WOLF CREEK
NUCLEAR OPERATING CORPORATION

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Manager Regulatory Affairs

April 21 , 2009

RA 09-0059

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

Subject: Docket No. 50-482: 2008 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, 2008, through December 31, 2008.

No commitments are identified in this correspondence. If you have any questions concerning this matter, please contact me at (620) 364-4117, or Ms. Diane Hooper at (620) 364-4041.

Sincerely,

Richard D. Flannigan

RDF/rlt

Enclosure: 2008 Annual Radiological Environmental Operating Report

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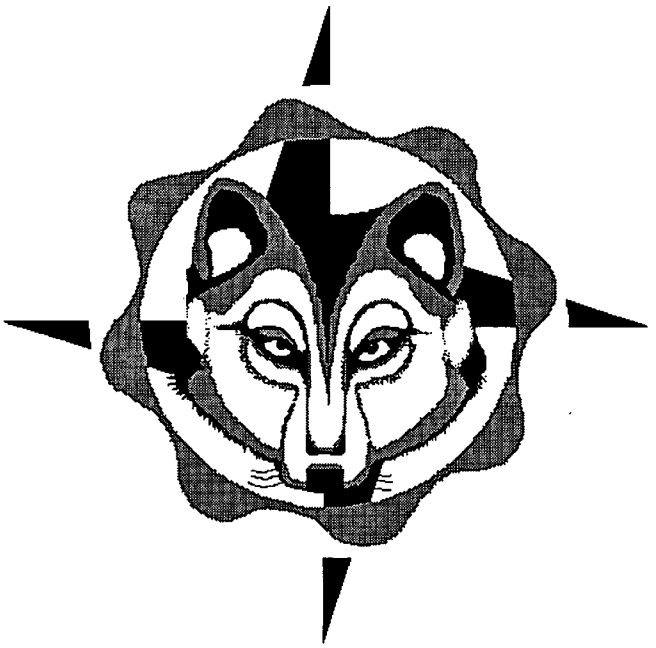
IE25
NRR

WOLF CREEK NUCLEAR OPERATING CORPORATION

WOLF CREEK GENERATING STATION

2008 ANNUAL RADIOLOGICAL

ENVIRONMENTAL OPERATING REPORT



April 15, 2009

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EXECUTIVE SUMMARY

Plant-related activation, corrosion or fission products were not detected during 2008 in airborne particulate and radioiodine filters, ground water, drinking water, broadleaf vegetation, crops, terrestrial vegetation, aquatic vegetation, or soil samples. Activation, corrosion or fission products attributable to plant operation were detected during 2008 in surface water, shoreline sediment, fish, deer, and bottom sediment 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 2008 Annual Radiological Environmental Operating Report for Wolf Creek Generating Station (WCGS) covers the period from January 1 through December 31, 2008. 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 lists sampling pathways and frequencies of sampling and 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 analysis.

Gross beta analysis of the air particulate filters was 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 in groups of five 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 seven 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), control location at Harris (location 48) 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 locations are 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. 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, formally 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 analysis was performed on the shoreline sediment samples. Shoreline sediment sample locations were the Coffey County Lake discharge cove (DC) indicator location and at the control location (JRR).

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 analysis was 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 three gardens. Two indicator (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 one indicator location (NR-D1) 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. Due to the wet conditions, the crops were not irrigated in 2008. 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.

Shoreline sediment was collected at SC (Stringtown Cemetery). Gamma isotopic analysis was performed on the shoreline sediment sample. The indicator sample was collected as part of a cooperative sampling effort with the Kansas Department of Health and Environment (KDHE). The sample location is identified on Figure 3.

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) and the control location (JRR). Gamma isotopic analysis was performed on the bottom sediment samples. 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.

Aquatic vegetation was collected from indicator locations DC ALT, EEA and MUDS. Gamma isotopic analysis was performed on the aquatic vegetation samples. These samples were collected as part of a cooperative sampling effort with the KDHE. The sample locations are identified on Figure 3.

Terrestrial vegetation was sampled from indicator locations EEA and MUDS. Gamma isotopic analysis was performed on the terrestrial vegetation samples. These samples were collected as part of a cooperative sampling effort with the KDHE. The sample locations are identified on Figure 4.

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

A road-killed deer was sampled from indicator location A1.6. Gamma isotopic analysis and tritium analysis was performed. This sample was collected as part of a cooperative sampling effort with the KDHE. The sample location is identified on Figure 4.

II. DISCUSSION OF RESULTS

Analysis results for 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.

Chart 1 reflects that during the 04/30/08 – 05/08/08 sample period, the air particulate filter at location 18 was shredded which resulted in a lower than normal gross beta result (Condition Report 2008-002214).

Chart 1 also reflects higher than normal gross beta results for control location 48 during the 06/25/2008 – 07/02/2008 sample period (Condition Report 2008-003143) and control location

53 during the 12/26/2008 – 12/31/2008 sample period (Condition Report 2008-006136). Both were attributed to low sample volumes due to equipment malfunction.

The gross beta results of 2008 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 2008 weekly gross beta analyses range for indicator locations was 0.005 to 0.061 pCi/m^3, which was lower than the 1983 and 1984 pre-operational range. Additionally, the annual mean for indicator locations for 2008 (0.031 pCi/m^3) was slightly 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 2008 (0.031 pCi/m^3) was slightly lower than the annual mean of the control locations (0.033 pCi/m^3). The indicator location with the highest gross beta annual mean was location 37 (0.032 pCi/m^3), which was also slightly lower than the annual mean of the control locations (0.033 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 2008, the range for Be-7 detected activity was 0.062 to 0.150 pCi/m^3 for indicator locations, and the annual mean for indicator locations was 0.091 pCi/m^3.

The control locations annual mean for Be-7 detected activity (0.087 pCi/m^3) was similar to the indicator locations annual mean (0.091 pCi/m^3).

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

No effects of plant operation were seen via the airborne pathway for the year, 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 standard 90-day quarter.

The annual mean of all indicator locations in 2008 was 0.115 mR/day and the annual mean for the control locations was 0.124 mR/day. For pre-operational comparison, in 1981, the annual mean of all indicator locations was 0.21 mR/day and annual mean for the control locations was 0.19 mR/day.

The indicator location with the highest annual mean was 47 (0.174 mR/day). The close proximity of location 47 to the Radwaste Building is likely the reason direct radiation levels are higher at this location.

Chart 3 displays how closely the indicator and control location OSL dosimeter results are for 2008.

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 2008. 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 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.

(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 (3.4 pCi/L) was similar when compared to the annual mean of the control location gross beta activity (3.3 pCi/L). The 2008 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.

Activity due to plant operation was not evident in drinking water samples during 2008 and no unusual trends were noted.

(4) Shoreline Sediment

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

Co-60 activity (60.9 pCi/kg, dry) was detected in one shoreline sediment sampled obtained from the DC indicator location. Co-60 activity was attributable to plant operation and has been identified in plant effluents. Co-60 activity was not detected in pre-operational radiological environmental monitoring and was not detected in samples collected from control location JRR during 2008.

Cs-137 activity was also detected in one shoreline sediment sample obtained from the DC indicator location (160.9 +/- 57.2 pCi/kg, dry) and in one sample obtained from the JRR control location (131.1 +/- 41.6 pCi/kg, dry). The detected Cs-137 activity at the DC indicator location was likely due to fallout since the measured differences between the DC and JRR values are insignificant.

ODCM required lower limits of detection were met. 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.

During 2008, fish were also analyzed for tritium. All fish samples taken from Coffey County Lake had tritium activity detected (7,828.5 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 for 2008 (11,140 pCi/kg), would receive a committed effective dose equivalent of 0.015 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. Activity attributable to plant operation was not detected.

(4) Crop Samples

Gamma analysis detected naturally occurring K-40 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. The ODCM required lower limits of detection were met and no unusual trends were noted.

E. Additional Samples Collected (not required by ODCM)

(1) Shoreline Sediment

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

Cs-137 activity was also detected in one shoreline sediment sample obtained from the SC indicator location (98.7 +/- 30.6 pCi/kg, dry) and in one sample obtained from the JRR control location (131.1 +/- 41.6 pCi/kg, dry). The detected Cs-137 activity at the SC indicator location was likely due to fallout since the measured concentration was lower than the JRR control location.

No unusual trends were noted.

(2) 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.

Co-60 activity (127.4 and 95.6 pCi/kg) was detected in two of the indicator samples obtained from the Coffey County Lake discharge cove. Co-60 activity was attributable to plant operation and has been identified in plant effluents. Co-60 activity was not detected in pre-operational radiological environmental monitoring and was not detected in samples collected from control location JRR during 2008. Chart 7 plots the Co-60 detected activity from the discharge cove and reflects a decreasing trend. This downward trend is due to improvements made in the process system.

Cs-137 activity (range of 70.2 to 216.5 pCi/kg) was detected in six of the seven indicator location samples obtained from the Coffey County Lake discharge cove. A portion of this activity is due to fallout and a portion of this activity is likely plant-related since Cs-134 activity has been detected in the past. Cs-137 activity was detected in pre-operational samples, and the results for 2008 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 42 to 511 pCi/kg.) Cs-137 activity has been identified in plant effluents. Cs-137 activity (120.7 pCi/kg) was also detected in the control location (JRR) bottom sediment samples.

Cs-137 activity (59.6 and 63.1 pCi/kg) was also detected in two indicator location samples obtained from the Environmental Education Area (EEA). Since the detected Cs-137 activity

was lower than the detected Cs-137 activity measured at the JRR control location, this activity was likely due to fallout and not attributed to plant operation.

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 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 samples collected in 2008. Be-7 and K-40 activity were also detected during pre-operational monitoring.

Cs-137 activity (34.8 +/- 19.5 pCi/kg) was detected in a Water Plantain sample obtained from the EEA indicator sample location. This Cs-137 activity was likely due to fallout and not attributed to plant operation since Cs-137 activity is routinely detected in JRR control location bottom and shoreline sediment samples.

No other radionuclides were detected in aquatic vegetation samples and no unusual trends were noted.

(4) Terrestrial Vegetation

Naturally occurring Be-7 and K-40 activity were detected in terrestrial vegetation indicator location samples collected in 2008. No other radionuclides were detected. No unusual trends were identified.

(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 (126.2 and 249.5 pCi/kg) was also detected in both of the indicator location soil samples. 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 149 to 1,265 pCi/kg. The range of the 2008 detected Cs-137 activity in soil is lower than the decay corrected pre-operational range.

No unusual trends were identified.

(6) Deer

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

This deer sample was also analyzed for tritium. The detected tritium activity (243 pCi/kg, wet) was attributable to plant operation.

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

III. PROGRAM REVISIONS/CHANGES

In 2008, WCGS changed from Panasonic UD-814 thermoluminescent dosimeters (TLDs) to optically stimulated luminescence (OSL) dosimeters to measure direct radiation. Change was made after a field test comparison was performed. The evaluation for this change was documented in Quick Hit 1060.

Due to a change in the manufacturing process, the brand/type of air particulate filters was changed during 2008 (Condition Report 2008-002214). On May 15th, 2008, WCGS started using FP47M glass fiber filters.

During December of 2008, the air sample control location was changed from #48 to the new location #53. Change was made after a field test comparison was performed. Change was made to improve air sample control location reliability.

Broadleaf vegetation sample control location D-1 was removed from the REMP since the property has changed hands and the new occupants do not maintain a garden.

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
48	02/13/08 – 02/20/08	88%/~150	Equipment Malfunction/ Condition Report 2008-000574 Due to small sample volume, the LLD for I-131 was not obtained.
2	02/13/08 – 02/20/08	83%~140	Equipment Malfunction/ Condition Report 2008-000575
48	04/16/08 – 04/23/08	82%/~138	Equipment Malfunction/ Condition Report 2008-002128
48	06/25/08 – 07/02/08	74%/~123	Equipment Malfunction/ Condition Report 2008-003143
48	07/16/08 – 07/23/08	7%/~13	Equipment Malfunction/ Condition Report 2008-003143
48	08/13/08 - 08/20/08	99%/~163	Equipment Malfunction/ Condition Report 2008-004149
53	12/26/08 – 12/31/08	79%/~94	Power Outage then Equipment Malfunction Condition Report 2008-006136

Drinking Water Samples

Drinking water was not collected at Iola during the 02-07-08 to 03-05-08 sample period due to equipment malfunction. A grab sample was obtained on 03-05-2008. Condition Report 2008-000747 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 2008, 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 0.191 mRem for 2008.

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 (13,137 pCi/L), would receive a committed effective dose equivalent of 0.600 mRem per year. For an adult eating 21 kg of fish per year from Coffey County Lake, using the average tritium activity (7,828.5 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 0.610 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

2008 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 48 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 48 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 location C-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
	48	14.7	ENE	D
	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
	JRR	3.6	W	N
	SC	0.8	NNW	R
Fish	CCL	0.6	WNW	P
	JRR	3.7	W	N
Food/Garden	C-2	1.9	NE	C
	D-2	14.8	ENE	D
	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
	EEA	3.0	NNW	R
	JRR	3.7	W	N
	MUDS	1.5	WNW	P
Aquatic Vegetation	DC ALT	1.5	NW	Q
	EEA	3.0	NNW	R
	MUDS	1.5	WNW	P
Terrestrial Vegetation	EEA	3.0	NNW	R
	MUDS	1.5	WNW	P
Soil	EEA	3.0	NNW	R
	MUDS	1.5	WNW	P
Deer	A1.6	1.6	N	A

TABLE 3
OSL Dosimeter Results
(mR/90-day qtr.)

Location	Qtr. 1 90-Day Avg.	Qtr. 2 90-Day Avg.	Qtr. 3 90-Day Avg.	Qtr. 4 90-Day Avg.	Total Annual Exposure (mR)
1	12.4	12.8	10.9	11.6	47.6
2	6.5	8.7	9.4	12.5	37.1
4	9.5	10.0	7.6	10.4	37.4
5	7.1	8.1	7.1	9.3	31.6
7	9.5	10.2	9.2	10.0	38.8
8	10.6	12.6	11.0	13.2	47.5
9	9.5	10.7	9.6	11.0	40.8
11	10.6	8.2	10.1	11.0	40.0
12	12.4	11.6	11.1	10.4	45.5
13	13.0	11.1	13.8	11.0	48.9
14	14.2	11.6	8.8	12.0	46.7
15	11.2	12.1	10.2	11.5	45.0
16	11.2	9.2	10.2	13.6	44.3
17	11.8	9.7	10.1	10.0	41.6
18	11.2	10.2	9.4	7.6	38.4
19	9.6	10.9	10.7	14.3	45.5
20	12.0	12.3	11.2	13.7	49.2
22	12.6	10.4	14.0	14.8	51.8
23	9.0	10.9	10.3	12.1	42.3
24	10.8	6.7	9.8	12.1	39.3
25	5.9	6.6	6.2	7.2	26.0
26	8.9	9.0	8.5	11.0	37.4
27	12.6	10.0	8.4	12.1	43.1
29	4.8	7.6	5.2	14.3	31.9
30	10.1	10.0	8.5	12.6	41.1
32	8.9	9.7	7.1	11.8	37.5
34	10.7	13.1	7.0	12.7	43.4
35	12.4	10.6	8.8	14.3	46.2
36	10.0	12.6	10.7	11.0	44.3
37	9.5	7.3	8.0	8.8	33.5
38	12.4	12.1	12.5	18.1	55.0
39	8.9	7.8	12.5	10.9	40.1
41	8.3	11.4	5.8	12.1	37.5
42	0.9	6.2	3.4	3.4	13.9
43	7.7	5.2	3.4	5.6	21.9
44	10.6	9.2	11.2	8.8	39.8
46	9.0	10.4	10.8	11.0	41.2
47	11.2	22.3	18.3	10.9	62.8
48	11.1	13.2	8.4	9.8	42.5
49	11.7	11.8	10.7	15.0	49.2
50	13.6	12.1	10.2	16.9	52.8
51	9.0	10.9	7.5	7.2	34.7
52	10.2	11.4	7.5	13.2	42.3
53				17.7	17.7

