WOLF CREEK
NUCLEAR OPERATING CORPORATION

Cynthia R. Hafenstine
Manager Regulatory Affairs

April 25, 2016

RA 16-0036

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555

Subject: Docket No. 50-482: 2015 Annual Radiological Environmental Operating Report

Gentlemen:

The purpose of this letter is to submit the enclosed Annual Radiological Environmental Operating Report, which is being submitted pursuant to Wolf Creek Generating Station (WCGS) Technical Specification 5.6.2. This report covers radiological environmental monitoring around WCGS for the period of January 1, 2015, through December 31, 2015.

This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4204.

Sincerely,

Cynthia R. Hafenstine

Cynthia R. Hafenstine

CRH/rlt

Enclosure

cc: M. L. Dapas (NRC), w/e
C. F. Lyon (NRC), w/e
N. H. Taylor (NRC), w/e
Senior Resident Inspector (NRC), w/e

IE25
NRR

Wolf Creek Nuclear Operating Corporation

Wolf Creek Generating Station

2015 Annual Radiological Environmental Operating Report
(167 pages)

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

2015 ANNUAL RADIOLOGICAL

ENVIRONMENTAL OPERATING REPORT

April 15, 2016

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF CHARTS

EXECUTIVE SUMMARY

Plant-related activation, corrosion, or fission products were not detected during 2015 in air particulate filters, radioiodine canisters, drinking water, ground water, broadleaf vegetation, shoreline sediment, crops, bottom sediment, aquatic vegetation, terrestrial vegetation or soil samples. Activation, corrosion or fission products attributable to plant operation were detected during 2015 in surface water, fish, and deer samples.

Nuclides detected in Radiological Environmental Monitoring Program (REMP) samples were below applicable Nuclear Regulatory Commission (NRC) reporting levels.

Based upon the radiological environmental monitoring program results, it was concluded station operations had no significant radiological impact on the health and safety of the public or the environment.

INTRODUCTION

The 2015 Annual Radiological Environmental Operating Report for Wolf Creek Generating Station (WCGS) covers the period from January 1 through December 31, 2015. WCGS is located in Coffey County, Kansas, approximately five miles northeast of Burlington, Kansas.

Fuel loading commenced at WCGS on March 12, 1985. The operational phase of the REMP began with initial criticality on May 22, 1985, and the first detectable quantities of radioactivity were reported in plant effluents in June 1985.

This report contains a description of the REMP conducted by Wolf Creek Nuclear Operating Corporation (WCNOC), a discussion of monitoring program results, the revisions or changes to the program, program deviations, the Interlaboratory Comparison Program and a comparison to the Radioactive Effluent Release Program. The Interlaboratory Comparison Program results, a summary of results in the NRC Branch Technical Position specified format, the individual sample results, and the Land Use Census Report are included as appendices.

I. PROGRAM DESCRIPTION

Radiological environmental monitoring samples were collected according to the schedule in WCGS procedure AP 07B-004, *Offsite Dose Calculation Manual (Radiological Environmental Monitoring Program)*. Radiological environmental monitoring program samples were collected by the WCGS Environmental Management group and were analyzed by Environmental, Inc. Landauer, Inc. processed the environmental optically stimulated luminescence (OSL) dosimeters. Table 1 identifies the exposure pathway/sample type, number of samples and sample locations, sample collection frequency, and the type and frequency of analysis. Table 2 lists the sample location identifiers, distances and directions from the plant. Samples in addition to those required by AP 07B-004 were also obtained and analyzed.

The following is a description of the sampling and analysis program by individual pathways.

A. Airborne Pathway

Low volume air sampling pumps with digital flow meters continuously sampled air through 47 mm glass fiber particulate filters and radioiodine canisters, respectively. The air particulate filters and radioiodine canisters were collected weekly. Gross beta analysis was performed weekly on the air particulate filters. Gamma isotopic analysis was also performed quarterly on the air particulate filters. Radioiodine canisters were analyzed weekly for I-131.

Air samples were collected from six locations. The indicator locations sampled included 2, 18, 32, 37 and 49. A control location near the intersection of 20th Road and Yearling Road (location 53) was also sampled. Indicator sample locations are shown in Figure 1 and the control sample location is shown in Figure 5.

B. Direct Radiation Pathway

Optically stimulated luminescence (OSL) dosimeters were used continuously at 42 locations during the sample year to measure direct radiation. The OSLs were typically positioned roughly 3 to 4 feet above the ground in plastic thermostat boxes. Three OSLs were placed at each designated location. The OSLs were changed out quarterly and analyzed quarterly for gamma dose. Transit dose was measured and subtracted from the ambient dose. Indicator OSL sample locations are illustrated in Figure 2 and control sample locations are shown in Figure 5. Control sample locations were 39 (Beto Junction) and 53 (near the intersection of 20th Road and Yearling Road).

C. Waterborne Pathway

Gamma isotopic analysis was performed on the water samples. In addition to gamma isotopic analysis, analysis for I-131 was performed monthly on drinking water and quarterly on ground water samples. Gross beta analysis was performed monthly on drinking water samples. Tritium analysis was performed monthly for surface water and quarterly for drinking water. Tritium analysis was also performed quarterly on ground water samples. Four surface water samples from the Coffey County Lake Spillway (SP) location and four surface water samples from the John Redmond Reservoir (JRR) location were also analyzed for Fe-55. The waterborne pathway sample locations are shown in Figures 3 and 5.

Monthly grab samples of surface water were collected from the John Redmond Reservoir (JRR) control location and from the Coffey County Lake Spillway (SP) indicator location.

Quarterly grab samples of ground water were collected from seven wells. Six locations (C-10, C-49, F-1, G-2, J-1 and J-2) located hydrologically down gradient from the site were used as indicator sample locations. Location B-12 located hydrologically up gradient from the site was used as a control location.

Drinking water was sampled at the water treatment facilities in the towns of Iola (indicator sample location IO-DW) and Burlington (control sample location BW-15). The Iola facility is located downstream of the Neosho River-Wolf Creek confluence and the Burlington facility is located upstream of the Neosho River-Wolf Creek confluence. Composite samples were obtained monthly from automatic samplers at each location. The automatic drinking water samplers collected approximately 27 milliliters of water every two hours.

Shoreline sediments were sampled semiannually. Gamma isotopic analyses were performed on the shoreline sediment samples. Shoreline sediment sample locations were the Coffey County Lake discharge cove (DC) indicator location and the JRR control location.

D. Ingestion Pathway

Milk was not collected during the sample year. The Land Use Census did not identify any locations producing milk for human consumption within five miles of the plant.

Fish were sampled semiannually from the Coffey County Lake (indicator sample location) and from the tail waters of JRR (control sample location). These sample locations are identified in Figure 4. Gamma isotopic analyses were performed on the boneless meat portions of the fish. Several species of game fish and rough fish were sampled. Fish were also analyzed for tritium.

Broadleaf vegetation samples were collected monthly when available during the growing season. Indicator (A-3, B-1, H-2, and R-2) location gardens (Figure 4) and a control (D-2) location garden (Figure 5) were sampled. Gamma isotopic analyses were performed on these samples.

One irrigated crop sample was obtained from indicator location (NR-D1) downstream of the confluence of Wolf Creek and the Neosho River. Irrigated crops were also sampled from control location NR-U1. Gamma isotopic analysis was performed on each sample. Crop sample locations are identified on Figure 5.

E. Additional Samples Collected (not required by AP 07B-004)

Duplicate ground water grab samples were obtained quarterly from indicator location C-49 and were labeled L-49. These duplicate samples served as laboratory quality checks. Gamma isotopic analysis, I-131 analysis and tritium analysis were performed on the ground water samples.

Bottom sediment samples were collected from indicator sample locations at the Discharge Cove (DC), Ultimate Heat Sink (UHS), Essential Service Water (ESW) channel, Environmental Education Area (EEA), Makeup Discharge Structure (MUDS), and the control sample location at John Redmond Reservoir (JRR). Gamma isotopic analyses were performed on the bottom sediment samples. Fifteen samples collected from indicator locations and one sample collected from the control location were also analyzed for Fe-55. Two samples collected from indicator locations were also analyzed for the Hard-to-Detect (HTD) radionuclides. Three bottom sediment samples were collected as part of a cooperative sampling effort with the Kansas Department of Health and Environment (KDHE). The sample locations are identified on Figure 3.

Aquatic vegetation was collected from indicator locations Discharge Cove (DC), Makeup Discharge Structure (MUDS) and Environmental Education Area (EEA). Gamma isotopic analyses were performed on the aquatic vegetation samples. These samples were collected as part of a cooperative sampling effort with the KDHE. The sample locations are identified on Figure 3.

Terrestrial vegetation (grass) was sampled from the Environmental Education Area (EEA) and Makeup Discharge Structure (MUDS) indicator sample locations. Gamma isotopic analyses

were performed on the grass samples. These samples were collected as part of a cooperative sampling effort with the KDHE. The sample locations are identified on Figure 4.

Soil was sampled from the Makeup Discharge Structure (MUDS) and the Environmental Education Area (EEA) indicator sample locations. Gamma isotopic analysis was performed on the soil samples. These samples were collected as part of a cooperative sampling effort with the KDHE. The sample locations are identified on Figure 4.

A deer was sampled from indicator sample location Q1.0. Gamma isotopic analysis and tritium analysis was performed on the deer sample. This sample was collected as part of a cooperative sampling effort with the KDHE. The sample location is identified on Figure 4.

II. DISCUSSION OF RESULTS

Analysis results for pathways are summarized in Appendix B using the format described in Radiological Assessment Branch Technical Position, Revision 1, November 1979 (NRC Generic Letter 79-065). Results for individual samples are listed in Appendix C.

A. Airborne Pathway

Chart 1 graphically illustrates weekly gross beta results for the sample year for all of the airborne sample locations. Chart 2 represents the gross beta historical airborne smoothed averages of indicator sample locations and control sample locations. Charts 1 and 2 demonstrate how closely the indicator and control sample locations tracked together. Chart 2 reveals a seasonal cyclic trend; the gross beta values peak in the winter months (December or January) and decrease to a low point in the spring months (May or June). This trend is expected and is attributed to seasonal meteorological changes, i.e., changes in prevailing winds and precipitation.

The gross beta results of 2015 were compared to pre-operational monitoring results of 1983 and 1984. The weekly gross beta analyses range for 1983 and 1984 was 0.0064 to 0.084 pCi/m^3. The 2015 weekly gross beta analyses range for indicator locations was 0.006 to 0.059 pCi/m^3. The 2015 weekly gross beta analyses range was within the 1983 and 1984 pre-operational range. Additionally, the annual mean for indicator locations for 2015 (0.026 pCi/m^3) was lower than the annual mean for 1983 (0.032 pCi/m^3).

The gross beta results for the indicator locations were also compared to the control location. The annual mean for indicator locations for 2015 (0.026 pCi/m^3) was slightly higher than the annual mean of the control location (0.025 pCi/m^3). The indicator location with the highest gross beta annual mean was location 32 (0.027 pCi/m^3) and was slightly higher than the annual mean of the control location (0.025 pCi/m^3).

Naturally occurring Be-7 activity was detected, as was the case during pre-operational monitoring. In 1984, the range for Be-7 detected activity was 0.024 to 0.211 pCi/m^3 for indicator locations and the annual mean for indicator locations was 0.069 pCi/m^3. In 2015, the range for Be-7 detected activity was 0.051 to 0.098 pCi/m^3 for indicator locations and the annual mean for indicator locations was 0.079 pCi/m^3. The control location annual mean for Be-7 detected activity (0.076 pCi/m^3) was slightly lower than the annual mean of the indicator locations (0.079 pCi/m^3). The indicator location with the highest annual mean of detected Be-7 activity (0.083 pCi/ m^3) was location 49.

I-131 activity was not detected in the weekly analysis of radioiodine canisters at any location.

The AP 07B-004 required lower limits of detection were met. Plant-related activation, corrosion, or fission products were not detected during 2015 in air particulate filters and radioiodine canisters. No unusual trends were noted.

B. Direct Radiation Pathway

Quarterly OSL dosimeter results for each location are shown in Table 3. Measured values have been converted to a standardized 90-day quarter.

The annual mean of indicator sample locations in 2015 was 18.4 mR per standardized 90-day quarter. The annual mean of the control sample locations in 2015 was 19.2 mR per standardized 90-day quarter.

For pre-operational comparison, in 1981, the annual mean of indicator sample locations was 18.9 mR per standardized 90-day quarter and the annual mean for the control sample locations was 17.1 mR per standardized 90-day quarter. It should be noted WCGS changed from thermoluminescence dosimeters (TLD) to optically stimulated luminescence (OSL) dosimeters in 2008.

The indicator sample location with the highest annual mean was location 4 (22.1 mR per standardized 90-day quarter) which is slightly higher than the annual mean of the control sample locations (19.2 mR per standardized 90-day quarter).

Based upon Condition Report 00027489, improvements were made in measuring and subtracting transit dose in 2010. As expected, the OSL results have increased since 2010. Chart 3 visibly displays the increase of the OSL results. Chart 3 also displays how closely the indicator and control location OSL dosimeter results are for 2015.

Chart 4 displays the TLD nearsite sample locations (1, 2, 7-9, 11-14, 18, 26, 27, 29, 30, 37 and 38) and the control sample locations (locations 39 and 48) for the preoperational years through 2007.

C. Waterborne Pathway

(1) Surface Water

Tritium, attributable to WCGS operation, was detected in surface water samples collected from the SP indicator sample location. The annual mean for detected tritium activity at the SP location was 10,695 pCi/L and the range was 8,214 to 13,376 pCi/L. The detected tritium activity was below the 30,000 pCi/L AP 07B-004 reporting level. Chart 5 illustrates the yearly averages of surface water tritium data for the SP location. Chart 5 indicates the average tritium concentration of the SP location has reached equilibrium. Tritium activity was not detected in samples obtained from the control sample location (JRR).

During pre-operational radiological environmental monitoring, measured radiological activity was not detected in surface water samples.

The AP 07B-004 required lower limits of detection were met. Radionuclides were not detected by the gamma isotopic analyses or by Fe-55 analyses.

Tritium was the only activity detected during 2015 in surface water samples and no unusual trends were noted.

(2) Ground Water

The AP 07B-004 required lower limits of detection were met for I-131, tritium and gamma isotopic analyses. Radioactivity was not detected in any ground water samples. No unusual trends were noted. Plant-related activation, corrosion or fission products were not detected during 2015 in ground water samples.

(3) Drinking Water

Gross beta activity was detected in drinking water samples collected from the indicator sample location and in samples collected from the control sample location. The annual mean of the indicator sample location gross beta activity (2.7 pCi/L) was similar when compared to the annual mean of the control sample location gross beta activity (2.7 pCi/L). The 2015 annual means of gross beta activity for both the indicator and control sample locations were lower than those of the pre-operational monitoring year of 1984. In 1984, the annual mean of the indicator sample location gross beta activity was 7.5 pCi/L and the annual mean of the control sample location gross beta activity was 6.4 pCi/L.

Chart 6 illustrates the drinking water gross beta results for the last five years and how closely the gross beta results compared for the indicator and control sample locations.

Radionuclides were not detected by the I-131, gamma isotopic analyses or tritium analyses of the indicator or control location samples.

The AP 07B-004 required lower limits of detection were met. Plant-related activation, corrosion, or fission products were not detected during 2015 in drinking water samples and no unusual trends were noted.

(4) Shoreline Sediment

Naturally occurring K-40 was detected in shoreline sediment samples collected from the DC (indicator sample location) and JRR (control sample location). K-40 was also detected during pre-operational shoreline sediment monitoring.

Cs-137 activity was detected in the two shoreline sediment samples collected from the JRR control location. Cs-137 activity was not detected in the two shoreline sediment samples collected from the DC indicator sample location.

No other radionuclides were detected in the DC or JRR shoreline sediment samples during 2015.

The AP 07B-004 required lower limits of detection were met. Plant-related activation, corrosion, or fission products were not detected during 2015 in shoreline sediment samples and no unusual trends were noted.

D. Ingestion Pathway

(1) Milk

Milk was not collected during the sample year since no indicator locations within five miles of the plant were identified during the Land Use Census.

(2) Fish

Naturally occurring K-40 activity was detected in fish samples obtained from the Coffey County Lake (CCL) indicator sample location and in fish samples obtained from the JRR control sample location. K-40 activity was also detected during pre-operational fish monitoring.

Fish samples were also analyzed for tritium. Fish samples collected from Coffey County Lake had tritium activity detected (7,519 pCi/kg annual mean). The detected tritium activity was attributable to plant operation. An adult consuming 21 kilograms of fish, at the maximum measured tritium concentration (9,142 pCi/kg), would receive a committed effective dose equivalent of 0.012 mRem.

Tritium activity was not detected in the control location samples collected from JRR.

No other radionuclides were detected in fish samples during 2015. The AP 07B-004 required lower limits of detection were met and no unusual trends were noted.

(3) Broadleaf Vegetation

Gamma analyses of broadleaf vegetation samples obtained from indicator and control sample locations detected naturally occurring Be-7 and K-40. Be-7 and K-40 activity were also detected pre-operationally.

No other radionuclides were detected in broadleaf vegetation samples collected during the year.

The AP 07B-004 required lower limits of detection were met. Plant-related activation, corrosion, or fission products were not detected during 2015 in broadleaf vegetation samples and no unusual trends were noted.

(4) Crop Samples

Gamma analysis detected naturally occurring K-40 activity to be present in the samples collected from the indicator sample location and in the samples collected from the control sample location. K-40 activity was also detected during pre-operational crop monitoring. K-40 was the only activity detected in the crop samples.

The AP 07B-004 required lower limits of detection were met. Plant-related activation, corrosion, or fission products were not detected during 2015 in crop samples and no unusual trends were noted.

E. Additional Samples Collected (not required by AP 07B-004)

(1) Bottom Sediment

Gamma analysis detected naturally occurring K-40 activity to be present in the samples collected from the indicator sample locations and in the samples collected from the control sample location. K-40 activity was also detected during pre-operational bottom sediment monitoring.

Cs-137 activity was detected in ten samples obtained from indicator locations (range 43 to 109 pCi/kg, dry). Cs-137 activity was also detected in both samples obtained from the control sample location (range 110 to 120 pCi/kg, dry).

Cs-137 activity was detected in pre-operational samples. The Cs-137 activity detected in 2015 indicator sample location bottom sediment samples was within the pre-operational range. (Cs-137 activity detected in 1981 and 1982 was in the range of 79 to 953 pCi/kg. The decay corrected range of pre-operational Cs-137 activity detected is approximately 36 to 438 pCi/kg.)

The detected Cs-137 activity in the samples collected from the indicator sample locations was likely due to fallout since the measured activity is within the decay corrected range of pre-operational Cs-137 detected activity. Additionally, Cs-137 activity was also detected in both of the samples obtained from the JRR control location (range 110 to 120 pCi/kg, dry).

Chart 7 plots the Cs-137 detected activity from the discharge cove indicator sample location and JRR control sample location bottom sediment samples. The detected Cs-137 activity measured from the discharge cove location reflects a decreasing trend. The Chart 7 trendline indicates Cs-137 activity detected at the JRR control location has also been decreasing. Chart 7 also displays that in recent years, the detected Cs-137 activity for the JRR and DC sample locations overlap.

Fe-55 activity was not detected in the fifteen samples obtained from indicator sample locations or in the sample collected from the control sample location.

Analysis for the Hard-to-Detect radionuclides was performed on two indicator location samples. Sr-90 activity (37 pCi/kg, dry) was detected in one bottom sediment sample collected from the Ultimate Heat Sink (UHS) area.

Sr-90 activity was detected in pre-operational soil samples. (Sr-90 activity detected in February 1985 soil samples was in the range of 85 to 380 pCi/kg. The decay corrected range of pre-operational Sr-90 activity detected is approximately 41 to 184 pCi/kg.) The detected Sr-90 activity in the bottom sediment collected from the UHS indicator sample location is likely due to fallout since the activity is below the decay corrected pre-operational range.

No other radionuclides were detected in bottom sediment samples and no unusual trends were noted.

(2) Aquatic Vegetation

Gamma analyses of aquatic vegetation samples obtained from indicator sample locations detected naturally occurring Be-7 and K-40. Be-7 and K-40 activity were also detected during pre-operational monitoring.

No other radionuclides were detected in aquatic vegetation samples. Plant-related activation, corrosion, or fission products were not detected during 2015 in aquatic vegetation samples and no unusual trends were noted.

(3) Shoreline Sediment

Naturally occurring K-40 was detected in the shoreline sediment sample collected from the EEA indicator sample location. K-40 was also detected during pre-operational monitoring.

Cs-137 activity (40.1 pCi/kg, dry) was detected in a shoreline sediment sample obtained from the EEA indicator sample location. Cs-137 activity was also detected in pre-operational shoreline sediment samples. Cs-137 activity detected in shoreline sediment samples collected from the DC location from 1982 to 1984 was in the range of 224 to 437 pCi/kg. The decay corrected range of pre-operational Cs-137 activity detected is approximately 111 to 210 pCI/kg. The detected Cs-137 activity in the shoreline sediment sample was likely due to fallout since the results are lower than the pre-operational decay corrected range. Additionally, Cs-137 activity was detected in both shoreline sediment samples collected from the JRR control location (range of 42 to 105 pCi/kg, dry).

No other radionuclides were detected in the EEA shoreline sediment sample. Plant-related activation, corrosion, or fission products were not detected and no unusual trends were noted.

(4) Terrestrial Vegetation

Naturally occurring Be-7 and K-40 activity were detected in terrestrial vegetation indicator location samples. No other radionuclides were detected in terrestrial vegetation. Plant-related activation, corrosion or fission products were not detected during 2015 in terrestrial vegetation samples and no unusual trends were noted.

(5) Soil

Naturally occurring K-40 activity was detected in soil samples obtained from the indicator locations. K-40 activity was also detected during pre-operational soil monitoring.

Cs-137 activity was also detected in the three soil samples obtained from the indicator locations. Data was reviewed for soil samples collected pre-operationally. The detected Cs-137 activity range from February of 1985 was 255 to 2,160 pCi/kg. The decay corrected range of pre-operational Cs-137 activity detected in soil is approximately 126 to 1,069 pCi/kg. The detected Cs-137 activity in soil sampled in 2015 (maximum Cs-137 activity detected was 245 pCi/kg, dry) is within the decay corrected pre-operational range and is likely due to fallout.

Plant-related activation, corrosion, or fission products were not detected during 2015 in soil samples and no unusual trends were noted.

(6) Deer

Naturally occurring K-40 activity was detected in the deer sample obtained from the indicator location.

Tritium activity (2,305 pCi/kg) was also detected in the deer sample. The detected tritium activity was attributable to plant operation.

An adult consuming 72.6 kilograms of deer meat, at the measured tritium concentration (2,305 pCi/kg), would receive a committed effective dose equivalent of 0.011 mRem.

No other radionuclides were detected in the deer sample. No unusual trends were identified.

III. PROGRAM REVISIONS/CHANGES

No revisions or changes were made to AP 07B-004, *Offsite Dose Calculation Manual (Radiological Environmental Monitoring Program)* during 2015.

IV. PROGRAM DEVIATIONS

Air Samples

The following air sample location failed to meet the requirement for "continuous sampler operation." As described in footnote (1) of procedure AP 07B-004, *Offsite Dose Calculation Manual (Radiological Environmental Monitoring Program)*, Table 5-1, deviations are permitted from the required sampling schedule due to malfunction of sampling equipment and other legitimate reasons. Discrepancies greater than five percent between Total Military Time and Total Digital Flow Meter Time, which resulted in a loss of air sample collected, are listed in the following table.

Location	Sample Period	Percent Discrepancy/ Hours Unavailable	Explanation of Deviation/Comments Condition Report Number
32	09/14/15 – 09/22/15	71 / 137	Power Outage / Equipment Malfunction / Condition Report 00099736

Drinking Water Samples

Drinking water was not continuously collected at the Burlington control sample location during the 05-05-15 to 06-03-15 sample period since the sampler intake bay was empty due to water treatment plant maintenance. It was estimated that water was not sampled for approximately 26 hours during the sample period. Sufficient water was collected for the monthly composite sample. The drinking water sampler was moved on the same day of discovery to a bay that contained water. Condition Report 96948 was generated to document the condition.

Ground Water Protection

The following information is being provided in association with the Nuclear Energy Institute (NEI) Groundwater Protection Industry Initiative:

Describe offsite ground water or surface water sample results that exceeded the REMP reporting criteria that were voluntarily communicated to State/Local officials during the calendar year – None.

V. INTERLABORATORY COMPARISON PROGRAM

Environmental, Inc., Midwest Laboratory was contracted to perform radiological analysis of environmental samples for WCNOC. The lab participated in the intercomparison studies administered by Environmental Resources Associates. Appendix A is the Interlaboratory Comparison Program Results for Environmental, Inc., Midwest Laboratory. Intercomparison results, in-house spikes, blanks, duplicates and mixed analyte performance evaluation program results are also contained in Appendix A.

VI. COMPARISON TO THE RADIOACTIVE EFFLUENT RELEASE PROGRAM

As described in the section discussing radioisotopes found in fish from Coffey County Lake, dose that may be received as a result of tritium released from WCGS is comparable with the theoretical doses calculated by the Radioactive Effluent Release Program.

The theoretical doses calculated by the Radioactive Effluent Release Program assume a person drinks the water from Coffey County Lake and eats the fish from Coffey County Lake. Based upon these assumptions the dose to man from both pathways was calculated to be 0.185 mRem for 2015.

Using sample data obtained from the REMP, an adult drinking 2 liters per day of surface water from Coffey County Lake, using the average tritium activity (10,695 pCi/L), would receive a committed effective dose equivalent of 0.488 mRem per year. For an adult eating 21 kg of fish per year from Coffey County Lake, using the average tritium activity (7,519 pCi/kg), would receive a committed effective dose equivalent of 0.010 mRem per year. Based upon the REMP results, the dose from both pathways was calculated to be 0.498 mRem per year.

It should be noted Coffey County Lake is not used as a drinking water source. Calculating the dose to man for tritium detected in the Coffey County Lake surface water is for comparison purposes only.

The tritium dose values are being compared on a qualitative basis. It is not expected that the annual doses, as calculated in the Radioactive Effluent Release Report, would compare directly to those calculated from the REMP. The Radioactive Effluent Release Report provides a "snap shot" of potential dose resulting from the year's releases. The REMP data indicates the accumulated result of releasing tritium into the lake since the start of plant operation.

TABLE 1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DESCRIPTION (SAMPLE COLLECTION SPECIFIED BY AP 07B-004)

EXPOSURE PATHWAY/ SAMPLE TYPE	NUMBER OF SAMPLES AND SAMPLE LOCATIONS	SAMPLE COLLECTION FREQUENCY	TYPE AND FREQUENCY OF ANALYSIS
AIRBORNE	**(See Figures 1 & 5)**		
Radioiodine and Particulates	Samples from six locations	Continuous sampler operation with sample collection weekly, or more frequently if required, by dust loading.	Analyze radioiodine canister weekly for I-131
	Samples from locations near the site boundary in three sectors having the highest calculated annual average D/Q and one supplemental location (Locations 2, 18, 37, or 49 on Figure 1)		Analyze particulate filter weekly for gross beta activity; perform quarterly gamma isotopic analysis composite (by location)
	Sample from the vicinity of a community having the highest calculated annual average D/Q (Location 32 on Figure 1, New Strawn)		
	Sample from a control location 9.5 to 18.5 miles distant in a low ranked D/Q sector (Location 53 on Figure 5)		

TABLE 1 (Cont.)

EXPOSURE PATHWAY/ SAMPLE TYPE	NUMBER OF SAMPLES AND SAMPLE LOCATIONS	SAMPLE COLLECTION FREQUENCY	TYPE AND FREQUENCY OF ANALYSIS
DIRECT RADIATION	**(See Figures 2 & 5)**		
	39 routine monitoring stations with two or more dosimeters measuring dose continuously, placed as follows: An inner ring of stations, one in each meteorological sector 0-3 mile range from the site (Locations 1, 7, 9, 11-13, 18, 26, 27, 29, 30, 37, 38, 46, & 49 on Figure 2). An outer ring of stations, one in each meteorological sector in the 3 to 5 mile range from the site (Locations 4, 5, 15-17, 19, 22-25, 32, 34-36, 50 & 51 on Figure 2). Four sectors [A, B, G & J] contain an additional station (Locations 2, 8, 14 & 20). The balance of the stations to be placed in special interest areas such as population centers (Locations 23, 32 & 52), nearby residences	Quarterly	Gamma dose quarterly

TABLE 1 (Cont.)

EXPOSURE PATHWAY/ SAMPLE TYPE	NUMBER OF SAMPLES AND SAMPLE LOCATIONS	SAMPLE COLLECTION FREQUENCY	TYPE AND FREQUENCY OF ANALYSIS
DIRECT RADIATION (cont.)	(many locations are near a residence), schools (Locations 23 & 52), Wilson Cadman Wildlife Education Area (44), CCL Public Fishing Area (46) and in two areas to serve as control stations 10-20 miles distant from the site (Locations 39 and 53 on Figure 5).		
WATERBORNE	(See Figure 3)		
Surface	One sample upstream (Location JRR on Figure 3) and one sample downstream (Location SP on Figure 3).	Monthly grab sample	Monthly gamma isotopic analysis and composite for tritium analysis quarterly
Ground	Samples from one or two sources only if likely to be affected. Indicator samples at locations hydrologically down-gradient of the site (Locations C-10, C-49, F-1, G-2, J-1 and J-2 on Figure 3); control sample at a location hydrologically upgradient of the site (Location B-12 on Figure 3).	Quarterly grab sample	Quarterly gamma isotopic analysis and tritium analysis

TABLE 1 (Cont.)

EXPOSURE PATHWAY/ SAMPLE TYPE	NUMBER OF SAMPLES AND SAMPLE LOCATIONS	SAMPLE COLLECTION FREQUENCY	TYPE AND FREQUENCY OF ANALYSIS
WATERBORNE (cont.)			
Drinking	Sample of municipal water supply at an indicator location downstream of the Neosho River-Wolf Creek confluence (Location IO-DW on Figure 5); control sample from location upstream of the Neosho River-Wolf Creek confluence (Location BW-15 on Figure 3).	Monthly Composite	Monthly gamma isotopic analysis and gross beta analysis of composite sample. Quarterly tritium analysis of composites.
Shoreline Sediment	One sample from the vicinity of Coffey County Lake discharge cove (Location DC on Figure 3); control sample from John Redmond Reservoir (Location JRR on Figure 3).	Semiannually	Semiannual gamma isotopic analysis
INGESTION	(See Figures 4 & 5)		
Milk	Samples from milking animals at three indicator locations within 5 miles of the site having the highest dose potential (currently there are no locations producing milk for human consumption within 5 miles of the site); one sample from a control location greater than 10 miles from the site if indicator locations are sampled.	Semimonthly April to November; monthly December-March	Gamma isotopic analysis and I-131 analysis of each sample

TABLE 1 (Cont.)

EXPOSURE PATHWAY/ SAMPLE TYPE	NUMBER OF SAMPLES AND SAMPLE LOCATIONS	SAMPLE COLLECTION FREQUENCY	TYPE AND FREQUENCY OF ANALYSIS
INGESTION (cont.)			
Fish	Indicator samples of 1 to 3 recreationally important species from Coffey County Lake; control samples of similar species from John Redmond Reservoir spillway (Figure 4).	Semiannually	Gamma isotopic analysis on edible portions
Broadleaf Vegetation	Samples of available broadleaf vegetation from two indicator locations (using the criteria from the "Land Use Census" section) with highest calculated annual average D/Q (Locations A-3 and Q-6 and alternate locations B-1, H-2, N-1 and R-2 on Figure 4); sample of similar broadleaf vegetation from a control location 9.5 to 18.5 miles distant in a low ranked D/Q sector (Location D-2 on Figure 5).	Monthly when available	Gamma isotopic analysis on edible portions
Irrigated Crops	Sample of crops irrigated with water from the Neosho River downstream of the Neosho River - Wolf Creek confluence (locations will vary from year to year, e.g., Location NR-D1 and NR-D2 on Figure 5).	At time of harvest	Gamma isotopic analysis on edible portions

TABLE 2
SAMPLE LOCATION IDENTIFIERS, DISTANCES (Miles) AND DIRECTIONS (Sectors)

Sample Type	Location Identifier	Distance from Reactor	Direction	Sector
Air Particulates and Radioiodine	2	2.7	N	A
	18	3.0	SSE	H
	32	3.1	WNW	P
	37	2.0	NNW	R
	49	0.8	NNE	B
	53	10.8	ENE	D
Dosimeters	1	1.4	N	A
	2	2.7	N	A
	4	4.0	NNE	B
	5	4.1	NE	C
	7	2.1	NE	C
	8	1.7	NNE	B
	9	2.0	ENE	D
	11	1.7	E	E
	12	1.9	ESE	F
	13	1.6	SE	G
	14	2.5	SE	G
	15	4.6	ESE	F
	16	4.3	E	E
	17	3.7	SE	G
	18	3.0	SSE	H
	19	3.9	SSE	H
	20	3.3	S	J
	22	3.9	SSW	K
	23	4.3	SW	L
	24	4.1	WSW	M
	25	3.4	W	N
	26	2.4	WSW	M
	27	2.2	SW	L
	29	2.7	SSW	K
	30	2.5	W	N
	32	3.1	WNW	P
	34	4.4	NW	Q
	35	4.6	NNW	R
	36	4.2	N	A
	37	2.0	NNW	R
	38	1.2	NW	Q
	39	13.1	N	A
	41	0.8	NNW	R
	42	0.8	SSE	H
	43	0.7	WNW	P
	44	3.0	NNW	R

TABLE 2 (Cont.)
SAMPLE LOCATION IDENTIFIERS, DISTANCES (Miles) AND DIRECTIONS (Sectors)

Sample Type	Location Identifier	Distance from Reactor	Direction	Sector
Dosimeters	46	1.6	WNW	P
	49	0.8	NNE	B
	50	3.6	ENE	D
	51	4.3	S	J
	52	3.6	SW	L
	53	10.8	ENE	D
Surface Water	JRR	3.7	W	N
	SP	3.2	SSE	H
Ground Water	B-12	1.9	NNE	B
	C-10	2.7	W	N
	C-49/L-49	2.8	SW	L
	F-1	2.5	ESE	F
	G-2	3.6	SE	G
	J-1	3.8	S	J
	J-2	4.3	S	J
Drinking Water	BW-15	3.9	SW	L
	IO-DW	26.1	SSE	H
Shoreline Sediment	DC	0.8	WNW	P
	EEA	3.0	NNW	R
	JRR	3.6	W	N
Fish	CCL	0.6	E to NNW	E to R
	JRR	3.7	W	N
Food/Garden	A-3	2.6	N	A
	B-1	0.8	NNE	B
	D-2	14.8	ENE	D
	H-2	3.0	SSE	H
	R-2	2.0	NNW	R
Crops	NR-D1	8.9	S	J
	NR-U1	4.0	SSW	K
Bottom Sediment	DC	0.9	WNW	P
	EEA	3.0	NNW	R
	ESW	0.5	E	E
	JRR	3.7	W	N
	MUDS	1.5	WNW	P
	UHS	0.6	E	E
Aquatic Vegetation	DC	0.9	WNW	P
	EEA	3.0	NNW	R
	MUDS	1.5	WNW	P

TABLE 2 (Cont.)
SAMPLE LOCATION IDENTIFIERS, DISTANCES (Miles) AND DIRECTIONS (Sectors)

Sample Type	Location Identifier	Distance from Reactor	Direction	Sector
Terrestrial Vegetation	EEA	3.0	NNW	R
	MUDS	1.5	WNW	P
Soil	EEA	3.0	NNW	R
	MUDS	1.5	WNW	P
Meat (Deer)	Q1.0	1.0	NW	Q

TABLE 3
OSL Dosimeter Results
(mR/Standardized 90-day Quarter)

Location	Qtr. 1 (mR)	Qtr. 2 (mR)	Qtr. 3 (mR)	Qtr. 4 (mR)	Total Annual Exposure (mR)
1	19.3	19.3	22.0	18.3	78.9
2	18.1	16.6	19.3	18.4	72.4
4	26.2	22.8	22.1	17.2	88.3
5	14.6	19.3	18.6	13.5	66.0
7	18.5	20.6	18.7	16.5	74.3
8	19.2	20.6	21.6	18.4	79.8
9	13.5	18.0	18.1	16.5	66.1
11	18.3	20.8	22.1	18.4	79.6
12	17.8	19.8	20.1	17.0	74.7
13	17.8	19.3	19.1	16.0	72.2
14	17.1	18.9	20.7	19.2	75.9
15	16.7	17.8	16.6	17.0	68.1
16	16.3	17.8	19.1	17.4	70.6
17	19.9	19.0	17.4	17.4	73.7
18	16.7	15.8	19.1	15.5	67.1
19	18.3	19.8	20.1	17.9	76.1
20	17.8	19.3	19.4	16.0	72.5
22	20.4	20.3	20.1	19.4	80.2
23	18.3	18.0	21.1	17.4	74.8
24	18.8	17.8	20.1	15.9	72.6
25	14.0	16.3	19.6	16.9	66.8
26	19.5	17.8	16.1	16.4	69.8
27	18.3	20.3	21.6	19.4	79.6
29	14.6	16.3	14.4	15.5	60.8
30	19.2	19.8	20.1	21.8	80.9
32	17.9	18.8	18.8	20.3	75.8
34	19.3	17.4	20.8	20.8	78.3
35	19.7	16.4	19.6	20.8	76.5
36	16.5	19.5	18.6	20.3	74.9
37	16.4	17.7	19.3	18.8	72.2
38	18.8	18.8	21.3	21.1	80.0
39	15.5	18.5	19.1	16.9	70.0
41	17.7	18.7	18.4	19.7	74.5
42	11.4	13.8	12.2	12.9	50.3
43	12.0	11.2	10.7	13.9	47.8
44	17.7	18.3	20.5	18.5	75.0
46	18.8	20.8	21.1	20.8	81.5
49	13.6	15.1	16.3	16.8	61.8
50	19.9	17.8	22.1	20.8	80.6
51	18.8	20.3	21.8	19.2	80.1
52	18.4	21.7	23.1	22.8	86.0
53	20.0	20.7	23.3	19.8	83.8

FIGURE 1

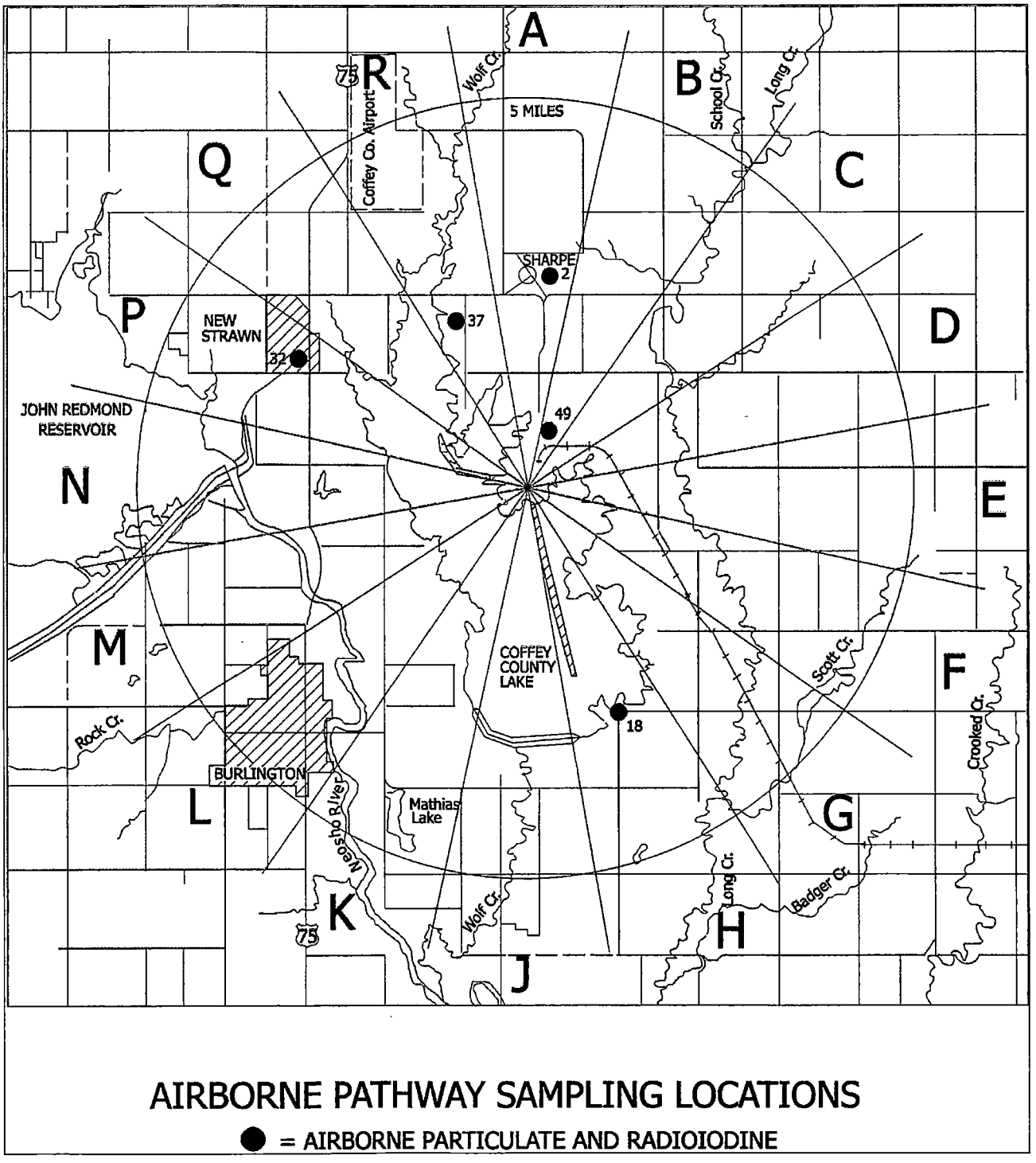
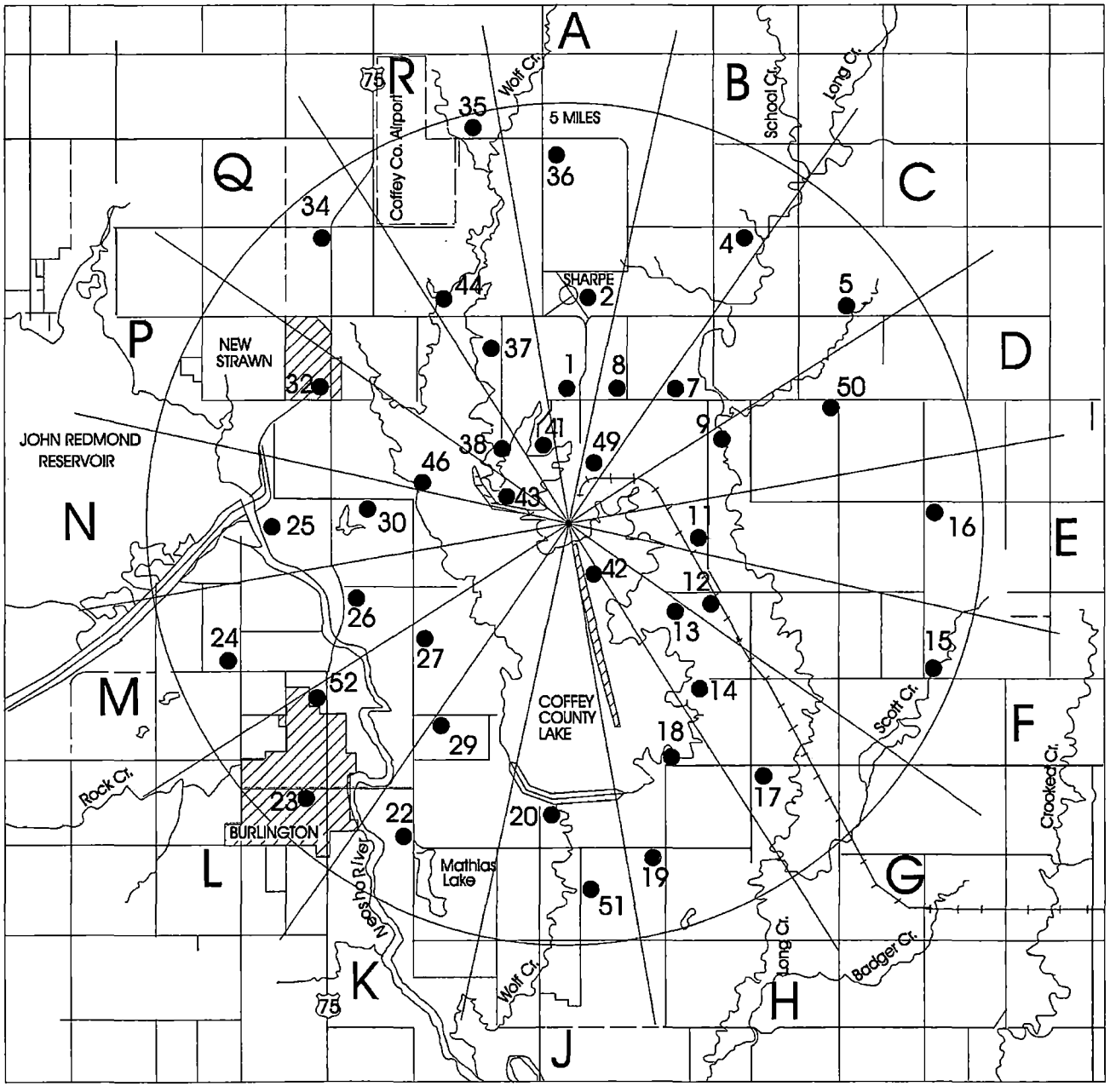

