WOLF CREEK
NUCLEAR OPERATING CORPORATION

Gautam Sen
Manager Regulatory Affairs

April 27, 2011

RA 11-0129

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

Subject: Docket No. 50-482: 2010 Annual Radiological Environmental Operating Report

Gentlemen:

Enclosed is the 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, 2010, through December 31, 2010.

This letter contains no commitments. If you have any questions concerning this matter, please contact me at (620) 364-4175, or Ms. Diane Hooper at (620) 364-4041.

Sincerely,

Gautam Sen

GS/rlt

Enclosure: 2010 Annual Radiological Environmental Operating Report

cc: E. E. Collins (NRC), w/e
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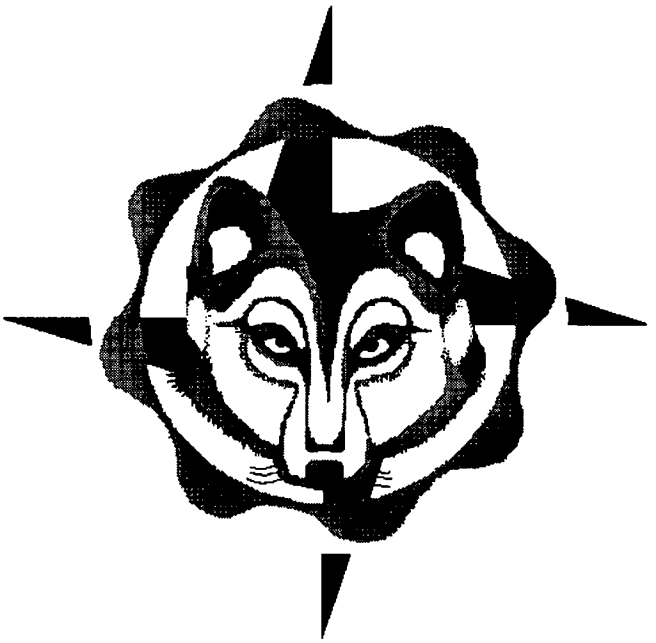
IE25
NRR

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

2010 ANNUAL RADIOLOGICAL

ENVIRONMENTAL OPERATING REPORT



April 15, 2011

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 2010 in airborne particulate and radioiodine filters, ground water, drinking water, broadleaf vegetation, shoreline sediment, crops, aquatic vegetation, bottom sediment, or soil samples. Activation, corrosion or fission products attributable to plant operation were detected during 2010 in surface water, fish, deer, and alligator samples.

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

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

INTRODUCTION

The 2010 Annual Radiological Environmental Operating Report for Wolf Creek Generating Station (WCGS) covers the period from January 1 through December 31, 2010. 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 Effluents Release Program. The Interlaboratory Comparison Program results, a summary of results in the Nuclear Regulatory Commission (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/sample locations, sample collection frequency and type/frequency of analysis. Table 2 lists each sample location's distance and direction from the plant. Samples in addition to those required by the WCGS Offsite Dose Calculation Manual (ODCM) 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 collected particulate and radioiodine samples on 47 mm glass fiber filters and charcoal canisters, respectively. The filters and charcoal canisters were changed out weekly, labeled, and shipped to Environmental, Inc. for analyses.

Gross beta analyses of the air particulate filters were performed after a nominal 72-hour period to allow the radon and thoron daughter products to decay.

Weekly air particulate filters were combined into quarterly composites for each location and analyzed for gamma emitting isotopes.

Charcoal canisters were routinely counted to determine the presence or absence of I-131. Positive indication of I-131 would have resulted in analysis of each individual charcoal canister.

Air samples were collected from six locations. Indicator locations 2, 37, and 49 are located in the three sectors with the highest ground level deposition constants (D/Q). Air sampling stations are also located in the community of New Strawn (indicator location 32) and a control location near the intersection of 20th Road and Yearling Road (location 53). Supplemental indicator location (location 18) was also sampled during the year. Indicator locations are shown in Figure 1 and the control location is shown in Figure 5.

B. Direct Radiation Pathway

Optically stimulated luminescence (OSL) dosimeters were used at 44 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. Two OSLs were placed at each designated location. The OSLs were changed out quarterly. Transit dose was measured and subtracted from the ambient dose. Indicator OSL sample locations are illustrated in Figure 2 and control locations are shown in Figure 5. Control locations were 39 (Beto Junction), 48 (Harris) and 53 (near the intersection of 20th Road and Yearling Road).

C. Waterborne Pathway

All water samples were analyzed to determine whether gamma emitters were present. In addition to gamma isotopic analysis, radiochemical analysis for I-131 was performed on drinking water and ground water samples. Gross beta analysis was also performed on drinking water samples. Tritium analysis was performed monthly by liquid scintillation for surface water and quarterly for drinking water. Tritium analysis was also performed on ground water samples. One surface water sample from the SP location was also analyzed for Fe-55. Water sampling locations are shown in Figures 3 and 5.

Monthly grab samples of surface water were collected from John Redmond Reservoir (JRR) as a control location and from the "SP" location, which is located near the spillway of Coffey County Lake, formerly known as Wolf Creek Lake, as an indicator location.

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

Drinking water was sampled at the water treatment facilities for the towns of Burlington (control location BW-15) and Iola (indicator location IO-DW). The Burlington facility is located upstream and the Iola facility is located downstream of the confluence of the discharge from Coffey County Lake and the Neosho River. Composite samples were obtained monthly from automatic samplers at each location that collected approximately 27 ml. of drinking 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

Because no sampling locations that produce milk for human consumption were identified within five miles of the plant, milk was not collected during the sample year.

Fish were sampled semiannually from the tail waters of JRR (control, Figure 4) and from Coffey County Lake (indicator, 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 from four gardens. Three indicator (H-2, N-1 and Q-6) gardens (Figure 4) and one control (D-2) garden (Figure 5) were sampled. Gamma isotopic analyses were performed on all samples.

Crop samples were obtained from two indicator locations (NR-D1 and NR-D2) downstream of the confluence of Wolf Creek and the Neosho River. Two crop samples were obtained 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 ODCM)

Quarterly, duplicate ground water grab samples were obtained from indicator location C-49 and were labeled L-49. These duplicate samples served as laboratory quality checks. The ground water samples were analyzed for gamma emitters, I-131, and tritium.

Bottom sediment samples were collected from indicator locations at the Coffey County Lake discharge cove (DC), Environmental Education Area (EEA), Make-Up Discharge Structure (MUDS), Ultimate Heat Sink (UHS), and the control location (JRR). Gamma isotopic analyses were performed on the bottom sediment samples. One sample from the DC and a sample from JRR were also analyzed for Fe-55. Some of these indicator 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.

A shoreline sediment sample was collected from indicator location EEA. Gamma isotopic analysis was performed on the sample. This sample was collected as part of a cooperative sampling effort with the KDHE. The sample location is identified on Figure 3.

Aquatic vegetation was collected from indicator locations DC ALT and 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.

Soil was sampled from indicator locations MUDS and EEA. Gamma isotopic analyses were 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.

One road-killed deer was sampled from indicator location R2.5. Gamma isotopic analysis and tritium analysis were performed. This sample was collected as part of a cooperative sampling effort with the KDHE. The sample location is identified on Figure 4.

An alligator was sampled from indicator location CCL. Gamma isotopic analysis and tritium analysis were performed. The sample location is identified on Figure 4.

II. DISCUSSION OF RESULTS

Analysis results for all 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.

In this section, results are discussed by pathway and analysis type. Monitoring results are compared with control data, preoperational values, sources of radioactivity, and effluent releases when applicable. Trends or seasonal effects are discussed.

A. Airborne Pathway

Chart 1 graphically illustrates weekly gross beta results for the sample year. Chart 2 represents the historical smoothed averages of indicator locations and the control locations gross beta data.

Charts 1 and 2 demonstrate how closely the indicator and control locations tracked together. Chart 2 reveals a seasonal cyclic trend in which 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 2010 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 2010 weekly gross beta analyses range for all indicator locations was 0.007 to 0.050 pCi/m^3, which was within the 1983 and 1984 pre-operational range. Additionally, the annual mean for indicator locations for 2010 (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 2010 (0.026 pCi/m^3) was the same as the annual mean of the control location (0.026 pCi/m^3). The indicator location with the highest gross beta annual mean was location 49 (0.026 pCi/m^3), which was the same as the annual mean of the control location (0.026 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 2010, the range for Be-7 detected activity was 0.058 to 0.105 pCi/m^3 for indicator locations and the annual mean for indicator locations was 0.082 pCi/m^3.

The control location annual mean for Be-7 detected activity (0.082 pCi/m^3) was the same as the indicator locations annual mean (0.082 pCi/m^3).

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

Plant-related activation, corrosion, or fission products were not detected during 2010 in airborne particulate and radioiodine filters and 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 all indicator locations in 2010 was 18.9 mR per standardized 90-day quarter. The annual mean of the control locations in 2010 was 19.7 mR per standardized 90-day quarter.

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

The indicator location with the highest annual mean was 47 (25.2 mR per standardized 90-quarter). The close proximity of location 47 to the Radwaste Building is likely the reason direct radiation levels are higher at this location.

Based upon Condition Report 00027489, improvements were made in measuring and subtracting transit dose. As expected, the OSL results have increased for all locations. 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 2010.

Chart 4 displays the TLD nearsite locations (1, 2, 7-9, 11-14, 18, 26, 27, 29, 30, 37 and 38) and the control 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 all surface water samples collected from Coffey County Lake during 2010. Chart 5 illustrates the yearly averages of surface water tritium data for the spillway location. Chart 5 indicates that the average tritium concentration of the Coffey County Lake may have reached equilibrium.

ODCM required lower limits of detection were met and tritium activity was not detected in samples obtained from the control location (JRR).

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

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

(2) Ground Water

ODCM 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 2010 in ground water samples.

(3) Drinking Water

Gross beta activity was detected in all drinking water samples collected from the indicator location and the control location. The annual mean of the indicator location gross beta activity (2.8 pCi/L) was similar when compared to the annual mean of the control location gross beta activity (2.9 pCi/L). The 2010 annual means of gross beta activity for both the indicator and control locations were lower than those of the pre-operational monitoring year of 1984. In 1984, the annual mean of the indicator location gross beta activity was 7.5 pCi/L and the annual mean of the control 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 locations.

ODCM required lower limits of detection were met. Additionally, radionuclides were not detected by the I-131, Tritium, or gamma isotopic analyses.

Plant-related activation, corrosion, or fission products were not detected during 2010 in drinking water samples and no unusual trends were noted.

(4) Shoreline Sediment

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

Cs-137 activity (184.2 +/- 98.8 pCi/kg, dry) was detected in one shoreline sediment sample obtained from the DC indicator location. Cs-137 activity (116.8 +/- 31.3 pCi/kg, dry) was also detected in one shoreline sediment sample obtained from the JRR control location.

Cs-137 activity was 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, dry. The decay corrected range of pre-operational Cs-137 activity detected is approximately 124 to 235 pCi/kg, dry. The detected Cs-137 activity in the shoreline sediment sample collected at the DC indicator location in 2010 was likely due to fallout since the measured activity is within the decay corrected range of pre-operational Cs-137 detected activity.

ODCM required lower limits of detection were met. Plant-related activation, corrosion, or fission products were not detected during 2010 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 all fish samples obtained from the CCL indicator location and the JRR control location. K-40 activity was also detected during pre-operational fish monitoring.

Fish samples were also analyzed for tritium. All fish samples taken from Coffey County Lake had tritium activity detected (7,481 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 (8,358 pCi/kg), would receive a committed effective dose equivalent of 0.011 mRem.

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

No other radionuclides were detected in fish during the year. The ODCM 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 locations detected naturally occurring gamma emitters Be-7 and K-40. Be-7 and K-40 activity were also detected pre-operationally.

No other radionuclides were detected in broadleaf vegetation during the year. The ODCM required lower limits of detection were met and no unusual trends were noted. Plant-related activation, corrosion, or fission products were not detected during 2010 in broadleaf vegetation samples.

(4) Crop Samples

Gamma analysis detected naturally occurring K-40 activity to be present in all of the samples. K-40 activity was also detected during pre-operational crop monitoring. K-40 was the only activity detected in crop samples. Plant-related activation, corrosion, or fission products were not detected during 2010 in crop samples and no unusual trends were noted.

E. Additional Samples Collected (not required by ODCM)

(1) Bottom Sediment

Naturally occurring K-40 was detected in all of the bottom sediment samples obtained from the indicator locations and the control locations. K-40 activity was also detected during pre-operational bottom sediment monitoring.

Cs-137 activity was detected in seven out of the nine samples obtained from indicator locations (range 40 to 111 pCi/kg, dry). Cs-137 activity was also detected in one sample obtained from the control location (112 pCi/kg, dry). Since the measured Cs-137 concentrations of the indicator location samples were lower than the Cs-137 concentration of the control location, this activity was likely due to fallout and not attributed to plant operation.

Cs-137 activity was detected in pre-operational samples, and the results for 2010 indicator bottom sediment samples were 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 40 to 484 pCi/kg.)

Chart 8 plots the Cs-137 detected activity from the discharge cove indicator location and JRR control location bottom sediment samples. The detected Cs-137 activity measured from the discharge cove location reflects a decreasing trend. The Chart 8 trend line indicates that as expected, Cs-137 activity detected at the JRR control location has also been decreasing.

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

(3) Aquatic Vegetation

Naturally occurring Be-7 and K-40 activity were detected in all aquatic vegetation samples. Be-7 and K-40 activity were also detected during pre-operational monitoring.

No other radionuclides were detected. Plant-related activation, corrosion, or fission products were not detected during 2010 in aquatic vegetation samples and no unusual trends were noted.

(4) Shoreline Sediment

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

Cs-137 activity (101.9 pCi/kg, dry) was detected in the shoreline sediment sample obtained from the EEA indicator location. Cs-137 activity (116.8 pCi/kg, dry) was also detected in one shoreline sediment sample obtained from the JRR control location. The detected Cs-137 activity at the EEA indicator location was likely due to fallout and is not attributed to plant operation since the measured activity at the control location was slightly higher than the measured activity at the indicator location.

No other radionuclides were detected. Plant-related activation, corrosion, or fission products were not detected and no unusual trends were noted.

(5) Soil

Naturally occurring K-40 activity was detected in both of the indicator location soil samples. K-40 activity was also detected during pre-operational soil monitoring.

Cs-137 activity (336 pCi/kg) was also detected in the EEA indicator location soil sample. This activity is likely due to fallout. 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, dry. The decay corrected range of pre-operational Cs-137 activity detected in soil is approximately 142 to 1,203 pCi/kg. The range of the 2010 detected Cs-137 activity in soil is within the decay corrected pre-operational range.

Plant-related activation, corrosion, or fission products were not detected during 2010 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.

The deer sample was also analyzed for tritium. The detected tritium activity (626 pCi/kg, wet) was attributable to plant operation.

No other radionuclides were detected. No unusual trends were identified.

(7) Alligator

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

The alligator sample was also analyzed for tritium. The detected tritium activity (7,737 pCi/kg, wet) was attributable to plant operation.

No other radionuclides were detected.

III. PROGRAM REVISIONS/CHANGES

Control dosimeter location #48 (Harris) was removed from the REMP and control dosimeter location #53 was added to the REMP. This change was made based upon a comparison that was performed which reflected that there was no significant difference between the two locations.

IV. PROGRAM DEVIATIONS

Air Samples

The following air sample locations 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/ Condition Report Number/ Comments
18	04/26/10 – 05/03/10	50%/81	Equipment Malfunction Condition Report 00025260 (LLDs were attained.)
53	05/11/10 – 05/17/10	79%/114	Equipment Malfunction Condition Report 00025608 Due to low sample volume, the LLDs for Gross Beta and I-131 were unattainable.
37	05/17/10 – 05/24/10	12%/21	Power Outage Condition Report 00025712 (LLDs were attained.)
37	06/08/10 – 06/14/10	15%/21	Power Outage Condition Report 00026100 (LLDs were attained.)
32	07/19/10 - 07/26/10	8.9%/14	Voltage Outside of Acceptable Range Condition Report 00026950 (LLDs were attained.)

Drinking Water Samples

Drinking water was not continuously collected at the Burlington control sample location during the 09-07-2010 to 10-06-2010 sample period due to an equipment malfunction (faulty float assembly). Approximately ¾ of a gallon of water was collected before the sampler stopped operating. This sample and a grab sample were submitted to the vendor lab for analysis. The drinking water sampler was replaced with a spare drinking water sampler on the same day of discovery. Condition Report 00028670 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 RESULTS

During 2010, 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 EFFLUENTS 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 that 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 0.111 mRem for 2010.

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 (11,428 pCi/L), would receive a committed effective dose equivalent of 0.522 mRem per year. For an adult eating 21 kg of fish per year from Coffey County Lake, using the average tritium activity (7,481 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 0.532 mRem per year.

It should be noted that the Coffey County Lake is not 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

2010 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM DESCRIPTION (SAMPLE COLLECTION SPECIFIED BY ODCM)

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 (Locations 2, 37, 49 and supplemental location 18 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)**		
	40 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, 47, & 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), Environmental 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 up gradient of the site (Location B-12 on Figure 3).	Quarterly grab sample	Quarterly gamma isotopic 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 site (Location IO-DW on Figure 5); control sample from location upstream of the site (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 Q-6 and N-1 and alternate locations B-1, H-2 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 (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	4.1	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
	47	0.16	S	J
	48	14.7	ENE	D
	49	0.8	NNE	B
	50	3.6	ENE	D
	51	4.0	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	D-2	14.8	ENE	D
	H-2	3.0	SSE	H
	N-1	2.4	W	N
	Q-6	2.4	NW	Q
Crops	NR-D1	8.9	S	J
	NR-D2	11.5	S	J
	NR-U1	4.0	SSW	K
Bottom Sediment	DC	0.9	WNW	P
	JRR	3.7	W	N
	MUDS	1.5	WNW	P
	UHS	0.6	E	E
Aquatic Vegetation	DC ALT	1.5	NW	Q
	EEA	3.0	NNW	R
Soil	EEA	3.0	NNW	R
	MUDS	1.5	WNW	P
Meet (Alligator)	CCL	1.5	WNW	P
Meet (Deer)	R2.5	2.5	NNW	R

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	19.1	20.1	20.8	21.0	81.0
2	18.2	15.5	17.8	16.2	67.7
4	18.8	18.2	20.0	21.6	78.6
5	16.1	18.2	19.8	17.7	71.8
7	15.2	16.6	19.1	21.5	72.4
8	18.0	21.4	21.8	22.4	83.6
9	17.4	16.6	16.4	17.4	67.8
11	19.1	20.5	22.4	22.9	84.9
12	19.7	18.8	17.6	19.6	75.7
13	19.7	17.5	18.2	22.7	78.1
14	20.3	18.4	22.5	20.5	81.7
15	20.9	20.9	19.0	19.3	80.1
16	18.2	15.9	19.0	18.0	71.1
17	16.1	20.0	22.3	18.5	76.9
18	19.9	17.3	16.8	18.4	72.4
19	18.7	19.1	20.1	19.8	77.7
20	19.2	16.8	20.0	20.7	76.7
22	19.2	21.8	21.7	23.3	86.0
23	18.3	20.0	21.4	22.2	81.9
24	15.6	20.0	19.2	19.5	74.3
25	15.6	15.5	15.5	17.7	64.3
26	17.6	17.3	18.2	18.6	71.7
27	17.0	20.4	17.1	20.4	74.9
29	15.4	16.4	13.8	14.6	60.2
30	19.8	18.2	21.4	18.6	78.0
32	17.2	17.3	17.8	17.5	69.8
34	18.1	20.4	21.5	22.2	82.2
35	18.8	17.3	17.6	20.9	74.6
36	18.2	20.0	19.2	20.9	78.3
37	17.2	20.4	20.1	18.9	76.6
38	21.9	21.4	20.1	20.7	84.1
39	18.6	19.1	17.9	19.8	75.4
41	18.0	18.4	19.1	18.3	73.8
42	13.2	11.0	11.0	12.4	47.6
43	11.5	11.9	11.6	12.4	47.4
44	17.7	21.8	20.4	20.4	80.3
46	19.2	19.5	21.4	20.9	81.0
47	27.4	22.3	21.8	29.2	100.7
48	18.2	19.6	18.4	21.6	77.8
49	18.8	18.2	17.3	18.0	72.3
50	19.8	22.2	22.0	23.2	87.2
51	15.9	19.5	16.2	16.6	68.2
52	17.7	19.1	21.4	24.9	83.1
53	18.8	20.5	22.7	21.1	83.1

FIGURE 1

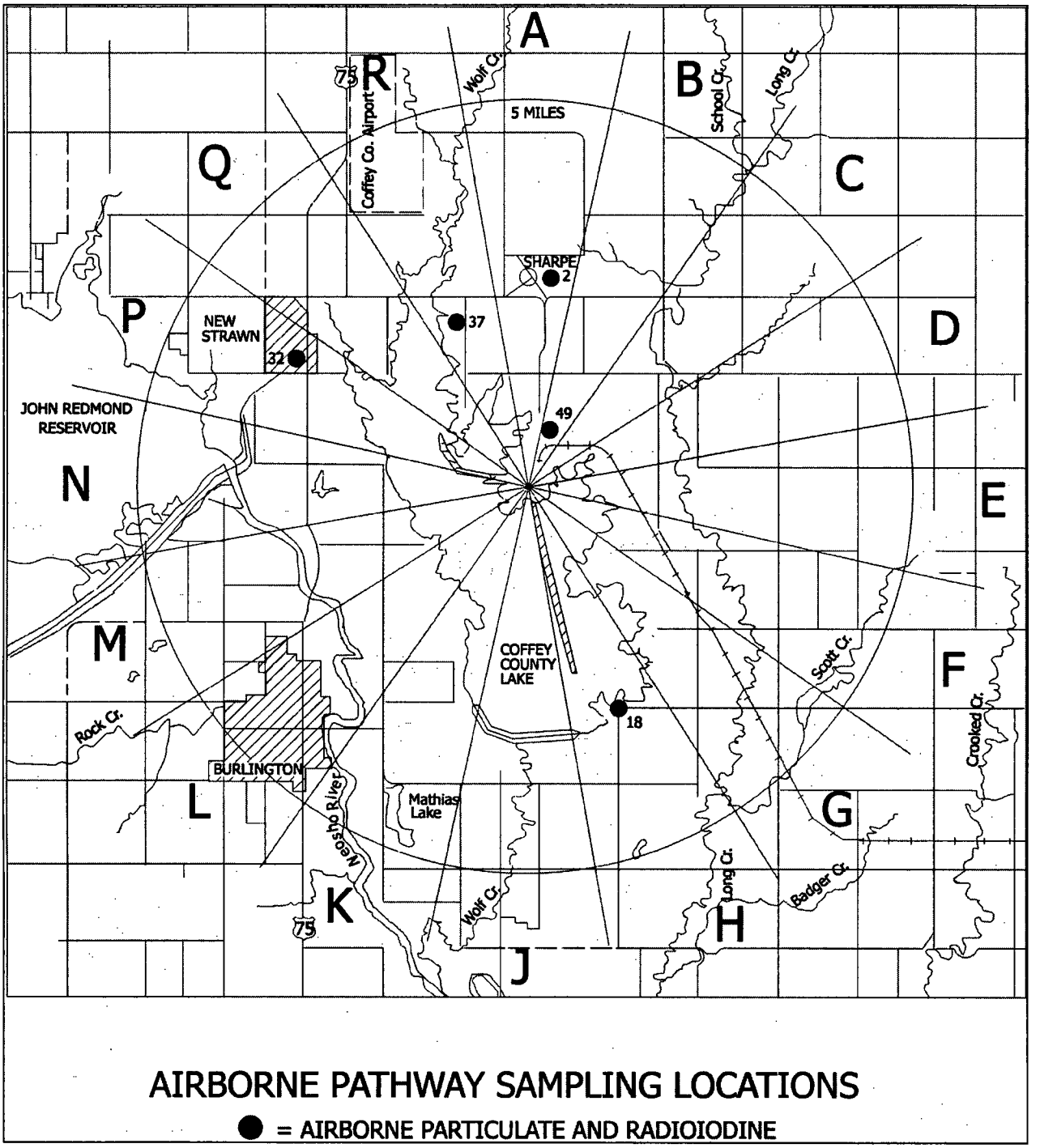
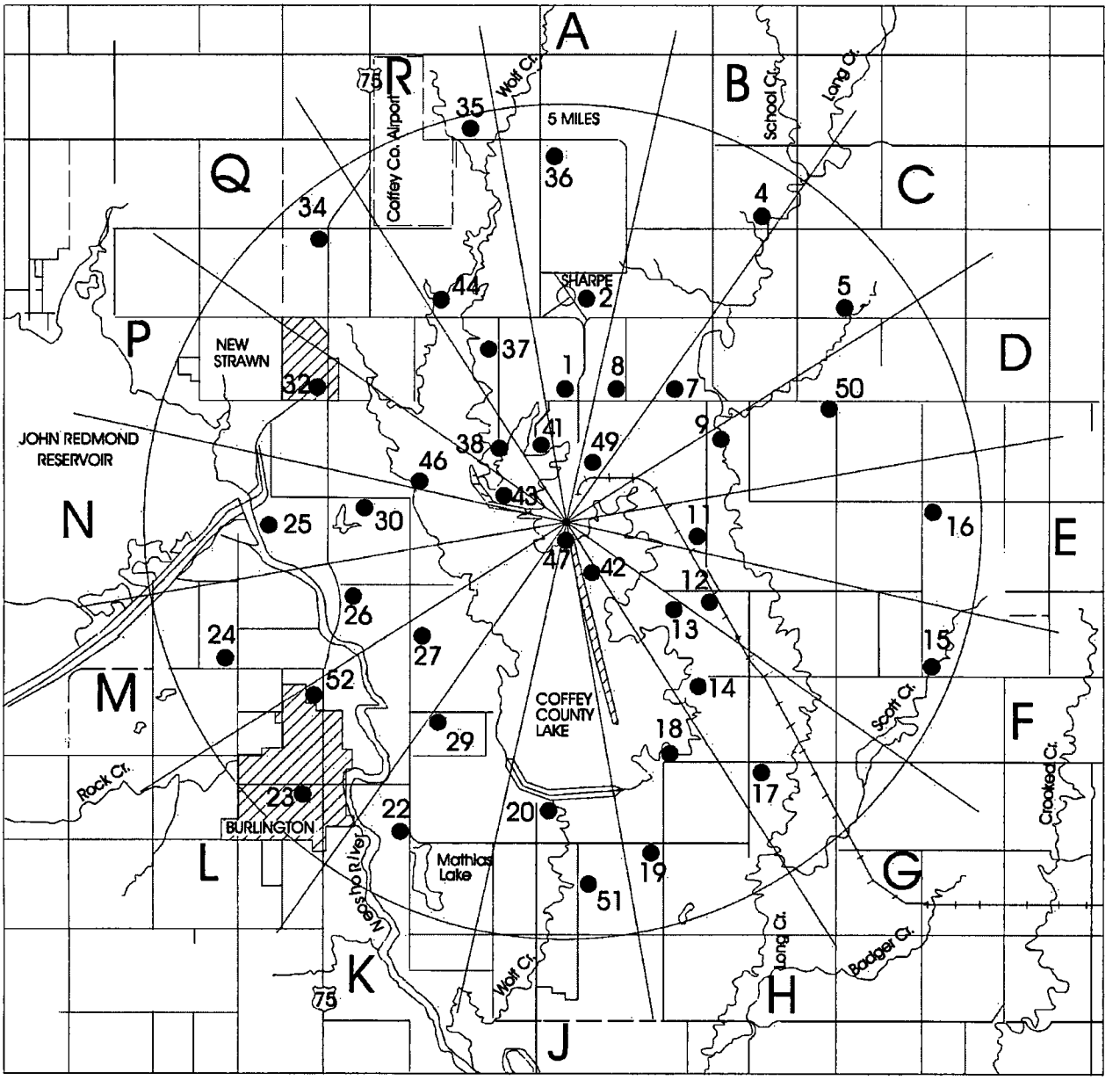

A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
5 MILES
Coffey Co. Airport
Wolf Cr.
School Cr.
Long Cr.
SHARPE
2
37
NEW STRAWN
32
JOHN REDMOND RESERVOIR
49
COFFEY COUNTY LAKE
18
Scott Cr.
Crooked Cr.
Rock Cr.
BURLINGTON
Neosho River
Mathias Lake
Badger Cr.
75
AIRBORNE PATHWAY SAMPLING LOCATIONS
● = AIRBORNE PARTICULATE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

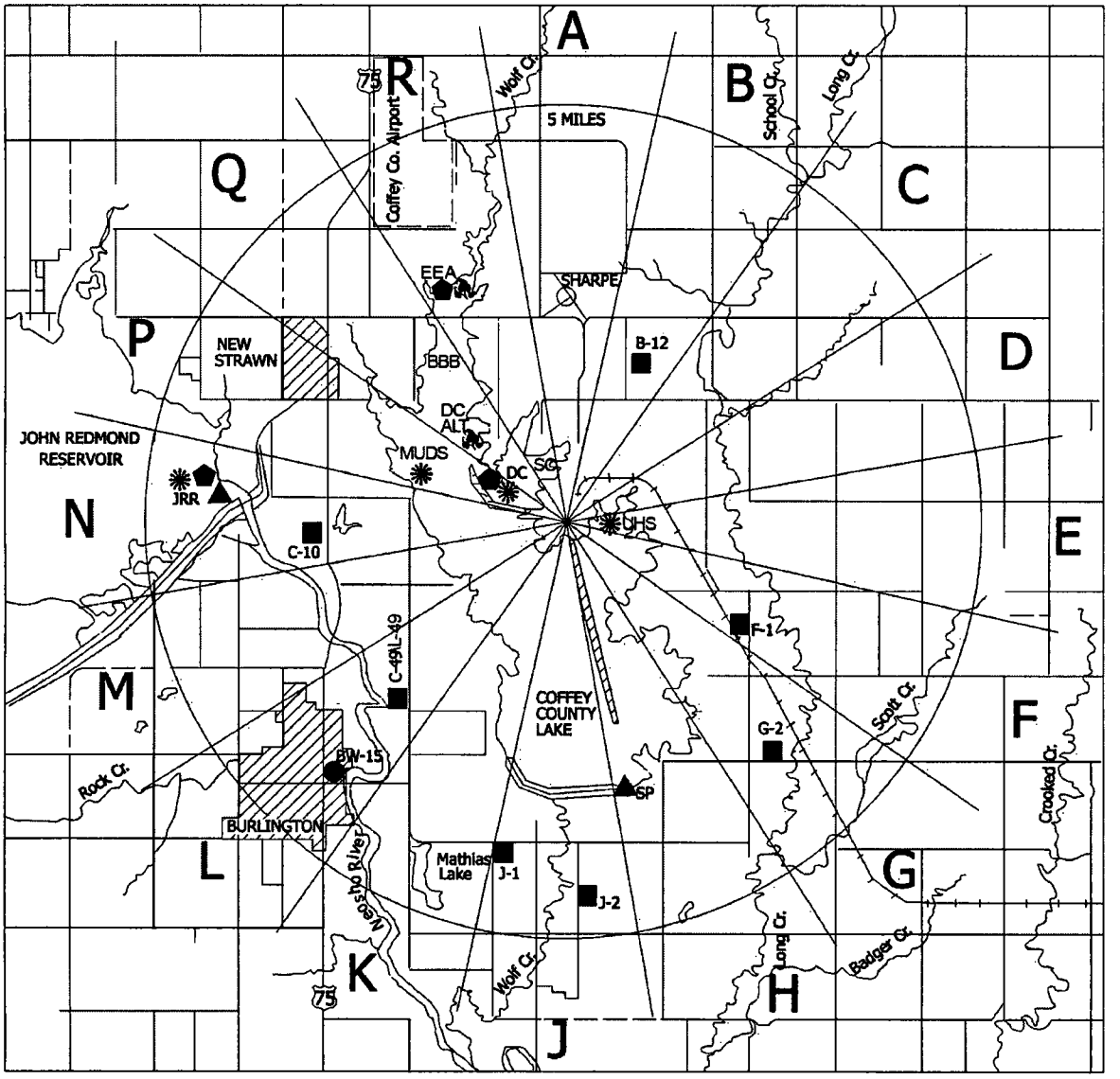
FIGURE 2



DIRECT RADIATION PATHWAY SAMPLING LOCATIONS

● = DOSIMETER LOCATIONS

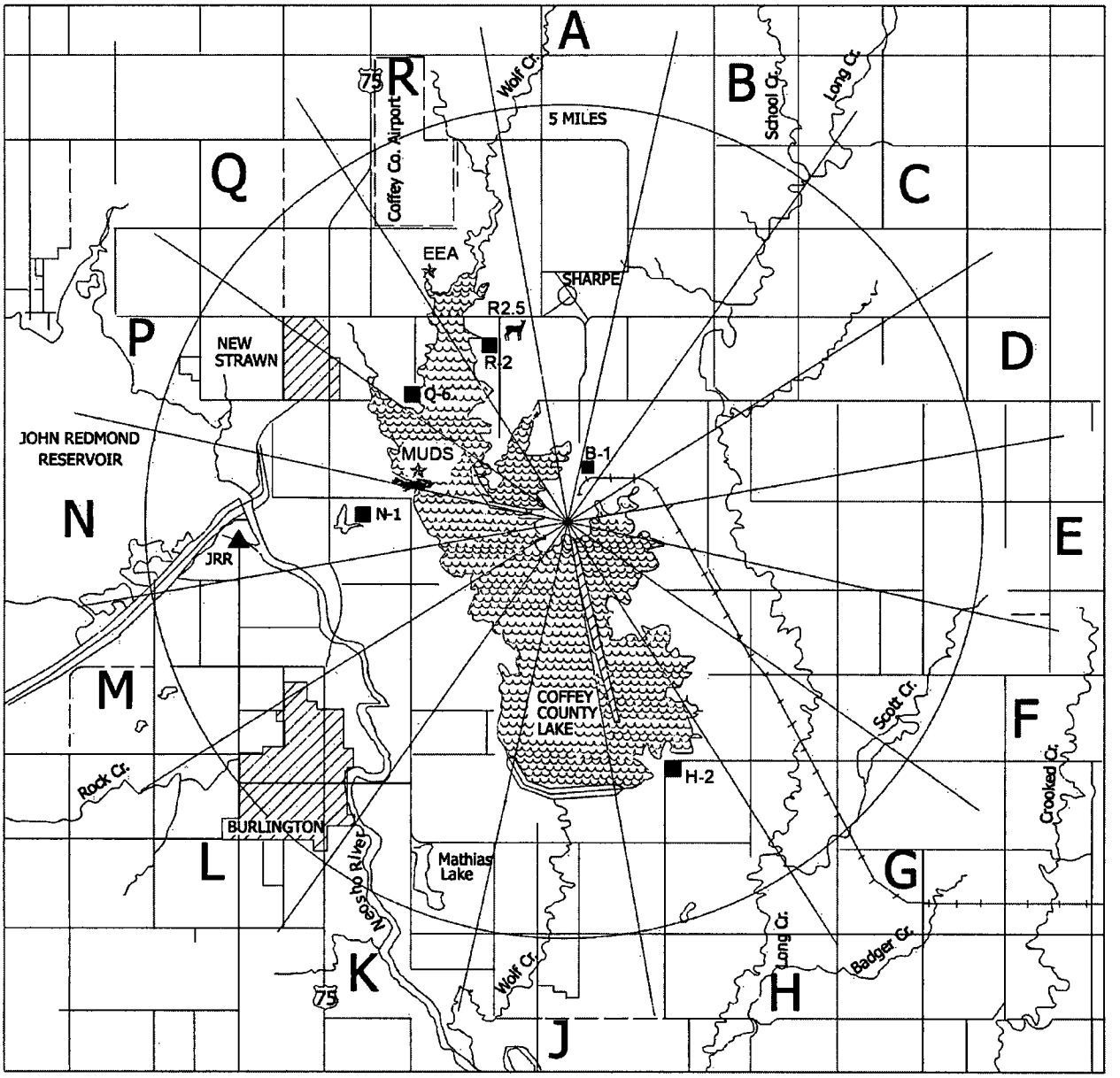
FIGURE 3



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 = ALLIGATOR

= FISH (CCL) = TERRESTRIAL VEGETATION = DEER

FIGURE 5

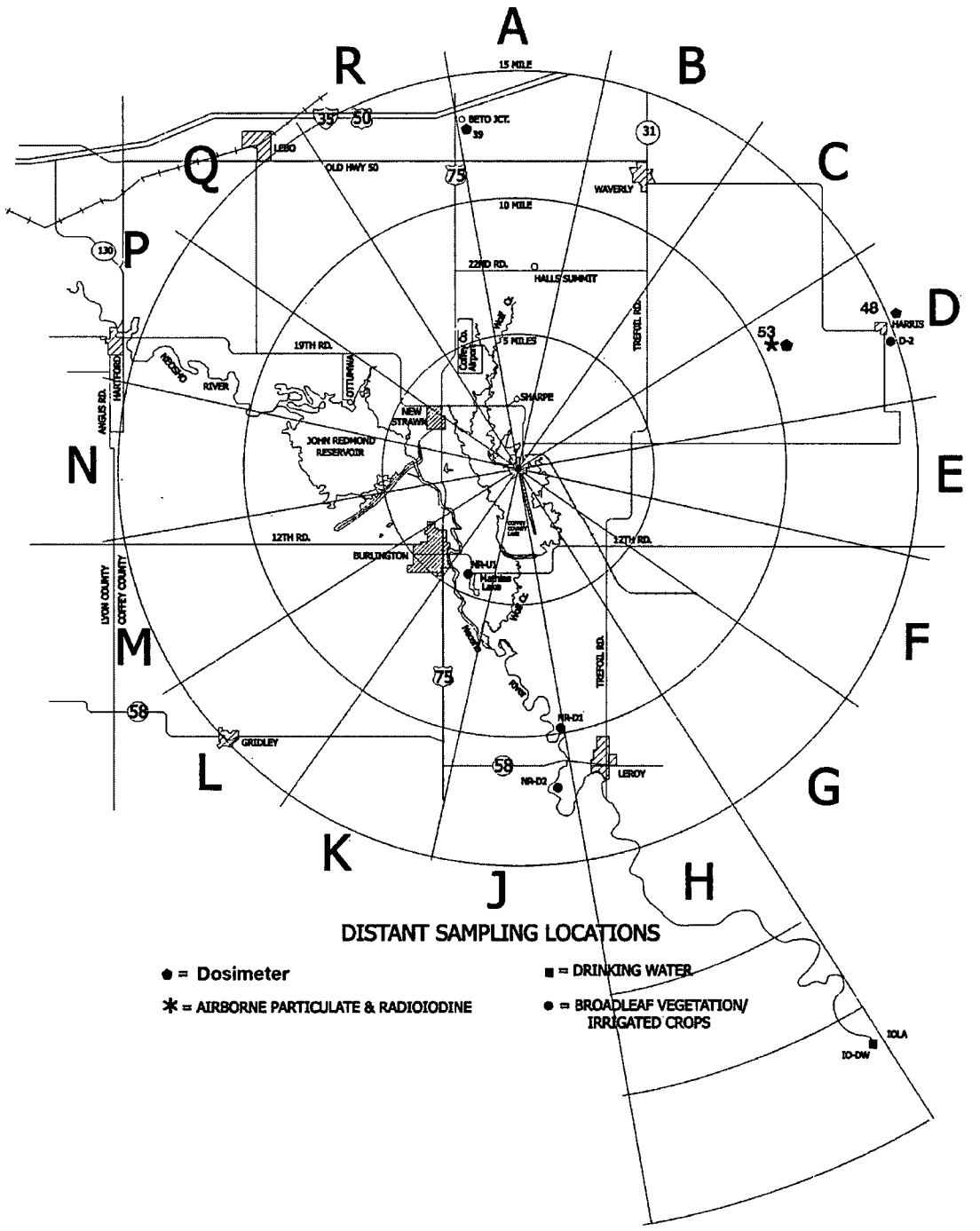

A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
15 MILE
10 MILE
5 MILES
OLD HWY 50
22ND RD.
19TH RD.
12TH RD.
LEBO
BETO JCT.
WAVERLY
HALLS SUMMIT
HARRIS
SHARPE
NEW STRAWN
JOHN REDMOND RESERVOIR
BURLINGTON
GRIDLEY
LEROY
TREFOIL RD.
ANGUS RD.
LYON COUNTY
COFFEY COUNTY
NR-U1
NR-D1
NR-D2
D-2
IOLA
IO-DW
DISTANT SAMPLING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