FIGURE 1

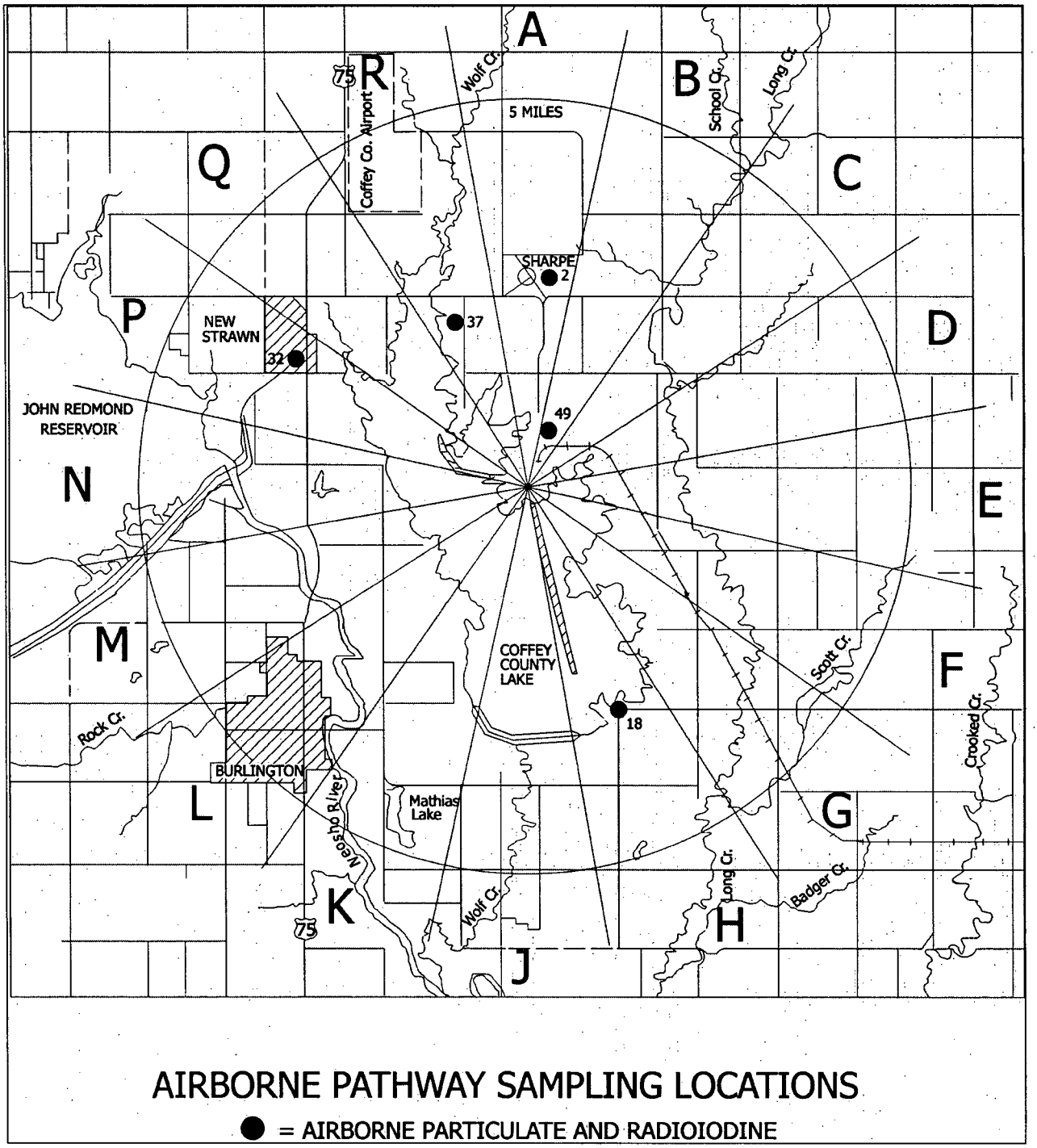
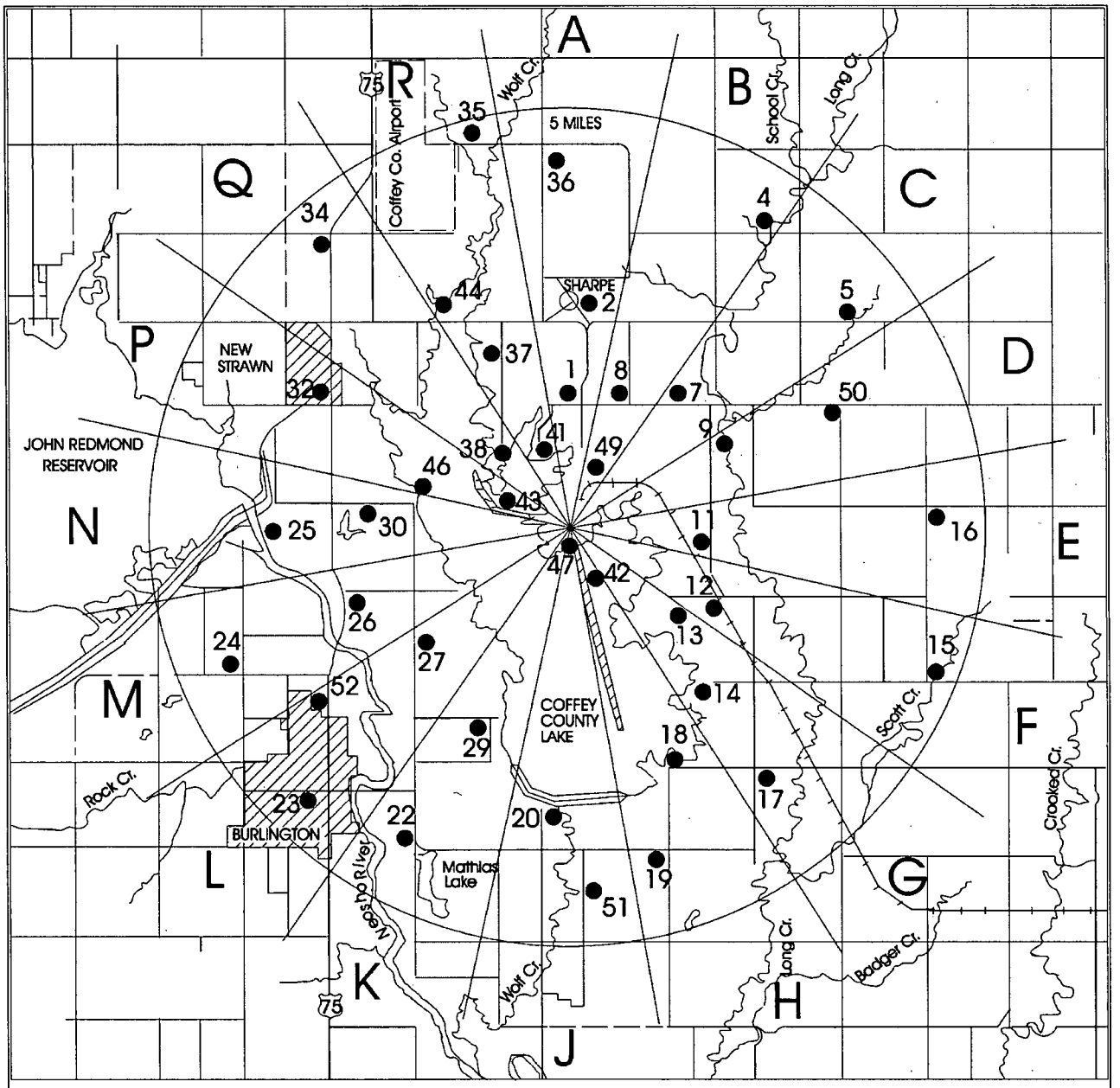

A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
5 MILES
Wolf Cr.
School Cr.
Long Cr.
Coffey Co. Airport
75
SHARPE
2
37
NEW STRAWN
32
JOHN REDMOND RESERVOIR
49
COFFEY COUNTY LAKE
18
Scott Cr.
Crooked Cr.
Rock Cr.
BURLINGTON
Neosho River
Mathias Lake
Badger Cr.
AIRBORNE PATHWAY SAMPLING LOCATIONS
● = AIRBORNE PARTICULATE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

