0785	0.187	0.157	< 0.785	0.785
Panfish	3/16/2016	0.0758	0.0678	0.35	0.136	< 0.678	0.678
Panfish	3/16/2016	0.138	0.0819	0.211	0.164	< 0.819	0.819

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	3/16/2016	0.0933	0.0789	0.377	0.02	< 0.158	0.158
Bass	3/16/2016	< 0.0919	0.0919	0.483	0.02	< 0.184	0.184
Bass	3/16/2016	0.149	0.0585	0.415	0.02	0.153	0.117
Bass	3/16/2016	0.0944	0.0711	0.886	0.02	< 0.142	0.142
Bass	3/16/2016	0.0718	0.0526	0.571	0.02	< 0.105	0.105
Bass	3/16/2016	0.214	0.0582	0.302	0.02	< 0.116	0.116
Bass	5/4/2016	0.0828	0.0523	0.596	0.02	< 0.105	0.105
Catfish	3/16/2016	0.194	0.0536	0.118	0.02	< 0.107	0.107
Catfish	3/16/2016	0.182	0.0599	0.152	0.02	< 0.12	0.12
Catfish	5/4/2016	0.167	0.0655	0.214	0.02	< 0.131	0.131
Catfish	5/4/2016	0.19	0.0836	0.0905	0.02	< 0.167	0.167
Catfish	5/4/2016	0.224	0.0637	0.135	0.02	< 0.127	0.127
Catfish	5/4/2016	0.198	0.0961	0.0985	0.02	< 0.192	0.192
Catfish	5/4/2016	0.188	0.0846	0.186	0.02	< 0.169	0.169
Panfish	3/16/2016	0.0983	0.0789	0.0542	0.02	< 0.158	0.158
Panfish	3/16/2016	0.143	0.0701	0.0951	0.02	< 0.14	0.14
Panfish	3/16/2016	0.126	0.0553	0.0962	0.02	< 0.111	0.111
Panfish	3/16/2016	0.0837	0.0576	0.0922	0.02	< 0.115	0.115
Panfish	3/16/2016	0.0834	0.0785	0.0916	0.02	< 0.157	0.157
Panfish	3/16/2016	0.0907	0.0678	0.0563	0.02	< 0.136	0.136
Panfish	3/16/2016	0.147	0.0819	0.047	0.02	< 0.164	0.164

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Zinc ($\mu\text{g/g}$)	Detection Limit ($\mu\text{g/g}$)
Bass	3/16/2016	5.32	0.158
Bass	3/16/2016	4.27	0.184
Bass	3/16/2016	4.31	0.117
Bass	3/16/2016	3.76	0.142
Bass	3/16/2016	3.94	0.105
Bass	3/16/2016	5.83	0.116
Bass	5/4/2016	4.09	0.105
Catfish	3/16/2016	5.78	0.107
Catfish	3/16/2016	5.69	0.12
Catfish	5/4/2016	4.14	0.131
Catfish	5/4/2016	4.44	0.167
Catfish	5/4/2016	3.44	0.127
Catfish	5/4/2016	6.12	0.192
Catfish	5/4/2016	3.17	0.169
Panfish	3/16/2016	6.91	0.158
Panfish	3/16/2016	5.87	0.14
Panfish	3/16/2016	6.84	0.111
Panfish	3/16/2016	6.25	0.115
Panfish	3/16/2016	6.12	0.157
Panfish	3/16/2016	5.16	0.136
Panfish	3/16/2016	7.12	0.164

Table 11 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Mullet	2/18/2016	< 1.14	1.14	0.679	0.555	< 0.0555	0.0555
Mullet	2/18/2016	< 1.23	1.23	< 0.555	0.555	< 0.0555	0.0555
Mullet	2/18/2016	< 1.29	1.29	< 0.655	0.655	< 0.0655	0.0655
Mullet	2/18/2016	< 0.993	0.993	< 0.662	0.662	< 0.0662	0.0662
Mullet	2/18/2016	< 0.982	0.982	< 0.862	0.862	< 0.0862	0.0862
Mullet	2/18/2016	< 0.832	0.832	< 0.817	0.817	< 0.0817	0.0817
Mullet	2/18/2016	< 0.833	0.833	< 0.76	0.76	< 0.076	0.076
Red Drum	11/1/2016	< 1.29	1.29	1.28	0.858	< 0.0858	0.0858
Red Drum	11/7/2016	< 1.62	1.62	1.49	1.08	< 0.108	0.108
Red Drum	11/7/2016	< 1.53	1.53	< 1.02	1.02	0.189	0.102
Red Drum	11/7/2016	< 1.16	1.16	< 0.776	0.776	< 0.0776	0.0776
Red Drum	11/7/2016	< 1.13	1.13	< 0.75	0.75	< 0.075	0.075
Red Drum	11/7/2016	< 1.13	1.13	1.39	0.756	< 0.0756	0.0756
Red Drum	12/7/2016	< 1.09	1.09	1.21	0.727	< 0.0727	0.0727
Sea Trout	11/7/2016	< 1.39	1.39	< 0.93	0.93	< 0.093	0.093
Sea Trout	12/7/2016	< 1.18	1.18	< 0.784	0.784	< 0.0784	0.0784
Sea Trout	12/20/2016	< 1.25	1.25	< 0.833	0.833	< 0.0833	0.0833
Sea Trout	12/20/2016	< 1.25	1.25	< 0.833	0.833	< 0.0833	0.0833
Sea Trout	12/20/2016	< 0.765	0.765	< 0.51	0.51	< 0.051	0.051
Sea Trout	12/20/2016	< 0.948	0.948	< 0.632	0.632	< 0.0632	0.0632
Sea Trout	12/20/2016	< 0.948	0.948	< 0.632	0.632	< 0.0632	0.0632

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8 (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Mullet	2/18/2016	0.0741	0.0555	0.267	0.152	< 0.76	0.76
Mullet	2/18/2016	< 0.0555	0.0555	0.352	0.163	< 0.817	0.817
Mullet	2/18/2016	< 0.0655	0.0655	0.272	0.172	< 0.862	0.862
Mullet	2/18/2016	0.126	0.0662	0.428	0.132	< 0.662	0.662
Mullet	2/18/2016	< 0.0862	0.0862	0.386	0.131	< 0.655	0.655
Mullet	2/18/2016	< 0.0817	0.0817	0.252	0.111	< 0.555	0.555
Mullet	2/18/2016	< 0.076	0.076	0.18	0.111	< 0.555	0.555
Red Drum	11/1/2016	0.12	0.0858	0.303	0.172	< 0.858	0.858
Red Drum	11/7/2016	< 0.108	0.108	0.39	0.216	< 1.08	1.08
Red Drum	11/7/2016	0.207	0.102	0.453	0.204	< 1.02	1.02
Red Drum	11/7/2016	< 0.0776	0.0776	0.274	0.155	< 0.776	0.776
Red Drum	11/7/2016	0.104	0.075	0.355	0.15	< 0.75	0.75
Red Drum	11/7/2016	< 0.0756	0.0756	0.255	0.151	< 0.756	0.756
Red Drum	11/7/2016	< 0.0733	0.0727	< 0.194	0.145	< 0.727	0.727
Sea Trout	11/7/2016	< 0.093	0.093	0.293	0.186	< 0.93	0.93
Sea Trout	12/7/2016	0.0815	0.0784	0.323	0.157	< 0.784	0.784
Sea Trout	12/20/2016	0.0997	0.0833	0.24	0.126	< 0.833	0.833
Sea Trout	12/20/2016	0.125	0.0833	0.354	0.126	< 0.833	0.833
Sea Trout	12/20/2016	< 0.051	0.051	0.287	0.102	< 0.51	0.51
Sea Trout	12/20/2016	< 0.0632	0.0632	0.351	0.167	< 0.632	0.632
Sea Trout	12/20/2016	< 0.0632	0.0632	0.327	0.167	< 0.632	0.632

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8 (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Mullet	2/18/2016	< 0.076	0.076	< 0.02	0.02	< 0.152	0.152
Mullet	2/18/2016	0.16	0.0817	< 0.02	0.02	< 0.163	0.163
Mullet	2/18/2016	< 0.0862	0.0862	< 0.02	0.02	< 0.172	0.172
Mullet	2/18/2016	0.0917	0.0662	< 0.02	0.02	< 0.132	0.132
Mullet	2/18/2016	0.0951	0.0655	< 0.02	0.02	< 0.131	0.131
Mullet	2/18/2016	< 0.0555	0.0555	0.0214	0.02	< 0.111	0.111
Mullet	2/18/2016	0.0662	0.0555	< 0.02	0.02	< 0.111	0.111
Red Drum	11/1/2016	0.101	0.0858	0.0491	0.02	0.216	0.172
Red Drum	11/7/2016	0.114	0.108	0.0596	0.02	< 0.216	0.216
Red Drum	11/7/2016	0.257	0.102	0.057	0.02	0.562	0.204
Red Drum	11/7/2016	0.0794	0.0776	0.0771	0.02	0.176	0.155
Red Drum	11/7/2016	0.0942	0.075	0.0802	0.02	< 0.15	0.15
Red Drum	11/7/2016	0.17	0.0756	0.0844	0.02	< 0.151	0.151
Red Drum	12/7/2016	< 0.111	0.0727	0.076	0.02	< 0.145	0.145
Sea Trout	11/7/2016	0.125	0.093	0.0881	0.02	0.343	0.186
Sea Trout	12/7/2016	< 0.0784	0.0784	0.148	0.02	0.244	0.157
Sea Trout	12/20/2016	< 0.0632	0.0632	0.0547	0.02	0.235	0.167
Sea Trout	12/20/2016	< 0.0632	0.0632	0.09	0.02	0.204	0.167
Sea Trout	12/20/2016	< 0.051	0.051	0.0744	0.02	< 0.102	0.102
Sea Trout	12/20/2016	< 0.0833	0.0833	0.108	0.02	0.154	0.126
Sea Trout	12/20/2016	< 0.0833	0.0833	0.0898	0.02	0.17	0.126

Note:

Values shaded blue are laboratory qualified as an estimated value.

Table 11 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8 (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Mullet	2/18/2016	2.99	0.152
Mullet	2/18/2016	4.25	0.163
Mullet	2/18/2016	3.1	0.172
Mullet	2/18/2016	3.62	0.132
Mullet	2/18/2016	3.12	0.131
Mullet	2/18/2016	2.7	0.111
Mullet	2/18/2016	2.77	0.111
Red Drum	11/1/2016	4.64	0.172
Red Drum	11/7/2016	5.13	0.216
Red Drum	11/7/2016	4.92	0.204
Red Drum	11/7/2016	3.97	0.155
Red Drum	11/7/2016	4.39	0.15
Red Drum	11/7/2016	3.68	0.151
Red Drum	12/7/2016	4.2	0.145
Sea Trout	11/7/2016	5.13	0.186
Sea Trout	12/7/2016	4.5	0.157
Sea Trout	12/20/2016	3.54	0.167
Sea Trout	12/20/2016	3.85	0.167
Sea Trout	12/20/2016	4.93	0.102
Sea Trout	12/20/2016	3.48	0.126
Sea Trout	12/20/2016	4.75	0.126

Table 12 Radioactivity in Air Emission Samples

Tritium is monitored with continuous real-time instrumentation. Results of this online monitoring are included with the analytical results provided in this table.

The releases of Kr-85, C-14, and tritium (H-3) from the H-Area Canyon Facility (292-H) were calculated based on the “burn-up” of spent fuel processed in that facility. Results from these calculations are not included in this table.

The units for all samples are pCi/m³. Significant results are identified by bold text and cell boxes highlighted in blue.

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 264-H Stack

Sample Date	Cr-51		Co-58		Co-60	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/9/2016	1.91E-02	3.30E-02	-5.00E-03	2.89E-03	4.73E-03	4.00E-03
1/16/2016	6.95E-02	3.47E-02	9.46E-04	3.78E-03	-3.32E-03	3.01E-03
1/23/2016	1.04E-02	2.57E-02	-2.61E-03	3.03E-03	1.21E-03	2.89E-03
1/30/2016	-1.01E-02	2.57E-02	-6.14E-03	3.63E-03	-3.49E-03	2.76E-03
2/6/2016	-9.62E-05	2.92E-02	-2.70E-03	3.16E-03	5.00E-03	3.31E-03
2/13/2016	-2.86E-02	3.43E-02	-2.78E-03	3.49E-03	1.17E-03	3.06E-03
2/20/2016	-2.38E-02	2.94E-02	2.95E-03	3.27E-03	1.34E-03	3.13E-03
2/27/2016	1.49E-02	2.82E-02	4.65E-03	2.96E-03	7.41E-04	3.00E-03
3/5/2016	-3.30E-02	3.14E-02	-5.27E-03	3.62E-03	-5.78E-03	3.36E-03
3/12/2016	8.24E-03	3.17E-02	6.14E-03	3.40E-03	2.84E-03	3.28E-03
3/19/2016	-1.92E-02	2.91E-02	6.95E-03	3.46E-03	-3.59E-03	3.00E-03
3/26/2016	-2.43E-02	2.86E-02	2.08E-03	2.67E-03	1.75E-03	3.25E-03
4/2/2016	-5.30E-02	3.06E-02	-2.42E-04	3.14E-03	2.06E-03	2.54E-03
4/9/2016	4.57E-04	2.96E-02	3.14E-03	3.40E-03	-3.81E-03	3.07E-03
4/16/2016	-9.32E-03	2.82E-02	-2.16E-03	2.73E-03	-3.95E-04	1.76E-03
4/23/2016	6.68E-03	2.94E-02	1.61E-03	3.22E-03	9.08E-04	3.09E-03
4/30/2016	-3.59E-02	3.23E-02	-1.45E-03	2.85E-03	7.16E-03	2.41E-03
5/7/2016	5.86E-03	3.24E-02	3.00E-03	3.59E-03	-9.57E-04	3.08E-03
5/14/2016	2.42E-04	2.82E-02	3.54E-04	2.78E-03	-1.04E-03	3.00E-03
5/21/2016	1.17E-02	2.86E-02	-1.92E-03	2.56E-03	4.59E-03	2.23E-03
5/28/2016	-3.92E-02	2.80E-02	-2.51E-03	2.92E-03	-3.78E-03	2.69E-03
6/4/2016	-3.22E-02	2.69E-02	-5.70E-04	3.01E-03	-4.57E-04	2.47E-03
6/11/2016	-1.99E-03	3.02E-02	-1.78E-03	2.95E-03	2.29E-03	2.87E-03
6/18/2016	1.39E-02	3.27E-02	-1.68E-04	3.39E-03	-3.54E-03	3.25E-03
6/25/2016	3.35E-02	3.19E-02	1.70E-03	3.47E-03	-2.34E-03	3.74E-03
7/2/2016	1.25E-02	2.81E-02	-9.03E-04	2.36E-03	2.92E-03	3.29E-03
7/9/2016	-2.03E-02	2.69E-02	6.11E-04	2.64E-03	3.16E-03	2.58E-03
7/16/2016	4.22E-02	3.40E-02	7.43E-03	2.89E-03	-1.67E-03	2.38E-03
7/23/2016	2.03E-02	2.99E-02	-4.95E-03	3.54E-03	-3.43E-04	3.14E-03
7/30/2016	3.22E-02	3.47E-02	5.46E-03	3.46E-03	-4.41E-03	3.15E-03
8/6/2016	-2.63E-02	2.57E-02	-1.71E-03	3.27E-03	1.80E-03	3.12E-03
8/13/2016	-9.89E-03	3.61E-02	4.00E-03	2.58E-03	-5.35E-03	3.25E-03
8/20/2016	-2.86E-02	3.59E-02	-6.11E-04	3.42E-03	-4.68E-03	3.29E-03
8/27/2016	3.35E-04	3.28E-02	4.84E-03	3.70E-03	-1.00E-03	3.58E-03
9/3/2016	3.76E-03	3.13E-02	1.22E-03	3.19E-03	4.46E-03	3.00E-03
9/10/2016	-3.30E-02	2.78E-02	-2.40E-03	2.89E-03	1.15E-02	3.94E-03
9/17/2016	7.00E-03	2.76E-02	-2.69E-03	3.60E-03	2.10E-03	3.02E-03
9/24/2016	-2.95E-02	3.17E-02	1.60E-03	3.09E-03	-1.30E-03	2.95E-03

Sample Date	Cr-51		Co-58		Co-60	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
10/1/2016	-1.39E-02	2.91E-02	-1.65E-04	2.91E-03	-5.51E-03	2.59E-03
10/10/2016	2.45E-02	2.57E-02	-3.76E-03	2.31E-03	4.00E-05	2.77E-03
10/15/2016	-8.92E-04	3.55E-02	-1.89E-03	3.69E-03	-3.70E-03	4.13E-03
10/22/2016	1.10E-02	2.80E-02	1.24E-03	2.83E-03	7.89E-04	3.38E-03
10/29/2016	7.51E-02	3.33E-02	-3.81E-03	3.22E-03	2.56E-03	3.44E-03
11/5/2016	-5.84E-03	2.72E-02	3.41E-03	2.65E-03	1.85E-03	3.31E-03
11/12/2016	4.35E-02	2.89E-02	6.59E-04	2.86E-03	2.46E-03	3.05E-03
11/19/2016	1.98E-02	2.08E-02	9.54E-04	2.21E-03	1.30E-03	2.86E-03
12/24/2016	-4.11E-02	3.75E-02	1.24E-03	3.31E-03	-2.26E-03	3.57E-03
12/31/2016	5.00E-03	3.46E-02	1.19E-03	3.43E-03	-5.41E-03	4.09E-03

Location: 264-H Stack (continued)

Sample Date	Cs-137		Se-75		Gross Beta	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/9/2016	-4.35E-04	3.08E-03	2.70E-03	4.44E-03	1.02E-02	3.39E-03
1/16/2016	1.08E-03	3.40E-03	-4.35E-04	4.08E-03	1.89E-02	3.85E-03
1/23/2016	-5.84E-03	3.53E-03	4.03E-03	4.42E-03	1.80E-02	3.60E-03
1/30/2016	2.39E-03	3.34E-03	-2.48E-04	4.49E-03	1.42E-02	3.43E-03
2/6/2016	2.73E-03	2.77E-03	5.22E-03	3.98E-03	8.73E-03	2.92E-03
2/13/2016	2.02E-03	3.66E-03	-6.24E-03	4.22E-03	1.64E-02	3.53E-03
2/20/2016	2.32E-03	3.13E-03	-3.73E-03	3.60E-03	6.19E-03	2.83E-03
2/27/2016	-3.00E-04	2.87E-03	2.41E-03	3.97E-03	8.97E-03	2.96E-03
3/5/2016	7.08E-03	4.06E-03	2.95E-03	4.52E-03	1.32E-02	3.49E-03
3/12/2016	-5.92E-03	3.43E-03	1.32E-03	4.37E-03	1.30E-02	3.29E-03
3/19/2016	-4.27E-03	3.39E-03	-5.86E-03	3.95E-03	9.89E-03	3.17E-03
3/26/2016	-6.11E-04	3.13E-03	3.27E-03	4.32E-03	1.13E-02	3.13E-03
4/2/2016	-6.08E-03	3.20E-03	-3.19E-03	4.16E-03	7.00E-03	2.82E-03
4/9/2016	1.59E-03	3.59E-03	-2.08E-03	4.57E-03	1.04E-02	3.11E-03
4/16/2016	-2.40E-03	2.87E-03	1.47E-03	3.59E-03	7.08E-03	2.59E-03
4/23/2016	-7.41E-04	3.07E-03	-3.89E-03	4.26E-03	9.62E-03	3.15E-03
4/30/2016	-2.69E-03	3.29E-03	-4.38E-03	4.32E-03	1.40E-02	3.47E-03
5/7/2016	2.51E-03	3.15E-03	3.19E-03	4.19E-03	5.57E-03	2.62E-03
5/14/2016	6.08E-03	3.72E-03	-1.17E-04	4.05E-03	1.49E-02	2.44E-03
5/21/2016	2.86E-03	3.15E-03	4.70E-03	4.28E-03	8.22E-03	2.07E-03
5/28/2016	2.68E-03	3.45E-03	4.38E-03	4.06E-03	1.18E-02	2.10E-03
6/4/2016	-7.14E-04	2.90E-03	1.93E-03	3.83E-03	1.09E-02	2.08E-03
6/11/2016	3.70E-03	3.23E-03	-2.21E-03	3.75E-03	1.23E-02	3.09E-03
6/18/2016	-5.92E-03	3.61E-03	-2.56E-03	4.39E-03	1.68E-02	3.61E-03

Sample Date	Cs-137		Se-75		Gross Beta	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
6/25/2016	2.84E-03	3.58E-03	-3.65E-03	4.39E-03	2.44E-02	4.11E-03
7/2/2016	-2.04E-04	3.22E-03	-1.93E-03	4.39E-03	7.27E-03	2.74E-03
7/9/2016	-3.03E-03	3.44E-03	1.39E-03	3.99E-03	1.36E-02	3.23E-03
7/16/2016	-6.11E-04	3.60E-03	2.81E-03	5.01E-03	1.39E-02	3.73E-03
7/23/2016	1.34E-03	2.95E-03	-2.78E-03	4.10E-03	1.09E-02	3.35E-03
7/30/2016	5.14E-05	2.91E-03	1.09E-02	4.61E-03	1.12E-02	3.48E-03
8/6/2016	-2.58E-03	2.85E-03	5.32E-04	3.82E-03	4.86E-03	2.80E-03
8/13/2016	8.76E-04	3.03E-03	-4.27E-03	4.15E-03	1.04E-02	3.41E-03
8/20/2016	-1.65E-03	3.64E-03	8.43E-05	4.50E-03	1.54E-02	2.94E-03
8/27/2016	5.38E-03	3.38E-03	-4.00E-03	4.37E-03	1.55E-02	3.68E-03
9/3/2016	-1.24E-03	2.72E-03	-1.77E-03	4.03E-03	1.00E-02	2.74E-03
9/10/2016	1.41E-03	3.20E-03	2.89E-03	4.02E-03	2.47E-02	3.13E-03
9/17/2016	1.59E-03	3.43E-03	8.76E-03	4.40E-03	1.01E-02	2.56E-03
9/24/2016	1.80E-05	3.51E-03	3.49E-03	4.67E-03	4.16E-03	2.74E-03
10/1/2016	2.21E-03	3.49E-03	5.92E-03	4.64E-03	2.17E-02	3.94E-03
10/10/2016	5.08E-04	2.45E-03	4.81E-04	3.12E-03	1.42E-02	2.74E-03
10/15/2016	-4.92E-03	4.00E-03	7.95E-04	5.85E-03	1.81E-02	4.52E-03
10/22/2016	3.35E-03	3.57E-03	-3.03E-03	4.05E-03	2.14E-02	3.78E-03
10/29/2016	-9.11E-05	3.02E-03	-1.60E-03	4.58E-03	1.58E-02	3.55E-03
11/5/2016	-2.51E-03	3.31E-03	4.49E-03	4.25E-03	1.34E-02	3.09E-03
11/12/2016	-5.86E-04	2.70E-03	1.11E-03	4.12E-03	9.54E-03	2.85E-03
11/19/2016	-2.26E-03	2.57E-03	1.65E-03	3.06E-03	1.14E-02	2.63E-03
12/24/2016	-4.08E-03	3.58E-03	-7.73E-03	4.15E-03	1.28E-02	3.29E-03
12/31/2016	2.35E-03	3.13E-03	1.86E-02	6.93E-03	8.57E-03	3.22E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 264-H Stack (continued)

Sample Date	Gross Alpha	
	Conc.	Standard Dev.
1/9/2016	3.68E-03	1.99E-03
1/16/2016	9.89E-04	1.25E-03
1/23/2016	-6.70E-04	2.91E-04
1/30/2016	-6.81E-04	2.97E-04
2/6/2016	1.08E-03	1.27E-03
2/13/2016	-6.73E-04	2.92E-04
2/20/2016	1.45E-04	8.84E-04
2/27/2016	-6.78E-04	2.69E-04
3/5/2016	2.73E-04	9.48E-04
3/12/2016	1.02E-03	1.13E-03
3/19/2016	3.62E-06	9.32E-04
3/26/2016	1.28E-03	1.30E-03
4/2/2016	3.16E-03	1.86E-03
4/9/2016	3.11E-03	1.83E-03
4/16/2016	7.35E-04	1.08E-03
4/23/2016	4.19E-03	2.09E-03
4/30/2016	1.69E-03	1.53E-03
5/7/2016	-5.11E-04	1.48E-04
5/14/2016	2.11E-03	1.19E-03
5/21/2016	3.16E-03	1.30E-03
5/28/2016	3.38E-04	7.10E-04
6/4/2016	-3.46E-05	6.11E-04
6/11/2016	2.35E-06	8.59E-04
6/18/2016	1.33E-04	1.14E-03
6/25/2016	-8.41E-04	6.28E-04
7/2/2016	1.02E-03	1.39E-03
7/9/2016	1.89E-03	1.63E-03
7/16/2016	1.20E-03	1.46E-03
7/23/2016	5.49E-03	2.38E-03
7/30/2016	2.92E-04	1.14E-03
8/6/2016	1.09E-03	1.32E-03
8/13/2016	1.03E-03	1.32E-03
8/20/2016	4.05E-03	1.64E-03
8/27/2016	2.13E-03	1.84E-03
9/3/2016	-6.86E-04	5.18E-04
9/10/2016	2.22E-03	1.18E-03
9/17/2016	2.29E-03	1.20E-03
9/24/2016	1.24E-03	1.26E-03

Sample Date	Gross Alpha	
	Conc.	Standard Dev.
10/1/2016	1.43E-03	1.38E-03
10/10/2016	1.03E-03	9.93E-04
10/15/2016	4.54E-04	1.18E-03
10/22/2016	1.94E-03	1.41E-03
10/29/2016	2.03E-03	1.48E-03
11/5/2016	2.03E-03	1.43E-03
11/12/2016	2.97E-03	1.71E-03
11/19/2016	1.04E-03	1.00E-03
12/24/2016	2.61E-03	1.69E-03
12/31/2016	1.03E-03	1.34E-03

Location: 210-Z Building Stack

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	3.57E-02	3.67E-02	4.30E-02	4.59E-02	1.17E-02	1.03E-02
5/10/2016	-2.58E-02	3.81E-02	-9.43E-02	4.92E-02	8.41E-03	1.39E-02
8/9/2016	1.53E-02	4.41E-02	-4.00E-02	4.26E-02	-3.24E-03	1.17E-02
11/9/2016	-1.44E-02	4.35E-02	-1.83E-03	3.94E-02	-3.68E-03	1.09E-02

Sample Date	U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	3.32E-04	1.94E-04	-1.83E-04	1.30E-04	6.68E-04	2.76E-04
5/10/2016	1.88E-04	2.30E-04	2.86E-04	2.03E-04	3.08E-04	2.57E-04
8/9/2016	8.11E-04	3.75E-04	2.97E-04	2.18E-04	2.81E-04	2.31E-04
11/9/2016	6.16E-04	2.97E-04	-4.78E-05	1.97E-04	1.08E-03	3.79E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	1.08E-04	1.17E-04	3.38E-04	2.02E-04	3.95E-04	2.26E-04
5/10/2016	1.10E-04	1.12E-04	-1.49E-04	1.06E-04	8.16E-04	3.29E-04
8/9/2016	-8.41E-05	7.78E-05	-1.26E-05	1.59E-05	4.86E-04	2.51E-04
11/9/2016	2.26E-04	2.00E-04	1.06E-04	1.06E-04	3.35E-04	2.30E-04

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 210-Z Building Stack (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	0.00E+00	1.36E-04	-7.86E-03	6.10E-02	-1.81E-02	7.35E-03
5/10/2016	3.97E-05	1.43E-04	-2.21E-02	4.10E-02	-2.36E-02	8.96E-03
8/9/2016	1.16E-04	1.23E-04	4.59E-02	7.40E-02	-1.93E-02	1.01E-02
11/9/2016	2.11E-04	1.50E-04	9.08E-02	6.17E-02	1.07E-02	2.20E-02

Location: 221-S Personnel Area (Zone 2)

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	6.76E-03	4.49E-02	-4.46E-02	5.83E-02	-2.02E-02	1.18E-02
4/18/2016	1.18E-01	5.55E-02	7.00E-02	5.57E-02	6.57E-03	1.71E-02
7/11/2016	-6.27E-02	5.15E-02	5.38E-02	5.73E-02	-1.81E-03	1.72E-02
10/17/2016	3.92E-02	4.86E-02	6.57E-03	5.71E-02	2.28E-02	2.08E-02

Sample Date	U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	2.76E-04	2.09E-04	-3.08E-06	3.44E-06	7.68E-04	3.74E-04
4/18/2016	4.81E-03	1.89E-03	-2.19E-04	9.04E-04	2.31E-03	1.25E-03
7/11/2016	1.26E-03	4.94E-04	6.05E-05	2.18E-04	1.66E-03	5.28E-04
10/17/2016	1.66E-03	5.39E-04	2.25E-04	2.76E-04	3.14E-04	2.66E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	-7.11E-06	8.80E-06	4.03E-04	2.74E-04	1.20E-04	1.46E-04
4/18/2016	1.32E-03	1.07E-03	4.51E-04	6.03E-04	7.19E-05	2.30E-04
7/11/2016	9.86E-04	4.50E-04	7.78E-04	4.03E-04	-5.92E-06	1.87E-04
10/17/2016	-1.31E-05	1.62E-05	-1.96E-05	2.44E-05	9.05E-04	3.78E-04

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 221-S Personnel Area (Zone 2) (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	0.00E+00	1.77E-04	-6.24E-02	6.45E-02	7.05E-03	3.03E-02
4/18/2016	1.33E-04	1.33E-04	1.43E-01	8.63E-02	-1.69E-02	4.89E-03
7/11/2016	-9.65E-05	9.71E-05	-2.19E-03	8.48E-02	-1.89E-02	2.10E-02
10/17/2016	-2.38E-06	2.64E-06	-7.65E-02	6.95E-02	6.65E-02	4.84E-02

Location: 235-F Sandfilter Discharge

Sample Date	Co-60		Cs-137		U-234	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/5/2016	-1.22E-03	1.64E-03	1.16E-04	2.17E-03	4.35E-05	2.07E-05
1/12/2016	-7.84E-05	2.10E-03	-2.81E-03	2.09E-03	5.68E-05	1.86E-05
1/19/2016	-8.03E-04	1.77E-03	5.24E-03	2.65E-03	4.51E-05	1.65E-05
1/26/2016	3.49E-03	2.11E-03	-6.70E-04	1.80E-03	3.22E-05	1.36E-05
2/2/2016	-1.91E-03	2.30E-03	1.00E-03	2.21E-03	2.70E-05	1.26E-05
2/9/2016	1.98E-03	2.44E-03	-1.27E-03	2.55E-03	1.09E-05	8.22E-06
2/16/2016	-1.43E-03	2.55E-03	6.57E-03	2.53E-03	3.03E-05	1.47E-05
2/23/2016	1.51E-03	2.30E-03	-1.84E-03	1.85E-03	7.78E-06	9.28E-06
3/1/2016	1.28E-03	1.79E-03	4.24E-04	2.31E-03	2.95E-05	1.34E-05
3/8/2016	-1.32E-04	2.29E-03	-4.27E-03	2.53E-03	4.65E-05	1.68E-05
3/15/2016	-2.78E-03	2.37E-03	6.49E-04	2.15E-03	2.33E-05	1.18E-05
3/22/2016	-7.08E-04	2.34E-03	6.73E-04	2.28E-03	6.43E-05	2.27E-05
3/29/2016	5.35E-03	2.61E-03	2.31E-03	2.22E-03	4.41E-05	1.86E-05
4/5/2016	4.00E-03	1.77E-03	5.86E-03	3.13E-03	-4.43E-06	1.17E-05
4/12/2016	-8.43E-04	2.12E-03	2.45E-03	2.12E-03	2.73E-05	1.57E-05
4/19/2016	-1.63E-03	2.17E-03	-1.87E-03	2.51E-03	1.23E-05	1.42E-05
4/26/2016	-1.87E-03	1.64E-03	9.62E-04	2.47E-03	3.81E-06	9.71E-06
5/3/2016	1.97E-03	1.82E-03	-4.68E-05	2.30E-03	2.21E-05	1.47E-05
5/10/2016	1.09E-03	1.89E-03	2.02E-03	2.52E-03	4.92E-05	1.86E-05
5/17/2016	-2.06E-03	2.61E-03	3.89E-04	2.61E-03	6.27E-05	2.09E-05
5/25/2016	4.46E-04	2.31E-03	-1.61E-03	2.02E-03	7.95E-06	9.32E-06
5/31/2016	1.85E-03	2.32E-03	-1.94E-03	2.32E-03	2.19E-05	1.50E-05
6/7/2016	1.55E-04	2.01E-03	1.05E-03	2.53E-03	1.83E-05	1.18E-05
6/14/2016	-1.81E-04	1.99E-03	1.53E-03	2.41E-03	1.44E-05	1.22E-05
6/21/2016	1.26E-04	1.84E-03	-2.25E-03	2.55E-03	4.43E-05	1.71E-05
6/28/2016	-2.95E-04	2.37E-03	1.15E-03	2.24E-03	6.00E-05	1.95E-05
7/5/2016	-3.08E-03	1.83E-03	-1.09E-03	2.59E-03	1.11E-05	1.33E-05
7/12/2016	9.43E-04	2.26E-03	8.05E-04	2.30E-03	3.62E-05	1.60E-05

Sample Date	Co-60		Cs-137		U-234	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
7/19/2016	-2.08E-04	2.06E-03	-1.59E-04	2.32E-03	2.89E-05	1.32E-05
7/26/2016	-3.35E-03	2.07E-03	-2.50E-03	2.28E-03	4.57E-05	1.77E-05
8/2/2016	-1.91E-03	2.12E-03	7.38E-04	2.23E-03	1.99E-05	1.30E-05
8/9/2016	-1.06E-04	2.20E-03	-4.86E-03	2.38E-03	4.62E-05	1.78E-05
8/16/2016	1.83E-03	2.21E-03	-9.24E-05	2.02E-03	9.97E-06	7.76E-06
8/23/2016	-3.19E-03	2.46E-03	5.76E-04	2.08E-03	4.68E-05	1.68E-05
8/30/2016	-5.08E-04	2.35E-03	-2.97E-03	2.33E-03	6.22E-05	1.99E-05
9/6/2016	-1.37E-03	2.30E-03	-2.76E-04	2.39E-03	5.89E-05	1.92E-05
9/13/2016	9.70E-04	1.97E-03	-8.46E-04	2.17E-03	3.51E-05	1.48E-05
9/20/2016	-1.16E-03	1.95E-03	1.73E-03	2.67E-03	3.22E-05	1.45E-05
9/27/2016	-2.01E-03	2.16E-03	3.46E-03	2.12E-03	7.73E-05	2.25E-05
10/4/2016	-2.76E-03	2.02E-03	1.29E-03	2.53E-03	3.51E-05	1.45E-05
10/11/2016	-9.59E-04	2.73E-03	1.24E-03	2.62E-03	6.62E-05	2.04E-05
10/18/2016	3.49E-04	2.13E-03	4.19E-03	2.33E-03	4.11E-05	1.90E-05
10/25/2016	-6.24E-04	2.55E-03	2.29E-03	2.50E-03	4.89E-05	1.83E-05
11/1/2016	-2.18E-03	2.91E-03	2.97E-03	2.33E-03	3.05E-05	1.47E-05
11/8/2016	-2.92E-04	2.15E-03	3.14E-03	2.40E-03	5.84E-05	1.89E-05
11/15/2016	1.12E-03	2.07E-03	-1.45E-03	2.06E-03	3.54E-05	1.55E-05
11/22/2016	1.25E-03	2.74E-03	-2.78E-03	2.37E-03	4.11E-05	1.58E-05
11/29/2016	8.76E-04	2.59E-03	-5.68E-04	2.50E-03	2.25E-05	1.50E-05
12/6/2016	8.16E-04	2.36E-03	7.89E-04	2.64E-03	4.11E-05	1.72E-05
11/13/2016	1.46E-03	2.16E-03	3.89E-03	2.06E-03	5.70E-05	2.08E-05
12/20/2016	8.57E-04	2.21E-03	2.26E-03	2.41E-03	5.32E-05	1.84E-05
12/27/2016	-8.16E-04	1.30E-03	-5.11E-04	2.59E-03	3.16E-05	1.47E-05
1/3/2017	1.95E-03	2.18E-03	-1.89E-03	2.42E-03	3.68E-05	1.41E-05

Location: 235-F Sandfilter Discharge (continued)

Sample Date	U-235		U-238		Pu-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/5/2016	-4.65E-06	4.73E-06	2.64E-05	1.49E-05	1.57E-05	1.30E-05
1/12/2016	-4.84E-06	4.73E-06	3.41E-05	1.43E-05	-2.84E-07	3.55E-07
1/19/2016	-1.23E-07	1.37E-07	2.44E-05	1.34E-05	-7.41E-06	5.03E-06
1/26/2016	0.00E+00	6.71E-06	3.27E-05	1.35E-05	4.51E-06	5.19E-06
2/2/2016	0.00E+00	7.19E-06	1.65E-05	9.59E-06	5.03E-06	5.68E-06
2/9/2016	0.00E+00	7.00E-06	5.73E-05	1.84E-05	-5.62E-07	7.00E-07
2/16/2016	-4.70E-06	4.71E-06	6.27E-05	1.93E-05	1.01E-05	7.52E-06
2/23/2016	7.32E-06	7.33E-06	2.37E-05	1.19E-05	2.13E-06	9.09E-06
3/1/2016	0.00E+00	7.07E-06	7.68E-05	2.18E-05	-4.00E-06	3.92E-06
3/8/2016	1.44E-05	1.02E-05	5.24E-05	1.77E-05	-8.00E-06	5.60E-06
3/15/2016	7.22E-06	7.24E-06	1.17E-05	8.30E-06	5.78E-06	5.89E-06

Sample Date	U-235		U-238		Pu-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
3/22/2016	4.11E-06	1.24E-05	5.49E-05	1.92E-05	-4.38E-06	3.83E-06
3/29/2016	-3.14E-06	9.89E-06	9.68E-06	1.14E-05	3.43E-04	5.02E-05
4/5/2016	1.74E-06	9.00E-06	3.00E-05	1.36E-05	2.37E-05	1.33E-05
4/12/2016	-7.41E-07	8.28E-07	3.16E-05	1.51E-05	5.38E-06	6.05E-06
4/19/2016	-5.05E-06	5.09E-06	3.08E-05	1.38E-05	-1.84E-07	2.29E-07
4/26/2016	0.00E+00	6.97E-06	1.71E-05	9.93E-06	-1.91E-07	2.39E-07
5/3/2016	0.00E+00	7.24E-06	3.59E-05	1.49E-05	5.24E-06	5.47E-06
5/10/2016	0.00E+00	6.94E-06	4.16E-05	1.59E-05	7.51E-06	8.96E-06
5/17/2016	7.49E-06	7.49E-06	3.00E-05	1.37E-05	3.95E-06	1.01E-05
5/25/2016	-4.89E-06	4.91E-06	4.14E-05	1.60E-05	-3.89E-06	3.92E-06
5/31/2016	1.76E-05	1.41E-05	6.11E-05	1.97E-05	-8.03E-06	5.93E-06
6/7/2016	6.86E-06	6.87E-06	2.16E-05	1.13E-05	4.95E-06	5.28E-06
6/14/2016	0.00E+00	6.37E-06	3.97E-05	1.63E-05	1.21E-05	9.89E-06
6/21/2016	1.05E-05	1.23E-05	6.92E-05	2.16E-05	5.51E-06	5.83E-06
6/28/2016	-4.95E-06	4.98E-06	2.34E-05	1.22E-05	-2.84E-07	3.55E-07
7/5/2016	1.42E-05	1.01E-05	1.91E-05	1.21E-05	5.24E-06	5.58E-06
7/12/2016	7.14E-06	7.16E-06	4.62E-05	1.65E-05	4.46E-05	1.62E-05
7/19/2016	0.00E+00	7.17E-06	5.24E-05	1.77E-05	-2.86E-07	3.61E-07
7/26/2016	0.00E+00	7.90E-06	7.00E-05	2.40E-05	7.41E-06	8.96E-06
8/2/2016	7.57E-06	7.57E-06	4.68E-05	1.95E-05	-3.81E-06	1.05E-05
8/9/2016	-2.69E-06	9.59E-06	2.41E-05	1.33E-05	-4.05E-06	3.74E-06
8/16/2016	-3.68E-07	4.08E-07	6.86E-06	8.43E-06	-4.24E-06	3.93E-06
8/23/2016	-2.41E-06	9.93E-06	4.03E-05	1.58E-05	-7.97E-06	5.72E-06
8/30/2016	2.27E-06	8.18E-06	4.95E-05	1.67E-05	1.11E-05	7.83E-06
9/6/2016	0.00E+00	7.89E-06	2.95E-05	1.33E-05	1.34E-05	1.07E-05
9/13/2016	2.44E-06	8.76E-06	4.73E-05	1.69E-05	-3.95E-06	3.99E-06
9/20/2016	7.95E-06	7.95E-06	2.08E-05	1.37E-05	-3.76E-06	3.82E-06
9/27/2016	1.39E-05	1.02E-05	6.30E-05	2.24E-05	-5.27E-07	6.56E-07
10/4/2016	6.89E-06	7.29E-06	2.47E-05	1.38E-05	-5.27E-07	6.57E-07
10/11/2016	-3.46E-07	3.89E-07	4.76E-05	1.74E-05	5.00E-06	5.62E-06
10/18/2016	2.06E-06	8.67E-06	3.62E-05	1.62E-05	-5.27E-07	6.54E-07
10/25/2016	0.00E+00	6.95E-06	3.32E-05	1.66E-05	1.84E-06	6.65E-06
11/1/2016	7.08E-06	7.10E-06	2.29E-05	1.15E-05	-2.92E-06	7.64E-06
11/8/2016	-4.81E-06	4.83E-06	2.54E-05	1.37E-05	1.84E-05	1.32E-05
11/15/2016	9.14E-06	1.08E-05	1.68E-05	9.74E-06	-1.20E-05	6.70E-06
11/22/2016	-4.95E-06	4.83E-06	4.11E-05	1.57E-05	1.82E-05	1.19E-05
11/29/2016	-1.02E-05	7.18E-06	3.27E-05	1.57E-05	-3.92E-07	4.89E-07
12/6/2016	1.51E-06	8.63E-06	7.46E-05	2.14E-05	0.00E+00	6.84E-06
11/13/2016	-8.62E-07	9.78E-07	7.41E-05	2.21E-05	-8.41E-06	5.96E-06
12/20/2016	6.84E-06	7.47E-06	4.19E-05	1.60E-05	0.00E+00	7.03E-06
12/27/2016	-5.84E-06	5.30E-06	6.43E-05	2.07E-05	5.57E-06	5.57E-06
1/3/2017	1.26E-05	9.24E-06	5.24E-05	1.68E-05	5.89E-06	5.90E-06

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 235-F Sandfilter Discharge (continued)

Sample Date	Pu-239		Am-241		Cm-244	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/5/2016	-5.73E-07	7.21E-07	2.55E-05	1.41E-05	5.89E-06	5.91E-06
1/12/2016	4.59E-06	5.64E-06	2.66E-05	1.26E-05	0.00E+00	6.97E-06
1/19/2016	-8.49E-07	1.06E-06	4.57E-06	5.60E-06	0.00E+00	6.59E-06
1/26/2016	6.78E-06	7.96E-06	2.28E-05	1.15E-05	-2.73E-07	3.02E-07
2/2/2016	0.00E+00	7.47E-06	2.14E-05	1.08E-05	-2.70E-07	2.99E-07
2/9/2016	0.00E+00	7.31E-06	1.62E-05	9.44E-06	-2.73E-07	3.01E-07
2/16/2016	4.86E-06	5.32E-06	2.73E-05	1.36E-05	0.00E+00	7.11E-06
2/23/2016	1.72E-05	1.41E-05	5.65E-06	9.21E-06	0.00E+00	6.69E-06
3/1/2016	2.92E-05	1.33E-05	2.78E-05	1.55E-05	1.62E-06	6.88E-06
3/8/2016	-4.14E-06	3.94E-06	7.49E-06	1.31E-05	5.95E-06	6.27E-06
3/15/2016	-1.86E-07	2.35E-07	3.27E-05	1.45E-05	-3.62E-06	3.35E-06
3/22/2016	5.14E-06	5.81E-06	3.22E-05	1.47E-05	2.25E-05	1.14E-05
3/29/2016	-6.16E-06	8.55E-06	1.50E-05	1.05E-05	1.88E-05	1.20E-05
4/5/2016	-5.73E-07	7.15E-07	1.86E-05	1.37E-05	6.08E-06	6.19E-06
4/12/2016	3.41E-06	1.01E-05	2.95E-05	1.63E-05	1.09E-05	7.83E-06
4/19/2016	-1.19E-06	1.49E-06	1.54E-05	9.44E-06	0.00E+00	6.87E-06
4/26/2016	4.59E-06	6.14E-06	2.97E-05	1.39E-05	1.20E-05	8.53E-06
5/3/2016	9.68E-06	8.01E-06	1.04E-05	7.99E-06	0.00E+00	6.97E-06
5/10/2016	2.28E-05	1.15E-05	2.13E-05	1.17E-05	0.00E+00	6.93E-06
5/17/2016	-4.24E-06	3.94E-06	3.49E-06	1.28E-05	-3.92E-06	3.93E-06
5/25/2016	-8.05E-06	1.20E-05	-5.92E-07	7.38E-06	0.00E+00	6.86E-06
5/31/2016	6.03E-06	6.03E-06	-1.65E-06	1.86E-06	-6.32E-07	7.14E-07
6/7/2016	4.08E-06	5.52E-06	1.54E-05	1.05E-05	1.11E-05	8.11E-06
6/14/2016	2.40E-06	9.17E-06	1.85E-05	1.07E-05	-2.66E-07	2.94E-07
6/21/2016	-8.84E-06	5.53E-06	2.02E-05	1.16E-05	-2.67E-07	2.96E-07
6/28/2016	8.19E-07	7.20E-06	1.43E-05	9.82E-06	-2.67E-07	2.94E-07
7/5/2016	-4.08E-06	3.70E-06	2.78E-05	1.27E-05	-9.19E-08	1.02E-07
7/12/2016	2.76E-05	1.28E-05	2.32E-05	1.28E-05	-9.22E-08	1.02E-07
7/19/2016	-3.84E-07	4.81E-07	3.62E-05	1.51E-05	-4.11E-06	4.02E-06
7/26/2016	-2.50E-06	7.87E-06	5.62E-06	9.59E-06	-3.86E-06	3.88E-06
8/2/2016	1.93E-05	1.33E-05	1.99E-05	1.25E-05	0.00E+00	6.19E-06
8/9/2016	6.84E-06	8.84E-06	5.16E-05	1.77E-05	-3.41E-07	3.81E-07
8/16/2016	3.30E-06	1.01E-05	2.78E-05	1.61E-05	5.65E-06	6.04E-06
8/23/2016	-8.46E-06	1.23E-05	-5.57E-06	4.49E-06	0.00E+00	7.74E-06
8/30/2016	5.05E-06	5.60E-06	3.70E-05	1.70E-05	6.00E-06	6.01E-06
9/6/2016	1.68E-05	1.01E-05	-3.65E-06	9.36E-06	1.33E-05	9.44E-06
9/13/2016	1.73E-05	1.04E-05	2.48E-05	1.45E-05	-7.97E-06	5.67E-06
9/20/2016	1.08E-05	8.10E-06	8.11E-06	1.12E-05	0.00E+00	6.78E-06
9/27/2016	1.03E-06	6.65E-06	9.38E-06	8.59E-06	5.54E-06	5.66E-06

Sample Date	Pu-239		Am-241		Cm-244	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
10/4/2016	4.70E-06	5.66E-06	1.02E-05	9.21E-06	-9.54E-08	1.07E-07
10/11/2016	1.03E-05	8.00E-06	1.30E-05	1.29E-05	5.49E-06	5.60E-06
10/18/2016	-4.27E-06	3.58E-06	5.78E-06	9.56E-06	5.68E-06	5.80E-06
10/25/2016	1.84E-06	6.64E-06	3.03E-05	1.34E-05	5.22E-06	5.23E-06
11/1/2016	1.46E-05	1.21E-05	2.18E-05	1.17E-05	5.65E-06	5.67E-06
11/8/2016	2.12E-05	1.07E-05	4.49E-05	1.67E-05	1.14E-05	8.05E-06
11/15/2016	7.70E-06	9.04E-06	9.51E-06	8.88E-06	5.70E-06	5.80E-06
11/22/2016	2.60E-05	1.47E-05	3.41E-05	1.86E-05	6.24E-06	6.36E-06
11/29/2016	1.88E-05	1.19E-05	4.05E-05	1.70E-05	5.95E-06	6.06E-06
12/6/2016	2.52E-05	1.42E-05	2.46E-05	1.43E-05	-6.35E-07	7.13E-07
11/13/2016	2.73E-05	1.48E-05	1.65E-05	1.05E-05	-6.35E-07	7.11E-07
12/20/2016	2.40E-05	1.23E-05	4.22E-05	1.77E-05	0.00E+00	7.17E-06
12/27/2016	2.95E-05	1.43E-05	1.77E-05	1.12E-05	-8.27E-06	5.87E-06
1/3/2017	1.12E-05	8.45E-06	4.14E-05	1.69E-05	6.08E-06	6.10E-06

Location: 235-F Sandfilter Discharge (continued)

Sample Date	Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.
1/5/2016	-2.68E-04	2.87E-03	-7.49E-04	3.17E-04
1/12/2016	-2.04E-03	2.94E-03	2.11E-04	1.18E-03
1/19/2016	4.08E-03	3.32E-03	1.43E-03	1.67E-03
1/26/2016	3.62E-05	2.90E-03	2.58E-03	2.03E-03
2/2/2016	4.84E-03	3.36E-03	-8.65E-04	3.81E-04
2/9/2016	6.22E-03	3.52E-03	-8.73E-04	3.84E-04
2/16/2016	9.19E-04	3.07E-03	1.42E-03	1.57E-03
2/23/2016	9.38E-04	3.20E-03	-9.16E-04	3.71E-04
3/1/2016	9.57E-03	3.98E-03	-9.16E-04	3.66E-04
3/8/2016	3.76E-03	3.41E-03	-7.78E-04	3.29E-04
3/15/2016	2.95E-03	3.40E-03	-1.09E-03	4.66E-04
3/22/2016	-3.76E-03	2.73E-03	1.12E-03	1.64E-03
3/29/2016	8.86E-04	2.96E-03	2.81E-03	2.03E-03
4/5/2016	-3.62E-03	2.72E-03	-1.11E-03	4.76E-04
4/12/2016	2.18E-03	3.34E-03	1.11E-03	1.63E-03
4/19/2016	1.94E-03	3.21E-03	1.07E-03	1.61E-03
4/26/2016	1.94E-03	3.23E-03	-1.18E-03	4.51E-04
5/3/2016	-1.57E-03	2.65E-03	-6.68E-04	1.95E-04
5/10/2016	7.97E-03	2.72E-03	-3.86E-05	9.36E-04
5/17/2016	3.27E-03	2.40E-03	-3.03E-05	9.09E-04
5/25/2016	4.57E-03	2.47E-03	-1.17E-03	4.40E-04
5/31/2016	3.08E-03	2.38E-03	-6.51E-04	7.82E-04

Sample Date	Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.
6/7/2016	2.81E-04	3.19E-03	8.24E-06	1.22E-03
6/14/2016	-7.73E-04	2.80E-03	-9.97E-04	7.61E-04
6/21/2016	1.09E-03	3.03E-03	1.38E-03	1.86E-03
6/28/2016	-1.76E-04	2.87E-03	1.76E-04	1.40E-03
7/5/2016	1.16E-03	3.52E-03	3.59E-04	1.39E-03
7/12/2016	-8.14E-04	3.34E-03	3.62E-04	1.39E-03
7/19/2016	1.89E-03	3.59E-03	-7.54E-04	8.33E-04
7/26/2016	-7.46E-04	3.33E-03	-7.57E-04	8.38E-04
8/2/2016	1.89E-03	3.59E-03	-7.57E-04	8.37E-04
8/9/2016	3.35E-03	3.83E-03	1.99E-04	1.28E-03
8/16/2016	1.13E-03	2.80E-03	9.03E-04	1.25E-03
8/23/2016	4.54E-03	3.38E-03	-1.01E-03	7.68E-04
8/30/2016	3.81E-03	3.31E-03	1.76E-04	1.41E-03
9/6/2016	1.07E-03	3.21E-03	-6.68E-04	2.38E-04
9/13/2016	6.70E-03	3.23E-03	1.92E-04	9.59E-04
9/20/2016	4.30E-03	3.54E-03	4.46E-04	1.14E-03
9/27/2016	3.05E-03	3.20E-03	-5.97E-04	2.85E-04
10/4/2016	-4.00E-04	2.83E-03	1.79E-03	1.71E-03
10/11/2016	-2.86E-03	2.80E-03	-6.70E-04	2.40E-04
10/18/2016	9.57E-03	4.00E-03	4.43E-04	1.14E-03
10/25/2016	-3.00E-03	2.80E-03	1.55E-03	1.59E-03
11/1/2016	5.65E-03	3.47E-03	5.86E-04	1.21E-03
11/8/2016	5.59E-03	3.46E-03	1.76E-03	1.69E-03
11/15/2016	3.32E-04	2.90E-03	5.84E-04	1.20E-03
11/22/2016	3.46E-03	3.25E-03	4.03E-03	2.31E-03
11/29/2016	5.05E-03	3.62E-03	-6.81E-04	2.42E-04
12/6/2016	1.54E-03	3.30E-03	2.73E-03	1.99E-03
12/13/2016	4.30E-03	3.32E-03	5.70E-04	1.18E-03
12/20/2016	1.08E-03	3.17E-03	-9.95E-04	2.05E-04
12/27/2016	1.60E-03	3.23E-03	1.21E-03	1.56E-03
1/3/2017	3.05E-03	3.36E-03	-9.86E-04	2.03E-04

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 241-278H Caustic Extraction

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
3/29/2016	1.44E-03	2.83E-03	2.15E+00	1.45E-01	-5.22E-04	1.05E-03
4/21/2016	2.44E-03	3.70E-03	5.84E-01	4.23E-02	1.07E-03	9.86E-04
9/15/2016	-5.70E-03	2.70E-03	-1.93E-03	2.92E-03	-4.35E-04	4.21E-04

Sample Date	U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
3/29/2016	4.00E-05	2.02E-05	1.17E-05	1.25E-05	3.00E-05	1.74E-05
4/21/2016	1.06E-05	1.26E-05	-5.43E-07	6.04E-07	5.35E-06	1.36E-05
9/15/2016	1.53E-05	8.26E-06	1.45E-06	5.22E-06	8.19E-06	6.53E-06

Sample Date	Pu-238		Pu-239		Am-241	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
3/29/2016	-6.73E-06	6.75E-06	3.35E-06	1.21E-05	2.51E-05	2.25E-05
4/21/2016	2.02E-05	1.61E-05	2.89E-06	1.04E-05	2.16E-05	1.66E-05
9/15/2016	1.25E-06	4.51E-06	7.49E-06	5.32E-06	7.62E-06	6.90E-06

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
3/29/2016	-1.33E-05	9.44E-06	1.59E+00	6.76E-02	6.81E-03	4.62E-03
4/21/2016	0.00E+00	1.33E-05	3.05E-01	1.88E-02	-2.04E-03	5.97E-04
9/15/2016	0.00E+00	4.42E-06	-5.54E-04	1.86E-03	-4.00E-04	1.43E-04

Location: 241-2H Mercury Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
3/24/2016	-7.08E-03	3.94E-03	1.75E-03	3.89E-03	9.54E-04	2.78E-03	4.89E-04	1.20E-03
9/15/2016	-3.51E-04	4.80E-03	4.78E-03	4.44E-03	-3.73E-04	2.60E-03	2.40E-03	1.75E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 241-81H ETP Process Stack

Sample Date	Radionuclide	Conc.	Standard Dev.
12/8/2016	Co-60	-5.38E-03	4.68E-03
12/8/2016	Cs-137	-2.19E-03	4.15E-03
12/8/2016	Sr-89/90	-1.29E-03	1.04E-03
12/8/2016	U-234	1.23E-04	3.92E-05
12/8/2016	U-235	-1.59E-06	1.81E-06
12/8/2016	U-238	9.00E-05	3.28E-05
12/8/2016	Pu-238	-7.11E-06	7.13E-06
12/8/2016	Pu-239	1.07E-05	1.07E-05
12/8/2016	Am-241	7.24E-05	3.30E-05
12/8/2016	Cm-244	-1.17E-06	1.33E-06
12/8/2016	Gross B	2.49E-02	7.99E-03
12/8/2016	Gross A	2.95E-03	3.03E-03

Location: 241-84H ETP Lab Stack

Sample Date	Radionuclide	Conc.	Standard Dev.
12/8/2016	Co-60	-5.78E-03	4.86E-03
12/8/2016	Cs-137	1.46E-05	3.84E-03
12/8/2016	Sr-89/90	1.57E-03	1.39E-03
12/8/2016	U-234	9.92E-05	3.85E-05
12/8/2016	U-235	-1.17E-05	1.01E-05
12/8/2016	U-238	8.81E-05	3.60E-05
12/8/2016	Pu-238	2.12E-05	1.50E-05
12/8/2016	Pu-239	4.57E-05	2.48E-05
12/8/2016	Am-241	8.08E-05	3.24E-05
12/8/2016	Cm-244	-9.03E-06	7.88E-06
12/8/2016	Gross B	4.46E-03	6.43E-03
12/8/2016	Gross A	8.68E-04	2.22E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 250-S Glass Waste Bldg. #1488

Sample Date	Radionuclide	Conc.	Standard Dev.
5/23/2016	Co-60	3.78E-02	4.61E-02
5/23/2016	Cs-137	-5.65E-04	5.45E-02
5/23/2016	Sr-89/90	5.78E-02	2.20E-02
5/23/2016	U-234	6.11E-04	3.17E-04
5/23/2016	U-235	5.78E-04	3.35E-04
5/23/2016	U-238	7.81E-04	3.52E-04
5/23/2016	Pu-238	-1.95E-04	1.44E-04
5/23/2016	Pu-239	4.86E-05	1.75E-04
5/23/2016	Am-241	1.13E-03	4.94E-04
5/23/2016	Cm-244	3.43E-05	1.82E-04
5/23/2016	Gross B	2.18E-01	6.85E-02
5/23/2016	Gross A	-1.55E-02	1.84E-02

Location: 250-S Glass Waste Bldg. #1509

Sample Date	Radionuclide	Conc.	Standard Dev.
5/31/2016	Co-60	-7.27E-02	4.84E-02
5/31/2016	Cs-137	-2.23E-02	3.88E-02
5/31/2016	Sr-89/90	-5.73E-04	1.52E-02
5/31/2016	U-234	6.86E-04	3.39E-04
5/31/2016	U-235	-1.08E-04	1.09E-04
5/31/2016	U-238	3.92E-04	2.28E-04
5/31/2016	Pu-238	-7.86E-05	8.42E-05
5/31/2016	Pu-239	1.18E-04	1.18E-04
5/31/2016	Am-241	2.21E-04	1.91E-04
5/31/2016	Cm-244	1.13E-04	1.29E-04
5/31/2016	Gross B	3.49E-01	6.97E-02
5/31/2016	Gross A	1.17E-02	2.43E-02

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 250-S Glass Waste Bldg. #3928

Sample Date	Radionuclide	Conc.	Standard Dev.
5/9/2016	Co-60	3.05E-02	6.47E-02
5/9/2016	Cs-137	-2.70E-02	6.61E-02
5/9/2016	Sr-89/90	2.13E-03	1.90E-02
5/9/2016	U-234	1.51E-03	5.41E-04
5/9/2016	U-235	2.02E-04	2.02E-04
5/9/2016	U-238	1.63E-03	5.25E-04
5/9/2016	Pu-238	1.53E-04	1.54E-04
5/9/2016	Pu-239	1.53E-04	1.53E-04
5/9/2016	Am-241	1.19E-03	4.86E-04
5/9/2016	Cm-244	-1.35E-04	1.17E-04
5/9/2016	Gross B	3.19E-01	8.42E-02
5/9/2016	Gross A	4.86E-02	3.94E-02

Location: 250-S Glass Waste Bldg. #3940

Sample Date	Radionuclide	Conc.	Standard Dev.
5/16/2016	Co-60	-5.76E-02	7.11E-02
5/16/2016	Cs-137	4.57E-02	7.40E-02
5/16/2016	Sr-89/90	-8.49E-03	2.22E-02
5/16/2016	U-234	1.11E-03	5.71E-04
5/16/2016	U-235	2.29E-04	2.29E-04
5/16/2016	U-238	1.35E-03	5.45E-04
5/16/2016	Pu-238	6.35E-05	2.29E-04
5/16/2016	Pu-239	5.62E-04	3.33E-04
5/16/2016	Am-241	1.12E-03	5.18E-04
5/16/2016	Cm-244	1.98E-04	1.99E-04
5/16/2016	Gross B	2.70E-01	9.13E-02
5/16/2016	Gross A	1.82E-02	3.70E-02

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 251-S Glass Waste Bldg. 2 Vault A

Sample Date	Radionuclide	Conc.	Standard Dev.
5/31/2016	Co-60	-3.51E-03	2.31E-03
5/31/2016	Cs-137	-3.59E-03	2.45E-03
5/31/2016	Sr-89/90	7.05E-04	8.04E-04
5/31/2016	U-234	3.35E-05	1.71E-05
5/31/2016	U-235	1.48E-05	1.05E-05
5/31/2016	U-238	3.19E-05	1.53E-05
5/31/2016	Pu-238	-2.13E-06	8.88E-06
5/31/2016	Pu-239	-2.13E-06	8.76E-06
5/31/2016	Am-241	3.00E-05	1.48E-05
5/31/2016	Cm-244	-6.97E-07	7.78E-07
5/31/2016	Gross B	2.41E-02	3.82E-03
5/31/2016	Gross A	1.20E-03	1.36E-03

Location: 251-S Glass Waste Bldg. 2 Vault B

Sample Date	Radionuclide	Conc.	Standard Dev.
5/23/2016	Co-60	-2.21E-03	2.86E-03
5/23/2016	Cs-137	-8.41E-04	2.97E-03
5/23/2016	Sr-89/90	-2.97E-04	7.74E-04
5/23/2016	U-234	5.11E-05	1.95E-05
5/23/2016	U-235	0.00E+00	9.21E-06
5/23/2016	U-238	6.92E-06	7.32E-06
5/23/2016	Pu-238	9.46E-06	1.11E-05
5/23/2016	Pu-239	6.73E-06	7.15E-06
5/23/2016	Am-241	8.92E-06	1.48E-05
5/23/2016	Cm-244	7.11E-06	7.12E-06
5/23/2016	Gross B	1.81E-02	3.89E-03
5/23/2016	Gross A	2.11E-03	1.71E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 251-S Glass Waste Bldg. 2 Vault C

Sample Date	Radionuclide	Conc.	Standard Dev.
5/16/2016	Co-60	5.32E-03	3.52E-03
5/16/2016	Cs-137	3.68E-03	3.16E-03
5/16/2016	Sr-89/90	5.03E-04	8.59E-04
5/16/2016	U-234	1.72E-05	1.38E-05
5/16/2016	U-235	-6.08E-06	6.10E-06
5/16/2016	U-238	3.16E-05	1.74E-05
5/16/2016	Pu-238	0.00E+00	9.44E-06
5/16/2016	Pu-239	-8.19E-06	1.20E-05
5/16/2016	Am-241	4.27E-06	8.33E-06
5/16/2016	Cm-244	0.00E+00	9.21E-06
5/16/2016	Gross B	2.00E-02	3.96E-03
5/16/2016	Gross A	-6.49E-05	1.18E-03

Location: 251-S Glass Waste Bldg. 2 Vault D

Sample Date	Radionuclide	Conc.	Standard Dev.
5/9/2016	Co-60	1.75E-03	1.95E-03
5/9/2016	Cs-137	8.22E-04	2.97E-03
5/9/2016	Sr-89/90	4.00E-04	6.86E-04
5/9/2016	U-234	1.87E-05	1.19E-05
5/9/2016	U-235	1.38E-05	9.82E-06
5/9/2016	U-238	3.89E-05	1.50E-05
5/9/2016	Pu-238	-1.82E-06	7.52E-06
5/9/2016	Pu-239	-9.38E-06	9.13E-06
5/9/2016	Am-241	1.56E-05	1.11E-05
5/9/2016	Cm-244	0.00E+00	7.25E-06
5/9/2016	Gross B	9.78E-03	2.81E-03
5/9/2016	Gross A	-6.27E-04	7.40E-04

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 291-F Stack Isokinetic

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-3.76E-04	8.80E-03	-1.47E-02	9.63E-03	1.51E-03	2.18E-03
1/18/2016	-1.14E-03	7.24E-03	1.91E-03	9.00E-03	8.97E-04	2.49E-03
1/25/2016	-5.24E-03	7.71E-03	-4.78E-03	9.89E-03	2.44E-03	2.42E-03
2/1/2016	3.03E-03	7.46E-03	-7.51E-03	9.09E-03	-1.26E-03	2.41E-03
2/8/2016	1.22E-02	7.22E-03	3.32E-03	8.72E-03	5.81E-03	2.92E-03
2/15/2016	4.35E-03	1.05E-02	-1.96E-03	1.11E-02	6.78E-03	3.43E-03
2/22/2016	-3.59E-03	5.49E-03	-5.03E-03	9.93E-03	2.63E-03	2.00E-03
2/29/2016	-1.42E-02	7.68E-03	-2.55E-03	9.09E-03	-2.81E-03	2.12E-03
3/7/2016	-8.49E-03	7.48E-03	9.84E-03	1.01E-02	-5.57E-04	1.48E-03
3/14/2016	7.38E-03	8.88E-03	6.84E-03	1.07E-02	4.32E-04	2.95E-03
3/21/2016	-1.06E-02	9.44E-03	-1.88E-02	1.00E-02	3.03E-03	2.54E-03
3/28/2016	3.78E-04	7.30E-03	-3.97E-03	7.72E-03	-1.30E-03	2.31E-03
4/4/2016	-1.20E-03	1.22E-02	-6.00E-03	9.21E-03	-2.54E-03	2.20E-03
4/11/2016	-1.38E-03	8.72E-03	-7.57E-03	9.09E-03	8.27E-04	2.59E-03
4/18/2016	-3.46E-03	8.96E-03	1.40E-03	9.74E-03	-9.86E-05	2.63E-03
4/25/2016	-1.19E-02	9.28E-03	-8.05E-03	9.48E-03	3.30E-04	2.57E-03
5/2/2016	1.33E-02	1.09E-02	1.15E-02	1.11E-02	-2.92E-04	2.10E-03
5/9/2016	1.27E-02	9.13E-03	-2.36E-02	1.23E-02	2.25E-03	2.42E-03
5/16/2016	-5.57E-03	8.76E-03	-2.46E-04	1.01E-02	-2.06E-04	2.96E-03
5/23/2016	4.62E-03	8.76E-03	9.32E-03	6.56E-03	-3.43E-03	2.21E-03
5/25/2016	2.97E-02	3.43E-02	-4.95E-02	3.80E-02	4.08E-03	9.74E-03
5/30/2016	2.38E-02	1.44E-02	1.80E-02	1.61E-02	8.62E-05	4.40E-03
5/31/2016	1.25E-01	7.86E-02	2.31E-02	7.91E-02	3.68E-04	1.88E-02
11/14/2016	1.49E-02	9.24E-03	1.45E-02	9.56E-03	3.62E-02	5.23E-03
11/21/2016	-8.14E-03	9.71E-03	1.59E-02	8.88E-03	2.48E-03	3.06E-03
11/30/2016	-2.14E-02	8.92E-03	-2.84E-03	8.11E-03	1.64E-03	2.41E-03
12/5/2016	1.57E-02	1.13E-02	2.16E-01	3.05E-02	1.42E-01	1.31E-02
12/12/2016	-4.57E-04	8.67E-03	1.18E-01	2.25E-02	2.73E-01	1.83E-02
12/19/2016	-5.41E-04	6.53E-03	1.00E-01	2.02E-02	1.45E-01	9.63E-03
12/26/2016	1.06E-02	9.71E-03	1.58E-01	2.48E-02	1.92E-01	1.22E-02
1/2/2017	-5.65E-03	8.23E-03	8.81E-02	1.68E-02	9.08E-02	7.55E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 291-F Stack Isokinetic (continued)

Sample Date	U-234		U-235		Np-237	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	4.84E-04	1.05E-04	0.00E+00	2.53E-05	-1.66E-06	2.28E-06
1/18/2016	2.55E-04	9.13E-05	-9.65E-06	3.99E-05	-2.52E-05	3.53E-05
1/25/2016	3.32E-04	9.00E-05	9.22E-06	3.33E-05	-5.51E-05	3.07E-05
2/1/2016	1.16E-04	5.25E-05	-1.59E-06	1.79E-06	-1.53E-05	1.50E-05
2/8/2016	8.00E-05	4.04E-05	4.78E-05	3.52E-05	2.29E-05	2.34E-05
2/15/2016	3.41E-03	3.69E-04	1.97E-04	8.72E-05	3.32E-05	3.96E-05
2/22/2016	2.53E-04	7.84E-05	0.00E+00	2.70E-05	-4.70E-05	2.76E-05
2/29/2016	9.19E-04	1.51E-04	1.28E-04	5.77E-05	-2.31E-06	3.17E-06
3/7/2016	1.47E-04	6.72E-05	-3.68E-05	2.60E-05	3.24E-05	3.81E-05
3/14/2016	5.05E-04	1.27E-04	-2.81E-06	3.15E-06	3.92E-05	4.59E-05
3/21/2016	3.11E-05	3.83E-05	2.78E-05	3.05E-05	8.86E-06	3.15E-05
3/28/2016	3.30E-04	8.88E-05	4.89E-05	3.48E-05	1.59E-05	2.78E-05
4/4/2016	1.59E-04	6.10E-05	2.81E-05	2.81E-05	-2.44E-05	3.74E-05
4/11/2016	2.51E-04	7.73E-05	0.00E+00	2.68E-05	7.43E-05	4.31E-05
4/18/2016	1.01E-04	5.98E-05	-2.78E-06	3.08E-06	5.00E-05	3.54E-05
4/25/2016	1.69E-04	7.25E-05	1.64E-04	6.97E-05	1.54E-05	3.93E-05
5/2/2016	1.13E-04	5.87E-05	9.22E-06	3.33E-05	-5.97E-05	4.15E-05
5/9/2016	9.05E-06	4.02E-05	2.86E-05	2.86E-05	-2.52E-05	3.47E-05
5/16/2016	2.48E-04	7.66E-05	6.43E-06	3.38E-05	-9.14E-06	3.24E-05
5/23/2016	6.84E-05	4.37E-05	6.11E-06	3.07E-05	-2.89E-05	1.96E-05
5/25/2016	-6.05E-05	6.06E-05	1.12E-04	1.12E-04	1.01E-04	2.10E-04
5/30/2016	3.14E-04	1.12E-04	6.43E-05	7.57E-05	1.39E-05	9.09E-05
5/31/2016	1.49E-03	5.75E-04	4.24E-04	3.02E-04	1.70E-04	1.74E-04
11/14/2016	1.05E-02	4.18E-04	7.38E-04	7.78E-05	2.06E-05	2.07E-05
11/21/2016	7.11E-04	1.39E-04	1.81E-05	4.72E-05	-5.65E-05	2.86E-05
11/30/2016	3.65E-04	8.67E-05	-1.61E-05	1.58E-05	0.00E+00	2.43E-05
12/5/2016	2.44E-01	1.62E-02	1.59E-02	1.47E-03	2.18E-04	1.13E-04
12/12/2016	1.27E-01	8.42E-03	9.35E-03	8.80E-04	1.88E-04	6.85E-05
12/19/2016	7.54E-02	5.01E-03	5.43E-03	5.58E-04	6.46E-05	3.76E-05
12/26/2016	1.45E-01	9.52E-03	9.30E-03	8.54E-04	8.62E-05	5.75E-05
1/2/2017	7.38E-02	4.77E-03	4.49E-03	4.59E-04	5.62E-05	4.67E-05

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 291-F Stack Isokinetic (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	1.02E-03	1.56E-04	8.92E-05	4.87E-05	4.73E-04	1.06E-04
1/18/2016	2.57E-04	7.93E-05	1.21E-04	7.24E-05	1.75E-04	7.30E-05
1/25/2016	4.46E-04	1.04E-04	-1.24E-06	1.77E-06	1.31E-04	5.95E-05
2/1/2016	9.30E-05	4.67E-05	5.05E-05	4.15E-05	7.27E-05	4.73E-05
2/8/2016	2.66E-05	3.13E-05	6.51E-06	2.78E-05	-1.65E-05	1.54E-05
2/15/2016	9.00E-03	7.22E-04	2.07E-04	7.88E-05	3.14E-03	3.66E-04
2/22/2016	2.68E-04	8.76E-05	9.08E-05	4.79E-05	1.08E-04	6.19E-05
2/29/2016	2.48E-03	2.70E-04	1.47E-04	6.04E-05	8.38E-04	1.46E-04
3/7/2016	2.44E-04	7.52E-05	7.00E-05	4.28E-05	4.76E-05	3.45E-05
3/14/2016	2.65E-04	9.13E-05	2.89E-05	2.95E-05	6.30E-05	5.52E-05
3/21/2016	1.20E-04	5.53E-05	4.38E-05	5.20E-05	1.28E-04	6.09E-05
3/28/2016	3.24E-04	8.50E-05	5.03E-04	1.19E-04	1.65E-04	6.38E-05
4/4/2016	1.89E-04	7.04E-05	-2.38E-06	3.35E-06	3.00E-05	3.82E-05
4/11/2016	1.67E-04	6.68E-05	-2.42E-06	3.42E-06	1.45E-04	6.18E-05
4/18/2016	1.12E-04	5.04E-05	5.76E-05	4.61E-05	1.24E-04	5.57E-05
4/25/2016	1.88E-04	7.01E-05	4.57E-05	3.25E-05	7.62E-06	5.00E-05
5/2/2016	5.05E-05	4.19E-05	7.76E-05	4.48E-05	-1.84E-06	2.65E-06
5/9/2016	1.37E-05	3.94E-05	2.17E-05	2.18E-05	1.99E-05	2.21E-05
5/16/2016	1.28E-04	6.37E-05	4.03E-05	3.54E-05	1.16E-04	5.31E-05
5/23/2016	2.19E-04	7.49E-05	-5.49E-06	7.86E-06	1.44E-04	5.57E-05
5/25/2016	4.54E-04	2.04E-04	2.97E-04	1.75E-04	2.48E-03	5.43E-04
5/30/2016	6.38E-04	1.67E-04	1.37E-04	8.76E-05	3.22E-04	1.43E-04
5/31/2016	1.82E-03	6.28E-04	2.19E-04	2.70E-04	7.32E-04	4.06E-04
11/14/2016	1.52E-02	5.49E-04	1.87E-04	6.89E-05	4.59E-03	4.70E-04
11/21/2016	5.46E-04	1.18E-04	8.76E-05	5.04E-05	6.76E-04	1.34E-04
11/30/2016	4.22E-04	9.32E-05	3.68E-05	2.90E-05	7.00E-04	1.34E-04
12/5/2016	3.62E-01	2.28E-02	2.47E-03	3.64E-04	1.69E-01	1.38E-02
12/12/2016	1.89E-01	1.18E-02	1.68E-03	2.39E-04	6.49E-02	5.22E-03
12/19/2016	1.22E-01	7.61E-03	7.11E-04	1.37E-04	5.00E-02	3.99E-03
12/26/2016	2.11E-01	1.30E-02	1.41E-03	2.15E-04	6.86E-02	5.58E-03
1/2/2017	1.12E-01	6.78E-03	9.78E-04	1.63E-04	4.89E-02	3.95E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 291-F Stack Isokinetic (continued)

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-3.38E-07	3.77E-07	8.62E-05	4.34E-05	1.26E-02	1.32E-02	7.70E-04	4.49E-03
1/18/2016	4.62E-05	3.58E-05	2.45E-05	2.46E-05	-4.92E-03	1.16E-02	1.20E-03	5.18E-03
1/25/2016	4.32E-05	3.34E-05	7.65E-06	2.76E-05	1.43E-02	1.36E-02	5.95E-03	6.95E-03
2/1/2016	4.27E-05	3.46E-05	-1.61E-06	1.81E-06	8.46E-03	1.18E-02	-3.32E-03	1.46E-03
2/8/2016	2.78E-06	2.80E-05	-1.58E-06	1.78E-06	3.11E-03	1.11E-02	1.05E-03	4.55E-03
2/15/2016	5.03E-04	1.20E-04	1.99E-04	7.24E-05	2.26E-02	1.50E-02	2.09E-02	1.12E-02
2/22/2016	1.18E-04	5.32E-05	2.33E-05	2.33E-05	-5.65E-03	1.24E-02	8.68E-04	4.88E-03
2/29/2016	3.16E-04	8.63E-05	-3.32E-06	3.72E-06	2.69E-03	1.25E-02	9.22E-03	7.45E-03
3/7/2016	2.14E-05	2.15E-05	0.00E+00	2.68E-05	2.38E-02	1.36E-02	-2.84E-03	1.21E-03
3/14/2016	6.03E-05	4.28E-05	-1.99E-05	1.99E-05	-5.32E-03	1.55E-02	4.35E-05	6.19E-03
3/21/2016	2.50E-05	2.51E-05	0.00E+00	3.07E-05	4.54E-02	1.71E-02	-4.59E-03	1.97E-03
3/28/2016	6.35E-05	5.28E-05	0.00E+00	2.59E-05	1.40E-02	1.24E-02	1.86E-03	4.56E-03
4/4/2016	-1.22E-06	1.36E-06	-1.52E-05	1.53E-05	2.03E-02	1.50E-02	2.89E-05	5.04E-03
4/11/2016	6.95E-05	4.13E-05	4.65E-05	3.30E-05	9.81E-03	1.42E-02	-4.70E-03	2.01E-03
4/18/2016	-1.66E-05	1.69E-05	-4.27E-07	4.78E-07	7.92E-03	1.32E-02	-4.86E-03	1.84E-03
4/25/2016	-8.70E-06	3.60E-05	2.54E-05	2.59E-05	-8.35E-03	1.17E-02	4.54E-03	6.81E-03
5/2/2016	-9.08E-07	1.01E-06	0.00E+00	2.81E-05	6.78E-03	1.28E-02	6.86E-03	6.91E-03
5/9/2016	2.51E-05	2.61E-05	-1.71E-05	1.72E-05	2.37E-02	1.08E-02	-1.48E-04	3.97E-03
5/16/2016	2.18E-05	2.36E-05	0.00E+00	2.78E-05	3.46E-02	1.15E-02	-1.60E-04	3.81E-03
5/23/2016	1.87E-05	2.02E-05	1.98E-05	1.98E-05	1.45E-03	7.61E-03	-2.05E-03	2.49E-03
5/25/2016	2.89E-05	1.04E-04	-1.14E-04	8.09E-05	1.07E-01	4.34E-02	9.00E-03	1.82E-02
5/30/2016	3.89E-05	3.88E-05	0.00E+00	4.50E-05	-4.62E-04	1.53E-02	-1.80E-04	6.56E-03
5/31/2016	6.59E-05	2.39E-04	-1.31E-04	1.31E-04	1.91E-01	1.15E-01	5.73E-03	4.63E-02
11/14/2016	4.08E-03	2.09E-04	1.15E-04	2.95E-05	1.47E-01	2.31E-02	5.51E-02	1.61E-02
11/21/2016	7.24E-05	4.61E-05	4.27E-05	3.06E-05	1.56E-02	1.36E-02	1.92E-02	9.78E-03
11/30/2016	1.01E-04	5.05E-05	3.49E-05	2.50E-05	9.43E-03	1.08E-02	1.43E-03	3.66E-03
12/5/2016	7.14E-02	4.56E-03	2.64E-03	3.32E-04	8.89E-01	6.32E-02	9.08E-01	7.81E-02
12/12/2016	2.95E-02	2.14E-03	1.29E-03	2.27E-04	8.70E-01	5.11E-02	3.14E-01	3.93E-02
12/19/2016	1.74E-02	1.23E-03	7.68E-04	1.40E-04	5.68E-01	4.05E-02	2.95E-01	3.61E-02
12/26/2016	1.86E-02	1.31E-03	7.59E-04	1.43E-04	1.01E+00	5.41E-02	5.54E-01	4.98E-02
1/2/2017	1.29E-02	9.52E-04	4.41E-04	1.02E-04	4.89E-01	3.74E-02	2.70E-01	3.34E-02

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 291-H Stack Isokinetic

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/7/2016	4.95E-03	4.58E-03	-2.45E-03	3.59E-03	2.42E-03	1.16E-03
1/14/2016	3.81E-03	4.50E-03	4.46E-03	4.61E-03	4.41E-03	1.42E-03
1/21/2016	9.46E-04	4.84E-03	-4.86E-04	4.08E-03	3.35E-03	1.30E-03
1/29/2016	6.68E-03	3.70E-03	2.73E-03	4.01E-03	5.62E-03	1.38E-03
2/5/2016	-9.38E-04	3.79E-03	7.92E-03	3.91E-03	1.23E-03	1.39E-03
2/11/2016	-4.38E-03	5.05E-03	-2.01E-03	5.40E-03	6.43E-03	2.02E-03
2/18/2016	4.30E-03	3.57E-03	1.05E-02	5.43E-03	4.65E-03	1.61E-03
2/25/2016	-6.08E-04	3.85E-03	5.22E-03	5.05E-03	3.41E-03	1.08E-03
3/3/2016	7.97E-03	2.86E-03	4.43E-03	4.05E-03	4.51E-03	1.55E-03
3/10/2016	5.62E-03	4.28E-03	3.62E-03	4.80E-03	2.03E-03	9.28E-04
3/17/2016	4.62E-03	3.48E-03	4.97E-03	4.98E-03	5.97E-04	1.20E-03
3/24/2016	-1.58E-03	4.67E-03	9.43E-03	4.67E-03	7.24E-04	1.11E-03
3/31/2016	-2.57E-03	4.04E-03	-3.24E-03	5.49E-03	4.68E-03	1.60E-03
4/7/2016	-3.35E-04	4.36E-03	5.08E-03	3.97E-03	4.68E-04	1.14E-03
4/14/2016	1.24E-03	3.20E-03	-3.65E-03	4.19E-03	6.11E-04	1.08E-03
4/21/2016	-6.81E-03	4.16E-03	1.93E-03	3.62E-03	1.22E-04	1.26E-03
4/28/2016	-2.76E-03	3.54E-03	-2.50E-03	4.59E-03	2.42E-03	1.34E-03
5/5/2016	1.65E-03	2.99E-03	1.13E-03	4.26E-03	-1.77E-03	8.11E-04
5/12/2016	6.00E-04	4.25E-03	-5.27E-03	5.02E-03	4.11E-04	9.74E-04
5/19/2016	3.46E-03	3.94E-03	-5.14E-03	4.37E-03	8.51E-05	1.31E-03
5/26/2017	7.24E-04	3.95E-03	1.88E-01	1.78E-02	9.84E-02	6.89E-03
6/2/2016	4.32E-03	4.02E-03	2.16E-04	4.56E-03	1.55E-03	1.26E-03
6/9/2016	1.84E-04	3.08E-03	1.05E-02	4.98E-03	6.43E-04	1.11E-03
6/16/2016	-1.52E-03	4.63E-03	-8.78E-04	4.70E-03	8.95E-04	1.22E-03
6/23/2016	-1.54E-03	5.44E-03	7.19E-03	5.03E-03	1.54E-03	1.80E-03
6/30/2016	6.54E-03	3.53E-03	-2.64E-03	3.76E-03	-1.79E-04	1.50E-03
7/7/2016	3.35E-03	3.66E-03	5.16E-03	4.89E-03	-7.76E-04	1.21E-03
7/14/2016	1.67E-03	3.98E-03	-4.51E-03	3.88E-03	1.04E-03	1.29E-03
7/21/2016	-7.70E-03	4.87E-03	7.78E-03	3.78E-03	2.49E-03	1.10E-03
7/28/2016	-3.84E-03	3.49E-03	-4.81E-03	4.94E-03	-6.65E-04	9.04E-04
8/4/2016	-2.24E-03	3.97E-03	9.27E-03	5.98E-03	1.06E-02	2.07E-03
8/11/2016	1.38E-03	4.20E-03	-7.19E-05	4.61E-03	5.46E-03	1.71E-03
8/18/2016	-1.03E-04	4.38E-03	8.38E-03	4.44E-03	6.95E-03	1.74E-03
8/25/2016	-1.06E-03	4.28E-03	3.19E-03	5.01E-03	3.59E-03	1.58E-03
9/1/2016	-5.84E-03	4.42E-03	2.03E-02	6.90E-03	5.00E-03	1.59E-03
9/8/2016	-5.76E-03	4.04E-03	-7.65E-03	4.84E-03	6.00E-03	1.68E-03
9/15/2016	-3.08E-03	4.62E-03	1.10E-02	5.53E-03	3.41E-03	1.59E-03
9/22/2016	1.37E-03	3.72E-03	3.95E-03	4.65E-03	2.30E-03	1.51E-03

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
9/29/2016	3.35E-04	5.06E-03	7.73E-03	4.91E-03	7.78E-03	1.87E-03
10/6/2016	5.14E-03	4.35E-03	3.86E-03	4.92E-03	3.95E-03	1.59E-03
10/13/2016	3.14E-03	4.51E-03	4.92E-03	5.36E-03	8.32E-03	1.89E-03
10/20/2016	9.11E-04	3.82E-03	3.46E-03	3.92E-03	1.30E-03	1.34E-03
10/27/2016	-8.08E-03	3.74E-03	-3.78E-03	5.90E-03	2.69E-03	1.48E-03
11/3/2016	1.62E-03	4.69E-03	6.92E-03	5.12E-03	1.41E-03	1.45E-03
11/10/2016	-2.00E-03	3.91E-03	1.84E-02	8.80E-03	1.39E-02	2.20E-03
11/17/2016	2.06E-03	3.96E-03	1.94E-02	5.68E-03	1.82E-02	2.72E-03
11/24/2016	-3.76E-03	4.65E-03	6.05E-03	4.64E-03	1.40E-03	1.45E-03
12/1/2016	-8.00E-03	4.20E-03	1.34E-02	5.18E-03	6.84E-03	1.83E-03
12/8/2016	6.32E-03	4.20E-03	1.04E-02	5.43E-03	5.84E-03	1.73E-03
12/15/2016	3.35E-03	4.05E-03	1.55E-02	5.74E-03	1.43E-02	2.32E-03
12/22/2016	-3.19E-04	3.44E-03	1.76E-02	6.34E-03	1.98E-02	2.00E-03
12/29/2016	-4.97E-03	5.14E-03	1.83E-02	5.81E-03	1.02E-02	1.58E-03

Location: 291-H Stack Isokinetic (continued)

Sample Date	U-234		U-235		Np-237	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/7/2016	5.97E-05	2.47E-05	1.23E-05	1.23E-05	1.40E-05	1.75E-05
1/14/2016	1.02E-04	3.30E-05	0.00E+00	1.23E-05	1.01E-05	1.11E-05
1/21/2016	6.03E-05	3.20E-05	2.55E-05	1.80E-05	2.86E-06	1.39E-05
1/29/2016	6.78E-05	2.81E-05	3.49E-05	2.02E-05	2.21E-05	1.85E-05
2/15/2016	7.08E-05	2.72E-05	-7.81E-07	8.63E-07	-8.03E-06	3.23E-05
2/11/2016	1.06E-04	3.60E-05	-9.19E-07	1.01E-06	4.27E-06	1.62E-05
2/18/2016	1.15E-04	2.59E-05	5.43E-05	2.08E-05	1.10E-05	7.78E-06
2/25/2016	3.51E-05	2.27E-05	1.32E-05	1.32E-05	-2.35E-05	1.37E-05
3/3/2016	5.92E-05	2.95E-05	1.29E-05	1.29E-05	-8.62E-06	2.19E-05
3/10/2016	9.89E-03	7.04E-04	3.70E-04	7.81E-05	-1.35E-05	9.59E-06
3/17/2016	2.86E-04	6.77E-05	1.53E-05	1.66E-05	0.00E+00	1.56E-05
3/24/2016	8.92E-05	3.24E-05	1.28E-05	1.40E-05	-3.73E-06	2.55E-05
3/31/2016	1.03E-04	3.34E-05	1.70E-05	2.00E-05	-3.73E-06	1.55E-05
4/7/2016	5.30E-05	3.08E-05	2.18E-05	2.59E-05	3.65E-06	1.31E-05
4/14/2016	3.51E-05	2.34E-05	-3.95E-06	1.63E-05	3.22E-06	1.16E-05
4/21/2016	7.92E-05	3.29E-05	1.23E-05	1.38E-05	4.11E-06	1.51E-05
4/28/2016	6.24E-05	2.82E-05	-2.62E-05	1.44E-05	1.61E-05	1.89E-05
5/5/2016	5.65E-05	3.08E-05	-8.11E-06	8.17E-06	2.05E-05	2.53E-05
5/12/2016	6.24E-05	3.45E-05	2.54E-05	1.80E-05	5.03E-06	2.57E-05
5/19/2016	3.11E-05	2.63E-05	1.59E-05	2.03E-05	1.87E-05	2.29E-05
5/26/2016	9.27E-05	3.28E-05	3.57E-05	2.16E-05	2.68E-06	1.16E-05
6/2/2016	8.22E-05	2.95E-05	1.27E-05	1.27E-05	0.00E+00	1.38E-05