CHART 1

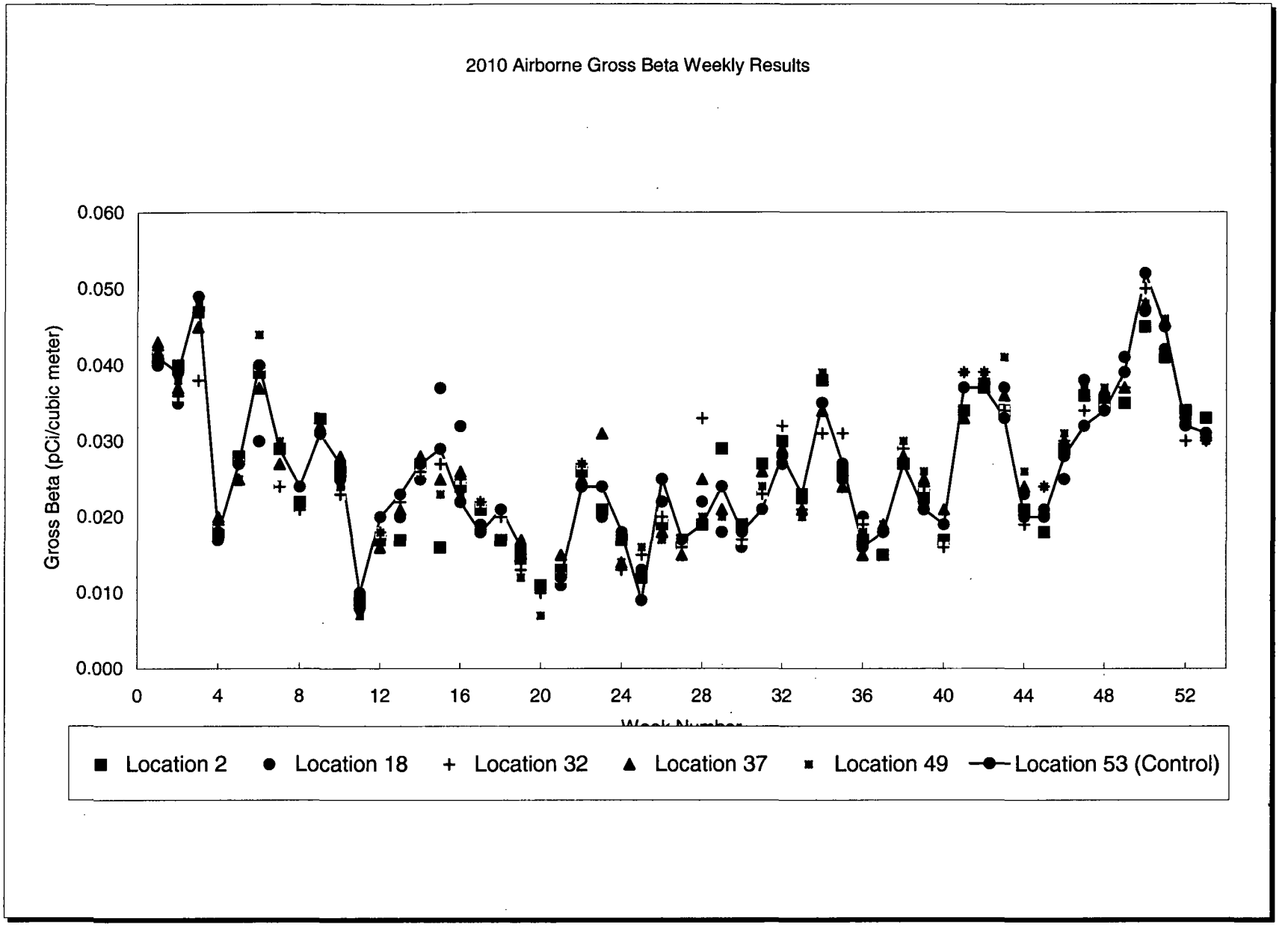

2010 Airborne Gross Beta Weekly Results
Gross Beta (pCi/cubic meter)
0.060
0.050
0.040
0.030
0.020
0.010
0.000
0
4
8
12
16
20
24
28
32
36
40
44
48
52
Week Number
Location 2
Location 18
Location 32
Location 37
Location 49
Location 53 (Control)

CHART 2

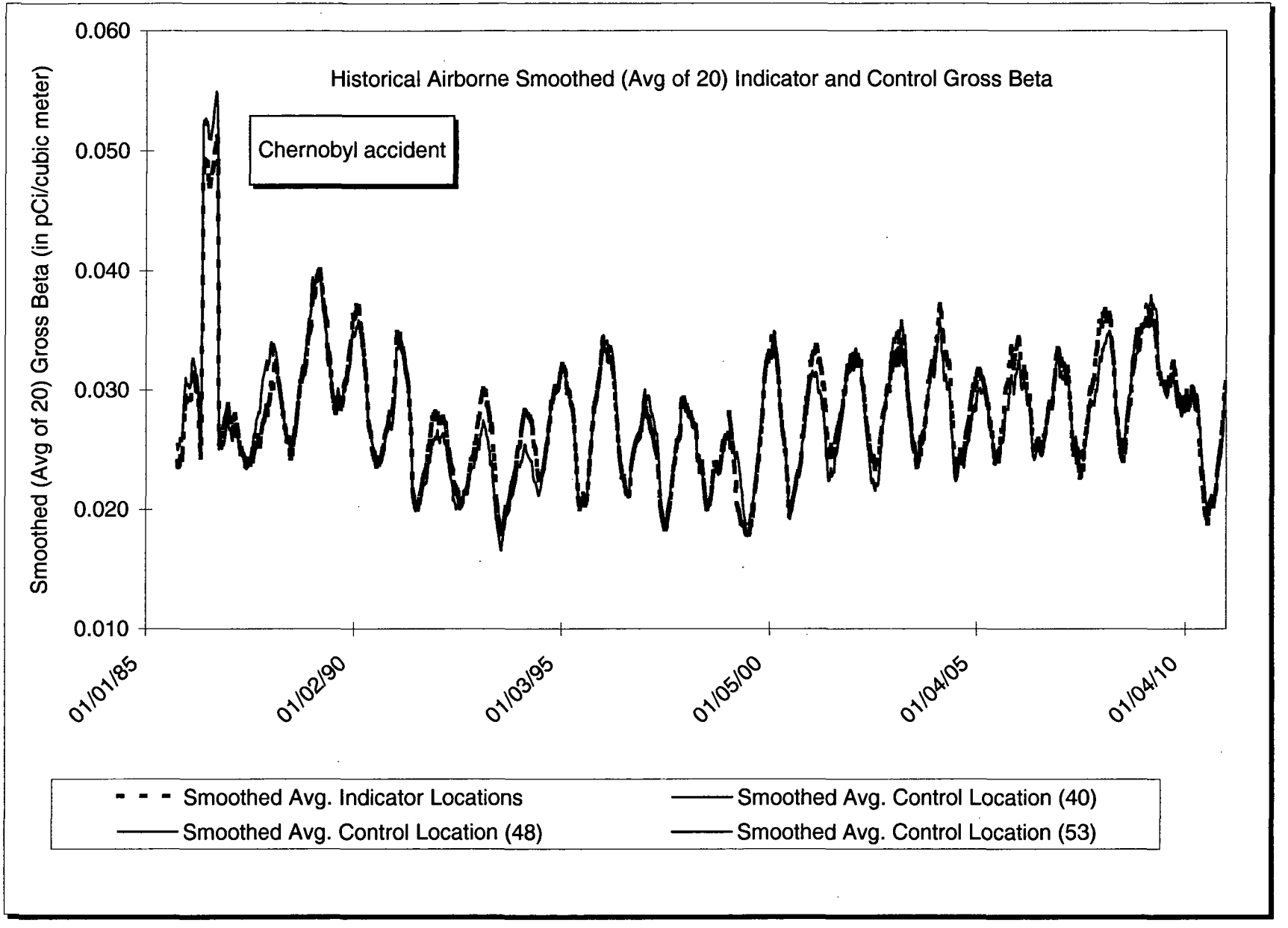

Historical Airborne Smoothed (Avg of 20) Indicator and Control Gross Beta
Chernobyl accident
Smoothed (Avg of 20) Gross Beta (in pCi/cubic meter)
0.060
0.050
0.040
0.030
0.020
0.010
01/01/85
01/02/90
01/03/95
01/05/00
01/04/05
01/04/10
Smoothed Avg. Indicator Locations
Smoothed Avg. Control Location (40)
Smoothed Avg. Control Location (48)
Smoothed Avg. Control Location (53)

CHART 3

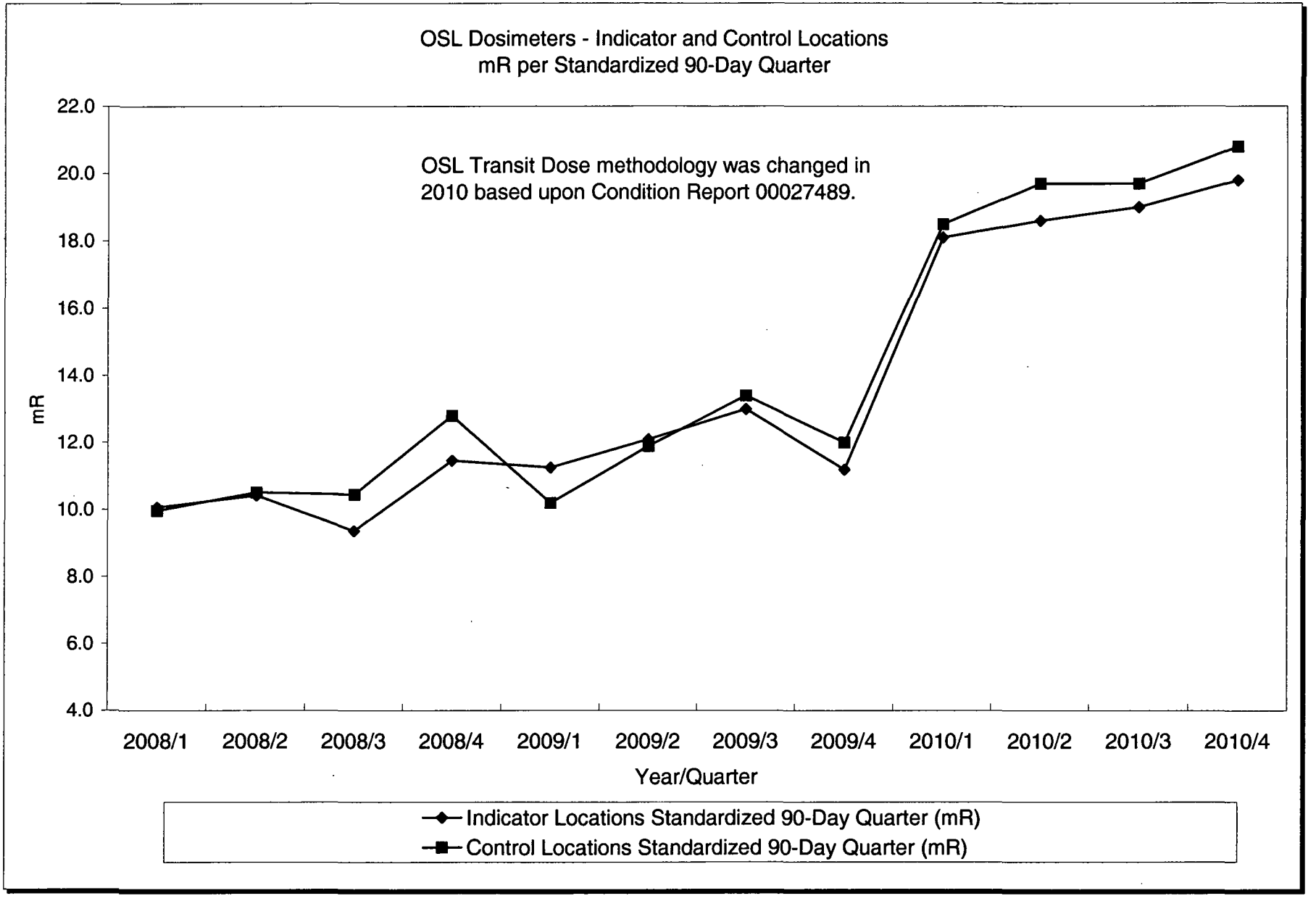

OSL Dosimeters - Indicator and Control Locations
mR per Standardized 90-Day Quarter
OSL Transit Dose methodology was changed in
2010 based upon Condition Report 00027489.
22.0
20.0
18.0
16.0
14.0
12.0
10.0
8.0
6.0
4.0
mR
2008/1
2008/2
2008/3
2008/4
2009/1
2009/2
2009/3
2009/4
2010/1
2010/2
2010/3
2010/4
Year/Quarter
Indicator Locations Standardized 90-Day Quarter (mR)
Control Locations Standardized 90-Day Quarter (mR)

CHART 4

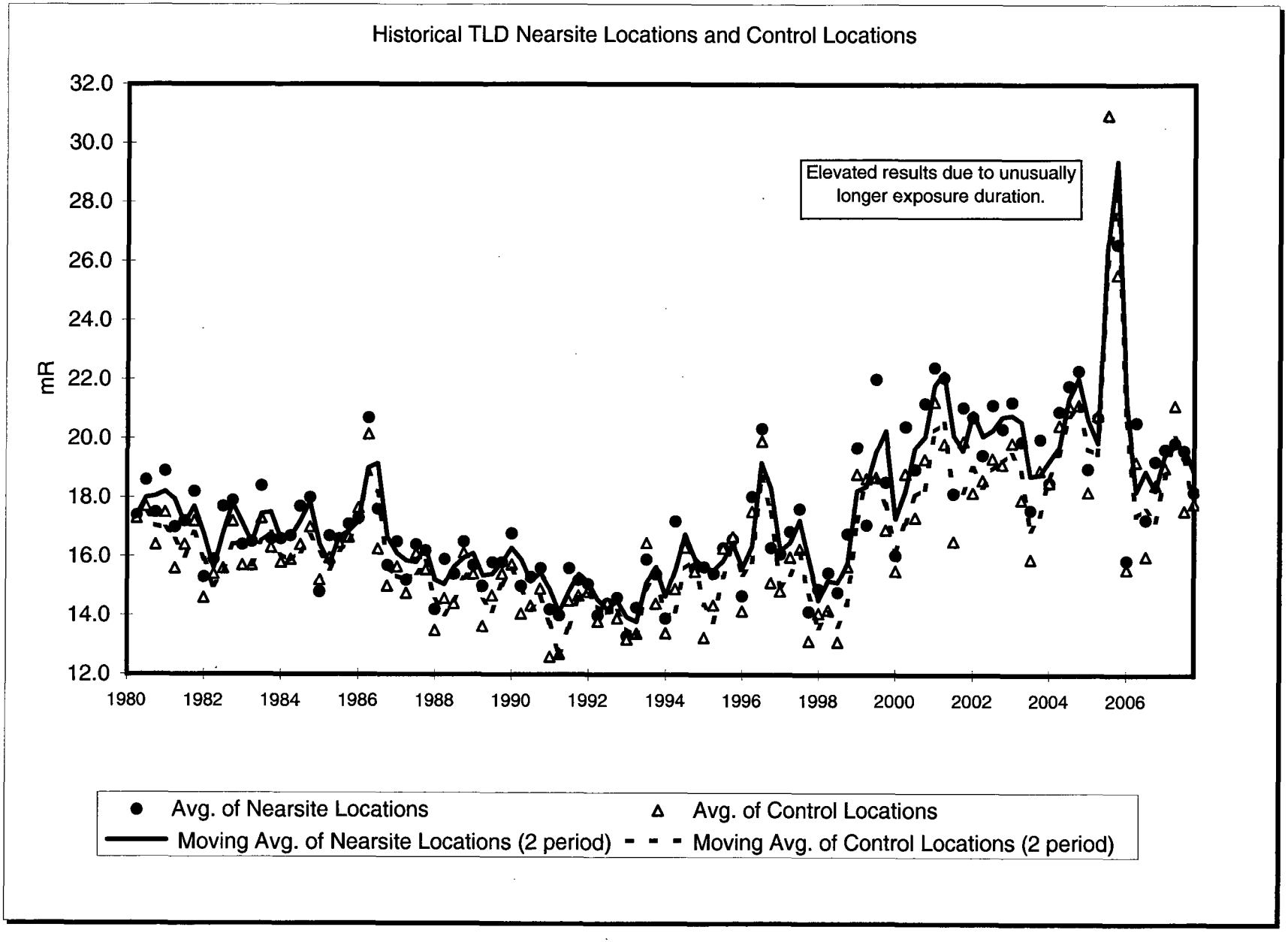

Historical TLD Nearsite Locations and Control Locations
mR
32.0
30.0
28.0
26.0
24.0
22.0
20.0
18.0
16.0
14.0
12.0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
Elevated results due to unusually longer exposure duration.
Avg. of Nearsite Locations
Avg. of Control Locations
Moving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

CHART 5

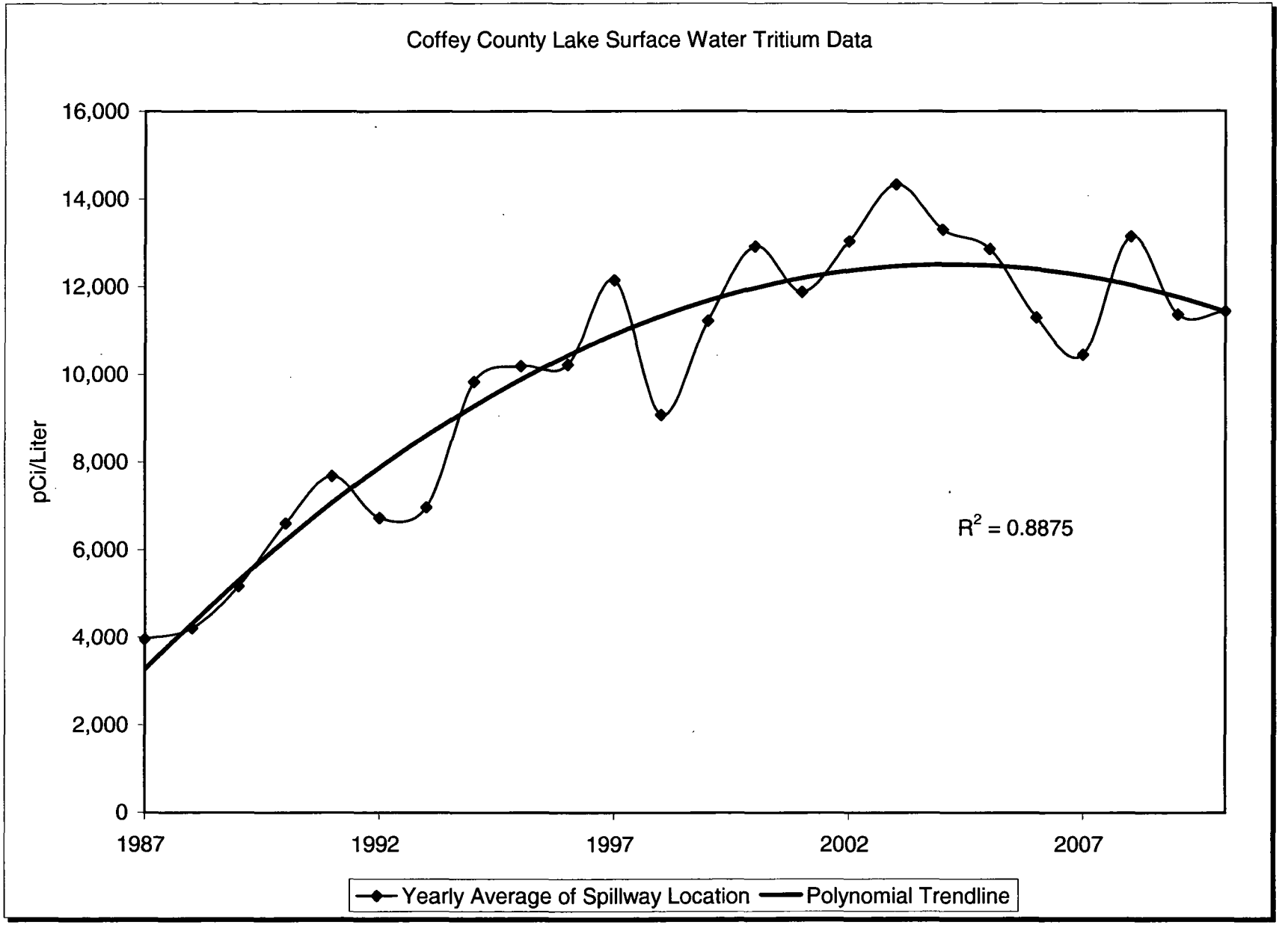

Coffey County Lake Surface Water Tritium Data
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
pCi/Liter
1987
1992
1997
2002
2007
R2 = 0.8875
Yearly Average of Spillway Location
Polynomial Trendline

CHART 6

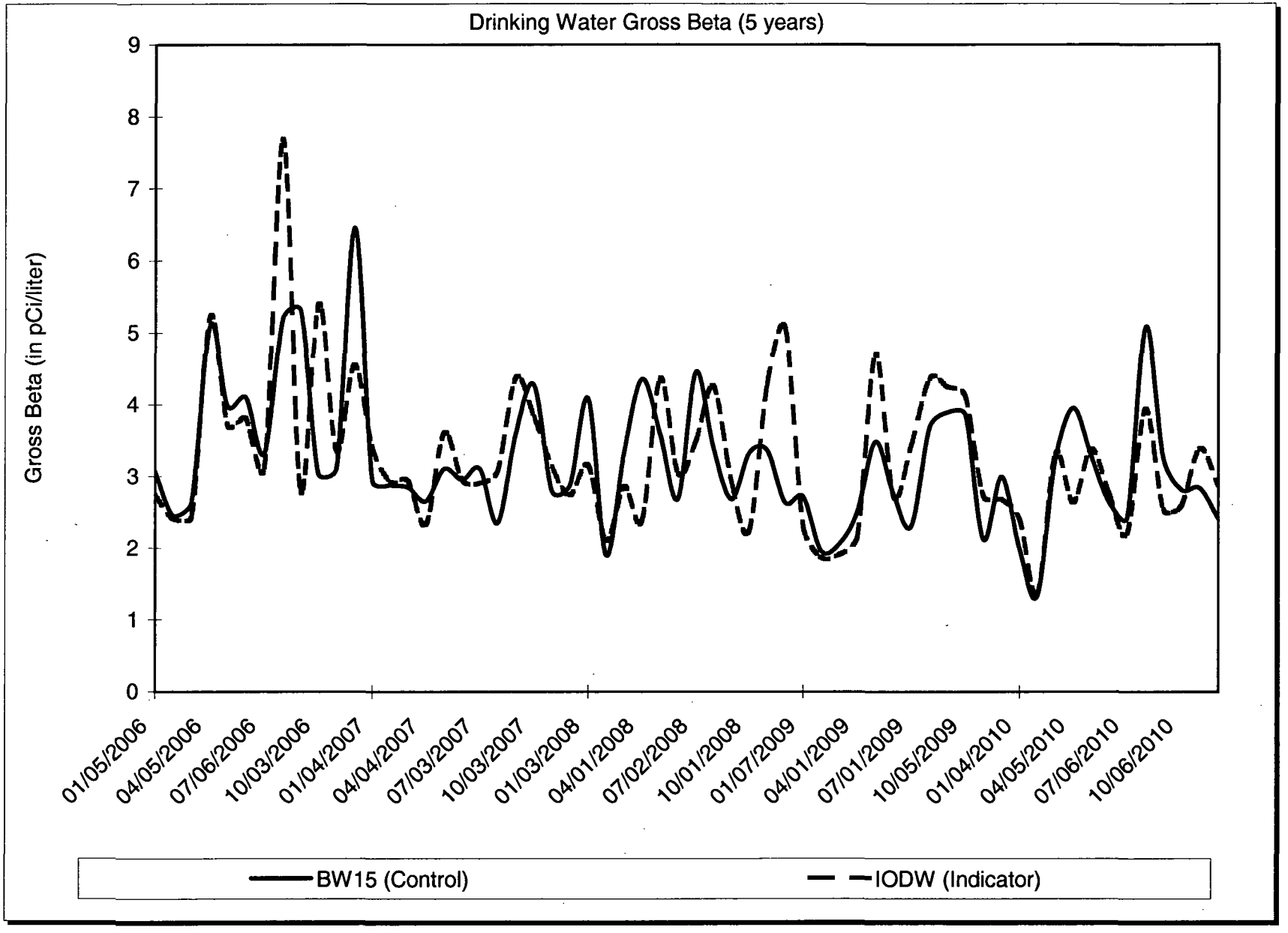

Drinking Water Gross Beta (5 years)
Gross Beta (in pCi/liter)
9
8
7
6
5
4
3
2
1
0
01/05/2006
04/05/2006
07/06/2006
10/03/2006
01/04/2007
04/04/2007
07/03/2007
10/03/2007
01/03/2008
04/01/2008
07/02/2008
10/01/2008
01/07/2009
04/01/2009
07/01/2009
10/05/2009
01/04/2010
04/05/2010
07/06/2010
10/06/2010
BW15 (Control)
IODW (Indicator)

CHART 7

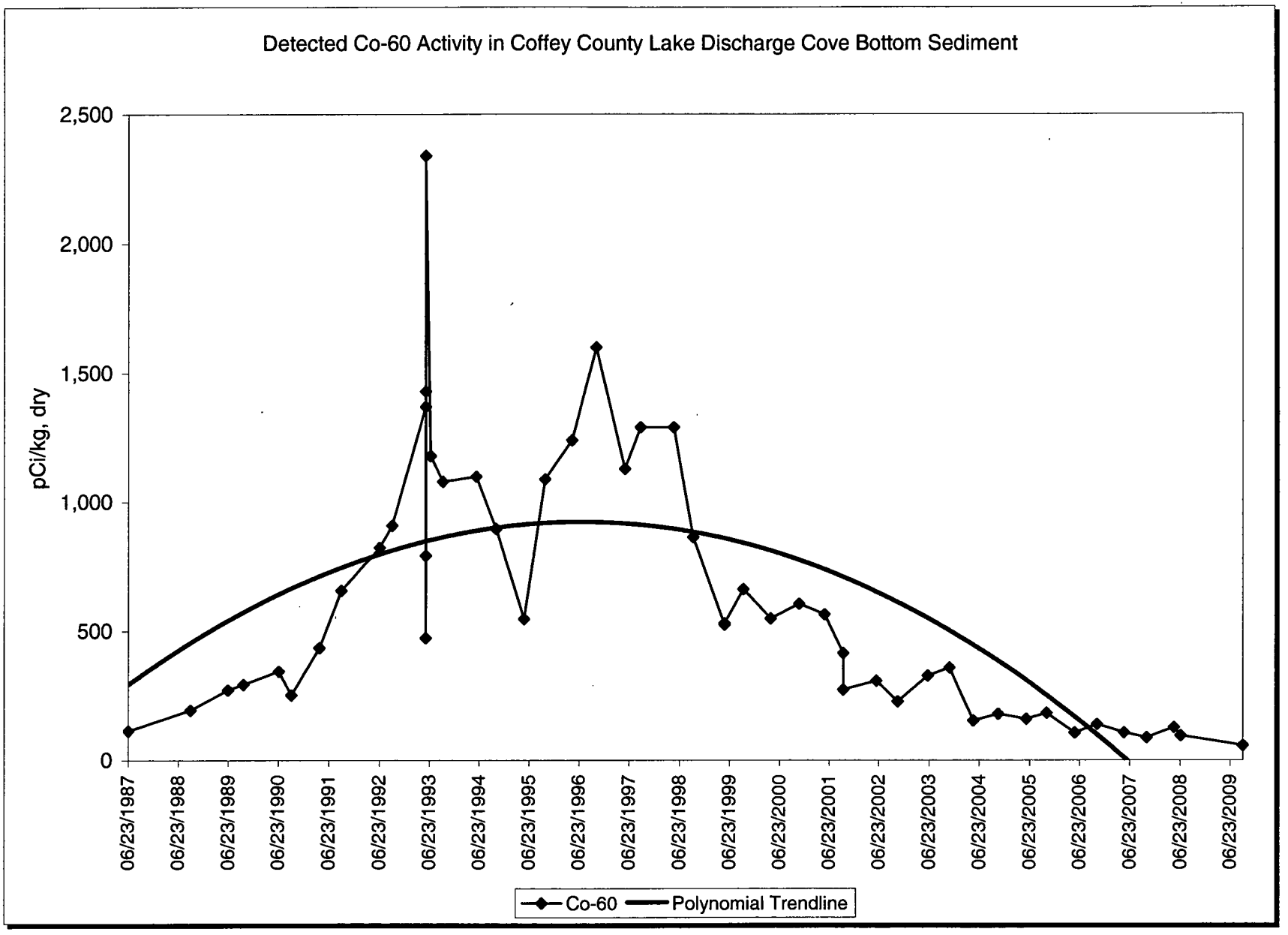
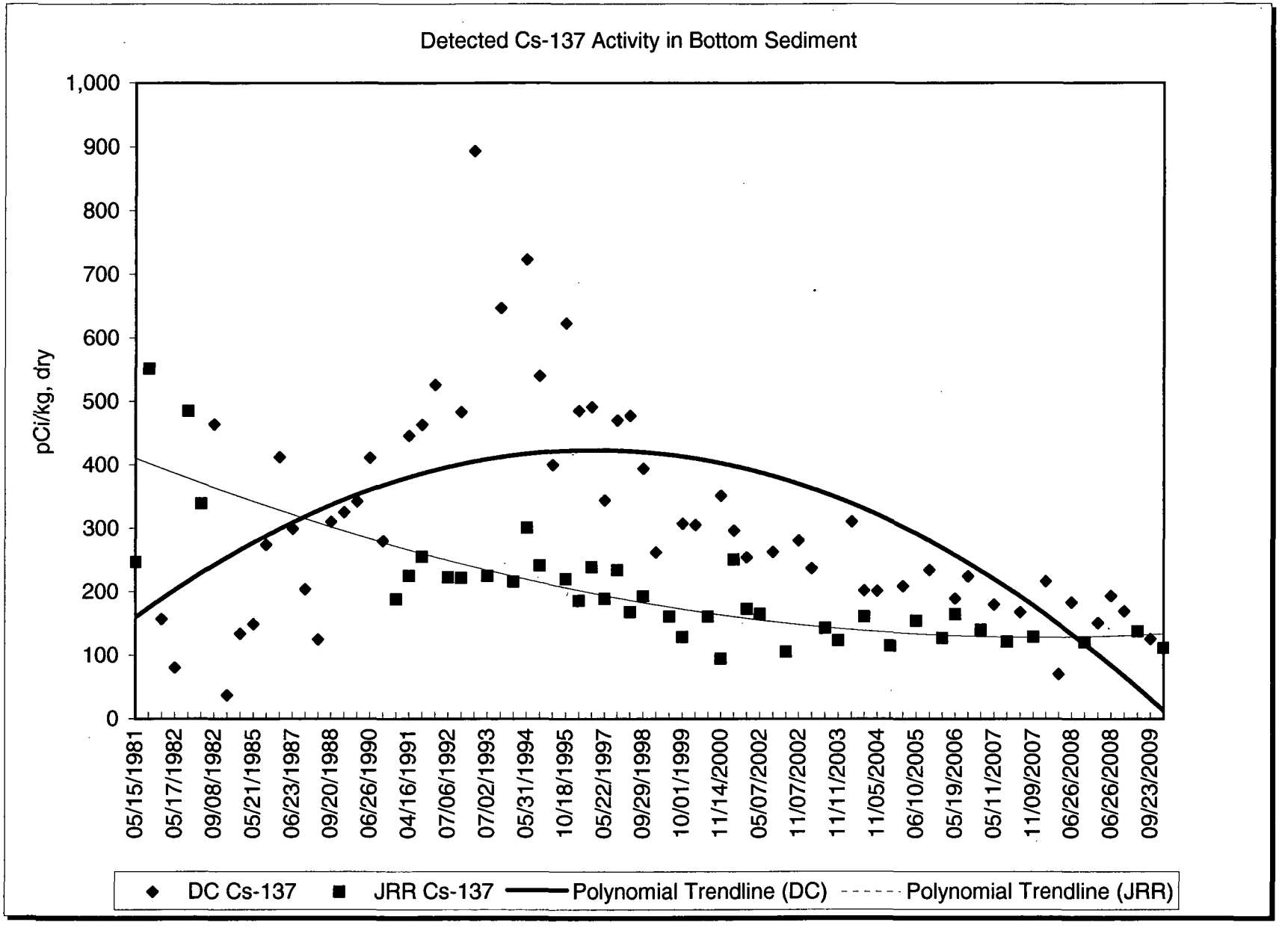

Detected Co-60 Activity in Coffey County Lake Discharge Cove Bottom Sediment
pCi/kg, dry
2,500
2,000
1,500
1,000
500
0
06/23/1987
06/23/1988
06/23/1989
06/23/1990
06/23/1991
06/23/1992
06/23/1993
06/23/1994
06/23/1995
06/23/1996
06/23/1997
06/23/1998
06/23/1999
06/23/2000
06/23/2001
06/23/2002
06/23/2003
06/23/2004
06/23/2005
06/23/2006
06/23/2007
06/23/2008
06/23/2009
Co-60
Polynomial Trendline

CHART 8


Detected Cs-137 Activity in Bottom Sediment
pCi/kg, dry
1,000
900
800
700
600
500
400
300
200
100
0
05/15/1981
05/17/1982
09/08/1982
05/21/1985
06/23/1987
09/20/1988
06/26/1990
04/16/1991
07/06/1992
07/02/1993
05/31/1994
10/18/1995
05/22/1997
09/29/1998
10/01/1999
11/14/2000
05/07/2002
11/07/2002
11/11/2003
11/05/2004
06/10/2005
05/19/2006
05/11/2007
11/09/2007
06/26/2008
06/26/2008
09/23/2009
DC Cs-137
JRR Cs-137
Polynomial Trendline (DC)
Polynomial Trendline (JRR)

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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, 2010 through December, 2010

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 International Intercomparison of Environmental Dosimeters, when available, and internal laboratory testing.