A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
5 MILES
Wolf Cr.
School Cr.
Long Cr.
Coffey Co. Airport
75
SHARPE
2
37
NEW STRAWN
32
49
JOHN REDMOND RESERVOIR
COFFEY COUNTY LAKE
18
Scott Cr.
Crooked Cr.
Rock Cr.
BURLINGTON
Neosho River
Mathias Lake
Badger Cr.
AIRBORNE PATHWAY SAMPLING LOCATIONS
● = AIRBORNE PARTICULATE AND RADIOIODINE

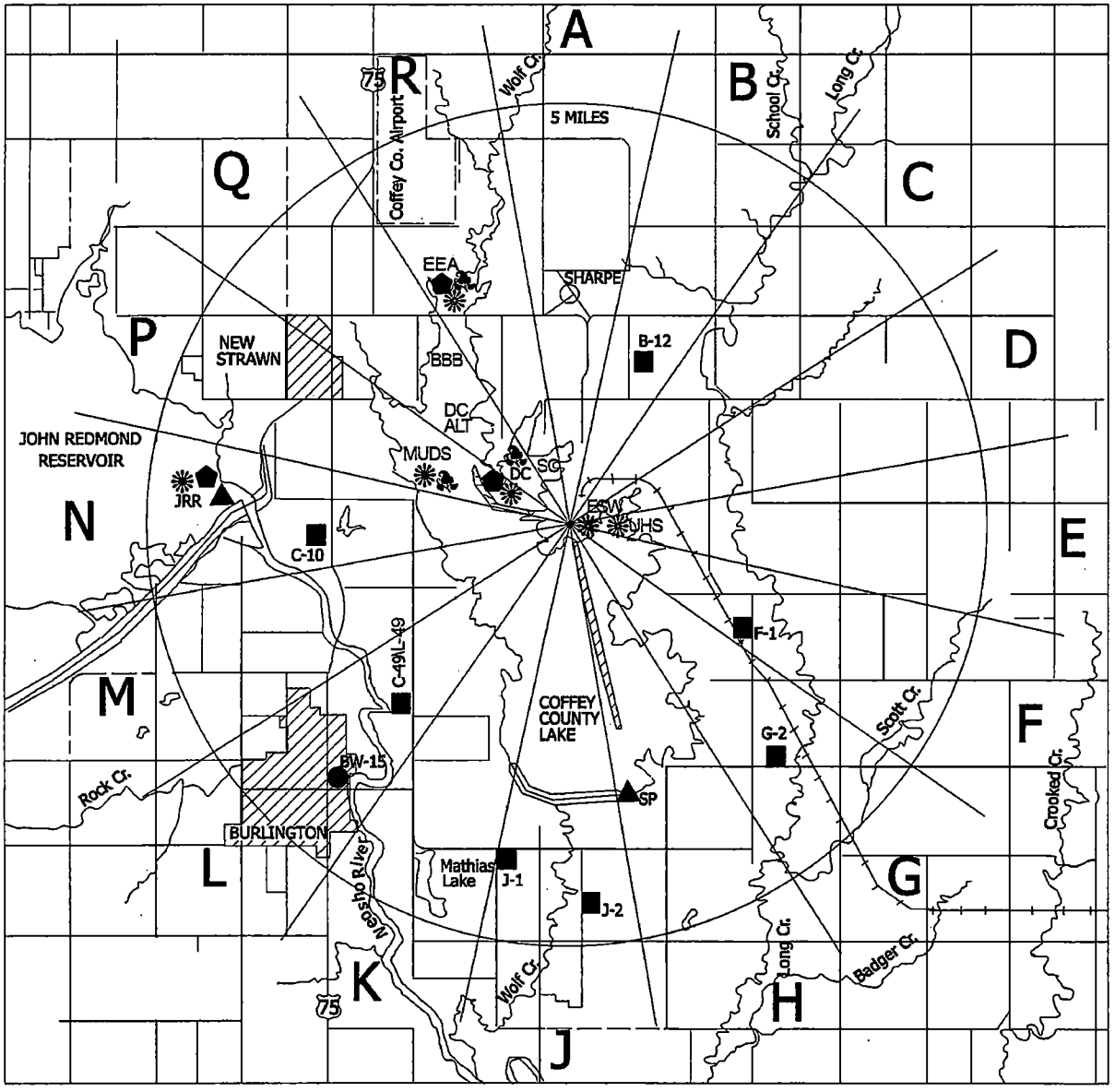
FIGURE 2



DIRECT RADIATION PATHWAY SAMPLING LOCATIONS

● = DOSIMETER LOCATIONS

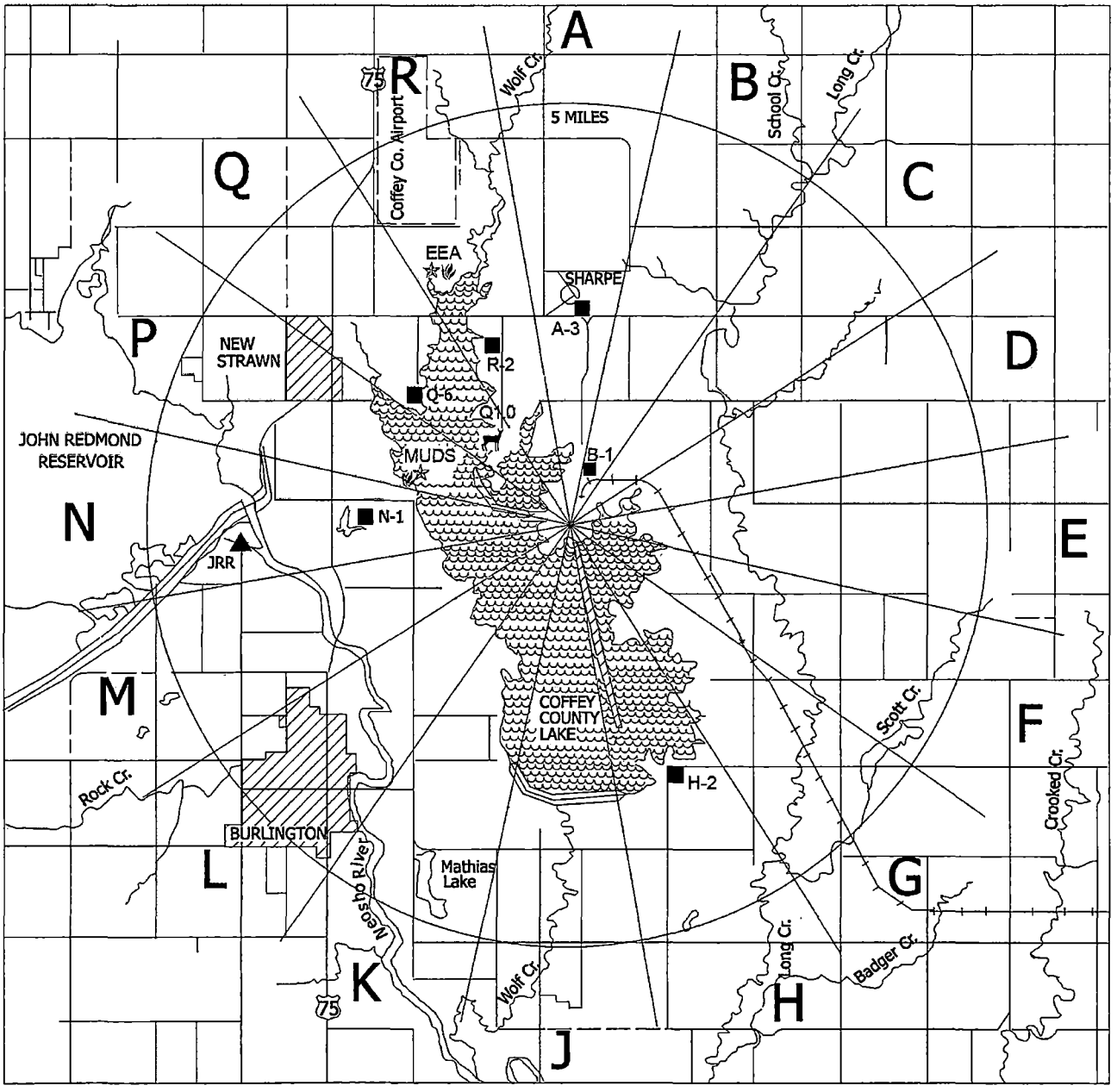
FIGURE 3



WATERBORNE PATHWAY SAMPLING LOCATIONS

- ● = DRINKING WATER
- ▲ = SURFACE WATER
- ■ = GROUND WATER
- ⬟ = SHORELINE SEDIMENT
- ✳ = BOTTOM SEDIMENT
- = AQUATIC VEGETATION

FIGURE 4



INGESTION PATHWAY SAMPLING LOCATIONS

▲ = FISH (JRR) ■ = BROADLEAF VEGETATION ☆ = SOIL

= FISH (CCL) = TERRESTRIAL VEGETATION = DEER

FIGURE 5

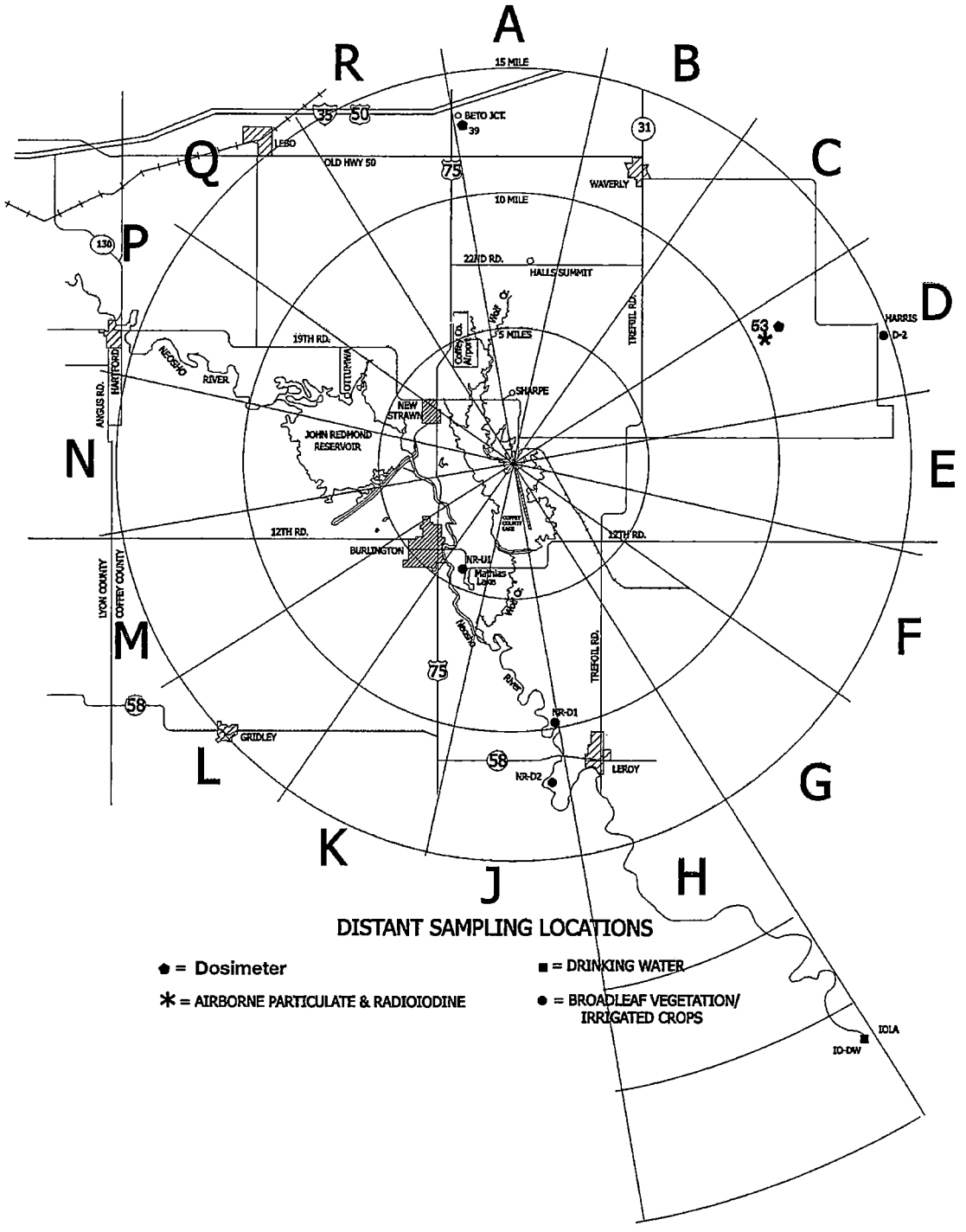

A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
15 MILE
10 MILE
5 MILES
OLD HWY 50
22ND RD.
19TH RD.
12TH RD.
HALLS SUMMIT
SHARPE
BURLINGTON
NEW STRAWN
JOHN REDMOND RESERVOIR
NEOSHO RIVER
WOLF CR.
TREFOIL RD.
WAVERLY
LEBO
HARRIS
GRIDLEY
LEROY
IOLA
BETO JCT.
LYON COUNTY
COFFEY COUNTY
ANGUS RD.
HAMILTON
COTTONWOOD
NR-U1
NR-D1
NR-D2
ID-DW
D-2
DISTANT SAMPLING LOCATIONS
● = Dosimeter
✱ = AIRBORNE PARTICULATE & RADIOIODINE
■ = DRINKING WATER
● = BROADLEAF VEGETATION/ IRRIGATED CROPS

CHART 1

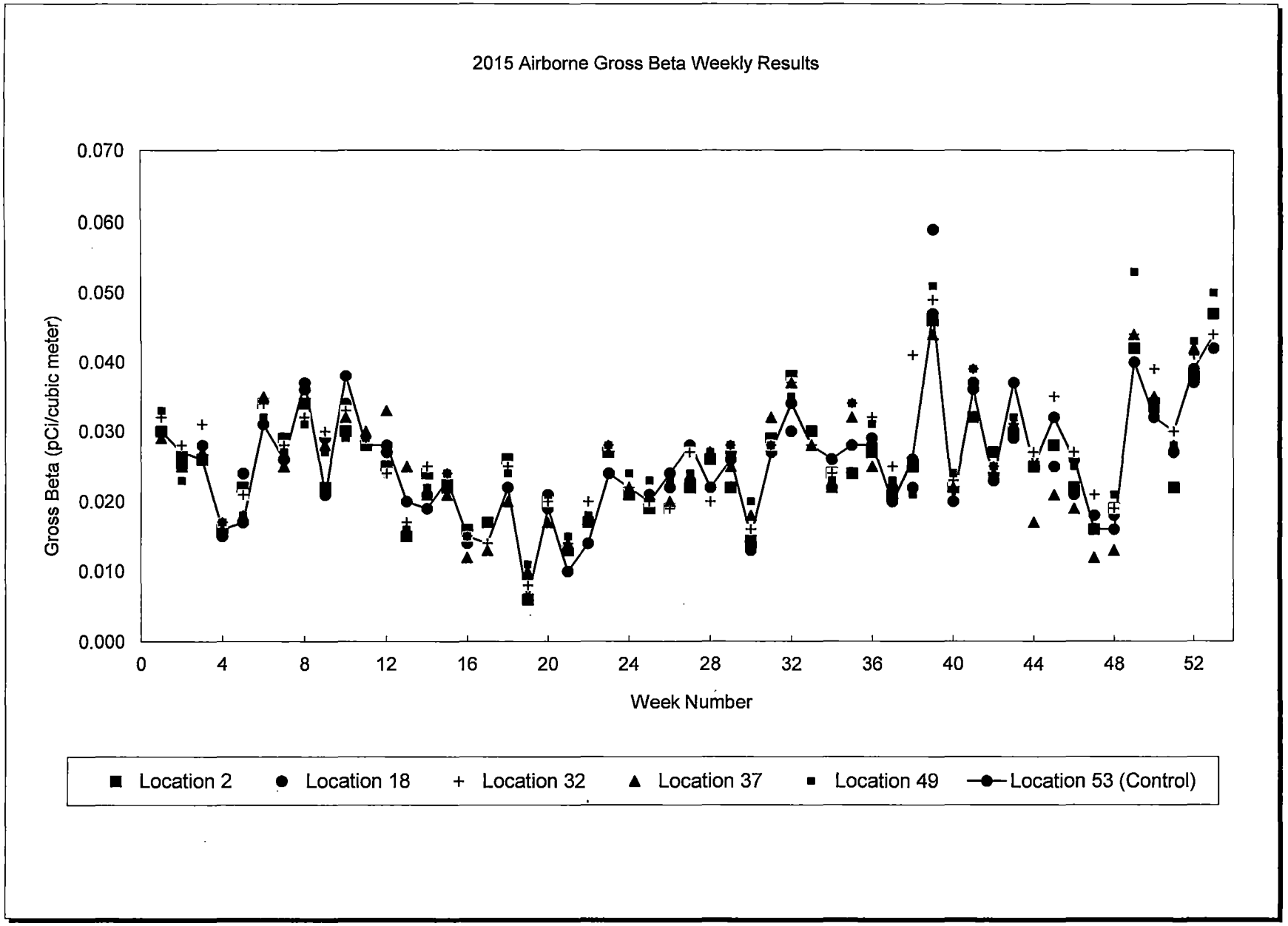

2015 Airborne Gross Beta Weekly Results
Gross Beta (pCi/cubic meter)
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
0
4
8
12
16
20
24
28
32
36
40
44
48
52
Week Number
Location 2
Location 18
Location 32
Location 37
Location 49
Location 53 (Control)

CHART 2

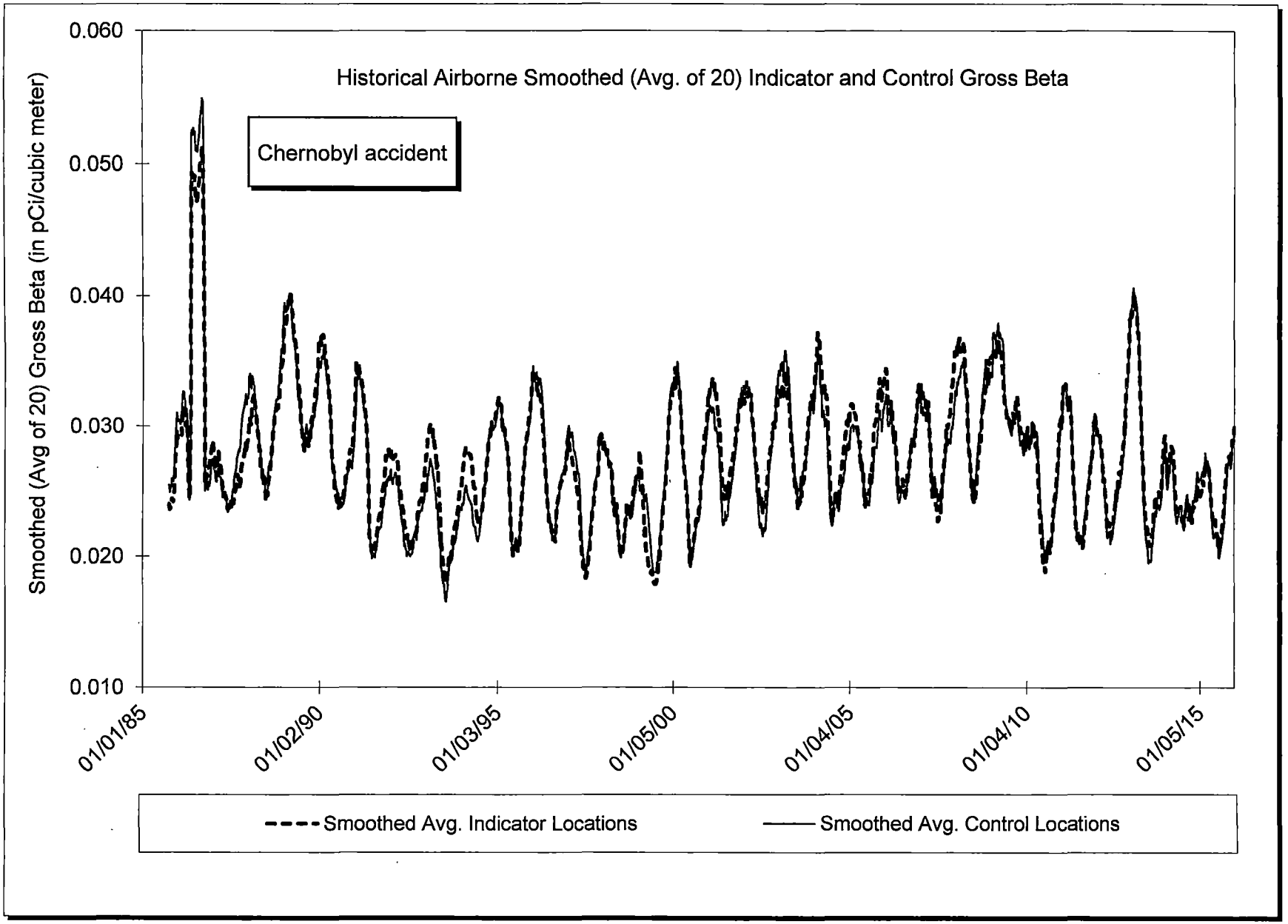

Historical Airborne Smoothed (Avg. of 20) Indicator and Control Gross Beta
Chernobyl accident
Smoothed (Avg of 20) Gross Beta (in pCi/cubic meter)
0.060
0.050
0.040
0.030
0.020
0.010
01/01/85
01/02/90
01/03/95
01/05/00
01/04/05
01/04/10
01/05/15
Smoothed Avg. Indicator Locations
Smoothed Avg. Control Locations

CHART 3

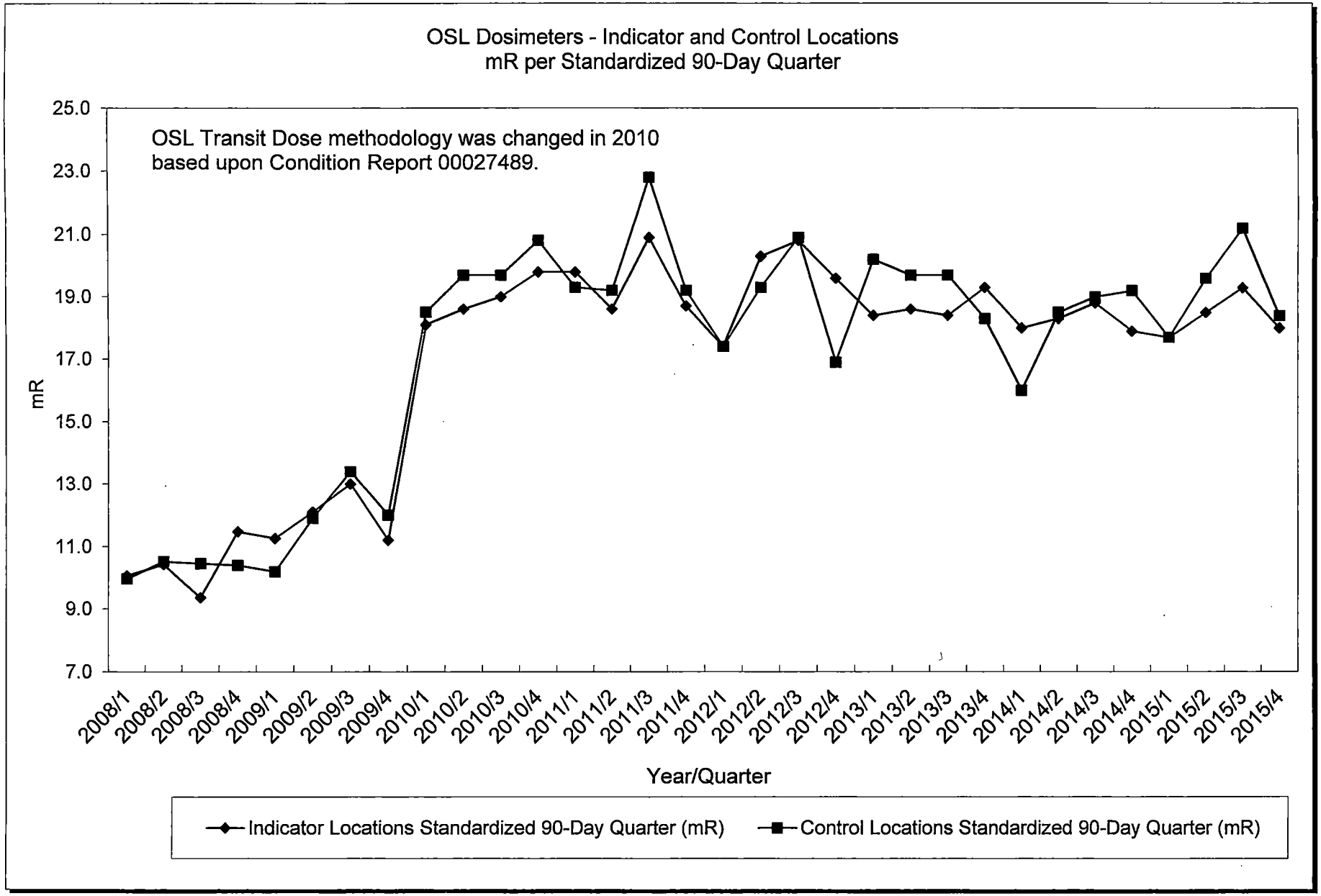

OSL Dosimeters - Indicator and Control Locations
mR per Standardized 90-Day Quarter
OSL Transit Dose methodology was changed in 2010
based upon Condition Report 00027489.
mR
25.0
23.0
21.0
19.0
17.0
15.0
13.0
11.0
9.0
7.0
2008/1
2008/2
2008/3
2008/4
2009/1
2009/2
2009/3
2009/4
2010/1
2010/2
2010/3
2010/4
2011/1
2011/2
2011/3
2011/4
2012/1
2012/2
2012/3
2012/4
2013/1
2013/2
2013/3
2013/4
2014/1
2014/2
2014/3
2014/4
2015/1
2015/2
2015/3
2015/4
Year/Quarter
Indicator Locations Standardized 90-Day Quarter (mR)
Control Locations Standardized 90-Day Quarter (mR)

CHART 4

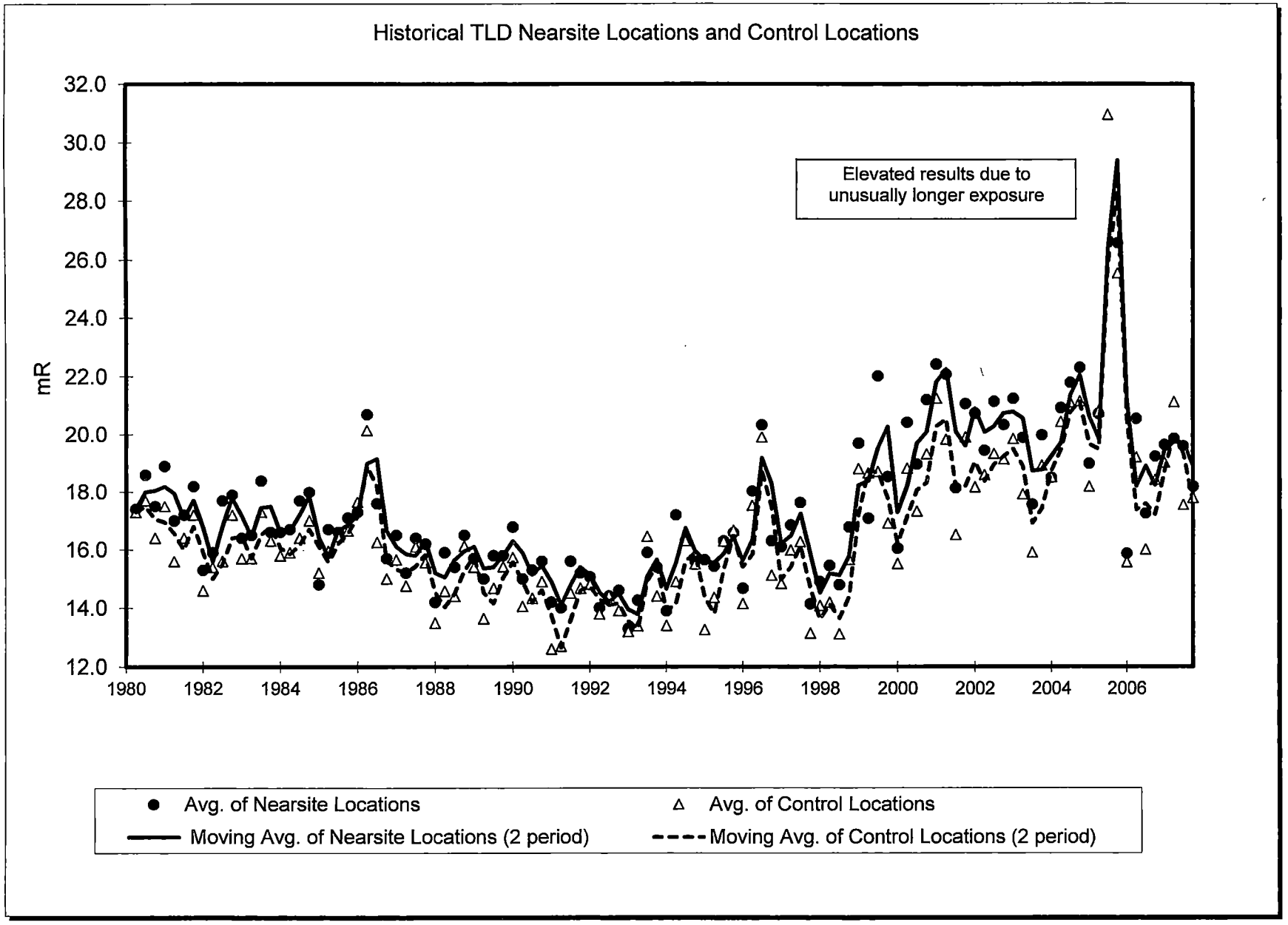

Historical TLD Nearsite Locations and Control Locations
mR
32.0
30.0
28.0
26.0
24.0
22.0
20.0
18.0
16.0
14.0
12.0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
Elevated results due to unusually longer exposure
Avg. of Nearsite Locations
Avg. of Control Locations
Moving Avg. of Nearsite Locations (2 period)
Moving Avg. of Control Locations (2 period)

CHART 5

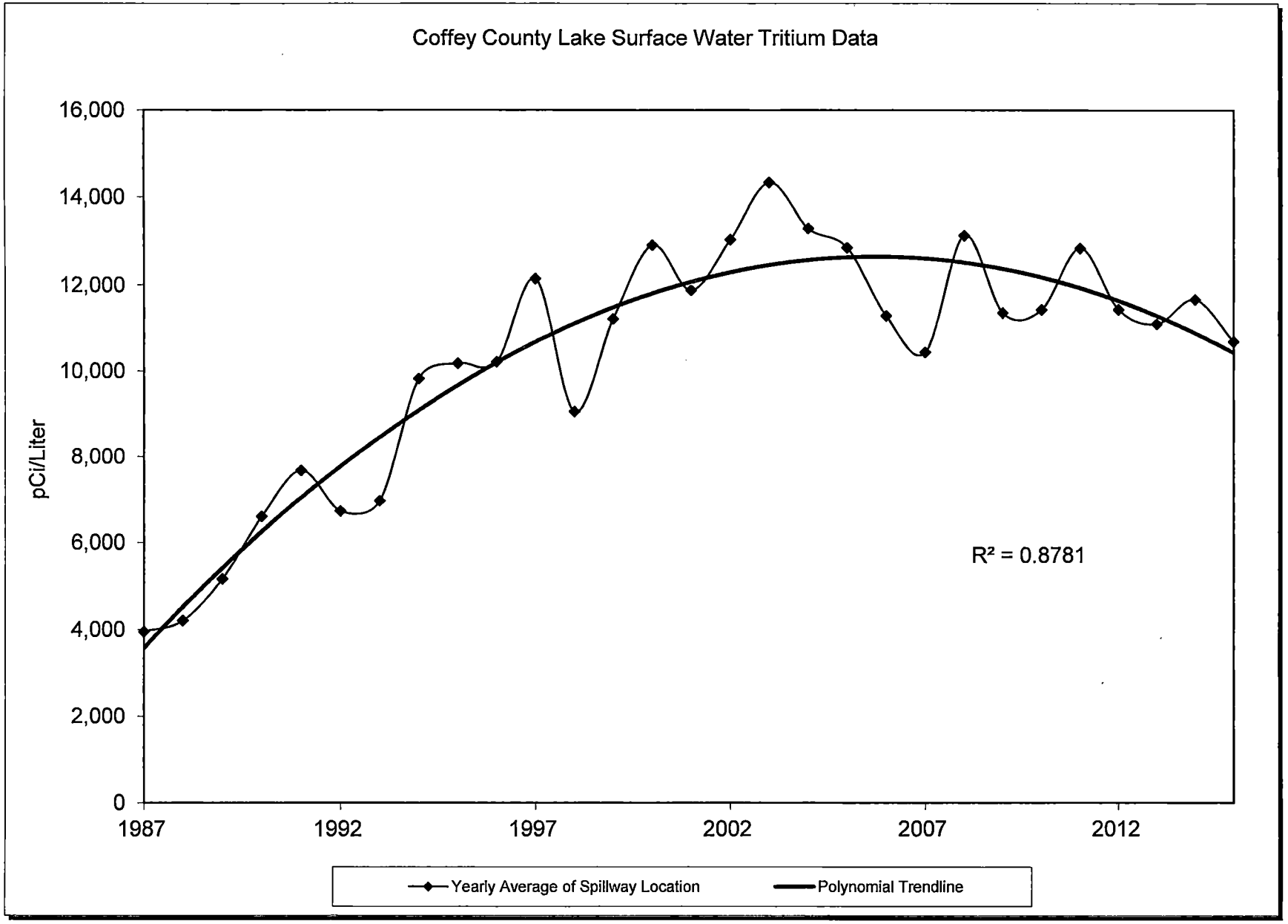

Coffey County Lake Surface Water Tritium Data
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
pCi/Liter
1987
1992
1997
2002
2007
2012
R² = 0.8781
Yearly Average of Spillway Location
Polynomial Trendline

CHART 6

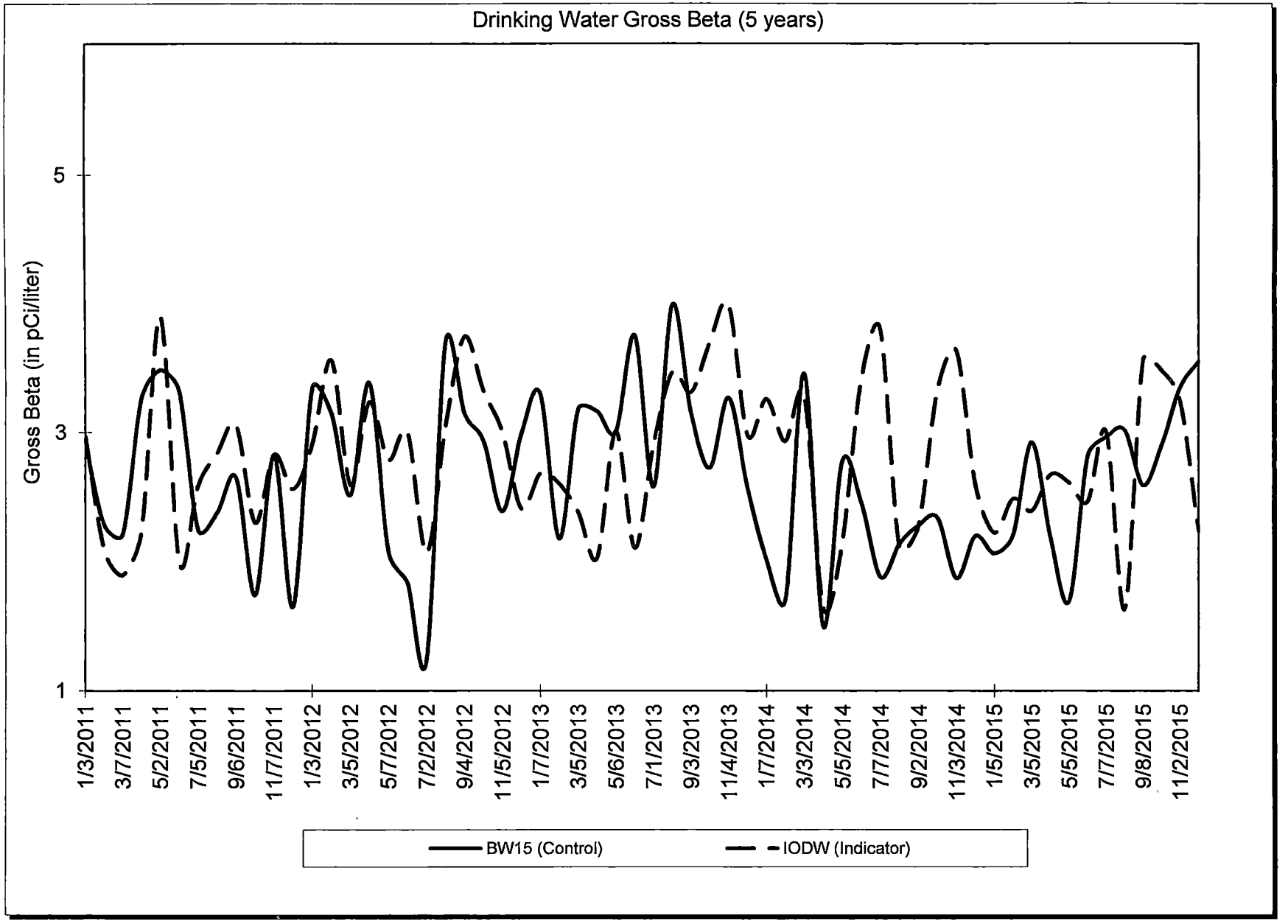
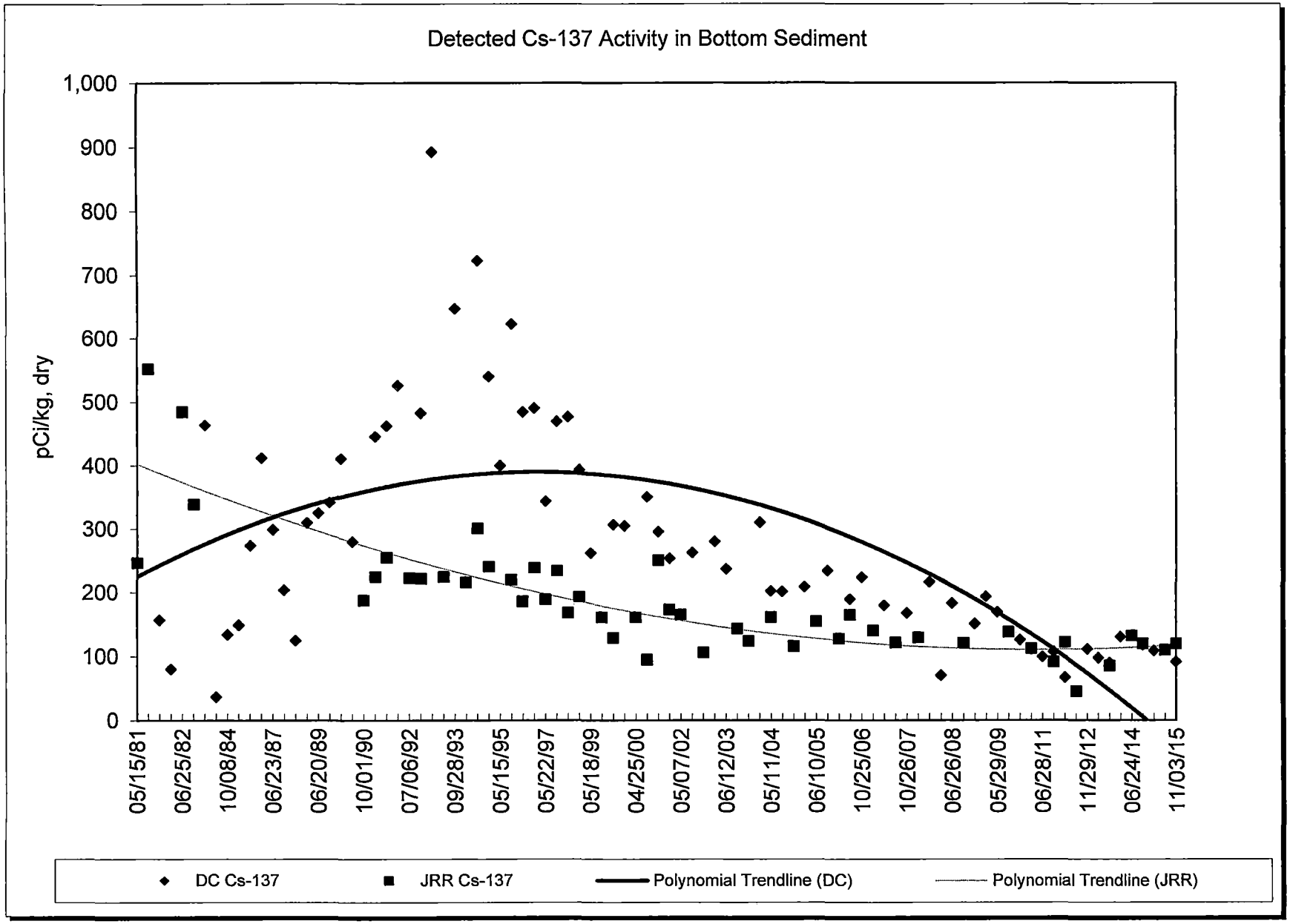

Drinking Water Gross Beta (5 years)
Gross Beta (in pCi/liter)
5
3
1
1/3/2011
3/7/2011
5/2/2011
7/5/2011
9/6/2011
11/7/2011
1/3/2012
3/5/2012
5/7/2012
7/2/2012
9/4/2012
11/5/2012
1/7/2013
3/5/2013
5/6/2013
7/1/2013
9/3/2013
11/4/2013
1/7/2014
3/3/2014
5/5/2014
7/7/2014
9/2/2014
11/3/2014
1/5/2015
3/5/2015
5/5/2015
7/7/2015
9/8/2015
11/2/2015
BW15 (Control)
IODW (Indicator)

CHART 7


Detected Cs-137 Activity in Bottom Sediment
pCi/kg, dry
1,000
900
800
700
600
500
400
300
200
100
0
05/15/81
06/25/82
10/08/84
06/23/87
06/20/89
10/01/90
07/06/92
09/28/93
05/15/95
05/22/97
05/18/99
04/25/00
05/07/02
06/12/03
05/11/04
06/10/05
10/25/06
10/26/07
06/26/08
05/29/09
06/28/11
11/29/12
06/24/14
11/03/15
DC Cs-137
JRR Cs-137
Polynomial Trendline (DC)
Polynomial Trendline (JRR)

ATI Environmental, Inc.
Midwest Laboratory
700 Landwehr Road • Northbrook, IL 60062-2310
phone (847) 564-0700 • fax (847) 564-4517

APPENDIX A

INTERLABORATORY COMPARISON PROGRAM RESULTS

NOTE: Environmental Inc., Midwest Laboratory participates in intercomparison studies administered by Environmental Resources Associates, and serves as a replacement for studies conducted previously by the U.S. EPA Environmental Monitoring Systems Laboratory, Las Vegas, Nevada. Results are reported in Appendix A. TLD Intercomparison results, in-house spikes, blanks, duplicates and mixed analyte performance evaluation program results are also reported. Appendix A is updated four times a year; the complete Appendix is included in March, June, September and December monthly progress reports only.