Sample Date	U-234		U-235		Np-237	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
6/9/2016	1.10E-04	3.76E-05	1.70E-05	1.99E-05	0.00E+00	1.23E-05
6/16/2016	8.35E-05	2.82E-05	0.00E+00	1.11E-05	1.10E-05	1.12E-05
6/23/2016	1.18E-04	3.92E-05	1.41E-05	1.41E-05	-1.74E-05	1.24E-05
6/30/2016	8.11E-05	3.34E-05	0.00E+00	1.22E-05	-2.26E-05	1.31E-05
7/7/2016	8.86E-05	3.31E-05	1.23E-05	1.32E-05	1.10E-05	1.12E-05
7/14/2016	6.24E-05	2.58E-05	1.21E-05	1.30E-05	-2.58E-05	1.98E-05
7/21/2016	4.00E-05	2.67E-05	0.00E+00	1.34E-05	3.43E-06	1.25E-05
7/28/2016	8.05E-05	2.90E-05	4.14E-06	1.50E-05	2.73E-05	2.18E-05
8/4/2016	2.38E-05	1.90E-05	-8.38E-06	8.40E-06	1.98E-05	1.51E-05
8/11/2016	9.38E-05	3.61E-05	-1.78E-05	1.26E-05	1.49E-05	1.90E-05
8/18/2016	5.92E-05	2.46E-05	-6.11E-07	6.75E-07	7.73E-06	1.97E-05
8/25/2016	3.73E-05	2.40E-05	-5.27E-06	1.92E-05	1.16E-05	1.16E-05
9/1/2016	1.22E-04	3.88E-05	1.26E-05	1.34E-05	1.96E-05	2.32E-05
9/8/2016	8.51E-05	3.17E-05	-4.86E-06	1.73E-05	1.04E-05	1.05E-05
9/15/2016	5.76E-05	2.76E-05	1.33E-05	1.33E-05	-1.27E-05	9.32E-06
9/22/2016	4.32E-05	2.18E-05	0.00E+00	1.19E-05	1.03E-05	1.04E-05
9/29/2016	6.08E-05	2.96E-05	-1.08E-05	9.52E-06	3.11E-05	2.58E-05
10/6/2016	6.84E-05	2.85E-05	-1.37E-06	1.53E-06	-8.89E-06	8.96E-06
10/13/2016	1.15E-04	3.71E-05	1.40E-05	1.43E-05	1.10E-05	1.11E-05
10/20/2016	9.30E-05	3.47E-05	-2.28E-07	2.56E-07	-3.73E-06	1.53E-05
10/16/2016	1.21E-04	3.96E-05	1.16E-05	1.30E-05	-1.52E-05	1.08E-05
11/3/2016	1.41E-04	4.14E-05	-1.00E-05	8.80E-06	-6.81E-06	6.84E-06
11/10/2016	1.14E-04	3.79E-05	1.36E-05	1.37E-05	3.89E-06	1.40E-05
11/17/2016	3.05E-05	2.59E-05	-1.71E-05	1.20E-05	2.42E-05	1.72E-05
11/24/2016	6.97E-05	3.66E-05	2.25E-05	2.69E-05	-4.00E-06	1.65E-05
12/1/2016	1.05E-04	3.41E-05	-2.07E-07	2.32E-07	1.09E-05	1.10E-05
12/8/2016	1.85E-04	4.64E-05	2.62E-05	1.92E-05	1.03E-05	1.05E-05
12/15/2016	2.25E-04	5.77E-05	-6.46E-07	7.43E-07	1.26E-05	1.29E-05
12/22/2016	2.78E-04	6.36E-05	5.46E-06	1.97E-05	5.65E-05	2.57E-05
12/29/2016	1.34E-04	3.96E-05	4.59E-06	1.66E-05	1.02E-04	3.60E-05

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 291-H Stack Isokinetic (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/7/2016	6.95E-05	2.66E-05	1.36E-03	1.59E-04	8.62E-04	1.19E-04
1/14/2016	9.19E-05	3.12E-05	2.95E-03	2.82E-04	1.48E-03	1.68E-04
1/21/2016	4.11E-05	2.08E-05	2.16E-03	2.26E-04	6.38E-04	9.74E-05
1/29/2016	5.32E-05	2.67E-05	5.65E-03	4.82E-04	2.08E-03	2.10E-04
2/5/2016	6.73E-05	3.03E-05	4.19E-04	1.07E-04	2.16E-04	7.81E-05
2/11/2016	1.14E-04	4.12E-05	1.98E-03	2.22E-04	8.68E-04	1.26E-04
2/18/2016	1.28E-04	2.82E-05	7.81E-03	4.64E-04	3.46E-03	2.29E-04
2/25/2016	7.43E-05	2.86E-05	8.30E-04	1.18E-04	3.65E-04	7.20E-05
3/3/2016	4.16E-05	2.10E-05	8.57E-04	1.18E-04	1.92E-04	5.02E-05
3/10/2016	1.62E-04	4.33E-05	8.30E-04	1.10E-04	4.03E-04	7.33E-05
3/17/2016	2.97E-05	2.48E-05	4.84E-04	8.28E-05	3.76E-04	7.37E-05
3/24/2016	1.11E-04	3.64E-05	1.04E-03	1.31E-04	6.86E-04	1.05E-04
3/31/2016	7.22E-05	2.77E-05	8.81E-04	1.21E-04	1.07E-03	1.35E-04
4/7/2016	2.47E-05	1.97E-05	6.81E-04	1.02E-04	9.32E-04	1.25E-04
4/14/2016	1.60E-05	1.89E-05	3.84E-04	6.81E-05	7.43E-04	1.02E-04
4/21/2016	7.70E-05	2.95E-05	6.92E-04	1.08E-04	1.31E-03	1.61E-04
4/28/2016	8.41E-05	3.14E-05	9.05E-04	1.26E-04	1.72E-03	1.95E-04
5/5/2016	8.78E-05	3.01E-05	6.84E-04	9.78E-05	9.62E-04	1.24E-04
5/12/2016	4.38E-05	2.42E-05	1.32E-03	1.62E-04	1.62E-03	1.89E-04
5/19/2016	4.51E-05	2.44E-05	1.01E-03	1.36E-04	1.56E-03	1.81E-04
5/26/2016	4.97E-05	2.24E-05	1.03E-03	1.28E-04	3.11E-03	2.89E-04
6/2/2016	2.05E-05	1.45E-05	9.00E-05	3.86E-05	2.35E-04	5.57E-05
6/9/2016	6.51E-05	2.83E-05	5.76E-04	9.09E-05	1.84E-04	4.98E-05
6/16/2016	8.27E-05	2.83E-05	9.16E-05	3.48E-05	3.24E-05	1.94E-05
6/23/2016	9.03E-05	3.30E-05	2.32E-04	5.75E-05	2.92E-04	6.85E-05
6/30/2016	4.46E-05	2.49E-05	3.92E-04	7.25E-05	1.78E-04	4.70E-05
7/7/2016	2.84E-05	2.35E-05	9.97E-05	3.38E-05	1.33E-04	3.95E-05
7/14/2016	9.35E-05	3.16E-05	4.14E-04	7.35E-05	1.33E-03	1.58E-04
7/21/2016	4.38E-05	2.19E-05	2.86E-04	5.82E-05	1.17E-03	1.41E-04
7/28/2016	5.03E-05	2.92E-05	2.78E-04	6.06E-05	1.62E-04	4.53E-05
8/4/2016	8.89E-05	3.16E-05	2.68E-04	5.69E-05	1.75E-04	4.47E-05
8/11/2016	5.49E-05	2.82E-05	2.73E-04	6.13E-05	3.57E-04	7.08E-05
8/18/2016	4.95E-05	2.23E-05	2.56E-04	5.98E-05	7.24E-05	3.19E-05
8/25/2016	6.03E-05	2.89E-05	4.92E-04	8.53E-05	3.14E-04	6.92E-05
9/1/2016	1.22E-04	3.88E-05	3.51E-04	7.12E-05	2.09E-04	5.18E-05
9/8/2016	6.41E-05	2.81E-05	4.95E-04	8.12E-05	5.19E-04	8.59E-05
9/15/2016	1.08E-04	3.46E-05	3.00E-04	6.12E-05	1.22E-03	1.41E-04
9/22/2016	7.57E-05	2.90E-05	2.31E-04	5.48E-05	1.91E-04	4.89E-05
9/29/2016	9.19E-05	3.30E-05	3.27E-04	7.06E-05	2.64E-04	5.90E-05

Sample Date	U-238		Pu-238		Pu-239	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
10/6/2016	4.57E-05	2.31E-05	1.65E-03	2.02E-04	1.58E-04	5.33E-05
10/13/2016	5.70E-05	2.60E-05	9.32E-04	1.24E-04	2.95E-04	6.11E-05
10/20/2016	8.11E-05	3.28E-05	1.77E-04	4.59E-05	1.12E-03	1.41E-04
10/27/2016	5.54E-05	2.65E-05	7.05E-04	1.07E-04	1.87E-04	5.17E-05
11/3/2016	4.59E-05	2.48E-05	4.65E-05	2.70E-05	-1.80E-05	1.69E-05
11/10/2016	5.51E-05	2.48E-05	5.86E-04	9.59E-05	5.03E-04	8.80E-05
11/17/2016	5.14E-05	2.31E-05	1.66E-03	1.96E-04	3.05E-03	3.09E-04
11/24/2016	6.97E-05	3.03E-05	1.56E-03	1.87E-04	9.70E-04	1.35E-04
12/1/2016	9.46E-05	3.20E-05	1.18E-03	1.48E-04	1.54E-03	1.79E-04
12/8/2016	1.85E-04	4.63E-05	7.59E-04	1.07E-04	1.17E-03	1.44E-04
12/15/2016	2.20E-04	5.52E-05	3.08E-03	3.23E-04	2.95E-03	3.14E-04
12/22/2016	2.92E-04	6.49E-05	1.73E-02	1.46E-03	8.05E-03	7.14E-04
12/29/2016	3.70E-05	2.37E-05	6.24E-04	9.56E-05	4.62E-04	7.96E-05

Location: 291-H Stack Isokinetic (continued)

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/7/2016	1.25E-04	4.05E-05	0.00E+00	1.52E-05	1.69E-02	7.27E-03	6.22E-04	2.15E-03
1/14/2016	1.38E-04	3.93E-05	0.00E+00	1.26E-05	1.24E-02	7.48E-03	6.86E-03	4.39E-03
1/21/2016	7.32E-05	3.12E-05	1.23E-05	1.23E-05	1.56E-02	7.08E-03	5.24E-04	2.30E-03
1/29/2016	2.51E-04	5.39E-05	9.84E-06	9.86E-06	2.11E-02	6.98E-03	1.21E-02	5.19E-03
2/5/2016	1.89E-05	1.56E-05	-7.86E-07	8.80E-07	1.67E-03	5.54E-03	-1.62E-03	7.14E-04
2/11/2016	7.16E-05	3.64E-05	1.29E-05	1.39E-05	1.05E-02	7.41E-03	6.03E-04	2.63E-03
2/18/2016	2.89E-04	6.20E-05	4.62E-05	2.44E-05	1.85E-02	8.04E-03	1.50E-02	5.95E-03
2/25/2016	1.08E-04	3.61E-05	1.03E-05	1.03E-05	3.11E-02	8.55E-03	3.38E-04	2.19E-03
3/3/2016	9.14E-05	3.43E-05	2.01E-05	1.56E-05	1.78E-02	7.40E-03	-1.71E-03	6.81E-04
3/10/2016	1.31E-04	4.94E-05	-1.04E-05	1.04E-05	-3.81E-03	5.21E-03	1.29E-02	5.43E-03
3/17/2016	6.05E-05	2.73E-05	2.39E-05	1.70E-05	-1.99E-03	6.14E-03	-2.22E-03	9.52E-04
3/24/2016	8.70E-05	3.33E-05	-8.16E-06	8.18E-06	9.43E-03	7.26E-03	6.68E-03	4.54E-03
3/31/2016	3.57E-04	7.16E-05	2.48E-05	1.76E-05	2.66E-02	8.05E-03	-1.34E-03	3.87E-04
4/7/2016	9.86E-05	3.36E-05	0.00E+00	1.31E-05	4.03E-03	6.55E-03	6.46E-03	4.40E-03
4/14/2016	8.54E-05	3.09E-05	1.06E-05	1.06E-05	7.05E-03	6.40E-03	9.95E-03	4.95E-03
4/21/2016	1.11E-04	3.74E-05	3.86E-06	1.46E-05	7.00E-03	6.60E-03	-6.03E-05	2.37E-03
4/28/2016	2.37E-04	5.43E-05	2.17E-05	2.53E-05	9.54E-03	6.40E-03	-2.12E-03	7.99E-04
5/5/2016	1.90E-04	4.77E-05	2.21E-05	1.56E-05	4.00E-03	5.62E-03	5.00E-03	3.60E-03
5/12/2016	1.91E-04	4.67E-05	0.00E+00	1.39E-05	-5.24E-04	4.15E-03	6.35E-03	3.13E-03
5/19/2016	2.24E-04	5.36E-05	-1.56E-05	1.11E-05	4.30E-03	4.40E-03	6.05E-03	2.99E-03
5/26/2016	9.30E-04	1.15E-04	0.00E+00	1.27E-05	5.35E-01	1.87E-02	8.22E-03	3.45E-03
6/2/2016	3.43E-05	2.18E-05	0.00E+00	1.14E-05	8.92E-03	4.68E-03	-1.15E-03	1.37E-03

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
6/9/2016	1.07E-04	3.43E-05	1.05E-05	1.05E-05	-6.76E-03	4.98E-03	1.70E-05	2.23E-03
6/16/2016	3.38E-05	1.95E-05	0.00E+00	1.30E-05	1.26E-02	6.93E-03	3.38E-04	2.73E-03
6/23/2016	2.48E-04	5.61E-05	3.49E-05	2.02E-05	-4.54E-03	5.51E-03	3.73E-04	2.95E-03
6/30/2016	7.14E-05	2.73E-05	2.01E-05	1.42E-05	6.73E-04	5.59E-03	4.78E-03	4.13E-03
7/7/2016	2.35E-04	5.39E-05	0.00E+00	1.31E-05	-2.78E-03	6.17E-03	6.84E-04	2.62E-03
7/14/2016	2.51E-04	5.48E-05	0.00E+00	1.18E-05	-1.04E-02	5.31E-03	4.81E-03	3.90E-03
7/21/2016	1.45E-04	3.94E-05	2.04E-05	1.45E-05	9.49E-03	7.10E-03	-1.38E-03	1.53E-03
7/28/2016	1.04E-04	3.64E-05	-7.30E-06	7.32E-06	1.09E-03	6.62E-03	-1.44E-03	1.60E-03
8/4/2016	8.95E-05	3.51E-05	-7.43E-06	6.89E-06	5.35E-02	1.05E-02	2.81E-03	3.41E-03
8/11/2016	1.90E-04	4.91E-05	1.03E-05	1.09E-05	2.59E-02	9.04E-03	4.84E-03	4.02E-03
8/18/2016	1.30E-04	3.84E-05	1.07E-05	1.07E-05	3.84E-02	7.06E-03	1.74E-03	2.42E-03
8/25/2016	6.95E-05	3.02E-05	0.00E+00	1.26E-05	3.32E-02	8.45E-03	2.54E-03	3.46E-03
9/1/2016	8.24E-05	2.95E-05	2.03E-05	1.44E-05	8.46E-03	6.37E-03	3.30E-04	2.66E-03
9/8/2016	1.03E-04	3.62E-05	1.09E-05	1.09E-05	3.65E-02	7.30E-03	2.51E-03	2.38E-03
9/15/2016	2.17E-04	5.17E-05	-7.54E-06	7.55E-06	2.29E-02	6.74E-03	3.68E-03	2.66E-03
9/22/2016	5.14E-05	2.92E-05	2.55E-05	2.03E-05	8.16E-03	6.83E-03	3.00E-03	3.08E-03
9/29/2016	1.33E-04	4.22E-05	0.00E+00	1.40E-05	3.73E-02	8.96E-03	1.15E-03	2.41E-03
10/6/2016	9.38E-05	3.36E-05	2.31E-05	1.64E-05	1.66E-02	7.42E-03	1.18E-03	2.45E-03
10/13/2016	2.28E-04	6.56E-05	1.74E-05	1.75E-05	3.30E-02	8.96E-03	3.11E-03	3.17E-03
10/20/2016	1.08E-04	4.24E-05	1.25E-05	1.25E-05	1.69E-02	7.65E-03	7.30E-03	4.32E-03
10/27/2016	3.35E-05	1.95E-05	-5.54E-07	6.18E-07	1.29E-02	6.82E-03	7.81E-03	4.50E-03
11/3/2016	1.16E-05	1.16E-05	1.08E-05	1.15E-05	-5.76E-03	4.80E-03	1.12E-03	2.31E-03
11/10/2016	1.12E-04	3.71E-05	-7.11E-06	7.11E-06	6.97E-02	1.09E-02	9.95E-03	4.99E-03
11/17/2016	1.57E-04	4.57E-05	-7.95E-06	7.76E-06	1.89E-02	2.87E-03	1.45E-03	1.03E-03
11/24/2016	1.05E-04	3.57E-05	3.43E-05	2.01E-05	4.57E-03	1.85E-03	1.98E-03	1.14E-03
12/1/2016	2.01E-04	5.21E-05	3.54E-06	1.35E-05	4.65E-02	9.52E-03	7.22E-03	4.28E-03
12/8/2016	2.03E-04	4.82E-05	-2.06E-07	2.30E-07	3.32E-02	8.80E-03	5.27E-03	3.84E-03
12/15/2016	5.14E-04	8.27E-05	1.11E-05	1.13E-05	8.43E-02	1.14E-02	7.35E-03	4.26E-03
12/22/2016	7.70E-04	1.23E-04	3.19E-05	2.30E-05	5.51E-02	1.00E-02	3.27E-02	8.37E-03
12/29/2016	1.41E-04	4.46E-05	-8.78E-06	8.16E-06	5.11E-02	1.03E-02	-2.00E-03	4.10E-04

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 291-S Vitrification Process (Zone 1)

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	7.16E-02	7.91E-02	-4.00E-03	1.14E-01	8.76E-03	2.43E-02
4/18/2016	-5.08E-02	6.80E-02	-1.35E-01	1.00E-01	8.35E-03	3.06E-02
7/11/2016	3.16E-02	5.03E-02	-3.27E-02	5.78E-02	8.49E-03	1.90E-02
10/17/2016	1.66E-01	1.39E-01	8.32E-02	1.33E-01	-2.24E-02	3.43E-02

Location: 291-S Vitrification Process (Zone 1) (continued)

Sample Date	U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	4.27E-04	3.23E-04	2.73E-04	2.80E-04	5.14E-04	4.20E-04
4/18/2016	1.80E-03	7.47E-04	9.68E-05	3.49E-04	1.25E-03	6.01E-04
7/11/2016	9.86E-04	4.37E-04	3.89E-04	2.76E-04	9.43E-04	3.90E-04
10/17/2016	1.29E-03	6.99E-04	1.05E-04	4.42E-04	1.16E-03	6.04E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	2.24E-04	2.37E-04	2.02E-04	2.42E-04	4.38E-04	3.41E-04
4/18/2016	1.23E-03	8.80E-04	1.55E-04	7.47E-04	7.30E-04	4.45E-04
7/11/2016	1.99E-04	2.40E-04	-1.49E-05	1.88E-05	9.51E-04	3.98E-04
10/17/16	2.53E-04	2.83E-04	2.39E-04	2.87E-04	1.95E-03	8.09E-04

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	7.78E-05	2.86E-04	1.37E-01	1.28E-01	1.06E-02	4.59E-02
4/18/2016	0.00E+00	3.07E-04	1.48E-02	1.20E-01	1.96E-02	4.81E-02
7/11/2016	2.84E-04	2.01E-04	8.32E-02	9.52E-02	4.97E-03	3.19E-02
10/17/16	5.73E-04	4.10E-04	3.76E-01	1.91E-01	7.38E-02	7.55E-02

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 292-F Main Stack (195 ft)

Sample Date	I-129	
	Conc.	Standard Dev.
1/18/2016	3.00E-02	2.30E-03
1/18/2016	1.09E-02	2.32E-03
2/1/2016	4.35E-02	2.85E-03
2/1/2016	2.92E-03	2.47E-03
2/15/2016	2.73E-02	4.16E-03
2/15/2016	1.43E-02	3.06E-03
2/29/2016	5.49E-02	6.00E-03
2/29/2016	5.86E-03	1.39E-03
3/14/2016	1.16E-01	9.59E-03
3/14/2016	1.69E-02	4.63E-03
3/28/2016	1.36E-01	1.06E-02
3/28/2016	7.68E-03	1.89E-03
4/11/2016	6.81E-02	6.98E-03
4/11/2016	3.46E-02	4.48E-03
4/25/2016	1.12E-01	9.67E-03
4/25/2016	2.81E-02	4.32E-03
5/9/2016	9.41E-02	9.44E-03
5/9/2016	2.68E-02	3.65E-03
5/23/2016	1.88E-01	1.39E-02
5/23/2016	3.70E-03	2.10E-03
6/6/2016	1.55E-01	1.25E-02
6/6/2016	2.63E-02	3.69E-03
6/20/2016	1.65E-01	1.31E-02
6/20/2016	3.30E-02	4.91E-03
7/4/2016	1.39E-01	6.05E-03
7/4/2016	2.32E-02	2.00E-03
7/18/2016	2.49E-01	8.47E-03
7/18/2016	3.51E-02	2.48E-03
8/1/2016	1.70E-01	1.60E-02
8/1/2016	4.86E-02	5.78E-03
8/18/2016	8.89E-03	2.37E-03
8/18/2016	2.06E-01	7.03E-03
8/29/2016	1.82E-01	1.77E-02
8/29/2016	4.51E-02	5.70E-03
9/12/2016	1.54E-01	1.46E-02
9/12/2016	2.29E-02	4.04E-03
9/26/2016	1.92E-01	1.80E-02
9/26/2016	1.46E-02	3.35E-03
10/10/2016	1.51E-01	1.45E-02

Sample Date	I-129	
	Conc.	Standard Dev.
10/10/2016	2.78E-02	5.53E-03
10/24/2016	1.05E-01	1.11E-02
10/24/2016	3.00E-02	3.96E-03
11/7/2016	1.40E-01	1.12E-02
11/7/2016	1.35E-02	3.23E-03
11/21/2016	5.35E-02	6.15E-03
11/21/2016	9.51E-03	2.74E-03
12/5/2016	3.43E-02	5.21E-03
12/5/2016	9.57E-03	2.82E-03
12/19/2016	2.81E-02	3.61E-03
12/19/2016	1.82E-02	3.49E-03
1/2/2017	2.68E-02	4.55E-03
1/2/2017	1.19E-02	2.89E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 292-H Main Stack (195 ft)

Sample Date	I-129	
	Conc.	Standard Dev.
1/20/2016	1.41E-01	9.32E-03
1/20/2016	3.68E-02	1.14E-02
2/3/2016	2.14E-01	1.27E-02
2/3/2016	1.38E-02	9.36E-03
2/17/2016	1.35E-01	1.78E-02
2/17/2016	6.49E-02	1.74E-02
3/2/2016	2.37E-01	1.37E-02
3/2/2016	8.70E-02	1.65E-02
3/16/2016	3.97E-01	3.30E-02
3/16/2016	5.30E-02	1.13E-02
3/30/2016	4.19E-01	3.45E-02
3/30/2016	4.43E-03	4.83E-03
4/13/2016	2.22E-01	2.40E-02
4/13/2016	8.05E-02	9.74E-03
4/27/2016	3.22E-01	2.86E-02
4/27/2016	4.41E-02	1.10E-02
5/11/2016	2.27E-01	2.33E-02
5/11/2016	7.97E-02	1.13E-02
5/25/2016	2.01E-01	1.97E-02
5/25/2016	1.31E-01	1.74E-02
6/8/2016	3.16E-01	2.95E-02
6/8/2016	1.01E-01	1.12E-02
6/22/2016	4.05E-01	3.57E-02
6/22/2016	1.02E-01	1.73E-02
7/6/2016	5.59E-01	4.48E-02
7/6/2016	1.85E-03	5.23E-03
7/20/2016	2.26E-01	2.81E-02
7/20/2016	1.02E-01	1.87E-02
8/3/2016	3.16E-01	1.73E-02
8/3/2016	7.46E-02	6.21E-03
8/17/2016	2.97E-01	1.43E-02
8/17/2016	1.73E-01	1.08E-02
8/31/2016	5.92E-01	4.59E-02
8/31/2016	1.46E-01	1.84E-02
9/14/2016	3.78E-01	2.97E-02
9/14/2016	1.84E-01	1.97E-02
9/28/2016	4.00E-01	3.41E-02
9/28/2016	1.20E-01	1.73E-02

Sample Date	I-129	
	Conc.	Standard Dev.
10/12/2016	4.62E-01	3.69E-02
10/12/2016	5.95E-02	9.63E-03
10/26/2016	2.89E-01	2.78E-02
10/26/2016	2.70E-02	1.36E-02
11/9/2016	3.59E-01	3.07E-02
11/9/2016	1.42E-01	1.70E-02
11/22/2016	2.01E-01	2.28E-02
11/22/2016	5.03E-02	1.79E-02
12/7/2016	3.41E-01	1.57E-02
12/7/2016	8.97E-02	6.75E-03
12/21/2016	3.70E-01	2.81E-02
12/21/2016	5.54E-02	1.13E-02
1/4/2017	2.81E-01	2.61E-02
1/4/2017	1.57E-01	1.75E-02

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 451-Z Saltstone Vaults

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	-3.65E-03	3.20E-03	1.41E-03	3.93E-03	-1.21E-03	6.65E-04
5/10/2016	5.81E-03	4.03E-03	6.41E-04	3.96E-03	-7.95E-04	1.13E-03
8/9/2016	-6.05E-03	4.53E-03	-4.49E-03	3.22E-03	1.12E-03	1.13E-03
11/9/2016	-2.37E-03	4.32E-03	4.92E-03	4.26E-03	1.36E-03	1.23E-03

Sample Date	U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	1.88E-05	1.35E-05	1.17E-05	1.17E-05	9.49E-06	9.52E-06
5/10/2016	2.06E-05	2.36E-05	1.12E-05	1.12E-05	3.00E-06	1.08E-05
8/9/2016	3.16E-05	2.11E-05	-4.68E-06	1.67E-05	3.89E-05	1.99E-05
11/9/2016	3.95E-05	2.00E-05	0.00E+00	1.12E-05	4.30E-05	2.32E-05

Sample Date	Pu-238		Pu-39		Am-241	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	8.49E-06	9.21E-06	-6.30E-07	7.86E-07	5.08E-05	2.51E-05
5/10/2016	-1.75E-07	2.19E-07	1.88E-05	1.33E-05	3.35E-05	2.11E-05
8/9/2016	-7.22E-06	6.70E-06	2.24E-05	1.88E-05	2.95E-05	1.76E-05
11/9/2016	3.84E-05	2.08E-05	2.02E-05	1.43E-05	7.16E-05	3.24E-05

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	0.00E+00	1.41E-05	3.92E-02	8.51E-03	2.07E-03	2.61E-03
5/10/2016	-1.56E-05	1.11E-05	2.21E-02	5.03E-03	-7.49E-05	1.47E-03
8/9/2016	9.38E-06	1.00E-05	1.88E-02	7.42E-03	2.92E-04	1.99E-03
11/9/2016	-7.65E-06	7.66E-06	3.78E-02	8.07E-03	4.62E-03	3.24E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 511-S Low Pt. Pump Pit

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	8.16E-03	5.23E-02	2.56E-02	5.69E-02	2.92E-02	1.77E-02
4/18/2016	1.32E-02	7.15E-02	6.73E-02	7.55E-02	2.52E-02	2.44E-02
7/11/2016	1.68E-02	4.79E-02	4.54E-02	6.53E-02	1.01E-02	1.73E-02
10/17/2016	9.16E-03	5.32E-02	-8.03E-02	5.77E-02	1.39E-02	1.65E-02

Sample Date	U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	4.03E-04	3.49E-04	0.00E+00	1.88E-04	4.16E-04	3.47E-04
4/18/2016	4.05E-03	1.24E-03	6.05E-04	7.09E-04	2.69E-03	1.08E-03
7/11/2016	3.92E-04	3.36E-04	3.73E-04	2.64E-04	4.49E-04	2.63E-04
10/17/2016	3.97E-04	3.30E-04	-8.59E-06	9.71E-06	4.30E-04	2.61E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	7.57E-04	3.74E-04	0.00E+00	1.78E-04	1.54E-03	5.21E-04
4/18/2016	9.54E-04	8.06E-04	2.81E-04	3.83E-04	1.02E-03	4.76E-04
7/11/2016	3.16E-04	2.30E-04	2.00E-04	2.54E-04	3.22E-04	3.22E-04
10/17/2016	-1.31E-05	1.64E-05	2.59E-04	2.01E-04	9.30E-04	4.17E-04

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	-7.35E-06	8.28E-06	1.30E-01	9.17E-02	7.49E-03	3.27E-02
4/18/2016	-1.38E-04	1.39E-04	1.87E-01	1.14E-01	1.57E-02	3.87E-02
7/11/2016	0.00E+00	1.53E-04	9.62E-02	9.36E-02	-1.89E-02	2.10E-02
10/17/2016	-2.38E-06	2.70E-06	4.89E-01	8.14E-02	-1.40E-02	4.67E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 512-S Late Wash

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	4.84E-03	3.19E-03	1.26E+00	8.59E-02	2.16E-03	1.04E-03
1/29/2016	3.95E-03	4.11E-03	9.38E+00	6.08E-01	1.19E-02	2.46E-03
1/30/2016	1.03E-01	1.11E-01	1.44E+02	9.40E+00	1.91E-01	4.98E-02
4/18/2016	-2.26E-03	1.92E-03	-1.77E-03	3.11E-03	6.41E-04	8.92E-04
7/11/2016	-1.09E-03	2.49E-03	-1.46E-03	3.06E-03	-8.86E-05	8.41E-04
10/17/2016	2.81E-03	2.76E-03	-1.55E-04	2.95E-03	-1.07E-03	6.58E-04

Sample Date	U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	3.84E-05	2.00E-05	1.20E-05	1.22E-05	4.86E-05	2.23E-05
1/29/2016	6.65E-05	2.90E-05	1.42E-05	1.42E-05	1.06E-04	3.76E-05
1/30/2016	1.82E-03	7.33E-04	0.00E+00	3.30E-04	1.33E-03	6.07E-04
4/18/2016	3.70E-05	1.67E-05	0.00E+00	9.13E-06	4.43E-05	1.83E-05
7/11/2016	6.11E-05	2.23E-05	9.54E-06	9.56E-06	4.86E-05	2.13E-05
10/17/2016	2.42E-05	1.54E-05	8.54E-06	9.04E-06	1.37E-05	1.69E-05

Sample Date	Pu-238		Pu-239		Am-241	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	1.94E-04	4.66E-05	1.90E-05	1.48E-05	3.08E-05	1.90E-05
1/29/2016	1.45E-03	1.61E-04	3.89E-05	2.47E-05	9.35E-05	3.62E-05
1/30/2016	2.86E-02	3.55E-03	9.41E-04	5.46E-04	3.51E-04	4.72E-04
4/18/2016	1.43E-05	1.04E-05	3.32E-06	1.25E-05	2.78E-05	1.92E-05
7/11/2016	2.44E-05	1.57E-05	6.62E-06	7.51E-06	2.89E-05	1.77E-05
10/17/2016	2.00E-05	1.21E-05	-3.27E-06	9.52E-06	3.59E-05	1.90E-05

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/18/2016	0.00E+00	1.28E-05	1.13E+00	3.69E-02	-2.07E-03	6.37E-04
1/29/2016	1.07E-05	1.14E-05	6.84E+00	1.07E-01	1.69E-02	6.79E-03
1/30/2016	-1.40E-05	1.57E-05	9.73E+01	1.97E+00	2.61E-01	1.33E-01
4/18/2016	1.55E-05	1.10E-05	-2.04E-03	3.30E-03	5.89E-04	1.44E-03
7/11/2016	0.00E+00	8.67E-06	8.92E-03	5.03E-03	-9.46E-04	1.05E-03
10/17/2016	7.00E-06	7.15E-06	5.16E-03	4.38E-03	3.27E-03	2.38E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 735-A Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/2/2016	-9.89E-04	1.34E-03	-4.16E-04	1.26E-03	2.97E-03	1.20E-03	9.22E-05	4.05E-04
3/1/2016	-1.40E-03	1.23E-03	9.05E-05	1.35E-03	1.15E-03	1.11E-03	4.32E-04	5.32E-04
4/5/2016	1.63E-03	1.17E-03	-7.59E-04	1.16E-03	1.05E-03	8.84E-04	1.91E-06	3.23E-04
5/3/2016	4.08E-04	1.36E-03	4.73E-04	1.47E-03	4.62E-04	9.52E-04	1.33E-03	7.83E-04
6/7/2016	-7.05E-04	1.15E-03	3.05E-04	1.20E-03	1.69E-03	9.52E-04	6.08E-04	5.42E-04
7/5/2016	-1.55E-03	1.19E-03	-2.10E-03	1.46E-03	2.65E-03	1.17E-03	5.86E-05	4.78E-04
8/2/2016	8.19E-04	1.42E-03	3.35E-03	1.46E-03	3.86E-03	1.39E-03	1.22E-04	4.71E-04
9/6/2016	1.10E-04	1.07E-03	1.17E-03	1.30E-03	2.89E-03	8.72E-04	2.03E-04	2.99E-04
10/4/2016	4.00E-04	1.21E-03	6.35E-04	1.57E-03	3.27E-03	1.23E-03	-2.08E-04	9.86E-05
11/1/2016	-5.97E-04	1.80E-03	-2.09E-03	1.55E-03	7.11E-03	1.52E-03	1.37E-03	7.93E-04
12/6/2016	-2.24E-03	1.09E-03	-7.27E-04	1.16E-03	5.68E-03	1.25E-03	7.35E-04	5.35E-04
1/3/2017	2.39E-03	1.20E-03	1.49E-03	1.69E-03	3.00E-03	1.24E-03	3.65E-05	3.78E-04

Location: 772-1F Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-5.30E-03	6.01E-02	7.92E-02	5.59E-02	4.54E-02	4.36E-02	-1.21E-02	4.87E-03
1/18/2016	3.43E-02	5.18E-02	-7.57E-02	6.72E-02	4.46E-02	4.08E-02	-1.14E-02	5.03E-03
1/25/2016	-4.08E-02	5.96E-02	5.08E-02	5.47E-02	-2.28E-02	3.31E-02	3.68E-03	1.58E-02
2/1/2016	7.41E-02	5.33E-02	2.95E-02	6.45E-02	2.08E-03	3.65E-02	3.68E-03	1.59E-02
2/8/2016	5.19E-02	5.88E-02	-4.70E-02	5.57E-02	6.05E-02	4.26E-02	3.62E-03	1.58E-02
2/15/2016	-5.38E-02	5.11E-02	-3.30E-02	4.63E-02	2.01E-02	4.10E-02	-1.19E-02	4.83E-03
2/22/2016	-4.46E-02	5.66E-02	-1.36E-02	4.94E-02	4.16E-02	4.36E-02	2.66E-03	1.55E-02
2/22/2016	-1.23E-02	6.30E-02	1.97E-02	5.26E-02	2.01E-02	4.10E-02	-1.22E-02	4.92E-03
3/7/2016	-4.46E-03	4.98E-02	-4.35E-02	5.79E-02	9.49E-02	4.65E-02	4.35E-03	1.50E-02
3/14/2016	-1.09E-02	3.51E-02	2.86E-02	5.34E-02	-2.95E-02	3.61E-02	1.16E-04	1.59E-02
3/21/2016	7.43E-02	5.33E-02	-2.68E-02	5.68E-02	5.24E-02	4.40E-02	9.62E-05	1.63E-02
3/28/2016	-2.76E-03	3.70E-02	-6.00E-02	5.75E-02	1.16E-01	4.80E-02	-9.54E-03	2.76E-03
4/4/2016	5.86E-02	5.93E-02	-5.86E-02	5.92E-02	3.46E-02	4.26E-02	2.97E-02	2.65E-02
4/11/2016	7.86E-03	5.11E-02	-9.78E-02	6.76E-02	4.43E-03	4.04E-02	-1.51E-02	6.47E-03
4/18/2016	6.00E-02	5.61E-02	-4.38E-03	5.11E-02				
4/25/2016	-1.68E-02	5.11E-02	3.24E-02	5.36E-02	1.07E-01	4.77E-02	-1.52E-02	5.70E-03
5/2/2016	4.38E-02	5.48E-02	1.49E-03	6.46E-02				
5/9/2016	-3.62E-02	5.18E-02	-2.15E-02	6.55E-02	5.54E-02	1.77E-02	-3.11E-04	7.50E-03
5/16/2016	4.97E-02	4.89E-02	5.73E-02	6.19E-02				
5/23/2016	4.14E-02	4.03E-02	5.97E-02	5.14E-02	1.29E-02	1.50E-02	1.64E-02	1.07E-02
5/30/2016	3.97E-02	4.89E-02	-8.68E-02	4.82E-02				

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
6/6/2016	1.18E-02	4.95E-02	-4.00E-02	5.98E-02	4.43E-02	2.41E-02	-8.70E-03	3.72E-03
6/13/2016	-8.35E-02	5.25E-02	7.95E-02	5.35E-02				
6/20/2016	1.02E-01	5.93E-02	2.33E-02	5.11E-02	-2.64E-02	1.50E-02	1.25E-03	9.82E-03
6/27/2016	2.86E-02	5.11E-02	-4.97E-02	5.73E-02				
7/4/2016	1.94E-01	5.34E-02	4.54E-02	5.98E-02	-5.46E-03	1.81E-02	1.43E-03	1.13E-02
7/11/2016	-3.27E-02	5.66E-02	-5.76E-02	5.27E-02				
7/18/2016	2.46E-03	4.19E-02	-4.22E-02	5.54E-02	1.14E-02	2.25E-02	2.78E-03	1.07E-02
7/25/2016	4.43E-02	5.21E-02	6.05E-03	5.96E-02				
8/1/2016	1.09E-02	5.39E-02	7.81E-02	4.40E-02	-5.54E-03	2.10E-02	9.95E-03	1.20E-02
8/8/2016	1.01E-02	5.78E-02	-4.59E-02	5.43E-02				
8/15/2016	2.95E-02	4.98E-02	4.51E-02	6.27E-02	1.61E-02	1.84E-02	-1.56E-03	7.98E-03
8/22/2016	1.80E-02	5.50E-02	6.78E-02	5.66E-02				
8/29/2016	6.03E-02	4.19E-02	-3.76E-03	5.56E-02	2.41E-02	2.09E-02	1.31E-03	1.05E-02
9/5/2016	4.03E-02	4.95E-02	3.68E-03	5.41E-02				
9/12/2016	-1.26E-02	5.84E-02	-6.22E-02	5.23E-02	-2.48E-03	1.97E-02	1.21E-02	1.24E-02
9/19/2016	3.76E-02	3.85E-02	5.43E-02	5.57E-02				
9/26/2016	5.32E-02	6.29E-02	-6.08E-02	6.10E-02	6.89E-03	1.91E-02	-4.78E-03	2.29E-03
10/3/2016	6.76E-02	6.01E-02	9.30E-02	5.47E-02				
10/10/2016	5.38E-02	5.92E-02	-7.57E-02	5.31E-02	2.30E-02	2.20E-02	3.46E-03	8.84E-03
10/17/2016	1.95E-02	6.13E-02	-1.10E-02	5.39E-02				
10/24/2016	5.19E-02	5.34E-02	-3.24E-02	6.07E-02	3.11E-02	2.30E-02	1.19E-02	1.22E-02
10/31/2016	9.24E-02	6.24E-02	-6.81E-02	5.94E-02				
11/7/2016	1.10E-01	5.36E-02	1.52E-02	5.77E-02	1.33E-02	2.00E-02	3.27E-02	1.89E-02
11/14/2016	1.74E-03	2.56E-03	-1.41E-03	2.67E-03				
11/21/2016	7.11E-02	5.93E-02	2.30E-02	5.76E-02	1.60E-03	1.07E-03	-2.26E-04	1.07E-04
11/28/2016	9.43E-02	6.11E-02	3.08E-02	5.14E-02				
12/5/2016	-3.73E-02	4.64E-02	-2.23E-03	6.09E-02	3.65E-02	2.35E-02	-5.35E-03	1.90E-03
12/12/2016	3.30E-02	6.35E-02	8.32E-02	5.66E-02				
12/19/2016	6.22E-02	5.88E-02	9.16E-04	5.11E-02	4.92E-02	2.43E-02	-7.68E-03	1.58E-03
12/26/2016	-2.41E-02	5.36E-02	-5.14E-02	5.90E-02				
1/2/2017	3.30E-02	5.97E-02	-1.85E-02	5.87E-02	5.16E-02	2.44E-02	9.00E-03	1.17E-02

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 772-4F

Sample Date	Co-60		Cs-137	
	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-3.89E-03	3.02E-03	-1.53E-03	2.70E-03
1/18/2016	2.34E-03	2.53E-03	4.81E-03	2.37E-03
1/25/2016	5.14E-04	2.87E-03	5.35E-04	2.55E-03
2/1/2016	-2.67E-03	2.83E-03	-5.32E-03	2.89E-03
2/8/2016	-2.05E-03	2.82E-03	-3.62E-03	2.52E-03
2/15/2016	-3.35E-03	2.47E-03	8.08E-04	2.85E-03
2/22/2016	2.40E-03	2.63E-03	-4.41E-03	2.85E-03
2/29/2016	-3.89E-03	2.91E-03	4.16E-03	3.05E-03
3/7/2016	1.84E-03	2.89E-03	-5.32E-04	2.73E-03
3/14/2016	1.71E-03	3.13E-03	3.08E-03	2.73E-03
3/21/2016	-1.62E-03	3.51E-03	1.06E-03	3.15E-03
3/28/2016	-4.84E-03	3.25E-03	1.02E-03	2.82E-03
4/4/2016	1.59E-03	2.36E-03	1.03E-03	2.27E-03
4/11/2016	-2.32E-04	2.81E-03	3.81E-03	3.01E-03
4/18/2016	4.84E-03	2.83E-03	4.22E-03	2.26E-03
4/25/2016	2.97E-03	2.46E-03	-4.84E-04	2.90E-03
5/2/2016	9.57E-04	2.74E-03	-6.46E-03	2.90E-03
5/9/2016	-3.00E-03	2.89E-03	5.59E-03	2.89E-03
5/16/2016	1.57E-03	2.87E-03	1.49E-03	3.19E-03
5/23/2016	-2.31E-03	2.95E-03	1.09E-02	3.59E-03
5/30/2016	-1.40E-03	2.63E-03	7.14E-04	2.55E-03
6/6/2016	-4.65E-03	2.65E-03	6.38E-04	2.25E-03
6/13/2016	-1.32E-03	3.09E-03	-1.79E-03	2.89E-03
6/20/2016	-1.11E-03	2.66E-03	2.52E-03	2.61E-03
6/27/2016	2.11E-03	2.65E-03	2.04E-03	2.95E-03
7/4/2016	1.73E-03	2.68E-03	-4.32E-03	3.22E-03
7/11/2016	2.73E-03	2.26E-03	-5.16E-04	2.82E-03
7/18/2016	1.57E-03	2.78E-03	2.86E-03	3.21E-03
7/25/2016	1.24E-03	2.99E-03	-1.36E-03	2.89E-03
8/1/2016	-5.46E-04	1.76E-03	-1.62E-03	3.06E-03
8/8/2016	1.56E-03	2.58E-03	-6.05E-03	2.94E-03
8/15/2016	3.65E-03	2.81E-03	4.86E-03	2.34E-03
8/22/2016	-2.14E-03	2.56E-03	4.86E-04	3.06E-03
8/29/2016	-3.27E-03	2.81E-03	4.57E-04	3.19E-03
9/5/2016	8.49E-04	2.91E-03	3.05E-03	3.31E-03
9/12/2016	7.97E-04	3.07E-03	9.00E-04	2.89E-03
9/19/2016	-4.08E-03	2.94E-03	-3.92E-03	3.30E-03
9/26/2016	-3.92E-03	2.73E-03	6.54E-03	3.27E-03
10/3/2016	2.69E-03	2.78E-03	-3.54E-03	3.12E-03

Sample Date	Co-60		Cs-137	
	Conc.	Standard Dev.	Conc.	Standard Dev.
10/10/2016	-1.66E-03	2.61E-03	3.89E-03	2.96E-03
10/17/2016	-5.05E-03	3.41E-03	2.95E-04	3.19E-03
10/24/2016	4.14E-04	2.78E-03	2.11E-03	3.19E-03
10/31/2016	1.90E-04	2.94E-03	-1.20E-03	3.06E-03
11/7/2016	1.10E-03	2.86E-03	-2.81E-03	3.41E-03
11/14/2016	2.56E-03	2.47E-03	-3.11E-03	2.60E-03
11/21/2016	-3.24E-03	2.74E-03	2.04E-03	2.92E-03
11/28/2016	5.54E-04	2.69E-03	7.62E-04	2.65E-03
12/5/2016	-1.11E-03	2.48E-03	-3.65E-03	3.47E-03
12/12/2016	-1.72E-03	2.32E-03	7.76E-03	3.08E-03
12/19/2016	-1.91E-03	3.07E-03	-1.58E-03	2.97E-03
12/26/2016	3.86E-03	1.69E-03	-6.05E-03	3.22E-03
1/2/2017	8.78E-04	2.50E-03	1.46E-03	3.03E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 772-4F (continued)

Sample Date	Sr-89/90		U-234		U-235		U-238	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-1.10E-03	6.32E-04	8.00E-05	2.41E-05	-1.55E-07	1.70E-07	1.53E-05	1.26E-05
1/18/2016	-4.19E-04	7.01E-04	3.59E-05	1.67E-05	-1.54E-07	1.72E-07	5.08E-05	1.97E-05
1/25/2016	2.21E-03	8.50E-04	4.38E-05	1.95E-05	0.00E+00	8.63E-06	3.51E-05	1.58E-05
2/1/2016	-3.30E-04	6.54E-04	3.76E-05	1.85E-05	-5.92E-06	5.93E-06	3.11E-05	1.69E-05
2/8/2016	8.84E-04	7.49E-04	4.03E-05	2.05E-05	0.00E+00	8.88E-06	2.16E-05	1.26E-05
2/15/2016	-1.71E-04	5.77E-04	8.57E-05	2.51E-05	-5.30E-06	5.31E-06	1.93E-05	1.12E-05
2/22/2016	-7.86E-05	6.09E-04	4.84E-05	1.95E-05	0.00E+00	9.56E-06	5.95E-05	2.02E-05
2/29/2016	1.09E-03	6.27E-04	3.16E-05	1.73E-05	9.08E-06	9.09E-06	3.68E-05	1.66E-05
3/7/2017	8.76E-04	5.98E-04	5.27E-05	2.39E-05	-3.27E-06	1.35E-05	3.97E-05	1.79E-05
3/14/2016	3.95E-04	5.39E-04	3.95E-05	1.90E-05	0.00E+00	8.92E-06	1.23E-05	1.46E-05
3/21/2016	1.52E-03	7.57E-04	5.03E-05	1.92E-05	0.00E+00	7.85E-06	5.24E-05	2.10E-05
3/28/2016	7.76E-04	6.97E-04	5.00E-05	1.91E-05	0.00E+00	8.08E-06	6.38E-05	2.17E-05
4/4/2016	-6.05E-04	6.81E-04	3.41E-05	1.57E-05	7.62E-06	8.67E-06	3.68E-05	1.77E-05
4/11/2016	-2.35E-05	7.52E-04	2.28E-05	1.36E-05	8.68E-06	9.74E-06	1.81E-05	1.45E-05
4/25/2016	1.74E-04	3.07E-04	3.59E-05	1.16E-05	8.86E-06	6.29E-06	3.35E-05	1.18E-05
5/9/2016	5.14E-04	4.21E-04	2.41E-05	1.55E-05	1.20E-05	1.41E-05	2.42E-05	1.54E-05
5/23/2016	-4.08E-04	3.51E-04	2.57E-05	1.05E-05	-2.92E-06	2.95E-06	3.78E-05	1.30E-05
6/6/2016	-2.09E-04	4.20E-04	4.59E-05	1.35E-05	-1.42E-06	5.87E-06	2.73E-05	9.97E-06
6/20/2016	7.78E-05	4.45E-04	3.24E-05	1.29E-05	4.46E-06	4.47E-06	2.97E-05	1.13E-05
7/4/2016	-4.22E-04	4.70E-04	3.32E-05	1.21E-05	-3.46E-06	3.46E-06	6.41E-05	1.73E-05
7/18/2016	6.92E-06	2.33E-04	2.41E-05	6.91E-06	4.59E-06	3.25E-06	2.97E-05	7.61E-06
8/1/2016	-3.27E-04	4.05E-04	9.73E-06	8.38E-06	0.00E+00	4.26E-06	5.24E-05	1.44E-05
8/15/2016	2.46E-04	4.05E-04	2.34E-05	1.05E-05	-2.30E-07	2.59E-07	1.74E-05	9.93E-06
8/29/2016	-4.89E-05	3.06E-04	2.60E-05	1.01E-05	4.62E-06	4.63E-06	6.73E-05	1.63E-05
9/12/2016	-5.11E-05	3.19E-04	4.16E-05	1.36E-05	-2.95E-06	2.97E-06	6.43E-05	1.56E-05
9/26/2016	-2.54E-05	2.35E-04	3.11E-05	1.17E-05	4.62E-06	4.63E-06	3.24E-05	1.25E-05
10/10/2016	4.14E-04	5.01E-04	5.49E-05	1.58E-05	4.41E-06	4.66E-06	1.21E-05	7.98E-06
10/24/2016	8.86E-05	4.04E-04	7.32E-05	1.73E-05	4.46E-06	4.45E-06	4.92E-05	1.46E-05
11/7/2016	3.54E-04	4.28E-04	1.11E-05	9.44E-06	-6.22E-06	4.36E-06	4.84E-05	1.37E-05
11/21/2016	2.62E-04	4.79E-04	8.89E-06	1.00E-05	-1.65E-06	6.49E-06	3.19E-05	1.19E-05
12/5/2016	3.51E-04	4.24E-04	4.49E-05	1.36E-05	4.14E-06	4.77E-06	3.62E-05	1.33E-05
12/19/2016	1.42E-04	2.61E-04	3.84E-05	1.26E-05	4.46E-06	4.85E-06	4.41E-05	1.40E-05
1/2/2017	1.02E-04	2.53E-04	5.00E-05	1.45E-05	-3.41E-07	3.86E-07	5.03E-05	1.43E-05

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 772-4F (continued)

Sample Date	Pu-238		Pu-239		Am-241		Cm-244	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-3.57E-07	4.47E-07	2.76E-05	1.48E-05	2.00E-05	1.25E-05	0.00E+00	8.76E-06
1/18/2016	-3.57E-07	4.42E-07	5.70E-06	7.01E-06	3.35E-05	1.58E-05	2.28E-06	8.22E-06
1/25/2016	1.23E-05	9.32E-06	2.16E-06	7.79E-06	3.35E-05	1.51E-05	-3.38E-07	3.74E-07
2/1/2016	5.89E-06	6.72E-06	6.59E-06	6.61E-06	2.16E-05	1.26E-05	-3.35E-07	3.75E-07
2/8/2016	1.34E-05	1.01E-05	2.35E-05	1.50E-05	4.08E-05	1.69E-05	-3.41E-07	3.78E-07
2/15/2016	-4.92E-06	4.45E-06	6.19E-06	6.74E-06	2.81E-05	1.59E-05	7.54E-06	7.56E-06
2/22/2016	-5.19E-06	4.71E-06	-4.76E-07	5.92E-07	4.49E-05	1.86E-05	0.00E+00	8.30E-06
2/29/2016	7.19E-06	7.34E-06	-9.97E-06	6.90E-06	5.00E-05	2.25E-05	-2.76E-06	9.93E-06
3/7/2017	6.51E-06	6.65E-06	6.38E-06	6.66E-06	5.16E-05	2.09E-05	-3.54E-07	3.92E-07
3/14/2016	-1.17E-07	1.47E-07	-2.57E-06	9.63E-06	-1.35E-06	9.52E-06	-2.68E-06	9.59E-06
3/21/2016	-4.92E-06	4.58E-06	8.08E-06	1.09E-05	1.07E-05	1.49E-05	0.00E+00	8.22E-06
3/28/2016	6.00E-04	7.60E-05	5.81E-06	7.11E-06	5.73E-05	2.40E-05	-5.30E-06	5.32E-06
4/4/2016	-7.59E-06	1.05E-05	-1.22E-05	1.15E-05	4.86E-05	2.12E-05	-1.25E-07	1.39E-07
4/11/2016	2.14E-05	1.30E-05	9.11E-06	1.16E-05	5.51E-05	2.15E-05	3.57E-05	1.62E-05
4/25/2016	3.43E-06	3.58E-06	7.54E-06	6.77E-06	1.48E-05	9.74E-06	-3.03E-06	3.03E-06
5/9/2016	-2.40E-06	2.33E-06	8.16E-06	6.51E-06	1.09E-05	7.01E-06	-2.59E-06	2.59E-06
5/23/2016	4.86E-06	5.71E-06	-1.21E-06	5.01E-06	1.83E-05	9.48E-06	-4.00E-07	4.47E-07
6/6/2016	-1.77E-07	2.22E-07	-1.92E-06	5.05E-06	2.00E-05	9.48E-06	-2.37E-06	2.21E-06
6/20/2016	-1.77E-07	2.22E-07	-1.87E-06	4.83E-06	1.31E-05	7.44E-06	-1.67E-07	1.86E-07
7/4/2016	-1.82E-07	2.29E-07	3.35E-06	3.63E-06	1.79E-05	8.19E-06	-5.84E-08	6.51E-08
7/18/2016	-8.76E-08	1.11E-07	1.94E-06	2.08E-06	6.62E-06	3.40E-06	-2.81E-08	3.11E-08
8/1/2016	-1.26E-07	1.58E-07	-3.78E-07	4.75E-07	1.73E-05	8.76E-06	3.70E-06	3.70E-06
8/15/2016	9.78E-07	4.26E-06	5.49E-06	7.01E-06	1.24E-05	8.09E-06	-2.12E-07	2.39E-07
8/29/2016	-2.40E-06	2.42E-06	9.03E-07	4.34E-06	2.57E-05	1.04E-05	0.00E+00	4.53E-06
9/12/2016	1.16E-06	4.20E-06	2.04E-06	5.95E-06	1.43E-05	8.40E-06	-2.31E-06	2.32E-06
9/26/2016	1.14E-05	6.63E-06	3.81E-06	3.81E-06	1.76E-05	7.94E-06	3.49E-06	3.48E-06
10/10/2016	-3.30E-07	4.13E-07	6.38E-07	4.14E-06	1.67E-05	8.40E-06	-2.42E-06	2.37E-06
10/24/2016	1.15E-06	4.13E-06	3.43E-06	3.44E-06	1.05E-05	7.36E-06	-2.24E-06	2.24E-06
11/7/2016	-2.42E-07	3.03E-07	-2.42E-06	2.47E-06	1.49E-05	9.13E-06	1.18E-06	4.47E-06
11/21/2016	3.14E-06	3.41E-06	4.49E-06	5.27E-06	2.56E-05	1.07E-05	-5.92E-08	6.66E-08
12/5/2016	-4.76E-06	3.38E-06	3.57E-06	3.57E-06	1.62E-05	7.86E-06	-4.00E-07	4.42E-07
12/19/2016	3.57E-06	3.57E-06	1.02E-06	4.28E-06	2.69E-05	1.07E-05	0.00E+00	4.51E-06
1/2/2017	3.59E-06	3.60E-06	1.90E-05	9.24E-06	3.03E-06	3.92E-06	0.00E+00	4.46E-06

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 772-4F (continued)

Sample Date	Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	3.43E-04	3.93E-03	-1.14E-03	4.63E-04
1/18/2016	-2.29E-03	3.33E-03	3.54E-04	1.52E-03
1/25/2016	2.86E-04	3.61E-03	-1.08E-03	4.77E-04
2/1/2016	2.86E-04	3.59E-03	-1.08E-03	4.75E-04
2/8/2016	-1.46E-03	3.44E-03	3.51E-04	1.51E-03
2/15/2016	2.46E-03	4.17E-03	2.51E-04	1.45E-03
2/22/2016	4.16E-03	4.37E-03	2.54E-04	1.48E-03
2/29/2016	2.46E-03	4.16E-03	2.54E-04	1.47E-03
3/7/2016	-1.98E-03	3.45E-03	-9.46E-04	4.02E-04
3/14/2016	-1.22E-03	3.75E-03	-1.36E-03	5.84E-04
3/21/2016	2.18E-03	3.78E-03	-8.59E-04	2.50E-04
3/28/2016	-2.08E-03	3.36E-03	6.19E-04	1.51E-03
4/4/2016	6.08E-03	4.43E-03	-1.35E-03	5.78E-04
4/11/2016	-4.57E-03	3.44E-03	-1.37E-03	5.88E-04
4/25/2016	2.68E-03	2.16E-03	-2.05E-05	7.81E-04
5/9/2016	3.92E-03	1.62E-03	-7.89E-04	2.97E-04
5/23/2016	2.36E-03	1.52E-03	-3.89E-04	4.67E-04
6/6/2016	1.88E-03	2.16E-03	-7.49E-04	3.21E-04
6/20/2016	-1.74E-03	1.61E-03	-6.78E-04	5.18E-04
7/4/2016	1.58E-03	2.33E-03	2.43E-04	9.32E-04
7/18/2016	5.81E-04	1.10E-03	-2.45E-04	2.70E-04
8/1/2016	3.16E-03	2.49E-03	-6.59E-04	3.44E-04
8/15/2016	-5.11E-04	1.69E-03	2.44E-04	7.73E-04
8/29/2016	3.51E-04	1.86E-03	-6.73E-04	5.12E-04
9/12/2016	3.51E-03	2.28E-03	2.95E-04	7.57E-04
9/26/2016	1.38E-03	2.12E-03	1.82E-03	1.32E-03
10/10/2016	3.59E-03	2.32E-03	-4.54E-04	1.62E-04
10/24/2016	2.33E-03	2.18E-03	-4.46E-04	1.59E-04
11/7/2016	3.03E-03	2.12E-03	1.94E-03	1.36E-03
11/21/2016	6.27E-04	1.87E-03	3.84E-04	7.88E-04
12/5/2016	-2.39E-04	1.95E-03	1.08E-03	1.10E-03
12/19/2016	6.78E-04	2.00E-03	-6.49E-04	1.34E-04
1/2/2017	1.92E-03	2.12E-03	-6.54E-04	1.35E-04

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 773-A B Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/2/2016	-3.70E-04	1.19E-03	-3.70E-04	1.29E-03	4.35E-04	8.50E-04	-2.50E-04	1.10E-04
3/1/2016	1.63E-03	1.08E-03	7.03E-04	1.18E-03	7.68E-05	8.84E-04	-2.62E-04	1.06E-04
4/5/2016	2.32E-04	8.11E-04	1.46E-03	1.13E-03	5.16E-04	7.05E-04	3.95E-04	3.97E-04
5/3/2016	1.86E-04	9.21E-04	1.52E-04	1.02E-03	1.34E-03	7.50E-04	3.70E-04	3.73E-04
6/7/2016	3.24E-04	1.04E-03	1.09E-04	1.01E-03	3.43E-04	7.40E-04	2.61E-04	3.83E-04
7/5/2016	1.26E-03	1.04E-03	-6.22E-04	1.40E-03	1.79E-03	1.00E-03	4.03E-04	5.48E-04
8/2/2016	-7.92E-04	1.17E-03	2.21E-03	1.12E-03	5.00E-04	1.02E-03	4.51E-04	5.47E-04
9/6/2016	-4.11E-04	8.39E-04	-1.03E-03	9.21E-04	9.32E-04	7.11E-04	5.97E-04	3.59E-04
10/4/2016	-1.60E-04	1.38E-03	4.95E-04	1.34E-03	2.76E-03	1.09E-03	-1.82E-04	8.63E-05
11/1/2016	-6.16E-04	1.62E-03	9.16E-04	1.24E-03	1.20E-03	9.36E-04	5.08E-04	4.86E-04
12/6/2016	8.70E-04	8.06E-04	-1.84E-04	8.59E-04	1.55E-03	7.89E-04	-1.30E-04	6.19E-05
1/3/2017	1.22E-03	1.43E-03	-7.78E-04	1.26E-03	2.48E-04	9.67E-04	1.10E-03	7.13E-04

Location: 773-A C Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/2/2016	1.07E-03	1.07E-03	1.38E-04	1.20E-03	1.39E-03	9.74E-04	8.38E-05	3.66E-04
3/1/2016	-1.07E-04	1.18E-03	3.78E-04	1.24E-03	6.65E-04	9.56E-04	4.54E-04	5.05E-04
4/5/2016	1.59E-04	9.93E-04	1.76E-04	1.00E-03	1.94E-03	8.59E-04	1.20E-04	2.95E-04
5/3/2016	2.68E-04	1.32E-03	2.21E-03	1.33E-03	4.27E-04	8.76E-04	1.19E-03	7.02E-04
6/7/2016	-8.35E-04	7.50E-04	6.84E-05	7.01E-04	6.41E-04	5.56E-04	3.76E-04	3.34E-04
7/5/2016	-6.70E-04	1.19E-03	-3.62E-04	1.39E-03	1.29E-03	9.67E-04	5.38E-05	4.34E-04
8/2/2016	4.24E-04	1.28E-03	1.46E-04	1.41E-03	7.03E-04	1.06E-03	4.59E-04	5.57E-04
9/6/2016	-1.42E-03	9.24E-04	-4.81E-05	1.15E-03	2.18E-03	7.78E-04	-2.41E-04	1.25E-04
10/4/2016	8.30E-04	1.08E-03	-1.74E-03	1.52E-03	3.35E-03	1.15E-03	1.84E-04	3.83E-04
11/1/2016	-1.16E-03	1.43E-03	-2.78E-04	1.40E-03	1.99E-03	1.01E-03	-1.78E-04	8.43E-05
12/6/2016	1.79E-03	1.10E-03	2.11E-03	1.16E-03	9.08E-04	7.49E-04	1.24E-03	6.19E-04
1/3/2017	2.40E-03	1.40E-03	4.73E-04	1.39E-03	1.78E-03	1.04E-03	3.30E-05	3.39E-04

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 776-A Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/2/2016	1.99E-02	1.92E-02	4.32E-03	1.93E-02	1.19E-02	1.34E-02	1.24E-03	5.36E-03
3/1/2016	1.09E-02	1.51E-02	-3.73E-03	1.77E-02	6.30E-03	1.32E-02	1.13E-02	8.59E-03
4/5/2016	1.40E-02	1.58E-02	-1.72E-03	1.64E-02	2.07E-02	1.24E-02	2.29E-05	4.20E-03
5/3/2016	1.98E-02	2.00E-02	-2.97E-03	1.75E-02	1.29E-02	1.33E-02	-3.00E-03	8.72E-04
6/7/2016	4.97E-03	1.39E-02	2.44E-02	1.70E-02	-1.26E-02	9.13E-03	4.03E-03	5.90E-03
7/5/2016	4.65E-03	2.11E-02	2.69E-02	2.14E-02	1.32E-02	1.36E-02	8.05E-04	6.45E-03
8/2/2016	-9.76E-03	1.63E-02	-1.09E-02	1.98E-02	7.38E-03	1.51E-02	7.14E-03	8.63E-03
9/6/2016	-8.03E-03	1.21E-02	-3.84E-04	1.49E-02	4.65E-03	9.93E-03	4.84E-03	4.50E-03
10/4/2016	-4.65E-02	2.14E-02	-2.70E-02	2.08E-02	1.30E-02	1.35E-02	-2.73E-03	1.30E-03
11/1/2016	2.42E-03	1.98E-02	8.57E-03	2.00E-02	1.56E-02	1.36E-02	-2.59E-03	1.23E-03
12/6/2016	2.48E-02	1.81E-02	-1.30E-02	1.44E-02	2.36E-02	1.20E-02	-2.01E-03	9.56E-04
1/3/2017	2.29E-02	1.78E-02	-2.35E-03	1.92E-02	3.76E-02	1.64E-02	-4.51E-03	9.28E-04

Location: 791-A Sandfilter Discharge

Sample Date	Co-60		Cs-137		I-129	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/5/2016	3.84E-03	6.54E-03	1.29E-03	5.82E-03	1.08E-03	5.02E-03
1/12/2016	-7.76E-03	5.61E-03	1.91E-03	5.82E-03	2.25E-03	5.73E-03
1/19/2016	-4.86E-03	4.31E-03	1.47E-02	6.84E-03	-6.49E-03	6.38E-03
1/26/2016	2.21E-03	5.27E-03	-1.78E-03	6.79E-03	-6.03E-04	2.61E-03
2/2/2016	3.70E-03	6.02E-03	-2.42E-03	6.78E-03	8.35E-03	5.75E-03
2/9/2016	-4.81E-04	6.03E-03	-3.62E-03	6.56E-03	-7.86E-04	3.13E-03
2/16/2016	3.78E-03	5.83E-03	6.59E-03	6.16E-03	1.10E-03	3.44E-03
2/23/2016	-3.65E-03	4.70E-03	-6.81E-03	5.64E-03	6.19E-02	4.86E-03
3/1/2016	1.43E-03	7.19E-03	-9.49E-03	7.58E-03	2.56E-02	6.09E-03
3/8/2016	7.95E-03	7.35E-03	1.16E-02	8.47E-03	2.12E-02	4.42E-03
3/15/2016	1.14E-02	6.72E-03	-2.50E-03	6.53E-03	2.65E-02	7.16E-03
3/22/2016	7.35E-03	6.69E-03	2.36E-03	7.50E-03	8.41E-03	3.39E-03
3/29/2016	9.14E-03	6.81E-03	-1.69E-02	6.10E-03	1.53E-02	4.59E-03
4/5/2016	4.16E-03	3.98E-03	9.54E-03	3.98E-03	3.22E-02	5.92E-03
4/12/2016	3.78E-03	3.07E-03	-6.76E-04	3.09E-03	2.55E-02	8.52E-03
4/19/2016	5.03E-03	5.96E-03	1.62E-03	5.21E-03	1.87E-02	7.00E-03
4/26/2016	7.16E-03	6.56E-03	5.27E-04	7.35E-03	2.45E-02	8.19E-03
5/3/2016	-3.30E-03	6.07E-03	-7.43E-03	7.50E-03	1.81E-02	4.28E-03
5/10/2016	1.63E-03	5.83E-03	1.23E-03	5.00E-03	1.50E-02	6.33E-03

Sample Date	Co-60		Cs-137		I-129	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
5/17/2016	4.57E-03	6.29E-03	4.92E-03	5.94E-03	1.40E-02	3.83E-03
5/24/2016	1.19E-03	5.95E-03	2.78E-03	6.27E-03	2.73E-02	5.53E-03
5/31/2016	-2.04E-03	4.92E-03	1.16E-03	7.22E-03	2.12E-02	4.78E-03
6/7/2016	-3.62E-03	4.68E-03	5.76E-03	5.78E-03	1.39E-02	4.20E-03
6/14/2016	-9.16E-03	6.40E-03	1.11E-02	8.08E-03	2.86E-02	6.37E-03
6/21/2016	-2.12E-04	6.11E-03	2.42E-03	7.60E-03	2.63E-02	5.66E-03
6/28/2016	-4.92E-03	6.26E-03	8.95E-03	7.09E-03	1.59E-02	7.02E-03
7/5/2016	9.30E-03	6.72E-03	4.84E-04	7.63E-03	1.99E-02	5.51E-03
7/12/2016	-5.59E-04	6.31E-03	-5.38E-03	7.08E-03	1.54E-02	8.34E-03
7/19/2016	3.11E-04	5.67E-03	1.34E-03	7.37E-03	2.07E-02	6.19E-03
7/26/2016	-2.48E-03	6.22E-03	4.19E-03	7.08E-03	2.97E-02	5.68E-03
8/2/2016	-8.11E-04	7.03E-03	4.32E-03	6.26E-03	2.23E-02	5.71E-03
8/9/2016	-1.48E-02	7.15E-03	5.46E-03	6.78E-03	1.26E-02	6.25E-03
8/16/2016	1.20E-02	5.36E-03	-6.38E-05	6.65E-03	2.21E-02	4.89E-03
8/23/2016	-5.70E-03	5.70E-03	-6.81E-05	6.98E-03	1.10E-02	4.41E-03
8/30/2016	-1.04E-02	7.63E-03	-2.78E-03	6.40E-03	1.52E-02	4.25E-03
9/6/2016	5.95E-03	6.09E-03	2.22E-03	7.00E-03	1.11E-02	3.72E-03
9/13/2016	-1.81E-03	5.92E-03	3.03E-04	6.94E-03	4.70E-03	3.58E-03
9/20/2016	5.24E-04	6.11E-03	-7.38E-03	6.90E-03	9.81E-03	4.23E-03
9/27/2016	8.51E-04	7.82E-03	-5.35E-03	5.80E-03	1.11E-02	4.11E-03
10/4/2016	6.43E-03	5.73E-03	1.15E-03	7.52E-03	1.96E-02	8.04E-03
10/11/2016	9.32E-04	6.42E-03	-4.14E-03	5.32E-03	1.07E-02	3.09E-03
10/18/2016	2.68E-04	7.75E-03	1.27E-02	6.43E-03	8.43E-03	3.00E-03
10/25/2016	6.16E-04	6.61E-03	-5.81E-03	7.49E-03	1.22E-02	6.32E-03
11/1/2016	2.21E-03	6.22E-03	3.97E-03	6.11E-03	2.38E-03	2.54E-03
11/8/2016	1.45E-02	6.97E-03	-4.84E-03	6.40E-03	3.84E-04	3.30E-03
11/15/2016	-2.92E-04	5.24E-03	-3.38E-03	5.37E-03	8.24E-03	2.90E-03
11/22/2016	2.38E-04	6.69E-03	-6.73E-03	5.97E-03	8.22E-03	4.95E-03
11/29/2016	-3.78E-03	5.11E-03	3.05E-03	6.35E-03	6.19E-04	3.39E-03
12/6/2016	-1.25E-02	6.39E-03	1.69E-03	6.31E-03	2.05E-03	2.66E-03
12/13/2016	6.16E-03	5.51E-03	8.27E-04	5.24E-03	1.04E-02	5.83E-03
12/20/016	-9.30E-03	6.40E-03	-3.51E-04	6.58E-03	5.68E-03	3.43E-03
12/27/2016	1.85E-03	7.65E-03	-9.27E-04	5.80E-03	-9.27E-04	3.19E-03
1/3/2017	-3.22E-03	5.40E-03	-5.22E-03	6.99E-03	9.27E-03	4.05E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: 791-A Sandfilter Discharge (continued)

Sample Date	Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.
1/5/2016	-3.11E-03	3.71E-03	-1.06E-03	4.51E-04
1/12/2016	6.97E-03	5.08E-03	-1.37E-03	5.50E-04
1/19/2016	-2.35E-03	3.55E-03	-1.19E-03	5.29E-04
1/26/2016	-2.32E-03	3.50E-03	-1.20E-03	5.30E-04
2/2/2016	1.34E-02	5.37E-03	-1.28E-03	5.64E-04
2/9/2016	9.41E-03	4.95E-03	4.00E-04	1.74E-03
2/16/2016	5.57E-03	4.96E-03	3.49E-03	2.83E-03
2/23/2016	5.35E-03	5.16E-03	2.01E-03	2.47E-03
3/1/2016	1.62E-02	5.95E-03	5.11E-04	1.77E-03
3/8/2016	3.73E-03	5.07E-03	-1.29E-03	5.45E-04
3/15/2016	7.73E-03	5.25E-03	3.32E-03	2.95E-03
3/22/2016	7.35E-03	5.05E-03	2.66E-03	2.69E-03
3/29/2016	8.19E-03	5.05E-03	2.62E-03	2.65E-03
4/5/2016	-1.85E-04	2.18E-03	-5.70E-04	1.66E-04
4/12/2016	1.21E-03	2.49E-03	6.35E-06	9.82E-04
4/19/2016	-1.98E-03	3.86E-03	-1.64E-03	6.23E-04
4/26/2016	9.38E-03	5.45E-03	-5.57E-05	1.94E-03
5/3/2016	2.55E-03	4.43E-03	-1.03E-03	3.00E-04
5/10/2016	-8.00E-04	3.15E-03	8.57E-04	1.70E-03
5/17/2016	1.88E-03	3.35E-03	-4.19E-05	1.41E-03
5/24/2016	-4.00E-04	3.23E-03	5.00E-03	2.46E-03
5/31/2016	1.35E-02	4.05E-03	-6.30E-05	1.46E-03
6/7/2016	1.57E-02	5.96E-03	8.35E-06	1.87E-03
6/14/2016	3.49E-03	4.58E-03	2.07E-03	2.80E-03
6/21/2016	1.16E-02	5.43E-03	-1.63E-03	1.24E-03
6/28/2016	3.65E-03	4.53E-03	-1.54E-03	1.17E-03
7/5/2016	7.81E-03	5.16E-03	-1.59E-03	1.21E-03
7/12/2016	-1.22E-03	5.00E-03	5.70E-04	2.19E-03
7/19/2016	7.51E-04	5.16E-03	5.89E-04	2.26E-03
7/26/2016	3.76E-03	5.37E-03	-1.19E-03	1.32E-03
8/2/2016	3.70E-03	5.30E-03	-1.18E-03	1.31E-03
8/9/2016	1.11E-02	6.28E-03	4.05E-03	3.35E-03
8/16/2016	-1.23E-03	3.91E-03	1.43E-03	1.98E-03
8/23/2016	4.68E-03	4.71E-03	-1.62E-03	1.23E-03
8/30/2016	6.62E-03	5.00E-03	2.78E-04	2.25E-03
9/6/2016	-2.21E-03	3.97E-03	-5.68E-04	1.17E-03
9/13/2016	1.69E-03	4.28E-03	-6.00E-04	1.22E-03
9/20/2016	3.46E-03	4.85E-03	-1.03E-03	3.68E-04
9/27/2016	1.31E-02	5.46E-03	-9.49E-04	4.49E-04

Sample Date	Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.
10/4/2016	-1.44E-03	3.96E-03	9.22E-04	1.90E-03
10/11/2016	8.76E-03	5.25E-03	2.35E-03	2.41E-03
10/18/2016	6.08E-03	5.02E-03	6.84E-04	1.76E-03
10/25/2016	6.14E-03	4.98E-03	-9.97E-04	3.54E-04
11/1/2016	1.50E-02	5.38E-03	8.41E-04	1.75E-03
11/8/2016	3.24E-03	4.66E-03	4.70E-03	3.29E-03
11/15/2016	7.89E-03	4.83E-03	8.54E-04	1.77E-03
11/22/2016	1.56E-02	5.64E-03	2.67E-03	2.56E-03
11/29/2016	1.42E-03	4.52E-03	6.62E-04	1.70E-03
12/6/2016	5.14E-03	4.51E-03	-8.43E-04	4.01E-04
12/13/2016	1.37E-03	4.11E-03	8.54E-04	1.76E-03
12/20/2016	-3.16E-03	3.90E-03	1.65E-04	1.67E-03
12/27/2016	1.50E-03	4.42E-03	-1.47E-03	3.02E-04
1/3/2016	3.38E-03	4.67E-03	-1.49E-03	3.06E-04

Location: K-Area Main Stack (148 ft)

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-3.41E-03	9.59E-03	3.62E-04	1.17E-02	2.36E-02	9.56E-03	7.30E-04	3.21E-03
3/14/2016	-4.46E-03	7.28E-03	-3.65E-03	8.04E-03	2.97E-02	8.51E-03	8.95E-03	5.09E-03
5/9/2016	8.41E-03	6.46E-03	-5.76E-03	7.40E-03	1.80E-02	5.01E-03	6.95E-03	3.12E-03
7/4/2016	-1.26E-03	8.18E-03	-1.54E-03	8.45E-03	3.19E-02	8.37E-03	7.59E-03	5.09E-03
9/5/2016	-3.59E-03	5.64E-03	6.27E-03	6.83E-03	2.19E-02	6.60E-03	3.89E-03	2.82E-03
10/31/2016	-1.55E-03	6.67E-03	6.95E-03	9.40E-03	2.17E-02	7.44E-03	1.06E-03	2.21E-03
1/2/2017	2.14E-02	9.36E-03	8.08E-03	8.46E-03	1.79E-02	7.43E-03	2.18E-04	2.27E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: KIS Stack

Sample Date	Co-60		Cs-137		Sr-89/90		Th-228	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	4.84E-03	7.19E-03	1.79E-02	9.04E-03	1.66E-03	1.94E-03	1.17E-04	1.44E-04
1/18/2016	-1.31E-02	5.33E-03	-1.13E-02	7.52E-03	-2.11E-03	1.44E-03	7.92E-05	3.98E-05
1/25/2016	8.46E-03	7.75E-03	-2.54E-02	8.10E-03	6.03E-04	1.76E-03	6.97E-05	4.63E-05
2/1/2016	2.92E-03	7.74E-03	-5.97E-04	7.30E-03	-3.92E-03	1.87E-03	4.95E-05	7.92E-05
2/8/2016	6.19E-03	6.57E-03	3.73E-03	8.76E-03	8.49E-04	2.36E-03	1.23E-04	5.32E-05
2/15/2016	7.92E-03	6.84E-03	1.48E-02	8.00E-03	-3.32E-04	2.27E-03	1.58E-04	6.71E-05
2/22/2016	2.55E-03	7.30E-03	5.84E-03	7.05E-03	1.47E-03	1.53E-03	1.18E-04	7.22E-05
2/29/2016	-4.16E-03	6.16E-03	-1.21E-02	7.25E-03	-1.01E-03	2.00E-03	3.70E-05	7.34E-05
3/7/2016	4.70E-03	7.30E-03	-9.51E-04	7.50E-03	3.22E-03	1.60E-03	2.22E-04	1.04E-04
3/14/2016	-5.76E-03	6.72E-03	-5.19E-03	9.21E-03	1.68E-03	1.89E-03	3.76E-05	4.80E-05
3/21/2016	5.73E-04	5.05E-03	-5.32E-03	7.99E-03	1.51E-03	2.07E-03	1.74E-04	6.71E-05
3/28/2016	-2.38E-03	9.17E-03	-1.56E-02	9.89E-03	2.27E-03	1.03E-03	8.73E-05	7.94E-05
4/4/2016	-6.43E-03	8.28E-03	2.09E-03	8.59E-03	1.07E-03	1.86E-03	1.42E-04	9.52E-05
4/11/2016	2.95E-03	7.38E-03	-5.68E-03	8.59E-03	1.77E-03	2.00E-03	9.78E-05	9.13E-05
4/18/2016	5.16E-03	7.11E-03	6.19E-04	7.87E-03	6.49E-04	2.24E-03	6.68E-06	8.53E-05
4/25/2016	5.86E-05	6.29E-03	1.42E-03	8.30E-03	-1.62E-04	1.90E-03	2.63E-05	6.96E-05
5/2/2016	3.43E-03	7.49E-03	4.86E-03	6.29E-03	-1.90E-03	1.60E-03	1.44E-04	5.76E-05
5/9/2016	1.07E-03	7.62E-03	9.65E-03	7.78E-03	3.08E-03	2.04E-03	7.62E-05	8.67E-05
5/16/2016	-1.47E-03	5.45E-03	3.70E-03	6.53E-03	3.57E-03	2.73E-03	1.82E-04	6.93E-05
5/23/2016	1.70E-03	6.06E-03	-4.41E-03	8.20E-03	3.86E-03	2.47E-03	2.16E-04	9.32E-05
5/30/2016	-7.81E-03	4.86E-03	-1.25E-03	8.48E-03	5.05E-04	2.17E-03	3.38E-04	1.11E-04
6/6/2017	-1.04E-02	8.47E-03	-2.70E-03	6.66E-03	5.22E-03	2.35E-03	3.86E-05	8.38E-05
6/13/2016	7.27E-03	7.30E-03	8.70E-03	7.61E-03	-6.78E-04	1.82E-03	1.72E-04	1.05E-04
6/20/2016	6.95E-04	7.46E-03	6.32E-03	7.73E-03	6.78E-05	2.29E-03	2.06E-04	8.63E-05
6/27/2016	-9.73E-03	8.40E-03	-2.89E-03	7.95E-03	-7.16E-04	2.51E-03	1.24E-04	8.26E-05
7/4/2016	-1.73E-03	8.76E-03	5.08E-03	7.68E-03	-8.89E-04	2.10E-03	1.57E-04	8.84E-05
7/11/2016	-1.41E-03	6.57E-03	1.07E-02	7.38E-03	3.46E-03	2.48E-03	9.68E-05	8.92E-05
7/18/2016	7.46E-03	5.54E-03	3.03E-03	6.68E-03	-2.52E-03	1.55E-03	3.76E-05	7.37E-05
7/25/2016	8.84E-04	8.33E-03	3.84E-03	7.99E-03	1.78E-03	1.83E-03	2.23E-04	7.55E-05
8/1/2016	3.24E-03	6.56E-03	6.41E-03	8.23E-03	-9.16E-05	2.24E-03	1.24E-04	3.45E-05
8/8/2016	8.19E-04	8.63E-03	-1.28E-03	6.21E-03	-5.22E-04	2.24E-03	9.84E-05	4.86E-05
8/15/2016	3.08E-03	6.51E-03	9.35E-03	7.62E-03	1.11E-03	2.42E-03	3.14E-04	8.13E-05
8/16/2016	-8.14E-03	7.70E-03	3.03E-03	8.13E-03	3.70E-04	2.29E-03	1.62E-04	6.96E-05
8/29/2016	4.00E-03	7.48E-03	6.03E-03	7.44E-03	-3.41E-03	1.88E-03	1.26E-04	7.94E-05
9/5/2016	-1.11E-02	6.53E-03	-5.00E-04	7.89E-03	7.62E-04	2.30E-03	6.51E-05	5.99E-05
12/12/2016	-1.63E-03	9.09E-03	-4.35E-03	7.69E-03	-2.43E-04	2.25E-03	1.11E-04	7.51E-05
12/19/2016	2.56E-03	7.35E-03	4.65E-03	7.85E-03	2.27E-03	2.38E-03	1.19E-04	1.10E-04
10/3/2016	4.08E-03	5.60E-03	5.32E-03	5.71E-03	-7.00E-04	1.54E-03	8.24E-05	5.03E-05
10/10/2016	2.68E-03	3.87E-03	7.14E-03	3.82E-03	5.73E-04	1.15E-03	-4.92E-05	3.22E-05

Sample Date	Co-60		Cs-137		Sr-89/90		Th-228	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
10/16/2017	6.24E-03	5.71E-03	-2.95E-03	5.66E-03	-8.22E-04	1.45E-03	1.58E-04	7.37E-05
10/24/2016	-1.40E-03	4.18E-03	4.51E-03	4.38E-03	-8.41E-04	1.26E-03	1.11E-04	5.66E-05
10/31/2016	-2.97E-03	5.62E-03	1.17E-02	5.98E-03	5.30E-03	1.90E-03	1.27E-04	6.67E-05
11/7/2016	-2.49E-03	5.03E-03	1.05E-03	5.98E-03	-8.05E-05	1.48E-03	1.12E-04	4.80E-05
11/14/2016	-1.77E-03	4.47E-03	-1.09E-02	5.51E-03	1.80E-03	1.59E-03	9.35E-05	5.57E-05
11/21/2016	-1.07E-03	5.32E-03	4.11E-04	5.78E-03	2.18E-03	1.99E-03	8.97E-05	4.69E-05
11/28/2016	5.19E-03	3.77E-03	3.49E-03	4.83E-03	8.19E-05	1.41E-03	9.24E-05	5.49E-05
12/5/2016	-3.81E-03	4.97E-03	-5.70E-03	4.82E-03	2.27E-03	1.48E-03	8.51E-05	4.09E-05
12/12/2016	5.81E-03	5.51E-03	1.92E-03	6.31E-03	2.59E-03	1.68E-03	7.78E-05	3.72E-05
12/19/2016	7.24E-03	3.96E-03	-1.81E-03	5.92E-03	7.03E-05	9.17E-04	1.25E-04	4.90E-05
12/16/2016	-1.57E-03	3.74E-03	2.62E-03	4.40E-03	2.08E-03	1.34E-03	6.49E-05	3.16E-05
1/2/2017	-2.27E-03	5.32E-03	-1.11E-03	4.63E-03	1.95E-03	1.54E-03	5.84E-05	3.00E-05

Location: KIS Stack (continued)

Sample Date	Th-230		Th-232		U-234		U-235	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	6.89E-04	1.60E-04	6.86E-05	4.05E-05	1.40E-04	5.24E-05	-1.38E-05	1.39E-05
1/18/2016	3.57E-04	9.09E-05	2.30E-04	6.85E-05	1.22E-04	5.23E-05	2.58E-05	2.58E-05
1/25/2016	5.19E-04	1.10E-04	9.22E-05	4.22E-05	3.35E-05	4.23E-05	7.46E-06	2.70E-05
2/1/2016	6.95E-04	1.31E-04	1.25E-04	4.86E-05	8.57E-05	4.63E-05	0.00E+00	2.35E-05
2/8/2016	3.27E-04	9.00E-05	1.89E-04	6.14E-05	1.41E-04	5.08E-05	2.04E-05	2.20E-05
2/15/2016	5.68E-04	1.34E-04	1.02E-04	4.58E-05	1.24E-04	5.58E-05	2.29E-05	2.29E-05
2/22/2016	5.05E-04	1.25E-04	6.27E-05	3.63E-05	1.29E-04	5.01E-05	0.00E+00	2.21E-05
2/29/2016	5.16E-04	1.16E-04	6.11E-05	3.54E-05	1.13E-04	4.67E-05	-1.55E-05	1.56E-05
3/7/2016	3.24E-04	9.52E-05	1.73E-04	6.47E-05	2.02E-04	6.78E-05	0.00E+00	2.41E-05
3/14/2016	2.97E-04	8.72E-05	1.18E-04	5.01E-05	1.56E-04	6.34E-05	6.00E-05	4.95E-05
3/21/2016	2.41E-04	7.75E-05	8.84E-05	4.93E-05	1.42E-04	5.76E-05	6.19E-06	2.90E-05
3/28/2016	7.78E-04	1.82E-04	1.61E-04	7.72E-05	2.32E-04	8.72E-05	4.59E-05	5.41E-05
4/4/2016	3.78E-04	1.03E-04	8.84E-05	4.79E-05	4.27E-05	4.79E-05	7.54E-06	2.73E-05
4/11/2016	4.00E-04	1.00E-04	9.46E-05	4.26E-05	1.02E-04	5.12E-05	0.00E+00	2.05E-05
4/18/2016	2.69E-04	9.56E-05	1.36E-04	5.22E-05	4.05E-05	3.51E-05	6.68E-05	4.05E-05
4/25/2016	5.51E-04	1.21E-04	1.22E-04	5.32E-05	1.02E-04	4.41E-05	1.94E-05	2.20E-05
5/2/2016	3.05E-04	8.80E-05	7.46E-05	3.83E-05	7.76E-05	4.58E-05	-1.57E-05	1.58E-05
5/9/2016	4.11E-04	1.01E-04	9.81E-05	4.77E-05	5.62E-05	3.99E-05	2.27E-05	2.27E-05
5/16/2016	4.59E-04	1.06E-04	1.26E-04	4.83E-05	1.72E-04	6.08E-05	-2.27E-06	2.54E-06
5/23/2016	3.76E-04	9.82E-05	1.96E-04	6.31E-05	1.48E-04	6.17E-05	-2.26E-06	2.54E-06
5/30/2016	6.78E-04	1.29E-04	2.18E-04	6.43E-05	1.01E-04	4.83E-05	2.32E-05	2.33E-05
6/6/2016	3.92E-04	9.74E-05	1.51E-04	5.43E-05	1.11E-04	5.52E-05	-4.81E-05	2.81E-05
6/13/2016	2.51E-04	7.61E-05	1.34E-04	5.12E-05	3.76E-04	8.88E-05	0.00E+00	2.17E-05
6/20/2016	3.46E-04	8.67E-05	1.23E-04	5.34E-05	1.84E-04	5.88E-05	7.54E-06	2.72E-05

Sample Date	Th-230		Th-232		U-234		U-235	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
6/27/2016	2.13E-04	7.05E-05	6.38E-05	4.05E-05	1.15E-04	4.74E-05	-1.58E-05	1.59E-05
7/4/2016	2.78E-04	8.16E-05	8.35E-05	4.42E-05	1.47E-04	5.28E-05	-1.65E-05	1.51E-05
7/11/2016	2.18E-04	6.97E-05	1.18E-04	5.06E-05	4.41E-05	3.51E-05	2.18E-05	2.35E-05
7/18/2016	1.64E-04	6.16E-05	9.08E-05	4.12E-05	1.15E-04	5.23E-05	0.00E+00	2.30E-05
7/25/2016	1.02E-04	5.37E-05	1.22E-04	5.06E-05	1.24E-04	5.62E-05	-1.54E-05	1.56E-05
8/1/2016	1.95E-04	4.94E-05	1.56E-04	3.82E-05	1.36E-04	3.68E-05	-2.40E-05	2.59E-05
8/8/2016	2.19E-04	7.27E-05	1.84E-04	6.01E-05	2.06E-04	6.34E-05	-1.54E-05	1.55E-05
8/15/2016	4.65E-04	1.10E-04	3.16E-05	3.75E-05	1.70E-04	5.81E-05	4.57E-05	3.34E-05
8/22/2016	3.30E-04	9.52E-05	1.99E-04	6.41E-05	1.21E-04	5.30E-05	6.78E-06	2.85E-05
8/29/2016	2.37E-04	7.35E-05	9.05E-05	4.15E-05	9.70E-05	4.65E-05	6.30E-06	2.70E-05
9/5/2016	2.19E-04	6.92E-05	2.06E-04	6.41E-05	2.28E-04	6.74E-05	9.27E-05	4.76E-05
9/12/2016	5.14E-04	1.14E-04	1.33E-04	5.08E-05	4.38E-05	3.49E-05	2.32E-05	2.32E-05
9/19/2016	7.05E-04	1.29E-04	7.35E-05	3.70E-05	1.09E-04	4.74E-05	0.00E+00	2.08E-05
10/3/2016	1.85E-04	5.44E-05	8.00E-05	3.40E-05	1.77E-04	5.19E-05	2.03E-05	2.58E-05
10/10/2016	1.27E-04	3.88E-05	8.27E-05	3.16E-05	5.49E-05	2.39E-05	1.05E-05	1.07E-05
10/17/2016	1.66E-04	4.94E-05	1.52E-04	4.96E-05	7.57E-05	3.12E-05	1.53E-05	1.56E-05
10/24/2016	7.03E-05	3.27E-05	9.24E-05	3.33E-05	1.07E-04	3.78E-05	1.28E-05	1.44E-05
10/31/2016	3.49E-04	7.59E-05	4.41E-05	2.91E-05	7.51E-05	3.80E-05	-1.53E-06	1.72E-06
11/7/2016	3.43E-04	7.63E-05	9.03E-05	3.53E-05	9.32E-05	3.72E-05	1.57E-05	1.57E-05
11/14/2016	1.75E-04	5.15E-05	8.68E-05	3.76E-05	1.37E-04	4.32E-05	2.97E-05	2.11E-05
11/21/2016	1.50E-04	4.81E-05	8.35E-05	3.44E-05	1.55E-04	4.95E-05	5.38E-06	2.04E-05
11/28/2016	1.88E-04	5.01E-05	1.55E-04	4.39E-05	8.65E-05	3.12E-05	1.31E-05	1.34E-05
12/5/2016	1.94E-04	5.02E-05	5.78E-05	2.61E-05	1.65E-04	4.39E-05	-9.76E-06	9.04E-06
12/12/2016	4.73E-04	9.86E-05	5.59E-05	2.82E-05	2.76E-04	6.36E-05	1.51E-05	1.60E-05
12/19/2016	3.30E-04	8.12E-05	8.05E-05	3.32E-05	1.39E-04	4.74E-05	-2.14E-05	1.53E-05
12/26/2016	1.55E-04	4.42E-05	7.16E-05	2.95E-05	7.03E-05	3.17E-05	4.11E-05	2.46E-05
1/2/2017	2.89E-04	6.72E-05	9.14E-05	3.97E-05	8.76E-05	3.95E-05	3.38E-05	2.50E-05