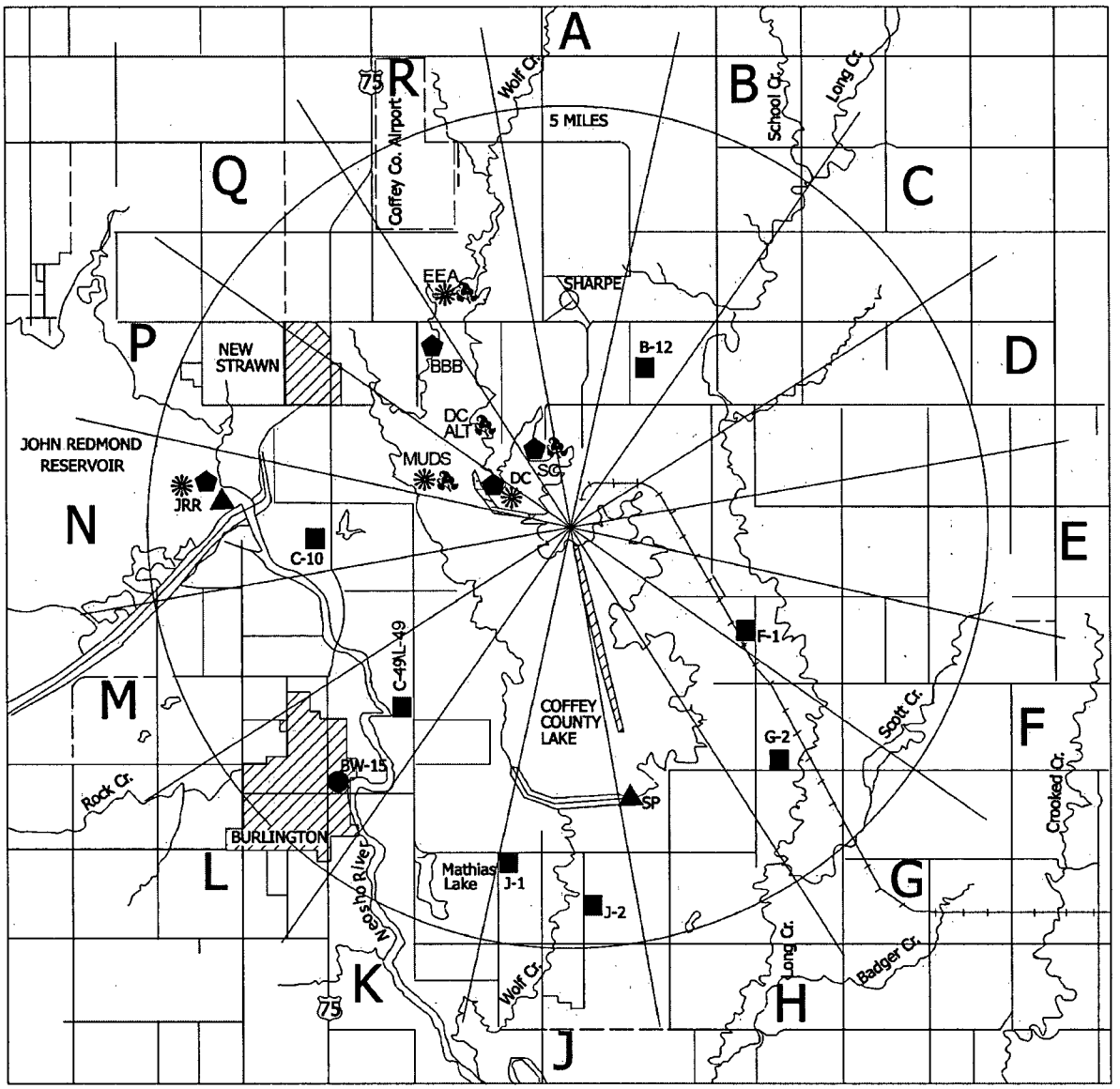
FIGURE 2



DIRECT RADIATION PATHWAY SAMPLING LOCATIONS

● = DOSIMETER LOCATIONS

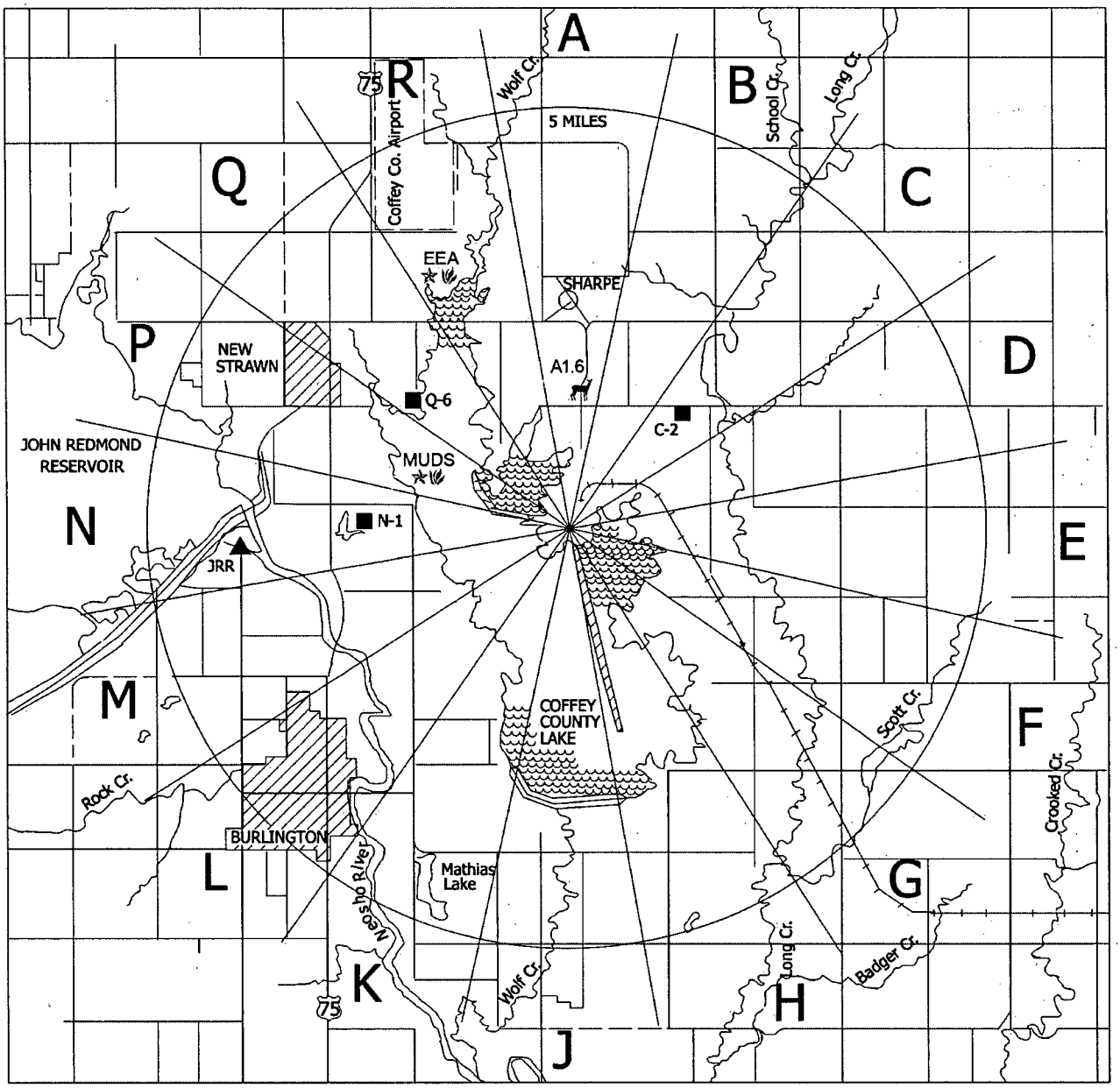
FIGURE 3



WATERBORNE PATHWAY SAMPLING LOCATIONS

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

FIGURE 4



INGESTION PATHWAY SAMPLING LOCATIONS

▲ = FISH (JRR)
= FISH (CCL)
■ = BROADLEAF VEGETATION
= TERRESTRIAL VEGETATION
= SOIL
= DEER

FIGURE 5

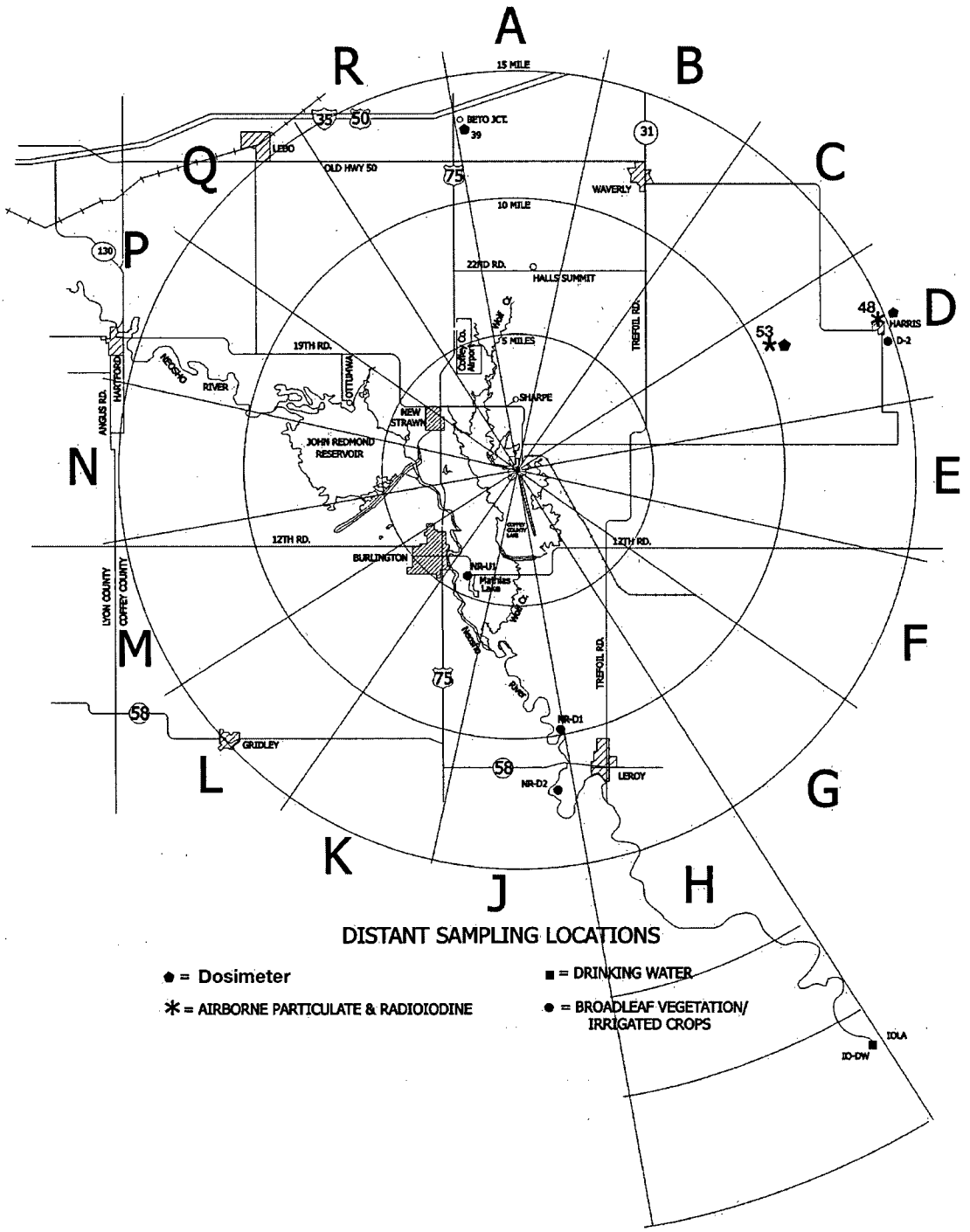

A
B
C
D
E
F
G
H
J
K
L
M
N
P
Q
R
15 MILE
10 MILE
5 MILES
BETO JCT.
LEBO
OLD HWY 50
WAVERLY
HALLS SUMMIT
22ND RD.
19TH RD.
12TH RD.
HARRIS
D-2
SHARPE
NEW STRAWN
JOHN REDMOND RESERVOIR
BURLINGTON
NR-U1
NR-D1
NR-D2
GRIDLEY
LEROY
HARTFORD
ANGUS RD.
LYON COUNTY
COFFEY COUNTY
TREFOIL RD.
IOLA
IO-DW
DISTANT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

CHART 1

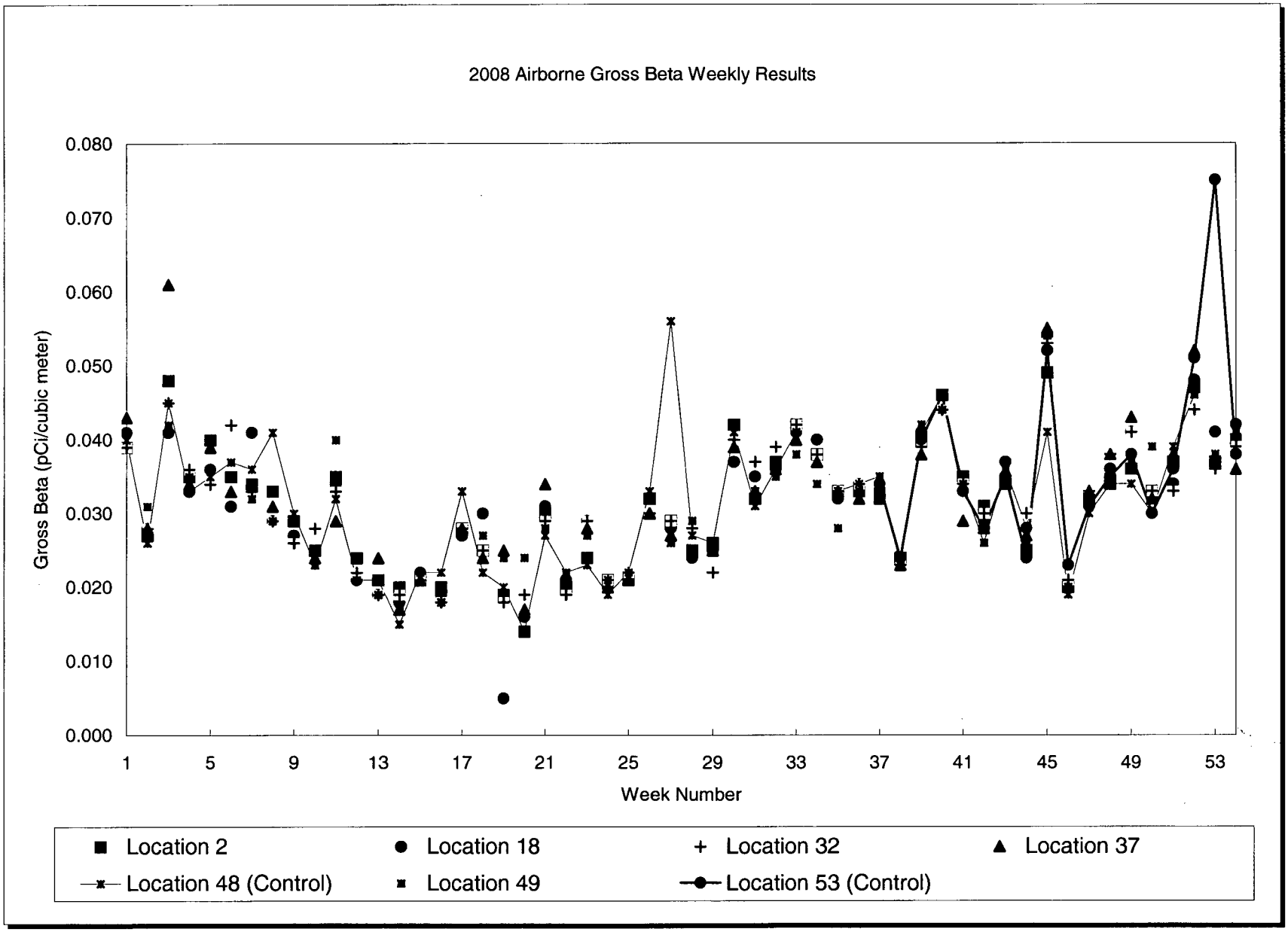

2008 Airborne Gross Beta Weekly Results
Gross Beta (pCi/cubic meter)
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
1
5
9
13
17
21
25
29
33
37
41
45
49
53
Week Number
Location 2
Location 18
Location 32
Location 37
Location 48 (Control)
Location 49
Location 53 (Control)

CHART 2

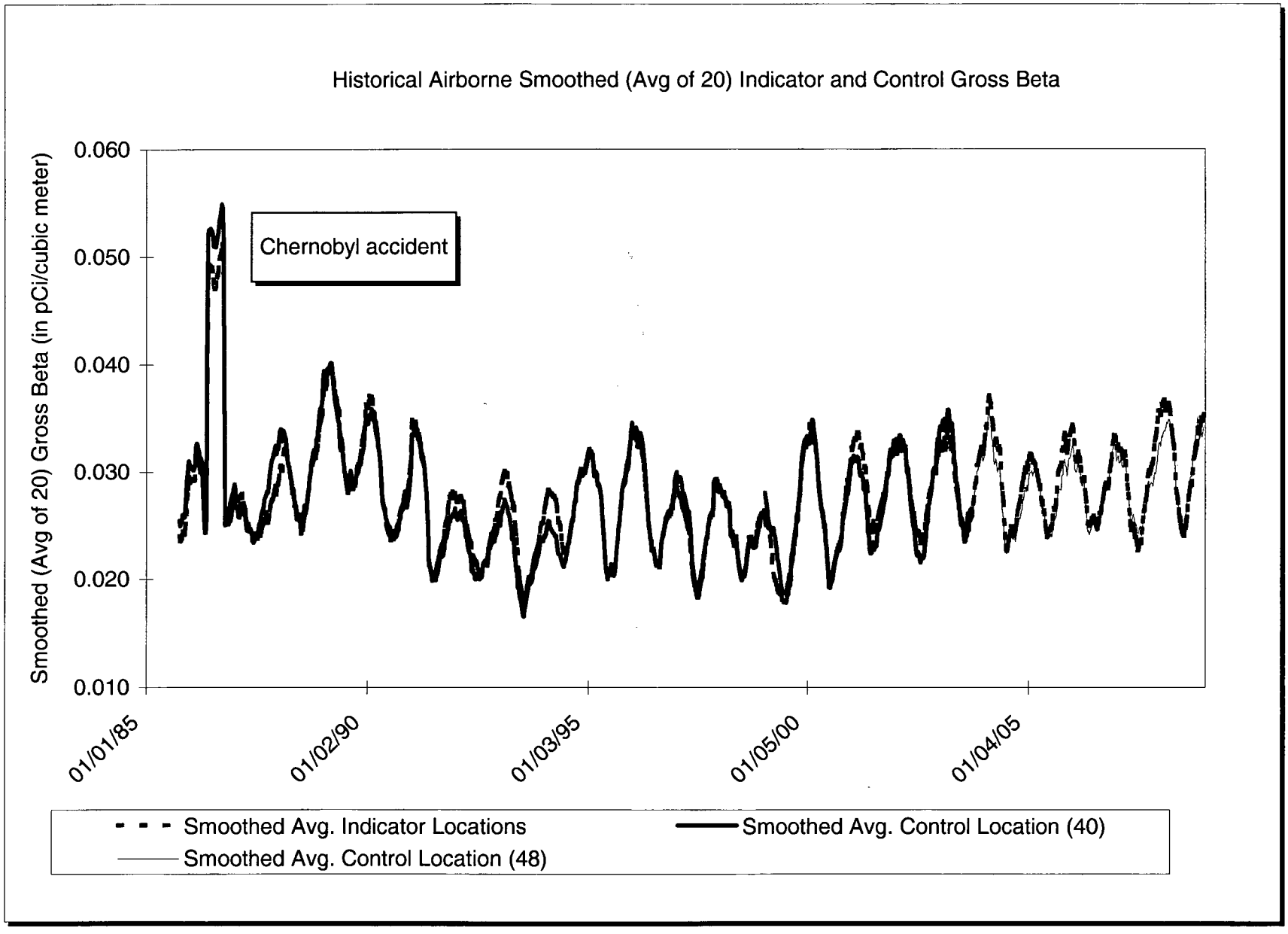

Historical Airborne Smoothed (Avg of 20) Indicator and Control Gross Beta
Smoothed (Avg of 20) Gross Beta (in pCi/cubic meter)
0.060
0.050
0.040
0.030
0.020
0.010
Chernobyl accident
01/01/85
01/02/90
01/03/95
01/05/00
01/04/05
Smoothed Avg. Indicator Locations
Smoothed Avg. Control Location (40)
Smoothed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

CHART 3

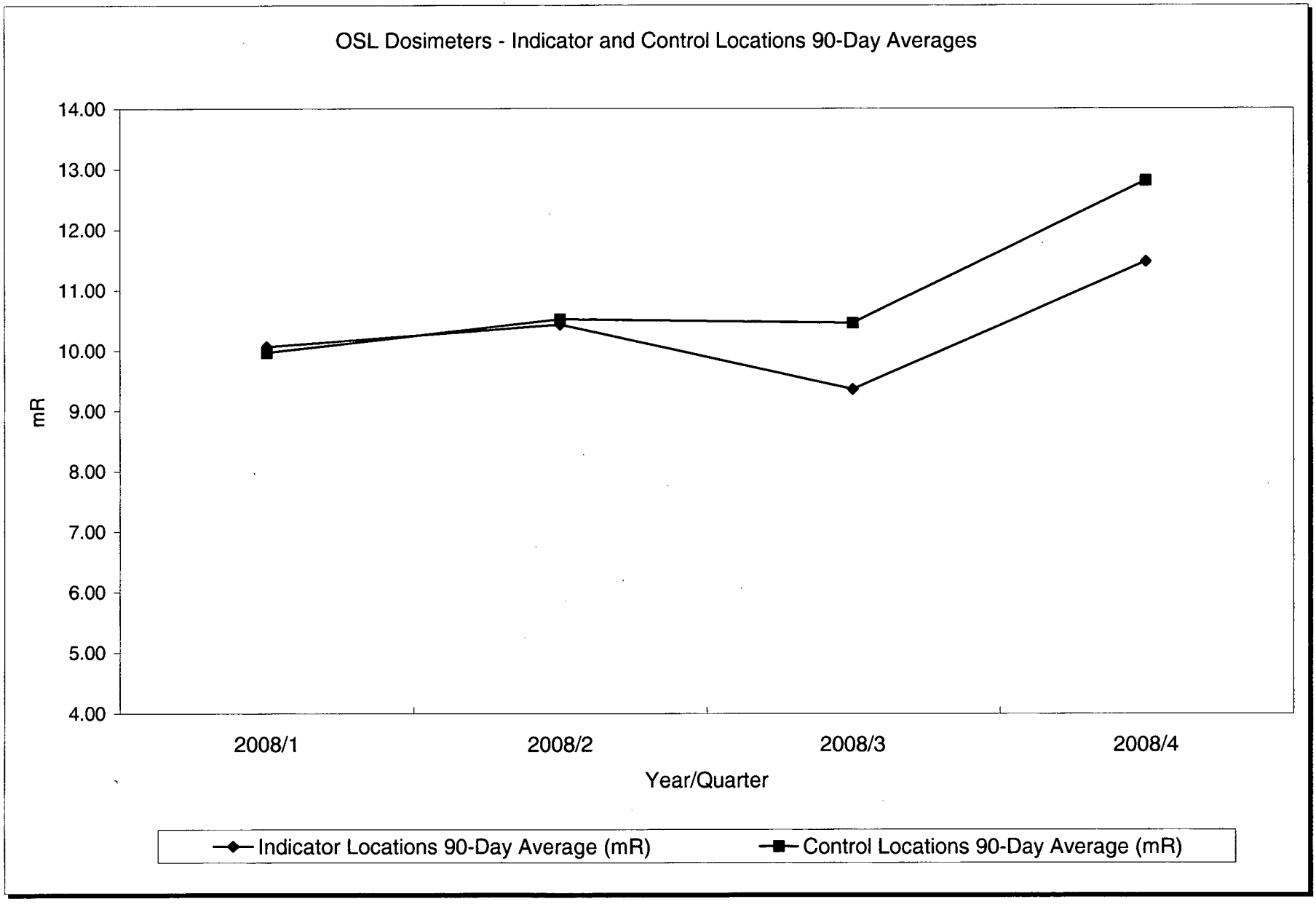

OSL Dosimeters - Indicator and Control Locations 90-Day Averages
14.00
13.00
12.00
11.00
10.00
9.00
8.00
7.00
6.00
5.00
4.00
mR
2008/1
2008/2
2008/3
2008/4
Year/Quarter
Indicator Locations 90-Day Average (mR)
Control Locations 90-Day Average (mR)