January, 2015 through December, 2015

Appendix A

Interlaboratory Comparison Program Results

Environmental, Inc., Midwest Laboratory has participated in interlaboratory comparison (crosscheck) programs since the formulation of it's quality control program in December 1971. These programs are operated by agencies which supply environmental type samples containing concentrations of radionuclides known to the issuing agency but not to participant laboratories. The purpose of such a program is to provide an independent check on a laboratory's analytical procedures and to alert it of any possible problems.

Participant laboratories measure the concentration of specified radionuclides and report them to the issuing agency. Several months later, the agency reports the known values to the participant laboratories and specifies control limits. Results consistently higher or lower than the known values or outside the control limits indicate a need to check the instruments or procedures used.

Results in Table A-1 were obtained through participation in the environmental sample crosscheck program administered by Environmental Resources Associates, serving as a replacement for studies conducted previously by the U.S. EPA Environmental Monitoring Systems Laboratory, Las Vegas, Nevada.

Table A-2 lists results for thermoluminescent dosimeters (TLDs), via internal laboratory testing and by irradiation and evaluation by the University of Wisconsin-Madison Radiation Calibration Laboratory at the University of Wisconsin Medical Radiation Research Center.

Table A-3 lists results of the analyses on in-house "spiked" samples for the past twelve months. All samples are prepared using NIST traceable sources. Data for previous years available upon request.

Table A-4 lists results of the analyses on in-house "blank" samples for the past twelve months. Data for previous years available upon request.

Table A-5 lists REMP specific analytical results from the in-house "duplicate" program for the past twelve months. Acceptance is based on the difference of the results being less than the sum of the errors. Complete analytical data for duplicate analyses is available upon request.

The results in Table A-6 were obtained through participation in the Mixed Analyte Performance Evaluation Program.

Results in Table A-7 were obtained through participation in the environmental sample crosscheck program administered by Environmental Resources Associates, serving as a replacement for studies conducted previously by the Environmental Measurement Laboratory Quality Assessment Program (EML).

Attachment A lists the laboratory precision at the 1 sigma level for various analyses. The acceptance criteria in Table A-3 is set at ± 2 sigma.

Out-of-limit results are explained directly below the result.

Attachment A

ACCEPTANCE CRITERIA FOR "SPIKED" SAMPLES

LABORATORY PRECISION: ONE STANDARD DEVIATION VALUES FOR VARIOUS ANALYSES[a]

Analysis	Level	One standard deviation for single determination
Gamma Emitters	5 to 100 pCi/liter or kg > 100 pCi/liter or kg	5.0 pCi/liter 5% of known value
Strontium-89[b]	5 to 50 pCi/liter or kg > 50 pCi/liter or kg	5.0 pCi/liter 10% of known value
Strontium-90[b]	2 to 30 pCi/liter or kg > 30 pCi/liter or kg	5.0 pCi/liter 10% of known value
Potassium-40	≥ 0.1 g/liter or kg	5% of known value
Gross alpha	≤ 20 pCi/liter > 20 pCi/liter	5.0 pCi/liter 25% of known value
Gross beta	≤ 100 pCi/liter > 100 pCi/liter	5.0 pCi/liter 5% of known value
Tritium	≤ 4,000 pCi/liter > 4,000 pCi/liter	$\pm 1\sigma$ = $169.85 \times (\text{known})^{0.0933}$ 10% of known value
Radium-226,-228	≥ 0.1 pCi/liter	15% of known value
Plutonium	≥ 0.1 pCi/liter, gram, or sample	10% of known value
Iodine-131, Iodine-129[b]	≤ 55 pCi/liter > 55 pCi/liter	6 pCi/liter 10% of known value
Uranium-238, Nickel-63[b] Technetium-99[b]	≤ 35 pCi/liter > 35 pCi/liter	6 pCi/liter 15% of known value
Iron-55[b]	50 to 100 pCi/liter > 100 pCi/liter	10 pCi/liter 10% of known value
Other Analyses [b]	---	20% of known value

[a] From EPA publication, "Environmental Radioactivity Laboratory Intercomparison Studies Program, Fiscal Year, 1981-1982, EPA-600/4-81-004.

[b] Laboratory limit.

TABLE A-1. Interlaboratory Comparison Crosscheck program, Environmental Resource Associates (ERA)[a].

Lab Code	Date	Concentration (pCi/L)				
		Analysis	Laboratory Result [b]	ERA Result [c]	Control Limits	Acceptance
ERW-1444	4/6/2015	Sr-89	59.71 ± 5.44	63.20	51.10 - 71.20	Pass
ERW-1444	4/6/2015	Sr-90	43.41 ± 2.43	41.90	30.80 - 48.10	Pass
ERW-1448	4/6/2015	Ba-133	77.75 ± 4.69	82.50	69.30 - 90.80	Pass
ERW-1448	4/6/2015	Cs-134	68.82 ± 3.08	75.70	61.80 - 83.30	Pass
ERW-1448	4/6/2015	Cs-137	191.9 ± 5.9	189.0	170.0 - 210.0	Pass
ERW-1448	4/6/2015	Co-60	85.05 ± 4.59	84.50	76.00 - 95.30	Pass
ERW-1448	4/6/2015	Zn-65	196.0 ± 12.0	203.0	183.0 - 238.0	Pass
ERW-1450	4/6/2015	Gr. Alpha	34.05 ± 1.90	42.60	22.10 - 54.00	Pass
ERW-1450	4/6/2015	G. Beta	26.93 ± 1.12	32.90	21.30 - 40.60	Pass
ERW-1453	4/6/2015	I-131	22.47 ± 0.83	23.80	19.70 - 28.30	Pass
ERW-1456	4/6/2015	Ra-226	8.20 ± 0.56	8.43	6.33 - 9.90	Pass
ERW-1456	4/6/2015	Ra-228	5.00 ± 0.67	4.39	2.56 - 6.01	Pass
ERW-1456	4/6/2015	Uranium	5.98 ± 0.31	6.59	4.99 - 7.83	Pass
ERW-1461	4/6/2015	H-3	3,254 ± 180	3280	2,770 - 3,620	Pass
ERW-5528	10/5/2015	Sr-89	34.76 ± 0.06	35.70	26.70 - 42.50	Pass
ERW-5528	10/5/2015	Sr-90	29.23 ± 0.06	31.10	22.70 - 36.10	Pass
ERW-5531	10/5/2015	Ba-133	30.91 ± 0.53	32.50	25.90 - 36.70	Pass
ERW-5531	10/5/2015	Cs-134	57.40 ± 2.57	62.30	50.69 - 68.50	Pass
ERW-5531	10/5/2015	Cs-137	163.1 ± 4.8	157.0	141.0 - 175.0	Pass
ERW-5531	10/5/2015	Co-60	73.41 ± 1.72	71.10	64.00 - 80.70	Pass
ERW-5531	10/5/2015	Zn-65	138.9 ± 5.7	126.0	113.0 - 149.0	Pass
ERW-5534	10/5/2015	Gr. Alpha	29.99 ± 0.08	51.60	26.90 - 64.70	Pass
ERW-5534	10/5/2015	G. Beta	27.52 ± 0.04	36.60	24.10 - 44.20	Pass
ERW-5537	10/5/2015	I-131	25.54 ± 0.60	26.30	21.90 - 31.00	Pass
ERW-5540	10/5/2015	Ra-226	7.32 ± 0.37	7.29	5.49 - 8.63	Pass
ERW-5540 [d]	10/5/2015	Ra-228	7.80 ± 0.02	4.25	2.46 - 5.85	Fail
ERW-5540 [e]	10/5/2015	Ra-228	4.45 ± 0.96	4.25	2.46 - 5.85	Pass
ERW-5540	10/5/2015	Uranium	53.30 ± 0.55	56.20	45.70 - 62.40	Pass
ERW-5543	10/5/2015	H-3	21,260 ± 351	21,300	18,700 - 23,400	Pass

[a] Results obtained by Environmental, Inc., Midwest Laboratory as a participant in the crosscheck program for proficiency testing in drinking water conducted by Environmental Resources Associates (ERA).

[b] Unless otherwise indicated, the laboratory result is given as the mean ± standard deviation for three determinations.

[c] Results are presented as the known values, expected laboratory precision (1 sigma, 1 determination) and control limits as provided by ERA.

[d] Ra-228 spike was at a level close to the detection level. The high result was likely caused by interference from short-lived Rn-222 daughters.

[e] The result of reanalysis (Compare to original result, footnoted "e" above).

TABLE A-2.1. Thermoluminescent Dosimetry, (TLD, $CaSO_4$: Dy Cards). [a]

Lab Code	Irradiation Date	Description	Known Value (mR)	Lab Result (mR)	Control Limits (mR)	Acceptance
Environmental, Inc.						
2015-1	6/24/2015	30 cm.	98.81	103.67 ± 6.05	69.20 - 128.50	Pass
2015-1	6/24/2015	30 cm.	98.81	111.32 ± 15.97	69.20 - 128.50	Pass
2015-1	6/24/2015	60 cm.	24.70	27.23 ± 1.33	17.30 - 32.10	Pass
2015-1	6/24/2015	60 cm.	24.70	26.98 ± 4.98	17.30 - 32.10	Pass
2015-1	6/24/2015	120 cm.	6.18	6.71 ± 1.77	4.30 - 8.00	Pass
2015-1	6/24/2015	120 cm.	6.18	6.78 ± 0.38	4.30 - 8.00	Pass
2015-1	6/24/2015	120 cm.	6.18	6.43 ± 2.00	4.30 - 8.00	Pass
2015-1	6/24/2015	150 cm.	3.95	4.13 ± 0.72	2.80 - 5.10	Pass
2015-1	6/24/2015	150 cm.	3.95	4.12 ± 1.36	2.80 - 5.10	Pass
2015-1	6/24/2015	150 cm.	3.95	4.50 ± 1.51	2.80 - 5.10	Pass
2015-1	6/24/2015	180 cm.	2.74	3.27 ± 0.28	1.90 - 3.60	Pass
2015-1	6/24/2015	180 cm.	2.74	3.05 ± 1.11	1.90 - 3.60	Pass
2015-1	6/24/2015	180 cm.	2.74	3.14 ± 0.18	1.90 - 3.60	Pass

TABLE A-2.2 Thermoluminescent Dosimetry, (TLD, $CaSO_4$: Dy Cards). [b]

				mrem		
Lab Code	Irradiation Date	Description	Delivered Dose	Reported Dose	Performance [c] Quotient (P)	Acceptance [d]
Environmental, Inc.						
2015-2	12/15/2015	Spike 1	138.0	118.5 ± 2.1	-0.14	Pass
2015-2	12/15/2015	Spike 2	138.0	120.0 ± 1.6	-0.13	Pass
2015-2	12/15/2015	Spike 3	138.0	121.9 ± 1.9	-0.12	Pass
2015-2	12/15/2015	Spike 4	138.0	124.5 ± 3.3	-0.10	Pass
2015-2	12/15/2015	Spike 5	138.0	126.5 ± 3.2	-0.08	Pass
2015-2	12/15/2015	Spike 6	138.0	140.0 ± 4.2	0.01	Pass
2015-2	12/15/2015	Spike 7	138.0	128.2 ± 1.2	-0.07	Pass
2015-2	12/15/2015	Spike 8	138.0	128.0 ± 4.0	-0.07	Pass
2015-2	12/15/2015	Spike 9	138.0	124.9 ± 5.1	-0.09	Pass
2015-2	12/15/2015	Spike 10	138.0	122.9 ± 3.0	-0.11	Pass
2015-2	12/15/2015	Spike 11	138.0	123.3 ± 3.0	-0.11	Pass
2015-2	12/15/2015	Spike 12	138.0	119.0 ± 3.4	-0.14	Pass
2015-2	12/15/2015	Spike 13	138.0	123.0 ± 2.7	-0.11	Pass
2015-2	12/15/2015	Spike 14	138.0	125.4 ± 2.0	-0.09	Pass
2015-2	12/15/2015	Spike 15	138.0	122.0 ± 3.1	-0.12	Pass
2015-2	12/15/2015	Spike 16	138.0	120.8 ± 2.0	-0.12	Pass
2015-2	12/15/2015	Spike 17	138.0	118.8 ± 1.1	-0.14	Pass
2015-2	12/15/2015	Spike 18	138.0	117.0 ± 2.3	-0.15	Pass
2015-2	12/15/2015	Spike 19	138.0	120.8 ± 2.6	-0.12	Pass
2015-2	12/15/2015	Spike 20	138.0	122.6 ± 3.0	-0.11	Pass
Mean (Spike 1-20)				123.4	0.11	Pass
Standard Deviation (Spike 1-20)				5.0	0.04	Pass

[a] TLD's were irradiated at Environmental Inc. Midwest Laboratory. (Table A-2.1)

[b] TLD's were irradiated by the University of Wisconsin-Madison Radiation Calibration Laboratory following ANSI N13.37 protocol from a known air kerma rate. TLD's were read and the results were submitted by Environmental Inc. to the University of Wisconsin-Madison Radiation Calibration Laboratory for comparison to the delivered dose.(Table A-2.2)

[c] Performance Quotient (P) is calculated as ((reported dose - conventially true value) ÷ conventially true value) where the conventially true value is the delivered dose.

[d] Acceptance is achieved when neither the absolute value of mean of the P values, nor the standard deviation of the P values exceed 0.15.

e Tables A2.1 and A2.2 assume 1 roentgen = 1 rem (per NRC -Health Physics Positions Based on 10 CFR Part 20 - Question 96 - Page Last Reviewed/Updated Thursday, October 01, 2015).

TABLE A-3. In-House "Spiked" Samples

Lab Code [b]	Date	Concentration (pCi/L)[a] Analysis	Laboratory results 2s, n=1 [c]	Known Activity	Control Limits [d]	Acceptance
W-020315	2/3/2015	Ra-226	16.19 ± 0.42	16.70	13.36 - 20.04	Pass
W-021215	2/12/2015	Gr. Alpha	18.38 ± 0.39	20.10	16.08 - 24.12	Pass
W-021215	2/12/2015	Gr. Beta	27.98 ± 0.32	30.90	24.72 - 37.08	Pass
SPW-687	2/27/2015	Ni-63	239.6 ± 3.5	202.4	161.9 - 242.9	Pass
SPAP-689	3/2/2015	Gr. Beta	42.37 ± 3.50	43.61	34.89 - 52.33	Pass
SPAP-691	3/2/2015	Cs-134	1.77 ± 0.61	1.90	1.52 - 2.28	Pass
SPAP-691	3/2/2015	Cs-137	83.02 ± 2.60	97.20	77.76 - 116.64	Pass
SPW-693	3/2/2015	Cs-134	44.30 ± 2.53	53.40	42.72 - 64.08	Pass
SPW-693	3/2/2015	Cs-137	74.82 ± 3.50	73.80	59.04 - 88.56	Pass
SPW-693	3/2/2015	Sr-89	87.45 ± 3.62	87.48	69.98 - 104.98	Pass
SPW-693	3/25/2015	Sr-90	37.22 ± 1.55	38.10	30.48 - 45.72	Pass
SPMI-697	3/2/2015	Cs-134	96.67 ± 7.74	107.00	85.60 - 128.40	Pass
SPMI-697	3/2/2015	Cs-137	78.51 ± 7.02	73.84	59.07 - 88.61	Pass
SPMI-697	3/2/2015	Sr-89	72.98 ± 4.86	87.48	69.98 - 104.98	Pass
SPMI-697	3/2/2015	Sr-90	39.17 ± 1.51	38.10	30.48 - 45.72	Pass
SPW-699	3/2/2015	H-3	59,592 ± 703	58,445	46,756 - 70,134	Pass
W-031115	3/11/2015	Ra-226	13.73 ± 0.35	16.70	13.36 - 20.04	Pass
W-030215	3/2/2015	Ra-228	32.79 ± 2.31	31.44	25.15 - 37.73	Pass
SPF-1040	3/16/2015	Cs-134	787.5 ± 9.2	840.0	672.0 - 1,008.0	Pass
SPF-1040	3/16/2015	Cs-137	2,599 ± 24	2,360	1,888 - 2,832	Pass
SPW-1036	3/25/2015	Fe-55	1,792 ± 63	1961	1,569 - 2,353	Pass
SPW-1374	4/6/2015	U-238	46.03 ± 2.25	41.70	25.02 - 58.38	Pass
W-040815	4/8/2015	Gr. Alpha	20.18 ± 0.42	20.10	16.08 - 24.12	Pass
W-040815	4/8/2015	Gr. Beta	29.70 ± 0.33	30.90	24.72 - 37.08	Pass
SPW-1038	4/13/2015	C-14	3,497 ± 9	4,734	2,840 - 6,628	Pass
W-2165	4/20/2015	H-3	5550 ± 226	5,780	3,468 - 8,092	Pass
W-2165	4/20/2015	Sr-89	90.70 ± 8.20	108.70	65.22 - 152.18	Pass
W-2165	4/20/2015	Sr-90	76.80 ± 2.00	75.90	45.54 - 106.26	Pass
W-2165	4/20/2015	Cs-134	62.40 ± 6.40	57.30	34.38 - 80.22	Pass
W-2165	4/20/2015	Cs-137	91.30 ± 7.70	84.00	50.40 - 117.60	Pass
W-2392	4/13/2015	H-3	5032 ± 214	5780	3468 - 8092	Pass
W-2392	4/13/2015	Ni-63	222.4 ± 3.8	202.0	121.2 - 282.8	Pass
W-2392	4/13/2015	Cs-134	53.26 ± 5.01	57.30	34.38 - 80.22	Pass
W-2392	4/13/2015	Cs-137	91.90 ± 7.76	84.20	50.52 - 117.88	Pass
W-042415	4/24/2015	Ra-226	12.52 ± 0.39	16.70	10.02 - 23.38	Pass
W-050715	5/7/2015	Gr. Alpha	19.05 ± 0.41	20.10	12.06 - 28.14	Pass
W-050715	5/7/2015	Gr. Beta	27.30 ± 0.32	30.90	18.54 - 43.26	Pass
W-061215	6/12/2015	Gr. Alpha	20.72 ± 0.44	20.10	12.06 - 28.14	Pass
W-061215	6/12/2015	Gr. Beta	28.51 ± 0.33	30.90	18.54 - 43.26	Pass
U-2982	6/9/2015	Gr. Beta	500.1 ± 5.1	604.0	362.4 - 845.6	Pass
U-3200	6/9/2015	H-3	2229 ± 424	2346	1408 - 3284	Pass
W-70915	7/9/2015	Gr. Alpha	18.76 ± 0.40	20.10	12.1 - 28.1	Pass
W-70915	7/9/2015	Gr. Beta	29.71 ± 0.33	30.90	18.5 - 43.3	Pass
SPAP-3859	7/21/2015	Gr. Beta	41.59 ± 0.12	43.61	26.17 - 61.05	Pass
SPAP-3861	7/21/2015	Cs-134	1.69 ± 0.60	1.69	1.0 - 2.4	Pass

TABLE A-3. In-House "Spiked" Samples

Lab Code [b]	Date	Concentration (pCi/L)[a] Analysis	Laboratory results 2s, n=1 [c]	Known Activity	Control Limits [d]	Acceptance
SPAP-3861	7/21/2015	Cs-137	93.71 ± 2.64	96.45	57.87 - 135.03	Pass
SPMI-3863	7/21/2015	Cs-134	38.21 ± 5.12	47.02	28.21 - 65.83	Pass
SPMI-3863	7/21/2015	Cs-137	78.65 ± 7.94	73.18	43.91 - 102.45	Pass
SPMI-3863	7/21/2015	Sr-90	41.05 ± 1.62	37.78	22.67 - 52.89	Pass
SPW-3871	7/21/2015	Cs-134	45.59 ± 6.39	47.02	28.21 - 65.83	Pass
SPW-3871	7/21/2015	Cs-137	78.73 ± 7.03	73.18	43.91 - 102.45	Pass
SPW-3871	7/21/2015	Sr-90	38.36 ± 1.58	37.78	22.67 - 52.89	Pass
SPW-3873	7/21/2015	H-3	60,034 ± 671	57,199	34,319 - 80,079	Pass
SPW-3875	7/21/2015	Ni-63	451.3 ± 3.3	403.7	242.2 - 565.2	Pass
SPW-3877	7/21/2015	Tc-99	483.0 ± 8.3	539.1	323.5 - 754.7	Pass
SPMI-3879	7/21/2015	C-14	4,921 ± 19	4,736	2,842 - 6,630	Pass
SPSO-4037	7/21/2015	Ni-63	42,458 ± 309	40,370	24,222 - 56,518	Pass
SPW-072515	7/17/2015	Ra-228	35.48 ± 3	31.44	18.86 - 44.02	Pass
SPF-4104	7/29/2015	Cs-134	661.5 ± 115.9	740.0	444.0 - 1036.0	Pass
SPF-4104	7/29/2015	Cs-137	2,469 ± 59	2,340	1,404 - 3,276	Pass
SPW-81015	8/10/2015	Gr. Alpha	21.59 ± 0.46	20.10	12.06 - 28.14	Pass
SPW-81015	8/10/2015	Gr. Beta	27.58 ± 0.32	30.90	18.54 - 43.26	Pass
SPW-81315	8/13/2015	Ra-226	15.05 ± 0.36	16.70	10.02 - 23.38	Pass
SPW-90615	9/6/2015	Gr. Alpha	18.32 ± 0.40	20.10	12.06 - 28.14	Pass
SPW-90615	9/6/2015	Gr. Beta	29.43 ± 0.33	30.90	18.54 - 43.26	Pass
W-091415	9/14/2016	Gr. Alpha	19.35 ± 0.51	20.10	12.06 - 28.14	Pass
W-091415	9/14/2016	Gr. Beta	31.53 ± 0.35	30.90	18.54 - 43.26	Pass
W-100815	10/8/2015	Ra-228	12.27 ± 0.33	16.70	10.02 - 23.38	Pass
W-100615	10/6/2016	Gr. Alpha	20.62 ± 0.43	20.10	12.06 - 28.14	Pass
W-100615	10/6/2016	Gr. Beta	29.35 ± 0.33	30.90	18.54 - 43.26	Pass
W-5277	10/16/2015	H-3	5,224 ± 218	5,466	3,280 - 7,652	Pass
W-5277	10/16/2015	Cs-134	99.40 ± 6.64	99.20	59.52 - 138.88	Pass
W-5277	10/16/2015	Cs-137	89.60 ± 6.64	83.20	49.92 - 116.48	Pass
W-110415	11/4/2015	Ra-226	12.27 ± 0.33	16.70	10.02 - 23.38	Pass
W-111115	11/11/2015	Ra-228	31.78 ± 2.48	31.44	18.86 - 44.02	Pass
W-6086,6087	11/18/2015	H-3	10,882 ± 309	11,231	6,738 - 15,723	Pass
W-6086,6087	11/18/2015	Cs-134	92.98 ± 7.29	96.25	57.75 - 134.75	Pass
W-6086,6087	11/18/2015	Cs-137	76.65 ± 7.81	82.94	49.76 - 116.12	Pass
W-112515	11/25/2015	Gr. Alpha	20.91 ± 0.52	20.10	12.06 - 28.14	Pass
W-112515	11/25/2015	Gr. Beta	31.59 ± 0.35	30.90	18.54 - 43.26	Pass
W-120715	12/7/2015	Fe-55	2,431 ± 97	2,319	1,391 - 3,247	Pass
W-120815	12/8/2015	Gr. Alpha	20.72 ± 0.43	20.10	12.06 - 28.14	Pass
W-120815	12/8/2015	Gr. Beta	29.50 ± 0.33	30.90	18.54 - 43.26	Pass
W-121515	12/15/2015	Ra-226	14.77 ± 0.42	16.70	10.02 - 23.38	Pass

[a] Liquid sample results are reported in pCi/Liter, air filters(pCi/m3), charcoal (pCi/charcoal canister), and solid samples (pCi/kg).

[b] Laboratory codes : W (Water), MI (milk), AP (air filter), SO (soil), VE (vegetation), CH (charcoal canister), F (fish), U (urine).

[c] Results are based on single determinations.

[d] Control limits are established from the precision values listed in Attachment A of this report, adjusted to ± 2s.

NOTE: For fish, Jello is used for the spike matrix. For vegetation, cabbage is used for the spike matrix.

TABLE A-4. In-House "Blank" Samples

Lab Code	Sample Type	Date	Analysis[b]	Concentration (pCi/L)[a]		
				Laboratory results (4.66σ)		Acceptance
				LLD	Activity[c]	Criteria (4.66 σ)
W-020315	Water	2/3/2015	Ra-226	0.03	0.03 ± 0.02	1
W-021215	Water	2/12/2015	Gr. Alpha	0.47	-0.37 ± 0.30	2
W-021215	Water	2/12/2015	Gr. Beta	0.76	-0.62 ± 0.51	4
SPW-686	Water	2/27/2015	Ni-63	2.36	-0.74 ± 1.42	20
SPAP-688	Air Particulate	3/2/2015	Gr. Beta	0.003	-0.001 ± 0.002	0.01
SPAP-690	Air Particulate	3/2/2015	Cs-134	0.006	0.428 ± 0.927	0.05
SPAP-690	Air Particulate	3/2/2015	Cs-137	0.006	-0.785 ± 1.146	0.05
W-030215	Water	3/2/2015	Ra-228	0.76	0.22 ± 0.38	2
SPW-692	Water	3/2/2015	Cs-134	6.70	-1.57 ± 3.55	10
SPW-692	Water	3/2/2015	Cs-137	6.18	-0.15 ± 3.20	10
SPW-692	Water	3/2/2015	Sr-89	0.61	-0.51 ± 0.51	5
SPW-692	Water	3/2/2015	Sr-90	0.60	0.38 ± 0.33	1
SPMI-696	Milk	3/2/2015	Cs-134	3.75	-0.25 ± 2.24	10
SPMI-696	Milk	3/2/2015	Cs-137	4.36	-0.25 ± 2.24	10
SPMI-696	Milk	3/2/2015	Sr-89	0.80	-0.40 ± 0.84	5
SPMI-696	Milk	3/2/2015	Sr-90	0.49	0.98 ± 0.32	1
SPW-698	Water	3/2/2015	H-3	144.0	28.6 ± 88.9	200
SPW-1035	Water	3/16/2015	Fe-55	599.7	72.6 ± 368.1	1000
SPW-1037	Water	3/16/2015	C-14	8.94	2.16 ± 5.47	200
SPF-1039	Fish	3/16/2015	Cs-134	13.54	-1.00 ± 6.80	100
SPF-1039	Fish	3/16/2015	Cs-137	9.80	4.87 ± 7.00	100
W-040615	Water	4/6/2015	Ra-226	0.04	0.01 ± 0.03	2
W-1373	Water	4/6/2015	U-238	0.08	0.01 ± 0.01	1
W-1375	Water	4/6/2015	Pu-238	0.03	0.00 ± 0.01	1
W-050715	Water	5/7/2015	Gr. Alpha	0.38	-0.10 ± 0.25	2
W-050715	Water	5/7/2015	Gr. Beta	0.74	-0.14 ± 0.51	4
W-061215	Water	6/12/2015	Gr. Alpha	0.42	-0.10 ± 0.29	2
W-061215	Water	6/12/2015	Gr. Beta	0.75	-0.04 ± 0.53	4
SPW-3858	Water	7/21/2015	Gr. Beta	0.003	0.004 ± 0.002	2
SPAP-3860	Air Particulate	7/21/2015	Cs-134	0.011	0.010 ± 0.005	0.05
SPAP-3860	Air Particulate	7/21/2015	Cs-137	0.009	0.000 ± 0.005	0.05
SPMI-3862	Milk	7/21/2015	Cs-134	3.13	1.56 ± 1.74	10
SPMI-3862	Milk	7/21/2015	Cs-137	3.20	1.69 ± 1.89	10
SPMI-3862	Milk	7/21/2015	Sr-89	2.17	-1.30 ± 2.05	5
SPMI-3862	Milk	7/21/2015	Sr-90	0.90	0.74 ± 0.50	1
SPW-3870	Water	7/21/2015	Cs-134	3.01	0.71 ± 1.66	10
SPW-3870	Water	7/21/2015	Cs-137	3.94	0.81 ± 1.86	10
SPW-3870	Water	7/21/2015	Sr-89	2.28	-0.42 ± 1.80	5
SPW-3870	Water	7/21/2015	Sr-90	0.84	0.25 ± 0.42	1

TABLE A-4. In-House "Blank" Samples

Lab Code	Sample Type	Date	Analysis[b]	Concentration (pCi/L)[a]		
				Laboratory results (4.66σ)		Acceptance
				LLD	Activity[c]	Criteria (4.66 σ)
SPW-3872	Water	7/21/2015	H-3	142.6	82.7 ± 79.4	200
SPW-3874	Water	7/21/2015	Ni-63	2.98	0.77 ± 1.82	20
SPW-3876	Water	7/21/2015	Tc-99	5.49	-3.81 ± 3.26	10
SPW-3878	Water	7/21/2015	C-14	17.06	8.52 ± 10.54	200
SPSO-4036	Soil	7/21/2015	Ni-63	135.7	51.3 ± 83.0	1000
SPF-4103	Fish	7/29/2015	Cs-134	14.17	-37.70 ± 9.67	100
SPF-4103	Fish	7/29/2015	Cs-137	12.39	1.13 ± 8.06	100
W-081015	Water	8/10/2015	Gr. Alpha	0.48	-0.10 ± 0.33	2
W-081015	Water	8/10/2015	Gr. Beta	0.78	-0.18 ± 0.54	4
W-081815	Water	8/18/2015	Ra-226	0.03	0.03 ± 0.02	2
W-090615	Water	9/6/2015	Gr. Alpha	0.40	0.00 ± 0.28	2
W-090615	Water	9/6/2015	Gr. Beta	0.77	0.22 ± 0.54	4
W-091415	Water	9/14/2015	Gr. Alpha	0.41	0.10 ± 0.30	2
W-091415	Water	9/14/2015	Gr. Beta	0.77	0.04 ± 0.54	4
W-100615	Water	10/6/2015	Gr. Alpha	0.41	-0.15 ± 0.27	2
W-100615	Water	10/6/2015	Gr. Beta	0.75	-0.12 ± 0.52	4
W-112515	Water	11/25/2015	Gr. Alpha	0.42	0.05 ± 0.30	2
W-112515	Water	11/25/2015	Gr. Beta	0.78	-0.31 ± 0.54	4
W-120815	Water	12/8/2015	Gr. Alpha	0.42	-0.08 ± 0.29	2
W-120815	Water	12/8/2015	Gr. Beta	0.76	0.17 ± 0.54	4
W-121515	Water	12/15/2015	Ra-226	0.01	0.01 ± 0.01	2

[a] Liquid sample results are reported in pCi/Liter, air filters(pCi/m^3), charcoal (pCi/charcoal canister), and solid samples (pCi/kg).

[b] I-131(G); iodine-131 as analyzed by gamma spectroscopy.

[c] Activity reported is a net activity result.

TABLE A-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
CF-62,63	1/7/2015	Gr. Beta	5.72 ± 0.12	5.78 ± 0.12	5.75 ± 0.42	Pass
CF-62,63	1/7/2015	Be-7	0.915 ± 0.135	0.919 ± 0.102	0.917 ± 0.15	Pass
CF-62,63	1/7/2015	K-40	3.97 ± 0.28	3.88 ± 0.23	3.92 ± 0.33	Pass
CF-62,63	1/7/2015	Sr-90	0.017 ± 0.006	0.011 ± 0.006	0.014 ± 0.004	Pass
SG-83,84	1/12/2015	K-40	10.11 ± 1.42	9.69 ± 1.20	9.90 ± 1.16	Pass
SG-83,84	1/12/2015	Tl-208	0.57 ± 0.07	0.56 ± 0.06	0.57 ± 0.05	Pass
SG-83,84	1/12/2015	Pb-212	1.73 ± 0.10	1.58 ± 0.09	1.65 ± 0.13	Pass
SG-83,84	1/12/2015	Pb-214	13.33 ± 0.33	13.88 ± 0.28	13.61 ± 0.22	Pass
SG-83,84	1/12/2015	Bi-214	13.48 ± 0.39	13.45 ± 0.29	13.47 ± 0.24	Pass
SG-83,84	1/12/2015	Ra-226	25.68 ± 2.19	26.22 ± 1.53	25.95 ± 1.34	Pass
SG-83,84	1/12/2015	Ac-228	13.33 ± 0.59	12.86 ± 0.43	13.09 ± 0.36	Pass
AP-011215A/B	1/12/2015	Gr. Beta	0.025 ± 0.004	0.023 ± 0.004	0.024 ± 0.003	Pass
WW-315,316	1/27/2015	H-3	1,961 ± 178	1,868 ± 174	1,915 ± 124	Pass
DW-60010,60011	1/28/2015	Ra-226	1.25 ± 0.14	1.40 ± 0.15	1.33 ± 0.10	Pass
DW-60010,60011	1/28/2015	Ra-228	2.00 ± 0.66	1.39 ± 0.60	1.70 ± 0.45	Pass
SG-336,337	1/30/2015	Bi-214	6.63 ± 0.20	6.45 ± 0.45	6.54 ± 0.21	Pass
SG-336;337	1/30/2015	Pb-214	6.45 ± 0.19	6.45 ± 0.37	6.45 ± 0.21	Pass
SG-336,337	1/30/2015	Ac-228	4.43 ± 0.24	4.20 ± 0.58	4.32 ± 0.31	Pass
AP-020415A/B	2/4/2015	Gr. Beta	0.021 ± 0.004	0.019 ± 0.035	0.035 ± 0.020	Pass
AP-021115A/B	2/11/2015	Gr. Beta	0.034 ± 0.004	0.040 ± 0.047	0.037 ± 0.003	Pass
DW-60023,60024	2/26/2015	Ra-226	1.52 ± 0.15	1.51 ± 0.15	1.52 ± 0.11	Pass
DW-60023,60024	2/26/2015	Ra-228	0.97 ± 0.48	1.66 ± 0.58	1.32 ± 0.38	Pass
S-799,800	2/26/2015	K-40	11.96 ± 0.98	11.49 ± 0.82	11.72 ± 0.64	Pass
S-799,800	2/26/2015	Tl-208	0.36 ± 0.04	0.31 ± 0.04	0.34 ± 0.03	Pass
S-799,800	2/26/2015	Pb-212	0.92 ± 0.06	0.91 ± 0.06	0.91 ± 0.05	Pass
S-799,800	2/26/2015	Bi-212	1.26 ± 0.45	1.50 ± 0.40	1.38 ± 0.30	Pass
S-799,800	2/26/2015	Ac-228	1.35 ± 0.22	1.23 ± 0.17	1.29 ± 0.14	Pass
SG-834,835	2/2/2015	Gr. Alpha	113.3 ± 6.3	117.2 ± 2.8	115.2 ± 3.4	Pass
SG-834,835	2/2/2015	Gr. Beta	82.27 ± 2.79	84.33 ± 2.74	83.30 ± 1.96	Pass
DW-60031,60032	3/4/2015	Gr. Alpha	185.4 ± 7.4	177.0 ± 7.2	181.2 ± 5.2	Pass
DW-60036,60037	3/4/2015	Ra-226	6.89 ± 0.34	6.88 ± 0.32	6.89 ± 0.23	Pass
DW-60036,60037	3/4/2015	Ra-228	4.43 ± 0.73	4.41 ± 0.72	4.42 ± 0.51	Pass
DW-60048,60049	3/4/2015	Ra-226	0.84 ± 0.10	0.94 ± 0.11	0.89 ± 0.07	Pass
DW-60048,60049	3/4/2015	Ra-228	0.68 ± 0.41	1.42 ± 0.58	1.05 ± 0.36	Pass
AP-1169,1170	3/19/2015	Be-7	0.20 ± 0.02	0.24 ± 0.10	0.22 ± 0.07	Pass
DW-60069,60070	4/8/2015	Gr. Alpha	3.58 ± 0.88	3.92 ± 0.88	3.75 ± 0.62	Pass
AP-040915	4/9/2015	Gr. Beta	0.027 ± 0.005	0.023 ± 0.005	0.025 ± 0.003	Pass
WW-2394,2395	4/13/2015	H-3	1,628 ± 139	1,695 ± 141	1,662 ± 99	Pass
SG-1847,1848	4/20/2015	K-40	3.24 ± 1.18	1.99 ± 0.76	2.62 ± 0.70	Pass
SG-1847,1848	4/20/2015	Pb-214	5.80 ± 0.22	6.23 ± 0.76	6.02 ± 0.40	Pass
SG-1847,1848	4/20/2015	Ac-228	5.26 ± 0.51	5.00 ± 0.42	5.13 ± 0.33	Pass
XWW-2267,2268	4/23/2015	H-3	6,584 ± 244	6,164 ± 237	6,374 ± 170	Pass
XWW-2078,2079	4/27/2015	H-3	359.0 ± 89.6	418.7 ± 92.3	388.9 ± 64.3	Pass

TABLE A-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
XWW-2162,2163	4/28/2015	H-3	4,408 ± 201	4,242 ± 198	4,325 ± 141	Pass
SG-1868,1869	4/28/2015	Gr. Alpha	47.57 ± 3.63	43.61 ± 3.58	45.59 ± 2.55	Pass
SG-1868,1869	4/28/2015	Gr. Beta	50.90 ± 1.94	51.90 ± 2.02	51.40 ± 1.40	Pass
SG-1868,1869	4/28/2015	Pb-214	13.80 ± 0.52	13.54 ± 0.62	13.67 ± 0.40	Pass
SG-1868,1869	4/28/2015	Ra-228	20.10 ± 0.92	22.10 ± 1.29	21.10 ± 0.79	Pass
AP-042915	4/29/2015	Gr. Beta	0.014 ± 0.003	0.014 ± 0.003	0.014 ± 0.002	Pass
DW-60076,60077	5/4/2015	Ra-228	2.89 ± 0.61	2.45 ± 0.57	2.67 ± 0.42	Pass
AP-050515	5/5/2015	Gr. Beta	0.026 ± 0.004	0.025 ± 0.004	0.026 ± 0.003	Pass
AP-051115	5/11/2015	Gr. Beta	0.006 ± 0.005	0.010 ± 0.005	0.008 ± 0.004	Pass
DW-60087,60088	5/14/2015	Ra-226	1.58 ± 0.17	1.52 ± 0.17	1.55 ± 0.12	Pass
DW-60087,60088	5/14/2015	Ra-228	0.94 ± 0.50	0.94 ± 0.50	0.94 ± 0.35	Pass
SG-2436,2437	5/15/2015	Pb-214	22.90 ± 2.31	24.10 ± 2.43	23.50 ± 1.68	Pass
SG-2436,2437	5/15/2015	Ra-228	47.95 ± 0.61	47.80 ± 0.71	47.88 ± 0.47	Pass
SG-2436,2437	5/15/2015	Gr. Alpha	267.8 ± 7.9	254.6 ± 7.6	261.2 ± 5.5	Pass
SG-2458,2459	5/19/2015	Pb-214	75.00 ± 1.66	77.70 ± 1.75	76.35 ± 1.21	Pass
SG-2458,2459	5/19/2015	Ra-228	41.10 ± 0.92	40.80 ± 0.83	40.95 ± 0.62	Pass
DW-60095,60096	5/26/2015	Gr. Alpha	1.34 ± 0.69	0.91 ± 0.62	1.13 ± 0.46	Pass
AP-052715	5/27/2015	Gr. Beta	0.010 ± 0.003	0.010 ± 0.003	0.010 ± 0.002	Pass
S-2627,2628	5/29/2015	Pb-214	0.85 ± 0.07	0.85 ± 0.07	0.85 ± 0.05	Pass
S-2627,2628	5/29/2015	Ac-228	0.85 ± 0.14	1.08 ± 0.12	0.97 ± 0.09	Pass
S-2627,2628	5/29/2015	Cs-137	0.07 ± 0.02	0.07 ± 0.02	0.07 ± 0.01	Pass
S-2605,2606	6/1/2015	Ac-228	0.42 ± 0.06	0.38 ± 0.07	0.40 ± 0.05	Pass
S-2605,2606	6/1/2015	Ra-226	0.44 ± 0.03	0.49 ± 0.03	0.47 ± 0.02	Pass
S-2605,2606	6/1/2015	K-40	10.89 ± 0.51	11.40 ± 0.48	11.15 ± 0.35	Pass
S-2605,2606	6/1/2015	Cs-137	0.05 ± 0.01	0.05 ± 0.01	0.05 ± 0.01	Pass
S-2858,2859	6/2/2015	Cs-137	34.30 ± 16.05	40.66 ± 17.79	37.48 ± 11.98	Pass
S-2858,2859	6/2/2015	Be-7	1501 ± 264	1171 ± 214	1336 ± 170	Pass
S-2858,2859	6/2/2015	K-40	22,122 ± 658	20,987 ± 600	21,555 ± 445	Pass
AP-060315	6/3/2015	Gr. Beta	0.022 ± 0.004	0.021 ± 0.004	0.022 ± 0.003	Pass
DW-30107,30108	6/8/2015	Gr. Alpha	1.34 ± 0.82	1.47 ± 0.85	1.41 ± 0.59	Pass
SG-2900,2901	6/9/2015	Ac-228	10.22 ± 1.36	8.32 ± 1.07	9.27 ± 0.87	Pass
SG-2900,2901	6/9/2015	Pb-214	7.55 ± 0.43	7.27 ± 0.41	7.41 ± 0.30	Pass
AP-061515	6/15/2015	Gr. Beta	0.022 ± 0.004	0.021 ± 0.004	0.022 ± 0.003	Pass
XWW-3173,3174	6/18/2015	H-3	841.9 ± 123.6	799.3 ± 122.4	820.6 ± 87.0	Pass
AP-062215	6/22/2015	Gr. Beta	0.023 ± 0.004	0.018 ± 0.004	0.020 ± 0.003	Pass
S-3216,3217	6/24/2015	K-40	10.38 ± 0.51	10.51 ± 0.53	10.45 ± 0.37	Pass
S-3216,3217	6/24/2015	Be-7	3.65 ± 0.24	3.38 ± 0.27	3.52 ± 0.18	Pass
VE-3300,3301	6/24/2015	Be-7	0.78 ± 0.15	0.83 ± 0.23	0.81 ± 0.14	Pass
VE-3300,3301	6/24/2015	K-40	29.12 ± 0.62	29.36 ± 0.64	29.24 ± 0.45	Pass
AP-062915	6/29/2015	Gr. Beta	0.023 ± 0.005	0.023 ± 0.005	0.023 ± 0.003	Pass
WW-3632,3633	6/30/2015	H-3	5,169 ± 225	5,058 ± 223	5,114 ± 158	Pass