Location: KIS Stack (continued)

Sample Date	Np-237		U-238		Pu-238		Pu-239	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	5.32E-06	2.45E-05	5.59E-05	3.55E-05	1.20E-04	6.22E-05	7.78E-05	4.13E-05
1/18/2016	-8.32E-06	2.74E-05	6.62E-06	2.50E-05	2.54E-05	3.11E-05	-1.32E-05	1.32E-05
1/25/2016	1.90E-05	2.11E-05	1.02E-04	5.14E-05	-3.51E-05	3.42E-05	0.00E+00	2.25E-05
2/1/2016	1.25E-05	3.29E-05	1.58E-04	5.66E-05	2.44E-05	3.01E-05	5.32E-06	2.30E-05
2/8/2016	2.40E-05	2.87E-05	8.81E-05	3.98E-05	5.00E-06	2.18E-05	5.00E-06	2.18E-05
2/15/2016	4.08E-06	2.23E-05	2.23E-04	6.56E-05	1.26E-04	4.95E-05	-1.02E-06	1.40E-06
2/22/2016	-1.35E-05	1.36E-05	6.16E-05	3.94E-05	4.59E-06	2.44E-05	1.94E-05	2.03E-05
2/29/2016	-2.04E-06	2.85E-06	1.19E-04	5.18E-05	2.39E-05	2.99E-05	3.68E-05	2.72E-05
3/7/2016	0.00E+00	2.36E-05	1.17E-04	4.85E-05	2.36E-05	3.06E-05	-7.08E-07	9.97E-07

Sample Date	Np-237		U-238		Pu-238		Pu-239	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
3/14/2016	3.49E-05	4.13E-05	1.27E-04	5.34E-05	2.76E-05	3.24E-05	2.44E-05	3.30E-05
3/21/2016	-1.84E-05	2.81E-05	1.41E-04	5.75E-05	0.00E+00	2.20E-05	2.70E-05	3.65E-05
3/28/2016	9.92E-06	3.58E-05	1.12E-04	5.62E-05	8.22E-04	1.69E-04	2.95E-05	2.95E-05
4/4/2016	1.95E-05	1.95E-05	1.28E-04	4.90E-05	7.54E-05	3.95E-05	4.54E-06	2.34E-05
4/11/2016	2.43E-05	2.85E-05	1.32E-04	5.29E-05	4.03E-05	3.40E-05	8.81E-05	4.13E-05
4/18/2016	-4.49E-05	2.63E-05	1.31E-04	4.99E-05	2.97E-05	3.48E-05	0.00E+00	2.56E-05
4/25/2016	3.81E-05	2.72E-05	8.19E-05	4.63E-05	-1.26E-05	1.26E-05	2.52E-05	2.96E-05
5/2/2016	-4.59E-05	3.21E-05	1.38E-04	5.62E-05	7.68E-05	3.85E-05	3.68E-05	2.76E-05
5/9/2016	-4.35E-05	3.08E-05	9.05E-05	4.17E-05	3.54E-05	2.51E-05	5.76E-05	3.79E-05
5/16/2016	-7.84E-06	2.82E-05	6.16E-05	3.91E-05	3.54E-05	3.07E-05	4.03E-05	2.90E-05
5/23/2016	-9.92E-07	1.41E-06	8.38E-05	4.54E-05	-5.24E-06	7.43E-06	1.87E-05	1.91E-05
5/30/2016	-2.45E-05	1.76E-05	1.00E-04	4.80E-05	3.62E-05	2.60E-05	-2.76E-05	1.74E-05
6/6/2016	-1.48E-05	1.50E-05	1.82E-04	6.37E-05	2.17E-05	2.21E-05	1.88E-05	2.29E-05
6/13/2016	-7.19E-05	3.24E-05	1.47E-04	6.29E-05	4.16E-05	3.05E-05	9.11E-05	5.03E-05
6/20/2016	6.89E-06	2.49E-05	1.81E-04	5.93E-05	6.84E-06	2.46E-05	-2.81E-05	1.93E-05
6/27/2016	5.73E-05	3.34E-05	9.41E-05	4.36E-05	3.78E-05	2.69E-05	-2.62E-05	1.79E-05
7/4/2016	-6.46E-06	2.53E-05	5.51E-05	3.19E-05	4.24E-05	3.38E-05	3.65E-05	2.58E-05
7/11/2016	-1.45E-05	1.42E-05	1.01E-04	4.81E-05	4.22E-05	2.99E-05	-2.81E-05	2.01E-05
7/18/2016	-5.03E-05	3.27E-05	1.91E-04	5.85E-05	1.38E-04	5.18E-05	-1.14E-05	3.22E-05
7/25/2016	-4.16E-05	2.48E-05	1.18E-04	5.12E-05	6.89E-06	2.48E-05	2.03E-05	2.08E-05
8/1/2016	3.59E-05	2.73E-05	1.31E-04	3.75E-05	1.68E-05	1.92E-05	2.46E-05	2.94E-05
8/8/2016	-2.65E-05	1.74E-05	1.45E-04	5.48E-05	2.24E-05	2.89E-05	-6.38E-06	2.05E-05
8/15/2016	2.09E-05	2.10E-05	1.01E-04	4.85E-05	2.55E-05	3.28E-05	4.78E-05	3.86E-05
8/22/2016	-6.41E-06	2.64E-05	1.15E-04	4.74E-05	7.38E-05	3.90E-05	-1.93E-05	2.90E-05
8/29/2016	-6.65E-06	2.74E-05	1.08E-04	4.51E-05	7.78E-05	4.03E-05	-1.97E-05	3.02E-05
9/5/2016	1.77E-05	1.77E-05	8.14E-05	4.47E-05	5.73E-05	3.74E-05	2.33E-05	2.73E-05
9/12/2016	2.01E-05	2.02E-05	1.31E-04	5.03E-05	4.38E-05	3.77E-05	1.99E-05	1.99E-05
9/19/2016	1.92E-05	1.93E-05	9.16E-05	4.39E-05	2.26E-05	3.03E-05	-2.54E-05	1.81E-05
10/3/2016	3.41E-05	2.72E-05	3.97E-05	3.34E-05	4.49E-05	3.17E-05	1.90E-05	2.27E-05
10/10/2016	-9.38E-06	1.43E-05	8.62E-05	2.80E-05	2.78E-05	1.61E-05	-2.47E-05	1.25E-05
10/17/2016	-8.08E-06	8.11E-06	8.73E-05	3.38E-05	0.00E+00	1.43E-05	3.59E-05	2.09E-05
10/24/2016	0.00E+00	1.37E-05	5.73E-05	2.58E-05	1.07E-05	1.17E-05	2.62E-06	1.40E-05
10/31/2016	0.00E+00	1.65E-05	9.81E-05	3.93E-05	2.53E-05	1.88E-05	-5.76E-06	1.81E-05
11/7/2016	4.97E-06	1.79E-05	1.06E-04	3.94E-05	1.76E-05	2.36E-05	-1.07E-05	9.86E-06
11/14/2016	8.19E-06	2.09E-05	7.24E-05	2.97E-05	1.82E-05	2.44E-05	-4.89E-06	1.67E-05
11/21/2016	0.00E+00	1.65E-05	1.37E-04	4.40E-05	2.64E-05	3.34E-05	2.70E-05	2.07E-05
11/28/2016	0.00E+00	1.39E-05	9.73E-05	3.29E-05	-1.81E-06	2.70E-06	1.53E-05	1.96E-05
12/5/2016	1.27E-05	1.30E-05	1.21E-04	3.72E-05	1.66E-05	2.02E-05	3.78E-05	2.26E-05
12/12/2016	-2.61E-07	3.80E-07	1.16E-04	3.94E-05	4.95E-05	2.54E-05	2.42E-05	1.79E-05
12/19/2016	1.89E-05	2.21E-05	9.49E-05	3.81E-05	4.08E-06	1.69E-05	3.22E-05	2.62E-05
12/26/2016	1.24E-05	1.24E-05	7.95E-05	3.03E-05	-8.97E-06	8.22E-06	3.70E-05	2.15E-05
1/2/2017	1.45E-05	1.46E-05	4.24E-05	2.46E-05	4.22E-05	2.54E-05	7.68E-05	3.70E-05

Table 12 Radioactivity in Air Emission Samples (continued)

Location: KIS Stack (continued)

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-2.95E-07	3.31E-07	0.00E+00	2.35E-05	1.54E-02	1.20E-02	6.68E-04	3.94E-03
1/18/2016	1.74E-05	2.05E-05	6.62E-06	2.39E-05	1.18E-02	1.08E-02	-2.89E-03	1.28E-03
1/25/2016	1.57E-05	1.88E-05	0.00E+00	2.18E-05	7.16E-03	1.03E-02	9.27E-04	4.02E-03
2/1/2016	1.69E-05	2.21E-05	1.96E-05	2.12E-05	3.00E-03	9.93E-03	-2.92E-03	1.28E-03
2/8/2016	1.60E-05	2.11E-05	-1.40E-06	1.57E-06	5.16E-03	1.01E-02	-2.86E-03	1.26E-03
2/15/2016	-6.97E-06	2.74E-05	-2.95E-06	3.31E-06	2.45E-02	1.29E-02	6.54E-04	3.94E-03
2/22/2016	-1.35E-05	1.36E-05	0.00E+00	2.26E-05	-9.68E-03	9.82E-03	1.19E-02	7.55E-03
2/29/2016	-1.33E-05	1.29E-05	-9.32E-06	2.65E-05	2.76E-02	1.30E-02	-3.08E-03	1.23E-03
3/7/2016	0.00E+00	2.23E-05	-1.27E-05	1.27E-05	1.44E-02	1.13E-02	-2.55E-03	1.08E-03
3/14/2016	6.65E-06	2.40E-05	1.97E-05	1.98E-05	2.29E-02	1.26E-02	2.14E-05	4.02E-03
3/21/2016	2.09E-05	2.09E-05	-6.86E-06	2.83E-05	1.85E-02	1.22E-02	2.26E-05	4.03E-03
3/28/2016	1.44E-04	7.79E-05	1.09E-05	3.94E-05	3.14E-02	1.76E-02	8.35E-03	8.43E-03
4/4/2016	1.80E-05	1.91E-05	0.00E+00	2.10E-05	-3.24E-03	1.00E-02	-3.68E-03	1.58E-03
4/11/2016	-9.78E-07	1.09E-06	0.00E+00	2.38E-05	9.24E-04	1.05E-02	2.73E-05	4.05E-03
4/18/2016	7.78E-05	3.91E-05	2.53E-05	3.01E-05	-4.78E-03	9.36E-03	-3.84E-03	1.46E-03
4/25/2016	6.51E-06	2.35E-05	-2.61E-05	1.82E-05	4.11E-03	1.03E-02	-3.84E-03	1.45E-03
5/2/2016	6.00E-06	2.43E-05	-1.33E-05	1.34E-05	-1.03E-03	9.44E-03	1.60E-03	3.91E-03
5/9/2016	-7.16E-07	8.05E-07	3.89E-05	2.76E-05	8.30E-03	7.95E-03	5.65E-03	4.54E-03
5/16/2016	-1.29E-06	1.45E-06	-1.33E-05	1.33E-05	3.11E-03	7.45E-03	-8.54E-05	2.92E-03
5/23/2016	3.89E-05	2.87E-05	0.00E+00	2.39E-05	5.95E-03	7.70E-03	1.79E-03	3.58E-03
5/30/2016	4.08E-05	2.89E-05	0.00E+00	2.26E-05	2.02E-02	8.84E-03	3.84E-03	4.24E-03
6/6/2016	-2.55E-05	1.82E-05	-1.26E-05	1.26E-05	-1.47E-03	1.02E-02	3.73E-03	5.47E-03
6/13/2016	-1.22E-05	1.26E-05	-2.42E-05	1.72E-05	1.53E-02	1.13E-02	-3.41E-03	2.59E-03
6/20/2016	7.05E-05	3.55E-05	0.00E+00	2.05E-05	-6.97E-03	8.72E-03	-3.35E-03	2.57E-03
6/27/2016	0.00E+00	2.30E-05	0.00E+00	2.30E-05	8.05E-03	1.06E-02	4.57E-03	6.17E-03
7/4/2016	3.32E-05	2.55E-05	-2.33E-05	1.66E-05	1.27E-02	1.25E-02	1.21E-03	4.64E-03
7/11/2016	-2.23E-06	2.48E-06	-1.23E-05	1.24E-05	1.03E-02	1.24E-02	4.92E-03	5.95E-03
7/18/2016	-2.47E-05	3.81E-05	1.83E-05	1.83E-05	1.91E-03	1.16E-02	-2.54E-03	2.81E-03
7/25/2016	2.61E-05	3.06E-05	-6.43E-06	2.65E-05	1.91E-02	1.31E-02	5.00E-03	6.03E-03
8/1/2016	-1.98E-06	1.56E-06	1.80E-05	1.35E-05	1.48E-03	1.16E-02	5.00E-03	6.04E-03
8/8/2016	1.71E-05	1.93E-05	-9.76E-07	1.09E-06	-5.46E-03	1.14E-02	4.59E-03	5.78E-03
8/15/2016	0.00E+00	2.27E-05	6.35E-06	2.29E-05	1.48E-02	9.93E-03	1.21E-03	3.83E-03
8/22/2016	4.11E-05	2.92E-05	0.00E+00	2.67E-05	1.69E-02	1.15E-02	4.59E-03	6.21E-03
8/29/2016	3.46E-05	2.45E-05	0.00E+00	2.24E-05	1.93E-02	1.17E-02	5.84E-04	4.74E-03
9/5/2016	0.00E+00	2.41E-05	-1.34E-05	1.35E-05	7.49E-03	1.01E-02	6.46E-03	4.63E-03
9/12/2016	1.80E-05	1.86E-05	6.11E-06	2.21E-05	6.16E-04	9.52E-03	2.59E-03	3.73E-03
9/19/2016	-1.39E-05	1.33E-05	1.96E-05	1.97E-05	2.12E-02	1.24E-02	-2.25E-03	7.99E-04
10/3/2016	-9.57E-06	9.59E-06	0.00E+00	1.64E-05	3.81E-03	7.01E-03	1.37E-03	2.82E-03
10/10/2016	-7.73E-06	6.71E-06	1.32E-05	1.55E-05	2.92E-03	5.54E-03	-1.14E-03	4.05E-04

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
10/17/2016	-1.48E-06	1.68E-06	0.00E+00	1.86E-05	1.32E-02	8.59E-03	1.05E-03	2.69E-03
10/24/2016	1.12E-05	1.12E-05	2.15E-05	1.57E-05	2.54E-02	8.50E-03	5.30E-03	3.86E-03
10/31/2016	-1.66E-05	1.18E-05	-6.62E-07	7.35E-07	1.39E-02	8.01E-03	9.30E-03	5.36E-03
11/7/2016	-1.62E-05	1.15E-05	1.20E-05	1.20E-05	1.73E-02	8.30E-03	3.95E-03	3.77E-03
11/14/2016	-2.23E-05	2.23E-05	-8.78E-06	8.80E-06	-3.76E-03	6.03E-03	1.33E-03	2.73E-03
11/21/2016	1.55E-05	1.56E-05	-2.55E-07	2.89E-07	1.08E-02	8.30E-03	1.45E-03	2.99E-03
11/28/2016	-7.51E-06	7.54E-06	-2.06E-07	2.30E-07	1.15E-02	7.41E-03	-1.40E-03	4.97E-04
12/5/2016	1.24E-05	1.24E-05	1.20E-05	1.23E-05	2.16E-03	6.47E-03	-1.39E-03	4.95E-04
12/12/2016	0.00E+00	1.59E-05	-2.47E-07	2.76E-07	-2.56E-03	6.25E-03	6.54E-03	4.58E-03
12/19/2016	1.36E-05	1.36E-05	-7.19E-07	8.06E-07	-6.54E-03	6.22E-03	-2.29E-03	4.73E-04
12/26/2016	1.15E-05	1.18E-05	1.16E-05	1.16E-05	1.72E-02	8.03E-03	2.26E-04	2.34E-03
1/2/2017	-9.92E-06	9.67E-06	0.00E+00	1.65E-05	1.73E-02	9.32E-03	2.68E-04	2.77E-03

Location: L-Area Disassembly

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-7.51E-03	4.43E-02	-1.03E-01	4.64E-02	2.33E-01	5.18E-02	2.55E-02	2.09E-02
4/11/2016	-6.70E-03	4.91E-02	1.25E-01	5.90E-02	1.43E-01	4.56E-02	3.24E-02	2.34E-02
7/11/2016	-2.81E-03	3.41E-02	-2.61E-02	4.72E-02	9.86E-02	4.44E-02	1.51E-02	1.92E-02
10/10/2016	6.89E-03	3.52E-02	2.95E-02	4.55E-02	2.95E-01	5.44E-02	1.70E-02	1.75E-02

Location: L-Area Main Stack (148 ft)

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
1/11/2016	-1.27E-02	1.62E-02	-9.54E-03	1.78E-02	1.01E-02	1.30E-02	8.08E-04	4.69E-03
3/14/2016	-6.70E-03	1.69E-02	7.76E-03	1.65E-02	1.09E-02	1.28E-02	2.97E-05	4.80E-03
5/9/2016	2.40E-02	1.65E-02	3.11E-03	1.69E-02	2.14E-02	9.86E-03	8.89E-03	5.80E-03
7/11/2016	2.57E-02	1.82E-02	-4.95E-03	1.73E-02	-5.57E-03	1.24E-02	1.49E-03	5.73E-03
9/12/2016	-1.02E-02	1.64E-02	4.30E-03	1.44E-02	5.76E-02	1.67E-02	1.07E-02	7.81E-03
11/14/2016	-1.56E-03	1.77E-02	-4.46E-03	1.54E-02	2.56E-02	1.34E-02	1.17E-02	8.21E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: Saltstone SDU-2

Sample Date	Co-60		Cs-137		Sr-89/90		U-234	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	-3.30E-04	3.45E-03	-2.58E-04	3.93E-03	1.66E-03	9.09E-04	-1.37E-05	9.59E-06
5/10/2016	2.46E-03	3.53E-03	7.68E-04	3.51E-03	-5.19E-04	1.05E-03	2.78E-06	1.19E-05
8/9/2016	-3.22E-03	3.01E-03	-1.07E-03	3.19E-03	1.81E-03	1.21E-03	-8.11E-06	6.86E-06
11/9/2016	6.05E-03	4.13E-03	-3.03E-03	4.17E-03	-1.66E-04	1.06E-03	4.59E-05	2.61E-05

Sample Date	U-235		U-238		Pu-238		Pu-239	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	0.00E+00	1.22E-05	6.08E-05	2.51E-05	1.84E-05	1.36E-05	8.86E-06	9.59E-06
5/10/2016	4.05E-06	1.46E-05	3.27E-06	1.18E-05	9.35E-06	9.59E-06	-6.35E-06	6.37E-06
8/9/2016	-6.14E-07	6.92E-07	-7.24E-06	6.76E-06	-5.27E-07	6.61E-07	8.32E-06	9.59E-06
11/9/2016	0.00E+00	1.22E-05	3.95E-05	2.68E-05	1.09E-05	1.52E-05	1.27E-05	1.49E-05

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	4.81E-05	2.38E-05	0.00E+00	1.31E-05	4.08E-02	8.55E-03	2.70E-04	1.90E-03
5/10/2016	8.84E-06	1.15E-05	1.09E-05	1.09E-05	3.11E-02	5.58E-03	3.54E-03	2.33E-03
8/9/2016	7.68E-05	2.99E-05	-5.68E-07	6.44E-07	2.18E-02	7.79E-03	5.76E-03	3.74E-03
11/9/2016	3.08E-05	2.11E-05	0.00E+00	1.14E-05	4.81E-02	8.72E-03	9.05E-04	1.92E-03

Table 12 Radioactivity in Air Emission Samples (continued)

Location: Saltstone SDU-5

Sample Date	Co-60		Cs-137		Sr-89/90		U-234	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	3.08E-04	2.12E-03	-1.72E-03	2.74E-03	-3.27E-04	6.49E-04	4.89E-05	1.88E-05
5/10/2016	-1.61E-03	2.38E-03	4.38E-03	3.16E-03	6.11E-05	9.32E-04	3.59E-05	2.11E-05
8/9/2016	-2.03E-03	2.05E-03	-2.56E-03	2.94E-03	-1.58E-03	5.45E-04	1.58E-05	1.36E-05
11/9/2016	5.38E-04	2.99E-03	-5.32E-03	2.97E-03	-2.10E-04	7.89E-04	3.95E-05	1.90E-05

Sample Date	U-235		U-238		Pu-238		Pu-239	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	0.00E+00	8.16E-06	9.32E-06	1.09E-05	-4.73E-07	5.89E-07	6.19E-06	6.74E-06
5/10/2016	-5.95E-06	6.01E-06	1.45E-05	1.03E-05	-1.31E-07	1.65E-07	-9.57E-06	6.80E-06
8/9/2016	-4.59E-07	5.16E-07	2.03E-06	8.67E-06	-5.24E-06	4.84E-06	6.46E-06	7.40E-06
11/9/2016	0.00E+00	8.84E-06	3.70E-05	1.67E-05	-1.06E-05	6.61E-06	-9.22E-06	6.58E-06

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.	Conc.	Standard Dev.
2/16/2016	7.32E-05	2.50E-05	-5.00E-06	5.00E-06	2.76E-02	6.36E-03	5.62E-03	3.06E-03
5/10/2016	2.18E-05	1.39E-05	-5.14E-06	5.15E-06	2.55E-02	4.28E-03	1.98E-03	1.62E-03
8/9/2016	2.68E-05	1.75E-05	-4.24E-07	4.82E-07	2.14E-02	4.76E-03	7.00E-03	2.43E-03
11/9/2016	-1.42E-06	1.62E-06	1.68E-05	1.19E-05	3.43E-02	6.44E-03	2.07E-03	2.00E-03

Location: Z201-SSRT

Sample Date	Radionuclide	Conc.	Standard Dev.
11/9/2016	Co-60	-4.03E-03	3.01E-03
11/9/2016	Cs-137	-5.11E-03	3.06E-03
11/9/2016	Sr-89/90	-7.81E-04	7.71E-04
11/9/2016	U-234	7.27E-05	2.64E-05
11/9/2016	U-235	1.24E-05	1.46E-05
11/9/2016	U-238	1.75E-05	1.40E-05
11/9/2016	Pu-238	1.24E-05	1.01E-05
11/9/2016	Pu-239	2.76E-05	1.39E-05
11/9/2016	Am-241	3.19E-05	2.28E-05
11/9/2016	Cm-244	0.00E+00	9.21E-06
11/9/2016	Gross B	-4.92E-04	3.52E-03
11/9/2016	Gross A	2.08E-03	1.99E-03

Table 13 Comparison of Annual Average Air Effluent Radionuclide Concentrations to DOE Derived Concentration Technical Standards*

Stack/Facility	Radionuclide	Average Effluent Concentration (μCi/mL)	DOE DCSs (μCi/mL)	Fraction of DOE DCS
A Area 791-A Sandfilter Discharge	I-129	1.41E-14	3.80E-11	3.71E-04
			Sum of Fractions	3.71E-04
C Area C-Area Main Stack (148')	H-3 (oxide)	3.64E-07	2.10E-07	1.73E+00
			Sum of Fractions	1.73E+00
F Area 235-F Sandfilter Discharge	U-234	3.60E-17	4.00E-13	9.00E-05
	U-238	3.89E-17	4.70E-13	8.28E-05
	Pu-238	9.44E-18	3.70E-14	2.55E-04
	Pu-239	7.50E-18	3.40E-14	2.21E-04
	Am-241	2.03E-17	4.10E-14	4.95E-04
			Sum of Fractions	1.14E-03
291-F Stack Isokinetic	Sr-89/90	2.91E-14	2.50E-11	1.16E-03
	I-129	1.37E-13	3.80E-11	3.61E-03
	Cs-137	2.06E-14	9.80E-11	2.10E-04
	U-234	2.22E-14	4.00E-13	5.55E-02
	U-235	1.50E-15	4.50E-13	3.33E-03
	Np-237	2.77E-17	8.10E-14	3.42E-04
	U-238	3.33E-14	4.70E-13	7.09E-02
	Pu-238	3.16E-16	3.70E-14	8.54E-03
	Pu-239	1.35E-14	3.40E-14	3.97E-01
	Am-241	5.01E-15	4.10E-14	1.22E-01
	Cm-244	2.01E-16	6.90E-14	2.91E-03
			Sum of Fractions	6.66E-01
772-4F Stack	U-234	3.90E-17	4.00E-13	9.75E-05
	U-238	3.77E-17	4.70E-13	8.02E-05
	Pu-238	2.01E-17	3.70E-14	5.43E-04
	Pu-239	4.05E-18	3.40E-14	1.19E-04
	Am-241	2.42E-17	4.10E-14	5.90E-04
			Sum of Fractions	1.43E-03

Table 13 Comparison of Annual Average Air Effluent Radionuclide Concentrations to DOE Derived Concentration Technical Standards (continued)

Stack/Facility	Radionuclide	Average Effluent Concentration (μCi/mL)	DOE DCSs (μCi/mL)	Fraction of DOE DCS
H Area 291-H Stack Isokinetic	H-3 (oxide)	9.29E-09	2.10E-07	4.42E-02
	C-14	4.16E-12	6.60E-10	6.31E-03
	Kr-85	1.01E-06	3.60E-06	2.79E-01
	Sr-89/90	5.97E-15	2.50E-11	2.39E-04
	I-129	4.04E-13	3.80E-11	1.06E-02
	Cs-137	8.34E-15	9.80E-11	8.51E-05
	U-234	2.80E-16	4.00E-13	7.00E-04
	U-235	1.46E-17	4.50E-13	3.24E-05
	Np-237	7.10E-18	8.10E-14	8.77E-05
	U-238	7.71E-17	4.70E-13	1.64E-04
	Pu-238	1.34E-15	3.70E-14	3.62E-02
	Pu-239	1.00E-15	3.40E-14	2.94E-02
	Am-241	1.70E-16	4.10E-14	4.15E-03
				Sum of Fractions
K Area K-Area Main Stack (148')	H-3(oxide)	2.72E-06	2.10E-07	1.30E+01
			Sum of Fractions	1.30E+01
	Sr-89/90	7.99E-16	2.50E-11	3.20E-05
	Th-228	1.16E-16	9.40E-14	1.23E-03
	Th-230	3.47E-16	2.80E-13	1.24E-03
	Th-232	1.14E-16	1.60E-13	7.13E-04
	U-234	1.27E-16	4.00E-13	3.18E-04
	U-238	1.07E-16	4.70E-13	2.28E-04
	Pu-238	4.76E-17	3.70E-14	1.29E-03
			Sum of Fractions	5.05E-03
L Area L-Area Disassembly	H-3 (oxide)	4.85E-06	2.10E-07	2.31E+01
			Sum of Fractions	2.31E+01
L-Area Main Stack (148')	H-3 (oxide)	3.27E-06	2.10E-07	1.56E+01
			Sum of Fractions	1.56E+01

Table 13 Comparison of Annual Average Air Effluent Radionuclide Concentrations to DOE Derived Concentration Technical Standards (continued)

Stack/Facility	Radionuclide	Average Effluent Concentration (μCi/mL)	DOE DCSs (μCi/mL)	Fraction of DOE DCS
Tritium 232-H (200ft)	H-3 (elemental)	6.91E-07	2.10E-03	3.29E-04
	H-3 (oxide)	4.82E-06	2.10E-07	2.30E+01
			Sum of Fractions	2.30E+01
233-H	H-3 (elemental)	6.03E-07	2.10E-03	2.87E-04
	H-3 (oxide)	4.03E-07	2.10E-07	1.92E+00
			Sum of Fractions	1.92E+00
234-H	H-3 (elemental)	3.39E-07	2.10E-03	1.62E-04
	H-3 (oxide)	4.62E-06	2.10E-07	2.20E+01
			Sum of Fractions	2.20E+01
238-H	H-3 (oxide)	6.78E-06	2.10E-07	3.23E+01
			Sum of Fractions	3.23E+01
264-H	H-3 (elemental)	2.14E-07	2.10E-03	1.02E-04
	H-3 (oxide)	1.36E-06	2.10E-07	6.48E+00
	Se-75	7.43E-16	2.80E-09	2.65E-07
			Sum of Fractions	6.48E+00

Note:

* DOE-STD-1196-2011, Derived Concentration Technical Standard

Table 14 Tritium in Environmental Air

All samples are collected on Silica Gel. The units for all samples are pCi/m³. Significant results are identified by bold text and cell boxes highlighted in blue.

Onsite Location: Burial Ground North

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	9.95E+01	5.24E+00
2/3/2016	1.94E+02	7.16E+00
2/17/2016	1.03E+02	5.43E+00
3/2/2016	1.10E+02	5.60E+00
3/16/2016	1.29E+02	6.75E+00
3/30/2016	8.19E+01	5.93E+00
4/13/2016	5.57E+01	4.95E+00
4/27/2016	1.99E+02	7.65E+00
5/11/2016	1.10E+02	6.82E+00
5/25/2016	9.16E+01	6.75E+00
6/8/2016	2.04E+02	1.14E+01
6/22/2016	1.23E+02	8.39E+00
7/6/2016	3.81E+01	6.74E+00
7/20/2016	6.54E+01	7.01E+00
8/3/2016	3.03E+02	1.19E+01
8/17/2016	1.51E+02	1.00E+01
8/31/2016	2.02E+02	1.09E+01
9/14/2016	2.01E+02	1.08E+01
9/28/2016	3.22E+02	1.27E+01
10/12/2016	2.95E+02	1.06E+01
10/26/2016	1.65E+02	8.15E+00
11/9/2016	3.68E+02	1.04E+01
11/22/2016	2.45E+02	6.43E+00
12/7/2016	2.21E+02	7.80E+00
12/20/2016	8.92E+01	5.46E+00
1/4/2017	1.08E+02	5.81E+00

Site Perimeter: Allendale Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	-3.81E+00	2.65E+00
2/3/2016	-6.84E+00	2.55E+00
2/17/2016	5.54E+00	2.28E+00
3/2/2016	7.30E+00	2.89E+00
3/16/2016	-2.78E+00	2.94E+00
3/30/2016	1.99E+00	3.08E+00
4/13/2016	6.14E+00	3.09E+00
4/27/2016	2.03E+00	1.71E+00
5/11/2016	6.92E-01	3.49E+00
5/25/2016	-4.65E-02	3.02E+00
6/8/2016	7.89E+00	2.89E+00
6/22/2016	2.47E+00	3.58E+00
7/6/2016	4.92E+00	4.40E+00
7/20/2016	9.81E+00	4.63E+00
8/3/2016	7.14E+00	4.21E+00
8/17/2016	9.41E+00	5.59E+00
8/31/2016	-2.37E+00	3.72E+00
9/14/2016	-1.54E+00	3.28E+00
9/28/2016	-5.03E+00	4.47E+00
10/12/2016	-3.84E-01	4.39E+00
10/26/2016	-2.45E+00	3.12E+00
11/9/2016	-2.73E-01	3.09E+00
11/22/2016	2.86E+00	2.19E+00
12/7/2016	2.28E-01	3.20E+00
12/20/2016	2.31E+00	2.69E+00
1/4/2017	6.81E+00	2.33E+00

Table 14 Tritium in Environmental Air (continued)

Site Perimeter: Barnwell Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	7.11E-01	3.60E+00
2/3/2016	-2.38E-01	2.99E+00
2/17/2016	2.41E+00	2.69E+00
3/2/2016	6.32E+00	2.86E+00
3/16/2016	7.30E-01	3.61E+00
3/30/2016	2.63E+00	3.91E+00
4/13/2016	4.49E+00	3.41E+00
4/27/2016	3.92E+00	3.46E+00
5/11/2016	-1.12E-01	3.94E+00
5/25/2016	4.78E+00	4.18E+00
6/8/2016	8.00E+00	4.67E+00
6/22/2016	9.51E+00	4.92E+00
7/6/2016	1.40E+00	4.97E+00
7/20/2016	9.27E+00	5.05E+00
8/3/2016	8.81E+00	4.92E+00
8/17/2016	7.14E+00	6.66E+00
8/31/2016	-2.45E+00	5.43E+00
9/14/2016	6.22E+00	5.46E+00
9/28/2016	-6.68E+00	5.36E+00
10/12/2016	-2.34E+00	4.80E+00
10/26/2016	1.73E+02	3.99E+00
11/9/2016	3.38E+00	3.79E+00
11/22/2016	8.49E+00	2.41E+00
12/7/2016	-3.03E+00	3.27E+00
12/20/2016	1.90E+01	3.58E+00
1/4/2017	1.02E+01	3.20E+00

Site Perimeter: D Area

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	6.78E+00	2.73E+00
2/3/2016	1.96E+00	2.61E+00
2/17/2016	6.65E+00	4.51E+00
3/2/2016	4.86E+00	2.78E+00
3/16/2016	-1.84E+00	2.94E+00
3/30/2016	-2.56E+00	3.32E+00
4/13/2016	2.48E+00	3.05E+00
4/27/2016	3.14E+00	3.03E+00
5/11/2016	5.46E-02	3.83E+00
5/25/2016	-4.84E-01	3.91E+00
6/8/2016	1.71E+01	4.96E+00
6/22/2016	4.65E+00	4.70E+00
7/6/2016	3.32E+00	4.56E+00
7/20/2016	4.00E+00	4.71E+00
8/3/2016	4.92E+00	4.71E+00
8/17/2016	6.86E+00	6.34E+00
8/31/2016	2.34E+00	5.18E+00
9/14/2016	2.73E+00	5.37E+00
9/28/2016	-1.30E-01	2.77E-01
10/12/2016	1.27E+01	4.77E+00
10/26/2016	1.35E+01	3.91E+00
11/9/2016	1.89E+00	3.39E+00
11/22/2016	4.30E+00	3.73E+00
12/7/2016	1.77E+00	3.94E+00
12/20/2016	2.38E+01	4.45E+00
1/4/2017	9.70E+00	2.76E+00

Table 14 Tritium in Environmental Air (continued)

Site Perimeter: Darkhorse @ Williston Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	1.68E+00	3.52E+00
2/3/2016	-1.38E+00	3.12E+00
2/17/2016	4.05E-01	2.60E+00
3/2/2016	1.12E+01	2.89E+00
3/16/2016	-1.96E+00	3.00E+00
3/30/2016	2.45E+00	2.92E+00
4/13/2016	-3.76E-01	3.01E+00
4/27/2016	6.43E+00	3.46E+00
5/11/2016	8.00E-01	4.03E+00
5/25/2016	5.11E+00	3.84E+00
6/8/2016	8.70E+00	5.93E+00
6/22/2016	5.46E+00	3.93E+00
7/6/2016	3.68E+00	5.06E+00
7/20/2016	2.07E+01	5.32E+00
8/3/2016	1.50E+01	5.10E+00
8/17/2016	-5.03E+00	6.26E+00
8/31/2016	4.24E+00	5.58E+00
9/14/2016	-7.30E-01	5.21E+00
9/28/2016	-3.54E+00	5.55E+00
10/12/2016	1.88E+00	4.24E+00
10/26/2016	5.51E+00	3.84E+00
11/9/2016	2.92E+01	4.38E+00
11/22/2016	5.16E-01	2.07E+00
12/7/2016	3.32E+00	3.51E+00
12/20/2016	1.24E+01	3.43E+00
1/4/2017	7.30E+00	2.74E+00

Site Perimeter: East Talatha

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	-2.21E-01	3.33E+00
2/3/2016	-1.38E+00	3.02E+00
2/17/2016	-9.24E-01	2.57E+00
3/2/2016	5.65E+00	2.32E+00
3/16/2016	1.85E-01	3.17E+00
3/30/2016	7.81E+00	3.42E+00
4/13/2016	5.81E+00	3.25E+00
4/27/2016	-7.08E-01	3.27E+00
5/11/2016	5.68E-02	3.98E+00
5/25/2016	5.24E+00	3.94E+00
6/8/2016	1.25E+01	5.01E+00
6/22/2016	8.49E+00	4.77E+00
7/6/2016	1.48E+01	5.80E+00
7/20/2016	1.14E+01	5.16E+00
8/3/2016	2.04E+01	5.47E+00
8/17/2016	1.51E+01	7.10E+00
8/31/2016	6.62E+00	5.96E+00
9/14/2016	-5.41E-01	5.52E+00
9/28/2016	-8.59E-01	5.73E+00
10/12/2016	3.30E+00	4.15E+00
10/26/2016	4.05E+00	3.82E+00
11/9/2016	-1.04E-01	3.52E+00
11/22/2016	-1.94E+00	1.91E+00
12/7/2016	4.76E+00	3.41E+00
12/20/2016	1.38E+01	3.32E+00
1/4/2017	6.57E+00	2.61E+00

Table 14 Tritium in Environmental Air (continued)

Site Perimeter: Green Pond

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	-1.87E+00	3.20E+00
2/3/2016	-2.26E+00	2.92E+00
2/17/2016	2.49E+00	2.36E+00
3/2/2016	1.07E+01	2.96E+00
3/16/2016	3.70E+00	4.45E+00
3/30/2016	2.06E+00	3.20E+00
4/13/2016	5.81E+00	3.14E+00
4/27/2016	3.38E+00	3.28E+00
5/11/2016	1.88E+00	3.94E+00
5/25/2016	7.24E+00	3.98E+00
6/8/2016	1.18E+01	4.88E+00
6/22/2016	5.97E+00	4.48E+00
7/6/2016	7.76E+00	5.36E+00
7/20/2016	1.24E+01	5.14E+00
8/3/2016	5.95E+00	4.81E+00
8/17/2016	1.29E+01	6.94E+00
8/31/2016	-1.25E+00	5.25E+00
9/14/2016	6.24E+00	5.41E+00
9/28/2016	-3.51E+00	5.66E+00
10/12/2016	2.32E+00	4.17E+00
10/26/2016	2.40E+00	3.59E+00
11/9/2016	7.84E-01	3.59E+00
11/22/2016	3.11E-02	2.10E+00
12/7/2016	2.51E+00	3.07E+00
12/20/2016	1.03E+01	3.17E+00
1/4/2017	7.43E+00	2.85E+00

Site Perimeter: Highway 21/167

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	-1.21E+00	3.51E+00
2/3/2016	-2.27E+00	2.87E+00
2/17/2016	-6.16E-01	2.04E+00
3/2/2016	5.32E+00	2.97E+00
3/16/2016	-1.75E+00	3.09E+00
3/30/2016	-4.35E+00	3.53E+00
4/13/2016	-9.59E-01	3.05E+00
4/27/2016	4.84E+00	3.42E+00
5/11/2016	6.49E+00	4.20E+00
5/25/2016	1.09E+01	4.38E+00
6/8/2016	8.62E+00	4.64E+00
6/22/2016	3.97E+00	4.58E+00
7/6/2016	2.56E+00	5.12E+00
7/20/2016	9.70E+00	5.25E+00
8/3/2016	1.98E+01	5.50E+00
8/17/2016	1.80E+01	7.09E+00
8/31/2016	-6.16E+00	5.54E+00
9/14/2016	5.70E+00	5.72E+00
9/28/2016	-4.89E+00	5.47E+00
10/12/2016	1.06E+01	7.03E+00
10/26/2016	-2.86E+00	3.73E+00
11/9/2016	1.37E+00	3.65E+00
11/22/2016	3.22E+00	2.25E+00
12/7/2016	3.35E+00	3.33E+00
12/20/2016	2.78E+00	2.97E+00
1/4/2017	4.51E+00	1.77E+00

Table 14 Tritium in Environmental Air (continued)

Site Perimeter: Jackson

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	3.19E-01	3.07E+00
2/3/2016	5.00E+00	3.34E+00
2/17/2016	-1.39E-01	2.43E+00
3/2/2016	5.89E+00	2.78E+00
3/16/2016	-1.36E+00	3.30E+00
3/30/2016	7.08E+00	3.50E+00
4/13/2016	4.97E+00	3.21E+00
4/27/2016	5.00E+00	3.59E+00
5/11/2016	6.46E-01	4.13E+00
5/25/2016	7.62E+00	4.29E+00
6/8/2016	1.79E+01	5.25E+00
6/22/2016	2.10E-01	9.78E-02
7/6/2016	2.95E+00	5.44E+00
7/20/2016	1.16E+01	5.53E+00
8/3/2016	1.08E+01	4.87E+00
8/17/2016	1.17E+00	7.79E+00
8/31/2016	4.65E+00	5.94E+00
9/14/2016	-3.32E+00	9.04E+00
9/28/2016	-6.54E+00	4.65E+00
10/12/2016	2.34E+00	4.02E+00
10/26/2016	4.70E-01	3.51E+00
11/9/2016	9.00E+00	3.93E+00
11/22/2016	2.48E+00	2.21E+00
12/7/2016	5.95E-01	3.00E+00
12/20/2016	7.70E+00	3.13E+00
1/4/2017	1.69E+01	3.45E+00

Site Perimeter: Patterson Mill Road

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	-7.73E-01	3.39E+00
2/3/2016	-3.14E+00	3.22E+00
2/17/2016	2.34E+00	3.07E+00
3/2/2016	2.76E+00	2.67E+00
3/16/2016	-3.62E-01	3.09E+00
3/30/2016	1.72E+00	3.41E+00
4/13/2016	3.35E+00	3.24E+00
4/27/2016	-4.65E+00	9.09E+00
5/11/2016	-4.46E+00	8.92E+00
5/25/2016	-1.38E+00	3.84E+00
6/8/2016	1.73E+01	4.95E+00
6/22/2016	6.51E+00	4.89E+00
7/6/2016	9.95E+00	5.51E+00
7/20/2016	9.27E+00	5.43E+00
8/3/2016	1.27E+01	5.28E+00
8/17/2016	2.78E+00	6.65E+00
8/31/2016	-7.11E+00	5.31E+00
9/14/2016	1.03E+01	5.77E+00
9/28/2016	-3.54E+00	5.58E+00
10/12/2016	4.59E+00	4.76E+00
10/26/2016	-4.57E-01	4.35E+00
11/9/2016	-2.89E+00	3.93E+00
11/22/2016	1.96E+00	2.11E+00
12/7/2016	-3.92E-01	3.42E+00
12/20/2016	1.58E+01	4.37E+00
1/4/2017	7.27E+00	3.09E+00

Table 14 Tritium in Environmental Air (continued)

Site Perimeter: Talatha Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/20/2016	1.29E+00	2.76E+00
2/3/2016	-1.76E+00	2.65E+00
2/17/2016	2.44E+00	2.10E+00
3/2/2016	5.19E+00	2.60E+00
3/16/2016	7.57E+00	3.28E+00
3/30/2016	5.05E+00	3.31E+00
4/13/2016	1.20E+00	3.14E+00
4/27/2016	-1.44E-01	3.12E+00
5/11/2016	2.73E+00	3.86E+00
5/25/2016	-5.76E-01	3.73E+00
6/8/2016	1.41E+01	4.70E+00
6/22/2016	1.11E+01	4.62E+00
7/6/2016	1.43E+01	5.30E+00
7/20/2016	9.24E+00	4.77E+00
8/3/2016	6.54E+00	4.58E+00
8/17/2016	8.38E+00	6.56E+00
8/31/2016	-5.81E+00	5.39E+00
9/14/2016	1.29E+00	5.17E+00
9/28/2016	-5.54E+00	5.34E+00
10/12/2016	4.81E+00	4.03E+00
10/26/2016	4.81E+00	3.91E+00
11/9/2016	3.14E+00	3.58E+00
11/22/2016	7.57E+00	2.22E+00
12/7/2016	8.51E-01	3.54E+00
12/20/2016	1.24E+01	3.39E+00
1/4/2017	6.49E+00	2.68E+00

25-Mile Radius: Aiken Airport

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/21/2016	1.30E+00	3.74E+00
2/4/2016	3.51E+00	6.90E+00
2/18/2016	-3.86E-01	2.25E+00
3/3/2016	6.78E+00	3.36E+00
3/17/2016	-2.05E+00	3.13E+00
3/31/2016	4.22E+00	3.45E+00
4/14/2016	1.50E+00	3.07E+00
4/28/2016	4.46E+00	3.63E+00
5/12/2016	-7.05E+00	4.11E+00
5/26/2016	7.70E+00	4.27E+00
6/9/2016	7.57E+00	4.81E+00
6/23/2016	1.41E+00	4.53E+00
7/6/2016	1.24E+01	5.51E+00
7/21/2016	7.03E+00	5.24E+00
8/4/2016	1.54E+01	5.92E+00
8/18/2016	1.44E+01	6.99E+00
9/1/2016	4.19E+00	5.74E+00
9/15/2016	-1.93E+00	5.25E+00
9/29/2016	-8.19E+00	5.48E+00
10/13/2016	8.81E-01	4.07E+00
9/27/2016	8.49E+00	4.17E+00
11/10/2016	4.78E+00	3.64E+00
11/21/2016	5.14E+00	2.60E+00
12/8/2016	4.27E-01	3.01E+00
12/19/2016	5.78E+00	3.35E+00
1/5/2017	4.76E+00	2.77E+00

Table 14 Tritium in Environmental Air (continued)

25-Mile Radius: Augusta Lock and Dam 614

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/21/2016	-1.49E+00	3.32E+00
2/4/2016	-1.39E+00	3.13E+00
2/18/2016	1.85E+00	2.82E+00
3/3/2016	4.38E+00	2.73E+00
3/17/2016	-6.00E+00	3.13E+00
3/31/2016	-1.86E+00	3.19E+00
4/14/2016	-1.02E+00	2.94E+00
4/28/2016	-2.01E+00	3.57E+00
5/12/2016	-1.40E+00	3.89E+00
5/26/2016	5.03E+00	4.50E+00
6/9/2016	1.59E+01	4.94E+00
6/23/2016	-3.22E+00	4.40E+00
7/6/2016	-5.51E-01	5.23E+00
7/21/2016	1.36E+01	5.30E+00
8/4/2016	9.51E+00	4.41E+00
8/18/2016	1.18E+01	6.62E+00
9/1/2016	2.43E+00	5.06E+00
9/15/2016	1.40E+01	5.62E+00
9/29/2016	-8.57E+00	4.97E+00
10/13/2016	7.14E-01	3.80E+00
9/27/2016	1.62E+00	3.80E+00
11/10/2016	8.30E-01	3.36E+00
11/21/2016	7.81E-01	2.23E+00
12/8/2016	1.25E+00	3.16E+00
12/19/2016	2.78E+00	2.73E+00
1/5/2017	1.25E+01	2.89E+00

25-Mile Radius: Highway 301 @ State Line
(control location)

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/21/2016	-6.00E-01	3.94E+00
2/4/2016	-7.41E+00	3.85E+00
2/18/2016	-2.61E+00	3.01E+00
3/3/2016	6.86E+00	2.96E+00
3/17/2016	-3.49E+00	3.55E+00
3/31/2016	-1.03E+00	3.66E+00
4/14/2016	2.07E+00	3.32E+00
4/28/2016	4.95E+00	3.47E+00
5/12/2016	2.23E+00	4.08E+00
5/26/2016	4.62E+00	4.41E+00
6/9/2016	7.73E+00	4.98E+00
6/23/2016	7.57E+00	5.38E+00
7/6/2016	2.86E+00	5.44E+00
7/21/2016	4.49E+00	5.18E+00
8/4/2016	1.24E+01	5.31E+00
8/18/2016	5.43E+00	6.63E+00
9/15/2016	3.59E+00	5.98E+00
9/29/2016	-9.16E+00	5.52E+00
10/13/2016	5.22E-01	4.51E+00
9/27/2016	-2.00E+00	3.97E+00
11/10/2016	-1.09E-01	3.72E+00
11/21/2016	5.24E+00	2.74E+00
12/8/2016	1.41E-01	3.30E+00
12/19/2016	6.35E+00	3.73E+00
1/5/2017	8.11E+00	3.32E+00

Table 15 Tritium in Rainwater

The units for all samples are pCi/L. Significant results are identified by bold text and cell boxes highlighted in blue.

Onsite: Burial Ground North

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	6.92E+03	2.83E+02
3/2/2016	-1.06E+02	1.57E+02
3/30/2016	3.59E+03	2.09E+02
4/27/2016	8.14E+02	1.39E+02
5/25/2016	1.40E+03	1.84E+02
6/22/2016	6.54E+02	1.47E+02
7/20/2016	1.38E+03	1.77E+02
8/17/2016	5.62E+02	1.90E+02
9/14/2016	1.06E+03	1.66E+02
10/12/2016	2.15E+03	2.01E+02
12/7/2016	5.35E+03	2.54E+02
1/4/2017	3.11E+03	2.01E+02

Site Perimeter: Allendale Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-4.30E+01	1.35E+02
3/2/2016	3.00E+00	1.61E+02
3/30/2016	2.12E+02	1.21E+02
4/27/2016	2.41E+01	4.83E+01
5/25/2016	9.24E+01	1.46E+02
6/22/2016	8.84E+01	1.32E+02
7/20/2016	-1.03E+02	1.38E+02
8/17/2016	4.57E+01	1.74E+02
9/14/2016	3.41E+02	1.45E+02
10/12/2016	1.77E+02	1.50E+02
12/7/2016	1.04E+02	1.61E+02
1/4/2017	-5.76E+01	1.17E+02

Site Perimeter: Barnwell Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-1.58E+02	1.34E+02
3/2/2016	-1.96E+02	1.55E+02
3/30/2016	1.64E+02	1.20E+02
4/27/2016	1.48E+02	1.14E+02
5/25/2016	-8.65E+01	1.39E+02
6/22/2016	-1.75E+02	1.22E+02
7/20/2016	-3.62E+00	1.35E+02
8/17/2016	-2.60E+02	1.60E+02
9/14/2016	2.36E+02	1.43E+02
10/12/2016	2.70E+02	1.55E+02
12/7/2016	1.34E+02	1.59E+02
1/4/2017	1.31E+02	1.22E+02

Site Perimeter: D Area

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-1.26E+02	1.31E+02
3/2/2016	-3.43E+01	1.60E+02
3/30/2016	2.84E+02	1.22E+02
4/27/2016	1.14E+02	1.18E+02
5/25/2016	9.41E+01	1.49E+02
6/22/2016	1.10E+02	1.30E+02
7/20/2016	-9.43E+01	1.31E+02
8/17/2016	-3.11E+02	1.66E+02
9/14/2016	4.81E+02	1.51E+02
10/12/2016	2.81E+02	1.52E+02
12/7/2016	3.89E+02	1.62E+02
1/4/2017	2.45E+02	1.26E+02

Table 15 Tritium in Rainwater (continued)

Site Perimeter: Darkhorse @ Williston Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-4.14E+02	1.29E+02
3/2/2016	1.63E+02	1.66E+02
3/30/2016	2.10E+02	1.20E+02
4/27/2016	8.43E+01	4.86E+01
5/25/2016	1.76E+02	1.53E+02
6/22/2016	8.32E+01	1.33E+02
7/20/2016	1.92E+02	1.45E+02
8/17/2016	2.40E+01	1.76E+02
9/14/2016	3.32E+02	1.45E+02
10/12/2016	6.97E+01	1.47E+02
12/7/2016	1.03E+02	1.57E+02
1/4/2017	1.56E+02	1.24E+02

Site Perimeter: East Talatha

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-1.18E+02	1.36E+02
3/2/2016	4.43E+00	1.59E+02
3/30/2016	3.11E+01	1.14E+02
4/27/2016	6.30E+01	4.74E+01
5/25/2016	2.33E+02	1.56E+02
6/22/2016	1.98E+01	1.27E+02
7/20/2016	1.92E+02	1.45E+02
8/17/2016	-3.00E+02	1.66E+02
9/14/2016	4.05E+02	1.47E+02
10/12/2016	1.48E+02	1.52E+02
12/7/2016	-2.20E+02	1.49E+02
1/4/2017	2.89E+02	1.28E+02

Site Perimeter: Green Pond

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-1.41E+02	1.33E+02
3/2/2016	-1.04E+01	1.59E+02
3/30/2016	8.03E+02	1.41E+02
4/27/2016	-4.57E+01	4.67E+01
5/25/2016	2.48E+02	1.51E+02
6/22/2016	-2.15E+01	1.25E+02
7/20/2016	-7.43E+01	1.35E+02
8/17/2016	1.16E+02	1.75E+02
9/14/2016	2.63E+02	1.43E+02
10/12/2016	1.56E+02	1.48E+02
12/7/2016	-1.00E+02	1.59E+02
1/4/2017	1.98E+02	1.26E+02

Site Perimeter: Highway 21/167

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-1.82E+02	1.31E+02
3/2/2016	1.78E+01	1.60E+02
3/30/2016	1.68E+02	1.19E+02
4/27/2016	2.62E+02	5.21E+01
5/25/2016	1.33E+02	1.51E+02
6/22/2016	-9.00E+01	1.26E+02
7/20/2016	1.28E+02	1.39E+02
8/17/2016	-1.51E+02	1.69E+02
9/14/2016	1.45E+02	1.39E+02
10/12/2016	-9.73E+01	1.40E+02
12/7/2016	1.05E+02	1.61E+02
1/4/2017	9.30E+01	1.22E+02

Table 15 Tritium in Rainwater (continued)

Site Perimeter: Jackson

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-2.27E+02	1.29E+02
3/2/2016	9.14E+01	1.61E+02
3/30/2016	2.16E+02	1.21E+02
4/27/2016	-1.25E+01	4.61E+01
5/25/2016	2.81E+02	1.53E+02
6/22/2016	-1.12E+01	1.30E+02
7/20/2016	-7.27E+00	1.35E+02
8/17/2016	2.89E+02	1.73E+02
9/14/2016	4.89E+02	1.50E+02
10/12/2016	-1.31E+02	1.41E+02
12/7/2016	1.08E+02	1.60E+02
1/4/2017	1.89E+02	1.24E+02

Site Perimeter: Patterson Mill Road

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-6.59E+01	1.37E+02
3/2/2016	-6.41E+01	1.59E+02
3/30/2016	4.68E+01	1.14E+02
4/27/2016	-4.19E+01	4.66E+01
5/25/2016	9.14E+01	1.53E+02
6/22/2016	-2.33E+01	1.25E+02
7/20/2016	2.57E+01	1.37E+02
8/17/2016	-3.27E+02	1.67E+02
9/14/2016	1.75E+02	1.41E+02
10/12/2016	-1.41E+01	1.43E+02
12/7/2016	1.24E+02	1.60E+02
1/4/2017	2.31E+02	1.26E+02

Site Perimeter: Talatha Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	4.49E+01	1.38E+02
3/2/2016	9.19E+01	1.62E+02
3/30/2016	3.89E+02	1.27E+02
4/27/2016	2.73E-04	4.77E+01
5/25/2016	1.62E+01	1.46E+02
6/22/2016	1.56E+02	1.31E+02
7/20/2016	3.78E+02	1.50E+02
8/17/2016	-2.66E+02	1.60E+02
9/14/2016	2.07E+02	1.40E+02
10/12/2016	1.29E+02	1.51E+02
12/7/2016	-6.00E+00	1.55E+02
1/4/2017	1.77E+02	1.24E+02

25-Mile Radius: Aiken Airport

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/3/2016	-2.02E+02	1.33E+02
3/2/2016	-1.37E+01	1.64E+02
3/30/2016	1.48E+02	1.21E+02
4/27/2016	2.92E+01	1.14E+02
5/25/2016	1.21E+02	1.47E+02
6/22/2016	-1.78E+01	1.24E+02
7/20/2016	7.49E+01	1.45E+02
8/17/2016	-3.59E+01	1.61E+02
9/14/2016	4.57E+02	1.48E+02
10/12/2016	3.19E+02	1.58E+02
12/7/2016	8.11E+01	1.57E+02
1/4/2017	2.64E+02	1.27E+02

Table 15 Tritium in Rainwater (continued)

25-Mile Radius: Augusta Lock and Dam 614

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/4/2016	-2.78E+02	1.28E+02
3/3/2016	-9.78E+01	1.60E+02
3/31/2016	1.60E+02	1.21E+02
4/28/2016	1.58E+02	1.20E+02
5/26/2016	1.84E+02	1.53E+02
6/23/2016	-1.29E+02	1.23E+02
7/21/2016	1.22E+02	1.46E+02
8/18/2016	1.08E+01	1.71E+02
9/15/2016	3.00E+02	1.45E+02
10/13/2016	1.50E+02	1.59E+02
12/8/2016	8.92E+01	1.59E+02
1/5/2017	9.62E+01	1.22E+02

25-Mile Radius: Highway 301 @ State Line
(Control Location)

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/4/2016	-3.14E+02	1.32E+02
3/3/2016	-5.65E+01	1.59E+02
3/31/2016	2.23E+02	1.24E+02
4/28/2016	-6.73E+01	4.76E+01
5/26/2016	2.05E+02	1.52E+02
6/23/2016	-1.51E+02	1.32E+02
7/21/2016	-6.35E+01	1.40E+02
8/18/2016	-2.78E+02	1.61E+02
9/15/2016	1.69E+02	1.40E+02
10/13/2016	4.97E+01	1.46E+02
12/8/2016	3.92E+01	1.57E+02
1/5/2017	5.41E+01	1.21E+02

Table 16 Thermoluminescent Dosimeter (TLD) Data

Location	Quarter 1 mR/day	Quarter 2 mR/day	Quarter 3 mR/day	Quarter 4 mR/day	Annual Total mR/year
Barnwell	0.28	0.28	0.30	0.28	104
Beech Island	0.35	0.33	0.32	0.36	124
Girard	0.33	0.32	0.30	0.33	118
Jackson	0.29	0.29	0.27	0.27	102.8
Martin	0.29	0.30	0.27	0.28	103.6
McBean	0.26	0.26	0.23	0.28	93.4
New Ellenton	0.30	0.30	0.28	0.28	106
Williston	0.36	0.33	0.33	0.35	125
Windsor	0.26	0.26	0.25	0.26	94.1
PP_15	0.29	0.23	0.24	0.26	93.1
PP_42	0.24	0.21	0.24	0.24	84.5
PP_48	0.23	0.21	0.20	0.22	78.1
PP_51	0.24	0.23	0.23	0.26	87.2
PP_57D	Environmental TLDs for TLD Site PP_57D could not be deployed due to road conditions				
PP_61B	0.23	0.22	0.21	0.22	79.8
PP_65D	0.28	0.27	0.24	0.27	96.8
PP_72B	0.22	0.21	0.21	0.23	79.0
PP_75D	0.20	0.19	0.18	0.21	70.7
BGN	0.37	0.34	0.33	0.34	125
Allendale Gate	0.20	0.18	0.19	0.20	70.2
Barnwell Gate	0.25	0.21	0.21	0.23	82.9
D-Area	0.23	0.22	0.21	0.22	79.8
Dark Horse	0.24	0.20	0.20	0.23	78.7
East Talatha	0.22	0.21	0.20	0.23	77.6
Green Pond	0.31	0.28	0.27	0.30	106
Hwy 21/167	0.31	0.27	0.28	0.31	106
Jackson	0.32	0.27	0.25	0.27	102.2
Patterson Mill Rd	0.23	0.19	0.18	0.21	74.3
Talatha Gate	0.26	0.25	0.23	0.27	91.7
Aiken Airport	0.23	0.27	0.20	0.25	82.9
Augusta Lock & Dam	0.28	0.23	0.25	0.27	100.1
Hwy 301	0.28	0.29	0.26	0.26	97.6

Table 16 Thermoluminescent Dosimeter (TLD) Data (continued)

Location	Quarter 1 mR/day	Quarter 2 mR/day	Quarter 3 mR/day	Quarter 4 mR/day	Annual Total mR/year
GAP_1H	0.23	0.20	0.21	0.21	78.5
GAP_1L	0.23	0.18	0.20	0.20	73.5
GAP_2H	0.24	0.20	0.20	0.22	78.9
GAP_2L	0.23	0.20	0.21	0.22	78.7
GAP_3H	0.27	0.26	0.24	0.24	91.3
GAP_3L	0.26	0.24	0.24	0.25	90.1
GAP_4H	0.29	0.26	0.29	0.26	102
GAP_4L	0.28	0.27	0.27	0.28	100.6
GAP_5H	0.22	0.20	0.21	0.21	77.1
GAP_5L	0.23	0.20	0.21	0.22	77.8
NRC_1	0.30	0.27	0.29	0.28	104
NRC_2	0.19	0.18	0.17	0.17	64.3
NRC_3	0.22	0.18	0.19	0.19	70.5
NRC_4	0.26	0.24	0.24	0.22	87.4
NRC_5	0.29	0.27	0.29	0.29	105
NRC_6	0.23	0.21	0.22	0.22	80.5
NRC_7	0.23	0.20	0.22	0.22	80.5
NRC_8	0.23	0.20	0.23	0.22	79.6

Notes:

1. mR = milliRoentgen, exposure unit for gamma radiation
2. Although the TLD is an integrating device, the derived unit mR/day is used to facilitate comparison between locations or through time at a single location
3. An 18% uncertainty is associated with each result

KEY	
	Population Centers
	Site Perimeter Stations
	Air Surveillance Stations
	Plant Vogtle Vicinity

Table 17 Radionuclides in Soil

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	4/20/2016	-5.70E-03	8.10E-03	1.58E-01	2.31E-02
H Area					
2000 Feet East	4/20/2016	4.89E-03	7.79E-03	2.17E-01	2.35E-02
Z Area					
#3	4/11/2016	5.19E-03	1.04E-02	3.54E-01	3.39E-02
Burial Ground					
643-26E-2	5/11/2016	-6.57E-03	1.34E-02	-4.51E-03	1.46E-02
Burial Ground North	3/23/2016	7.49E-03	1.09E-02	8.38E-02	3.13E-02
Plant Perimeter					
Allendale Gate	3/23/2016	6.95E-03	8.40E-03	4.27E-01	3.85E-02
Barnwell Gate	3/23/2016	-5.41E-03	8.43E-03	8.41E-02	1.95E-02
D-Area	3/23/2016	-2.92E-03	1.17E-02	3.00E-01	3.34E-02
Darkhorse @ Williston Gate	3/23/2016	-9.73E-03	7.42E-03	1.51E-01	1.87E-02
East Talatha	3/23/2016	1.04E-02	7.40E-03	1.24E-01	1.93E-02
Green Pond	3/23/2016	-1.35E-02	8.96E-03	2.08E-01	2.40E-02
Highway 21/167	3/23/2016	5.54E-03	8.80E-03	9.92E-02	2.38E-02
Jackson	3/23/2016	-5.03E-03	9.93E-03	7.16E-02	1.66E-02
Patterson Mill Road	3/23/2016	1.48E-02	8.84E-03	2.14E-01	2.37E-02
Talatha Gate	3/23/2016	-7.03E-03	1.06E-02	2.10E-01	2.85E-02
25-Mile Radius					
Aiken Airport	3/23/2016	6.03E-03	7.11E-03	3.22E-01	3.02E-02
Augusta Lock and Dam 614	3/23/2016	3.11E-03	1.15E-02	1.78E-01	3.20E-02
Highway 301 @ State Line	3/23/2016	1.78E-03	1.07E-02	1.34E-01	2.70E-02

Table 17 Radionuclides in Soil (continued)

Location	Sample Date	Sr-89/90		U-234	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	4/20/2016	4.73E-02	5.08E-02	1.63E+00	1.43E-01
H Area					
2000 Feet East	4/20/2016	9.03E-02	5.99E-02	9.08E-01	7.91E-02
Z Area					
#3	4/11/2016	-4.76E-02	3.44E-02	9.86E-01	8.67E-02
Burial Ground					
643-26E-2	5/11/2016	-3.62E-03	3.62E-02	1.42E+00	1.08E-01
Burial Ground North	3/23/2016	6.32E-02	4.03E-02	1.11E+00	8.63E-02
Plant Perimeter					
Allendale Gate	3/23/2016	-2.34E-02	3.92E-02	4.43E-01	4.20E-02
Barnwell Gate	3/23/2016	-3.38E-02	4.42E-02	7.22E-01	6.45E-02
D-Area	3/23/2016	3.14E-02	4.27E-02	1.44E+00	1.11E-01
Darkhorse @ Williston Gate	3/23/2016	6.00E-02	5.17E-02	7.00E-01	6.59E-02
East Talatha	3/23/2016	1.60E-01	5.88E-02	8.46E-01	7.43E-02
Green Pond	3/23/2016	-1.72E-02	4.50E-02	4.62E-01	4.83E-02
Highway 21/167	3/23/2016	5.16E-02	4.51E-02	5.84E-01	5.60E-02
Jackson	3/23/2016	5.41E-02	4.27E-02	6.97E-01	5.99E-02
Patterson Mill Road	3/23/2016	2.67E-02	4.58E-02	5.43E-01	4.91E-02
Talatha Gate	3/23/2016	5.70E-03	4.44E-02	8.00E-01	6.68E-02
25-Mile Radius					
Aiken Airport	3/23/2016	2.56E-01	5.77E-02	5.59E-01	5.23E-02
Augusta Lock and Dam 614	3/23/2016	-1.67E-02	4.19E-02	1.36E+00	1.04E-01
Highway 301 @ State Line	3/23/2016	3.24E-02	5.42E-02	2.00E+00	1.44E-01

Table 17 Radionuclides in Soil (continued)

Location	Sample Date	U-235		Np-237	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	4/20/2016	5.24E-02	1.64E-02	8.84E-05	3.75E-04
H Area					
2000 Feet East	4/20/2016	5.59E-02	1.45E-02	3.86E-04	4.73E-04
Z Area					
#3	4/11/2016	7.08E-02	1.67E-02	8.19E-05	2.96E-04
Burial Ground					
643-26E-2	5/11/2016	5.89E-02	1.33E-02	-6.86E-04	3.49E-04
Burial Ground North	3/23/2016	4.05E-02	1.07E-02	-3.38E-04	2.28E-04
Plant Perimeter					
Allendale Gate	3/23/2016	2.06E-02	7.43E-03	-2.30E-04	4.00E-04
Barnwell Gate	3/23/2016	4.51E-02	1.22E-02	7.92E-05	2.87E-04
D-Area	3/23/2016	4.16E-02	1.18E-02	6.22E-05	2.81E-04
Darkhorse @ Williston Gate	3/23/2016	2.57E-02	1.05E-02	3.43E-04	3.44E-04
East Talatha	3/23/2016	3.19E-02	1.04E-02	9.27E-05	3.35E-04
Green Pond	3/23/2016	1.71E-02	7.84E-03	-5.73E-04	3.42E-04
Highway 21/167	3/23/2016	3.62E-02	1.12E-02	-4.05E-04	2.77E-04
Jackson	3/23/2016	3.73E-02	1.03E-02	-1.54E-05	1.70E-05
Patterson Mill Road	3/23/2016	2.04E-02	7.43E-03	-9.05E-04	4.69E-04
Talatha Gate	3/23/2016	3.86E-02	1.04E-02	2.78E-04	5.90E-04
25-Mile Radius					
Aiken Airport	3/23/2016	2.97E-02	9.63E-03	1.29E-03	6.65E-04
Augusta Lock and Dam 614	3/23/2016	4.59E-02	1.19E-02	-2.76E-04	2.87E-04
Highway 301 @ State Line	3/23/2016	9.62E-02	1.70E-02	-8.43E-05	3.50E-04

Table 17 Radionuclides in Soil (continued)

Location	Sample Date	U-238		Pu-238	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	4/20/2016	1.64E+00	1.39E-01	3.32E-02	4.27E-03
H Area					
2000 Feet East	4/20/2016	9.68E-01	8.08E-02	4.76E-03	1.26E-03
Z Area					
#3	4/11/2016	1.04E+00	8.76E-02	2.92E-03	8.76E-04
Burial Ground					
643-26E-2	5/11/2016	1.49E+00	1.09E-01	1.28E-03	7.43E-04
Burial Ground North	3/23/2016	1.08E+00	8.16E-02	7.97E-04	5.09E-04
Plant Perimeter					
Allendale Gate	3/23/2016	3.97E-01	3.83E-02	1.38E-03	7.55E-04
Barnwell Gate	3/23/2016	6.65E-01	5.85E-02	6.95E-04	4.13E-04
D-Area	3/23/2016	1.50E+00	1.12E-01	1.22E-02	1.93E-03
Darkhorse @ Williston Gate	3/23/2016	7.08E-01	6.45E-02	-1.24E-04	4.69E-04
East Talatha	3/23/2016	7.97E-01	6.85E-02	4.49E-04	5.45E-04
Green Pond	3/23/2016	5.11E-01	5.05E-02	3.68E-04	4.46E-04
Highway 21/167	3/23/2016	6.00E-01	5.61E-02	9.68E-05	3.49E-04
Jackson	3/23/2016	8.11E-01	6.60E-02	3.30E-04	3.87E-04
Patterson Mill Road	3/23/2016	6.81E-01	5.64E-02	-1.04E-05	1.26E-05
Talatha Gate	3/23/2016	8.54E-01	6.79E-02	1.68E-03	7.02E-04
25-Mile Radius					
Aiken Airport	3/23/2016	5.51E-01	5.10E-02	1.30E-03	6.59E-04
Augusta Lock and Dam 614	3/23/2016	1.43E+00	1.04E-01	1.20E-04	4.94E-04
Highway 301 @ State Line	3/23/2016	2.10E+00	1.45E-01	4.08E-04	4.97E-04

Table 17 Radionuclides in Soil (continued)

Location	Sample Date	Pu-239		Am-241	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	4/20/2016	4.86E-02	5.68E-03	4.76E-03	1.28E-03
H Area					
2000 Feet East	4/20/2016	1.65E-02	2.63E-03	2.31E-03	8.96E-04
Z Area					
#3	4/11/2016	9.95E-03	1.80E-03	4.43E-03	1.05E-03
Burial Ground					
643-26E-2	5/11/2016	1.40E-02	2.19E-03	-9.95E-06	8.24E-06
Burial Ground North	3/23/2016	1.00E-02	1.75E-03	9.43E-04	4.88E-04
Plant Perimeter					
Allendale Gate	3/23/2016	1.89E-02	2.97E-03	8.27E-03	1.52E-03
Barnwell Gate	3/23/2016	7.05E-03	1.40E-03	2.24E-03	7.59E-04
D-Area	3/23/2016	2.56E-02	3.15E-03	9.84E-03	1.64E-03
Darkhorse @ Williston Gate	3/23/2016	5.11E-03	1.39E-03	2.59E-03	9.09E-04
East Talatha	3/23/2016	3.76E-03	1.14E-03	3.22E-03	9.93E-04
Green Pond	3/23/2016	4.70E-03	1.29E-03	3.41E-03	1.00E-03
Highway 21/167	3/23/2016	3.19E-03	1.00E-03	1.78E-03	6.94E-04
Jackson	3/23/2016	2.29E-03	8.21E-04	1.30E-03	5.49E-04
Patterson Mill Road	3/23/2016	8.97E-03	1.98E-03	2.44E-03	9.32E-04
Talatha Gate	3/23/2016	1.27E-02	2.18E-03	3.73E-03	9.67E-04
25-Mile Radius					
Aiken Airport	3/23/2016	1.13E-02	2.15E-03	2.01E-03	7.81E-04
Augusta Lock and Dam 614	3/23/2016	1.35E-02	2.60E-03	2.04E-03	8.41E-04
Highway 301 @ State Line	3/23/2016	8.92E-03	1.70E-03	2.26E-03	7.64E-04

Table 17 Radionuclides in Soil (continued)

Location	Sample Date	Cm-244		Gross Beta	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	4/20/2016	3.16E-04	3.15E-04	3.38E+00	1.30E+00
H Area					
2000 Feet East	4/20/2016	0.00E+00	3.96E-04	4.92E+00	1.41E+00
Z Area					
#3	4/11/2016	2.97E-04	3.63E-04	7.19E+00	1.53E+00
Burial Ground					
643-26E-2	5/11/2016	4.38E-04	3.12E-04	7.81E+00	1.65E+00
Burial Ground North	3/23/2016	0.00E+00	3.00E-04	1.26E+01	1.35E+00
Plant Perimeter					
Allendale Gate	3/23/2016	0.00E+00	3.17E-04	3.11E+00	9.36E-01
Barnwell Gate	3/23/2016	-3.41E-04	2.34E-04	2.95E+00	1.28E+00
D-Area	3/23/2016	3.03E-04	3.53E-04	1.57E+01	1.44E+00
Darkhorse @ Williston Gate	3/23/2016	8.11E-05	3.32E-04	3.11E+00	9.44E-01
East Talatha	3/23/2016	2.81E-04	2.94E-04	8.46E+00	1.63E+00
Green Pond	3/23/2016	8.32E-05	3.40E-04	4.62E+00	1.03E+00
Highway 21/167	3/23/2016	-8.54E-05	3.52E-04	3.32E+00	9.52E-01
Jackson	3/23/2016	1.97E-03	6.65E-04	4.19E+00	1.00E+00
Patterson Mill Road	3/23/2016	-1.09E-05	9.71E-06	9.05E+00	1.22E+00
Talatha Gate	3/23/2016	-3.11E-04	2.20E-04	3.32E+00	1.30E+00
25-Mile Radius					
Aiken Airport	3/23/2016	0.00E+00	3.77E-04	3.41E+00	9.56E-01
Augusta Lock and Dam 614	3/23/2016	9.57E-05	4.08E-04	7.57E+00	1.16E+00
Highway 301 @ State Line	3/23/2016	3.22E-04	3.92E-04	8.57E+00	1.18E+00

Table 17 Radionuclides in Soil (continued)

Location	Sample Date	Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)
F Area			
2000 Feet West	4/20/2016	4.03E+00	1.28E+00
H Area			
2000 Feet East	4/20/2016	6.38E+00	1.66E+00
Z Area			
#3	4/11/2016	2.92E+00	1.11E+00
Burial Ground			
643-26E-2	5/11/2016	1.14E+01	2.14E+00
Burial Ground North	3/23/2016	2.29E+01	2.06E+00
Plant Perimeter			
Allendale Gate	3/23/2016	3.59E+00	8.19E-01
Barnwell Gate	3/23/2016	6.38E+00	1.55E+00
D-Area	3/23/2016	1.33E+01	1.59E+00
Darkhorse @ Williston Gate	3/23/2016	4.57E+00	9.63E-01
East Talatha	3/23/2016	9.70E+00	1.81E+00
Green Pond	3/23/2016	4.14E+00	1.05E+00
Highway 21/167	3/23/2016	3.73E+00	8.96E-01
Jackson	3/23/2016	4.59E+00	1.01E+00
Patterson Mill Road	3/23/2016	1.39E+01	1.72E+00
Talatha Gate	3/23/2016	5.84E+00	1.46E+00
25-Mile Radius			
Aiken Airport	3/23/2016	1.89E+00	6.83E-01
Augusta Lock and Dam 614	3/23/2016	1.23E+01	1.60E+00
Highway 301 @ State Line	3/23/2016	1.16E+01	1.39E+00

Table 18 Radionuclides in Grassy Vegetation

Location	Sample Date	Tritium (H-3)		Co-60	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	4/21/2016	2.24E+00	3.85E-02	-2.76E-02	1.88E-02
Site Perimeter					
Allendale Gate	4/21/2016	1.41E-02	1.79E-02	-1.02E-02	1.89E-02
Barnwell Gate	4/21/2016	4.65E-02	2.32E-02	-1.52E-03	1.25E-02
D Area	4/21/2016	-1.54E-02	2.01E-02	4.62E-03	2.32E-02
Darkhorse @ Williston Gate	4/25/2016	1.68E-02	1.59E-02	-1.81E-02	1.16E-02
East Talatha	4/25/2016	2.30E-01	1.66E-02	-1.09E-02	9.59E-03
Green Pond	4/25/2016	4.16E-02	1.77E-02	1.63E-02	1.50E-02
Highway 21/167	5/2/2016	1.33E-02	1.87E-02	-5.76E-03	1.21E-02
Jackson	4/25/2016	4.11E-02	2.01E-02	1.44E-02	1.36E-02
Patterson Mill Road	5/2/2016	3.19E-03	1.50E-02	2.57E-02	1.25E-02
Talatha Gate	4/21/2016	5.05E-02	2.05E-02	2.42E-02	1.65E-02
25-Mile Radius					
Aiken Airport	4/21/2016	3.35E-02	2.31E-02	-3.73E-03	1.89E-02
Augusta Lock and Dam 614	4/21/2016	1.91E-01	2.46E-02	4.92E-02	3.11E-02
Highway 301 @ State Line	5/3/2016	3.62E-02	2.31E-02	1.80E-02	2.01E-02

Table 18 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Cs-137		Sr-89/90	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	4/21/2016	-1.76E-02	1.35E-02	7.05E-02	1.61E-02
Site Perimeter					
Allendale Gate	4/21/2016	5.46E-01	5.69E-02	2.28E-01	2.70E-02
Barnwell Gate	4/21/2016	2.89E-02	1.39E-02	3.05E-01	3.02E-02
D Area	4/21/2016	6.51E-02	2.13E-02	9.08E-02	1.85E-02
Darkhorse @ Williston Gate	4/25/2016	1.03E-01	1.77E-02	4.35E-01	3.61E-02
East Talatha	4/25/2016	1.69E-01	2.50E-02	4.00E-01	3.65E-02
Green Pond	4/25/2016	5.95E-02	1.80E-02	2.32E-01	2.55E-02
Highway 21/167	5/2/2016	2.63E-01	3.41E-02	6.14E-01	4.88E-02
Jackson	4/25/2016	2.26E-01	3.19E-02	2.70E-01	2.94E-02
Patterson Mill Road	5/2/2016	8.54E-02	2.69E-02	1.80E-01	2.33E-02
Talatha Gate	4/21/2016	1.22E-01	2.92E-02	1.43E-01	2.46E-02
25-Mile Radius					
Aiken Airport	4/21/2016	4.19E-02	1.66E-02	1.37E-01	2.03E-02
Augusta Lock and Dam 614	4/21/2016	6.57E-02	2.68E-02	8.76E-02	1.69E-02
Highway 301 @ State Line	5/3/2016	1.45E-01	3.19E-02	1.01E-01	1.89E-02

Table 18 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	U-234		U-235	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	4/21/2016	2.56E-03	7.15E-04	-2.56E-05	2.39E-05
Site Perimeter					
Allendale Gate	4/21/2016	2.21E-03	5.72E-04	-2.56E-05	2.22E-05
Barnwell Gate	4/21/2016	2.95E-03	7.29E-04	3.38E-04	2.62E-04
D Area	4/21/2016	2.53E-03	5.81E-04	1.13E-04	1.42E-04
Darkhorse @ Williston Gate	4/25/2016	1.15E-03	3.79E-04	2.56E-04	2.28E-04
East Talatha	4/25/2016	4.14E-03	7.23E-04	3.41E-04	2.16E-04
Green Pond	4/25/2016	5.30E-03	8.92E-04	1.70E-04	2.32E-04
Highway 21/167	5/2/2016	2.49E-03	5.73E-04	2.48E-04	1.98E-04
Jackson	4/25/2016	1.12E-02	1.43E-03	2.81E-04	2.22E-04
Patterson Mill Road	5/2/2016	1.82E-03	5.17E-04	1.13E-04	1.42E-04
Talatha Gate	4/21/2016	1.96E-03	5.17E-04	2.46E-04	1.96E-04
25-Mile Radius					
Aiken Airport	4/21/2016	1.20E-02	1.67E-03	4.22E-05	2.46E-04
Augusta Lock and Dam 614	4/21/2016	2.86E-03	6.07E-04	1.68E-05	1.55E-04
Highway 301 @ State Line	5/3/2016	2.92E-03	6.79E-04	-2.56E-05	2.26E-05

Table 18 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Np-237		U-238	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	4/21/2016	2.56E-04	1.49E-04	2.05E-03	6.27E-04
Site Perimeter					
Allendale Gate	4/21/2016	2.13E-04	1.51E-04	2.64E-03	6.01E-04
Barnwell Gate	4/21/2016	8.59E-05	8.63E-05	2.62E-03	6.58E-04
D Area	4/21/2016	1.94E-04	1.55E-04	3.68E-03	6.97E-04
Darkhorse @ Williston Gate	4/25/2016	0.00E+00	1.19E-04	1.14E-03	3.53E-04
East Talatha	4/25/2016	3.76E-04	2.39E-04	5.08E-03	7.90E-04
Green Pond	4/25/2016	-2.97E-05	1.23E-04	5.78E-03	9.21E-04
Highway 21/167	5/2/2016	3.27E-05	1.17E-04	1.44E-03	4.38E-04
Jackson	4/25/2016	0.00E+00	1.37E-04	1.22E-02	1.49E-03
Patterson Mill Road	5/2/2016	0.00E+00	1.07E-04	7.86E-04	3.36E-04
Talatha Gate	4/21/2016	0.00E+00	9.48E-05	1.54E-03	4.51E-04
25-Mile Radius					
Aiken Airport	4/21/2016	1.76E-04	1.25E-04	1.06E-02	1.54E-03
Augusta Lock and Dam 614	4/21/2016	3.57E-04	1.80E-04	3.19E-03	6.30E-04
Highway 301 @ State Line	5/3/2016	2.29E-04	1.83E-04	2.57E-03	6.41E-04

Table 18 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Tc-99		Gross Beta	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	4/21/2016	2.52E-01	9.04E-02	1.35E+01	1.25E+00
Site Perimeter					
Allendale Gate	4/21/2016	2.20E-01	5.33E-02	7.78E+00	1.00E+00
Barnwell Gate	4/21/2016	2.76E-01	5.41E-02	7.78E+00	9.93E-01
D Area	4/21/2016	2.53E-01	5.44E-02	9.86E+00	1.10E+00
Darkhorse @ Williston Gate	4/25/2016	2.86E-01	6.49E-02	1.04E+01	1.12E+00
East Talatha	4/25/2016	1.68E-01	5.27E-02	5.97E+00	9.13E-01
Green Pond	4/25/2016	3.24E-01	5.89E-02	1.16E+01	1.18E+00
Highway 21/167	5/2/2016	3.11E-01	5.47E-02	4.76E+00	8.36E-01
Jackson	4/25/2016	2.57E-01	5.39E-02	1.05E+01	1.12E+00
Patterson Mill Road	5/2/2016	1.69E-01	5.25E-02	6.08E+00	9.09E-01
Talatha Gate	4/21/2016	1.57E-01	5.24E-02	7.43E+00	9.78E-01
Aiken Airport	4/21/2016	3.51E-01	9.21E-02	1.35E+01	1.26E+00
Augusta Lock and Dam 614	4/21/2016	9.57E-01	2.09E-01	1.56E+01	1.31E+00
Highway 301 @ State Line	5/3/2016	2.25E-01	5.34E-02	1.23E+01	1.20E+00

Table 18 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)
Onsite			
Burial Ground North	4/21/2016	8.19E-01	4.60E-01
Site Perimeter			
Allendale Gate	4/21/2016	1.98E-02	2.09E-01
Barnwell Gate	4/21/2016	1.99E-01	2.68E-01
D Area	4/21/2016	6.08E-01	4.03E-01
Darkhorse @ Williston Gate	4/25/2016	1.52E-02	2.11E-01
East Talatha	4/25/2016	1.96E-01	2.60E-01
Green Pond	4/25/2016	8.51E-01	4.77E-01
Highway 21/167	5/2/2016	2.00E-01	2.62E-01
Jackson	4/25/2016	-1.82E-01	8.55E-02
Patterson Mill Road	5/2/2016	2.08E-02	1.94E-01
Talatha Gate	4/21/2016	2.04E-01	2.73E-01
25-Mile Radius			
Aiken Airport	4/21/2016	6.11E-01	4.10E-01
Augusta Lock and Dam 614	4/21/2016	-1.89E-01	8.47E-02
Highway 301 @ State Line	5/3/2016	1.18E-02	2.11E-01

Table 19 Radionuclides in Terrestrial Food

Terrestrial food samples are provided by members of the public. Samples are provided from locations surrounding SRS within designated quadrants from 0 to 10 miles from the SRS boundary and a control quadrant located from 10 to 25 miles from the SRS boundary to the southeast.

Radionuclide: H-3 (tritium)

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	-1.69E-03	2.12E-02
NW Quadrant 0-10 Miles	1/11/2016	1.82E-02	1.78E-02
SE Quadrant 0-10 Miles	1/7/2016	-8.89E-03	1.85E-02
SE Quadrant 25 Miles	1/11/2016	-6.14E-03	1.70E-02
SW Quadrant 0-10 Miles	1/12/2016	2.21E-02	1.71E-02
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	-1.04E-02	2.38E-02
Plant Perimeter: NW Quadrant	7/14/2016	-1.67E-02	2.34E-02
Plant Perimeter: SE Quadrant	6/30/2016	1.55E-02	2.37E-02
Plant Perimeter: SW Quadrant	7/14/2016	-2.54E-02	2.36E-02
SE Quadrant 25 Miles	6/21/2016	8.00E-03	2.10E-02
Beef			
NE Quadrant 0-10 Miles	10/4/2016	-2.21E-02	1.80E-02
NW Quadrant 0-10 Miles	2/23/2016	4.78E-02	2.08E-02
SE Quadrant 0-10 Miles	6/8/2016	-2.78E-02	2.19E-02
SE Quadrant 25 Miles	2/24/2016	2.22E-02	1.93E-02
SW Quadrant 0-10 Miles	6/1/2016	1.94E-02	2.14E-02
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	-6.11E-03	1.79E-02
NW Quadrant 0-10 Miles	1/28/2016	4.35E-02	2.41E-02
SE Quadrant 0-10 Miles	1/11/2016	1.11E-01	2.51E-02
SE Quadrant 25 Miles	1/19/2016	2.42E-02	2.40E-02
SW Quadrant 0-10 Miles	1/12/2016	2.10E-02	2.31E-02
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	1.75E-02	1.01E-02
NW Quadrant 0-10 Miles	6/16/2016	-1.62E-02	1.28E-02
SE Quadrant 0-10 Miles	6/8/2016	2.50E-02	1.49E-02
SE Quadrant 25 Miles	6/8/2016	1.66E-02	1.72E-02
SW Quadrant 0-10 Miles	6/16/2016	4.16E-03	1.71E-02

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Co-60

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	1.02E-02	6.22E-03
NW Quadrant 0-10 Miles	1/11/2016	4.22E-03	4.72E-03
SE Quadrant 0-10 Miles	1/7/2016	6.51E-03	5.54E-03
SE Quadrant 25 Miles	1/11/2016	4.08E-03	6.04E-03
SW Quadrant 0-10 Miles	1/12/2016	-4.38E-03	4.87E-03
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	4.84E-04	1.19E-03
Plant Perimeter: NW Quadrant	7/14/2016	-1.60E-04	1.16E-03
Plant Perimeter: SE Quadrant	6/30/2016	-1.80E-03	1.14E-03
Plant Perimeter: SW Quadrant	7/14/2016	-1.35E-03	1.17E-03
SE Quadrant 25 Miles	6/21/2016	-5.49E-04	1.20E-03
Beef			
NE Quadrant 0-10 Miles	10/4/2016	1.68E-03	7.54E-03
NW Quadrant 0-10 Miles	2/23/2016	1.74E-03	3.06E-03
SE Quadrant 0-10 Miles	6/8/2016	5.81E-05	2.67E-03
SE Quadrant 25 Miles	2/24/2016	-3.00E-04	2.83E-03
SW Quadrant 0-10 Miles	6/1/2016	2.64E-03	2.49E-03
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	7.97E-03	6.00E-03
NW Quadrant 0-10 Miles	1/28/2016	-1.02E-03	5.18E-03
SE Quadrant 0-10 Miles	1/11/2016	-4.78E-03	4.42E-03
SE Quadrant 25 Miles	1/19/2016	-1.61E-04	5.13E-03
SW Quadrant 0-10 Miles	1/12/2016	-7.70E-03	6.34E-03
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	1.73E-03	2.07E-03
NW Quadrant 0-10 Miles	6/16/2016	1.41E-04	1.95E-03
SE Quadrant 0-10 Miles	6/8/2016	-3.16E-03	1.88E-03
SE Quadrant 25 Miles	6/8/2016	3.03E-03	1.83E-03
SW Quadrant 0-10 Miles	6/16/2016	-1.16E-03	1.86E-03

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Cs-137

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	1.74E-02	4.16E-03
NW Quadrant 0-10 Miles	1/11/2016	3.78E-03	2.95E-03
SE Quadrant 0-10 Miles	1/7/2016	1.45E-02	4.96E-03
SE Quadrant 25 Miles	1/11/2016	2.31E-02	4.68E-03
SW Quadrant 0-10 Miles	1/12/2016	1.13E-02	4.19E-03
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	5.76E-04	1.17E-03
Plant Perimeter: NW Quadrant	7/14/2016	8.08E-06	1.08E-03
Plant Perimeter: SE Quadrant	6/30/2016	-8.78E-04	1.15E-03
Plant Perimeter: SW Quadrant	7/14/2016	-2.89E-04	1.03E-03
SE Quadrant 25 Miles	6/21/2016	-5.95E-04	1.05E-03
Beef			
NE Quadrant 0-10 Miles	10/4/2016	2.70E-04	7.16E-03
NW Quadrant 0-10 Miles	2/23/2016	3.38E-04	2.25E-03
SE Quadrant 0-10 Miles	6/8/2016	1.62E-03	2.58E-03
SE Quadrant 25 Miles	2/24/2016	7.24E-04	2.56E-03
SW Quadrant 0-10 Miles	6/1/2016	1.46E-02	4.74E-03
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	3.24E-02	6.50E-03
NW Quadrant 0-10 Miles	1/28/2016	2.56E-02	5.64E-03
SE Quadrant 0-10 Miles	1/11/2016	2.15E-02	4.01E-03
SE Quadrant 25 Miles	1/19/2016	3.35E-02	7.07E-03
SW Quadrant 0-10 Miles	1/12/2016	2.47E-02	5.86E-03
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	1.86E-03	1.57E-03
NW Quadrant 0-10 Miles	6/16/2016	1.02E-02	2.87E-03
SE Quadrant 0-10 Miles	6/8/2016	1.48E-03	1.60E-03
SE Quadrant 25 Miles	6/8/2016	1.14E-03	1.56E-03
SW Quadrant 0-10 Miles	6/16/2016	5.41E-03	2.41E-03

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Sr-89/90

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	1.91E-01	2.35E-02
NW Quadrant 0-10 Miles	1/11/2016	2.84E-01	2.91E-02
SE Quadrant 0-10 Miles	1/7/2016	3.27E-01	3.88E-02
SE Quadrant 25 Miles	1/11/2016	2.64E-01	2.69E-02
SW Quadrant 0-10 Miles	1/12/2016	1.95E-01	2.32E-02
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	5.14E-03	2.46E-03
Plant Perimeter: NW Quadrant	7/14/2016	2.67E-03	2.30E-03
Plant Perimeter: SE Quadrant	6/30/2016	-6.65E-06	2.17E-03
Plant Perimeter: SW Quadrant	7/14/2016	4.57E-03	2.46E-03
SE Quadrant 25 Miles	6/21/2016	3.68E-03	2.38E-03
Beef			
NE Quadrant 0-10 Miles	10/4/2016	1.84E-03	1.15E-03
NW Quadrant 0-10 Miles	2/23/2016	5.32E-04	1.00E-03
SE Quadrant 0-10 Miles	6/8/2016	-2.70E-06	8.72E-04
SE Quadrant 25 Miles	2/24/2016	1.49E-04	9.63E-04
SW Quadrant 0-10 Miles	6/1/2016	-2.97E-06	9.67E-04
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	4.08E-02	8.67E-03
NW Quadrant 0-10 Miles	1/28/2016	1.51E-01	1.11E-02
SE Quadrant 0-10 Miles	1/11/2016	2.78E-01	1.48E-02
SE Quadrant 25 Miles	1/19/2016	1.38E-01	1.24E-02
SW Quadrant 0-10 Miles	1/12/2016	9.86E-02	1.03E-02
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	4.78E-02	1.82E-02
NW Quadrant 0-10 Miles	6/16/2016	5.62E-03	1.48E-02
SE Quadrant 0-10 Miles	6/8/2016	5.00E-03	1.55E-02
SE Quadrant 25 Miles	6/8/2016	1.50E-02	1.68E-02
SW Quadrant 0-10 Miles	6/16/2016	-1.19E-02	1.38E-02

Table 19 Radionuclides in Terrestrial Food (continued)

The uranium series results for all cabbage were historical highs when compared with data going back to 2003. To verify the results were accurate, the samples were rerun on a different instrument. Comparison of the results using two different instruments indicated the results were valid. As soils have natural amounts of uranium, these results are within an acceptable range.