CHART 4

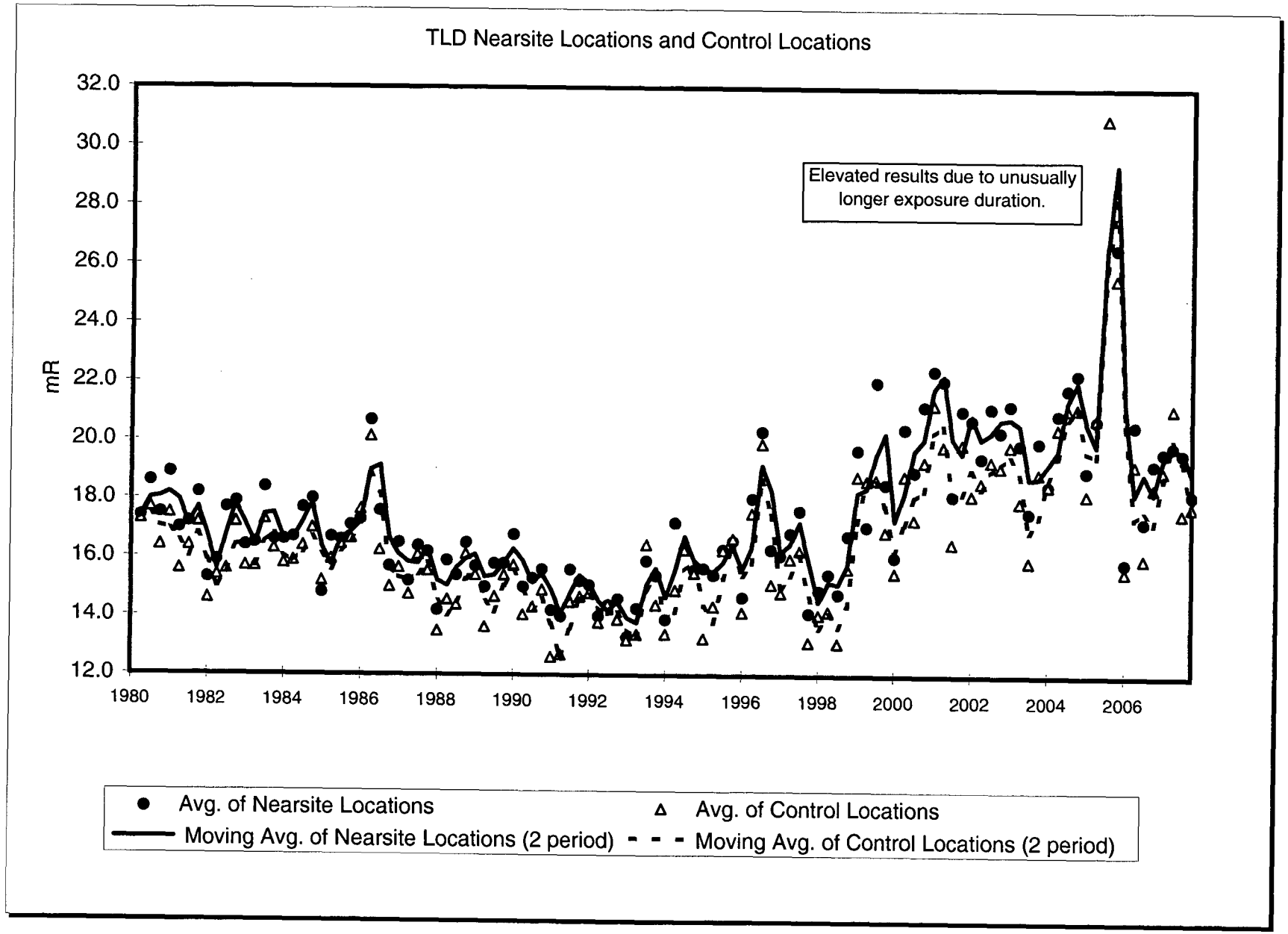

TLD Nearsite Locations and Control Locations
mR
32.0
30.0
28.0
26.0
24.0
22.0
20.0
18.0
16.0
14.0
12.0
1980
1982
1984
1986
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
Elevated results due to unusually longer exposure duration.
Avg. of Nearsite Locations
Avg. of Control Locations
Moving Avg. of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

CHART 5

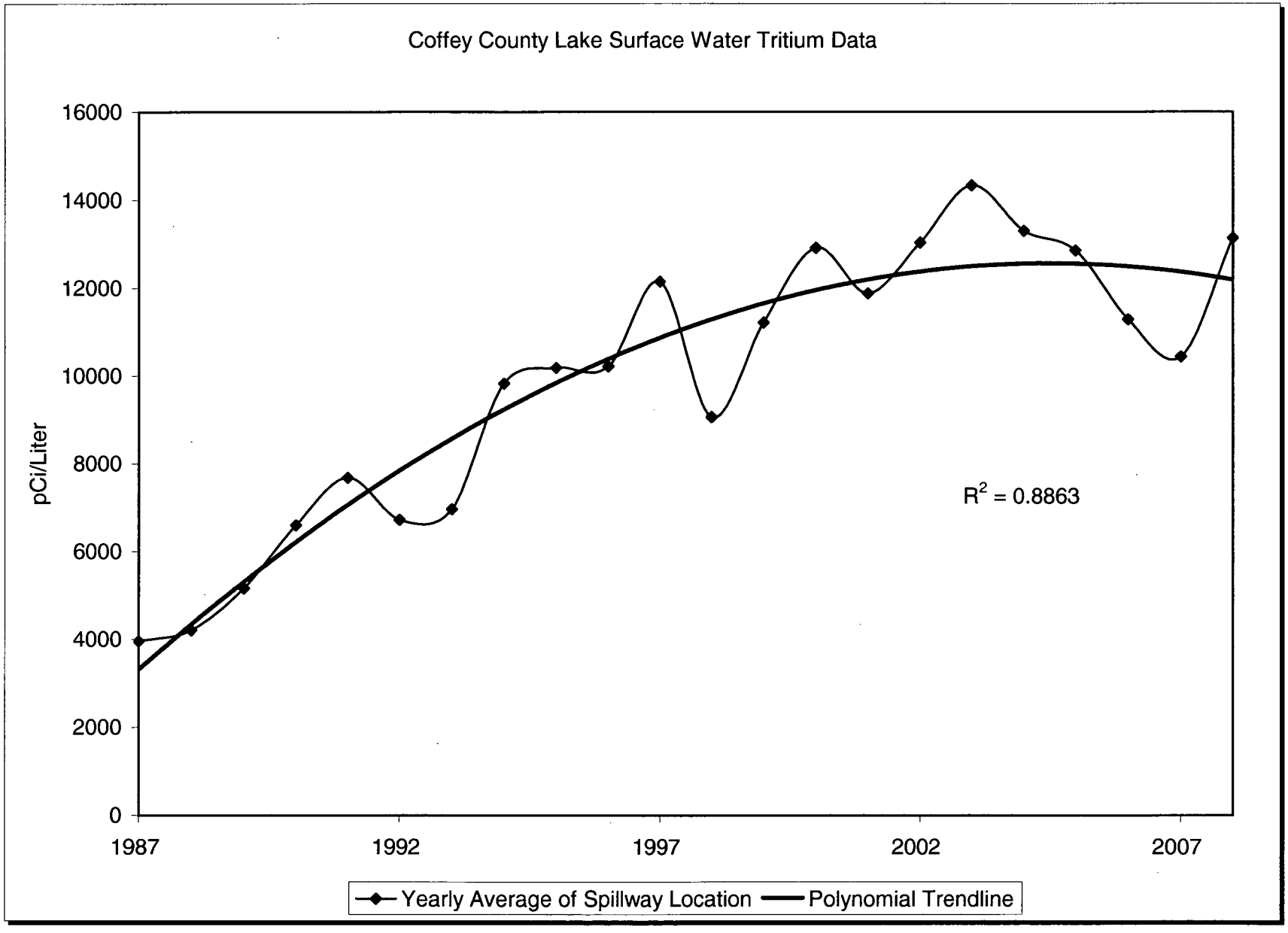

Coffey County Lake Surface Water Tritium Data
16000
14000
12000
10000
8000
6000
4000
2000
0
pCi/Liter
1987
1992
1997
2002
2007
R2 = 0.8863
Yearly Average of Spillway Location
Polynomial Trendline

CHART 6

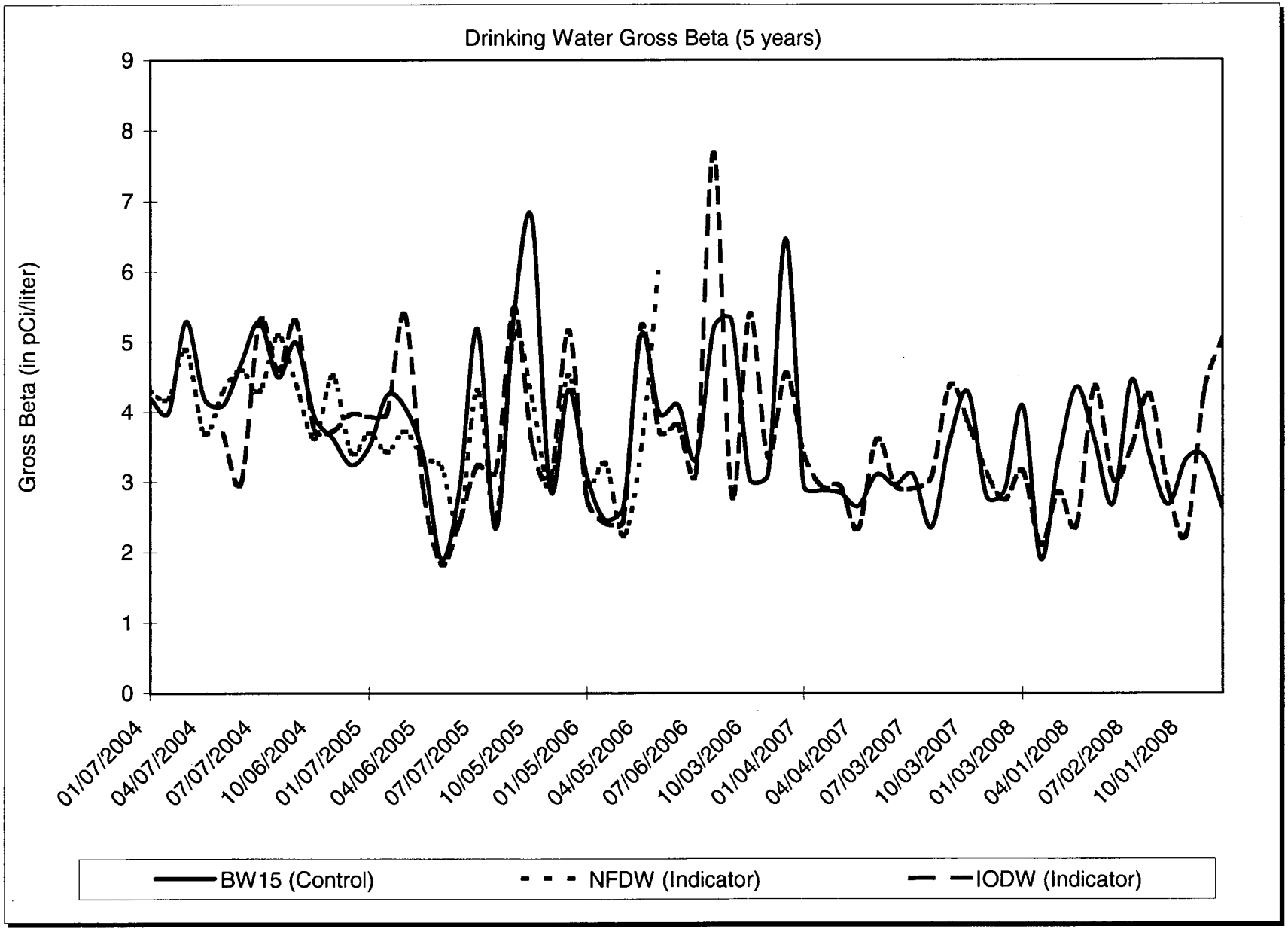

Drinking Water Gross Beta (5 years)
Gross Beta (in pCi/liter)
9
8
7
6
5
4
3
2
1
0
01/07/2004
04/07/2004
07/07/2004
10/06/2004
01/07/2005
04/06/2005
07/07/2005
10/05/2005
01/05/2006
04/05/2006
07/06/2006
10/03/2006
01/04/2007
04/04/2007
07/03/2007
10/03/2007
01/03/2008
04/01/2008
07/02/2008
10/01/2008
BW15 (Control)
NFDW (Indicator)
IODW (Indicator)