TABLE A-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
AP-3822, 3823	7/1/2015	Be-7	0.075 ± 0.011	0.068 ± 0.012	0.072 ± 0.008	Pass
AP-3969, 3970	7/1/2015	Be-7	0.063 ± 0.008	0.064 ± 0.010	0.063 ± 0.006	Pass
WW-3632, 3633	7/6/2015	H-3	5,169 ± 225	5,058 ± 223	5,114 ± 159	Pass
W-4368, 4369	7/6/2015	Gr. Alpha	26.70 ± 4.00	24.10 ± 3.90	25.40 ± 2.79	Pass
W-4368, 4369	7/6/2015	Gr. Beta	34.62 ± 2.10	33.30 ± 2.02	33.96 ± 1.46	Pass
DW-60138, 60139	7/7/2015	Ra-226	0.07 ± 0.04	0.11 ± 0.05	0.09 ± 0.03	Pass
DW-60138, 60139	7/7/2015	Ra-228	1.04 ± 0.41	1.15 ± 0.47	1.10 ± 0.31	Pass
WW-4158, 4159	7/9/2015	H-3	138.8 ± 82.4	174.0 ± 84.1	156.4 ± 58.9	Pass
MI-2902, 2903	7/10/2015	K-40	1271 ± 118	1308 ± 115	1289 ± 82	Pass
SG-3533, 3534	7/10/2015	Gr. Alpha	238.0 ± 8.2	249.5 ± 8.5	243.8 ± 5.9	Pass
DW-60150, 60151	7/10/2015	Ra-226	1.53 ± 0.16	1.49 ± 0.12	1.51 ± 0.10	Pass
DW-60150, 60151	7/10/2015	Ra-228	2.68 ± 0.68	1.89 ± 0.62	2.29 ± 0.46	Pass
VE-3716, 3717	7/14/2015	K-40	3.85 ± 0.33	3.71 ± 0.31	3.78 ± 0.23	Pass
MI-3759, 3760	7/15/2015	K-40	1819 ± 127	1764 ± 140	1791 ± 94	Pass
MI-3759, 3760	7/15/2015	Sr-90	1.00 ± 0.36	0.61 ± 0.32	0.80 ± 0.24	Pass
AP-072115	7/21/2015	Gr. Beta	0.022 ± 0.004	0.027 ± 0.004	0.024 ± 0.003	Pass
VE-4053, 4054	7/21/2015	Be-7	0.52 ± 0.15	0.49 ± 0.11	0.50 ± 0.09	Pass
VE-4053, 4054	7/21/2015	K-40	8.00 ± 0.42	7.61 ± 0.31	7.81 ± 0.26	Pass
AP-4200, 4201	7/29/2015	Be-7	1.06 ± 0.12	0.96 ± 0.11	1.01 ± 0.08	Pass
AP-4200, 4201	7/29/2015	K-40	5.03 ± 0.24	4.96 ± 0.23	4.99 ± 0.16	Pass
W-4137, 4138	7/31/2015	Ra-226	0.58 ± 0.13	0.45 ± 0.14	0.52 ± 0.10	Pass
XWW-4431, 4432	8/5/2015	H-3	4,773 ± 213	4,915 ± 216	4,844 ± 152	Pass
SG-4305, 4306	8/6/2015	Ra-228	10.34 ± 0.58	11.46 ± 0.62	10.90 ± 0.42	Pass
AP-081015	8/10/2015	Gr. Beta	0.038 ± 0.005	0.039 ± 0.005	0.039 0.004	Pass
AP-081115	8/11/2015	Gr. Beta	0.024 ± 0.004	0.020 ± 0.004	0.022 0.003	Pass
VE-4452, 4453	8/11/2015	K-40	3.77 ± 0.29	3.78 ± 0.26	3.77 ± 0.20	Pass
AP-081715	8/17/2015	Gr. Beta	0.030 ± 0.005	0.030 ± 0.005	0.030 ± 0.003	Pass
DW-60195, 60196	8/17/2015	Ra-226	0.39 ± 0.10	0.37 ± 0.10	0.38 ± 0.07	Pass
DW-60195, 60196	8/17/2015	Ra-228	1.43 ± 0.51	1.97 ± 0.61	1.70 ± 0.40	Pass
DW-60198, 60199	8/17/2015	Gr. Alpha	2.93 ± 0.94	2.11 ± 0.96	2.52 ± 0.67	Pass
VE-4578, 4579	8/18/2015	K-40	4.14 ± 0.25	4.32 ± 0.24	4.23 ± 0.17	Pass
SW-4662, 4663	8/25/2015	H-3	351.3 ± 89.8	415.6 ± 92.8	383.4 ± 64.6	Pass
DW-60212, 60213	8/25/2015	Ra-226	0.09 ± 0.07	0.10 ± 0.08	0.10 ± 0.05	Pass
LW-4788, 4789	8/27/2015	Gr. Beta	0.97 ± 0.51	1.68 ± 0.59	1.32 ± 0.39	Pass
AP-083115	8/31/2015	Gr. Beta	0.032 ± 0.005	0.031 ± 0.005	0.031 ± 0.003	Pass
AP-4875, 4876	9/3/2015	Be-7	0.294 ± 0.125	0.202 ± 0.109	0.248 ± 0.083	Pass
VE-5083, 5084	9/14/2015	Be-7	0.47 ± 0.23	0.56 ± 0.19	0.52 ± 0.15	Pass
VE-5083, 5084	9/14/2015	K-40	6.20 ± 0.51	6.36 ± 0.50	6.28 ± 0.36	Pass
VE-5167, 5168	9/16/2015	Be-7	0.40 ± 0.11	0.41 ± 0.10	0.41 ± 0.07	Pass
VE-5167, 5168	9/16/2015	K-40	3.56 ± 0.27	3.91 ± 0.24	3.74 ± 0.18	Pass
BS-5188, 5189	9/16/2015	K-40	9.69 ± 0.51	10.51 ± 0.52	10.10 ± 0.36	Pass
F-5419, 5420	9/17/2015	K-40	3.48 ± 0.47	3.49 ± 0.56	3.49 ± 0.36	Pass
DW-60238, 60239	9/18/2015	Ra-226	1.93 ± 0.23	2.31 ± 0.26	2.12 ± 0.17	Pass
DW-60238, 60239	9/18/2015	Ra-228	4.44 ± 0.78	5.61 ± 0.84	5.03 ± 0.57	Pass
AP-092215A/B	9/22/2015	Gr. Beta	0.021 ± 0.004	0.025 ± 0.004	0.023 ± 0.00	Pass
WW-5398, 5399	9/22/2015	H-3	1,857 ± 145	1,846 ± 144	1,852 ± 102	Pass
AP-6007, 6008	9/28/2015	Be-7	0.08 ± 0.01	0.08 ± 0.01	0.08 ± 0.01	Pass

TABLE A-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
XW-7490, 7491	9/29/2015	Ni-63	2,332 ± 233	2,108 ± 211	2,220 ± 157	Pass
WW-5377, 5378	9/30/2015	H-3	220.0 ± 84.6	197.0 ± 83.5	208.5 ± 59.4	Pass
AP-6028, 6029	9/30/2015	Be-7	0.073 ± 0.009	0.083 ± 0.012	0.078 ± 0.007	Pass
G-5461,2	10/1/2015	Be-7	2.02 ± 0.32	1.98 ± 0.25	2.00 ± 0.20	Pass
G-5461,2	10/1/2015	K-40	8.77 ± 0.66	9.31 ± 0.59	9.04 ± 0.44	Pass
SO-5482, 5483	10/1/2015	Ac-228	0.76 ± 0.12	0.74 ± 0.30	0.75 ± 0.16	Pass
SO-5482, 5483	10/1/2015	Bi-214	0.53 ± 0.04	0.52 ± 0.04	0.52 ± 0.03	Pass
SO-5482, 5483	10/1/2015	Cs-137	0.12 ± 0.03	0.12 ± 0.03	0.12 ± 0.02	Pass
SO-5482, 5483	10/1/2015	K-40	2.17 ± 0.73	2.10 ± 0.72	2.13 ± 0.51	Pass
SO-5482, 5483	10/1/2015	Pb-214	0.57 ± 0.04	0.55 ± 0.04	0.56 ± 0.03	Pass
SO-5482, 5483	10/1/2015	Ra-226	1.45 ± 0.27	1.46 ± 0.30	1.45 ± 0.20	Pass
SO-5482, 5483	10/1/2015	Tl-208	0.24 ± 0.03	0.25 ± 0.03	0.24 ± 0.02	Pass
WW-5524, 5525	10/5/2015	H-3	1,192 ± 123	1,318 ± 127	1,255 ± 89	Pass
AP-5881, 5882	10/5/2015	Be-7	0.078 ± 0.008	0.085 ± 0.011	0.082 ± 0.007	Pass
AP-5881, 5882	10/5/2015	K-40	0.009 ± 0.004	0.010 ± 0.006	0.010 ± 0.004	Pass
SG-6400,1	10/5/2015	Gr. Alpha	19.09 ± 3.14	19.45 ± 3.25	19.27 ± 2.26	Pass
SG-6400,1	10/5/2015	Gr. Beta	31.36 ± 2.08	29.80 ± 2.13	30.58 ± 1.49	Pass
VE-5923, 5924	10/12/2015	K-40	4.29 ± 0.29	4.13 ± 0.33	4.21 ± 0.22	Pass
SS-5818, 5819	10/14/2015	Ac-228	0.20 ± 0.06	0.24 ± 0.06	0.22 ± 0.04	Pass
SS-5818, 5819	10/14/2015	Cs-137	0.03 ± 0.02	0.02 ± 0.01	0.03 ± 0.01	Pass
SS-5818, 5819	10/14/2015	Gr. Beta	8.10 ± 0.87	8.08 ± 0.96	8.09 ± 0.65	Pass
SS-5818, 5819	10/14/2015	Pb-212	0.19 ± 0.03	0.17 ± 0.02	0.18 ± 0.02	Pass
SS-5818, 5819	10/14/2015	Ra-226	0.47 ± 0.24	0.45 ± 0.19	0.46 ± 0.15	Pass
SS-5818, 5819	10/14/2015	Tl-208	0.06 ± 0.02	0.06 ± 0.02	0.06 ± 0.01	Pass
DW-60251, 60252	10/15/2015	Ra-226	0.56 ± 0.12	0.50 ± 0.08	0.53 ± 0.07	Pass
DW-60251, 60252	10/15/2015	Ra-228	0.79 ± 0.48	1.16 ± 0.59	0.98 ± 0.38	Pass
SO-5944, 5945	10/21/2015	Ac-228	1.08 ± 0.15	1.14 ± 0.15	1.11 ± 0.10	Pass
SO-5944, 5945	10/21/2015	Bi-214	0.89 ± 0.08	0.82 ± 0.06	0.85 ± 0.05	Pass
SO-5944, 5945	10/21/2015	Cs-137	0.06 ± 0.02	0.08 ± 0.03	0.07 ± 0.02	Pass
SO-5944, 5945	10/21/2015	Pb-212	1.06 ± 0.06	0.99 ± 0.05	1.03 ± 0.04	Pass
SO-5944, 5945	10/21/2015	Pb-214	1.00 ± 0.09	0.89 ± 0.06	0.95 ± 0.05	Pass
SO-5944, 5945	10/21/2015	Ra-226	2.13 ± 0.43	2.16 ± 0.37	2.14 ± 0.28	Pass
SO-5944, 5945	10/21/2015	Tl-208	0.36 ± 0.04	0.34 ± 0.04	0.35 ± 0.03	Pass
S-6175, 6176	10/23/2015	K-40	16.86 ± 1.92	14.28 ± 1.66	15.57 ± 1.27	Pass
XWW-6196, 6197	10/26/2015	H-3	2,856 ± 170	2,815 ± 169	2,836 ± 120	Pass
SO-6259, 6260	10/28/2015	Ac-228	0.60 ± 0.10	0.53 ± 0.08	0.57 ± 0.07	Pass
SO-6259, 6260	10/28/2015	Bi-214	0.40 ± 0.06	0.50 ± 0.05	0.45 ± 0.04	Pass
SO-6259, 6260	10/28/2015	Cs-137	0.17 ± 0.03	0.19 ± 0.03	0.18 ± 0.02	Pass
SO-6259, 6260	10/28/2015	Gr. Beta	21.6 ± 1.1	23.36 ± 1.21	22.48 ± 0.82	Pass
SO-6259, 6260	10/28/2015	Pb-212	0.53 ± 0.04	0.49 ± 0.04	0.51 ± 0.03	Pass
SO-6259, 6260	10/28/2015	Tl-208	0.16 ± 0.03	0.19 ± 0.04	0.18 ± 0.02	Pass

TABLE A-5. In-House "Duplicate" Samples

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
LW-6280, 6281	10/29/2015	Gr. Beta	2.03 ± 0.91	1.97 ± 0.97	2.00 ± 0.67	Pass
MI-6484, 6485	11/11/2015	K-40	1,384 ± 82	1,432 ± 89	1,408 ± 60	Pass
SO-6841, 6842	11/24/2015	Cs-137	0.18 ± 0.03	0.16 ± 0.03	0.17 ± 0.02	Pass
SO-6841, 6842	11/24/2015	K-40	13.62 ± 0.76	13.67 ± 0.69	13.64 ± 0.51	Pass
WW-6978, 6979	11/30/2015	H-3	569.0 ± 97.7	480.3 ± 93.9	524.7 ± 67.8	Pass
SW-6936, 6937	12/10/2015	H-3	151.9 ± 80.0	176.2 ± 81.2	164.0 ± 57.0	Pass
SW-7017, 7018	12/10/2015	H-3	584.3 ± 98.7	451.6 ± 93.9	518.0 ± 68.1	Pass
LW-7020, 7021	12/10/2015	H-3	236.9 ± 84.2	285.6 ± 86.5	261.2 ± 60.3	Pass
AP-7351, 7352	12/29/2015	Be-7	0.099 ± 0.020	0.084 ± 0.018	0.091 ± 0.014	Pass
AP-7414, 7415	12/30/2015	Be-7	0.049 ± 0.013	0.048 ± 0.011	0.048 ± 0.008	Pass

Note: Duplicate analyses are performed on every twentieth sample received in-house. Results are not listed for those analyses with activities that measure below the LLD.

[a] Results are reported in units of pCi/L, except for air filters (pCi/Filter or pCi/m3), food products, vegetation, soil, sediment (pCi/g).

TABLE A-6. Department of Energy's Mixed Analyte Performance Evaluation Program (MAPEP).

			Concentration [a]			
Lab Code [b]	Date	Analysis	Laboratory result	Known Activity	Control Limits [c]	Acceptance
MASO-975	2/1/2015	Ni-63	341 ± 18	448	314 - 582	Pass
MASO-975	2/1/2015	Sr-90	523 ± 12	653	457 - 849	Pass
MASO-975	2/1/2015	Tc-99	614 ± 12	867	607 - 1,127	Pass
MASO-975	2/1/2015	Cs-134	533 ± 6	678	475 - 881	Pass
MASO-975	2/1/2015	Cs-137	0.8 ± 2.5	0.0	NA [c]	Pass
MASO-975	2/1/2015	Co-57	0.5 ± 1.0	0.0	NA [c]	Pass
MASO-975	2/1/2015	Co-60	741 ± 8	817	572 - 1,062	Pass
MASO-975	2/1/2015	Mn-54	1,153 ± 9	1,198	839 - 1,557	Pass
MASO-975	2/1/2015	Zn-65	892 ± 18	1064	745 - 1,383	Pass
MAW-969	2/1/2015	Am-241	0.650 ± 0.078	0.654	0.458 - 0.850	Pass
MAW-969	2/1/2015	Cs-134	21.1 ± 0.3	23.5	16.5 - 30.6	Pass
MAW-969	2/1/2015	Cs-137	19.6 ± 0.3	19.1	13.4 - 24.8	Pass
MAW-969 [d]	2/1/2015	Co-57	10.2 ± 0.4	29.9	20.9 - 38.9	Fail
MAW-969	2/1/2015	Co-60	0.02 ± 0.05	0.00	NA [c]	Pass
MAW-969	2/1/2015	H-3	569 ± 13	563	394 - 732	Pass
MAW-969	2/1/2015	Fe-55	6.00 ± 6.60	6.88	4.82 - 8.94	Pass
MAW-969	2/1/2015	Mn-54	0.02 ± 0.07	0.00	NA [c]	Pass
MAW-969	2/1/2015	Ni-63	2.9 ± 3.0	0.00	NA [c]	Pass
MAW-969	2/1/2015	Zn-65	16.5 ± 0.9	18.3	12.8 - 23.8	Pass
MAW-969	2/1/2015	Tc-99	3.40 ± 0.60	3.18	2.23 - 4.13	Pass
MAW-969	2/1/2015	Pu-238	0.02 ± 0.03	0.01	NA [e]	Pass
MAW-969	2/1/2015	Pu-239/240	0.81 ± 0.10	0.83	0.58 - 1.08	Pass
MAW-969	2/1/2015	U-233/234	0.150 ± 0.040	0.148	0.104 - 0.192	Pass
MAW-969	2/1/2015	U-238	0.84 ± 0.09	0.97	0.68 - 1.26	Pass
MAW-969	2/1/2015	Sr-90	9.40 ± 1.30	9.48	6.64 - 12.32	Pass
MAW-950	2/1/2015	Gr. Alpha	0.66 ± 0.05	1.07	0.32 - 1.81	Pass
MAW-950	2/1/2015	Gr. Beta	2.72 ± 0.06	2.79	1.40 - 4.19	Pass
MAW-947	2/1/2015	I-129	1.26 ± 0.12	1.49	1.04 - 1.94	Pass
MAAP-978	2/1/2015	Am-241	0.069 ± 0.200	0.068	0.048 - 0.089	Pass
MAAP-978	2/1/2015	Cs-134	1.00 ± 0.04	1.15	0.81 - 1.50	Pass
MAAP-978	2/1/2015	Cs-137	0.004 ± 0.023	0.00	NA [c]	Pass
MAAP-978 [f]	2/1/2015	Co-57	0.04 ± 0.04	1.51	1.06 - 1.96	Fail
MAAP-978	2/1/2015	Co-60	0.01 ± 0.02	0.00	NA [c]	Pass
MAAP-978	2/1/2015	Mn-54	1.11 ± 0.08	1.02	0.71 - 1.33	Pass
MAAP-978	2/1/2015	Zn-65	0.83 ± 0.10	0.83	0.58 - 1.08	Pass
MAAP-978	2/1/2015	Pu-238	-0.003 ± 0.010	0.000	NA [c]	Pass
MAAP-978	2/1/2015	Pu-239/240	0.090 ± 0.022	0.085	0.059 - 0.110	Pass
MAAP-978	2/1/2015	U-233/234	0.020 ± 0.010	0.016	0.011 - 0.020	Pass
MAAP-978	2/1/2015	U-238	0.073 ± 0.018	0.099	0.069 - 0.129	Pass

TABLE A-6. Department of Energy's Mixed Analyte Performance Evaluation Program (MAPEP).

			Concentration [a]			
Lab Code [b]	Date	Analysis	Laboratory result	Known Activity	Control Limits [c]	Acceptance
MAAP-981	2/1/2015	Sr-89	38.1 ± 1.0	47.5	33.3 - 61.8	Pass
MAAP-981	2/1/2015	Sr-90	1.22 ± 0.13	1.06	0.74 - 1.38	Pass
MAAP-984	2/1/2015	Gr. Alpha	0.59 ± 0.06	1.77	0.53 - 3.01	Pass
MAAP-984	2/1/2015	Gr. Beta	0.95 ± 0.07	0.75	0.38 - 1.13	Pass
MAVE-972	2/1/2015	Cs-134	6.98 ± 0.13	7.32	5.12 - 9.52	Pass
MAVE-972	2/1/2015	Cs-137	9.73 ± 0.21	9.18	6.43 - 11.93	Pass
MAVE-972	2/1/2015	Co-57	0.01 ± 0.04	0.00	NA [c]	Pass
MAVE-972	2/1/2015	Co-60	3.89 ± 0.20	5.55	3.89 - 7.22	Pass
MAVE-972	2/1/2015	Mn-54	0.04 ± 0.07	0.00	NA [c]	Pass
MAVE-972	2/1/2015	Zn-65	0.09 ± 0.12	0.00	NA [c]	Pass
MAAP-978	2/1/2015	Pu-238	-0.003 ± 0.010	0.000	NA [c]	Pass
MAAP-978	2/1/2015	Pu-239/240	0.090 ± 0.022	0.085	0.059 - 0.110	Pass
MAAP-978	2/1/2015	U-233/234	0.020 ± 0.010	0.016	0.011 - 0.020	Pass
MAAP-978	2/1/2015	U-238	0.073 ± 0.018	0.099	0.069 - 0.129	Pass
MAAP-981	2/1/2015	Sr-89	38.1 ± 1.0	47.5	33.3 - 61.8	Pass
MAAP-981	2/1/2015	Sr-90	1.22 ± 0.13	1.06	0.74 - 1.38	Pass
MAAP-984	2/1/2015	Gr. Alpha	0.59 ± 0.06	1.77	0.53 - 3.01	Pass
MAAP-984	2/1/2015	Gr. Beta	0.95 ± 0.07	0.75	0.38 - 1.13	Pass
MAVE-972	2/1/2015	Cs-134	6.98 ± 0.13	7.32	5.12 - 9.52	Pass
MAVE-972	2/1/2015	Cs-137	9.73 ± 0.21	9.18	6.43 - 11.93	Pass
MAVE-972	2/1/2015	Co-57	0.01 ± 0.04	0.00	NA [c]	Pass
MAVE-972	2/1/2015	Co-60	3.89 ± 0.20	5.55	3.89 - 7.22	Pass
MAVE-972	2/1/2015	Mn-54	0.04 ± 0.07	0.00	NA [c]	Pass
MAVE-972	2/1/2015	Zn-65	0.09 ± 0.12	0.00	NA [c]	Pass
MASO-4903	8/1/2015	Ni-63	556 ± 18	682	477 - 887	Pass
MASO-4903 [g]	8/1/2015	Sr-90	231 ± 7	425	298 - 553	Fail
MASO-4903 [g]	8/1/2015	Sr-90	352 ± 10	425	298 - 553	Pass
MASO-4903 [h]	8/1/2015	Tc-99	411 ± 11	631	442 - 820	Fail
MASO-4903	8/1/2015	Cs-134	833 ± 10	1,010	707 - 1,313	Pass
MASO-4903	8/1/2015	Cs-137	808 ± 11	809.00	566 - 1,052	Pass
MASO-4903	8/1/2015	Co-57	1,052 ± 10	1,180	826 - 1,534	Pass
MASO-4903	8/1/2015	Co-60	2 ± 2	1.3	NA [e]	Pass
MASO-4903	8/1/2015	Mn-54	1,331 ± 13	1,340	938 - 1,742	Pass
MASO-4903	8/1/2015	Zn-65	686 ± 15	662	463 - 861	Pass

TABLE A-6. Department of Energy's Mixed Analyte Performance Evaluation Program (MAPEP).

			Concentration [a]			
Lab Code [b]	Date	Analysis	Laboratory result	Known Activity	Control Limits [c]	Acceptance
MAW-5007	8/1/2015	Cs-134	16.7 ± 0.4	23.1	16.2 - 30.0	Pass
MAW-5007	8/1/2015	Cs-137	-0.4 ± 0.1	0.0	NA [c]	Pass
MAW-5007	8/1/2015	Co-57	21.8 ± 0.4	20.8	14.6 - 27.0	Pass
MAW-5007	8/1/2015	Co-60	17.3 ± 0.3	17.1	12.0 - 22.2	Pass
MAW-5007	8/1/2015	H-3	227.5 ± 8.9	216.0	151.0 - 281.0	Pass
MAW-5007 [i]	8/1/2015	Fe-55	4.2 ± 14.1	13.1	9.2 - 17.0	Fail
MAW-5007	8/1/2015	Mn-54	16.6 ± 0.5	15.6	10.9 - 20.3	Pass
MAW-5007	8/1/2015	Ni-63	9.1 ± 2.6	8.6	6.0 - 11.1	Pass
MAW-5007	8/1/2015	Zn-65	15.5 ± 0.9	13.9	9.7 - 18.1	Pass
MAW-5007	8/1/2015	Tc-99	6.80 ± 0.60	7.19	5.03 - 9.35	Pass
MAW-5007	8/1/2015	Sr-90	4.80 ± 0.50	4.80	3.36 - 6.24	Pass
MAW-5007	8/1/2015	Gr. Alpha	0.41 ± 0.04	0.43	0.13 - 0.73	Pass
MAW-5007	8/1/2015	Gr. Beta	3.45 ± 0.07	3.52	1.76 - 5.28	Pass
MAW-5007	8/1/2015	I-129	1.42 ± 0.13	1.49	1.04 - 1.94	Pass
MAAP-4911	8/1/2015	Sr-89	3.55 ± 0.67	3.98	2.79 - 5.17	Pass
MAAP-4911	8/1/2015	Sr-90	0.94 ± 0.16	1.05	0.74 - 1.37	Pass
MAAP-4907	8/1/2015	Gr. Alpha	0.30 ± 0.04	0.90	0.27 - 1.53	Pass
MAAP-4907	8/1/2015	Gr. Beta	1.85 ± 0.09	1.56	0.78 - 2.34	Pass
MAVE-4901	8/1/2015	Cs-134	5.56 ± 0.16	5.80	4.06 - 7.54	Pass
MAVE-4901	8/1/2015	Cs-137	-0.02 ± 0.06	0.00	NA [c]	Pass
MAVE-4901	8/1/2015	Co-57	7.74 ± 0.18	6.62	4.63 - 8.61	Pass
MAVE-4901	8/1/2015	Co-60	4.84 ± 0.15	4.56	3.19 - 5.93	Pass
MAVE-4901	8/1/2015	Mn-54	8.25 ± 0.25	7.68	5.38 - 9.98	Pass
MAVE-4901	8/1/2015	Zn-65	5.78 ± 0.29	5.46	3.82 - 7.10	Pass

[a] Results are reported in units of Bq/kg (soil), Bq/L (water) or Bq/total sample (filters, vegetation).

[b] Laboratory codes as follows: MAW (water), MAAP (air filter), MASO (soil), MAVE (vegetation).

[c] MAPEP results are presented as the known values and expected laboratory precision (1 sigma, 1 determination) and control limits as defined by the MAPEP. A known value of "zero" indicates an analysis was included in the testing series as a "false positive". MAPEP does not provide control limits.

[d] Lab result was 27.84. Data entry error resulted in a non-acceptable result.

[e] Provided in the series for "sensitivity evaluation". MAPEP does not provide control limits.

[f] Lab result was 1.58. Data entry error resulted in a non-acceptable result.

[g] The incomplete separation of calcium from strontium caused a failed low result. The result of reanalysis acceptable.

[h] The complex sample matrix is interfering with yield calculations causing a failed low result. An investigation is in process to determine a more reliable yield determination.

[i] The known activity was below the routine laboratory detection limits for the available aliquot fraction.

TABLE A-7. Interlaboratory Comparison Crosscheck program, Environmental Resource Associates (ERA)[a].

Lab Code [b]	Date	Analysis	Concentration (pCi/L) [b] Laboratory Result [c]	ERA Result [d]	Control Limits	Acceptance
ERAP-1091	3/16/2015	Am-241	46.8 ± 2.2	49.8	30.7 - 67.4	Pass
ERAP-1091	3/16/2015	Co-60	85.1 ± 2.9	79.1	61.2 - 98.8	Pass
ERAP-1091	3/16/2015	Cs-134	825.6 ± 34.7	909.0	578.0 - 1,130.0	Pass
ERAP-1091	3/16/2015	Cs-137	1,312 ± 12	1,170	879 - 1,540	Pass
ERAP-1091	3/16/2015	Fe-55	760.6 ± 48.2	836.0	259.0 - 1630.0	Pass
ERAP-1091	3/16/2015	Mn-54	<2.7	<50	0.0 - 50.0	Pass
ERAP-1091	3/16/2015	Pu-238	51.0 ± 3.9	52.1	35.7 - 68.5	Pass
ERAP-1091	3/16/2015	Pu-239/240	38.3 ± 1.3	40.3	29.20 - 52.70	Pass
ERAP-1091	3/16/2015	Sr-90	95.3 ± 11.4	96.6	47.2 - 145.0	Pass
ERAP-1091	3/16/2015	U-233/234	29.0 ± 1.2	34.3	21.3 - 51.7	Pass
ERAP-1091	3/16/2015	U-238	31.0 ± 1.1	34.0	22.0 - 47.0	Pass
ERAP-1091	3/16/2015	Zn-65	1099.3 ± 146.5	986.0	706.0 - 1360.0	Pass
ERAP-1094	3/16/2015	Gr. Alpha	73.7 ± 0.7	62.2	20.8 - 96.6	Pass
ERAP-1094	3/16/2015	Gr. Beta	69.6 ± 0.8	58.4	36.9 - 85.1	Pass
ERSO-1098	3/16/2015	Am-241	1571.8 ± 209.6	1,500	878 - 1,950	Pass
ERSO-1098	3/16/2015	Ac-228	1198.8 ± 140.4	1,250	802 - 1,730	Pass
ERSO-1098	3/16/2015	Bi-212	1420.1 ± 455.7	1,780	474 - 2,620	Pass
ERSO-1098	3/16/2015	Bi-214	3466.9 ± 86.9	4,430	2,670 - 6,380	Pass
ERSO-1098	3/16/2015	Co-60	1779.8 ± 41.0	1,880	1,270 - 2,590	Pass
ERSO-1098	3/16/2015	Cs-134	5204.6 ± 64.5	6,390	4,180 - 7,680	Pass
ERSO-1098	3/16/2015	Cs-137	1417.1 ± 41.9	1,490	1,140 - 1,920	Pass
ERSO-1098	3/16/2015	K-40	10,597 ± 380	10,700	7,810 - 14,400	Pass
ERSO-1098	3/16/2015	Mn-54	<62.2	< 1000	0.0 - 1,000	Pass
ERSO-1098	3/16/2015	Pb-212	1,032 ± 41	1,230	806 - 1,710	Pass
ERSO-1098	3/16/2015	Pb-214	3,629 ± 93	4,530	2,640 - 6,760	Pass
ERSO-1098	3/16/2015	Pu-238	942.9 ± 128.8	998.0	600.0 - 1,380.0	Pass
ERSO-1098	3/16/2015	Pu-239/240	1,185 ± 140	1,210	791 - 1,670	Pass
ERSO-1098	3/16/2015	Sr-90	1,724 ± 125	1,940	740 - 3,060	Pass
ERSO-1098	3/16/2015	Th-234	3,666 ± 948	3,890	1,230 - 7,320	Pass
ERSO-1098	3/16/2015	U-233/234	3,474 ± 226	3,920	2,400 - 5,020	Pass
ERSO-1098	3/16/2015	U-238	3,620 ± 232	3,890	2,410 - 4,930	Pass
ERSO-1098	3/16/2015	Zn-65	7,362 ± 145	7,130	5,680 - 9,470	Pass
ERW-1095	3/16/2015	Gr. Alpha	93.4 ± 11.5	119.0	42.2 - 184.0	Pass
ERW-1095	3/16/2015	Gr. Beta	145.2 ± 4.8	158.0	90.5 - 234.0	Pass
ERW-1110	3/16/2015	H-3	10,573 ± 78	10,300	6,900 - 14,700	Pass
ERVE-1100	3/16/2015	Am-241	4,537 ± 266	4,340	2,650 - 5,770	Pass
ERVE-1100	3/16/2015	Cm-244	1,338 ± 146	1,360	666 - 2,120	Pass

TABLE A-7. Interlaboratory Comparison Crosscheck program, Environmental Resource Associates (ERA)[a].

Lab Code [b]	Date	Analysis	Concentration (pCi/L) [b] Laboratory Result [c]	ERA Result [d]	Control Limits	Acceptance
ERVE-1100 [e]	3/16/2015	Co-60	1,030 ± 29	1,540	1,060 - 2,150	Fail
ERVE-1100 [f]	3/16/2015	Co-60	1,684 ± 48	1,540	1,060 - 2,150	Pass
ERVE-1100 [e]	3/16/2015	Cs-134	1,615 ± 27	2,650	1,700 - 3,440	Fail
ERVE-1100 [f]	3/16/2015	Cs-134	2,554 ± 49	2,650	1,700 - 3,440	Pass
ERVE-1100 [e]	3/16/2015	Cs-137	1,248 ± 29	1,810	1,310 - 2,520	Fail
ERVE-1100 [f]	3/16/2015	Cs-137	2,078 ± 68	1,810	1,310 - 2,520	Pass
ERVE-1100 [e]	3/16/2015	K-40	22,037 ± 463	30,900	22,300 - 43,400	Fail
ERVE-1100 [f]	3/16/2015	K-40	34,895 ± 764	30,900	22,300 - 43,400	Pass
ERVE-1100 [e]	3/16/2015	Mn-54	<13.8	<300	0.0 - 300.0	Pass
ERVE-1100 [f]	3/16/2015	Mn-54	<24.4	<300	0.0 - 300.0	Pass
ERVE-1100	3/16/2015	Pu-238	3,232 ± 232	3,680	2,190 - 5,040	Pass
ERVE-1100	3/16/2015	Pu-239/240	3,606 ± 240	4,180	2,570 - 5,760	Pass
ERVE-1100	3/16/2015	Sr-90	6,023 ± 326	6,590	3,760 - 8,740	Pass
ERVE-1100	3/16/2015	U-233/234	2,653 ± 153	3,150	2,070 - 4,050	Pass
ERVE-1100	3/16/2015	U-238	2,717 ± 163	3,130	2,090 - 3,980	Pass
ERVE-1100 [e]	3/16/2015	Zn-65	<94.6	1,090	786 - 1,530	Fail
ERVE-1100 [f]	3/16/2015	Zn-65	1,306 ± 75	1,090	786 - 1,530	Pass
ERW-1103	3/16/2015	Am-241	47.1 ± 4.0	46.0	31.0 - 61.7	Pass
ERW-1103	3/16/2015	Co-60	1,217 ± 17	1,250	1,090 - 1,460	Pass
ERW-1103	3/16/2015	Cs-134	1,121 ± 18	1,260	925 - 1,450	Pass
ERW-1103	3/16/2015	Cs-137	1,332 ± 31	1,360	1,150 - 1,630	Pass
ERW-1103	3/16/2015	Mn-54	<3.7	<100	0.00 - 100.00	Pass
ERW-1103	3/16/2015	Pu-238	54.5 ± 1.6	72.4	53.6 - 90.1	Pass
ERW-1103 [g]	3/16/2015	Pu-239/240	140.2 ± 7.8	184.0	143.0 - 232.0	Fail
ERW-3742 [h]	9/27/2012	Pu-239/240	89.3 ± 4.9	97.7	66.6 - 108.0	Pass
ERW-1103	3/16/2015	U-233/234	56.5 ± 6.4	61.8	46.4 - 79.7	Pass
ERW-1103	3/16/2015	U-238	58.4 ± 5.8	61.3	46.7 - 75.2	Pass
ERW-1103	3/16/2015	Zn-65	1,191 ± 136	1,180	984 - 1,490	Pass
ERW-1103	3/16/2015	Fe-55	1,149 ± 144	1,070	638 - 1,450	Pass
ERW-1103	3/16/2015	Sr-90	860.0 ± 37.0	912.0	594.0 - 1,210.0	Pass

[a] Results obtained by Environmental, Inc., Midwest Laboratory as a participant in the crosscheck program for proficiency testing administered by Environmental Resources Associates, serving as a replacement for studies conducted previously by the Environmental Measurements Laboratory Quality Assessment Program (EML).

[b] Laboratory codes as follows: ERW (water), ERAP (air filter), ERSO (soil), ERVE (vegetation). Results are reported in units of pCi/L, except for air filters (pCi/Filter), vegetation and soil (pCi/kg).

[c] Unless otherwise indicated, the laboratory result is given as the mean ± standard deviation for three determinations.

[d] Results are presented as the known values, expected laboratory precision (1 sigma, 1 determination) and control limits as provided by ERA. A known value of "zero" indicates an analysis was included in the testing series as a "false positive". Control limits are not provided.

[e] Technician error weighing sample caused submitted gamma results to be understated and outside the control limits.(low)

[f] The result of reanalysis with the correct sample volume (Compare to original result, footnoted "e" above).

[g] The results of reanalysis were outside the control limits (low).

[h] Sample ERW-3742 was ordered from ERA to determine why ERW-1103 results for Pu-239 were outside the acceptable range. The results for ERW-3742 were acceptable. No reason for the unacceptable results for ERW-3742 was determined.

Appendix B

Summary Tables in the format of NRC Radiological Assessment Branch Technical Position
Revision 1, November 1979

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility: Wolf Creek Generating Station Docket No.: 50-482

Location of Facility: Coffey County, Kansas Reporting Period: Annual 2015

Medium of Pathway Sampled (Unit of Measurement)	Analysis and Total Number of Analysis Performed	ODCM Lower Limit of Detection (LLD)	All Indicator Locations ** Mean (f) ** Range	Indicator Location with Highest Annual Mean Name Distance and Direction	 ** Mean (f) ** Range	Control Locations ** Mean (f) ** Range	Number of Nonroutine Reported Measurements **
Air Particulate (pCi/m^3)	Gross Beta (318)	0.01	0.026 (265/265) (0.006 - 0.059)	32 3.1 miles WNW	0.027 (53/53) (0.008 - 0.049)	Station 53 0.025 (53/53) (0.006 - 0.047)	0
	Gamma (24) Be-7	-	0.079 (20/20) (0.051 - 0.098)	49 0.8 miles NNE	0.083 (4/4) (0.070 - 0.093)	0.076 (4/4) (0.060 - 0.086)	0
Air Radioiodine (pCi/m^3)	I-131 (318)	0.07	- (0/265)	N/A	N/A	Station 53 - (0/53)	0
Direct Radiation Dosimeters (mR per std. 90-day Qtr.)	Gamma Dose (168)	-	18.4 (160/160) (10.7 – 26.2)	4 4.0 miles NNE	22.1 (4/4) (17.2 – 26.2)	Stations 39 & 53 19.2 (8/8) (15.5 – 23.3)	0
Surface Water (pCi/l)	Gamma (24)		- (0/12)	N/A	N/A	JRR - (0/12)	0
	Tritium (24)	3,000	10,695 (12/12) (8,214–13,376)	SP 3.2 miles SSE	10,695 (12/12) (8,214–13,376))	- (0/12)	0
	Fe-55 (8)	-	- (0/4)	N/A	N/A	- (0/4)	0
Ground Water (pCi/l)	I-131 (32)	1	- (0/28)	N/A	N/A	B-12 - (0/4)	0
	Gamma (32)		- (0/28)	N/A	N/A	- (0/4)	0
	Tritium (32)	2,000	- (0/28)	N/A	N/A	- (0/4)	0

** Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parentheses (f)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY
Name of Facility: Wolf Creek Generating Station Docket No.: 50-482
Location of Facility: Coffey County, Kansas Reporting Period: Annual 2015

Medium of Pathway Sampled (Unit of Measurement)	Analysis and Total Number of Analysis Performed	ODCM Lower Limit of Detection (LLD)	All Indicator Locations ** Mean (f) ** Range	Indicator Location with Highest Annual Mean Name Distance and Direction	** Mean (f) ** Range	Control Locations ** Mean (f) ** Range	Number of Nonroutine Reported Measurements **
Drinking Water (pCi/l)	I-131 (24)	1	- (0/12)	N/A	N/A	BW-15 - (0/12)	0
	Gross Beta (24)	4	2.7 (12/12) (1.6 – 3.6)	IO-DW 26.1 miles SSE	2.7 (12/12) (1.6 – 3.6)	2.7 (12/12) (1.7 – 3.6)	0
	Gamma (24)		- (0/12)	N/A	N/A	- (0/12)	0
	Tritium (8)	2,000	- (0/4)	N/A	N/A	- (0/4)	0
Shoreline Sediment (pCi/kg dry)	Gamma (5)					JRR	
	K-40	-	7,786 (3/3) (5,556 – 11,775)	EEA 3.0 miles NNW	11,775 (1/1)	10,576 (2/2) (10,215 – 10,937)	0
	Cs-137	-	40 (1/3)	EEA 3.0 miles NNW	40 (1/1)	73 (2/2) (42 – 105)	0
Fish (pCi/kg wet)	Gamma (22)					JRR	
	K-40	-	3,477 (13/13) (3,205 – 3,860)	CCL 0.6 miles E to NNW	3,477 (13/13) (3,205 – 3,860)	3,626 (9/9) (3,329 – 4,240)	0
	Tritium (22)	-	7,519 (13/13) (5,848 – 9,142)	CCL 0.6 miles E to NNW	7,519 (13/13) (5,848 – 9,142)	- (0/9)	0

** Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parentheses (f)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY
Name of Facility: Wolf Creek Generating Station Docket No.: 50-482
Location of Facility: Coffey County, Kansas Reporting Period: Annual 2015

Medium of Pathway Sampled (Unit of Measurement)	Analysis and Total Number of Analysis Performed	ODCM Lower Limit of Detection (LLD)	All Indicator Locations ** Mean (f) ** Range	Indicator Location with Highest Annual Mean Name Distance and Direction	 ** Mean (f) ** Range	Control Locations ** Mean (f) ** Range	Number of Nonroutine Reported Measurements **
Food and Garden (pCi/kg wet)	Gamma (28)					D-2	
	Be-7	-	700 (19/20) (308 – 1,688)	A-3 2.6 miles N	1,018 (3/3) (623 – 1,688)	686 (7/8) (511 – 930)	0
	K-40	-	5,909 (20/20) (3,957 – 8,986)	H-2 3.0 miles SSE	6,613 (7/7) (4,856 – 8,986)	6,220 (8/8) (4,513 – 7,645)	0
Crops (pCi/kg wet)	Gamma (3)					NR-U1	
	K-40	-	3,104 (1/1)	NR-D1 8.9 miles S	3,104 (1/1)	8,794 (2/2) (2,941 – 14,647)	0
Bottom Sediment (pCi/kg dry)	Gamma (19)					JRR	
	K-40	-	11,350 (17/17) (6,627 – 14,026)	DC 0.8 miles WNW	12,779 (3/3) (11,349-14,026)	17,554 (2/2) (16,612 – 18,495)	0
	Cs-137	-	75 (10/17) (43 – 109)	DC 0.8 miles WNW	100 (2/3) (91 – 109)	115 (2/2) (110 – 120)	0
	Fe-55 (16)	-	- (0/15)	N/A	N/A	- (0/1)	0
	HTD (2)						
	Sr-90	-	37 (1/2)	UHS 0.6 miles E	37 (1/2)	N/A	0

** Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parentheses (f)

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility: Wolf Creek Generating Station Docket No.: 50-482

Location of Facility: Coffey County, Kansas Reporting Period: Annual 2015

Medium of Pathway Sampled (Unit of Measurement)	Analysis and Total Number of Analysis Performed	ODCM Lower Limit of Detection (LLD)	All Indicator Locations ** Mean (f) ** Range	Indicator Location with Highest Annual Mean Name Distance and Direction	** Mean (f) ** Range	Control Locations ** Mean (f) ** Range	Number of Nonroutine Reported Measurements **
Aquatic Vegetation (pCi/kg wet)	Gamma (3)					No Control	
	Be-7	-	487 (2/3) (282 – 692)	EEA 3.0 miles NNW	692 (1/1)		0
	K-40	-	3,835 (3/3) (3,314 – 4,250)	DC 0.8 miles WNW	4,250 (1/1)		0
Terrestrial Vegetation (pCi/kg wet)	Gamma (2)					No Control	
	Be-7	-	1,596 (2/2) (1,065 – 2,128)	EEA 3.0 miles NNW	2,128 (1/1)		0
	K-40	-	5,369 (2/2) (5,026 – 5,713)	EEA 3.0 miles NNW	5,713 (1/1)		0
Soil (pCi/kg dry)	Gamma (3)					No Control	
	K-40	-	10,669 (3/3) (9,711 – 11,234)	MUDS 1.5 miles WNW	11,148 (2/2) (11,061–11,234)		0
	Cs-137	-	193 (3/3) (118 – 245)	EEA 3.0 miles NNW	245 (1/1)		0
Deer (pCi/kg wet)	Gamma (1)					No Control	
	K-40	-	2,808 (1/1)	Q1.0 1.0 miles NW	2,808 (1/1)		0
	Tritium (1)	-	2,305 (1/1)	Q1.0 1.0 miles NW	2,305 (1/1)		0

** Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parentheses (f)

APPENDIX C

INDIVIDUAL SAMPLE RESULTS

Air Particulate Filters and Radioiodine Canisters

Location: 002

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
29-Dec-14	05-Jan-15	323	0.030 +/- 0.004	< 0.010	
05-Jan-15	12-Jan-15	310	0.026 +/- 0.004	< 0.010	
12-Jan-15	19-Jan-15	279	0.026 +/- 0.004	< 0.008	
19-Jan-15	27-Jan-15	348	0.016 +/- 0.003	< 0.011	
27-Jan-15	04-Feb-15	349	0.022 +/- 0.004	< 0.010	
04-Feb-15	11-Feb-15	306	0.034 +/- 0.004	< 0.016	
11-Feb-15	18-Feb-15	299	0.029 +/- 0.004	< 0.011	
18-Feb-15	25-Feb-15	301	0.034 +/- 0.004	< 0.021	
25-Feb-15	04-Mar-15	324	0.022 +/- 0.004	< 0.013	
04-Mar-15	11-Mar-15	275	0.030 +/- 0.005	< 0.014	
11-Mar-15	18-Mar-15	304	0.028 +/- 0.005	< 0.012	
11-Mar-15	18-Mar-15	304	0.030 +/- 0.005		Duplicate
18-Mar-15	25-Mar-15	201	0.025 +/- 0.006	< 0.031	
25-Mar-15	01-Apr-15	301	0.015 +/- 0.004	< 0.011	
01-Apr-15	08-Apr-15	296	0.024 +/- 0.005	< 0.007	
08-Apr-15	15-Apr-15	297	0.022 +/- 0.005	< 0.012	
15-Apr-15	22-Apr-15	299	0.016 +/- 0.004	< 0.014	
22-Apr-15	29-Apr-15	301	0.017 +/- 0.003	< 0.012	
29-Apr-15	05-May-15	244	0.026 +/- 0.004	< 0.011	
05-May-15	11-May-15	261	0.006 +/- 0.005	< 0.012	
05-May-15	11-May-15	261	0.010 +/- 0.005		Duplicate
11-May-15	18-May-15	294	0.020 +/- 0.004	< 0.008	
18-May-15	27-May-15	373	0.013 +/- 0.003	< 0.017	
27-May-15	03-Jun-15	312	0.017 +/- 0.004	< 0.012	
03-Jun-15	08-Jun-15	203	0.027 +/- 0.006	< 0.018	
08-Jun-15	15-Jun-15	295	0.021 +/- 0.004	< 0.009	
15-Jun-15	22-Jun-15	298	0.019 +/- 0.004	< 0.009	
22-Jun-15	29-Jun-15	299	0.019 +/- 0.004	< 0.012	
29-Jun-15	06-Jul-15	303	0.022 +/- 0.005	< 0.007	
06-Jul-15	13-Jul-15	302	0.026 +/- 0.004	< 0.012	
13-Jul-15	21-Jul-15	343	0.022 +/- 0.004	< 0.016	
13-Jul-15	21-Jul-15	343	0.027 +/- 0.004		Duplicate
21-Jul-15	27-Jul-15	251	0.014 +/- 0.006	< 0.007	
27-Jul-15	03-Aug-15	302	0.029 +/- 0.005	< 0.016	
03-Aug-15	10-Aug-15	299	0.038 +/- 0.005	< 0.010	
03-Aug-15	10-Aug-15	299	0.039 +/- 0.005		Duplicate
10-Aug-15	17-Aug-15	304	0.030 +/- 0.005	< 0.015	
17-Aug-15	24-Aug-15	302	0.024 +/- 0.005	< 0.014	
24-Aug-15	31-Aug-15	305	0.024 +/- 0.005	< 0.007	
31-Aug-15	08-Sep-15	333	0.027 +/- 0.004	< 0.007	
31-Aug-15	08-Sep-15	333	0.028 +/- 0.004		Duplicate

Air Particulate Filters and Radioiodine Canisters

Location: 002

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
08-Sep-15	14-Sep-15	258	0.021 +/- 0.005	< 0.011	
08-Sep-15	14-Sep-15	258	0.021 +/- 0.005		Duplicate
14-Sep-15	22-Sep-15	341	0.025 +/- 0.004	< 0.012	
22-Sep-15	29-Sep-15	298	0.046 +/- 0.005	< 0.013	
29-Sep-15	05-Oct-15	258	0.022 +/- 0.005	< 0.013	
05-Oct-15	13-Oct-15	329	0.032 +/- 0.005	< 0.006	
13-Oct-15	19-Oct-15	260	0.027 +/- 0.005	< 0.014	
19-Oct-15	26-Oct-15	291	0.030 +/- 0.005	< 0.019	
26-Oct-15	02-Nov-15	295	0.025 +/- 0.005	< 0.017	
02-Nov-15	10-Nov-15	343	0.028 +/- 0.004	< 0.015	
10-Nov-15	17-Nov-15	301	0.022 +/- 0.005	< 0.014	
17-Nov-15	24-Nov-15	310	0.016 +/- 0.004	< 0.013	
17-Nov-15	24-Nov-15	310	0.017 +/- 0.005		Duplicate
24-Nov-15	30-Nov-15	262	0.019 +/- 0.005	< 0.018	
30-Nov-15	07-Dec-15	312	0.042 +/- 0.005	< 0.010	
07-Dec-15	14-Dec-15	296	0.034 +/- 0.005	< 0.013	
14-Dec-15	21-Dec-15	312	0.022 +/- 0.005	< 0.013	
21-Dec-15	29-Dec-15	340	0.038 +/- 0.005	< 0.015	
29-Dec-15	04-Jan-16	257	0.047 +/- 0.006	< 0.012	

Air Particulate Filters and Radioiodine Canisters

Location: 018

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
29-Dec-14	05-Jan-15	333	0.032 +/- 0.004	< 0.010	
05-Jan-15	12-Jan-15	315	0.025 +/- 0.004	< 0.010	
12-Jan-15	19-Jan-15	287	0.028 +/- 0.004	< 0.007	
19-Jan-15	27-Jan-15	350	0.015 +/- 0.003	< 0.011	
27-Jan-15	04-Feb-15	348	0.024 +/- 0.004	< 0.010	
04-Feb-15	11-Feb-15	310	0.034 +/- 0.004	< 0.016	
11-Feb-15	18-Feb-15	307	0.029 +/- 0.004	< 0.011	
18-Feb-15	25-Feb-15	307	0.036 +/- 0.004	< 0.020	
25-Feb-15	04-Mar-15	320	0.029 +/- 0.005	< 0.013	
04-Mar-15	11-Mar-15	284	0.034 +/- 0.005	< 0.014	
11-Mar-15	18-Mar-15	301	0.029 +/- 0.005	< 0.013	
18-Mar-15	25-Mar-15	301	0.027 +/- 0.005	< 0.021	
25-Mar-15	01-Apr-15	301	0.015 +/- 0.004	< 0.011	
01-Apr-15	08-Apr-15	306	0.021 +/- 0.004	< 0.006	
08-Apr-15	15-Apr-15	300	0.024 +/- 0.005	< 0.012	
15-Apr-15	22-Apr-15	304	0.014 +/- 0.004	< 0.014	
15-Apr-15	22-Apr-15	304	0.013 +/- 0.004		Duplicate
22-Apr-15	29-Apr-15	303	0.014 +/- 0.003	< 0.012	
22-Apr-15	29-Apr-15	303	0.014 +/- 0.003		Duplicate
29-Apr-15	05-May-15	253	0.026 +/- 0.004	< 0.011	
29-Apr-15	05-May-15	253	0.025 +/- 0.004		Duplicate
05-May-15	11-May-15	269	0.009 +/- 0.005	< 0.011	
11-May-15	18-May-15	292	0.021 +/- 0.004	< 0.008	
18-May-15	27-May-15	384	0.013 +/- 0.003	< 0.017	
27-May-15	03-Jun-15	313	0.014 +/- 0.004	< 0.012	
03-Jun-15	08-Jun-15	209	0.027 +/- 0.006	< 0.017	
08-Jun-15	15-Jun-15	292	0.022 +/- 0.004	< 0.009	
15-Jun-15	22-Jun-15	298	0.021 +/- 0.004	< 0.009	
22-Jun-15	29-Jun-15	296	0.022 +/- 0.004	< 0.012	
29-Jun-15	06-Jul-15	298	0.023 +/- 0.005	< 0.007	
06-Jul-15	13-Jul-15	302	0.026 +/- 0.004	< 0.012	
13-Jul-15	21-Jul-15	334	0.027 +/- 0.004	< 0.017	
21-Jul-15	27-Jul-15	255	0.013 +/- 0.005	< 0.007	
27-Jul-15	03-Aug-15	297	0.027 +/- 0.005	< 0.016	
03-Aug-15	10-Aug-15	297	0.030 +/- 0.005	< 0.010	
10-Aug-15	17-Aug-15	302	0.028 +/- 0.005	< 0.015	
17-Aug-15	24-Aug-15	298	0.022 +/- 0.005	< 0.014	
24-Aug-15	31-Aug-15	303	0.028 +/- 0.005	< 0.007	
31-Aug-15	08-Sep-15	337	0.029 +/- 0.004	< 0.007	
08-Sep-15	14-Sep-15	261	0.022 +/- 0.005	< 0.011	
14-Sep-15	22-Sep-15	338	0.022 +/- 0.004	< 0.012	

Air Particulate Filters and Radioiodine Canisters

Location: 018

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
22-Sep-15	29-Sep-15	300	0.059 +/- 0.006	< 0.013	
29-Sep-15	05-Oct-15	256	0.020 +/- 0.005	< 0.013	
05-Oct-15	13-Oct-15	335	0.037 +/- 0.005	< 0.006	
13-Oct-15	19-Oct-15	259	0.024 +/- 0.005	< 0.014	
19-Oct-15	26-Oct-15	295	0.029 +/- 0.005	< 0.019	
26-Oct-15	02-Nov-15	273	0.027 +/- 0.005	< 0.018	
02-Nov-15	10-Nov-15	348	0.025 +/- 0.004	< 0.015	
10-Nov-15	17-Nov-15	299	0.021 +/- 0.005	< 0.014	
17-Nov-15	24-Nov-15	306	0.018 +/- 0.005	< 0.013	
24-Nov-15	30-Nov-15	261	0.018 +/- 0.005	< 0.018	
30-Nov-15	07-Dec-15	304	0.044 +/- 0.005	< 0.010	
07-Dec-15	14-Dec-15	293	0.033 +/- 0.005	< 0.013	
14-Dec-15	21-Dec-15	307	0.027 +/- 0.005	< 0.014	
14-Dec-15	21-Dec-15	307	0.029 +/- 0.005		Duplicate
21-Dec-15	29-Dec-15	339	0.037 +/- 0.005	< 0.015	
29-Dec-15	04-Jan-16	261	0.042 +/- 0.006	< 0.012	

Air Particulate Filters and Radioiodine Canisters

Location: 032

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
29-Dec-14	05-Jan-15	306	0.032 +/- 0.004	< 0.011	
05-Jan-15	12-Jan-15	308	0.028 +/- 0.004	< 0.010	
12-Jan-15	19-Jan-15	286	0.031 +/- 0.005	< 0.007	
19-Jan-15	27-Jan-15	347	0.017 +/- 0.003	< 0.011	
27-Jan-15	04-Feb-15	342	0.021 +/- 0.004	< 0.010	
04-Feb-15	11-Feb-15	311	0.034 +/- 0.004	< 0.016	
11-Feb-15	18-Feb-15	296	0.028 +/- 0.004	< 0.011	
18-Feb-15	25-Feb-15	307	0.032 +/- 0.004	< 0.020	
25-Feb-15	04-Mar-15	314	0.030 +/- 0.005	< 0.013	
04-Mar-15	11-Mar-15	285	0.033 +/- 0.005	< 0.014	
11-Mar-15	18-Mar-15	302	0.029 +/- 0.005	< 0.013	
18-Mar-15	25-Mar-15	296	0.024 +/- 0.005	< 0.021	
18-Mar-15	25-Mar-15	296	0.027 +/- 0.005		Duplicate
25-Mar-15	01-Apr-15	302	0.017 +/- 0.004	< 0.011	
01-Apr-15	08-Apr-15	301	0.025 +/- 0.005	< 0.006	
08-Apr-15	15-Apr-15	302	0.024 +/- 0.005	< 0.012	
15-Apr-15	22-Apr-15	304	0.015 +/- 0.004	< 0.014	
22-Apr-15	29-Apr-15	303	0.014 +/- 0.003	< 0.012	
29-Apr-15	05-May-15	246	0.025 +/- 0.004	< 0.011	
05-May-15	11-May-15	263	0.008 +/- 0.005	< 0.012	
11-May-15	18-May-15	294	0.020 +/- 0.004	< 0.008	
18-May-15	27-May-15	382	0.014 +/- 0.003	< 0.017	
18-May-15	27-May-15	382	0.010 +/- 0.003		Duplicate
27-May-15	03-Jun-15	311	0.020 +/- 0.004	< 0.012	
03-Jun-15	08-Jun-15	207	0.028 +/- 0.006	< 0.017	
08-Jun-15	15-Jun-15	293	0.022 +/- 0.004	< 0.009	
15-Jun-15	22-Jun-15	309	0.020 +/- 0.004	< 0.009	
22-Jun-15	29-Jun-15	294	0.019 +/- 0.004	< 0.012	
29-Jun-15	06-Jul-15	301	0.027 +/- 0.005	< 0.007	
06-Jul-15	13-Jul-15	305	0.020 +/- 0.004	< 0.012	
13-Jul-15	21-Jul-15	345	0.028 +/- 0.004	< 0.016	
21-Jul-15	27-Jul-15	258	0.016 +/- 0.006	< 0.006	
27-Jul-15	03-Aug-15	295	0.028 +/- 0.005	< 0.016	
03-Aug-15	10-Aug-15	303	0.037 +/- 0.005	< 0.010	
10-Aug-15	17-Aug-15	308	0.028 +/- 0.005	< 0.015	
17-Aug-15	24-Aug-15	300	0.024 +/- 0.005	< 0.014	
24-Aug-15	31-Aug-15	336	0.034 +/- 0.005	< 0.006	
31-Aug-15	08-Sep-15	336	0.032 +/- 0.005	< 0.007	
08-Sep-15	14-Sep-15	257	0.025 +/- 0.005	< 0.011	
14-Sep-15	22-Sep-15	98	0.041 +/- 0.012	< 0.041	
22-Sep-15	29-Sep-15	307	0.049 +/- 0.005	< 0.013	

Air Particulate Filters and Radioiodine Canisters

Location: 032

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
29-Sep-15	05-Oct-15	257	0.023 +/- 0.005	< 0.013	
05-Oct-15	13-Oct-15	334	0.039 +/- 0.005	< 0.006	
13-Oct-15	19-Oct-15	261	0.025 +/- 0.005	< 0.014	
19-Oct-15	26-Oct-15	294	0.031 +/- 0.005	< 0.019	
26-Oct-15	02-Nov-15	301	0.027 +/- 0.005	< 0.016	
02-Nov-15	10-Nov-15	344	0.035 +/- 0.005	< 0.015	
10-Nov-15	17-Nov-15	303	0.027 +/- 0.005	< 0.014	
17-Nov-15	24-Nov-15	310	0.021 +/- 0.005	< 0.013	
24-Nov-15	30-Nov-15	257	0.019 +/- 0.005	< 0.018	
30-Nov-15	07-Dec-15	309	0.044 +/- 0.005	< 0.010	
07-Dec-15	14-Dec-15	293	0.039 +/- 0.005	< 0.013	
14-Dec-15	21-Dec-15	310	0.030 +/- 0.005	< 0.013	
21-Dec-15	29-Dec-15	330	0.041 +/- 0.005	< 0.015	
29-Dec-15	04-Jan-16	261	0.044 +/- 0.006	< 0.012	

Air Particulate Filters and Radioiodine Canisters

Location: 037

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
29-Dec-14	05-Jan-15	312	0.029 +/- 0.004	< 0.010	
05-Jan-15	12-Jan-15	308	0.025 +/- 0.004	< 0.010	
12-Jan-15	19-Jan-15	287	0.027 +/- 0.004	< 0.007	
19-Jan-15	27-Jan-15	354	0.016 +/- 0.003	< 0.010	
27-Jan-15	04-Feb-15	345	0.018 +/- 0.003	< 0.010	
04-Feb-15	11-Feb-15	308	0.035 +/- 0.004	< 0.016	
11-Feb-15	18-Feb-15	299	0.025 +/- 0.004	< 0.011	
18-Feb-15	25-Feb-15	305	0.034 +/- 0.004	< 0.020	
25-Feb-15	04-Mar-15	317	0.028 +/- 0.005	< 0.013	
04-Mar-15	11-Mar-15	284	0.032 +/- 0.005	< 0.014	
11-Mar-15	18-Mar-15	307	0.030 +/- 0.005	< 0.012	
18-Mar-15	25-Mar-15	297	0.033 +/- 0.005	< 0.021	
25-Mar-15	01-Apr-15	304	0.025 +/- 0.005	< 0.011	
01-Apr-15	08-Apr-15	303	0.021 +/- 0.004	< 0.006	
08-Apr-15	15-Apr-15	303	0.021 +/- 0.004	< 0.012	
08-Apr-15	15-Apr-15	303	0.023 +/- 0.005		Duplicate
15-Apr-15	22-Apr-15	307	0.012 +/- 0.004	< 0.014	
22-Apr-15	29-Apr-15	305	0.013 +/- 0.003	< 0.011	
29-Apr-15	05-May-15	248	0.020 +/- 0.004	< 0.011	
05-May-15	11-May-15	264	0.010 +/- 0.005	< 0.011	
11-May-15	18-May-15	298	0.017 +/- 0.004	< 0.008	
18-May-15	27-May-15	386	0.014 +/- 0.003	< 0.017	
27-May-15	03-Jun-15	315	0.017 +/- 0.004	< 0.012	
27-May-15	03-Jun-15	315	0.017 +/- 0.004		Duplicate
03-Jun-15	08-Jun-15	204	0.027 +/- 0.006	< 0.017	
08-Jun-15	15-Jun-15	303	0.022 +/- 0.004	< 0.008	
08-Jun-15	15-Jun-15	303	0.021 +/- 0.004		Duplicate
15-Jun-15	22-Jun-15	304	0.021 +/- 0.004	< 0.009	
22-Jun-15	29-Jun-15	300	0.020 +/- 0.004	< 0.012	
29-Jun-15	06-Jul-15	303	0.022 +/- 0.005	< 0.007	
06-Jul-15	13-Jul-15	305	0.027 +/- 0.004	< 0.012	
13-Jul-15	21-Jul-15	345	0.025 +/- 0.004	< 0.016	
21-Jul-15	27-Jul-15	251	0.018 +/- 0.006	< 0.007	
27-Jul-15	03-Aug-15	302	0.032 +/- 0.005	< 0.016	
03-Aug-15	10-Aug-15	304	0.037 +/- 0.005	< 0.010	
10-Aug-15	17-Aug-15	310	0.028 +/- 0.005	< 0.015	
17-Aug-15	24-Aug-15	300	0.022 +/- 0.005	< 0.014	
24-Aug-15	31-Aug-15	309	0.032 +/- 0.005	< 0.007	
24-Aug-15	31-Aug-15	309	0.031 +/- 0.005		Duplicate
31-Aug-15	08-Sep-15	337	0.025 +/- 0.004	< 0.007	
08-Sep-15	14-Sep-15	263	0.021 +/- 0.005	< 0.011	

Air Particulate Filters and Radioiodine Canisters

Location: 037

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
14-Sep-15	22-Sep-15	342	0.025 +/- 0.004	< 0.012	
22-Sep-15	29-Sep-15	308	0.044 +/- 0.005	< 0.013	
29-Sep-15	05-Oct-15	257	0.022 +/- 0.005	< 0.013	
05-Oct-15	13-Oct-15	338	0.037 +/- 0.005	< 0.006	
13-Oct-15	19-Oct-15	261	0.024 +/- 0.005	< 0.014	
19-Oct-15	26-Oct-15	294	0.031 +/- 0.005	< 0.019	
26-Oct-15	02-Nov-15	303	0.017 +/- 0.005	< 0.016	
02-Nov-15	10-Nov-15	347	0.021 +/- 0.004	< 0.015	
10-Nov-15	17-Nov-15	295	0.019 +/- 0.005	< 0.014	
17-Nov-15	24-Nov-15	311	0.012 +/- 0.004	< 0.013	
24-Nov-15	30-Nov-15	258	0.013 +/- 0.005	< 0.018	
30-Nov-15	07-Dec-15	297	0.044 +/- 0.005	< 0.011	
07-Dec-15	14-Dec-15	297	0.035 +/- 0.005	< 0.013	
14-Dec-15	21-Dec-15	312	0.028 +/- 0.005	< 0.013	
21-Dec-15	29-Dec-15	341	0.042 +/- 0.005	< 0.015	
21-Dec-15	29-Dec-15	341	0.039 +/- 0.005		Duplicate
29-Dec-15	04-Jan-16	270	0.047 +/- 0.006	< 0.012	

Air Particulate Filters and Radioiodine Canisters

Location: 049

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
29-Dec-14	05-Jan-15	316	0.033 +/- 0.004	< 0.010	
05-Jan-15	12-Jan-15	310	0.023 +/- 0.004	< 0.010	
12-Jan-15	19-Jan-15	287	0.028 +/- 0.004	< 0.007	
19-Jan-15	27-Jan-15	352	0.017 +/- 0.003	< 0.010	
27-Jan-15	04-Feb-15	348	0.018 +/- 0.003	< 0.010	
04-Feb-15	11-Feb-15	307	0.032 +/- 0.004	< 0.016	
11-Feb-15	18-Feb-15	298	0.027 +/- 0.004	< 0.011	
11-Feb-15	18-Feb-15	298	0.028 +/- 0.004		Duplicate
18-Feb-15	25-Feb-15	308	0.031 +/- 0.004	< 0.020	
25-Feb-15	04-Mar-15	314	0.027 +/- 0.005	< 0.013	
04-Mar-15	11-Mar-15	292	0.029 +/- 0.005	< 0.014	
11-Mar-15	18-Mar-15	305	0.029 +/- 0.005	< 0.012	
18-Mar-15	25-Mar-15	301	0.028 +/- 0.005	< 0.021	
25-Mar-15	01-Apr-15	304	0.016 +/- 0.004	< 0.011	
01-Apr-15	08-Apr-15	301	0.022 +/- 0.004	< 0.006	
08-Apr-15	15-Apr-15	301	0.024 +/- 0.005	< 0.012	
15-Apr-15	22-Apr-15	302	0.015 +/- 0.004	< 0.014	
22-Apr-15	29-Apr-15	302	0.017 +/- 0.003	< 0.012	
29-Apr-15	05-May-15	251	0.024 +/- 0.004	< 0.011	
05-May-15	11-May-15	264	0.011 +/- 0.005	< 0.011	
11-May-15	18-May-15	296	0.021 +/- 0.004	< 0.008	
18-May-15	27-May-15	387	0.015 +/- 0.003	< 0.017	
27-May-15	03-Jun-15	315	0.018 +/- 0.004	< 0.012	
03-Jun-15	08-Jun-15	205	0.028 +/- 0.006	< 0.017	
08-Jun-15	15-Jun-15	331	0.024 +/- 0.004	< 0.008	
15-Jun-15	22-Jun-15	310	0.023 +/- 0.004	< 0.009	
15-Jun-15	22-Jun-15	310	0.018 +/- 0.004		Duplicate
22-Jun-15	29-Jun-15	300	0.023 +/- 0.004	< 0.012	
22-Jun-15	29-Jun-15	300	0.023 +/- 0.004		Duplicate
29-Jun-15	06-Jul-15	302	0.024 +/- 0.005	< 0.007	
06-Jul-15	13-Jul-15	304	0.027 +/- 0.004	< 0.012	
13-Jul-15	21-Jul-15	344	0.028 +/- 0.004	< 0.016	
21-Jul-15	27-Jul-15	257	0.020 +/- 0.006	< 0.006	
27-Jul-15	03-Aug-15	302	0.028 +/- 0.005	< 0.016	
03-Aug-15	10-Aug-15	303	0.035 +/- 0.005	< 0.010	
10-Aug-15	17-Aug-15	307	0.030 +/- 0.005	< 0.015	
10-Aug-15	17-Aug-15	307	0.030 +/- 0.005		Duplicate
17-Aug-15	24-Aug-15	300	0.023 +/- 0.005	< 0.014	
24-Aug-15	31-Aug-15	303	0.034 +/- 0.005	< 0.007	
31-Aug-15	08-Sep-15	340	0.031 +/- 0.005	< 0.007	
08-Sep-15	14-Sep-15	259	0.023 +/- 0.005	< 0.011	

Air Particulate Filters and Radioiodine Canisters

Location: 049

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
14-Sep-15	22-Sep-15	318	0.021 +/- 0.004	< 0.013	
14-Sep-15	22-Sep-15	318	0.025 +/- 0.004		Duplicate
22-Sep-15	29-Sep-15	309	0.051 +/- 0.005	< 0.013	
29-Sep-15	05-Oct-15	257	0.024 +/- 0.005	< 0.013	
05-Oct-15	13-Oct-15	329	0.039 +/- 0.005	< 0.006	
13-Oct-15	19-Oct-15	245	0.025 +/- 0.005	< 0.015	
19-Oct-15	26-Oct-15	336	0.032 +/- 0.005	< 0.017	
26-Oct-15	02-Nov-15	301	0.025 +/- 0.005	< 0.016	
02-Nov-15	10-Nov-15	343	0.032 +/- 0.004	< 0.015	
10-Nov-15	17-Nov-15	303	0.025 +/- 0.005	< 0.014	
17-Nov-15	24-Nov-15	316	0.018 +/- 0.004	< 0.013	
24-Nov-15	30-Nov-15	261	0.021 +/- 0.005	< 0.018	
30-Nov-15	07-Dec-15	313	0.053 +/- 0.005	< 0.010	
07-Dec-15	14-Dec-15	295	0.034 +/- 0.005	< 0.013	
14-Dec-15	21-Dec-15	313	0.028 +/- 0.005	< 0.013	
21-Dec-15	29-Dec-15	336	0.043 +/- 0.005	< 0.015	
29-Dec-15	04-Jan-16	261	0.050 +/- 0.006	< 0.012	

Air Particulate Filters and Radioiodine Canisters

Location: 053

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
29-Dec-14	05-Jan-15	310	0.030 +/- 0.004	< 0.010	
05-Jan-15	12-Jan-15	307	0.027 +/- 0.004	< 0.010	
12-Jan-15	19-Jan-15	284	0.026 +/- 0.004	< 0.007	
19-Jan-15	27-Jan-15	350	0.016 +/- 0.003	< 0.011	
27-Jan-15	04-Feb-15	345	0.017 +/- 0.003	< 0.010	
04-Feb-15	11-Feb-15	305	0.031 +/- 0.004	< 0.016	
11-Feb-15	18-Feb-15	308	0.026 +/- 0.004	< 0.011	
18-Feb-15	25-Feb-15	296	0.037 +/- 0.005	< 0.021	
25-Feb-15	04-Mar-15	312	0.021 +/- 0.004	< 0.013	
04-Mar-15	11-Mar-15	294	0.038 +/- 0.005	< 0.013	
11-Mar-15	18-Mar-15	297	0.028 +/- 0.005	< 0.013	
18-Mar-15	25-Mar-15	296	0.028 +/- 0.005	< 0.021	
25-Mar-15	01-Apr-15	302	0.020 +/- 0.005	< 0.011	
01-Apr-15	08-Apr-15	303	0.019 +/- 0.004	< 0.006	
01-Apr-15	08-Apr-15	303	0.021 +/- 0.004		Duplicate
08-Apr-15	15-Apr-15	300	0.023 +/- 0.005	< 0.012	
15-Apr-15	22-Apr-15	305	0.015 +/- 0.004	< 0.014	
22-Apr-15	29-Apr-15	303	0.014 +/- 0.003	< 0.012	
29-Apr-15	05-May-15	252	0.022 +/- 0.004	< 0.011	
05-May-15	11-May-15	265	0.006 +/- 0.005	< 0.011	
11-May-15	18-May-15	299	0.019 +/- 0.004	< 0.008	
18-May-15	27-May-15	380	0.010 +/- 0.003	< 0.017	
27-May-15	03-Jun-15	309	0.014 +/- 0.004	< 0.012	
03-Jun-15	08-Jun-15	206	0.024 +/- 0.006	< 0.017	
08-Jun-15	15-Jun-15	306	0.022 +/- 0.004	< 0.008	
15-Jun-15	22-Jun-15	312	0.020 +/- 0.004	< 0.009	
22-Jun-15	29-Jun-15	317	0.024 +/- 0.004	< 0.011	
29-Jun-15	06-Jul-15	311	0.028 +/- 0.005	< 0.007	
06-Jul-15	13-Jul-15	311	0.022 +/- 0.004	< 0.012	
13-Jul-15	21-Jul-15	356	0.026 +/- 0.004	< 0.016	
21-Jul-15	27-Jul-15	258	0.015 +/- 0.005	< 0.006	
27-Jul-15	03-Aug-15	301	0.027 +/- 0.005	< 0.016	
03-Aug-15	10-Aug-15	302	0.034 +/- 0.005	< 0.010	
10-Aug-15	17-Aug-15	302	0.028 +/- 0.005	< 0.015	
17-Aug-15	24-Aug-15	305	0.026 +/- 0.005	< 0.014	
24-Aug-15	31-Aug-15	302	0.028 +/- 0.005	< 0.007	
31-Aug-15	08-Sep-15	338	0.028 +/- 0.004	< 0.007	
08-Sep-15	14-Sep-15	257	0.020 +/- 0.005	< 0.011	
14-Sep-15	22-Sep-15	345	0.026 +/- 0.004	< 0.012	
22-Sep-15	29-Sep-15	302	0.047 +/- 0.005	< 0.013	
29-Sep-15	05-Oct-15	256	0.020 +/- 0.005	< 0.013	

Air Particulate Filters and Radioiodine Canisters

Location: 053

Collection StartDate	Collection EndDate	Volume m3	Gross Beta Concentration (pCi/m3)	I-131 Concentration (pCi/m3)	Duplicate Analysis
05-Oct-15	13-Oct-15	333	0.036 +/- 0.005	< 0.006	
13-Oct-15	19-Oct-15	258	0.023 +/- 0.005	< 0.014	
19-Oct-15	26-Oct-15	282	0.037 +/- 0.005	< 0.020	
19-Oct-15	26-Oct-15	282	0.036 +/- 0.005		Duplicate
26-Oct-15	02-Nov-15	292	0.025 +/- 0.005	< 0.017	
02-Nov-15	10-Nov-15	347	0.032 +/- 0.004	< 0.015	
10-Nov-15	17-Nov-15	304	0.026 +/- 0.005	< 0.014	
17-Nov-15	24-Nov-15	310	0.016 +/- 0.004	< 0.013	
24-Nov-15	30-Nov-15	262	0.016 +/- 0.005	< 0.018	
30-Nov-15	07-Dec-15	306	0.040 +/- 0.005	< 0.010	
07-Dec-15	14-Dec-15	294	0.032 +/- 0.005	< 0.013	
14-Dec-15	21-Dec-15	311	0.030 +/- 0.005	< 0.013	
21-Dec-15	29-Dec-15	345	0.039 +/- 0.005	< 0.015	
29-Dec-15	04-Jan-16	258	0.044 +/- 0.006	< 0.012	
29-Dec-15	04-Jan-16	258	0.051 +/- 0.006		Duplicate

Quarterly Air Particulates - Gamma

Location: 002

01-Apr-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.068	+/-	0.015
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Jun-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.089	+/-	0.015
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Sep-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.076	+/-	0.014
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Dec-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.051	+/-	0.010
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

***Duplicate Analysis**

Quarterly Air Particulates - Gamma

Location: 018

01-Apr-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.074	+/-	0.013
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Jun-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.090	+/-	0.014
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Sep-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.098	+/-	0.016
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Dec-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.066	+/-	0.016
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.003
CO-60		<	0.001
ZN-65		<	0.002
ZR-NB-95		<	0.003
CS-134		<	0.001
CS-137		<	0.001

***Duplicate Analysis**

Quarterly Air Particulates - Gamma

Location: 032

01-Apr-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.075	+/-	0.018
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Jun-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.087	+/-	0.015
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.002
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Sep-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.087	+/-	0.016
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.002
CS-134		<	0.001
CS-137		<	0.001

29-Dec-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.061	+/-	0.017
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.003
CO-60		<	0.001
ZN-65		<	0.003
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

***Duplicate Analysis**

Quarterly Air Particulates - Gamma

Location: 037

01-Apr-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.083	+/-	0.015
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.002
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Jun-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.089	+/-	0.016
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Sep-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.086	+/-	0.019
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Dec-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.065	+/-	0.014
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

***Duplicate Analysis**

Quarterly Air Particulates - Gamma

Location: 049

01-Apr-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.074	+/-	0.013
MN-54	<		0.001
CO-58	<		0.001
FE-59	<		0.001
CO-60	<		0.001
ZN-65	<		0.001
ZR-NB-95	<		0.001
CS-134	<		0.001
CS-137	<		0.001

29-Jun-15

Nuclide	Concentration (pCi/m3)			
BE-7	0.093	+/-	0.014	
BE-7	0.096	+/-	0.017	*
MN-54	<		0.001	*
MN-54	<		0.001	
CO-58	<		0.001	*
CO-58	<		0.001	
FE-59	<		0.002	*
FE-59	<		0.002	
CO-60	<		0.001	*
CO-60	<		0.001	
ZN-65	<		0.001	
ZN-65	<		0.002	*
ZR-NB-95	<		0.001	*
ZR-NB-95	<		0.001	
CS-134	<		0.001	*
CS-134	<		0.001	
CS-137	<		0.001	*
CS-137	<		0.001	

29-Sep-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.093	+/-	0.017
MN-54	<		0.001
CO-58	<		0.001
FE-59	<		0.002
CO-60	<		0.001
ZN-65	<		0.001
ZR-NB-95	<		0.001
CS-134	<		0.001
CS-137	<		0.001

29-Dec-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.070	+/-	0.013

***Duplicate Analysis**

Quarterly Air Particulates - Gamma

Location: 049

MN-54	<	0.001
CO-58	<	0.001
FE-59	<	0.002
CO-60	<	0.001
ZN-65	<	0.001
ZR-NB-95	<	0.001
CS-134	<	0.001
CS-137	<	0.001

*Duplicate Analysis

Quarterly Air Particulates - Gamma

Location: 053

01-Apr-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.077	+/-	0.018
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.002
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Jun-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.086	+/-	0.015
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Sep-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.082	+/-	0.012
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

29-Dec-15

Nuclide	Concentration (pCi/m3)		
BE-7	0.060	+/-	0.014
MN-54		<	0.001
CO-58		<	0.001
FE-59		<	0.001
CO-60		<	0.001
ZN-65		<	0.001
ZR-NB-95		<	0.001
CS-134		<	0.001
CS-137		<	0.001

***Duplicate Analysis**

Exposure Pathway - Waterborne
Surface Water
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
26-Jan-15	SURFACE WATER	MN-54	<	3.0	
26-Jan-15	SURFACE WATER	CO-58	<	3.0	
26-Jan-15	SURFACE WATER	FE-59	<	3.3	
26-Jan-15	SURFACE WATER	CO-60	<	1.2	
26-Jan-15	SURFACE WATER	ZN-65	<	2.9	
26-Jan-15	SURFACE WATER	ZR-NB-95	<	3.6	
26-Jan-15	SURFACE WATER	I-131	<	8.5	
26-Jan-15	SURFACE WATER	CS-134	<	3.8	
26-Jan-15	SURFACE WATER	CS-137	<	2.6	
26-Jan-15	SURFACE WATER	BA-LA-140	<	4.2	
26-Jan-15	SURFACE WATER	H-3	<	192.0	
18-Feb-15	SURFACE WATER	MN-54	<	3.1	
18-Feb-15	SURFACE WATER	CO-58	<	4.7	
18-Feb-15	SURFACE WATER	FE-59	<	6.3	
18-Feb-15	SURFACE WATER	CO-60	<	1.3	
18-Feb-15	SURFACE WATER	ZN-65	<	4.1	
18-Feb-15	SURFACE WATER	ZR-NB-95	<	3.9	
18-Feb-15	SURFACE WATER	I-131	<	6.0	
18-Feb-15	SURFACE WATER	CS-134	<	3.8	
18-Feb-15	SURFACE WATER	CS-137	<	2.8	
18-Feb-15	SURFACE WATER	BA-LA-140	<	3.3	
18-Feb-15	SURFACE WATER	H-3	<	148.0	
18-Feb-15	SURFACE WATER	FE-55	<	87.0	
11-Mar-15	SURFACE WATER	MN-54	<	3.2	
11-Mar-15	SURFACE WATER	CO-58	<	1.9	
11-Mar-15	SURFACE WATER	FE-59	<	4.8	
11-Mar-15	SURFACE WATER	CO-60	<	2.1	
11-Mar-15	SURFACE WATER	ZN-65	<	5.3	
11-Mar-15	SURFACE WATER	ZR-NB-95	<	2.5	
11-Mar-15	SURFACE WATER	I-131	<	5.2	
11-Mar-15	SURFACE WATER	CS-134	<	3.0	
11-Mar-15	SURFACE WATER	CS-137	<	2.6	
11-Mar-15	SURFACE WATER	BA-LA-140	<	2.7	
11-Mar-15	SURFACE WATER	H-3	<	148.0	
17-Apr-15	SURFACE WATER	MN-54	<	2.9	
17-Apr-15	SURFACE WATER	CO-58	<	3.1	
17-Apr-15	SURFACE WATER	FE-59	<	6.8	
17-Apr-15	SURFACE WATER	CO-60	<	3.7	

Exposure Pathway - Waterborne
Surface Water
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
17-Apr-15	SURFACE WATER	ZN-65	<	7.4	
17-Apr-15	SURFACE WATER	ZR-NB-95	<	2.7	
17-Apr-15	SURFACE WATER	I-131	<	7.5	
17-Apr-15	SURFACE WATER	CS-134	<	4.2	
17-Apr-15	SURFACE WATER	CS-137	<	2.7	
17-Apr-15	SURFACE WATER	BA-LA-140	<	3.4	
17-Apr-15	SURFACE WATER	H-3	<	152.0	
18-May-15	SURFACE WATER	MN-54	<	2.3	
18-May-15	SURFACE WATER	CO-58	<	1.0	
18-May-15	SURFACE WATER	FE-59	<	2.9	
18-May-15	SURFACE WATER	CO-60	<	1.7	
18-May-15	SURFACE WATER	ZN-65	<	3.5	
18-May-15	SURFACE WATER	ZR-NB-95	<	2.1	
18-May-15	SURFACE WATER	I-131	<	3.3	
18-May-15	SURFACE WATER	CS-134	<	3.2	
18-May-15	SURFACE WATER	CS-137	<	2.2	
18-May-15	SURFACE WATER	BA-LA-140	<	1.7	
18-May-15	SURFACE WATER	H-3	<	154.0	
18-May-15	SURFACE WATER	FE-55	<	167.0	
22-Jun-15	SURFACE WATER	MN-54	<	2.1	
22-Jun-15	SURFACE WATER	CO-58	<	1.0	
22-Jun-15	SURFACE WATER	FE-59	<	3.7	
22-Jun-15	SURFACE WATER	CO-60	<	2.2	
22-Jun-15	SURFACE WATER	ZN-65	<	4.3	
22-Jun-15	SURFACE WATER	ZR-NB-95	<	2.7	
22-Jun-15	SURFACE WATER	I-131	<	4.5	
22-Jun-15	SURFACE WATER	CS-134	<	2.9	
22-Jun-15	SURFACE WATER	CS-137	<	2.8	
22-Jun-15	SURFACE WATER	BA-LA-140	<	2.2	
22-Jun-15	SURFACE WATER	H-3	<	148.0	
13-Jul-15	SURFACE WATER	MN-54	<	2.1	
13-Jul-15	SURFACE WATER	CO-58	<	2.9	
13-Jul-15	SURFACE WATER	FE-59	<	4.5	
13-Jul-15	SURFACE WATER	CO-60	<	3.9	
13-Jul-15	SURFACE WATER	ZN-65	<	2.7	
13-Jul-15	SURFACE WATER	ZR-NB-95	<	2.9	
13-Jul-15	SURFACE WATER	I-131	<	5.1	
13-Jul-15	SURFACE WATER	CS-134	<	3.3	

Exposure Pathway - Waterborne
Surface Water
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
13-Jul-15	SURFACE WATER	CS-137	<	2.8	
13-Jul-15	SURFACE WATER	BA-LA-140	<	2.8	
13-Jul-15	SURFACE WATER	H-3	<	153.0	
17-Aug-15	SURFACE WATER	MN-54	<	3.0	Duplicate
17-Aug-15	SURFACE WATER	MN-54	<	2.1	
17-Aug-15	SURFACE WATER	CO-58	<	2.9	Duplicate
17-Aug-15	SURFACE WATER	CO-58	<	2.3	
17-Aug-15	SURFACE WATER	FE-59	<	7.3	Duplicate
17-Aug-15	SURFACE WATER	FE-59	<	4.4	
17-Aug-15	SURFACE WATER	CO-60	<	3.7	Duplicate
17-Aug-15	SURFACE WATER	CO-60	<	2.9	
17-Aug-15	SURFACE WATER	ZN-65	<	7.0	Duplicate
17-Aug-15	SURFACE WATER	ZN-65	<	3.1	
17-Aug-15	SURFACE WATER	ZR-NB-95	<	4.1	Duplicate
17-Aug-15	SURFACE WATER	ZR-NB-95	<	2.4	
17-Aug-15	SURFACE WATER	I-131	<	6.4	Duplicate
17-Aug-15	SURFACE WATER	I-131	<	5.9	
17-Aug-15	SURFACE WATER	CS-134	<	4.4	Duplicate
17-Aug-15	SURFACE WATER	CS-134	<	3.3	
17-Aug-15	SURFACE WATER	CS-137	<	5.0	Duplicate
17-Aug-15	SURFACE WATER	CS-137	<	2.2	
17-Aug-15	SURFACE WATER	BA-LA-140	<	3.5	Duplicate
17-Aug-15	SURFACE WATER	BA-LA-140	<	3.1	
17-Aug-15	SURFACE WATER	H-3	<	147.0	Duplicate
17-Aug-15	SURFACE WATER	H-3	<	147.0	
17-Aug-15	SURFACE WATER	FE-55	<	187.0	Duplicate
17-Aug-15	SURFACE WATER	FE-55	<	189.0	
23-Sep-15	SURFACE WATER	MN-54	<	2.3	
23-Sep-15	SURFACE WATER	CO-58	<	1.7	
23-Sep-15	SURFACE WATER	FE-59	<	2.5	
23-Sep-15	SURFACE WATER	CO-60	<	2.4	
23-Sep-15	SURFACE WATER	ZN-65	<	4.9	
23-Sep-15	SURFACE WATER	ZR-NB-95	<	4.2	
23-Sep-15	SURFACE WATER	I-131	<	5.5	
23-Sep-15	SURFACE WATER	CS-134	<	3.2	
23-Sep-15	SURFACE WATER	CS-137	<	2.1	
23-Sep-15	SURFACE WATER	BA-LA-140	<	3.2	
23-Sep-15	SURFACE WATER	H-3	<	150.0	

Exposure Pathway - Waterborne
Surface Water
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
29-Oct-15	SURFACE WATER	MN-54	<	3.4	
29-Oct-15	SURFACE WATER	CO-58	<	3.4	
29-Oct-15	SURFACE WATER	FE-59	<	5.5	
29-Oct-15	SURFACE WATER	CO-60	<	2.2	
29-Oct-15	SURFACE WATER	ZN-65	<	5.4	
29-Oct-15	SURFACE WATER	ZR-NB-95	<	2.1	
29-Oct-15	SURFACE WATER	I-131	<	10.0	
29-Oct-15	SURFACE WATER	CS-134	<	4.5	
29-Oct-15	SURFACE WATER	CS-137	<	3.1	
29-Oct-15	SURFACE WATER	BA-LA-140	<	3.0	
29-Oct-15	SURFACE WATER	H-3	<	143.0	
23-Nov-15	SURFACE WATER	MN-54	<	3.3	
23-Nov-15	SURFACE WATER	CO-58	<	3.3	
23-Nov-15	SURFACE WATER	FE-59	<	5.2	
23-Nov-15	SURFACE WATER	CO-60	<	2.0	
23-Nov-15	SURFACE WATER	ZN-65	<	4.3	
23-Nov-15	SURFACE WATER	ZR-NB-95	<	3.6	
23-Nov-15	SURFACE WATER	I-131	<	5.7	
23-Nov-15	SURFACE WATER	CS-134	<	4.2	
23-Nov-15	SURFACE WATER	CS-137	<	3.1	
23-Nov-15	SURFACE WATER	BA-LA-140	<	4.0	
23-Nov-15	SURFACE WATER	H-3	<	147.0	
23-Nov-15	SURFACE WATER	FE-55	<	96.0	
10-Dec-15	SURFACE WATER	MN-54	<	3.1	
10-Dec-15	SURFACE WATER	CO-58	<	4.3	
10-Dec-15	SURFACE WATER	FE-59	<	6.1	
10-Dec-15	SURFACE WATER	CO-60	<	3.5	
10-Dec-15	SURFACE WATER	ZN-65	<	7.5	
10-Dec-15	SURFACE WATER	ZR-NB-95	<	4.2	
10-Dec-15	SURFACE WATER	I-131	<	8.2	
10-Dec-15	SURFACE WATER	CS-134	<	4.7	
10-Dec-15	SURFACE WATER	CS-137	<	3.0	
10-Dec-15	SURFACE WATER	BA-LA-140	<	4.8	
10-Dec-15	SURFACE WATER	H-3	<	146.0	