Radionuclide: U-234

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	6.59E-04	2.78E-04
NW Quadrant 0-10 Miles	1/11/2016	4.57E-02	3.76E-03
SE Quadrant 0-10 Miles	1/7/2016	2.86E-02	2.67E-03
SE Quadrant 25 Miles	1/11/2016	6.16E-03	9.74E-04
SW Quadrant 0-10 Miles	1/12/2016	4.81E-04	2.80E-04
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	5.27E-05	3.17E-05
Plant Perimeter: NW Quadrant	7/14/2016	2.36E-05	2.97E-05
Plant Perimeter: SE Quadrant	6/30/2016	2.26E-05	2.86E-05
Plant Perimeter: SW Quadrant	7/14/2016	3.43E-05	2.58E-05
SE Quadrant 25 Miles	6/21/2016	6.38E-05	4.37E-05
Beef			
NE Quadrant 0-10 Miles	10/4/2016	9.65E-05	3.31E-05
NW Quadrant 0-10 Miles	2/23/2016	6.11E-05	2.62E-05
SE Quadrant 0-10 Miles	6/8/2016	1.19E-04	3.47E-05
SE Quadrant 25 Miles	2/24/2016	5.00E-05	2.17E-05
SW Quadrant 0-10 Miles	6/1/2016	1.23E-04	4.40E-05
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	1.75E-03	5.04E-04
NE Quadrant 0-10 Miles	1/7/2016	5.08E-04	2.63E-04
NW Quadrant 0-10 Miles	1/28/2016	9.11E-02	7.08E-03
NW Quadrant 0-10 Miles	1/28/2016	4.65E-02	3.97E-03
SE Quadrant 0-10 Miles	1/11/2016	9.05E-03	1.24E-03
SE Quadrant 0-10 Miles	1/11/2016	1.52E-02	1.84E-03
SE Quadrant 25 Miles	1/19/2016	9.24E-04	4.32E-04
SE Quadrant 25 Miles	1/19/2016	8.19E-04	4.29E-04
SW Quadrant 0-10 Miles	1/12/2016	4.78E-03	9.28E-04
SW Quadrant 0-10 Miles	1/12/2016	4.05E-03	8.96E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	1.03E-03	3.74E-04
NW Quadrant 0-10 Miles	6/16/2016	1.73E-03	4.83E-04
SE Quadrant 0-10 Miles	6/8/2016	1.21E-03	4.13E-04
SE Quadrant 25 Miles	6/8/2016	1.09E-03	3.77E-04
SW Quadrant 0-10 Miles	6/16/2016	5.68E-03	9.82E-04

Table 19 Radionuclides in Terrestrial Food (continued)

The uranium series results for all cabbage were historical highs when compared with data going back to 2003. To verify the results were accurate, the samples were rerun on a different instrument. Comparison of the results using two different instruments indicated the results were valid. As soils have natural amounts of uranium, these results are within an acceptable range.

Radionuclide: U-235

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	1.18E-04	1.40E-04
NW Quadrant 0-10 Miles	1/11/2016	2.24E-03	6.05E-04
SE Quadrant 0-10 Miles	1/7/2016	8.70E-04	3.73E-04
SE Quadrant 25 Miles	1/11/2016	-6.92E-05	2.02E-04
SW Quadrant 0-10 Miles	1/12/2016	-6.38E-05	1.79E-04
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	-1.54E-06	1.29E-06
Plant Perimeter: NW Quadrant	7/14/2016	-1.54E-06	1.30E-06
Plant Perimeter: SE Quadrant	6/30/2016	-1.54E-06	1.29E-06
Plant Perimeter: SW Quadrant	7/14/2016	-1.54E-06	1.29E-06
SE Quadrant 25 Miles	6/21/2016	-1.54E-06	1.28E-06
Beef			
NE Quadrant 0-10 Miles	10/4/2016	-9.41E-07	7.93E-07
NW Quadrant 0-10 Miles	2/23/2016	1.20E-05	1.30E-05
SE Quadrant 0-10 Miles	6/8/2016	-9.41E-07	7.90E-07
SE Quadrant 25 Miles	2/24/2016	-9.41E-07	7.82E-07
SW Quadrant 0-10 Miles	6/1/2016	1.31E-05	1.41E-05
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	-1.18E-05	1.03E-05
NE Quadrant 0-10 Miles	1/7/2016	-1.07E-04	1.08E-04
NW Quadrant 0-10 Miles	1/28/2016	3.00E-03	7.49E-04
NW Quadrant 0-10 Miles	1/28/2016	2.55E-03	6.61E-04
SE Quadrant 0-10 Miles	1/11/2016	7.49E-04	3.46E-04
SE Quadrant 0-10 Miles	1/11/2016	3.68E-04	2.60E-04
SE Quadrant 25 Miles	1/19/2016	-1.18E-05	1.05E-05
SE Quadrant 25 Miles	1/19/2016	-1.14E-04	1.16E-04
SW Quadrant 0-10 Miles	1/12/2016	1.71E-04	1.85E-04
SW Quadrant 0-10 Miles	1/12/2016	0.00E+00	2.04E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	-9.68E-06	8.31E-06
NW Quadrant 0-10 Miles	6/16/2016	-1.95E-04	1.31E-04
SE Quadrant 0-10 Miles	6/8/2016	-1.05E-04	9.59E-05
SE Quadrant 25 Miles	6/8/2016	1.65E-04	2.05E-04
SW Quadrant 0-10 Miles	6/16/2016	-9.68E-06	8.47E-06

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Np-237

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	6.14E-05	1.47E-04
NW Quadrant 0-10 Miles	1/11/2016	-5.22E-05	5.47E-05
SE Quadrant 0-10 Miles	1/7/2016	2.39E-04	2.47E-04
SE Quadrant 25 Miles	1/11/2016	-9.19E-06	1.69E-04
SW Quadrant 0-10 Miles	1/12/2016	8.05E-05	2.86E-04
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	-3.03E-05	1.77E-05
Plant Perimeter: NW Quadrant	7/14/2016	-1.69E-05	1.21E-05
Plant Perimeter: SE Quadrant	6/30/2016	1.82E-05	3.02E-05
Plant Perimeter: SW Quadrant	7/14/2016	-1.88E-05	1.39E-05
SE Quadrant 25 Miles	6/21/2016	-1.24E-06	1.98E-05
Beef			
NE Quadrant 0-10 Miles	10/4/2016	-7.24E-06	7.06E-06
NW Quadrant 0-10 Miles	2/23/2016	-2.00E-07	2.31E-07
SE Quadrant 0-10 Miles	6/8/2016	-2.00E-07	2.20E-07
SE Quadrant 25 Miles	2/24/2016	-6.65E-06	6.46E-06
SW Quadrant 0-10 Miles	6/1/2016	2.39E-06	9.36E-06
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	5.97E-04	3.57E-04
NW Quadrant 0-10 Miles	1/28/2016	9.27E-06	1.75E-04
SE Quadrant 0-10 Miles	1/11/2016	3.46E-04	2.04E-04
SE Quadrant 25 Miles	1/19/2016	1.25E-04	1.98E-04
SW Quadrant 0-10 Miles	1/12/2016	-1.68E-04	1.37E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	2.12E-04	1.75E-04
NW Quadrant 0-10 Miles	6/16/2016	6.97E-04	2.86E-04
SE Quadrant 0-10 Miles	6/8/2016	3.05E-04	1.83E-04
SE Quadrant 25 Miles	6/8/2016	2.66E-04	1.59E-04
SW Quadrant 0-10 Miles	6/16/2016	1.96E-04	1.44E-04

Table 19 Radionuclides in Terrestrial Food (continued)

The uranium series results for all cabbage were historical highs when compared with data going back to 2003. To verify the results were accurate, the samples were rerun on a different instrument. Comparison of the results using two different instruments indicated the results were valid. As soils have natural amounts of uranium, these results are within an acceptable range.

Radionuclide: U-238

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	5.68E-04	2.90E-04
NW Quadrant 0-10 Miles	1/11/2016	4.70E-02	3.75E-03
SE Quadrant 0-10 Miles	1/7/2016	2.69E-02	2.49E-03
SE Quadrant 25 Miles	1/11/2016	4.86E-03	8.38E-04
SW Quadrant 0-10 Miles	1/12/2016	6.73E-04	3.21E-04
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	1.56E-05	1.84E-05
Plant Perimeter: NW Quadrant	7/14/2016	6.68E-05	4.63E-05
Plant Perimeter: SE Quadrant	6/30/2016	-1.46E-05	1.22E-05
Plant Perimeter: SW Quadrant	7/14/2016	3.35E-05	2.58E-05
SE Quadrant 25 Miles	6/21/2016	6.89E-05	3.62E-05
Beef			
NE Quadrant 0-10 Miles	10/4/2016	1.74E-05	1.36E-05
NW Quadrant 0-10 Miles	2/23/2016	7.51E-05	3.09E-05
SE Quadrant 0-10 Miles	6/8/2016	1.10E-04	3.31E-05
SE Quadrant 25 Miles	2/24/2016	6.73E-05	2.49E-05
SW Quadrant 0-10 Miles	6/1/2016	1.27E-04	4.10E-05
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	8.43E-04	3.34E-04
NE Quadrant 0-10 Miles	1/7/2016	-1.32E-04	1.98E-04
NW Quadrant 0-10 Miles	1/28/2016	9.41E-02	7.03E-03
NW Quadrant 0-10 Miles	1/28/2016	4.16E-02	3.53E-03
SE Quadrant 0-10 Miles	1/11/2016	1.08E-02	1.35E-03
SE Quadrant 0-10 Miles	1/11/2016	1.52E-02	1.81E-03
SE Quadrant 25 Miles	1/19/2016	3.00E-03	7.05E-04
SE Quadrant 25 Miles	1/19/2016	5.97E-04	3.25E-04
SW Quadrant 0-10 Miles	1/12/2016	3.24E-03	7.32E-04
SW Quadrant 0-10 Miles	1/12/2016	3.00E-03	7.53E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	1.28E-03	4.00E-04
NW Quadrant 0-10 Miles	6/16/2016	1.30E-03	4.07E-04
SE Quadrant 0-10 Miles	6/8/2016	7.70E-04	3.20E-04
SE Quadrant 25 Miles	6/8/2016	1.16E-03	3.90E-04
SW Quadrant 0-10 Miles	6/16/2016	5.68E-03	9.36E-04

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Pu-238

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	3.65E-04	1.98E-04
NW Quadrant 0-10 Miles	1/11/2016	2.81E-04	1.78E-04
SE Quadrant 0-10 Miles	1/7/2016	4.14E-05	1.49E-04
SE Quadrant 25 Miles	1/11/2016	2.56E-04	1.82E-04
SW Quadrant 0-10 Miles	1/12/2016	5.27E-04	2.66E-04
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	1.79E-05	1.79E-05
Plant Perimeter: NW Quadrant	7/14/2016	2.09E-05	2.45E-05
Plant Perimeter: SE Quadrant	6/30/2016	1.84E-05	1.84E-05
Plant Perimeter: SW Quadrant	7/14/2016	3.70E-05	2.63E-05
SE Quadrant 25 Miles	6/21/2016	0.00E+00	1.98E-05
Beef			
NE Quadrant 0-10 Miles	10/4/2016	9.30E-06	1.07E-05
NW Quadrant 0-10 Miles	2/23/2016	-1.19E-06	1.37E-06
SE Quadrant 0-10 Miles	6/8/2016	-6.70E-06	5.57E-06
SE Quadrant 25 Miles	2/24/2016	3.76E-05	1.98E-05
SW Quadrant 0-10 Miles	6/1/2016	6.54E-06	7.95E-06
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	1.45E-04	1.46E-04
NW Quadrant 0-10 Miles	1/28/2016	1.38E-04	1.38E-04
SE Quadrant 0-10 Miles	1/11/2016	6.32E-05	1.61E-04
SE Quadrant 25 Miles	1/19/2016	4.03E-05	1.45E-04
SW Quadrant 0-10 Miles	1/12/2016	0.00E+00	2.29E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	7.59E-05	9.67E-05
NW Quadrant 0-10 Miles	6/16/2016	2.69E-04	1.71E-04
SE Quadrant 0-10 Miles	6/8/2016	8.65E-05	1.07E-04
SE Quadrant 25 Miles	6/8/2016	7.32E-05	9.36E-05
SW Quadrant 0-10 Miles	6/16/2016	1.84E-04	1.46E-04

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Pu-239

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	-3.38E-05	1.16E-04
NW Quadrant 0-10 Miles	1/11/2016	3.03E-04	2.07E-04
SE Quadrant 0-10 Miles	1/7/2016	7.35E-04	3.11E-04
SE Quadrant 25 Miles	1/11/2016	1.22E-04	1.29E-04
SW Quadrant 0-10 Miles	1/12/2016	-5.76E-06	6.86E-06
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	5.35E-05	3.11E-05
Plant Perimeter: NW Quadrant	7/14/2016	1.56E-05	1.75E-05
Plant Perimeter: SE Quadrant	6/30/2016	1.83E-05	1.83E-05
Plant Perimeter: SW Quadrant	7/14/2016	0.00E+00	2.07E-05
SE Quadrant 25 Miles	6/21/2016	3.03E-05	2.15E-05
Beef			
NE Quadrant 0-10 Miles	10/4/2016	3.49E-06	1.26E-05
NW Quadrant 0-10 Miles	2/23/2016	1.96E-05	1.39E-05
SE Quadrant 0-10 Miles	6/8/2016	8.22E-06	8.22E-06
SE Quadrant 25 Miles	2/24/2016	9.59E-06	9.59E-06
SW Quadrant 0-10 Miles	6/1/2016	7.70E-06	7.69E-06
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	7.24E-04	3.29E-04
NW Quadrant 0-10 Miles	1/28/2016	1.38E-04	2.87E-04
SE Quadrant 0-10 Miles	1/11/2016	-6.30E-05	6.41E-05
SE Quadrant 25 Miles	1/19/2016	-3.22E-04	1.64E-04
SW Quadrant 0-10 Miles	1/12/2016	6.49E-05	2.34E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	-7.27E-05	6.20E-05
NW Quadrant 0-10 Miles	6/16/2016	-1.12E-05	1.28E-05
SE Quadrant 0-10 Miles	6/8/2016	1.94E-04	1.49E-04
SE Quadrant 25 Miles	6/8/2016	1.68E-04	1.29E-04
SW Quadrant 0-10 Miles	6/16/2016	4.22E-04	2.38E-04

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Am-241

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	1.08E-04	1.27E-04
NW Quadrant 0-10 Miles	1/11/2016	1.73E-04	1.22E-04
SE Quadrant 0-10 Miles	1/7/2016	0.00E+00	1.05E-04
SE Quadrant 25 Miles	1/11/2016	9.05E-05	9.04E-05
SW Quadrant 0-10 Miles	1/12/2016	2.61E-04	1.51E-04
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	-1.14E-05	1.15E-05
Plant Perimeter: NW Quadrant	7/14/2016	0.00E+00	2.11E-05
Plant Perimeter: SE Quadrant	6/30/2016	-1.15E-05	1.15E-05
Plant Perimeter: SW Quadrant	7/14/2016	0.00E+00	2.09E-05
SE Quadrant 25 Miles	6/21/2016	1.72E-05	1.72E-05
Beef			
NE Quadrant 0-10 Miles	10/4/2016	3.08E-04	1.99E-04
NW Quadrant 0-10 Miles	2/23/2016	-7.59E-06	5.60E-06
SE Quadrant 0-10 Miles	6/8/2016	-7.65E-06	5.64E-06
SE Quadrant 25 Miles	2/24/2016	5.30E-06	7.81E-06
SW Quadrant 0-10 Miles	6/1/2016	-2.20E-06	1.81E-06
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	-5.54E-05	5.59E-05
NW Quadrant 0-10 Miles	1/28/2016	0.00E+00	1.04E-04
SE Quadrant 0-10 Miles	1/11/2016	5.95E-04	2.37E-04
SE Quadrant 25 Miles	1/19/2016	-1.09E-04	7.82E-05
SW Quadrant 0-10 Miles	1/12/2016	0.00E+00	1.01E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	4.38E-05	1.97E-04
NW Quadrant 0-10 Miles	6/16/2016	3.11E-04	2.30E-04
SE Quadrant 0-10 Miles	6/8/2016	1.41E-04	1.53E-04
SE Quadrant 25 Miles	6/8/2016	3.92E-04	2.35E-04
SW Quadrant 0-10 Miles	6/16/2016	2.86E-04	1.74E-04

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Cm-244

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	-6.05E-05	5.40E-05
NW Quadrant 0-10 Miles	1/11/2016	-6.41E-05	5.75E-05
SE Quadrant 0-10 Miles	1/7/2016	-6.57E-06	5.47E-06
SE Quadrant 25 Miles	1/11/2016	-6.57E-06	5.46E-06
SW Quadrant 0-10 Miles	1/12/2016	2.23E-05	1.04E-04
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	-1.30E-05	1.15E-05
Plant Perimeter: NW Quadrant	7/14/2016	1.65E-05	1.81E-05
Plant Perimeter: SE Quadrant	6/30/2016	-1.49E-06	1.23E-06
Plant Perimeter: SW Quadrant	7/14/2016	-1.49E-06	1.24E-06
SE Quadrant 25 Miles	6/21/2016	1.59E-05	1.75E-05
Beef			
NE Quadrant 0-10 Miles	10/4/2016	1.12E-04	1.12E-04
NW Quadrant 0-10 Miles	2/23/2016	0.00E+00	1.03E-05
SE Quadrant 0-10 Miles	6/8/2016	5.49E-06	1.40E-05
SE Quadrant 25 Miles	2/24/2016	0.00E+00	9.21E-06
SW Quadrant 0-10 Miles	6/1/2016	1.13E-05	1.32E-05
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	0.00E+00	9.56E-05
NW Quadrant 0-10 Miles	1/28/2016	0.00E+00	1.05E-04
SE Quadrant 0-10 Miles	1/11/2016	3.78E-04	2.13E-04
SE Quadrant 25 Miles	1/19/2016	8.19E-05	8.19E-05
SW Quadrant 0-10 Miles	1/12/2016	1.14E-04	1.34E-04
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	-7.89E-06	7.22E-06
NW Quadrant 0-10 Miles	6/16/2016	-7.89E-06	7.21E-06
SE Quadrant 0-10 Miles	6/8/2016	-7.89E-06	7.08E-06
SE Quadrant 25 Miles	6/8/2016	-7.89E-06	6.96E-06
SW Quadrant 0-10 Miles	6/16/2016	-7.89E-06	6.65E-06

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Tc-99

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	4.95E-01	6.09E-02
NW Quadrant 0-10 Miles	1/11/2016	4.24E-01	7.67E-02
SE Quadrant 0-10 Miles	1/7/2016	3.95E-01	5.88E-02
SE Quadrant 25 Miles	1/11/2016	1.02E+00	1.15E-01
SW Quadrant 0-10 Miles	1/12/2016	1.85E-01	5.09E-02
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	2.73E-02	1.20E-02
Plant Perimeter: NW Quadrant	7/14/2016	2.24E-02	1.19E-02
Plant Perimeter: SE Quadrant	6/30/2016	4.73E-03	1.16E-02
Plant Perimeter: SW Quadrant	7/14/2016	1.66E-02	1.18E-02
SE Quadrant 25 Miles	6/21/2016	6.49E-03	1.17E-02
Beef			
NE Quadrant 0-10 Miles	10/4/2016	4.73E-02	2.60E-02
NW Quadrant 0-10 Miles	2/23/2016	2.27E-02	2.56E-02
SE Quadrant 0-10 Miles	6/8/2016	3.86E-02	2.59E-02
SE Quadrant 25 Miles	2/24/2016	6.14E-02	2.62E-02
SW Quadrant 0-10 Miles	6/1/2016	1.36E-02	2.55E-02
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	1.83E-01	6.86E-02
NW Quadrant 0-10 Miles	1/28/2016	2.40E-01	6.86E-02
SE Quadrant 0-10 Miles	1/11/2016	3.35E-02	6.17E-02
SE Quadrant 25 Miles	1/19/2016	1.10E-01	6.58E-02
SW Quadrant 0-10 Miles	1/12/2016	2.55E-01	6.77E-02
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	1.21E-01	8.55E-02
NW Quadrant 0-10 Miles	6/16/2016	2.28E-02	8.43E-02
SE Quadrant 0-10 Miles	6/8/2016	8.14E-02	8.46E-02
SE Quadrant 25 Miles	6/8/2016	4.54E-02	8.44E-02
SW Quadrant 0-10 Miles	6/16/2016	2.28E-01	8.72E-02

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Gross Beta

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	3.81E+01	2.00E+00
NW Quadrant 0-10 Miles	1/11/2016	2.78E+01	1.71E+00
SE Quadrant 0-10 Miles	1/7/2016	3.54E+01	1.90E+00
SE Quadrant 25 Miles	1/11/2016	3.51E+01	1.91E+00
SW Quadrant 0-10 Miles	1/12/2016	2.95E+01	1.76E+00
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	4.68E-01	4.12E-02
Plant Perimeter: NW Quadrant	7/14/2016	4.49E-01	4.04E-02
Plant Perimeter: SE Quadrant	6/30/2016	5.97E-01	4.60E-02
Plant Perimeter: SW Quadrant	7/14/2016	4.92E-01	4.21E-02
SE Quadrant 25 Miles	6/21/2016	6.46E-01	4.77E-02
Beef			
NE Quadrant 0-10 Miles	10/4/2016	2.76E+00	1.83E-01
NW Quadrant 0-10 Miles	2/23/2016	2.86E+00	1.86E-01
SE Quadrant 0-10 Miles	6/8/2016	2.45E+00	1.73E-01
SE Quadrant 25 Miles	2/24/2016	2.45E+00	1.74E-01
SW Quadrant 0-10 Miles	6/1/2016	2.22E+00	1.65E-01
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	1.74E+01	9.67E-01
NW Quadrant 0-10 Miles	1/28/2016	3.11E+01	1.28E+00
SE Quadrant 0-10 Miles	1/11/2016	2.49E+01	1.14E+00
SE Quadrant 25 Miles	1/19/2016	1.51E+01	9.09E-01
SW Quadrant 0-10 Miles	1/12/2016	2.09E+01	1.06E+00
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	3.86E+00	2.64E-01
NW Quadrant 0-10 Miles	6/16/2016	3.97E+00	2.67E-01
SE Quadrant 0-10 Miles	6/8/2016	4.27E+00	2.76E-01
SE Quadrant 25 Miles	6/8/2016	4.03E+00	2.69E-01
SW Quadrant 0-10 Miles	6/16/2016	4.14E+00	2.73E-01

Table 19 Radionuclides in Terrestrial Food (continued)

Radionuclide: Gross Alpha

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/7/2016	4.51E-01	4.80E-01
NW Quadrant 0-10 Miles	1/11/2016	1.81E-01	3.57E-01
SE Quadrant 0-10 Miles	1/7/2016	-3.27E-01	9.63E-02
SE Quadrant 25 Miles	1/11/2016	-3.19E-01	9.44E-02
SW Quadrant 0-10 Miles	1/12/2016	1.15E+00	6.01E-01
Fruit			
Plant Perimeter: NE Quadrant	1/21/2016	-5.81E-03	4.20E-03
Plant Perimeter: NW Quadrant	7/14/2016	6.78E-04	7.70E-03
Plant Perimeter: SE Quadrant	6/30/2016	1.42E-02	1.25E-02
Plant Perimeter: SW Quadrant	7/14/2016	6.54E-04	7.75E-03
SE Quadrant 25 Miles	6/21/2016	-6.49E-03	4.60E-03
Beef			
NE Quadrant 0-10 Miles	10/4/2016	1.78E-02	3.84E-02
NW Quadrant 0-10 Miles	2/23/2016	6.62E-02	5.12E-02
SE Quadrant 0-10 Miles	6/8/2016	8.95E-02	5.55E-02
SE Quadrant 25 Miles	2/24/2016	9.16E-02	5.68E-02
SW Quadrant 0-10 Miles	6/1/2016	-6.05E-03	2.83E-02
Cabbage			
NE Quadrant 0-10 Miles	1/7/2016	-1.31E-01	1.21E-01
NW Quadrant 0-10 Miles	1/28/2016	3.08E-01	2.99E-01
SE Quadrant 0-10 Miles	1/11/2016	1.53E-01	2.18E-01
SE Quadrant 25 Miles	1/19/2016	7.19E-02	1.99E-01
SW Quadrant 0-10 Miles	1/12/2016	2.86E-01	2.63E-01
Wheat			
NE Quadrant 0-10 Miles	6/14/2016	1.05E-02	4.55E-02
NW Quadrant 0-10 Miles	6/16/2016	1.55E-01	8.55E-02
SE Quadrant 0-10 Miles	6/8/2016	-2.57E-02	2.69E-02
SE Quadrant 25 Miles	6/8/2016	1.21E-01	7.84E-02
SW Quadrant 0-10 Miles	6/16/2016	1.23E-01	8.01E-02

Table 20 Radionuclides in Cow's Milk

The dairies are located in communities surrounding SRS in both South Carolina and Georgia.

Location	Sample Date	H-3 (tritium)		Co-60	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
SC Dairy 1					
	1/27/2016	4.41E+02	9.09E+01	4.84E-01	1.01E+00
	4/18/2016	-7.73E+01	8.63E+01	2.89E-01	9.71E-01
	7/13/2016	5.16E+01	7.59E+01	-1.50E+00	1.09E+00
	10/18/2016	1.63E+02	7.48E+01	4.32E-01	9.67E-01
SC Dairy 2					
	1/28/2016	-1.36E+02	7.74E+01	-9.22E-01	9.52E-01
	4/20/2016	4.81E+01	8.72E+01	-7.41E+01	2.95E+01
	7/13/2016	1.92E+02	7.64E+01	9.73E-01	1.00E+00
	10/18/2016	-3.03E+00	7.16E+01	1.46E+00	1.04E+00
SC Dairy 3					
	1/27/2016	-3.65E+02	7.47E+01	1.44E+00	1.01E+00
	4/19/2016	1.10E+02	8.72E+01	1.97E+00	1.11E+00
	7/13/2016	8.24E+01	7.55E+01	9.95E-01	1.13E+00
	10/18/2016	-9.16E+00	7.19E+01	2.44E+00	1.02E+00
SC Dairy 4					
	1/27/2016	-8.32E+00	7.88E+01	1.47E+00	9.89E-01
	4/19/2016	-4.78E+01	8.59E+01	7.19E-01	9.74E-01
	7/13/2016	2.02E+02	7.71E+01	1.40E+00	1.14E+00
	10/18/2016	2.67E+01	7.04E+01	7.81E-01	9.32E-01
GA Dairy 1					
	1/27/2016	2.78E+00	7.92E+01	6.46E-01	1.03E+00
	4/19/2016	2.64E+01	8.67E+01	1.44E-01	9.36E-01
	7/13/2016	8.89E+01	7.63E+01	-4.84E-01	9.93E-01
	10/18/2016	-1.54E+01	7.21E+01	1.22E+00	1.04E+00
GA Dairy 2					
	1/27/2016	1.67E+02	8.25E+01	2.12E+00	9.93E-01
	4/18/2016	3.59E+01	8.72E+01	-6.76E-01	1.02E+00
	7/13/2016	1.42E+01	7.48E+01	7.49E-02	1.05E+00
	10/18/2016	5.51E+01	6.91E+01	-2.00E+00	1.23E+00
GA Dairy 3					
	1/27/2016	2.92E+02	8.59E+01	-8.51E-01	9.44E-01
	4/18/2016	1.26E+02	8.72E+01	-2.95E-02	1.01E+00
	7/14/2016	1.23E+02	7.80E+01	-6.65E-01	1.02E+00
	10/18/2016	1.21E+02	7.14E+01	-4.84E-01	9.74E-01
GA Dairy 4					
	1/27/2016	-1.53E+02	7.73E+01	2.22E-01	9.71E-01
	4/18/2016	1.15E+02	8.59E+01	1.70E-01	9.78E-01
	7/13/2016	5.70E+00	7.47E+01	1.25E+00	1.06E+00
	10/19/2016	-3.11E+01	7.28E+01	3.32E-01	1.02E+00

Table 20 Radionuclides in Cow's Milk (continued)

Location	Sample Date	Cs-137		Sr-90	
		Result (pCi/L)	Standard Deviation (pCi/L)	Result (pCi/L)	Standard Deviation (pCi/L)
SC Dairy 1					
	1/27/2016	3.54E-02	1.02E+00	8.49E-01	3.71E+01
	4/18/2016	2.69E+00	9.09E-01	-2.81E-01	3.65E-01
	7/13/2016	6.27E-01	1.07E+00	4.41E-02	7.04E-02
	10/18/2016	3.46E-01	9.00E-01	5.08E-01	8.92E-01
SC Dairy 2					
	1/28/2016	6.24E-01	8.84E-01	6.03E-01	3.65E-01
	4/20/2016	2.86E+01	2.37E+01	-6.27E-01	3.20E+00
	7/13/2016	3.03E-01	8.72E-01	2.22E-01	2.01E-01
	10/18/2016	-1.63E-02	9.00E-01	5.32E-01	9.52E-01
SC Dairy 3					
	1/27/2016	5.57E-04	9.17E-01	-1.58E-01	8.00E-02
	4/19/2016	6.59E-01	8.80E-01	5.59E-01	1.32E+00
	7/13/2016	-4.43E-01	1.05E+00	5.49E-01	2.39E-01
	10/18/2016	1.01E+00	8.80E-01	5.89E-01	6.56E-01
SC Dairy 4					
	1/27/2016	7.84E-01	9.28E-01	5.73E-01	1.36E+00
	4/19/2016	-5.54E-01	8.96E-01	7.24E-01	1.39E+00
	7/13/2016	1.83E+00	1.12E+00	9.84E-01	7.14E-01
	10/18/2016	1.69E+00	1.02E+00	8.54E-01	1.21E+00
GA Dairy 1					
	1/27/2016	1.56E-04	9.32E-01	6.16E-01	1.26E+00
	4/19/2016	8.78E-01	8.67E-01	4.89E-01	8.07E-01
	7/13/2016	1.29E+00	9.32E-01	-5.65E-03	3.70E-03
	10/18/2016	4.32E-01	8.84E-01	2.81E-01	7.40E-01
GA Dairy 2					
	1/27/2016	2.63E+00	9.21E-01	-2.07E-01	1.08E-01
	4/18/2016	-3.89E-03	9.63E-01	-5.30E-01	8.13E-01
	7/13/2016	3.92E+00	1.38E+00	-1.07E-03	5.79E-02
	10/18/2016	9.38E-01	8.96E-01	1.33E+00	4.47E+00
GA Dairy 3					
	1/27/2016	3.84E-01	9.09E-01	-1.68E-01	1.98E-01
	4/18/2016	1.99E+00	9.63E-01	7.49E-01	2.89E-01
	7/14/2016	3.73E-01	9.09E-01	-4.62E-01	8.18E-01
	10/18/2016	1.83E+00	8.59E-01	3.51E-01	1.45E-01
GA Dairy 4					
	1/27/2016	2.48E+00	9.52E-01	1.04E-01	6.26E-02
	4/18/2016	2.68E+00	9.48E-01	8.19E-02	6.68E-02
	7/13/2016	2.52E-02	8.72E-01	-7.16E-01	2.65E+00
	10/19/2016	2.95E+00	1.00E+00	4.62E-01	7.34E-01

Table 21 Radionuclides in Liquid Effluent Samples

Location: F-012 281-8F Retention Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/17/2016	8.84E+02	1.44E+02	-4.00E-01	2.00E+00	4.92E+00	2.41E+00
4/3/2016	9.49E+02	1.62E+02	1.86E+00	2.03E+00	5.46E+00	2.95E+00
5/30/2016	1.04E+03	1.63E+02	8.38E-01	1.65E+00	7.41E+00	2.54E+00
6/16/2016	5.38E+02	1.48E+02	1.68E+00	1.93E+00	1.10E+00	2.24E+00
8/28/2016	1.26E+03	1.80E+02	2.73E+00	2.15E+00	1.19E+01	3.13E+00
9/12/2016	7.70E+02	1.57E+02	3.11E+00	2.05E+00	1.76E+01	3.71E+00
10/13/2016	4.95E+02	1.55E+02	3.92E-01	1.88E+00	5.92E+00	3.14E+00
12/23/2016	2.97E+03	2.13E+02	-3.46E+00	2.10E+00	4.49E+00	2.22E+00

Sample Date	Sr-89/90		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/17/2016	4.11E+00	1.27E+00	1.10E-01	2.66E-01	2.89E-02	1.55E-02
4/3/2016	2.28E+00	1.02E+00	2.42E-01	3.08E-01	5.00E-02	2.22E-02
5/30/2016	6.41E-01	1.13E+00	-8.86E-02	3.33E-01	9.84E-02	3.22E-02
6/16/2016	3.57E-01	8.92E-01	-2.03E-01	2.80E-01	4.76E-02	2.11E-02
8/28/2016	4.11E-01	1.04E+00	-2.09E-01	3.03E-01	1.06E-01	3.06E-02
9/12/2016	3.11E+00	1.22E+00	5.08E-02	2.77E-01	8.86E-02	2.74E-02
10/13/2016	2.32E+00	1.30E+00	-4.11E-02	2.77E-01	4.51E-02	2.32E-02
12/23/2016	8.76E-01	6.99E-01	6.97E-01	3.81E-01	1.08E-01	3.05E-02

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/17/2016	-1.55E-05	1.78E-04	1.94E-02	1.57E-02	9.49E-02	2.74E-02
4/3/2016	3.22E-03	1.18E-02	0.00E+00	9.44E-03	1.03E-01	2.99E-02
5/30/2016	2.97E-02	1.72E-02	-2.89E-03	1.20E-02	9.54E-02	3.09E-02
6/16/2016	1.55E-02	1.83E-02	7.89E-03	8.02E-03	3.97E-02	1.99E-02
8/28/2016	-3.22E-03	1.30E-02	-4.22E-05	6.51E-04	4.54E-02	1.99E-02
9/12/2016	1.82E-02	1.31E-02	-5.76E-03	5.71E-03	6.14E-02	2.40E-02
10/13/2016	1.97E-02	1.41E-02	-1.52E-04	2.36E-03	1.35E-01	3.52E-02
12/23/2016	3.14E-03	1.14E-02	-2.76E-03	1.14E-02	9.46E-02	2.96E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: F-012 281-8F Retention Basin (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/17/2016	4.41E-02	2.12E-02	4.68E-02	2.36E-02	1.05E-02	1.24E-02
4/3/2016	1.94E-02	1.62E-02	2.42E-02	1.56E-02	1.22E-02	1.50E-02
5/30/2016	8.57E-02	2.89E-02	8.43E-03	1.81E-02	3.08E-03	1.11E-02
6/16/2016	5.49E-02	2.12E-02	2.34E-02	1.41E-02	2.78E-03	1.00E-02
8/28/2016	3.19E-02	2.14E-02	-2.04E-02	1.56E-02	-2.60E-03	1.05E-02
9/12/2016	2.81E-02	1.82E-02	8.32E-03	9.00E-03	2.41E-02	1.41E-02
10/13/2016	3.46E-02	1.77E-02	2.86E-02	1.86E-02	2.69E-03	9.71E-03
12/23/2016	-1.31E-04	2.02E-03	-5.51E-03	5.47E-03	-2.92E-03	1.17E-02

Sample Date	Cm-244		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/17/2016	0.00E+00	9.74E-03	6.22E-01	8.03E-01	8.51E+00	1.09E+00
4/3/2016	3.05E-03	1.11E-02	9.03E-01	7.76E-01	1.13E+01	1.71E+00
5/30/2016	0.00E+00	1.07E-02	1.81E-01	8.34E-01	9.78E+00	1.61E+00
6/16/2016	0.00E+00	1.01E-02	3.97E+00	4.03E-01	8.95E+00	1.57E+00
8/28/2016	2.28E-02	1.32E-02	-4.24E-02	7.52E-01	9.51E+00	1.65E+00
9/12/2016	7.97E-03	7.97E-03	9.03E-01	7.53E-01	1.72E+01	2.06E+00
10/13/2016	5.30E-03	1.35E-02	5.51E-01	7.36E-01	7.92E+00	1.57E+00
12/23/2016	-1.37E-05	1.61E-04	5.00E-01	7.82E-01	5.95E+00	1.45E+00

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
1/17/2016	2.42E-01	2.77E-01
4/3/2016	-3.08E-01	1.30E-01
5/30/2016	-2.24E-02	3.42E-01
6/16/2016	-1.99E-01	1.11E-01
8/28/2016	-2.07E-01	2.26E-01
9/12/2016	-2.08E-01	2.25E-01
10/13/2016	-3.57E-02	3.63E-01
12/23/2016	2.78E-01	4.79E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: F-013 200-F Cooling Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	5.54E+02	1.34E+02	-2.11E+00	2.09E+00	2.01E+00	2.04E+00
3/24/2016	3.49E+02	1.40E+02	1.19E+00	2.05E+00	1.25E+00	2.24E+00
5/22/2016	8.19E+02	1.56E+02	1.38E+00	1.92E+00	9.95E-01	2.26E+00
6/28/2016	9.92E+02	1.74E+02	5.41E-01	2.11E+00	4.14E+00	2.29E+00
8/9/2016	9.03E+02	1.55E+02	1.79E-01	1.84E+00	-7.73E-01	1.96E+00
10/4/2016	1.47E+03	1.79E+02	-4.70E+00	2.15E+00	1.32E+00	2.24E+00
12/13/2016	1.58E+03	1.77E+02	2.86E+00	2.02E+00	1.59E+00	2.18E+00

Sample Date	Sr-89/90		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.61E+00	1.01E+00	1.25E-01	3.25E-01	1.49E-01	3.65E-02
3/24/2016	6.76E-01	8.37E-01	1.22E+00	5.82E-01	6.81E-02	2.66E-02
5/22/2016	-3.78E-02	1.01E+00	-7.32E-02	2.78E-01	1.36E-01	3.63E-02
6/28/2016	2.52E+00	6.58E-01	1.27E+00	5.81E-01	1.88E-01	4.20E-02
8/9/2016	1.17E-01	1.00E+00	-3.35E-02	2.80E-01	1.59E-01	3.70E-02
10/4/2016	3.95E-01	1.14E+00	1.09E+00	3.29E-01	6.70E-02	2.58E-02
12/13/2016	-7.08E-01	5.77E-01	7.65E-02	2.69E-01	1.39E-01	3.69E-02

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.89E-02	1.96E-02	-6.19E-05	9.32E-04	1.36E-01	3.58E-02
3/24/2016	3.86E-02	1.97E-02	-1.12E-02	7.98E-03	9.65E-02	3.00E-02
5/22/2016	3.08E-02	1.95E-02	-1.03E-02	7.55E-03	2.03E-01	4.43E-02
6/28/2016	6.65E-03	1.70E-02	-5.35E-03	9.52E-03	1.72E-01	4.09E-02
8/9/2016	3.11E-03	1.12E-02	2.08E-02	1.67E-02	1.30E-01	3.49E-02
10/4/2016	1.99E-02	1.42E-02	7.32E-03	8.00E-03	1.12E-01	3.53E-02
12/13/2016	6.43E-03	1.65E-02	8.08E-03	8.10E-03	1.28E-01	3.45E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: F-013 200-F Cooling Basin (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.76E-02	2.36E-02	8.30E-02	2.85E-02	6.00E-02	3.08E-02
3/24/2016	3.86E-02	2.20E-02	8.19E-03	8.50E-03	2.09E-02	1.79E-02
5/22/2016	6.86E-02	2.43E-02	5.35E-02	2.11E-02	6.08E-02	2.32E-02
6/28/2016	3.41E-02	1.89E-02	6.57E-02	2.49E-02	6.19E-02	2.49E-02
8/9/2016	2.06E-02	1.65E-02	8.84E-02	2.89E-02	4.38E-02	2.21E-02
10/4/2016	2.22E-02	1.31E-02	7.32E-03	1.55E-02	4.30E-02	1.94E-02
12/13/2016	3.46E-02	1.93E-02	2.66E-02	1.72E-02	8.41E-03	8.67E-03

Sample Date	Cm-244		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	7.89E-02	2.91E-02	4.05E+00	8.88E-01	6.27E+00	1.38E+00
3/24/2016	1.56E-02	1.11E-02	-6.92E-02	7.58E-01	8.68E+00	1.52E+00
5/22/2016	1.71E-02	1.21E-02	-1.11E-01	7.66E-01	4.22E+00	1.27E+00
6/28/2016	1.66E-02	1.18E-02	9.57E-01	7.41E-01	6.35E+00	1.47E+00
8/9/2016	1.08E-02	1.08E-02	5.43E-01	7.59E-01	2.01E+00	1.16E+00
10/4/2016	3.41E-02	1.71E-02	1.63E+00	7.53E-01	3.70E+00	1.31E+00
12/13/2016	3.35E-02	1.69E-02	3.46E-01	7.81E-01	2.64E+00	1.22E+00

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	4.11E-01	4.57E-01
3/24/2016	-2.03E-01	5.77E-02
5/22/2016	9.95E-01	6.86E-01
6/28/2016	1.04E-01	4.05E-01
8/9/2016	4.41E-01	5.32E-01
10/4/2016	9.65E-01	6.93E-01
12/13/2016	6.24E-01	5.97E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: F-05

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.28E+03	1.56E+02	-1.89E+00	3.16E+00	1.50E+00	2.06E+00
3/7/2016	5.73E+01	1.46E+02	-1.77E+00	2.92E+00	2.07E+00	1.87E+00
4/5/2016	1.23E+03	1.68E+02	-9.73E+00	2.72E+00	-1.32E+00	1.62E+00
5/2/2016	7.00E+02	1.51E+02	-4.38E+00	2.77E+00	1.35E+00	1.83E+00
6/6/2016	2.49E+02	1.35E+02	3.24E+00	3.89E+00	1.16E-01	1.73E+00
7/5/2016	4.08E+02	1.58E+02	-1.12E+01	3.80E+00	-6.32E-01	1.79E+00
8/1/2016	4.62E+01	1.55E+02	7.73E+00	5.97E+00	2.64E+00	1.98E+00
9/6/2016	2.56E+01	1.51E+02	-7.46E+00	4.66E+00	-1.74E+00	2.10E+00
11/7/2016	-5.54E+01	1.64E+02	-9.05E-01	3.97E+00	-6.81E-01	1.91E+00

Sample Date	Cs-137		Sr-89/90		I-129	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	2.08E+00	2.27E+00	4.00E+00	4.42E-01	1.40E-01	3.02E-01
3/7/2016	1.30E-01	2.00E+00	1.84E+00	2.00E-01	-3.24E-02	2.92E-01
4/5/2016	-2.37E+00	2.59E+00	7.62E+00	6.16E-01	2.44E-01	2.76E-01
5/2/2016	5.14E-01	2.09E+00	7.11E+00	6.17E-01	9.00E-01	3.62E-01
6/6/2016	-2.56E+00	2.05E+00	4.43E+00	4.48E-01	1.58E-02	2.63E-01
7/5/2016	-2.00E-01	2.12E+00	4.19E+00	4.63E-01	-1.86E-01	3.01E-01
8/1/2016	3.11E+00	2.14E+00	8.68E+00	7.13E-01	9.24E-02	2.74E-01
9/6/2016	1.64E+00	1.88E+00	-8.38E-02	1.84E-01	-3.70E-01	2.81E-01
11/7/2016	-2.13E-01	1.94E+00	1.06E+00	2.51E-01	-3.16E-01	2.80E-01

Sample Date	U-234		U-235		Np-237	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	6.89E-02	1.26E-02	1.69E-02	5.75E-03	-2.45E-03	1.88E-03
3/7/2016	1.21E-01	1.86E-02	1.04E-02	4.83E-03	-3.27E-03	2.02E-03
4/5/2016	3.92E-02	9.32E-03	-9.95E-06	5.84E-04	5.46E-04	2.00E-03
5/2/2016	4.73E-02	9.97E-03	6.49E-04	2.41E-03	-1.22E-03	1.27E-03
6/6/2016	6.62E-02	1.24E-02	1.14E-02	5.17E-03	4.14E-03	3.43E-03
7/5/2016	5.19E-02	1.20E-02	1.40E-03	3.65E-03	6.41E-04	2.24E-03
8/1/2016	1.47E-01	1.99E-02	6.84E-03	4.40E-03	8.14E-03	3.82E-03
9/6/2016	7.68E-02	1.47E-02	2.03E-03	2.36E-03	-3.03E-03	3.05E-03
11/7/2016	7.32E-01	5.80E-02	4.95E-02	1.07E-02	-1.88E-03	2.92E-03

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: F-05 (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	9.00E-02	1.49E-02	7.22E-03	4.47E-03	6.03E-03	3.87E-03
3/7/2016	1.10E-01	1.86E-02	6.43E-03	3.40E-03	2.67E-03	3.45E-03
4/5/2016	6.95E-02	1.30E-02	1.19E-02	4.88E-03	7.00E-03	4.20E-03
5/2/2016	6.19E-02	1.14E-02	1.44E-02	5.55E-03	5.41E-03	3.16E-03
6/6/2016	9.70E-02	1.50E-02	1.76E-02	5.72E-03	1.46E-02	6.19E-03
7/5/2016	7.76E-02	1.45E-02	1.20E-02	6.16E-03	3.16E-03	4.01E-03
8/1/2016	1.62E-01	2.23E-02	2.78E-02	7.30E-03	2.15E-02	6.39E-03
9/6/2016	8.27E-02	1.49E-02	5.95E-03	4.17E-03	2.95E-03	4.40E-03
11/7/2016	8.24E-01	6.32E-02	5.19E-02	1.11E-02	9.76E-02	1.67E-02

Sample Date	Am-241		Cm-244		Tc-99	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	2.45E-02	7.26E-03	1.07E-02	6.45E-03	3.14E+00	7.82E-01
3/7/2016	3.84E-02	8.54E-03	5.73E-03	3.65E-03	1.90E+00	7.60E-01
4/5/2016	1.35E-02	6.48E-03	-2.84E-06	1.67E-04	-2.24E-01	7.64E-01
5/2/2016	1.75E-02	5.63E-03	5.19E-03	3.01E-03	-3.19E-01	5.42E-01
6/6/2016	5.54E-02	1.13E-02	2.00E-02	6.40E-03	7.16E-01	8.55E-01
7/5/2016	2.56E-02	6.47E-03	6.35E-03	3.22E-03	3.00E+00	7.56E-01
8/1/2016	1.85E-01	2.46E-02	3.76E-02	9.97E-03	4.46E-01	7.56E-01
9/6/2016	2.78E-02	7.29E-03	5.16E-03	2.05E-03	-2.36E-01	7.34E-01
11/7/2016	5.32E-01	4.37E-02	1.14E-01	1.50E-02	7.81E-01	7.82E-01

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.25E+01	1.17E+00	2.19E-01	2.47E-01
3/7/2016	6.19E+00	6.23E-01	2.00E-01	1.61E-01
4/5/2016	1.77E+01	1.37E+00	6.24E-01	3.57E-01
5/2/2016	1.79E+01	1.37E+00	5.95E-01	3.55E-01
6/6/2016	1.12E+01	1.12E+00	1.54E-01	2.29E-01
7/5/2016	1.22E+01	1.18E+00	8.76E-01	4.23E-01
8/1/2016	1.58E+01	1.34E+00	7.95E-01	3.94E-01
9/6/2016	2.13E+00	4.36E-01	4.89E-02	1.44E-01
11/7/2016	5.59E+00	8.55E-01	1.46E+00	4.93E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-1C H-Area Effluent

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.84E+03	1.70E+02	-1.84E+00	2.94E+00	1.83E+00	1.87E+00
3/7/2016	3.24E+03	2.22E+02	2.35E+00	2.91E+00	-2.70E-01	2.20E+00
4/5/2016	3.32E+03	2.17E+02	-3.92E+00	2.86E+00	5.97E+00	2.04E+00
5/2/2016	2.92E+03	2.06E+02	-7.57E-01	2.77E+00	3.08E+00	1.90E+00
6/6/2016	9.14E+03	3.13E+02	1.45E+00	4.24E+00	5.46E+00	2.15E+00
7/5/2016	7.92E+03	2.95E+02	-3.59E+00	4.21E+00	1.72E+00	1.86E+00
8/1/2016	2.26E+04	3.30E+02	1.96E+01	4.32E+00	2.26E+00	2.01E+00
9/6/2016	9.89E+03	3.29E+02	-1.37E+01	4.91E+00	-1.89E+00	2.07E+00
10/3/2016	8.16E+03	3.05E+02	-2.76E+00	3.89E+00	8.76E-01	2.20E+00
11/7/2016	3.30E+03	2.24E+02	-4.32E+00	3.99E+00	1.57E+00	2.13E+00
12/5/2016	2.13E+03	1.87E+02	-5.65E+00	3.81E+00	2.92E+00	1.98E+00
1/3/2017	4.65E+03	2.45E+02	4.95E+00	3.95E+00	-7.41E-01	1.90E+00

Sample Date	Cs-137		Sr-89/90		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	2.92E+00	2.19E+00	1.10E+00	2.66E-01	1.81E-02	6.93E-03
3/7/2016	1.02E+01	4.18E+00	3.54E+00	2.91E-01	1.74E-02	7.50E-03
4/5/2016	-1.52E+00	2.13E+00	1.17E+00	2.48E-01	1.91E-02	6.22E-03
5/2/2016	2.16E+00	2.06E+00	1.31E+00	2.64E-01	1.45E-02	6.11E-03
6/6/2016	2.04E+00	2.21E+00	9.46E-01	2.56E-01	1.09E-02	4.67E-03
7/5/2016	-2.61E+00	2.14E+00	1.03E+00	2.61E-01	1.72E-02	7.62E-03
8/1/2016	1.26E+00	2.07E+00	1.42E+00	2.94E-01	2.24E-02	7.70E-03
9/6/2016	2.07E+00	2.26E+00	9.35E-01	2.70E-01	2.12E-02	8.39E-03
10/3/2016	2.54E+00	2.08E+00	1.61E+00	3.41E-01	1.50E-02	6.22E-03
11/7/2016	1.83E+00	2.10E+00	1.21E+00	2.60E-01	2.97E-02	7.50E-03
12/5/2016	8.43E-01	2.27E+00	6.38E-01	1.58E-01	1.91E-02	8.41E-03
1/3/2017	3.46E+00	2.20E+00	1.10E+00	2.49E-01	2.78E-02	8.84E-03

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-1C H-Area Effluent (continued)

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.43E-02	5.49E-03	6.76E-03	4.71E-03	1.48E-02	6.90E-03
3/7/2016	-9.78E-06	5.69E-04	6.19E-03	3.41E-03	2.89E-02	1.02E-02
4/5/2016	3.92E-03	2.90E-03	7.27E-03	3.25E-03	2.06E-02	7.01E-03
5/2/2016	6.57E-04	2.44E-03	3.19E-03	1.93E-03	9.65E-03	4.70E-03
6/6/2016	7.51E-04	2.72E-03	5.59E-03	3.71E-03	3.84E-02	8.80E-03
7/5/2016	-7.00E-04	2.89E-03	2.10E-02	6.75E-03	8.30E-03	6.63E-03
8/1/2016	4.14E-03	3.07E-03	1.82E-03	1.96E-03	1.72E-02	8.46E-03
9/6/2016	5.89E-03	3.70E-03	2.27E-02	7.02E-03	1.48E-02	7.25E-03
10/3/2016	6.19E-03	3.70E-03	9.70E-03	5.28E-03	2.05E-02	8.39E-03
11/7/2016	9.65E-03	4.73E-03	9.35E-03	4.45E-03	2.55E-02	7.95E-03
12/5/2016	2.76E-03	3.57E-03	1.02E-02	4.24E-03	2.53E-02	7.88E-03
1/3/2017	6.76E-03	4.28E-03	1.33E-02	4.81E-03	1.41E-02	6.59E-03

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	9.95E-02	1.67E-02	9.73E-03	4.74E-03	9.81E-03	4.74E-03
3/7/2016	7.51E-01	6.52E-02	7.81E-02	1.29E-02	4.62E-02	9.52E-03
4/5/2016	3.49E-01	3.41E-02	2.35E-02	6.71E-03	1.57E-02	6.31E-03
5/2/2016	1.73E-01	2.17E-02	9.49E-03	3.95E-03	5.46E-03	3.16E-03
6/6/2016	2.34E-01	2.66E-02	6.62E-03	4.11E-03	5.65E-03	3.59E-03
7/5/2016	3.22E-01	3.70E-02	2.39E-02	7.29E-03	3.08E-02	7.38E-03
8/1/2016	8.68E-02	1.44E-02	6.03E-03	3.86E-03	1.85E-02	7.02E-03
9/6/2016	1.75E-01	2.39E-02	2.86E-02	8.96E-03	2.28E-02	6.60E-03
10/3/2016	1.77E-01	2.15E-02	1.20E-02	4.96E-03	4.89E-02	9.40E-03
11/7/2016	2.33E-01	2.87E-02	2.78E-02	8.18E-03	6.78E-02	1.21E-02
12/5/2016	3.14E-01	3.40E-02	3.43E-02	8.33E-03	3.43E-02	7.88E-03
1/3/2017	2.29E-01	2.63E-02	3.78E-02	8.67E-03	1.86E-02	6.97E-03

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-1C H-Area Effluent (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	4.19E-03	4.86E-03	4.86E+00	8.22E-01	2.02E-01	2.57E-01
3/7/2016	1.99E-02	6.32E-03	1.17E+01	1.14E+00	2.76E+00	7.29E-01
4/5/2016	6.92E-03	3.51E-03	5.03E+00	8.33E-01	2.25E+00	6.53E-01
5/2/2016	3.59E-03	2.55E-03	4.00E+00	7.68E-01	1.68E+00	5.62E-01
6/6/2016	3.35E-03	2.37E-03	4.16E+00	7.75E-01	8.54E-01	4.25E-01
7/5/2016	7.35E-03	4.01E-03	4.68E+00	8.28E-01	3.92E-01	3.19E-01
8/1/2016	2.61E-03	2.62E-03	6.14E+00	9.13E-01	1.42E+00	5.29E-01
9/6/2016	1.74E-03	1.75E-03	3.73E+00	7.71E-01	5.54E-01	3.57E-01
10/3/2016	4.30E-03	3.57E-03	4.05E+00	8.08E-01	6.97E-01	4.15E-01
11/7/2016	6.89E-03	3.53E-03	3.73E+00	7.50E-01	1.92E+00	5.85E-01
12/5/2016	6.35E-03	3.20E-03	4.57E+00	7.83E-01	1.36E+00	5.15E-01
1/3/2017	1.84E-02	5.92E-03	2.56E+00	7.65E-01	3.65E+00	8.32E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-3 F-Area Effluent

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	4.24E+02	1.31E+02	-1.76E+00	2.95E+00	4.81E-01	2.15E+00
3/7/2016	-1.51E+01	1.47E+02	-2.07E+00	2.86E+00	1.85E+00	1.90E+00
4/5/2016	1.73E+02	1.33E+02	1.54E+00	3.06E+00	-1.31E+00	2.09E+00
5/2/2016	2.33E+02	1.32E+02	1.25E+00	3.07E+00	2.18E+00	1.89E+00
6/6/2016	4.43E+02	1.39E+02	5.16E+00	3.89E+00	1.81E+00	1.83E+00
7/5/2016	4.03E+02	1.60E+02	-1.18E+01	5.32E+00	1.36E+00	1.97E+00
8/1/2016	4.24E+02	1.63E+02	5.32E+00	4.32E+00	3.65E+00	2.02E+00
9/6/2016	9.84E+02	1.81E+02	-1.87E+01	4.88E+00	1.78E+00	2.14E+00
10/3/2016	6.08E+02	1.54E+02	3.41E+00	3.96E+00	1.22E+00	1.93E+00
11/7/2016	1.79E+02	1.72E+02	-2.28E+00	3.85E+00	9.00E-01	1.84E+00
12/5/2016	1.47E+03	1.72E+02	-2.70E+00	3.86E+00	1.86E-01	1.93E+00
1/3/2017	4.81E+03	2.57E+02	7.78E-01	3.93E+00	4.51E-01	2.30E+00

Sample Date	Cs-137		Sr-89/90		I-129	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	6.03E+00	2.10E+00	1.14E-02	1.71E-01	-9.70E-02	2.61E-01
3/7/2016	-3.86E-01	2.01E+00	1.76E-01	1.04E-01	-3.57E-01	2.63E-01
4/5/2016	-4.97E+00	2.08E+00	-7.51E-02	1.44E-01	2.30E-01	2.72E-01
5/2/2016	8.32E-01	2.11E+00	4.38E-02	1.67E-01	1.77E-02	5.80E-01
6/6/2016	2.19E+00	2.25E+00	7.84E-02	1.76E-01	4.92E-01	2.69E-01
7/5/2016	-1.04E+00	2.32E+00	1.92E-01	2.01E-01	-1.58E-01	2.65E-01
8/1/2016	-1.11E+00	2.08E+00	1.84E-02	1.85E-01	1.14E+00	3.29E-01
9/6/2016	-9.84E-02	2.07E+00	-8.92E-02	1.89E-01	8.35E-01	4.37E-01
10/3/2016	-3.78E+00	2.31E+00	3.03E-01	2.46E-01	-2.08E-01	2.76E-01
11/7/2016	1.46E+00	1.96E+00	2.30E-01	1.82E-01	1.11E+00	4.89E-01
12/5/2016	7.51E-02	2.32E+00	4.41E-01	1.37E-01	-5.08E-01	2.74E-01
1/3/2017	-2.17E+00	2.07E+00	3.97E-01	2.02E-01	4.27E-01	4.27E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-3 F-Area Effluent (continued)

Sample Date	U-234		U-235		Np-237	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	4.81E-02	1.04E-02	1.85E-03	1.86E-03	6.41E-03	4.31E-03
3/7/2016	1.70E-01	2.19E-02	9.62E-03	4.47E-03	-2.59E-03	4.06E-03
4/5/2016	3.30E-02	8.52E-03	1.96E-03	2.09E-03	-5.57E-04	2.33E-03
5/2/2016	2.64E-02	7.41E-03	-1.34E-03	1.38E-03	-6.00E-03	3.40E-03
6/6/2016	2.89E-01	2.94E-02	1.28E-02	5.28E-03	6.30E-04	2.41E-03
7/5/2016	5.32E-02	1.19E-02	3.89E-03	2.87E-03	-2.25E-03	1.60E-03
8/1/2016	9.32E-02	1.57E-02	1.71E-02	6.10E-03	3.51E-03	2.62E-03
9/6/2016	9.78E-02	1.64E-02	1.02E-02	5.17E-03	3.57E-03	2.69E-03
10/3/2016	6.32E-02	1.21E-02	4.00E-03	2.94E-03	-3.05E-05	2.40E-03
11/7/2016	7.59E-02	1.25E-02	6.30E-04	2.70E-03	-1.01E-03	2.99E-03
12/5/2016	7.30E-02	1.41E-02	7.65E-03	4.20E-03	3.68E-03	2.62E-03
1/3/2017	7.22E-02	1.39E-02	1.09E-02	5.23E-03	1.79E-03	1.79E-03

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	4.78E-02	1.08E-02	2.35E-02	8.02E-03	1.02E-02	4.95E-03
3/7/2016	1.85E-01	2.40E-02	1.60E-02	6.18E-03	6.24E-04	4.37E-03
4/5/2016	2.44E-02	7.75E-03	2.20E-03	2.64E-03	4.95E-03	3.31E-03
5/2/2016	4.03E-02	9.21E-03	8.65E-03	4.44E-03	2.16E-03	2.55E-03
6/6/2016	3.32E-01	3.15E-02	8.22E-03	4.47E-03	2.34E-02	7.92E-03
7/5/2016	5.95E-02	1.25E-02	1.16E-02	5.43E-03	7.76E-03	4.70E-03
8/1/2016	1.33E-01	2.03E-02	1.92E-02	6.02E-03	8.70E-03	3.98E-03
9/6/2016	1.26E-01	1.84E-02	1.29E-02	5.63E-03	2.32E-03	3.76E-03
10/3/2016	6.78E-02	1.35E-02	3.62E-03	2.96E-03	7.22E-03	4.12E-03
11/7/2016	6.16E-02	1.19E-02	5.43E-03	3.82E-03	2.45E-03	3.42E-03
12/5/2016	6.46E-02	1.23E-02	6.03E-04	2.21E-03	7.27E-03	3.73E-03
1/3/2017	8.81E-02	1.46E-02	4.14E-03	3.29E-03	5.30E-03	3.27E-03

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-3 F-Area Effluent (continued)

Sample Date	Am-241		Cm-244		Tc-99	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	8.11E-03	4.42E-03	3.65E-03	4.34E-03	2.97E+00	5.44E-01
3/7/2016	1.76E-03	1.79E-03	0.00E+00	2.17E-03	1.83E+00	7.64E-01
4/5/2016	4.59E-03	4.77E-03	3.43E-03	2.46E-03	3.76E-01	7.69E-01
5/2/2016	1.80E-03	2.16E-03	5.95E-04	2.15E-03	2.51E+00	7.81E-01
6/6/2016	4.86E-02	9.82E-03	1.03E-02	4.22E-03	3.81E-01	7.84E-01
7/5/2016	2.32E-03	2.78E-03	1.71E-03	1.74E-03	1.12E+00	7.31E-01
8/1/2016	8.27E-04	3.01E-03	2.45E-03	2.46E-03	7.00E-01	7.67E-01
9/6/2016	9.14E-03	4.48E-03	1.70E-03	1.71E-03	1.05E+00	7.61E-01
10/3/2016	6.38E-03	3.22E-03	3.16E-03	2.24E-03	8.00E-01	7.65E-01
11/7/2016	3.73E-03	2.99E-03	-6.38E-06	3.80E-04	2.64E+00	8.07E-01
12/5/2016	1.76E-03	1.76E-03	0.00E+00	2.16E-03	-1.38E-01	7.62E-01
1/3/2017	2.02E-03	2.12E-03	6.70E-04	2.37E-03	-1.25E-01	7.77E-01

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	3.16E+00	6.97E-01	1.66E+00	5.37E-01
3/7/2016	3.05E+00	4.95E-01	1.66E+00	3.72E-01
4/5/2016	3.14E+00	7.14E-01	2.00E+00	6.06E-01
5/2/2016	3.24E+00	6.95E-01	1.14E+00	4.73E-01
6/6/2016	6.81E+00	9.28E-01	2.78E+00	7.24E-01
7/5/2016	2.69E+00	7.02E-01	3.73E-01	3.03E-01
8/1/2016	4.30E+00	8.41E-01	1.23E+00	4.93E-01
9/6/2016	2.01E+00	6.54E-01	5.14E-01	3.30E-01
10/3/2016	3.57E+00	7.85E-01	1.03E+00	4.74E-01
11/7/2016	4.70E+00	8.02E-01	6.81E-01	3.48E-01
12/5/2016	3.59E+00	7.29E-01	3.16E+00	7.71E-01
1/3/2017	2.07E+00	6.51E-01	1.85E-01	2.34E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-004

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.22E+03	1.53E+02	-9.54E-01	2.02E+00	-1.85E+00	2.19E+00
3/7/2016	9.19E+03	3.32E+02	-6.35E-01	1.89E+00	7.27E-01	2.07E+00
4/5/2016	2.31E+04	4.84E+02	2.09E+00	1.71E+00	-8.11E-01	2.25E+00
5/2/2016	1.96E+04	4.53E+02	-1.09E+00	1.88E+00	-2.57E-02	2.04E+00
6/6/2016	6.68E+03	2.80E+02	8.05E-01	1.89E+00	1.09E+00	2.25E+00
7/5/2016	2.92E+04	5.40E+02	-5.14E-01	1.98E+00	-1.12E+00	2.30E+00
8/1/2016	4.11E+04	4.47E+02	-2.49E+00	1.96E+00	1.96E+00	2.10E+00
9/6/2016	1.40E+04	3.91E+02	2.16E+00	2.08E+00	4.59E-01	2.02E+00
10/3/2016	1.06E+04	3.48E+02	3.86E+00	2.02E+00	1.84E+00	2.09E+00
11/7/2016	4.86E+03	2.58E+02	3.95E+00	1.70E+00	-1.18E+00	2.06E+00
12/5/2016	5.24E+03	2.53E+02	3.19E-01	2.00E+00	2.05E+00	2.23E+00
1/3/2017	1.09E+04	3.46E+02	9.35E-01	2.15E+00	-3.32E-01	2.04E+00

Sample Date	Sr-89/90		U-234		U-235	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	-8.16E-01	9.00E-01	1.47E-01	3.77E-02	2.02E-02	1.44E-02
3/7/2016	-8.68E-01	5.45E-01	3.62E-01	6.04E-02	2.97E-02	1.72E-02
4/5/2016	1.13E+00	7.07E-01	2.53E-01	5.41E-02	2.23E-02	1.59E-02
5/2/2016	6.89E-01	9.36E-01	2.92E-01	5.54E-02	2.09E-02	1.51E-02
6/6/2016	1.09E+00	1.00E+00	1.74E-01	4.03E-02	1.34E-02	1.57E-02
7/5/2016	-6.00E-01	1.03E+00	2.76E-01	5.25E-02	5.32E-02	2.41E-02
8/1/2016	8.35E-01	8.80E-01	4.43E-01	6.78E-02	3.35E-02	2.15E-02
9/6/2016	6.11E-02	9.74E-01	3.62E-01	6.09E-02	2.37E-02	1.91E-02
10/3/2016	3.03E-01	1.09E+00	2.76E-01	5.24E-02	2.04E-02	1.50E-02
11/7/2016	6.16E-01	1.09E+00	4.62E-01	7.17E-02	1.40E-02	1.64E-02
12/5/2016	6.62E-02	8.96E-01	5.43E-01	7.73E-02	3.14E-02	1.82E-02
1/3/2017	1.81E-01	1.16E+00	2.70E-01	5.24E-02	-5.00E-05	5.88E-04

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-004 (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	6.78E-02	2.64E-02	1.01E-01	2.99E-02	2.76E-03	1.01E-02
3/7/2016	5.84E-02	2.38E-02	5.00E-02	2.06E-02	1.66E-02	1.18E-02
4/5/2016	5.11E-02	2.59E-02	3.03E-03	1.98E-02	3.00E-03	1.09E-02
5/2/2016	7.62E-02	2.64E-02	3.59E-02	1.85E-02	1.51E-02	1.78E-02
6/6/2016	2.70E-02	1.72E-02	8.41E-03	8.44E-03	-1.12E-02	8.00E-03
7/5/2016	5.73E-02	2.60E-02	1.80E-02	1.44E-02	0.00E+00	1.01E-02
8/1/2016	5.68E-02	2.26E-02	2.73E-02	2.29E-02	3.03E-03	1.02E-02
9/6/2016	6.57E-02	2.42E-02	-3.92E-05	5.14E-04	7.84E-03	7.94E-03
10/3/2016	6.08E-02	2.54E-02	1.92E-02	1.53E-02	2.46E-02	1.45E-02
11/7/2016	9.05E-02	3.14E-02	-5.57E-03	5.61E-03	-1.11E-02	7.93E-03
12/5/2016	9.27E-02	2.95E-02	3.32E-02	1.67E-02	0.00E+00	9.74E-03
1/3/2017	1.94E-02	1.65E-02	2.69E-02	1.59E-02	1.20E-02	1.41E-02

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	-3.41E-01	8.16E-01	1.08E+00	6.59E-01
3/7/2016	1.38E+00	7.23E-01	5.84E-01	3.74E-01
4/5/2016	2.70E+00	1.16E+00	1.02E+00	7.05E-01
5/2/2016	2.57E+00	1.07E+00	1.40E-01	3.46E-01
6/6/2016	1.19E+00	1.01E+00	3.19E-01	4.70E-01
7/5/2016	2.35E+00	1.19E+00	1.09E+00	7.02E-01
8/1/2016	1.19E+00	1.15E+00	1.38E+00	7.56E-01
9/6/2016	1.65E+00	1.12E+00	1.01E-01	3.92E-01
10/3/2016	1.04E+00	1.10E+00	9.59E-01	6.85E-01
11/7/2016	2.36E+00	1.11E+00	1.31E-01	3.38E-01
12/5/2016	2.86E+00	1.12E+00	1.99E+00	8.92E-01
1/3/2017	3.46E+00	1.24E+00	5.08E-02	3.42E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/13/2016	4.92E+03	2.36E+02	-1.01E+00	2.16E+00	2.65E+01	4.67E+00
2/3/2016	4.16E+03	2.32E+02	-4.62E+00	2.08E+00	2.60E+01	3.95E+00
2/12/2016	2.51E+03	2.08E+02	-2.05E-01	1.74E+00	3.78E+01	5.12E+00
2/29/2016	1.12E+03	1.73E+02	1.29E+00	2.04E+00	3.35E+01	5.17E+00
3/10/2016	1.51E+03	1.84E+02	4.32E+00	2.14E+00	2.25E+01	4.62E+00
4/1/2016	2.64E+03	2.02E+02	2.95E+00	1.92E+00	2.86E+01	4.36E+00
4/5/2016	5.05E+03	2.51E+02	1.27E+00	2.25E+00	2.73E+01	4.70E+00
4/26/2016	3.41E+03	2.20E+02	7.05E-01	2.44E+00	3.89E+01	5.32E+00
5/21/2016	3.59E+03	2.23E+02	4.27E-02	1.76E+00	2.65E+01	4.46E+00
6/2/2016	5.57E+03	2.63E+02	9.43E-01	1.78E+00	2.59E+01	4.32E+00
6/11/2016	3.68E+03	2.23E+02	3.11E+00	1.88E+00	4.27E+01	5.23E+00
7/13/2016	3.73E+03	2.23E+02	1.14E+00	2.04E+00	6.11E+01	6.44E+00
7/27/2016	4.81E+03	2.44E+02	1.28E+00	2.05E+00	5.22E+01	5.82E+00
8/10/2016	4.46E+03	2.40E+02	4.16E+00	1.94E+00	3.84E+01	4.99E+00
8/17/2016	1.35E+03	1.68E+02	4.11E-01	2.13E+00	3.24E+01	4.47E+00
9/12/2016	2.95E+03	2.14E+02	-1.77E-01	1.92E+00	4.14E+01	5.68E+00
10/14/2016	4.30E+03	2.27E+02	-2.14E-01	2.07E+00	3.89E+01	4.72E+00
12/8/2016	3.46E+03	2.19E+02	2.78E-01	2.15E+00	2.73E+01	5.60E+00
12/21/2016	7.08E+03	2.85E+02	-1.38E+00	1.84E+00	1.95E+01	4.32E+00

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin (continued)

Sample Date	Sr-89/90		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/13/2016	1.47E+00	1.07E+00	3.35E-01	2.99E-01	7.81E-02	2.50E-02
2/3/2016	1.56E+00	9.97E-01	-1.35E-01	3.11E-01	7.57E-02	2.52E-02
2/12/2016	4.14E+00	1.32E+00	6.46E-01	3.30E-01	8.08E-02	2.69E-02
2/29/2016	5.73E+00	1.29E+00	3.57E-01	2.54E-01	1.10E-01	3.12E-02
3/10/2016	3.16E+00	6.55E-01	2.08E-01	2.68E-01	1.84E-02	2.15E-02
4/1/2016	5.08E+00	1.19E+00	9.68E-01	4.90E-01	6.22E-02	2.36E-02
4/5/2016	1.07E+01	1.76E+00	1.27E-01	3.11E-01	7.11E-02	2.85E-02
4/26/2016	8.78E+00	1.60E+00	-9.76E-02	3.98E-01	2.39E-02	2.10E-02
5/21/2016	7.62E+00	1.58E+00	-8.27E-02	3.27E-01	6.32E-02	2.50E-02
6/2/2016	9.70E+00	1.54E+00	5.54E-01	2.83E-01	8.59E-02	2.70E-02
6/11/2016	9.76E+00	1.56E+00	1.19E-01	3.31E-01	3.73E-02	2.15E-02
7/13/2016	1.01E+01	1.68E+00	1.78E+00	3.75E-01	7.57E-02	2.64E-02
7/27/2016	6.22E+00	1.40E+00	1.20E+00	5.58E-01	9.30E-02	3.08E-02
8/10/2016	4.43E+00	1.28E+00	4.46E-01	2.96E-01	7.11E-02	2.65E-02
8/17/2016	3.84E+00	1.24E+00	1.21E+00	3.46E-01	9.03E-02	2.82E-02
9/12/2016	3.49E+00	1.26E+00	2.73E-01	2.85E-01	1.08E-01	3.17E-02
10/14/2016	5.78E+00	1.51E+00	-4.68E-01	2.59E-01	1.06E-01	3.25E-02
12/8/2016	3.16E+00	8.37E-01	1.36E-01	2.76E-01	1.47E-01	3.75E-02
12/21/2016	2.76E+00	8.30E-01	-5.24E-01	2.83E-01	5.68E-02	2.25E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin (continued)

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/13/2016	-1.55E-05	1.78E-04	-5.81E-03	5.78E-03	4.97E-02	1.95E-02
2/3/2016	3.76E-02	1.89E-02	-2.86E-03	1.16E-02	7.78E-02	2.70E-02
2/12/2016	0.00E+00	1.01E-02	-7.46E-03	7.41E-03	6.43E-02	2.42E-02
2/29/2016	3.24E-02	2.06E-02	1.09E-02	1.29E-02	1.02E-01	3.01E-02
3/10/2016	-4.89E-05	5.70E-04	-5.14E-03	5.09E-03	7.14E-02	2.61E-02
4/1/2016	2.15E-02	1.72E-02	8.05E-03	8.06E-03	4.95E-02	2.29E-02
4/5/2016	0.00E+00	1.02E-02	3.86E-02	1.76E-02	7.65E-02	2.80E-02
4/26/2016	9.97E-03	1.00E-02	1.65E-02	1.18E-02	6.97E-02	2.78E-02
5/21/2016	9.84E-03	9.86E-03	0.00E+00	1.02E-02	4.70E-02	2.23E-02
6/2/2016	1.29E-02	1.51E-02	-4.24E-05	6.20E-04	3.89E-02	1.84E-02
6/11/2016	9.89E-03	9.93E-03	4.38E-02	2.00E-02	1.06E-01	3.20E-02
7/13/2016	-3.08E-03	1.25E-02	8.16E-03	8.18E-03	7.32E-02	2.47E-02
7/27/2016	1.01E-02	1.03E-02	2.33E-03	8.55E-03	2.97E-02	2.08E-02
8/10/2016	1.22E-02	1.43E-02	-5.54E-03	5.49E-03	8.81E-02	2.76E-02
8/17/2016	9.05E-03	9.09E-03	1.06E-02	1.25E-02	4.35E-02	1.95E-02
9/12/2016	-8.86E-05	1.03E-03	-6.54E-03	6.51E-03	9.03E-02	2.78E-02
10/14/2016	9.59E-03	9.71E-03	1.96E-02	1.61E-02	6.46E-02	2.54E-02
12/8/2016	2.01E-02	1.46E-02	1.82E-02	1.30E-02	1.06E-01	3.09E-02
12/21/2016	2.34E-02	1.88E-02	1.75E-02	1.24E-02	7.30E-02	2.56E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/13/2016	4.73E-01	7.38E-02	5.65E-02	2.58E-02	4.68E-02	2.12E-02
2/3/2016	2.61E-01	5.22E-02	1.39E-02	1.65E-02	1.61E-02	1.15E-02
2/12/2016	1.54E-01	4.37E-02	5.86E-02	2.83E-02	2.07E-02	1.66E-02
2/29/2016	1.78E-01	4.10E-02	8.11E-03	8.15E-03	8.62E-03	8.67E-03
3/10/2016	1.45E-01	3.58E-02	3.00E-02	1.54E-02	8.03E-03	8.07E-03
4/1/2016	1.92E-01	4.18E-02	4.24E-02	2.07E-02	2.40E-02	1.46E-02
4/5/2016	1.68E-01	3.89E-02	7.65E-03	7.70E-03	1.61E-02	1.22E-02
4/26/2016	3.78E-01	6.44E-02	1.64E-02	1.17E-02	1.72E-02	1.29E-02
5/21/2016	8.76E-02	3.35E-02	-1.52E-04	2.31E-03	1.97E-02	1.40E-02
6/2/2016	2.66E-01	5.06E-02	1.52E-02	1.12E-02	9.03E-03	9.04E-03
6/11/2016	1.24E-01	3.53E-02	1.72E-02	1.27E-02	8.08E-03	8.10E-03
7/13/2016	6.95E-01	9.28E-02	5.65E-02	2.21E-02	3.35E-02	1.67E-02
7/27/2016	1.26E-01	3.13E-02	4.22E-02	1.75E-02	1.14E-02	1.14E-02
8/10/2016	1.06E-01	3.06E-02	2.45E-02	1.43E-02	1.06E-02	1.06E-02
8/17/2016	1.02E-01	2.95E-02	2.36E-02	1.38E-02	0.00E+00	9.71E-03
9/12/2016	1.26E-01	3.68E-02	3.08E-03	1.19E-02	1.62E-02	1.16E-02
10/14/2016	6.41E-02	2.70E-02	3.62E-02	2.00E-02	8.43E-03	8.45E-03
12/8/2016	3.19E-01	6.02E-02	1.80E-02	1.28E-02	2.70E-02	1.72E-02
12/21/2016	2.46E-01	5.18E-02	4.62E-02	2.25E-02	2.13E-02	1.72E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin (continued)

Sample Date	Cm-244		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/13/2016	-6.16E-03	6.20E-03	-1.29E+00	7.80E-01	2.25E+01	7.51E-01
2/3/2016	-5.59E-03	6.04E-03	2.76E+00	7.69E-01	2.50E+01	1.13E+00
2/12/2016	8.51E-03	9.56E-03	1.79E+00	7.53E-01	2.70E+01	1.17E+00
2/29/2016	4.24E-02	1.99E-02	3.57E+00	7.79E-01	2.54E+01	1.12E+00
3/10/2016	0.00E+00	1.03E-02	2.00E+00	7.62E-01	2.37E+01	1.09E+00
4/1/2016	3.97E-02	1.80E-02	1.09E+00	8.16E-01	2.42E+01	1.11E+00
4/5/2016	8.05E-03	8.08E-03	2.84E-01	7.80E-01	4.24E+01	1.45E+00
4/26/2016	0.00E+00	9.63E-03	1.96E+00	7.77E-01	3.54E+01	1.89E+00
5/21/2016	9.70E-03	9.71E-03	6.86E-01	7.50E-01	3.32E+01	1.28E+00
6/2/2016	0.00E+00	1.08E-02	3.03E+00	9.82E-01	3.78E+01	1.36E+00
6/11/2016	1.59E-02	1.13E-02	3.32E+00	7.94E-01	4.73E+01	1.52E+00
7/13/2016	8.22E-03	8.26E-03	2.95E+00	7.93E-01	6.16E+01	1.74E+00
7/27/2016	1.13E-02	1.13E-02	5.95E+00	8.38E-01	4.95E+01	1.56E+00
8/10/2016	1.05E-02	1.05E-02	9.59E-01	7.65E-01	3.51E+01	1.31E+00
8/17/2016	0.00E+00	9.74E-03	6.14E-01	7.61E-01	2.70E+01	1.16E+00
9/12/2016	8.00E-03	8.01E-03	1.86E+00	7.89E-01	1.39E+01	8.46E-01
10/14/2016	0.00E+00	1.00E-02	2.78E-01	7.73E-01	2.78E+01	1.17E+00
12/8/2016	1.60E-02	1.14E-02	1.34E+00	7.85E-01	2.25E+01	1.06E+00
12/21/2016	9.03E-03	9.04E-03	1.11E-01	7.76E-01	2.10E+01	1.05E+00

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin (continued)

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
1/13/2016	9.95E-01	2.24E-01
2/3/2016	1.15E+00	3.55E-01
2/12/2016	9.32E-01	3.05E-01
2/29/2016	2.84E-01	1.88E-01
3/10/2016	2.86E-01	1.87E-01
4/1/2016	6.89E-01	2.78E-01
4/5/2016	6.84E-01	2.67E-01
4/26/2016	1.06E-01	2.46E-01
5/21/2016	5.95E-01	2.46E-01
6/2/2016	3.16E-01	1.86E-01
6/11/2016	3.16E-01	1.88E-01
7/13/2016	3.97E-01	2.27E-01
7/27/2016	6.43E-01	2.63E-01
8/10/2016	3.57E-01	1.99E-01
8/17/2016	3.43E-01	1.91E-01
9/12/2016	1.79E-01	1.48E-01
10/14/2016	2.53E-02	8.40E-02
12/8/2016	4.00E-01	2.07E-01
12/21/2016	1.46E+00	3.79E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: HP-15 Tritium Facility Outfall

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	4.49E+03	2.28E+02	-5.57E-02	2.23E+00	-2.73E+00	1.95E+00
3/7/2016	6.30E+03	2.82E+02	-4.70E-02	2.01E+00	1.01E+00	2.01E+00
4/5/2016	8.14E+03	3.05E+02	2.68E+00	1.82E+00	-3.89E+00	2.34E+00
5/2/2016	9.54E+03	3.28E+02	1.37E+00	1.86E+00	-9.19E-01	2.01E+00
6/6/2016	8.46E+03	3.11E+02	-2.05E-01	2.02E+00	4.73E-01	2.00E+00
7/5/2016	1.73E+04	4.26E+02	-3.19E-01	2.15E+00	1.66E+00	2.24E+00
8/1/2016	2.49E+04	3.59E+02	-1.51E+00	1.98E+00	-8.46E-01	2.11E+00
9/6/2016	2.97E+04	5.43E+02	-4.86E-01	2.31E+00	1.52E-01	1.99E+00
10/3/2016	1.29E+04	3.75E+02	-3.51E+00	2.28E+00	-3.49E+00	2.32E+00
11/7/2016	5.78E+03	2.67E+02	3.16E+00	2.08E+00	5.32E+00	2.42E+00
12/5/2016	4.22E+03	2.31E+02	1.19E+00	2.16E+00	2.15E-01	2.36E+00
1/3/2017	1.01E+04	3.35E+02	-2.60E-01	2.15E+00	-3.68E-01	2.12E+00

Sample Date	Sr-89/90		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	4.51E-02	2.02E-01	1.94E+00	6.06E-01	2.29E-01	2.55E-01
3/7/2016	3.16E-01	1.53E-01	1.79E+00	4.29E-01	2.26E-01	1.81E-01
4/5/2016	-2.22E-01	1.33E-01	5.05E-01	5.04E-01	1.85E-01	2.72E-01
5/2/2016	2.13E-01	2.06E-01	6.38E-01	4.79E-01	-1.11E-01	3.21E-02
6/6/2016	7.65E-02	1.82E-01	4.00E-01	4.92E-01	3.49E-01	3.09E-01
7/5/2016	-1.75E-01	1.95E-01	1.39E+00	6.15E-01	4.30E-01	3.48E-01
8/1/2016	1.68E-01	1.69E-01	2.32E+00	7.13E-01	6.68E-01	4.34E-01
9/6/2016	1.25E-01	1.99E-01	4.32E-01	5.36E-01	4.22E-01	3.43E-01
10/3/2016	1.57E-01	2.24E-01	5.00E-01	5.34E-01	-2.01E-01	1.11E-01
11/7/2016	1.67E-01	2.17E-01	4.11E-01	4.94E-01	4.32E-01	3.15E-01
12/5/2016	1.68E+00	3.07E-01	1.30E+00	5.45E-01	9.76E-02	2.03E-01
1/3/2017	2.26E-01	2.35E-01	8.81E-01	5.57E-01	2.92E-02	1.87E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: K Canal

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	2.50E+02	1.25E+02	1.88E-01	2.28E+00	3.78E+00	1.92E+00
3/7/2016	-1.02E+02	1.43E+02	1.65E-01	1.95E+00	-1.62E+00	2.04E+00
4/5/2016	9.92E+01	1.35E+02	-3.38E-01	2.12E+00	1.06E-01	2.10E+00
5/2/2016	1.61E+02	1.33E+02	1.69E+00	1.95E+00	-7.05E-01	2.25E+00
6/6/2016	1.99E+02	1.34E+02	-1.71E-01	1.78E+00	5.14E+00	2.29E+00
7/5/2016	1.28E+02	1.50E+02	-2.69E+00	1.97E+00	6.38E-01	2.07E+00
8/1/2016	2.84E+02	1.60E+02	2.89E+00	1.88E+00	-5.24E-01	2.08E+00
9/6/2016	3.03E+02	1.57E+02	-1.92E+00	2.47E+00	3.49E+00	2.05E+00
10/3/2016	4.41E+02	1.47E+02	-2.35E-01	1.93E+00	-9.35E-01	2.05E+00
11/7/2016	3.95E+02	1.71E+02	6.43E-01	1.87E+00	-2.51E+00	2.06E+00
12/5/2016	4.57E+01	1.31E+02	2.56E+00	1.90E+00	-6.49E-01	2.11E+00
1/3/2017	2.89E+02	1.49E+02	-3.27E+00	1.99E+00	-1.28E+00	1.84E+00

Sample Date	Sr-89/90		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	2.46E-01	2.14E-01	2.95E+00	6.79E-01	5.43E-01	3.33E-01
3/7/2016	3.62E-02	1.25E-01	2.11E+00	4.45E-01	2.13E-01	1.71E-01
4/5/2016	2.48E-01	1.82E-01	2.76E+00	6.80E-01	3.30E-01	2.94E-01
5/2/2016	1.39E-01	1.85E-01	1.95E+00	5.95E-01	2.47E-01	2.50E-01
6/6/2016	-3.92E-01	1.27E-01	2.57E+00	6.71E-01	5.24E-01	3.58E-01
7/5/2016	-2.48E-02	2.08E-01	2.04E+00	6.59E-01	3.89E-01	3.16E-01
8/1/2016	1.14E-01	1.69E-01	3.32E+00	7.61E-01	2.01E-01	2.59E-01
9/6/2016	3.35E-01	2.17E-01	3.70E+00	7.73E-01	1.09E+00	4.73E-01
10/3/2016	-2.89E-01	1.85E-01	2.52E+00	6.97E-01	1.56E-01	2.66E-01
11/7/2016	3.68E-01	2.51E-01	2.38E+00	6.59E-01	9.70E-01	4.42E-01
12/5/2016	-1.76E-01	2.06E-01	3.57E+00	7.23E-01	1.92E+00	6.09E-01
1/3/2017	7.08E-03	2.32E-01	2.09E+00	6.57E-01	2.05E-01	2.59E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: L07

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	3.68E+02	1.35E+02	1.96E+00	1.71E+00	-1.95E+00	2.08E+00
3/7/2016	-1.88E+02	1.40E+02	-8.81E-01	1.83E+00	1.81E+00	2.09E+00
4/5/2016	1.04E+02	1.41E+02	-2.97E+00	2.02E+00	1.07E+00	2.11E+00
5/2/2016	5.46E+01	1.32E+02	-7.00E-01	1.97E+00	-9.22E-01	2.08E+00
6/6/2016	2.78E+02	1.31E+02	-8.05E-01	2.12E+00	6.54E+00	3.20E+00
7/5/2016	7.08E+00	1.48E+02	2.73E-02	1.88E+00	5.32E-01	2.27E+00
8/1/2016	-1.12E+02	1.48E+02	1.09E+00	1.74E+00	-7.27E-01	2.05E+00
9/6/2016	1.45E+02	1.54E+02	8.35E-01	2.11E+00	-1.15E+00	2.00E+00
10/3/2016	1.30E+01	1.35E+02	2.64E+00	2.13E+00	1.51E+00	2.30E+00
11/7/2016	1.26E+02	1.64E+02	2.40E+00	1.71E+00	-5.49E-01	2.09E+00
12/5/2016	8.08E+01	1.31E+02	8.81E-01	1.95E+00	-4.89E-01	2.13E+00
1/3/2017	-1.58E+02	1.34E+02	3.70E+00	2.31E+00	2.92E-01	2.02E+00

Sample Date	Sr-89/90		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	-1.38E-01	1.96E-01	2.22E+00	4.01E-01	1.92E-01	1.58E-01
3/7/2016	1.86E-01	1.43E-01	1.77E+00	2.59E-01	2.02E-01	1.11E-01
4/5/2016	1.66E-01	1.79E-01	2.18E+00	3.95E-01	4.54E-01	2.25E-01
5/2/2016	-1.52E-01	1.65E-01	2.54E+00	4.16E-01	1.86E-01	1.66E-01
6/6/2016	-2.38E-01	1.45E-01	2.49E+00	4.13E-01	9.24E-02	1.37E-01
7/5/2016	-4.54E-01	1.74E-01	1.56E+00	3.69E-01	2.97E-02	1.16E-01
8/1/2016	1.42E-01	1.80E-01	2.08E+00	4.06E-01	1.29E-02	1.03E-01
9/6/2016	3.51E-01	2.20E-01	2.04E+00	3.99E-01	3.00E-02	1.17E-01
10/3/2016	1.39E-01	2.43E-01	2.56E+00	4.33E-01	1.82E-01	1.78E-01
11/7/2016	2.76E-01	2.49E-01	1.84E+00	3.73E-01	1.31E-01	1.34E-01
12/5/2016	-6.00E-02	2.28E-01	2.01E+00	3.74E-01	-5.24E-02	2.44E-02
1/3/2017	3.59E-01	2.40E-01	1.89E+00	3.85E-01	1.33E-02	1.01E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: S-004