CHART 7

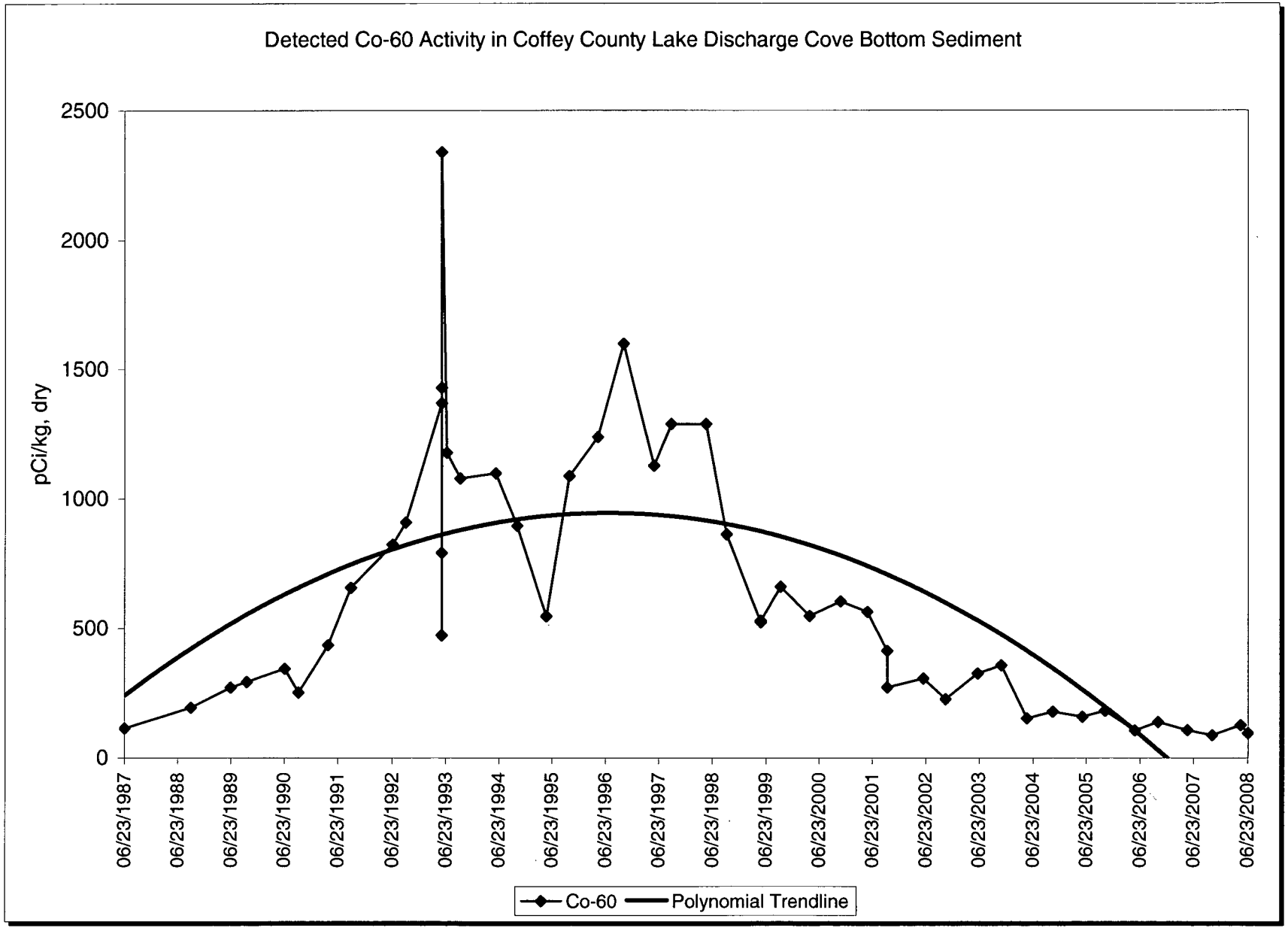
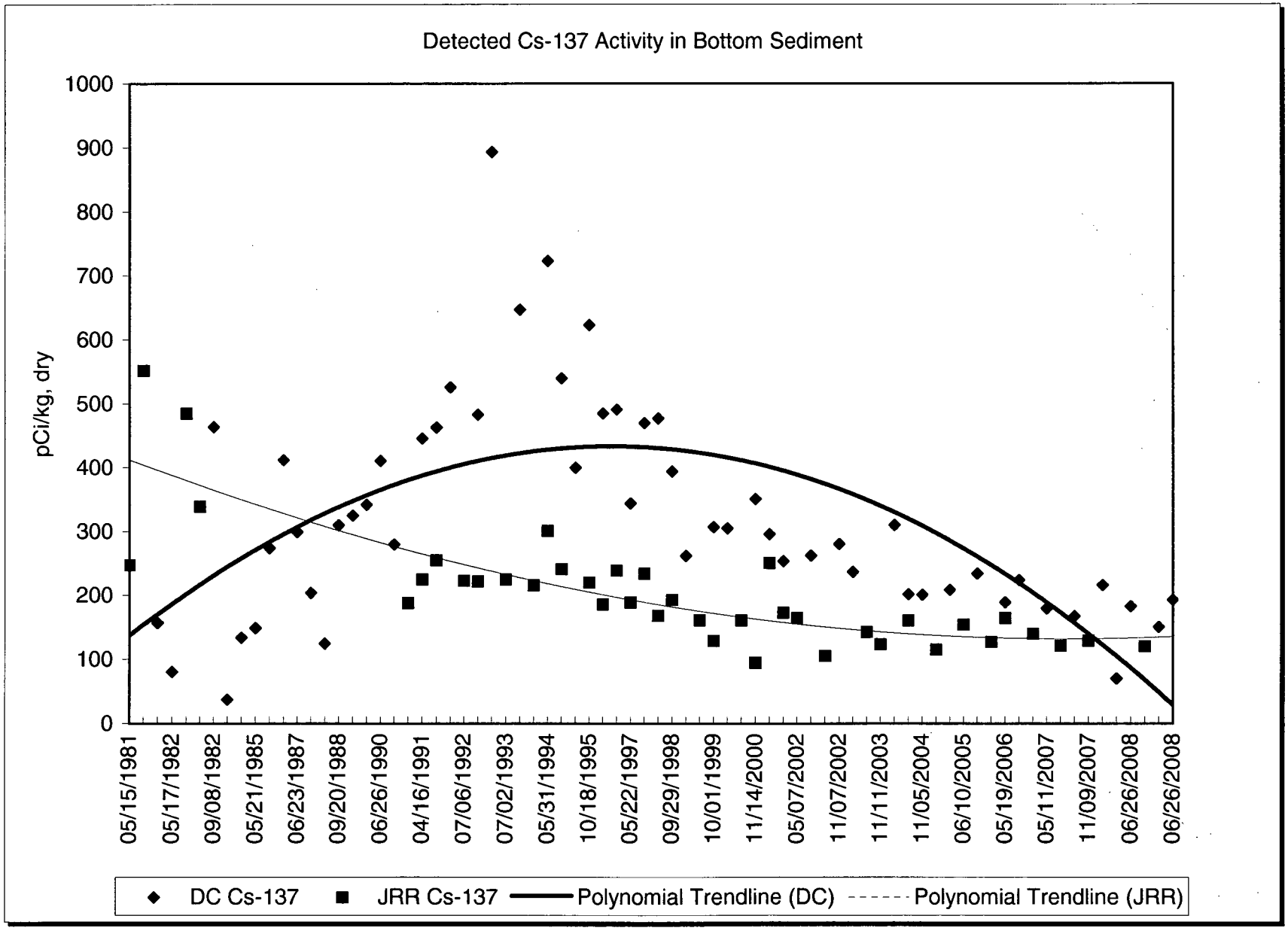

Detected Co-60 Activity in Coffey County Lake Discharge Cove Bottom Sediment
pCi/kg, dry
2500
2000
1500
1000
500
0
06/23/1987
06/23/1988
06/23/1989
06/23/1990
06/23/1991
06/23/1992
06/23/1993
06/23/1994
06/23/1995
06/23/1996
06/23/1997
06/23/1998
06/23/1999
06/23/2000
06/23/2001
06/23/2002
06/23/2003
06/23/2004
06/23/2005
06/23/2006
06/23/2007
06/23/2008
Co-60
Polynomial Trendline

CHART 8


Detected Cs-137 Activity in Bottom Sediment
pCi/kg, dry
1000
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
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, 2008 through December, 2008

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.

The results in Table A-2 list 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-1148	03/24/08	Sr-89	50.6 ± 2.4	60.4	48.6 - 68.2	Pass
STW-1148	03/24/08	Sr-90	42.4 ± 1.4	39.2	28.8 - 45.1	Pass
STW-1149	03/24/08	Ba-133	56.9 ± 5.4	58.3	48.3 - 64.3	Pass
STW-1149	03/24/08	Co-60	73.9 ± 1.6	76.6	68.9 - 86.7	Pass
STW-1149	03/24/08	Cs-134	50.2 ± 1.9	46.6	37.4 - 51.3	Pass
STW-1149	03/24/08	Cs-137	97.7 ± 2.2	102.0	91.8 - 115.0	Pass
STW-1149	03/24/08	Zn-65	109.9 ± 5.8	106.0	95.4 - 126.0	Pass
STW-1150	03/24/08	Gr. Alpha	43.7 ± 7.5	50.8	26.5 - 63.7	Pass
STW-1150	03/24/08	Gr. Beta	36.4 ± 1.8	51.4	35.0 - 58.4	Pass
STW-1151	03/24/08	I-131	29.3 ± 1.4	28.7	23.9 - 33.6	Pass
STW-1152	03/24/08	Ra-226	15.0 ± 1.1	15.3	11.4 - 17.6	Pass
STW-1152	03/24/08	Ra-228	18.4 ± 1.8	17.0	11.4 - 20.4	Pass
STW-1152	03/24/08	Uranium	23.4 ± 1.3	24.6	19.8 - 27.6	Pass
STW-1153	03/24/08	H-3	12551.0 ± 207.0	12000.0	10400.0 - 13200.0	Pass
STW-1154	07/07/08	Sr-89	24.9 ± 3.5	28.7	20.4 - 35.3	Pass
STW-1154	07/07/08	Sr-90	39.7 ± 0.5	40.0	29.4 - 46.0	Pass
STW-1155	07/07/08	Ba-133	45.0 ± 1.2	46.6	38.1 - 51.8	Pass
STW-1155	07/07/08	Co-60	24.9 ± 3.0	25.7	22.3 - 31.0	Pass
STW-1155	07/07/08	Cs-134	90.4 ± 5.3	93.2	76.6 - 102.0	Pass
STW-1155	07/07/08	Cs-137	57.1 ± 2.8	54.6	49.1 - 62.9	Pass
STW-1155	07/07/08	Zn-65	102.9 ± 7.3	98.8	88.9 - 118.0	Pass
STW-1156	07/07/08	Gr. Alpha	24.8 ± 1.6	30.7	15.7 - 40.0	Pass
STW-1156	07/07/08	Gr. Beta	23.9 ± 0.9	25.8	16.1 - 33.7	Pass
STW-1157	07/07/08	Ra-226	8.0 ± 0.6	8.1	6.1 - 9.5	Pass
STW-1157	07/07/08	Ra-228	7.7 ± 0.8	7.4	4.7 - 9.5	Pass
STW-1157	07/07/08	Uranium	11.2 ± 0.3	11.3	8.9 - 13.0	Pass
STW-1164	10/06/08	Sr-89	42.2 ± 3.2	48.7	38.2 - 56.1	Pass
STW-1164	10/06/08	Sr-90	35.4 ± 1.2	33.6	24.6 - 38.8	Pass
STW-1165	10/06/08	Ba-133	56.9 ± 1.0	63.5	52.8 - 69.9	Pass
STW-1165	10/06/08	Co-60	47.6 ± 1.3	49.1	44.2 - 56.6	Pass
STW-1165	10/06/08	Cs-134	26.4 ± 4.0	25.6	19.7 - 28.4	Pass
STW-1165	10/06/08	Cs-137	24.3 ± 0.7	25.6	21.6 - 31.2	Pass
STW-1165	10/06/08	Zn-65	72.0 ± 2.9	68.6	61.2 - 83.0	Pass
STW-1166	10/06/08	Gr. Alpha	24.2 ± 4.8	26.9	13.6 - 35.5	Pass
STW-1166	10/06/08	Gr. Beta	32.6 ± 1.0	38.0	25.1 - 45.5	Pass
STW-1167	10/06/08	I-131	29.0 ± 0.3	28.1	23.4 - 33.0	Pass
STW-1168	10/06/08	Ra-226	15.0 ± 1.0	16.1	12.0 - 18.4	Pass
STW-1168	10/06/08	Ra-228	16.0 ± 1.0	14.1	9.4 - 17.1	Pass
STW-1168	10/06/08	Uranium	47.8 ± 2.0	50.3	40.8 - 55.9	Pass
STW-1169	10/06/08	H-3	2357.0 ± 66.0	2220.0	1830.0 - 2460.0	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.						
2008-1	6/16/2008	40 cm.	30.23	33.87 ± 1.17	21.16 - 39.30	Pass
2008-1	6/16/2008	50 cm.	19.35	23.13 ± 0.57	13.55 - 25.16	Pass
2008-1	6/16/2008	60 cm.	13.44	16.25 ± 1.10	9.41 - 17.47	Pass
2008-1	6/16/2008	70 cm.	9.87	10.39 ± 0.52	6.91 - 12.83	Pass
2008-1	6/16/2008	80 cm.	7.56	7.44 ± 0.51	5.29 - 9.83	Pass
2008-1	6/16/2008	90 cm.	5.97	5.80 ± 1.04	4.18 - 7.76	Pass
2008-1	6/16/2008	100 cm.	4.84	4.32 ± 0.43	3.39 - 6.29	Pass
2008-1	6/16/2008	120 cm.	3.36	2.69 ± 0.15	2.35 - 4.37	Pass
2008-1	6/16/2008	150 cm.	2.15	2.05 ± 0.69	1.51 - 2.80	Pass
2008-1	6/16/2008	180 cm.	1.49	1.23 ± 0.80	1.04 - 1.94	Pass
Environmental, Inc.						
2008-2	11/17/2008	30 cm.	63.05	73.10 ± 1.84	44.14 - 81.97	Pass
2008-2	11/17/2008	40 cm.	35.46	40.80 ± 2.30	24.82 - 46.10	Pass
2008-2	11/17/2008	50 cm.	22.7	24.10 ± 0.58	15.89 - 29.51	Pass
2008-2	11/17/2008	60 cm.	15.76	15.98 ± 0.55	11.03 - 20.49	Pass
2008-2	11/17/2008	60 cm.	15.76	19.49 ± 0.93	11.03 - 20.49	Pass
2008-2	11/17/2008	70 cm.	11.58	11.97 ± 0.54	8.11 - 15.05	Pass
2008-2	11/17/2008	75 cm.	10.09	9.45 ± 0.28	7.06 - 13.12	Pass
2008-2	11/17/2008	80 cm.	8.87	9.30 ± 0.18	6.21 - 11.53	Pass
2008-2	11/17/2008	90 cm.	7.01	7.19 ± 0.43	4.91 - 9.11	Pass
2008-2	11/17/2008	90 cm.	7.01	6.84 ± 0.42	4.91 - 9.11	Pass
2008-2	11/17/2008	100 cm.	5.67	5.47 ± 0.19	3.97 - 7.37	Pass
2008-2	11/17/2008	110 cm.	4.69	3.98 ± 0.27	3.28 - 6.10	Pass
2008-2	11/17/2008	120 cm.	3.94	3.09 ± 0.21	2.76 - 5.12	Pass
2008-2	11/17/2008	120 cm.	3.94	3.12 ± 0.34	2.76 - 5.12	Pass
2008-2	11/17/2008	150 cm.	2.52	2.55 ± 0.12	1.76 - 3.28	Pass
2008-2	11/17/2008	150 cm.	2.52	2.24 ± 0.08	1.76 - 3.28	Pass
2008-2	11/17/2008	180 cm.	1.75	1.36 ± 0.08	1.23 - 2.28	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-111	1/14/2008	Tc-99	32.20 ± 0.85	32.34	20.34 - 44.34	Pass
SPW-298	1/31/2008	Ni-63	213.55 ± 3.07	212.58	148.81 - 276.35	Pass
W-11708	1/17/2008	Ra-226	11.34 ± 0.43	12.69	8.88 - 16.50	Pass
SPW-711	2/25/2008	U-238	33.56 ± 1.74	41.70	29.19 - 54.21	Pass
SPAP-881	3/11/2008	Cs-134	19.29 ± 1.53	20.09	10.09 - 30.09	Pass
SPAP-881	3/11/2008	Cs-137	114.04 ± 3.03	113.90	102.51 - 125.29	Pass
SPAP-883	3/11/2008	Gr. Beta [e]	54.56 ± 0.12	51.64	30.98 - 72.30	Pass
SPMI-885	3/11/2008	Sr-90	45.93 ± 1.60	45.13	36.10 - 54.16	Pass
SPW-887	3/11/2008	Sr-90	38.82 ± 1.60	45.13	36.10 - 54.16	Pass
SPW-889	3/11/2008	H-3	67325.00 ± 725.00	67384.00	53907.20 - 80860.80	Pass
W-31808	3/18/2008	Gr. Alpha	19.51 ± 0.40	20.08	10.04 - 30.12	Pass
W-31808	3/18/2008	Gr. Beta	47.20 ± 0.42	45.67	35.67 - 55.67	Pass
SPMI-885	3/24/2008	Cs-134	40.93 ± 1.55	39.69	29.69 - 49.69	Pass
SPMI-885	3/24/2008	Cs-137	61.36 ± 2.82	56.91	46.91 - 66.91	Pass
SPW-887	3/24/2008	Cs-134	40.68 ± 1.44	39.69	29.69 - 49.69	Pass
SPW-887	3/24/2008	Cs-137	58.52 ± 2.93	56.91	46.91 - 66.91	Pass
SPW-1282	4/2/2008	U-238	41.30 ± 1.78	41.70	29.19 - 54.21	Pass
W-40308	4/3/2008	Ra-226	15.17 ± 0.50	12.69	8.88 - 16.50	Pass
SPW-5580	4/7/2008	H-3	211.02 ± 7.71	240.00	0.00 - 806.46	Pass
SPW-1562	4/8/2008	Ra-228	28.93 ± 2.09	30.51	21.36 - 39.66	Pass
SPW-1560	4/10/2008	Tc-99	29.74 ± 0.84	32.34	20.34 - 44.34	Pass
SPW-1621	4/16/2008	Fe-55	27205.80 ± 982.90	28370.00	22696.00 - 34044.00	Pass
W-51508	5/15/2008	Gr. Alpha	24.01 ± 0.41	20.08	10.04 - 30.12	Pass
W-51508	5/15/2008	Gr. Beta	47.97 ± 0.41	45.68	35.68 - 55.68	Pass
SPAP-2673	6/2/2008	Cs-134	17.39 ± 1.32	18.60	8.60 - 28.60	Pass
SPAP-2673	6/2/2008	Cs-137	106.82 ± 3.42	113.30	101.97 - 124.63	Pass
SPAP-2674	6/2/2008	Gr. Beta [e]	53.57 ± 0.13	51.40	30.84 - 71.96	Pass
SPF-2745	6/2/2008	Cs-134	0.34 ± 0.02	0.37	0.22 - 0.52	Pass
SPF-2745	6/2/2008	Cs-137	2.06 ± 0.04	2.27	1.36 - 3.18	Pass
SPMI-2677	6/3/2008	Cs-137	53.99 ± 6.15	56.66	46.66 - 66.66	Pass
SPMI-2677A	6/3/2008	I-131	26.64 ± 0.59	28.58	16.58 - 40.58	Pass
SPW-2677	6/3/2008	Cs-134	40.30 ± 3.35	37.21	27.21 - 47.21	Pass
SPW-2677	6/3/2008	I-131(G)	25.92 ± 4.48	28.58	18.58 - 38.58	Pass
SPMI-2679	6/3/2008	Cs-134	35.02 ± 2.93	37.21	27.21 - 47.21	Pass
SPMI-2679	6/3/2008	Cs-137	58.49 ± 6.05	56.66	46.66 - 66.66	Pass
SPMI-2679	6/3/2008	I-131(G)	25.30 ± 4.97	28.58	18.58 - 38.58	Pass
SPMI-2679A	6/3/2008	I-131	30.37 ± 0.50	28.58	16.58 - 40.58	Pass
SPVE-2681	6/3/2008	I-131(G)	1.11 ± 0.06	0.95	0.57 - 1.33	Pass
SPW-2683	6/2/2008	Ni-63	2151.70 ± 10.22	2119.30	1483.51 - 2755.09	Pass
SPW-2685	6/2/2008	H-3	64927.20 ± 704.80	66540.80	53232.64 - 79848.96	Pass
SPW-2689	6/2/2008	C-14	4405.40 ± 15.21	4742.00	2845.20 - 6638.80	Pass