Exposure Pathway - Waterborne
Surface Water
Location: SP

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
26-Jan-15	SURFACE WATER	MN-54	<	2.0	
26-Jan-15	SURFACE WATER	CO-58	<	2.2	
26-Jan-15	SURFACE WATER	FE-59	<	3.6	
26-Jan-15	SURFACE WATER	CO-60	<	2.6	
26-Jan-15	SURFACE WATER	ZN-65	<	4.8	
26-Jan-15	SURFACE WATER	ZR-NB-95	<	2.8	
26-Jan-15	SURFACE WATER	I-131	<	6.7	
26-Jan-15	SURFACE WATER	CS-134	<	2.7	
26-Jan-15	SURFACE WATER	CS-137	<	3.5	
26-Jan-15	SURFACE WATER	BA-LA-140	<	3.3	
26-Jan-15	SURFACE WATER	H-3	12,270 +/-	402.0	
18-Feb-15	SURFACE WATER	MN-54	<	2.0	
18-Feb-15	SURFACE WATER	MN-54	<	3.1	Duplicate
18-Feb-15	SURFACE WATER	CO-58	<	2.4	Duplicate
18-Feb-15	SURFACE WATER	CO-58	<	1.1	
18-Feb-15	SURFACE WATER	FE-59	<	6.8	Duplicate
18-Feb-15	SURFACE WATER	FE-59	<	2.9	
18-Feb-15	SURFACE WATER	CO-60	<	3.5	Duplicate
18-Feb-15	SURFACE WATER	CO-60	<	2.8	
18-Feb-15	SURFACE WATER	ZN-65	<	4.1	Duplicate
18-Feb-15	SURFACE WATER	ZN-65	<	2.7	
18-Feb-15	SURFACE WATER	ZR-NB-95	<	2.1	
18-Feb-15	SURFACE WATER	ZR-NB-95	<	3.1	Duplicate
18-Feb-15	SURFACE WATER	I-131	<	7.6	Duplicate
18-Feb-15	SURFACE WATER	I-131	<	6.1	
18-Feb-15	SURFACE WATER	CS-134	<	3.5	Duplicate
18-Feb-15	SURFACE WATER	CS-134	<	3.3	
18-Feb-15	SURFACE WATER	CS-137	<	2.5	Duplicate
18-Feb-15	SURFACE WATER	CS-137	<	2.8	
18-Feb-15	SURFACE WATER	BA-LA-140	<	4.4	Duplicate
18-Feb-15	SURFACE WATER	BA-LA-140	<	2.6	
18-Feb-15	SURFACE WATER	H-3	12,590 +/-	330.0	
18-Feb-15	SURFACE WATER	H-3	12,498 +/-	329.0	Duplicate
18-Feb-15	SURFACE WATER	FE-55	<	87.0	
18-Feb-15	SURFACE WATER	FE-55	<	155.0	Duplicate
11-Mar-15	SURFACE WATER	MN-54	<	3.7	
11-Mar-15	SURFACE WATER	CO-58	<	2.6	
11-Mar-15	SURFACE WATER	FE-59	<	6.7	

Exposure Pathway - Waterborne
Surface Water
Location: SP

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	SURFACE WATER	CO-60	<	1.7	
11-Mar-15	SURFACE WATER	ZN-65	<	4.3	
11-Mar-15	SURFACE WATER	ZR-NB-95	<	2.9	
11-Mar-15	SURFACE WATER	I-131	<	8.2	
11-Mar-15	SURFACE WATER	CS-134	<	3.5	
11-Mar-15	SURFACE WATER	CS-137	<	3.8	
11-Mar-15	SURFACE WATER	BA-LA-140	<	4.0	
11-Mar-15	SURFACE WATER	H-3	12,932 +/-	338.0	
17-Apr-15	SURFACE WATER	MN-54	<	3.1	
17-Apr-15	SURFACE WATER	CO-58	<	2.6	
17-Apr-15	SURFACE WATER	FE-59	<	7.3	
17-Apr-15	SURFACE WATER	CO-60	<	1.9	
17-Apr-15	SURFACE WATER	ZN-65	<	3.3	
17-Apr-15	SURFACE WATER	ZR-NB-95	<	2.4	
17-Apr-15	SURFACE WATER	I-131	<	7.8	
17-Apr-15	SURFACE WATER	CS-134	<	4.0	
17-Apr-15	SURFACE WATER	CS-137	<	3.2	
17-Apr-15	SURFACE WATER	BA-LA-140	<	2.7	
17-Apr-15	SURFACE WATER	H-3	13,376 +/-	342.0	
18-May-15	SURFACE WATER	MN-54	<	2.8	
18-May-15	SURFACE WATER	CO-58	<	3.2	
18-May-15	SURFACE WATER	FE-59	<	3.7	
18-May-15	SURFACE WATER	CO-60	<	2.5	
18-May-15	SURFACE WATER	ZN-65	<	5.2	
18-May-15	SURFACE WATER	ZR-NB-95	<	2.8	
18-May-15	SURFACE WATER	I-131	<	7.0	
18-May-15	SURFACE WATER	CS-134	<	4.0	
18-May-15	SURFACE WATER	CS-137	<	2.7	
18-May-15	SURFACE WATER	BA-LA-140	<	2.7	
18-May-15	SURFACE WATER	H-3	12,598 +/-	336.0	
18-May-15	SURFACE WATER	FE-55	<	174.0	
22-Jun-15	SURFACE WATER	MN-54	<	2.9	
22-Jun-15	SURFACE WATER	CO-58	<	1.6	
22-Jun-15	SURFACE WATER	FE-59	<	1.7	
22-Jun-15	SURFACE WATER	CO-60	<	1.3	
22-Jun-15	SURFACE WATER	ZN-65	<	1.9	
22-Jun-15	SURFACE WATER	ZR-NB-95	<	1.9	
22-Jun-15	SURFACE WATER	I-131	<	4.6	

Exposure Pathway - Waterborne
Surface Water
Location: SP

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
22-Jun-15	SURFACE WATER	CS-134	<	3.1	
22-Jun-15	SURFACE WATER	CS-137	<	2.9	
22-Jun-15	SURFACE WATER	BA-LA-140	<	1.8	
22-Jun-15	SURFACE WATER	H-3	10,179 +/-	299.0	
13-Jul-15	SURFACE WATER	MN-54	<	3.2	
13-Jul-15	SURFACE WATER	CO-58	<	3.1	
13-Jul-15	SURFACE WATER	FE-59	<	4.9	
13-Jul-15	SURFACE WATER	CO-60	<	3.4	
13-Jul-15	SURFACE WATER	ZN-65	<	7.0	
13-Jul-15	SURFACE WATER	ZR-NB-95	<	2.4	
13-Jul-15	SURFACE WATER	I-131	<	3.7	
13-Jul-15	SURFACE WATER	CS-134	<	3.8	
13-Jul-15	SURFACE WATER	CS-137	<	2.5	
13-Jul-15	SURFACE WATER	BA-LA-140	<	2.1	
13-Jul-15	SURFACE WATER	H-3	10,652 +/-	308.0	
17-Aug-15	SURFACE WATER	MN-54	<	2.3	
17-Aug-15	SURFACE WATER	CO-58	<	1.7	
17-Aug-15	SURFACE WATER	FE-59	<	4.6	
17-Aug-15	SURFACE WATER	CO-60	<	1.4	
17-Aug-15	SURFACE WATER	ZN-65	<	3.1	
17-Aug-15	SURFACE WATER	ZR-NB-95	<	2.7	
17-Aug-15	SURFACE WATER	I-131	<	6.5	
17-Aug-15	SURFACE WATER	CS-134	<	3.3	
17-Aug-15	SURFACE WATER	CS-137	<	3.0	
17-Aug-15	SURFACE WATER	BA-LA-140	<	4.6	
17-Aug-15	SURFACE WATER	H-3	9,686 +/-	293.0	
17-Aug-15	SURFACE WATER	FE-55	<	194.0	
23-Sep-15	SURFACE WATER	MN-54	<	2.6	
23-Sep-15	SURFACE WATER	CO-58	<	2.9	
23-Sep-15	SURFACE WATER	FE-59	<	4.8	
23-Sep-15	SURFACE WATER	CO-60	<	2.0	
23-Sep-15	SURFACE WATER	ZN-65	<	2.8	
23-Sep-15	SURFACE WATER	ZR-NB-95	<	2.6	
23-Sep-15	SURFACE WATER	I-131	<	5.2	
23-Sep-15	SURFACE WATER	CS-134	<	3.2	
23-Sep-15	SURFACE WATER	CS-137	<	3.4	
23-Sep-15	SURFACE WATER	BA-LA-140	<	4.7	
23-Sep-15	SURFACE WATER	H-3	8,999 +/-	286.0	

Exposure Pathway - Waterborne
Surface Water
Location: SP

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
29-Oct-15	SURFACE WATER	MN-54	<	2.1	
29-Oct-15	SURFACE WATER	CO-58	<	3.2	
29-Oct-15	SURFACE WATER	FE-59	<	5.8	
29-Oct-15	SURFACE WATER	CO-60	<	2.7	
29-Oct-15	SURFACE WATER	ZN-65	<	3.1	
29-Oct-15	SURFACE WATER	ZR-NB-95	<	3.5	
29-Oct-15	SURFACE WATER	I-131	<	7.6	
29-Oct-15	SURFACE WATER	CS-134	<	4.3	
29-Oct-15	SURFACE WATER	CS-137	<	3.9	
29-Oct-15	SURFACE WATER	BA-LA-140	<	2.0	
29-Oct-15	SURFACE WATER	H-3	8,330 +/-	270.0	
23-Nov-15	SURFACE WATER	MN-54	<	1.7	
23-Nov-15	SURFACE WATER	CO-58	<	2.3	
23-Nov-15	SURFACE WATER	FE-59	<	5.0	
23-Nov-15	SURFACE WATER	CO-60	<	1.9	
23-Nov-15	SURFACE WATER	ZN-65	<	3.3	
23-Nov-15	SURFACE WATER	ZR-NB-95	<	2.4	
23-Nov-15	SURFACE WATER	I-131	<	4.7	
23-Nov-15	SURFACE WATER	CS-134	<	2.9	
23-Nov-15	SURFACE WATER	CS-137	<	3.5	
23-Nov-15	SURFACE WATER	BA-LA-140	<	3.6	
23-Nov-15	SURFACE WATER	H-3	8,509 +/-	273.0	
23-Nov-15	SURFACE WATER	FE-55	<	95.0	
10-Dec-15	SURFACE WATER	MN-54	<	3.3	
10-Dec-15	SURFACE WATER	CO-58	<	2.8	
10-Dec-15	SURFACE WATER	FE-59	<	5.8	
10-Dec-15	SURFACE WATER	CO-60	<	2.0	
10-Dec-15	SURFACE WATER	ZN-65	<	4.0	
10-Dec-15	SURFACE WATER	ZR-NB-95	<	3.7	
10-Dec-15	SURFACE WATER	I-131	<	7.6	
10-Dec-15	SURFACE WATER	CS-134	<	4.2	
10-Dec-15	SURFACE WATER	CS-137	<	3.5	
10-Dec-15	SURFACE WATER	BA-LA-140	<	2.4	
10-Dec-15	SURFACE WATER	H-3	8,214 +/-	267.0	

Exposure Pathway - Waterborne
Ground Water
Location: B-12

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	1.4	
11-Mar-15	GROUND WATER	CO-58	<	2.1	
11-Mar-15	GROUND WATER	FE-59	<	2.8	
11-Mar-15	GROUND WATER	CO-60	<	2.3	
11-Mar-15	GROUND WATER	ZN-65	<	3.1	
11-Mar-15	GROUND WATER	ZR-NB-95	<	2.1	
11-Mar-15	GROUND WATER	I-131	<	0.303	
11-Mar-15	GROUND WATER	CS-134	<	3.2	
11-Mar-15	GROUND WATER	CS-137	<	2.8	
11-Mar-15	GROUND WATER	BA-LA-140	<	3.2	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	1.9	
18-May-15	GROUND WATER	CO-58	<	2.7	
18-May-15	GROUND WATER	FE-59	<	2.9	
18-May-15	GROUND WATER	CO-60	<	2.2	
18-May-15	GROUND WATER	ZN-65	<	3.9	
18-May-15	GROUND WATER	ZR-NB-95	<	2.3	
18-May-15	GROUND WATER	I-131	<	0.375	
18-May-15	GROUND WATER	CS-134	<	3.4	
18-May-15	GROUND WATER	CS-137	<	4.0	
18-May-15	GROUND WATER	BA-LA-140	<	3.9	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	2.8	
24-Aug-15	GROUND WATER	CO-58	<	3.2	
24-Aug-15	GROUND WATER	FE-59	<	4.6	
24-Aug-15	GROUND WATER	CO-60	<	2.1	
24-Aug-15	GROUND WATER	ZN-65	<	3.1	
24-Aug-15	GROUND WATER	ZR-NB-95	<	3.3	
24-Aug-15	GROUND WATER	I-131	<	0.473	
24-Aug-15	GROUND WATER	CS-134	<	3.4	
24-Aug-15	GROUND WATER	CS-137	<	2.6	
24-Aug-15	GROUND WATER	BA-LA-140	<	2.6	
24-Aug-15	GROUND WATER	H-3	<	145.0	
23-Nov-15	GROUND WATER	MN-54	<	3.0	
23-Nov-15	GROUND WATER	CO-58	<	3.2	
23-Nov-15	GROUND WATER	FE-59	<	4.9	
23-Nov-15	GROUND WATER	CO-60	<	2.3	
23-Nov-15	GROUND WATER	ZN-65	<	2.9	

Exposure Pathway - Waterborne
Ground Water
Location: B-12

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
23-Nov-15	GROUND WATER	ZR-NB-95	<	2.8	
23-Nov-15	GROUND WATER	I-131	<	0.32	
23-Nov-15	GROUND WATER	CS-134	<	3.5	
23-Nov-15	GROUND WATER	CS-137	<	3.1	
23-Nov-15	GROUND WATER	BA-LA-140	<	3.8	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Ground Water
Location: C-10

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	2.2	
11-Mar-15	GROUND WATER	CO-58	<	3.0	
11-Mar-15	GROUND WATER	FE-59	<	5.0	
11-Mar-15	GROUND WATER	CO-60	<	1.5	
11-Mar-15	GROUND WATER	ZN-65	<	3.0	
11-Mar-15	GROUND WATER	ZR-NB-95	<	3.8	
11-Mar-15	GROUND WATER	I-131	<	0.479	
11-Mar-15	GROUND WATER	CS-134	<	3.2	
11-Mar-15	GROUND WATER	CS-137	<	2.8	
11-Mar-15	GROUND WATER	BA-LA-140	<	5.1	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	2.4	
18-May-15	GROUND WATER	CO-58	<	2.7	
18-May-15	GROUND WATER	FE-59	<	3.8	
18-May-15	GROUND WATER	CO-60	<	2.7	
18-May-15	GROUND WATER	ZN-65	<	1.9	
18-May-15	GROUND WATER	ZR-NB-95	<	3.2	
18-May-15	GROUND WATER	I-131	<	0.312	
18-May-15	GROUND WATER	CS-134	<	3.4	
18-May-15	GROUND WATER	CS-137	<	2.5	
18-May-15	GROUND WATER	BA-LA-140	<	1.6	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	3.2	
24-Aug-15	GROUND WATER	CO-58	<	1.9	
24-Aug-15	GROUND WATER	FE-59	<	7.0	
24-Aug-15	GROUND WATER	CO-60	<	1.7	
24-Aug-15	GROUND WATER	ZN-65	<	2.8	
24-Aug-15	GROUND WATER	ZR-NB-95	<	2.6	
24-Aug-15	GROUND WATER	I-131	<	0.317	
24-Aug-15	GROUND WATER	CS-134	<	3.4	
24-Aug-15	GROUND WATER	CS-137	<	3.4	
24-Aug-15	GROUND WATER	BA-LA-140	<	3.8	
24-Aug-15	GROUND WATER	H-3	<	179.0	
23-Nov-15	GROUND WATER	MN-54	<	2.8	
23-Nov-15	GROUND WATER	CO-58	<	1.4	
23-Nov-15	GROUND WATER	FE-59	<	4.3	
23-Nov-15	GROUND WATER	CO-60	<	1.2	
23-Nov-15	GROUND WATER	ZN-65	<	5.4	

Exposure Pathway - Waterborne
Ground Water
Location: C-10

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
23-Nov-15	GROUND WATER	ZR-NB-95	<	2.3	
23-Nov-15	GROUND WATER	I-131	<	0.327	
23-Nov-15	GROUND WATER	CS-134	<	3.3	
23-Nov-15	GROUND WATER	CS-137	<	3.5	
23-Nov-15	GROUND WATER	BA-LA-140	<	4.5	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Ground Water
Location: C-49

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	2.8	
11-Mar-15	GROUND WATER	CO-58	<	2.6	
11-Mar-15	GROUND WATER	FE-59	<	5.6	
11-Mar-15	GROUND WATER	CO-60	<	2.8	
11-Mar-15	GROUND WATER	ZN-65	<	5.6	
11-Mar-15	GROUND WATER	ZR-NB-95	<	2.6	
11-Mar-15	GROUND WATER	I-131	<	0.392	
11-Mar-15	GROUND WATER	CS-134	<	3.5	
11-Mar-15	GROUND WATER	CS-137	<	3.5	
11-Mar-15	GROUND WATER	BA-LA-140	<	2.7	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	3.2	
18-May-15	GROUND WATER	CO-58	<	1.4	
18-May-15	GROUND WATER	FE-59	<	3.3	
18-May-15	GROUND WATER	CO-60	<	2.1	
18-May-15	GROUND WATER	ZN-65	<	2.1	
18-May-15	GROUND WATER	ZR-NB-95	<	2.6	
18-May-15	GROUND WATER	I-131	<	0.294	
18-May-15	GROUND WATER	CS-134	<	3.5	
18-May-15	GROUND WATER	CS-137	<	3.3	
18-May-15	GROUND WATER	BA-LA-140	<	2.2	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	2.7	
24-Aug-15	GROUND WATER	CO-58	<	1.8	
24-Aug-15	GROUND WATER	FE-59	<	3.6	
24-Aug-15	GROUND WATER	CO-60	<	2.3	
24-Aug-15	GROUND WATER	ZN-65	<	2.6	
24-Aug-15	GROUND WATER	ZR-NB-95	<	3.5	
24-Aug-15	GROUND WATER	I-131	<	0.352	
24-Aug-15	GROUND WATER	CS-134	<	3.4	
24-Aug-15	GROUND WATER	CS-137	<	2.3	
24-Aug-15	GROUND WATER	BA-LA-140	<	4.0	
24-Aug-15	GROUND WATER	H-3	<	179.0	
23-Nov-15	GROUND WATER	MN-54	<	3.6	
23-Nov-15	GROUND WATER	CO-58	<	3.6	
23-Nov-15	GROUND WATER	FE-59	<	6.1	
23-Nov-15	GROUND WATER	CO-60	<	2.3	
23-Nov-15	GROUND WATER	ZN-65	<	4.4	

Exposure Pathway - Waterborne
Ground Water
Location: C-49

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
23-Nov-15	GROUND WATER	ZR-NB-95	<	3.2	
23-Nov-15	GROUND WATER	I-131	<	0.259	
23-Nov-15	GROUND WATER	CS-134	<	4.3	
23-Nov-15	GROUND WATER	CS-137	<	2.7	
23-Nov-15	GROUND WATER	BA-LA-140	<	4.2	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Ground Water
Location: F-1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	3.0	
11-Mar-15	GROUND WATER	CO-58	<	1.6	
11-Mar-15	GROUND WATER	FE-59	<	4.1	
11-Mar-15	GROUND WATER	CO-60	<	2.2	
11-Mar-15	GROUND WATER	ZN-65	<	1.6	
11-Mar-15	GROUND WATER	ZR-NB-95	<	1.9	
11-Mar-15	GROUND WATER	I-131	<	0.467	
11-Mar-15	GROUND WATER	CS-134	<	3.2	
11-Mar-15	GROUND WATER	CS-137	<	1.8	
11-Mar-15	GROUND WATER	BA-LA-140	<	1.5	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	2.4	
18-May-15	GROUND WATER	CO-58	<	1.8	
18-May-15	GROUND WATER	FE-59	<	5.6	
18-May-15	GROUND WATER	CO-60	<	3.5	
18-May-15	GROUND WATER	ZN-65	<	6.0	
18-May-15	GROUND WATER	ZR-NB-95	<	2.4	
18-May-15	GROUND WATER	I-131	<	0.324	
18-May-15	GROUND WATER	CS-134	<	3.2	
18-May-15	GROUND WATER	CS-137	<	1.8	
18-May-15	GROUND WATER	BA-LA-140	<	4.0	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	3.4	
24-Aug-15	GROUND WATER	CO-58	<	2.5	
24-Aug-15	GROUND WATER	FE-59	<	5.4	
24-Aug-15	GROUND WATER	CO-60	<	2.4	
24-Aug-15	GROUND WATER	ZN-65	<	3.6	
24-Aug-15	GROUND WATER	ZR-NB-95	<	3.4	
24-Aug-15	GROUND WATER	I-131	<	0.337	
24-Aug-15	GROUND WATER	CS-134	<	4.4	
24-Aug-15	GROUND WATER	CS-137	<	4.8	
24-Aug-15	GROUND WATER	BA-LA-140	<	1.7	
24-Aug-15	GROUND WATER	H-3	<	179.0	
23-Nov-15	GROUND WATER	MN-54	<	1.6	
23-Nov-15	GROUND WATER	CO-58	<	2.8	
23-Nov-15	GROUND WATER	FE-59	<	7.7	
23-Nov-15	GROUND WATER	CO-60	<	2.9	
23-Nov-15	GROUND WATER	ZN-65	<	6.3	

Exposure Pathway - Waterborne
Ground Water
Location: F-1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
23-Nov-15	GROUND WATER	ZR-NB-95	<	3.3	
23-Nov-15	GROUND WATER	I-131	<	0.454	
23-Nov-15	GROUND WATER	CS-134	<	3.1	
23-Nov-15	GROUND WATER	CS-137	<	2.0	
23-Nov-15	GROUND WATER	BA-LA-140	<	2.3	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Ground Water
Location: G-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	4.6	
11-Mar-15	GROUND WATER	CO-58	<	2.8	
11-Mar-15	GROUND WATER	FE-59	<	6.8	
11-Mar-15	GROUND WATER	CO-60	<	2.2	
11-Mar-15	GROUND WATER	ZN-65	<	6.5	
11-Mar-15	GROUND WATER	ZR-NB-95	<	3.9	
11-Mar-15	GROUND WATER	I-131	<	0.291	
11-Mar-15	GROUND WATER	CS-134	<	3.8	
11-Mar-15	GROUND WATER	CS-137	<	4.1	
11-Mar-15	GROUND WATER	BA-LA-140	<	5.2	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	2.3	
18-May-15	GROUND WATER	CO-58	<	2.6	
18-May-15	GROUND WATER	FE-59	<	4.3	
18-May-15	GROUND WATER	CO-60	<	2.5	
18-May-15	GROUND WATER	ZN-65	<	6.0	
18-May-15	GROUND WATER	ZR-NB-95	<	3.2	
18-May-15	GROUND WATER	I-131	<	0.42	
18-May-15	GROUND WATER	CS-134	<	3.6	
18-May-15	GROUND WATER	CS-137	<	3.7	
18-May-15	GROUND WATER	BA-LA-140	<	2.2	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	4.5	
24-Aug-15	GROUND WATER	CO-58	<	3.4	
24-Aug-15	GROUND WATER	FE-59	<	9.1	
24-Aug-15	GROUND WATER	CO-60	<	2.8	
24-Aug-15	GROUND WATER	ZN-65	<	9.7	
24-Aug-15	GROUND WATER	ZR-NB-95	<	6.6	
24-Aug-15	GROUND WATER	I-131	<	0.286	
24-Aug-15	GROUND WATER	CS-134	<	5.1	
24-Aug-15	GROUND WATER	CS-137	<	4.9	
24-Aug-15	GROUND WATER	BA-LA-140	<	3.0	
24-Aug-15	GROUND WATER	H-3	<	145.0	
23-Nov-15	GROUND WATER	MN-54	<	4.5	
23-Nov-15	GROUND WATER	CO-58	<	2.7	
23-Nov-15	GROUND WATER	FE-59	<	7.8	
23-Nov-15	GROUND WATER	CO-60	<	2.5	
23-Nov-15	GROUND WATER	ZN-65	<	7.9	

Exposure Pathway - Waterborne
Ground Water
Location: G-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
23-Nov-15	GROUND WATER	ZR-NB-95	<	3.6	
23-Nov-15	GROUND WATER	I-131	<	0.312	
23-Nov-15	GROUND WATER	CS-134	<	4.1	
23-Nov-15	GROUND WATER	CS-137	<	3.4	
23-Nov-15	GROUND WATER	BA-LA-140	<	3.5	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Ground Water
Location: J-1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	3.4	
11-Mar-15	GROUND WATER	CO-58	<	2.4	
11-Mar-15	GROUND WATER	FE-59	<	3.5	
11-Mar-15	GROUND WATER	CO-60	<	1.4	
11-Mar-15	GROUND WATER	ZN-65	<	5.4	
11-Mar-15	GROUND WATER	ZR-NB-95	<	3.8	
11-Mar-15	GROUND WATER	I-131	<	0.307	
11-Mar-15	GROUND WATER	CS-134	<	3.6	
11-Mar-15	GROUND WATER	CS-137	<	3.5	
11-Mar-15	GROUND WATER	BA-LA-140	<	4.1	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	2.8	
18-May-15	GROUND WATER	CO-58	<	2.6	
18-May-15	GROUND WATER	FE-59	<	3.9	
18-May-15	GROUND WATER	CO-60	<	2.3	
18-May-15	GROUND WATER	ZN-65	<	3.9	
18-May-15	GROUND WATER	ZR-NB-95	<	4.1	
18-May-15	GROUND WATER	I-131	<	0.335	
18-May-15	GROUND WATER	CS-134	<	3.6	
18-May-15	GROUND WATER	CS-137	<	2.8	
18-May-15	GROUND WATER	BA-LA-140	<	2.2	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	3.3	
24-Aug-15	GROUND WATER	CO-58	<	3.9	
24-Aug-15	GROUND WATER	FE-59	<	6.4	
24-Aug-15	GROUND WATER	CO-60	<	3.2	
24-Aug-15	GROUND WATER	ZN-65	<	5.5	
24-Aug-15	GROUND WATER	ZR-NB-95	<	5.8	
24-Aug-15	GROUND WATER	I-131	<	0.275	
24-Aug-15	GROUND WATER	CS-134	<	4.2	
24-Aug-15	GROUND WATER	CS-137	<	4.7	
24-Aug-15	GROUND WATER	BA-LA-140	<	2.9	
24-Aug-15	GROUND WATER	H-3	<	145.0	
23-Nov-15	GROUND WATER	MN-54	<	1.8	
23-Nov-15	GROUND WATER	CO-58	<	2.0	
23-Nov-15	GROUND WATER	FE-59	<	4.1	
23-Nov-15	GROUND WATER	CO-60	<	1.9	
23-Nov-15	GROUND WATER	ZN-65	<	5.6	

Exposure Pathway - Waterborne
Ground Water
Location: J-1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
23-Nov-15	GROUND WATER	ZR-NB-95	<	2.7	
23-Nov-15	GROUND WATER	I-131	<	0.309	
23-Nov-15	GROUND WATER	CS-134	<	3.6	
23-Nov-15	GROUND WATER	CS-137	<	3.0	
23-Nov-15	GROUND WATER	BA-LA-140	<	3.9	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Ground Water
Location: J-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	2.5	
11-Mar-15	GROUND WATER	CO-58	<	2.6	
11-Mar-15	GROUND WATER	FE-59	<	3.7	
11-Mar-15	GROUND WATER	CO-60	<	2.2	
11-Mar-15	GROUND WATER	ZN-65	<	3.0	
11-Mar-15	GROUND WATER	ZR-NB-95	<	2.9	
11-Mar-15	GROUND WATER	I-131	<	0.314	
11-Mar-15	GROUND WATER	CS-134	<	3.7	
11-Mar-15	GROUND WATER	CS-137	<	2.9	
11-Mar-15	GROUND WATER	BA-LA-140	<	2.4	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	2.1	
18-May-15	GROUND WATER	CO-58	<	3.0	
18-May-15	GROUND WATER	FE-59	<	4.2	
18-May-15	GROUND WATER	CO-60	<	2.3	
18-May-15	GROUND WATER	ZN-65	<	2.4	
18-May-15	GROUND WATER	ZR-NB-95	<	1.8	
18-May-15	GROUND WATER	I-131	<	0.305	
18-May-15	GROUND WATER	CS-134	<	4.2	
18-May-15	GROUND WATER	CS-137	<	3.7	
18-May-15	GROUND WATER	BA-LA-140	<	2.4	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	3.6	
24-Aug-15	GROUND WATER	MN-54	<	3.2	Duplicate
24-Aug-15	GROUND WATER	CO-58	<	3.6	Duplicate
24-Aug-15	GROUND WATER	CO-58	<	3.5	
24-Aug-15	GROUND WATER	FE-59	<	4.1	
24-Aug-15	GROUND WATER	FE-59	<	11.5	Duplicate
24-Aug-15	GROUND WATER	CO-60	<	4.1	Duplicate
24-Aug-15	GROUND WATER	CO-60	<	2.6	
24-Aug-15	GROUND WATER	ZN-65	<	6.1	Duplicate
24-Aug-15	GROUND WATER	ZN-65	<	10.2	
24-Aug-15	GROUND WATER	ZR-NB-95	<	5.1	Duplicate
24-Aug-15	GROUND WATER	ZR-NB-95	<	3.2	
24-Aug-15	GROUND WATER	I-131	<	0.559	
24-Aug-15	GROUND WATER	I-131	<	0.362	Duplicate
24-Aug-15	GROUND WATER	CS-134	<	6.7	Duplicate
24-Aug-15	GROUND WATER	CS-134	<	4.2	

Exposure Pathway - Waterborne
Ground Water
Location: J-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
24-Aug-15	GROUND WATER	CS-137	<	4.0	
24-Aug-15	GROUND WATER	CS-137	<	4.2	Duplicate
24-Aug-15	GROUND WATER	BA-LA-140	<	5.1	Duplicate
24-Aug-15	GROUND WATER	BA-LA-140	<	2.9	
24-Aug-15	GROUND WATER	H-3	<	179.0	Duplicate
24-Aug-15	GROUND WATER	H-3	<	179.0	
23-Nov-15	GROUND WATER	MN-54	<	3.7	
23-Nov-15	GROUND WATER	CO-58	<	1.8	
23-Nov-15	GROUND WATER	FE-59	<	2.6	
23-Nov-15	GROUND WATER	CO-60	<	2.7	
23-Nov-15	GROUND WATER	ZN-65	<	4.9	
23-Nov-15	GROUND WATER	ZR-NB-95	<	4.4	
23-Nov-15	GROUND WATER	I-131	<	0.286	
23-Nov-15	GROUND WATER	CS-134	<	3.7	
23-Nov-15	GROUND WATER	CS-137	<	2.9	
23-Nov-15	GROUND WATER	BA-LA-140	<	4.5	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Ground Water
Location: L-49

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
11-Mar-15	GROUND WATER	MN-54	<	3.0	
11-Mar-15	GROUND WATER	CO-58	<	3.2	
11-Mar-15	GROUND WATER	FE-59	<	7.0	
11-Mar-15	GROUND WATER	CO-60	<	2.4	
11-Mar-15	GROUND WATER	ZN-65	<	2.6	
11-Mar-15	GROUND WATER	ZR-NB-95	<	3.2	
11-Mar-15	GROUND WATER	I-131	<	0.282	
11-Mar-15	GROUND WATER	CS-134	<	3.2	
11-Mar-15	GROUND WATER	CS-137	<	5.0	
11-Mar-15	GROUND WATER	BA-LA-140	<	3.4	
11-Mar-15	GROUND WATER	H-3	<	148.0	
18-May-15	GROUND WATER	MN-54	<	1.7	
18-May-15	GROUND WATER	CO-58	<	1.9	
18-May-15	GROUND WATER	FE-59	<	4.6	
18-May-15	GROUND WATER	CO-60	<	2.2	
18-May-15	GROUND WATER	ZN-65	<	4.8	
18-May-15	GROUND WATER	ZR-NB-95	<	2.0	
18-May-15	GROUND WATER	I-131	<	0.284	
18-May-15	GROUND WATER	CS-134	<	2.8	
18-May-15	GROUND WATER	CS-137	<	2.6	
18-May-15	GROUND WATER	BA-LA-140	<	2.7	
18-May-15	GROUND WATER	H-3	<	154.0	
24-Aug-15	GROUND WATER	MN-54	<	3.4	
24-Aug-15	GROUND WATER	CO-58	<	2.8	
24-Aug-15	GROUND WATER	FE-59	<	3.7	
24-Aug-15	GROUND WATER	CO-60	<	2.7	
24-Aug-15	GROUND WATER	ZN-65	<	6.6	
24-Aug-15	GROUND WATER	ZR-NB-95	<	5.3	
24-Aug-15	GROUND WATER	I-131	<	0.232	
24-Aug-15	GROUND WATER	CS-134	<	4.3	
24-Aug-15	GROUND WATER	CS-137	<	3.5	
24-Aug-15	GROUND WATER	BA-LA-140	<	4.0	
24-Aug-15	GROUND WATER	H-3	<	145.0	
23-Nov-15	GROUND WATER	MN-54	<	2.6	
23-Nov-15	GROUND WATER	CO-58	<	1.5	
23-Nov-15	GROUND WATER	FE-59	<	5.0	
23-Nov-15	GROUND WATER	CO-60	<	3.1	
23-Nov-15	GROUND WATER	ZN-65	<	2.7	

Exposure Pathway - Waterborne
Ground Water
Location: L-49

Collection Date	Sample Description	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
23-Nov-15	GROUND WATER	ZR-NB-95	<	2.7	
23-Nov-15	GROUND WATER	I-131	<	0.31	
23-Nov-15	GROUND WATER	CS-134	<	3.4	
23-Nov-15	GROUND WATER	CS-137	<	2.1	
23-Nov-15	GROUND WATER	BA-LA-140	<	3.8	
23-Nov-15	GROUND WATER	H-3	<	147.0	

Exposure Pathway - Waterborne
Drinking Water
Location: BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
09-Feb-15	MN-54	< 1.5	
09-Feb-15	CO-58	< 1.5	
09-Feb-15	FE-59	< 2.0	
09-Feb-15	CO-60	< 1.7	
09-Feb-15	ZN-65	< 2.3	
09-Feb-15	ZR-NB-95	< 1.6	
09-Feb-15	I-131	< 0.484	
09-Feb-15	CS-134	< 2.1	
09-Feb-15	CS-137	< 2.0	
09-Feb-15	BA-LA-140	< 0.8	
09-Feb-15	GROSS BETA	2.057 +/- 0.632	
05-Mar-15	MN-54	< 2.4	
05-Mar-15	CO-58	< 2.3	
05-Mar-15	FE-59	< 5.3	
05-Mar-15	CO-60	< 1.9	
05-Mar-15	ZN-65	< 4.8	
05-Mar-15	ZR-NB-95	< 3.0	
05-Mar-15	I-131	< 0.379	
05-Mar-15	CS-134	< 3.4	
05-Mar-15	CS-137	< 2.1	
05-Mar-15	BA-LA-140	< 3.7	
05-Mar-15	GROSS BETA	2.199 +/- 0.456	
02-Apr-15	MN-54	< 2.3	
02-Apr-15	CO-58	< 1.6	
02-Apr-15	FE-59	< 2.9	
02-Apr-15	CO-60	< 1.7	
02-Apr-15	ZN-65	< 4.8	
02-Apr-15	ZR-NB-95	< 3.3	
02-Apr-15	I-131	< 0.353	
02-Apr-15	CS-134	< 2.7	
02-Apr-15	CS-137	< 2.7	
02-Apr-15	BA-LA-140	< 2.1	
02-Apr-15	GROSS BETA	2.922 +/- 0.672	
05-May-15	MN-54	< 2.3	
05-May-15	CO-58	< 3.2	
05-May-15	FE-59	< 4.5	
05-May-15	CO-60	< 2.9	
05-May-15	ZN-65	< 2.9	

Exposure Pathway - Waterborne
Drinking Water
Location: BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
05-May-15	ZR-NB-95	< 1.9	
05-May-15	I-131	< 0.286	
05-May-15	CS-134	< 3.9	
05-May-15	CS-137	< 4.5	
05-May-15	BA-LA-140	< 1.5	
05-May-15	GROSS BETA	2.179 +/- 0.62	
03-Jun-15	MN-54	< 2.5	
03-Jun-15	CO-58	< 2.1	
03-Jun-15	FE-59	< 4.3	
03-Jun-15	CO-60	< 2.1	
03-Jun-15	ZN-65	< 3.6	
03-Jun-15	ZR-NB-95	< 1.8	
03-Jun-15	I-131	< 0.343	
03-Jun-15	CS-134	< 2.8	
03-Jun-15	CS-137	< 2.2	
03-Jun-15	BA-LA-140	< 2.0	
03-Jun-15	GROSS BETA	1.693 +/- 0.591	
07-Jul-15	MN-54	< 2.7	
07-Jul-15	CO-58	< 3.4	
07-Jul-15	FE-59	< 6.7	
07-Jul-15	CO-60	< 3.3	
07-Jul-15	ZN-65	< 9.5	
07-Jul-15	ZR-NB-95	< 6.2	
07-Jul-15	I-131	< 0.353	
07-Jul-15	CS-134	< 5.3	
07-Jul-15	CS-137	< 3.3	
07-Jul-15	BA-LA-140	< 3.4	
07-Jul-15	GROSS BETA	2.812 +/- 0.672	
03-Aug-15	MN-54	< 1.8	
03-Aug-15	CO-58	< 1.9	
03-Aug-15	FE-59	< 1.9	
03-Aug-15	CO-60	< 1.1	
03-Aug-15	ZN-65	< 2.1	
03-Aug-15	ZR-NB-95	< 2.2	
03-Aug-15	I-131	< 0.315	
03-Aug-15	CS-134	< 2.6	
03-Aug-15	CS-137	< 1.5	
03-Aug-15	BA-LA-140	< 1.6	

Exposure Pathway - Waterborne
Drinking Water
Location: BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
03-Aug-15	GROSS BETA	2.961 +/- 0.651	
08-Sep-15	MN-54	< 2.8	
08-Sep-15	CO-58	< 1.6	
08-Sep-15	FE-59	< 3.5	
08-Sep-15	CO-60	< 1.2	
08-Sep-15	ZN-65	< 3.6	
08-Sep-15	ZR-NB-95	< 1.8	
08-Sep-15	I-131	< 0.482	
08-Sep-15	CS-134	< 3.1	
08-Sep-15	CS-137	< 2.8	
08-Sep-15	BA-LA-140	< 3.7	
08-Sep-15	GROSS BETA	3.018 +/- 0.686	
05-Oct-15	MN-54	< 3.9	
05-Oct-15	CO-58	< 6.3	
05-Oct-15	FE-59	< 4.1	
05-Oct-15	CO-60	< 4.7	
05-Oct-15	ZN-65	< 8.3	
05-Oct-15	ZR-NB-95	< 3.6	
05-Oct-15	I-131	< 0.46	
05-Oct-15	CS-134	< 5.5	
05-Oct-15	CS-137	< 2.8	
05-Oct-15	BA-LA-140	< 4.9	
05-Oct-15	GROSS BETA	2.588 +/- 0.654	
02-Nov-15	MN-54	< 2.4	
02-Nov-15	CO-58	< 3.3	
02-Nov-15	FE-59	< 3.7	
02-Nov-15	CO-60	< 3.0	
02-Nov-15	ZN-65	< 4.0	
02-Nov-15	ZR-NB-95	< 3.9	
02-Nov-15	I-131	< 0.304	
02-Nov-15	CS-134	< 4.3	
02-Nov-15	CS-137	< 4.5	
02-Nov-15	BA-LA-140	< 2.5	
02-Nov-15	GROSS BETA	2.897 +/- 0.685	
07-Dec-15	MN-54	< 5.6	
07-Dec-15	CO-58	< 5.1	
07-Dec-15	FE-59	< 9.5	
07-Dec-15	CO-60	< 3.4	

Exposure Pathway - Waterborne
Drinking Water
Location: BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-Dec-15	ZN-65	< 10.6	
07-Dec-15	ZR-NB-95	< 2.8	
07-Dec-15	I-131	< 0.475	
07-Dec-15	CS-134	< 5.5	
07-Dec-15	CS-137	< 3.7	
07-Dec-15	BA-LA-140	< 4.5	
07-Dec-15	GROSS BETA	3.351 +/- 0.714	
04-Jan-16	MN-54	< 3.4	
04-Jan-16	CO-58	< 2.6	
04-Jan-16	FE-59	< 5.8	
04-Jan-16	CO-60	< 2.8	
04-Jan-16	ZN-65	< 6.4	
04-Jan-16	ZR-NB-95	< 2.7	
04-Jan-16	I-131	< 0.252	
04-Jan-16	CS-134	< 3.7	
04-Jan-16	CS-137	< 3.6	
04-Jan-16	BA-LA-140	< 3.5	
04-Jan-16	GROSS BETA	3.556 +/- 0.738	

Exposure Pathway - Waterborne
Drinking Water
Location: IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
09-Feb-15	MN-54	< 2.9	
09-Feb-15	CO-58	< 2.9	
09-Feb-15	FE-59	< 5.2	
09-Feb-15	CO-60	< 1.5	
09-Feb-15	ZN-65	< 4.1	
09-Feb-15	ZR-NB-95	< 1.6	
09-Feb-15	I-131	< 0.458	
09-Feb-15	CS-134	< 2.7	
09-Feb-15	CS-137	< 2.3	
09-Feb-15	BA-LA-140	< 3.4	
09-Feb-15	GROSS BETA	2.219 +/- 0.641	
05-Mar-15	MN-54	< 3.2	
05-Mar-15	CO-58	< 2.3	
05-Mar-15	FE-59	< 4.2	
05-Mar-15	CO-60	< 2.3	
05-Mar-15	ZN-65	< 5.0	
05-Mar-15	ZR-NB-95	< 2.0	
05-Mar-15	I-131	< 0.345	
05-Mar-15	CS-134	< 3.2	
05-Mar-15	CS-137	< 3.5	
05-Mar-15	BA-LA-140	< 2.4	
05-Mar-15	GROSS BETA	2.483 +/- 0.503	
02-Apr-15	MN-54	< 3.4	
02-Apr-15	CO-58	< 2.7	
02-Apr-15	FE-59	< 6.0	
02-Apr-15	CO-60	< 2.4	
02-Apr-15	ZN-65	< 3.2	
02-Apr-15	ZR-NB-95	< 3.0	
02-Apr-15	I-131	< 0.375	
02-Apr-15	CS-134	< 3.4	
02-Apr-15	CS-137	< 3.9	
02-Apr-15	BA-LA-140	< 3.4	
02-Apr-15	GROSS BETA	2.390 +/- 0.658	
05-May-15	MN-54	< 2.7	
05-May-15	CO-58	< 3.9	
05-May-15	FE-59	< 7.1	
05-May-15	CO-60	< 4.1	
05-May-15	ZN-65	< 5.6	

Exposure Pathway - Waterborne
Drinking Water
Location: IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
05-May-15	ZR-NB-95	< 2.2	
05-May-15	I-131	< 0.256	
05-May-15	CS-134	< 4.3	
05-May-15	CS-137	< 5.4	
05-May-15	BA-LA-140	< 3.4	
05-May-15	GROSS BETA	2.668 +/- 0.665	
03-Jun-15	MN-54	< 2.8	
03-Jun-15	CO-58	< 1.6	
03-Jun-15	FE-59	< 3.3	
03-Jun-15	CO-60	< 1.3	
03-Jun-15	ZN-65	< 2.4	
03-Jun-15	ZR-NB-95	< 2.4	
03-Jun-15	I-131	< 0.424	
03-Jun-15	CS-134	< 2.8	
03-Jun-15	CS-137	< 1.9	
03-Jun-15	BA-LA-140	< 1.9	
03-Jun-15	GROSS BETA	2.608 +/- 0.676	
07-Jul-15	MN-54	< 2.2	
07-Jul-15	CO-58	< 2.9	
07-Jul-15	FE-59	< 1.3	
07-Jul-15	CO-60	< 2.2	
07-Jul-15	ZN-65	< 4.0	
07-Jul-15	ZR-NB-95	< 1.8	
07-Jul-15	I-131	< 0.364	
07-Jul-15	CS-134	< 3.3	
07-Jul-15	CS-137	< 2.8	
07-Jul-15	BA-LA-140	< 3.1	
07-Jul-15	GROSS BETA	2.463 +/- 0.674	
03-Aug-15	MN-54	< 1.2	
03-Aug-15	CO-58	< 1.2	
03-Aug-15	FE-59	< 2.8	
03-Aug-15	CO-60	< 1.4	
03-Aug-15	ZN-65	< 1.8	
03-Aug-15	ZR-NB-95	< 2.5	
03-Aug-15	I-131	< 0.282	
03-Aug-15	CS-134	< 2.2	
03-Aug-15	CS-137	< 2.3	
03-Aug-15	BA-LA-140	< 1.4	