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.44E+03	1.61E+02	2.76E-01	2.02E+00	1.05E-01	1.98E+00
3/7/2016	5.95E+03	2.73E+02	-2.17E+00	1.74E+00	-7.14E-01	2.17E+00
4/5/2016	8.86E+03	3.15E+02	-7.22E-01	1.91E+00	2.52E+00	2.27E+00
5/2/2016	6.00E+03	2.66E+02	6.41E+00	3.69E+00	4.05E+00	2.39E+00
6/6/2016	5.92E+03	2.64E+02	-4.73E-01	1.94E+00	-2.29E+00	2.27E+00
7/5/2016	1.56E+04	3.98E+02	1.83E+00	1.83E+00	-5.03E-01	2.18E+00
8/1/2016	4.73E+04	4.67E+02	1.59E+00	1.91E+00	-1.05E-01	2.13E+00
9/6/2016	2.19E+03	2.05E+02	4.54E-01	2.21E+00	2.21E+00	2.17E+00
10/3/2016	3.59E+03	2.27E+02	-4.19E+00	2.19E+00	1.99E+00	2.19E+00
12/5/2016	3.84E+03	2.21E+02	-5.03E-01	2.09E+00	-2.76E+00	2.01E+00
1/3/2017	9.24E+03	3.17E+02	2.68E+00	1.99E+00	-5.27E-01	1.94E+00

Sample Date	Sr-89/90		U-234		U-235	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.16E+00	8.84E-01	1.09E-01	3.29E-02	-6.95E-03	6.94E-03
3/7/2016	4.76E-01	6.51E-01	4.22E-02	2.10E-02	1.96E-02	1.39E-02
4/5/2016	1.92E+00	9.44E-01	5.95E-02	2.76E-02	1.10E-02	1.11E-02
5/2/2016	-9.43E-01	8.23E-01	8.03E-02	2.83E-02	3.30E-02	1.94E-02
6/6/2016	-1.43E-01	9.04E-01	2.76E-02	1.76E-02	0.00E+00	1.03E-02
7/5/2016	6.92E-01	1.14E+00	8.68E-02	2.83E-02	1.07E-02	2.23E-02
8/1/2016	1.34E+00	9.00E-01	1.02E-01	3.07E-02	-4.92E-05	5.80E-04
9/6/2016	1.07E+00	1.03E+00	6.81E-02	2.64E-02	-1.19E-04	1.40E-03
10/3/2016	1.33E+00	1.14E+00	1.97E-02	2.29E-02	-2.03E-04	2.40E-03
12/5/2016	2.16E-01	9.17E-01	1.01E-01	3.02E-02	2.07E-02	1.48E-02
1/3/2017	1.83E+00	1.28E+00	1.18E-01	3.27E-02	9.68E-03	9.78E-03

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: S-004 (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	5.03E-02	2.19E-02	8.86E-02	2.96E-02	-5.76E-03	5.72E-03
3/7/2016	3.95E-02	1.83E-02	3.24E-02	2.06E-02	-6.49E-03	6.53E-03
4/5/2016	7.14E-02	2.60E-02	0.00E+00	1.11E-02	-1.37E-05	1.79E-04
5/2/2016	3.24E-02	2.21E-02	1.64E-02	1.19E-02	-2.76E-03	1.13E-02
6/6/2016	1.24E-01	3.30E-02	7.68E-03	7.72E-03	7.68E-03	7.68E-03
7/5/2016	5.19E-02	2.15E-02	3.86E-02	2.10E-02	2.09E-02	1.66E-02
8/1/2016	1.31E-01	3.64E-02	-1.18E-02	8.50E-03	1.18E-02	1.39E-02
9/6/2016	8.70E-02	3.03E-02	-5.00E-03	4.97E-03	-3.92E-05	5.09E-04
10/3/2016	1.16E-01	3.59E-02	-5.38E-03	5.39E-03	-5.54E-05	7.26E-04
12/5/2016	9.49E-02	3.11E-02	0.00E+00	1.16E-02	0.00E+00	1.16E-02
1/3/2017	9.41E-02	2.89E-02	2.04E-02	1.64E-02	0.00E+00	1.06E-02

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	1.46E+01	1.89E+00	1.28E+00	7.84E-01
3/7/2016	1.95E+01	1.53E+00	2.38E+00	8.37E-01
4/5/2016	1.74E+01	2.07E+00	1.34E+00	9.40E-01
5/2/2016	1.26E+01	1.78E+00	1.50E+00	8.88E-01
6/6/2016	9.38E+00	1.63E+00	2.42E+00	1.08E+00
7/5/2016	1.71E+01	2.08E+00	9.59E-01	7.84E-01
8/1/2016	2.86E+01	2.63E+00	5.41E+00	1.63E+00
9/6/2016	1.05E+01	1.76E+00	4.84E+00	1.52E+00
10/3/2016	1.52E+01	2.04E+00	3.41E+00	1.32E+00
12/5/2016	2.46E+01	2.36E+00	2.28E+00	1.15E+00
1/3/2017	1.74E+01	2.12E+00	2.70E+00	1.18E+00

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: TB-2 Outfall at Road 1A

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	3.22E+02	1.27E+02	-7.43E+00	2.86E+00	3.30E+00	2.10E+00
3/7/2016	-7.97E+01	1.35E+02	1.25E+00	2.94E+00	5.00E+00	1.86E+00
4/5/2016	1.79E+02	1.33E+02	-5.24E+00	2.83E+00	6.86E-01	2.00E+00
5/2/2016	3.24E+02	1.41E+02	-7.65E+00	2.85E+00	1.52E+00	1.97E+00
6/6/2016	2.16E+02	1.27E+02	1.21E+00	3.86E+00	1.78E+00	2.07E+00
7/5/2016	2.29E+02	1.57E+02	-9.89E+00	4.13E+00	2.29E+00	2.17E+00
8/1/2016	2.63E+02	1.56E+02	1.64E+00	4.31E+00	4.62E+00	2.31E+00
9/6/2016	2.73E+02	1.58E+02	-5.95E+00	4.74E+00	-8.57E-01	1.96E+00
10/3/2016	1.14E+02	1.37E+02	1.69E+00	3.98E+00	1.77E+00	2.41E+00
11/7/2016	5.35E+01	1.61E+02	2.46E+00	4.11E+00	-1.15E+00	1.84E+00
12/5/2016	3.38E+01	1.30E+02	-8.92E-01	3.91E+00	6.76E-01	1.93E+00
1/3/2017	4.19E+01	1.37E+02	-3.57E+00	3.87E+00	-1.33E+00	1.95E+00

Sample Date	Cs-137		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	-1.47E-02	2.01E+00	9.59E-01	5.01E-01	1.15E-01	1.95E-02
3/7/2016	1.44E+00	2.07E+00	6.54E-01	2.56E-01	9.43E-02	1.56E-02
4/5/2016	1.25E+00	2.45E+00	6.92E-03	5.95E-01	6.32E-02	1.31E-02
5/2/2016	-2.46E+00	2.14E+00	7.54E-01	2.70E-01	9.43E-02	1.66E-02
6/6/2016	2.81E+00	2.16E+00	7.05E-02	2.73E-01	1.93E-01	2.38E-02
7/5/2016	-1.23E+00	2.21E+00	-1.42E-01	2.56E-01	1.37E-01	1.92E-02
8/1/2016	-1.50E+00	1.89E+00	8.81E-01	4.47E-01	1.34E-01	1.80E-02
9/6/2016	4.00E+00	2.17E+00	5.51E-02	2.76E-01	1.34E-01	2.03E-02
10/3/2016	-2.32E+00	1.99E+00	3.49E-01	2.89E-01	7.03E-02	1.39E-02
11/7/2016	1.86E+00	2.06E+00	1.14E-01	2.85E-01	4.97E-02	1.20E-02
12/5/2016	-1.92E-01	1.92E+00	-5.24E-01	2.49E-01	7.89E-02	1.37E-02
1/3/2017	-1.25E+00	2.12E+00	2.15E-01	2.55E-01	6.95E-02	1.41E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: TB-2 Outfall at Road 1A (continued)

Sample Date	U-235		U-238		Pu-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	2.97E-03	3.52E-03	8.11E-02	1.55E-02	1.41E-02	5.42E-03
3/7/2016	2.69E-03	3.16E-03	5.76E-02	1.12E-02	-1.27E-03	1.35E-03
4/5/2016	9.00E-03	4.58E-03	5.41E-02	1.15E-02	4.65E-03	3.71E-03
5/2/2016	1.10E-02	5.30E-03	5.73E-02	1.17E-02	2.44E-03	3.27E-03
6/6/2016	1.75E-02	6.70E-03	1.51E-01	2.00E-02	6.16E-02	1.26E-02
7/5/2016	2.23E-02	7.20E-03	1.17E-01	1.64E-02	8.57E-03	4.30E-03
8/1/2016	3.97E-03	2.95E-03	6.73E-02	1.29E-02	4.65E-03	3.72E-03
9/6/2016	1.54E-03	4.26E-03	6.89E-02	1.34E-02	1.73E-03	1.85E-03
10/3/2016	8.30E-03	5.08E-03	3.86E-02	1.03E-02	5.76E-04	1.99E-03
11/7/2016	2.78E-03	3.28E-03	6.76E-02	1.24E-02	-5.76E-04	2.41E-03
12/5/2016	5.08E-03	4.07E-03	5.68E-02	1.24E-02	5.41E-03	2.28E-03
1/3/2017	6.59E-03	3.95E-03	4.86E-02	1.17E-02	1.44E-02	5.68E-03

Sample Date	Pu-239		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	2.00E-03	2.13E-03	1.86E+00	8.10E-01	1.56E+00	3.68E-01
3/7/2016	0.00E+00	2.41E-03	6.89E-01	7.43E-01	1.59E+00	2.53E-01
4/5/2016	3.97E-03	2.85E-03	1.87E+00	8.72E-01	8.19E-01	3.13E-01
5/2/2016	2.46E-03	2.90E-03	3.03E-01	5.09E-01	2.35E+00	4.09E-01
6/6/2016	2.54E-02	8.24E-03	-1.44E-01	7.93E-01	5.78E+00	5.84E-01
7/5/2016	-1.43E-03	1.43E-03	1.81E+00	7.40E-01	4.30E+00	5.22E-01
8/1/2016	-1.33E-03	1.36E-03	-6.95E-02	7.50E-01	7.54E-01	3.34E-01
9/6/2016	1.73E-03	1.85E-03	1.24E+00	7.96E-01	-8.76E-02	2.40E-01
10/3/2016	-1.11E-05	7.35E-04	1.98E+00	8.03E-01	1.32E+00	3.54E-01
11/7/2016	5.76E-04	2.10E-03	-1.24E+00	7.50E-01	1.69E-01	2.47E-01
12/5/2016	7.19E-03	3.61E-03	4.43E-01	7.72E-01	1.64E+00	3.53E-01
1/3/2017	3.43E-03	2.44E-03	9.41E-01	8.49E-01	1.18E+00	3.47E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: TB-2 Outfall at Road 1A (continued)

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	5.54E-01	2.40E-01
3/7/2016	1.11E+00	2.26E-01
4/5/2016	7.30E-01	2.78E-01
5/2/2016	1.68E+00	3.98E-01
6/6/2016	4.57E+00	6.59E-01
7/5/2016	2.14E+00	4.54E-01
8/1/2016	7.57E-01	2.81E-01
9/6/2016	5.35E-01	2.33E-01
10/3/2016	8.43E-02	1.44E-01
11/7/2016	8.32E-01	2.81E-01
12/5/2016	1.18E+00	3.41E-01
1/3/2017	5.24E-01	2.28E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	1.28E+06	3.28E+03	1.70E+01	2.97E+00	4.38E-01	1.80E+00
1/19/2016	9.27E+05	2.81E+03	3.73E+01	3.15E+00	6.70E-01	1.79E+00
1/25/2016	8.46E+05	2.68E+03	5.16E+01	3.39E+00	-7.59E-01	2.06E+00
2/1/2016	1.50E+06	3.58E+03	9.14E+01	3.80E+00	3.49E-01	2.09E+00
2/8/2016	1.81E+06	4.03E+03	8.32E+01	3.71E+00	2.84E-01	1.96E+00
2/22/2016	1.33E+06	3.45E+03	6.65E+01	3.73E+00	9.68E-01	1.82E+00
2/29/2016	1.18E+06	3.25E+03	4.05E+01	3.38E+00	2.73E+00	2.27E+00
3/7/2016	8.97E+05	2.85E+03	3.30E+01	3.29E+00	1.59E+00	1.87E+00
3/14/2016	8.54E+05	2.73E+03	-1.20E+01	3.82E+00	7.03E-01	2.13E+00
3/21/2016	4.95E+05	2.06E+03	-3.89E+00	4.04E+00	-1.09E+00	1.96E+00
3/28/2016	3.24E+05	1.67E+03	-5.05E+00	3.87E+00	1.35E+00	2.06E+00
4/5/2016	2.62E+05	1.40E+03	-3.78E-01	2.78E+00	2.03E+00	2.17E+00
4/11/2016	2.67E+05	1.41E+03	-1.04E+00	2.80E+00	5.57E-01	1.78E+00
5/2/2016	3.51E+05	1.80E+03	8.32E-01	7.28E+00	-1.39E+00	1.97E+00
5/16/2016	3.14E+05	1.53E+03	-1.71E+00	7.42E+00	1.64E+00	1.87E+00
6/6/2016	2.05E+05	1.34E+03	3.54E+00	4.15E+00	7.46E-01	1.93E+00
6/13/2016	1.58E+05	1.19E+03	7.08E+00	4.05E+00	4.51E+00	1.87E+00
6/20/2016	1.27E+05	1.06E+03	-4.68E+00	4.01E+00	8.41E-01	1.99E+00
6/27/2016	1.18E+05	1.01E+03	-5.19E+00	4.05E+00	-9.27E-01	2.11E+00
7/18/2016	1.14E+05	1.02E+03	4.03E+00	4.70E+00	-6.70E-01	1.82E+00
7/25/2016	1.19E+05	1.04E+03	-5.86E-01	4.59E+00	1.05E+00	2.10E+00
8/1/2016	1.16E+05	1.04E+03	6.38E+00	3.99E+00	1.99E+00	1.98E+00
8/8/2016	9.65E+04	9.40E+02	1.46E+00	4.08E+00	1.34E+00	1.89E+00
8/15/2016	1.29E+05	1.09E+03	-4.70E-01	4.02E+00	-9.08E-01	1.98E+00
8/22/2016	2.23E+05	1.41E+03	5.78E-01	4.05E+00	4.84E+00	1.85E+00
9/6/2016	1.93E+05	1.29E+03	-8.70E+00	4.71E+00	-1.36E+00	1.99E+00
9/12/2016	2.11E+05	1.39E+03	-5.03E+00	4.11E+00	1.51E+00	2.07E+00
9/19/2016	1.71E+05	1.25E+03	4.92E+00	4.50E+00	-1.06E+00	1.97E+00
9/26/2016	2.10E+05	1.38E+03	-4.27E+00	4.32E+00	-1.41E+00	2.02E+00
10/3/2016	3.70E+05	1.82E+03	-1.20E+00	4.99E+00	-2.36E+00	1.78E+00
10/10/2016	7.59E+05	2.59E+03	7.38E+00	5.20E+00	-3.49E+00	1.95E+00
10/17/2016	1.51E+06	2.53E+03	4.59E+00	5.12E+00	3.30E+00	1.78E+00
10/24/2016	2.36E+06	4.50E+03	7.81E+00	4.70E+00	-2.02E+00	1.90E+00
10/31/2016	7.68E+05	2.39E+03	3.30E+00	4.97E+00	3.46E+00	2.19E+00
11/7/2016	6.43E+05	2.32E+03	-6.27E+00	4.00E+00	1.72E+00	1.87E+00
11/14/2016	1.47E+06	3.52E+03	-1.04E-01	3.89E+00	-3.30E+00	1.84E+00
11/21/2016	1.75E+06	3.84E+03	6.35E+00	3.99E+00	-3.30E+00	2.40E+00
11/28/2016	9.00E+05	2.76E+03	3.41E+00	3.89E+00	-9.95E-01	2.31E+00

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
12/5/2016	5.11E+05	2.08E+03	2.34E+00	4.03E+00	-8.86E-01	1.95E+00
12/12/2016	5.14E+05	2.08E+03	-3.11E+00	4.02E+00	1.51E+00	2.06E+00
12/26/2016	4.86E+05	2.03E+03	-7.00E+00	4.18E+00	2.46E-01	2.03E+00
12/27/2016	4.97E+05	2.11E+03	2.15E-01	4.06E+00	3.05E+00	2.25E+00

Sample Date	Cs-137		Sr-89/90		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	1.03E+03	6.76E+01	1.23E+00	8.43E-01	3.38E-02	1.49E-02
1/19/2016	1.19E+03	7.87E+01	-2.78E-01	7.50E-01	3.30E-02	1.46E-02
1/25/2016	9.11E+02	5.99E+01	1.83E+00	8.72E-01	4.73E-02	1.78E-02
2/1/2016	7.11E+02	4.71E+01	2.78E-01	7.08E-01	6.00E-02	2.32E-02
2/8/2016	6.08E+02	4.05E+01	-4.81E-01	6.33E-01	4.30E-02	1.72E-02
2/22/2016	7.86E+02	5.21E+01	6.76E-01	7.65E-01	5.59E-02	1.98E-02
2/29/2016	7.03E+02	4.65E+01	-3.57E-01	6.58E-01	5.03E-02	1.89E-02
3/7/2016	1.02E+03	6.77E+01	8.95E-01	4.62E-01	6.84E-02	2.29E-02
3/14/2016	8.59E+02	5.66E+01	-4.51E-01	3.59E-01	5.43E-02	2.03E-02
3/21/2016	1.49E+03	9.89E+01	2.70E-01	3.98E-01	8.05E-02	2.47E-02
3/28/2016	1.09E+03	7.30E+01	6.51E-01	6.79E-01	4.97E-02	1.83E-02
4/5/2016	5.97E+02	4.05E+01	1.46E-01	6.44E-01	3.54E-02	1.80E-02
4/11/2016	7.57E+02	5.09E+01	9.70E-01	7.86E-01	5.59E-02	2.19E-02
5/2/2016	6.62E+02	4.70E+01	9.68E-01	7.95E-01	7.49E-02	2.31E-02
5/16/2016	6.08E+02	4.35E+01	8.86E-01	7.39E-01	6.89E-02	2.22E-02
6/6/2016	3.14E+02	2.31E+01	7.41E-02	6.60E-01	2.86E-02	1.57E-02
6/13/2016	9.24E+01	8.47E+00	-6.05E-01	6.09E-01	4.14E-02	1.84E-02
6/20/2016	5.24E+01	5.42E+00	-2.44E-01	7.87E-01	2.10E-03	1.44E-02
6/27/2016	2.60E+01	4.07E+00	1.48E+00	9.13E-01	3.41E-02	1.66E-02
7/18/2016	1.92E+01	3.38E+00	2.20E-01	7.12E-01	4.76E-02	1.83E-02
7/25/2016	1.55E+01	3.49E+00	-4.59E-02	7.24E-01	1.57E-02	1.37E-02
8/1/2016	8.65E+00	3.00E+00	-3.08E-02	6.79E-01	3.19E-02	1.60E-02
8/8/2016	1.72E+01	4.59E+00	-7.70E-01	6.06E-01	2.62E-02	1.40E-02
8/15/2016	1.59E+01	3.86E+00	-4.14E-01	6.45E-01	5.57E-02	3.76E-02
8/22/2016	7.76E+00	3.06E+00	1.81E-01	7.06E-01	7.14E-02	2.40E-02
9/6/2016	7.35E+00	3.92E+00	-3.22E-01	7.35E-01	8.76E-02	2.60E-02
9/12/2016	1.37E+01	3.50E+00	8.95E-01	7.98E-01	2.78E-02	1.69E-02
9/19/2016	5.08E+00	2.22E+00	-1.02E+00	6.34E-01	9.35E-02	2.68E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	Cs-137		Sr-89/90		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
9/26/2016	2.52E+00	2.08E+00	1.15E+00	9.32E-01	7.41E-02	2.42E-02
10/3/2016	1.01E+01	3.76E+00	-2.12E-01	8.67E-01	1.15E-01	2.94E-02
10/10/2016	5.22E+00	2.29E+00	8.08E-01	8.92E-01	3.14E-02	1.87E-02
10/17/2016	5.41E+00	2.80E+00	6.27E-02	1.00E+00	8.24E-02	2.42E-02
10/24/2016	5.97E+00	2.35E+00	1.50E+00	1.01E+00	4.92E-02	1.83E-02
10/31/2016	1.71E+00	2.25E+00	-8.32E-01	5.85E-01	6.19E-02	2.34E-02
11/7/2016	1.41E+00	2.12E+00	-2.24E-01	7.60E-01	4.86E-02	1.84E-02
11/14/2016	1.35E+00	2.60E+00	-1.28E-02	6.90E-01	6.84E-02	2.14E-02
11/21/2016	-1.37E+00	2.32E+00	-7.38E-01	5.93E-01	3.57E-02	1.58E-02
11/28/2016	-4.22E-01	2.37E+00	1.13E-01	6.98E-01	5.43E-02	2.21E-02
12/5/2016	2.16E+00	2.18E+00	-6.24E-01	3.62E-01	8.03E-02	2.59E-02
12/12/2016	2.86E+00	2.18E+00	9.43E-01	4.85E-01	6.49E-02	2.30E-02
12/26/2016	4.24E-01	2.14E+00	-1.23E-01	4.60E-01	4.43E-02	1.78E-02
12/27/2016	5.11E+00	2.28E+00	2.86E-01	5.28E-01	7.38E-02	2.36E-02

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	2.10E-02	1.22E-02	1.40E-02	1.14E-02	4.51E-02	1.67E-02
1/19/2016	1.37E-02	9.74E-03	1.85E-03	7.09E-03	6.08E-02	1.92E-02
1/25/2016	2.44E-03	8.80E-03	8.68E-03	1.04E-02	3.54E-02	1.57E-02
2/1/2016	2.67E-02	1.55E-02	1.60E-02	1.29E-02	5.24E-02	2.21E-02
2/8/2016	-5.05E-03	5.07E-03	4.54E-03	1.17E-02	4.49E-02	1.90E-02
2/22/2016	7.70E-03	7.73E-03	2.15E-03	8.02E-03	3.70E-02	1.64E-02
2/29/2016	-5.19E-03	5.21E-03	-4.95E-05	9.24E-04	3.35E-02	1.71E-02
3/7/2016	-1.00E-02	7.66E-03	2.20E-03	8.21E-03	3.19E-02	1.72E-02
3/14/2016	2.36E-03	8.72E-03	-4.68E-03	4.66E-03	4.62E-02	1.86E-02
3/21/2016	1.49E-02	1.07E-02	-1.10E-02	1.09E-02	2.38E-02	1.41E-02
3/28/2016	1.02E-02	1.21E-02	-1.13E-02	1.13E-02	5.59E-02	1.97E-02
4/5/2016	2.53E-03	9.28E-03	-2.26E-03	9.32E-03	4.35E-02	1.74E-02
4/11/2016	1.66E-02	1.18E-02	3.65E-03	9.44E-03	2.89E-02	1.66E-02
5/2/2016	7.46E-03	7.55E-03	2.00E-03	7.21E-03	3.84E-02	1.71E-02
5/16/2016	-3.03E-05	4.42E-04	-1.61E-02	1.24E-02	3.84E-02	1.71E-02
6/6/2016	-5.46E-03	5.48E-03	-4.54E-03	4.52E-03	1.98E-02	1.16E-02
6/13/2016	-1.08E-02	7.65E-03	-4.30E-03	4.28E-03	5.22E-02	1.96E-02
6/20/2016	0.00E+00	8.11E-03	-8.89E-03	6.27E-03	4.54E-02	1.86E-02
6/27/2016	-2.62E-03	1.08E-02	1.15E-02	1.36E-02	4.43E-02	1.82E-02

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
7/18/2016	-9.89E-03	6.69E-03	1.33E-02	9.44E-03	2.56E-02	1.50E-02
7/25/2016	-4.89E-03	5.11E-03	-4.73E-03	4.69E-03	1.75E-02	1.20E-02
8/1/2016	-4.95E-03	5.15E-03	-4.16E-03	4.13E-03	7.35E-02	2.40E-02
8/8/2016	-5.43E-03	5.63E-03	6.00E-03	6.11E-03	2.60E-02	1.48E-02
8/15/2016	1.88E-02	1.88E-02	-2.92E-05	5.47E-04	-1.05E-02	1.14E-02
8/22/2016	-1.01E-02	7.35E-03	8.05E-03	9.56E-03	6.89E-02	2.35E-02
9/6/2016	1.51E-02	1.09E-02	-3.38E-05	6.37E-04	5.49E-02	1.98E-02
9/12/2016	7.32E-03	7.55E-03	2.60E-03	9.52E-03	4.35E-02	1.87E-02
9/19/2016	-7.11E-05	1.03E-03	-4.81E-03	4.80E-03	3.43E-02	1.82E-02
9/26/2016	1.88E-02	1.51E-02	2.02E-03	8.13E-03	3.89E-02	1.74E-02
10/3/2016	7.70E-03	7.81E-03	6.05E-03	1.31E-02	6.24E-02	2.43E-02
10/10/2016	1.03E-02	1.22E-02	-2.39E-03	9.59E-03	5.19E-02	2.07E-02
10/17/2016	1.82E-02	1.47E-02	4.05E-03	1.10E-02	3.57E-02	1.90E-02
10/24/2016	3.03E-02	1.54E-02	9.30E-03	1.73E-02	5.49E-02	2.00E-02
10/31/2016	-5.30E-03	5.30E-03	-1.40E-02	8.20E-03	4.46E-02	1.86E-02
11/7/2016	7.51E-03	7.54E-03	-7.89E-03	5.66E-03	6.86E-02	2.33E-02
11/14/2016	2.47E-03	9.32E-03	-9.38E-03	7.80E-03	6.41E-02	2.21E-02
11/21/2016	2.24E-03	8.50E-03	2.12E-03	7.82E-03	5.62E-02	1.89E-02
11/28/2016	9.05E-03	9.36E-03	-3.95E-03	3.94E-03	3.43E-02	2.01E-02
12/5/2016	-8.49E-05	1.25E-03	0.00E+00	8.46E-03	3.24E-02	1.54E-02
12/12/2016	-8.49E-05	1.24E-03	0.00E+00	7.31E-03	5.22E-02	2.02E-02
12/26/2016	2.59E-03	9.44E-03	-7.54E-03	5.39E-03	4.43E-02	1.78E-02
12/27/2016	8.27E-03	8.35E-03	7.27E-03	7.28E-03	4.00E-02	1.74E-02

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	1.79E-02	1.04E-02	-6.00E-03	9.13E-03	7.19E-03	7.22E-03
1/19/2016	1.14E-02	8.12E-03	1.14E-02	8.26E-03	2.54E-03	9.17E-03
1/25/2016	2.15E-02	1.41E-02	1.29E-02	9.24E-03	8.92E-03	1.05E-02
2/1/2016	1.35E-02	1.01E-02	2.04E-02	1.19E-02	-1.22E-05	1.80E-04
2/8/2016	1.35E-02	1.01E-02	2.27E-02	1.45E-02	-1.22E-05	1.79E-04
2/22/2016	-4.49E-03	4.68E-03	1.52E-02	1.22E-02	1.39E-02	9.89E-03
2/29/2016	2.22E-03	8.67E-03	1.63E-02	1.30E-02	1.39E-02	9.89E-03
3/7/2016	2.68E-02	1.36E-02	2.17E-03	8.15E-03	-1.18E-05	1.74E-04
3/14/2016	2.51E-02	1.68E-02	1.36E-02	9.93E-03	-8.86E-03	6.26E-03
3/21/2016	6.49E-03	6.59E-03	-4.41E-03	4.42E-03	-1.18E-05	1.73E-04

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
3/28/2016	2.01E-02	1.17E-02	2.16E-03	8.18E-03	2.01E-03	8.29E-03
4/5/2016	1.34E-02	9.59E-03	-7.08E-05	1.31E-03	-1.72E-04	2.52E-03
4/11/2016	1.08E-02	8.38E-03	1.81E-03	6.59E-03	6.76E-03	7.74E-03
5/2/2016	1.98E-02	1.28E-02	1.39E-02	1.11E-02	-4.41E-03	4.42E-03
5/16/2016	3.41E-02	1.57E-02	-9.08E-03	6.45E-03	0.00E+00	7.98E-03
6/6/2016	0.00E+00	8.38E-03	2.00E-02	1.21E-02	1.71E-02	9.93E-03
6/13/2016	0.00E+00	7.89E-03	1.26E-02	9.40E-03	-4.24E-03	4.24E-03
6/20/2016	2.62E-02	1.37E-02	4.35E-03	1.12E-02	-3.57E-05	5.25E-04
6/27/2016	1.13E-02	1.37E-02	-3.19E-05	6.06E-04	1.43E-02	1.02E-02
7/18/2016	1.96E-02	1.20E-02	2.13E-03	8.01E-03	6.70E-03	6.70E-03
7/25/2016	1.39E-02	9.93E-03	-9.59E-06	1.84E-04	-5.73E-03	5.80E-03
8/1/2016	1.84E-02	1.07E-02	1.22E-02	8.72E-03	0.00E+00	8.37E-03
8/8/2016	1.19E-02	8.51E-03	-9.59E-06	1.77E-04	0.00E+00	8.30E-03
8/15/2016	6.43E-03	6.48E-03	6.43E-03	6.48E-03	0.00E+00	8.14E-03
8/22/2016	1.80E-02	1.05E-02	-9.59E-06	1.77E-04	0.00E+00	8.46E-03
9/6/2016	1.50E-02	1.22E-02	6.32E-03	7.02E-03	-3.57E-05	5.23E-04
9/12/2016	2.34E-02	1.39E-02	7.68E-03	8.40E-03	-3.57E-05	5.20E-04
9/19/2016	2.31E-03	8.67E-03	2.12E-02	1.30E-02	1.35E-02	9.67E-03
9/26/2016	-6.43E-03	9.78E-03	1.27E-02	9.32E-03	1.35E-02	9.59E-03
10/3/2016	1.62E-02	1.37E-02	4.00E-03	1.05E-02	6.51E-03	6.52E-03
10/10/2016	2.92E-02	1.61E-02	2.69E-02	1.39E-02	1.46E-02	1.17E-02
10/17/2016	6.16E-03	6.42E-03	8.22E-03	9.89E-03	1.10E-02	1.30E-02
10/24/2016	2.27E-03	8.52E-03	2.32E-02	1.51E-02	8.81E-03	1.04E-02
10/31/2016	1.61E-02	1.29E-02	4.62E-03	1.17E-02	-1.03E-05	1.51E-04
11/7/2016	1.17E-02	8.31E-03	1.95E-03	7.06E-03	-4.35E-03	4.33E-03
11/14/2016	9.22E-03	1.10E-02	9.16E-03	1.11E-02	-7.78E-05	1.14E-03
11/21/2016	-4.65E-05	8.92E-04	6.32E-03	6.74E-03	-2.43E-03	9.74E-03
11/28/2016	1.89E-03	7.06E-03	-8.38E-05	1.56E-03	1.98E-03	7.54E-03
12/5/2016	2.34E-03	8.47E-03	1.64E-02	1.32E-02	0.00E+00	8.67E-03
12/12/2016	1.98E-03	7.18E-03	7.95E-03	9.36E-03	6.97E-03	7.00E-03
12/26/2016	2.23E-02	1.17E-02	5.54E-03	5.73E-03	4.70E-03	1.23E-02
12/27/2016	7.08E-03	7.67E-03	7.16E-03	7.35E-03	7.51E-03	7.76E-03

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	7.11E-03	7.10E-03	1.01E+02	2.25E+00	2.95E-01	2.68E-01
1/19/2016	3.00E-02	1.51E-02	1.50E+02	2.73E+00	3.27E-01	2.34E-01
1/25/2016	-2.17E-04	3.19E-03	1.77E+02	2.96E+00	7.86E-02	1.55E-01
2/1/2016	1.54E-02	1.30E-02	1.22E+02	2.44E+00	9.49E-02	1.51E-01
2/8/2016	1.95E-02	1.22E-02	1.46E+02	2.67E+00	8.38E-02	1.46E-01
2/22/2016	2.95E-02	1.67E-02	1.07E+02	2.30E+00	2.84E-01	2.26E-01
2/29/2016	-2.17E-04	3.20E-03	2.50E+02	2.50E+00	3.16E-01	1.61E-01
3/7/2016	7.08E-03	7.10E-03	3.62E+02	3.07E+00	2.05E-01	1.69E-01
3/14/2016	0.00E+00	7.63E-03	1.93E+02	3.11E+00	6.30E-01	3.35E-01
3/21/2016	0.00E+00	7.98E-03	2.21E+02	3.34E+00	-1.59E-01	1.50E-01
3/28/2016	-1.13E-05	1.65E-04	2.31E+02	3.42E+00	1.34E-01	2.41E-01
4/5/2016	6.59E-03	6.64E-03	1.27E+02	2.50E+00	1.72E-01	1.92E-01
4/11/2016	6.86E-03	6.89E-03	1.84E+02	3.02E+00	4.78E-02	1.69E-01
5/2/2016	-4.35E-03	4.37E-03	1.33E+02	2.58E+00	6.92E-02	1.75E-01
5/16/2016	0.00E+00	7.99E-03	1.73E+02	2.92E+00	2.73E-01	2.27E-01
6/6/2016	7.51E-03	8.80E-03	7.30E+01	1.91E+00	-1.56E-01	5.42E-02
6/13/2016	0.00E+00	8.20E-03	2.62E+01	1.15E+00	5.41E-01	2.73E-01
6/20/2016	4.57E-03	1.17E-02	1.04E+01	7.44E-01	-7.14E-02	3.83E-02
6/27/2016	-4.70E-03	4.74E-03	9.76E+00	7.31E-01	1.34E-01	1.65E-01
7/18/2016	-4.41E-03	4.40E-03	5.35E+00	5.64E-01	-6.73E-02	7.26E-02
7/25/2016	8.51E-03	8.53E-03	4.03E+00	5.06E-01	3.14E-02	1.25E-01
8/1/2016	3.00E-03	1.08E-02	1.76E+00	3.84E-01	1.35E-01	1.64E-01
8/8/2016	1.85E-02	1.31E-02	1.36E+00	3.61E-01	3.78E-02	1.47E-01
8/15/2016	-5.70E-03	5.70E-03	2.53E+00	4.32E-01	-7.95E-02	8.67E-02
8/22/2016	0.00E+00	8.47E-03	1.80E+00	3.89E-01	-7.86E-02	8.63E-02
9/6/2016	-4.49E-03	4.52E-03	2.73E+00	4.44E-01	3.76E-02	1.48E-01
9/12/2016	0.00E+00	7.88E-03	1.41E+00	3.67E-01	1.09E-01	1.86E-01
9/19/2016	0.00E+00	7.80E-03	7.57E-01	3.19E-01	1.04E-01	1.75E-01
9/26/2016	2.01E-02	1.17E-02	1.51E+00	3.69E-01	-1.09E-02	1.25E-01
10/3/2016	0.00E+00	7.76E-03	2.28E+00	4.23E-01	-1.46E-02	1.53E-01
10/10/2016	3.30E-02	1.58E-02	5.32E-01	3.00E-01	-1.03E-02	1.43E-01
10/17/2016	1.95E-02	1.13E-02	1.15E+00	3.19E-01	1.85E-01	1.78E-01
10/24/2016	2.18E-02	1.38E-02	1.77E+00	3.74E-01	1.60E-01	1.64E-01
10/31/2016	1.33E-02	9.40E-03	1.11E+00	3.28E-01	-7.22E-02	2.56E-02
11/7/2016	-4.27E-03	4.29E-03	9.57E-01	3.17E-01	4.78E-02	1.24E-01
11/14/2016	6.78E-03	6.84E-03	8.89E-01	3.13E-01	2.78E-01	2.03E-01
11/21/2016	-9.32E-03	6.57E-03	6.00E-01	3.02E-01	-1.27E-01	6.95E-02
11/28/2016	2.01E-03	7.35E-03	7.73E-01	3.25E-01	3.57E-01	2.55E-01

Table 21 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
12/5/2016	7.27E-03	7.30E-03	1.55E+00	3.51E-01	3.49E-01	2.45E-01
12/12/2016	2.07E-02	1.20E-02	8.27E-01	2.90E-01	3.59E-01	2.07E-01
12/26/2016	1.41E-02	1.00E-02	6.54E-01	2.95E-01	-7.54E-02	3.27E-02
12/27/2016	-1.10E-05	1.64E-04	8.41E-01	3.17E-01	2.09E-01	1.71E-01

Table 22 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci}/\text{mL}$)	DOE DCS ($\mu\text{Ci}/\text{mL}$)	Fraction of DOE DCS	
A Area: TB-2 Outfall at Road 1A	H-3	Below MDL	1.64E-07	1.90E-03	8.64E-05	
	C-14	Below MDL	-2.70E-09	6.20E-05	0.00E+00	
	Co-60	Below MDL	1.52E-09	7.20E-06	2.12E-04	
	I-129	Below MDL	2.83E-10	3.30E-07	8.56E-04	
	Cs-137	Below MDL	1.98E-10	3.00E-06	6.61E-05	
	U-234	3.79E-05	1.03E-10	6.80E-07	1.51E-04	
	U-235	1.20E-06	7.81E-12	7.20E-07	1.09E-05	
	U-238	2.65E-05	7.22E-11	7.50E-07	9.63E-05	
	Pu-238	2.91E-06	9.69E-12	1.50E-07	6.46E-05	
	Pu-239	8.50E-07	3.67E-12	1.40E-07	2.62E-05	
	Tc-99	Below MDL	8.07E-10	4.40E-05	1.83E-05	
	Sum of Fractions					1.59E-03
	Sum of Fractions Excluding H-3					1.50E-03
	F Area: F-013 200-F Cooling Basin	H-3	2.22E-02	9.52E-07	1.90E-03	5.01E-04
Co-60		Below MDL	-9.34E-11	7.20E-06	0.00E+00	
Sr-89/90		Below MDL	6.52E-10	1.10E-06	5.93E-04	
I-129		3.69E-06	5.25E-10	3.30E-07	1.59E-03	
Cs-137		Below MDL	1.51E-09	3.00E-06	5.02E-04	
U-234		3.06E-06	1.29E-10	6.80E-07	1.90E-04	
U-235		Below MDL	2.06E-11	7.20E-07	2.86E-05	
Np-237		Below MDL	1.34E-12	3.20E-07	4.18E-06	
U-238		3.28E-06	1.40E-10	7.50E-07	1.86E-04	
Pu-238		2.38E-07	3.52E-11	1.50E-07	2.35E-04	
Pu-239		9.88E-07	4.75E-11	1.40E-07	3.39E-04	
Am-241		7.50E-07	4.27E-11	1.70E-07	2.51E-04	
Cm-244		2.96E-07	2.95E-11	2.60E-07	1.14E-04	
Tc-99		1.53E-05	1.05E-09	4.40E-05	2.39E-05	
Sum of Fractions					4.56E-03	
Sum of Fractions Excluding H-3					4.06E-03	

Table 22 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci}/\text{mL}$)	DOE DCS ($\mu\text{Ci}/\text{mL}$)	Fraction of DOE DCS	
F-05	H-3	3.25E-03	4.38E-07	1.90E-03	2.31E-04	
	C-14	Below MDL	-2.93E-09	6.20E-05	0.00E+00	
	Co-60	Below MDL	3.67E-10	7.20E-06	5.10E-05	
	Sr-89/90	4.70E-05	4.31E-09	1.10E-06	3.92E-03	
	I-129	Below MDL	5.40E-11	3.30E-07	1.64E-04	
	Cs-137	Below MDL	2.36E-10	3.00E-06	7.86E-05	
	U-234	9.23E-07	1.50E-10	6.80E-07	2.21E-04	
	U-235	6.87E-08	1.10E-11	7.20E-07	1.53E-05	
	Np-237	3.66E-09	1.79E-13	3.20E-07	5.61E-07	
	U-238	1.14E-06	1.75E-10	7.50E-07	2.33E-04	
	Pu-238	1.22E-07	1.73E-11	1.50E-07	1.15E-04	
	Pu-239	7.83E-08	1.79E-11	1.40E-07	1.28E-04	
	Am-241	5.43E-07	1.02E-10	1.70E-07	6.01E-04	
	Cm-244	1.27E-07	2.27E-11	2.60E-07	8.74E-05	
	Tc-99	6.81E-06	1.02E-09	4.40E-05	2.32E-05	
	Sum of Fractions					5.87E-03
	Sum of Fractions Excluding H-3					5.64E-03
FM-3 F-Area Effluent	H-3	1.19E-01	8.46E-07	1.90E-03	4.45E-04	
	C-14	Below MDL	-1.83E-09	6.20E-05	0.00E+00	
	Co-60	Below MDL	1.21E-09	7.20E-06	1.68E-04	
	Sr-89/90	1.07E-06	1.44E-10	1.10E-06	1.31E-04	
	I-129	5.75E-06	2.43E-10	3.30E-07	7.37E-04	
	Cs-137	Below MDL	-2.48E-10	3.00E-06	0.00E+00	
	U-234	1.84E-05	9.13E-11	6.80E-07	1.34E-04	
	U-235	8.80E-07	6.61E-12	7.20E-07	9.19E-06	
	Np-237	Below MDL	5.93E-13	3.20E-07	1.85E-06	
	U-238	2.08E-05	1.02E-10	7.50E-07	1.37E-04	
	Pu-238	1.24E-06	9.67E-12	1.50E-07	6.45E-05	
	Pu-239	6.96E-07	6.85E-12	1.40E-07	4.90E-05	
	Am-241	1.36E-06	7.59E-12	1.70E-07	4.47E-05	
	Cm-244	2.88E-07	2.31E-12	2.60E-07	8.87E-06	
	Tc-99	7.21E-05	1.18E-09	4.40E-05	2.67E-05	
	Sum of Fractions					1.96E-03
	Sum of Fractions Excluding H-3					1.51E-03

Table 22 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci}/\text{mL}$)	DOE DCS ($\mu\text{Ci}/\text{mL}$)	Fraction of DOE DCS	
F-Tank Farm: F-012 281-8F Retention Basin	H-3	9.77E-02	1.11E-06	1.90E-03	5.86E-04	
	Co-60	Below MDL	8.46E-10	7.20E-06	1.18E-04	
	Sr-89/90	6.39E-05	1.76E-09	1.10E-06	1.60E-03	
	I-129	Below MDL	6.97E-11	3.30E-07	2.11E-04	
	Cs-137	3.79E-04	7.36E-09	3.00E-06	2.45E-03	
	U-234	5.66E-06	7.16E-11	6.80E-07	1.05E-04	
	U-235	Below MDL	1.08E-11	7.20E-07	1.50E-05	
	Np-237	Below MDL	1.96E-12	3.20E-07	6.12E-06	
	U-238	6.91E-06	8.37E-11	7.50E-07	1.12E-04	
	Pu-238	2.05E-06	3.73E-11	1.50E-07	2.49E-04	
	Pu-239	7.28E-07	1.42E-11	1.40E-07	1.02E-04	
	Am-241	Below MDL	6.24E-12	1.70E-07	3.67E-05	
	Cm-244	Below MDL	4.88E-12	2.60E-07	1.88E-05	
	Tc-99	Below MDL	9.48E-10	4.40E-05	2.16E-05	
	Sum of Fractions					5.64E-03
Sum of Fractions Excluding H-3					5.05E-03	
H Area: FM-1C H-Area Effluent	H-3	2.17E+00	6.59E-06	1.90E-03	3.47E-03	
	C-14	3.28E-04	-6.84E-10	6.20E-05	0.00E+00	
	Co-60	Below MDL	1.90E-09	7.20E-06	2.63E-04	
	Sr-89/90	4.12E-04	1.33E-09	1.10E-06	1.21E-03	
	Cs-137	Below MDL	2.10E-09	3.00E-06	7.01E-04	
	U-234	6.25E-06	1.94E-11	6.80E-07	2.85E-05	
	U-235	6.08E-07	4.52E-12	7.20E-07	6.28E-06	
	Np-237	2.45E-06	9.76E-12	3.20E-07	3.05E-05	
	U-238	6.48E-06	1.99E-11	7.50E-07	2.65E-05	
	Pu-238	8.32E-05	2.62E-10	1.50E-07	1.75E-03	
	Pu-239	8.54E-06	2.48E-11	1.40E-07	1.77E-04	
	Am-241	8.68E-06	2.70E-11	1.70E-07	1.59E-04	
	Cm-244	1.13E-06	7.13E-12	2.60E-07	2.74E-05	
	Sum of Fractions					7.85E-03
	Sum of Fractions Excluding H-3					4.38E-03

Table 22 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS	
H-004	H-3	8.36E-01	1.46E-05	1.90E-03	7.71E-03	
	Co-60	Below MDL	7.03E-10	7.20E-06	9.77E-05	
	Sr-89/90	Below MDL	2.23E-10	1.10E-06	2.03E-04	
	Cs-137	Below MDL	2.34E-10	3.00E-06	7.78E-05	
	U-234	1.94E-05	3.22E-10	6.80E-07	4.73E-04	
	U-235	Below MDL	2.35E-11	7.20E-07	3.27E-05	
	U-238	2.20E-06	6.03E-11	7.50E-07	8.04E-05	
	Pu-238	5.51E-07	2.64E-11	1.50E-07	1.76E-04	
	Pu-239	Below MDL	5.21E-12	1.40E-07	3.72E-05	
	Sum of Fractions					8.89E-03
	Sum of Fractions Excluding H-3					1.18E-03
H-ETP: U3R-2A ETP Outfall at Road C	H-3	1.48E+01	6.51E-04	1.90E-03	3.43E-01	
	C-14	2.54E-04	9.85E-09	6.20E-05	1.59E-04	
	Co-60	Below MDL	4.17E-10	7.20E-06	5.79E-05	
	Sr-89/90	Below MDL	2.08E-10	1.10E-06	1.89E-04	
	Cs-137	8.19E-03	3.26E-07	3.00E-06	1.09E-01	
	U-234	1.14E-06	5.38E-11	6.80E-07	7.91E-05	
	U-235	Below MDL	4.87E-12	7.20E-07	6.76E-06	
	Np-237	Below MDL	1.28E-13	3.20E-07	3.99E-07	
	U-238	8.64E-07	4.27E-11	7.50E-07	5.69E-05	
	Pu-238	1.49E-08	1.23E-11	1.50E-07	8.23E-05	
	Pu-239	Below MDL	8.09E-12	1.40E-07	5.78E-05	
	Am-241	Below MDL	3.62E-12	1.70E-07	2.13E-05	
	Cm-244	3.21E-08	6.79E-12	2.60E-07	2.61E-05	
	Sum of Fractions					4.52E-01
	Sum of Fractions Excluding H-3					1.09E-01

Table 22 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS	
H-Tank Farm: H-017 281-8H Retention Basin	H-3	4.85E-01	3.70E-06	1.90E-03	1.95E-03	
	Co-60	Below MDL	7.52E-10	7.20E-06	1.04E-04	
	Sr-89/90	7.02E-04	5.65E-09	1.10E-06	5.14E-03	
	I-129	1.63E-05	3.71E-10	3.30E-07	1.13E-03	
	Cs-137	4.44E-03	3.41E-08	3.00E-06	1.14E-02	
	U-234	1.01E-05	7.66E-11	6.80E-07	1.13E-04	
	U-235	Below MDL	1.13E-11	7.20E-07	1.57E-05	
	Np-237	3.31E-07	8.46E-12	3.20E-07	2.64E-05	
	U-238	8.83E-06	6.96E-11	7.50E-07	9.28E-05	
	Pu-238	2.61E-05	2.22E-10	1.50E-07	1.48E-03	
	Pu-239	1.43E-06	2.71E-11	1.40E-07	1.94E-04	
	Am-241	1.70E-07	1.70E-11	1.70E-07	9.99E-05	
	Cm-244	4.90E-07	9.25E-12	2.60E-07	3.56E-05	
	Tc-99	1.19E-04	1.75E-09	4.40E-05	3.98E-05	
				Sum of Fractions		2.18E-02
			Sum of Fractions Excluding H-3		1.98E-02	
HP-52 H-Area Tank Farm	H-3	2.63E-01	6.95E-07	1.90E-03	3.66E-04	
	Co-60	Below MDL	5.09E-10	7.20E-06	7.07E-05	
	Sr-89/90	Below MDL	1.18E-10	1.10E-06	1.07E-04	
	Cs-137	Below MDL	1.23E-10	3.00E-06	4.10E-05	
	U-234	8.06E-06	2.77E-11	6.80E-07	4.07E-05	
	U-235	4.14E-07	4.22E-12	7.20E-07	5.86E-06	
	U-238	1.11E-05	3.39E-11	7.50E-07	4.52E-05	
	Pu-238	1.27E-06	9.03E-12	1.50E-07	6.02E-05	
	Pu-239	3.59E-07	3.95E-12	1.40E-07	2.82E-05	
	Am-241	4.01E-06	9.49E-12	1.70E-07	5.58E-05	
	Cm-244	1.21E-06	2.67E-12	2.60E-07	1.03E-05	
				Sum of Fractions		8.31E-04
			Sum of Fractions Excluding H-3		4.65E-04	
K Area: K Canal	H-3	1.40E-02	2.08E-07	1.90E-03	1.09E-04	
	Co-60	Below MDL	-3.91E-11	7.20E-06	0.00E+00	
	Sr-89/90	Below MDL	5.09E-11	1.10E-06	4.63E-05	
	Cs-137	Below MDL	4.11E-10	3.00E-06	1.37E-04	
				Sum of Fractions		2.92E-04
				Sum of Fractions Excluding H-3		1.83E-04

Table 22 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci}/\text{mL}$)	DOE DCS ($\mu\text{Ci}/\text{mL}$)	Fraction of DOE DCS	
L Area: L-07	H-3	3.57E-01	5.98E-08	1.90E-03	3.15E-05	
	Co-60	Below MDL	6.81E-10	7.20E-06	9.46E-05	
	Sr-89/90	Below MDL	4.79E-11	1.10E-06	4.35E-05	
	Cs-137	Below MDL	4.96E-10	3.00E-06	1.65E-04	
	Sum of Fractions					3.35E-04
	Sum of Fractions Excluding H-3					3.04E-04
S Area: S-004	H-3	4.74E-01	9.98E-06	1.90E-03	5.25E-03	
	Co-60	Below MDL	4.71E-10	7.20E-06	6.55E-05	
	Sr-89/90	Below MDL	8.13E-10	1.10E-06	7.39E-04	
	Cs-137	Below MDL	3.62E-10	3.00E-06	1.21E-04	
	U-234	2.01E-06	7.40E-11	6.80E-07	1.09E-04	
	U-235	Below MDL	8.86E-12	7.20E-07	1.23E-05	
	U-238	7.59E-06	8.11E-11	7.50E-07	1.08E-04	
	Pu-238	6.64E-08	1.66E-11	1.50E-07	1.10E-04	
	Pu-239	Below MDL	2.30E-12	1.40E-07	1.64E-05	
	Sum of Fractions					6.53E-03
Sum of Fractions Excluding H-3					1.28E-03	
Tritium: HP-15 Tritium Facility Outfall	H-3	3.55E+00	1.18E-05	1.90E-03	6.22E-03	
	Co-60	Below MDL	1.67E-10	7.20E-06	2.32E-05	
	Sr-89/90	8.02E-06	2.32E-10	1.10E-06	2.10E-04	
	Cs-137	Below MDL	-2.84E-10	3.00E-06	0.00E+00	
	Sum of Fractions					6.45E-03
Sum of Fractions Excluding H-3					2.34E-04	

Table 23 Radionuclides in Stormwater Basin Water

Location: E-05

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	4.86E+03	2.46E+02	2.09E+00	1.77E+00	2.11E-01	2.22E+00
2/8/2016	5.30E+03	2.53E+02	-7.73E-01	1.83E+00	-3.51E+00	1.97E+00
3/14/2016	5.16E+03	2.65E+02	1.48E+00	2.07E+00	-3.22E+00	2.33E+00
4/11/2016	1.08E+04	3.58E+02	5.32E-01	2.08E+00	1.68E+00	2.02E+00
6/13/2016	1.72E+04	4.29E+02	-2.41E+00	1.64E+00	-1.21E+00	2.01E+00
8/8/2016	5.62E+03	2.85E+02	-5.59E+00	2.18E+00	-1.89E+00	2.15E+00
10/10/2016	7.51E+03	3.07E+02	-3.49E-01	1.99E+00	-1.85E+00	2.11E+00
12/12/2016	9.49E+03	3.16E+02	2.05E-01	1.91E+00	-2.19E+00	2.13E+00

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	1.82E-01	8.07E-01	2.49E+00	6.44E-01	2.12E-01	2.36E-01
2/8/2016	1.57E+00	7.71E-01	2.05E+00	6.10E-01	1.25E+00	4.90E-01
3/14/2016	-3.11E-01	7.95E-01	4.08E+00	7.49E-01	1.09E+00	4.53E-01
4/11/2016	-9.92E-01	7.42E-01	2.59E+00	6.44E-01	5.73E-01	3.38E-01
6/13/2016	1.40E+00	8.04E-01	3.65E+00	7.37E-01	5.57E-02	1.73E-01
8/8/2016	2.89E+00	9.48E-01	3.92E+00	7.79E-01	2.09E-01	2.54E-01
10/10/2016	8.97E-01	7.40E-01	2.78E+00	6.58E-01	5.84E-01	3.36E-01
12/12/2016	2.97E+00	9.67E-01	1.95E+00	6.63E-01	4.76E-01	3.42E-01

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: EAV Basin North (E-004)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	8.00E+03	3.16E+02	-9.65E-01	1.77E+00	3.73E+00	1.87E+00
2/8/2016	6.38E+03	2.97E+02	5.86E+00	3.51E+00	2.35E-01	1.99E+00
3/14/2016	8.16E+03	3.20E+02	1.04E+00	1.91E+00	7.19E+00	2.47E+00
4/11/2016	9.81E+03	3.53E+02	1.23E+00	2.01E+00	4.05E-01	2.11E+00
5/9/2016	8.68E+03	3.12E+02	1.53E+00	2.14E+00	-6.49E-02	2.14E+00
6/13/2016	9.46E+03	3.24E+02	-9.30E-01	1.96E+00	-2.12E+00	1.99E+00
7/11/2016	5.51E+03	2.72E+02	2.78E+00	1.87E+00	1.49E+00	1.81E+00
8/8/2016	7.03E+03	2.91E+02	9.65E-01	2.23E+00	-9.59E-02	2.18E+00
9/12/2016	4.70E+03	2.48E+02	3.30E+00	2.08E+00	8.24E-01	2.25E+00
10/10/2016	4.95E+03	2.58E+02	-6.11E-01	2.09E+00	-9.05E-01	2.01E+00
11/14/2016	5.46E+03	2.53E+02	3.92E-01	2.13E+00	2.73E+00	2.32E+00
12/12/2016	8.51E+03	3.01E+02	-9.35E-02	2.12E+00	2.52E+00	2.13E+00

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	6.38E+00	7.98E-01	2.43E+00	6.42E-01	9.78E-01	4.14E-01
2/8/2016	2.65E+00	5.46E-01	1.62E+00	5.68E-01	2.00E-01	2.35E-01
3/14/2016	7.22E-01	8.11E-01	2.55E+00	6.43E-01	1.05E+00	4.36E-01
4/11/2016	3.59E-01	7.94E-01	2.11E+00	6.06E-01	3.89E-01	2.82E-01
5/9/2016	-1.92E-01	7.70E-01	1.92E+00	6.15E-01	6.57E-04	1.69E-01
6/13/2016	1.35E+00	7.61E-01	1.17E+00	5.57E-01	3.68E-01	2.76E-01
7/11/2016	-1.94E-01	7.42E-01	1.75E+00	6.34E-01	2.06E-01	2.50E-01
8/8/2016	7.65E-01	7.70E-01	2.24E+00	6.67E-01	-1.05E-01	1.15E-01
9/12/2016	8.86E-01	7.39E-01	-3.03E-02	4.83E-01	1.99E-01	2.40E-01
10/10/2016	2.54E+00	1.14E+00	1.81E+00	5.85E-01	7.30E-01	3.65E-01
11/14/2016	7.22E-01	7.55E-01	1.69E+00	6.38E-01	2.97E-01	2.87E-01
12/12/2016	-2.35E-01	7.62E-01	2.86E+00	7.39E-01	9.84E-01	4.52E-01

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: EAV Basin South (E-003)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/8/2016	4.86E+03	2.67E+02	-1.34E+00	1.84E+00	-4.49E+00	1.95E+00
10/10/2016	3.41E+03	2.34E+02	5.03E-01	2.12E+00	-2.28E-01	2.20E+00

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/8/2016	7.57E-01	7.37E-01	2.10E+00	6.06E-01	2.00E-01	2.35E-01
10/10/2016	2.21E-01	7.31E-01	1.52E+00	5.61E-01	7.24E-01	3.63E-01

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: Pond 400

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	3.89E+02	1.43E+02	1.89E+00	1.82E+00	5.11E+00	2.32E+00
2/8/2016	5.70E+02	1.50E+02	1.82E+00	2.06E+00	6.11E+00	2.09E+00
3/14/2016	5.16E+02	1.67E+02	2.38E+00	1.83E+00	-4.11E-01	2.25E+00
4/11/2016	1.95E+01	1.58E+02	-3.30E+00	2.03E+00	8.49E-01	2.02E+00
5/9/2016	4.62E+02	1.41E+02	-4.62E-01	2.01E+00	-6.70E-01	2.25E+00
6/13/2016	4.54E+02	1.44E+02	3.76E+00	1.87E+00	-2.14E+00	2.18E+00
7/11/2016	-1.19E+02	1.49E+02	-1.61E+00	2.09E+00	1.68E+00	2.10E+00
8/8/2016	5.16E+01	1.55E+02	4.14E+00	1.77E+00	-1.22E+00	2.11E+00
9/12/2016	1.12E+03	1.71E+02	3.73E+00	2.10E+00	-1.45E+00	2.22E+00
10/10/2016	-2.11E+01	1.39E+02	-1.90E+00	2.20E+00	-3.05E+00	2.14E+00
11/14/2016	-1.28E+01	1.26E+02	-1.78E+00	2.25E+00	7.00E-01	2.29E+00
12/12/2016	2.84E+03	1.48E+02	-4.35E+00	1.77E+00	-4.35E-01	2.13E+00

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	-9.95E-01	7.79E-01	7.19E+00	9.28E-01	5.38E-01	3.31E-01
2/8/2016	3.43E+00	7.77E-01	7.22E+00	9.28E-01	5.51E-01	3.48E-01
3/14/2016	-1.52E+00	7.57E-01	4.41E+00	7.66E-01	2.38E-01	2.42E-01
4/11/2016	3.78E-01	7.75E-01	6.49E+00	8.88E-01	5.76E-01	3.41E-01
5/9/2016	-9.95E-01	7.62E-01	4.92E+00	8.15E-01	3.19E-01	2.86E-01
6/13/2016	8.97E-01	7.57E-01	5.11E+00	8.28E-01	8.65E-01	4.02E-01
7/11/2016	8.41E-01	7.56E-01	7.19E+00	9.59E-01	8.81E-01	4.25E-01
8/8/2016	-6.35E-01	7.44E-01	2.84E+00	7.14E-01	1.00E+00	4.35E-01
9/12/2016	2.62E-01	7.27E-01	6.16E+00	9.04E-01	3.70E-01	3.01E-01
10/10/2016	1.09E+00	7.81E-01	5.03E+00	8.05E-01	9.03E-01	4.05E-01
11/14/2016	4.08E+00	8.04E-01	1.45E+01	1.29E+00	1.19E+00	5.08E-01
12/12/2016	4.41E-01	7.71E-01	5.00E+00	8.54E-01	4.65E-01	3.36E-01

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: SWDF Basin North (E-002)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	2.97E+03	2.13E+02	1.08E+00	1.85E+00	2.69E+00	2.07E+00
2/8/2016	7.00E+03	2.91E+02	3.35E-01	1.78E+00	2.27E-01	1.99E+00
3/14/2016	9.30E+03	3.36E+02	2.76E+00	2.16E+00	-1.74E-01	2.21E+00
4/11/2016	8.35E+03	3.27E+02	1.85E+00	2.13E+00	8.19E-02	2.11E+00
5/9/2016	8.16E+03	3.06E+02	-4.59E+00	2.08E+00	-2.70E+00	2.22E+00
6/13/2016	5.70E+03	2.76E+02	4.68E-01	1.62E+00	-1.39E-01	2.14E+00
8/8/2016	8.00E+03	3.12E+02	4.46E-01	1.65E+00	-4.27E+00	2.08E+00
9/12/2016	5.08E+03	2.67E+02	-1.83E+00	1.81E+00	-3.30E+00	2.21E+00
10/10/2016	4.14E+03	2.60E+02	2.25E-01	2.07E+00	-2.18E+00	2.16E+00
11/14/2016	2.14E+04	4.63E+02	3.03E+00	2.02E+00	4.14E+00	2.21E+00
12/12/2016	1.70E+04	4.09E+02	-3.24E-01	1.87E+00	4.78E-01	2.11E+00

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	9.38E-01	8.18E-01	2.48E+00	6.45E-01	3.81E-01	2.92E-01
2/8/2016	6.05E+00	8.54E-01	3.05E+00	6.79E-01	3.84E-01	3.03E-01
3/14/2016	1.52E-01	7.82E-01	1.57E+00	5.62E-01	6.95E-02	1.72E-01
4/11/2016	6.38E-01	7.89E-01	9.81E-01	5.11E-01	4.00E-01	2.90E-01
5/9/2016	-1.11E+00	7.62E-01	3.78E-01	4.89E-01	6.41E-01	3.65E-01
6/13/2016	3.57E-01	7.45E-01	5.05E+00	8.25E-01	2.25E-01	2.45E-01
8/8/2016	4.49E-01	7.71E-01	4.62E+00	8.20E-01	-1.13E-01	1.24E-01
9/12/2016	1.25E+00	7.46E-01	3.46E+00	7.50E-01	5.11E-02	2.00E-01
10/10/2016	9.78E-01	7.42E-01	3.95E+00	7.36E-01	8.16E-02	1.73E-01
11/14/2016	8.19E-01	7.56E-01	7.03E+00	9.56E-01	1.46E-01	2.62E-01
12/12/2016	8.57E-01	7.77E-01	5.14E+00	8.59E-01	3.05E-01	3.00E-01

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: SWDF Basin South (E-001)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	3.35E+03	2.22E+02	1.01E+00	1.97E+00	2.08E+00	1.94E+00
2/8/2016	2.97E+03	2.16E+02	6.62E-01	2.21E+00	-2.02E+00	1.84E+00
3/14/2016	2.70E+03	2.20E+02	1.35E+00	1.93E+00	3.43E-01	2.33E+00
4/11/2016	3.51E+03	2.41E+02	-1.86E-01	1.99E+00	2.36E+00	2.03E+00
5/9/2016	5.41E+03	2.53E+02	7.84E-01	1.89E+00	-8.51E-01	1.94E+00
6/13/2016	6.49E+03	2.86E+02	-2.04E+00	2.04E+00	-1.44E-01	2.06E+00
7/11/2016	6.22E+03	2.80E+02	-4.76E-01	2.01E+00	8.51E-01	1.94E+00
8/8/2016	4.32E+03	2.51E+02	-2.06E-01	1.95E+00	-4.54E+00	1.99E+00
9/12/2016	1.91E+03	1.94E+02	4.38E+00	2.02E+00	7.92E-01	2.13E+00
10/10/2016	1.73E+03	1.97E+02	1.98E+00	2.00E+00	1.72E+00	2.21E+00
11/14/2016	2.78E+03	2.02E+02	-1.30E-01	1.83E+00	-2.32E-01	2.35E+00
12/12/2016	5.54E+03	2.54E+02	2.11E+00	1.80E+00	9.14E-01	2.07E+00

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	3.95E-01	9.17E-01	2.95E+00	6.76E-01	2.06E-01	2.29E-01
2/8/2016	2.34E+00	7.84E-01	2.95E+00	6.71E-01	5.41E-01	3.40E-01
3/14/2016	2.89E-01	7.84E-01	2.04E+00	6.00E-01	6.84E-02	1.70E-01
4/11/2016	4.22E-01	7.80E-01	2.78E+00	6.58E-01	5.73E-01	3.38E-01
5/9/2016	-4.70E-01	7.69E-01	2.64E+00	6.70E-01	4.62E-01	3.15E-01
6/13/2016	3.11E+00	9.36E-01	2.61E+00	6.66E-01	-1.04E-01	5.83E-02
7/11/2016	1.58E+00	7.67E-01	3.84E+00	7.73E-01	-1.08E-01	1.19E-01
8/8/2016	1.36E+00	7.73E-01	4.30E+00	7.99E-01	4.92E-02	1.94E-01
9/12/2016	1.92E+00	7.54E-01	4.65E+00	8.22E-01	5.16E-01	3.31E-01
10/10/2016	5.16E+00	8.18E-01	3.54E+00	7.10E-01	2.44E-01	2.35E-01
11/14/2016	6.92E-01	7.54E-01	3.24E+00	7.62E-01	9.54E-01	4.39E-01
12/12/2016	1.68E+00	7.88E-01	3.08E+00	7.31E-01	1.44E-01	2.46E-01

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: Z-Area Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	3.11E+03	2.16E+02	4.84E-01	1.78E+00	2.97E+02	2.07E+01
2/8/2016	4.35E+03	2.41E+02	1.49E-01	2.02E+00	2.30E+02	1.65E+01
3/14/2016	2.20E+03	2.09E+02	-1.94E+00	2.11E+00	1.71E+02	1.31E+01
4/11/2016	2.15E+03	2.36E+02	7.08E+00	2.05E+00	1.41E+02	1.17E+01
5/9/2016	2.05E+03	1.84E+02	-7.03E-01	1.73E+00	1.86E+02	1.47E+01
6/13/2016	4.08E+03	2.36E+02	-1.41E+00	1.93E+00	1.99E+02	1.54E+01
7/11/2016	2.97E+03	2.19E+02	1.87E+00	2.05E+00	5.62E+02	3.83E+01
8/8/2016	2.42E+03	2.09E+02	-2.38E-01	1.95E+00	3.38E+02	2.37E+01
9/12/2016	6.78E+02	1.75E+02	-1.99E+00	1.97E+00	2.70E+02	1.94E+01
10/10/2016	1.70E+02	1.44E+02	-2.69E+00	1.96E+00	2.60E+02	1.93E+01
11/14/2016	1.09E+02	1.26E+02	1.38E+00	1.94E+00	2.58E+02	1.88E+01
12/12/2016	2.54E+03	1.91E+02	4.30E-01	1.84E+00	1.08E+03	7.47E+01

Sample Date	Sr-89/90		I-129		U-234	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	1.04E+00	4.61E-01	4.57E-02	3.03E-01	6.00E-02	1.58E-02
2/8/2016			-4.27E-01	2.69E-01	4.78E-02	1.41E-02
3/14/2016	3.35E-01	2.25E-01	2.89E-01	2.65E-01	3.59E-02	1.28E-02
4/11/2016	-1.75E-01	3.40E-01	8.03E-01	4.96E-01	5.41E-02	1.60E-02
5/9/2016	3.41E-01	3.73E-01	1.94E-01	3.08E-01	1.95E-02	1.05E-02
6/13/2016	-4.14E-01	3.03E-01	8.78E-02	3.15E-01	5.00E-02	1.54E-02
7/11/2016	1.72E-01	3.73E-01	1.20E+00	5.07E-01	1.12E-01	2.13E-02
8/8/2016	1.10E-01	3.57E-01	-2.97E-01	2.66E-01	5.03E-02	1.40E-02
9/12/2016	3.81E-01	3.99E-01	2.34E-01	2.77E-01	6.16E-02	1.66E-02
10/10/2016	5.65E-01	4.59E-01	1.83E-01	2.90E-01	5.49E-02	1.52E-02
11/14/2016	5.81E-01	3.83E-01	-4.68E-02	2.59E-01	7.11E-02	1.64E-02
12/12/2016	7.95E-01	2.76E-01	1.79E+00	5.77E-01	4.68E-02	1.50E-02

Note:

Blackened cells indicate no data for that date.

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: Z-Area Basin (continued)

Sample Date	U-235		Np-237		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	-6.19E-06	1.80E-04	4.14E-03	5.15E-03	4.24E-02	1.33E-02
2/8/2016	0.00E+00	3.50E-03	-2.31E-03	2.40E-03	5.92E-02	1.55E-02
3/14/2016	-1.96E-05	5.71E-04	1.10E-02	9.32E-03	3.46E-02	1.32E-02
4/11/2016	1.31E-02	4.18E-03	7.78E-03	6.30E-03	2.57E-02	1.16E-02
5/9/2016	-1.52E-05	4.44E-04	1.12E-02	7.10E-03	3.38E-02	1.10E-02
6/13/2016	4.03E-03	4.05E-03	8.30E-03	6.73E-03	5.22E-02	1.46E-02
7/11/2016	7.30E-03	5.27E-03	3.86E-03	3.88E-03	6.59E-02	1.63E-02
8/8/2016	7.78E-03	5.55E-03	3.46E-03	3.58E-03	2.60E-02	1.18E-02
9/12/2016	-2.66E-03	2.77E-03	9.41E-04	3.51E-03	3.16E-02	1.18E-02
10/10/2016	3.84E-03	3.93E-03	-3.46E-03	5.60E-03	3.19E-02	1.23E-02
11/14/2016	7.81E-03	5.83E-03	-1.05E-03	4.30E-03	5.08E-02	1.41E-02
12/12/2016	5.35E-03	6.51E-03	3.27E-03	3.28E-03	4.35E-02	1.36E-02

Sample Date	Pu-238		Pu-239		Am-241	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	4.03E-02	1.15E-02	6.16E-03	4.57E-03	1.23E-03	4.47E-03
2/8/2016	3.35E-03	4.10E-03	3.38E-03	3.43E-03	7.03E-03	5.02E-03
3/14/2016	5.86E-02	1.69E-02	1.33E-03	5.09E-03	3.73E-03	3.76E-03
4/11/2016	3.62E-02	1.21E-02	-3.30E-03	4.05E-03	-2.39E-03	3.65E-03
5/9/2016	6.97E-02	1.65E-02	6.65E-03	4.74E-03	4.89E-03	4.90E-03
6/13/2016	2.95E-02	1.10E-02	4.65E-03	5.96E-03	0.00E+00	4.21E-03
7/11/2016	6.89E-02	1.80E-02	5.08E-03	6.19E-03	5.57E-03	6.54E-03
8/8/2016	8.03E-03	6.45E-03	-4.78E-06	1.84E-04	0.00E+00	4.85E-03
9/12/2016	8.49E-03	5.26E-03	1.13E-02	6.46E-03	-1.78E-05	5.19E-04
10/10/2016	6.70E-03	7.96E-03	1.09E-03	4.30E-03	-2.35E-03	2.36E-03
11/14/2016	1.22E-02	6.39E-03	-4.14E-03	3.15E-03	-3.92E-05	1.15E-03
12/12/2016	2.05E-02	9.00E-03	9.68E-03	5.68E-03	3.43E-03	3.45E-03

Table 23 Radionuclides in Stormwater Basin Water (continued)

Location: Z-Area Basin (continued)

Sample Date	Cm-244		Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	1.10E-02	6.35E-03	2.76E+00	9.09E-01
2/8/2016	1.03E-02	7.14E-03	6.73E+00	8.67E-01
3/14/2016	6.16E-03	7.30E-03	3.03E+00	8.63E-01
4/11/2016	1.13E-02	7.18E-03	1.35E+00	7.85E-01
5/9/2016	4.84E-03	4.83E-03	3.16E-01	7.79E-01
6/13/2016	0.00E+00	4.21E-03	4.38E+00	9.52E-01
7/11/2016	-2.76E-03	4.99E-03	4.65E+00	8.14E-01
8/8/2016	5.14E-03	5.15E-03	3.81E+00	8.11E-01
9/12/2016	-2.16E-03	2.21E-03	6.14E+00	8.13E-01
10/10/2016	0.00E+00	4.18E-03	9.30E+00	9.97E-01
11/14/2016	6.73E-03	4.83E-03	2.84E+00	7.86E-01
12/12/2016	-2.26E-03	2.27E-03	1.56E+01	1.04E+00

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/11/2016	2.02E+02	4.73E+00	6.08E-01	3.45E-01
2/8/2016	1.87E+02	4.55E+00	5.81E-01	3.65E-01
3/14/2016	1.31E+02	3.67E+00	4.81E-01	3.27E-01
4/11/2016	1.07E+02	3.30E+00	7.22E-03	1.65E-01
5/9/2016	1.36E+02	3.76E+00	-1.87E-01	6.54E-02
6/13/2016	1.46E+02	4.09E+00	-1.35E-01	5.57E-02
7/11/2016	4.70E+02	7.27E+00	5.49E-01	3.67E-01
8/8/2016	2.29E+02	5.15E+00	7.54E-01	3.91E-01
9/12/2016	1.84E+02	4.81E+00	7.59E-01	3.88E-01
10/10/2016	1.90E+02	4.80E+00	-2.55E-02	1.65E-01
11/14/2016	1.88E+02	4.51E+00	1.59E+00	5.78E-01
12/12/2016	5.68E+02	7.99E+00	3.59E+00	8.76E-01

Table 24 Radionuclides in Stream Water

Stream: Tim's Branch
Location: TB-5 Near Road C

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.10E+02	1.28E+02	1.33E+00	1.59E+00	3.73E+00	2.10E+00
3/8/2016	1.78E+02	1.43E+02	9.51E-01	1.88E+00	-9.38E-01	2.12E+00
4/6/2016	1.30E+02	1.82E+02	6.24E-01	1.71E+00	2.27E+00	2.05E+00
5/3/2016	3.68E+02	1.49E+02	1.88E+00	2.25E+00	1.48E+00	2.11E+00
6/7/2016	2.60E+02	1.43E+02	2.44E+00	1.88E+00	-3.00E+00	1.97E+00
7/6/2016	1.37E+02	1.36E+02	4.92E-01	2.03E+00	-2.45E+00	2.06E+00
8/2/2016	2.36E+02	1.75E+02	-3.65E+00	2.36E+00	-2.35E+00	2.36E+00
9/2/2016	1.43E+02	1.80E+02	1.10E+00	2.13E+00	9.05E-02	1.97E+00
10/4/2016	-8.14E+00	1.58E+02	-2.58E+00	2.08E+00	1.17E-01	1.92E+00
11/8/2016	1.77E+02	1.82E+02	1.59E+00	2.16E+00	1.07E+00	2.20E+00
12/6/2016	3.35E+01	1.36E+02	2.76E+00	1.82E+00	1.67E-02	2.21E+00
1/4/2017	4.03E+02	1.54E+02	-9.16E-01	2.01E+00	-1.02E+00	2.20E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	Sr-89/90	3.97E-01	2.57E-01
	I-129	1.19E-01	2.57E-01
	U-234	4.19E-01	3.78E-02
	U-235	1.91E-02	6.76E-03
	U-238	4.68E-01	4.00E-02
	Pu-238	-7.05E-04	2.00E-03
	Pu-239	-5.03E-06	3.42E-04
	Am-241	1.07E-02	4.61E-03
	Cm-244	1.78E-03	2.26E-03
	Tc-99	4.84E-01	7.86E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Tim's Branch (continued)
Location: TB-5 Near Road C (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.27E+00	2.21E-01	3.43E+00	2.85E-01
3/8/2016	1.83E+00	2.04E-01	1.89E+00	2.20E-01
4/6/2016	6.81E+00	3.51E-01	1.40E+01	5.78E-01
5/3/2016	1.64E+00	1.98E-01	2.05E+00	2.27E-01
6/7/2016	1.39E+00	2.12E-01	2.14E+00	2.49E-01
7/6/2016	1.59E+00	2.14E-01	2.26E+00	2.64E-01
8/2/2016	3.95E+00	3.16E-01	6.76E+00	4.42E-01
9/2/2016	5.14E+00	3.47E-01	8.35E+00	4.93E-01
10/4/2016	5.27E-01	2.04E-01	8.24E-01	1.67E-01
11/8/2016	1.47E+00	2.16E-01	1.30E+00	1.92E-01
12/6/2016	1.65E+00	2.23E-01	1.28E+00	1.91E-01
1/4/2017	2.81E+00	2.59E-01	2.15E+00	2.46E-01

Stream: Upper Three Runs
Location: Crouch Branch at Road 4

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	4.92E+03	2.38E+02	2.92E+00	2.04E+00	3.05E+00	2.02E+00
3/8/2016	5.97E+03	2.77E+02	2.10E-02	1.95E+00	-7.27E-02	2.14E+00
4/6/2016	6.16E+03	2.68E+02	1.92E+00	1.96E+00	3.81E+00	2.07E+00
5/3/2016	6.43E+03	2.72E+02	-1.03E-01	1.84E+00	7.43E-01	1.98E+00
6/7/2016	8.89E+03	3.07E+02	1.62E+00	1.87E+00	-2.03E+00	2.17E+00
7/6/2016	4.49E+03	2.38E+02	1.70E+00	2.21E+00	3.95E+00	2.24E+00
8/2/2016	5.16E+03	2.60E+02	-2.81E+00	2.28E+00	1.80E+00	2.33E+00
9/2/2016	5.46E+03	2.70E+02	3.24E+00	2.18E+00	1.12E+00	2.01E+00
10/4/2016	4.78E+03	2.65E+02	-1.19E+00	2.08E+00	1.85E+00	2.22E+00
11/8/2016	5.00E+03	2.64E+02	-2.37E+00	1.86E+00	-2.02E+00	2.20E+00
12/6/2016	4.19E+03	2.32E+02	1.28E+00	2.02E+00	-9.84E-01	1.96E+00
1/4/2017	4.92E+03	2.51E+02	1.70E+00	1.85E+00	1.96E+00	2.17E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)
Location: Crouch Branch at Road 4 (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	Sr-89/90	4.08E-01	2.11E-01
	I-129	1.82E-01	2.48E-01
	U-234	1.92E-02	6.70E-03
	U-235	4.43E-03	3.17E-03
	U-238	2.57E-02	7.41E-03
	Pu-238	-8.38E-07	1.86E-03
	Pu-239	-2.81E-03	1.99E-03
	Am-241	1.08E-02	4.88E-03
	Cm-244	5.08E-03	2.95E-03
	Tc-99	2.22E-01	7.57E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.23E+00	1.80E-01	4.38E-01	1.13E-01
3/8/2016	1.09E+00	1.74E-01	8.22E-02	6.70E-02
4/6/2016	1.24E+00	1.81E-01	2.65E-01	9.59E-02
5/3/2016	4.57E-01	1.46E-01	1.91E-01	7.74E-02
6/7/2016	1.27E+00	1.44E-01	5.54E-01	9.86E-02
7/6/2016	5.03E-01	1.64E-01	4.35E-01	1.32E-01
8/2/2016	1.03E+00	2.18E-01	4.97E-01	1.34E-01
9/2/2016	1.27E+00	3.54E-01	9.65E-02	1.24E-01
10/4/2016	7.84E-01	2.05E-01	1.91E-01	1.03E-01
11/8/2016	8.43E-01	2.09E-01	3.24E-01	1.18E-01
12/6/2016	6.24E-01	1.99E-01	2.37E-01	1.06E-01
1/4/2017	8.95E-01	1.87E-01	1.67E-01	8.09E-02

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)
Location: F-01

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	8.11E+02	1.41E+02	4.32E-01	1.81E+00	4.16E-01	2.05E+00
3/8/2016	2.32E+02	1.46E+02	6.24E+00	2.31E+00	1.22E+00	2.04E+00
5/3/2016	8.68E+02	1.51E+02	3.00E-01	1.85E+00	6.24E+00	3.34E+00
6/7/2016	5.70E+02	1.36E+02	6.00E-01	1.80E+00	-5.27E+00	2.16E+00
8/2/2016	2.47E+03	2.01E+02	3.03E+00	1.89E+00	-2.59E+00	2.03E+00
10/4/2016	3.27E+02	1.54E+02	-1.69E+00	2.00E+00	4.76E+00	2.15E+00
12/6/2016	2.76E+03	2.03E+02	1.94E+00	2.07E+00	-4.05E+00	2.23E+00
1/4/2017	9.70E+02	1.61E+02	-1.59E+00	1.90E+00	-2.67E-01	1.71E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/4/2016	Sr-89/90	2.37E-01	1.92E-01
	I-129	-1.43E-01	2.73E-01
	U-234	5.62E-02	1.21E-02
	U-235	2.02E-03	2.13E-03
	Np-237	5.51E-03	3.63E-03
	U-238	8.65E-02	1.49E-02
	Pu-238	8.70E-03	5.24E-03
	Pu-239	6.00E-03	4.03E-03
	Am-241	3.35E-03	3.99E-03
	Cm-244	0.00E+00	2.16E-03
	Tc-99	7.76E-01	7.63E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.00E+00	3.81E-01	1.28E+00	2.73E-01
3/8/2016	5.08E+00	2.99E-01	3.27E+00	3.20E-01
5/3/2016	2.06E+00	2.08E-01	5.11E-01	1.18E-01
6/7/2016	2.61E+00	1.78E-01	5.46E-01	1.07E-01
8/2/2016	2.43E+00	2.65E-01	9.08E-01	1.72E-01
10/4/2016	2.68E+00	2.51E-01	1.25E+00	2.02E-01
12/6/2016	2.21E+00	2.61E-01	7.78E-01	1.61E-01
1/4/2017	2.04E+00	2.21E-01	7.27E-01	1.58E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)
Location: U3R-1A Treadway Bridge RD 8-1

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.86E+02	1.28E+02	3.73E-01	1.90E+00	-5.05E-01	2.00E+00
3/8/2016	-1.23E+02	1.28E+02	-6.05E-01	1.71E+00	-5.08E+00	2.04E+00
4/6/2016	2.38E+02	1.68E+02	5.76E-01	1.92E+00	-3.95E-01	2.22E+00
5/3/2016	5.51E+02	7.26E+01	3.70E+00	1.96E+00	-4.65E+00	2.21E+00
6/7/2016	6.97E+01	1.21E+02	-2.13E-01	1.71E+00	-8.95E-01	2.11E+00
7/6/2016	3.16E+02	1.36E+02	-8.97E-01	2.39E+00	-2.86E+00	2.07E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/23/2016	Sr-89/90	1.09E-01	1.82E-01
	I-129	-6.51E-02	2.61E-01
	U-234	3.22E-02	8.16E-03
	U-235	6.49E-03	3.79E-03
	U-238	1.98E-02	6.46E-03
	Pu-238	2.89E-03	3.40E-03
	Pu-239	-5.03E-06	3.42E-04
	Am-241	7.70E-03	4.34E-03
	Cm-244	1.77E-03	2.23E-03
Tc-99	5.41E-06	7.61E-01	

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.83E+00	2.06E-01	2.60E+00	2.49E-01
3/8/2016	2.04E+00	2.13E-01	2.73E+00	2.60E-01
4/6/2016	4.54E+00	2.92E-01	6.14E+00	3.78E-01
5/3/2016	1.26E+00	1.84E-01	2.09E+00	2.27E-01
6/7/2016	1.44E+00	2.13E-01	2.08E+00	2.41E-01
7/6/2016	1.39E+00	2.35E-01	2.30E+00	2.56E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: U3R-2 F Storm Sewer

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.73E+03	1.69E+02	1.30E+00	2.05E+00	-5.62E-01	2.02E+00
3/8/2016	1.73E+01	1.31E+02	-2.10E+00	2.04E+00	2.13E+00	2.18E+00
4/6/2016	5.38E+02	1.73E+02	-2.70E+00	2.03E+00	1.38E+00	1.99E+00
5/3/2016	5.24E+02	1.38E+02	6.86E-02	1.98E+00	1.97E-01	2.10E+00
6/7/2016	7.97E+01	1.21E+02	2.08E+00	2.00E+00	-2.39E+00	2.05E+00
8/2/2016	7.95E+02	1.58E+02	-1.32E+00	2.33E+00	2.45E+00	2.34E+00
9/6/2016	6.97E+02	1.71E+02	4.81E-01	1.84E+00	1.26E+00	2.16E+00
11/8/2016	-2.27E+01	1.62E+02	4.70E+00	2.08E+00	-2.78E+00	2.27E+00
12/6/2016	1.80E+03	1.78E+02	-1.50E+00	2.01E+00	2.62E+00	2.17E+00
1/4/2017	1.09E+03	1.66E+02	9.16E-01	2.07E+00	4.27E-01	2.12E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/4/2016	Sr-89/90	1.45E-02	1.73E-01
	I-129	5.76E-01	2.73E-01
	U-234	5.73E-01	5.08E-02
	U-235	3.49E-02	9.09E-03
	Np-237	-2.97E-03	4.21E-03
	U-238	1.05E+00	7.91E-02
	Pu-238	9.30E-03	5.11E-03
	Pu-239	7.35E-03	3.36E-03
	Am-241	2.24E-03	4.12E-03
	Cm-244	1.71E-03	1.71E-03
	Tc-99	3.59E-01	7.57E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)
Location: U3R-2 F Storm Sewer (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.66E+00	3.67E-01	9.46E-01	2.20E-01
3/8/2016	1.56E+00	1.92E-01	5.54E-01	1.24E-01
4/6/2016	3.57E+00	2.62E-01	1.51E+00	1.95E-01
5/3/2016	2.56E+00	2.25E-01	6.92E-01	1.36E-01
6/7/2016	2.08E+00	2.34E-01	9.05E-01	1.66E-01
8/2/2016	3.89E+00	3.09E-01	2.37E+00	2.72E-01
9/6/2016	4.81E+00	3.30E-01	1.60E+00	2.21E-01
11/8/2016	1.20E+00	2.28E-01	7.95E-01	1.61E-01
12/6/2016	1.67E+00	2.45E-01	8.70E-01	1.67E-01
1/4/2017	2.43E+00	2.34E-01	9.73E-01	1.72E-01

Stream: Upper Three Runs
Location: U3R-3 at Road C

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	6.68E+02	1.44E+02	-5.14E-01	1.88E+00	-5.11E+00	1.99E+00
3/8/2016	4.84E+02	1.53E+02	-1.83E+00	2.06E+00	6.14E-01	2.09E+00
4/6/2016	8.30E+02	1.88E+02	-3.27E+00	1.92E+00	4.38E-01	2.12E+00
5/3/2016	4.00E+02	1.39E+02	-1.34E+00	1.86E+00	1.58E+00	2.11E+00
6/7/2016	3.57E+02	1.36E+02	-2.76E+00	2.12E+00	7.86E-01	2.06E+00
7/6/2016	5.54E+02	1.43E+02	2.02E+00	2.35E+00	-9.22E-01	2.02E+00
8/2/2016	2.66E+02	1.46E+02	4.97E-01	2.05E+00	-1.98E+00	2.23E+00
9/6/2016	6.00E+02	1.75E+02	-2.97E-01	2.12E+00	3.22E+00	2.20E+00
10/4/2016	3.86E+02	1.60E+02	-9.38E-01	2.22E+00	1.08E+00	2.35E+00
11/8/2016	5.78E+02	1.79E+02	7.43E-01	2.07E+00	-3.03E+00	2.11E+00
12/6/2016	5.89E+02	1.55E+02	-9.16E-01	2.14E+00	-1.78E+00	2.10E+00
1/4/2017	4.95E+02	1.60E+02	7.81E-01	1.78E+00	3.22E+00	2.21E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: U3R-3 at Road C (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	Sr-89/90	-9.73E-02	1.73E-01
	I-129	8.30E-01	5.31E-01
	U-234	3.86E-02	9.00E-03
	U-235	3.49E-03	4.16E-03
	U-238	3.51E-02	8.59E-03
	Pu-238	7.27E-04	2.62E-03
	Pu-239	-1.46E-03	1.47E-03
	Am-241	5.27E-03	3.23E-03
	Cm-244	0.00E+00	1.97E-03
	Tc-99	2.49E-01	7.85E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.08E+00	1.76E-01	1.11E+00	1.65E-01
3/8/2016	8.30E-01	1.66E-01	1.29E+00	1.84E-01
4/6/2016	3.32E+00	2.63E-01	6.30E+00	3.89E-01
5/3/2016	7.95E-01	1.92E-01	2.29E+00	2.39E-01
6/7/2016	8.46E-01	1.88E-01	1.18E+00	1.87E-01
7/6/2016	1.83E+00	2.74E-01	2.02E+00	2.43E-01
8/2/2016	5.14E+00	3.28E-01	7.19E+00	4.64E-01
9/6/2016	3.03E+00	2.68E-01	5.30E+00	3.93E-01
10/4/2016	1.12E+00	2.40E-01	2.00E+00	2.47E-01
11/8/2016	1.68E+00	2.73E-01	3.32E+00	3.12E-01
12/6/2016	1.21E+00	2.45E-01	2.14E+00	2.53E-01
1/4/2017	1.05E+00	1.97E-01	1.49E+00	2.06E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: U3R-4 at Road A

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	8.46E+02	1.50E+02	-2.76E-01	1.98E+00	2.66E+00	2.11E+00
3/8/2016	4.97E+02	1.53E+02	2.00E+00	1.92E+00	1.57E+00	2.06E+00
4/6/2016	4.46E+02	1.48E+02	-1.19E+00	2.10E+00	-1.03E+00	2.08E+00
5/3/2016	5.41E+02	1.38E+02	5.14E-01	2.07E+00	-2.16E-01	2.12E+00
6/7/2016	9.43E+02	1.73E+02	-2.68E+00	2.01E+00	8.19E-01	2.20E+00
7/6/2016	4.89E+02	1.44E+02	1.06E+00	1.83E+00	-3.78E-01	1.97E+00
8/2/2016	4.16E+02	1.49E+02	-6.65E-01	1.87E+00	-3.70E-01	2.20E+00
9/6/2016	6.08E+02	1.03E+02	1.45E+00	1.82E+00	-8.84E-01	1.92E+00
10/4/2016	7.35E+02	1.06E+02	1.15E+00	2.09E+00	4.73E+00	2.29E+00
11/8/2016	4.84E+02	1.76E+02	-2.41E+00	2.05E+00	-4.59E-01	2.03E+00
12/6/2016	6.30E+02	1.47E+02	6.30E-02	2.02E+00	1.31E+00	2.15E+00
1/4/2017	5.41E+02	1.62E+02	1.67E+00	1.83E+00	-2.11E+00	1.92E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	Sr-89/90	4.30E-01	2.08E-01
	I-129	3.38E-02	2.46E-01
	Pu-238	6.27E-03	3.66E-03
	Pu-239	2.08E-03	2.15E-03
	Am-241	9.41E-03	4.67E-03
	Cm-244	0.00E+00	1.97E-03
	Tc-99	2.22E-01	7.57E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)
 Location: U3R-4 at Road A (continued)