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

Lab Code [b]	Date	Analysis	Concentration (pCi/L)[a] Laboratory results 2s, n=1	Known Activity	Control Limits[c]	Acceptance
W-81408	8/14/2008	Ra-226	12.98 ± 0.35	12.69	8.88 - 16.50	Pass
SPW-1562	8/14/2008	Ra-228	29.09 ± 2.46	30.51	21.36 - 39.66	Pass
SPW-81808	8/18/2008	U-238	42.59 ± 1.96	41.70	29.19 - 54.21	Pass
W-81808	8/18/2008	Gr. Alpha	21.36 ± 0.42	20.08	10.04 - 30.12	Pass
W-81808	8/18/2008	Gr. Beta	49.33 ± 1.01	45.68	35.68 - 55.68	Pass
W-112008	11/20/2008	Gr. Alpha	20.13 ± 0.40	20.08	10.04 - 30.12	Pass
W-112008	11/20/2008	Gr. Beta	48.28 ± 0.42	45.60	35.60 - 55.60	Pass
SPAP-6839	12/5/2008	Cs-134	15.39 ± 2.72	15.68	5.68 - 25.68	Pass
SPAP-6839	12/5/2008	Cs-137	111.45 ± 9.85	112.00	100.80 - 123.20	Pass
SPAP-6841	12/5/2008	Gr. Beta [e]	49.26 ± 0.12	50.72	30.43 - 71.01	Pass
SPW-6843	12/5/2008	C-14	19377.50 ± 55.27	23708.00	14224.80 - 33191.20	Pass
SPW-6845	12/5/2008	Fe-55	7068.30 ± 692.30	6028.00	4822.40 - 7233.60	Pass
SPW-6847	12/5/2008	Tc-99	37.71 ± 1.33	32.34	20.34 - 44.34	Pass
SPW-6849	12/5/2008	Ni-63	232.56 ± 3.26	211.34	147.94 - 274.74	Pass
SPW-6851	12/5/2008	H-3	63664.00 ± 8745.00	64674.00	51739.20 - 77608.80	Pass
SPF-6859	12/5/2008	Cs-134	0.63 ± 0.02	0.63	0.38 - 0.88	Pass
SPF-6859	12/5/2008	Cs-137	2.35 ± 0.01	2.24	1.34 - 3.14	Pass
SPW-7059	12/19/2008	Sr-90	49.19 ± 2.62	44.33	35.46 - 53.20	Pass
SPMI-7061	12/19/2008	Sr-90	39.39 ± 2.19	44.33	35.46 - 53.20	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.

[e] Control limits based on the laboratory limit, Attachment A ("Other Analyses").

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-17	Water	1/3/2008	U-238	0.09	0.01 ± 0.07	1
SPW-112	Water	1/14/2008	Tc-99	4.70	-0.06 ± 2.85	10
W-11408	Water	1/14/2008	Ra-226	0.05	0.05 ± 0.04	1
SPAP-880	Air Filter	3/11/2008	Cs-134	0.91	-	100
SPAP-880	Air Filter	3/11/2008	Cs-137	1.13	-	100
SPW-888	Water	3/11/2008	H-3	159.99	-78.90 ± 80.40	200
W-31808	Water	3/18/2008	Gr. Alpha	0.42	-0.05 ± 0.29	1
W-31808	Water	3/18/2008	Gr. Beta	0.72	0.09 ± 0.51	3.2
SPMI-884	Milk	3/24/2008	Cs-134	2.79	-	10
SPMI-884	Milk	3/24/2008	Cs-137	3.36	-	10
W-40308	Water	4/3/2008	Ra-226	0.04	0.05 ± 0.03	1
SPW-1563	Water	4/8/2008	Ra-228	0.57	0.31 ± 0.30	2
SPW-1561	Water	4/10/2008	Tc-99	4.77	-3.42 ± 2.85	10
SPW-1621	Water	4/16/2008	Fe-55	668.50	-170.70 ± 397.20	1000
SPW-2451	Water	5/22/2008	U-238	0.21	0.35 ± 0.24	1
SPW-2676	Water	6/2/2008	Cs-134	2.03	-	10
SPW-2676	Water	6/2/2008	Cs-134	3.60	-	10
SPW-2676	Water	6/2/2008	Cs-137	2.38	-	10
SPW-2677	Water	6/2/2008	Cs-134	2.78	-	10
SPW-2677	Water	6/2/2008	I-131(G)	3.49	-	20
SPW-2677	Water	6/2/2008	I-131(G)	5.25	-	20
SPF-2744	Fish	6/2/2008	Cs-134	5.48	-	100
SPF-2744	Fish	6/2/2008	Cs-137	4.83	-	100
SPW-2676	Water	6/3/2008	I-131	0.18	0.01 ± 0.11	0.5
SPMI-2678	Milk	6/3/2008	I-131	0.22	0.12 ± 0.15	0.5
SPVE-2680	Vegetation	6/3/2008	I-131(G)	0.01	-	20
SPW-3581	Water	7/14/2008	U-238	0.10	0.13 ± 0.12	1
W-80708	Water	8/7/2008	Gr. Alpha	0.63	-0.02 ± 0.44	1
W-80708	Water	8/7/2008	Gr. Beta	1.43	-0.47 ± 0.99	3.2
W-81408	Water	8/14/2008	Ra-226	0.06	0.14 ± 0.04	1
SPW-1563	Water	8/14/2008	Ra-228	0.79	0.89 ± 0.47	2
SPW-81808	Water	8/18/2008	U-238	0.18	0.04 ± 0.13	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)
W-112008	Water	11/20/2008	Gr. Alpha	0.40	0.02 ± 0.28	1
W-112008	Water	11/20/2008	Gr. Beta	0.75	-0.16 ± 0.52	3.2
SPAP-6838	Air Filter	12/5/2008	Cs-134	1.01	-	100
SPAP-6838	Air Filter	12/5/2008	Cs-137	0.95	-	100
SPAP-6840	Air Filter	12/5/2008	Gr. Beta	0.96	2.69 ± 0.64	3.2
SPW-6842	Water	12/5/2008	C-14	7.79	-3.04 ± 4.05	200
SPW-6844	Water	12/5/2008	Fe-55	715.10	21.70 ± 435.10	1000
SPW-6846	Water	12/5/2008	Tc-99	1.36	-0.47 ± 0.82	10
SPW-6848	Water	12/5/2008	Ni-63	1.94	3.08 ± 1.23	20
SPF-6858	Fish	12/5/2008	Cs-134	1.53	-	100
SPF-6858	Fish	12/5/2008	Cs-137	3.92	-	100
SPW-7058	Water	12/19/2008	Cs-134	2.62	-	10
SPW-7058	Water	12/19/2008	Cs-137	2.39	-	10
SPW-7058	Water	12/19/2008	Sr-90	0.65	-0.28 ± 0.26	1
SPMI-7060	Milk	12/19/2008	Cs-134	2.18	-	10
SPMI-7060	Milk	12/19/2008	Cs-137	3.87	-	10
SPMI-7060	Milk	12/19/2008	I-131(G)	2.80	-	20
SPMI-7060 [d]	Milk	12/19/2008	Sr-90	0.53	0.76 ± 0.34	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.

[d] Low levels of Sr-90 are still detected in the environment. A concentration of (1-5 pCi/L) in milk is not unusual.