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	Analysis	Concentration (pCi/L) Laboratory Result[b]	ERA Result[c]	Control Limits	Acceptance
STW-1205	04/05/10	Sr-89	63.0 ± 5.7	60.4	48.6 - 68.2	Pass
STW-1205	04/05/10	Sr-90	37.4 ± 2.4	41.3	30.4 - 47.4	Pass
STW-1206	04/05/10	Ba-133	63.6 ± 3.3	65.9	54.9 - 72.5	Pass
STW-1206	04/05/10	Co-60	83.3 ± 2.9	84.5	76.0 - 95.3	Pass
STW-1206	04/05/10	Cs-134	71.0 ± 3.4	71.6	58.4 - 78.8	Pass
STW-1206	04/05/10	Cs-137	145.5 ± 5.1	146.0	131.0 - 163.0	Pass
STW-1206	04/05/10	Zn-65	194.9 ± 7.8	186.0	167.0 - 219.0	Pass
STW-1207	04/05/10	Gr. Alpha	26.5 ± 1.7	32.9	16.9 - 42.6	Pass
STW-1207	04/05/10	Gr. Beta	34.5 ± 1.6	37.5	24.7 - 45.0	Pass
STW-1208	04/05/10	I-131	22.7 ± 0.8	26.4	21.9 - 31.1	Pass
STW-1209	04/05/10	Ra-226	15.2 ± 0.7	14.6	10.9 - 16.8	Pass
STW-1209	04/05/10	Ra-228	15.6 ± 1.8	15.1	10.1 - 18.3	Pass
STW-1209	04/05/10	Uranium	59.5 ± 0.7	62.3	50.7 - 69.1	Pass
STW-1210	04/05/10	H-3	12955 ± 332	12400.0	10800 - 13600	Pass
STW-1224	10/04/10	Sr-89	65.3 ± 5.7	68.5	55.8 - 76.7	Pass
STW-1224	10/04/10	Sr-90	39.9 ± 2.3	43.0	31.7 - 49.3	Pass
STW-1225	10/04/10	Ba-133	67.2 ± 4.3	68.9	57.5 - 75.8	Pass
STW-1225	10/04/10	Co-60	53.2 ± 3.3	53.4	48.1 - 61.3	Pass
STW-1225	10/04/10	Cs-134	47.3 ± 5.1	43.2	34.5 - 47.5	Pass
STW-1225	10/04/10	Cs-137	118.0 ± 5.9	123.0	111.0 - 138.0	Pass
STW-1225	10/04/10	Zn-65	107.0 ± 8.7	102.0	91.8 - 122.0	Pass
STW-1226	10/04/10	Gr. Alpha	30.7 ± 2.9	42.3	21.9 - 53.7	Pass
STW-1226	10/04/10	Gr. Beta	32.7 ± 0.8	36.6	24.0 - 44.2	Pass
STW-1227	10/04/10	I-131	28.6 ± 1.1	27.5	22.9 - 32.3	Pass
STW-1228	10/04/10	Ra-226	11.8 ± 0.6	11.4	8.5 - 13.2	Pass
STW-1228	10/04/10	Ra-228	12.0 ± 1.8	9.9	6.4 - 12.3	Pass
STW-1228	10/04/10	Uranium	34.8 ± 0.4	36.8	29.8 - 41.0	Pass
STW-1229	10/04/10	H-3	13682 ± 352	12900.0	11200 - 14200	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.

TABLE A-2. Crosscheck program results; Thermoluminescent Dosimetry, (TLD, $CaSO_4$: Dy Cards).

Lab Code	Date	Description	mR Known Value	mR Lab Result ± 2 sigma	Control Limits	Acceptance
Environmental, Inc.						
2010-1	6/8/2010	30 cm.	75.07	90.78 ± 3.60	52.55 - 97.59	Pass
2010-1	6/8/2010	40 cm.	42.23	50.88 ± 3.59	29.56 - 54.90	Pass
2010-1	6/8/2010	50 cm.	27.03	32.12 ± 1.90	18.92 - 35.14	Pass
2010-1	6/8/2010	60 cm.	18.77	21.80 ± 0.90	13.14 - 24.40	Pass
2010-1	6/8/2010	70 cm.	13.79	15.38 ± 1.39	9.65 - 17.93	Pass
2010-1	6/8/2010	75 cm.	12.01	11.30 ± 1.07	8.41 - 15.61	Pass
2010-1	6/8/2010	80 cm.	10.56	10.90 ± 0.61	7.39 - 13.73	Pass
2010-1	6/8/2010	90 cm.	8.34	7.84 ± 0.83	5.84 - 10.84	Pass
2010-1	6/8/2010	100 cm.	6.76	6.61 ± 0.52	4.73 - 8.79	Pass
2010-1	6/8/2010	110 cm.	5.58	4.29 ± 0.55	3.91 - 7.25	Pass
2010-1	6/8/2010	120 cm.	4.69	3.64 ± 0.33	3.28 - 6.10	Pass
2010-1	6/8/2010	150 cm.	3.00	2.82 ± 0.84	2.10 - 3.90	Pass
2010-1	6/8/2010	180 cm.	2.09	1.55 ± 0.23	1.46 - 2.72	Pass
Environmental, Inc.						
2010-2	12/13/2010	100 cm.	4.94	4.65 ± 0.57	3.46 - 6.42	Pass
2010-2	12/13/2010	110 cm.	4.09	3.50 ± 0.74	2.86 - 5.32	Pass
2010-2	12/13/2010	120 cm.	3.43	2.68 ± 0.36	2.40 - 4.46	Pass
2010-2	12/13/2010	150 cm.	2.2	1.75 ± 0.42	1.54 - 2.86	Pass
2010-2	12/13/2010	180 cm.	1.53	1.32 ± 0.52	1.07 - 1.99	Pass
2010-2	12/13/2010	40 cm.	30.89	38.56 ± 2.11	21.62 - 40.16	Pass
2010-2	12/13/2010	50 cm.	19.77	23.35 ± 1.82	13.84 - 25.70	Pass
2010-2	12/13/2010	60 cm.	13.73	14.53 ± 1.24	9.61 - 17.85	Pass
2010-2	12/13/2010	60 cm.	13.73	15.84 ± 1.53	9.61 - 17.85	Pass
2010-2	12/13/2010	80 cm.	7.72	8.33 ± 0.74	5.40 - 10.04	Pass
2010-2	12/13/2010	90 cm.	6.1	5.93 ± 0.73	4.27 - 7.93	Pass

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

Lab Code [b]	Date	Concentration (pCi/L)[a] Analysis	Laboratory results 2s, n=1 [c]	Known Activity	Control Limits [d]	Acceptance
SPW-12648	1/20/2010	Ra-228	40.04 ± 2.99	40.54	28.38 - 52.70	Pass
SPW-279	1/27/2010	U-238	4.52 ± 0.22	4.17	0.00 - 16.17	Pass
SPW-391	2/4/2010	Ni-63	179.70 ± 2.96	209.62	146.73 - 272.51	Pass
W-21210	2/12/2010	Ra-226	16.05 ± 0.39	16.77	11.74 - 21.80	Pass
W-21710	2/17/2010	Gr. Alpha	17.54 ± 0.37	20.00	10.00 - 30.00	Pass
W-21710	2/17/2010	Gr. Beta	42.47 ± 0.39	45.20	35.20 - 55.20	Pass
SPAP-669	2/25/2010	Gr. Beta	45.78 ± 0.11	49.24	29.54 - 68.94	Pass
SPAP-671	2/25/2010	Cs-134	10.56 ± 3.15	10.38	0.38 - 20.38	Pass
SPAP-671	2/25/2010	Cs-137	105.36 ± 3.15	109.20	98.28 - 120.12	Pass
SPMI-674	2/25/2010	Co-60	67.38 ± 5.65	68.79	58.79 - 78.79	Pass
SPMI-674	2/25/2010	Cs-134	60.61 ± 6.28	51.91	41.91 - 61.91	Pass
SPMI-674	2/25/2010	Cs-137	173.80 ± 10.30	163.80	147.42 - 180.18	Pass
SPW-676	2/25/2010	Co-60	66.13 ± 5.22	68.79	58.79 - 78.79	Pass
SPW-676	2/25/2010	Cs-134	51.54 ± 5.97	51.91	41.91 - 61.91	Pass
SPW-676	2/25/2010	Cs-137	179.30 ± 9.95	163.80	147.42 - 180.18	Pass
SPW-678	2/25/2010	H-3	59213.70 ± 709.90	60407.70	48326.16 - 72489.24	Pass
SPF-680	2/25/2010	Cs-134	402.56 ± 22.40	415.00	373.50 - 456.50	Pass
SPF-680	2/25/2010	Cs-137	2267.90 ± 75.60	2180.00	1962.00 - 2398.00	Pass
SPW-682	2/25/2010	Tc-99	29.70 ± 1.51	32.34	20.34 - 44.34	Pass
SPW-2871	4/5/2010	Ra-228	33.91 ± 2.85	36.80	25.76 - 47.84	Pass
W-40510	4/5/2010	Gr. Alpha	20.65 ± 0.42	20.00	10.00 - 30.00	Pass
W-40510	4/5/2010	Gr. Beta	44.72 ± 0.40	45.20	35.20 - 55.20	Pass
SPW-2083	4/28/2010	U-238	4.20 ± 0.32	4.17	0.00 - 16.17	Pass
W-51310	5/13/2010	Ra-226	17.04 ± 0.50	16.77	11.74 - 21.80	Pass
SPW-3181	6/17/2010	Tc-99	29.87 ± 1.09	32.34	20.34 - 44.34	Pass
SPW-3272	6/25/2010	H-3	5489.00 ± 224.00	5928.00	4742.40 - 7113.60	Pass
SPW-3278	6/25/2010	Fe-55	17054.00 ± 348.00	19614.00	15691.20 - 23536.80	Pass
SPW-3280	6/25/2010	C-14	3410.60 ± 9.75	4738.00	2842.80 - 6633.20	Pass
SPAP-3270	6/28/2010	Cs-134	12.24 ± 3.13	10.38	0.38 - 20.38	Pass
SPAP-3270	6/28/2010	Cs-137	103.92 ± 7.14	109.20	98.28 - 120.12	Pass
SPW-3274	6/28/2010	Co-60	67.48 ± 5.53	65.84	55.84 - 75.84	Pass
SPW-3274	6/28/2010	Cs-134	49.55 ± 6.11	46.38	36.38 - 56.38	Pass
SPW-3274	6/28/2010	Cs-137	58.85 ± 6.54	54.17	44.17 - 64.17	Pass
SPW-3274	6/28/2010	Sr-90	41.59 ± 1.83	42.72	34.18 - 51.26	Pass
SPMI-3276	6/28/2010	Co-60	66.80 ± 5.25	65.84	55.84 - 75.84	Pass
SPMI-3276	6/28/2010	Cs-134	48.20 ± 3.88	46.38	36.38 - 56.38	Pass
SPMI-3276	6/28/2010	Cs-137	62.46 ± 6.33	54.17	44.17 - 64.17	Pass
SPMI-3276	6/28/2010	Sr-90	43.32 ± 1.63	42.72	34.18 - 51.26	Pass

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

Lab Code [b]	Date	Concentration (pCi/L)[a] Analysis	Laboratory results 2s, n=1	Known Activity	Control Limits[c]	Acceptance
SPW-5081	9/9/2010	Tc-99	30.22 ± 1.06	32.34	20.34 - 44.34	Pass
W-90910	9/9/2010	Gr. Alpha	20.95 ± 0.43	20.00	10.00 - 30.00	Pass
W-90910	9/9/2010	Gr. Beta	45.20 ± 0.41	45.20	35.20 - 55.20	Pass
W-91010	9/10/2010	Ra-226	17.48 ± 0.50	16.77	11.74 - 21.80	Pass
SPW-2874	9/23/2010	Ra-228	34.60 ± 2.68	36.80	25.76 - 47.84	Pass
XWW-5302	10/6/2010	Ba-133	154.13 ± 8.90	155.21	139.69 - 170.73	Pass
XWW-5302	10/6/2010	Co-60	24.65 ± 4.11	23.28	13.28 - 33.28	Pass
XWW-5302	10/6/2010	Cs-134	14.03 ± 3.87	13.95	3.95 - 23.95	Pass
XWW-5302	10/6/2010	Cs-137	61.16 ± 6.08	59.22	49.22 - 69.22	Pass
SPW-6035	10/21/2010	U-238	4.52 ± 0.20	4.17	0.00 - 16.17	Pass
W-120110	12/1/2010	Gr. Alpha	20.27 ± 0.41	20.00	10.00 - 30.00	Pass
W-120110	12/1/2010	Gr. Beta	46.75 ± 0.41	45.20	35.20 - 55.20	Pass
W-121610	12/16/2010	Ra-226	17.99 ± 0.43	16.77	11.74 - 21.80	Pass

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

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

[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 ± 2σ.

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)
SPW-12658	Water	1/20/2010	Ra-228	0.79	0.61 ± 0.44	2
SPW-280	Water	1/27/2010	U-238	0.18	0.07 ± 0.13	1
SPW-392	Water	2/4/2010	Ni-63	15.90	-11.80 ± 9.40	20
W-21210	Water	2/12/2010	Ra-226	0.03	0.06 ± 0.02	1
W-21710	Water	2/17/2010	Gr. Alpha	0.41	0.09 ± 0.30	1
W-21710	Water	2/17/2010	Gr. Beta	0.73	0.23 ± 0.52	3.2
SPAP-668	Air Filter	2/25/2010	Gr. Beta	0.11	0.008 ± 0.002	3.2
SPAP-670	Air Filter	2/25/2010	Cs-134	1.87	-	100
SPAP-670	Air Filter	2/25/2010	Cs-137	2.31	-	100
SPMI-672	Milk	2/25/2010	Cs-137	3.52	-	10
SPMI-672	Milk	2/25/2010	I-131(G)	6.09	-	20
SPW-675	Water	2/25/2010	Co-60	1.55	-	10
SPW-675	Water	2/25/2010	Cs-137	2.69	-	10
SPW-675	Water	2/25/2010	I-131(G)	5.68	-	20
SPF-679	Fish	2/25/2010	Cs-134	10.94	-	100
SPF-679	Fish	2/25/2010	Cs-137	18.37	-	100
SPW-681	Water	2/25/2010	Tc-99	16.11	-10.75 ± 9.53	10
SPW-2881	Water	4/5/2010	Ra-228	0.89	0.22 ± 0.44	2
W-40510	Water	4/5/2010	Gr. Alpha	0.40	-0.20 ± 0.26	1
W-40510	Water	4/5/2010	Gr. Beta	0.75	-0.09 ± 0.52	3.2
SPW-2084	Water	4/28/2010	U-238	0.14	0.03 ± 0.10	1
W-51310	Water	5/13/2010	Ra-226	0.03	0.06 ± 0.02	1
SPW-3271	Water	6/25/2010	H-3	151.60	-58.10 ± 71.90	200
SPW-3278	Water	6/25/2010	Fe-55	634.50	256.80 ± 396.40	1000
SPW-3279	water	6/25/2010	C-14	8.57	-1.84 ± 5.18	200
SPAP-3269	Air Filter	6/28/2010	Cs-134	1.71	-	100
SPAP-3269	Air Filter	6/28/2010	Cs-137	2.42	-	100
SPW-3273	Water	6/28/2010	Co-60	1.64	-	10
SPW-3273	Water	6/28/2010	Cs-134	3.89	-	10
SPW-3273	Water	6/28/2010	Cs-137	4.29	-	10
SPW-3273	water	6/25/2010	Sr-90	0.50	-0.04 ± 0.22	1
SPMI-3275	Milk	6/28/2010	Cs-134	3.33	-	10
SPMI-3275	Milk	6/28/2010	Cs-137	3.82	-	10
SPMI-3275	Milk	6/28/2010	I-131(G)	3.71	-	20
SPMI-3275	Milk	6/28/2010	Sr-90	0.58	0.81 ± 0.36	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-5080	Water	9/9/2010	Tc-99	2.15	-0.71 ± 1.29	10
W-90910	Water	9/9/2010	Gr. Alpha	0.39	0.10 ± 0.28	1
W-90910	Water	9/9/2010	Gr. Beta	0.78	-0.09 ± 0.55	3.2
W-91010	Water	9/10/2010	Ra-226	0.04	0.07 ± 0.03	1
SPW-2884	Water	9/23/2010	Ra-228	0.71	1.14 ± 0.46	2
SPW-6036	Water	10/21/2010	U-238	0.11	0.07 ± 0.10	1
W-120110	Water	12/1/2010	Gr. Alpha	0.43	-0.05 ± 0.29	1
W-120110	Water	12/1/2010	Gr. Beta	0.75	-0.08 ± 0.53	3.2
W-121610	Water	12/16/2010	Ra-226	0.03	0.04 ± 0.02	1
BKW-120610	water	12/6/2010	Ba-133	5.66	-	10
BKW-120610	water	12/6/2010	Co-60	4.49	-	10
BKW-120610	water	12/6/2010	Cs-134	4.41	-	10
BKW-120610	water	12/6/2010	Cs-137	5.33	-	10
W-121610	Water	12/16/2010	Ra-226	0.03	0.04 ± 0.02	1

[a] Liquid sample results are reported in pCi/Liter, air filters(pCi/filter), 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. For gamma spectroscopic analysis, activity detected below the LLD value is not reported.

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
CF-20, 21	1/4/2010	Gr. Beta	10.96 ± 0.27	11.30 ± 0.28	11.13 ± 0.19	Pass
CF-20, 21	1/4/2010	K-40	8.88 ± 0.48	8.27 ± 0.78	8.58 ± 0.46	Pass
CF-20, 21	1/4/2010	Sr-90	0.02 ± 0.01	0.02 ± 0.01	0.02 ± 0.00	Pass
CF-41, 42	1/4/2010	Be-7	0.45 ± 0.11	0.41 ± 0.14	0.43 ± 0.09	Pass
CF-41, 42	1/4/2010	Gr. Beta	3.26 ± 0.10	3.33 ± 0.11	3.30 ± 0.07	Pass
CF-41, 42	1/4/2010	K-40	2.85 ± 0.36	3.04 ± 0.22	2.95 ± 0.21	Pass
MI-111, 112	1/12/2010	K-40	1276.00 ± 98.96	1334.80 ± 105.00	1305.40 ± 72.14	Pass
DW-10010, 10011	1/13/2010	Ra-226	0.48 ± 0.10	0.43 ± 0.10	0.46 ± 0.07	Pass
DW-10010, 10011	1/13/2010	Ra-226	1.59 ± 0.61	1.13 ± 0.47	1.36 ± 0.39	Pass
WW-215, 216	1/18/2010	H-3	211.16 ± 87.57	291.90 ± 91.31	251.53 ± 63.26	Pass
DW-10022, 10023	1/21/2010	Ra-226	8.57 ± 0.91	10.20 ± 1.08	9.39 ± 0.71	Pass
DW-10022, 10023	1/21/2010	Ra-228	5.68 ± 1.36	3.59 ± 1.17	4.64 ± 0.90	Pass
WW-424, 425	1/28/2010	H-3	422.30 ± 95.90	484.20 ± 98.50	453.25 ± 68.74	Pass
DW-10034, 10035	1/28/2010	Ra-226	0.93 ± 0.13	0.90 ± 0.11	0.92 ± 0.09	Pass
DW-10034, 10035	1/28/2010	Ra-228	1.16 ± 0.62	1.29 ± 0.62	1.23 ± 0.44	Pass
SW-382, 383	2/1/2010	Gr. Beta	2.22 ± 0.68	1.18 ± 0.71	1.70 ± 0.49	Pass
DW-10046, 10047	2/2/2010	Ra-226	6.11 ± 0.91	7.88 ± 1.17	7.00 ± 0.74	Pass
DW-10046, 10047	2/2/2010	Ra-228	5.84 ± 1.11	6.13 ± 1.14	5.99 ± 0.80	Pass
WW-693, 694	2/23/2010	H-3	1458.00 ± 131.00	1531.00 ± 133.00	1494.50 ± 93.34	Pass
SW-782, 783	3/1/2010	Gr. Beta	1.05 ± 0.42	1.60 ± 0.43	1.33 ± 0.30	Pass
SW-782, 783	3/1/2010	K-40	1.50 ± 0.15	1.52 ± 0.15	1.51 ± 0.11	Pass
MI-946, 947	3/9/2010	K-40	1485.00 ± 109.30	1347.40 ± 108.30	1416.20 ± 76.93	Pass
W-1035, 1036	3/17/2010	Ra-226	11.78 ± 1.51	9.76 ± 1.26	10.77 ± 0.98	Pass
W-1035, 1036	3/17/2010	Ra-228	5.31 ± 2.42	8.45 ± 2.78	6.88 ± 1.84	Pass
SW-1285, 1286	3/17/2010	H-3	377.60 ± 104.50	282.70 ± 100.70	330.15 ± 72.56	Pass
W-1103, 1104	3/18/2010	H-3	12690 ± 333	12679 ± 333	12685 ± 235	Pass
WW-1193, 1194	3/18/2010	H-3	227.38 ± 95.19	251.81 ± 96.15	239.60 ± 67.65	Pass
LW-1909, 1910	3/24/2010	H-3	1529.40 ± 144.60	1404.40 ± 140.80	1466.90 ± 100.91	Pass
LW-1909, 1910	3/25/2010	H-3	2.40 ± 0.97	1.99 ± 1.03	2.20 ± 0.71	Pass
DW-10068, 10069	3/25/2010	Gr. Alpha	1.08 ± 1.02	1.35 ± 1.05	1.22 ± 0.73	Pass
DW-10070, 10071	3/29/2010	Ra-226	1.58 ± 0.17	1.69 ± 0.16	1.64 ± 0.12	Pass
DW-10070, 10071	3/29/2010	Ra-228	1.16 ± 0.47	1.34 ± 0.49	1.25 ± 0.34	Pass
AP-1729, 1730	3/30/2010	Be-7	0.08 ± 0.01	0.08 ± 0.01	0.08 ± 0.01	Pass
AP-1782, 1783	3/30/2010	Be-7	0.08 ± 0.01	0.09 ± 0.01	0.09 ± 0.01	Pass
E-1392, 1393	4/1/2010	Gr. Beta	1.59 ± 0.07	1.66 ± 0.08	1.63 ± 0.05	Pass
E-1392, 1393	4/1/2010	K-40	902.30 ± 179.00	1076.70 ± 202.90	989.50 ± 135.29	Pass
WW-1422, 1423	4/1/2010	Gr. Beta	22.23 ± 1.58	19.42 ± 1.40	20.83 ± 1.06	Pass
SW-1464, 1465	4/1/2010	H-3	262.06 ± 98.96	233.18 ± 97.75	247.62 ± 69.55	Pass
XW-1666, 1667	4/1/2010	Fe-55	7.05 ± 0.71	7.25 ± 0.74	7.15 ± 0.51	Pass
SG-1532, 1533	4/6/2010	Ac-228	19.45 ± 1.14	20.07 ± 1.19	19.76 ± 0.82	Pass
SG-1532, 1533	4/6/2010	Pb-214	12.66 ± 0.52	13.32 ± 0.54	12.99 ± 0.38	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
SG-1506, 1507	4/7/2010	Ac-228	1.28 ± 0.15	1.15 ± 0.14	1.22 ± 0.10	Pass
SG-1506, 1507	4/7/2010	Pb-214	1.24 ± 0.10	1.22 ± 0.09	1.23 ± 0.07	Pass
SW-1645, 1646	4/14/2010	H-3	312.00 ± 100.00	352.00 ± 102.00	332.00 ± 71.42	Pass
DW-10095, 10096	4/14/2010	Ra-226	4.87 ± 0.53	5.57 ± 0.61	5.22 ± 0.40	Pass
DW-10095, 10096	4/14/2010	Ra-228	2.49 ± 0.56	2.76 ± 0.60	2.63 ± 0.41	Pass
W-2013, 2014	4/16/2010	Gr. Alpha	33.45 ± 3.98	39.11 ± 4.54	36.28 ± 3.02	Pass
W-2013, 2014	4/16/2010	Gr. Beta	14.83 ± 0.96	16.07 ± 0.96	15.45 ± 0.68	Pass
WW-2431, 2432	4/19/2010	H-3	400.40 ± 98.10	377.70 ± 97.10	389.05 ± 69.01	Pass
SO-2037, 2038	4/22/2010	K-40	2.89 ± 0.40	2.89 ± 0.51	2.89 ± 0.32	Pass
W-2325, 2326	4/26/2010	H-3	399.00 ± 92.00	429.00 ± 94.00	414.00 ± 65.76	Pass
AP-2149, 2150	4/29/2010	Be-7	0.14 ± 0.08	0.26 ± 0.12	0.20 ± 0.07	Pass
LW-2191, 2192	4/29/2010	Gr. Beta	1.16 ± 0.56	0.79 ± 0.52	0.97 ± 0.38	Pass
G-2170, 2171	5/3/2010	Be-7	0.91 ± 0.32	0.86 ± 0.26	0.89 ± 0.21	Pass
G-2170, 2171	5/3/2010	Gr. Beta	8.73 ± 0.22	9.01 ± 0.23	8.87 ± 0.16	Pass
G-2170, 2171	5/3/2010	K-40	7.24 ± 0.44	7.48 ± 0.78	7.36 ± 0.45	Pass
SWT-2282, 2283	5/4/2010	Gr. Beta	0.73 ± 0.52	1.58 ± 0.57	1.16 ± 0.39	Pass
WW-2233, 2234	5/5/2010	Gr. Alpha	1.56 ± 1.47	2.27 ± 1.65	1.92 ± 1.10	Pass
WW-2233, 2234	5/5/2010	Gr. Beta	2.33 ± 1.14	4.08 ± 1.24	3.21 ± 0.84	Pass
TD-2410, 2411	5/10/2010	H-3	431.92 ± 96.50	403.05 ± 95.26	417.48 ± 67.80	Pass
SG-2347, 2348	5/13/2010	Ra-226	37.34 ± 0.42	37.91 ± 0.36	37.63 ± 0.28	Pass
F-2463, 2464	5/17/2010	K-40	2.69 ± 0.56	2.65 ± 0.38	2.67 ± 0.34	Pass
XW-2834, 2835	5/20/2010	H-3	209.53 ± 83.34	263.11 ± 85.95	236.32 ± 59.86	Pass
WW-2597, 2598	5/25/2010	H-3	288.10 ± 98.20	155.80 ± 93.40	221.95 ± 67.76	Pass
MI-2639, 2640	5/25/2010	K-40	1428.80 ± 110.60	1408.60 ± 107.40	1418.70 ± 77.08	Pass
SL-2771, 2772	6/1/2010	Gr. Beta	5.33 ± 0.18	5.30 ± 0.18	5.32 ± 0.13	Pass
SL-2771, 2772	6/1/2010	K-40	4.67 ± 0.46	4.88 ± 0.46	4.78 ± 0.33	Pass
SW-2879, 2880	6/1/2010	H-3	335.60 ± 92.60	356.40 ± 93.60	346.00 ± 65.83	Pass
SG-2904, 2905	6/7/2010	Gamma	5.20 ± 0.20	5.50 ± 0.10	5.35 ± 0.11	Pass
SO-3039, 3040	6/8/2010	Be-7	0.12 ± 0.03	0.13 ± 0.08	0.13 ± 0.04	Pass
SO-3039, 3040	6/8/2010	Cs-137	0.01 ± 0.00	0.01 ± 0.00	0.01 ± 0.00	Pass
SO-3039, 3040	6/8/2010	Gr. Beta	22.80 ± 2.05	23.84 ± 2.44	23.32 ± 1.59	Pass
SO-3039, 3040	6/8/2010	K-40	11.30 ± 1.20	11.70 ± 1.20	11.50 ± 0.85	Pass
SO-3039, 3040	6/8/2010	U-233/4	0.12 ± 0.02	0.13 ± 0.01	0.13 ± 0.01	Pass
SO-3039, 3040	6/8/2010	U-238	0.12 ± 0.01	0.13 ± 0.01	0.13 ± 0.01	Pass
WW-3060, 3061	6/14/2010	H-3	199.16 ± 95.13	203.59 ± 95.34	201.38 ± 67.34	Pass
VE-3351, 3352	6/21/2010	Be-7	1.86 ± 0.25	1.85 ± 0.27	1.85 ± 0.18	Pass
VE-3351, 3352	6/21/2010	K-40	6.10 ± 0.52	6.10 ± 0.57	6.10 ± 0.39	Pass
W-3469, 3470	6/25/2010	H-3	573.00 ± 110.00	525.00 ± 108.00	549.00 ± 77.08	Pass
SG-3539, 3540	6/29/2010	Ac-228	14.55 ± 0.51	14.57 ± 0.44	14.56 ± 0.34	Pass
SG-3539, 3540	6/29/2010	Pb-214	15.50 ± 1.56	16.80 ± 1.71	16.15 ± 1.16	Pass
AP-3743, 3744	6/30/2010	Be-7	0.07 ± 0.01	0.07 ± 0.01	0.07 ± 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
G-3427, 3428	7/1/2010	Be-7	1.18 ± 0.29	1.06 ± 0.25	1.12 ± 0.19	Pass
G-3427, 3428	7/1/2010	K-40	8.79 ± 0.64	7.85 ± 0.65	8.32 ± 0.46	Pass
SW-3512, 3513	7/6/2010	H-3	441.00 ± 103.00	423.00 ± 102.00	432.00 ± 72.48	Pass
AP-3680, 3681	7/8/2010	Be-7	0.16 ± 0.08	0.13 ± 0.07	0.15 ± 0.05	Pass
VE-3791, 3792	7/12/2010	K-40	4.37 ± 0.38	4.23 ± 0.35	4.30 ± 0.26	Pass
WW-3934, 3935	7/12/2010	H-3	3091.00 ± 187.00	3242.00 ± 191.00	3166.50 ± 133.65	Pass
DW-10135, 10136	7/13/2010	Ra-226	0.18 ± 0.07	0.26 ± 0.07	0.22 ± 0.05	Pass
DW-10135, 10136	7/13/2010	Ra-228	0.76 ± 0.44	0.81 ± 0.41	0.79 ± 0.30	Pass
W-4063, 4064	7/14/2010	H-3	469.00 ± 104.00	351.00 ± 99.00	410.00 ± 71.79	Pass
DW-10143, 10144	7/19/2010	Gr. Alpha	2.84 ± 0.74	2.49 ± 0.73	2.67 ± 0.52	Pass
DW-10148, 10149	7/23/2010	Ra-226	2.08 ± 0.39	2.97 ± 0.55	2.53 ± 0.34	Pass
DW-10148, 10149	7/23/2010	Ra-228	1.90 ± 0.61	2.00 ± 0.61	1.95 ± 0.43	Pass
DW-10159, 10160	7/23/2010	Ra-226	0.91 ± 0.14	0.79 ± 0.21	0.85 ± 0.13	Pass
DW-10159, 10160	7/23/2010	Ra-228	1.41 ± 0.54	1.30 ± 0.53	1.36 ± 0.38	Pass
SL-4106, 4107	8/2/2010	Be-7	2.05 ± 0.20	2.05 ± 0.18	2.05 ± 0.13	Pass
SL-4106, 4107	8/2/2010	Gr. Beta	5.06 ± 0.32	4.62 ± 0.30	4.84 ± 0.22	Pass
SL-4106, 4107	8/2/2010	K-40	1.89 ± 0.24	1.70 ± 0.17	1.80 ± 0.15	Pass
SG-4085, 4086	8/3/2010	Ra-226	20.23 ± 2.04	21.45 ± 2.16	20.84 ± 1.49	Pass
SG-4085, 4086	8/3/2010	Ra-228	15.88 ± 0.41	16.24 ± 0.36	16.06 ± 0.27	Pass
SWT-4304, 4305	8/3/2010	Gr. Beta	2.08 ± 1.07	2.44 ± 0.98	2.26 ± 0.73	Pass
BS-4398, 4399	8/10/2010	Cs-137	78.80 ± 33.50	94.30 ± 51.90	86.55 ± 30.89	Pass
BS-4398, 4399	8/10/2010	K-40	13708 ± 795	12091 ± 1110	12900 ± 683	Pass
VE-4531, 4532	8/11/2010	Gr. Beta	36.20 ± 0.90	35.80 ± 0.90	36.00 ± 0.64	Pass
VE-4531, 4532	8/11/2010	K-40	27.31 ± 0.70	27.58 ± 0.62	27.45 ± 0.47	Pass
VE-4531, 4532	8/11/2010	U-233/4	0.014 ± 0.003	0.014 ± 0.003	0.014 ± 0.002	Pass
VE-4531, 4532	8/11/2010	U-238	0.012 ± 0.003	0.010 ± 0.002	0.011 ± 0.002	Pass
DW-10170, 10171	8/13/2010	Ra-226	1.32 ± 0.14	1.26 ± 0.14	1.29 ± 0.10	Pass
DW-10170, 10171	8/13/2010	Ra-228	2.55 ± 0.78	1.76 ± 0.71	2.16 ± 0.53	Pass
AP-4766, 4767	8/26/2010	Be-7	0.18 ± 0.09	0.25 ± 0.13	0.22 ± 0.08	Pass
DW-10182, 10183	8/27/2010	Ra-226	0.15 ± 0.08	0.11 ± 0.07	0.13 ± 0.05	Pass
VE-4928, 4929	9/1/2010	K-40	2.99 ± 0.41	3.18 ± 0.28	3.09 ± 0.25	Pass
SL-4883, 4884	9/1/2010	Gr. Beta	6.90 ± 0.20	7.10 ± 0.20	7.00 ± 0.14	Pass
SL-4883, 4884[b]	9/1/2010	K-40	7.15 ± 0.99	5.07 ± 0.51	6.11 ± 0.56	Fail
W-5135, 5136	9/6/2010	H-3	658.60 ± 110.80	600.90 ± 108.50	629.75 ± 77.54	Pass
SW-5071, 5072	9/13/2010	H-3	186.70 ± 101.10	267.30 ± 104.40	227.00 ± 72.66	Pass
XWW-5246, 5247	9/14/2010	H-3	1990.60 ± 157.70	1986.20 ± 157.60	1988.40 ± 111.48	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
VE-5114, 5115	9/9/2010	Be-7	1.14 ± 0.35	1.48 ± 0.26	1.31 ± 0.22	Pass
VE-5114, 5115	9/9/2010	Gr. Beta	34.72 ± 1.29	33.38 ± 1.23	34.05 ± 0.89	Pass
VE-5114, 5115	9/9/2010	H-3	79367 ± 837	79421 ± 837	79394 ± 592	Pass
VE-5114, 5115	9/9/2010	K-40	22.13 ± 0.67	21.93 ± 0.58	22.03 ± 0.44	Pass
VE-5114, 5115	9/9/2010	U-233/4	0.08 ± 0.01	0.06 ± 0.01	0.07 ± 0.01	Pass
MI-5267, 5268	9/20/2010	K-40	1281.10 ± 118.90	1218.60 ± 110.80	1249.85 ± 81.26	Pass
SO-5357, 5358	9/23/2010	K-40	10894.00 ± 560.00	11175.00 ± 760.00	11034.50 ± 472.02	Pass
AP-5357, 5358	9/23/2010	Be-7	0.11 ± 0.02	0.09 ± 0.02	0.10 ± 0.01	Pass
DW-10194, 10195	9/23/2010	Ra-226	0.40 ± 0.10	0.20 ± 0.10	0.30 ± 0.07	Pass
DW-10194, 10195	9/23/2010	Ra-228	1.61 ± 0.65	0.88 ± 0.47	1.25 ± 0.40	Pass
WW-5442, 5443	9/29/2010	H-3	6706.00 ± 252.00	6510.00 ± 249.00	6608.00 ± 177.13	Pass
VE-5469, 5470	9/29/2010	K-40	2.86 ± 0.38	2.57 ± 0.37	2.72 ± 0.26	Pass
BS-5886, 5887	9/29/2010	Cs-137	83.36 ± 23.31	58.97 ± 21.16	71.17 ± 15.74	Pass
BS-5886, 5887	9/29/2010	K-40	13913.00 ± 775.40	13582.00 ± 710.30	13747.50 ± 525.78	Pass
G-5513, 5514	10/4/2010	Be-7	6.73 ± 0.40	6.36 ± 0.41	6.55 ± 0.29	Pass
E-5492, 5493	10/4/2010	Gr. Beta	1.74 ± 0.05	1.77 ± 0.05	1.76 ± 0.04	Pass
E-5492, 5493	10/4/2010	K-40	1.57 ± 0.17	1.55 ± 0.18	1.56 ± 0.12	Pass
G-5512, 5513	10/4/2010	Gr. Beta	10.86 ± 0.44	10.39 ± 0.39	10.63 ± 0.29	Pass
G-5512, 5513	10/4/2010	K-40	7.10 ± 0.54	7.41 ± 0.59	7.26 ± 0.40	Pass
MI-5541, 5542	10/4/2010	K-40	1090.60 ± 106.70	1246.10 ± 102.60	1168.35 ± 74.01	Pass
MI-5541, 5542	10/4/2010	Sr-90	1.44 ± 0.38	1.11 ± 0.35	1.27 ± 0.26	Pass
F-6061, 6062	10/9/2010	H-3	7.64 ± 0.23	7.49 ± 0.23	7.57 ± 0.16	Pass
F-6061, 6062	10/9/2010	K-40	2.81 ± 0.40	2.56 ± 0.50	2.68 ± 0.32	Pass
VE-5740, 5741	10/10/2010	K-40	4.92 ± 0.53	4.61 ± 0.34	4.77 ± 0.32	Pass
VE-5761, 5762	10/12/2010	Be-7	1.05 ± 0.29	0.69 ± 0.15	0.87 ± 0.16	Pass
VE-5761, 5762	10/12/2010	K-40	3.45 ± 0.45	3.34 ± 0.29	3.40 ± 0.27	Pass
AP-5910, 5911	10/14/2010	Be-7	0.23 ± 0.09	0.30 ± 0.12	0.26 ± 0.08	Pass
WW-6294, 6295	10/18/2010	H-3	1681.49 ± 146.32	1637.41 ± 144.98	1659.45 ± 102.99	Pass
P-6038, 6039	10/19/2010	H-3	2131.90 ± 159.50	2212.00 ± 161.70	2171.95 ± 113.56	Pass
AP-6195, 6196	10/21/2010	Be-7	0.27 ± 0.11	0.26 ± 0.13	0.26 ± 0.09	Pass
WW-6366, 6367	10/23/2010	H-3	477.28 ± 102.02	529.99 ± 104.27	503.64 ± 72.94	Pass
SWU-6315, 6316	10/26/2010	Gr. Beta	1.85 ± 1.00	1.40 ± 0.90	1.62 ± 0.67	Pass
SO-6336, 6337	10/28/2010	Cs-137	0.23 ± 0.03	0.23 ± 0.04	0.23 ± 0.02	Pass
SO-6336, 6337	10/28/2010	Gr. Beta	26.36 ± 1.67	24.78 ± 1.52	25.57 ± 1.13	Pass
SO-6336, 6337	10/28/2010	K-40	13.43 ± 0.76	13.73 ± 0.81	13.58 ± 0.56	Pass
AP-6453, 6454	10/28/2010	Be-7	0.23 ± 0.12	0.30 ± 0.15	0.26 ± 0.10	Pass
BS-6475, 6476	11/1/2010	Gr. Beta	13.13 ± 1.83	12.75 ± 1.67	12.94 ± 1.24	Pass
F-6658, 6659	11/3/2010	K-40	2.79 ± 0.40	2.94 ± 0.44	2.86 ± 0.30	Pass
F-6565, 6566	11/4/2010	Cs-137	0.06 ± 0.02	0.04 ± 0.01	0.05 ± 0.01	Pass
F-6565, 6566	11/4/2010	Gr. Beta	3.90 ± 0.10	4.10 ± 0.10	3.96 ± 0.06	Pass
F-6565, 6566	11/4/2010	K-40	2.63 ± 0.45	2.57 ± 0.35	2.60 ± 0.29	Pass
SS-5761, 5762	11/16/2010	K-40	15.42 ± 1.57	15.87 ± 1.21	15.65 ± 0.99	Pass
WW-7056, 7057	11/30/2010	Gr. Beta	2.09 ± 0.84	2.22 ± 0.80	2.16 ± 0.58	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
SO-7166, 7167	11/30/2010	Cs-137	0.12 ± 0.04	0.11 ± 0.03	0.11 ± 0.03	Pass
SO-7166, 7167	11/30/2010	K-40	14.93 ± 0.88	14.49 ± 0.86	14.71 ± 0.61	Pass
WW-7412, 7413	12/6/2010	H-3	469.78 ± 146.32	503.57 ± 93.96	486.68 ± 86.94	Pass
MI-7187, 7188	12/8/2010	K-40	1495.10 ± 129.00	1398.40 ± 109.10	1446.75 ± 84.47	Pass
MI-7187, 7188	12/8/2010	Sr-90	0.57 ± 0.31	0.66 ± 0.28	0.62 ± 0.21	Pass
WW-7255, 7256	12/8/2010	H-3	243.46 ± 90.39	327.34 ± 94.11	285.40 ± 65.24	Pass
AP-7276, 7277	12/9/2010	Be-7	0.13 ± 0.07	0.18 ± 0.10	0.16 ± 0.06	Pass
XWW-7297, 7298	12/9/2010	H-3	686.00 ± 102.00	764.60 ± 105.00	725.30 ± 73.19	Pass
AP-7344, 7345	12/16/2010	Be-7	0.16 ± 0.09	0.17 ± 0.09	0.16 ± 0.06	Pass
SWT-7480, 7481	12/28/2010	Gr. Beta	0.90 ± 0.40	1.03 ± 0.41	0.97 ± 0.29	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), food products, vegetation, soil, sediment (pCi/g).