Sample Date	U-234		U-235		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.82E-01	3.05E-02	5.27E-03	6.22E-03	1.46E-01	2.57E-02
2/22/2016	3.86E-02	9.71E-03	2.24E-03	2.26E-03	4.16E-02	9.24E-03
3/8/2016	1.10E-01	2.18E-02	1.22E-02	7.09E-03	1.25E-01	2.24E-02
4/6/2016	4.54E-01	5.11E-02	3.46E-02	1.25E-02	4.70E-01	5.06E-02
5/3/2016	5.27E-01	5.70E-02	2.14E-02	9.93E-03	6.81E-01	6.53E-02
6/7/2016	1.24E-01	2.31E-02	4.62E-03	4.62E-03	1.72E-01	2.76E-02
7/6/2016	8.46E-02	1.91E-02	5.65E-03	6.61E-03	4.78E-02	1.32E-02
8/2/2016	1.54E-01	2.53E-02	1.62E-02	8.27E-03	1.65E-01	2.70E-02
9/6/2016	7.68E-02	1.90E-02	1.33E-02	8.02E-03	1.05E-01	2.17E-02
10/4/2016	1.07E-01	2.23E-02	8.27E-03	6.58E-03	1.18E-01	2.29E-02
11/8/2016	6.24E-02	1.74E-02	4.14E-03	4.15E-03	5.35E-02	1.45E-02
12/6/2016	5.19E-02	1.39E-02	9.35E-03	7.49E-03	4.22E-02	1.32E-02
1/4/2017	1.28E-01	2.43E-02	1.70E-02	8.67E-03	1.55E-01	2.66E-02

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	9.76E-01	1.73E-01	1.39E+00	1.93E-01
3/8/2016	1.14E+00	1.80E-01	1.82E+00	2.15E-01
4/6/2016	6.76E+00	3.49E-01	1.31E+01	5.68E-01
5/3/2016	1.90E+00	2.62E-01	5.76E+00	3.75E-01
6/7/2016	7.24E-01	1.95E-01	1.76E+00	2.30E-01
7/6/2016	1.50E+00	2.40E-01	2.69E+00	2.82E-01
8/2/2016	1.29E+00	2.01E-01	1.71E+00	2.33E-01
9/6/2016	1.56E+00	2.42E-01	3.03E+00	2.95E-01
10/4/2016	1.08E+00	2.28E-01	1.15E+00	1.92E-01
11/8/2016	1.16E+00	2.05E-01	1.53E+00	2.08E-01
12/6/2016	1.65E+00	2.16E-01	1.84E+00	2.33E-01
1/4/2017	2.76E+00	2.50E-01	3.24E+00	3.08E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek
Location: FM-2 at Road 4

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	9.95E+02	1.53E+02	-2.01E+00	1.76E+00	-5.97E-01	2.05E+00
3/8/2016	3.92E+02	1.59E+02	5.22E-01	2.18E+00	-1.37E+00	2.12E+00
4/6/2016	1.10E+03	1.98E+02	-4.89E-02	1.76E+00	1.27E+00	1.94E+00
5/3/2016	1.41E+03	1.80E+02	2.84E+00	2.12E+00	3.24E+00	2.15E+00
6/7/2016	2.33E+03	2.06E+02	1.58E+00	2.26E+00	5.73E-01	2.12E+00
7/6/2016	4.19E+03	2.46E+02	-1.02E+00	1.87E+00	3.24E+00	2.27E+00
8/2/2016	5.08E+03	2.80E+02	1.32E+00	1.71E+00	9.84E+00	2.68E+00
9/6/2016	5.38E+03	3.07E+02	1.74E+00	2.04E+00	1.14E+00	2.07E+00
10/4/2016	4.70E+03	2.89E+02	6.65E+00	1.98E+00	6.00E+00	2.09E+00
11/8/2016	2.89E+03	2.47E+02	-2.78E+00	2.04E+00	6.70E+00	3.11E+00
12/6/2016	3.73E+03	3.01E+02	1.99E+00	1.91E+00	-9.32E-01	2.23E+00
1/4/2017	2.66E+03	2.20E+02	2.21E+00	2.10E+00	1.88E+00	2.23E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	U-234	2.36E-02	6.77E-03
	U-235	-1.35E-03	2.07E-03
	U-238	2.13E-02	6.23E-03
	Pu-238	2.61E-02	7.75E-03
	Pu-239	6.51E-03	3.84E-03
	Am-241	1.11E-02	4.98E-03
	Cm-244	1.74E-03	2.12E-03

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-2 at Road 4 (continued)

Sample Date	Sr-89/90		I-129		Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.92E-01	2.21E-01	-1.75E-01	2.70E-01	2.01E+00	7.63E-01
3/8/2016	5.62E-01	1.69E-01	4.43E-01	2.94E-01	1.53E+00	7.61E-01
4/6/2016	1.01E-01	1.66E-01	3.78E-01	2.80E-01	-1.39E-02	7.60E-01
5/3/2016	3.51E-01	2.12E-01	3.38E-01	2.69E-01	2.04E+00	7.74E-01
6/7/2016	1.39E+00	2.99E-01	-1.94E-01	2.89E-01	1.16E+00	7.78E-01
7/6/2016	2.66E+00	3.87E-01	1.02E+00	4.80E-01	1.54E+00	7.70E-01
8/2/2016	2.54E+00	2.91E-01	1.33E-01	2.58E-01	1.03E+00	7.64E-01
9/6/2016	1.92E+00	3.29E-01	-2.18E-01	2.94E-01	2.76E-01	7.41E-01
10/4/2016	2.50E+00	3.83E-01	6.84E-02	2.89E-01	1.93E+00	7.93E-01
11/8/2016	2.70E+00	4.05E-01	1.05E+00	3.09E-01	-5.57E-01	7.60E-01
12/6/2016	4.03E+00	4.47E-01	7.70E-01	3.06E-01	1.39E+00	8.28E-01
1/4/2017	1.86E+00	3.64E-01	4.51E-01	2.65E-01	-1.25E-01	7.73E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.25E+00	1.80E-01	3.24E-01	1.01E-01
3/8/2016	6.27E-01	1.55E-01	2.69E-01	9.28E-02
4/6/2016	1.55E+00	2.00E-01	9.08E-01	1.57E-01
5/3/2016	2.66E+00	2.27E-01	5.19E-01	1.20E-01
6/7/2016	2.60E+00	1.75E-01	3.08E-01	8.24E-02
7/6/2016	7.95E+00	3.82E-01	5.95E-01	1.52E-01
8/2/2016	8.51E+00	4.08E-01	5.95E-01	1.51E-01
9/6/2016	5.70E+00	5.87E-01	4.41E-01	2.17E-01
10/4/2016	1.06E+01	4.52E-01	8.49E-01	1.83E-01
11/8/2016	9.08E+00	4.26E-01	1.32E+00	2.14E-01
12/6/2016	1.39E+01	4.96E-01	1.04E+00	1.87E-01
1/4/2017	4.35E+00	3.12E-01	6.78E-01	1.52E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-2B Above F-Area Effluent

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.18E+04	3.54E+02	-1.20E-01	1.90E+00	3.54E+00	2.13E+00
3/8/2016	9.84E+03	3.41E+02	2.44E+00	1.98E+00	3.16E-01	2.19E+00
4/6/2016	1.21E+04	3.61E+02	-3.05E+00	1.81E+00	-1.44E-01	2.17E+00
5/3/2016	1.18E+04	3.66E+02	-2.16E+00	2.04E+00	2.60E+00	1.94E+00
6/7/2016	1.49E+04	3.95E+02	2.18E+00	2.06E+00	-1.05E+00	2.24E+00
7/6/2016	1.42E+04	4.76E+02	2.95E+00	1.98E+00	-1.99E-01	2.35E+00
8/2/2016	2.21E+04	5.38E+02	-2.56E-01	2.21E+00	2.89E+00	2.25E+00
9/6/2016	1.95E+04	7.06E+02	1.03E+00	2.11E+00	1.02E+00	2.10E+00
10/4/2016	2.07E+04	5.20E+02	1.60E+00	1.92E+00	8.54E+00	3.47E+00
11/8/2016	1.72E+04	4.18E+02	-7.97E-01	2.12E+00	3.97E+00	2.25E+00
12/6/2016	2.42E+04	5.14E+02	-5.70E-01	2.02E+00	1.16E+01	3.51E+00
1/4/2017	1.72E+04	4.35E+02	1.64E+00	1.92E+00	2.04E+00	2.31E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	U-234	1.72E-02	5.88E-03
	U-235	4.81E-03	3.85E-03
	U-238	1.89E-02	6.15E-03
	Pu-238	3.59E-02	9.32E-03
	Pu-239	2.23E-03	2.29E-03
	Am-241	1.24E-02	4.92E-03
	Cm-244	0.00E+00	2.16E-03

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-2B Above F-Area Effluent (continued)

Sample Date	Sr-89/90		I-129		Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	9.24E-01	2.72E-01	-1.90E-01	3.25E-01	7.24E+00	8.38E-01
3/8/2016	1.01E+00	2.02E-01	3.30E-01	3.91E-01	9.73E-01	7.52E-01
4/6/2016	2.17E+00	3.31E-01	3.86E-01	2.60E-01	6.30E-01	7.77E-01
5/3/2016	1.45E+00	3.07E-01	8.41E-01	3.30E-01	1.89E+00	7.96E-01
6/7/2016	1.75E+00	3.19E-01	6.86E-01	4.25E-01	5.38E-01	7.73E-01
7/6/2016	6.08E+00	6.03E-01	8.73E-01	4.41E-01	1.46E+00	7.67E-01
8/2/2016	4.16E+00	3.73E-01	3.00E-01	2.59E-01	1.30E+00	7.65E-01
9/6/2016	9.57E+00	7.91E-01	1.09E+00	5.04E-01	3.03E+00	7.92E-01
10/4/2016	3.30E+00	4.33E-01	4.84E-01	2.67E-01	2.29E+00	7.88E-01
11/8/2016	1.26E+00	3.03E-01	-3.68E-03	3.28E-01	1.40E-02	7.73E-01
12/6/2016	1.97E+00	3.21E-01	7.14E-01	2.90E-01	1.01E+00	7.80E-01
1/4/2017	1.84E+00	3.53E-01	5.46E-01	3.00E-01	2.38E+00	8.18E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	6.70E+00	3.28E-01	4.14E-01	1.15E-01
3/8/2016	4.08E+00	2.67E-01	3.89E-01	1.12E-01
4/6/2016	5.46E+00	3.05E-01	7.51E-01	1.47E-01
5/3/2016	5.62E+00	3.03E-01	7.08E-01	1.38E-01
6/7/2016	6.65E+00	2.52E-01	4.46E-01	9.48E-02
7/6/2016	1.26E+01	4.73E-01	2.64E+00	3.01E-01
8/2/2016	7.11E+00	3.81E-01	1.27E+00	2.07E-01
9/6/2016	1.07E+01	7.91E-01	2.84E+00	5.18E-01
10/4/2016	1.40E+01	5.23E-01	2.92E+00	3.58E-01
11/8/2016	6.84E+00	3.63E-01	7.49E-01	1.53E-01
12/6/2016	1.09E+01	4.44E-01	5.16E-01	1.33E-01
1/4/2017	6.76E+00	3.69E-01	5.97E-01	1.46E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-3A Below F-Area Effluent

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	5.11E+05	2.11E+03	5.84E-01	2.03E+00	5.59E-01	2.02E+00
3/8/2016	6.84E+05	2.45E+03	5.43E+00	2.07E+00	3.92E+00	2.10E+00
4/6/2016	6.70E+05	2.24E+03	1.68E+00	2.00E+00	2.17E+00	1.97E+00
5/3/2016	6.03E+05	2.37E+03	-5.65E-01	2.10E+00	2.03E+00	2.14E+00
6/7/2016	4.46E+05	1.97E+03	2.70E+00	1.62E+00	-1.34E+00	1.99E+00
7/6/2016	6.14E+05	2.39E+03	-1.31E+00	1.99E+00	5.03E-01	2.29E+00
8/2/2016	6.16E+05	2.40E+03	-1.12E+00	1.90E+00	-1.03E+00	2.22E+00
9/6/2016	4.95E+05	2.12E+03	1.49E+00	1.86E+00	8.84E-01	2.18E+00
10/4/2016	6.11E+05	2.39E+03	1.43E+00	2.03E+00	5.97E+00	2.91E+00
11/8/2016	6.54E+05	2.22E+03	-3.57E+00	2.11E+00	-4.59E+00	2.15E+00
12/6/2016	6.81E+05	2.39E+03	1.76E+00	1.94E+00	4.00E+00	2.19E+00
1/4/2017	5.00E+05	2.12E+03	1.70E+00	2.12E+00	1.58E-01	2.29E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	U-234	5.57E-02	1.08E-02
	U-235	4.43E-03	3.16E-03
	U-238	2.76E-02	7.63E-03
	Pu-238	-8.38E-07	2.06E-03
	Pu-239	7.24E-04	2.66E-03
	Am-241	1.58E-02	5.75E-03
	Cm-244	1.12E-03	1.96E-03

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
 Location: FM-3A Below F-Area Effluent (continued)

Sample Date	Sr-89/90		I-129		Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.26E+00	2.92E-01	3.22E-01	2.89E-01	5.70E+00	8.50E-01
3/8/2016	4.30E-01	1.65E-01	-2.52E-01	2.51E-01	2.11E+00	7.66E-01
4/6/2016	3.03E-01	1.82E-01	1.05E+00	4.69E-01	2.36E+00	9.36E-01
5/3/2016	1.14E-01	1.88E-01	6.14E-01	3.34E-01	2.17E+00	8.04E-01
6/7/2016	4.89E-01	2.39E-01	6.62E-02	2.52E-01	1.71E+00	8.84E-01
7/6/2016	4.11E-01	2.57E-01	1.78E+00	4.74E-01	1.77E+00	7.74E-01
8/2/2016	7.32E-01	2.08E-01	3.86E-01	5.23E-01	1.52E+00	7.69E-01
9/6/2016	5.95E-01	2.43E-01	1.91E+00	6.76E-01	5.89E-01	7.56E-01
10/4/2016	3.81E-01	2.22E-01	6.22E-01	3.08E-01	1.08E+00	7.68E-01
11/8/2016	7.92E-01	2.70E-01	7.16E-01	4.06E-01	-1.55E+00	7.39E-01
12/6/2016	1.57E-01	1.90E-01	8.89E-01	4.07E-01	1.28E+00	7.84E-01
1/4/2017	-6.81E-04	2.24E-01	1.62E-01	2.56E-01	1.68E+00	7.99E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.41E+00	2.54E-01	3.05E+00	2.83E-01
3/8/2016	2.05E+00	2.10E-01	6.35E-01	1.36E-01
4/6/2016	2.73E+00	2.44E-01	1.62E+00	2.09E-01
5/3/2016	2.21E+00	2.15E-01	9.24E-01	1.59E-01
6/7/2016	2.70E+00	1.81E-01	7.51E-01	1.15E-01
7/6/2016	2.05E+00	2.28E-01	5.76E-01	1.50E-01
8/2/2016	1.66E+00	2.41E-01	5.22E-01	1.41E-01
9/6/2016	1.50E+00	3.79E-01	5.27E-01	2.30E-01
10/4/2016	1.97E+00	2.53E-01	7.16E-01	1.62E-01
11/8/2016	1.73E+00	2.25E-01	9.95E-01	1.70E-01
12/6/2016	1.27E+00	2.07E-01	4.68E-01	1.20E-01
1/4/2017	2.10E+00	2.53E-01	1.22E+00	1.97E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-6 at Road A-12.2

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.40E+04	4.76E+02	2.84E+00	1.78E+00	1.34E+00	2.06E+00
3/8/2016	2.16E+04	4.59E+02	-2.78E+00	1.96E+00	4.62E-01	2.00E+00
4/6/2016	2.22E+04	4.50E+02	-8.49E-01	2.10E+00	2.95E+00	2.02E+00
5/3/2016	2.62E+04	5.17E+02	3.65E+00	1.90E+00	3.78E+00	2.22E+00
6/7/2016	2.54E+04	4.93E+02	1.62E+00	1.96E+00	-2.92E-02	2.21E+00
7/6/2016	2.78E+04	5.37E+02	-1.97E-01	1.95E+00	-2.59E+00	2.08E+00
8/2/2016	3.00E+04	5.55E+02	3.41E+00	2.05E+00	4.19E+00	2.31E+00
9/6/2016	2.76E+04	5.14E+02	8.00E-01	1.98E+00	3.51E+00	2.13E+00
10/4/2016	3.24E+04	5.83E+02	1.64E+00	1.79E+00	2.45E+00	2.38E+00
11/8/2016	2.17E+04	4.48E+02	3.19E-01	2.15E+00	-2.40E+00	2.36E+00
12/6/2016	3.24E+04	5.45E+02	-1.43E+00	1.93E+00	-2.29E-01	2.11E+00
1/4/2017	2.63E+04	4.93E+02	-1.17E-01	1.86E+00	8.95E-01	2.32E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	Sr-89/90	1.17E+00	2.73E-01
	I-129	9.76E-02	2.99E-01
	U-234	6.19E-02	1.13E-02
	U-235	2.03E-03	2.05E-03
	U-238	7.11E-02	1.20E-02
	Pu-238	8.54E-03	4.64E-03
	Pu-239	6.51E-04	2.40E-03
	Am-241	1.22E-02	4.83E-03
	Cm-244	1.04E-02	4.26E-03
Tc-99	9.73E-01	7.69E-01	

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-6 at Road A-12.2 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.81E+00	2.60E-01	3.68E-01	1.04E-01
3/8/2016	3.62E+00	2.55E-01	5.14E-01	1.20E-01
4/6/2016	7.78E+00	3.59E-01	3.97E+00	3.23E-01
5/3/2016	4.92E+00	3.01E-01	1.80E+00	2.20E-01
6/7/2016	4.35E+00	3.02E-01	1.45E+00	2.13E-01
7/6/2016	3.73E+00	2.81E-01	5.32E-01	1.49E-01
8/2/2016	4.59E+00	3.05E-01	5.00E-01	1.46E-01
9/6/2016	3.84E+00	2.85E-01	6.00E-01	1.57E-01
10/4/2016	3.65E+00	2.97E-01	2.81E-01	1.19E-01
11/8/2016	3.97E+00	3.08E-01	5.57E-01	1.46E-01
12/6/2016	3.41E+00	2.77E-01	4.38E-01	1.20E-01
1/4/2017	3.84E+00	2.87E-01	4.95E-01	1.29E-01

Stream: Four Mile Creek
Location: FM-A7 at Road A-7

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.22E+04	5.51E+02	2.24E+00	1.86E+00	2.19E+00	1.95E+00
3/8/2016	2.89E+04	5.32E+02	3.38E+00	1.98E+00	2.07E+00	2.10E+00
4/6/2016	3.22E+04	5.44E+02	-3.22E-01	1.67E+00	1.14E+00	2.09E+00
5/3/2016	3.54E+04	5.98E+02	3.11E+00	2.02E+00	4.41E+00	2.24E+00
6/7/2016	3.22E+04	5.55E+02	-7.65E-01	1.96E+00	-6.11E-01	2.04E+00
7/6/2016	3.89E+04	6.44E+02	-3.54E+00	2.05E+00	2.08E+00	2.14E+00
8/2/2016	4.27E+04	6.64E+02	-1.07E+00	2.05E+00	4.05E+00	2.53E+00
9/6/2016	4.19E+04	6.51E+02	1.15E+00	2.02E+00	5.16E+00	2.33E+00
10/4/2016	4.30E+04	6.79E+02	5.16E-01	2.27E+00	1.15E+01	4.21E+00
11/8/2016	3.89E+04	5.86E+02	1.62E+00	2.16E+00	-1.23E+00	2.25E+00
12/6/2016	4.49E+04	6.48E+02	-2.78E-01	2.12E+00	1.22E+01	3.40E+00
1/4/2017	3.51E+04	6.00E+02	-2.54E+00	1.98E+00	5.03E+00	2.17E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-A7 at Road A-7 (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	U-234	2.17E-01	2.45E-02
	U-235	1.79E-02	6.47E-03
	U-238	2.95E-01	2.97E-02
	Pu-238	1.50E-02	5.79E-03
	Pu-239	7.14E-03	4.60E-03
	Am-241	2.13E-02	6.48E-03
	Cm-244	1.76E-02	5.66E-03

Sample Date	Sr-89/90		I-129		Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.40E+00	3.09E-01	2.06E+00	4.38E-01	3.22E+00	7.81E-01
2/22/2016	1.52E+00	3.05E-01	1.67E-01	3.19E-01	6.35E-01	7.87E-01
3/8/2016	1.50E+00	2.46E-01	4.05E-01	3.12E-01	2.73E+00	7.77E-01
4/6/2016	1.74E+00	2.91E-01	2.14E+00	5.20E-01	1.74E+00	7.94E-01
5/3/2016	1.83E+00	3.24E-01	1.26E+00	5.10E-01	3.78E+00	8.49E-01
6/7/2016	1.57E+00	2.95E-01	1.91E+00	4.71E-01	2.07E+00	5.40E-01
7/6/2016	2.22E+00	3.53E-01	3.43E+00	6.26E-01	2.08E+00	7.74E-01
8/2/2016	2.70E+00	2.99E-01	3.59E+00	5.85E-01	3.41E+00	7.97E-01
9/6/2016	2.84E+00	3.75E-01	3.57E+00	5.39E-01	4.22E+00	8.05E-01
10/4/2016	2.04E+00	3.25E-01	3.70E+00	6.49E-01	1.97E+00	7.82E-01
11/8/2016	2.26E+00	3.60E-01	4.95E+00	6.65E-01	9.49E-01	7.85E-01
12/6/2016	-1.95E-02	1.57E-01	3.76E+00	6.60E-01	2.35E+00	7.99E-01
1/4/2017	1.41E+00	3.16E-01	1.87E+00	5.21E-01	2.59E+00	8.19E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-A7 at Road A-7 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	5.22E+00	2.96E-01	5.59E-01	1.33E-01
3/8/2016	5.08E+00	2.92E-01	8.84E-01	1.60E-01
4/6/2016	7.32E+00	3.49E-01	2.97E+00	2.81E-01
5/3/2016	4.95E+00	2.89E-01	6.76E-01	1.39E-01
6/7/2016	6.14E+00	3.46E-01	9.92E-01	1.81E-01
7/6/2016	7.81E+00	3.81E-01	6.11E-01	1.66E-01
8/2/2016	6.89E+00	3.79E-01	1.28E+00	2.19E-01
9/6/2016	8.16E+00	3.89E-01	5.51E-01	1.62E-01
10/4/2016	8.30E+00	4.18E-01	2.36E+00	2.95E-01
11/8/2016	8.19E+00	3.94E-01	1.14E+00	1.96E-01
12/6/2016	7.62E+00	3.82E-01	1.24E+00	2.04E-01
1/4/2017	6.78E+00	3.71E-01	8.24E-01	1.70E-01

Stream: Pen Branch
Location: PB-3 at Road A-13.2

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	9.46E+03	3.17E+02	2.86E+00	1.88E+00	-1.29E+00	2.14E+00
3/8/2016	7.19E+03	2.94E+02	-1.20E+00	2.14E+00	1.39E+00	2.10E+00
4/6/2016	9.11E+03	3.27E+02	2.06E+00	2.09E+00	-5.05E+00	2.17E+00
5/3/2016	1.22E+04	3.65E+02	-2.95E+00	2.03E+00	-4.95E-02	2.16E+00
6/7/2016	1.56E+04	4.09E+02	2.84E+00	2.17E+00	1.07E+00	2.09E+00
7/6/2016	1.64E+04	4.13E+02	-1.35E+00	1.95E+00	-2.78E+00	2.06E+00
8/2/2016	1.71E+04	4.23E+02	-7.16E-02	2.31E+00	2.32E+00	2.06E+00
9/6/2016	1.51E+04	3.92E+02	-2.04E+00	2.15E+00	2.84E+00	2.07E+00
10/4/2016	1.71E+04	4.32E+02	3.49E-01	2.23E+00	-1.84E+00	2.08E+00
11/8/2016	1.45E+04	3.76E+02	-1.34E+00	1.91E+00	-2.45E+00	2.07E+00
12/6/2016	1.40E+04	3.79E+02	1.07E-02	1.90E+00	-7.49E-01	2.15E+00
1/4/2017	8.51E+03	3.08E+02	1.33E+00	2.16E+00	-1.55E+00	2.00E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Pen Branch (continued)
Location: PB-3 at Road A-13.2 (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	Sr-89/90	1.98E-01	1.94E-01
	I-129	1.41E+00	4.18E-01
	U-234	2.62E-02	7.52E-03
	U-235	2.25E-03	2.27E-03
	U-238	3.65E-02	8.63E-03
	Pu-238	7.22E-04	2.61E-03
	Pu-239	2.16E-03	2.22E-03
	Am-241	-1.27E-03	1.43E-03
	Cm-244	1.86E-03	2.22E-03
	Tc-99	8.49E-01	7.66E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.99E+00	2.11E-01	1.75E+00	2.15E-01
3/8/2016	8.78E-01	1.66E-01	2.73E-01	9.17E-02
4/6/2016	1.83E+00	1.51E-01	1.29E+00	1.34E-01
5/3/2016	3.00E-01	1.38E-01	8.57E-02	7.50E-02
6/7/2016	3.41E-01	1.64E-01	1.69E-01	9.17E-02
7/6/2016	5.41E-01	1.67E-01	3.92E-01	1.37E-01
8/2/2016	9.62E-01	1.85E-01	2.27E-01	1.13E-01
9/6/2016	6.14E-01	1.69E-01	1.95E-01	1.08E-01
10/4/2016	8.08E-01	2.08E-01	3.19E-01	1.23E-01
11/8/2016	1.38E+00	2.03E-01	2.58E-01	9.89E-02
12/6/2016	1.10E+00	1.91E-01	4.05E-01	1.18E-01
1/4/2017	1.40E+00	2.10E-01	7.59E-01	1.56E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Steel Creek
Location: SC-2A 1 mile above Road B

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	5.76E+04	7.13E+02	-1.98E+00	1.84E+00	5.65E-01	2.26E+00
3/8/2016	4.27E+04	6.24E+02	1.08E+00	2.25E+00	5.65E+00	2.16E+00
4/6/2016	4.95E+04	6.29E+02	-1.17E+00	2.07E+00	1.01E+01	3.12E+00
5/3/2016	4.81E+04	6.71E+02	2.15E+00	1.76E+00	7.59E+00	2.50E+00
6/7/2016	6.43E+04	7.88E+02	2.95E+00	2.02E+00	5.97E+00	2.66E+00
7/6/2016	5.59E+04	7.24E+02	1.01E+00	1.86E+00	9.43E+00	2.43E+00
8/2/2016	6.81E+04	8.16E+02	2.70E+00	2.06E+00	1.59E+01	3.25E+00
9/6/2016	7.51E+04	8.36E+02	-2.12E+00	1.76E+00	2.64E+00	2.27E+00
10/4/2016	6.51E+04	7.85E+02	2.28E+00	2.13E+00	-1.88E+00	2.54E+00
11/8/2016	6.43E+04	7.11E+02	5.84E-01	1.70E+00	-1.51E+00	2.07E+00
12/6/2016	5.65E+04	7.08E+02	-3.32E+00	1.79E+00	3.11E+00	2.39E+00
1/4/2017	4.76E+04	6.68E+02	2.18E+00	2.06E+00	1.80E+00	2.26E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	Sr-89/90	1.46E-01	1.99E-01
	I-129	-6.35E-01	2.59E-01
	U-234	5.78E-02	1.10E-02
	U-235	-2.28E-06	1.35E-04
	U-238	4.03E-02	9.28E-03
	Pu-238	2.95E-03	3.46E-03
	Pu-239	-5.03E-06	3.43E-04
	Am-241	1.09E-02	4.67E-03
	Cm-244	5.41E-03	3.14E-03
	Tc-99	7.62E-01	7.93E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Steel Creek (continued)
Location: SC-2A 1 mile above Road B (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.14E+00	2.43E-01	1.35E+00	1.85E-01
3/8/2016	5.81E+00	3.13E-01	4.19E+00	3.22E-01
4/6/2016	2.22E+01	4.17E-01	2.26E+01	5.60E-01
5/3/2016	3.84E+00	2.74E-01	1.77E+00	2.18E-01
6/7/2016	3.22E+00	2.72E-01	1.10E+00	1.87E-01
7/6/2016	3.41E+00	2.73E-01	1.55E+00	2.24E-01
8/2/2016	5.62E+00	3.51E-01	3.22E+00	3.09E-01
9/6/2016	3.38E+00	2.73E-01	2.23E+00	2.66E-01
10/4/2016	2.17E+00	2.54E-01	2.43E-01	1.10E-01
11/8/2016	2.58E+00	2.46E-01	1.01E+00	1.78E-01
12/6/2016	3.38E+00	2.72E-01	1.19E+00	1.90E-01
1/4/2017	2.73E+00	2.69E-01	8.30E-01	1.63E-01

Stream: Steel Creek
Location: SC-4 Steel Creek at Road A

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.88E+03	1.75E+02	2.41E-01	1.78E+00	8.24E-01	2.08E+00
3/8/2016	1.84E+03	1.85E+02	-3.76E+00	1.98E+00	-1.31E+00	2.07E+00
4/6/2016	1.92E+03	2.06E+02	-2.32E+00	1.86E+00	-3.49E+00	2.07E+00
5/3/2016	1.94E+03	1.84E+02	2.40E+00	2.02E+00	1.46E+00	1.98E+00
6/7/2016	1.62E+03	1.71E+02	7.84E-01	1.79E+00	8.65E-01	2.17E+00
7/6/2016	1.83E+03	1.78E+02	-1.47E+00	1.73E+00	9.38E-01	2.05E+00
8/2/2016	1.11E+03	1.67E+02	1.96E+00	2.07E+00	-5.41E+00	2.32E+00
9/6/2016	1.88E+03	1.83E+02	-1.01E+00	1.98E+00	-3.73E+00	1.95E+00
10/4/2016	1.40E+03	1.91E+02	8.49E-01	2.11E+00	3.22E+00	2.21E+00
11/8/2016	2.25E+03	2.08E+02	-1.85E-01	2.20E+00	6.78E-01	2.18E+00
12/6/2016	1.75E+03	1.72E+02	-1.55E-01	2.05E+00	2.30E-01	2.35E+00
1/4/2017	1.14E+03	1.73E+02	-3.30E+00	2.03E+00	-2.24E+00	2.32E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Steel Creek (continued)
 Location: SC-4 Steel Creek at Road A (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	Sr-89/90	2.89E-01	2.02E-01
	I-129	-2.70E-01	2.91E-01
	U-234	1.54E-02	6.07E-03
	U-235	2.92E-03	3.45E-03
	U-238	1.83E-02	6.27E-03
	Pu-238	-7.08E-04	1.92E-03
	Pu-239	7.03E-04	2.58E-03
	Am-241	4.05E-03	3.38E-03
	Cm-244	0.00E+00	2.16E-03
	Tc-99	2.09E-01	7.59E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.20E+00	1.79E-01	8.70E-02	6.51E-02
3/8/2016	1.35E+00	1.85E-01	2.38E-01	9.00E-02
4/6/2016	9.97E-01	1.82E-01	4.08E-01	1.17E-01
5/3/2016	1.09E+00	1.75E-01	2.35E-01	9.71E-02
6/7/2016	9.76E-01	1.92E-01	1.14E-01	8.35E-02
7/6/2016	1.32E+00	2.01E-01	4.54E-01	1.43E-01
8/2/2016	9.35E-01	1.84E-01	1.35E-01	1.00E-01
9/6/2016	1.01E+00	1.87E-01	2.24E-01	1.12E-01
10/4/2016	6.03E-01	1.98E-01	1.69E-01	1.03E-01
11/8/2016	1.01E+00	2.13E-01	1.40E-01	9.89E-02
12/6/2016	1.10E+00	2.00E-01	2.04E-01	8.72E-02
1/4/2017	1.48E+00	2.12E-01	4.65E-01	1.25E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs
Location: L3R-1A at Road B

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	4.03E+02	1.30E+02	2.11E+00	1.95E+00	-6.65E-01	2.07E+00
3/8/2016	7.59E+01	1.33E+02	-1.48E+00	1.65E+00	-8.76E-01	2.09E+00
4/6/2016	8.89E+00	1.59E+02	-6.62E-01	1.78E+00	1.21E+00	2.16E+00
5/3/2016	3.43E+02	1.32E+02	-1.87E+00	1.76E+00	3.81E-01	2.09E+00
6/7/2016	1.28E+02	1.21E+02	-2.69E+00	1.74E+00	9.03E-02	1.80E+00
7/6/2016	3.68E+02	1.30E+02	-2.89E+00	2.09E+00	-1.22E+00	2.08E+00
8/2/2016	2.24E+02	1.37E+02	-9.49E-01	2.45E+00	3.57E+00	2.25E+00
9/6/2016	6.54E+01	1.38E+02	-2.68E+00	1.94E+00	1.86E+00	2.09E+00
10/4/2016	1.84E+01	1.44E+02	1.94E+00	2.02E+00	2.43E+00	2.06E+00
11/8/2016	3.81E+02	1.66E+02	-6.78E-03	2.24E+00	9.08E-01	2.13E+00
12/6/2016	1.64E+02	1.25E+02	-2.43E+00	2.10E+00	3.22E+00	2.03E+00
1/4/2017	1.38E+02	1.41E+02	1.45E+00	2.23E+00	-1.31E+00	2.12E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2016	Sr-89/90	6.22E-01	2.38E-01
	I-129	2.78E-01	3.05E-01
	U-234	1.21E-02	5.71E-03
	U-235	-7.14E-04	2.92E-03
	U-238	1.26E-02	5.21E-03
	Pu-238	2.04E-03	2.05E-03
	Pu-239	4.08E-03	2.95E-03
	Am-241	8.51E-03	4.02E-03
	Cm-244	0.00E+00	2.20E-03
	Tc-99	2.92E-01	7.86E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs (continued)
Location: L3R-1A at Road B (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.24E+00	1.80E-01	1.30E-01	7.06E-02
3/8/2016	1.82E+00	2.01E-01	1.99E-01	8.09E-02
4/6/2016	1.89E+00	2.11E-01	8.22E-02	7.13E-02
5/3/2016	1.03E+00	1.70E-01	1.03E-01	7.44E-02
6/7/2016	1.24E+00	2.02E-01	5.43E-02	6.97E-02
7/6/2016	1.22E+00	1.95E-01	1.22E-02	7.49E-02
8/2/2016	9.73E-01	2.16E-01	1.07E-01	8.96E-02
9/6/2016	1.56E+00	2.08E-01	1.84E-01	1.02E-01
10/4/2016	8.49E-01	2.05E-01	4.78E-02	7.95E-02
11/8/2016	1.01E+00	2.13E-01	1.59E-01	9.71E-02
12/6/2016	1.82E+00	2.26E-01	1.96E-01	8.37E-02
1/4/2017	1.44E+00	2.08E-01	3.49E-02	5.62E-02

Stream: Lower Three Runs
Location: L3R-2Patterson Mill Rd

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.41E+03	1.63E+02	-1.76E+00	1.82E+00	3.00E-01	2.08E+00
3/8/2016	6.95E+02	1.56E+02	-3.03E-02	1.98E+00	-2.69E-01	2.07E+00
4/6/2016	1.11E+03	1.91E+02	-1.01E+00	1.79E+00	3.62E-01	2.01E+00
5/3/2016	1.57E+03	1.75E+02	-1.93E+00	1.91E+00	-4.76E+00	2.13E+00
6/7/2016	1.61E+03	1.68E+02	1.63E-01	2.22E+00	-6.49E-01	2.12E+00
7/6/2016	1.60E+03	1.73E+02	-2.66E+00	1.82E+00	-7.41E-01	1.87E+00
8/2/2016	2.52E+03	2.02E+02	1.27E+00	1.86E+00	-2.13E+00	2.18E+00
9/6/2016	2.31E+03	1.89E+02	-3.73E-01	1.77E+00	-1.87E+00	1.96E+00
10/4/2016	1.23E+03	1.85E+02	4.54E-02	2.04E+00	2.89E+00	2.17E+00
11/8/2016	1.36E+03	1.90E+02	5.14E+00	2.08E+00	-5.49E-01	1.96E+00
12/6/2016	1.39E+03	1.64E+02	1.28E+00	1.99E+00	2.28E+00	2.06E+00
1/4/2017	8.16E+02	1.65E+02	-6.65E-01	1.75E+00	2.16E-01	2.01E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs (continued)
 Location: L3R-2 Patterson Mill Road (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	Sr-89/90	1.15E-01	1.91E-01
	I-129	6.38E-01	3.95E-01
	U-234	2.40E-02	6.91E-03
	U-235	6.86E-04	2.49E-03
	U-238	2.73E-02	7.37E-03
	Pu-238	-8.38E-07	2.04E-03
	Pu-239	2.07E-03	2.13E-03
	Am-241	8.54E-03	4.26E-03
	Cm-244	2.12E-03	1.86E-03
	Tc-99	-2.38E-01	7.56E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.70E+00	1.99E-01	1.04E+00	1.73E-01
3/8/2016	1.52E+00	1.91E-01	4.49E-01	1.14E-01
4/6/2016	1.37E+00	1.95E-01	2.84E-01	1.02E-01
5/3/2016	1.16E+00	1.77E-01	2.34E-01	9.67E-02
6/7/2016	1.39E+00	2.08E-01	5.62E-02	7.22E-02
7/6/2016	1.25E+00	2.43E-01	8.14E-01	1.67E-01
8/2/2016	1.31E+00	2.01E-01	6.81E-01	1.67E-01
9/6/2016	2.00E+00	2.26E-01	4.73E-01	1.43E-01
10/4/2016	1.13E+00	1.92E-01	2.27E-01	9.40E-02
11/8/2016	1.12E+00	2.19E-01	2.84E-01	1.18E-01
12/6/2016	1.82E+00	2.19E-01	2.01E-01	9.09E-02
1/4/2017	1.08E+00	1.96E-01	4.08E-01	1.19E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs (continued)
Location: L3R-3 at Highway 125

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	6.43E+02	1.42E+02	3.41E+00	1.95E+00	-2.09E+00	2.08E+00
3/8/2016	3.95E+02	1.50E+02	-2.56E+00	2.32E+00	1.47E+00	1.97E+00
4/6/2016	5.14E+02	1.80E+02	-3.03E+00	2.02E+00	1.48E+00	2.16E+00
5/3/2016	4.51E+02	1.46E+02	2.19E-01	1.87E+00	4.11E+00	2.12E+00
6/7/2016	6.46E+02	1.48E+02	-1.16E+00	1.90E+00	3.05E+00	2.27E+00
7/6/2016	7.73E+02	1.51E+02	-1.39E+00	2.07E+00	-1.76E+00	2.13E+00
8/2/2016	7.78E+02	1.60E+02	-1.29E+00	1.81E+00	1.74E+00	2.03E+00
9/6/2016	6.62E+02	1.51E+02	-1.52E+00	2.03E+00	-1.04E+00	2.00E+00
10/4/2016	4.32E+02	1.61E+02	8.27E-01	1.93E+00	-1.79E+00	2.27E+00
11/8/2016	7.89E+02	1.83E+02	3.11E+00	2.04E+00	3.59E+00	2.17E+00
12/6/2016	7.27E+02	1.50E+02	1.67E+00	2.13E+00	4.86E-01	2.14E+00
1/4/2017	2.67E+02	1.52E+02	-8.78E-01	1.88E+00	3.03E+00	2.21E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	Sr-89/90	2.35E-01	2.00E-01
	I-129	7.89E-01	3.87E-01
	U-234	4.92E-02	1.00E-02
	U-235	7.22E-04	2.61E-03
	U-238	4.57E-02	9.59E-03
	Pu-238	-8.38E-07	2.04E-03
	Pu-239	4.35E-03	3.15E-03
	Am-241	3.59E-03	2.73E-03
	Cm-244	0.00E+00	2.10E-03
	Tc-99	3.65E-01	7.64E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs (continued)
Location: L3R-3 at Highway 125 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.20E+00	1.80E-01	6.24E-01	1.32E-01
3/8/2016	1.73E+00	1.99E-01	6.05E-01	1.30E-01
4/6/2016	2.46E+00	2.33E-01	1.47E+00	2.05E-01
5/3/2016	1.15E+00	1.78E-01	2.89E-01	1.05E-01
6/7/2016	2.33E+00	2.47E-01	1.98E+00	2.61E-01
7/6/2016	3.30E+00	2.68E-01	4.84E-01	1.47E-01
8/2/2016	2.05E+00	2.27E-01	1.69E-01	1.07E-01
9/6/2016	4.19E+00	3.01E-01	4.16E+00	3.79E-01
10/4/2016	1.38E+00	2.40E-01	1.26E+00	2.10E-01
11/8/2016	1.51E+00	2.34E-01	4.03E-01	1.32E-01
12/6/2016	1.18E+00	2.04E-01	2.38E-01	9.36E-02
1/4/2017	1.24E+00	2.03E-01	3.57E-01	1.14E-01

Stream: Identified as Miscellaneous
Location: G-010

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	5.32E+02	1.39E+02	1.22E+00	2.08E+00	1.34E+00	2.14E+00
3/8/2016	7.35E+02	1.62E+02	2.97E+00	2.07E+00	-2.66E-01	2.03E+00
4/6/2016	1.11E+03	1.93E+02	4.81E-01	2.17E+00	3.89E-01	2.12E+00
5/3/2016	5.59E+02	1.47E+02	2.54E+00	2.00E+00	-4.00E-01	2.02E+00
6/7/2016	9.38E+02	1.57E+02	2.65E+00	1.56E+00	-6.78E-02	2.20E+00
7/6/2016	2.29E+03	1.96E+02	-1.50E+00	1.72E+00	6.08E+00	2.03E+00
8/2/2016	5.08E+03	2.62E+02	2.28E+00	2.08E+00	6.57E-02	2.15E+00
9/6/2016	2.27E+03	2.13E+02	1.96E+00	2.20E+00	-5.14E-01	1.99E+00
10/4/2016	8.78E+02	1.75E+02	-1.63E+00	2.01E+00	2.00E+00	1.96E+00
11/8/2016	7.32E+02	1.87E+02	1.18E+00	2.02E+00	-5.32E-01	2.11E+00
12/6/2016	2.35E+02	1.44E+02	3.78E+00	1.87E+00	-1.18E+00	2.18E+00
1/4/2017	4.59E+02	1.54E+02	-1.61E+00	2.07E+00	4.32E+00	2.37E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)
Location: G-010 (continued)

Sample Date	Sr-89/90		I-129		U-234	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.92E-01	1.24E-01	-6.46E-02	3.15E-01	3.27E-02	9.56E-03
3/8/2016	-7.35E-03	1.97E-01	9.89E-01	4.32E-01	4.38E-02	9.17E-03
4/6/2016	8.97E-02	2.16E-01	3.27E-01	2.64E-01	3.00E-02	7.83E-03
5/3/2016	3.73E-01	2.07E-01	1.78E-01	2.76E-01	1.74E-02	7.61E-03
6/7/2016	4.05E-02	2.28E-01	1.26E-01	2.57E-01	1.88E-02	6.05E-03
7/6/2016	9.97E-01	2.87E-01	1.92E-01	2.48E-01	2.27E-02	6.81E-03
8/2/2016	1.54E-01	1.97E-01	2.76E-01	2.43E-01	1.90E-02	6.20E-03
9/6/2016	2.12E-01	2.16E-01	-1.08E-01	2.45E-01	4.89E-02	1.00E-02
10/4/2016	1.62E-01	2.04E-01	8.38E-01	2.87E-01	1.65E-02	5.91E-03
11/8/2016	6.32E-01	2.60E-01	1.54E-01	2.50E-01	1.78E-02	6.64E-03
12/6/2016	3.27E-02	2.00E-01	-2.60E-01	3.36E-01	2.57E-02	7.48E-03
1/4/2017	2.63E-01	2.03E-01	7.86E-02	2.65E-01	4.78E-02	1.04E-02

Sample Date	U-235		U-238		Pu-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.19E-03	2.25E-03	3.38E-02	1.05E-02	1.12E-02	4.66E-03
3/8/2016	1.98E-03	1.98E-03	4.97E-02	9.56E-03	6.05E-03	4.02E-03
4/6/2016	2.30E-03	2.33E-03	3.16E-02	8.15E-03	1.60E-02	5.46E-03
5/3/2016	5.38E-03	3.85E-03	9.41E-03	5.19E-03	3.19E-03	3.88E-03
6/7/2016	2.05E-03	2.08E-03	1.38E-02	5.41E-03	3.86E-02	8.63E-03
7/6/2016	0.00E+00	1.92E-03	1.75E-02	5.65E-03	1.19E-02	4.71E-03
8/2/2016	-1.38E-03	1.39E-03	1.62E-02	6.01E-03	1.06E-02	5.21E-03
9/6/2016	4.14E-03	2.92E-03	5.68E-02	1.05E-02	2.81E-02	7.95E-03
10/4/2016	-2.12E-06	1.25E-04	2.04E-02	6.32E-03	3.38E-03	2.39E-03
11/8/2016	-3.46E-06	2.08E-04	2.29E-02	7.09E-03	2.47E-03	2.90E-03
12/6/2016	8.14E-04	2.35E-03	2.57E-02	7.66E-03	3.08E-02	1.00E-02
1/4/2017	-2.03E-06	1.22E-04	5.08E-02	1.04E-02	1.34E-02	5.82E-03

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: G-010 (continued)

Sample Date	Pu-239		Am-241		Cm-244	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.73E-03	3.30E-03	1.12E-02	6.10E-03	1.73E-03	2.07E-03
3/8/2016	3.84E-03	3.07E-03	5.30E-03	3.15E-03	4.08E-03	3.27E-03
4/6/2016	1.01E-02	5.08E-03	1.34E-02	5.71E-03	1.10E-02	4.97E-03
5/3/2016	6.38E-04	2.32E-03	7.86E-03	3.96E-03	6.46E-04	2.34E-03
6/7/2016	3.51E-03	2.52E-03	1.28E-02	5.35E-03	5.19E-03	3.02E-03
7/6/2016	5.68E-04	2.06E-03	1.49E-02	5.61E-03	5.86E-04	2.12E-03
8/2/2016	1.99E-03	2.00E-03	7.70E-03	4.29E-03	0.00E+00	1.98E-03
9/6/2016	3.89E-03	2.77E-03	1.72E-02	5.60E-03	1.70E-03	1.72E-03
10/4/2016	5.62E-03	3.59E-03	1.18E-02	4.63E-03	0.00E+00	2.02E-03
11/8/2016	2.46E-03	4.45E-03	1.58E-02	5.44E-03	5.76E-04	2.08E-03
12/6/2016	1.03E-03	3.71E-03	7.76E-03	3.95E-03	5.76E-03	3.34E-03
1/4/2017	6.32E-03	3.69E-03	8.22E-03	4.18E-03	2.03E-03	2.04E-03

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.14E+00	8.18E-01	1.01E+01	9.09E-01	5.46E-01	3.42E-01
3/8/2016	1.90E+00	7.60E-01	1.25E+01	1.54E+00	7.22E-02	4.73E-01
4/6/2016	1.68E+00	9.74E-01	1.06E+01	9.56E-01	-1.92E-01	2.62E-01
5/3/2016	-2.34E-01	7.60E-01	9.73E+00	1.43E+00	-2.39E-01	2.58E-01
6/7/2016	2.25E+00	9.63E-01	1.22E+01	1.72E+00	7.70E-01	7.07E-01
7/6/2016	7.62E-01	7.59E-01	1.28E+01	1.49E+00	-3.76E-01	5.18E-01
8/2/2016	-5.00E-01	7.43E-01	1.39E+01	1.74E+00	6.73E-01	8.26E-01
9/6/2016	1.33E+00	7.80E-01	1.34E+01	1.72E+00	6.62E-01	8.13E-01
10/4/2016	6.35E-01	7.63E-01	8.92E+00	1.53E+00	-1.34E-01	3.16E-01
11/8/2016	2.76E-01	7.69E-01	1.11E+01	1.70E+00	7.78E-01	5.68E-01
12/6/2016	-2.07E-01	7.61E-01	1.49E+01	1.84E+00	4.54E-02	3.89E-01
1/4/2017	7.49E-01	8.48E-01	9.14E+00	1.67E+00	1.60E+00	7.91E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous
Location: HP-52 H-Area Tank Farm

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	7.16E+02	1.39E+02	-2.64E+00	2.07E+00	-1.48E+00	2.01E+00
3/8/2016	5.97E+02	1.50E+02	-8.11E-02	1.84E+00	1.47E+00	2.15E+00
4/6/2016	1.66E+03	2.05E+02	2.76E+00	1.87E+00	1.00E+00	2.20E+00
5/3/2016	1.74E+02	1.24E+02	6.05E-01	2.01E+00	1.09E+00	2.25E+00
6/7/2016	1.01E+03	1.50E+02	-2.97E+00	1.94E+00	-4.73E+00	2.23E+00
7/6/2016	5.00E+02	1.35E+02	2.46E+00	1.84E+00	4.97E+00	2.15E+00
8/2/2016	9.65E+02	1.58E+02	-1.57E+00	1.96E+00	3.43E+00	2.74E+00
9/6/2016	1.12E+03	1.80E+02	-1.20E+00	1.98E+00	-1.42E+00	2.26E+00
10/4/2016	2.63E+02	1.49E+02	2.81E+00	1.95E+00	1.78E+00	2.08E+00
11/8/2016	-1.19E+01	1.60E+02	2.84E+00	1.82E+00	-2.52E+00	2.23E+00
12/6/2016	5.65E+02	1.45E+02	8.97E-01	1.86E+00	-1.34E+00	2.22E+00
1/4/2017	7.89E+02	1.56E+02	2.22E+00	2.04E+00	-7.92E-01	2.15E+00

Sample Date	Sr-89/90		U-234		U-235	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.18E-01	1.22E-01	3.11E-02	9.00E-03	1.99E-03	2.05E-03
3/8/2016	-3.03E-01	1.71E-01	1.31E-02	4.86E-03	4.05E-03	2.87E-03
4/6/2016	3.32E-01	2.30E-01	4.92E-02	1.03E-02	1.63E-02	6.59E-03
5/3/2016	1.18E-02	1.75E-01	1.80E-02	6.25E-03	6.46E-03	3.80E-03
6/7/2016	-3.24E-02	2.11E-01	1.05E-02	4.49E-03	2.17E-03	2.05E-03
7/6/2016	1.03E-01	2.26E-01	1.39E-02	6.04E-03	4.46E-03	3.17E-03
8/2/2016	-4.19E-02	1.81E-01	8.05E-02	1.30E-02	4.00E-03	2.83E-03
9/6/2016	2.95E-01	2.22E-01	3.03E-02	7.65E-03	4.16E-03	2.96E-03
10/4/2016	2.20E-01	1.97E-01	2.23E-02	7.71E-03	2.06E-03	2.08E-03
11/8/2016	1.65E-01	2.11E-01	9.92E-03	5.39E-03	2.04E-03	2.07E-03
12/6/2016	2.66E-02	1.84E-01	3.24E-02	8.25E-03	4.68E-03	3.73E-03
1/4/2017	5.22E-01	2.31E-01	2.06E-02	6.84E-03	-1.70E-03	2.48E-03

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: HP-52 H-Area Tank Farm (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	4.68E-02	1.16E-02	1.69E-02	5.73E-03	1.12E-02	5.21E-03
3/8/2016	2.78E-02	7.10E-03	6.95E-03	3.51E-03	3.49E-03	4.02E-03
4/6/2016	4.78E-02	1.03E-02	1.13E-02	4.68E-03	2.50E-03	2.97E-03
5/3/2016	1.74E-02	5.74E-03	2.25E-03	2.76E-03	2.26E-03	2.68E-03
6/7/2016	1.75E-02	5.74E-03	3.84E-03	3.06E-03	5.46E-03	3.51E-03
7/6/2016	2.23E-02	6.80E-03	7.05E-03	4.10E-03	4.54E-03	1.85E-03
8/2/2016	1.07E-01	1.50E-02	3.32E-02	8.49E-03	4.22E-03	3.38E-03
9/6/2016	2.36E-02	6.64E-03	1.11E-03	2.85E-03	-1.11E-03	1.11E-03
10/4/2016	1.95E-02	6.46E-03	8.65E-03	3.91E-03	4.03E-03	3.23E-03
11/8/2016	1.15E-02	5.61E-03	1.12E-03	2.03E-03	3.95E-03	3.14E-03
12/6/2016	3.46E-02	8.33E-03	1.02E-02	4.21E-03	2.26E-03	2.65E-03
1/4/2017	3.08E-02	8.30E-03	5.86E-03	3.71E-03	4.68E-03	3.90E-03

Sample Date	Am-241		Cm-244	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	5.30E-03	4.59E-03	1.06E-02	4.63E-03
3/8/2016	3.78E-03	2.76E-03	3.76E-03	2.67E-03
4/6/2016	7.70E-04	2.96E-03	2.33E-03	2.80E-03
5/3/2016	1.15E-02	4.98E-03	-5.97E-04	2.08E-03
6/7/2016	1.90E-02	6.09E-03	9.70E-03	4.85E-03
7/6/2016	1.07E-02	4.15E-03	3.54E-03	1.99E-03
8/2/2016	1.45E-02	5.95E-03	0.00E+00	2.37E-03
9/6/2016	1.19E-02	4.62E-03	-1.13E-03	2.07E-03
10/4/2016	8.46E-03	3.92E-03	0.00E+00	1.98E-03
11/8/2016	6.81E-03	3.51E-03	3.35E-03	2.39E-03
12/6/2016	1.18E-02	4.59E-03	1.68E-03	1.68E-03
1/4/2017	9.24E-03	4.47E-03	-1.14E-03	1.14E-03

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: HP-52 H-Area Tank Farm (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.46E+00	2.53E-01	1.57E+00	2.13E-01
3/8/2016	3.62E+00	2.58E-01	1.67E+00	2.22E-01
4/6/2016	7.49E+00	3.53E-01	2.49E+00	2.70E-01
5/3/2016	3.76E+00	2.62E-01	2.33E+00	2.48E-01
6/7/2016	4.38E+00	3.05E-01	1.87E+00	2.41E-01
7/6/2016	3.22E+00	2.67E-01	1.60E+00	2.35E-01
8/2/2016	4.51E+00	3.23E-01	1.48E+00	2.18E-01
9/6/2016	3.38E+00	2.92E-01	7.70E-01	1.67E-01
10/4/2016	3.27E+00	2.68E-01	9.68E-01	1.78E-01
11/8/2016	3.70E+00	2.89E-01	1.99E+00	2.42E-01
12/6/2016	4.19E+00	3.01E-01	1.81E+00	2.30E-01
1/4/2017	4.76E+00	3.07E-01	3.03E+00	3.07E-01

Stream: Identified as Miscellaneous

Location: Mary's Branch

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	1.71E+04	4.03E+02	1.15E+00	1.95E+00	-3.27E+00	2.30E+00
3/8/2016	1.63E+04	4.03E+02	3.16E+00	1.88E+00	-4.03E+00	2.05E+00
4/6/2016	1.64E+04	4.10E+02	-1.45E-01	1.97E+00	-2.78E+00	2.25E+00
5/3/2016	1.65E+04	4.02E+02	5.32E+00	2.49E+00	1.00E+00	2.22E+00
6/7/2016	1.74E+04	4.23E+02	-9.78E-01	2.00E+00	2.40E-01	2.13E+00
7/6/2016	1.66E+04	4.10E+02	1.53E+00	2.11E+00	2.78E+00	2.14E+00
8/2/2016	1.65E+04	4.18E+02	-6.41E-02	2.02E+00	2.47E+00	2.05E+00
9/6/2016	1.53E+04	3.80E+02	-1.14E+00	1.76E+00	-1.09E+00	2.12E+00
10/4/2016	1.48E+04	3.95E+02	4.89E+00	2.24E+00	4.24E-01	2.17E+00
11/8/2016	1.37E+04	3.60E+02	-3.08E+00	2.01E+00	-4.38E+00	2.25E+00
12/6/2016	1.28E+04	3.54E+02	2.65E+00	1.96E+00	-3.27E+00	2.13E+00
1/4/2017	1.15E+04	3.40E+02	8.19E-01	1.90E+00	2.04E+00	1.97E+00

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: Mary's Branch (continued)

Sample Date	U-234		U-235		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	4.86E-02	1.53E-02	1.33E-03	4.83E-03	3.32E-02	1.26E-02
3/8/2016	6.81E-02	1.76E-02	1.45E-03	5.22E-03	5.27E-02	1.46E-02
4/6/2016	7.68E-02	1.84E-02	4.24E-03	4.26E-03	5.14E-02	1.42E-02
5/3/2016	5.70E-02	1.61E-02	8.11E-03	9.56E-03	4.38E-02	1.35E-02
6/7/2016	2.97E-02	1.02E-02	5.46E-03	6.41E-03	3.76E-02	1.20E-02
7/6/2016	3.24E-02	1.19E-02	0.00E+00	4.37E-03	3.59E-02	1.20E-02
8/2/2016	2.89E-01	3.72E-02	2.59E-02	1.14E-02	3.03E-01	3.86E-02
9/6/2016	4.16E-02	1.36E-02	5.68E-03	6.95E-03	4.16E-02	1.30E-02
10/4/2016	3.70E-02	1.47E-02	2.36E-02	1.13E-02	3.05E-02	1.24E-02
11/8/2016	2.00E-02	9.97E-03	4.14E-03	4.15E-03	3.00E-02	1.08E-02
12/6/2016	2.97E-02	1.04E-02	-2.73E-03	4.15E-03	2.29E-02	1.01E-02
1/4/2017	3.08E-02	1.21E-02	2.12E-02	9.71E-03	2.73E-02	1.11E-02

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	9.08E-01	1.73E-01	2.52E+00	2.52E-01
3/8/2016	9.54E-01	1.74E-01	2.45E+00	2.49E-01
4/6/2016	1.73E+00	2.15E-01	4.35E+00	3.21E-01
5/3/2016	2.92E-01	1.79E-01	2.76E+00	2.59E-01
6/7/2016	1.28E-01	1.75E-01	2.06E+00	2.45E-01
7/6/2016	1.58E+00	2.47E-01	5.35E+00	3.86E-01
8/2/2016	1.52E+00	2.15E-01	3.68E+00	3.29E-01
9/6/2016	1.09E+00	2.26E-01	3.16E+00	2.99E-01
10/4/2016	5.92E-01	2.18E-01	1.66E+00	2.25E-01
11/8/2016	8.97E-01	1.96E-01	2.05E+00	2.38E-01
12/6/2016	8.59E-01	1.85E-01	2.06E+00	2.44E-01
1/4/2017	2.84E+00	2.54E-01	4.49E+00	3.59E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous
Location: McQueens Branch

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/8/2016	1.53E+03	1.76E+02	5.65E-02	1.80E+00	2.95E+00	2.07E+00
3/14/2016	1.79E+03	2.02E+02	2.55E+00	2.02E+00	-2.03E+00	2.13E+00
4/11/2016	1.78E+03	2.01E+02	6.00E-01	2.09E+00	-2.05E+00	2.26E+00
5/9/2016	1.59E+03	1.76E+02	2.11E-01	2.02E+00	-2.89E+00	2.10E+00
6/13/2016	1.84E+03	2.03E+02	2.78E+00	1.77E+00	1.30E+00	2.22E+00
7/11/2016	2.32E+03	2.13E+02	-4.46E-02	2.01E+00	2.32E+00	2.10E+00
8/8/2016	2.18E+03	2.08E+02	5.51E-01	2.16E+00	4.57E+00	1.96E+00
9/12/2016	1.46E+03	1.95E+02	-1.74E+00	2.10E+00	4.92E+00	2.23E+00
10/10/2016	1.26E+03	1.76E+02	-2.67E+00	1.98E+00	-7.95E-01	2.30E+00
11/14/2016	1.31E+03	1.66E+02	-1.04E+00	2.18E+00	1.63E+00	2.18E+00
12/12/2016	1.16E+03	1.58E+02	4.19E-01	2.19E+00	-2.51E+00	2.07E+00
1/9/2016	1.51E+03	1.80E+02	3.03E+00	2.18E+00	1.52E+00	2.20E+00

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/8/2016	6.86E-01	3.05E-01	5.32E-01	2.30E-01
3/14/2016	7.59E-01	1.62E-01	6.57E-01	1.37E-01
4/11/2016	8.19E-01	3.01E-01	2.55E-01	1.75E-01
5/9/2016	6.14E-01	2.69E-01	5.51E-01	2.28E-01
6/13/2016	1.07E+00	3.20E-01	6.62E-01	2.51E-01
7/11/2016	1.02E+00	3.29E-01	1.10E-01	1.33E-01
8/8/2016	2.44E+00	4.26E-01	1.95E+00	4.24E-01
9/12/2016	5.97E-01	2.03E-01	6.54E-01	1.52E-01
10/10/2016	1.15E+00	3.47E-01	3.32E-01	1.98E-01
11/14/2016	8.54E-01	3.02E-01	3.65E-01	1.86E-01
12/12/2016	6.62E-01	2.74E-01	5.68E-01	2.32E-01
1/9/2016	1.05E+00	3.36E-01	4.35E-01	2.09E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous
Location: TNX-008

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.00E+02	1.26E+02	1.17E+00	2.02E+00	1.04E+00	2.26E+00
3/8/2016	3.65E+02	1.43E+02	6.62E-01	2.00E+00	-4.30E-01	2.18E+00
4/6/2016	5.84E+02	1.76E+02	-4.54E-01	2.12E+00	-1.07E+00	2.15E+00
5/3/2016	2.31E+02	1.24E+02	-3.97E-01	2.01E+00	-1.68E+00	2.11E+00
6/7/2016	4.41E+02	1.49E+02	-1.08E+00	1.84E+00	2.52E+00	2.27E+00
7/6/2016	3.24E+02	1.35E+02	-1.83E+00	1.92E+00	1.79E+00	1.81E+00
8/2/2016	1.59E+02	1.38E+02	-1.63E+00	2.16E+00	-1.65E+00	2.19E+00
9/6/2016	4.24E+02	1.68E+02	-1.26E+00	1.97E+00	1.44E-01	2.01E+00
10/4/2016	2.54E+02	1.41E+02	3.54E-01	2.19E+00	-9.95E-01	2.14E+00
8/8/2016	-1.15E+02	1.56E+02	2.54E+00	1.98E+00	1.24E+00	2.01E+00
12/6/2016	2.66E+02	1.30E+02	4.00E-02	1.91E+00	1.21E+00	2.24E+00
1/4/2016	1.66E+02	1.45E+02	1.82E+00	1.84E+00	1.92E+00	1.93E+00

Sample Date	U-234		U-235		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	5.41E-02	1.34E-02	2.97E-03	3.50E-03	6.68E-02	1.38E-02
3/8/2016	5.43E-02	1.23E-02	1.08E-02	4.90E-03	6.49E-02	1.22E-02
4/6/2016	7.62E-02	1.40E-02	4.24E-03	3.03E-03	6.30E-02	1.21E-02
5/3/2016	5.08E-02	1.20E-02	1.48E-02	5.99E-03	5.00E-02	1.09E-02
6/7/2016	4.89E-02	1.00E-02	4.27E-03	3.02E-03	7.49E-02	1.26E-02
7/6/2016	1.15E+00	8.76E-02	6.22E-02	1.28E-02	1.25E+00	8.92E-02
8/2/2016	1.43E-01	1.86E-02	1.27E-02	5.64E-03	1.56E-01	2.03E-02
9/6/2016	5.32E-02	1.20E-02	4.08E-03	3.34E-03	5.54E-02	1.13E-02
10/4/2016	1.80E-02	8.10E-03	2.51E-03	3.92E-03	1.54E-02	6.93E-03
8/8/2016	3.16E-02	9.82E-03	4.35E-03	3.09E-03	4.76E-02	1.05E-02
12/6/2016	2.76E-02	8.03E-03	-1.34E-03	1.35E-03	4.22E-02	1.04E-02
1/4/2016	6.35E-02	1.37E-02	-9.97E-06	5.95E-04	6.03E-02	1.28E-02

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)
Location: TNX-008 (continued)

Sample Date	Pu-238		Pu-239	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	2.59E-02	7.15E-03	2.46E-03	2.99E-03
3/8/2016	3.46E-03	2.46E-03	-2.89E-03	2.95E-03
4/6/2016	1.19E-02	4.56E-03	5.08E-03	2.99E-03
5/3/2016	3.95E-03	3.54E-03	0.00E+00	1.95E-03
6/7/2016	1.63E-02	6.15E-03	1.95E-03	1.96E-03
7/6/2016	1.87E-03	1.88E-03	-4.97E-03	2.52E-03
8/2/2016	7.08E-03	3.54E-03	1.18E-03	3.01E-03
9/6/2016	8.51E-03	3.96E-03	-7.84E-06	5.18E-04
10/4/2016	-2.26E-03	1.60E-03	-2.26E-03	1.70E-03
8/8/2016	5.14E-03	1.93E-03	5.14E-04	1.88E-03
12/6/2016	1.68E-03	1.70E-03	0.00E+00	1.89E-03
1/4/2017	-5.51E-04	2.43E-03	-1.07E-03	1.15E-03

Sample Date	Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)
2/22/2016	6.24E-01	7.62E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2016	3.73E+00	2.62E-01	5.19E-01	1.50E-01
3/8/2016	4.14E+00	2.74E-01	9.95E-01	2.00E-01
4/6/2016	5.95E+00	2.30E-01	2.35E+00	2.07E-01
5/3/2016	3.68E+00	2.65E-01	1.04E+00	2.02E-01
6/7/2016	4.24E+00	2.96E-01	3.78E-01	1.38E-01
7/6/2016	1.15E+01	4.74E-01	1.22E+01	7.73E-01
8/2/2016	5.08E+00	3.22E-01	1.30E+00	2.50E-01
9/6/2016	5.86E+00	3.61E-01	1.83E+00	2.77E-01
10/4/2016	4.27E+00	3.23E-01	8.68E-01	2.20E-01
8/8/2016	5.08E+00	3.28E-01	6.95E-01	1.73E-01
12/6/2016	6.30E+00	3.50E-01	5.95E-01	1.62E-01
1/4/2017	5.86E+00	3.34E-01	1.14E+00	2.09E-01

Table 24 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous
Location: U3R-0

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
8/2/2016	2.04E+02	1.36E+02	1.22E+00	1.98E+00	1.93E+00	2.36E+00
9/6/2016	3.03E+02	1.67E+02	6.11E-01	1.98E+00	4.22E-01	2.06E+00
10/4/2016	2.92E+01	1.34E+02	2.44E+00	2.29E+00	-2.60E-02	2.21E+00
8/8/2016	2.39E+02	1.65E+02	-1.83E+00	1.70E+00	-3.00E+00	1.86E+00
12/6/2016	1.62E+02	1.28E+02	4.24E+00	2.05E+00	2.55E-01	2.10E+00
1/4/2017	3.22E+02	1.36E+02	2.15E+00	1.95E+00	7.68E-01	2.04E+00

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
8/2/2016	1.56E+00	2.40E-01	2.29E+00	2.56E-01
9/6/2016	1.91E+00	2.53E-01	2.89E+00	2.86E-01
10/4/2016	8.22E-01	2.36E-01	2.40E+00	2.65E-01
8/8/2016	1.03E+00	2.01E-01	1.88E+00	2.27E-01
12/6/2016	1.75E+00	2.22E-01	3.14E+00	2.99E-01
1/4/2017	5.76E+00	3.40E-01	8.62E+00	4.95E-01

Table 25 Radionuclides in Savannah River Water

Location: River Mile 118.8

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/5/2016	8.41E+01	6.34E+01	-1.55E-01	2.16E-01	2.86E-02	2.11E-01
1/12/2016	2.92E+02	4.59E+01	-1.11E-02	4.55E-01	3.24E-01	4.54E-01
1/19/2016	2.34E+02	4.77E+01	1.48E-01	3.42E-01	1.69E-01	4.22E-01
1/26/2016	1.21E+02	4.92E+01	-2.03E-01	3.66E-01	-2.97E-02	3.96E-01
2/2/2016	1.65E+02	5.00E+01	-2.05E-01	3.88E-01	-2.18E-01	4.30E-01
2/9/2016	1.10E+02	4.48E+01	4.84E-01	4.13E-01	-7.30E-01	4.22E-01
2/16/2016	1.49E+02	4.54E+01	4.68E-01	3.13E-01	-3.57E-01	3.64E-01
2/23/2016	2.03E+02	4.73E+01	-1.76E-01	3.13E-01	-1.83E-01	3.81E-01
3/1/2016	3.86E+02	4.84E+01	4.73E-01	3.67E-01	-1.04E+00	3.51E-01
3/8/2016	5.49E+02	5.02E+01	-2.76E-01	2.89E-01	-3.41E-02	3.16E-01
3/15/2016	3.59E+02	4.81E+01	7.05E-02	3.71E-01	9.62E-02	3.63E-01
3/21/2016	2.48E+02	4.83E+01	-3.97E-03	4.34E-01	-6.32E-01	4.32E-01
3/29/2016	6.84E+02	5.18E+01	2.45E-01	2.35E-01	-8.76E-02	2.33E-01
4/4/2016	7.49E+02	5.21E+01	1.59E-01	3.02E-01	-5.27E-02	3.44E-01
4/12/2016	1.64E+02	4.61E+01	-5.65E-02	2.64E-01	4.43E-01	2.89E-01
4/19/2016	1.91E+02	4.72E+01	1.76E-01	2.54E-01	1.05E-01	2.74E-01
4/26/2016	1.57E+02	4.68E+01	2.04E-01	3.12E-01	1.92E-01	4.14E-01
5/3/2016	3.59E+02	4.90E+01	-1.19E-01	2.94E-01	5.35E-01	3.38E-01
5/10/2016	2.44E+02	4.68E+01	4.30E-01	4.89E-01	6.57E-01	4.95E-01
5/16/2016	1.31E+02	4.74E+01	3.08E-01	4.80E-01	-1.69E-02	4.67E-01
5/24/2016	1.53E+02	4.52E+01	1.19E-01	3.03E-01	-4.08E-01	3.32E-01
5/31/2016	3.54E+02	4.88E+01	3.16E-01	3.12E-01	-1.19E-01	3.65E-01
6/7/2016	1.69E+02	4.30E+01	4.89E-01	3.97E-01	5.14E-01	4.55E-01
6/14/2016	1.74E+02	4.77E+01	1.96E-01	3.69E-01	-4.73E-01	4.13E-01
6/21/2016	3.73E+02	4.95E+01	-2.28E-02	4.74E-01	2.51E-01	4.77E-01
6/28/2016	1.84E+02	4.74E+01	5.00E-01	4.78E-01	9.00E-01	5.66E-01
7/5/2016	1.80E+02	4.63E+01	2.81E-01	4.35E-01	1.45E+00	5.36E-01
7/12/2016	1.46E+02	4.90E+01	-5.59E-01	5.23E-01	-5.43E-01	5.81E-01
7/19/2016	3.65E+02	4.74E+01	7.81E-01	4.89E-01	-5.81E-01	5.93E-01
7/26/2016	1.77E+02	4.72E+01	-1.75E-01	6.60E-01	-2.25E-01	7.41E-01
8/2/2016	6.19E+02	5.05E+01	7.43E-02	6.23E-01	1.36E+00	8.18E-01
8/9/2016	6.57E+02	5.09E+01	4.27E-01	5.99E-01	5.22E-02	7.16E-01
8/16/2016	3.03E+02	4.75E+01	-1.50E-01	5.32E-01	6.16E-01	5.17E-01
8/23/2016	4.81E+02	5.03E+01	1.68E-01	5.07E-01	4.14E-01	6.06E-01
8/30/2016	6.16E+02	5.07E+01	9.54E-02	3.51E-01	-1.23E-01	4.04E-01
9/6/2016	2.01E+02	4.86E+01	-3.27E-01	3.46E-01	1.09E-02	3.75E-01
9/13/2016	2.50E+02	4.80E+01	-1.25E-01	4.89E-01	-1.98E-01	4.67E-01
9/20/2016	4.08E+02	5.10E+01	3.19E-01	4.95E-01	4.30E-01	5.21E-01
9/27/2016	7.00E+02	5.14E+01	4.19E-01	5.17E-01	-6.46E-02	4.64E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 118.8 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/4/2016	1.46E+02	4.57E+01	1.04E-01	4.52E-01	1.28E+00	5.58E-01
10/11/2016	4.08E+02	5.03E+01	4.86E-01	3.34E-01	1.70E-01	3.62E-01
10/18/2016	2.54E+02	4.66E+01	-1.42E-01	3.15E-01	3.89E-01	3.35E-01
10/25/2016	1.81E+02	4.71E+01	-2.04E-02	2.31E-01	-7.38E-01	2.33E-01
11/1/2016	2.02E+02	4.66E+01	8.14E-01	2.44E-01	-1.45E-01	2.74E-01
11/8/2016	3.16E+02	4.83E+01	1.88E-01	2.62E-01	-3.05E-01	2.18E-01
11/15/2016	5.54E+02	5.01E+01	1.47E-01	2.40E-01	-2.09E-01	2.39E-01
11/21/2016	4.68E+02	4.83E+01	-3.86E-03	1.88E-01	4.49E-01	2.29E-01
11/29/2016	1.39E+02	4.41E+01	3.92E-02	3.36E-01	-4.49E-01	3.63E-01
12/6/2016	1.41E+02	4.53E+01	-1.18E-01	5.36E-01	7.08E-01	6.42E-01
12/13/2016	2.34E+02	4.63E+01	-3.24E-01	2.15E-01	9.24E-02	2.90E-01
12/19/2016	7.24E+02	5.26E+01	5.46E-03	4.15E-01	1.78E-01	4.50E-01
12/27/2016	3.00E+02	4.88E+01	3.32E-01	2.52E-01	-3.73E-01	2.33E-01
1/3/2017	2.76E+02	4.86E+01	6.05E-02	2.31E-01	-1.28E-02	2.46E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
3/1/2016	Sr-89/90	-1.75E-01	1.51E-01
	U-234	4.05E-02	8.96E-03
	U-235	2.78E-03	3.28E-03
	U-238	3.16E-02	8.11E-03
	Pu-238	3.78E-03	3.05E-03
	Pu-239	1.61E-03	1.74E-03
	Am-241	1.01E-02	4.26E-03
	Cm-244	-2.35E-06	1.38E-04
Tc-99	6.92E-02	7.83E-01	

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/5/2016	1.69E+00	1.98E-01	1.48E-01	8.05E-02
1/12/2016	1.79E+00	1.55E-01	1.32E-01	6.07E-02
1/19/2016	1.81E+00	1.55E-01	1.94E-01	6.59E-02
1/26/2016	2.01E+00	2.08E-01	2.97E-01	1.03E-01
2/2/2016	1.95E+00	2.06E-01	3.76E-01	1.12E-01
2/9/2016	2.45E+00	2.23E-01	3.73E-01	1.17E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 118.8 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/16/2016	2.05E+00	2.11E-01	3.54E-01	1.17E-01
2/23/2016	2.32E+00	2.20E-01	5.62E-01	1.41E-01
3/1/2016	2.13E+00	2.13E-01	3.76E-01	1.18E-01
3/8/2016	2.05E+00	2.10E-01	9.27E-02	7.61E-02
3/15/2016	1.50E+00	1.91E-01	2.89E-01	1.06E-01
3/21/2016	2.11E+00	2.11E-01	3.35E-01	1.07E-01
3/29/2016	1.54E+00	2.02E-01	2.32E-01	1.03E-01
4/4/2016	2.25E+00	2.19E-01	4.59E-01	1.32E-01
4/12/2016	2.17E+00	1.59E-01	4.57E-01	8.80E-02
4/19/2016	1.60E+00	2.04E-01	9.51E-02	8.23E-02
4/26/2016	1.81E+00	2.01E-01	1.98E-01	8.76E-02
5/3/2016	1.49E+00	1.89E-01	6.68E-02	8.02E-02
5/10/2016	2.03E+00	3.77E-01	4.59E-01	2.34E-01
5/16/2016	2.09E+00	3.79E-01	1.39E-01	1.41E-01
5/24/2016	1.66E+00	2.10E-01	3.03E-01	1.10E-01
5/31/2016	1.84E+00	2.26E-01	2.16E-01	1.05E-01
6/7/2016	1.89E+00	2.28E-01	1.22E-04	6.91E-02
6/14/2016	2.21E+00	2.32E-01	1.92E-01	1.06E-01
6/21/2016	1.71E+00	2.04E-01	1.13E-01	8.04E-02
6/28/2016	2.02E+00	2.28E-01	1.90E-01	1.21E-01
7/5/2016	1.85E+00	2.59E-01	4.11E-01	1.36E-01
7/12/2016	1.98E+00	2.26E-01	2.86E-01	1.31E-01
7/19/2016	1.48E+00	2.36E-01	9.16E-02	9.78E-02
7/26/2016	1.69E+00	2.44E-01	3.54E-01	1.37E-01
8/2/2016	1.38E+00	2.34E-01	2.92E-01	1.30E-01
8/9/2016	1.97E+00	2.53E-01	1.91E-01	1.16E-01
8/16/2016	1.86E+00	2.22E-01	2.22E-01	1.24E-01
8/23/2016	2.06E+00	2.29E-01	8.57E-02	1.05E-01
8/30/2016	1.82E+00	4.00E-01	4.27E-01	2.35E-01
9/6/2016	1.55E+00	2.10E-01	1.45E-01	1.08E-01
9/13/2016	1.81E+00	2.20E-01	2.22E-01	1.24E-01
9/20/2016	2.07E+00	2.56E-01	2.27E-01	1.22E-01
9/27/2016	1.95E+00	2.53E-01	4.57E-01	1.50E-01
10/4/2016	2.18E+00	2.56E-01	1.96E-01	1.21E-01
10/11/2016	2.05E+00	2.53E-01	2.97E-01	1.33E-01
10/18/2016	1.82E+00	2.22E-01	2.35E-01	1.06E-01
10/25/2016	1.67E+00	2.38E-01	2.33E-02	9.13E-02
11/1/2016	1.56E+00	2.35E-01	1.58E-01	1.13E-01
11/8/2016	1.90E+00	2.48E-01	1.98E-01	1.22E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 118.8 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
11/15/2016	2.02E+00	2.29E-01	3.11E-01	1.19E-01
11/21/2016	1.82E+00	2.45E-01	1.96E-01	1.21E-01
11/29/2016	1.56E+00	2.36E-01	1.62E-01	1.16E-01
12/6/2016	2.65E+00	2.57E-01	3.35E-01	1.16E-01
12/13/2016	3.00E+00	1.94E-01	1.91E-01	7.05E-02
12/19/2016	2.11E+00	2.44E-01	1.50E-01	9.74E-02
12/27/2016	1.13E+00	2.09E-01	2.07E-01	1.02E-01
1/3/2017	1.61E+00	2.25E-01	1.48E-02	6.90E-02

Location: River Mile 118.8BR

Sample Date	H-3 (tritium)	
	Result (pCi/L)	Standard Dev. (pCi/L)
1/5/2016	8.92E+01	6.36E+01
2/9/2016	1.49E+02	5.58E+01
2/16/2016	1.56E+02	5.50E+01
2/23/2016	1.80E+02	5.92E+01
3/1/2016	3.16E+02	5.83E+01
3/8/2016	5.43E+02	6.04E+01
3/15/2016	4.16E+02	6.06E+01
3/21/2016	2.70E+02	6.03E+01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 141.5

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/7/2016	3.11E+02	1.55E+02	-5.05E-02	1.96E-01	-2.56E-01	1.83E-01
2/9/2016	1.35E+02	5.60E+01	2.84E-01	3.55E-01	-1.71E-01	3.48E-01
2/16/2016	2.62E+02	5.58E+01	-1.68E-02	2.51E-01	-3.68E-01	2.57E-01
2/23/2016	3.49E+02	6.09E+01	-1.52E-01	2.69E-01	-1.09E-01	3.15E-01
3/1/2016	3.35E+02	5.88E+01	-1.69E-01	3.22E-01	2.68E-01	3.13E-01
3/8/2016	6.35E+02	6.07E+01	1.11E-01	3.35E-01	-4.16E-01	3.53E-01
3/15/2016	4.03E+02	6.04E+01	-4.14E-01	3.61E-01	1.59E-01	3.82E-01
3/21/2016	3.73E+02	6.03E+01	-2.73E-01	2.59E-01	-1.05E-01	2.77E-01
3/29/2016	3.86E+02	5.99E+01	-1.38E-01	2.14E-01	1.04E-01	2.31E-01
4/4/2016	9.16E+02	6.29E+01	3.00E-01	2.48E-01	-3.41E-02	2.57E-01
4/12/2016	1.45E+02	5.94E+01	4.41E-02	2.36E-01	5.30E-01	3.01E-01
4/19/2016	4.00E+02	5.87E+01	-1.37E-01	1.83E-01	5.70E-01	2.48E-01
4/26/2016	1.46E+02	5.82E+01	-1.82E-01	2.76E-01	3.08E-02	2.82E-01
5/3/2016	3.49E+02	5.96E+01	4.49E-01	3.23E-01	-9.11E-01	3.52E-01
5/10/2016	2.41E+02	5.62E+01	2.81E-02	2.58E-01	-3.73E-02	2.67E-01
5/16/2016	1.72E+02	5.75E+01	1.69E-01	2.12E-01	6.81E-01	2.48E-01
5/24/2016	1.54E+02	5.76E+01	1.09E-02	1.73E-01	4.78E-02	2.04E-01
5/31/2016	5.03E+02	6.10E+01	-2.76E-01	2.51E-01	3.22E-01	2.76E-01
6/7/2016	2.70E+02	5.85E+01	3.11E-01	2.83E-01	-5.38E-01	3.28E-01
6/14/2016	3.70E+02	5.90E+01	5.38E-01	2.72E-01	-1.24E-01	2.72E-01
6/21/2016	5.19E+02	5.98E+01	-1.16E-01	1.86E-01	1.17E-01	2.22E-01
6/28/2016	1.28E+02	5.78E+01	6.57E-02	2.40E-01	-2.22E-01	2.72E-01
7/5/2016	9.43E+01	5.72E+01	-2.36E-01	2.85E-01	1.25E-01	3.11E-01
7/12/2016	1.99E+02	6.04E+01	-1.07E-01	1.95E-01	4.89E-01	1.85E-01
7/19/2016	5.00E+02	5.90E+01	1.91E-02	3.38E-01	-1.93E-02	3.46E-01
7/26/2016	1.32E+02	5.96E+01	4.00E-01	3.43E-01	7.43E-02	3.84E-01
8/2/2016	6.05E+02	6.23E+01	4.35E-01	3.98E-01	-2.25E-02	4.26E-01
8/9/2016	7.03E+02	6.10E+01	-2.55E-02	2.17E-01	-7.51E-02	2.37E-01
8/16/2016	3.16E+02	5.87E+01	3.27E-01	2.27E-01	1.26E-01	2.69E-01
8/23/2016	4.59E+02	6.38E+01	6.95E-01	2.82E-01	2.50E-01	2.91E-01
8/30/2016	5.65E+02	6.15E+01	1.74E-01	2.04E-01	-4.84E-02	2.21E-01
9/6/2016	1.68E+02	5.86E+01	-1.82E-01	2.31E-01	-3.54E-01	2.53E-01
9/13/2016	1.00E+02	6.12E+01	-2.92E-01	2.41E-01	-2.89E-01	2.78E-01
9/20/2016	3.81E+02	6.19E+01	-3.27E-01	2.56E-01	-3.68E-01	2.60E-01
9/27/2016	6.22E+02	6.19E+01	-4.43E-01	2.65E-01	3.73E-01	2.52E-01
10/4/2016	1.97E+02	5.73E+01	-1.49E-01	2.40E-01	-2.11E-03	2.64E-01
10/11/2016	4.08E+02	6.25E+01	-1.68E-01	2.04E-01	-9.89E-02	2.13E-01
10/18/2016	3.97E+02	5.88E+01	1.12E-01	2.46E-01	-2.86E-01	2.78E-01
10/25/2016	2.30E+02	6.03E+01	-1.54E-01	1.87E-01	-2.51E-01	2.04E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 141.5 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
11/1/2016	2.47E+02	5.95E+01	-1.75E-01	2.19E-01	-2.65E-01	2.42E-01
11/8/2016	2.66E+02	6.00E+01	1.48E-01	2.25E-01	1.83E-01	2.31E-01
11/15/2016	6.00E+02	6.22E+01	5.49E-01	2.49E-01	-7.81E-02	2.91E-01
11/21/2016	4.92E+02	6.00E+01	2.13E-01	1.92E-01	4.78E-01	2.97E-01
11/29/2016	3.65E+02	5.95E+01	2.47E-01	5.87E-01	5.43E-01	5.90E-01
12/6/2016	3.16E+02	5.99E+01	1.71E-02	3.74E-01	7.65E-01	3.98E-01
12/13/2016	2.70E+02	6.00E+01	6.35E-02	2.35E-01	-4.16E-01	2.50E-01
12/19/2016	8.22E+02	6.32E+01	2.03E-01	2.45E-01	-4.46E-01	3.03E-01
12/27/2016	4.46E+02	6.19E+01	7.00E-02	2.32E-01	-1.21E-01	2.45E-01
1/3/2017	2.89E+02	6.11E+01	3.65E-01	2.04E-01	-1.82E-02	2.36E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
3/1/2016	Sr-89/90	1.35E-01	1.67E-01
	U-234	2.78E-02	7.57E-03
	U-235	2.81E-03	3.30E-03
	U-238	3.11E-02	7.89E-03
	Pu-238	-3.59E-06	2.37E-04
	Pu-239	-5.54E-04	2.30E-03
	Am-241	1.67E-03	1.81E-03
	Cm-244	1.66E-03	1.68E-03
Tc-99	3.59E-01	7.84E-01	

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/7/2016	1.86E+00	2.04E-01	2.51E-01	9.52E-02
2/9/2016	2.08E+00	2.11E-01	4.73E-01	1.26E-01
2/16/2016	2.20E+00	2.14E-01	1.43E-01	8.23E-02
2/23/2016	1.74E+00	2.00E-01	4.05E-01	1.21E-01
3/1/2016	2.18E+00	2.14E-01	2.33E-01	9.89E-02
3/8/2016	1.85E+00	2.03E-01	1.73E-01	8.80E-02
3/15/2016	1.67E+00	1.97E-01	2.01E-01	9.24E-02
3/21/2016	3.14E+00	2.42E-01	2.49E-01	9.44E-02
3/29/2016	2.24E+00	2.24E-01	2.51E-01	1.03E-01
4/4/2016	2.58E+00	2.36E-01	7.70E-01	1.58E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 141.5 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
4/12/2016	2.04E+00	2.18E-01	3.05E-01	1.11E-01
4/19/2016	1.99E+00	2.16E-01	1.19E-01	8.48E-02
4/26/2016	1.73E+00	1.98E-01	2.26E-01	9.21E-02
5/3/2016	2.16E+00	2.14E-01	2.63E-01	1.09E-01
5/10/2016	1.33E+00	3.27E-01	4.11E-02	1.03E-01
5/16/2016	1.76E+00	3.55E-01	-5.70E-02	1.62E-02
5/24/2016	1.95E+00	2.20E-01	2.95E-01	1.07E-01
5/31/2016	1.95E+00	1.59E-01	9.00E-02	6.64E-02
6/7/2016	1.64E+00	2.20E-01	9.73E-02	8.92E-02
6/14/2016	1.48E+00	2.14E-01	1.64E-01	1.01E-01
6/21/2016	1.81E+00	2.07E-01	1.38E-01	8.21E-02
6/28/2016	1.97E+00	2.25E-01	1.81E-01	1.15E-01
7/5/2016	1.88E+00	2.22E-01	1.17E-01	1.07E-01
7/12/2016	1.80E+00	2.47E-01	3.35E-01	1.30E-01
7/19/2016	2.25E+00	2.61E-01	4.57E-01	1.43E-01
7/26/2016	1.78E+00	2.46E-01	4.32E-01	1.42E-01
8/2/2016	1.92E+00	2.24E-01	2.86E-01	1.31E-01
8/9/2016	1.79E+00	2.46E-01	6.19E-02	9.52E-02
8/16/2016	1.58E+00	2.11E-01	8.30E-02	1.01E-01
8/23/2016	1.82E+00	2.20E-01	8.19E-02	1.01E-01
8/30/2016	2.26E+00	4.20E-01	1.12E-01	1.46E-01
9/6/2016	2.54E+00	2.45E-01	3.54E-01	1.40E-01
9/13/2016	1.50E+00	2.08E-01	2.48E-01	1.24E-01
9/20/2016	1.74E+00	2.45E-01	2.81E-01	1.26E-01
9/27/2016	1.88E+00	2.49E-01	1.55E-01	1.08E-01
10/4/2016	2.29E+00	2.59E-01	1.49E-01	1.07E-01
10/11/2016	1.75E+00	2.42E-01	2.21E-01	1.20E-01
10/18/2016	2.25E+00	2.59E-01	2.58E-01	1.27E-01
10/25/2016	2.30E+00	2.58E-01	2.16E-02	8.92E-02
11/1/2016	2.12E+00	2.39E-01	1.34E-01	8.10E-02
11/8/2016	2.06E+00	2.52E-01	1.94E-01	1.20E-01
11/15/2016	2.31E+00	2.47E-01	3.73E-01	1.22E-01
11/21/2016	1.54E+00	2.35E-01	1.93E-01	1.18E-01
11/29/2016	2.09E+00	2.39E-01	2.39E-01	1.02E-01
12/6/2016	2.30E+00	2.37E-01	1.86E-01	9.36E-02
12/13/2016	2.04E+00	1.73E-01	3.65E-01	8.88E-02
12/19/2016	1.56E+00	2.23E-01	7.81E-02	7.96E-02
12/27/2016	1.99E+00	2.40E-01	1.84E-01	1.03E-01
1/3/2017	2.27E+00	2.41E-01	-5.76E-02	3.82E-02