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
AP-8809, 8810	1/2/2008	Be-7	0.06 ± 0.02	0.06 ± 0.01	0.06 ± 0.01	Pass
CF-42, 43	1/2/2008	Gr. Beta	8.88 ± 0.19	8.99 ± 0.19	8.94 ± 0.13	Pass
CF-42, 43	1/2/2008	K-40	5.08 ± 0.29	5.19 ± 0.30	5.14 ± 0.21	Pass
DW-80020, 80021	1/7/2008	Gr. Alpha	2.28 ± 0.84	1.98 ± 0.86	2.13 ± 0.60	Pass
U-169, 170	1/10/2008	Beta-K40	7.50 ± 5.50	11.70 ± 5.10	9.60 ± 3.75	Pass
SO-8836, 8837	1/14/2008	Cs-137	0.80 ± 0.05	0.75 ± 0.05	0.77 ± 0.03	Pass
SO-8836, 8837	1/14/2008	Gr. Alpha	13.30 ± 4.31	15.58 ± 4.10	14.44 ± 2.98	Pass
SO-8836, 8837	1/14/2008	Gr. Alpha	33.68 ± 3.73	29.21 ± 3.10	31.45 ± 2.43	Pass
SO-8836, 8837	1/14/2008	K-40	12.31 ± 0.74	12.96 ± 0.73	12.64 ± 0.52	Pass
DW-80045, 80046	1/15/2008	Gr. Alpha	2.94 ± 1.13	3.41 ± 1.04	3.17 ± 0.77	Pass
DW-80045, 80046	1/15/2008	Gr. Beta	1.86 ± 0.66	1.36 ± 0.63	1.61 ± 0.45	Pass
MI-138, 139	1/15/2008	K-40	1262.40 ± 81.70	1396.20 ± 154.20	1329.30 ± 87.25	Pass
LW-190, 191	1/16/2008	Gr. Beta	2.85 ± 1.07	1.64 ± 1.02	2.24 ± 0.74	Pass
DW-8008, 8009	1/16/2008	Ra-226	2.77 ± 0.20	3.11 ± 0.22	2.94 ± 0.15	Pass
DW-8008, 8009	1/16/2008	Ra-228	3.95 ± 0.74	3.96 ± 0.77	3.96 ± 0.53	Pass
DW-80057, 80058	1/21/2008	Gr. Alpha	6.77 ± 0.66	7.91 ± 1.73	7.34 ± 0.92	Pass
DW-80057, 80058	1/21/2008	Gr. Beta	13.83 ± 0.97	14.78 ± 1.01	14.31 ± 0.70	Pass
SWU-479, 480	1/29/2008	Gr. Beta	4.49 ± 1.13	3.13 ± 1.14	3.81 ± 0.80	Pass
W-920, 921	2/4/2008	Gr. Beta	4.20 ± 1.30	3.30 ± 1.30	3.75 ± 0.92	Pass
SW-540, 541	2/12/2008	Gr. Alpha	2.75 ± 1.16	4.01 ± 1.18	3.38 ± 0.83	Pass
SW-540, 541	2/12/2008	Gr. Beta	6.46 ± 1.11	6.71 ± 1.03	6.59 ± 0.76	Pass
DW-80155, 80156	2/12/2008	Ra-226	2.55 ± 0.22	2.01 ± 0.16	2.28 ± 0.14	Fail
DW-80155, 80156	2/12/2008	Ra-228	1.86 ± 0.70	1.53 ± 0.67	1.70 ± 0.48	Pass
DW-80165, 80166	2/20/2008	Gr. Alpha	1.51 ± 0.90	0.80 ± 1.05	1.16 ± 0.69	Pass
DW-80166, 80167	2/20/2008	Ra-226	0.40 ± 0.09	0.46 ± 0.09	0.43 ± 0.06	Pass
DW-80166, 80167	2/20/2008	Ra-228	1.44 ± 0.52	1.42 ± 0.57	1.43 ± 0.39	Pass
DW-80166, 80167	2/20/2008	Uranium	0.69 ± 0.25	0.69 ± 0.26	0.69 ± 0.18	Pass
W-1413, 1414	3/3/2008	Gr. Beta	7.50 ± 3.00	3.70 ± 2.60	5.60 ± 1.98	Pass
DW-80189, 80190	3/11/2008	Ra-226	4.41 ± 0.30	4.09 ± 0.25	4.25 ± 0.20	Pass
DW-80189, 80190	3/11/2008	Ra-228	1.99 ± 0.65	2.17 ± 0.66	2.08 ± 0.46	Pass
MI-1006, 1007	3/12/2008	K-40	1451.90 ± 112.80	1409.50 ± 111.40	1430.70 ± 79.27	Pass
MI-1006, 1007	3/12/2008	Sr-90	0.48 ± 0.31	0.97 ± 0.38	0.72 ± 0.24	Pass
DW-80205, 80206	3/14/2008	Gr. Alpha	3.64 ± 0.80	3.39 ± 0.82	3.52 ± 0.57	Pass
DW-80202, 80203	3/14/2008	Ra-226	3.16 ± 0.21	3.00 ± 0.19	3.08 ± 0.14	Pass
DW-80202, 80203	3/14/2008	Ra-228	2.40 ± 1.00	2.07 ± 0.69	2.24 ± 0.61	Pass
DW-80208, 80209	3/14/2008	U-233/4	1.32 ± 0.25	1.29 ± 0.36	1.31 ± 0.22	Pass
SG-1080, 1081	3/18/2008	Pb-214	3.99 ± 0.30	4.15 ± 0.29	4.07 ± 0.21	Pass
SO-1195, 1196	3/18/2008	U-233/4	0.14 ± 0.02	0.14 ± 0.02	0.14 ± 0.01	Pass
SO-1195, 1196	3/18/2008	U-238	0.13 ± 0.02	0.13 ± 0.02	0.13 ± 0.01	Pass
WW-1242, 1243	3/24/2008	Gr. Beta	10.36 ± 1.63	9.06 ± 1.55	9.71 ± 1.13	Pass
AP-1519, 1520	4/2/2008	Be-7	0.07 ± 0.01	0.08 ± 0.01	0.08 ± 0.01	Pass
W-1565, 1566	4/2/2008	Gr. Alpha	0.82 ± 0.64	1.58 ± 0.72	1.20 ± 0.48	Pass
W-1565, 1566	4/2/2008	Gr. Beta	3.73 ± 0.86	5.51 ± 1.09	4.62 ± 0.69	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
DW-80255, 80256	4/8/2008	Ra-226	0.19 ± 0.08	0.28 ± 0.11	0.24 ± 0.07	Pass
DW-80255, 80256	4/8/2008	Ra-228	1.79 ± 0.57	1.32 ± 0.55	1.56 ± 0.40	Pass
DW-80259, 80260	4/8/2008	Gr. Alpha	3.39 ± 0.82	3.62 ± 0.82	3.51 ± 0.58	Pass
DW-80301, 80302	4/11/2008	Ra-226	0.47 ± 0.09	0.47 ± 0.09	0.47 ± 0.06	Pass
DW-80301, 80302	4/11/2008	Ra-228	1.02 ± 0.42	0.82 ± 0.45	0.92 ± 0.31	Pass
SO-1913, 1914	4/15/2008	K-40	12.79 ± 0.73	13.88 ± 0.85	13.34 ± 0.56	Pass
DW-80313, 80314	4/16/2008	Ra-226	3.39 ± 0.22	3.28 ± 0.21	3.34 ± 0.15	Pass
DW-80313, 80314	4/16/2008	Ra-228	4.27 ± 0.72	5.14 ± 0.77	4.71 ± 0.53	Pass
SWU-2087, 2088	4/29/2008	Gr. Beta	2.20 ± 0.60	3.50 ± 0.90	2.85 ± 0.54	Pass
LW-2297, 2298	4/30/2008	Gr. Beta	1.41 ± 0.43	1.02 ± 0.40	1.22 ± 0.30	Pass
LW-2321, 2322	4/30/2008	Gr. Beta	1.33 ± 0.54	1.23 ± 0.54	1.28 ± 0.38	Pass
BS-2063, 2064	5/1/2008	Gr. Beta	13.71 ± 2.06	17.60 ± 2.49	15.66 ± 1.62	Pass
SG-2229, 2230	5/5/2008	Ac-228	26.25 ± 2.70	24.90 ± 2.55	25.58 ± 1.86	Pass
W-2792, 2793	5/5/2008	Gr. Beta	7.20 ± 2.30	7.00 ± 2.50	7.10 ± 1.70	Pass
SG-2229, 2230	5/5/2008	Pb-214	23.28 ± 0.30	23.54 ± 0.33	23.41 ± 0.22	Pass
F-2850, 2851	5/7/2008	Cs-137	3.37 ± 0.21	3.16 ± 0.19	3.27 ± 0.14	Pass
DW-80376, 80377	5/9/2008	Ra-226	0.94 ± 0.13	1.07 ± 0.13	1.01 ± 0.09	Pass
DW-80376, 80377	5/9/2008	Ra-228	2.05 ± 0.57	1.40 ± 0.51	1.73 ± 0.38	Pass
MI-2363, 2364	5/14/2008	K-40	1335.40 ± 111.20	1510.70 ± 124.30	1423.05 ± 83.39	Pass
SG-2752, 2753	5/14/2008	Be-7	264.60 ± 83.90	222.80 ± 93.10	243.70 ± 62.66	Pass
SG-2752, 2753	5/14/2008	Cs-137	64.80 ± 6.00	68.90 ± 5.80	66.85 ± 4.17	Pass
SG-2752, 2753	5/14/2008	Gr. Alpha	19.35 ± 3.48	22.88 ± 4.04	21.12 ± 2.67	Pass
SG-2752, 2753	5/14/2008	Gr. Beta	30.53 ± 2.40	33.31 ± 2.71	31.92 ± 1.81	Pass
SG-2752, 2753	5/14/2008	K-40	9121.90 ± 191.80	9183.70 ± 194.20	9152.80 ± 136.47	Pass
DW-80389, 80390	5/14/2008	Ra-226	2.99 ± 0.36	2.58 ± 0.31	2.79 ± 0.24	Pass
DW-80389, 80390	5/14/2008	Ra-228	2.87 ± 0.68	1.73 ± 0.57	2.30 ± 0.44	Pass
DW-80392, 80393	5/14/2008	Gr. Alpha	19.94 ± 1.30	17.89 ± 1.26	18.92 ± 0.91	Pass
DW-80394, 80395	5/14/2008	U-233/4	2.03 ± 0.27	2.54 ± 0.39	2.29 ± 0.24	Pass
BS-2490, 2491	5/16/2008	Cs-137	6.81 ± 1.20	6.76 ± 1.23	6.78 ± 0.86	Pass
WW-2462, 2463	5/19/2008	H-3	158.61 ± 80.90	205.63 ± 83.06	182.12 ± 57.97	Pass
W-2826, 2827	5/27/2008	Gr. Alpha	3.47 ± 2.23	4.22 ± 2.20	3.84 ± 1.57	Pass
W-2826, 2827	5/27/2008	Gr. Beta	10.67 ± 1.92	9.43 ± 1.76	10.05 ± 1.30	Pass
SG-3378, 3379	6/2/2008	Gr. Alpha	6.51 ± 1.15	7.83 ± 1.32	7.17 ± 0.88	Pass
SG-3378, 3379	6/2/2008	Gr. Beta	16.23 ± 0.95	15.76 ± 1.06	16.00 ± 0.71	Pass
SG-3393, 3394	6/4/2008	Be-7	0.82 ± 0.23	0.66 ± 0.33	0.74 ± 0.20	Pass
SG-3393, 3394	6/4/2008	Cs-137	0.07 ± 0.01	0.07 ± 0.01	0.07 ± 0.01	Pass
SG-3393, 3394	6/4/2008	Gr. Alpha	18.96 ± 3.49	16.96 ± 3.34	17.96 ± 2.42	Pass
SG-3393, 3394	6/4/2008	Gr. Beta	30.01 ± 2.49	30.17 ± 2.56	30.09 ± 1.79	Pass
SG-3393, 3394	6/4/2008	K-40	9.78 ± 0.30	10.00 ± 0.28	9.89 ± 0.21	Pass
LW-2939, 2940	6/12/2008	Gr. Beta	1.46 ± 0.59	1.74 ± 0.59	1.60 ± 0.42	Pass
WW-3053, 3054	6/17/2008	Gr. Beta	4.28 ± 0.83	5.27 ± 0.91	4.77 ± 0.61	Pass
SW-3154, 3155	6/24/2008	Gr. Beta	2.15 ± 1.01	2.79 ± 0.97	2.47 ± 0.70	Pass

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

			Concentration (pCi/L)[a]			
Lab Code	Date	Analysis	First Result	Second Result	Averaged Result	Acceptance
BS-3245, 3246	6/27/2008	Co-60	108.84 ± 44.14	91.10 ± 22.32	99.97 ± 24.73	Pass
BS-3245, 3246	6/27/2008	Cs-137	952.18 ± 52.78	941.56 ± 13.61	946.87 ± 27.25	Pass
XW-1080, 1081	6/30/2008	Fe-55	2.96 ± 0.32	2.71 ± 0.30	2.84 ± 0.22	Pass
XW-3786, 3787	6/30/2008	Fe-55	2.96 ± 0.32	2.71 ± 0.30	2.84 ± 0.22	Pass
G-3274, 3275	7/1/2008	Gr. Beta	7.65 ± 0.24	7.44 ± 0.24	7.55 ± 0.17	Pass
SL-3295, 3296	7/1/2008	Gr. Beta	3.76 ± 0.24	3.64 ± 0.24	3.70 ± 0.17	Pass
AP-3531, 3532	7/1/2008	Be-7	0.10 ± 0.01	0.08 ± 0.01	0.09 ± 0.01	Pass
AP-3663, 3664	7/2/2008	Be-7	0.08 ± 0.01	0.08 ± 0.02	0.08 ± 0.01	Pass
AP-3690, 3691	7/2/2008	Be-7	0.07 ± 0.01	0.07 ± 0.01	0.07 ± 0.01	Pass
W-4333, 4334	7/7/2008	Gr. Beta	7.20 ± 1.90	7.70 ± 1.70	7.45 ± 1.27	Pass
W-4840, 4841	7/7/2008	Gr. Beta	6.70 ± 1.60	6.70 ± 1.80	6.70 ± 1.20	Pass
DW-80415, 80416	7/7/2008	Ra-226	2.81 ± 0.47	2.00 ± 0.34	2.41 ± 0.29	Pass
SG-3964, 3965	7/9/2008	Be-7	1.35 ± 0.23	1.51 ± 0.22	1.43 ± 0.16	Pass
SG-3964, 3965	7/9/2008	Cs-137	0.04 ± 0.01	0.04 ± 0.01	0.04 ± 0.00	Pass
SG-3964, 3965	7/9/2008	Gr. Alpha	23.17 ± 3.39	18.76 ± 3.24	20.97 ± 2.34	Pass
SG-3964, 3965	7/9/2008	Gr. Beta	28.99 ± 2.12	29.25 ± 2.31	29.12 ± 1.57	Pass
SG-3964, 3965	7/9/2008	K-40	6.86 ± 0.19	6.84 ± 0.17	6.85 ± 0.13	Pass
DW-80427, 80428	7/9/2008	Ra-226	3.25 ± 0.24	3.27 ± 0.20	3.26 ± 0.16	Pass
DW-80427, 80428	7/9/2008	Ra-228	2.65 ± 0.67	3.25 ± 0.72	2.95 ± 0.49	Pass
DW-80451, 80452	7/15/2008	Ra-226	1.02 ± 0.10	0.96 ± 0.12	0.99 ± 0.08	Pass
DW-80451, 80452	7/15/2008	Ra-228	1.09 ± 0.62	1.14 ± 0.60	1.12 ± 0.43	Pass
DW-80481, 80482	7/16/2008	Ra-226	1.20 ± 0.13	1.40 ± 0.14	1.30 ± 0.10	Pass
DW-80481, 80482	7/16/2008	Ra-228	1.69 ± 0.68	1.65 ± 0.77	1.67 ± 0.51	Pass
MI-3842, 3843	7/21/2008	K-40	1282.60 ± 108.30	1379.00 ± 111.40	1330.80 ± 77.68	Pass
MI-3892, 3893	7/28/2008	K-40	1371.50 ± 102.90	1501.20 ± 111.80	1436.35 ± 75.97	Pass
DW-4067, 4068	7/29/2008	Gr. Beta	10.46 ± 2.37	14.25 ± 2.78	12.36 ± 1.83	Pass
SWT-4158, 4159	7/29/2008	Gr. Beta	1.58 ± 0.45	1.80 ± 0.47	1.69 ± 0.33	Pass
LW-4221, 4222	7/31/2008	Gr. Beta	1.35 ± 0.56	0.91 ± 0.52	1.13 ± 0.38	Pass
LW-4242, 4243	7/31/2008	Gr. Beta	1.36 ± 0.56	1.18 ± 0.53	1.27 ± 0.38	Pass
VE-4046, 4047	8/4/2008	Be-7	0.77 ± 0.13	0.82 ± 0.19	0.80 ± 0.12	Pass
VE-4046, 4047	8/4/2008	Gr. Beta	8.81 ± 0.36	8.34 ± 0.31	8.58 ± 0.24	Pass
VE-4046, 4047	8/4/2008	K-40	5.17 ± 0.34	5.33 ± 0.42	5.25 ± 0.27	Pass
W-4821, 4822	8/4/2008	Gr. Alpha	1.70 ± 0.80	1.70 ± 0.90	1.70 ± 0.60	Pass
W-4821, 4822	8/4/2008	Gr. Beta	3.90 ± 0.80	3.70 ± 0.90	3.80 ± 0.60	Pass
W-4801, 4802	8/5/2008	Gr. Alpha	4.40 ± 2.40	4.80 ± 2.30	4.60 ± 1.66	Pass
W-4801, 4802	8/5/2008	Gr. Beta	13.20 ± 1.30	14.50 ± 1.40	13.85 ± 0.96	Pass
DW-80522, 80523	8/5/2008	Ra-226	0.50 ± 0.12	0.28 ± 0.12	0.39 ± 0.08	Pass
DW-80522, 80523	8/5/2008	Ra-228	1.23 ± 0.60	1.09 ± 0.57	1.16 ± 0.41	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
DW-80531, 80532	8/5/2008	Gr. Alpha	18.90 ± 1.86	17.80 ± 1.96	18.35 ± 1.35	Pass
DW-80534, 80535	8/5/2008	Ra-226	3.01 ± 0.18	3.33 ± 0.18	3.17 ± 0.13	Pass
DW-80534, 80535	8/5/2008	Ra-228	2.24 ± 0.59	2.12 ± 0.59	2.18 ± 0.42	Pass
SG-4584, 4585	8/6/2008	Be-7	7.11 ± 0.20	7.44 ± 0.37	7.27 ± 0.21	Pass
SG-4584, 4585	8/6/2008	Cs-137	0.05 ± 0.01	0.04 ± 0.01	0.04 ± 0.00	Pass
SG-4584, 4585	8/6/2008	K-40	7.88 ± 10.18	8.02 ± 0.21	7.95 ± 5.09	Pass
SG-4584, 4585	8/6/2008	Ra-226	3.94 ± 0.18	3.74 ± 0.22	3.84 ± 0.14	Pass
SG-4573, 4574	8/13/2008	Gr. Alpha	240.72 ± 8.74	251.53 ± 9.56	246.13 ± 6.48	Pass
SG-4573, 4574	8/13/2008	Gr. Beta	201.60 ± 4.28	206.88 ± 4.71	204.24 ± 3.18	Pass
SG-4584, 4585	8/13/2008	Gr. Alpha	14.07 ± 3.10	12.97 ± 3.04	13.52 ± 2.17	Pass
SG-4584, 4585	8/13/2008	Gr. Beta	22.08 ± 2.36	23.02 ± 2.34	22.55 ± 1.66	Pass
DW-80547, 80548	8/13/2008	Gr. Alpha	3.33 ± 1.11	3.88 ± 1.07	3.61 ± 0.77	Pass
DW-80551, 80552	8/13/2008	U-233/4	2.57 ± 0.48	2.13 ± 0.46	2.35 ± 0.33	Pass
DW-80553, 80554	8/13/2008	Ra-226	0.92 ± 0.14	1.21 ± 0.17	1.07 ± 0.11	Pass
DW-80553, 80554	8/13/2008	Ra-228	2.20 ± 0.61	1.64 ± 0.56	1.92 ± 0.41	Pass
DW-80566, 80567	8/20/2008	Ra-226	1.10 ± 0.11	1.10 ± 0.10	1.10 ± 0.07	Pass
DW-80566, 80567	8/20/2008	Ra-228	2.01 ± 0.58	1.74 ± 0.58	1.88 ± 0.41	Pass
VE-4647, 4648	8/27/2008	K-40	1.97 ± 0.17	2.00 ± 0.21	1.99 ± 0.14	Pass
SL-4690, 4691	9/2/2008	Gr. Beta	2.28 ± 0.25	2.35 ± 0.24	2.32 ± 0.17	Pass
ME-4732, 4733	9/2/2008	Gr. Beta	2.86 ± 0.09	2.70 ± 0.09	2.78 ± 0.06	Pass
ME-4732, 4733	9/2/2008	K-40	2.44 ± 0.37	2.82 ± 0.51	2.63 ± 0.32	Pass
SG-5180, 5181	9/3/2008	Be-7	15.50 ± 0.43	15.54 ± 0.38	15.52 ± 0.29	Pass
SG-5180, 5181	9/3/2008	Cs-137	0.07 ± 0.01	0.07 ± 0.01	0.07 ± 0.01	Pass
SG-5180, 5181	9/3/2008	Gr. Alpha	18.74 ± 3.33	17.61 ± 3.15	18.18 ± 2.29	Pass
SG-5180, 5181	9/3/2008	Gr. Beta	29.19 ± 2.10	28.49 ± 2.15	28.84 ± 1.50	Pass
SG-5180, 5181	9/3/2008	K-40	8.55 ± 0.32	8.11 ± 0.27	8.33 ± 0.21	Pass
SG-5187, 5188	9/3/2008	Be-7	6.18 ± 0.54	5.90 ± 0.77	6.04 ± 0.47	Pass
SG-5187, 5188	9/3/2008	K-40	7.16 ± 0.60	7.29 ± 0.60	7.23 ± 0.42	Pass
SG-5193, 5194	9/3/2008	Gr. Alpha	5.80 ± 1.30	7.00 ± 1.50	6.40 ± 0.99	Pass
SG-5193, 5194	9/3/2008	Gr. Beta	15.60 ± 1.10	15.60 ± 1.10	15.60 ± 0.78	Pass
DW-4871, 4872	9/5/2008	I-131	1.15 ± 0.27	1.16 ± 0.31	1.16 ± 0.21	Pass
VE-5022, 5023	9/10/2008	K-40	1.27 ± 0.14	1.11 ± 0.06	1.19 ± 0.08	Pass
DW-5337, 5338	9/10/2008	Gr. Beta	3.00 ± 1.07	2.19 ± 1.05	2.60 ± 0.75	Pass
WW-4977, 4978	9/17/2008	Gr. Beta	3.71 ± 1.10	2.32 ± 1.11	3.01 ± 0.78	Pass
BS-5088, 5089	9/19/2008	K-40	10493 ± 607	10299 ± 470	10396 ± 384	Pass
DW-80584, 80585	9/19/2008	U-233/4	3.01 ± 0.52	2.44 ± 0.47	2.73 ± 0.35	Pass
DW-80584, 80585	9/19/2008	U-238	0.70 ± 0.25	0.27 ± 0.18	0.49 ± 0.15	Pass
DW-80579, 80580	9/25/2008	Gr. Alpha	10.69 ± 1.31	12.84 ± 1.51	11.77 ± 1.00	Pass
DW-80579, 80580	9/25/2008	Ra-226	3.13 ± 0.22	2.89 ± 0.21	3.01 ± 0.15	Pass
DW-80579, 80580	9/25/2008	Ra-228	3.03 ± 0.73	1.98 ± 0.69	2.51 ± 0.50	Pass
G-5389, 5390	10/1/2008	Be-7	1.49 ± 0.32	1.36 ± 0.28	1.43 ± 0.21	Pass
G-5389, 5390	10/1/2008	Gr. Beta	10.86 ± 0.24	11.18 ± 0.25	11.02 ± 0.17	Pass
G-5389, 5390	10/1/2008	K-40	7.42 ± 0.67	8.06 ± 0.63	7.74 ± 0.46	Pass