[b] Analysis was repeated, result of reanalysis: 4.83 ± 0.29 pCi/L.

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

			Concentration [b]			
Lab Code [c]	Date	Analysis	Laboratory result	Known Activity	Control Limits [d]	Acceptance
STVE-1199	03/01/10	Co-57	0.01 ± 0.03	0.00	-	Pass
STVE-1199	03/01/10	Co-60	3.39 ± 0.12	3.27	2.29 - 4.25	Pass
STVE-1199	03/01/10	Cs-134	4.74 ± 0.15	4.39	3.07 - 5.71	Pass
STVE-1199	03/01/10	Cs-137	3.32 ± 0.17	3.06	2.14 - 3.98	Pass
STVE-1199	03/01/10	Mn-54	0.01 ± 0.05	0.00	-	Pass
STVE-1199	03/01/10	Zn-65	8.03 ± 0.33	7.10	4.97 - 9.23	Pass
STW-1200	03/01/10	Gr. Alpha	0.40 ± 0.05	0.68	0.00 - 1.35	Pass
STW-1200	03/01/10	Gr. Beta	3.03 ± 0.07	3.09	1.55 - 4.64	Pass
STW-1201	03/01/10	Am-241	1.05 ± 0.08	1.30	0.91 - 1.69	Pass
STW-1201	03/01/10	Co-57	28.90 ± 0.40	28.30	19.80 - 36.80	Pass
STW-1201	03/01/10	Co-60	0.06 ± 0.05	0.00	-	Pass
STW-1201	03/01/10	Cs-134	-0.03 ± 0.09	0.00	-	Pass
STW-1201	03/01/10	Cs-137	60.60 ± 0.60	60.60	42.40 - 78.80	Pass
STW-1201	03/01/10	Fe-55	3.00 ± 14.40	0.00	-	Pass
STW-1201	03/01/10	H-3	93.20 ± 18.30	90.80	63.60 - 118.00	Pass
STW-1201	03/01/10	Mn-54	27.80 ± 0.40	26.90	18.80 - 35.00	Pass
STW-1201	03/01/10	Ni-63	49.10 ± 3.50	59.90	41.90 - 77.90	Pass
STW-1201	03/01/10	Sr-90	-0.10 ± 0.60	0.00	-	Pass
STW-1201	03/01/10	Tc-99	0.50 ± 0.50	0.00	-	Pass
STW-1201	03/01/10	U-233/4	1.21 ± 0.05	1.22	0.85 - 1.59	Pass
STW-1201	03/01/10	U-238	1.20 ± 0.05	1.25	0.88 - 1.63	Pass
STW-1201	03/01/10	Zn-65	42.70 ± 0.80	40.70	28.50 - 52.90	Pass
STSO-1202	03/01/10	Co-57	520.00 ± 10.80	522.00	365.00 - 679.00	Pass
STSO-1202	03/01/10	Co-60	599.10 ± 2.80	622.00	435.00 - 809.00	Pass
STSO-1202	03/01/10	Cs-134	666.10 ± 4.70	733.00	513.00 - 953.00	Pass
STSO-1202	03/01/10	Cs-137	774.40 ± 4.50	779.00	545.00 - 1013.00	Pass
STSO-1202	03/01/10	K-40	562.00 ± 15.30	559.00	391.00 - 727.00	Pass
STSO-1202	03/01/10	Mn-54	866.20 ± 4.60	849.00	594.00 - 1104.00	Pass
STSO-1202	03/01/10	Sr-90	225.50 ± 11.80	288.00	202.00 - 374.00	Pass
STSO-1202	03/01/10	U-233/4	59.90 ± 2.50	60.00	42.00 - 78.00	Pass
STSO-1202	03/01/10	U-238	62.10 ± 2.60	64.00	45.00 - 83.00	Pass
STSO-1202	03/01/10	Zn-65	-1.23 ± 1.96	0.00	-	Pass
STAP-1203	03/01/10	Am-241	0.10 ± 0.01	0.15	0.10 - 0.19	Pass
STAP-1203	03/01/10	Co-57	0.01 ± 0.02	0.00	-	Pass
STAP-1203	03/01/10	Co-60	2.63 ± 0.19	2.47	1.73 - 3.22	Pass
STAP-1203	03/01/10	Cs-134	2.21 ± 0.34	2.13	1.49 - 2.77	Pass
STAP-1203	03/01/10	Cs-137	1.66 ± 0.22	1.53	1.07 - 1.99	Pass
STAP-1203	03/01/10	Mn-54	3.42 ± 0.26	3.02	2.11 - 3.93	Pass
STAP-1203	03/01/10	Sr-90	0.02 ± 0.06	0.00	-	Pass
STAP-1203	03/01/10	Zn-65	-0.05 ± 0.11	0.00	-	Pass

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

			Concentration [b]			
Lab Code [c]	Date	Analysis	Laboratory result	Known Activity	Control Limits [d]	Acceptance
STAP-1204	03/01/10	Gr. Alpha	0.13 ± 0.03	0.43	0.00 - 0.85	Pass
STAP-1204	03/01/10	Gr. Beta	1.46 ± 0.07	1.29	0.65 - 1.94	Pass
STW-1211	08/01/10	Am-241	0.02 ± 0.02	0.00	-	Pass
STW-1211	08/01/10	Co-57	36.40 ± 4.80	36.00	25.20 - 46.80	Pass
STW-1211	08/01/10	Co-60	28.30 ± 1.00	28.30	19.80 - 36.80	Pass
STW-1211	08/01/10	Cs-134	29.30 ± 2.10	31.40	22.00 - 40.80	Pass
STW-1211	08/01/10	Cs-137	44.60 ± 1.80	44.20	30.90 - 57.50	Pass
STW-1211	08/01/10	Fe-55	48.50 ± 20.10	60.20	42.10 - 78.30	Pass
STW-1211	08/01/10	H-3	503.60 ± 12.80	453.40	317.40 - 589.40	Pass
STW-1211	08/01/10	K-40	38.50 ± 2.50	38.90	27.20 - 50.60	Pass
STW-1211	08/01/10	Mn-54	0.10 ± 0.30	0.00	-	Pass
STW-1211	08/01/10	Ni-63	49.30 ± 3.10	56.10	39.30 - 72.90	Pass
STW-1211	08/01/10	Pu-238	1.49 ± 0.15	1.81	1.27 - 2.35	Pass
STW-1211	08/01/10	Pu-239/40	1.20 ± 0.10	1.35	0.95 - 1.76	Pass
STW-1211	08/01/10	Sr-90	9.20 ± 1.30	8.30	5.80 - 10.80	Pass
STW-1211	08/01/10	Tc-99	28.10 ± 0.90	33.60	23.50 - 43.70	Pass
STW-1211	08/01/10	U-233/4	2.04 ± 0.14	2.01	1.41 - 2.61	Pass
STW-1211	08/01/10	U-238	2.05 ± 0.14	2.07	1.45 - 2.69	Pass
STW-1211	08/01/10	Zn-65	32.80 ± 3.00	31.00	21.70 - 40.30	Pass
STW-1212	08/01/10	Gr. Alpha	1.54 ± 0.09	1.92	0.58 - 3.26	Pass
STW-1212	08/01/10	Gr. Beta	4.13 ± 0.15	4.39	2.20 - 6.59	Pass
STVE-1213	08/01/10	Co-57	9.60 ± 0.54	8.27	5.79 - 10.75	Pass
STVE-1213	08/01/10	Co-60	0.05 ± 0.08	0.00	-	Pass
STVE-1213	08/01/10	Cs-134	4.83 ± 0.26	4.79	3.35 - 6.23	Pass
STVE-1213	08/01/10	Cs-137	6.45 ± 0.66	5.88	4.12 - 7.64	Pass
STVE-1213	08/01/10	Mn-54	7.12 ± 0.66	6.29	4.40 - 8.17	Pass
STVE-1213	08/01/10	Zn-65	6.05 ± 0.74	5.39	3.77 - 7.01	Pass
STSO-1214	08/01/10	Co-57	0.10 ± 1.60	0.00	-	Pass
STSO-1214	08/01/10	Co-60	370.00 ± 6.00	343.00	240.00 - 446.00	Pass
STSO-1214	08/01/10	Cs-134	1005.00 ± 21.00	940.00	658.00 - 1222.00	Pass
STSO-1214	08/01/10	Cs-137	755.00 ± 15.00	670.00	469.00 - 871.00	Pass
STSO-1214	08/01/10	K-40	783.00 ± 54.00	699.00	489.00 - 909.00	Pass
STSO-1214	08/01/10	Mn-54	942.00 ± 15.00	820.00	574.00 - 1066.00	Pass
STSO-1214	08/01/10	Pu-238	69.20 ± 6.20	64.00	45.00 - 83.00	Pass
STSO-1214	08/01/10	Pu-239/40	76.50 ± 6.20	71.00	50.00 - 92.00	Pass
STSO-1214	08/01/10	Sr-90	3.50 ± 8.00	0.00	-	Pass
STSO-1214	08/01/10	U-233/4	76.50 ± 6.20	71.00	50.00 - 92.00	Pass
STSO-1214	08/01/10	U-238	271.40 ± 9.00	289.00	202.00 - 376.00	Pass
STSO-1214	08/01/10	Zn-65	310.00 ± 18.00	265.00	186.00 - 345.00	Pass

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

			Concentration [b]			
Lab Code [c]	Date	Analysis	Laboratory result	Known Activity	Control Limits [d]	Acceptance
STAP-1215	08/01/10	Co-57	4.47 ± 0.21	4.08	2.86 - 5.30	Pass
STAP-1215	08/01/10	Co-60	3.15 ± 0.30	2.92	2.04 - 3.80	Pass
STAP-1215	08/01/10	Cs-134	3.03 ± 0.17	2.98	2.09 - 3.87	Pass
STAP-1215	08/01/10	Cs-137	0.01 ± 0.05	0.00	-	Pass
STAP-1215	08/01/10	Mn-54	3.69 ± 0.39	3.18	2.23 - 4.13	Pass
STAP-1215	08/01/10	Sr-90	1.00 ± 0.12	1.01	0.71 - 1.31	Pass
STAP-1215	08/01/10	Zn-65	0.03 ± 0.15	0.00	-	Pass
STAP-1216	08/01/10	Gr. Alpha	0.01 ± 0.01	0.00	-	Pass
STAP-1216	08/01/10	Gr. Beta	0.54 ± 0.05	0.50	0.25 - 0.75	Pass

[a] Results obtained by Environmental, Inc., Midwest Laboratory as a participant in the Department of Energy's Mixed Analyte Performance Evaluation Program, Idaho Operations office, Idaho Falls, Idaho

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

[c] Laboratory codes as follows: STW (water), STAP (air filter), STSO (soil), STVE (vegetation).

[d] 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.

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

Lab Code [b]	Date	Analysis	Concentration (pCi/L) Laboratory Result [c]	ERA Result [d]	Control Limits	Acceptance
STAP-1217	09/20/10	Am-241	55.6 ± 2.9	74.1	43.3 - 102.0	Pass
STAP-1217	09/20/10	Co-60	517.1 ± 9.1	479.0	371.0 - 598.0	Pass
STAP-1217	09/20/10	Cs-134	384.6 ± 33.7	388.0	253.0 - 480.0	Pass
STAP-1217	09/20/10	Cs-137	589.4 ± 7.1	514.0	386.0 - 675.0	Pass
STAP-1217	09/20/10	Mn-54	0.0 ± 0.0	-	-	Pass
STAP-1217	09/20/10	Pu-238	76.5 ± 4.0	72.9	50.0 - 95.8	Pass
STAP-1217	09/20/10	Pu-239/40	73.0 ± 3.8	69.6	50.5 - 90.1	Pass
STAP-1217	09/20/10	Sr-90	172.9 ± 21.3	159.0	70.0 - 247.0	Pass
STAP-1217	09/20/10	U-233/234	64.9 ± 3.9	71.8	45.2 - 106.0	Pass
STAP-1217	09/20/10	U-238	68.0 ± 4.0	71.2	45.6 - 101.0	Pass
STAP-1217	09/20/10	Uranium	135.5 ± 8.7	146.0	74.6 - 232.0	Pass
STAP-1217	09/20/10	Zn-65	563.1 ± 15.3	465.0	322.0 - 644.0	Pass
STAP-1218	09/20/10	Gr. Alpha	66.1 ± 3.2	52.3	27.1 - 78.7	Pass
STAP-1218	09/20/10	Gr. Beta	69.9 ± 2.5	52.7	32.5 - 77.0	Pass
STSO-1219	09/20/10	Ac-228	1632.0 ± 80.4	1830.0	1170.0 - 2580.0	Pass
STSO-1219	09/20/10	Am-241	1063.0 ± 120.9	1120.0	669.0 - 1440.0	Pass
STSO-1219	09/20/10	Bi-212	1752.0 ± 255.6	2070.0	543.0 - 3100.0	Pass
STSO-1219	09/20/10	Bi-214	909.3 ± 38.9	983.0	603.0 - 1410.0	Pass
STSO-1219	09/20/10	Co-60	4852.0 ± 153.5	4780.0	3480.0 - 6420.0	Pass
STSO-1219	09/20/10	Cs-134	2190.0 ± 50.7	2240.0	1440.0 - 2700.0	Pass
STSO-1219	09/20/10	Cs-137	3584.0 ± 42.5	3530.0	2700.0 - 4580.0	Pass
STSO-1219	09/20/10	K-40	10017.0 ± 274.5	10700.0	7760.0 - 14500.0	Pass
STSO-1219	09/20/10	Mn-54	0.0 ± 0.0	-	-	Pass
STSO-1219	09/20/10	Pb-212	1573.0 ± 28.2	1640.0	1060.0 - 2310.0	Pass
STSO-1219	09/20/10	Pb-214	999.0 ± 39.2	969.0	580.0 - 1440.0	Pass
STSO-1219	09/20/10	Pu-238	1568.0 ± 155.0	1280.0	733.0 - 1800.0	Pass
STSO-1219	09/20/10	Pu-239/40	1445.0 ± 142.9	1180.0	805.0 - 1570.0	Pass
STSO-1219 [e]	09/20/10	U-233/234	599.4 ± 69.4	1360.0	862.0 - 1690.0	Fail
STSO-1219 [e]	09/20/10	U-238	633.8 ± 71.3	1340.0	819.0 - 1700.0	Fail
STSO-1219 [e]	09/20/10	Uranium	1248.0 ± 152.7	2770.0	1580.0 - 3740.0	Fail
STSO-1219	09/20/10	Zn-65	2447.0 ± 60.1	2300.0	1820.0 - 3080.0	Pass
STVE-1220	09/20/10	Co-60	1108.0 ± 38.7	1010.0	683.0 - 1450.0	Pass
STVE-1220	09/20/10	Cs-134	1161.0 ± 57.3	1040.0	595.0 - 1440.0	Pass
STVE-1220	09/20/10	Cs-137	1400.0 ± 43.0	1260.0	924.0 - 1750.0	Pass
STVE-1220	09/20/10	K-40	27400.0 ± 683.4	22600.0	16200.0 - 32000.0	Pass
STVE-1220	09/20/10	Mn-54	0.0 ± 0.0	-	-	Pass

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

Lab Code [b]	Date	Analysis	Concentration (pCi/L) Laboratory Result [c]	ERA Result [d]	Control Limits	Acceptance
STVE-1220	09/20/10	Am-241	4185.0 ± 180.0	4760.0	2710.0 - 6540.0	Pass
STVE-1220	09/20/10	Cm-244	2329.0 ± 132.5	2740.0	1350.0 - 4270.0	Pass
STVE-1220	09/20/10	Pu-238	4912.0 ± 194.0	4740.0	2560.0 - 6940.0	Pass
STVE-1220	09/20/10	Pu-239/40	4765.0 ± 111.0	4470.0	2770.0 - 6100.0	Pass
STVE-1220	09/20/10	Sr-90	7706.0 ± 583.9	7810.0	4360.0 - 10400.0	Pass
STVE-1220	09/20/10	U-233/234	3862.0 ± 203.0	4010.0	2750.0 - 5320.0	Pass
STVE-1220	09/20/10	U-238	3926.0 ± 205.3	3980.0	2800.0 - 5030.0	Pass
STVE-1220	09/20/10	Uranium	7671.0 ± 201.2	8180.0	5620.0 - 10600.0	Pass
STVE-1220	09/20/10	Zn-65	1443.0 ± 81.0	1210.0	874.0 - 1650.0	Pass
STW-1221	09/20/10	Am-241	127.9 ± 4.2	176.0	120.0 - 238.0	Pass
STW-1221	09/20/10	Co-60	697.8 ± 10.4	714.0	622.0 - 844.0	Pass
STW-1221	09/20/10	Cs-134	437.5 ± 13.3	492.0	363.0 - 565.0	Pass
STW-1221	09/20/10	Cs-137	612.8 ± 11.6	625.0	531.0 - 749.0	Pass
STW-1221	09/20/10	Fe-55	936.8 ± 508.2	825.0	480.0 - 1100.0	Pass
STW-1221	09/20/10	Mn-54	0.0 ± 0.0	-	-	Pass
STW-1221	09/20/10	Pu-238	148.1 ± 6.0	162.0	122.0 - 201.0	Pass
STW-1221	09/20/10	Pu-239/40	154.1 ± 6.2	148.0	114.0 - 183.0	Pass
STW-1221	09/20/10	Sr-90	872.3 ± 13.4	921.0	585.0 - 1230.0	Pass
STW-1221	09/20/10	U-233/234	99.1 ± 4.4	109.0	82.2 - 140.0	Pass
STW-1221	09/20/10	U-238	103.7 ± 4.5	108.0	82.5 - 134.0	Pass
STW-1221	09/20/10	Uranium	206.5 ± 9.8	221.0	159.0 - 294.0	Pass
STW-1221	09/20/10	Zn-65	489.1 ± 16.2	489.0	414.0 - 610.0	Pass
STW-1222	09/20/10	Gr. Alpha	110.6 ± 3.5	146.0	64.8 - 216.0	Pass
STW-1222	09/20/10	Gr. Beta	134.6 ± 2.6	143.0	83.6 - 210.0	Pass
STW-1223	09/20/10	H-3	23500.0 ± 1438.0	21600.0	14100.0 - 31900.0	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: STW (water), STAP (air filter), STSO (soil), STVE (vegetation).

[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] Analysis was repeated using total dissolution. Results of the reanalysis,
U-233/234: 1137 ± 254 pCi/kg, U-238: 1193 ± 116 pCi/kg, Total Uranium: 2379 ± 254 pCi/kg.

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 2010

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 (317)	0.01	0.026 (265/265) (0.007 - 0.050)	49 0.8 miles NNE	0.026 (53/53) (0.007 - 0.048)	Station 53 0.026 (52/52) (0.009 - 0.052)	0
	Gamma (24) Be-7	-	0.082 (20/20) (0.058 - 0.105)	49 0.8 miles NNE	0.083 (4/4) (0.058 - 0.105)	0.082 (4/4) (0.059 - 0.099)	0
Air Radioiodine (pCi/m^3)	I-131 (317)	0.07	- (0/265)	N/A	N/A	- (0/52)	0
Direct Radiation Dosimeters (mR per std. 90-day Qtr.)	Gamma Dose (176)	-	18.9 (164/164) (11.0 – 29.2)	47 0.16 miles S	25.2 (4/4) (21.8 – 29.2)	Stations 39, 48 & 53 19.7 (12/12) (17.9 – 22.7)	0
Surface Water (pCi/l)	Gamma (24)		- (0/12)	N/A	N/A	JRR - (0/12)	0
	Tritium (24)	3,000	11,428 (12/12) (9,645 – 13,436)	SP 3.2 miles SSE	11,428 (12/12) (9,645 – 13,436)	- (0/12)	0
	Fe-55 (1)	-	- (0/1)	N/A	N/A		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

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Location of Facility: Coffey County, Kansas Reporting Period: Annual 2010

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 (25)	1	- (0/12)	N/A	N/A	BW-15 - (0/13)	0
	Gross Beta (25)	4	2.8 (12/12) (1.4 – 3.9)	IO-DW 26.1 miles SSE	2.8 (12/12) (1.4 – 3.9)	2.9 (13/13) (1.3 – 5.1)	0
	Gamma (25)		- (0/12)	N/A	N/A	- (0/13)	0
	Tritium (8)	2,000	- (0/4)	N/A	N/A	- (0/4)	0
Shoreline Sediment (pCi/kg dry)	Gamma (5)					JRR	
	K-40	-	10,133 (3/3) (9,012 – 11,494)	DC 0.8 miles WNW	10,253 (2/2) (9,012 – 11,494)	10,950 (2/2) (9,530 – 12,370)	0
	Cs-137	180	143.1 (2/3) (101.9 – 184.2)	DC 0.8 miles WNW	184.2 (1/2)	116.8 (1/2)	0
Fish (pCi/kg wet)	Gamma (22)					JRR	
	K-40	-	3,202 (15/15) (2,807 – 3,733)	CCL 0.6 miles E to NNW	3,202 (15/15) (2,807 – 3,733)	3,280 (7/7) (2,674 – 3,726)	0
	Tritium (22)	-	7,481 (15/15) (6,096 – 8,358)	CCL 0.6 miles E to NNW	7,481 (15/15) (6,096 – 8,358)	- (0/7)	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

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Location of Facility: Coffey County, Kansas Reporting Period: Annual 2010

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 (17)					D-2	
	Be-7	-	813 (11/11) (418 – 1,856)	Q-6 2.4 miles NW	1,761 (2/2) (1,667 – 1,856)	662 (6/6) (376 – 1,293)	0
	K-40	-	4,367 (11/11) (2,717 – 6,097)	Q-6 2.4 miles NW	5,509 (2/2) (4,921 – 6,097)	5,643 (6/6) (3,636 – 7,604)	0
						NR-U1	
Crops (pCi/kg wet)	Gamma (4)						
	K-40	-	2,771 (2/2) (2,671 – 2,871)	NR-D2 11.5 miles S	2,871 (1/1)	8,555 (2/2) (2,833 – 14,278)	0
Bottom Sediment (pCi/kg dry)	Gamma (11)					JRR	
	K-40	-	11,659 (9/9) (9,696 – 13,708)	UHS 0.6 miles E	12,278 (6/6) (10,870–13,708)	9,194 (2/2) (5,348 – 13,040)	0
	Cs-137	-	66 (7/9) (40 – 111)	DC 0.8 miles WNW	111 (1/2)	112 (1/2)	0
	Fe-55 (2)	-	- (0/1)	N/A	N/A	- (0/1)	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

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Location of Facility: Coffey County, Kansas Reporting Period: Annual 2010

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 (2)					No Control	
	Be-7	-	561 (2/2) (431 – 691)	DC-ALT 1.5 miles NW	691 (1/1)		0
	K-40	-	2,558 (2/2) (2,449 – 2,667)	EEA 3.0 miles NNW	2,667 (1/1)		0
Soil (pCi/kg dry)	Gamma (2)					No Control	
	K-40	-	9,114 (2/2) (8,791 – 9,437)	EEA 3.0 miles NNW	9,437 (1/1)		0
	Cs-137	-	336 (1/2)	EEA 3.0 miles NNW	336 (1/1)		0
Deer (pCi/kg wet)	Gamma (1)					No Control	
	K-40	-	2,793 (1/1)	R2.5 2.5 miles NNW	2,793 (1/1)		0
	Tritium (1)	-	626 (1/1)	R2.5 2.5 miles NNW	626 (1/1)		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

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Location of Facility: Coffey County, Kansas Reporting Period: Annual 2010

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 **
Alligator (pCi/kg wet)	Gamma (1)					No Control	
	K-40	-	1,899 (1/1)	CCL 1.5 miles WNW	1,899 (1/1)		0
	Tritium (1)	-	7,737 (1/1)	CCL 1.5 miles WNW	7,737 (1/1)		0

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

Air Particulate and Charcoal Filters

Location: 002

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
28-DEC-09	04-JAN-10	323	0.041 +/- 0.004	< 0.006	
04-JAN-10	11-JAN-10	296	0.040 +/- 0.004	< 0.009	
11-JAN-10	18-JAN-10	310	0.047 +/- 0.005	< 0.008	
11-JAN-10	18-JAN-10	310	0.049 +/- 0.005		Duplicate
18-JAN-10	25-JAN-10	282	0.018 +/- 0.004	< 0.012	
25-JAN-10	01-FEB-10	313	0.028 +/- 0.004	< 0.012	
01-FEB-10	08-FEB-10	299	0.039 +/- 0.005	< 0.009	
08-FEB-10	16-FEB-10	359	0.029 +/- 0.004	< 0.008	
16-FEB-10	22-FEB-10	245	0.022 +/- 0.004	< 0.014	
22-FEB-10	01-MAR-10	299	0.033 +/- 0.004	< 0.010	
01-MAR-10	08-MAR-10	284	0.026 +/- 0.004	< 0.008	
08-MAR-10	15-MAR-10	291	0.009 +/- 0.003	< 0.014	
15-MAR-10	22-MAR-10	295	0.017 +/- 0.004	< 0.020	
22-MAR-10	29-MAR-10	290	0.017 +/- 0.004	< 0.012	
29-MAR-10	05-APR-10	280	0.027 +/- 0.004	< 0.012	
05-APR-10	12-APR-10	289	0.016 +/- 0.004	< 0.007	
12-APR-10	19-APR-10	291	0.024 +/- 0.004	< 0.013	
19-APR-10	26-APR-10	279	0.021 +/- 0.004	< 0.010	
26-APR-10	03-MAY-10	301	0.017 +/- 0.004	< 0.011	
03-MAY-10	11-MAY-10	343	0.015 +/- 0.003	< 0.010	
11-MAY-10	17-MAY-10	257	0.011 +/- 0.004	< 0.018	
17-MAY-10	24-MAY-10	307	0.013 +/- 0.003	< 0.016	
24-MAY-10	02-JUN-10	372	0.026 +/- 0.003	< 0.007	
02-JUN-10	08-JUN-10	266		< 0.009	
02-JUN-10	08-JUN-10	266	0.021 +/- 0.004		
08-JUN-10	14-JUN-10	261	0.017 +/- 0.004	< 0.012	
14-JUN-10	21-JUN-10	303	0.012 +/- 0.003	< 0.011	
21-JUN-10	28-JUN-10	307	0.019 +/- 0.004	< 0.008	
28-JUN-10	06-JUL-10	393	0.017 +/- 0.003	< 0.014	
06-JUL-10	12-JUL-10	260	0.019 +/- 0.004	< 0.008	
12-JUL-10	19-JUL-10	297	0.029 +/- 0.004	< 0.010	
19-JUL-10	26-JUL-10	295	0.019 +/- 0.004	< 0.013	
19-JUL-10	26-JUL-10	295	0.017 +/- 0.004		Duplicate
26-JUL-10	02-AUG-10	298	0.027 +/- 0.004	< 0.009	
02-AUG-10	09-AUG-10	304	0.030 +/- 0.004	< 0.009	
09-AUG-10	16-AUG-10	293	0.023 +/- 0.004	< 0.007	
16-AUG-10	23-AUG-10	290	0.038 +/- 0.004	< 0.011	
23-AUG-10	30-AUG-10	297	0.026 +/- 0.004	< 0.009	
30-AUG-10	07-SEP-10	351	0.017 +/- 0.003	< 0.011	
07-SEP-10	13-SEP-10	257	0.015 +/- 0.004	< 0.010	