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 150.0

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/7/2016	3.41E+02	1.52E+02	-6.78E-02	1.87E-01	-9.38E-02	1.80E-01
2/9/2016	8.57E+01	5.56E+01	1.97E-01	2.11E-01	-2.18E-01	2.50E-01
2/16/2016	1.72E+02	5.55E+01	-2.55E-01	2.49E-01	-1.10E-01	2.41E-01
2/23/2016	1.44E+02	5.88E+01	-2.21E-01	2.47E-01	-1.13E-01	2.76E-01
3/1/2016	1.74E+02	5.74E+01	2.23E-01	2.36E-01	-2.32E-01	2.47E-01
3/8/2016	2.39E+02	5.76E+01	-2.76E-01	3.74E-01	-1.15E-01	3.52E-01
3/15/2016	2.04E+02	5.93E+01	-1.08E-02	2.55E-01	6.81E-02	2.77E-01
3/21/2016	7.05E+01	5.83E+01	1.38E-01	2.40E-01	-2.46E-01	2.59E-01
3/29/2016	2.73E+02	5.89E+01	1.16E-01	2.36E-01	-2.51E-01	2.05E-01
4/4/2016	3.11E+02	5.77E+01	-1.43E-02	1.97E-01	-4.38E-02	2.07E-01
4/12/2016	-2.78E+01	5.85E+01	-3.65E-02	2.18E-01	-3.46E-02	2.36E-01
4/19/2016	3.11E+02	5.77E+01	-4.19E-02	2.13E-01	-1.90E-01	2.24E-01
4/26/2016	1.21E+02	5.84E+01	-1.08E-01	2.20E-01	-3.81E-01	2.45E-01
5/3/2016	2.40E+02	5.73E+01	2.86E-01	2.42E-01	7.43E-01	2.96E-01
5/10/2016	2.49E+02	5.78E+01	1.74E-01	2.63E-01	2.60E-01	2.81E-01
5/16/2016	1.36E+02	6.10E+01	4.27E-03	3.23E-01	3.68E-01	3.61E-01
5/24/2016	1.95E+02	5.75E+01	-4.03E-02	1.94E-01	-4.70E-02	2.23E-01
5/31/2016	2.48E+02	5.85E+01	-1.31E-01	2.26E-01	2.70E-01	2.63E-01
6/7/2016	3.27E+02	5.90E+01	5.51E-01	2.67E-01	2.58E-01	3.11E-01
6/14/2016	2.78E+02	6.17E+01	3.86E-01	3.00E-01	-1.79E-01	2.56E-01
6/21/2016	2.40E+02	5.69E+01	-4.30E-03	2.53E-01	-1.98E-01	2.50E-01
6/28/2016	2.01E+02	5.77E+01	3.16E-01	2.86E-01	-1.31E-01	3.22E-01
7/5/2016	2.30E+02	5.88E+01	-1.44E-01	1.94E-01	1.30E-01	2.47E-01
7/12/2016	7.32E+01	5.96E+01	-2.32E-01	2.65E-01	9.19E-02	2.69E-01
7/19/2016	3.54E+02	5.77E+01	-3.57E-01	2.45E-01	-3.19E-02	3.11E-01
7/26/2016	2.20E+02	6.14E+01	-1.55E-02	2.59E-01	4.84E-01	3.24E-01
8/2/2016	3.03E+02	5.98E+01	-3.97E-01	3.34E-01	8.81E-03	3.84E-01
8/9/2016	4.65E+02	6.13E+01	-1.45E-01	3.28E-01	2.52E-01	3.03E-01
8/16/2016	2.54E+02	5.82E+01	-2.17E-01	3.41E-01	1.06E+00	3.80E-01
8/23/2016	2.60E+02	6.01E+01	1.31E-01	3.65E-01	7.38E-01	3.93E-01
8/30/2016	2.84E+02	6.02E+01	3.57E-01	3.01E-01	-1.49E-01	3.15E-01
9/6/2016	2.42E+02	5.96E+01	-1.17E-01	2.74E-01	3.73E-01	2.77E-01
9/13/2016	1.38E+02	6.19E+01	6.68E-01	2.58E-01	-3.14E-01	2.90E-01
9/20/2016	2.31E+02	6.09E+01	-3.08E-02	3.30E-01	1.54E-01	3.87E-01
9/27/2016	2.76E+02	5.82E+01	1.30E-01	2.39E-01	-3.11E-01	2.41E-01
10/4/2016	2.70E+02	5.78E+01	4.38E-01	2.62E-01	-4.38E-01	3.32E-01
10/11/2016	3.32E+02	6.15E+01	1.99E-01	2.77E-01	-8.41E-02	2.95E-01
10/18/2016	3.89E+02	5.90E+01	2.64E-01	2.86E-01	-2.06E-01	2.86E-01
10/25/2016	3.35E+02	6.16E+01	-4.43E-01	2.35E-01	-9.84E-02	2.73E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 150.0 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
11/1/2016	3.84E+02	6.04E+01	6.05E-02	2.45E-01	7.38E-02	2.62E-01
11/8/2016	2.35E+02	6.05E+01	-7.43E-02	3.05E-01	-3.57E-01	2.76E-01
11/15/2016	2.76E+02	6.08E+01	2.52E-01	2.25E-01	3.86E-01	2.56E-01
11/21/2016	2.32E+02	5.83E+01	4.00E-01	2.06E-01	-2.17E-01	2.76E-01
11/29/2016	3.05E+02	5.92E+01	3.97E-01	2.48E-01	-1.53E-01	2.68E-01
12/6/2016	2.09E+02	5.98E+01	-4.95E-02	3.09E-01	2.42E-02	3.79E-01
12/13/2016	2.70E+02	6.00E+01	5.38E-02	2.59E-01	-4.22E-01	2.94E-01
12/19/2016	3.73E+02	5.99E+01	4.92E-01	3.34E-01	3.30E-01	3.89E-01
12/27/2016	3.57E+02	6.09E+01	3.51E-02	2.15E-01	-4.43E-02	2.09E-01
1/3/2017	3.14E+02	6.12E+01	-2.17E-01	2.94E-01	2.61E-01	2.74E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
3/1/2016	Sr-89/90	1.54E-01	1.74E-01
	U-234	3.38E-02	8.55E-03
	U-235	7.03E-04	2.55E-03
	U-238	2.22E-02	6.47E-03
	Pu-238	-3.59E-06	2.37E-04
	Pu-239	-2.23E-03	1.61E-03
	Am-241	-9.54E-06	5.63E-04
	Cm-244	-1.12E-03	1.12E-03
Tc-99	-1.09E+00	7.65E-01	

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/7/2016	2.16E+00	2.13E-01	1.39E-01	7.53E-02
2/9/2016	1.90E+00	2.05E-01	2.27E-01	9.59E-02
2/16/2016	1.96E+00	2.07E-01	2.76E-01	1.01E-01
2/23/2016	2.43E+00	2.23E-01	8.57E-01	1.66E-01
3/1/2016	2.33E+00	2.19E-01	1.47E-01	8.50E-02
3/8/2016	2.14E+00	2.13E-01	2.81E-01	1.00E-01
3/15/2016	1.62E+00	1.95E-01	3.57E-01	1.12E-01
3/21/2016	2.14E+00	2.12E-01	2.18E-01	8.88E-02
3/29/2016	1.89E+00	2.13E-01	-1.32E-02	6.08E-02
4/4/2016	2.06E+00	2.14E-01	5.62E-01	1.41E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 150.0 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
4/12/2016	2.21E+00	1.59E-01	4.92E-01	8.96E-02
4/19/2016	1.98E+00	2.16E-01	3.97E-02	7.11E-02
4/26/2016	1.43E+00	1.87E-01	1.67E-01	8.14E-02
5/3/2016	1.53E+00	1.90E-01	6.49E-02	7.82E-02
5/10/2016	1.62E+00	3.47E-01	4.11E-02	1.03E-01
5/16/2016	1.46E+00	3.35E-01	3.78E-02	9.48E-02
5/24/2016	1.84E+00	2.16E-01	2.00E-01	9.24E-02
5/31/2016	1.51E+00	2.14E-01	1.55E-01	9.59E-02
6/7/2016	1.51E+00	2.14E-01	1.57E-01	9.71E-02
6/14/2016	2.05E+00	2.29E-01	4.84E-01	1.44E-01
6/21/2016	1.57E+00	1.98E-01	1.39E-01	8.27E-02
6/28/2016	1.64E+00	2.13E-01	1.49E-01	1.11E-01
7/5/2016	2.06E+00	2.65E-01	3.68E-01	1.28E-01
7/12/2016	2.39E+00	2.39E-01	1.11E-01	1.02E-01
7/19/2016	1.72E+00	2.44E-01	3.03E-01	1.26E-01
7/26/2016	2.97E+00	2.82E-01	1.22E-01	1.03E-01
8/2/2016	1.58E+00	2.39E-01	2.76E-01	1.23E-01
8/9/2016	1.66E+00	2.42E-01	2.46E-01	1.20E-01
8/16/2016	2.10E+00	2.30E-01	2.19E-01	1.22E-01
8/23/2016	2.31E+00	2.37E-01	2.17E-01	1.21E-01
8/30/2016	1.97E+00	4.04E-01	1.13E-01	1.47E-01
9/6/2016	2.35E+00	2.38E-01	8.14E-02	1.00E-01
9/13/2016	1.98E+00	2.25E-01	8.08E-02	9.93E-02
9/20/2016	1.62E+00	2.41E-01	1.56E-01	1.09E-01
9/27/2016	2.10E+00	2.56E-01	1.25E-01	1.05E-01
10/4/2016	1.99E+00	2.48E-01	5.43E-02	9.32E-02
10/11/2016	2.25E+00	2.58E-01	1.88E-01	1.16E-01
10/18/2016	1.84E+00	2.21E-01	1.18E-01	8.03E-02
10/25/2016	2.06E+00	2.51E-01	2.25E-02	9.09E-02
11/1/2016	1.95E+00	2.48E-01	1.21E-01	1.05E-01
11/8/2016	2.54E+00	2.68E-01	2.28E-01	1.25E-01
11/15/2016	2.25E+00	2.36E-01	1.58E-01	9.04E-02
11/21/2016	2.21E+00	2.58E-01	2.26E-01	1.23E-01
11/29/2016	2.34E+00	2.60E-01	1.21E-01	1.06E-01
12/6/2016	1.68E+00	2.24E-01	4.19E-01	1.25E-01
12/13/2016	2.32E+00	1.79E-01	1.39E-01	6.36E-02
12/19/2016	9.86E-01	1.99E-01	-4.68E-02	4.51E-02
12/27/2016	1.64E+00	2.28E-01	2.15E-01	1.07E-01
1/3/2017	1.85E+00	2.32E-01	-5.14E-02	4.81E-02

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 150.4

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/9/2016	8.30E+01	4.54E+01	1.01E-01	3.84E-01	-4.51E-01	3.74E-01
2/16/2016	1.34E+02	4.63E+01	3.32E-02	2.65E-01	2.19E-01	2.89E-01
2/23/2016	6.16E+02	5.29E+01	-1.93E-01	2.76E-01	2.38E-01	2.80E-01
3/1/2016	1.37E+03	5.96E+01	-3.43E-02	2.82E-01	4.27E-01	2.80E-01
3/8/2016	1.78E+03	6.29E+01	1.26E-01	3.78E-01	-6.62E-01	4.09E-01
3/15/2016	5.46E+02	5.10E+01	1.65E-02	2.62E-01	-2.30E-01	2.90E-01
3/21/2016	1.24E+03	6.01E+01	2.16E-01	3.58E-01	-6.81E-01	4.20E-01
3/29/2016	8.89E+02	5.40E+01	2.21E-02	2.96E-01	-8.03E-02	3.28E-01
4/4/2016	2.57E+03	7.06E+01	1.77E-01	3.17E-01	-8.22E-01	3.21E-01
4/12/2016	1.48E+02	4.67E+01	2.32E-01	2.31E-01	-3.92E-01	2.49E-01
4/19/2016	6.19E+02	5.29E+01	4.46E-01	2.36E-01	-4.81E-02	2.70E-01
4/26/2016	2.18E+02	4.80E+01	1.27E-01	2.78E-01	-3.84E-01	2.74E-01
5/3/2016	7.24E+02	5.39E+01	3.24E-01	3.14E-01	-5.41E-02	3.25E-01
5/10/2016	2.56E+02	4.83E+01	5.62E-01	2.85E-01	5.49E-01	2.70E-01
5/16/2016	1.94E+02	4.83E+01	-8.22E-02	2.94E-01	1.14E-01	3.31E-01
5/24/2016	1.66E+02	4.62E+01	-2.21E-01	1.97E-01	-1.44E-01	2.12E-01
5/31/2016	9.19E+02	5.58E+01	-2.73E-02	2.59E-01	5.62E-02	2.86E-01
6/7/2016	8.27E+01	4.61E+01	4.97E-02	1.93E-01	2.81E-01	2.12E-01
6/14/2016	1.93E+01	4.67E+01	2.49E-02	2.38E-01	-5.22E-02	2.15E-01
6/21/2016	6.43E+02	5.36E+01	6.43E-01	2.05E-01	2.84E-03	2.29E-01
6/28/2016	1.58E+01	4.67E+01	-8.49E-03	2.55E-01	1.75E-01	2.66E-01
7/5/2016	2.40E+02	4.79E+01	-1.50E-02	2.77E-01	2.03E-01	3.03E-01
7/12/2016	2.51E+02	5.07E+01	1.13E-01	1.95E-01	3.24E-02	1.95E-01
7/19/2016	1.15E+03	5.65E+01	-1.07E-01	4.12E-01	2.86E-01	3.99E-01
7/26/2016	2.78E+02	5.12E+01	-8.81E-02	4.51E-01	-3.43E-01	4.52E-01
8/2/2016	1.71E+03	6.17E+01	1.75E-01	2.92E-01	3.11E-01	2.97E-01
8/9/2016	1.63E+03	6.12E+01	-1.57E-01	2.28E-01	-1.78E-01	2.34E-01
8/16/2016	5.11E+02	5.03E+01	7.38E-02	2.87E-01	-1.50E-04	3.27E-01
8/23/2016	1.37E+03	6.23E+01	-1.09E-01	2.81E-01	-6.05E-02	2.95E-01
8/30/2016	1.34E+03	5.84E+01	3.05E-01	2.13E-01	2.01E-01	2.17E-01
9/6/2016	1.99E+02	4.90E+01	9.08E-02	1.76E-01	6.70E-02	2.54E-01
9/13/2016	4.59E+02	5.14E+01	1.79E-01	2.91E-01	6.30E-02	2.90E-01
9/20/2016	5.22E+02	5.21E+01	4.03E-01	3.24E-01	4.49E-03	3.38E-01
9/27/2016	1.81E+03	6.29E+01	6.78E-01	1.93E-01	2.09E-03	3.06E-01
10/4/2016	3.30E+02	4.81E+01	-2.61E-01	2.35E-01	6.19E-01	3.60E-01
10/11/2016	8.03E+02	5.46E+01	-4.35E-01	3.01E-01	-2.12E-02	2.80E-01
10/18/2016	1.84E+02	4.56E+01	3.89E-01	2.77E-01	-3.11E-01	2.73E-01
10/25/2016	8.32E+01	4.62E+01	-2.65E-01	2.07E-01	3.62E-01	2.30E-01
11/1/2016	2.86E+02	4.82E+01	2.08E-01	2.52E-01	-3.14E-01	2.73E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 150.4 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
11/8/2016	8.05E+02	5.50E+01	1.50E-01	2.59E-01	-8.19E-02	2.76E-01
11/15/2016	1.70E+03	6.46E+01	4.16E-02	2.83E-01	6.00E-01	2.77E-01
11/21/2016	1.36E+03	5.88E+01	-4.78E-02	2.24E-01	2.25E-01	1.90E-01
11/29/2016	2.03E+02	4.67E+01	-1.05E-01	3.44E-01	-6.30E-01	4.15E-01
12/6/2016	1.03E+02	4.56E+01	3.49E-01	3.25E-01	3.62E-01	3.32E-01
12/13/2016	1.06E+02	4.47E+01	1.57E-01	2.11E-01	-7.30E-02	2.32E-01
12/19/2016	1.80E+03	6.30E+01	3.22E-01	3.05E-01	5.59E-01	3.47E-01
12/27/2016	9.19E+01	4.72E+01	-9.27E-02	2.27E-01	-1.46E-01	2.31E-01
1/3/2017	2.73E+01	4.63E+01	-2.73E-01	3.03E-01	4.08E-01	2.82E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
3/1/2016	Sr-89/90	9.11E-02	1.61E-01
	U-234	4.41E-02	9.52E-03
	U-235	8.27E-03	4.20E-03
	U-238	2.34E-02	6.58E-03
	Pu-238	-5.68E-04	2.34E-03
	Pu-239	1.12E-03	2.94E-03
	Am-241	1.42E-02	5.42E-03
	Cm-244	-2.35E-06	1.38E-04
Tc-99	-5.51E-01	7.72E-01	

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/9/2016	2.43E+00	2.22E-01	3.68E-01	1.15E-01
2/16/2016	2.06E+00	2.10E-01	4.35E-01	1.20E-01
2/23/2016	2.14E+00	2.13E-01	3.54E-01	1.16E-01
3/1/2016	2.70E+00	2.31E-01	6.27E-01	1.45E-01
3/8/2016	2.28E+00	2.17E-01	2.86E-01	1.05E-01
3/15/2016	1.89E+00	2.04E-01	3.00E-01	1.04E-01
3/21/2016	2.69E+00	2.29E-01	3.32E-01	1.06E-01
3/29/2016	2.09E+00	2.19E-01	1.21E-01	8.55E-02
4/4/2016	2.46E+00	2.25E-01	4.54E-01	1.31E-01
4/12/2016	2.02E+00	1.55E-01	1.96E-01	6.26E-02
4/19/2016	1.60E+00	2.04E-01	4.03E-02	7.18E-02

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 150.4 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
4/26/2016	2.06E+00	2.10E-01	1.68E-01	8.24E-02
5/3/2016	1.75E+00	1.99E-01	1.51E-01	9.36E-02
5/10/2016	2.18E+00	3.87E-01	4.57E-01	2.33E-01
5/16/2016	1.22E+00	3.19E-01	1.37E-01	1.38E-01
5/24/2016	2.22E+00	2.30E-01	3.32E-01	1.14E-01
5/31/2016	1.69E+00	2.21E-01	1.84E-01	9.97E-02
6/7/2016	1.84E+00	2.27E-01	1.59E-01	9.82E-02
6/14/2016	2.70E+00	2.49E-01	2.56E-01	1.16E-01
6/21/2016	1.82E+00	2.08E-01	3.05E-01	1.11E-01
6/28/2016	1.87E+00	2.22E-01	1.56E-01	1.16E-01
7/5/2016	1.91E+00	2.59E-01	1.80E-01	1.04E-01
7/12/2016	1.83E+00	2.20E-01	3.43E-01	1.35E-01
7/19/2016	1.75E+00	2.45E-01	1.53E-01	1.07E-01
7/26/2016	2.11E+00	2.57E-01	4.97E-01	1.50E-01
8/2/2016	1.53E+00	2.37E-01	2.40E-01	1.17E-01
8/9/2016	1.68E+00	2.42E-01	-3.27E-02	7.69E-02
8/16/2016	2.22E+00	2.34E-01	1.40E-02	9.00E-02
8/23/2016	1.92E+00	2.24E-01	4.86E-02	9.59E-02
8/30/2016	2.73E+00	4.44E-01	1.25E-02	1.09E-01
9/6/2016	1.95E+00	2.25E-01	2.51E-01	1.26E-01
9/13/2016	1.81E+00	2.19E-01	8.08E-02	9.93E-02
9/20/2016	2.11E+00	2.57E-01	6.32E-02	9.71E-02
9/27/2016	1.99E+00	2.53E-01	9.49E-02	1.01E-01
10/4/2016	1.93E+00	2.47E-01	8.81E-02	1.00E-01
10/11/2016	2.02E+00	2.55E-01	6.73E-01	1.75E-01
10/18/2016	2.07E+00	2.30E-01	3.62E-01	1.23E-01
10/25/2016	2.34E+00	2.60E-01	5.59E-02	9.71E-02
11/1/2016	1.54E+00	2.37E-01	4.27E-01	1.48E-01
11/8/2016	2.15E+00	2.54E-01	5.73E-02	9.89E-02
11/15/2016	2.19E+00	2.34E-01	1.62E-02	5.64E-02
11/21/2016	2.33E+00	2.60E-01	5.68E-02	9.82E-02
11/29/2016	2.38E+00	2.62E-01	1.26E-01	1.10E-01
12/6/2016	1.94E+00	2.33E-01	1.05E-01	7.65E-02
12/13/2016	2.37E+00	1.80E-01	3.16E-01	8.50E-02
12/19/2016	1.88E+00	2.37E-01	1.52E-01	9.86E-02
12/27/2016	1.47E+00	2.21E-01	1.43E-01	9.17E-02
1/3/2017	2.00E+00	2.39E-01	4.78E-02	7.69E-02

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 160.0

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/5/2016	2.62E+01	6.10E+01	3.54E-02	1.83E-01	-3.24E-02	1.90E-01
1/12/2016	2.18E+02	4.59E+01	-1.62E-01	3.23E-01	-1.67E-02	3.92E-01
1/19/2016	8.19E+01	5.87E+01	1.71E-01	2.91E-01	6.19E-01	3.68E-01
1/26/2016	9.92E+01	5.06E+01	2.73E-01	3.45E-01	-3.78E-01	3.50E-01
2/2/2016	1.39E+02	4.98E+01	9.05E-02	3.69E-01	-4.16E-02	3.72E-01
2/9/2016	1.11E+02	5.60E+01	-3.62E-02	3.12E-01	1.58E-01	3.46E-01
2/16/2016	9.32E+01	5.47E+01	9.97E-04	2.21E-01	-1.10E-01	2.22E-01
2/23/2016	3.51E+01	5.86E+01	-7.38E-02	2.11E-01	8.57E-03	2.35E-01
3/1/2016	-1.45E+01	5.57E+01	-8.11E-02	2.36E-01	-2.73E-02	2.55E-01
3/8/2016	1.29E+02	5.66E+01	6.14E-02	2.23E-01	-2.21E-01	2.74E-01
3/15/2016	2.78E+01	5.73E+01	1.12E-01	2.50E-01	1.56E-01	2.68E-01
3/21/2016	-1.20E+01	5.90E+01	-3.22E-02	3.02E-01	1.13E-01	2.92E-01
3/29/2016	1.42E+02	5.78E+01	3.32E-01	2.39E-01	-2.28E-01	2.52E-01
4/4/2016	6.65E+01	5.53E+01	-3.11E-01	3.02E-01	-4.54E-01	3.38E-01
4/12/2016	-2.03E+01	5.79E+01	-9.76E-03	2.20E-01	3.05E-01	2.49E-01
4/19/2016	7.70E+01	5.55E+01	1.95E-01	1.92E-01	1.33E-01	2.20E-01
4/26/2016	1.05E+02	5.80E+01	-1.97E-01	2.52E-01	1.11E-01	2.92E-01
5/3/2016	1.34E+02	5.78E+01	-1.38E-01	2.61E-01	1.00E-01	2.73E-01
5/10/2016	1.22E+02	5.77E+01	-3.05E-02	2.41E-01	5.08E-01	2.57E-01
5/16/2016	1.24E+02	5.90E+01	6.76E-02	2.83E-01	-4.76E-02	2.96E-01
5/24/2016	6.16E+01	5.67E+01	5.89E-01	1.77E-01	-4.95E-02	1.98E-01
5/31/2016	1.47E+02	5.87E+01	2.73E-01	2.35E-01	7.73E-02	2.69E-01
6/7/2016	1.09E+02	5.68E+01	1.33E-01	2.20E-01	1.15E-01	2.11E-01
6/14/2016	1.08E+02	6.01E+01	1.66E-01	2.11E-01	3.35E-01	2.08E-01
6/21/2016	9.22E+01	5.62E+01	2.58E-01	2.13E-01	3.89E-02	2.16E-01
6/28/2016	1.03E+02	5.51E+01	4.19E-01	2.40E-01	-5.32E-02	2.81E-01
7/5/2016	4.97E+01	5.73E+01	1.21E-01	3.03E-01	-2.97E-01	2.87E-01
7/12/2016	-6.86E+01	5.82E+01	4.65E-02	4.14E-01	3.38E-01	4.01E-01
7/19/2016	9.78E+01	5.56E+01	3.16E-01	2.45E-01	-4.65E-01	2.96E-01
7/26/2016	-4.57E+00	5.90E+01	1.16E-01	2.82E-01	3.76E-01	3.21E-01
8/2/2016	4.38E+01	5.77E+01	2.38E-01	3.74E-01	-4.73E-01	4.03E-01
8/9/2016	2.50E+02	5.91E+01	-3.73E-01	2.33E-01	7.41E-02	2.27E-01
8/16/2016	8.54E+01	5.69E+01	-6.76E-01	2.81E-01	-3.49E-01	2.95E-01
8/23/2016	1.09E+02	6.40E+01	-1.52E-01	2.65E-01	7.92E-02	2.92E-01
8/30/2016	9.84E+01	5.75E+01	2.17E-01	2.60E-01	-1.00E-01	2.69E-01
9/6/2016	1.47E+00	5.75E+01	-1.25E-01	2.35E-01	-2.92E-01	2.18E-01
9/13/2016	1.73E+01	6.18E+01	1.36E-01	2.41E-01	1.06E-01	2.69E-01
9/20/2016	6.16E+01	5.92E+01	-1.67E-03	2.16E-01	-1.85E-01	2.66E-01
9/27/2016	1.18E+02	5.69E+01	3.92E-02	2.44E-01	-1.31E-01	2.73E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 160.0 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/4/2016	1.02E+01	5.54E+01	-5.41E-02	2.06E-01	2.92E-01	2.26E-01
10/11/2016	2.11E+01	5.80E+01	-4.35E-02	2.39E-01	-3.86E-03	2.61E-01
10/18/2016	6.54E+01	5.66E+01	-8.00E-02	2.49E-01	1.38E-01	2.46E-01
10/25/2016	5.89E+01	5.90E+01	9.00E-02	1.72E-01	-3.76E-02	1.91E-01
11/1/2016	1.51E+02	5.82E+01	1.24E-01	2.31E-01	-1.30E-01	2.37E-01
11/8/2016	4.35E+01	5.86E+01	1.56E-01	1.92E-01	-4.05E-01	2.21E-01
11/15/2016	8.54E+01	6.17E+01	-1.67E-01	2.26E-01	-2.31E-01	2.40E-01
11/21/2016	3.81E+01	5.62E+01	-8.68E-02	2.02E-01	-1.43E-01	1.95E-01
11/29/2016	1.88E+02	5.87E+01	1.42E-01	3.43E-01	-4.57E-01	3.51E-01
12/6/2016	1.09E+02	5.83E+01	4.08E-01	2.66E-01	-1.36E-01	2.95E-01
12/13/2016	-9.19E+00	5.92E+01	-8.84E-02	2.07E-01	1.76E-02	2.09E-01
12/19/2016	1.11E+02	5.75E+01	2.20E-01	2.43E-01	-2.86E-01	2.83E-01
12/27/2016	6.89E+01	5.80E+01	3.46E-03	2.13E-01	-6.22E-01	2.09E-01
1/3/2017	4.38E+01	5.94E+01	2.34E-02	2.11E-01	-1.53E-02	2.32E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
3/1/2016	Sr-89/90	1.04E-02	1.53E-01
	U-234	2.45E-02	6.75E-03
	U-235	2.01E-03	2.03E-03
	U-238	3.97E-02	8.72E-03
	Pu-238	3.27E-03	2.35E-03
	Pu-239	3.24E-03	2.42E-03
	Am-241	3.35E-03	2.50E-03
	Cm-244	1.66E-03	1.68E-03
	Tc-99	-3.73E-01	7.76E-01

Table 25 Radionuclides in River Water (continued)

Location: River Mile 160.0 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/5/2016	1.81E+00	2.01E-01	2.84E-01	9.56E-02
1/12/2016	2.09E+00	1.63E-01	2.78E-01	7.75E-02
1/19/2016	1.82E+00	1.56E-01	2.84E-01	7.42E-02
1/26/2016	2.22E+00	2.15E-01	3.57E-01	1.11E-01
2/2/2016	2.36E+00	2.20E-01	3.35E-01	1.10E-01
2/9/2016	2.01E+00	2.09E-01	2.61E-01	1.03E-01
2/16/2016	2.34E+00	2.19E-01	2.23E-01	9.44E-02
2/23/2016	2.07E+00	2.11E-01	2.69E-01	1.05E-01
3/1/2016	2.10E+00	2.12E-01	3.14E-01	1.09E-01
3/8/2016	2.28E+00	2.17E-01	1.70E-01	8.67E-02
3/15/2016	1.66E+00	1.97E-01	2.27E-01	9.59E-02
3/21/2016	2.42E+00	2.21E-01	2.76E-01	9.78E-02
3/29/2016	2.37E+00	2.28E-01	2.01E-01	9.74E-02
4/4/2016	2.36E+00	2.22E-01	4.81E-01	1.34E-01
4/12/2016	1.86E+00	1.51E-01	1.92E-01	6.12E-02
4/19/2016	2.19E+00	2.22E-01	1.34E-02	6.67E-02
4/26/2016	1.61E+00	1.94E-01	1.94E-01	8.59E-02
5/3/2016	1.65E+00	1.96E-01	2.05E-01	1.00E-01
5/10/2016	2.01E+00	3.74E-01	4.11E-02	1.04E-01
5/16/2016	1.08E+00	3.07E-01	3.86E-02	9.63E-02
5/24/2016	1.78E+00	2.14E-01	1.69E-01	8.76E-02
5/31/2016	1.89E+00	2.28E-01	9.27E-02	8.53E-02
6/7/2016	1.76E+00	2.24E-01	2.24E-01	1.09E-01
6/14/2016	1.95E+00	2.20E-01	-3.81E-02	5.96E-02
6/21/2016	1.54E+00	1.96E-01	1.39E-01	8.28E-02
6/28/2016	1.74E+00	2.18E-01	3.27E-01	1.38E-01
7/5/2016	2.41E+00	2.74E-01	2.46E-01	1.14E-01
7/12/2016	2.35E+00	2.41E-01	1.22E+00	2.20E-01
7/19/2016	1.80E+00	2.46E-01	1.22E-01	1.03E-01
7/26/2016	1.94E+00	2.51E-01	9.14E-02	9.78E-02
8/2/2016	1.71E+00	2.44E-01	5.89E-01	1.59E-01
8/9/2016	1.46E+00	2.35E-01	1.54E-01	1.08E-01
8/16/2016	1.98E+00	2.26E-01	2.25E-01	1.25E-01
8/23/2016	1.66E+00	2.14E-01	1.44E-02	9.00E-02
8/30/2016	2.26E+00	4.20E-01	1.13E-01	1.48E-01
9/6/2016	1.94E+00	2.25E-01	1.51E-01	1.13E-01
9/13/2016	1.98E+00	2.25E-01	-1.95E-02	7.94E-02
9/20/2016	2.02E+00	2.54E-01	2.19E-01	1.18E-01
9/27/2016	2.14E+00	2.58E-01	9.46E-02	1.01E-01

Table 25 Radionuclides in Savannah River Water (continued)

Location: River Mile 160.0 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/4/2016	2.28E+00	2.60E-01	3.11E-01	1.30E-01
10/11/2016	1.51E+00	2.34E-01	2.26E-01	1.22E-01
10/18/2016	2.08E+00	2.30E-01	8.57E-02	7.40E-02
10/25/2016	1.60E+00	2.36E-01	1.22E-01	1.06E-01
11/1/2016	1.76E+00	2.41E-01	1.21E-01	1.05E-01
11/8/2016	3.03E+00	2.81E-01	5.65E-02	1.00E-01
11/15/2016	2.20E+00	2.34E-01	1.22E-01	8.31E-02
11/21/2016	1.80E+00	2.45E-01	3.27E-01	1.36E-01
11/29/2016	2.16E+00	2.56E-01	1.94E-01	1.19E-01
12/6/2016	2.25E+00	2.44E-01	2.68E-01	1.06E-01
12/13/2016	2.29E+00	1.78E-01	1.93E-01	7.07E-02
12/19/2016	1.36E+00	2.17E-01	1.13E-01	8.80E-02
12/27/2016	1.73E+00	2.30E-01	1.45E-01	9.40E-02
1/3/2017	1.65E+00	2.27E-01	4.76E-02	7.53E-02

Location: Beaver Dam Creek River Mouth

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
3/1/2016	Sr-89/90	3.59E-01	1.92E-01
	U-234	4.00E-02	9.67E-03
	U-235	3.03E-03	3.60E-03
	U-238	4.68E-02	1.01E-02
	Pu-238	3.70E-03	3.07E-03
	Pu-239	1.58E-03	1.62E-03
	Am-241	1.18E-02	5.14E-03
	Cm-244	-7.00E-07	2.26E-03
	Tc-99	-9.54E-01	7.63E-01
	Gross B	1.93E+00	2.29E-01
	Gross A	1.53E-01	9.52E-02

Table 26 Summary of Savannah River Site Tritium Transport, 1960–2016
(values are in curies)

Year	Based on Point-of-Release Conc. and Flow ^a	Based on Stream Conc. and Flow ^b	Based on Savannah River Conc. and Flow ^c
1960	64,000 ^b	69,600	73,700
1961	69,000 ^b	83,000	77,000
1962	58,000 ^b	64,000	63,000
1963	97,000 ^b	96,900	122,800
1964	111,000 ^b	131,600	143,000
1965	108,400	109,200	100,200
1966	84,900	97,800	78,300
1967	70,600	77,000	68,500
1968	63,800	67,200	61,800
1969	64,600	64,000	58,100
1970	36,900	43,200	31,800
1971	38,200	44,700	39,100
1972	46,800	47,300	45,300
1973	71,100	62,800	61,100
1974	59,900	54,600	46,000
1975	55,600	50,000	49,500
1976	59,600	47,400	51,100
1977	43,800	39,700	42,500
1978	37,600	35,300	36,600
1979	29,400	27,100	30,600
1980	24,900	28,800	30,700
1981	23,900	22,100	25,100
1982	32,200	31,300	30,600
1983	34,200	33,000	33,000
1984	32,800	32,600	33,200
1985	25,000	22,300	24,100
1986	27,800	22,300	22,100
1987	22,700	20,500	26,200
1988	19,300	18,300	14,600
1989	17,300	17,800	15,600
1990	16,100	15,600	14,500
1991	27,400	26,600	26,300
1992	13,800	13,100	13,800
1993	11,300	12,700	12,200
1994	8,800	10,400	10,900
1995	9,900	11,400	10,700
1996	7,560	8,020	8,950
1997	8,350	8,550	7,700
1998	10,555	10,588	9,420
1999	6,111	6,292	5,810
2000	5,995	5,956	5,420
2001	4,423	4,315	4,815
2002	3,096	2,857	4,051
2003	4,319	4,139	5,910
2004	2,683	2,785	3,630
2005	2,506	2,378	4,480
2006	1,644	1,391	3,328
2007	1,317	1,025	1,938
2008	1,535	1,185	2,660
2009	1,559	1,271	2,350
2010	1,285	1,205	2,058
2011	942	776	2,090
2012	746	690	1,874
2013	1,082	1,057	2,482
2014	789	767	2,513
2015	807	856	2,394
2016	724	787	1,698

Notes:

- a Includes direct releases to streams and migration from seepage basins and the Solid Waste Disposal Facility to streams.
- b Includes heat exchanger cooling water released from P-Area (of PAR pond origin) to Steel Creek.
- c Beginning in 1986, this amount includes tritium released from Plant Vogtle (992 Ci reported in 2016)

Table 27 Radionuclides in Savannah River Sediment

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	5/5/2016	-3.41E-03	1.82E-02	2.61E-01	3.32E-02
RM-129 Lower 3 Runs Mouth	5/5/2016	1.26E-02	1.44E-02	9.35E-02	1.93E-02
RM-134.0 Below Little Hell Landing	5/5/2016	-1.30E-02	1.56E-02	1.58E-01	2.65E-02
RM-150.2 Below Four Mile Creek	5/5/2016	2.22E-02	1.35E-02	6.95E-01	5.52E-02
RM-151 R-3A Above Vogtle	5/5/2016	-1.31E-02	1.33E-02	5.70E-02	1.79E-02
RM-152.1 Beaver Dam Creek	5/5/2016	1.25E-02	1.50E-02	8.97E-03	1.40E-02
RM-157.2 Upper 3 Runs Mouth	5/5/2016	-4.05E-03	1.94E-02	2.78E-01	3.29E-02
RM-160.5 Demier Landing	5/5/2016	2.14E-02	1.51E-02	3.73E-02	1.63E-02

Location	Sample Date	Sr-89/90		U-234	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	5/5/2016	1.75E-02	4.00E-02	1.69E+00	1.28E-01
RM-129 Lower 3 Runs Mouth	5/5/2016	-3.32E-02	3.61E-02	1.48E+00	1.16E-01
RM-134.0 Below Little Hell Landing	5/2/2016	1.62E-01	4.80E-02	1.52E+00	1.15E-01
RM-150.2 Below Four Mile Creek	5/5/2016	3.30E-02	4.47E-02	2.09E+00	1.60E-01
RM-151 R-3A Above Vogtle	5/2/2016	1.09E-01	4.35E-02	1.71E+00	1.32E-01
RM-152.1 Beaver Dam Creek	5/5/2016	2.42E-03	3.71E-02	9.59E-01	8.03E-02
RM-157.2 Upper 3 Runs Mouth	5/5/2016	5.97E-02	4.39E-02	1.50E+00	1.16E-01
RM-160.5 Demier Landing	5/2/2016	1.41E-01	4.72E-02	1.84E+00	1.39E-01

Location	Sample Date	U-235		Np-237	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	5/5/2016	8.92E-02	1.69E-02	-4.65E-06	5.10E-06
RM-129 Lower 3 Runs Mouth	5/5/2016	8.73E-02	1.76E-02	-8.22E-04	4.13E-04
RM-134.0 Below Little Hell Landing	5/2/2016	6.76E-02	1.41E-02	7.11E-05	2.73E-04
RM-150.2 Below Four Mile Creek	5/5/2016	9.49E-02	1.91E-02	7.35E-04	4.71E-04
RM-151 R-3A Above Vogtle	5/2/2016	7.32E-02	1.59E-02	-3.19E-04	4.80E-04
RM-152.1 Beaver Dam Creek	5/5/2016	5.22E-02	1.31E-02	1.02E-03	5.96E-04
RM-157.2 Upper 3 Runs Mouth	5/5/2016	8.65E-02	1.71E-02	-8.54E-05	3.32E-04
RM-160.5 Demier Landing	5/2/2016	9.14E-02	1.72E-02	-1.63E-04	1.59E-04

Table 27 Radionuclides in Savannah River Sediment (continued)

Location	Sample Date	U-238		Pu-238	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	5/5/2016	1.56E+00	1.14E-01	1.54E-04	4.05E-04
RM-129 Lower 3 Runs Mouth	5/5/2016	1.46E+00	1.11E-01	6.03E-04	7.03E-04
RM-134.0 Below Little Hell Landing	5/2/2016	1.48E+00	1.08E-01	4.46E-04	3.21E-04
RM-150.2 Below Four Mile Creek	5/5/2016	1.88E+00	1.41E-01	2.78E-03	8.76E-04
RM-151 R-3A Above Vogtle	5/2/2016	1.70E+00	1.27E-01	5.22E-04	4.73E-04
RM-152.1 Beaver Dam Creek	5/5/2016	9.38E-01	7.62E-02	1.08E-04	4.05E-04
RM-157.2 Upper 3 Runs Mouth	5/5/2016	1.53E+00	1.14E-01	8.73E-04	5.87E-04
RM-160.5 Demier Landing	5/2/2016	1.76E+00	1.28E-01	2.31E-04	2.37E-04

Location	Sample Date	Pu-239		Am-241	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	5/5/2016	1.43E-03	5.93E-04	3.51E-03	9.63E-04
RM-129 Lower 3 Runs Mouth	5/5/2016	1.11E-03	7.42E-04	1.55E-03	6.32E-04
RM-134.0 Below Little Hell Landing	5/2/2016	2.25E-03	7.31E-04	8.41E-04	4.32E-04
RM-150.2 Below Four Mile Creek	5/5/2016	8.05E-04	5.36E-04	4.27E-03	1.01E-03
RM-151 R-3A Above Vogtle	5/2/2016	8.84E-04	5.55E-04	1.42E-03	5.89E-04
RM-152.1 Beaver Dam Creek	5/5/2016	1.35E-03	6.83E-04	2.73E-04	3.42E-04
RM-157.2 Upper 3 Runs Mouth	5/5/2016	4.46E-03	1.15E-03	8.05E-04	5.60E-04
RM-160.5 Demier Landing	5/2/2016	0.00E+00	2.70E-04	4.32E-03	1.00E-03

Location	Sample Date	Cm-244	
		Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	5/5/2016	8.22E-04	4.13E-04
RM-129 Lower 3 Runs Mouth	5/5/2016	2.12E-04	2.12E-04
RM-134.0 Below Little Hell Landing	5/2/2016	2.81E-04	3.31E-04
RM-150.2 Below Four Mile Creek	5/5/2016	2.29E-03	7.03E-04
RM-151 R-3A Above Vogtle	5/2/2016	-1.87E-04	1.58E-04
RM-152.1 Beaver Dam Creek	5/5/2016	0.00E+00	2.41E-04
RM-157.2 Upper 3 Runs Mouth	5/5/2016	0.00E+00	2.52E-04
RM-160.5 Demier Landing	5/2/2016	8.03E-04	4.05E-04

Table 27 Radionuclides in Savannah River Sediment (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	5/5/2016	2.21E+01	2.29E+00	9.62E+00	2.07E+00
RM-129 Lower 3 Runs Mouth	5/5/2016	1.66E+01	2.04E+00	6.41E+00	1.67E+00
RM-134.0 Below Little Hell Landing	5/2/2016	2.23E+01	2.26E+00	6.51E+00	1.64E+00
RM-150.2 Below Four Mile Creek	5/5/2016	2.05E+01	2.22E+00	1.11E+01	2.16E+00
RM-151 R-3A Above Vogtle	5/2/2016	2.37E+01	2.32E+00	8.84E+00	1.85E+00
RM-152.1 Beaver Dam Creek	5/5/2016	1.95E+01	2.17E+00	1.00E+01	2.06E+00
RM-157.2 Upper 3 Runs Mouth	5/5/2016	2.06E+01	2.25E+00	1.78E+01	2.77E+00
RM-160.5 Demier Landing	5/2/2016	2.02E+01	2.18E+00	7.49E+00	1.73E+00

Table 28 Radionuclides in SRS Stream and Basin Sediments

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	2/29/2016	8.24E-03	1.16E-02	-1.18E-02	1.45E-02
E-06	2/29/2016	-6.65E-03	1.66E-02	4.19E-02	2.63E-02
EAV Basin North (E-004)	3/1/2016	-1.70E-02	1.76E-02	3.32E-02	2.17E-02
EAV Basin South (E-003)	5/4/2016	-7.27E-03	1.50E-02	4.41E-03	1.87E-02
FM-2 at Road 4	6/28/2016	1.05E-02	1.07E-02	1.40E+01	9.09E-01
FM-3A Below F-Area Effluent	6/28/2016	-4.35E-03	8.33E-03	1.71E-01	2.19E-02
Four Mile A-7A (Beaver Pond)	6/28/2016	1.11E-02	1.19E-02	1.85E+01	1.20E+00
Four Mile Creek Swamp Discharge	8/18/2016	2.76E-02	9.59E-03	2.56E+00	1.72E-01
Four Mile Creek at Road A-7	6/28/2016	7.14E-03	9.82E-03	6.95E+00	4.55E-01
L3R-1A at Road B	8/16/2016	-5.46E-04	9.97E-03	2.15E-01	2.65E-02
L3R-2 Sediment	8/16/2016	1.43E-02	8.72E-03	1.51E+00	1.03E-01
MCQBR downstream of Z-Basin	8/18/2016	1.50E-02	8.67E-03	-2.76E-02	1.21E-02
McQueen Branch at Monroe Road	5/4/2016	1.90E-03	1.45E-02	1.94E-01	2.61E-02
POND 400	3/1/2016	2.09E-02	1.64E-02	3.76E-01	4.00E-02
Pen Branch Swamp Discharge	8/18/2016	4.38E-02	3.40E-02	1.21E+00	1.09E-01
RM 150.4 Sediment	5/2/2016	-8.78E-03	1.38E-02	1.84E-02	1.42E-02
River Mile 160.0 Sediment	5/2/2016	-3.86E-03	1.20E-02	4.19E-02	1.83E-02
SC-2A 1 mile above Road B	6/28/2016	1.09E-02	1.36E-02	2.27E+01	1.47E+00
SC-4 Steel Creek at Road A	6/16/2016	-5.46E-03	1.03E-02	2.14E+00	1.45E-01
SWDF Basin North (E-002)	5/4/2016	4.46E-03	8.63E-03	8.49E-03	1.14E-02
SWDF Basin South (E-001)	5/4/2016	-9.24E-04	1.47E-02	1.65E-01	2.76E-02
TB-5 Near Road C	3/1/2016	5.54E-04	1.23E-02	-4.92E-03	1.79E-02
Tinker Creek 1	2/29/2016	-1.11E-02	1.05E-02	5.51E-02	1.92E-02
U3R-1A Treadway Bridge RD 8-1	2/29/2016	5.51E-02	2.99E-02	1.45E-01	5.12E-02
U3R-4 Sediment	3/1/2016	-2.59E-02	1.72E-02	1.16E-01	2.65E-02
R-Area (Downstream of R-1)	8/18/2016	2.43E-02	2.36E-02	4.19E+01	3.59E-01
Z Basin	7/11/2016	2.60E-02	1.93E-02	2.92E+03	2.95E+00

Table 28 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Sr-89/90		U-234	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	2/29/2016	-1.05E-02	4.10E-02	1.26E+00	9.82E-02
E-06	2/29/2016	2.49E-01	6.03E-02	1.53E+00	1.21E-01
EAV Basin North (E-004)	3/1/2016	-1.61E-03	4.33E-02	1.97E+00	1.50E-01
EAV Basin South (E-003)	5/4/2016	1.83E-01	7.53E-02	1.91E+00	1.45E-01
FM-2 at Road 4	6/28/2016	1.02E-01	5.98E-02	1.04E+00	8.30E-02
FM-3A Below F-Area Effluent	6/28/2016	9.24E-03	5.29E-02	1.26E+00	1.11E-01
Four Mile A-7A (Beaver Pond)	6/28/2016	8.65E-01	1.06E-01	3.92E+00	2.69E-01
Four Mile Creek Swamp Dischrg	8/18/2016	6.46E-02	5.23E-02	1.11E+00	8.88E-02
Four Mile Creek at Road A-7	6/28/2016	4.76E-01	7.65E-02	1.47E+00	1.13E-01
L3R-1A at Road B	8/16/2016	7.65E-02	5.57E-02	2.84E+00	2.00E-01
L3R-2 Sediment	8/16/2016	1.21E-02	6.59E-03	1.05E+00	9.00E-02
MCQBR downstream of Z-Basin	8/18/2016	7.35E-02	5.41E-02	2.68E+00	1.94E-01
McQueen Branch at Monroe Road	5/4/2016	1.22E-01	6.88E-02	1.84E+00	1.41E-01
POND 400	3/1/2016	1.78E-01	5.00E-02	2.11E+00	1.56E-01
Pen Branch Swamp Discharge	8/18/2016	1.14E-01	5.31E-02	6.95E-01	6.29E-02
RM 150.4 Sediment	5/2/2016	6.51E-02	3.92E-02	1.73E+00	1.38E-01
River Mile 160.0 Sediment	5/2/2016	1.69E-02	3.85E-02	1.24E+00	1.06E-01
SC-2A 1 mile above Road B	6/28/2016	1.74E-01	6.74E-02	2.09E+00	1.51E-01
SC-4 Steel Creek at Road A	6/16/2016	8.54E-02	6.29E-02	1.17E+00	9.97E-02
SWDF Basin North (E-002)	5/4/2016	2.35E-02	5.84E-02	6.19E-01	5.69E-02
SWDF Basin South (E-001)	5/4/2016	3.70E-02	4.06E-02	1.58E+00	1.28E-01
TB-5 Near Road C	3/1/2016	-2.92E-02	4.04E-02	6.30E+00	4.67E-01
Tinker Creek 1	2/29/2016	-7.43E-02	3.45E-02	6.62E-01	5.83E-02
U3R-1A Treadway Bridge RD 8-1	2/29/2016	7.51E-02	5.51E-02	1.84E+00	1.41E-01
U3R-4 Sediment	3/1/2016	-1.85E-02	3.73E-02	1.93E+00	1.39E-01
R-Area (Downstream of R-1)	8/18/2016	-4.79E-01	3.63E-01	9.60E-01	2.04E-01
Z Basin	7/11/2016	6.54E-01	3.71E-01	1.18E+00	7.35E-02

Table 28 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	U-235		Np-237	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	2/29/2016	7.49E-02	1.58E-02	3.59E-04	4.21E-04
E-06	2/29/2016	1.03E-01	1.98E-02	-4.43E-04	3.15E-04
EAV Basin North (E-004)	3/1/2016	7.00E-02	1.58E-02	4.46E-04	5.30E-04
EAV Basin South (E-003)	5/4/2016	9.84E-02	1.85E-02	-1.33E-04	5.47E-04
FM-2 at Road 4	6/28/2016	3.84E-02	1.03E-02	1.29E-02	2.05E-03
FM-3A Below F-Area Effluent	6/28/2016	7.11E-02	1.81E-02	-2.24E-04	1.96E-04
Four Mile A-7A (Beaver Pond)	6/28/2016	2.05E-01	2.64E-02	1.58E-02	2.33E-03
Four Mile Creek Swamp Dischrg	8/18/2016	4.22E-02	1.16E-02	2.46E-03	8.48E-04
Four Mile Creek at Road A-7	6/28/2016	4.95E-02	1.24E-02	3.38E-03	1.00E-03
L3R-1A at Road B	8/16/2016	1.36E-01	2.18E-02	1.58E-04	4.77E-04
L3R-2 Sediment	8/16/2016	3.92E-02	1.26E-02	-2.76E-05	3.13E-05
MCQBR downstream of Z-Basin	8/18/2016	1.13E-01	1.98E-02	6.89E-05	3.49E-04
McQueen Branch at Monroe Road	5/4/2016	8.16E-02	1.68E-02	-1.86E-04	1.81E-04
POND 400	3/1/2016	8.81E-02	1.70E-02	-4.35E-04	4.32E-04
Pen Branch Swamp Discharge	8/18/2016	4.35E-02	1.21E-02	-2.76E-05	3.08E-05
RM 150.4 Sediment	5/2/2016	4.19E-02	1.28E-02	-6.62E-04	5.59E-04
River Mile 160.0 Sediment	5/2/2016	7.03E-02	1.77E-02	4.43E-04	3.21E-04
SC-2A 1 mile above Road B	6/28/2016	8.24E-02	1.61E-02	7.00E-05	3.60E-04
SC-4 Steel Creek at Road A	6/16/2016	4.65E-02	1.34E-02	-4.03E-04	2.65E-04
SWDF Basin North (E-002)	5/4/2016	1.43E-02	6.52E-03	-3.78E-04	2.69E-04
SWDF Basin South (E-001)	5/4/2016	6.97E-02	1.67E-02	3.54E-03	1.06E-03
TB-5 Near Road C	3/1/2016	2.76E-01	4.12E-02	-9.92E-05	3.87E-04
Tinker Creek 1	2/29/2016	5.51E-02	1.29E-02	-1.25E-03	5.23E-04
U3R-1A Treadway Bridge RD 8-1	2/29/2016	1.14E-01	2.04E-02	0.00E+00	2.99E-04
U3R-4 Sediment	3/1/2016	9.73E-02	1.73E-02	2.95E-04	3.51E-04
R-Area (Downstream of R-1)	8/18/2016	1.57E-01	1.03E-01	-3.21E-03	7.10E-03
Z Basin	7/11/2016	1.33E-01	3.02E-02	2.80E-02	1.51E-02

Table 28 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	U-238		Pu-238	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	2/29/2016	1.22E+00	9.21E-02	4.43E-04	6.33E-04
E-06	2/29/2016	1.50E+00	1.15E-01	6.78E-04	6.36E-04
EAV Basin North (E-004)	3/1/2016	2.07E+00	1.50E-01	5.59E-03	1.38E-03
EAV Basin South (E-003)	5/4/2016	2.04E+00	1.48E-01	7.14E-03	1.91E-03
FM-2 at Road 4	6/28/2016	9.78E-01	7.64E-02	9.97E-01	8.06E-02
FM-3A Below F-Area Effluent	6/28/2016	1.26E+00	1.08E-01	2.30E-03	8.46E-04
Four Mile A-7A (Beaver Pond)	6/28/2016	4.38E+00	2.85E-01	5.84E-01	4.80E-02
Four Mile Creek Swamp Dischrg	8/18/2016	1.17E+00	9.00E-02	1.57E-02	2.33E-03
Four Mile Creek at Road A-7	6/28/2016	1.79E+00	1.29E-01	2.13E-01	1.88E-02
L3R-1A at Road B	8/16/2016	2.81E+00	1.92E-01	6.49E-05	3.34E-04
L3R-2 Sediment	8/16/2016	1.02E+00	8.67E-02	2.33E-04	2.65E-04
MCQBR downstream of Z-Basin	8/18/2016	2.57E+00	1.80E-01	1.69E-03	7.23E-04
McQueen Branch at Monroe Road	5/4/2016	1.66E+00	1.24E-01	2.66E-02	3.53E-03
POND 400	3/1/2016	2.04E+00	1.45E-01	6.00E-02	6.34E-03
Pen Branch Swamp Discharge	8/18/2016	8.30E-01	7.07E-02	4.24E-03	1.12E-03
RM 150.4 Sediment	5/2/2016	1.52E+00	1.19E-01	-1.95E-05	3.16E-04
River Mile 160.0 Sediment	5/2/2016	1.19E+00	1.00E-01	-3.97E-04	2.27E-04
SC-2A 1 mile above Road B	6/28/2016	1.89E+00	1.33E-01	1.06E-02	1.99E-03
SC-4 Steel Creek at Road A	6/16/2016	1.18E+00	9.82E-02	7.03E-03	1.56E-03
SWDF Basin North (E-002)	5/4/2016	5.41E-01	5.00E-02	4.70E-04	4.23E-04
SWDF Basin South (E-001)	5/4/2016	1.67E+00	1.29E-01	3.05E-01	2.74E-02
TB-5 Near Road C	3/1/2016	6.38E+00	4.55E-01	3.65E-04	5.73E-04
Tinker Creek 1	2/29/2016	6.51E-01	5.58E-02	9.49E-04	6.84E-04
U3R-1A Treadway Bridge RD 8-1	2/29/2016	2.03E+00	1.48E-01	1.02E-03	6.27E-04
U3R-4 Sediment	3/1/2016	1.90E+00	1.31E-01	3.89E-03	1.03E-03
R-Area (Downstream of R-1)	8/18/2016	6.31E-01	1.66E-01	9.17E-03	7.40E-03
Z Basin	7/11/2016	1.11E+00	7.15E-02	5.07E-03	5.80E-03

Table 28 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Pu-239		Am-241	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	2/29/2016	2.57E-04	2.68E-04	2.78E-02	2.78E-03
E-06	2/29/2016	3.05E-03	1.10E-03	8.30E-03	1.48E-03
EAV Basin North (E-004)	3/1/2016	4.05E-03	1.13E-03	1.98E-02	2.38E-03
EAV Basin South (E-003)	5/4/2016	2.30E-02	3.72E-03	7.59E-02	5.99E-03
FM-2 at Road 4	6/28/2016	7.35E-02	7.17E-03	3.05E-02	3.17E-03
FM-3A Below F-Area Effluent	6/28/2016	1.36E-02	2.29E-03	7.97E-03	1.47E-03
Four Mile A-7A (Beaver Pond)	6/28/2016	2.84E-01	2.39E-02	2.67E-01	1.78E-02
Four Mile Creek Swamp Dischrg	8/18/2016	1.50E-02	2.26E-03	1.28E-02	1.98E-03
Four Mile Creek at Road A-7	6/28/2016	9.24E-02	8.92E-03	8.38E-02	6.75E-03
L3R-1A at Road B	8/16/2016	2.49E-04	2.81E-04	2.19E-04	2.30E-04
L3R-2 Sediment	8/16/2016	3.95E-03	1.11E-03	2.03E-03	8.72E-04
MCQBR downstream of Z-Basin	8/18/2016	4.27E-03	1.17E-03	9.73E-04	5.33E-04
McQueen Branch at Monroe Road	5/4/2016	2.30E-02	3.15E-03	2.95E-03	8.63E-04
POND 400	3/1/2016	2.73E-01	2.36E-02	3.81E-02	3.59E-03
Pen Branch Swamp Discharge	8/18/2016	1.93E-02	2.72E-03	9.89E-03	1.56E-03
RM 150.4 Sediment	5/2/2016	6.84E-04	4.37E-04	2.38E-03	7.36E-04
River Mile 160.0 Sediment	5/2/2016	3.24E-04	4.47E-04	1.16E-03	5.25E-04
SC-2A 1 mile above Road B	6/28/2016	2.41E-02	3.36E-03	1.07E-02	1.68E-03
SC-4 Steel Creek at Road A	6/16/2016	8.62E-03	1.73E-03	5.27E-03	1.21E-03
SWDF Basin North (E-002)	5/4/2016	1.11E-03	5.69E-04	8.65E-04	5.61E-04
SWDF Basin South (E-001)	5/4/2016	2.36E-02	3.30E-03	1.68E-02	2.09E-03
TB-5 Near Road C	3/1/2016	7.89E-04	4.98E-04	-1.81E-04	1.75E-04
Tinker Creek 1	2/29/2016	2.89E-03	1.04E-03	1.73E-03	6.29E-04
U3R-1A Treadway Bridge RD 8-1	2/29/2016	9.62E-03	1.80E-03	3.22E-03	8.59E-04
U3R-4 Sediment	3/1/2016	9.95E-03	1.70E-03	1.72E-03	6.48E-04
R-Area (Downstream of R-1)	8/18/2016	4.34E-02	1.25E-02	3.98E-02	1.23E-02
Z Basin	7/11/2016	1.73E-03	4.80E-03	2.27E-02	1.11E-02

Table 28 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Cm-244	
		Result (pCi/g)	Standard Dev. (pCi/g)
E-05	2/29/2016	3.03E-03	7.57E-04
E-06	2/29/2016	1.38E-03	5.69E-04
EAV Basin North (E-004)	3/1/2016	2.09E-03	6.74E-04
EAV Basin South (E-003)	5/4/2016	5.05E-03	1.04E-03
FM-2 at Road 4	6/28/2016	1.40E-02	1.93E-03
FM-3A Below F-Area Effluent	6/28/2016	9.08E-03	1.57E-03
Four Mile A-7A (Beaver Pond)	6/28/2016	2.18E-01	1.47E-02
Four Mile Creek Swamp Dischrg	8/18/2016	1.07E-02	1.77E-03
Four Mile Creek at Road A-7	6/28/2016	7.70E-02	6.27E-03
L3R-1A at Road B	8/16/2016	3.03E-04	3.57E-04
L3R-2 Sediment	8/16/2016	0.00E+00	3.29E-04
MCQBR downstream of Z-Basin	8/18/2016	0.00E+00	2.74E-04
McQueen Branch at Monroe Road	5/4/2016	1.89E-04	2.23E-04
POND 400	3/1/2016	4.41E-03	1.01E-03
Pen Branch Swamp Discharge	8/18/2016	1.09E-03	6.42E-04
RM 150.4 Sediment	5/2/2016	1.85E-04	2.19E-04
River Mile 160.0 Sediment	5/2/2016	2.78E-04	3.63E-04
SC-2A 1 mile above Road B	6/28/2016	2.45E-04	3.25E-04
SC-4 Steel Creek at Road A	6/16/2016	1.08E-03	5.88E-04
SWDF Basin North (E-002)	5/4/2016	8.73E-05	3.14E-04
SWDF Basin South (E-001)	5/4/2016	5.92E-03	1.15E-03
TB-5 Near Road C	3/1/2016	2.31E-04	2.65E-04
Tinker Creek 1	2/29/2016	2.18E-04	2.18E-04
U3R-1A Treadway Bridge RD 8-1	2/29/2016	0.00E+00	2.78E-04
U3R-4 Sediment	3/1/2016	3.92E-05	2.51E-04
R-Area (Downstream of R-1)	8/18/2016	1.72E-03	4.77E-03
Z Basin	7/11/2016	1.16E-02	7.35E-03

Table 28 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	2/29/2016	7.51E+00	1.61E+00	1.07E+01	2.20E+00
E-06	2/29/2016	7.70E+00	1.62E+00	1.09E+01	2.24E+00
EAV Basin North (E-004)	3/1/2016	1.50E+01	2.02E+00	1.46E+01	2.77E+00
EAV Basin South (E-003)	5/4/2016	1.56E+01	2.04E+00	1.44E+01	2.65E+00
FM-2 at Road 4	6/28/2016	1.01E+01	1.68E+00	8.05E+00	1.61E+00
FM-3A Below F-Area Effluent	6/28/2016	6.35E+00	1.49E+00	8.11E+00	1.76E+00
Four Mile A-7A (Beaver Pond)	6/28/2016	3.51E+01	2.73E+00	2.21E+01	2.73E+00
Four Mile Creek Swamp Dischrg	8/18/2016	2.26E+00	1.26E+00	1.59E+00	8.55E-01
Four Mile Creek at Road A-7	6/28/2016	1.16E+01	1.76E+00	6.22E+00	1.42E+00
L3R-1A at Road B	8/16/2016	1.02E+01	1.80E+00	2.47E+01	2.97E+00
L3R-2 Sediment	8/16/2016	1.31E+01	1.90E+00	1.01E+01	1.86E+00
MCQBR downstream of Z-Basin	8/18/2016	1.25E+01	1.91E+00	2.42E+01	2.92E+00
McQueen Branch at Monroe Road	5/4/2016	7.76E+00	1.59E+00	6.84E+00	1.62E+00
POND 400	3/1/2016	3.35E+01	2.73E+00	2.18E+01	3.07E+00
Pen Branch Swamp Discharge	8/18/2016	7.68E+00	1.61E+00	5.03E+00	1.38E+00
RM 150.4 Sediment	5/2/2016	1.98E+01	2.18E+00	1.09E+01	2.15E+00
River Mile 160.0 Sediment	5/2/2016	2.15E+01	2.23E+00	7.38E+00	1.75E+00
SC-2A 1 mile above Road B	6/28/2016	1.47E+01	1.93E+00	8.05E+00	1.75E+00
SC-4 Steel Creek at Road A	6/16/2016	6.84E+00	1.56E+00	6.59E+00	1.51E+00
SWDF Basin North (E-002)	5/4/2016	3.08E+00	1.32E+00	7.89E+00	1.92E+00
SWDF Basin South (E-001)	5/4/2016	9.51E+00	1.70E+00	9.05E+00	1.90E+00
TB-5 Near Road C	3/1/2016	2.24E+01	2.33E+00	4.00E+01	3.73E+00
Tinker Creek 1	2/29/2016	5.68E+00	1.47E+00	8.68E+00	1.74E+00
U3R-1A Treadway Bridge RD 8-1	2/29/2016	4.86E+01	3.22E+00	5.62E+01	4.44E+00
U3R-4 Sediment	3/1/2016	1.75E+01	2.10E+00	2.05E+01	2.68E+00
R-Area (Downstream of R-1)	8/18/2016	4.58E+01	1.89E+00	1.70E+01	1.86E+00
Z Basin	7/11/2016	2.51E+03	1.48E+01	2.92E+01	2.78E+00

Table 29 Radionuclides in SRS Onsite Drinking Water

Location	Sample Date	Tritium (H-3)		Co-60	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	2/29/2016	2.76E+01	4.79E+01	5.97E-01	1.96E+00
681-3G Dom. Water Faucet	2/29/2016	1.07E+01	4.63E+01	2.38E-01	1.87E+00
704-16G	2/29/2016	-3.54E+01	4.80E+01	9.84E-01	1.92E+00
709-1G	2/29/2016	-2.40E+01	4.76E+01	-6.16E-01	1.77E+00
737-G	2/29/2016	2.92E+01	4.79E+01	2.12E+00	1.84E+00
782-3A	2/29/2016	-2.21E+01	4.75E+01	2.84E-01	2.10E+00
782-3A	4/13/2016	-7.49E+01	5.58E+01	1.45E+00	1.73E+00
782-3A	7/20/2016	2.32E+01	7.01E+01	3.84E+00	2.25E+00
782-3A	10/3/2016	-1.04E+02	4.67E+01	-2.70E-01	1.95E+00
905-112G Well	3/8/2016	-6.35E+01	4.90E+01	-2.44E+00	1.93E+00
905-113G Well	3/9/2016	-9.54E+00	4.93E+01	-3.05E+00	1.93E+00
905-125B	3/8/2016	-1.25E+02	4.91E+01	-4.70E-02	2.01E+00
905-67B	3/8/2016	-2.97E+01	4.77E+01	1.74E+00	2.09E+00

Location	Sample Date	Cs-137		Sr-89/90	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	2/29/2016	1.74E+00	2.14E+00	-4.97E-03	1.58E-01
681-3G Dom. Water Faucet	2/29/2016	1.56E+00	2.08E+00	-2.11E-02	1.57E-01
704-16G	2/29/2016	1.20E+00	2.05E+00	1.14E-02	1.69E-01
709-1G	2/29/2016	1.33E+00	1.89E+00	-2.09E-01	1.42E-01
737-G	2/29/2016	1.11E+00	2.13E+00	3.84E-02	1.59E-01
782-3A	2/29/2016	-1.01E+00	2.05E+00	9.57E-02	1.69E-01
782-3A	4/13/2016	-3.19E-01	2.11E+00	-1.06E-01	1.47E-01
782-3A	7/20/2016	-3.00E+00	2.22E+00	2.15E-01	1.71E-01
782-3A	10/3/2016	-2.04E+00	1.88E+00	1.04E-01	1.60E-01
905-112G Well	3/8/2016	-1.71E-01	2.10E+00	-3.92E-01	1.24E-01
905-113G Well	3/9/2016	-2.78E+00	1.95E+00	-4.97E-03	1.58E-01
905-125B	3/8/2016	-5.30E-01	1.95E+00	-2.11E-02	1.57E-01
905-67B	3/8/2016	8.84E-01	2.22E+00	1.14E-02	1.69E-01

Table 29 Radionuclides in SRS Onsite Drinking Water (continued)

Location	Sample Date	U-234		U-235	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	2/29/2016	2.30E-02	6.55E-03	2.02E-03	2.04E-03
681-3G Dom. Water Faucet	2/29/2016	4.95E-03	3.08E-03	6.76E-04	2.45E-03
704-16G	2/29/2016	1.28E-02	5.32E-03	4.30E-03	3.07E-03
709-1G	2/29/2016	2.78E-02	7.68E-03	4.11E-03	2.94E-03
737-G	2/29/2016	5.54E-03	4.81E-03	-2.02E-06	1.20E-04
782-3A	2/29/2016	3.76E-02	8.63E-03	6.32E-03	3.69E-03
905-112G Well	3/8/2016	2.73E-02	7.69E-03	2.95E-03	3.46E-03
905-113G Well	3/9/2016	4.86E-02	1.00E-02	7.86E-03	5.24E-03
905-125B	3/8/2016	5.30E-02	1.07E-02	6.49E-03	3.78E-03
905-67B	3/8/2016	2.43E-02	6.91E-03	2.86E-03	3.36E-03

Location	Sample Date	U-238		Pu-238	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	2/29/2016	1.53E-02	5.51E-03	4.59E-03	3.84E-03
681-3G Dom. Water Faucet	2/29/2016	1.32E-02	4.86E-03	-3.59E-06	2.37E-04
704-16G	2/29/2016	1.97E-02	6.39E-03	-5.57E-04	2.29E-03
709-1G	2/29/2016	3.38E-02	8.13E-03	5.84E-04	2.13E-03
737-G	2/29/2016	1.54E-02	5.88E-03	4.84E-03	2.85E-03
782-3A	2/29/2016	5.46E-02	1.04E-02	-5.84E-04	2.40E-03
905-112G Well	3/8/2016	5.22E-02	1.05E-02	-3.59E-06	2.41E-04
905-113G Well	3/9/2016	2.95E-02	8.17E-03	-1.03E-03	4.23E-03
905-125B	3/8/2016	8.73E-02	1.37E-02	6.35E-04	2.32E-03
905-67B	3/8/2016	2.60E-02	7.05E-03	6.43E-04	2.35E-03

Table 29 Radionuclides in SRS Onsite Drinking Water (continued)

Location	Sample Date	Pu-239		Am-241	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	2/29/2016	-1.73E-03	2.66E-03	1.77E-03	1.91E-03
681-3G Dom. Water Faucet	2/29/2016	4.54E-03	3.87E-03	2.45E-03	2.97E-03
704-16G	2/29/2016	4.97E-03	3.00E-03	8.30E-03	3.86E-03
709-1G	2/29/2016	-3.51E-03	2.05E-03	4.00E-03	3.30E-03
737-G	2/29/2016	1.60E-03	1.73E-03	8.16E-03	4.72E-03
782-3A	2/29/2016	5.73E-04	2.17E-03	4.22E-03	3.45E-03
905-112G Well	3/8/2016	-7.89E-06	5.30E-04	3.59E-03	2.67E-03
905-113G Well	3/9/2016	-2.06E-03	2.09E-03	1.05E-02	5.32E-03
905-125B	3/8/2016	2.54E-03	3.07E-03	5.78E-03	4.89E-03
905-67B	3/8/2016	-1.30E-03	1.37E-03	4.05E-03	2.99E-03

Location	Sample Date	Cm-244	
		Result (pCi/L)	Standard Dev. (pCi/L)
617-G	2/29/2016	3.54E-03	2.52E-03
681-3G Dom. Water Faucet	2/29/2016	6.08E-04	2.21E-03
704-16G	2/29/2016	-2.35E-06	1.38E-04
709-1G	2/29/2016	5.68E-04	2.06E-03
737-G	2/29/2016	-1.16E-03	1.16E-03
782-3A	2/29/2016	-2.35E-06	1.40E-04
905-112G Well	3/8/2016	-2.35E-06	1.40E-04
905-113G Well	3/9/2016	1.82E-03	1.84E-03
905-125B	3/8/2016	-1.44E-03	2.70E-03
905-67B	3/8/2016	-2.35E-06	1.42E-04

Table 29 Radionuclides in SRS Onsite Drinking Water (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	2/29/2016	1.29E+00	1.84E-01	5.38E-01	1.39E-01
681-3G Dom. Water Faucet	2/29/2016	2.62E+00	2.29E-01	1.32E+00	1.90E-01
704-16G	2/29/2016	1.70E+00	2.03E-01	2.09E+00	2.57E-01
709-1G	2/29/2016	9.51E-01	5.51E-01	1.50E-01	2.58E-01
737-G	2/29/2016	1.36E+00	1.88E-01	1.51E-01	1.01E-01
782-3A	2/29/2016	7.03E-01	1.63E-01	5.70E-01	1.58E-01
782-3A	4/13/2016	2.56E+00	1.72E-01	2.78E+00	2.34E-01
782-3A	7/20/2016	1.62E+00	2.47E-01	1.51E+00	2.55E-01
782-3A	10/3/2016	2.49E+00	2.53E-01	2.86E+00	3.63E-01
905-112G Well	3/8/2016	1.45E+00	1.88E-01	6.49E-01	1.33E-01
905-113G Well	3/9/2016	1.55E+00	1.93E-01	1.00E+00	1.64E-01
905-125B	3/8/2016	1.76E+00	2.02E-01	1.62E+00	2.05E-01
905-67B	3/8/2016	7.97E-01	1.65E-01	1.14E+00	1.75E-01

Table 30 Radionuclides in Offsite Water Treatment Plants

SRS collects samples from two water treatment plants that use Savannah River water as the source of drinking water that is provided to their customers. One plant, the North Augusta Public Water Works (PWW), is located upriver from SRS. The second plant, Beaufort-Jasper Water and Sewer Authority's (BJWSA) Purrysburg water treatment plant, is located downriver from SRS. The collected samples are of finished drinking water. Each sample is a composite of a month of daily aliquots.

Radionuclide: H-3 (tritium)

Sample Date	BJWSA – Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2016	9.35E+01	5.79E+01	7.70E+01	4.63E+01
2/29/2016	1.24E+02	5.85E+01	6.35E+01	4.67E+01
3/31/2016	2.09E+02	5.85E+01	2.21E+01	5.70E+01
4/30/2016	3.27E+02	7.50E+01	8.00E+01	5.66E+01
5/31/2016	2.05E+02	7.31E+01	1.76E+02	7.30E+01
6/30/2016	2.76E+02	7.38E+01	7.32E+01	7.12E+01
7/31/2016	1.15E+02	5.03E+01	1.59E+02	7.17E+01
8/31/2016	2.16E+02	5.08E+01	7.11E+01	4.96E+01
9/30/2016	3.41E+02	5.26E+01	3.43E+01	4.85E+01
10/31/2016	1.96E+02	8.23E+01	6.95E+01	8.06E+01
11/30/2016	2.32E+02	8.22E+01	5.46E-04	7.99E+01
12/31/2016	2.29E+02	8.21E+01	1.06E+01	7.96E+01

Radionuclide: Co-60

Sample Date	BJWSA – Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2016	4.43E+00	1.97E+00	-2.48E+00	1.76E+00
2/29/2016	6.49E-01	1.92E+00	-9.11E-01	1.80E+00
3/31/2016	2.22E+00	2.08E+00	1.43E+00	1.96E+00
4/30/2016	-3.76E+00	1.94E+00	3.92E+00	2.07E+00
5/31/2016	-1.16E+00	1.98E+00	3.43E+00	2.09E+00
6/30/2016	9.16E-01	2.25E+00	-3.78E+00	1.91E+00
7/31/2016	1.26E+00	1.93E+00	2.08E+00	2.09E+00
8/31/2016	1.09E+00	2.22E+00	3.35E-01	1.91E+00
9/30/2016	2.56E+00	1.64E+00	-8.76E-01	2.11E+00
10/31/2016	2.38E+00	2.16E+00	7.46E-01	2.16E+00
11/30/2016	-3.38E+00	1.64E+00	3.24E-01	2.10E+00
12/31/2016	3.27E+00	1.75E+00	8.68E-01	1.85E+00

Table 30 Radionuclides in Offsite Water Treatment Plants (continued)

Radionuclide: Cs-137

Sample Date	BJWSA – Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2016	-1.33E+00	2.11E+00	-7.22E-01	2.13E+00
2/29/2016	-3.11E-02	2.12E+00	-7.62E-01	2.08E+00
3/31/2016	-5.95E-01	2.28E+00	-1.10E+00	2.00E+00
4/30/2016	3.19E+00	2.01E+00	-1.42E+00	2.07E+00
5/31/2016	1.43E+00	2.14E+00	9.68E-01	2.19E+00
6/30/2016	1.79E-01	2.34E+00	-2.66E+00	1.91E+00
7/31/2016	4.46E+00	2.18E+00	1.14E+00	2.15E+00
8/31/2016	-3.32E+00	2.37E+00	-3.11E-01	2.09E+00
9/30/2016	1.57E-01	2.04E+00	-1.21E+00	2.35E+00
10/31/2016	5.70E+00	2.13E+00	-1.45E+00	1.95E+00
11/30/2016	4.84E+00	2.22E+00	1.83E-01	2.32E+00
12/31/2016	-3.22E-01	2.27E+00	8.62E-01	1.99E+00

Radionuclide: Gross Beta

Sample Date	BJWSA – Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2016	1.55E+00	2.05E-01	1.77E+00	2.01E-01
2/29/2016	1.11E+00	1.88E-01	1.76E+00	2.01E-01
3/31/2016	7.35E-01	1.73E-01	1.55E+00	2.02E-01
4/30/2016	2.25E+00	2.38E-01	1.74E+00	2.12E-01
5/31/2016	2.06E+00	2.31E-01	1.70E+00	2.21E-01
6/30/2016	1.91E+00	2.26E-01	2.13E+00	2.66E-01
7/31/2016	1.55E+00	2.36E-01	1.74E+00	2.45E-01
8/31/2016	1.24E+00	2.25E-01	1.91E+00	2.50E-01
9/30/2016	1.83E+00	2.46E-01	1.78E+00	2.42E-01
10/31/2016	1.95E+00	2.32E-01	2.33E+00	2.45E-01
11/30/2016	1.71E+00	2.24E-01	1.89E+00	1.68E-01
12/31/2016	1.60E+00	2.20E-01	1.96E+00	2.17E-01

Table 30 Radionuclides in Offsite Water Treatment Plants (continued)

Radionuclide: Gross Alpha

Sample Date	BJWSA – Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2016	-1.61E-02	7.50E-02	6.86E-02	7.47E-02
2/29/2016	-7.78E-02	5.62E-02	1.26E-01	8.46E-02
3/31/2016	1.51E-02	7.27E-02	1.35E-02	6.64E-02
4/30/2016	1.40E-01	1.29E-01	1.05E-01	7.52E-02
5/31/2016	1.42E-01	1.30E-01	-6.30E-02	5.12E-02
6/30/2016	2.27E-01	1.44E-01	2.12E-01	1.08E-01
7/31/2016	2.73E-02	1.05E-01	3.03E-02	8.96E-02
8/31/2016	2.86E-02	1.08E-01	6.14E-02	9.40E-02
9/30/2016	-5.35E-02	9.28E-02	1.86E-01	1.14E-01
10/31/2016	1.25E-01	9.56E-02	2.78E-01	1.03E-01
11/30/2016	-2.78E-02	5.93E-02	9.51E-02	5.33E-02
12/31/2016	8.76E-02	8.84E-02	-5.46E-03	4.42E-02

Table 31 Radionuclides in Freshwater Fish

SRS collects fish from the mouths of creeks that traverse SRS and enter into the Savannah River. All samples are from fish flesh, unless noted. Strontium-89/90 is analyzed in both fish flesh and fish bones and are reported separately. Bone samples are identified as “nonedible”.

Radionuclide: H-3 (tritium)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	3.41E-02	2.81E-02
Augusta Lock and Dam	Bass	7/27/2016	2.22E-02	3.08E-02
Augusta Lock and Dam	Bass	7/27/2016	4.46E-02	3.11E-02
Augusta Lock and Dam	Catfish	7/27/2016	1.24E-02	2.06E-02
Augusta Lock and Dam	Catfish	7/27/2016	5.00E-03	2.08E-02
Augusta Lock and Dam	Catfish	7/27/2016	1.65E-02	2.44E-02
Augusta Lock and Dam	Panfish	7/27/2016	5.19E-02	2.97E-02
Augusta Lock and Dam	Panfish	7/27/2016	4.59E-02	2.24E-02
Augusta Lock and Dam	Panfish	7/27/2016	4.08E-02	2.36E-02
Four Mile Creek River Mouth	Bass	7/20/2016	7.81E-02	2.97E-02
Four Mile Creek River Mouth	Bass	7/20/2016	5.49E-01	3.49E-02
Four Mile Creek River Mouth	Bass	7/20/2016	1.06E-01	3.00E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	7.32E-02	3.22E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	6.65E-02	3.22E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	7.84E-02	2.97E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	5.57E-02	3.62E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	2.66E-01	3.19E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	7.14E-02	2.97E-02
Hwy-301 Bridge Area	Bass	4/18/2016	1.09E-01	2.70E-02
Hwy-301 Bridge Area	Bass	4/18/2016	9.97E-02	2.44E-02
Hwy-301 Bridge Area	Bass	4/18/2016	8.30E-02	2.40E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	-1.69E-02	2.32E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	4.51E-02	2.69E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	5.00E-03	2.92E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	5.86E-02	2.65E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	2.15E-02	2.53E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	4.27E-02	2.40E-02
L3R Creek River Mouth	Bass	3/23/2016	1.44E-01	2.97E-02
L3R Creek River Mouth	Bass	3/23/2016	1.45E-01	2.57E-02
L3R Creek River Mouth	Bass	3/23/2016	1.40E-01	2.56E-02
L3R Creek River Mouth	Catfish	3/23/2016	2.31E-02	2.27E-02
L3R Creek River Mouth	Catfish	5/12/2016	3.68E-02	2.40E-02
L3R Creek River Mouth	Catfish	5/12/2016	8.11E-02	2.70E-02
L3R Creek River Mouth	Panfish	3/23/2016	2.54E-02	2.40E-02
L3R Creek River Mouth	Panfish	3/23/2016	1.16E-01	2.41E-02
L3R Creek River Mouth	Panfish	3/23/2016	8.62E-02	2.13E-02
Steel Creek River Mouth	Bass	3/30/2016	3.76E-01	2.86E-02

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: H-3 (tritium) (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Steel Creek River Mouth	Bass	4/28/2016	1.27E-01	2.08E-02
Steel Creek River Mouth	Bass	4/28/2016	6.62E-02	2.35E-02
Steel Creek River Mouth	Catfish	4/28/2016	1.67E-02	2.46E-02
Steel Creek River Mouth	Catfish	4/28/2016	1.12E-01	2.81E-02
Steel Creek River Mouth	Catfish	4/28/2016	2.08E-01	3.05E-02
Steel Creek River Mouth	Panfish	4/28/2016	6.11E-02	2.37E-02
Steel Creek River Mouth	Panfish	4/28/2016	1.04E-02	2.73E-02
Steel Creek River Mouth	Panfish	4/28/2016	7.68E-02	2.58E-02
U3R Creek River Mouth	Bass	5/4/2016	2.24E-02	2.56E-02
U3R Creek River Mouth	Bass	5/4/2016	1.77E-02	3.03E-02
U3R Creek River Mouth	Bass	5/4/2016	-4.00E-03	3.00E-02
U3R Creek River Mouth	Catfish	5/4/2016	4.68E-02	2.73E-02
U3R Creek River Mouth	Catfish	5/4/2016	1.09E-01	2.78E-02
U3R Creek River Mouth	Catfish	5/4/2016	5.89E-02	2.73E-02
U3R Creek River Mouth	Panfish	3/16/2016	1.17E-01	3.43E-02
U3R Creek River Mouth	Panfish	5/4/2016	1.57E-01	3.38E-02
U3R Creek River Mouth	Panfish	5/4/2016	5.11E-03	3.19E-02

Radionuclide: Co-60

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	-6.89E-03	4.43E-03
Augusta Lock and Dam	Bass	7/27/2016	-1.03E-03	4.16E-03
Augusta Lock and Dam	Bass	7/27/2016	-6.51E-03	4.16E-03
Augusta Lock and Dam	Catfish	7/27/2016	8.76E-04	3.92E-03
Augusta Lock and Dam	Catfish	7/27/2016	6.54E-03	4.43E-03
Augusta Lock and Dam	Catfish	7/27/2016	-6.81E-04	4.73E-03
Augusta Lock and Dam	Panfish	7/27/2016	5.57E-03	5.38E-03
Augusta Lock and Dam	Panfish	7/27/2016	-3.59E-04	5.49E-03
Augusta Lock and Dam	Panfish	7/27/2016	1.65E-03	5.16E-03
Four Mile Creek River Mouth	Bass	7/20/2016	-1.59E-04	4.22E-03
Four Mile Creek River Mouth	Bass	7/20/2016	-6.73E-03	4.27E-03
Four Mile Creek River Mouth	Bass	7/20/2016	-6.59E-03	4.30E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	4.73E-03	4.46E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	6.54E-03	4.19E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	3.30E-03	4.51E-03
Four Mile Creek River Mouth	Panfish	7/6/2016	8.14E-03	5.68E-03
Four Mile Creek River Mouth	Panfish	7/6/2016	1.22E-03	6.27E-03
Four Mile Creek River Mouth	Panfish	7/6/2016	-8.73E-03	5.35E-03
Hwy-301 Bridge Area	Bass	4/18/2016	2.45E-03	2.14E-03

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Co-60 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Hwy-301 Bridge Area	Bass	4/18/2016	1.73E-03	2.18E-03
Hwy-301 Bridge Area	Bass	4/18/2016	-3.81E-04	2.09E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	1.65E-03	2.19E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	2.92E-03	2.08E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	8.00E-04	2.13E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	2.05E-03	2.52E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	9.35E-04	2.37E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	3.76E-04	2.37E-03
L3R Creek River Mouth	Bass	3/23/2016	4.41E-03	5.22E-03
L3R Creek River Mouth	Bass	3/23/2016	2.84E-03	4.65E-03
L3R Creek River Mouth	Bass	3/23/2016	-1.14E-02	4.65E-03
L3R Creek River Mouth	Catfish	3/23/2016	9.30E-03	4.30E-03
L3R Creek River Mouth	Catfish	5/12/2016	-3.16E-03	4.08E-03
L3R Creek River Mouth	Catfish	5/12/2016	2.09E-04	4.76E-03
L3R Creek River Mouth	Panfish	3/23/2016	1.85E-03	6.22E-03
L3R Creek River Mouth	Panfish	3/23/2016	-1.56E-03	5.41E-03
L3R Creek River Mouth	Panfish	3/23/2016	5.92E-03	4.89E-03
Steel Creek River Mouth	Bass	3/30/2016	-2.08E-04	4.24E-03
Steel Creek River Mouth	Bass	4/28/2016	-9.92E-04	4.68E-03
Steel Creek River Mouth	Bass	4/28/2016	2.66E-03	4.51E-03
Steel Creek River Mouth	Catfish	4/28/2016	-2.54E-03	4.22E-03
Steel Creek River Mouth	Catfish	4/28/2016	2.05E-06	4.14E-03
Steel Creek River Mouth	Catfish	4/28/2016	8.62E-04	4.51E-03
Steel Creek River Mouth	Panfish	4/28/2016	-2.54E-03	5.30E-03
Steel Creek River Mouth	Panfish	4/28/2016	-2.08E-04	4.84E-03
Steel Creek River Mouth	Panfish	4/28/2016	3.00E-03	5.27E-03
U3R Creek River Mouth	Bass	5/4/2016	-5.84E-03	4.51E-03
U3R Creek River Mouth	Bass	5/4/2016	6.43E-03	4.38E-03
U3R Creek River Mouth	Bass	5/4/2016	2.24E-03	3.73E-03
U3R Creek River Mouth	Catfish	5/4/2016	-5.41E-03	4.89E-03
U3R Creek River Mouth	Catfish	5/4/2016	6.14E-03	4.70E-03
U3R Creek River Mouth	Catfish	5/4/2016	3.68E-03	4.49E-03
U3R Creek River Mouth	Panfish	3/16/2016	-2.58E-03	5.24E-03
U3R Creek River Mouth	Panfish	5/4/2016	-4.62E-03	5.95E-03
U3R Creek River Mouth	Panfish	5/4/2016	9.38E-03	5.70E-03

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Cs-137

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	2.06E-02	6.30E-03
Augusta Lock and Dam	Bass	7/27/2016	2.42E-02	6.57E-03
Augusta Lock and Dam	Bass	7/27/2016	1.11E-01	1.11E-02
Augusta Lock and Dam	Catfish	7/27/2016	1.16E-02	6.11E-03
Augusta Lock and Dam	Catfish	7/27/2016	4.00E-02	6.84E-03
Augusta Lock and Dam	Catfish	7/27/2016	2.37E-02	6.73E-03
Augusta Lock and Dam	Panfish	7/27/2016	3.59E-02	1.14E-02
Augusta Lock and Dam	Panfish	7/27/2016	1.30E-02	5.86E-03
Augusta Lock and Dam	Panfish	7/27/2016	8.86E-03	5.51E-03
Four Mile Creek River Mouth	Bass	7/20/2016	1.04E-01	1.07E-02
Four Mile Creek River Mouth	Bass	7/20/2016	2.69E-01	1.88E-02
Four Mile Creek River Mouth	Bass	7/20/2016	9.78E-02	1.01E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	4.46E-02	6.89E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	8.27E-02	8.95E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	2.86E-02	6.32E-03
Four Mile Creek River Mouth	Panfish	7/6/2016	2.12E-01	1.76E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	6.19E-02	1.17E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	5.03E-02	8.76E-03
Hwy-301 Bridge Area	Bass	4/18/2016	3.03E-02	3.49E-03
Hwy-301 Bridge Area	Bass	4/18/2016	4.24E-02	4.08E-03
Hwy-301 Bridge Area	Bass	4/18/2016	4.03E-02	4.32E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	2.68E-02	3.22E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	1.72E-02	3.14E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	3.03E-02	4.03E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	1.19E-02	3.54E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	1.08E-02	2.95E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	1.52E-02	3.11E-03
L3R Creek River Mouth	Bass	3/23/2016	1.01E-01	1.03E-02
L3R Creek River Mouth	Bass	3/23/2016	2.86E-01	1.99E-02
L3R Creek River Mouth	Bass	3/23/2016	4.08E-02	7.89E-03
L3R Creek River Mouth	Catfish	3/23/2016	1.45E-01	1.31E-02
L3R Creek River Mouth	Catfish	5/12/2016	8.43E-02	1.05E-02
L3R Creek River Mouth	Catfish	5/12/2016	1.12E-01	1.12E-02
L3R Creek River Mouth	Panfish	3/23/2016	3.89E-02	9.43E-03
L3R Creek River Mouth	Panfish	3/23/2016	8.03E-02	9.76E-03
L3R Creek River Mouth	Panfish	3/23/2016	4.14E-01	2.69E-02
Steel Creek River Mouth	Bass	3/30/2016	1.40E-01	1.19E-02
Steel Creek River Mouth	Bass	4/28/2016	1.08E-01	1.21E-02
Steel Creek River Mouth	Bass	4/28/2016	9.76E-02	1.17E-02
Steel Creek River Mouth	Catfish	4/28/2016	9.32E-02	1.07E-02
Steel Creek River Mouth	Catfish	4/28/2016	6.68E-02	8.70E-03

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Cs-137 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Steel Creek River Mouth	Catfish	4/28/2016	5.76E-02	7.76E-03
Steel Creek River Mouth	Panfish	4/28/2016	4.78E-02	9.84E-03
Steel Creek River Mouth	Panfish	4/28/2016	3.11E-02	8.89E-03
Steel Creek River Mouth	Panfish	4/28/2016	9.54E-02	1.11E-02
U3R Creek River Mouth	Bass	5/4/2016	3.84E-02	6.08E-03
U3R Creek River Mouth	Bass	5/4/2016	1.03E-01	1.08E-02
U3R Creek River Mouth	Bass	5/4/2016	2.19E-01	1.54E-02
U3R Creek River Mouth	Catfish	5/4/2016	3.97E-02	6.78E-03
U3R Creek River Mouth	Catfish	5/4/2016	2.76E-02	7.78E-03
U3R Creek River Mouth	Catfish	5/4/2016	2.06E-02	4.89E-03
U3R Creek River Mouth	Panfish	3/16/2016	3.05E-02	1.06E-02
U3R Creek River Mouth	Panfish	5/4/2016	1.09E-02	5.41E-03
U3R Creek River Mouth	Panfish	5/4/2016	1.03E-02	5.24E-03