Exposure Pathway - Waterborne
Drinking Water
Location: IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
03-Aug-15	GROSS BETA	3.005 +/- 0.707	
08-Sep-15	MN-54	< 3.2	
08-Sep-15	CO-58	< 2.3	
08-Sep-15	FE-59	< 2.4	
08-Sep-15	CO-60	< 2.1	
08-Sep-15	ZN-65	< 4.2	
08-Sep-15	ZR-NB-95	< 3.2	
08-Sep-15	I-131	< 0.473	
08-Sep-15	CS-134	< 4.1	
08-Sep-15	CS-137	< 5.3	
08-Sep-15	BA-LA-140	< 2.4	
08-Sep-15	GROSS BETA	1.631 +/- 0.617	
05-Oct-15	MN-54	< 2.7	
05-Oct-15	CO-58	< 2.4	
05-Oct-15	FE-59	< 4.5	
05-Oct-15	CO-60	< 2.3	
05-Oct-15	ZN-65	< 2.8	
05-Oct-15	ZR-NB-95	< 2.2	
05-Oct-15	I-131	< 0.207	
05-Oct-15	CS-134	< 3.3	
05-Oct-15	CS-137	< 4.6	
05-Oct-15	BA-LA-140	< 2.0	
05-Oct-15	GROSS BETA	3.571 +/- 0.751	
02-Nov-15	MN-54	< 2.8	
02-Nov-15	CO-58	< 3.0	
02-Nov-15	FE-59	< 5.9	
02-Nov-15	CO-60	< 2.2	
02-Nov-15	ZN-65	< 7.2	
02-Nov-15	ZR-NB-95	< 2.5	
02-Nov-15	I-131	< 0.338	
02-Nov-15	CS-134	< 4.5	
02-Nov-15	CS-137	< 3.2	
02-Nov-15	BA-LA-140	< 4.5	
02-Nov-15	GROSS BETA	3.488 +/- 0.743	
07-Dec-15	MN-54	< 2.9	
07-Dec-15	CO-58	< 3.3	
07-Dec-15	FE-59	< 4.0	
07-Dec-15	CO-60	< 4.3	

Exposure Pathway - Waterborne
Drinking Water
Location: IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-Dec-15	ZN-65	< 4.4	
07-Dec-15	ZR-NB-95	< 2.7	
07-Dec-15	I-131	< 0.2	
07-Dec-15	CS-134	< 4.0	
07-Dec-15	CS-137	< 4.6	
07-Dec-15	BA-LA-140	< 4.5	
07-Dec-15	GROSS BETA	3.250 +/- 0.705	
04-Jan-16	MN-54	< 5.0	
04-Jan-16	CO-58	< 6.9	
04-Jan-16	FE-59	< 7.7	
04-Jan-16	CO-60	< 5.0	
04-Jan-16	ZN-65	< 14.4	
04-Jan-16	ZR-NB-95	< 7.1	
04-Jan-16	I-131	< 0.423	
04-Jan-16	CS-134	< 6.6	
04-Jan-16	CS-137	< 6.2	
04-Jan-16	BA-LA-140	< 8.4	
04-Jan-16	GROSS BETA	2.233 +/- 0.641	

Exposure Pathway - Waterborne
Drinking Water
Quarterly Tritium Analysis
Location: BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
02-Apr-15	H-3	< 148	
07-Jul-15	H-3	< 146	
05-Oct-15	H-3	< 152	
04-Jan-16	H-3	< 140	

Exposure Pathway - Waterborne
Drinking Water
Quarterly Tritium Analysis
Location: IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
02-Apr-15	H-3	< 148	
07-Jul-15	H-3	< 146	
05-Oct-15	H-3	< 152	
05-Oct-15	H-3	< 152	Duplicate
04-Jan-16	H-3	< 142	

Exposure Pathway - Waterborne
Shoreline Sediment
Location: DC

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	SHORELINE SEDIMENT	K-40	5,555.7 +/-	464.7	
12-May-15	SHORELINE SEDIMENT	MN-54	<	24.1	
12-May-15	SHORELINE SEDIMENT	CO-58	<	18.9	
12-May-15	SHORELINE SEDIMENT	FE-59	<	45.0	
12-May-15	SHORELINE SEDIMENT	CO-60	<	15.7	
12-May-15	SHORELINE SEDIMENT	ZN-65	<	33.6	
12-May-15	SHORELINE SEDIMENT	CS-134	<	11.3	
12-May-15	SHORELINE SEDIMENT	CS-137	<	16.2	
03-Nov-15	SHORELINE SEDIMENT	K-40	6,027.2 +/-	437.7	
03-Nov-15	SHORELINE SEDIMENT	MN-54	<	21.0	
03-Nov-15	SHORELINE SEDIMENT	CO-58	<	20.0	
03-Nov-15	SHORELINE SEDIMENT	FE-59	<	51.6	
03-Nov-15	SHORELINE SEDIMENT	CO-60	<	10.6	
03-Nov-15	SHORELINE SEDIMENT	ZN-65	<	38.8	
03-Nov-15	SHORELINE SEDIMENT	CS-134	<	13.3	
03-Nov-15	SHORELINE SEDIMENT	CS-137	<	16.9	

Exposure Pathway - Waterborne
Shoreline Sediment
Location: EEA

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
31-Mar-15	SHORELINE SEDIMENT	K-40	11,775.0	+/- 587.2	
31-Mar-15	SHORELINE SEDIMENT	MN-54	<	22.5	
31-Mar-15	SHORELINE SEDIMENT	CO-58	<	29.5	
31-Mar-15	SHORELINE SEDIMENT	FE-59	<	38.8	
31-Mar-15	SHORELINE SEDIMENT	CO-60	<	19.9	
31-Mar-15	SHORELINE SEDIMENT	ZN-65	<	58.8	
31-Mar-15	SHORELINE SEDIMENT	CS-134	<	20.5	
31-Mar-15	SHORELINE SEDIMENT	CS-137	40.1	+/- 15.4	

Exposure Pathway - Waterborne
Shoreline Sediment
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
30-Jun-15	SHORELINE SEDIMENT	K-40	10,215.0 +/-	664.3	
30-Jun-15	SHORELINE SEDIMENT	MN-54	<	30.0	
30-Jun-15	SHORELINE SEDIMENT	CO-58	<	18.8	
30-Jun-15	SHORELINE SEDIMENT	FE-59	<	18.7	
30-Jun-15	SHORELINE SEDIMENT	CO-60	<	18.2	
30-Jun-15	SHORELINE SEDIMENT	ZN-65	<	46.1	
30-Jun-15	SHORELINE SEDIMENT	CS-134	<	28.3	
30-Jun-15	SHORELINE SEDIMENT	CS-137	104.6 +/-	35.3	
03-Nov-15	SHORELINE SEDIMENT	K-40	10,937.0 +/-	646.3	
03-Nov-15	SHORELINE SEDIMENT	MN-54	<	29.2	
03-Nov-15	SHORELINE SEDIMENT	CO-58	<	32.6	
03-Nov-15	SHORELINE SEDIMENT	FE-59	<	95.8	
03-Nov-15	SHORELINE SEDIMENT	CO-60	<	24.0	
03-Nov-15	SHORELINE SEDIMENT	ZN-65	<	65.7	
03-Nov-15	SHORELINE SEDIMENT	CS-134	<	26.2	
03-Nov-15	SHORELINE SEDIMENT	CS-137	42.3 +/-	24.3	

Exposure Pathway - Ingestion
Fish
Location: CCL

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
28-Apr-15	BLUE CATFISH	K-40	3,536.4 +/-	419.3	
28-Apr-15	BLUE CATFISH	MN-54	<	12.9	
28-Apr-15	BLUE CATFISH	CO-58	<	11.4	
28-Apr-15	BLUE CATFISH	FE-59	<	30.0	
28-Apr-15	BLUE CATFISH	CO-60	<	14.0	
28-Apr-15	BLUE CATFISH	ZN-65	<	16.5	
28-Apr-15	BLUE CATFISH	I-131	<	23.1	
28-Apr-15	BLUE CATFISH	CS-134	<	19.5	
28-Apr-15	BLUE CATFISH	CS-137	<	14.7	
28-Apr-15	BLUE CATFISH	H-3	8,775.0 +/-	241.0	
28-Apr-15	CHANNEL CATFISH	K-40	3,860.1 +/-	420.4	
28-Apr-15	CHANNEL CATFISH	MN-54	<	13.1	
28-Apr-15	CHANNEL CATFISH	CO-58	<	8.6	
28-Apr-15	CHANNEL CATFISH	FE-59	<	41.4	
28-Apr-15	CHANNEL CATFISH	CO-60	<	10.3	
28-Apr-15	CHANNEL CATFISH	ZN-65	<	20.7	
28-Apr-15	CHANNEL CATFISH	I-131	<	28.6	
28-Apr-15	CHANNEL CATFISH	CS-134	<	15.0	
28-Apr-15	CHANNEL CATFISH	CS-137	<	15.5	
28-Apr-15	CHANNEL CATFISH	H-3	7,499.0 +/-	229.0	
28-Apr-15	COMMON CARP	K-40	3,228.4 +/-	469.3	
28-Apr-15	COMMON CARP	MN-54	<	11.0	
28-Apr-15	COMMON CARP	CO-58	<	10.3	
28-Apr-15	COMMON CARP	FE-59	<	33.5	
28-Apr-15	COMMON CARP	CO-60	<	12.9	
28-Apr-15	COMMON CARP	ZN-65	<	8.0	
28-Apr-15	COMMON CARP	I-131	<	23.0	
28-Apr-15	COMMON CARP	CS-134	<	14.6	
28-Apr-15	COMMON CARP	CS-137	<	10.3	
28-Apr-15	COMMON CARP	H-3	9,142.0 +/-	244.0	
28-Apr-15	LARGEMOUTH BASS	K-40	3,591.4 +/-	398.3	
28-Apr-15	LARGEMOUTH BASS	MN-54	<	12.6	
28-Apr-15	LARGEMOUTH BASS	CO-58	<	10.7	
28-Apr-15	LARGEMOUTH BASS	FE-59	<	25.5	
28-Apr-15	LARGEMOUTH BASS	CO-60	<	11.8	
28-Apr-15	LARGEMOUTH BASS	ZN-65	<	15.4	
28-Apr-15	LARGEMOUTH BASS	I-131	<	35.5	
28-Apr-15	LARGEMOUTH BASS	CS-134	<	12.7	

Exposure Pathway - Ingestion
Fish
Location: CCL

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
28-Apr-15	LARGEMOUTH BASS	CS-137	<	13.8	
28-Apr-15	LARGEMOUTH BASS	H-3	9,085.0 +/-	255.0	
28-Apr-15	SMALLMOUTH BASS	K-40	3,421.2 +/-	415.1	
28-Apr-15	SMALLMOUTH BASS	MN-54	<	12.6	
28-Apr-15	SMALLMOUTH BASS	CO-58	<	7.7	
28-Apr-15	SMALLMOUTH BASS	FE-59	<	35.2	
28-Apr-15	SMALLMOUTH BASS	CO-60	<	14.0	
28-Apr-15	SMALLMOUTH BASS	ZN-65	<	8.8	
28-Apr-15	SMALLMOUTH BASS	I-131	<	34.8	
28-Apr-15	SMALLMOUTH BASS	CS-134	<	12.6	
28-Apr-15	SMALLMOUTH BASS	CS-137	<	14.5	
28-Apr-15	SMALLMOUTH BASS	H-3	8,274.0 +/-	238.0	
28-Apr-15	SMALLMOUTH BUFFALO	K-40	3,482.2 +/-	455.4	
28-Apr-15	SMALLMOUTH BUFFALO	MN-54	<	12.0	
28-Apr-15	SMALLMOUTH BUFFALO	CO-58	<	11.2	
28-Apr-15	SMALLMOUTH BUFFALO	FE-59	<	26.5	
28-Apr-15	SMALLMOUTH BUFFALO	CO-60	<	11.3	
28-Apr-15	SMALLMOUTH BUFFALO	ZN-65	<	8.2	
28-Apr-15	SMALLMOUTH BUFFALO	I-131	<	20.0	
28-Apr-15	SMALLMOUTH BUFFALO	CS-134	<	15.2	
28-Apr-15	SMALLMOUTH BUFFALO	CS-137	<	10.6	
28-Apr-15	SMALLMOUTH BUFFALO	H-3	8,737.0 +/-	241.0	
28-Apr-15	WHITE CRAPPIE	K-40	3,373.5 +/-	415.7	
28-Apr-15	WHITE CRAPPIE	MN-54	<	8.2	
28-Apr-15	WHITE CRAPPIE	CO-58	<	6.3	
28-Apr-15	WHITE CRAPPIE	FE-59	<	17.6	
28-Apr-15	WHITE CRAPPIE	CO-60	<	13.4	
28-Apr-15	WHITE CRAPPIE	ZN-65	<	18.1	
28-Apr-15	WHITE CRAPPIE	I-131	<	35.2	
28-Apr-15	WHITE CRAPPIE	CS-134	<	14.7	
28-Apr-15	WHITE CRAPPIE	CS-137	<	14.3	
28-Apr-15	WHITE CRAPPIE	H-3	8,739.0 +/-	247.0	
27-Oct-15	BLUE CATFISH	K-40	3,394.2 +/-	401.1	
27-Oct-15	BLUE CATFISH	MN-54	<	14.6	
27-Oct-15	BLUE CATFISH	CO-58	<	12.4	
27-Oct-15	BLUE CATFISH	FE-59	<	19.0	
27-Oct-15	BLUE CATFISH	CO-60	<	8.3	
27-Oct-15	BLUE CATFISH	ZN-65	<	23.7	

Exposure Pathway - Ingestion
Fish
Location: CCL

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
27-Oct-15	BLUE CATFISH	I-131	<	53.9	
27-Oct-15	BLUE CATFISH	CS-134	<	13.5	
27-Oct-15	BLUE CATFISH	CS-137	<	15.4	
27-Oct-15	BLUE CATFISH	H-3	6,710.0 +/-	224.0	
27-Oct-15	CHANNEL CATFISH	K-40	3,204.7 +/-	403.1	
27-Oct-15	CHANNEL CATFISH	MN-54	<	12.9	
27-Oct-15	CHANNEL CATFISH	CO-58	<	12.2	
27-Oct-15	CHANNEL CATFISH	FE-59	<	34.6	
27-Oct-15	CHANNEL CATFISH	CO-60	<	14.1	
27-Oct-15	CHANNEL CATFISH	ZN-65	<	36.0	
27-Oct-15	CHANNEL CATFISH	I-131	<	42.2	
27-Oct-15	CHANNEL CATFISH	CS-134	<	17.9	
27-Oct-15	CHANNEL CATFISH	CS-137	<	15.6	
27-Oct-15	CHANNEL CATFISH	H-3	6,313.0 +/-	214.0	
27-Oct-15	SMALLMOUTH BUFFALO	K-40	3,435.5 +/-	415.0	
27-Oct-15	SMALLMOUTH BUFFALO	MN-54	<	13.8	
27-Oct-15	SMALLMOUTH BUFFALO	CO-58	<	16.9	
27-Oct-15	SMALLMOUTH BUFFALO	FE-59	<	18.9	
27-Oct-15	SMALLMOUTH BUFFALO	CO-60	<	9.4	
27-Oct-15	SMALLMOUTH BUFFALO	ZN-65	<	27.8	
27-Oct-15	SMALLMOUTH BUFFALO	I-131	<	32.1	
27-Oct-15	SMALLMOUTH BUFFALO	CS-134	<	16.5	
27-Oct-15	SMALLMOUTH BUFFALO	CS-137	<	10.1	
27-Oct-15	SMALLMOUTH BUFFALO	H-3	6,065.0 +/-	204.0	
27-Oct-15	WALLEYE	K-40	3,519.0 +/-	421.0	
27-Oct-15	WALLEYE	MN-54	<	16.7	
27-Oct-15	WALLEYE	CO-58	<	15.9	
27-Oct-15	WALLEYE	FE-59	<	38.0	
27-Oct-15	WALLEYE	CO-60	<	15.3	
27-Oct-15	WALLEYE	ZN-65	<	34.3	
27-Oct-15	WALLEYE	I-131	<	56.8	
27-Oct-15	WALLEYE	CS-134	<	17.3	
27-Oct-15	WALLEYE	CS-137	<	12.0	
27-Oct-15	WALLEYE	H-3	6,669.0 +/-	217.0	
27-Oct-15	WHITE BASS	K-40	3,387.6 +/-	368.2	
27-Oct-15	WHITE BASS	MN-54	<	12.3	
27-Oct-15	WHITE BASS	CO-58	<	15.0	
27-Oct-15	WHITE BASS	FE-59	<	25.6	

Exposure Pathway - Ingestion
Fish
Location: CCL

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
27-Oct-15	WHITE BASS	CO-60	<	10.4	
27-Oct-15	WHITE BASS	ZN-65	<	15.7	
27-Oct-15	WHITE BASS	I-131	<	39.2	
27-Oct-15	WHITE BASS	CS-134	<	16.1	
27-Oct-15	WHITE BASS	CS-137	<	15.4	
27-Oct-15	WHITE BASS	H-3	5,890.0 +/-	203.0	
27-Oct-15	WIPER	K-40	3,772.5 +/-	458.0	
27-Oct-15	WIPER	MN-54	<	9.0	
27-Oct-15	WIPER	CO-58	<	12.7	
27-Oct-15	WIPER	FE-59	<	29.9	
27-Oct-15	WIPER	CO-60	<	9.4	
27-Oct-15	WIPER	ZN-65	<	22.5	
27-Oct-15	WIPER	I-131	<	47.3	
27-Oct-15	WIPER	CS-134	<	16.2	
27-Oct-15	WIPER	CS-137	<	13.2	
27-Oct-15	WIPER	H-3	5,848.0 +/-	195.0	

Exposure Pathway - Ingestion
Fish
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
13-May-15	CHANNEL CATFISH	K-40	3,610.9	+/- 416.1	
13-May-15	CHANNEL CATFISH	MN-54	<	11.6	
13-May-15	CHANNEL CATFISH	CO-58	<	8.9	
13-May-15	CHANNEL CATFISH	FE-59	<	38.6	
13-May-15	CHANNEL CATFISH	CO-60	<	11.7	
13-May-15	CHANNEL CATFISH	ZN-65	<	23.1	
13-May-15	CHANNEL CATFISH	I-131	<	42.2	
13-May-15	CHANNEL CATFISH	CS-134	<	12.1	
13-May-15	CHANNEL CATFISH	CS-137	<	13.2	
13-May-15	CHANNEL CATFISH	H-3	<	117.0	
13-May-15	COMMON CARP	K-40	3,860.5	+/- 392.1	
13-May-15	COMMON CARP	MN-54	<	13.6	
13-May-15	COMMON CARP	CO-58	<	10.4	
13-May-15	COMMON CARP	FE-59	<	23.4	
13-May-15	COMMON CARP	CO-60	<	12.1	
13-May-15	COMMON CARP	ZN-65	<	12.7	
13-May-15	COMMON CARP	I-131	<	43.3	
13-May-15	COMMON CARP	CS-134	<	14.7	
13-May-15	COMMON CARP	CS-137	<	16.7	
13-May-15	COMMON CARP	H-3	<	87.0	
13-May-15	FRESHWATER DRUM	K-40	3,329.2	+/- 396.1	
13-May-15	FRESHWATER DRUM	MN-54	<	13.8	
13-May-15	FRESHWATER DRUM	CO-58	<	13.0	
13-May-15	FRESHWATER DRUM	FE-59	<	32.8	
13-May-15	FRESHWATER DRUM	CO-60	<	12.9	
13-May-15	FRESHWATER DRUM	ZN-65	<	16.3	
13-May-15	FRESHWATER DRUM	I-131	<	33.2	
13-May-15	FRESHWATER DRUM	CS-134	<	13.4	
13-May-15	FRESHWATER DRUM	CS-137	<	13.4	
13-May-15	FRESHWATER DRUM	H-3	<	118.0	
13-May-15	SMALLMOUTH BUFFALO	K-40	3,916.1	+/- 429.6	
13-May-15	SMALLMOUTH BUFFALO	MN-54	<	15.3	
13-May-15	SMALLMOUTH BUFFALO	CO-58	<	18.4	
13-May-15	SMALLMOUTH BUFFALO	FE-59	<	21.6	
13-May-15	SMALLMOUTH BUFFALO	CO-60	<	13.2	
13-May-15	SMALLMOUTH BUFFALO	ZN-65	<	41.9	
13-May-15	SMALLMOUTH BUFFALO	I-131	<	60.1	
13-May-15	SMALLMOUTH BUFFALO	CS-134	<	15.9	

Exposure Pathway - Ingestion
Fish
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
13-May-15	SMALLMOUTH BUFFALO	CS-137	<	17.3	
13-May-15	SMALLMOUTH BUFFALO	H-3	<	120.0	
03-Nov-15	CHANNEL CATFISH	K-40	4,239.6 +/-	429.6	
03-Nov-15	CHANNEL CATFISH	MN-54	<	12.4	
03-Nov-15	CHANNEL CATFISH	CO-58	<	13.2	
03-Nov-15	CHANNEL CATFISH	FE-59	<	36.4	
03-Nov-15	CHANNEL CATFISH	CO-60	<	10.2	
03-Nov-15	CHANNEL CATFISH	ZN-65	<	32.2	
03-Nov-15	CHANNEL CATFISH	I-131	<	46.5	
03-Nov-15	CHANNEL CATFISH	CS-134	<	15.7	
03-Nov-15	CHANNEL CATFISH	CS-137	<	15.5	
03-Nov-15	CHANNEL CATFISH	H-3	<	116.0	
03-Nov-15	COMMON CARP	K-40	3,475.9 +/-	396.8	
03-Nov-15	COMMON CARP	MN-54	<	10.5	
03-Nov-15	COMMON CARP	CO-58	<	14.4	
03-Nov-15	COMMON CARP	FE-59	<	18.0	
03-Nov-15	COMMON CARP	CO-60	<	10.7	
03-Nov-15	COMMON CARP	ZN-65	<	26.2	
03-Nov-15	COMMON CARP	I-131	<	45.1	
03-Nov-15	COMMON CARP	CS-134	<	13.6	
03-Nov-15	COMMON CARP	CS-137	<	10.9	
03-Nov-15	COMMON CARP	H-3	<	112.0	
03-Nov-15	FRESHWATER DRUM	K-40	3,504.2 +/-	377.4	
03-Nov-15	FRESHWATER DRUM	MN-54	<	14.0	
03-Nov-15	FRESHWATER DRUM	CO-58	<	16.8	
03-Nov-15	FRESHWATER DRUM	FE-59	<	18.0	
03-Nov-15	FRESHWATER DRUM	CO-60	<	6.4	
03-Nov-15	FRESHWATER DRUM	ZN-65	<	23.0	
03-Nov-15	FRESHWATER DRUM	I-131	<	47.0	
03-Nov-15	FRESHWATER DRUM	CS-134	<	17.0	
03-Nov-15	FRESHWATER DRUM	CS-137	<	15.6	
03-Nov-15	FRESHWATER DRUM	H-3	<	113.0	
03-Nov-15	LARGEMOUTH BASS	K-40	3,352.0 +/-	379.2	
03-Nov-15	LARGEMOUTH BASS	MN-54	<	14.1	
03-Nov-15	LARGEMOUTH BASS	CO-58	<	14.5	
03-Nov-15	LARGEMOUTH BASS	FE-59	<	33.8	
03-Nov-15	LARGEMOUTH BASS	CO-60	<	12.1	
03-Nov-15	LARGEMOUTH BASS	ZN-65	<	36.9	

Exposure Pathway - Ingestion
Fish
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
03-Nov-15	LARGEMOUTH BASS	I-131	<	46.8	
03-Nov-15	LARGEMOUTH BASS	CS-134	<	13.4	
03-Nov-15	LARGEMOUTH BASS	CS-137	<	13.8	
03-Nov-15	LARGEMOUTH BASS	H-3	<	115.0	
03-Nov-15	SMALLMOUTH BUFFALO	K-40	3,343.8 +/-	387.5	
03-Nov-15	SMALLMOUTH BUFFALO	MN-54	<	14.5	
03-Nov-15	SMALLMOUTH BUFFALO	CO-58	<	11.1	
03-Nov-15	SMALLMOUTH BUFFALO	FE-59	<	23.5	
03-Nov-15	SMALLMOUTH BUFFALO	CO-60	<	8.0	
03-Nov-15	SMALLMOUTH BUFFALO	ZN-65	<	24.1	
03-Nov-15	SMALLMOUTH BUFFALO	I-131	<	49.1	
03-Nov-15	SMALLMOUTH BUFFALO	CS-134	<	15.3	
03-Nov-15	SMALLMOUTH BUFFALO	CS-137	<	13.0	
03-Nov-15	SMALLMOUTH BUFFALO	H-3	<	114.0	

Exposure Pathway - Ingestion
Food/Garden
Location: A-3

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
11-May-15	HORSERADISH LEAVES	BE-7	743.2	+/- 171.6	
11-May-15	HORSERADISH LEAVES	K-40	5,091.2	+/- 439.9	
11-May-15	HORSERADISH LEAVES	MN-54	<	14.1	
11-May-15	HORSERADISH LEAVES	CO-58	<	11.9	
11-May-15	HORSERADISH LEAVES	FE-59	<	21.5	
11-May-15	HORSERADISH LEAVES	CO-60	<	12.9	
11-May-15	HORSERADISH LEAVES	ZN-65	<	21.2	
11-May-15	HORSERADISH LEAVES	ZR-NB-95	<	16.5	
11-May-15	HORSERADISH LEAVES	I-131	<	26.2	
11-May-15	HORSERADISH LEAVES	CS-134	<	15.8	
11-May-15	HORSERADISH LEAVES	CS-137	<	15.5	
08-Jun-15	HORSERADISH LEAVES	BE-7	622.7	+/- 118.2	
08-Jun-15	HORSERADISH LEAVES	K-40	3,956.6	+/- 287.1	
08-Jun-15	HORSERADISH LEAVES	MN-54	<	10.6	
08-Jun-15	HORSERADISH LEAVES	CO-58	<	9.6	
08-Jun-15	HORSERADISH LEAVES	FE-59	<	23.0	
08-Jun-15	HORSERADISH LEAVES	CO-60	<	7.1	
08-Jun-15	HORSERADISH LEAVES	ZN-65	<	20.2	
08-Jun-15	HORSERADISH LEAVES	ZR-NB-95	<	11.8	
08-Jun-15	HORSERADISH LEAVES	I-131	<	21.0	
08-Jun-15	HORSERADISH LEAVES	CS-134	<	9.3	
08-Jun-15	HORSERADISH LEAVES	CS-137	<	10.1	
14-Jul-15	HORSERADISH LEAVES	BE-7	1,688.1	+/- 252.4	
14-Jul-15	HORSERADISH LEAVES	K-40	7,457.1	+/- 552.0	
14-Jul-15	HORSERADISH LEAVES	MN-54	<	12.5	
14-Jul-15	HORSERADISH LEAVES	CO-58	<	16.3	
14-Jul-15	HORSERADISH LEAVES	FE-59	<	27.5	
14-Jul-15	HORSERADISH LEAVES	CO-60	<	16.3	
14-Jul-15	HORSERADISH LEAVES	ZN-65	<	16.5	
14-Jul-15	HORSERADISH LEAVES	ZR-NB-95	<	11.7	
14-Jul-15	HORSERADISH LEAVES	I-131	<	29.0	
14-Jul-15	HORSERADISH LEAVES	CS-134	<	16.3	
14-Jul-15	HORSERADISH LEAVES	CS-137	<	18.0	

Exposure Pathway - Ingestion
Food/Garden
Location: B-1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
29-Apr-15	HORSERADISH LEAVES	BE-7	649.5 +/-	86.3	
29-Apr-15	HORSERADISH LEAVES	K-40	4,875.5 +/-	182.3	
29-Apr-15	HORSERADISH LEAVES	MN-54	<	6.3	
29-Apr-15	HORSERADISH LEAVES	CO-58	<	4.7	
29-Apr-15	HORSERADISH LEAVES	FE-59	<	11.3	
29-Apr-15	HORSERADISH LEAVES	CO-60	<	6.1	
29-Apr-15	HORSERADISH LEAVES	ZN-65	<	14.7	
29-Apr-15	HORSERADISH LEAVES	ZR-NB-95	<	5.8	
29-Apr-15	HORSERADISH LEAVES	I-131	<	21.5	
29-Apr-15	HORSERADISH LEAVES	CS-134	<	6.9	
29-Apr-15	HORSERADISH LEAVES	CS-137	<	7.9	
11-May-15	HORSERADISH LEAVES	BE-7	675.5 +/-	179.6	
11-May-15	HORSERADISH LEAVES	K-40	5,389.4 +/-	458.4	
11-May-15	HORSERADISH LEAVES	MN-54	<	9.6	
11-May-15	HORSERADISH LEAVES	CO-58	<	14.4	
11-May-15	HORSERADISH LEAVES	FE-59	<	19.5	
11-May-15	HORSERADISH LEAVES	CO-60	<	11.8	
11-May-15	HORSERADISH LEAVES	ZN-65	<	18.4	
11-May-15	HORSERADISH LEAVES	ZR-NB-95	<	12.3	
11-May-15	HORSERADISH LEAVES	I-131	<	25.9	
11-May-15	HORSERADISH LEAVES	CS-134	<	14.1	
11-May-15	HORSERADISH LEAVES	CS-137	<	18.6	
08-Jun-15	HORSERADISH LEAVES	BE-7	466.4 +/-	133.2	
08-Jun-15	HORSERADISH LEAVES	K-40	4,123.0 +/-	352.4	
08-Jun-15	HORSERADISH LEAVES	MN-54	<	8.7	
08-Jun-15	HORSERADISH LEAVES	CO-58	<	12.9	
08-Jun-15	HORSERADISH LEAVES	FE-59	<	16.5	
08-Jun-15	HORSERADISH LEAVES	CO-60	<	16.5	
08-Jun-15	HORSERADISH LEAVES	ZN-65	<	16.9	
08-Jun-15	HORSERADISH LEAVES	ZR-NB-95	<	13.5	
08-Jun-15	HORSERADISH LEAVES	I-131	<	28.0	
08-Jun-15	HORSERADISH LEAVES	CS-134	<	14.0	
08-Jun-15	HORSERADISH LEAVES	CS-137	<	11.1	
14-Jul-15	HORSERADISH LEAVES	BE-7	1,065.1 +/-	226.8	
14-Jul-15	HORSERADISH LEAVES	K-40	6,722.3 +/-	593.6	
14-Jul-15	HORSERADISH LEAVES	MN-54	<	17.6	
14-Jul-15	HORSERADISH LEAVES	CO-58	<	15.4	
14-Jul-15	HORSERADISH LEAVES	FE-59	<	39.0	

Exposure Pathway - Ingestion
Food/Garden
Location: B-1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
14-Jul-15	HORSERADISH LEAVES	CO-60	<	15.9	
14-Jul-15	HORSERADISH LEAVES	ZN-65	<	19.1	
14-Jul-15	HORSERADISH LEAVES	ZR-NB-95	<	14.0	
14-Jul-15	HORSERADISH LEAVES	I-131	<	19.0	
14-Jul-15	HORSERADISH LEAVES	CS-134	<	18.8	
14-Jul-15	HORSERADISH LEAVES	CS-137	<	21.1	
31-Aug-15	HORSERADISH LEAVES	BE-7	436.3 +/-	211.7	
31-Aug-15	HORSERADISH LEAVES	BE-7	353.6 +/-	194.8	Duplicate
31-Aug-15	HORSERADISH LEAVES	K-40	5,882.8 +/-	588.8	
31-Aug-15	HORSERADISH LEAVES	K-40	5,683.3 +/-	562.4	Duplicate
31-Aug-15	HORSERADISH LEAVES	MN-54	<	24.1	Duplicate
31-Aug-15	HORSERADISH LEAVES	MN-54	<	19.6	
31-Aug-15	HORSERADISH LEAVES	CO-58	<	17.9	
31-Aug-15	HORSERADISH LEAVES	CO-58	<	18.7	Duplicate
31-Aug-15	HORSERADISH LEAVES	FE-59	<	23.9	
31-Aug-15	HORSERADISH LEAVES	FE-59	<	42.0	Duplicate
31-Aug-15	HORSERADISH LEAVES	CO-60	<	15.4	Duplicate
31-Aug-15	HORSERADISH LEAVES	CO-60	<	12.4	
31-Aug-15	HORSERADISH LEAVES	ZN-65	<	37.0	Duplicate
31-Aug-15	HORSERADISH LEAVES	ZN-65	<	38.8	
31-Aug-15	HORSERADISH LEAVES	ZR-NB-95	<	14.2	
31-Aug-15	HORSERADISH LEAVES	ZR-NB-95	<	19.2	Duplicate
31-Aug-15	HORSERADISH LEAVES	I-131	<	50.2	
31-Aug-15	HORSERADISH LEAVES	I-131	<	59.7	Duplicate
31-Aug-15	HORSERADISH LEAVES	CS-134	<	21.7	Duplicate
31-Aug-15	HORSERADISH LEAVES	CS-134	<	19.4	
31-Aug-15	HORSERADISH LEAVES	CS-137	<	17.0	
31-Aug-15	HORSERADISH LEAVES	CS-137	<	17.8	Duplicate
14-Sep-15	HORSERADISH LEAVES	BE-7	1,060.3 +/-	210.4	
14-Sep-15	HORSERADISH LEAVES	K-40	5,297.6 +/-	455.4	
14-Sep-15	HORSERADISH LEAVES	MN-54	<	12.6	
14-Sep-15	HORSERADISH LEAVES	CO-58	<	16.3	
14-Sep-15	HORSERADISH LEAVES	FE-59	<	29.0	
14-Sep-15	HORSERADISH LEAVES	CO-60	<	9.3	
14-Sep-15	HORSERADISH LEAVES	ZN-65	<	25.5	
14-Sep-15	HORSERADISH LEAVES	ZR-NB-95	<	17.5	
14-Sep-15	HORSERADISH LEAVES	I-131	<	34.2	
14-Sep-15	HORSERADISH LEAVES	CS-134	<	14.8	

Exposure Pathway - Ingestion
Food/Garden
Location: B-1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
14-Sep-15	HORSERADISH LEAVES	CS-137	<	11.8	
26-Oct-15	HORSERADISH LEAVES	BE-7	587.5 +/-	191.8	
26-Oct-15	HORSERADISH LEAVES	K-40	5,263.2 +/-	492.4	
26-Oct-15	HORSERADISH LEAVES	MN-54	<	16.8	
26-Oct-15	HORSERADISH LEAVES	CO-58	<	14.0	
26-Oct-15	HORSERADISH LEAVES	FE-59	<	29.6	
26-Oct-15	HORSERADISH LEAVES	CO-60	<	12.4	
26-Oct-15	HORSERADISH LEAVES	ZN-65	<	34.9	
26-Oct-15	HORSERADISH LEAVES	ZR-NB-95	<	23.6	
26-Oct-15	HORSERADISH LEAVES	I-131	<	46.9	
26-Oct-15	HORSERADISH LEAVES	CS-134	<	14.1	
26-Oct-15	HORSERADISH LEAVES	CS-137	<	16.6	
10-Nov-15	HORSERADISH LEAVES	BE-7	814.9 +/-	118.0	
10-Nov-15	HORSERADISH LEAVES	K-40	7,085.9 +/-	254.9	
10-Nov-15	HORSERADISH LEAVES	MN-54	<	5.3	
10-Nov-15	HORSERADISH LEAVES	CO-58	<	8.9	
10-Nov-15	HORSERADISH LEAVES	FE-59	<	14.6	
10-Nov-15	HORSERADISH LEAVES	CO-60	<	8.3	
10-Nov-15	HORSERADISH LEAVES	ZN-65	<	21.1	
10-Nov-15	HORSERADISH LEAVES	ZR-NB-95	<	10.5	
10-Nov-15	HORSERADISH LEAVES	I-131	<	24.2	
10-Nov-15	HORSERADISH LEAVES	CS-134	<	7.6	
10-Nov-15	HORSERADISH LEAVES	CS-137	<	8.6	

Exposure Pathway - Ingestion
Food/Garden
Location: D-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
29-Apr-15	HORSERADISH LEAVES	BE-7	511.3 +/-	77.7	
29-Apr-15	HORSERADISH LEAVES	K-40	6,830.7 +/-	212.5	
29-Apr-15	HORSERADISH LEAVES	MN-54	<	3.8	
29-Apr-15	HORSERADISH LEAVES	CO-58	<	6.2	
29-Apr-15	HORSERADISH LEAVES	FE-59	<	15.1	
29-Apr-15	HORSERADISH LEAVES	CO-60	<	7.3	
29-Apr-15	HORSERADISH LEAVES	ZN-65	<	12.9	
29-Apr-15	HORSERADISH LEAVES	ZR-NB-95	<	8.7	
29-Apr-15	HORSERADISH LEAVES	I-131	<	14.2	
29-Apr-15	HORSERADISH LEAVES	CS-134	<	6.5	
29-Apr-15	HORSERADISH LEAVES	CS-137	<	7.0	
11-May-15	HORSERADISH LEAVES	BE-7	666.1 +/-	187.2	
11-May-15	HORSERADISH LEAVES	K-40	5,738.1 +/-	533.0	
11-May-15	HORSERADISH LEAVES	MN-54	<	16.7	
11-May-15	HORSERADISH LEAVES	CO-58	<	10.5	
11-May-15	HORSERADISH LEAVES	FE-59	<	37.4	
11-May-15	HORSERADISH LEAVES	CO-60	<	15.0	
11-May-15	HORSERADISH LEAVES	ZN-65	<	36.3	
11-May-15	HORSERADISH LEAVES	ZR-NB-95	<	14.3	
11-May-15	HORSERADISH LEAVES	I-131	<	21.9	
11-May-15	HORSERADISH LEAVES	CS-134	<	15.4	
11-May-15	HORSERADISH LEAVES	CS-137	<	13.1	
08-Jun-15	HORSERADISH LEAVES	BE-7	739.6 +/-	132.6	
08-Jun-15	HORSERADISH LEAVES	K-40	5,449.4 +/-	366.3	
08-Jun-15	HORSERADISH LEAVES	MN-54	<	8.6	
08-Jun-15	HORSERADISH LEAVES	CO-58	<	12.8	
08-Jun-15	HORSERADISH LEAVES	FE-59	<	30.2	
08-Jun-15	HORSERADISH LEAVES	CO-60	<	9.1	
08-Jun-15	HORSERADISH LEAVES	ZN-65	<	17.8	
08-Jun-15	HORSERADISH LEAVES	ZR-NB-95	<	13.0	
08-Jun-15	HORSERADISH LEAVES	I-131	<	20.5	
08-Jun-15	HORSERADISH LEAVES	CS-134	<	13.1	
08-Jun-15	HORSERADISH LEAVES	CS-137	<	15.3	
14-Jul-15	HORSERADISH LEAVES	BE-7	915.8 +/-	210.9	
14-Jul-15	HORSERADISH LEAVES	K-40	5,910.3 +/-	547.0	
14-Jul-15	HORSERADISH LEAVES	MN-54	<	12.3	
14-Jul-15	HORSERADISH LEAVES	CO-58	<	15.4	
14-Jul-15	HORSERADISH LEAVES	FE-59	<	28.3	

Exposure Pathway - Ingestion
Food/Garden
Location: D-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
14-Jul-15	HORSERADISH LEAVES	CO-60	<	18.2	
14-Jul-15	HORSERADISH LEAVES	ZN-65	<	20.7	
14-Jul-15	HORSERADISH LEAVES	ZR-NB-95	<	15.1	
14-Jul-15	HORSERADISH LEAVES	I-131	<	40.2	
14-Jul-15	HORSERADISH LEAVES	CS-134	<	17.9	
14-Jul-15	HORSERADISH LEAVES	CS-137	<	18.2	
31-Aug-15	RHUBARB	BE-7	519.1 +/-	194.4	
31-Aug-15	RHUBARB	K-40	4,512.5 +/-	450.3	
31-Aug-15	RHUBARB	MN-54	<	13.4	
31-Aug-15	RHUBARB	CO-58	<	12.7	
31-Aug-15	RHUBARB	FE-59	<	16.7	
31-Aug-15	RHUBARB	CO-60	<	10.4	
31-Aug-15	RHUBARB	ZN-65	<	24.0	
31-Aug-15	RHUBARB	ZR-NB-95	<	17.9	
31-Aug-15	RHUBARB	I-131	<	30.3	
31-Aug-15	RHUBARB	CS-134	<	17.5	
31-Aug-15	RHUBARB	CS-137	<	18.6	
14-Sep-15	HORSERADISH LEAVES	BE-7	519.8 +/-	207.2	
14-Sep-15	HORSERADISH LEAVES	K-40	7,144.6 +/-	565.6	
14-Sep-15	HORSERADISH LEAVES	MN-54	<	21.3	
14-Sep-15	HORSERADISH LEAVES	CO-58	<	15.1	
14-Sep-15	HORSERADISH LEAVES	FE-59	<	24.6	
14-Sep-15	HORSERADISH LEAVES	CO-60	<	22.1	
14-Sep-15	HORSERADISH LEAVES	ZN-65	<	34.8	
14-Sep-15	HORSERADISH LEAVES	ZR-NB-95	<	22.1	
14-Sep-15	HORSERADISH LEAVES	I-131	<	30.2	
14-Sep-15	HORSERADISH LEAVES	CS-134	<	17.9	
14-Sep-15	HORSERADISH LEAVES	CS-137	<	16.9	
26-Oct-15	HORSERADISH LEAVES	BE-7	<	190.7	
26-Oct-15	HORSERADISH LEAVES	K-40	6,530.0 +/-	522.3	
26-Oct-15	HORSERADISH LEAVES	MN-54	<	19.7	
26-Oct-15	HORSERADISH LEAVES	CO-58	<	11.2	
26-Oct-15	HORSERADISH LEAVES	FE-59	<	35.9	
26-Oct-15	HORSERADISH LEAVES	CO-60	<	18.8	
26-Oct-15	HORSERADISH LEAVES	ZN-65	<	40.6	
26-Oct-15	HORSERADISH LEAVES	ZR-NB-95	<	14.6	
26-Oct-15	HORSERADISH LEAVES	I-131	<	40.3	
26-Oct-15	HORSERADISH LEAVES	CS-134	<	16.7	

Exposure Pathway - Ingestion
Food/Garden
Location: D-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
26-Oct-15	HORSERADISH LEAVES	CS-137	<	16.4	
10-Nov-15	HORSERADISH LEAVES	BE-7	929.8 +/-	108.8	
10-Nov-15	HORSERADISH LEAVES	K-40	7,644.8 +/-	269.6	
10-Nov-15	HORSERADISH LEAVES	MN-54	<	8.7	
10-Nov-15	HORSERADISH LEAVES	CO-58	<	9.7	
10-Nov-15	HORSERADISH LEAVES	FE-59	<	11.4	
10-Nov-15	HORSERADISH LEAVES	CO-60	<	7.7	
10-Nov-15	HORSERADISH LEAVES	ZN-65	<	18.6	
10-Nov-15	HORSERADISH LEAVES	ZR-NB-95	<	8.8	
10-Nov-15	HORSERADISH LEAVES	I-131	<	22.4	
10-Nov-15	HORSERADISH LEAVES	CS-134	<	7.8	
10-Nov-15	HORSERADISH LEAVES	CS-137	<	8.2	