Air Particulate and Charcoal Filters

Location: 002

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
07-SEP-10	13-SEP-10	257	0.017 +/- 0.004		Duplicate
13-SEP-10	20-SEP-10	295	0.027 +/- 0.004	< 0.013	
20-SEP-10	27-SEP-10	306	0.023 +/- 0.004	< 0.013	
27-SEP-10	04-OCT-10	299	0.017 +/- 0.004	< 0.011	
04-OCT-10	11-OCT-10	295	0.034 +/- 0.004	< 0.009	
11-OCT-10	19-OCT-10	343	0.037 +/- 0.004	< 0.009	
19-OCT-10	25-OCT-10	253	0.034 +/- 0.005	< 0.015	
19-OCT-10	25-OCT-10	253	0.034 +/- 0.005		Duplicate
25-OCT-10	01-NOV-10	307	0.021 +/- 0.004	< 0.013	
01-NOV-10	09-NOV-10	351	0.018 +/- 0.003	< 0.015	
09-NOV-10	15-NOV-10	254	0.029 +/- 0.005	< 0.018	
15-NOV-10	22-NOV-10	303	0.036 +/- 0.004	< 0.013	
22-NOV-10	29-NOV-10	299	0.035 +/- 0.004	< 0.014	
29-NOV-10	06-DEC-10	318	0.035 +/- 0.004	< 0.012	
06-DEC-10	13-DEC-10	300	0.045 +/- 0.005	< 0.007	
13-DEC-10	20-DEC-10	294	0.041 +/- 0.005	< 0.010	
20-DEC-10	27-DEC-10	322	0.034 +/- 0.004	< 0.008	
27-DEC-10	03-JAN-11	303	0.033 +/- 0.004	< 0.010	

Air Particulate and Charcoal Filters

Location: 018

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
28-DEC-09	04-JAN-10	314	0.040 +/- 0.004	< 0.007	
04-JAN-10	11-JAN-10	298	0.035 +/- 0.004	< 0.009	
11-JAN-10	18-JAN-10	299	0.047 +/- 0.005	< 0.009	
18-JAN-10	25-JAN-10	296	0.017 +/- 0.004	< 0.011	
25-JAN-10	01-FEB-10	309	0.028 +/- 0.004	< 0.012	
01-FEB-10	08-FEB-10	295	0.030 +/- 0.004	< 0.010	
08-FEB-10	16-FEB-10	360	0.024 +/- 0.003	< 0.008	
16-FEB-10	22-FEB-10	247	0.021 +/- 0.004	< 0.014	
22-FEB-10	01-MAR-10	302	0.031 +/- 0.004	< 0.010	
01-MAR-10	08-MAR-10	291	0.025 +/- 0.004	< 0.008	
08-MAR-10	15-MAR-10	296	0.008 +/- 0.003	< 0.014	
15-MAR-10	22-MAR-10	301	0.017 +/- 0.004	< 0.020	
22-MAR-10	29-MAR-10	295	0.020 +/- 0.004	< 0.012	
29-MAR-10	05-APR-10	286	0.025 +/- 0.004	< 0.012	
05-APR-10	12-APR-10	288	0.037 +/- 0.004	< 0.007	
05-APR-10	12-APR-10	288	0.040 +/- 0.005		Duplicate
12-APR-10	19-APR-10	279	0.032 +/- 0.004	< 0.013	
19-APR-10	26-APR-10	290	0.019 +/- 0.004	< 0.010	
26-APR-10	03-MAY-10	146	0.017 +/- 0.007	< 0.022	
03-MAY-10	11-MAY-10	345	0.014 +/- 0.003	< 0.009	
11-MAY-10	17-MAY-10	264	0.011 +/- 0.004	< 0.018	
17-MAY-10	24-MAY-10	305	0.011 +/- 0.003	< 0.016	
24-MAY-10	02-JUN-10	373	0.026 +/- 0.003	< 0.007	
02-JUN-10	08-JUN-10	267	0.020 +/- 0.004	< 0.009	
08-JUN-10	14-JUN-10	246	0.017 +/- 0.004	< 0.013	
14-JUN-10	21-JUN-10	305	0.013 +/- 0.003	< 0.011	
21-JUN-10	28-JUN-10	297	0.022 +/- 0.004	< 0.008	
28-JUN-10	06-JUL-10	365	0.016 +/- 0.003	< 0.015	
06-JUL-10	12-JUL-10	257	0.022 +/- 0.004	< 0.008	
12-JUL-10	19-JUL-10	304	0.018 +/- 0.004	< 0.009	
19-JUL-10	26-JUL-10	297	0.016 +/- 0.004	< 0.013	
26-JUL-10	02-AUG-10	303	0.023 +/- 0.004	< 0.009	
02-AUG-10	09-AUG-10	302	0.027 +/- 0.004	< 0.009	
09-AUG-10	16-AUG-10	299	0.022 +/- 0.004	< 0.007	
16-AUG-10	23-AUG-10	294	0.035 +/- 0.004	< 0.011	
23-AUG-10	30-AUG-10	299	0.025 +/- 0.004	< 0.009	
30-AUG-10	07-SEP-10	353	0.020 +/- 0.003	< 0.011	
07-SEP-10	13-SEP-10	259	0.018 +/- 0.004	< 0.010	
13-SEP-10	20-SEP-10	300	0.029 +/- 0.004	< 0.012	
20-SEP-10	27-SEP-10	300	0.022 +/- 0.004	< 0.013	

Air Particulate and Charcoal Filters

Location: 018

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
27-SEP-10	04-OCT-10	306	0.017 +/- 0.004	< 0.010	
04-OCT-10	11-OCT-10	295	0.037 +/- 0.004	< 0.009	
11-OCT-10	19-OCT-10	342	0.038 +/- 0.004	< 0.009	
19-OCT-10	25-OCT-10	252	0.037 +/- 0.005	< 0.015	
25-OCT-10	01-NOV-10	307	0.023 +/- 0.004	< 0.013	
01-NOV-10	09-NOV-10	319	0.021 +/- 0.004	< 0.017	
01-NOV-10	09-NOV-10	319	0.022 +/- 0.004		Duplicate
09-NOV-10	15-NOV-10	255	0.025 +/- 0.004	< 0.018	
15-NOV-10	22-NOV-10	304	0.038 +/- 0.004	< 0.013	
22-NOV-10	29-NOV-10	305	0.036 +/- 0.004	< 0.013	
29-NOV-10	06-DEC-10	316	0.041 +/- 0.004	< 0.012	
06-DEC-10	13-DEC-10	312	0.047 +/- 0.005	< 0.006	
13-DEC-10	20-DEC-10	296	0.042 +/- 0.005	< 0.010	
20-DEC-10	27-DEC-10	311	0.033 +/- 0.004	< 0.008	
27-DEC-10	03-JAN-11	301	0.033 +/- 0.004	< 0.010	

Location: 032

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
28-DEC-09	04-JAN-10	319	0.042 +/- 0.004	< 0.007	
04-JAN-10	11-JAN-10	302	0.036 +/- 0.004	< 0.009	
11-JAN-10	18-JAN-10	308	0.038 +/- 0.004	< 0.008	
18-JAN-10	25-JAN-10	287	0.019 +/- 0.004	< 0.012	
25-JAN-10	01-FEB-10	313	0.027 +/- 0.004	< 0.012	
01-FEB-10	08-FEB-10	296	0.040 +/- 0.005	< 0.010	
08-FEB-10	16-FEB-10	354	0.024 +/- 0.004	< 0.008	
16-FEB-10	22-FEB-10	248	0.021 +/- 0.004	< 0.014	
22-FEB-10	01-MAR-10	298	0.031 +/- 0.004	< 0.010	
01-MAR-10	08-MAR-10	290	0.023 +/- 0.004	< 0.008	
08-MAR-10	15-MAR-10	298	0.010 +/- 0.003	< 0.014	
15-MAR-10	22-MAR-10	298	0.018 +/- 0.004	< 0.020	
22-MAR-10	29-MAR-10	289	0.022 +/- 0.004	< 0.012	
29-MAR-10	05-APR-10	277	0.026 +/- 0.004	< 0.012	
05-APR-10	12-APR-10	282	0.027 +/- 0.004	< 0.007	
12-APR-10	19-APR-10	285	0.025 +/- 0.004	< 0.013	
19-APR-10	26-APR-10	286	0.022 +/- 0.004	< 0.010	
26-APR-10	03-MAY-10	288	0.020 +/- 0.004	< 0.011	
26-APR-10	03-MAY-10	288	0.018 +/- 0.004		Duplicate
03-MAY-10	11-MAY-10	340	0.013 +/- 0.003	< 0.010	
11-MAY-10	17-MAY-10	259	0.010 +/- 0.004	< 0.018	
17-MAY-10	24-MAY-10	307	0.012 +/- 0.003	< 0.016	
24-MAY-10	02-JUN-10	367	0.027 +/- 0.003	< 0.008	
02-JUN-10	08-JUN-10	270	0.024 +/- 0.004	< 0.009	
08-JUN-10	14-JUN-10	249	0.013 +/- 0.004	< 0.012	
14-JUN-10	21-JUN-10	306	0.015 +/- 0.003	< 0.011	
14-JUN-10	21-JUN-10	306	0.012 +/- 0.003		Duplicate
21-JUN-10	28-JUN-10	300	0.020 +/- 0.004	< 0.008	
28-JUN-10	06-JUL-10	347	0.016 +/- 0.003	< 0.016	
06-JUL-10	12-JUL-10	257	0.033 +/- 0.005	< 0.008	
12-JUL-10	19-JUL-10	299	0.024 +/- 0.004	< 0.009	
19-JUL-10	26-JUL-10	266	0.017 +/- 0.004	< 0.014	
26-JUL-10	02-AUG-10	301	0.023 +/- 0.004	< 0.009	
02-AUG-10	09-AUG-10	306	0.032 +/- 0.004	< 0.009	
09-AUG-10	16-AUG-10	299	0.021 +/- 0.004	< 0.007	
16-AUG-10	23-AUG-10	290	0.031 +/- 0.004	< 0.011	
23-AUG-10	30-AUG-10	296	0.031 +/- 0.004	< 0.009	
30-AUG-10	07-SEP-10	346	0.019 +/- 0.003	< 0.011	
07-SEP-10	13-SEP-10	257	0.018 +/- 0.004	< 0.010	
13-SEP-10	20-SEP-10	297	0.029 +/- 0.004	< 0.012	

Air Particulate and Charcoal Filters

Location: 032

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
20-SEP-10	27-SEP-10	297	0.024 +/- 0.004	< 0.013	
27-SEP-10	04-OCT-10	302	0.016 +/- 0.004	< 0.011	
04-OCT-10	11-OCT-10	288	0.039 +/- 0.005	< 0.009	
11-OCT-10	19-OCT-10	342	0.039 +/- 0.004	< 0.009	
19-OCT-10	25-OCT-10	248	0.034 +/- 0.005	< 0.016	
25-OCT-10	01-NOV-10	303	0.019 +/- 0.004	< 0.013	
01-NOV-10	09-NOV-10	346	0.024 +/- 0.003	< 0.015	
09-NOV-10	15-NOV-10	257	0.030 +/- 0.005	< 0.018	
15-NOV-10	22-NOV-10	303	0.034 +/- 0.004	< 0.013	
22-NOV-10	29-NOV-10	303	0.035 +/- 0.004	< 0.013	
29-NOV-10	06-DEC-10	317	0.037 +/- 0.004	< 0.012	
06-DEC-10	13-DEC-10	290	0.050 +/- 0.005	< 0.007	
13-DEC-10	20-DEC-10	296	0.045 +/- 0.005	< 0.010	
20-DEC-10	27-DEC-10	318	0.030 +/- 0.004	< 0.008	
27-DEC-10	03-JAN-11	291	0.030 +/- 0.004	< 0.010	

Air Particulate and Charcoal Filters

Location: 037

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
28-DEC-09	04-JAN-10	314	0.043 +/- 0.004	< 0.007	
04-JAN-10	11-JAN-10	298	0.037 +/- 0.004	< 0.009	
11-JAN-10	18-JAN-10	310	0.045 +/- 0.005	< 0.008	
18-JAN-10	25-JAN-10	305	0.020 +/- 0.004	< 0.011	
18-JAN-10	25-JAN-10	305	0.020 +/- 0.004		Duplicate
25-JAN-10	01-FEB-10	311	0.025 +/- 0.004	< 0.012	
01-FEB-10	08-FEB-10	298	0.037 +/- 0.004	< 0.010	
08-FEB-10	16-FEB-10	370	0.027 +/- 0.003	< 0.007	
16-FEB-10	22-FEB-10	249	0.022 +/- 0.004	< 0.013	
22-FEB-10	01-MAR-10	310	0.032 +/- 0.004	< 0.009	
01-MAR-10	08-MAR-10	297	0.028 +/- 0.004	< 0.008	
08-MAR-10	15-MAR-10	300	0.010 +/- 0.003	< 0.014	
15-MAR-10	22-MAR-10	301	0.016 +/- 0.004	< 0.020	
22-MAR-10	29-MAR-10	295	0.021 +/- 0.004	< 0.012	
29-MAR-10	05-APR-10	285	0.028 +/- 0.004	< 0.012	
29-MAR-10	05-APR-10	285	0.023 +/- 0.004		Duplicate
05-APR-10	12-APR-10	296	0.025 +/- 0.004	< 0.007	
12-APR-10	19-APR-10	290	0.026 +/- 0.004	< 0.013	
19-APR-10	26-APR-10	299	0.019 +/- 0.004	< 0.010	
26-APR-10	03-MAY-10	294	0.017 +/- 0.004	< 0.011	
03-MAY-10	11-MAY-10	347	0.017 +/- 0.003	< 0.009	
11-MAY-10	17-MAY-10	259	0.011 +/- 0.004	< 0.018	
17-MAY-10	24-MAY-10	273	0.015 +/- 0.004	< 0.018	
24-MAY-10	02-JUN-10	375	0.025 +/- 0.003	< 0.007	
02-JUN-10	08-JUN-10	269	0.031 +/- 0.005	< 0.009	
08-JUN-10	14-JUN-10	211	0.014 +/- 0.005	< 0.015	
14-JUN-10	21-JUN-10	306	0.012 +/- 0.003	< 0.011	
21-JUN-10	28-JUN-10	309	0.018 +/- 0.004	< 0.007	
21-JUN-10	28-JUN-10	309	0.023 +/- 0.004		Duplicate
28-JUN-10	06-JUL-10	346	0.015 +/- 0.003	< 0.016	
06-JUL-10	12-JUL-10	256	0.025 +/- 0.004	< 0.008	
12-JUL-10	19-JUL-10	300	0.021 +/- 0.004	< 0.009	
19-JUL-10	26-JUL-10	299	0.019 +/- 0.004	< 0.012	
26-JUL-10	02-AUG-10	304	0.026 +/- 0.004	< 0.009	
02-AUG-10	09-AUG-10	308	0.029 +/- 0.004	< 0.009	
09-AUG-10	16-AUG-10	301	0.021 +/- 0.004	< 0.007	
16-AUG-10	23-AUG-10	293	0.034 +/- 0.004	< 0.011	
23-AUG-10	30-AUG-10	297	0.024 +/- 0.004	< 0.009	
30-AUG-10	07-SEP-10	352	0.015 +/- 0.003	< 0.011	
07-SEP-10	13-SEP-10	257	0.019 +/- 0.004	< 0.010	

Air Particulate and Charcoal Filters

Location: 037

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
13-SEP-10	20-SEP-10	297	0.028 +/- 0.004	< 0.012	
20-SEP-10	27-SEP-10	310	0.025 +/- 0.004	< 0.012	
20-SEP-10	27-SEP-10	310	0.025 +/- 0.004		Duplicate
27-SEP-10	04-OCT-10	307	0.021 +/- 0.004	< 0.010	
04-OCT-10	11-OCT-10	298	0.033 +/- 0.004	< 0.009	
11-OCT-10	19-OCT-10	344	0.038 +/- 0.004	< 0.009	
11-OCT-10	19-OCT-10	344	0.035 +/- 0.004		Duplicate
19-OCT-10	25-OCT-10	255	0.036 +/- 0.005	< 0.015	
25-OCT-10	01-NOV-10	311	0.024 +/- 0.004	< 0.013	
01-NOV-10	09-NOV-10	351	0.021 +/- 0.003	< 0.015	
09-NOV-10	15-NOV-10	258	0.030 +/- 0.005	< 0.018	
09-NOV-10	15-NOV-10	258	0.027 +/- 0.004		Duplicate
15-NOV-10	22-NOV-10	306	0.036 +/- 0.004	< 0.013	
22-NOV-10	29-NOV-10	304	0.036 +/- 0.004	< 0.013	
29-NOV-10	06-DEC-10	321	0.037 +/- 0.004	< 0.012	
06-DEC-10	13-DEC-10	304	0.048 +/- 0.005	< 0.007	
13-DEC-10	20-DEC-10	296	0.041 +/- 0.005	< 0.010	
20-DEC-10	27-DEC-10	332	0.033 +/- 0.004	< 0.008	
27-DEC-10	03-JAN-11	290	0.031 +/- 0.004	< 0.010	

Air Particulate and Charcoal Filters

Location: 049

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
28-DEC-09	04-JAN-10	321	0.042 +/- 0.004	< 0.006	
04-JAN-10	11-JAN-10	290	0.038 +/- 0.004	< 0.010	
11-JAN-10	18-JAN-10	308	0.048 +/- 0.005	< 0.008	
18-JAN-10	25-JAN-10	304	0.017 +/- 0.004	< 0.011	
25-JAN-10	01-FEB-10	284	0.025 +/- 0.004	< 0.013	
01-FEB-10	08-FEB-10	294	0.044 +/- 0.005	< 0.010	
01-FEB-10	08-FEB-10	294	0.039 +/- 0.005		Duplicate
08-FEB-10	16-FEB-10	359	0.030 +/- 0.004	< 0.008	
16-FEB-10	22-FEB-10	254	0.024 +/- 0.004	< 0.013	
22-FEB-10	01-MAR-10	301	0.031 +/- 0.004	< 0.010	
01-MAR-10	08-MAR-10	299	0.024 +/- 0.004	< 0.008	
08-MAR-10	15-MAR-10	300	0.007 +/- 0.003	< 0.014	
15-MAR-10	22-MAR-10	294	0.018 +/- 0.004	< 0.020	
22-MAR-10	29-MAR-10	289	0.020 +/- 0.004	< 0.012	
29-MAR-10	05-APR-10	290	0.025 +/- 0.004	< 0.012	
05-APR-10	12-APR-10	273	0.023 +/- 0.004	< 0.008	
12-APR-10	19-APR-10	294	0.023 +/- 0.004	< 0.012	
19-APR-10	26-APR-10	265	0.022 +/- 0.004	< 0.011	
26-APR-10	03-MAY-10	298	0.017 +/- 0.004	< 0.011	
03-MAY-10	11-MAY-10	345	0.012 +/- 0.003	< 0.009	
03-MAY-10	11-MAY-10	345	0.014 +/- 0.003		Duplicate
11-MAY-10	17-MAY-10	261	0.007 +/- 0.003	< 0.018	
17-MAY-10	24-MAY-10	308	0.012 +/- 0.003	< 0.016	
24-MAY-10	02-JUN-10	349	0.027 +/- 0.003	< 0.008	
02-JUN-10	08-JUN-10	288	0.021 +/- 0.004	< 0.009	
08-JUN-10	14-JUN-10	247	0.014 +/- 0.004	< 0.012	
14-JUN-10	21-JUN-10	300	0.016 +/- 0.004	< 0.011	
21-JUN-10	28-JUN-10	301	0.017 +/- 0.004	< 0.008	
28-JUN-10	06-JUL-10	325	0.017 +/- 0.004	< 0.017	
06-JUL-10	12-JUL-10	256	0.020 +/- 0.004	< 0.008	
12-JUL-10	19-JUL-10	294	0.020 +/- 0.004	< 0.010	
19-JUL-10	26-JUL-10	297	0.019 +/- 0.004	< 0.013	
26-JUL-10	02-AUG-10	298	0.024 +/- 0.004	< 0.009	
26-JUL-10	02-AUG-10	298	0.025 +/- 0.004		Duplicate
02-AUG-10	09-AUG-10	302	0.030 +/- 0.004	< 0.009	
09-AUG-10	16-AUG-10	301	0.020 +/- 0.004	< 0.007	
16-AUG-10	23-AUG-10	293	0.039 +/- 0.004	< 0.011	
23-AUG-10	30-AUG-10	297	0.026 +/- 0.004	< 0.009	
23-AUG-10	30-AUG-10	297	0.027 +/- 0.004		Duplicate
30-AUG-10	07-SEP-10	346	0.018 +/- 0.003	< 0.011	

Air Particulate and Charcoal Filters

Location: 049

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
30-AUG-10	07-SEP-10	346	0.017 +/- 0.003		Duplicate
07-SEP-10	13-SEP-10	258	0.019 +/- 0.004	< 0.010	
13-SEP-10	20-SEP-10	296	0.030 +/- 0.004	< 0.013	
20-SEP-10	27-SEP-10	304	0.026 +/- 0.004	< 0.013	
27-SEP-10	04-OCT-10	300	0.019 +/- 0.004	< 0.011	
04-OCT-10	11-OCT-10	296	0.039 +/- 0.005	< 0.009	
04-OCT-10	11-OCT-10	296	0.033 +/- 0.004		Duplicate
11-OCT-10	19-OCT-10	341	0.039 +/- 0.004	< 0.009	
19-OCT-10	25-OCT-10	250	0.041 +/- 0.005	< 0.016	
25-OCT-10	01-NOV-10	307	0.026 +/- 0.004	< 0.013	
01-NOV-10	09-NOV-10	345	0.024 +/- 0.003	< 0.015	
09-NOV-10	15-NOV-10	261	0.031 +/- 0.005	< 0.018	
15-NOV-10	22-NOV-10	301	0.037 +/- 0.004	< 0.013	
22-NOV-10	29-NOV-10	305	0.037 +/- 0.004	< 0.013	
29-NOV-10	06-DEC-10	323	0.041 +/- 0.004	< 0.012	
06-DEC-10	13-DEC-10	301	0.048 +/- 0.005	< 0.007	
13-DEC-10	20-DEC-10	293	0.046 +/- 0.005	< 0.010	
20-DEC-10	27-DEC-10	316	0.033 +/- 0.004	< 0.008	
27-DEC-10	03-JAN-11	313	0.030 +/- 0.004	< 0.010	
27-DEC-10	03-JAN-11	313	0.027 +/- 0.004		Duplicate

Air Particulate and Charcoal Filters

Location: 053

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
28-DEC-09	04-JAN-10	306	0.041 +/- 0.004	< 0.007	
04-JAN-10	11-JAN-10	309	0.039 +/- 0.004	< 0.009	
11-JAN-10	18-JAN-10	309	0.049 +/- 0.005	< 0.008	
18-JAN-10	25-JAN-10	293	0.018 +/- 0.004	< 0.011	
25-JAN-10	01-FEB-10	310	0.027 +/- 0.004	< 0.012	
01-FEB-10	08-FEB-10	305	0.040 +/- 0.004	< 0.009	
08-FEB-10	16-FEB-10	358	0.029 +/- 0.004	< 0.008	
16-FEB-10	22-FEB-10	247	0.024 +/- 0.004	< 0.014	
22-FEB-10	01-MAR-10	306	0.031 +/- 0.004	< 0.010	
01-MAR-10	08-MAR-10	296	0.027 +/- 0.004	< 0.008	
08-MAR-10	15-MAR-10	292	0.010 +/- 0.004	< 0.014	
15-MAR-10	22-MAR-10	305	0.020 +/- 0.004	< 0.019	
22-MAR-10	29-MAR-10	298	0.023 +/- 0.004	< 0.011	
29-MAR-10	05-APR-10	301	0.027 +/- 0.004	< 0.011	
05-APR-10	12-APR-10	298	0.029 +/- 0.004	< 0.007	
12-APR-10	19-APR-10	301	0.022 +/- 0.004	< 0.012	
19-APR-10	26-APR-10	305	0.018 +/- 0.004	< 0.009	
26-APR-10	03-MAY-10	292	0.021 +/- 0.004	< 0.011	
03-MAY-10	11-MAY-10	337	0.016 +/- 0.003	< 0.010	
11-MAY-10	17-MAY-10	54		< 0.088	
11-MAY-10	17-MAY-10	54	< 0.025		
17-MAY-10	24-MAY-10	301	0.012 +/- 0.003	< 0.016	
24-MAY-10	02-JUN-10	376	0.024 +/- 0.003	< 0.007	
24-MAY-10	02-JUN-10	376	0.027 +/- 0.003		Duplicate
02-JUN-10	08-JUN-10	268	0.024 +/- 0.004	< 0.009	
08-JUN-10	14-JUN-10	246	0.018 +/- 0.004	< 0.013	
14-JUN-10	21-JUN-10	299	0.009 +/- 0.003	< 0.011	
21-JUN-10	28-JUN-10	294	0.025 +/- 0.004	< 0.008	
28-JUN-10	06-JUL-10	368	0.017 +/- 0.003	< 0.015	
06-JUL-10	12-JUL-10	257	0.019 +/- 0.004	< 0.008	
12-JUL-10	19-JUL-10	299	0.024 +/- 0.004	< 0.009	
19-JUL-10	26-JUL-10	300	0.018 +/- 0.004	< 0.012	
26-JUL-10	02-AUG-10	302	0.021 +/- 0.004	< 0.009	
02-AUG-10	09-AUG-10	301	0.028 +/- 0.004	< 0.009	
02-AUG-10	09-AUG-10	301	0.030 +/- 0.004		Duplicate
09-AUG-10	16-AUG-10	302	0.023 +/- 0.004	< 0.007	
16-AUG-10	23-AUG-10	297	0.035 +/- 0.004	< 0.011	
23-AUG-10	30-AUG-10	299	0.027 +/- 0.004	< 0.009	
30-AUG-10	07-SEP-10	351	0.016 +/- 0.003	< 0.011	
07-SEP-10	13-SEP-10	257	0.018 +/- 0.004	< 0.010	

Location: 053

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
13-SEP-10	20-SEP-10	298	0.027 +/- 0.004	< 0.012	
20-SEP-10	27-SEP-10	302	0.021 +/- 0.004	< 0.013	
27-SEP-10	04-OCT-10	312	0.019 +/- 0.004	< 0.010	
04-OCT-10	11-OCT-10	296	0.037 +/- 0.004	< 0.009	
11-OCT-10	19-OCT-10	345	0.037 +/- 0.004	< 0.009	
19-OCT-10	25-OCT-10	255	0.033 +/- 0.005	< 0.015	
25-OCT-10	01-NOV-10	306	0.020 +/- 0.004	< 0.013	
01-NOV-10	09-NOV-10	352	0.020 +/- 0.003	< 0.015	
09-NOV-10	15-NOV-10	256	0.028 +/- 0.005	< 0.018	
15-NOV-10	22-NOV-10	303	0.032 +/- 0.004	< 0.013	
22-NOV-10	29-NOV-10	296	0.034 +/- 0.004	< 0.014	
29-NOV-10	06-DEC-10	312	0.039 +/- 0.004	< 0.012	
06-DEC-10	13-DEC-10	308	0.052 +/- 0.005	< 0.006	
13-DEC-10	20-DEC-10	294	0.045 +/- 0.005	< 0.010	
20-DEC-10	27-DEC-10	315	0.032 +/- 0.004	< 0.008	
27-DEC-10	03-JAN-11	295	0.031 +/- 0.004	< 0.010	

Location: 002

29-MAR-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.068+/-	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

28-JUN-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.092+/-	0.014
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

27-SEP-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.094+/-	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

03-JAN-11

Nuclide	Concentration (pCi/m^3)	
BE-7	0.060+/-	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

*** Duplicate Analysis**

Location: 018

29-MAR-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.077+/-	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

28-JUN-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.091+/-	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

27-SEP-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.093+/-	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

03-JAN-11

Nuclide	Concentration (pCi/m^3)	
BE-7	0.068+/-	0.011
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**

Location: 032

29-MAR-10 Nuclide	Concentration (pCi/m^3)		
BE-7	0.089+/-	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	

28-JUN-10 Nuclide	Concentration (pCi/m^3)		
BE-7	0.091+/-	0.015	*
BE-7	0.091+/-	0.015	
MN-54	<	0.001	*
MN-54	<	0.001	
CO-58	<	0.001	*
CO-58	<	0.001	
FE-59	<	0.001	
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	

27-SEP-10 Nuclide	Concentration (pCi/m^3)	
BE-7	0.080+/-	0.019
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 Particulate - Gamma

Location: 032

03-JAN-11 Nuclide	Concentration (pCi/m^3)	
BE-7	0.070+/-	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**

Location: 037

29-MAR-10 Nuclide	Concentration (pCi/m³)	
BE-7	0.078+/-	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

28-JUN-10 Nuclide	Concentration (pCi/m³)	
BE-7	0.100+/-	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

27-SEP-10 Nuclide	Concentration (pCi/m³)	
BE-7	0.080+/-	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

03-JAN-11 Nuclide	Concentration (pCi/m³)	
BE-7	0.071+/-	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

*** Duplicate Analysis**

Location: 049

29-MAR-10 Nuclide	Concentration (pCi/m^3)		
BE-7	0.070+/-	0.013	*
BE-7	0.080+/-	0.013	
MN-54	<	0.001	*
MN-54	<	0.001	
CO-58	<	0.001	*
CO-58	<	0.001	
FE-59	<	0.001	*
FE-59	<	0.001	
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	

28-JUN-10 Nuclide	Concentration (pCi/m^3)	
BE-7	0.105+/-	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

27-SEP-10 Nuclide	Concentration (pCi/m^3)	
BE-7	0.090+/-	0.017
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

*** Duplicate Analysis**

Location: 049

03-JAN-11

Nuclide	Concentration (pCi/m^3)	
BE-7	0.058+/-	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

*** Duplicate Analysis**

Location: 053

29-MAR-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.082+/-	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

28-JUN-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.099+/-	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

27-SEP-10

Nuclide	Concentration (pCi/m^3)	
BE-7	0.086+/-	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

03-JAN-11

Nuclide	Concentration (pCi/m^3)	
BE-7	0.059+/-	0.011
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**

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)		Duplicate Analysis
27-JAN-10	MN-54	<	1.8	
27-JAN-10	CO-58	<	1.7	
27-JAN-10	FE-59	<	3.2	
27-JAN-10	CO-60	<	1.5	
27-JAN-10	ZN-65	<	2.9	
27-JAN-10	ZR-NB-95	<	1.5	
27-JAN-10	I-131	<	3.0	
27-JAN-10	CS-134	<	2.1	
27-JAN-10	CS-137	<	2.7	
27-JAN-10	BA-LA-140	<	4.4	
27-JAN-10	H-3	<	163.0	
22-FEB-10	MN-54	<	2.3	
22-FEB-10	CO-58	<	3.2	
22-FEB-10	FE-59	<	3.1	
22-FEB-10	CO-60	<	3.1	
22-FEB-10	ZN-65	<	4.2	
22-FEB-10	ZR-NB-95	<	1.9	
22-FEB-10	I-131	<	4.3	
22-FEB-10	CS-134	<	2.9	
22-FEB-10	CS-137	<	3.5	
22-FEB-10	BA-LA-140	<	2.5	
22-FEB-10	H-3	<	152.0	
29-MAR-10	MN-54	<	2.8	
29-MAR-10	CO-58	<	3.0	
29-MAR-10	FE-59	<	6.1	
29-MAR-10	CO-60	<	2.3	
29-MAR-10	ZN-65	<	2.2	
29-MAR-10	ZR-NB-95	<	4.0	
29-MAR-10	I-131	<	4.2	
29-MAR-10	CS-134	<	2.7	
29-MAR-10	CS-137	<	3.4	
29-MAR-10	BA-LA-140	<	2.0	
29-MAR-10	H-3	<	177.0	
22-APR-10	MN-54	<	5.3	
22-APR-10	CO-58	<	5.4	
22-APR-10	FE-59	<	3.7	
22-APR-10	CO-60	<	3.4	
22-APR-10	ZN-65	<	5.0	
22-APR-10	ZR-NB-95	<	6.2	
22-APR-10	I-131	<	7.1	

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)		Duplicate Analysis
22-APR-10	CS-134	<	5.2	
22-APR-10	CS-137	<	5.2	
22-APR-10	BA-LA-140	<	5.0	
22-APR-10	H-3	<	175.0	
17-MAY-10	MN-54	<	3.3	
17-MAY-10	CO-58	<	2.1	
17-MAY-10	FE-59	<	5.8	
17-MAY-10	CO-60	<	1.5	
17-MAY-10	ZN-65	<	5.0	
17-MAY-10	ZR-NB-95	<	2.1	
17-MAY-10	I-131	<	5.2	
17-MAY-10	CS-134	<	4.0	
17-MAY-10	CS-137	<	3.6	
17-MAY-10	BA-LA-140	<	2.5	
17-MAY-10	H-3	<	151.0	
14-JUN-10	MN-54	<	1.9	Duplicate
14-JUN-10	MN-54	<	4.4	
14-JUN-10	CO-58	<	4.1	Duplicate
14-JUN-10	CO-58	<	2.1	
14-JUN-10	FE-59	<	5.0	Duplicate
14-JUN-10	FE-59	<	5.1	
14-JUN-10	CO-60	<	1.8	Duplicate
14-JUN-10	CO-60	<	4.0	
14-JUN-10	ZN-65	<	5.0	Duplicate
14-JUN-10	ZN-65	<	8.1	
14-JUN-10	ZR-NB-95	<	3.7	Duplicate
14-JUN-10	ZR-NB-95	<	3.8	
14-JUN-10	I-131	<	6.8	Duplicate
14-JUN-10	I-131	<	5.6	
14-JUN-10	CS-134	<	4.1	Duplicate
14-JUN-10	CS-134	<	4.5	
14-JUN-10	CS-137	<	2.7	Duplicate
14-JUN-10	CS-137	<	4.7	
14-JUN-10	BA-LA-140	<	2.8	Duplicate
14-JUN-10	BA-LA-140	<	4.4	
14-JUN-10	H-3	<	162.0	Duplicate
14-JUN-10	H-3	<	162.0	
19-JUL-10	MN-54	<	3.6	
19-JUL-10	CO-58	<	2.8	
19-JUL-10	FE-59	<	4.7	

Exposure Pathway - Waterborne
Surface Water

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)		Duplicate Analysis
19-JUL-10	CO-60	<	2.7	
19-JUL-10	ZN-65	<	5.1	
19-JUL-10	ZR-NB-95	<	4.0	
19-JUL-10	I-131	<	7.0	
19-JUL-10	CS-134	<	3.7	
19-JUL-10	CS-137	<	2.9	
19-JUL-10	BA-LA-140	<	1.8	
19-JUL-10	H-3	<	179.0	
23-AUG-10	MN-54	<	3.0	
23-AUG-10	CO-58	<	4.2	
23-AUG-10	FE-59	<	6.2	
23-AUG-10	CO-60	<	3.6	
23-AUG-10	ZN-65	<	3.4	
23-AUG-10	ZR-NB-95	<	3.9	
23-AUG-10	I-131	<	7.6	
23-AUG-10	CS-134	<	3.0	
23-AUG-10	CS-137	<	4.7	
23-AUG-10	BA-LA-140	<	3.4	
23-AUG-10	H-3	<	181.0	
27-SEP-10	MN-54	<	3.4	Duplicate
27-SEP-10	MN-54	<	3.2	
27-SEP-10	CO-58	<	4.3	Duplicate
27-SEP-10	CO-58	<	2.3	
27-SEP-10	FE-59	<	5.2	Duplicate
27-SEP-10	FE-59	<	3.0	
27-SEP-10	CO-60	<	4.0	Duplicate
27-SEP-10	CO-60	<	3.3	
27-SEP-10	ZN-65	<	6.3	Duplicate
27-SEP-10	ZN-65	<	4.1	
27-SEP-10	ZR-NB-95	<	4.8	Duplicate
27-SEP-10	ZR-NB-95	<	3.6	
27-SEP-10	I-131	<	9.3	Duplicate
27-SEP-10	I-131	<	4.9	
27-SEP-10	CS-134	<	5.2	Duplicate
27-SEP-10	CS-134	<	2.8	
27-SEP-10	CS-137	<	3.9	Duplicate
27-SEP-10	CS-137	<	3.0	
27-SEP-10	BA-LA-140	<	4.4	Duplicate
27-SEP-10	BA-LA-140	<	1.3	
27-SEP-10	H-3	<	160.0	Duplicate