Radionuclide: Sr-89/90 (edible)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	8.30E-04	9.86E-04
Augusta Lock and Dam	Bass	7/27/2016	9.03E-04	9.46E-04
Augusta Lock and Dam	Bass	7/27/2016	6.73E-04	9.70E-04
Augusta Lock and Dam	Catfish	7/27/2016	2.70E-03	1.21E-03
Augusta Lock and Dam	Catfish	7/27/2016	2.61E-03	1.07E-03
Augusta Lock and Dam	Catfish	7/27/2016	1.29E-03	1.07E-03
Augusta Lock and Dam	Panfish	7/27/2016	9.76E-03	2.35E-03
Augusta Lock and Dam	Panfish	7/27/2016	2.52E-03	2.25E-03
Augusta Lock and Dam	Panfish	7/27/2016	7.24E-03	2.14E-03
Four Mile Creek River Mouth	Bass	7/20/2016	4.59E-03	1.17E-03
Four Mile Creek River Mouth	Bass	7/20/2016	9.22E-03	1.52E-03
Four Mile Creek River Mouth	Bass	7/20/2016	6.54E-03	1.28E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	5.54E-03	1.27E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	2.24E-03	1.02E-03
Four Mile Creek River Mouth	Catfish	7/6/2016	-7.62E-04	8.14E-04
Four Mile Creek River Mouth	Panfish	7/6/2016	4.00E-03	1.99E-03
Four Mile Creek River Mouth	Panfish	7/6/2016	3.41E-03	1.90E-03
Four Mile Creek River Mouth	Panfish	7/6/2016	8.57E-03	2.41E-03
Hwy-301 Bridge Area	Bass	4/18/2016	3.81E-04	1.19E-03
Hwy-301 Bridge Area	Bass	4/18/2016	4.19E-03	1.24E-03
Hwy-301 Bridge Area	Bass	4/18/2016	9.08E-04	9.97E-04
Hwy-301 Bridge Area	Catfish	5/12/2016	1.15E-03	1.05E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	1.46E-03	1.05E-03

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Sr-89/90 (edible) (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Hwy-301 Bridge Area	Catfish	5/12/2016	1.88E-03	1.08E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	4.92E-03	2.38E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	1.42E-03	1.98E-03
Hwy-301 Bridge Area	Panfish	4/18/2016	5.00E-03	2.25E-03
L3R Creek River Mouth	Bass	3/23/2016	3.22E-03	1.22E-03
L3R Creek River Mouth	Bass	3/23/2016	4.00E-04	9.14E-04
L3R Creek River Mouth	Bass	3/23/2016	4.11E-03	1.09E-03
L3R Creek River Mouth	Catfish	3/23/2016	1.65E-03	8.54E-04
L3R Creek River Mouth	Catfish	5/12/2016	1.39E-03	9.24E-04
L3R Creek River Mouth	Catfish	5/12/2016	3.27E-03	1.11E-03
L3R Creek River Mouth	Panfish	3/23/2016	1.97E-03	1.82E-03
L3R Creek River Mouth	Panfish	3/23/2016	1.84E-03	3.22E-03
L3R Creek River Mouth	Panfish	3/23/2016	9.00E-04	2.14E-03
Steel Creek River Mouth	Bass	3/30/2016	9.08E-04	1.07E-03
Steel Creek River Mouth	Bass	4/28/2016	2.21E-03	1.36E-03
Steel Creek River Mouth	Bass	4/28/2016	1.48E-03	1.21E-03
Steel Creek River Mouth	Catfish	4/28/2016	3.92E-03	1.58E-03
Steel Creek River Mouth	Catfish	4/28/2016	-1.46E-04	1.39E-03
Steel Creek River Mouth	Catfish	4/28/2016	1.62E-03	1.21E-03
Steel Creek River Mouth	Panfish	4/28/2016	4.49E-03	2.34E-03
Steel Creek River Mouth	Panfish	4/28/2016	3.35E-03	2.06E-03
Steel Creek River Mouth	Panfish	4/28/2016	7.86E-04	2.55E-03
U3R Creek River Mouth	Bass	5/4/2016	3.35E-03	1.08E-03
U3R Creek River Mouth	Bass	5/4/2016	2.05E-03	9.49E-04
U3R Creek River Mouth	Bass	5/4/2016	7.95E-04	8.54E-04
U3R Creek River Mouth	Catfish	5/4/2016	1.79E-03	1.00E-03
U3R Creek River Mouth	Catfish	5/4/2016	1.82E-03	1.01E-03
U3R Creek River Mouth	Catfish	5/4/2016	-3.11E-04	9.32E-04
U3R Creek River Mouth	Panfish	3/16/2016	2.08E-03	1.95E-03
U3R Creek River Mouth	Panfish	5/4/2016	1.45E-03	1.59E-03
U3R Creek River Mouth	Panfish	5/4/2016	3.32E-03	1.86E-03

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Sr-89/90 (nonedible) (bone)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2017	7.16E-01	1.42E-01
Augusta Lock and Dam	Bass	7/27/2017	6.35E-01	1.36E-01
Augusta Lock and Dam	Bass	7/27/2017	9.22E-01	1.42E-01
Augusta Lock and Dam	Catfish	7/27/2017	7.84E-01	1.28E-01
Augusta Lock and Dam	Catfish	7/27/2017	7.05E-01	1.29E-01
Augusta Lock and Dam	Catfish	7/27/2017	7.35E-01	1.27E-01
Augusta Lock and Dam	Panfish	7/27/2017	8.81E-01	1.35E-01
Augusta Lock and Dam	Panfish	7/27/2017	6.97E-01	1.38E-01
Augusta Lock and Dam	Panfish	7/27/2017	8.97E-01	1.58E-01
Four Mile Creek River Mouth	Bass	7/20/2016	1.36E+00	1.59E-01
Four Mile Creek River Mouth	Bass	7/20/2016	4.57E+00	3.32E-01
Four Mile Creek River Mouth	Bass	7/20/2016	9.22E-01	1.34E-01
Four Mile Creek River Mouth	Catfish	7/6/2016	7.84E-01	1.26E-01
Four Mile Creek River Mouth	Catfish	7/6/2016	1.32E+00	1.54E-01
Four Mile Creek River Mouth	Catfish	7/6/2016	9.38E-01	1.35E-01
Four Mile Creek River Mouth	Panfish	7/6/2016	1.93E+00	1.89E-01
Four Mile Creek River Mouth	Panfish	7/6/2016	1.75E+00	1.81E-01
Four Mile Creek River Mouth	Panfish	7/6/2016	1.26E+00	1.52E-01
Hwy-301 Bridge Area	Bass	4/18/2016	7.08E-01	1.42E-01
Hwy-301 Bridge Area	Bass	4/18/2016	7.08E-01	1.42E-01
Hwy-301 Bridge Area	Bass	4/18/2016	6.03E-01	1.34E-01
Hwy-301 Bridge Area	Catfish	5/12/2016	4.68E-01	1.25E-01
Hwy-301 Bridge Area	Catfish	5/12/2016	6.76E-01	1.40E-01
Hwy-301 Bridge Area	Catfish	5/12/2016	7.30E-01	1.46E-01
Hwy-301 Bridge Area	Panfish	4/18/2016	8.41E-01	1.46E-01
Hwy-301 Bridge Area	Panfish	4/18/2016	6.76E-01	1.53E-01
Hwy-301 Bridge Area	Panfish	4/18/2016	6.73E-01	1.44E-01
L3R Creek River Mouth	Bass	3/23/2016	6.14E-01	1.34E-01
L3R Creek River Mouth	Bass	3/23/2016	4.65E-01	1.24E-01
L3R Creek River Mouth	Bass	3/23/2016	8.24E-01	1.54E-01
L3R Creek River Mouth	Catfish	5/12/2016	8.41E-01	1.42E-01
L3R Creek River Mouth	Catfish	5/12/2016	6.41E-01	1.33E-01
L3R Creek River Mouth	Catfish	5/12/2016	1.15E+00	2.21E-01
L3R Creek River Mouth	Panfish	3/23/2016	9.00E-01	1.58E-01
L3R Creek River Mouth	Panfish	3/23/2016	6.81E-01	1.37E-01
L3R Creek River Mouth	Panfish	3/23/2016	7.76E-01	1.74E-01
Steel Creek River Mouth	Bass	3/30/2016	7.24E-01	1.29E-01
Steel Creek River Mouth	Bass	4/28/2016	7.73E-01	1.37E-01
Steel Creek River Mouth	Bass	4/28/2016	4.32E-01	1.15E-01
Steel Creek River Mouth	Catfish	4/28/2016	5.35E-01	1.22E-01
Steel Creek River Mouth	Catfish	4/28/2016	8.59E-01	1.40E-01

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Sr-89/90 (nonedible) (bone) (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Steel Creek River Mouth	Catfish	4/28/2016	4.70E-01	1.09E-01
Steel Creek River Mouth	Panfish	4/28/2016	9.24E-01	1.40E-01
Steel Creek River Mouth	Panfish	4/28/2016	1.20E+00	1.58E-01
Steel Creek River Mouth	Panfish	4/28/2016	7.92E-01	1.35E-01
U3R Creek River Mouth	Bass	5/4/2016	7.16E-01	1.39E-01
U3R Creek River Mouth	Bass	5/4/2016	5.70E-01	1.31E-01
U3R Creek River Mouth	Bass	5/4/2016	9.05E-01	1.55E-01
U3R Creek River Mouth	Catfish	5/4/2016	6.05E-01	1.36E-01
U3R Creek River Mouth	Catfish	5/4/2016	8.81E-01	1.45E-01
U3R Creek River Mouth	Catfish	5/4/2016	7.22E-01	1.41E-01
U3R Creek River Mouth	Panfish	3/16/16	1.15E+00	1.68E-01
U3R Creek River Mouth	Panfish	5/4/2016	6.22E-01	1.35E-01
U3R Creek River Mouth	Panfish	5/4/2016	7.92E-01	1.40E-01

Radionuclide: I-129

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	-9.70E-04	7.00E-03
Augusta Lock and Dam	Bass	7/27/2016	6.03E-03	7.57E-03
Augusta Lock and Dam	Bass	7/27/2016	2.07E-02	1.20E-02
Augusta Lock and Dam	Panfish	7/27/2016	2.02E-02	2.33E-02
Augusta Lock and Dam	Panfish	7/27/2016	-1.92E-02	2.56E-02
Augusta Lock and Dam	Panfish	7/27/2016	-1.06E-02	2.35E-02
Augusta Lock and Dam	Catfish	7/27/2016	-4.14E-03	6.49E-03
Augusta Lock and Dam	Catfish	7/27/2016	4.35E-03	6.57E-03
Augusta Lock and Dam	Catfish	7/27/2016	1.42E-02	8.05E-03
Four Mile Creek River Mouth	Bass	7/20/2016	-1.08E-02	2.07E-02
Four Mile Creek River Mouth	Bass	7/20/2016	-4.68E-02	2.39E-02
Four Mile Creek River Mouth	Bass	7/20/2016	-6.70E-02	2.39E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	-2.86E-02	2.21E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	1.89E-02	2.26E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	-3.05E-02	2.64E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	-3.00E-02	2.23E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	6.27E-03	1.94E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	-5.57E-03	2.09E-02
Hwy-301 Bridge Area	Bass	4/18/2016	3.11E-02	1.84E-02
Hwy-301 Bridge Area	Bass	4/18/2016	-9.14E-03	1.98E-02
Hwy-301 Bridge Area	Bass	4/18/2016	-4.78E-02	2.20E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	-3.70E-03	2.43E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	4.08E-02	2.25E-02

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: I-129 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Hwy-301 Bridge Area	Panfish	4/18/2016	5.16E-02	2.31E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	-5.78E-03	1.98E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	-1.85E-03	6.43E-03
Hwy-301 Bridge Area	Catfish	5/12/2016	-3.00E-05	7.57E-03
L3R Creek River Mouth	Bass	3/23/2016	6.73E-03	6.73E-03
L3R Creek River Mouth	Bass	3/23/2016	-9.22E-03	7.08E-03
L3R Creek River Mouth	Bass	3/23/2016	-5.78E-03	7.81E-03
L3R Creek River Mouth	Panfish	3/23/2016	2.40E-02	7.86E-03
L3R Creek River Mouth	Panfish	3/23/2016	-2.86E-03	7.89E-03
L3R Creek River Mouth	Panfish	3/23/2016	8.43E-03	9.05E-03
L3R Creek River Mouth	Catfish	3/23/2016	-1.14E-02	2.13E-02
L3R Creek River Mouth	Catfish	5/12/2016	-2.56E-02	2.13E-02
L3R Creek River Mouth	Catfish	5/12/2016	-2.30E-02	2.22E-02
Steel Creek River Mouth	Bass	3/30/2016	-3.35E-02	2.26E-02
Steel Creek River Mouth	Bass	4/28/2016	5.51E-03	1.99E-02
Steel Creek River Mouth	Bass	4/28/2016	1.96E-02	1.98E-02
Steel Creek River Mouth	Panfish	4/28/2016	1.35E-02	8.30E-03
Steel Creek River Mouth	Panfish	4/28/2016	2.16E-02	1.05E-02
Steel Creek River Mouth	Panfish	4/28/2016	1.36E-02	8.11E-03
Steel Creek River Mouth	Catfish	4/28/2016	-1.35E-02	2.09E-02
Steel Creek River Mouth	Catfish	4/28/2016	-5.46E-03	6.38E-03
Steel Creek River Mouth	Catfish	4/28/2016	-4.51E-03	6.65E-03
U3R Creek River Mouth	Bass	5/4/2016	6.24E-03	1.95E-02
U3R Creek River Mouth	Bass	5/4/2016	2.15E-02	1.89E-02
U3R Creek River Mouth	Bass	5/4/2016	1.37E-02	1.64E-02
U3R Creek River Mouth	Panfish	3/16/16	-5.84E-03	7.95E-03
U3R Creek River Mouth	Panfish	5/4/2016	5.46E-04	2.35E-02
U3R Creek River Mouth	Panfish	5/4/2016	-4.59E-03	2.53E-02
U3R Creek River Mouth	Catfish	5/4/2016	1.35E-02	7.41E-03
U3R Creek River Mouth	Catfish	5/4/2016	3.32E-03	6.59E-03
U3R Creek River Mouth	Catfish	5/4/2016	7.22E-03	7.59E-03

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Tc-99

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	1.78E-02	2.47E-02
Augusta Lock and Dam	Bass	7/27/2016	8.22E-02	2.56E-02
Augusta Lock and Dam	Bass	7/27/2016	3.57E-02	2.49E-02
Augusta Lock and Dam	Panfish	7/27/2016	3.35E-02	2.49E-02
Augusta Lock and Dam	Panfish	7/27/2016	2.00E-02	2.47E-02
Augusta Lock and Dam	Panfish	7/27/2016	4.89E-02	2.51E-02
Augusta Lock and Dam	Catfish	7/27/2016	3.95E-02	2.50E-02
Augusta Lock and Dam	Catfish	7/27/2016	3.08E-02	2.49E-02
Augusta Lock and Dam	Catfish	7/27/2016	5.51E-02	2.52E-02
Four Mile Creek River Mouth	Bass	7/20/2016	7.57E-02	2.59E-02
Four Mile Creek River Mouth	Bass	7/20/2016	1.26E-01	2.67E-02
Four Mile Creek River Mouth	Bass	7/20/2016	9.24E-02	2.62E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	3.73E-02	2.54E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	9.59E-02	2.63E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	6.49E-02	2.58E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	5.30E-02	2.56E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	1.09E-01	2.64E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	5.05E-02	2.56E-02
Hwy-301 Bridge Area	Bass	4/18/2016	5.97E-02	2.92E-02
Hwy-301 Bridge Area	Bass	4/18/2016	1.12E-02	2.84E-02
Hwy-301 Bridge Area	Bass	4/18/2016	3.49E-02	2.89E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	2.14E-02	2.84E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	3.57E-02	2.86E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	3.32E-02	2.86E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	4.22E-02	2.89E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	7.70E-03	2.84E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	2.29E-02	2.84E-02
L3R Creek River Mouth	Bass	3/23/2016	2.97E-02	2.29E-02
L3R Creek River Mouth	Bass	3/23/2016	1.64E-02	2.28E-02
L3R Creek River Mouth	Bass	3/23/2016	1.15E-02	2.28E-02
L3R Creek River Mouth	Panfish	3/23/2016	3.14E-02	2.29E-02
L3R Creek River Mouth	Panfish	3/23/2016	3.46E-02	2.28E-02
L3R Creek River Mouth	Panfish	3/23/2016	6.00E-02	2.34E-02
L3R Creek River Mouth	Catfish	3/23/2016	5.32E-02	2.34E-02
L3R Creek River Mouth	Catfish	5/12/2016	2.36E-02	2.28E-02
L3R Creek River Mouth	Catfish	5/12/2016	3.27E-03	2.25E-02
Steel Creek River Mouth	Bass	3/30/2016	2.56E-02	2.42E-02
Steel Creek River Mouth	Bass	4/28/2016	6.19E-02	2.47E-02
Steel Creek River Mouth	Bass	4/28/2016	2.76E-02	2.48E-02
Steel Creek River Mouth	Panfish	4/28/2016	1.84E-02	2.41E-02
Steel Creek River Mouth	Panfish	4/28/2016	2.81E-02	2.45E-02

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Tc-99 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Steel Creek River Mouth	Panfish	4/28/2016	6.86E-03	2.40E-02
Steel Creek River Mouth	Catfish	4/28/2016	-1.07E-02	2.38E-02
Steel Creek River Mouth	Catfish	4/28/2016	3.46E-02	2.44E-02
Steel Creek River Mouth	Catfish	4/28/2016	6.19E-02	2.47E-02
U3R Creek River Mouth	Bass	5/4/2016	5.46E-02	2.70E-02
U3R Creek River Mouth	Bass	5/4/2016	-9.73E-03	2.60E-02
U3R Creek River Mouth	Bass	5/4/2016	4.24E-02	2.68E-02
U3R Creek River Mouth	Panfish	3/16/2016	6.92E-02	2.73E-02
U3R Creek River Mouth	Panfish	5/4/2016	6.35E-02	2.73E-02
U3R Creek River Mouth	Panfish	5/4/2016	4.24E-02	2.68E-02
U3R Creek River Mouth	Catfish	5/4/2016	4.97E-02	2.70E-02
U3R Creek River Mouth	Catfish	5/4/2016	7.65E-02	2.73E-02
U3R Creek River Mouth	Catfish	5/4/2016	4.97E-02	2.69E-02

Radionuclide: Gross Beta

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	2.62E+00	2.24E-01
Augusta Lock and Dam	Bass	7/27/2016	2.78E+00	2.29E-01
Augusta Lock and Dam	Bass	7/27/2016	3.00E+00	2.36E-01
Augusta Lock and Dam	Panfish	7/27/2016	2.02E+00	2.00E-01
Augusta Lock and Dam	Panfish	7/27/2016	1.88E+00	1.93E-01
Augusta Lock and Dam	Panfish	7/27/2016	1.45E+00	1.74E-01
Augusta Lock and Dam	Catfish	7/27/2016	2.89E+00	2.32E-01
Augusta Lock and Dam	Catfish	7/27/2016	2.81E+00	2.28E-01
Augusta Lock and Dam	Catfish	7/27/2016	3.16E+00	2.41E-01
Four Mile Creek River Mouth	Bass	7/20/2016	2.62E+00	1.59E-01
Four Mile Creek River Mouth	Bass	7/20/2016	2.70E+00	1.62E-01
Four Mile Creek River Mouth	Bass	7/20/2016	2.89E+00	1.66E-01
Four Mile Creek River Mouth	Panfish	7/6/2016	2.35E+00	1.52E-01
Four Mile Creek River Mouth	Panfish	7/6/2016	2.41E+00	1.54E-01
Four Mile Creek River Mouth	Panfish	7/6/2016	2.61E+00	1.59E-01
Four Mile Creek River Mouth	Catfish	7/6/2016	3.16E+00	1.72E-01
Four Mile Creek River Mouth	Catfish	7/6/2016	3.03E+00	1.69E-01
Four Mile Creek River Mouth	Catfish	7/6/2016	3.57E+00	1.82E-01
Hwy-301 Bridge Area	Bass	4/18/2016	2.44E+00	2.14E-01
Hwy-301 Bridge Area	Bass	4/18/2016	2.76E+00	2.26E-01
Hwy-301 Bridge Area	Bass	4/18/2016	2.31E+00	2.09E-01
Hwy-301 Bridge Area	Panfish	4/18/2016	1.82E+00	1.89E-01

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Gross Beta (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Hwy-301 Bridge Area	Panfish	4/18/2016	2.40E+00	2.12E-01
Hwy-301 Bridge Area	Panfish	4/18/2016	2.62E+00	2.21E-01
Hwy-301 Bridge Area	Catfish	5/12/2016	2.89E+00	2.31E-01
Hwy-301 Bridge Area	Catfish	5/12/2016	2.78E+00	2.27E-01
Hwy-301 Bridge Area	Catfish	5/12/2016	2.86E+00	2.30E-01
L3R Creek River Mouth	Bass	3/23/2016	2.44E+00	2.11E-01
L3R Creek River Mouth	Bass	3/23/2016	3.14E+00	2.36E-01
L3R Creek River Mouth	Bass	3/23/2016	2.44E+00	2.11E-01
L3R Creek River Mouth	Panfish	3/23/2016	1.94E+00	1.91E-01
L3R Creek River Mouth	Panfish	3/23/2016	2.10E+00	1.98E-01
L3R Creek River Mouth	Panfish	3/23/2016	2.78E+00	2.24E-01
L3R Creek River Mouth	Catfish	3/23/2016	3.19E+00	2.38E-01
L3R Creek River Mouth	Catfish	5/12/2016	2.81E+00	2.25E-01
L3R Creek River Mouth	Catfish	5/12/2016	2.67E+00	2.20E-01
Steel Creek River Mouth	Bass	3/30/2016	2.50E+00	2.16E-01
Steel Creek River Mouth	Bass	4/28/2016	2.32E+00	2.09E-01
Steel Creek River Mouth	Bass	4/28/2016	2.78E+00	2.26E-01
Steel Creek River Mouth	Panfish	4/28/2016	2.31E+00	2.09E-01
Steel Creek River Mouth	Panfish	4/28/2016	1.85E+00	1.90E-01
Steel Creek River Mouth	Panfish	4/28/2016	1.96E+00	1.95E-01
Steel Creek River Mouth	Catfish	4/28/2016	2.55E+00	2.18E-01
Steel Creek River Mouth	Catfish	4/28/2016	2.76E+00	2.25E-01
Steel Creek River Mouth	Catfish	4/28/2016	2.64E+00	2.21E-01
U3R Creek River Mouth	Bass	5/4/2016	2.95E+00	2.29E-01
U3R Creek River Mouth	Bass	5/4/2016	2.46E+00	2.11E-01
U3R Creek River Mouth	Bass	5/4/2016	3.35E+00	2.43E-01
U3R Creek River Mouth	Panfish	3/16/2016	2.67E+00	2.19E-01
U3R Creek River Mouth	Panfish	5/4/2016	2.31E+00	2.05E-01
U3R Creek River Mouth	Panfish	5/4/2016	2.52E+00	2.13E-01
U3R Creek River Mouth	Catfish	5/4/2016	3.22E+00	2.39E-01
U3R Creek River Mouth	Catfish	5/4/2016	3.03E+00	2.32E-01
U3R Creek River Mouth	Catfish	5/4/2016	2.64E+00	2.18E-01

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Gross Alpha

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Augusta Lock and Dam	Bass	7/27/2016	1.53E-01	8.08E-02
Augusta Lock and Dam	Bass	7/27/2016	2.59E-02	5.14E-02
Augusta Lock and Dam	Bass	7/27/2016	5.78E-02	6.03E-02
Augusta Lock and Dam	Panfish	7/27/2016	-6.57E-03	4.22E-02
Augusta Lock and Dam	Panfish	7/27/2016	-5.70E-03	3.70E-02
Augusta Lock and Dam	Panfish	7/27/2016	-4.03E-02	2.08E-02
Augusta Lock and Dam	Catfish	7/27/2016	-7.76E-03	3.89E-02
Augusta Lock and Dam	Catfish	7/27/2016	-4.11E-02	1.99E-02
Augusta Lock and Dam	Catfish	7/27/2016	-4.22E-02	2.01E-02
Four Mile Creek River Mouth	Bass	7/20/2016	-7.08E-03	3.00E-02
Four Mile Creek River Mouth	Bass	7/20/2016	-7.43E-03	3.11E-02
Four Mile Creek River Mouth	Bass	7/20/2016	-2.46E-02	2.62E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	-2.23E-02	2.46E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	-2.29E-02	2.52E-02
Four Mile Creek River Mouth	Panfish	7/6/2016	9.81E-03	3.62E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	-4.11E-02	1.96E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	-7.92E-03	3.08E-02
Four Mile Creek River Mouth	Catfish	7/6/2016	7.73E-03	3.49E-02
Hwy-301 Bridge Area	Bass	4/18/2016	4.00E-02	4.92E-02
Hwy-301 Bridge Area	Bass	4/18/2016	1.81E-01	8.76E-02
Hwy-301 Bridge Area	Bass	4/18/2016	4.24E-02	5.22E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	9.35E-03	3.81E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	1.04E-01	6.73E-02
Hwy-301 Bridge Area	Panfish	4/18/2016	7.54E-02	6.19E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	4.22E-02	5.19E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	1.71E-01	8.24E-02
Hwy-301 Bridge Area	Catfish	5/12/2016	1.06E-01	6.89E-02
L3R Creek River Mouth	Bass	3/23/2016	-3.27E-02	1.37E-02
L3R Creek River Mouth	Bass	3/23/2016	3.14E-02	4.76E-02
L3R Creek River Mouth	Bass	3/23/2016	-3.16E-02	1.32E-02
L3R Creek River Mouth	Panfish	3/23/2016	-3.05E-02	1.29E-02
L3R Creek River Mouth	Panfish	3/23/2016	3.05E-02	4.57E-02
L3R Creek River Mouth	Panfish	3/23/2016	-3.19E-02	1.33E-02
L3R Creek River Mouth	Catfish	3/23/2016	-7.65E-04	3.49E-02
L3R Creek River Mouth	Catfish	5/12/2016	-3.24E-02	1.35E-02
L3R Creek River Mouth	Catfish	5/12/2016	-5.92E-04	3.43E-02
Steel Creek River Mouth	Bass	3/30/2016	3.95E-02	4.84E-02
Steel Creek River Mouth	Bass	4/28/2016	9.38E-03	3.86E-02
Steel Creek River Mouth	Bass	4/28/2016	9.19E-03	3.86E-02
Steel Creek River Mouth	Panfish	4/28/2016	-2.19E-02	2.35E-02
Steel Creek River Mouth	Panfish	4/28/2016	-2.08E-02	2.25E-02

Table 31 Radionuclides in Freshwater Fish (continued)

Radionuclide: Gross Alpha (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Steel Creek River Mouth	Panfish	4/28/2016	1.02E-01	6.57E-02
Steel Creek River Mouth	Catfish	4/28/2016	4.00E-02	4.92E-02
Steel Creek River Mouth	Catfish	4/28/2016	9.22E-03	3.86E-02
Steel Creek River Mouth	Catfish	4/28/2016	-2.16E-02	2.31E-02
U3R Creek River Mouth	Bass	5/4/2016	-2.24E-02	5.92E-03
U3R Creek River Mouth	Bass	5/4/2016	1.22E-02	3.38E-02
U3R Creek River Mouth	Bass	5/4/2016	1.22E-02	3.57E-02
U3R Creek River Mouth	Panfish	3/16/2016	4.57E-02	4.78E-02
U3R Creek River Mouth	Panfish	5/4/2016	-2.15E-02	5.81E-03
U3R Creek River Mouth	Panfish	5/4/2016	-2.22E-02	5.97E-03
U3R Creek River Mouth	Catfish	5/4/2016	4.70E-02	4.95E-02
U3R Creek River Mouth	Catfish	5/4/2016	1.15E-01	6.89E-02
U3R Creek River Mouth	Catfish	5/4/2016	-2.24E-02	5.97E-03

Table 32 Radionuclides in Saltwater Fish

SRS collects saltwater fish from the mouth of the Savannah River near Savannah, GA, between river miles 0- 8. All samples are from fish flesh, unless noted. Strontium-89/90 is analyzed in both fish flesh and fish bones and are reported separately. Bone samples are identified as “nonedible.”

Sufficient sea trout were collected to make two composites.

Fish Type	Sample Date	H-3 (tritium)		Co-60	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	2/18/2016	1.88E-02	2.89E-02	-1.50E-02	1.04E-02
Marine Mullet	2/18/2016	-7.22E-03	2.92E-02	-9.35E-04	9.57E-03
Marine Mullet	2/18/2016	2.11E-02	2.89E-02	4.97E-03	1.10E-02
Red Fish (drum)	12/12/2016	4.76E-02	2.31E-02	-3.68E-03	4.08E-03
Red Fish (drum)	12/12/2016	2.37E-02	2.55E-02	6.35E-04	4.00E-03
Red Fish (drum)	12/12/2016	3.30E-02	2.56E-02	-6.97E-03	4.49E-03
Sea Trout	12/20/2016	3.62E-02	2.56E-02	-6.84E-03	4.00E-03
Sea Trout	12/20/2016	7.41E-02	2.62E-02	3.35E-03	4.54E-03

Fish Type	Sample Date	Cs-137		Sr-89/90 (edible)	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	2/18/2016	-3.22E-03	1.09E-02	1.42E-03	1.02E-03
Marine Mullet	2/18/2016	2.03E-02	1.09E-02	8.24E-04	9.32E-04
Marine Mullet	2/18/2016	5.86E-03	1.26E-02	1.51E-03	1.08E-03
Red Fish (drum)	12/12/2016	3.19E-03	3.95E-03	1.83E-03	9.70E-04
Red Fish (drum)	12/12/2016	2.84E-03	4.22E-03	5.43E-04	8.16E-04
Red Fish (drum)	12/12/2016	6.51E-03	4.43E-03	2.06E-03	1.09E-03
Sea Trout	12/20/2016	-1.02E-03	4.32E-03	3.51E-04	8.76E-04
Sea Trout	12/20/2016	1.54E-03	3.97E-03	-5.62E-04	8.62E-04

Fish Type	Sample Date	Sr-89/90- (nonedible) (bone)		I-129	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	2/18/2016	2.41E-01	6.86E-02	-2.84E-03	8.70E-03
Marine Mullet	2/18/2016	2.95E-01	7.03E-02	-2.34E-03	1.02E-02
Marine Mullet	2/18/2016	3.11E-01	7.14E-02	1.49E-02	8.95E-03
Red Fish (drum)	12/12/2016	7.59E-02	8.84E-02	-1.49E-02	2.03E-02
Red Fish (drum)	12/12/2016	-8.68E-02	6.43E-02	7.68E-03	1.15E-02
Red Fish (drum)	12/12/2016	2.44E-01	1.02E-01	1.55E-02	1.11E-02
Sea Trout	12/20/2016	2.19E-01	9.57E-02	-4.41E-03	1.97E-02
Sea Trout	12/20/2016	1.26E-01	8.51E-02	-4.38E-03	1.98E-02

Table 32 Radionuclides in Saltwater Fish (continued)

Fish Type	Sample Date	Tc-99	
		Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	2/18/2016	6.49E-02	2.73E-02
Marine Mullet	2/18/2016	2.68E-02	2.66E-02
Marine Mullet	2/18/2016	3.76E-02	2.67E-02
Red Fish (drum)	12/12/2016	4.19E-02	2.65E-02
Red Fish (drum)	12/12/2016	2.76E-02	2.63E-02
Red Fish (drum)	12/12/2016	2.16E-02	2.62E-02
Sea Trout	12/20/2016	3.73E-02	2.64E-02
Sea Trout	12/20/2016	4.11E-02	2.65E-02

Fish Type	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	2/18/2016	2.52E+00	2.14E-01	1.28E-02	3.57E-02
Marine Mullet	2/18/2016	2.53E+00	2.13E-01	1.23E-02	3.41E-02
Marine Mullet	2/18/2016	2.35E+00	2.08E-01	-2.45E-02	6.62E-03
Red Fish (drum)	12/12/2016	1.76E+00	1.86E-01	2.41E-03	3.32E-02
Red Fish (drum)	12/12/2016	1.23E+00	1.62E-01	3.27E-02	4.32E-02
Red Fish (drum)	12/12/2016	1.68E+00	1.83E-01	2.69E-03	3.43E-02
Sea Trout	12/20/2016	1.74E+00	1.86E-01	3.43E-02	4.62E-02
Sea Trout	12/20/2016	1.78E+00	1.87E-01	2.44E-03	3.38E-02

Table 33 Radionuclides in Shellfish

The shellfish SRS analyzes are from the mouth of the Savannah River near Savannah, GA, between river miles 0 - 8.

Shellfish Type	Crab		Shrimp	
Collection Date	6/23/2016		12/27/2016	
Radionuclide	Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Co-60	4.27E-03	2.02E-03	6.68E-03	6.58E-03
Cs-137	-7.11E-04	2.47E-03	1.04E-02	6.92E-03
Sr-89/90	8.00E-03	2.40E-03	3.32E-03	1.86E-03
I-129	6.86E-03	5.83E-03	4.24E-04	4.38E-03
Tc-99	3.22E-02	2.51E-02	2.03E-02	2.62E-02
Gross B	4.38E-01	1.21E-01	1.23E+00	1.64E-01
Gross A	4.76E-01	1.36E-01	1.43E-01	7.89E-02

Table 34 Radionuclides in Wildlife – Deer Flesh

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 12	11/30/2016	-2.19E-02	1.51E-02	1.76E+00	1.34E-01
Wildlife Compartment # 14	11/26/2016	3.41E-03	1.51E-02	4.86E-01	4.93E-02
Wildlife Compartment # 14	11/26/2016	1.97E-02	1.57E-02	1.02E+00	8.37E-02
Wildlife Compartment # 14	11/26/2016	1.97E-02	1.71E-02	1.06E+00	8.84E-02
Wildlife Compartment # 15	11/19/2016	-1.82E-02	1.41E-02	1.26E+00	1.01E-01
Wildlife Compartment # 15	11/19/2016	2.86E-02	1.38E-02	1.13E+00	9.44E-02
Wildlife Compartment # 15	11/19/2016	1.14E-02	1.69E-02	1.25E+00	9.89E-02
Wildlife Compartment # 16	11/26/2016	-2.54E-02	1.54E-02	8.97E-01	7.47E-02
Wildlife Compartment # 16	11/26/2016	2.33E-02	1.11E-02	6.76E-01	6.19E-02
Wildlife Compartment # 17	11/19/2016	-6.08E-03	1.47E-02	1.17E+00	9.36E-02
Wildlife Compartment # 17	11/19/2016	2.67E-02	1.86E-02	1.50E+00	1.21E-01
Wildlife Compartment # 17	11/19/2016	-1.84E-02	1.73E-02	7.84E-01	7.05E-02
Wildlife Compartment # 18	11/23/2016	2.46E-03	1.65E-02	2.53E+00	1.82E-01
Wildlife Compartment # 18	11/23/2016	-3.49E-03	1.69E-02	2.62E+00	1.90E-01
Wildlife Compartment # 18	11/23/2016	3.95E-02	1.57E-02	2.27E+00	1.68E-01
Wildlife Compartment # 18	11/23/2016	-3.19E-03	1.46E-02	2.76E+00	1.98E-01
Wildlife Compartment # 18	11/23/2016	2.60E-03	1.40E-02	4.76E+00	3.28E-01
Wildlife Compartment # 18	11/23/2016	3.70E-03	1.43E-02	3.14E+00	2.23E-01
Wildlife Compartment # 25	12/3/2016	7.22E-03	1.35E-02	4.59E-01	4.86E-02
Wildlife Compartment # 26	11/23/2016	4.43E-03	2.21E-02	1.10E+01	7.40E-01
Wildlife Compartment # 26	11/23/2016	3.86E-02	1.88E-02	4.65E+00	3.22E-01
Wildlife Compartment # 27	11/9/2016	2.10E-02	2.24E-02	2.95E+00	2.20E-01
Wildlife Compartment # 27	11/12/2016	-2.34E-02	1.60E-02	1.42E+00	1.08E-01
Wildlife Compartment # 42	11/16/2016	-6.08E-03	1.44E-02	8.57E-01	7.37E-02
Wildlife Compartment # 42	11/16/2016	-6.65E-03	1.54E-02	1.06E+00	8.55E-02
Wildlife Compartment # 42	11/16/2016	-1.49E-02	1.44E-02	1.31E+00	1.03E-01
Wildlife Compartment # 42	11/16/2016	-5.41E-03	1.13E-02	6.05E+00	4.11E-01
Wildlife Compartment # 42	11/16/2016	-1.45E-02	1.86E-02	9.65E-01	8.28E-02
Wildlife Compartment # 42	11/16/2016	2.12E-02	1.48E-02	1.18E+01	7.82E-01
Wildlife Compartment # 42	11/16/2016	-2.84E-03	1.70E-02	7.62E-01	6.67E-02
Wildlife Compartment # 5	11/12/2016	1.67E-02	1.12E-02	2.32E+00	1.68E-01
Wildlife Compartment # 5	11/12/2016	1.12E-02	1.29E-02	2.23E+00	1.61E-01
Wildlife Compartment # 5	11/12/2016	3.73E-03	1.28E-02	1.68E+00	1.29E-01
Wildlife Compartment # 5	11/12/2016	-5.89E-03	1.58E-02	1.00E+00	8.26E-02
Wildlife Compartment # 6	11/9/2016	8.32E-04	1.44E-02	3.81E+00	2.64E-01
Wildlife Compartment # 6	11/9/2016	-2.45E-02	1.25E-02	4.43E+00	3.06E-01
Wildlife Compartment # 7	11/9/2016	-2.18E-03	1.67E-02	3.32E+00	2.34E-01
Wildlife Compartment # 7	11/9/2016	-2.45E-02	1.48E-02	2.92E+00	2.06E-01
Wildlife Compartment # 7	11/9/2016	8.27E-03	1.48E-02	3.78E+00	2.62E-01
Wildlife Compartment # 7	11/9/2016	4.86E-03	1.48E-02	5.03E+00	3.42E-01
Wildlife Compartment # 7	11/9/2016	1.30E-02	1.84E-02	3.22E+00	2.28E-01
Wildlife Compartment # 7	11/9/2016	2.00E-02	2.56E-02	2.76E+00	2.09E-01

Table 34 Radionuclides in Wildlife – Deer Flesh (continued)

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment #26	3/4/2016	2.21E-02	1.57E-02	1.25E+00	1.01E-01
Wildlife Compartment #8	3/4/2016	4.72E-03	1.11E-02	8.40E-01	7.40E-02
Wildlife Compartment #26	3/4/2016	1.54E-02	1.39E-02	1.25E+00	9.75E-02
Wildlife Compartment #8	3/4/2016	1.37E-02	1.50E-02	7.20E+00	4.82E-01
Wildlife Compartment #13	3/4/2016	-5.65E-03	1.55E-02	2.44E-01	3.49E-02
Wildlife Compartment #14	3/4/2016	-8.21E-03	1.53E-02	8.45E-01	7.05E-02
Wildlife Compartment #20	3/4/2016	-1.54E-02	1.55E-02	1.48E+00	1.14E-01
Wildlife Compartment #13	3/4/2016	-3.17E-03	1.50E-02	9.49E-01	8.15E-02
Wildlife Compartment #12	3/4/2016	1.14E-02	1.52E-02	1.36E+00	1.06E-01
Wildlife Compartment #16	3/4/2016	-7.39E-03	1.63E-02	1.35E+00	1.03E-01
Wildlife Compartment #12	3/4/2016	-5.02E-03	1.10E-02	1.48E+00	1.14E-01
Wildlife Compartment #33	3/4/2016	-5.49E-03	1.39E-02	1.37E+00	1.06E-01
Wildlife Compartment #18	3/4/2016	-8.85E-04	1.39E-02	4.99E-01	4.97E-02
Wildlife Compartment #20	3/4/2016	-3.84E-03	1.61E-02	2.12E-01	3.52E-02
Wildlife Compartment #13	3/4/2016	-3.61E-03	1.40E-02	1.35E+00	1.06E-01
Wildlife Compartment #25	3/4/2016	-9.20E-03	1.30E-02	9.05E-01	7.70E-02
Wildlife Compartment #18	3/4/2016	-9.90E-03	1.45E-02	4.50E-01	5.00E-02
Wildlife Compartment #20	3/4/2016	-1.58E-02	1.29E-02	3.64E-01	4.54E-02
Wildlife Compartment #20	3/4/2016	-4.03E-03	1.53E-02	1.31E-01	2.78E-02
Wildlife Compartment #13	3/4/2016	-1.44E-02	1.67E-02	2.24E-01	3.70E-02
Wildlife Compartment #18	3/4/2016	-7.61E-03	1.37E-02	6.85E-01	6.45E-02
Wildlife Compartment #16	3/4/2016	2.67E-03	1.47E-02	6.51E-01	5.85E-02
Wildlife Compartment #32	3/10/2016	2.20E-02	1.47E-02	3.13E-01	4.08E-02
Wildlife Compartment #27	3/10/2016	1.41E-02	1.47E-02	3.54E-01	4.30E-02
Wildlife Compartment #33	3/10/2016	1.34E-02	1.52E-02	5.03E-01	5.20E-02
Wildlife Compartment #18	3/10/2016	1.31E-02	1.46E-02	8.81E-01	7.75E-02
Wildlife Compartment #25	3/10/2016	1.05E-03	1.39E-02	5.52E-01	5.75E-02
Wildlife Compartment #12	3/10/2016	2.38E-03	1.34E-02	8.88E-01	7.55E-02
Wildlife Compartment #25	3/10/2016	2.09E-03	1.42E-02	9.79E-01	8.10E-02
Wildlife Compartment #32	3/10/2016	-1.42E-02	1.37E-02	2.46E+00	1.77E-01
Wildlife Compartment #13	3/10/2016	2.33E-02	1.59E-02	1.34E+00	1.04E-01
Wildlife Compartment #32	3/10/2016	-1.31E-02	1.46E-02	6.53E-01	6.25E-02
Wildlife Compartment #25	3/10/2016	1.42E-02	1.44E-02	3.80E-01	5.15E-02
Wildlife Compartment #14	3/10/2016	3.51E-02	1.56E-02	2.43E+00	1.75E-01
Wildlife Compartment #16	3/10/2016	2.81E-02	1.49E-02	3.53E-01	4.22E-02
Wildlife Compartment #25	3/10/2016	1.15E-02	1.53E-02	8.42E-01	7.35E-02
Wildlife Compartment #27	3/10/2016	1.04E-03	1.39E-02	1.48E+00	1.13E-01
Wildlife Compartment #13	3/10/2016	1.44E-03	1.33E-02	2.71E+00	1.95E-01
Wildlife Compartment #16	3/10/2016	2.66E-02	1.56E-02	1.76E+00	1.35E-01
Wildlife Compartment #13	3/10/2016	-7.87E-03	1.45E-02	7.93E-01	7.45E-02
Wildlife Compartment #27	3/10/2016	2.01E-02	1.32E-02	7.72E-01	7.10E-02
Wildlife Compartment #13	3/10/2016	4.14E-03	1.26E-02	6.20E-01	6.10E-02

Table 34 Radionuclides in Wildlife – Deer Flesh (continued)

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment #13	3/10/2016	-1.15E-02	1.61E-02	5.12E-01	5.00E-02
Wildlife Compartment #13	3/10/2016	-6.27E-03	1.53E-02	1.43E+00	1.14E-01
Wildlife Compartment #13	3/10/2016	3.86E-03	1.35E-02	1.36E+00	1.08E-01
Wildlife Compartment #27	3/10/2016	-4.01E-02	1.70E-02	9.05E-01	7.85E-02
Wildlife Compartment #16	3/10/2016	1.54E-02	1.49E-02	4.10E-01	5.15E-02
Wildlife Compartment #27	3/10/2016	-1.32E-02	1.66E-02	9.67E-01	7.85E-02
Wildlife Compartment #27	3/10/2016	-1.55E-02	1.45E-02	1.39E+00	1.07E-01
Wildlife Compartment #13	3/10/2016	-1.09E-02	1.48E-02	6.36E-01	6.05E-02
Wildlife Compartment #27	3/10/2016	1.05E-03	1.39E-02	1.06E+00	8.55E-02
Wildlife Compartment #16	3/10/2016	2.01E-03	1.43E-02	2.68E+00	1.91E-01
Wildlife Compartment #8	3/10/2016	-1.67E-02	1.61E-02	6.07E+00	4.12E-01
Wildlife Compartment #12	3/17/2016	-1.72E-02	1.50E-02	1.15E+00	9.30E-02
Wildlife Compartment #8	3/17/2016	8.51E-03	1.70E-02	1.23E+00	1.00E-01
Wildlife Compartment #14	3/17/2016	4.09E-02	1.79E-02	9.58E-01	8.90E-02
Wildlife Compartment #14	3/17/2016	5.04E-03	1.57E-02	1.34E+00	1.02E-01
Wildlife Compartment #14	3/17/2016	-8.13E-03	1.59E-02	1.49E+00	1.17E-01
Wildlife Compartment #20	3/17/2016	4.40E-03	1.79E-02	4.26E-01	5.35E-02
Wildlife Compartment #32	3/17/2016	-7.08E-03	1.44E-02	2.11E+00	1.54E-01
Wildlife Compartment #33	3/17/2016	-1.12E-03	1.39E-02	1.31E+00	1.03E-01
Wildlife Compartment #18	3/17/2016	4.04E-04	1.71E-02	1.01E+00	8.90E-02
Wildlife Compartment #13	3/17/2016	2.06E-02	1.31E-02	1.13E+00	9.25E-02
Wildlife Compartment #20	3/17/2016	1.29E-02	1.39E-02	2.72E-01	4.09E-02
Wildlife Compartment #18	3/17/2016	1.03E-02	1.46E-02	4.74E-01	5.05E-02
Wildlife Compartment #20	3/17/2016	-7.91E-03	1.29E-02	5.45E-01	5.55E-02
Wildlife Compartment #12	3/17/2016	3.55E-03	1.58E-02	1.03E+00	8.60E-02
Wildlife Compartment #27	3/17/2016	4.30E-03	1.28E-02	1.06E+00	8.70E-02
Wildlife Compartment #20	3/17/2016	2.97E-03	1.38E-02	7.99E-01	6.85E-02
Wildlife Compartment #18	3/17/2016	2.30E-02	1.56E-02	6.47E-01	6.35E-02
Wildlife Compartment #13	10/17/2016	5.96E-03	1.63E-02	1.40E+00	1.09E-01
Wildlife Compartment #20	10/17/2016	-6.28E-04	1.52E-02	7.17E-01	6.40E-02
Wildlife Compartment #42	10/17/2016	5.02E-03	1.52E-02	3.72E+00	2.60E-01
Wildlife Compartment #26	10/20/2016	-5.67E-03	1.75E-02	1.03E+00	8.50E-02
Wildlife Compartment #12	10/20/2016	-2.12E-02	1.61E-02	3.27E+00	2.29E-01

Table 34 Radionuclides in Wildlife – Deer Flesh (continued)

Location	Sample Date	Sr-89/90	
		Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 12	11/30/2016	1.35E-03	1.75E-03
Wildlife Compartment # 14	11/26/2016	3.54E-04	1.79E-03
Wildlife Compartment # 14	11/26/2016	4.43E-03	1.94E-03
Wildlife Compartment # 14	11/26/2016	-5.24E-04	1.56E-03
Wildlife Compartment # 15	11/19/2016	5.73E-04	1.46E-03
Wildlife Compartment # 15	11/19/2016	1.09E-02	2.19E-03
Wildlife Compartment # 15	11/19/2016	4.19E-03	1.71E-03
Wildlife Compartment # 16	11/26/2016	-1.40E-03	1.67E-03
Wildlife Compartment # 16	11/26/2016	1.04E-02	2.34E-03
Wildlife Compartment # 17	11/19/2016	7.81E-04	1.47E-03
Wildlife Compartment # 17	11/19/2016	2.81E-03	1.58E-03
Wildlife Compartment # 17	11/19/2016	3.22E-03	1.61E-03
Wildlife Compartment # 18	11/23/2016	-1.35E-03	1.61E-03
Wildlife Compartment # 18	11/23/2016	-8.11E-04	1.63E-03
Wildlife Compartment # 18	11/23/2016	8.46E-04	1.70E-03
Wildlife Compartment # 18	11/23/2016	4.43E-03	1.96E-03
Wildlife Compartment # 18	11/23/2016	4.59E-03	2.03E-03
Wildlife Compartment # 18	11/23/2016	1.35E-03	1.76E-03
Wildlife Compartment # 25	12/3/2016	3.22E-03	1.81E-03
Wildlife Compartment # 26	11/23/2016	9.51E-03	2.91E-03
Wildlife Compartment # 26	11/23/2016	2.50E-03	1.93E-03
Wildlife Compartment # 27	11/9/2016	1.05E-03	1.51E-03
Wildlife Compartment # 27	11/12/2016	-1.27E-04	1.38E-03
Wildlife Compartment # 42	11/16/2016	1.95E-03	1.55E-03
Wildlife Compartment # 42	11/16/2016	2.09E-03	2.16E-03
Wildlife Compartment # 42	11/16/2016	1.77E-03	1.58E-03
Wildlife Compartment # 42	11/16/2016	3.43E-03	1.72E-03
Wildlife Compartment # 42	11/16/2016	4.46E-03	1.83E-03
Wildlife Compartment # 42	11/16/2016	3.78E-03	2.43E-03
Wildlife Compartment # 42	11/16/2016	3.65E-03	1.73E-03
Wildlife Compartment # 5	11/12/2016	2.89E-04	1.53E-03
Wildlife Compartment # 5	11/12/2016	6.32E-05	1.49E-03
Wildlife Compartment # 5	11/12/2016	2.12E-03	1.54E-03
Wildlife Compartment # 5	11/12/2016	1.51E-03	1.53E-03
Wildlife Compartment # 6	11/9/2016	8.30E-04	1.56E-03
Wildlife Compartment # 6	11/9/2016	8.41E-04	1.54E-03
Wildlife Compartment # 7	11/9/2016	2.92E-03	1.67E-03
Wildlife Compartment # 7	11/9/2016	1.10E-03	1.62E-03
Wildlife Compartment # 7	11/9/2016	-1.32E-03	1.30E-03
Wildlife Compartment # 7	11/9/2016	9.70E-04	1.49E-03
Wildlife Compartment # 7	11/9/2016	3.68E-03	1.74E-03
Wildlife Compartment # 7	11/9/2016	6.03E-03	1.89E-03

Table 34 Radionuclides in Wildlife – Deer Flesh (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 12	11/30/2016	3.84E+00	2.09E-01	-1.51E-02	5.88E-03
Wildlife Compartment # 14	11/26/2016	3.08E+00	1.88E-01	-1.45E-02	5.87E-03
Wildlife Compartment # 14	11/26/2016	3.35E+00	1.96E-01	3.62E-02	3.72E-02
Wildlife Compartment # 14	11/26/2016	2.84E+00	1.81E-01	-1.41E-02	5.78E-03
Wildlife Compartment # 15	11/19/2016	2.76E+00	1.79E-01	9.84E-03	2.42E-02
Wildlife Compartment # 15	11/19/2016	2.84E+00	1.80E-01	-1.35E-02	5.53E-03
Wildlife Compartment # 15	11/19/2016	2.95E+00	1.84E-01	-1.38E-02	5.63E-03
Wildlife Compartment # 16	11/26/2016	3.03E+00	1.87E-01	1.02E-02	2.55E-02
Wildlife Compartment # 16	11/26/2016	3.62E+00	2.04E-01	1.02E-02	2.66E-02
Wildlife Compartment # 17	11/19/2016	3.11E+00	1.89E-01	1.03E-02	2.59E-02
Wildlife Compartment # 17	11/19/2016	3.03E+00	1.87E-01	3.46E-02	3.52E-02
Wildlife Compartment # 17	11/19/2016	2.49E+00	1.71E-01	3.46E-02	3.47E-02
Wildlife Compartment # 18	11/23/2016	4.08E+00	2.15E-01	5.89E-02	4.34E-02
Wildlife Compartment # 18	11/23/2016	4.70E+00	2.30E-01	5.86E-02	4.35E-02
Wildlife Compartment # 18	11/23/2016	3.89E+00	2.10E-01	9.03E-03	2.42E-02
Wildlife Compartment # 18	11/23/2016	4.92E+00	2.36E-01	3.35E-02	3.55E-02
Wildlife Compartment # 18	11/23/2016	6.41E+00	2.67E-01	-1.68E-02	5.85E-03
Wildlife Compartment # 18	11/23/2016	5.24E+00	2.43E-01	3.35E-02	3.58E-02
Wildlife Compartment # 25	12/3/2016	3.11E+00	1.89E-01	1.02E-02	2.57E-02
Wildlife Compartment # 26	11/23/2016	8.97E+00	3.15E-01	3.05E-02	3.53E-02
Wildlife Compartment # 26	11/23/2016	5.24E+00	2.43E-01	8.68E-03	2.58E-02
Wildlife Compartment # 27	11/9/2016	3.92E+00	2.14E-01	-3.30E-02	1.42E-02
Wildlife Compartment # 27	11/12/2016	3.05E+00	1.91E-01	6.51E-02	5.06E-02
Wildlife Compartment # 42	11/16/2016	3.41E+00	1.98E-01	-1.51E-02	6.01E-03
Wildlife Compartment # 42	11/16/2016	3.73E+00	2.07E-01	6.19E-02	4.53E-02
Wildlife Compartment # 42	11/16/2016	3.73E+00	2.06E-01	1.09E-01	5.60E-02
Wildlife Compartment # 42	11/16/2016	7.05E+00	2.81E-01	3.22E-02	3.55E-02
Wildlife Compartment # 42	11/16/2016	3.57E+00	2.02E-01	6.24E-02	4.55E-02
Wildlife Compartment # 42	11/16/2016	9.03E+00	3.16E-01	5.84E-02	4.34E-02
Wildlife Compartment # 42	11/16/2016	3.76E+00	2.07E-01	6.16E-02	4.51E-02
Wildlife Compartment # 5	11/12/2016	3.68E+00	2.08E-01	3.81E-02	4.27E-02
Wildlife Compartment # 5	11/12/2016	3.24E+00	1.96E-01	1.53E-02	3.53E-02
Wildlife Compartment # 5	11/12/2016	3.30E+00	1.98E-01	3.92E-02	4.32E-02
Wildlife Compartment # 5	11/12/2016	2.55E+00	1.76E-01	1.74E-02	3.68E-02
Wildlife Compartment # 6	11/9/2016	4.73E+00	2.34E-01	1.34E-02	3.70E-02
Wildlife Compartment # 6	11/9/2016	4.59E+00	2.30E-01	3.62E-02	4.25E-02
Wildlife Compartment # 7	11/9/2016	4.05E+00	2.17E-01	1.43E-02	3.63E-02
Wildlife Compartment # 7	11/9/2016	4.92E+00	2.38E-01	-1.11E-02	2.82E-02
Wildlife Compartment # 7	11/9/2016	4.27E+00	2.22E-01	-3.32E-02	1.40E-02
Wildlife Compartment # 7	11/9/2016	6.32E+00	2.69E-01	-1.41E-02	2.92E-02
Wildlife Compartment # 7	11/9/2016	4.68E+00	2.33E-01	-3.51E-02	1.46E-02
Wildlife Compartment # 7	11/9/2016	3.73E+00	2.10E-01	1.57E-02	3.80E-02

Table 34 Radionuclides in Wildlife – Deer Flesh (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment #13	3/4/2016	2.68E+00	1.79E-01	4.84E-02	4.32E-02
Wildlife Compartment #16	3/4/2016	2.90E+00	1.85E-01	4.52E-02	4.08E-02
Wildlife Compartment #13	3/4/2016	3.02E+00	1.89E-01	4.63E-02	4.19E-02
Wildlife Compartment #13	3/4/2016	2.68E+00	1.78E-01	-2.38E-02	7.65E-03
Wildlife Compartment #25	3/10/2016	2.34E+00	1.66E-01	5.22E-02	4.24E-02
Wildlife Compartment #32	3/10/2016	2.71E+00	1.77E-01	4.03E-03	2.58E-02
Wildlife Compartment #27	3/10/2016	2.88E+00	1.82E-01	3.76E-03	2.49E-02
Wildlife Compartment #27	3/10/2016	2.78E+00	1.80E-01	7.77E-02	4.98E-02
Wildlife Compartment #27	3/10/2016	2.77E+00	1.80E-01	8.02E-02	5.15E-02
Wildlife Compartment #14	3/17/2016	2.97E+00	1.85E-01	2.82E-02	3.54E-02
Wildlife Compartment #13	3/17/2016	2.89E+00	1.83E-01	2.85E-02	3.57E-02
Wildlife Compartment #27	3/17/2016	2.24E+00	1.62E-01	4.13E-03	2.45E-02
Wildlife Compartment #13	3/17/2016	4.21E+00	2.21E-01	-9.79E-03	2.81E-02
Wildlife Compartment #20	3/17/2016	3.42E+00	2.01E-01	1.60E-02	3.74E-02
Wildlife Compartment #42	3/17/2016	5.12E+00	2.43E-01	3.71E-02	4.45E-02
Wildlife Compartment #26	10/20/2016	3.09E+00	1.91E-01	3.62E-02	3.82E-02
Wildlife Compartment #12	10/20/2016	3.60E+00	2.03E-01	7.89E-03	2.32E-02

Table 35 Radionuclides in Wildlife – Deer Bone

Location	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 12	11/30/2016	3.51E+00	3.19E-01
Wildlife Compartment # 14	11/26/2016	3.59E+00	2.91E-01
Wildlife Compartment # 14	11/26/2016	4.59E+00	3.47E-01
Wildlife Compartment # 14	11/26/2016	3.32E+00	2.78E-01
Wildlife Compartment # 15	11/19/2016	3.78E+00	2.99E-01
Wildlife Compartment # 15	11/19/2016	3.03E+00	2.59E-01
Wildlife Compartment # 15	11/19/2016	3.54E+00	2.85E-01
Wildlife Compartment # 16	11/26/2016	3.05E+00	2.65E-01
Wildlife Compartment # 16	11/26/2016	6.73E+00	4.59E-01
Wildlife Compartment # 17	11/19/2016	2.84E+00	2.56E-01
Wildlife Compartment # 17	11/19/2016	4.43E+00	3.38E-01
Wildlife Compartment # 17	11/19/2016	4.35E+00	3.24E-01
Wildlife Compartment # 18	11/23/2016	5.65E+00	4.04E-01
Wildlife Compartment # 18	11/23/2016	2.29E+00	2.26E-01
Wildlife Compartment # 18	11/23/2016	3.27E+00	2.77E-01
Wildlife Compartment # 18	11/23/2016	4.22E+00	3.35E-01
Wildlife Compartment # 18	11/23/2016	2.34E+00	2.28E-01
Wildlife Compartment # 18	11/23/2016	3.81E+00	3.07E-01
Wildlife Compartment # 25	12/3/2016	3.46E+00	2.99E-01
Wildlife Compartment # 26	11/23/2016	3.41E+00	2.89E-01
Wildlife Compartment # 26	11/23/2016	2.27E+00	2.25E-01
Wildlife Compartment # 27	11/9/2016	4.43E+00	3.45E-01
Wildlife Compartment # 27	11/12/2016	5.14E+00	3.92E-01
Wildlife Compartment # 42	11/16/2016	2.15E+00	2.16E-01
Wildlife Compartment # 42	11/16/2016	2.76E+00	2.49E-01
Wildlife Compartment # 42	11/16/2016	2.46E+00	2.37E-01
Wildlife Compartment # 42	11/16/2016	3.27E+00	2.73E-01
Wildlife Compartment # 42	11/16/2016	2.62E+00	2.37E-01
Wildlife Compartment # 42	11/16/2016	1.93E+00	2.11E-01
Wildlife Compartment # 42	11/16/2016	3.03E+00	2.64E-01
Wildlife Compartment # 5	11/12/2016	4.30E+00	3.33E-01
Wildlife Compartment # 5	11/12/2016	3.24E+00	2.80E-01
Wildlife Compartment # 5	11/12/2016	3.65E+00	2.99E-01
Wildlife Compartment # 5	11/12/2016	2.92E+00	2.60E-01
Wildlife Compartment # 6	11/9/2016	5.35E+00	3.99E-01
Wildlife Compartment # 6	11/9/2016	5.59E+00	4.31E-01
Wildlife Compartment # 7	11/9/2016	6.57E+00	4.77E-01
Wildlife Compartment # 7	11/9/2016	2.09E+00	2.17E-01
Wildlife Compartment # 7	11/9/2016	5.54E+00	4.13E-01
Wildlife Compartment # 7	11/9/2016	6.54E+00	4.67E-01
Wildlife Compartment # 7	11/9/2016	4.84E+00	3.82E-01

Table 36 Radionuclides in Wildlife – Hog Flesh

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 15	11/19/2016	-3.86E-04	1.90E-02	1.14E+00	9.40E-02
Wildlife Compartment # 16	11/26/2016	1.53E-02	1.46E-02	8.92E-01	7.76E-02
Wildlife Compartment # 32	11/16/2016	-4.16E-04	1.84E-02	3.03E-01	3.97E-02

Location	Sample Date	Sr-89/90	
		Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 15	11/19/2016	3.57E-03	1.69E-03
Wildlife Compartment # 16	11/26/2016	2.89E-03	1.81E-03
Wildlife Compartment # 32	11/16/2016	3.19E-03	1.69E-03

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 15	11/19/2016	2.70E+00	1.77E-01	-1.36E-02	5.60E-03
Wildlife Compartment # 16	11/26/2016	3.35E+00	1.96E-01	9.95E-03	2.55E-02
Wildlife Compartment # 32	11/16/2016	3.08E+00	1.89E-01	-1.45E-02	5.88E-03

Table 37 Radionuclides in Wildlife – Hog Bone

Radionuclide: Sr-89/90

Location	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 15	11/19/2016	2.50E+00	2.29E-01
Wildlife Compartment # 16	11/26/2016	1.62E+00	1.91E-01
Wildlife Compartment # 32	11/16/2016	2.13E+00	2.08E-01

Table 38 Blind Sample Results for pH Field Measurements

Sample Identification	pH Units			Difference ≤ 0.4 SU?
	Measured Value	Actual Value	Difference	
BpH-160101	4.13	4.08	0.05	Yes
BpH-160102	6.86	6.90	0.04	Yes
BpH-160101*	4.14	4.14	0.00	Yes
BpH-160102*	6.90	6.98	0.08	Yes
BpH-160301	4.15	4.08	0.07	Yes
BpH-160302	6.80	6.98	0.18	Yes
BpH-160301*	4.18	4.10	0.08	Yes
BpH-160302*	6.86	6.95	0.09	Yes
BpH-160501	4.21	4.12	0.09	Yes
BpH-160502	6.82	6.88	0.06	Yes
BpH-160601	6.96	6.88	0.08	Yes
BpH-160602	4.10	4.08	0.02	Yes
BpH-160601*	6.96	6.88	0.08	Yes
BpH-160602*	4.20	4.08	0.12	Yes
BpH-160801	4.20	4.04	0.16	Yes
BpH-160802	6.75	6.88	0.13	Yes
BpH-160901	6.88	6.90	0.02	Yes
BpH-160902	4.06	4.08	0.02	Yes
BpH-160901*	6.90	6.90	0.00	Yes
BpH-160902*	4.10	4.05	0.05	Yes
BpH-161101	6.90	6.90	0.00	Yes
BpH-161102	4.02	4.02	0.00	Yes
BpH-161201	4.00	3.99	0.01	Yes
BpH-161202	6.80	6.98	0.18	Yes

Note:

* The sample identification indicates the blind solution used. Blind solutions can be used up to 30 days after preparation: therefore the sample identifications are the same.

Table 39 NPDES Blind Sample Results

Outfall Locations and Sample Dates where there was no flow

NPDES Site	Sample Date
F-02	1/14/2016
F-05	1/14/2016
D-01B	5/5/2016
K-06	5/4/2016
F-01	6/23/2016
D-02	7/6/2016
F-02	7/28/2016
F-05	7/28/2016
H-07	10/19/2016
D-01	11/3/2016
D-01B	11/3/2016
D-01C	11/3/2016
K-06	11/17/2016
F-01	12/27/2016

Table 39 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls

Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
2/2/2016	A-01	B160201	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
2/2/2016	A-01	B160201	EBL	Iron	µg/L	128	125	2.4
2/2/2016	A-01	B160201	SES	Oil & Grease	mg/l	< 2.9	< 2.9	N/A
2/2/2016	A-01	B160201	EBL	Total Suspended Solids	mg/l	1	1	N/A
2/9/2016	F-08	B160202	EBL	Lead	µg/L	0.237	0.252	6.1
2/9/2016	F-08	B160202	EBL	Zinc	µg/L	83.7	84.9	1.4
2/1/2016	H-16	B160203	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
2/1/2016	H-16	B160203	EBL	Cadmium	µg/L	< 0.050	0.133	N/A
2/1/2016	H-16	B160203	EBL	Chromium	µg/L	< 2	< 2	N/A
2/1/2016	H-16	B160203	EBL	Copper	µg/L	< 2	< 2	N/A
2/1/2016	H-16	B160203	EBL	Lead	µg/L	< 0.010	0.039	N/A
2/1/2016	H-16	B160203	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
2/1/2016	H-16	B160203	EBL	Nickel	µg/L	< 3	< 3	N/A
2/1/2016	H-16	B160203	EBL	Silver	µg/L	< 1	< 1	N/A
2/1/2016	H-16	B160203	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
2/1/2016	H-16	B160203	EBL	Zinc	µg/L	4.34	3.68	N/A
3/3/2016	A-1A	B160301	SES	Trichloroethylene	µg/L	< 0.16	< 0.16	N/A
3/3/2016	A-1A	B160301	SES	Tetrachloroethylene	µg/L	< 0.22	< 0.22	N/A
3/8/2016	H-02	B160302	EBL	Copper	µg/L	6.40	6.26	N/A
3/8/2016	H-02	B160302	EBL	Lead	µg/L	0.147	0.131	11.5
3/8/2016	H-02	B160302	EBL	Zinc	µg/L	6.85	7.34	N/A
4/5/2016	A-11	B160401	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
4/5/2016	A-11	B160401	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
4/5/2016	G-10	B1-APR16-01	SES	Ammonia	mg/l	< 0.05	< 0.05	N/A
4/19/2016	H-12	B160402	EBL	Copper	µg/L	12.8	12.6	1.6
4/19/2016	H-12	B160402	EBL	Zinc	µg/L	21.9	20.2	8.1
4/4/2016	H-16	B160403	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
4/4/2016	H-16	B160403	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
4/4/2016	H-16	B160403	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
4/4/2016	H-16	B160403	EBL	Copper	µg/L	< 2	< 2	N/A
4/4/2016	H-16	B160403	EBL	Lead	µg/L	< 0.01	< 0.01	N/A

Table 39 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
4/4/2016	H-16	B160403	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
4/4/2016	H-16	B160403	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
4/4/2016	H-16	B160403	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
4/4/2016	H-16	B160403	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
4/4/2016	H-16	B160403	EBL	Zinc	µg/L	< 1	< 1	N/A
5/2/2016	D-01	B160501	EBL	Aluminum	µg/L	< 40	241	N/A
5/2/2016	D-01	B160501	EBL	Manganese	µg/L	< 1	< 1	N/A
5/2/2016	D-01C	B160503	SES	Oil & Grease	mg/l	< 3.6	< 3.6	N/A
5/2/2016	D-01C	B160503	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
6/1/2016	H-16	B160602	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
6/1/2016	H-16	B160602	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
6/1/2016	H-16	B160602	EBL	Chromium	µg/L	< 2	< 2	N/A
6/1/2016	H-16	B160602	EBL	Copper	µg/L	< 2	< 2	N/A
6/1/2016	H-16	B160602	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
6/1/2016	H-16	B160602	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
6/1/2016	H-16	B160602	EBL	Nickel	µg/L	< 3	< 3	N/A
6/1/2016	H-16	B160602	EBL	Silver	µg/L	< 1	< 1	N/A
6/1/2016	H-16	B160602	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
6/1/2016	H-16	B160602	EBL	Zinc	µg/L	6.12	4.61	N/A
6/8/2016	M-05	B160603	SES	Trichloroethylene	µg/L	< 0.16	< 0.16	N/A
6/8/2016	M-05	B160603	SES	Tetrachloroethylene	µg/L	< 0.22	< 0.22	N/A
7/6/2016	G-10	B1-JUL16-01	SES	Ammonia	mg/l	< 0.05	< 0.05	N/A
8/9/2016	A-01	B160801	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
8/9/2016	A-01	B160801	EBL	Iron	µg/L	363	374	3.0
8/9/2016	A-01	B160801	SES	Oil & Grease	mg/l	< 3.5	< 3.6	N/A
8/9/2016	A-01	B160801	EBL	Total Suspended Solids	mg/l	2	2	N/A
8/2/2016	F-08	B160802	EBL	Lead	µg/L	0.849	0.867	2.1
8/2/2016	F-08	B160802	EBL	Zinc	µg/L	48.6	42.5	13.4
8/1/2016	H-16	B160803	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
8/1/2016	H-16	B160803	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
8/1/2016	H-16	B160803	EBL	Chromium	µg/L	< 2	4.31	N/A
8/1/2016	H-16	B160803	EBL	Copper	µg/L	< 2	2.62	N/A

Table 39 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
8/1/2016	H-16	B160803	EBL	Lead	µg/L	< 0.01	0.046	N/A
8/1/2016	H-16	B160803	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
8/1/2016	H-16	B160803	EBL	Nickel	µg/L	< 3	9.53	N/A
8/1/2016	H-16	B160803	EBL	Silver	µg/L	< 1	< 1	N/A
8/1/2016	H-16	B160803	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
8/1/2016	H-16	B160803	EBL	Zinc	µg/L	5.64	11.80	N/A
9/20/2016	A-1A	B160901	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
9/20/2016	A-1A	B160901	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
9/15/2016	H-02	B160902	EBL	Copper	µg/L	3.92	4.15	N/A
9/15/2016	H-02	B160902	EBL	Lead	µg/L	0.077	0.076	1.3
9/15/2016	H-02	B160902	EBL	Zinc	µg/L	4.73	5.28	N/A
10/4/2016	A-11	B161001	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
10/4/2016	A-11	B161001	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
10/18/2016	H-12	B161003	EBL	Copper	µg/L	11.6	11.9	2.6
10/18/2016	H-12	B161003	EBL	Zinc	µg/L	34.1	37.0	8.2
10/3/2016	H-16	B161004	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
10/3/2016	H-16	B161004	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
10/3/2016	H-16	B161004	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
10/3/2016	H-16	B161004	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
10/3/2016	H-16	B161004	EBL	Lead	µg/L	< 0.010	0.018	N/A
10/3/2016	H-16	B161004	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
10/3/2016	H-16	B161004	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
10/3/2016	H-16	B161004	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
10/3/2016	H-16	B161004	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
10/3/2016	H-16	B161004	EBL	Zinc	µg/L	6.84	7.14	4.3
10/19/2016	K-18	B161005	EBL	Total Suspended Solids	mg/l	2	2	N/A
10/19/2016	L-07	B161006	EBL	Total Suspended Solids	mg/l	1	1	N/A
12/5/2016	H-16	B161202	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
12/5/2016	H-16	B161202	EBL	Cadmium	µg/L	0.059	< 0.050	N/A
12/5/2016	H-16	B161202	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
12/5/2016	H-16	B161202	EBL	Copper	µg/L	< 0.600	0.665	N/A
12/5/2016	H-16	B161202	EBL	Lead	µg/L	0.065	0.054	18.5

Table 39 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
12/5/2016	H-16	B161202	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
12/5/2016	H-16	B161202	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
12/5/2016	H-16	B161202	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
12/5/2016	H-16	B161202	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
12/5/2016	H-16	B161202	EBL	Zinc	µg/L	12.3	12.4	0.8
12/19/2016	M-05	B161203	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
12/19/2016	M-05	B161203	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A

Notes:

Laboratory Acronyms:

EBL = Environmental Bioassay Laboratory

SES = Shealy Environmental Services

CSWTF = Central Sanitary Wastewater Treatment Facility

Table 40 NPDES Duplicate Sample Results

Outfall Locations and Sample Dates where there was no flow

NPDES Site	Sample Date
A-1A	2/29/2016
D-01	4/7/2016
D-01B	4/7/2016
D-01C	4/7/2016
K-06	4/26/2016
H-07	4/26/2016
F-01	5/4/2016
F-02	6/23/2016
F-05	6/23/2016
F-08	7/12/2016
D-01	10/10/2016
D-01B	10/10/2016
D-01C	10/10/2016
K-06	10/18/2016
F-01	11/17/2016
F-02	12/27/2016
F-05	12/27/2016

Table 40 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
1/4/2016	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
1/4/2016	H-16	EBL	Cadmium	µg/L	0.05	< 0.05	N/A
1/4/2016	H-16	EBL	Chromium	µg/L	< 2	< 2	N/A
1/4/2016	H-16	EBL	Copper	µg/L	< 2	< 2	N/A
1/4/2016	H-16	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
1/4/2016	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
1/4/2016	H-16	EBL	Nickel	µg/L	< 3	< 3	N/A
1/4/2016	H-16	EBL	Silver	µg/L	< 1	< 1	N/A
1/4/2016	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
1/4/2016	H-16	EBL	Zinc	µg/L	9.57	9.59	N/A
1/5/2016	A-11	SES	Low Level Mercury	ng/L	2.74	2.85	3.9
1/5/2016	A-01	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
1/5/2016	A-01	EBL	Iron	µg/L	203	194	4.5
1/5/2016	A-01	SES	Oil & Grease	mg/L	< 3.5	< 3.2	N/A
1/5/2016	A-01	EBL	Total Suspended Solids	mg/L	1	1	N/A
1/7/2016	D-02	EBL	Copper	µg/L	< 2	< 2	N/A
1/7/2016	D-02	EBL	Nickel	µg/L	< 3	< 3	N/A
2/4/2016	D-02	SES	Oil & Grease	mg/l	< 3.3	< 3.4	N/A
1/7/2016	D-02	EBL	Total Suspended Solids	mg/l	2	2	N/A
1/7/2016	D-02	EBL	Zinc	µg/L	5.28	4.31	N/A
1/20/2016	F-08	EBL	Lead	µg/L	0.488	0.487	0.2
1/20/2016	F-08	EBL	Zinc	µg/L	101	105	3.9
2/1/2016	A-11	SES	Low Level Mercury	ng/L	64.9	60.4	7.2
2/11/2016	A-11	SES	Low Level Mercury	ng/L	87.2	92.1	5.5
2/22/2016	A-11	SES	Low Level Mercury	ng/L	15.8	15.9	0.6
2/26/2016	A-11	SES	Low Level Mercury	ng/L	12.2	12.2	0.0
2/29/2016	A-11	SES	Low Level Mercury	ng/L	14.2	14.3	0.7

Table 40 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
2/9/2016	H-02	EBL	Copper	µg/L	6.24	6.16	N/A
2/9/2016	H-02	EBL	Lead	µg/L	0.22	0.16	31.6
2/9/2016	H-02	EBL	Zinc	µg/L	12.5	11.3	10.1
3/15/2016	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
3/15/2016	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
3/15/2016	H-16	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
3/15/2016	H-16	EBL	Copper	µg/L	< 1.8	< 1.8	N/A
3/15/2016	H-16	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
3/15/2016	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
3/15/2016	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
3/15/2016	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
3/15/2016	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
3/15/2016	H-16	EBL	Zinc	µg/L	< 1	< 1	N/A
3/3/2016	A-11	SES	Low Level Mercury	ng/L	15.0	16.1	7.1
3/2/2016	A-11	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
3/2/2016	A-11	EBL	Total Suspended Solids	mg/L	1	1	N/A
3/8/2016	H-12	EBL	Copper	µg/L	8.98	9.43	N/A
3/8/2016	H-12	EBL	Zinc	µg/L	25.5	25.6	0.4
4/6/2016	A-11	SES	Low Level Mercury	ng/L	3.9	4.1	5.5
4/26/2016	K-18	EBL	pH	SU	7.7	7.7	0.0
4/26/2016	K-18	EBL	Total Suspended Solids	mg/L	2	2	N/A
4/26/2016	L-07	EBL	pH	SU	7.1	7.1	0.0
4/26/2016	L-07	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
5/10/2016	A-11	SES	Low Level Mercury	ng/L	7.33	7.08	3.5
5/2/2016	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
5/2/2016	H-16	EBL	Cadmium	µg/L	0.124	< 0.05	N/A
5/2/2016	H-16	EBL	Chromium	µg/L	< 2	< 2	N/A

Table 40 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
5/2/2016	H-16	EBL	Copper	µg/L	< 2	< 2	N/A
5/2/2016	H-16	EBL	Lead	µg/L	0.022	< 0.010	N/A
5/2/2016	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
5/2/2016	H-16	EBL	Nickel	µg/L	< 3	< 3	N/A
5/2/2016	H-16	EBL	Silver	µg/L	< 1	< 1	N/A
5/2/2016	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
5/2/2016	H-16	EBL	Zinc	µg/L	< 2	< 2	N/A
5/10/2016	M-05	SES	Trichloroethylene	µg/L	< 0.16	< 0.16	N/A
5/10/2016	M-05	SES	Tetrachloroethylene	µg/L	< 0.22	< 0.22	N/A
6/8/2016	A-11	SES	Low Level Mercury	ng/L	4.80	5.32	10.3
7/19/2016	A-01	CSWTF	Biochemical Oxygen Demand	mg/L	2.3	2.3	N/A
7/19/2016	A-01	EBL	Iron	µg/L	637	626	1.7
7/19/2016	A-01	SES	Oil & Grease	mg/L	< 3.6	< 3.3	N/A
7/19/2016	A-01	EBL	Total Suspended Solids	mg/L	2	2	N/A
7/19/2016	A-11	SES	Low Level Mercury	ng/L	11.9	12.4	4.1
7/18/2016	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
7/18/2016	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
7/18/2016	H-16	EBL	Chromium	µg/L	< 2.00	2.49	N/A
7/18/2016	H-16	EBL	Copper	µg/L	< 2	< 2	N/A
7/18/2016	H-16	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
7/18/2016	H-16	EBL	Mercury	µg/L	0.042	0.045	N/A
7/18/2016	H-16	EBL	Nickel	µg/L	< 3.00	5.25	N/A
7/18/2016	H-16	EBL	Silver	µg/L	< 1	< 1	N/A
7/18/2016	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
7/18/2016	H-16	EBL	Zinc	µg/L	< 2	< 2	N/A
8/10/2016	A-1A	SES	Trichloroethylene	µg/L	< 0.16	< 0.16	N/A
8/10/2016	A-1A	SES	Tetrachloroethylene	µg/L	< 0.22	< 0.22	N/A

Table 40 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
8/8/2016	A-11	SES	Low Level Mercury	ng/L	2.29	2.23	2.7
8/2/2016	H-02	EBL	Copper	µg/L	9.21	7.48	N/A
8/2/2016	H-02	EBL	Lead	µg/L	0.388	0.316	20.5
8/2/2016	H-02	EBL	Zinc	µg/L	11.50	7.15	N/A
9/7/2016	A-11	SES	Low Level Mercury	ng/L	3.04	2.83	7.2
9/20/2016	A-11	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
9/20/2016	A-11	EBL	Total Suspended Solids	mg/L	1	1	N/A
9/12/2016	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
9/12/2016	H-16	EBL	Cadmium	µg/L	0.11	< 0.05	N/A
9/12/2016	H-16	EBL	Chromium	µg/L	5.94	< 2	N/A
9/12/2016	H-16	EBL	Copper	µg/L	2.28	< 2	N/A
9/12/2016	H-16	EBL	Lead	µg/L	< 0.010	< 0.010	N/A
9/12/2016	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
9/12/2016	H-16	EBL	Nickel	µg/L	9.7	< 3.0	N/A
9/12/2016	H-16	EBL	Silver	µg/L	< 1	< 1	N/A
9/12/2016	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
9/12/2016	H-16	EBL	Zinc	µg/L	14.6	6.2	N/A
10/20/2016	A-11	SES	Low Level Mercury	ng/L	1.6	1.5	9.6
11/2/2016	A-11	SES	Low Level Mercury	ng/L	1.73	1.59	8.4
11/2/2016	M-05	SES	Trichloroethylene	µg/L	< 0.40	< 0.40	N/A
11/2/2016	M-05	SES	Tetrachloroethylene	µg/L	< 0.40	< 0.40	N/A
11/1/2016	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
11/1/2016	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
11/1/2016	H-16	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
11/1/2016	H-16	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
11/1/2016	H-16	EBL	Lead	µg/L	0.018	0.020	N/A
11/1/2016	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A

Table 40 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
11/1/2016	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
11/1/2016	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
11/1/2016	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
11/1/2016	H-16	EBL	Zinc	µg/L	3.46	3.77	N/A
12/21/2016	A-11	SES	Low Level Mercury	ng/L	9.77	9.81	0.4

Table 41 Summary of SRS Stream Water Quality Duplicate Sample Results Detected

Reported parameters are those where both results were detected (this includes estimated values).

The following analytes are measured monthly at each sampled location: aluminum, beryllium, cadmium, chromium, copper, hardness (total), iron, lead, manganese, mercury, nickel, nitrate-nitrogen, nitrite-nitrogen, thallium, total organic carbon, phosphorus, total suspended solids, and zinc.

The following pesticides and herbicides are measured quarterly at one stream location: aldrin, aroclor 1016, aroclor 1221, aroclor 1232, aroclor 1242, aroclor 1248, aroclor 1254, aroclor 1260, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, toxaphene, 2,4-D, 2,4,5-TP (Silvex)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
January 2016	FM-6	Hardness (total)	mg/L	14	19	30.3
		Iron	µg/L	628	618	1.6
		Manganese	µg/L	29.4	28.2	4.2
		Nitrate-Nitrogen	mg/L	0.45	0.6	28.6
		Total organic carbon	mg/L	3.3	3.3	0.0
		Phosphorus	mg/L	0.068	0.079	15.0
		Zinc	µg/L	14.5	14.6	0.7
February 2016	FM-2B	Iron	µg/L	530	528	0.4
		Manganese	µg/L	15.5	15.2	2.0
		Nitrate-Nitrogen	mg/L	0.14	0.13	7.4
		Total organic carbon	mg/L	4.8	4.7	2.1
		Zinc	µg/L	12.8	18.3	35.4
March 2016	L3R-2	Iron	µg/L	545	569	4.3
		Manganese	µg/L	82.7	85.2	3.0
		Nitrate-Nitrogen	mg/L	0.037	0.036	2.7
		Total organic carbon	mg/L	4.7	4.8	2.1
April 2016	PB-3	Iron	µg/L	1020	1040	1.9
		Manganese	µg/L	64.1	64.9	1.2
		Nitrate-Nitrogen	mg/L	0.097	0.088	9.7
		Total organic carbon	mg/L	7.6	7.6	0.0
		Phosphorus	mg/L	0.11	0.10	9.5
		Total suspended solids	mg/L	9	9	0.0
		Zinc	µg/L	24.6	25.9	5.1
May 2016	SC-4	Aluminum	µg/L	467	446	4.6
		Iron	µg/L	1300	1270	2.3
		Manganese	µg/L	169	164	3.0
		Nitrate-Nitrogen	mg/L	0.057	0.054	5.4
		Total organic carbon	mg/L	4.1	4.1	0.0
		Phosphorus	mg/L	0.057	0.050	5.1
		Total suspended solids	mg/L	37	37	0.0

**Table 41 Summary of SRS Stream Water Quality Duplicate Sample Results Detected
(continued)**

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
June 2016	TB-5	Iron	µg/L	4900	4790	2.3
		Manganese	µg/L	262	253	3.5
		Nitrate-Nitrogen	mg/L	0.046	0.062	29.6
		Total organic carbon	mg/L	6.8	6.9	1.5
		Phosphorus	mg/L	0.094	0.11	15.7
		Total suspended solids	mg/L	11	11	0.0
July 2016	TC-1	Iron	µg/L	786	757	3.8
		Manganese	µg/L	55.9	53.1	5.1
		Nitrate-Nitrogen	mg/L	0.34	0.40	16.2
		Total organic carbon	mg/L	3.3	3.2	3.1
		Phosphorus	mg/L	0.08	0.081	1.2
		Total suspended solids	mg/L	12	10	18.2
		Zinc	µg/L	25.8	23.8	8.1
August 2016	U3R-1A	Iron	µg/L	391	403	3.0
		Manganese	µg/L	7.61	6.97	8.8
		Total organic carbon	mg/L	2.1	2.4	13.3
September 2016	U3R-4	Iron	µg/L	607	595	2.0
		Manganese	µg/L	18.3	17.5	4.5
		Nitrate-Nitrogen	mg/L	0.043	0.044	2.3
		Total organic carbon	mg/L	5.4	5.5	1.8
		Phosphorus	mg/L	0.041	0.045	9.3
October 2016	FMC-2	Iron	µg/L	937	983	4.8
		Manganese	µg/L	28.3	30.3	6.8
		Nitrate-Nitrogen	mg/L	0.274	0.28	2.2
		Total organic carbon	mg/L	7.2	7.2	0.0
		Phosphorus	mg/L	0.088	0.14	45.6
		Total suspended solids	mg/L	9	7	25.0
		Zinc	µg/L	25.3	33.6	28.2
November 2016	FM-2B	Iron	µg/L	2370	2180	8.4
		Manganese	µg/L	120	112	6.9
		Nitrate-Nitrogen	mg/L	0.175	0.168	4.1
		Total organic carbon	mg/L	3.6	4.2	15.4
		Phosphorus	mg/L	0.069	0.13	61.3
		Total suspended solids	mg/L	14	14	0.0
December 2016	FM-6	Iron	µg/L	878	857	2.4
		Manganese	µg/L	47.7	45	5.8
		Nitrate-Nitrogen	mg/L	0.687	0.687	0.0
		Total organic carbon	mg/L	4.2	4.5	6.9
		Phosphorus	mg/L	0.072	0.12	50.0

Table 42 Summary of Savannah River Water Quality Duplicate Sample Results Detected

Reported parameters are those where both results were detected (this includes estimated values).

The following analytes are measured monthly at each sampled location: aluminum, beryllium, cadmium, chromium, copper, hardness (total), iron, lead, manganese, mercury, nickel, nitrate-nitrogen, nitrite-nitrogen, thallium, total organic carbon, phosphorus, total suspended solids and zinc.

The following pesticides and herbicides are measured quarterly at one river location: aldrin, aroclor 1016, aroclor 1221, aroclor 1232, aroclor 1242, aroclor 1248, aroclor 1254, aroclor 1260, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), chlordane, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, toxaphene, 2,4-D, and 2,4,5-TP (Silvex)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
January 2016	RM-141.5	Aluminum	µg/L	496	450	9.7
		Hardness (total)	mg/L	19	18	5.4
		Iron	µg/L	856	840	1.9
		Manganese	µg/L	14.7	14.2	3.5
		Nitrate-Nitrogen	mg/L	0.52	5.6	166.0
		Total organic carbon	mg/L	6.5	6.5	0.0
		Zinc	µg/L	11.9	10.5	12.5
February 2016	RM-129.1	Aluminum	µg/L	867	757	13.5
		Hardness (total)	mg/L	16	12	28.6
		Iron	µg/L	1050	962	8.7
		Manganese	µg/L	76.2	67.8	11.7
		Nitrate-Nitrogen	mg/L	0.30	0.33	9.5
		Total organic carbon	mg/L	4.8	4.9	2.1
		Phosphorus	mg/L	0.08	0.093	15.0
		Total suspended solids	mg/L	7	7	0.0
March 2016	RM-150.4	Aluminum	µg/L	242	219	10.0
		Iron	µg/L	622	604	2.9
		Manganese	µg/L	88.4	84.4	4.6
		Nitrate-Nitrogen	mg/L	0.38	0.21	57.6
		Total organic carbon	mg/L	3.6	3.7	2.7
		Phosphorus	mg/L	0.13	0.13	0.0
		Total suspended solids	mg/L	5	5	0.0
April 2016	RM-160	Iron	µg/L	525	528	0.6
		Manganese	µg/L	72.6	71.9	1.0
		Nitrate-Nitrogen	mg/L	0.19	0.21	10.0
		Total organic carbon	mg/L	4.9	4.9	0.0
		Phosphorus	mg/L	0.16	0.21	27.0
		Total suspended solids	mg/L	7	7	0.0

**Table 42 Summary of Savannah River Water Quality Duplicate Sample Results Detected
(continued)**

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
May 2016	RM-118.8	Aluminum	µg/L	243	311	24.5
		Iron	µg/L	666	764	13.7
		Manganese	µg/L	77.8	93.7	18.5
		Nitrate-Nitrogen	mg/L	0.34	0.34	0.0
		Total organic carbon	mg/L	4.4	4.3	2.3
		Phosphorus	mg/L	0.14	0.14	0.0
		Total suspended solids	mg/L	11	12	8.7
		Zinc	mg/L	12.5	16.3	26.4
June 2016	RM-129.1	Aluminum	µg/L	392	448	13.3
		Iron	µg/L	801	848	5.7
		Manganese	µg/L	92.3	91.7	0.7
		Nitrate-Nitrogen	mg/L	0.26	0.26	0.0
		Total organic carbon	mg/L	4.1	3.9	5.0
		Phosphorus	mg/L	0.13	0.13	0.0
		Total suspended solids	mg/L	9	9	0.0
July 2016	RM-141.5	Iron	µg/L	380	461	19.3
		Manganese	µg/L	70.4	80	12.8
		Nitrate-Nitrogen	mg/L	0.18	0.29	46.8
		Total organic carbon	mg/L	3.1	3.4	9.2
		Phosphorus	mg/L	0.085	0.085	0.0
		Total suspended solids	mg/L	7	9	25.0
August 2016	RM-150.4	Hardness (total)	mg/L	18	21	15.4
		Iron	µg/L	294	287	2.4
		Manganese	µg/L	52.6	53.9	2.4
		Nitrate-Nitrogen	mg/L	0.18	0.28	43.5
		Total organic carbon	mg/L	3.8	3.8	0.0
		Phosphorus	mg/L	0.21	0.21	0.0
September 2016	RM-160	Hardness (total)	mg/L	19	18	5.4
		Iron	µg/L	296	305	3.0
		Manganese	µg/L	56.9	59	3.6
		Nitrate-Nitrogen	mg/L	0.17	0.18	5.7
		Total organic carbon	mg/L	3.7	3.4	8.5
		Phosphorus	mg/L	0.18	0.20	10.5
October 2016	RM-118.8	Iron	µg/L	831	772	7.4
		Manganese	µg/L	80.5	79.6	1.1
		Nitrate-Nitrogen	mg/L	0.243	0.298	20.3
		Total organic carbon	mg/L	7.3	7.2	1.4
		Phosphorus	mg/L	0.11	0.16	37.0
		Total suspended solids	mg/L	5	6	18.2

**Table 42 Summary of Savannah River Water Quality Duplicate Sample Results Detected
(continued)**

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
November 2016	RM-129.1	Hardness (total)	mg/L	28	15	60.5
		Iron	µg/L	756	772	2.1
		Manganese	µg/L	29.7	29.9	0.7
		Nitrate-Nitrogen	mg/L	0.092	0.077	17.0
		Total organic carbon	mg/L	5.0	4.6	8.3
		Phosphorus	mg/L	0.064	0.04	46.2
		Zinc	µg/L	13.5	12.1	10.9
December 2016	RM-141.5	Iron	µg/L	517	515	0.4
		Manganese	µg/L	63.7	64.1	0.6
		Nitrate-Nitrogen	mg/L	0.199	0.195	2.0
		Total organic carbon	mg/L	4.2	4.2	0.0
		Phosphorus	mg/L	0.16	0.18	11.8