Exposure Pathway - Ingestion
Food/Garden
Location: H-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
29-Apr-15	HORSERADISH LEAVES	BE-7	493.3 +/-	68.5	
29-Apr-15	HORSERADISH LEAVES	K-40	6,472.4 +/-	219.6	
29-Apr-15	HORSERADISH LEAVES	MN-54	<	5.8	
29-Apr-15	HORSERADISH LEAVES	CO-58	<	6.0	
29-Apr-15	HORSERADISH LEAVES	FE-59	<	9.0	
29-Apr-15	HORSERADISH LEAVES	CO-60	<	7.5	
29-Apr-15	HORSERADISH LEAVES	ZN-65	<	13.9	
29-Apr-15	HORSERADISH LEAVES	ZR-NB-95	<	9.3	
29-Apr-15	HORSERADISH LEAVES	I-131	<	16.0	
29-Apr-15	HORSERADISH LEAVES	CS-134	<	6.1	
29-Apr-15	HORSERADISH LEAVES	CS-137	<	6.6	
11-May-15	HORSERADISH LEAVES	BE-7	437.0 +/-	178.8	
11-May-15	HORSERADISH LEAVES	K-40	6,152.3 +/-	474.0	
11-May-15	HORSERADISH LEAVES	MN-54	<	15.1	
11-May-15	HORSERADISH LEAVES	CO-58	<	7.2	
11-May-15	HORSERADISH LEAVES	FE-59	<	27.0	
11-May-15	HORSERADISH LEAVES	CO-60	<	14.9	
11-May-15	HORSERADISH LEAVES	ZN-65	<	26.7	
11-May-15	HORSERADISH LEAVES	ZR-NB-95	<	15.3	
11-May-15	HORSERADISH LEAVES	I-131	<	25.0	
11-May-15	HORSERADISH LEAVES	CS-134	<	15.6	
11-May-15	HORSERADISH LEAVES	CS-137	<	17.3	
14-Jul-15	HORSERADISH LEAVES	BE-7	624.5 +/-	161.7	
14-Jul-15	HORSERADISH LEAVES	K-40	4,855.6 +/-	417.9	
14-Jul-15	HORSERADISH LEAVES	MN-54	<	12.2	
14-Jul-15	HORSERADISH LEAVES	CO-58	<	9.5	
14-Jul-15	HORSERADISH LEAVES	FE-59	<	20.3	
14-Jul-15	HORSERADISH LEAVES	CO-60	<	7.5	
14-Jul-15	HORSERADISH LEAVES	ZN-65	<	30.2	
14-Jul-15	HORSERADISH LEAVES	ZR-NB-95	<	11.9	
14-Jul-15	HORSERADISH LEAVES	I-131	<	26.0	
14-Jul-15	HORSERADISH LEAVES	CS-134	<	12.0	
14-Jul-15	HORSERADISH LEAVES	CS-137	<	11.9	
31-Aug-15	HORSERADISH LEAVES	BE-7	<	218.7	
31-Aug-15	HORSERADISH LEAVES	K-40	5,132.7 +/-	533.2	
31-Aug-15	HORSERADISH LEAVES	MN-54	<	19.3	
31-Aug-15	HORSERADISH LEAVES	CO-58	<	13.4	
31-Aug-15	HORSERADISH LEAVES	FE-59	<	29.0	

Exposure Pathway - Ingestion
Food/Garden
Location: H-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
31-Aug-15	HORSERADISH LEAVES	CO-60	<	12.9	
31-Aug-15	HORSERADISH LEAVES	ZN-65	<	21.8	
31-Aug-15	HORSERADISH LEAVES	ZR-NB-95	<	23.4	
31-Aug-15	HORSERADISH LEAVES	I-131	<	30.1	
31-Aug-15	HORSERADISH LEAVES	CS-134	<	20.7	
31-Aug-15	HORSERADISH LEAVES	CS-137	<	23.4	
14-Sep-15	HORSERADISH LEAVES	BE-7	472.6 +/-	231.1	
14-Sep-15	HORSERADISH LEAVES	BE-7	555.2 +/-	191.4	Duplicate
14-Sep-15	HORSERADISH LEAVES	K-40	6,361.8 +/-	498.4	Duplicate
14-Sep-15	HORSERADISH LEAVES	K-40	6,203.1 +/-	505.2	
14-Sep-15	HORSERADISH LEAVES	MN-54	<	16.7	Duplicate
14-Sep-15	HORSERADISH LEAVES	MN-54	<	7.8	
14-Sep-15	HORSERADISH LEAVES	CO-58	<	13.4	Duplicate
14-Sep-15	HORSERADISH LEAVES	CO-58	<	15.8	
14-Sep-15	HORSERADISH LEAVES	FE-59	<	17.9	Duplicate
14-Sep-15	HORSERADISH LEAVES	FE-59	<	29.0	
14-Sep-15	HORSERADISH LEAVES	CO-60	<	7.2	Duplicate
14-Sep-15	HORSERADISH LEAVES	CO-60	<	14.3	
14-Sep-15	HORSERADISH LEAVES	ZN-65	<	33.4	
14-Sep-15	HORSERADISH LEAVES	ZN-65	<	21.7	Duplicate
14-Sep-15	HORSERADISH LEAVES	ZR-NB-95	<	17.1	
14-Sep-15	HORSERADISH LEAVES	ZR-NB-95	<	9.6	Duplicate
14-Sep-15	HORSERADISH LEAVES	I-131	<	45.1	Duplicate
14-Sep-15	HORSERADISH LEAVES	I-131	<	44.3	
14-Sep-15	HORSERADISH LEAVES	CS-134	<	16.5	Duplicate
14-Sep-15	HORSERADISH LEAVES	CS-134	<	17.2	
14-Sep-15	HORSERADISH LEAVES	CS-137	<	21.1	
14-Sep-15	HORSERADISH LEAVES	CS-137	<	15.5	Duplicate
26-Oct-15	HORSERADISH LEAVES	BE-7	307.9 +/-	150.2	
26-Oct-15	HORSERADISH LEAVES	K-40	8,488.9 +/-	567.0	
26-Oct-15	HORSERADISH LEAVES	MN-54	<	16.5	
26-Oct-15	HORSERADISH LEAVES	CO-58	<	19.4	
26-Oct-15	HORSERADISH LEAVES	FE-59	<	32.7	
26-Oct-15	HORSERADISH LEAVES	CO-60	<	12.8	
26-Oct-15	HORSERADISH LEAVES	ZN-65	<	29.7	
26-Oct-15	HORSERADISH LEAVES	ZR-NB-95	<	16.2	
26-Oct-15	HORSERADISH LEAVES	I-131	<	58.4	
26-Oct-15	HORSERADISH LEAVES	CS-134	<	17.0	

Exposure Pathway - Ingestion
Food/Garden
Location: H-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
26-Oct-15	HORSERADISH LEAVES	CS-137	<	17.6	
10-Nov-15	HORSERADISH LEAVES	BE-7	822.5 +/-	106.3	
10-Nov-15	HORSERADISH LEAVES	K-40	8,985.9 +/-	293.7	
10-Nov-15	HORSERADISH LEAVES	MN-54	<	10.7	
10-Nov-15	HORSERADISH LEAVES	CO-58	<	9.8	
10-Nov-15	HORSERADISH LEAVES	FE-59	<	28.6	
10-Nov-15	HORSERADISH LEAVES	CO-60	<	10.7	
10-Nov-15	HORSERADISH LEAVES	ZN-65	<	19.0	
10-Nov-15	HORSERADISH LEAVES	ZR-NB-95	<	10.4	
10-Nov-15	HORSERADISH LEAVES	I-131	<	21.8	
10-Nov-15	HORSERADISH LEAVES	CS-134	<	8.6	
10-Nov-15	HORSERADISH LEAVES	CS-137	<	9.1	

Exposure Pathway - Ingestion
Food/Garden
Location: R-2

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
11-May-15	HORSERADISH LEAVES	BE-7	697.4	+/- 186.7	
11-May-15	HORSERADISH LEAVES	K-40	5,805.5	+/- 566.7	
11-May-15	HORSERADISH LEAVES	MN-54	<	19.7	
11-May-15	HORSERADISH LEAVES	CO-58	<	20.2	
11-May-15	HORSERADISH LEAVES	FE-59	<	41.5	
11-May-15	HORSERADISH LEAVES	CO-60	<	12.4	
11-May-15	HORSERADISH LEAVES	ZN-65	<	31.0	
11-May-15	HORSERADISH LEAVES	ZR-NB-95	<	19.5	
11-May-15	HORSERADISH LEAVES	I-131	<	48.4	
11-May-15	HORSERADISH LEAVES	CS-134	<	18.9	
11-May-15	HORSERADISH LEAVES	CS-137	<	15.9	
08-Jun-15	HORSERADISH LEAVES	BE-7	642.4	+/- 102.0	
08-Jun-15	HORSERADISH LEAVES	K-40	4,933.1	+/- 304.8	
08-Jun-15	HORSERADISH LEAVES	MN-54	<	11.0	
08-Jun-15	HORSERADISH LEAVES	CO-58	<	10.6	
08-Jun-15	HORSERADISH LEAVES	FE-59	<	24.3	
08-Jun-15	HORSERADISH LEAVES	CO-60	<	5.0	
08-Jun-15	HORSERADISH LEAVES	ZN-65	<	19.0	
08-Jun-15	HORSERADISH LEAVES	ZR-NB-95	<	11.5	
08-Jun-15	HORSERADISH LEAVES	I-131	<	20.9	
08-Jun-15	HORSERADISH LEAVES	CS-134	<	10.6	
08-Jun-15	HORSERADISH LEAVES	CS-137	<	10.6	

Exposure Pathway - Ingestion
Food/Crops
Location: NR-D1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
02-Nov-15	IRRIGATED CORN	BE-7	<	67.6	
02-Nov-15	IRRIGATED CORN	K-40	3,103.8 +/-	256.7	
02-Nov-15	IRRIGATED CORN	MN-54	<	7.4	
02-Nov-15	IRRIGATED CORN	CO-58	<	9.6	
02-Nov-15	IRRIGATED CORN	FE-59	<	17.3	
02-Nov-15	IRRIGATED CORN	CO-60	<	5.7	
02-Nov-15	IRRIGATED CORN	ZN-65	<	20.0	
02-Nov-15	IRRIGATED CORN	ZR-NB-95	<	9.6	
02-Nov-15	IRRIGATED CORN	I-131	<	13.7	
02-Nov-15	IRRIGATED CORN	CS-134	<	9.5	
02-Nov-15	IRRIGATED CORN	CS-137	<	9.9	

Exposure Pathway - Ingestion
Food/Crops
Location: NR-U1

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
07-Oct-15	IRRIGATED CORN	BE-7	<	71.2	
07-Oct-15	IRRIGATED CORN	K-40	2,941.1 +/-	261.7	
07-Oct-15	IRRIGATED CORN	MN-54	<	5.2	
07-Oct-15	IRRIGATED CORN	CO-58	<	9.8	
07-Oct-15	IRRIGATED CORN	FE-59	<	12.1	
07-Oct-15	IRRIGATED CORN	CO-60	<	5.7	
07-Oct-15	IRRIGATED CORN	ZN-65	<	15.2	
07-Oct-15	IRRIGATED CORN	ZR-NB-95	<	9.2	
07-Oct-15	IRRIGATED CORN	I-131	<	12.9	
07-Oct-15	IRRIGATED CORN	CS-134	<	9.5	
07-Oct-15	IRRIGATED CORN	CS-137	<	7.1	
27-Oct-15	IRRIGATED SOYBEANS	BE-7	<	85.6	
27-Oct-15	IRRIGATED SOYBEANS	K-40	14,647.0 +/-	578.0	
27-Oct-15	IRRIGATED SOYBEANS	MN-54	<	11.1	
27-Oct-15	IRRIGATED SOYBEANS	CO-58	<	12.3	
27-Oct-15	IRRIGATED SOYBEANS	FE-59	<	18.2	
27-Oct-15	IRRIGATED SOYBEANS	CO-60	<	13.1	
27-Oct-15	IRRIGATED SOYBEANS	ZN-65	<	36.7	
27-Oct-15	IRRIGATED SOYBEANS	ZR-NB-95	<	12.1	
27-Oct-15	IRRIGATED SOYBEANS	I-131	<	25.4	
27-Oct-15	IRRIGATED SOYBEANS	CS-134	<	11.0	
27-Oct-15	IRRIGATED SOYBEANS	CS-137	<	10.1	

Exposure Pathway - Aquatic
Bottom Sediment
Location: DC

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	BOTTOM SEDIMENT	K-40	12,963.0	+/- 701.3	
12-May-15	BOTTOM SEDIMENT	MN-54	<	26.4	
12-May-15	BOTTOM SEDIMENT	CO-58	<	24.2	
12-May-15	BOTTOM SEDIMENT	FE-59	<	45.9	
12-May-15	BOTTOM SEDIMENT	CO-60	<	14.9	
12-May-15	BOTTOM SEDIMENT	ZN-65	<	42.4	
12-May-15	BOTTOM SEDIMENT	CS-134	<	18.9	
12-May-15	BOTTOM SEDIMENT	CS-137	108.5	+/- 32.4	
12-May-15	BOTTOM SEDIMENT	FE-55	<	19,250.9	
29-Jun-15	BOTTOM SEDIMENT	K-40	11,349.0	+/- 660.5	
29-Jun-15	BOTTOM SEDIMENT	MN-54	<	29.4	
29-Jun-15	BOTTOM SEDIMENT	CO-58	<	24.5	
29-Jun-15	BOTTOM SEDIMENT	FE-59	<	48.9	
29-Jun-15	BOTTOM SEDIMENT	CO-60	<	17.0	
29-Jun-15	BOTTOM SEDIMENT	ZN-65	<	38.0	
29-Jun-15	BOTTOM SEDIMENT	CS-134	<	17.4	
29-Jun-15	BOTTOM SEDIMENT	CS-137	<	26.1	
29-Jun-15	BOTTOM SEDIMENT	FE-55	<	16,340.0	
03-Nov-15	BOTTOM SEDIMENT	K-40	14,026.0	+/- 764.4	
03-Nov-15	BOTTOM SEDIMENT	MN-54	<	26.2	
03-Nov-15	BOTTOM SEDIMENT	CO-58	<	16.1	
03-Nov-15	BOTTOM SEDIMENT	FE-59	<	88.7	
03-Nov-15	BOTTOM SEDIMENT	CO-60	<	26.5	
03-Nov-15	BOTTOM SEDIMENT	ZN-65	<	77.9	
03-Nov-15	BOTTOM SEDIMENT	CS-134	<	24.8	
03-Nov-15	BOTTOM SEDIMENT	CS-137	91.2	+/- 39.6	
03-Nov-15	BOTTOM SEDIMENT	FE-55	<	15,356.0	

Exposure Pathway - Aquatic
Bottom Sediment
Location: EEA

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
31-Mar-15	BOTTOM SEDIMENT	K-40	12,389.0	+/- 696.8	
31-Mar-15	BOTTOM SEDIMENT	MN-54	<	30.6	
31-Mar-15	BOTTOM SEDIMENT	CO-58	<	19.6	
31-Mar-15	BOTTOM SEDIMENT	FE-59	<	57.8	
31-Mar-15	BOTTOM SEDIMENT	CO-60	<	11.2	
31-Mar-15	BOTTOM SEDIMENT	ZN-65	<	42.2	
31-Mar-15	BOTTOM SEDIMENT	CS-134	<	22.4	
31-Mar-15	BOTTOM SEDIMENT	CS-137	74.7	+/- 34.2	

Exposure Pathway - Aquatic
Bottom Sediment
Location: ESW 2015-10

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-Nov-15	BOTTOM SEDIMENT	K-40	6,626.8 +/-	516.8	
12-Nov-15	BOTTOM SEDIMENT	MN-54	<	25.3	
12-Nov-15	BOTTOM SEDIMENT	CO-58	<	26.8	
12-Nov-15	BOTTOM SEDIMENT	FE-59	<	28.8	
12-Nov-15	BOTTOM SEDIMENT	CO-60	<	9.8	
12-Nov-15	BOTTOM SEDIMENT	ZN-65	<	40.9	
12-Nov-15	BOTTOM SEDIMENT	CS-134	<	15.0	
12-Nov-15	BOTTOM SEDIMENT	CS-137	<	18.5	
12-Nov-15	BOTTOM SEDIMENT	FE-55	<	14,924.2	

Exposure Pathway - Aquatic
Bottom Sediment
Location: ESW 2015-9

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	BOTTOM SEDIMENT	K-40	9,675.8 +/-	676.2	
12-May-15	BOTTOM SEDIMENT	MN-54	<	25.5	
12-May-15	BOTTOM SEDIMENT	CO-58	<	18.3	
12-May-15	BOTTOM SEDIMENT	FE-59	<	34.1	
12-May-15	BOTTOM SEDIMENT	CO-60	<	16.0	
12-May-15	BOTTOM SEDIMENT	ZN-65	<	44.3	
12-May-15	BOTTOM SEDIMENT	CS-134	<	17.7	
12-May-15	BOTTOM SEDIMENT	CS-137	50.7 +/-	24.2	
12-May-15	BOTTOM SEDIMENT	FE-55	<	16,864.3	

Exposure Pathway - Aquatic
Bottom Sediment
Location: JRR

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
13-May-15	BOTTOM SEDIMENT	K-40	16,612.0	+/- 851.7	
13-May-15	BOTTOM SEDIMENT	MN-54	<	36.5	
13-May-15	BOTTOM SEDIMENT	CO-58	<	37.7	
13-May-15	BOTTOM SEDIMENT	FE-59	<	57.4	
13-May-15	BOTTOM SEDIMENT	CO-60	<	17.2	
13-May-15	BOTTOM SEDIMENT	ZN-65	<	62.5	
13-May-15	BOTTOM SEDIMENT	CS-134	<	20.4	
13-May-15	BOTTOM SEDIMENT	CS-137	109.6	+/- 36.9	
13-May-15	BOTTOM SEDIMENT	FE-55	<	19,558.4	
03-Nov-15	BOTTOM SEDIMENT	K-40	18,495.0	+/- 963.8	
03-Nov-15	BOTTOM SEDIMENT	MN-54	<	36.6	
03-Nov-15	BOTTOM SEDIMENT	CO-58	<	29.9	
03-Nov-15	BOTTOM SEDIMENT	FE-59	<	93.6	
03-Nov-15	BOTTOM SEDIMENT	CO-60	<	16.0	
03-Nov-15	BOTTOM SEDIMENT	ZN-65	<	64.6	
03-Nov-15	BOTTOM SEDIMENT	CS-134	<	28.9	
03-Nov-15	BOTTOM SEDIMENT	CS-137	119.5	+/- 40.1	

Exposure Pathway - Aquatic
Bottom Sediment
Location: MUDS

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
04-May-15	BOTTOM SEDIMENT	K-40	10,121.0	+/- 601.5	
04-May-15	BOTTOM SEDIMENT	MN-54	<	22.3	
04-May-15	BOTTOM SEDIMENT	CO-58	<	21.3	
04-May-15	BOTTOM SEDIMENT	FE-59	<	17.9	
04-May-15	BOTTOM SEDIMENT	CO-60	<	10.4	
04-May-15	BOTTOM SEDIMENT	ZN-65	<	39.4	
04-May-15	BOTTOM SEDIMENT	CS-134	<	14.3	
04-May-15	BOTTOM SEDIMENT	CS-137	<	21.1	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-33

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	BOTTOM SEDIMENT	K-40	10,544.0 +/-	646.2	
12-May-15	BOTTOM SEDIMENT	MN-54	<	25.2	
12-May-15	BOTTOM SEDIMENT	CO-58	<	21.7	
12-May-15	BOTTOM SEDIMENT	FE-59	<	22.2	
12-May-15	BOTTOM SEDIMENT	CO-60	<	14.6	
12-May-15	BOTTOM SEDIMENT	ZN-65	<	45.7	
12-May-15	BOTTOM SEDIMENT	CS-134	<	15.5	
12-May-15	BOTTOM SEDIMENT	CS-137	<	21.3	
12-May-15	BOTTOM SEDIMENT	FE-55	<	19,566.0	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-34

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	BOTTOM SEDIMENT	K-40	12,569.0 +/-	705.5	
12-May-15	BOTTOM SEDIMENT	MN-54	<	27.9	
12-May-15	BOTTOM SEDIMENT	CO-58	<	25.3	
12-May-15	BOTTOM SEDIMENT	FE-59	<	69.7	
12-May-15	BOTTOM SEDIMENT	CO-60	<	18.4	
12-May-15	BOTTOM SEDIMENT	ZN-65	<	63.8	
12-May-15	BOTTOM SEDIMENT	CS-134	<	22.1	
12-May-15	BOTTOM SEDIMENT	CS-137	85.8 +/-	35.8	
12-May-15	BOTTOM SEDIMENT	FE-55	<	19,412.9	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-35

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	BOTTOM SEDIMENT	K-40	8,692.4 +/-	559.1	
12-May-15	BOTTOM SEDIMENT	MN-54	<	15.4	
12-May-15	BOTTOM SEDIMENT	CO-58	<	22.7	
12-May-15	BOTTOM SEDIMENT	FE-59	<	51.8	
12-May-15	BOTTOM SEDIMENT	CO-60	<	8.4	
12-May-15	BOTTOM SEDIMENT	ZN-65	<	45.4	
12-May-15	BOTTOM SEDIMENT	CS-134	<	18.2	
12-May-15	BOTTOM SEDIMENT	CS-137	42.8 +/-	23.4	
12-May-15	BOTTOM SEDIMENT	FE-55	<	17,047.4	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-36

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	BOTTOM SEDIMENT	K-40	12,248.0	+/- 718.4	
12-May-15	BOTTOM SEDIMENT	MN-54	<	22.6	
12-May-15	BOTTOM SEDIMENT	CO-58	<	23.1	
12-May-15	BOTTOM SEDIMENT	FE-59	<	75.6	
12-May-15	BOTTOM SEDIMENT	CO-60	<	17.0	
12-May-15	BOTTOM SEDIMENT	ZN-65	<	54.5	
12-May-15	BOTTOM SEDIMENT	CS-134	<	17.0	
12-May-15	BOTTOM SEDIMENT	CS-137	83.6	+/- 39.1	
12-May-15	BOTTOM SEDIMENT	FE-55	<	19,596.2	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-37

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-Nov-15	BOTTOM SEDIMENT	K-40	10,974.0 +/-	1,098.0	
12-Nov-15	BOTTOM SEDIMENT	MN-54	<	41.2	
12-Nov-15	BOTTOM SEDIMENT	CO-58	<	52.1	
12-Nov-15	BOTTOM SEDIMENT	FE-59	<	116.9	
12-Nov-15	BOTTOM SEDIMENT	CO-60	<	19.2	
12-Nov-15	BOTTOM SEDIMENT	ZN-65	<	97.3	
12-Nov-15	BOTTOM SEDIMENT	CS-134	<	44.1	
12-Nov-15	BOTTOM SEDIMENT	CS-137	65.7 +/-	32.9	
12-Nov-15	BOTTOM SEDIMENT	NI-63	<	444.3	
12-Nov-15	BOTTOM SEDIMENT	SR-89	<	106.0	
12-Nov-15	BOTTOM SEDIMENT	SR-90	<	32.2	
12-Nov-15	BOTTOM SEDIMENT	FE-55	<	15,757.5	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-38

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-Nov-15	BOTTOM SEDIMENT	K-40	10,670.0 +/-	968.6	
12-Nov-15	BOTTOM SEDIMENT	MN-54	<	52.6	
12-Nov-15	BOTTOM SEDIMENT	CO-58	<	43.7	
12-Nov-15	BOTTOM SEDIMENT	FE-59	<	122.9	
12-Nov-15	BOTTOM SEDIMENT	CO-60	<	34.0	
12-Nov-15	BOTTOM SEDIMENT	ZN-65	<	81.3	
12-Nov-15	BOTTOM SEDIMENT	CS-134	<	35.8	
12-Nov-15	BOTTOM SEDIMENT	CS-137	<	49.5	
12-Nov-15	BOTTOM SEDIMENT	FE-55	<	15,718.3	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-39

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-Nov-15	BOTTOM SEDIMENT	K-40	12,713.0 +/-	1,078.0	
12-Nov-15	BOTTOM SEDIMENT	MN-54	<	43.0	
12-Nov-15	BOTTOM SEDIMENT	CO-58	<	42.5	
12-Nov-15	BOTTOM SEDIMENT	FE-59	<	129.0	
12-Nov-15	BOTTOM SEDIMENT	CO-60	<	36.7	
12-Nov-15	BOTTOM SEDIMENT	ZN-65	<	123.6	
12-Nov-15	BOTTOM SEDIMENT	CS-134	<	42.5	
12-Nov-15	BOTTOM SEDIMENT	CS-137	<	41.7	
12-Nov-15	BOTTOM SEDIMENT	FE-55	<	15,790.6	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS 2015-40

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-Nov-15	BOTTOM SEDIMENT	K-40	11,960.0 +/-	580.2	
12-Nov-15	BOTTOM SEDIMENT	MN-54	<	22.6	
12-Nov-15	BOTTOM SEDIMENT	CO-58	<	21.0	
12-Nov-15	BOTTOM SEDIMENT	FE-59	<	64.2	
12-Nov-15	BOTTOM SEDIMENT	CO-60	<	10.8	
12-Nov-15	BOTTOM SEDIMENT	ZN-65	<	46.2	
12-Nov-15	BOTTOM SEDIMENT	CS-134	<	19.1	
12-Nov-15	BOTTOM SEDIMENT	CS-137	48.8 +/-	17.1	
12-Nov-15	BOTTOM SEDIMENT	FE-55	<	15,526.8	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS HS-10

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-Nov-15	BOTTOM SEDIMENT	K-40	12,373.0 +/-	1,033.0	
12-Nov-15	BOTTOM SEDIMENT	MN-54	<	63.2	
12-Nov-15	BOTTOM SEDIMENT	CO-58	<	56.2	
12-Nov-15	BOTTOM SEDIMENT	FE-59	<	172.0	
12-Nov-15	BOTTOM SEDIMENT	CO-60	<	46.4	
12-Nov-15	BOTTOM SEDIMENT	ZN-65	<	100.0	
12-Nov-15	BOTTOM SEDIMENT	CS-134	<	39.8	
12-Nov-15	BOTTOM SEDIMENT	CS-137	<	59.6	
12-Nov-15	BOTTOM SEDIMENT	FE-55	<	15,357.8	

Exposure Pathway - Aquatic
Bottom Sediment
Location: UHS HS-9

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
12-May-15	BOTTOM SEDIMENT	K-40	13,062.0	+/- 796.8	
12-May-15	BOTTOM SEDIMENT	MN-54	<	37.8	
12-May-15	BOTTOM SEDIMENT	CO-58	<	27.0	
12-May-15	BOTTOM SEDIMENT	FE-59	<	19.8	
12-May-15	BOTTOM SEDIMENT	CO-60	<	16.7	
12-May-15	BOTTOM SEDIMENT	ZN-65	<	42.8	
12-May-15	BOTTOM SEDIMENT	CS-134	<	25.2	
12-May-15	BOTTOM SEDIMENT	CS-137	98.7	+/- 39.3	
12-May-15	BOTTOM SEDIMENT	NI-63	<	329.5	
12-May-15	BOTTOM SEDIMENT	SR-90	37.3	+/- 18.0	
12-May-15	BOTTOM SEDIMENT	FE-55	<	17,417.2	
12-May-15	BOTTOM SEDIMENT	SR-89	<	110.6	

Exposure Pathway - Aquatic Vegetation
Location: DC

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
29-Jun-15	CATTAILS	BE-7	282.0 +/-	108.4	
29-Jun-15	CATTAILS	K-40	4,249.7 +/-	360.1	
29-Jun-15	CATTAILS	MN-54	<	15.5	
29-Jun-15	CATTAILS	CO-58	<	16.3	
29-Jun-15	CATTAILS	FE-59	<	26.2	
29-Jun-15	CATTAILS	CO-60	<	14.9	
29-Jun-15	CATTAILS	ZN-65	<	26.9	
29-Jun-15	CATTAILS	ZR-NB-95	<	17.1	
29-Jun-15	CATTAILS	I-131	<	37.3	
29-Jun-15	CATTAILS	CS-134	<	13.9	
29-Jun-15	CATTAILS	CS-137	<	17.8	

Exposure Pathway - Aquatic Vegetation
Location: EEA

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
19-Jun-15	WATER PRIMROSE	BE-7	691.7 +/-	197.3	
19-Jun-15	WATER PRIMROSE	BE-7	664.9 +/-	230.9	Duplicate
19-Jun-15	WATER PRIMROSE	K-40	3,606.8 +/-	399.3	Duplicate
19-Jun-15	WATER PRIMROSE	K-40	3,314.2 +/-	403.9	
19-Jun-15	WATER PRIMROSE	MN-54	<	13.7	
19-Jun-15	WATER PRIMROSE	MN-54	<	13.5	Duplicate
19-Jun-15	WATER PRIMROSE	CO-58	<	9.8	Duplicate
19-Jun-15	WATER PRIMROSE	CO-58	<	10.6	
19-Jun-15	WATER PRIMROSE	FE-59	<	34.8	Duplicate
19-Jun-15	WATER PRIMROSE	FE-59	<	20.3	
19-Jun-15	WATER PRIMROSE	CO-60	<	9.2	Duplicate
19-Jun-15	WATER PRIMROSE	CO-60	<	15.6	
19-Jun-15	WATER PRIMROSE	ZN-65	<	29.9	
19-Jun-15	WATER PRIMROSE	ZN-65	<	28.4	Duplicate
19-Jun-15	WATER PRIMROSE	ZR-NB-95	<	10.4	
19-Jun-15	WATER PRIMROSE	ZR-NB-95	<	20.0	Duplicate
19-Jun-15	WATER PRIMROSE	I-131	<	25.6	
19-Jun-15	WATER PRIMROSE	I-131	<	26.7	Duplicate
19-Jun-15	WATER PRIMROSE	CS-134	<	15.6	
19-Jun-15	WATER PRIMROSE	CS-134	<	16.5	Duplicate
19-Jun-15	WATER PRIMROSE	CS-137	<	14.0	
19-Jun-15	WATER PRIMROSE	CS-137	<	15.8	Duplicate

Exposure Pathway - Aquatic Vegetation
Location: MUDS

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
29-Jul-15	BRITTLE NAIAD	BE-7	<	106.2	
29-Jul-15	BRITTLE NAIAD	K-40	3,942.4 +/-	293.9	
29-Jul-15	BRITTLE NAIAD	MN-54	<	10.5	
29-Jul-15	BRITTLE NAIAD	CO-58	<	7.2	
29-Jul-15	BRITTLE NAIAD	FE-59	<	17.7	
29-Jul-15	BRITTLE NAIAD	CO-60	<	8.1	
29-Jul-15	BRITTLE NAIAD	ZN-65	<	24.1	
29-Jul-15	BRITTLE NAIAD	ZR-NB-95	<	8.3	
29-Jul-15	BRITTLE NAIAD	I-131	<	21.1	
29-Jul-15	BRITTLE NAIAD	CS-134	<	8.9	
29-Jul-15	BRITTLE NAIAD	CS-137	<	5.8	

Exposure Pathway - Terrestrial
Vegetation
Location: EEA

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
19-Jun-15	PASTURAGE	BE-7	2,128.1+/-	291.3	
19-Jun-15	PASTURAGE	K-40	5,713.1+/-	528.5	
19-Jun-15	PASTURAGE	MN-54	<	17.8	
19-Jun-15	PASTURAGE	CO-58	<	13.5	
19-Jun-15	PASTURAGE	FE-59	<	28.4	
19-Jun-15	PASTURAGE	CO-60	<	14.6	
19-Jun-15	PASTURAGE	ZN-65	<	27.7	
19-Jun-15	PASTURAGE	ZR-NB-95	<	21.9	
19-Jun-15	PASTURAGE	I-131	<	44.1	
19-Jun-15	PASTURAGE	CS-134	<	16.9	
19-Jun-15	PASTURAGE	CS-137	<	13.1	

Exposure Pathway - Terrestrial
Vegetation
Location: MUDS

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
29-Jul-15	PASTURAGE	BE-7	958.3 +/-	111.4	Duplicate
29-Jul-15	PASTURAGE	BE-7	1,064.8 +/-	120.0	
29-Jul-15	PASTURAGE	K-40	5,025.7 +/-	235.2	
29-Jul-15	PASTURAGE	K-40	4,956.3 +/-	225.3	Duplicate
29-Jul-15	PASTURAGE	MN-54	<	6.2	Duplicate
29-Jul-15	PASTURAGE	MN-54	<	8.1	
29-Jul-15	PASTURAGE	CO-58	<	7.4	Duplicate
29-Jul-15	PASTURAGE	CO-58	<	5.7	
29-Jul-15	PASTURAGE	FE-59	<	19.7	
29-Jul-15	PASTURAGE	FE-59	<	14.2	Duplicate
29-Jul-15	PASTURAGE	CO-60	<	9.1	
29-Jul-15	PASTURAGE	CO-60	<	7.5	Duplicate
29-Jul-15	PASTURAGE	ZN-65	<	23.3	
29-Jul-15	PASTURAGE	ZN-65	<	16.4	Duplicate
29-Jul-15	PASTURAGE	ZR-NB-95	<	10.8	
29-Jul-15	PASTURAGE	ZR-NB-95	<	8.2	Duplicate
29-Jul-15	PASTURAGE	I-131	<	20.4	
29-Jul-15	PASTURAGE	I-131	<	17.0	Duplicate
29-Jul-15	PASTURAGE	CS-134	<	8.5	Duplicate
29-Jul-15	PASTURAGE	CS-134	<	10.5	
29-Jul-15	PASTURAGE	CS-137	<	8.5	Duplicate
29-Jul-15	PASTURAGE	CS-137	<	10.6	

Exposure Pathway - Terrestrial
Soil
Location: EEA

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
31-Mar-15	SOIL	K-40	9,710.8	+/- 601.6	
31-Mar-15	SOIL	MN-54	<	30.2	
31-Mar-15	SOIL	CO-58	<	22.0	
31-Mar-15	SOIL	FE-59	<	23.8	
31-Mar-15	SOIL	CO-60	<	8.6	
31-Mar-15	SOIL	ZN-65	<	41.9	
31-Mar-15	SOIL	CS-134	<	16.8	
31-Mar-15	SOIL	CS-137	244.7	+/- 37.6	

Exposure Pathway - Terrestrial
Soil
Location: MUDS

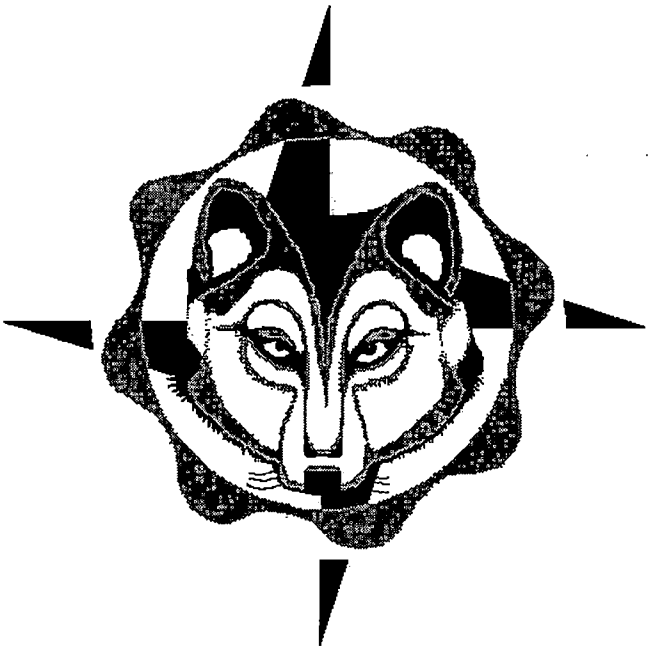
Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Dry)		Duplicate Analysis
01-Apr-15	SOIL	K-40	11,234.0 +/-	653.3	
01-Apr-15	SOIL	MN-54	<	21.6	
01-Apr-15	SOIL	CO-58	<	8.7	
01-Apr-15	SOIL	FE-59	<	66.6	
01-Apr-15	SOIL	CO-60	<	9.8	
01-Apr-15	SOIL	ZN-65	<	30.9	
01-Apr-15	SOIL	CS-134	<	22.4	
01-Apr-15	SOIL	CS-137	214.7 +/-	32.4	
07-Oct-15	SOIL	K-40	11,061.0 +/-	629.6	
07-Oct-15	SOIL	MN-54	<	27.5	
07-Oct-15	SOIL	CO-58	<	24.8	
07-Oct-15	SOIL	FE-59	<	87.4	
07-Oct-15	SOIL	CO-60	<	26.8	
07-Oct-15	SOIL	ZN-65	<	58.0	
07-Oct-15	SOIL	CS-134	<	24.4	
07-Oct-15	SOIL	CS-137	118.2 +/-	31.7	

Exposure Pathway - Ingestion
Meat
Location: Q1.0

Collection Date	Sample Description	Nuclide	Concentration (pCi/Kg Wet)		Duplicate Analysis
09-Nov-15	DEER	K-40	2,807.6 +/-	326.5	
09-Nov-15	DEER	MN-54	<	14.5	
09-Nov-15	DEER	CO-58	<	15.0	
09-Nov-15	DEER	FE-59	<	26.5	
09-Nov-15	DEER	CO-60	<	12.2	
09-Nov-15	DEER	ZN-65	<	30.8	
09-Nov-15	DEER	CS-134	<	11.1	
09-Nov-15	DEER	CS-137	<	12.1	
09-Nov-15	DEER	H-3	2,305.0 +/-	124.0	

WOLF CREEK GENERATING STATION

2015 LAND USE CENSUS REPORT



Prepared by:	Teresa L. Rice	09-24-15
	Teresa L. Rice	Date
Peer Review:	Craig T. Adkinson	10/5/15
	Craig T. Adkinson	Date
Approved by:	James K. Rudeen	10/13/15
	James K. Rudeen	Date

EXECUTIVE SUMMARY

The annual Land Use Census of rural residents within five miles of the Wolf Creek Generating Station (WCGS) has been completed in 2015 in accordance with AP 07B-004, [Offsite Dose Calculation Manual (Radiological Environmental Monitoring Program)].

No program changes are necessary regarding milk locations. Again, no milk sampling locations were identified.

The two broadleaf vegetation locations with the highest calculated annual average D/Q rankings are A2.60-17TE1527 and Q2.35-MILA1619. AP 07B-004 specifies, "Alternate sampling locations may be used to provide continued monitoring". The third-ranked garden is N2.38-RODR9. Since these gardens are currently listed as sample locations for the Radiological Environmental Monitoring Program in procedure AP 07B-004 (locations A-3, Q-6 and N-1), no program changes are necessary regarding broadleaf vegetation locations.

BACKGROUND

Section 5.2, Attachment A, of procedure AP 07B-004, directs that "a Land Use Census shall be conducted annually during the growing season to identify the nearest (1) milk animal, (2) residence, and (3) garden of greater than 500 square feet producing broadleaf vegetation in each of the 16 meteorological sections within five miles of the WCGS site."

Table 5-1, Attachment A, of procedure AP 07B-004, requires that broadleaf vegetation samples be collected from "two indicator locations (using the criteria from the "Land Use Census" section) with highest calculated annual average D/Q."

Table 5-1, Attachment A, of procedure AP 07B-004, also requires that milk samples be collected from "three indicator locations within 5 miles of the site having the highest dose potential."

METHODOLOGY

Over two hundred surveys were mailed to the rural residents living within five miles of WCGS. The survey excluded the residents of New Strawn and Burlington. These locations were excluded due to the large number of households and the low likelihood that information gained from these residences would affect the locations chosen for REMP sampling. Drive-by information was collected for the nearest residences in each sector that did not return surveys.

The information collected was compiled and the results are identified in Tables 1-3. Calculations were performed so that garden locations could be ranked by their respective D/Q. These results are contained in Table 4.

RESULTS

No changes were identified for the nearest occupied residence in each sector. Ten changes were noted for the nearest garden producing broadleaf vegetation. There were no changes regarding milk sample locations. Again, no locations were identified that routinely milked animals for human consumption.

TABLE 1

2015 Land Use Census Data

Location of Nearest:

Sector	Residence	Milking Animals	Broadleaf Garden
A	A2.47-17RD1474	None	A2.60-17TE1527
B	B3.53-QURD1755	None	None
C	C1.92-16RD1703	None	C4.89-18RD1859
D	D2.03-QULA1571	None	None
E	E1.77-QULA1485	None	None
F	F1.84-QULA1419	None	F2.44-RERD1391
G	G3.03-13RD1820	None	G4.08-SHRD1234
H	H3.09-12RD1711	None	H3.09-12RD1711
J	J3.70-11RD1540	None	J3.90-11RD1519
K	K2.70-12LA1439	None	K4.10-NARD1120
L	L2.10-NARD1339	None	L2.60-NARD1308
M	M2.34-14RD1346	None	M3.69-LYLA1290
N	N2.08-15RD1350	None	N2.38-RODR9
P	P2.76-HW751534	None	P4.97-LARD343
Q	Q2.35-MILA1619	None	Q2.35-MILA1619
R	R2.08-NALN1650	None	None

Identifiers are based upon the following protocol:

EXAMPLE: A2.47-17RD1474

"A" = Sector A

"2.47" = 2.47 miles from the reactor

"17RD1474" = address

TABLE 2

SECTOR	2014 NEAREST RESIDENCE	2015 NEAREST RESIDENCE
A	A2.47-17RD1474	A2.47-17RD1474
B	B3.53-QURD1755	B3.53-QURD1755
C	C1.92-16RD1703	C1.92-16RD1703
D	D2.03-QULA1571	D2.03-QULA1571
E	E1.77-QULA1485	E1.77-QULA1485
F	F1.84-QULA1419	F1.84-QULA1419
G	G3.03-13RD1820	G3.03-13RD1820
H	H3.09-12RD1711	H3.09-12RD1711
J	J3.70-11RD1540	J3.70-11RD1540
K	K2.70-12LA1439	K2.70-12LA1439
L	L2.10-NARD1339	L2.10-NARD1339
M	M2.34-14RD1346	M2.34-14RD1346
N	N2.08-15RD1350	N2.08-15RD1350
P	P2.76-HW751534	P2.76-HW751534
Q	Q2.35-MILA1619	Q2.35-MILA1619
R	R2.08-NALN1650	R2.08-NALN1650

NOTE: Entries underlined indicate changes from the 2014 Land Use Census.

TABLE 3

2015 Land Use Census Milk and Garden Data

SECTOR	2014 MILKING ANIMALS	2015 MILKING ANIMALS	2014 NEAREST GARDEN PRODUCING BROADLEAF VEGETATION	2015 NEAREST GARDEN PRODUCING BROADLEAF VEGETATION
A	None	None	A2.60-17TE1527	A2.60-17TE1527
B	None	None	None	None
C	None	None	C3.16-QURD1712	C4.89-18RD1859
D	None	None	D2.33-RERD1520	None
E	None	None	E4.92-15R2065	None
F	None	None	F2.28-14RD1785	F2.44-RERD1391
G	None	None	G3.66-12RD1814	G4.08-SHRD1234
H	None	None	None	H3.09-12RD1711
J	None	None	J3.70-11RD1540	J3.90-11RD1519
K	None	None	K4.10-NARD1120	K4.10-NARD1120
L	None	None	L2.39-NARD1309	L2.60-NARD1308
M	None	None	M3.78-LYRD1390	M3.69-LYLA1290
N	None	None	N2.38-RODR9	N2.38-RODR9
P	None	None	P3.52-16RD1196	P4.97-LARD343
Q	None	None	Q2.35-MILA1619	Q2.35-MILA1619
R	None	None	None	None

NOTE: Underlined entries indicate changes from the 2014 Land Use Census.

TABLE 4

Information Used for D/Q Calculations on Gardens Producing Broadleaf Vegetation

FROM LAND USE			FROM SA-13-002					
	DIST	CALC	NEAR	NEAR	FAR	FAR		SECTOR
SECTOR	(MI)	(METERS)	DIST	D / Q	DIST	D / Q	CALC	RANKING
A	2.60	**4184**	4000	1.86E-09	5000	1.26E-09	**1.75E-09**	1
B								
C	4.89	**7870**	7000	1.37E-10	8000	1.11E-10	**1.14E-10**	12
D								
E								
F	2.44	**3927**	3000	6.15E-10	4000	3.69E-10	**3.87E-10**	7
G	4.08	**6566**	6000	3.57E-10	7000	2.65E-10	**3.05E-10**	9
H	3.09	**4973**	4000	1.03E-09	5000	7.01E-10	**7.10E-10**	4
J	3.90	**6276**	6000	4.46E-10	7000	3.31E-10	**4.14E-10**	6
K	4.10	**6598**	6000	4.46E-10	7000	3.31E-10	**3.77E-10**	8
L	2.60	**4184**	4000	6.62E-10	5000	4.50E-10	**6.23E-10**	5
M	3.69	**5938**	5000	3.64E-10	6000	2.67E-10	**2.73E-10**	10
N	2.38	**3830**	3000	1.17E-09	4000	7.00E-10	**7.80E-10**	3
P	4.97	**7998**	7000	2.84E-10	8000	2.29E-10	**2.29E-10**	11
Q	2.35	**3782**	3000	1.46E-09	4000	8.79E-10	**1.01E-09**	2
R								

Originated by: Teresa L. Rice Date: 09-24-15

Verified by: Craig T. Atkinson Date: 10/5/15