Exposure Pathway - Waterborne
Surface Water

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)			Duplicate Analysis
27-SEP-10	H-3	<	160.0		
18-OCT-10	MN-54	<	3.0		
18-OCT-10	CO-58	<	3.4		
18-OCT-10	FE-59	<	6.9		
18-OCT-10	CO-60	<	4.3		
18-OCT-10	ZN-65	<	5.3		
18-OCT-10	ZR-NB-95	<	3.7		
18-OCT-10	I-131	<	10.7		
18-OCT-10	CS-134	<	3.3		
18-OCT-10	CS-137	<	3.8		
18-OCT-10	BA-LA-140	<	5.2		
18-OCT-10	H-3	<	159.0		
15-NOV-10	MN-54	<	2.5		
15-NOV-10	CO-58	<	3.2		
15-NOV-10	FE-59	<	4.3		
15-NOV-10	CO-60	<	3.5		
15-NOV-10	ZN-65	<	5.8		
15-NOV-10	ZR-NB-95	<	2.9		
15-NOV-10	I-131	<	5.2		
15-NOV-10	CS-134	<	2.7		
15-NOV-10	CS-137	<	3.2		
15-NOV-10	BA-LA-140	<	2.7		
15-NOV-10	H-3	<	163.0		
20-DEC-10	MN-54	<	2.7		
20-DEC-10	CO-58	<	2.3		
20-DEC-10	FE-59	<	4.4		
20-DEC-10	CO-60	<	3.0		
20-DEC-10	ZN-65	<	4.1		
20-DEC-10	ZR-NB-95	<	2.6		
20-DEC-10	I-131	<	5.0		
20-DEC-10	CS-134	<	2.7		
20-DEC-10	CS-137	<	3.1		
20-DEC-10	BA-LA-140	<	3.5		
20-DEC-10	H-3	<	161.0		

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)			Duplicate Analysis
27-JAN-10	MN-54		<	2.0	
27-JAN-10	CO-58		<	2.7	
27-JAN-10	FE-59		<	3.0	
27-JAN-10	CO-60		<	0.9	
27-JAN-10	ZN-65		<	5.8	
27-JAN-10	ZR-NB-95		<	3.2	
27-JAN-10	I-131		<	4.8	
27-JAN-10	CS-134		<	2.9	
27-JAN-10	CS-137		<	1.8	
27-JAN-10	BA-LA-140		<	2.3	
27-JAN-10	H-3	12,165	+/-	315.0	
22-FEB-10	MN-54		<	2.7	
22-FEB-10	CO-58		<	1.2	
22-FEB-10	FE-59		<	2.7	
22-FEB-10	CO-60		<	2.0	
22-FEB-10	ZN-65		<	5.3	
22-FEB-10	ZR-NB-95		<	3.0	
22-FEB-10	I-131		<	4.4	
22-FEB-10	CS-134		<	2.7	
22-FEB-10	CS-137		<	2.8	
22-FEB-10	BA-LA-140		<	4.8	
22-FEB-10	H-3	11,841	+/-	322.0	
29-MAR-10	MN-54		<	2.6	
29-MAR-10	CO-58		<	3.4	
29-MAR-10	FE-59		<	3.4	
29-MAR-10	CO-60		<	2.7	
29-MAR-10	ZN-65		<	7.2	
29-MAR-10	ZR-NB-95		<	4.1	
29-MAR-10	I-131		<	4.0	
29-MAR-10	CS-134		<	3.7	
29-MAR-10	CS-137		<	3.7	
29-MAR-10	BA-LA-140		<	2.1	
29-MAR-10	H-3	12,324	+/-	315.0	
22-APR-10	MN-54		<	2.1	
22-APR-10	CO-58		<	3.3	
22-APR-10	FE-59		<	4.4	
22-APR-10	CO-60		<	2.9	
22-APR-10	ZN-65		<	6.5	
22-APR-10	ZR-NB-95		<	4.0	
22-APR-10	I-131		<	8.1	

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)			Duplicate Analysis
22-APR-10	CS-134		<	3.6	
22-APR-10	CS-137		<	4.3	
22-APR-10	BA-LA-140		<	4.2	
22-APR-10	H-3	12,195	+/-	309.0	
17-MAY-10	MN-54		<	4.6	
17-MAY-10	CO-58		<	3.9	
17-MAY-10	FE-59		<	8.9	
17-MAY-10	CO-60		<	3.8	
17-MAY-10	ZN-65		<	5.6	
17-MAY-10	ZR-NB-95		<	3.4	
17-MAY-10	I-131		<	8.4	
17-MAY-10	CS-134		<	4.2	
17-MAY-10	CS-137		<	4.4	
17-MAY-10	BA-LA-140		<	3.9	
17-MAY-10	H-3	10,746	+/-	308.0	
14-JUN-10	MN-54		<	3.1	
14-JUN-10	CO-58		<	3.7	
14-JUN-10	FE-59		<	4.1	
14-JUN-10	CO-60		<	1.6	
14-JUN-10	ZN-65		<	5.3	
14-JUN-10	ZR-NB-95		<	3.0	
14-JUN-10	I-131		<	4.4	
14-JUN-10	CS-134		<	3.5	
14-JUN-10	CS-137		<	5.2	
14-JUN-10	BA-LA-140		<	2.7	
14-JUN-10	H-3	10,987	+/-	323.0	
19-JUL-10	MN-54		<	3.0	
19-JUL-10	CO-58		<	2.1	
19-JUL-10	FE-59		<	6.1	
19-JUL-10	CO-60		<	2.4	
19-JUL-10	ZN-65		<	3.9	
19-JUL-10	ZR-NB-95		<	3.9	
19-JUL-10	I-131		<	6.5	
19-JUL-10	CS-134		<	3.0	
19-JUL-10	CS-137		<	4.5	
19-JUL-10	BA-LA-140		<	2.2	
19-JUL-10	H-3	9,645	+/-	281.0	
23-AUG-10	MN-54		<	2.9	
23-AUG-10	CO-58		<	2.3	
23-AUG-10	FE-59		<	7.6	

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)			Duplicate Analysis
23-AUG-10	CO-60		<	3.8	
23-AUG-10	ZN-65		<	3.9	
23-AUG-10	ZR-NB-95		<	3.4	
23-AUG-10	I-131		<	7.3	
23-AUG-10	CS-134		<	2.9	
23-AUG-10	CS-137		<	5.0	
23-AUG-10	BA-LA-140		<	4.0	
23-AUG-10	H-3	10,097	+/-	294.0	
27-SEP-10	MN-54		<	3.4	
27-SEP-10	CO-58		<	3.6	
27-SEP-10	FE-59		<	4.3	
27-SEP-10	CO-60		<	4.3	
27-SEP-10	ZN-65		<	4.1	
27-SEP-10	ZR-NB-95		<	4.0	
27-SEP-10	I-131		<	4.7	
27-SEP-10	CS-134		<	1.7	
27-SEP-10	CS-137		<	4.4	
27-SEP-10	BA-LA-140		<	2.5	
27-SEP-10	H-3	10,914	+/-	322.0	
27-SEP-10	FE-55		<	152.0	
18-OCT-10	MN-54		<	2.9	
18-OCT-10	CO-58		<	2.5	
18-OCT-10	FE-59		<	4.6	
18-OCT-10	CO-60		<	5.1	
18-OCT-10	ZN-65		<	4.0	
18-OCT-10	ZR-NB-95		<	2.7	
18-OCT-10	I-131		<	8.3	
18-OCT-10	CS-134		<	3.0	
18-OCT-10	CS-137		<	3.8	
18-OCT-10	BA-LA-140		<	3.4	
18-OCT-10	H-3	10,689	+/-	316.0	
15-NOV-10	MN-54		<	4.0	
15-NOV-10	CO-58		<	2.5	
15-NOV-10	FE-59		<	3.7	
15-NOV-10	CO-60		<	3.9	
15-NOV-10	ZN-65		<	4.3	
15-NOV-10	ZR-NB-95		<	5.2	
15-NOV-10	I-131		<	6.6	
15-NOV-10	CS-134		<	3.5	
15-NOV-10	CS-137		<	3.6	

Exposure Pathway - Waterborne
Surface Water

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)			Duplicate Analysis
15-NOV-10	BA-LA-140		<	4.3	
15-NOV-10	H-3	13,436	+/-	355.0	
20-DEC-10	MN-54		<	2.6	
20-DEC-10	CO-58		<	2.5	
20-DEC-10	FE-59		<	3.9	
20-DEC-10	CO-60		<	1.2	
20-DEC-10	ZN-65		<	2.7	
20-DEC-10	ZR-NB-95		<	2.9	
20-DEC-10	I-131		<	4.5	
20-DEC-10	CS-134		<	2.4	
20-DEC-10	CS-137		<	3.7	
20-DEC-10	BA-LA-140		<	2.2	
20-DEC-10	H-3	12,093	+/-	320.0	

Exposure Pathway - Waterborne
Ground Water

Location B-12

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-FEB-10	MN-54	< 2.7	
22-FEB-10	CO-58	< 4.7	
22-FEB-10	FE-59	< 3.4	
22-FEB-10	CO-60	< 2.6	
22-FEB-10	ZN-65	< 8.0	
22-FEB-10	ZR-NB-95	< 3.3	
22-FEB-10	CS-134	< 4.3	
22-FEB-10	CS-137	< 4.9	
22-FEB-10	BA-LA-140	< 2.2	
22-FEB-10	H-3	< 152.0	
22-FEB-10	I-131 (CHEM)	< 0.274	
24-MAY-10	MN-54	< 2.6	
24-MAY-10	CO-58	< 1.9	
24-MAY-10	FE-59	< 3.2	
24-MAY-10	CO-60	< 3.0	
24-MAY-10	ZN-65	< 7.0	
24-MAY-10	ZR-NB-95	< 3.2	
24-MAY-10	CS-134	< 3.9	
24-MAY-10	CS-137	< 3.3	
24-MAY-10	BA-LA-140	< 1.3	
24-MAY-10	H-3	< 146.0	
24-MAY-10	I-131 (CHEM)	< 0.248	
23-AUG-10	MN-54	< 3.8	
23-AUG-10	CO-58	< 2.2	
23-AUG-10	FE-59	< 5.6	
23-AUG-10	CO-60	< 2.9	
23-AUG-10	ZN-65	< 4.2	
23-AUG-10	ZR-NB-95	< 3.0	
23-AUG-10	CS-134	< 3.9	
23-AUG-10	CS-137	< 2.6	
23-AUG-10	BA-LA-140	< 3.1	
23-AUG-10	H-3	< 181.0	
23-AUG-10	I-131 (CHEM)	< 0.232	
22-NOV-10	MN-54	< 3.2	
22-NOV-10	CO-58	< 7.3	
22-NOV-10	FE-59	< 5.1	
22-NOV-10	CO-60	< 4.4	
22-NOV-10	ZN-65	< 11.0	
22-NOV-10	ZR-NB-95	< 5.5	
22-NOV-10	CS-134	< 4.8	
22-NOV-10	CS-137	< 6.1	

Exposure Pathway - Waterborne
Ground Water

Location B-12

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-NOV-10	BA-LA-140	< 5.6	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.29	

Exposure Pathway - Waterborne
Ground Water

Location C-10

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-FEB-10	MN-54	< 2.5	
22-FEB-10	CO-58	< 2.3	
22-FEB-10	FE-59	< 4.9	
22-FEB-10	CO-60	< 3.2	
22-FEB-10	ZN-65	< 5.1	
22-FEB-10	ZR-NB-95	< 2.6	
22-FEB-10	CS-134	< 2.0	
22-FEB-10	CS-137	< 4.0	
22-FEB-10	BA-LA-140	< 2.5	
22-FEB-10	H-3	< 152.0	
22-FEB-10	I-131 (CHEM)	< 0.193	
24-MAY-10	MN-54	< 2.7	
24-MAY-10	CO-58	< 2.8	
24-MAY-10	FE-59	< 3.7	
24-MAY-10	CO-60	< 3.2	
24-MAY-10	ZN-65	< 5.0	
24-MAY-10	ZR-NB-95	< 2.5	
24-MAY-10	CS-134	< 2.6	
24-MAY-10	CS-137	< 3.6	
24-MAY-10	BA-LA-140	< 2.2	
24-MAY-10	H-3	< 146.0	
24-MAY-10	I-131 (CHEM)	< 0.247	
23-AUG-10	MN-54	< 2.7	
23-AUG-10	CO-58	< 2.6	
23-AUG-10	FE-59	< 6.2	
23-AUG-10	CO-60	< 3.6	
23-AUG-10	ZN-65	< 4.6	
23-AUG-10	ZR-NB-95	< 4.2	
23-AUG-10	CS-134	< 3.4	
23-AUG-10	CS-137	< 5.3	
23-AUG-10	BA-LA-140	< 4.5	
23-AUG-10	H-3	< 181.0	
23-AUG-10	I-131 (CHEM)	< 0.242	
22-NOV-10	MN-54	< 4.0	
22-NOV-10	CO-58	< 2.6	
22-NOV-10	FE-59	< 5.4	
22-NOV-10	CO-60	< 3.3	
22-NOV-10	ZN-65	< 5.9	
22-NOV-10	ZR-NB-95	< 4.0	
22-NOV-10	CS-134	< 4.1	
22-NOV-10	CS-137	< 3.2	

Exposure Pathway - Waterborne
Ground Water

Location C-10

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-NOV-10	BA-LA-140	< 2.9	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.449	

Location C-49

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-FEB-10	MN-54	< 3.3	
22-FEB-10	CO-58	< 3.1	
22-FEB-10	FE-59	< 5.3	
22-FEB-10	CO-60	< 2.6	
22-FEB-10	ZN-65	< 2.3	
22-FEB-10	ZR-NB-95	< 1.9	
22-FEB-10	CS-134	< 2.6	
22-FEB-10	CS-137	< 3.0	
22-FEB-10	BA-LA-140	< 3.1	
22-FEB-10	H-3	< 152.0	
22-FEB-10	I-131 (CHEM)	< 0.466	
24-MAY-10	MN-54	< 3.9	
24-MAY-10	CO-58	< 4.4	
24-MAY-10	FE-59	< 3.9	
24-MAY-10	CO-60	< 3.8	
24-MAY-10	ZN-65	< 7.5	
24-MAY-10	ZR-NB-95	< 2.7	
24-MAY-10	CS-134	< 4.5	
24-MAY-10	CS-137	< 5.3	
24-MAY-10	BA-LA-140	< 3.5	
24-MAY-10	H-3	< 146.0	
24-MAY-10	I-131 (CHEM)	< 0.313	
23-AUG-10	MN-54	< 3.9	
23-AUG-10	CO-58	< 2.7	
23-AUG-10	FE-59	< 8.1	
23-AUG-10	CO-60	< 3.4	
23-AUG-10	ZN-65	< 4.3	
23-AUG-10	ZR-NB-95	< 3.3	
23-AUG-10	CS-134	< 3.6	
23-AUG-10	CS-137	< 4.4	
23-AUG-10	BA-LA-140	< 4.9	
23-AUG-10	H-3	< 181.0	
23-AUG-10	I-131 (CHEM)	< 0.287	
22-NOV-10	MN-54	< 3.5	
22-NOV-10	CO-58	< 4.8	
22-NOV-10	FE-59	< 9.1	
22-NOV-10	CO-60	< 5.2	
22-NOV-10	ZN-65	< 8.3	
22-NOV-10	ZR-NB-95	< 6.8	
22-NOV-10	CS-134	< 5.1	
22-NOV-10	CS-137	< 4.2	

Exposure Pathway - Waterborne
Ground Water

Location C-49

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-NOV-10	BA-LA-140	< 6.6	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.458	

Exposure Pathway - Waterborne
Ground Water

Location F-1

Collection Date	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
22-FEB-10	MN-54	<	3.8	Duplicate
22-FEB-10	MN-54	<	2.7	
22-FEB-10	CO-58	<	4.5	Duplicate
22-FEB-10	CO-58	<	1.9	
22-FEB-10	FE-59	<	12.8	Duplicate
22-FEB-10	FE-59	<	4.6	
22-FEB-10	CO-60	<	5.9	Duplicate
22-FEB-10	CO-60	<	2.3	
22-FEB-10	ZN-65	<	17.4	Duplicate
22-FEB-10	ZN-65	<	5.0	
22-FEB-10	ZR-NB-95	<	6.7	Duplicate
22-FEB-10	ZR-NB-95	<	2.3	
22-FEB-10	CS-134	<	6.6	Duplicate
22-FEB-10	CS-134	<	1.9	
22-FEB-10	CS-137	<	6.7	Duplicate
22-FEB-10	CS-137	<	3.6	
22-FEB-10	BA-LA-140	<	7.1	Duplicate
22-FEB-10	BA-LA-140	<	1.8	
22-FEB-10	H-3	<	152.0	Duplicate
22-FEB-10	H-3	<	152.0	
22-FEB-10	I-131 (CHEM)	<	0.353	Duplicate
22-FEB-10	I-131 (CHEM)	<	0.287	
24-MAY-10	MN-54	<	1.6	
24-MAY-10	CO-58	<	1.9	
24-MAY-10	FE-59	<	4.1	
24-MAY-10	CO-60	<	1.8	
24-MAY-10	ZN-65	<	2.9	
24-MAY-10	ZR-NB-95	<	2.1	
24-MAY-10	CS-134	<	2.4	
24-MAY-10	CS-137	<	3.5	
24-MAY-10	BA-LA-140	<	2.9	
24-MAY-10	H-3	<	146.0	
24-MAY-10	I-131 (CHEM)	<	0.232	
23-AUG-10	MN-54	<	1.9	
23-AUG-10	CO-58	<	3.5	
23-AUG-10	FE-59	<	4.6	
23-AUG-10	CO-60	<	3.9	
23-AUG-10	ZN-65	<	4.7	
23-AUG-10	ZR-NB-95	<	3.0	
23-AUG-10	CS-134	<	2.2	
23-AUG-10	CS-137	<	2.5	

Exposure Pathway - Waterborne
Ground Water

Location F-1

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
23-AUG-10	BA-LA-140	< 2.0	
23-AUG-10	H-3	< 181.0	
23-AUG-10	I-131 (CHEM)	< 0.252	
22-NOV-10	MN-54	< 2.7	
22-NOV-10	CO-58	< 2.6	
22-NOV-10	FE-59	< 7.6	
22-NOV-10	CO-60	< 3.8	
22-NOV-10	ZN-65	< 4.6	
22-NOV-10	ZR-NB-95	< 3.9	
22-NOV-10	CS-134	< 2.7	
22-NOV-10	CS-137	< 5.4	
22-NOV-10	BA-LA-140	< 5.3	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.263	

Exposure Pathway - Waterborne
Ground Water

Location G-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-FEB-10	MN-54	< 3.4	
22-FEB-10	CO-58	< 2.6	
22-FEB-10	FE-59	< 4.7	
22-FEB-10	CO-60	< 3.9	
22-FEB-10	ZN-65	< 5.8	
22-FEB-10	ZR-NB-95	< 4.7	
22-FEB-10	CS-134	< 4.2	
22-FEB-10	CS-137	< 5.3	
22-FEB-10	BA-LA-140	< 2.2	
22-FEB-10	H-3	< 152.0	
22-FEB-10	I-131 (CHEM)	< 0.238	
24-MAY-10	MN-54	< 4.4	
24-MAY-10	CO-58	< 2.2	
24-MAY-10	FE-59	< 7.9	
24-MAY-10	CO-60	< 2.8	
24-MAY-10	ZN-65	< 13.3	
24-MAY-10	ZR-NB-95	< 5.1	
24-MAY-10	CS-134	< 4.3	
24-MAY-10	CS-137	< 6.4	
24-MAY-10	BA-LA-140	< 2.4	
24-MAY-10	H-3	< 146.0	
24-MAY-10	I-131 (CHEM)	< 0.207	
23-AUG-10	MN-54	< 2.8	
23-AUG-10	CO-58	< 1.6	
23-AUG-10	FE-59	< 2.9	
23-AUG-10	CO-60	< 2.7	
23-AUG-10	ZN-65	< 5.2	
23-AUG-10	ZR-NB-95	< 2.6	
23-AUG-10	CS-134	< 2.4	
23-AUG-10	CS-137	< 4.2	
23-AUG-10	BA-LA-140	< 3.3	
23-AUG-10	H-3	< 181.0	
23-AUG-10	I-131 (CHEM)	< 0.226	
22-NOV-10	MN-54	< 3.1	
22-NOV-10	CO-58	< 2.8	
22-NOV-10	FE-59	< 2.4	
22-NOV-10	CO-60	< 3.6	
22-NOV-10	ZN-65	< 5.6	
22-NOV-10	ZR-NB-95	< 3.4	
22-NOV-10	CS-134	< 2.8	
22-NOV-10	CS-137	< 4.2	

Exposure Pathway - Waterborne
Ground Water

Location G-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-NOV-10	BA-LA-140	< 2.8	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.368	

Exposure Pathway - Waterborne
Ground Water

Location J-1

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-FEB-10	MN-54	< 3.2	
22-FEB-10	CO-58	< 3.3	
22-FEB-10	FE-59	< 6.4	
22-FEB-10	CO-60	< 3.5	
22-FEB-10	ZN-65	< 6.7	
22-FEB-10	ZR-NB-95	< 4.1	
22-FEB-10	CS-134	< 4.1	
22-FEB-10	CS-137	< 2.6	
22-FEB-10	BA-LA-140	< 4.0	
22-FEB-10	H-3	< 152.0	
22-FEB-10	I-131 (CHEM)	< 0.273	
24-MAY-10	MN-54	< 3.3	
24-MAY-10	CO-58	< 3.4	
24-MAY-10	FE-59	< 2.1	
24-MAY-10	CO-60	< 2.9	
24-MAY-10	ZN-65	< 7.1	
24-MAY-10	ZR-NB-95	< 3.5	
24-MAY-10	CS-134	< 3.2	
24-MAY-10	CS-137	< 2.6	
24-MAY-10	BA-LA-140	< 3.9	
24-MAY-10	H-3	< 146.0	
24-MAY-10	I-131 (CHEM)	< 0.218	
23-AUG-10	MN-54	< 2.6	
23-AUG-10	CO-58	< 3.9	
23-AUG-10	FE-59	< 8.9	
23-AUG-10	CO-60	< 4.2	
23-AUG-10	ZN-65	< 10.6	
23-AUG-10	ZR-NB-95	< 4.1	
23-AUG-10	CS-134	< 4.1	
23-AUG-10	CS-137	< 4.6	
23-AUG-10	BA-LA-140	< 4.0	
23-AUG-10	H-3	< 181.0	
23-AUG-10	I-131 (CHEM)	< 0.219	
22-NOV-10	MN-54	< 5.6	
22-NOV-10	CO-58	< 5.8	
22-NOV-10	FE-59	< 8.8	
22-NOV-10	CO-60	< 7.3	
22-NOV-10	ZN-65	< 11.7	
22-NOV-10	ZR-NB-95	< 5.6	
22-NOV-10	CS-134	< 5.5	
22-NOV-10	CS-137	< 6.4	

Exposure Pathway - Waterborne
Ground Water

Location J-1

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-NOV-10	BA-LA-140	< 9.3	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.447	

Exposure Pathway - Waterborne
Ground Water

Location J-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-FEB-10	MN-54	< 2.6	
22-FEB-10	CO-58	< 2.0	
22-FEB-10	FE-59	< 6.1	
22-FEB-10	CO-60	< 2.6	
22-FEB-10	ZN-65	< 8.6	
22-FEB-10	ZR-NB-95	< 4.7	
22-FEB-10	CS-134	< 3.8	
22-FEB-10	CS-137	< 4.5	
22-FEB-10	BA-LA-140	< 3.9	
22-FEB-10	H-3	< 152.0	
22-FEB-10	I-131 (CHEM)	< 0.228	
24-MAY-10	MN-54	< 3.0	
24-MAY-10	CO-58	< 2.9	
24-MAY-10	FE-59	< 3.9	
24-MAY-10	CO-60	< 1.2	
24-MAY-10	ZN-65	< 4.0	
24-MAY-10	ZR-NB-95	< 2.4	
24-MAY-10	CS-134	< 3.2	
24-MAY-10	CS-137	< 2.8	
24-MAY-10	BA-LA-140	< 2.7	
24-MAY-10	H-3	< 146.0	
24-MAY-10	I-131 (CHEM)	< 0.221	
23-AUG-10	MN-54	< 3.3	
23-AUG-10	CO-58	< 3.4	
23-AUG-10	FE-59	< 3.5	
23-AUG-10	CO-60	< 3.5	
23-AUG-10	ZN-65	< 5.6	
23-AUG-10	ZR-NB-95	< 4.8	
23-AUG-10	CS-134	< 2.8	
23-AUG-10	CS-137	< 2.7	
23-AUG-10	BA-LA-140	< 3.9	
23-AUG-10	H-3	< 181.0	
23-AUG-10	I-131 (CHEM)	< 0.226	
22-NOV-10	MN-54	< 2.7	
22-NOV-10	CO-58	< 3.0	
22-NOV-10	FE-59	< 6.6	
22-NOV-10	CO-60	< 3.1	
22-NOV-10	ZN-65	< 7.5	
22-NOV-10	ZR-NB-95	< 3.6	
22-NOV-10	CS-134	< 3.7	
22-NOV-10	CS-137	< 4.1	

Exposure Pathway - Waterborne
Ground Water

Location J-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-NOV-10	BA-LA-140	< 2.9	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.37	

Exposure Pathway - Waterborne
Ground Water

Location L-49

Collection Date	Nuclide	Concentration (pCi/Liter)		Duplicate Analysis
22-FEB-10	MN-54	<	2.1	
22-FEB-10	CO-58	<	1.8	
22-FEB-10	FE-59	<	3.8	
22-FEB-10	CO-60	<	1.2	
22-FEB-10	ZN-65	<	2.7	
22-FEB-10	ZR-NB-95	<	2.1	
22-FEB-10	CS-134	<	2.6	
22-FEB-10	CS-137	<	3.3	
22-FEB-10	BA-LA-140	<	1.7	
22-FEB-10	H-3	<	152.0	
22-FEB-10	I-131 (CHEM)	<	0.489	
24-MAY-10	MN-54	<	3.0	
24-MAY-10	CO-58	<	1.8	
24-MAY-10	FE-59	<	5.7	
24-MAY-10	CO-60	<	1.9	
24-MAY-10	ZN-65	<	4.2	
24-MAY-10	ZR-NB-95	<	3.4	
24-MAY-10	CS-134	<	3.5	
24-MAY-10	CS-137	<	3.7	
24-MAY-10	BA-LA-140	<	2.3	
24-MAY-10	H-3	<	146.0	
24-MAY-10	I-131 (CHEM)	<	0.215	
23-AUG-10	MN-54	<	2.8	
23-AUG-10	CO-58	<	3.1	
23-AUG-10	FE-59	<	5.5	
23-AUG-10	CO-60	<	2.6	
23-AUG-10	ZN-65	<	6.9	
23-AUG-10	ZR-NB-95	<	2.9	
23-AUG-10	CS-134	<	2.6	
23-AUG-10	CS-137	<	3.8	
23-AUG-10	BA-LA-140	<	3.8	
23-AUG-10	H-3	<	181.0	
23-AUG-10	I-131 (CHEM)	<	0.24	
22-NOV-10	MN-54	<	3.8	
22-NOV-10	CO-58	<	1.9	
22-NOV-10	FE-59	<	7.2	
22-NOV-10	CO-60	<	3.2	
22-NOV-10	ZN-65	<	4.5	
22-NOV-10	ZR-NB-95	<	3.4	
22-NOV-10	CS-134	<	3.0	
22-NOV-10	CS-137	<	4.6	

Exposure Pathway - Waterborne
Ground Water

Location L-49

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-NOV-10	BA-LA-140	< 6.1	
22-NOV-10	H-3	< 144.0	
22-NOV-10	I-131 (CHEM)	< 0.419	

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
01-FEB-10	MN-54	< 2.6	
01-FEB-10	CO-58	< 1.7	
01-FEB-10	FE-59	< 3.7	
01-FEB-10	CO-60	< 2.4	
01-FEB-10	ZN-65	< 4.0	
01-FEB-10	ZR-NB-95	< 2.2	
01-FEB-10	CS-134	< 2.5	
01-FEB-10	CS-137	< 3.1	
01-FEB-10	BA-LA-140	< 2.0	
01-FEB-10	GROSS BETA	1.986 +/- 0.625	
01-FEB-10	I-131 (CHEM)	< 0.288	
01-MAR-10	MN-54	< 4.3	
01-MAR-10	CO-58	< 2.4	
01-MAR-10	FE-59	< 5.1	
01-MAR-10	CO-60	< 1.7	
01-MAR-10	ZN-65	< 3.9	
01-MAR-10	ZR-NB-95	< 3.0	
01-MAR-10	CS-134	< 3.0	
01-MAR-10	CS-137	< 3.0	
01-MAR-10	BA-LA-140	< 3.3	
01-MAR-10	GROSS BETA	1.339 +/- 0.558	
01-MAR-10	I-131 (CHEM)	< 0.316	
05-APR-10	MN-54	< 2.7	
05-APR-10	CO-58	< 2.6	
05-APR-10	FE-59	< 4.5	
05-APR-10	CO-60	< 3.3	
05-APR-10	ZN-65	< 4.7	
05-APR-10	ZR-NB-95	< 2.8	
05-APR-10	CS-134	< 3.1	
05-APR-10	CS-137	< 2.7	
05-APR-10	BA-LA-140	< 2.5	
05-APR-10	GROSS BETA	3.239 +/- 1.109	
05-APR-10	I-131 (CHEM)	< 0.282	
03-MAY-10	MN-54	< 2.3	
03-MAY-10	CO-58	< 2.2	
03-MAY-10	FE-59	< 4.2	
03-MAY-10	CO-60	< 2.3	
03-MAY-10	ZN-65	< 1.7	
03-MAY-10	ZR-NB-95	< 3.4	
03-MAY-10	CS-134	< 2.7	

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
03-MAY-10	CS-137	< 4.5	
03-MAY-10	BA-LA-140	< 2.1	
03-MAY-10	GROSS BETA	3.954 +/- 1.038	
03-MAY-10	I-131 (CHEM)	< 0.236	
02-JUN-10	MN-54	< 3.3	
02-JUN-10	CO-58	< 2.1	
02-JUN-10	FE-59	< 6.9	
02-JUN-10	CO-60	< 3.1	
02-JUN-10	ZN-65	< 4.9	
02-JUN-10	ZR-NB-95	< 3.2	
02-JUN-10	CS-134	< 3.0	
02-JUN-10	CS-137	< 2.5	
02-JUN-10	BA-LA-140	< 1.5	
02-JUN-10	GROSS BETA	3.293 +/- 1.11	
02-JUN-10	I-131 (CHEM)	< 0.311	
06-JUL-10	MN-54	< 3.2	
06-JUL-10	CO-58	< 2.0	
06-JUL-10	FE-59	< 4.5	
06-JUL-10	CO-60	< 2.4	
06-JUL-10	ZN-65	< 3.2	
06-JUL-10	ZR-NB-95	< 2.6	
06-JUL-10	CS-134	< 2.4	
06-JUL-10	CS-137	< 4.1	
06-JUL-10	BA-LA-140	< 3.1	
06-JUL-10	GROSS BETA	2.644 +/- 0.492	
06-JUL-10	I-131 (CHEM)	< 0.235	
02-AUG-10	MN-54	< 2.5	
02-AUG-10	CO-58	< 4.1	
02-AUG-10	FE-59	< 4.1	
02-AUG-10	CO-60	< 4.6	
02-AUG-10	ZN-65	< 2.9	
02-AUG-10	ZR-NB-95	< 4.0	
02-AUG-10	CS-134	< 1.6	
02-AUG-10	CS-137	< 4.1	
02-AUG-10	BA-LA-140	< 1.8	
02-AUG-10	GROSS BETA	2.428 +/- 0.634	
02-AUG-10	I-131 (CHEM)	< 0.324	
07-SEP-10	MN-54	< 1.8	
07-SEP-10	CO-58	< 1.9	
07-SEP-10	FE-59	< 3.3	

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date		Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-SEP-10		CO-60	< 2.7	
07-SEP-10		ZN-65	< 2.5	
07-SEP-10		ZR-NB-95	< 2.2	
07-SEP-10		CS-134	< 1.5	
07-SEP-10		CS-137	< 1.6	
07-SEP-10		BA-LA-140	< 1.1	
07-SEP-10		GROSS BETA	5.078 +/- 1.147	
07-SEP-10		I-131 (CHEM)	< 0.279	
06-OCT-10		MN-54	< 2.3	
06-OCT-10	GRAB	MN-54	< 3.3	
06-OCT-10		CO-58	< 2.9	
06-OCT-10	GRAB	CO-58	< 2.2	
06-OCT-10		FE-59	< 5.6	
06-OCT-10	GRAB	FE-59	< 2.7	
06-OCT-10		CO-60	< 3.9	
06-OCT-10	GRAB	CO-60	< 2.9	
06-OCT-10		ZN-65	< 2.8	
06-OCT-10	GRAB	ZN-65	< 4.4	
06-OCT-10		ZR-NB-95	< 2.8	
06-OCT-10	GRAB	ZR-NB-95	< 3.2	
06-OCT-10		CS-134	< 3.9	
06-OCT-10	GRAB	CS-134	< 3.4	
06-OCT-10		CS-137	< 3.6	
06-OCT-10	GRAB	CS-137	< 2.9	
06-OCT-10		BA-LA-140	< 2.8	
06-OCT-10	GRAB	BA-LA-140	< 1.4	
06-OCT-10		GROSS BETA	3.254 +/- 0.691	
06-OCT-10	GRAB	GROSS BETA	2.902 +/- 0.666	
06-OCT-10		I-131 (CHEM)	< 0.32	
06-OCT-10	GRAB	I-131 (CHEM)	< 0.263	
01-NOV-10		MN-54	< 3.6	
01-NOV-10		CO-58	< 2.6	
01-NOV-10		FE-59	< 5.5	
01-NOV-10		CO-60	< 3.2	
01-NOV-10		ZN-65	< 8.8	
01-NOV-10		ZR-NB-95	< 2.8	
01-NOV-10		CS-134	< 4.1	
01-NOV-10		CS-137	< 3.9	
01-NOV-10		BA-LA-140	< 2.8	
01-NOV-10		GROSS BETA	2.811 +/- 0.664	

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
01-NOV-10	I-131 (CHEM)	< 0.238	
06-DEC-10	MN-54	< 4.1	
06-DEC-10	CO-58	< 3.0	
06-DEC-10	FE-59	< 6.7	
06-DEC-10	CO-60	< 4.4	
06-DEC-10	ZN-65	< 4.3	
06-DEC-10	ZR-NB-95	< 3.0	
06-DEC-10	CS-134	< 4.2	
06-DEC-10	CS-137	< 3.8	
06-DEC-10	BA-LA-140	< 3.3	
06-DEC-10	GROSS BETA	2.835 +/- 0.652	
06-DEC-10	I-131 (CHEM)	< 0.168	
03-JAN-11	MN-54	< 2.6	
03-JAN-11	CO-58	< 2.0	
03-JAN-11	FE-59	< 4.5	
03-JAN-11	CO-60	< 1.4	
03-JAN-11	ZN-65	< 2.6	
03-JAN-11	ZR-NB-95	< 2.4	
03-JAN-11	CS-134	< 2.6	
03-JAN-11	CS-137	< 3.6	
03-JAN-11	BA-LA-140	< 2.5	
03-JAN-11	GROSS BETA	2.416 +/- 0.652	
03-JAN-11	I-131 (CHEM)	< 0.285	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
01-FEB-10	MN-54	< 3.0	
01-FEB-10	CO-58	< 2.5	
01-FEB-10	FE-59	< 4.2	
01-FEB-10	CO-60	< 2.9	
01-FEB-10	ZN-65	< 5.7	
01-FEB-10	ZR-NB-95	< 4.2	
01-FEB-10	CS-134	< 3.4	
01-FEB-10	CS-137	< 4.4	
01-FEB-10	BA-LA-140	< 2.8	
01-FEB-10	GROSS BETA	2.402 +/- 0.688	
01-FEB-10	I-131 (CHEM)	< 0.278	
01-MAR-10	MN-54	< 3.8	
01-MAR-10	CO-58	< 1.4	
01-MAR-10	FE-59	< 6.3	
01-MAR-10	CO-60	< 2.2	
01-MAR-10	ZN-65	< 5.3	
01-MAR-10	ZR-NB-95	< 4.3	
01-MAR-10	CS-134	< 4.3	
01-MAR-10	CS-137	< 3.8	
01-MAR-10	BA-LA-140	< 3.5	
01-MAR-10	GROSS BETA	1.360 +/- 0.613	
01-MAR-10	I-131 (CHEM)	< 0.203	
05-APR-10	MN-54	< 2.5	
05-APR-10	CO-58	< 2.8	
05-APR-10	FE-59	< 7.9	
05-APR-10	CO-60	< 1.4	
05-APR-10	ZN-65	< 4.4	
05-APR-10	ZR-NB-95	< 3.1	
05-APR-10	CS-134	< 3.0	
05-APR-10	CS-137	< 3.1	
05-APR-10	BA-LA-140	< 3.9	
05-APR-10	GROSS BETA	3.311 +/- 1.046	
05-APR-10	I-131 (CHEM)	< 0.263	
03-MAY-10	MN-54	< 2.7	
03-MAY-10	CO-58	< 3.5	
03-MAY-10	FE-59	< 3.7	
03-MAY-10	CO-60	< 3.1	
03-MAY-10	ZN-65	< 2.9	
03-MAY-10	ZR-NB-95	< 3.4	
03-MAY-10	CS-134	< 2.6	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
03-MAY-10	CS-137	< 3.6	
03-MAY-10	BA-LA-140	< 3.2	
03-MAY-10	GROSS BETA	2.640 +/- 1.089	
03-MAY-10	I-131 (CHEM)	< 0.389	
02-JUN-10	MN-54	< 3.1	
02-JUN-10	CO-58	< 3.9	
02-JUN-10	FE-59	< 5.0	
02-JUN-10	CO-60	< 1.9	
02-JUN-10	ZN-65	< 7.8	
02-JUN-10	ZR-NB-95	< 3.8	
02-JUN-10	CS-134	< 3.9	
02-JUN-10	CS-137	< 3.8	
02-JUN-10	BA-LA-140	< 3.8	
02-JUN-10	GROSS BETA	3.384 +/- 1.03	
02-JUN-10	I-131 (CHEM)	< 0.293	
06-JUL-10	MN-54	< 4.2	
06-JUL-10	CO-58	< 4.7	
06-JUL-10	FE-59	< 7.2	
06-JUL-10	CO-60	< 1.1	
06-JUL-10	ZN-65	< 7.0	
06-JUL-10	ZR-NB-95	< 4.0	
06-JUL-10	CS-134	< 3.3	
06-JUL-10	CS-137	< 2.9	
06-JUL-10	BA-LA-140	< 5.4	
06-JUL-10	GROSS BETA	2.774 +/- 0.519	
06-JUL-10	I-131 (CHEM)	< 0.22	
02-AUG-10	MN-54	< 3.6	
02-AUG-10	CO-58	< 1.8	
02-AUG-10	FE-59	< 6.0	
02-AUG-10	CO-60	< 4.0	
02-AUG-10	ZN-65	< 3.5	
02-AUG-10	ZR-NB-95	< 3.9	
02-AUG-10	CS-134	< 3.6	
02-AUG-10	CS-137	< 4.1	
02-AUG-10	BA-LA-140	< 2.2	
02-AUG-10	GROSS BETA	2.211 +/- 0.651	
02-AUG-10	I-131 (CHEM)	< 0.343	
07-SEP-10	MN-54	< 3.4	
07-SEP-10	CO-58	< 1.8	
07-SEP-10	FE-59	< 6.3	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-SEP-10	CO-60	< 3.2	
07-SEP-10	ZN-65	< 2.6	
07-SEP-10	ZR-NB-95	< 4.4	
07-SEP-10	CS-134	< 4.1	
07-SEP-10	CS-137	< 2.7	
07-SEP-10	BA-LA-140	< 3.1	
07-SEP-10	GROSS BETA	3.944 +/- 1.002	
07-SEP-10	I-131 (CHEM)	< 0.186	
06-OCT-10	MN-54	< 2.8	
06-OCT-10	CO-58	< 2.7	
06-OCT-10	FE-59	< 1.8	
06-OCT-10	CO-60	< 3.2	
06-OCT-10	ZN-65	< 5.6	
06-OCT-10	ZR-NB-95	< 2.9	
06-OCT-10	CS-134	< 3.0	
06-OCT-10	CS-137	< 2.0	
06-OCT-10	BA-LA-140	< 4.1	
06-OCT-10	GROSS BETA	2.546 +/- 0.658	
06-OCT-10	I-131 (CHEM)	< 0.369	
01-NOV-10	MN-54	< 2.7	
01-NOV-10	CO-58	< 2.5	
01-NOV-10	FE-59	< 4.1	
01-NOV-10	CO-60	< 1.6	
01-NOV-10	ZN-65	< 3.0	
01-NOV-10	ZR-NB-95	< 3.0	
01-NOV-10	CS-134	< 2.9	
01-NOV-10	CS-137	< 2.1	
01-NOV-10	BA-LA-140	< 3.2	
01-NOV-10	GROSS BETA	2.594 +/- 0.717	
01-NOV-10	I-131 (CHEM)	< 0.321	
06-DEC-10	MN-54	< 2.0	
06-DEC-10	CO-58	< 2.9	
06-DEC-10	FE-59	< 3.9	
06-DEC-10	CO-60	< 4.2	
06-DEC-10	ZN-65	< 2.9	
06-DEC-10	ZR-NB-95	< 3.3	
06-DEC-10	CS-134	< 2.9	
06-DEC-10	CS-137	< 3.9	
06-DEC-10	BA-LA-140	< 2.2	
06-DEC-10	GROSS BETA	3.392 +/- 0.737	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
06-DEC-10	I-131 (CHEM)	< 0.369	
03-JAN-11	MN-54	< 2.4	
03-JAN-11	CO-58	< 1.3	
03-JAN-11	FE-59	< 4.6	
03-JAN-11	CO-60	< 2.2	
03-JAN-11	ZN-65	< 4.4	
03-JAN-11	ZR-NB-95	< 3.6	
03-JAN-11	CS-134	< 3.5	
03-JAN-11	CS-137	< 3.4	
03-JAN-11	BA-LA-140	< 1.7	
03-JAN-11	GROSS BETA	2.878 +/- 0.716	
03-JAN-11	I-131 (CHEM)	< 0.291	

Exposure Pathway - Waterborne
Drinking Water
Quarterly Tritium Analysis

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
05-APR-10	H-3	< 144	
06-JUL-10	H-3	< 163	
06-JUL-10	H-3	< 163	Duplicate
06-OCT-10	H-3	< 161	
03-JAN-11	H-3	< 145	

Exposure Pathway - Waterborne
Drinking Water
Quarterly Tritium Analysis

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
05-APR-10	H-3	< 144	
06-JUL-10	H-3	< 163	
06-OCT-10	H-3	< 161	
03-JAN-11	H-3	< 145	

Exposure Pathway - Waterborne
Shoreline Sediment

Location DC

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
25-MAY-10	K-40	9,012.1 +/- 1,160.0	
25-MAY-10	MN-54	< 53.8	
25-MAY-10	CO-58	< 65.9	
25-MAY-10	FE-59	< 110.9	
25-MAY-10	CO-60	< 55.0	
25-MAY-10	ZN-65	< 105.6	
25-MAY-10	CS-134	< 68.2	
25-MAY-10	CS-137	184.2 +/- 98.8	
08-NOV-10	K-40	11,494.0 +/- 703.2	
08-NOV-10	MN-54	< 28.6	
08-NOV-10	CO-58	< 25.8	
08-NOV-10	FE-59	< 53.6	
08-NOV-10	CO-60	< 19.8	
08-NOV-10	ZN-65	< 47.1	
08-NOV-10	CS-134	< 20.9	
08-NOV-10	CS-137	< 20.3	

Exposure Pathway - Waterborne
Shoreline Sediment

Location EEA

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
02-JUN-10	K-40	9,892.2 +/- 755.6	
02-JUN-10	MN-54	< 25.1	
02-JUN-10	CO-58	< 16.1	
02-JUN-10	FE-59	< 35.1	
02-JUN-10	CO-60	< 8.4	
02-JUN-10	ZN-65	< 35.0	
02-JUN-10	CS-134	< 19.9	
02-JUN-10	CS-137	101.9 +/- 29.7	

Exposure Pathway - Waterborne
Shoreline Sediment

Location JRR

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
25-MAY-10	K-40	9,530.2 +/- 757.3	
25-MAY-10	MN-54	< 25.3	
25-MAY-10	CO-58	< 21.4	
25-MAY-10	FE-59	< 21.4	
25-MAY-10	CO-60	< 10.7	
25-MAY-10	ZN-65	< 38.2	
25-MAY-10	CS-134	< 24.7	
25-MAY-10	CS-137	116.8 +/- 31.3	
08-NOV-10	K-40	12,370.0 +/- 729.9	
08-NOV-10	MN-54	< 25.4	
08-NOV-10	CO-58	< 12.6	
08-NOV-10	FE-59	< 55.4	
08-NOV-10	CO-60	< 11.0	
08-NOV-10	ZN-65	< 43.9	
08-NOV-10	CS-134	< 13.7	
08-NOV-10	CS-137	< 21.0	

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
18-MAY-10	COMMON CARP	K-40	2,875.3 +/- 528.2	
18-MAY-10	COMMON CARP	MN-54	< 18.0	
18-MAY-10	COMMON CARP	CO-58	< 18.0	
18-MAY-10	COMMON CARP	FE-59	< 33.7	
18-MAY-10	COMMON CARP	CO-60	< 16.4	
18-MAY-10	COMMON CARP	ZN-65	< 41.8	
18-MAY-10	COMMON CARP	I-131	< 53.0	
18-MAY-10	COMMON CARP	CS-134	< 20.0	
18-MAY-10	COMMON CARP	CS-137	< 18.6	
18-MAY-10	COMMON CARP	H-3	7,305.0 +/- 227.0	
18-MAY-10	SMALLMOUTH BASS	K-40	3,629.7 +/- 554.4	Duplicate
18-MAY-10	SMALLMOUTH BASS	K-40	3,212.4 +/- 3,943.0	
18-MAY-10	SMALLMOUTH BASS	MN-54	< 20.2	Duplicate
18-MAY-10	SMALLMOUTH BASS	MN-54	< 17.0	
18-MAY-10	SMALLMOUTH BASS	CO-58	< 16.0	Duplicate
18-MAY-10	SMALLMOUTH BASS	CO-58	< 6.4	
18-MAY-10	SMALLMOUTH BASS	FE-59	< 22.1	Duplicate
18-MAY-10	SMALLMOUTH BASS	FE-59	< 25.7	
18-MAY-10	SMALLMOUTH BASS	CO-60	< 15.9	Duplicate
18-MAY-10	SMALLMOUTH BASS	CO-60	< 11.0	
18-MAY-10	SMALLMOUTH BASS	ZN-65	< 41.7	Duplicate
18-MAY-10	SMALLMOUTH BASS	ZN-65	< 23.7	
18-MAY-10	SMALLMOUTH BASS	I-131	< 24.0	
18-MAY-10	SMALLMOUTH BASS	CS-134	< 21.0	Duplicate
18-MAY-10	SMALLMOUTH BASS	CS-134	< 9.2	
18-MAY-10	SMALLMOUTH BASS	CS-137	< 20.0	Duplicate
18-MAY-10	SMALLMOUTH BASS	CS-137	< 11.0	
18-MAY-10	SMALLMOUTH BASS	H-3	8,184.0 +/- 224.0	Duplicate
18-MAY-10	SMALLMOUTH BASS	H-3	8,358.0 +/- 247.0	
18-MAY-10	WHITE BASS	K-40	3,181.3 +/- 388.2	
18-MAY-10	WHITE BASS	MN-54	< 12.6	
18-MAY-10	WHITE BASS	CO-58	< 8.9	
18-MAY-10	WHITE BASS	FE-59	< 23.8	
18-MAY-10	WHITE BASS	CO-60	< 11.0	
18-MAY-10	WHITE BASS	ZN-65	< 13.7	
18-MAY-10	WHITE BASS	I-131	< 21.0	
18-MAY-10	WHITE BASS	CS-134	< 5.4	
18-MAY-10	WHITE BASS	CS-137	< 10.4	
18-MAY-10	WHITE BASS	H-3	7,474.0 +/- 233.0	
25-MAY-10	CHANNEL CATFISH	K-40	3,267.2 +/- 361.8	Duplicate
25-MAY-10	CHANNEL CATFISH	K-40	3,170.9 +/- 533.3	

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
25-MAY-10	CHANNEL CATFISH	MN-54	< 14.0	Duplicate
25-MAY-10	CHANNEL CATFISH	MN-54	< 22.1	
25-MAY-10	CHANNEL CATFISH	CO-58	< 12.1	Duplicate
25-MAY-10	CHANNEL CATFISH	CO-58	< 18.0	
25-MAY-10	CHANNEL CATFISH	FE-59	< 35.0	Duplicate
25-MAY-10	CHANNEL CATFISH	FE-59	< 39.3	
25-MAY-10	CHANNEL CATFISH	CO-60	< 11.1	Duplicate
25-MAY-10	CHANNEL CATFISH	CO-60	< 15.4	
25-MAY-10	CHANNEL CATFISH	ZN-65	< 46.0	Duplicate
25-MAY-10	CHANNEL CATFISH	ZN-65	< 37.4	
25-MAY-10	CHANNEL CATFISH	I-131	< 25.0	
25-MAY-10	CHANNEL CATFISH	CS-134	< 8.8	Duplicate
25-MAY-10	CHANNEL CATFISH	CS-134	< 18.4	
25-MAY-10	CHANNEL CATFISH	CS-137	< 15.1	Duplicate
25-MAY-10	CHANNEL CATFISH	CS-137	< 23.9	
25-MAY-10	CHANNEL CATFISH	H-3	7,302.0 +/- 230.0	Duplicate
25-MAY-10	CHANNEL CATFISH	H-3	7,232.0 +/- 229.0	
25-MAY-10	FRESHWATER DRUM	K-40	3,291.0 +/- 514.2	
25-MAY-10	FRESHWATER DRUM	MN-54	< 18.9	
25-MAY-10	FRESHWATER DRUM	CO-58	< 13.7	
25-MAY-10	FRESHWATER DRUM	FE-59	< 27.9	
25-MAY-10	FRESHWATER DRUM	CO-60	< 17.1	
25-MAY-10	FRESHWATER DRUM	ZN-65	< 51.0	
25-MAY-10	FRESHWATER DRUM	I-131	< 39.0	
25-MAY-10	FRESHWATER DRUM	CS-134	< 18.4	
25-MAY-10	FRESHWATER DRUM	CS-137	< 24.3	
25-MAY-10	FRESHWATER DRUM	H-3	7,552.0 +/- 233.0	
25-MAY-10	SMALLMOUTH BUFFALO	K-40	3,547.9 +/- 542.9	
25-MAY-10	SMALLMOUTH BUFFALO	MN-54	< 23.3	
25-MAY-10	SMALLMOUTH BUFFALO	CO-58	< 21.7	
25-MAY-10	SMALLMOUTH BUFFALO	FE-59	< 42.5	
25-MAY-10	SMALLMOUTH BUFFALO	CO-60	< 19.3	
25-MAY-10	SMALLMOUTH BUFFALO	ZN-65	< 18.5	
25-MAY-10	SMALLMOUTH BUFFALO	I-131	< 54.0	
25-MAY-10	SMALLMOUTH BUFFALO	CS-134	< 12.4	
25-MAY-10	SMALLMOUTH BUFFALO	CS-137	< 10.6	
25-MAY-10	SMALLMOUTH BUFFALO	H-3	6,096.0 +/- 199.0	
19-OCT-10	BLUE CATFISH	K-40	2,856.9 +/- 377.4	
19-OCT-10	BLUE CATFISH	MN-54	< 7.9	
19-OCT-10	BLUE CATFISH	CO-58	< 11.2	
19-OCT-10	BLUE CATFISH	FE-59	< 22.5	

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
19-OCT-10	BLUE CATFISH	CO-60	< 11.9	
19-OCT-10	BLUE CATFISH	ZN-65	< 19.9	
19-OCT-10	BLUE CATFISH	I-131	< 31.0	
19-OCT-10	BLUE CATFISH	CS-134	< 10.6	
19-OCT-10	BLUE CATFISH	CS-137	< 8.6	
19-OCT-10	BLUE CATFISH	H-3	8,174.0 +/- 249.0	
19-OCT-10	CHANNEL CATFISH	K-40	3,182.6 +/- 394.9	
19-OCT-10	CHANNEL CATFISH	MN-54	< 8.6	
19-OCT-10	CHANNEL CATFISH	CO-58	< 14.1	
19-OCT-10	CHANNEL CATFISH	FE-59	< 33.9	
19-OCT-10	CHANNEL CATFISH	CO-60	< 10.6	
19-OCT-10	CHANNEL CATFISH	ZN-65	< 18.9	
19-OCT-10	CHANNEL CATFISH	I-131	< 53.0	
19-OCT-10	CHANNEL CATFISH	CS-134	< 10.2	
19-OCT-10	CHANNEL CATFISH	CS-137	< 7.3	
19-OCT-10	CHANNEL CATFISH	H-3	8,051.0 +/- 250.0	
19-OCT-10	COMMON CARP	K-40	2,867.3 +/- 358.8	
19-OCT-10	COMMON CARP	MN-54	< 13.3	
19-OCT-10	COMMON CARP	CO-58	< 9.4	
19-OCT-10	COMMON CARP	FE-59	< 27.3	
19-OCT-10	COMMON CARP	CO-60	< 10.8	
19-OCT-10	COMMON CARP	ZN-65	< 22.9	
19-OCT-10	COMMON CARP	I-131	< 40.0	
19-OCT-10	COMMON CARP	CS-134	< 12.3	
19-OCT-10	COMMON CARP	CS-137	< 13.2	
19-OCT-10	COMMON CARP	H-3	7,335.0 +/- 239.0	
19-OCT-10	FLATHEAD CATFISH	K-40	3,732.7 +/- 452.6	
19-OCT-10	FLATHEAD CATFISH	MN-54	< 12.2	
19-OCT-10	FLATHEAD CATFISH	CO-58	< 14.3	
19-OCT-10	FLATHEAD CATFISH	FE-59	< 22.1	
19-OCT-10	FLATHEAD CATFISH	CO-60	< 12.7	
19-OCT-10	FLATHEAD CATFISH	ZN-65	< 13.5	
19-OCT-10	FLATHEAD CATFISH	I-131	< 43.0	
19-OCT-10	FLATHEAD CATFISH	CS-134	< 12.5	
19-OCT-10	FLATHEAD CATFISH	CS-137	< 9.1	
19-OCT-10	FLATHEAD CATFISH	H-3	7,827.0 +/- 242.0	
19-OCT-10	SMALLMOUTH BUFFALO	K-40	2,556.6 +/- 530.3	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	K-40	2,807.1 +/- 399.6	
19-OCT-10	SMALLMOUTH BUFFALO	MN-54	< 15.5	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	MN-54	< 8.1	
19-OCT-10	SMALLMOUTH BUFFALO	CO-58	< 21.4	Duplicate

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)		Duplicate Analysis
19-OCT-10	SMALLMOUTH BUFFALO	CO-58	<	12.7	
19-OCT-10	SMALLMOUTH BUFFALO	FE-59	<	35.0	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	FE-59	<	25.2	
19-OCT-10	SMALLMOUTH BUFFALO	CO-60	<	23.2	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	CO-60	<	11.5	
19-OCT-10	SMALLMOUTH BUFFALO	ZN-65	<	32.6	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	ZN-65	<	15.0	
19-OCT-10	SMALLMOUTH BUFFALO	I-131	<	45.0	
19-OCT-10	SMALLMOUTH BUFFALO	CS-134	<	21.5	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	CS-134	<	9.4	
19-OCT-10	SMALLMOUTH BUFFALO	CS-137	<	19.0	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	CS-137	<	9.3	
19-OCT-10	SMALLMOUTH BUFFALO	H-3	7,491.0 +/-	231.0	Duplicate
19-OCT-10	SMALLMOUTH BUFFALO	H-3	7,644.0 +/-	233.0	
19-OCT-10	WALLEYE	K-40	3,590.6 +/-	388.5	
19-OCT-10	WALLEYE	MN-54	<	11.9	
19-OCT-10	WALLEYE	CO-58	<	8.7	
19-OCT-10	WALLEYE	FE-59	<	19.7	
19-OCT-10	WALLEYE	CO-60	<	12.1	
19-OCT-10	WALLEYE	ZN-65	<	9.1	
19-OCT-10	WALLEYE	I-131	<	32.0	
19-OCT-10	WALLEYE	CS-134	<	14.1	
19-OCT-10	WALLEYE	CS-137	<	12.9	
19-OCT-10	WALLEYE	H-3	7,574.0 +/-	240.0	
19-OCT-10	WHITE BASS	K-40	3,442.4 +/-	434.4	
19-OCT-10	WHITE BASS	MN-54	<	14.7	
19-OCT-10	WHITE BASS	CO-58	<	9.6	
19-OCT-10	WHITE BASS	FE-59	<	28.4	
19-OCT-10	WHITE BASS	CO-60	<	13.7	
19-OCT-10	WHITE BASS	ZN-65	<	13.9	
19-OCT-10	WHITE BASS	I-131	<	53.0	
19-OCT-10	WHITE BASS	CS-134	<	5.9	
19-OCT-10	WHITE BASS	CS-137	<	9.8	
19-OCT-10	WHITE BASS	H-3	6,586.0 +/-	222.0	
19-OCT-10	WHITE CRAPPIE	K-40	2,923.9 +/-	405.9	
19-OCT-10	WHITE CRAPPIE	MN-54	<	6.9	
19-OCT-10	WHITE CRAPPIE	CO-58	<	10.6	
19-OCT-10	WHITE CRAPPIE	FE-59	<	26.5	
19-OCT-10	WHITE CRAPPIE	CO-60	<	11.2	
19-OCT-10	WHITE CRAPPIE	ZN-65	<	16.9	
19-OCT-10	WHITE CRAPPIE	I-131	<	33.0	

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
19-OCT-10	WHITE CRAPPIE	CS-134	< 9.1	
19-OCT-10	WHITE CRAPPIE	CS-137	< 10.5	
19-OCT-10	WHITE CRAPPIE	H-3	6,962.0 +/- 233.0	
19-OCT-10	WIPER	K-40	3,354.6 +/- 407.0	
19-OCT-10	WIPER	MN-54	< 14.7	
19-OCT-10	WIPER	CO-58	< 12.0	
19-OCT-10	WIPER	FE-59	< 21.5	
19-OCT-10	WIPER	CO-60	< 11.6	
19-OCT-10	WIPER	ZN-65	< 9.0	
19-OCT-10	WIPER	I-131	< 43.0	
19-OCT-10	WIPER	CS-134	< 6.0	
19-OCT-10	WIPER	CS-137	< 15.0	
19-OCT-10	WIPER	H-3	8,046.0 +/- 246.0	

Location JRR

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
25-MAY-10	CHANNEL CATFISH	K-40	3,665.6 +/- 415.3	
25-MAY-10	CHANNEL CATFISH	MN-54	< 13.5	
25-MAY-10	CHANNEL CATFISH	CO-58	< 8.6	
25-MAY-10	CHANNEL CATFISH	FE-59	< 23.6	
25-MAY-10	CHANNEL CATFISH	CO-60	< 10.0	
25-MAY-10	CHANNEL CATFISH	ZN-65	< 29.6	
25-MAY-10	CHANNEL CATFISH	I-131	< 40.0	
25-MAY-10	CHANNEL CATFISH	CS-134	< 17.1	
25-MAY-10	CHANNEL CATFISH	CS-137	< 15.5	
25-MAY-10	CHANNEL CATFISH	H-3	< 119.0	
25-MAY-10	LARGEMOUTH BASS	K-40	3,314.0 +/- 610.6	
25-MAY-10	LARGEMOUTH BASS	MN-54	< 24.1	
25-MAY-10	LARGEMOUTH BASS	CO-58	< 20.0	
25-MAY-10	LARGEMOUTH BASS	FE-59	< 37.7	
25-MAY-10	LARGEMOUTH BASS	CO-60	< 25.2	
25-MAY-10	LARGEMOUTH BASS	ZN-65	< 47.2	
25-MAY-10	LARGEMOUTH BASS	I-131	< 63.0	
25-MAY-10	LARGEMOUTH BASS	CS-134	< 17.9	
25-MAY-10	LARGEMOUTH BASS	CS-137	< 18.7	
25-MAY-10	LARGEMOUTH BASS	H-3	< 132.0	
25-MAY-10	SMALLMOUTH BUFFALO	K-40	3,161.9 +/- 506.4	
25-MAY-10	SMALLMOUTH BUFFALO	MN-54	< 21.4	
25-MAY-10	SMALLMOUTH BUFFALO	CO-58	< 23.0	
25-MAY-10	SMALLMOUTH BUFFALO	FE-59	< 29.0	
25-MAY-10	SMALLMOUTH BUFFALO	CO-60	< 15.1	
25-MAY-10	SMALLMOUTH BUFFALO	ZN-65	< 50.0	
25-MAY-10	SMALLMOUTH BUFFALO	I-131	< 72.0	
25-MAY-10	SMALLMOUTH BUFFALO	CS-134	< 10.2	
25-MAY-10	SMALLMOUTH BUFFALO	CS-137	< 18.2	
25-MAY-10	SMALLMOUTH BUFFALO	H-3	< 116.0	
25-MAY-10	WHITE CRAPPIE	K-40	2,673.9 +/- 438.9	
25-MAY-10	WHITE CRAPPIE	MN-54	< 16.0	
25-MAY-10	WHITE CRAPPIE	CO-58	< 10.0	
25-MAY-10	WHITE CRAPPIE	FE-59	< 22.6	
25-MAY-10	WHITE CRAPPIE	CO-60	< 17.8	
25-MAY-10	WHITE CRAPPIE	ZN-65	< 45.0	
25-MAY-10	WHITE CRAPPIE	I-131	< 34.0	
25-MAY-10	WHITE CRAPPIE	CS-134	< 16.8	
25-MAY-10	WHITE CRAPPIE	CS-137	< 16.9	
25-MAY-10	WHITE CRAPPIE	H-3	< 123.0	
08-NOV-10	CHANNEL CATFISH	K-40	3,725.9 +/- 519.4	

Exposure Pathway - Ingestion
Fish

Location JRR

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
08-NOV-10	CHANNEL CATFISH	MN-54	< 9.5	
08-NOV-10	CHANNEL CATFISH	CO-58	< 20.6	
08-NOV-10	CHANNEL CATFISH	FE-59	< 47.7	
08-NOV-10	CHANNEL CATFISH	CO-60	< 16.5	
08-NOV-10	CHANNEL CATFISH	ZN-65	< 15.9	
08-NOV-10	CHANNEL CATFISH	I-131	< 107.0	
08-NOV-10	CHANNEL CATFISH	CS-134	< 14.3	
08-NOV-10	CHANNEL CATFISH	CS-137	< 18.7	
08-NOV-10	CHANNEL CATFISH	H-3	< 108.0	
08-NOV-10	COMMON CARP	K-40	3,358.6 +/- 429.4	
08-NOV-10	COMMON CARP	MN-54	< 11.6	
08-NOV-10	COMMON CARP	CO-58	< 15.0	
08-NOV-10	COMMON CARP	FE-59	< 24.4	
08-NOV-10	COMMON CARP	CO-60	< 16.9	
08-NOV-10	COMMON CARP	ZN-65	< 30.3	
08-NOV-10	COMMON CARP	I-131	< 69.0	
08-NOV-10	COMMON CARP	CS-134	< 12.0	
08-NOV-10	COMMON CARP	CS-137	< 15.6	
08-NOV-10	COMMON CARP	H-3	< 109.0	
08-NOV-10	SMALLMOUTH BUFFALO	K-40	3,058.0 +/- 427.2	
08-NOV-10	SMALLMOUTH BUFFALO	MN-54	< 15.2	
08-NOV-10	SMALLMOUTH BUFFALO	CO-58	< 15.8	
08-NOV-10	SMALLMOUTH BUFFALO	FE-59	< 31.7	
08-NOV-10	SMALLMOUTH BUFFALO	CO-60	< 15.5	
08-NOV-10	SMALLMOUTH BUFFALO	ZN-65	< 29.3	
08-NOV-10	SMALLMOUTH BUFFALO	I-131	< 109.0	
08-NOV-10	SMALLMOUTH BUFFALO	CS-134	< 7.6	
08-NOV-10	SMALLMOUTH BUFFALO	CS-137	< 13.6	
08-NOV-10	SMALLMOUTH BUFFALO	H-3	< 100.0	

Exposure Pathway - Ingestion
Food/Garden

Location D-2

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
26-APR-10	HORSERADISH LEAVES	BE-7	473.9 +/- 166.9	
26-APR-10	HORSERADISH LEAVES	K-40	3,636.3 +/- 338.9	
26-APR-10	HORSERADISH LEAVES	MN-54	< 11.9	
26-APR-10	HORSERADISH LEAVES	CO-58	< 6.5	
26-APR-10	HORSERADISH LEAVES	FE-59	< 28.0	
26-APR-10	HORSERADISH LEAVES	CO-60	< 10.8	
26-APR-10	HORSERADISH LEAVES	ZN-65	< 9.4	
26-APR-10	HORSERADISH LEAVES	ZR-NB-95	< 6.7	
26-APR-10	HORSERADISH LEAVES	I-131	< 12.2	
26-APR-10	HORSERADISH LEAVES	CS-134	< 6.0	
26-APR-10	HORSERADISH LEAVES	CS-137	< 10.1	
17-MAY-10	HORSERADISH LEAVES	BE-7	403.8 +/- 147.0	
17-MAY-10	HORSERADISH LEAVES	K-40	4,403.3 +/- 436.8	
17-MAY-10	HORSERADISH LEAVES	MN-54	< 12.9	
17-MAY-10	HORSERADISH LEAVES	CO-58	< 10.4	
17-MAY-10	HORSERADISH LEAVES	FE-59	< 37.7	
17-MAY-10	HORSERADISH LEAVES	CO-60	< 7.3	
17-MAY-10	HORSERADISH LEAVES	ZN-65	< 20.0	
17-MAY-10	HORSERADISH LEAVES	ZR-NB-95	< 15.1	
17-MAY-10	HORSERADISH LEAVES	I-131	< 16.5	
17-MAY-10	HORSERADISH LEAVES	CS-134	< 9.7	
17-MAY-10	HORSERADISH LEAVES	CS-137	< 11.5	
21-JUN-10	HORSERADISH LEAVES	BE-7	904.2 +/- 167.5	
21-JUN-10	HORSERADISH LEAVES	K-40	5,818.3 +/- 427.9	
21-JUN-10	HORSERADISH LEAVES	MN-54	< 14.2	
21-JUN-10	HORSERADISH LEAVES	CO-58	< 10.1	
21-JUN-10	HORSERADISH LEAVES	FE-59	< 20.0	
21-JUN-10	HORSERADISH LEAVES	CO-60	< 13.5	
21-JUN-10	HORSERADISH LEAVES	ZN-65	< 25.8	
21-JUN-10	HORSERADISH LEAVES	ZR-NB-95	< 8.9	
21-JUN-10	HORSERADISH LEAVES	I-131	< 25.2	
21-JUN-10	HORSERADISH LEAVES	CS-134	< 12.2	
21-JUN-10	HORSERADISH LEAVES	CS-137	< 14.1	
19-JUL-10	HORSERADISH LEAVES	BE-7	1,164.5 +/- 203.4	Duplicate
19-JUL-10	HORSERADISH LEAVES	BE-7	1,293.1 +/- 218.5	
19-JUL-10	HORSERADISH LEAVES	K-40	6,254.7 +/- 521.9	Duplicate
19-JUL-10	HORSERADISH LEAVES	K-40	7,283.7 +/- 565.4	
19-JUL-10	HORSERADISH LEAVES	MN-54	< 17.7	Duplicate
19-JUL-10	HORSERADISH LEAVES	MN-54	< 17.9	
19-JUL-10	HORSERADISH LEAVES	CO-58	< 16.1	Duplicate
19-JUL-10	HORSERADISH LEAVES	CO-58	< 10.3	

Exposure Pathway - Ingestion
Food/Garden

Location D-2

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)			Duplicate Analysis
19-JUL-10	HORSERADISH LEAVES	FE-59	<		34.0	Duplicate
19-JUL-10	HORSERADISH LEAVES	FE-59	<		34.3	
19-JUL-10	HORSERADISH LEAVES	CO-60	<		16.7	Duplicate
19-JUL-10	HORSERADISH LEAVES	CO-60	<		14.2	
19-JUL-10	HORSERADISH LEAVES	ZN-65	<		50.1	Duplicate
19-JUL-10	HORSERADISH LEAVES	ZN-65	<		28.8	
19-JUL-10	HORSERADISH LEAVES	ZR-NB-95	<		22.1	Duplicate
19-JUL-10	HORSERADISH LEAVES	ZR-NB-95	<		13.2	
19-JUL-10	HORSERADISH LEAVES	I-131	<		39.8	Duplicate
19-JUL-10	HORSERADISH LEAVES	I-131	<		16.1	
19-JUL-10	HORSERADISH LEAVES	CS-134	<		13.4	Duplicate
19-JUL-10	HORSERADISH LEAVES	CS-134	<		15.4	
19-JUL-10	HORSERADISH LEAVES	CS-137	<		14.2	Duplicate
19-JUL-10	HORSERADISH LEAVES	CS-137	<		16.1	
30-AUG-10	HORSERADISH LEAVES	BE-7	520.6	+/-	182.8	
30-AUG-10	HORSERADISH LEAVES	K-40	7,603.9	+/-	541.1	
30-AUG-10	HORSERADISH LEAVES	MN-54	<		13.8	
30-AUG-10	HORSERADISH LEAVES	CO-58	<		16.2	
30-AUG-10	HORSERADISH LEAVES	FE-59	<		23.7	
30-AUG-10	HORSERADISH LEAVES	CO-60	<		15.1	
30-AUG-10	HORSERADISH LEAVES	ZN-65	<		16.1	
30-AUG-10	HORSERADISH LEAVES	ZR-NB-95	<		15.0	
30-AUG-10	HORSERADISH LEAVES	I-131	<		24.3	
30-AUG-10	HORSERADISH LEAVES	CS-134	<		13.7	
30-AUG-10	HORSERADISH LEAVES	CS-137	<		13.9	
27-SEP-10	HORSERADISH LEAVES	BE-7	375.8	+/-	175.6	
27-SEP-10	HORSERADISH LEAVES	K-40	5,112.1	+/-	540.8	
27-SEP-10	HORSERADISH LEAVES	MN-54	<		20.3	
27-SEP-10	HORSERADISH LEAVES	CO-58	<		18.7	
27-SEP-10	HORSERADISH LEAVES	FE-59	<		28.8	
27-SEP-10	HORSERADISH LEAVES	CO-60	<		11.9	
27-SEP-10	HORSERADISH LEAVES	ZN-65	<		22.9	
27-SEP-10	HORSERADISH LEAVES	ZR-NB-95	<		14.9	
27-SEP-10	HORSERADISH LEAVES	I-131	<		29.2	
27-SEP-10	HORSERADISH LEAVES	CS-134	<		19.4	
27-SEP-10	HORSERADISH LEAVES	CS-137	<		18.3	

Exposure Pathway - Ingestion
Food/Garden

Location H-2

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
26-APR-10	HORSERADISH LEAVES	BE-7	917.3 +/- 201.2	
26-APR-10	HORSERADISH LEAVES	K-40	4,411.7 +/- 516.9	
26-APR-10	HORSERADISH LEAVES	MN-54	< 17.3	
26-APR-10	HORSERADISH LEAVES	CO-58	< 19.6	
26-APR-10	HORSERADISH LEAVES	FE-59	< 20.9	
26-APR-10	HORSERADISH LEAVES	CO-60	< 13.6	
26-APR-10	HORSERADISH LEAVES	ZN-65	< 42.3	
26-APR-10	HORSERADISH LEAVES	ZR-NB-95	< 16.8	
26-APR-10	HORSERADISH LEAVES	I-131	< 16.2	
26-APR-10	HORSERADISH LEAVES	CS-134	< 15.5	
26-APR-10	HORSERADISH LEAVES	CS-137	< 23.0	
17-MAY-10	HORSERADISH LEAVES	BE-7	808.1 +/- 228.6	
17-MAY-10	HORSERADISH LEAVES	K-40	3,327.3 +/- 434.4	
17-MAY-10	HORSERADISH LEAVES	MN-54	< 18.1	
17-MAY-10	HORSERADISH LEAVES	CO-58	< 10.9	
17-MAY-10	HORSERADISH LEAVES	FE-59	< 24.5	
17-MAY-10	HORSERADISH LEAVES	CO-60	< 13.1	
17-MAY-10	HORSERADISH LEAVES	ZN-65	< 13.8	
17-MAY-10	HORSERADISH LEAVES	ZR-NB-95	< 13.1	
17-MAY-10	HORSERADISH LEAVES	I-131	< 14.7	
17-MAY-10	HORSERADISH LEAVES	CS-134	< 16.4	
17-MAY-10	HORSERADISH LEAVES	CS-137	< 12.8	
30-AUG-10	HORSERADISH LEAVES	BE-7	559.8 +/- 196.6	
30-AUG-10	HORSERADISH LEAVES	K-40	5,920.9 +/- 637.2	
30-AUG-10	HORSERADISH LEAVES	MN-54	< 20.8	
30-AUG-10	HORSERADISH LEAVES	CO-58	< 15.5	
30-AUG-10	HORSERADISH LEAVES	FE-59	< 44.5	
30-AUG-10	HORSERADISH LEAVES	CO-60	< 17.4	
30-AUG-10	HORSERADISH LEAVES	ZN-65	< 43.0	
30-AUG-10	HORSERADISH LEAVES	ZR-NB-95	< 19.7	
30-AUG-10	HORSERADISH LEAVES	I-131	< 34.3	
30-AUG-10	HORSERADISH LEAVES	CS-134	< 23.3	
30-AUG-10	HORSERADISH LEAVES	CS-137	< 25.1	

Exposure Pathway - Ingestion
Food/Garden

Location N-1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
26-APR-10	HORSERADISH LEAVES	BE-7	532.8 +/- 172.4	
26-APR-10	HORSERADISH LEAVES	K-40	3,307.7 +/- 385.3	
26-APR-10	HORSERADISH LEAVES	MN-54	< 9.8	
26-APR-10	HORSERADISH LEAVES	CO-58	< 9.2	
26-APR-10	HORSERADISH LEAVES	FE-59	< 23.2	
26-APR-10	HORSERADISH LEAVES	CO-60	< 11.7	
26-APR-10	HORSERADISH LEAVES	ZN-65	< 35.6	
26-APR-10	HORSERADISH LEAVES	ZR-NB-95	< 17.7	
26-APR-10	HORSERADISH LEAVES	I-131	< 23.3	
26-APR-10	HORSERADISH LEAVES	CS-134	< 15.3	
26-APR-10	HORSERADISH LEAVES	CS-137	< 17.4	
17-MAY-10	HORSERADISH LEAVES	BE-7	459.8 +/- 116.4	
17-MAY-10	HORSERADISH LEAVES	K-40	2,716.9 +/- 330.2	
17-MAY-10	HORSERADISH LEAVES	MN-54	< 12.2	
17-MAY-10	HORSERADISH LEAVES	CO-58	< 8.1	
17-MAY-10	HORSERADISH LEAVES	FE-59	< 18.8	
17-MAY-10	HORSERADISH LEAVES	CO-60	< 9.2	
17-MAY-10	HORSERADISH LEAVES	ZN-65	< 20.5	
17-MAY-10	HORSERADISH LEAVES	ZR-NB-95	< 13.9	
17-MAY-10	HORSERADISH LEAVES	I-131	< 12.8	
17-MAY-10	HORSERADISH LEAVES	CS-134	< 11.5	
17-MAY-10	HORSERADISH LEAVES	CS-137	< 14.6	
21-JUN-10	HORSERADISH LEAVES	BE-7	468.6 +/- 137.2	
21-JUN-10	HORSERADISH LEAVES	K-40	4,087.6 +/- 378.3	
21-JUN-10	HORSERADISH LEAVES	MN-54	< 11.0	
21-JUN-10	HORSERADISH LEAVES	CO-58	< 8.2	
21-JUN-10	HORSERADISH LEAVES	FE-59	< 22.4	
21-JUN-10	HORSERADISH LEAVES	CO-60	< 9.6	
21-JUN-10	HORSERADISH LEAVES	ZN-65	< 25.7	
21-JUN-10	HORSERADISH LEAVES	ZR-NB-95	< 8.1	
21-JUN-10	HORSERADISH LEAVES	I-131	< 29.1	
21-JUN-10	HORSERADISH LEAVES	CS-134	< 11.8	
21-JUN-10	HORSERADISH LEAVES	CS-137	< 14.6	
19-JUL-10	HORSERADISH LEAVES	BE-7	595.1 +/- 185.1	
19-JUL-10	HORSERADISH LEAVES	K-40	4,414.0 +/- 491.6	
19-JUL-10	HORSERADISH LEAVES	MN-54	< 12.6	
19-JUL-10	HORSERADISH LEAVES	CO-58	< 16.7	
19-JUL-10	HORSERADISH LEAVES	FE-59	< 22.1	
19-JUL-10	HORSERADISH LEAVES	CO-60	< 17.9	
19-JUL-10	HORSERADISH LEAVES	ZN-65	< 37.3	
19-JUL-10	HORSERADISH LEAVES	ZR-NB-95	< 17.5	

Exposure Pathway - Ingestion
Food/Garden

Location N-1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)			Duplicate Analysis
19-JUL-10	HORSERADISH LEAVES	I-131		<	31.6	
19-JUL-10	HORSERADISH LEAVES	CS-134		<	15.7	
19-JUL-10	HORSERADISH LEAVES	CS-137		<	17.9	
30-AUG-10	HORSERADISH LEAVES	BE-7	658.7	+/-	152.2	
30-AUG-10	HORSERADISH LEAVES	K-40	3,658.3	+/-	372.6	
30-AUG-10	HORSERADISH LEAVES	MN-54		<	10.8	
30-AUG-10	HORSERADISH LEAVES	CO-58		<	13.1	
30-AUG-10	HORSERADISH LEAVES	FE-59		<	21.7	
30-AUG-10	HORSERADISH LEAVES	CO-60		<	12.0	
30-AUG-10	HORSERADISH LEAVES	ZN-65		<	26.6	
30-AUG-10	HORSERADISH LEAVES	ZR-NB-95		<	12.4	
30-AUG-10	HORSERADISH LEAVES	I-131		<	27.4	
30-AUG-10	HORSERADISH LEAVES	CS-134		<	10.1	
30-AUG-10	HORSERADISH LEAVES	CS-137		<	14.0	
27-SEP-10	HORSERADISH LEAVES	BE-7	417.9	+/-	154.7	
27-SEP-10	HORSERADISH LEAVES	K-40	5,179.6	+/-	504.0	
27-SEP-10	HORSERADISH LEAVES	MN-54		<	16.9	
27-SEP-10	HORSERADISH LEAVES	CO-58		<	20.7	
27-SEP-10	HORSERADISH LEAVES	FE-59		<	26.1	
27-SEP-10	HORSERADISH LEAVES	CO-60		<	10.7	
27-SEP-10	HORSERADISH LEAVES	ZN-65		<	35.3	
27-SEP-10	HORSERADISH LEAVES	ZR-NB-95		<	17.6	
27-SEP-10	HORSERADISH LEAVES	I-131		<	23.5	
27-SEP-10	HORSERADISH LEAVES	CS-134		<	15.0	
27-SEP-10	HORSERADISH LEAVES	CS-137		<	16.7	

Exposure Pathway - Ingestion
Food/Garden

Location Q-6

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
21-JUN-10	HORSERADISH LEAVES	BE-7	1,852.6 +/- 272.1	Duplicate
21-JUN-10	HORSERADISH LEAVES	BE-7	1,856.4 +/- 246.8	
21-JUN-10	HORSERADISH LEAVES	K-40	6,095.1 +/- 571.7	Duplicate
21-JUN-10	HORSERADISH LEAVES	K-40	6,096.7 +/- 516.3	
21-JUN-10	HORSERADISH LEAVES	MN-54	< 24.5	Duplicate
21-JUN-10	HORSERADISH LEAVES	MN-54	< 11.0	
21-JUN-10	HORSERADISH LEAVES	CO-58	< 19.6	Duplicate
21-JUN-10	HORSERADISH LEAVES	CO-58	< 13.6	
21-JUN-10	HORSERADISH LEAVES	FE-59	< 34.2	Duplicate
21-JUN-10	HORSERADISH LEAVES	FE-59	< 24.0	
21-JUN-10	HORSERADISH LEAVES	CO-60	< 17.6	Duplicate
21-JUN-10	HORSERADISH LEAVES	CO-60	< 13.3	
21-JUN-10	HORSERADISH LEAVES	ZN-65	< 31.6	Duplicate
21-JUN-10	HORSERADISH LEAVES	ZN-65	< 36.9	
21-JUN-10	HORSERADISH LEAVES	ZR-NB-95	< 25.0	Duplicate
21-JUN-10	HORSERADISH LEAVES	ZR-NB-95	< 19.6	
21-JUN-10	HORSERADISH LEAVES	I-131	< 35.5	Duplicate
21-JUN-10	HORSERADISH LEAVES	I-131	< 18.2	
21-JUN-10	HORSERADISH LEAVES	CS-134	< 19.6	Duplicate
21-JUN-10	HORSERADISH LEAVES	CS-134	< 12.4	
21-JUN-10	HORSERADISH LEAVES	CS-137	< 16.7	Duplicate
21-JUN-10	HORSERADISH LEAVES	CS-137	< 14.2	
19-JUL-10	HORSERADISH LEAVES	BE-7	1,666.5 +/- 283.6	
19-JUL-10	HORSERADISH LEAVES	K-40	4,921.4 +/- 568.8	
19-JUL-10	HORSERADISH LEAVES	MN-54	< 21.1	
19-JUL-10	HORSERADISH LEAVES	CO-58	< 23.2	
19-JUL-10	HORSERADISH LEAVES	FE-59	< 46.6	
19-JUL-10	HORSERADISH LEAVES	CO-60	< 15.3	
19-JUL-10	HORSERADISH LEAVES	ZN-65	< 40.4	
19-JUL-10	HORSERADISH LEAVES	ZR-NB-95	< 21.1	
19-JUL-10	HORSERADISH LEAVES	I-131	< 51.4	
19-JUL-10	HORSERADISH LEAVES	CS-134	< 21.2	
19-JUL-10	HORSERADISH LEAVES	CS-137	< 21.4	

Exposure Pathway - Ingestion
Feed and Forage

Location NR-D1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)		Duplicate Analysis
29-SEP-10	IRRIGATED CORN	BE-7	<	34.3	
29-SEP-10	IRRIGATED CORN	K-40	2,670.5 +/-	225.4	
29-SEP-10	IRRIGATED CORN	MN-54	<	5.1	
29-SEP-10	IRRIGATED CORN	CO-58	<	7.4	
29-SEP-10	IRRIGATED CORN	FE-59	<	12.9	
29-SEP-10	IRRIGATED CORN	CO-60	<	4.6	
29-SEP-10	IRRIGATED CORN	ZN-65	<	15.4	
29-SEP-10	IRRIGATED CORN	ZR-NB-95	<	8.8	
29-SEP-10	IRRIGATED CORN	I-131	<	8.2	
29-SEP-10	IRRIGATED CORN	CS-134	<	7.3	
29-SEP-10	IRRIGATED CORN	CS-137	<	8.3	

Exposure Pathway - Ingestion
Feed and Forage

Location NR-D2

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)		Duplicate Analysis
23-SEP-10	IRRIGATED CORN	BE-7	<	41.7	
23-SEP-10	IRRIGATED CORN	K-40	2,871.0 +/-	238.5	
23-SEP-10	IRRIGATED CORN	MN-54	<	7.3	
23-SEP-10	IRRIGATED CORN	CO-58	<	6.9	
23-SEP-10	IRRIGATED CORN	FE-59	<	13.1	
23-SEP-10	IRRIGATED CORN	CO-60	<	6.4	
23-SEP-10	IRRIGATED CORN	ZN-65	<	7.1	
23-SEP-10	IRRIGATED CORN	ZR-NB-95	<	7.2	
23-SEP-10	IRRIGATED CORN	I-131	<	6.8	
23-SEP-10	IRRIGATED CORN	CS-134	<	5.0	
23-SEP-10	IRRIGATED CORN	CS-137	<	7.0	

Exposure Pathway - Ingestion
Feed and Forage

Location NR-U1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)		Duplicate Analysis
13-OCT-10	IRRIGATED SOYBEANS	BE-7	<	78.7	
13-OCT-10	IRRIGATED SOYBEANS	K-40	14,278.0 +/-	568.5	
13-OCT-10	IRRIGATED SOYBEANS	MN-54	<	9.3	
13-OCT-10	IRRIGATED SOYBEANS	CO-58	<	10.9	
13-OCT-10	IRRIGATED SOYBEANS	FE-59	<	23.6	
13-OCT-10	IRRIGATED SOYBEANS	CO-60	<	7.7	
13-OCT-10	IRRIGATED SOYBEANS	ZN-65	<	22.3	
13-OCT-10	IRRIGATED SOYBEANS	ZR-NB-95	<	7.1	
13-OCT-10	IRRIGATED SOYBEANS	I-131	<	15.0	
13-OCT-10	IRRIGATED SOYBEANS	CS-134	<	12.7	
13-OCT-10	IRRIGATED SOYBEANS	CS-137	<	10.9	
13-OCT-10	NON-IRRIGATED CORN	BE-7	<	61.4	
13-OCT-10	NON-IRRIGATED CORN	K-40	2,832.7 +/-	248.1	
13-OCT-10	NON-IRRIGATED CORN	MN-54	<	4.8	
13-OCT-10	NON-IRRIGATED CORN	CO-58	<	8.4	
13-OCT-10	NON-IRRIGATED CORN	FE-59	<	12.2	
13-OCT-10	NON-IRRIGATED CORN	CO-60	<	7.2	
13-OCT-10	NON-IRRIGATED CORN	ZN-65	<	12.7	
13-OCT-10	NON-IRRIGATED CORN	ZR-NB-95	<	8.3	
13-OCT-10	NON-IRRIGATED CORN	I-131	<	16.2	
13-OCT-10	NON-IRRIGATED CORN	CS-134	<	6.9	
13-OCT-10	NON-IRRIGATED CORN	CS-137	<	5.3	

Exposure Pathway - Aquatic
Bottom Sediment

Location DC

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
25-MAY-10	K-40	11,563.0 +/- 1,307.0	
25-MAY-10	MN-54	< 65.5	
25-MAY-10	CO-58	< 74.1	
25-MAY-10	FE-59	< 135.6	
25-MAY-10	CO-60	< 71.8	
25-MAY-10	ZN-65	< 102.2	
25-MAY-10	CS-134	< 63.8	
25-MAY-10	CS-137	< 78.5	
08-NOV-10	K-40	10,003.0 +/- 1,264.0	
08-NOV-10	MN-54	< 55.2	
08-NOV-10	CO-58	< 51.7	
08-NOV-10	FE-59	< 70.0	
08-NOV-10	CO-60	< 59.3	
08-NOV-10	ZN-65	< 88.4	
08-NOV-10	CS-134	< 50.0	
08-NOV-10	CS-137	110.9 +/- 55.7	
08-NOV-10	FE-55	< 6,444.0	

Exposure Pathway - Aquatic
Bottom Sediment

Location JRR

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
25-MAY-10	K-40	5,347.6 +/- 550.9	
25-MAY-10	MN-54	< 25.0	
25-MAY-10	CO-58	< 12.7	
25-MAY-10	FE-59	< 49.6	
25-MAY-10	CO-60	< 15.9	
25-MAY-10	ZN-65	< 40.4	
25-MAY-10	CS-134	< 19.5	
25-MAY-10	CS-137	< 25.1	
08-NOV-10	K-40	13,040.0 +/- 1,501.0	
08-NOV-10	MN-54	< 82.9	
08-NOV-10	CO-58	< 62.5	
08-NOV-10	FE-59	< 121.5	
08-NOV-10	CO-60	< 39.8	
08-NOV-10	ZN-65	< 96.6	
08-NOV-10	CS-134	< 50.0	
08-NOV-10	CS-137	111.7 +/- 58.1	
08-NOV-10	FE-55	< 6,428.0	

Exposure Pathway - Aquatic
Bottom Sediment

Location MUDS

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
02-JUN-10	K-40	9,695.8 +/- 625.8	
02-JUN-10	MN-54	< 23.8	
02-JUN-10	CO-58	< 14.8	
02-JUN-10	FE-59	< 18.4	
02-JUN-10	CO-60	< 20.4	
02-JUN-10	ZN-65	< 32.3	
02-JUN-10	CS-134	< 13.7	
02-JUN-10	CS-137	< 22.3	

Exposure Pathway - Aquatic
Bottom Sediment

Location UHS #1

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-AUG-10	K-40	11,699.0 +/- 672.7	
10-AUG-10	MN-54	< 26.9	
10-AUG-10	CO-58	< 18.1	
10-AUG-10	FE-59	< 22.9	
10-AUG-10	CO-60	< 23.0	
10-AUG-10	ZN-65	< 47.6	
10-AUG-10	CS-134	< 19.5	
10-AUG-10	CS-137	54.1 +/- 29.1	

Exposure Pathway - Aquatic
Bottom Sediment

Location UHS #2

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-AUG-10	K-40	10,870.0 +/- 678.1	
10-AUG-10	MN-54	< 23.2	
10-AUG-10	CO-58	< 23.6	
10-AUG-10	FE-59	< 51.5	
10-AUG-10	CO-60	< 24.7	
10-AUG-10	ZN-65	< 39.8	
10-AUG-10	CS-134	< 18.3	
10-AUG-10	CS-137	39.8 +/- 19.4	

Exposure Pathway - Aquatic
Bottom Sediment

Location UHS #3

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-AUG-10	K-40	13,268.0 +/- 724.0	
10-AUG-10	MN-54	< 26.1	
10-AUG-10	CO-58	< 24.6	
10-AUG-10	FE-59	< 28.5	
10-AUG-10	CO-60	< 31.7	
10-AUG-10	ZN-65	< 44.8	
10-AUG-10	CS-134	< 23.7	
10-AUG-10	CS-137	73.4 +/- 26.7	

Exposure Pathway - Aquatic
Bottom Sediment

Location UHS #4

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-AUG-10	K-40	12,091.0 +/- 1,110.0	Duplicate
10-AUG-10	K-40	13,708.0 +/- 794.8	
10-AUG-10	MN-54	< 41.7	Duplicate
10-AUG-10	MN-54	< 27.5	
10-AUG-10	CO-58	< 36.5	Duplicate
10-AUG-10	CO-58	< 18.6	
10-AUG-10	FE-59	< 74.0	Duplicate
10-AUG-10	FE-59	< 46.3	
10-AUG-10	CO-60	< 40.8	Duplicate
10-AUG-10	CO-60	< 19.7	
10-AUG-10	ZN-65	< 105.3	Duplicate
10-AUG-10	ZN-65	< 49.8	
10-AUG-10	CS-134	< 32.4	Duplicate
10-AUG-10	CS-134	< 9.6	
10-AUG-10	CS-137	94.3 +/- 51.9	Duplicate
10-AUG-10	CS-137	78.8 +/- 33.5	

Exposure Pathway - Aquatic
Bottom Sediment

Location UHS #5

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-AUG-10	K-40	11,852.0 +/- 663.4	
10-AUG-10	MN-54	< 28.1	
10-AUG-10	CO-58	< 22.6	
10-AUG-10	FE-59	< 26.7	
10-AUG-10	CO-60	< 17.8	
10-AUG-10	ZN-65	< 52.8	
10-AUG-10	CS-134	< 17.4	
10-AUG-10	CS-137	54.6 +/- 28.0	

Exposure Pathway - Aquatic
Bottom Sediment

Location UHS #6

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-AUG-10	K-40	12,270.0 +/- 696.4	
10-AUG-10	MN-54	< 26.4	
10-AUG-10	CO-58	< 23.8	
10-AUG-10	FE-59	< 26.9	
10-AUG-10	CO-60	< 23.2	
10-AUG-10	ZN-65	< 36.5	
10-AUG-10	CS-134	< 18.2	
10-AUG-10	CS-137	48.1 +/- 22.3	

Exposure Pathway - Aquatic Vegetation

Location DC-ALT

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)		Duplicate Sample
25-AUG-10	AMERICAN LOTUS	BE-7	691.1 +/-	196.3	
25-AUG-10	AMERICAN LOTUS	K-40	2,448.8 +/-	291.3	
25-AUG-10	AMERICAN LOTUS	MN-54	<	11.6	
25-AUG-10	AMERICAN LOTUS	CO-58	<	13.4	
25-AUG-10	AMERICAN LOTUS	FE-59	<	16.0	
25-AUG-10	AMERICAN LOTUS	CO-60	<	11.1	
25-AUG-10	AMERICAN LOTUS	ZN-65	<	16.6	
25-AUG-10	AMERICAN LOTUS	ZR-NB-95	<	13.4	
25-AUG-10	AMERICAN LOTUS	I-131	<	22.2	
25-AUG-10	AMERICAN LOTUS	CS-134	<	13.6	
25-AUG-10	AMERICAN LOTUS	CS-137	<	17.3	

Exposure Pathway - Aquatic Vegetation

Location EEA

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)			Duplicate Sample
10-AUG-10	WATER PRIMROSE	BE-7	382.6	+/-	154.0	Duplicate
10-AUG-10	WATER PRIMROSE	BE-7	430.6	+/-	165.1	
10-AUG-10	WATER PRIMROSE	K-40	2,651.6	+/-	286.9	Duplicate
10-AUG-10	WATER PRIMROSE	K-40	2,666.6	+/-	381.9	
10-AUG-10	WATER PRIMROSE	MN-54		<	11.8	Duplicate
10-AUG-10	WATER PRIMROSE	MN-54		<	16.3	
10-AUG-10	WATER PRIMROSE	CO-58		<	9.6	Duplicate
10-AUG-10	WATER PRIMROSE	CO-58		<	11.0	
10-AUG-10	WATER PRIMROSE	FE-59		<	18.3	Duplicate
10-AUG-10	WATER PRIMROSE	FE-59		<	30.2	
10-AUG-10	WATER PRIMROSE	CO-60		<	8.6	Duplicate
10-AUG-10	WATER PRIMROSE	CO-60		<	23.0	
10-AUG-10	WATER PRIMROSE	ZN-65		<	21.3	Duplicate
10-AUG-10	WATER PRIMROSE	ZN-65		<	38.3	
10-AUG-10	WATER PRIMROSE	ZR-NB-95		<	10.0	Duplicate
10-AUG-10	WATER PRIMROSE	ZR-NB-95		<	15.3	
10-AUG-10	WATER PRIMROSE	I-131		<	20.9	Duplicate
10-AUG-10	WATER PRIMROSE	I-131		<	20.0	
10-AUG-10	WATER PRIMROSE	CS-134		<	12.7	Duplicate
10-AUG-10	WATER PRIMROSE	CS-134		<	7.3	
10-AUG-10	WATER PRIMROSE	CS-137		<	14.6	Duplicate
10-AUG-10	WATER PRIMROSE	CS-137		<	20.0	

Exposure Pathway - Terrestrial
Soil

Location EEA

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-AUG-10	K-40	9,437.1 +/- 612.2	
10-AUG-10	MN-54	< 25.0	
10-AUG-10	CO-58	< 19.6	
10-AUG-10	FE-59	< 30.1	
10-AUG-10	CO-60	< 6.4	
10-AUG-10	ZN-65	< 41.6	
10-AUG-10	CS-134	< 15.3	
10-AUG-10	CS-137	336.1 +/- 37.8	

Exposure Pathway - Terrestrial
Soil

Location MUDS

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
02-JUN-10	K-40	8,791.4 +/- 1,143.0	
02-JUN-10	MN-54	< 40.5	
02-JUN-10	CO-58	< 53.8	
02-JUN-10	FE-59	< 51.7	
02-JUN-10	CO-60	< 36.9	
02-JUN-10	ZN-65	< 92.6	
02-JUN-10	CS-134	< 50.6	
02-JUN-10	CS-137	< 60.8	

Exposure Pathway - Ingestion
Meat

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
28-JAN-10	ALLIGATOR	K-40	1,899.2 +/- 293.1	
28-JAN-10	ALLIGATOR	MN-54	< 9.3	
28-JAN-10	ALLIGATOR	CO-58	< 9.8	
28-JAN-10	ALLIGATOR	FE-59	< 20.6	
28-JAN-10	ALLIGATOR	CO-60	< 13.8	
28-JAN-10	ALLIGATOR	ZN-65	< 22.2	
28-JAN-10	ALLIGATOR	CS-134	< 10.6	
28-JAN-10	ALLIGATOR	CS-137	< 16.7	
28-JAN-10	ALLIGATOR	H-3	7,737.0 +/- 219.0	

Exposure Pathway - Ingestion
Meat

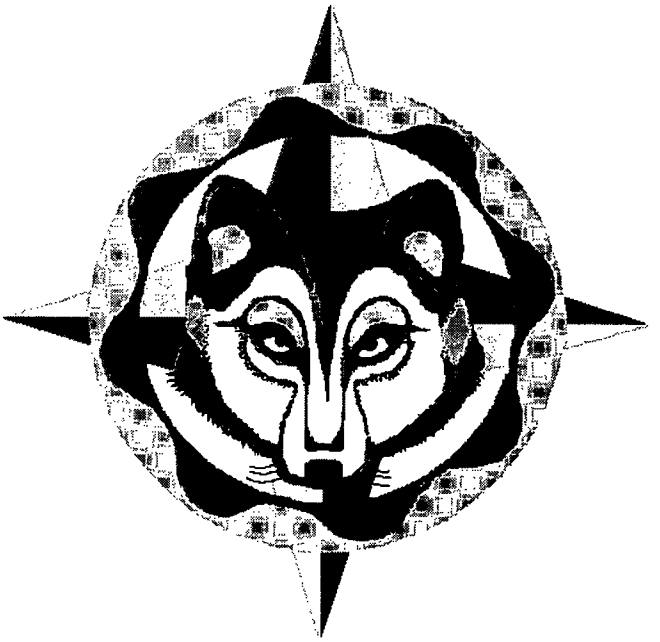
Location R2.5

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)		Duplicate Analysis
10-DEC-10	DEER	K-40	2,793.3 +/-	347.8	
10-DEC-10	DEER	MN-54	<	12.7	
10-DEC-10	DEER	CO-58	<	8.5	
10-DEC-10	DEER	FE-59	<	17.0	
10-DEC-10	DEER	CO-60	<	14.5	
10-DEC-10	DEER	ZN-65	<	22.0	
10-DEC-10	DEER	CS-134	<	11.7	
10-DEC-10	DEER	CS-137	<	12.6	
10-DEC-10	DEER	H-3	626.0 +/-	92.0	

WOLF CREEK GENERATING STATION

2010 LAND USE CENSUS REPORT

Revision 1



Prepared by:	Teresa L. Rice	12-16-2010
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Peer Review:	Ralph L Logsdon	12-16-2010
	Ralph L. Logsdon	Date
Approved by:	Robert Hammond	12-16-2010
	Robert A. Hammond	Date

EXECUTIVE SUMMARY

The 2010 Land Use Census Report has been revised to incorporate the re-calculated D/Qs for the broadleaf vegetation locations using the data from Engineering Evaluation SA-10-004.

The annual Land Use Census of rural residents within five miles of the Wolf Creek Generating Station (WCGS) has been completed for 2010 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.

No program changes are necessary regarding the broadleaf vegetation sample locations. The broadleaf vegetation locations that had the highest calculated annual average D/Q rankings are Q2.35-MILA1619, N2.38-RODR9, and L2.39-NARD1309, respectively. Samples are currently being obtained from locations Q2.35-MILA1619 and N2.38-RODR9.

BACKGROUND

Section 5.2, Attachment A, of the ODCM 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" and "the results of the Land Use Census shall be included in the Annual Radiological Environmental Operating Report."

Table 5-1, Attachment A, of the ODCM (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 the ODCM (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

Two hundred fourteen surveys were mailed to the rural residents living within five miles of WCGS. A follow-up survey was sent to residents who did not respond. The survey excluded the residents of New Strawn, Burlington, and a trailer park north of 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 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

NOTE: A Global Positioning System was used to verify residence distances and sectors.

Three changes were noted for the nearest occupied residences in each sector. Those changes were in sectors E, F, and R.

Five location changes were noted for the nearest garden producing broadleaf vegetation. These changes are identified in Table 3.

There were no changes regarding milk sample locations. Again, no locations were identified that routinely milked animals for human consumption.

TABLE 1

2010 Land Use Census Data

Location of Nearest:

Sector	Residence	Milking Animals	Broadleaf Garden
A	A2.60-17TE1520	None	None
B	B3.53-QURD1755	None	None
C	C1.92-16RD1655	None	C4.89-18RD1859
D	D2.03-QULA1571	None	D3.00-16RD1829
E	E1.77-QULA1485	None	None
F	F2.28-14RD1785	None	F2.44-RERD1391
G	G3.03-13RD1820	None	G3.77-12RD1831
H	H3.09-12RD1711	None	H3.30-QURD1175
J	J3.70-11RD1540	None	J3.90-11RD1531
K	K2.70-12LA1439	None	None
L	L2.10-NARD1339	None	L2.39-NARD1309
M	M2.34-14RD1330	None	M3.10-13LA1290
N	N1.71-NARD1441	None	N2.38-RODR9
P	P2.76-HW751534	None	P2.76-HW751534
Q	Q2.35-MILA1619	None	Q2.35-MILA1619
R	R4.43-NARD1891	None	None

Identifiers are based upon the following protocol:

EXAMPLE: A1.4-16RD1525

"A" = Sector A

"1.4" = 1.4 miles from the reactor

"16RD1525" = address

TABLE 2

SECTOR	2009 NEAREST RESIDENCE	2010 NEAREST RESIDENCE
A	A2.60-17TE1520	A2.60-17TE1520
B	B3.53-QURD1755	B3.53-QURD1755
C	C1.92-16RD1655	C1.92-16RD1655
D	D2.03-QULA1571	D2.03-QULA1571
E	E1.78-QULA1451	E1.77-QULA1485
F	F2.39-14RD1802	F2.28-14RD1785
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	M2.34-14RD1330	M2.34-14RD1330
N	N1.71-NARD1441	N1.71-NARD1441
P	P2.76-HW751534	P2.76-HW751534
Q	Q2.35-MILA1619	Q2.35-MILA1619
R	R2.08-NALN1650	R4.43-NARD1891

NOTE: Entries underlined indicate changes from the 2009 Land Use Census.

Locations are identified based upon the following protocol:
EXAMPLE: A1.4-16RD1525

First letter is based upon sector, thus "A" designates this residence is in sector A.

The number immediately following the first letter designates the distance (in miles) from the reactor.

The characters following the dash represent a unique identifier based upon location address.

The example is in sector A, 1.4 miles from the reactor, at 1525 16th Road.

TABLE 3

2010 Land Use Census Milk and Garden Data

SECTOR	2009 MILKING ANIMALS	2010 MILKING ANIMALS	2009 CLOSEST GARDEN PRODUCING BROADLEAF VEGETATION	2010 CLOSEST GARDEN PRODUCING BROADLEAF VEGETATION
A	None	None	A4.91-OXRD1940	None
B	None	None	None	None
C	None	None	C3.58-RERD1675	C4.89-18RD1859
D	None	None	D3.00-16RD1829	D3.00-16RD1829
E	None	None	E4.40-TRRD1551	None
F	None	None	F2.39-14RD1802	F2.44-RERD1391
G	None	None	G3.77-12RD1831	G3.77-12RD1831
H	None	None	H3.30-QURD1175	H3.30-QURD1175
J	None	None	J3.90-11RD1531	J3.90-11RD1531
K	None	None	None	None
L	None	None	L2.39-NARD1309	L2.39-NARD1309
M	None	None	M2.34-14RD1330	M3.10-13LA1290
N	None	None	N2.38-RODR9	N2.38-RODR9
P	None	None	P2.76-HW751534	P2.76-HW751534
Q	None	None	Q2.35-MILA1619	Q2.35-MILA1619
R	None	None	None	None

NOTE: Underlined entries indicate changes from the 2009 Land Use Census.

Locations are identified based upon the following protocol:
EXAMPLE: A1.4-16RD1525

First letter is based upon sector, thus "A" designates this residence is in sector A.

The number immediately following the first letter designates the distance (in miles) from the reactor.

The characters following the dash represent a unique identifier based upon location address.

The example is in sector A, 1.4 miles from the reactor, at 1525 16th Road.

TABLE 4

Information Used for D/Q Calculations

FROM LAND USE CENSUS			FROM SA-10-004 Eval.					
	DIST	CALC	NEAR	NEAR	FAR	FAR		SECTOR
SECTOR	(MI)	(METERS)	DIST	D / Q	DIST	D / Q	CALC	RANKING
A								
B								
C	4.89	7870	7000	1.66E-10	8000	1.34E-10	1.38E-10	11
D	3.00	4828	4000	2.67E-10	5000	1.82E-10	1.97E-10	10
E								
F	2.44	3927	3000	7.22E-10	4000	4.33E-10	4.54E-10	6
G	3.77	6067	6000	3.57E-10	7000	2.65E-10	3.51E-10	9
H	3.30	5311	5000	7.01E-10	6000	5.16E-10	6.43E-10	4
J	3.90	6276	6000	4.33E-10	7000	3.22E-10	4.02E-10	7
K								
L	2.39	3846	3000	1.04E-09	4000	6.24E-10	6.88E-10	3
M	3.10	4989	4000	5.73E-10	5000	3.90E-10	3.92E-10	8
N	2.38	3830	3000	1.25E-09	4000	7.51E-10	8.36E-10	2
P	2.76	4442	4000	6.88E-10	5000	4.68E-10	5.91E-10	5
Q	2.35	3782	3000	1.53E-09	4000	9.17E-10	1.05E-09	1
R								

Originated by: Teresa L. Rice Date: 12-16-2010

Verified by: Ralph L Logsdon Date: 12-16-2010