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

Lab Code	Date	Analysis	Concentration (pCi/L)[a] First Result	Second Result	Averaged Result	Acceptance
AP-5814, 5815	10/1/2008	Be-7	0.08 ± 0.01	0.08 ± 0.01	0.08 ± 0.01	Pass
SG-6111, 6112	10/6/2008	Gr. Alpha	9.34 ± 1.82	8.95 ± 1.67	9.15 ± 1.24	Pass
SG-6111, 6112	10/6/2008	Gr. Beta	17.46 ± 1.46	18.86 ± 1.35	18.16 ± 0.99	Pass
DW-80592, 80593	10/7/2008	Gr. Alpha	2.30 ± 1.14	1.57 ± 0.88	1.94 ± 0.72	Pass
DW-80594, 80595	10/7/2008	Ra-228	1.41 ± 0.55	1.22 ± 0.50	1.32 ± 0.37	Pass
DW-80650, 80651	10/8/2008	Gr. Alpha	1.30 ± 0.86	0.12 ± 0.79	0.71 ± 0.58	Pass
DW-80650, 80651	10/8/2008	Gr. Beta	2.92 ± 0.69	3.03 ± 0.64	2.98 ± 0.47	Pass
DW-80629, 80630	10/13/2008	Ra-226	3.12 ± 0.18	2.87 ± 0.17	3.00 ± 0.12	Pass
DW-80629, 80630	10/13/2008	Ra-228	2.71 ± 0.80	3.28 ± 0.81	3.00 ± 0.57	Pass
DW-80663, 80664	10/13/2008	Gr. Alpha	5.91 ± 1.70	3.14 ± 1.44	4.53 ± 1.11	Pass
MI-5572, 5573	10/14/2008	K-40	1391.00 ± 97.39	1443.90 ± 110.60	1417.45 ± 73.68	Pass
MI-5603, 5604	10/14/2008	K-40	1412.80 ± 109.30	1413.80 ± 110.50	1413.30 ± 77.71	Pass
DW-80676, 80677	10/20/2008	Gr. Alpha	12.20 ± 1.48	11.87 ± 1.54	12.04 ± 1.07	Pass
DW-80676, 80677	10/20/2008	Ra-226	5.04 ± 0.25	5.10 ± 0.25	5.07 ± 0.18	Pass
DW-80676, 80677	10/20/2008	Ra-228	5.87 ± 0.86	6.98 ± 0.95	6.43 ± 0.64	Pass
SW-80687, 80688	10/22/2008	Gr. Alpha	3.42 ± 1.03	2.98 ± 1.01	3.20 ± 0.72	Pass
DW-80729, 80730	10/30/2008	Gr. Alpha	8.40 ± 1.45	7.76 ± 2.00	8.08 ± 1.24	Pass
DW-80729, 80730	10/30/2008	Gr. Beta	16.94 ± 1.45	15.41 ± 1.37	16.18 ± 1.00	Pass
DW-80738, 80739	10/31/2008	U-233/4	2.94 ± 0.50	3.06 ± 0.63	3.00 ± 0.40	Pass
DW-80747, 80748	10/31/2008	Ra-226	0.60 ± 0.09	0.50 ± 0.08	0.55 ± 0.06	Pass
DW-80747, 80748	10/31/2008	Ra-228	1.33 ± 0.59	1.38 ± 0.60	1.36 ± 0.42	Pass
BS-6271, 6272	11/3/2008	Gr. Beta	12.26 ± 1.69	13.78 ± 1.84	13.02 ± 1.25	Pass
SS-6593, 6594	11/19/2008	K-40	12.35 ± 0.57	13.10 ± 0.76	12.73 ± 0.48	Pass
MI-7046, 7047	12/16/2008	K-40	1380.10 ± 109.80	1477.30 ± 98.32	1428.70 ± 73.69	Pass
DW-80698, 80699	12/23/2008	Ra-226	3.13 ± 0.22	3.21 ± 0.23	3.17 ± 0.16	Pass
DW-80698, 80699	12/23/2008	Ra-228	5.48 ± 0.91	5.86 ± 0.93	5.67 ± 0.65	Pass
SW-7281, 7282	12/30/2008	Gr. Beta	0.87 ± 0.54	1.35 ± 0.54	1.11 ± 0.38	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).

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
STW-1137	01/01/08	Am-241	1.27 ± 0.06	1.23	0.86 - 1.60	Pass
STW-1137	01/01/08	Co-57	23.80 ± 0.60	22.80	16.00 - 29.60	Pass
STW-1137	01/01/08	Co-60	8.60 ± 0.50	8.40	5.88 - 10.92	Pass
STW-1137[e]	01/01/08	Cs-134	-0.021 ± 0.10	0.00	-1.00 - 1.00	Pass
STW-1137[e]	01/01/08	Cs-137	0.00 ± 0.10	0.00	-1.00 - 1.00	Pass
STW-1137	01/01/08	Fe-55	32.60 ± 11.60	36.50	25.60 - 47.50	Pass
STW-1137	01/01/08	H-3	515.10 ± 12.70	472.00	330.00 - 614.00	Pass
STW-1137	01/01/08	Mn-54	12.90 ± 0.80	12.10	8.50 - 15.70	Pass
STW-1137	01/01/08	Ni-63	29.50 ± 2.30	30.70	21.50 - 39.90	Pass
STW-1137	01/01/08	Pu-238	0.60 ± 0.06	0.73	0.51 - 0.95	Pass
STW-1137	01/01/08	Pu-239/40	0.019 ± 0.015	0.01	0.00 - 1.00	Pass
STW-1137	01/01/08	Sr-90	12.00 ± 1.50	11.40	7.98 - 14.82	Pass
STW-1137	01/01/08	Tc-99	9.40 ± 1.70	11.20	7.80 - 14.60	Pass
STW-1137	01/01/08	U-233/4	3.37 ± 0.20	3.63	2.54 - 4.72	Pass
STW-1137	01/01/08	U-238	3.63 ± 0.21	3.74	2.62 - 4.86	Pass
STW-1137	01/01/08	Zn-65	16.90 ± 1.40	16.30	11.40 - 21.20	Pass
STW-1138	01/01/08	Gr. Alpha	0.96 ± 0.14	1.40	0.00 - 2.80	Pass
STW-1138	01/01/08	Gr. Beta	2.30 ± 0.15	2.43	1.22 - 3.65	Pass
STAP-1139	01/01/08	Co-57	3.90 ± 0.07	3.55	2.49 - 4.62	Pass
STAP-1139	01/01/08	Co-60	1.43 ± 0.07	1.31	0.92 - 1.70	Pass
STAP-1139	01/01/08	Cs-134	2.59 ± 0.16	2.52	1.76 - 3.28	Pass
STAP-1139	01/01/08	Cs-137	3.05 ± 0.12	2.70	1.89 - 3.51	Pass
STAP-1139	01/01/08	Mn-54	0.43 ± 0.58	0.00	0.00 - 1.00	Pass
STAP-1139	01/01/08	Pu-238	0.080 ± 0.016	0.11	0.07 - 0.14	Pass
STAP-1139	01/01/08	Pu-239/40	0.12 ± 0.02	0.11	0.08 - 0.15	Pass
STAP-1139	01/01/08	Sr-90	1.30 ± 0.27	1.55	1.08 - 2.01	Pass
STAP-1139[e]	01/01/08	U-233/4	0.43 ± 0.03	0.22	0.15 - 0.28	Fail
STAP-1139[e]	01/01/08	U-238	0.44 ± 0.03	0.23	0.16 - 0.29	Fail
STAP-1139	01/01/08	Zn-65	2.36 ± 0.18	2.04	1.43 - 2.65	Pass
STAP-1140	01/01/08	Gr. Alpha	0.11 ± 0.03	0.35	0.00 - 0.70	Pass
STAP-1140	01/01/08	Gr. Beta	0.34 ± 0.04	0.29	0.14 - 0.43	Pass
STVE-1141	01/01/08	Co-57	8.30 ± 0.18	6.89	4.82 - 8.96	Pass
STVE-1141	01/01/08	Co-60	3.03 ± 0.13	2.77	1.94 - 3.60	Pass
STVE-1141	01/01/08	Cs-134	6.53 ± 0.29	6.28	4.40 - 8.16	Pass
STVE-1141	01/01/08	Cs-137	3.90 ± 0.19	3.41	2.39 - 4.43	Pass
STVE-1141	01/01/08	Mn-54	5.43 ± 0.21	4.74	3.32 - 6.16	Pass
STVE-1141	01/01/08	Zn-65	0.033 ± 0.10	0.00	0.00 - 1.00	Pass

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

Lab Code[c]	Date	Concentration [b] Analysis	Laboratory result	Known Activity	Control Limits [d]	Acceptance
STSO-1142	01/01/08	Co-57	483.00 ± 3.00	421.00	295.00 - 547.00	Pass
STSO-1142	01/01/08	Co-60	3.00 ± 0.80	2.90	0.00 - 5.00	Pass
STSO-1142	01/01/08	Cs-134	896.50 ± 7.40	854.00	598.00 - 1110.00	Pass
STSO-1142	01/01/08	Cs-137	624.40 ± 4.10	545.00	382.00 - 709.00	Pass
STSO-1142	01/01/08	Mn-54	667.20 ± 3.80	570.00	399.00 - 741.00	Pass
STSO-1142	01/01/08	Ni-63	536.00 ± 15.50	640.00	448.00 - 832.00	Pass
STSO-1142	01/01/08	Pu-238	78.60 ± 4.80	72.80	51.00 - 94.60	Pass
STSO-1142	01/01/08	Pu-239/40	89.10 ± 4.50	90.10	63.10 - 117.10	Pass
STSO-1142	01/01/08	U-233/4	134.41 ± 5.40	142.00	99.00 - 185.00	Pass
STSO-1142	01/01/08	U-238	139.00 ± 5.50	148.00	104.00 - 192.00	Pass
STSO-1142	01/01/08	Zn-65	0.093 ± 0.91	0.00	0.00 - 1.00	Pass
STSO-1158	08/01/08	Am-241	57.73 ± 4.78	69.10	48.40 - 89.80	Pass
STSO-1158	08/01/08	Co-57	353.02 ± 2.01	333.00	233.00 - 433.00	Pass
STSO-1158	08/01/08	Co-60	151.99 ± 1.58	145.00	102.00 - 189.00	Pass
STSO-1158	08/01/08	Cs-134	499.72 ± 2.65	581.00	407.00 - 755.00	Pass
STSO-1158	08/01/08	Cs-137	2.54 ± 0.25	2.80	0.00 - 5.00	Pass
STSO-1158	08/01/08	K-40	643.94 ± 15.50	570.00	399.00 - 741.00	Pass
STSO-1158	08/01/08	Mn-54	452.14 ± 2.96	415.00	291.00 - 540.00	Pass
STSO-1158	08/01/08	Ni-63	803.09 ± 17.01	760.00	532.00 - 988.00	Pass
STSO-1158	08/01/08	Pu-238	0.12 ± 0.54	0.00	0.00 - 5.00	Pass
STSO-1158	08/01/08	Pu-239/40	60.88 ± 5.89	55.60	38.90 - 72.30	Pass
STSO-1158	08/01/08	Sr-90	1.95 ± 2.04	0.00	0.00 - 5.00	Pass
STSO-1158 [f]	08/01/08	Tc-99	337.00 ± 17.30	335.00	235.00 - 436.00	Pass
STSO-1158	08/01/08	U-238	315.67 ± 11.29	303.00	212.00 - 394.00	Pass
STSO-1158	08/01/08	Zn-65	0.10 ± 2.04	0.00	0.00 - 5.00	Pass
STVE-1159	08/01/08	Co-57	8.52 ± 0.23	7.10	5.00 - 9.20	Pass
STVE-1159	08/01/08	Co-60	5.08 ± 0.19	4.70	3.30 - 6.10	Pass
STVE-1159	08/01/08	Cs-134	5.26 ± 0.18	5.50	3.90 - 7.20	Pass
STVE-1159	08/01/08	Cs-137	0.01 ± 0.14	0.00	0.00 - 1.00	Pass
STVE-1159	08/01/08	Mn-54	6.39 ± 0.28	5.80	4.10 - 7.50	Pass
STVE-1159	08/01/08	Zn-65	7.73 ± 0.45	6.90	4.80 - 9.00	Pass

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

Lab Code[c]	Date	Analysis	Concentration[b] Laboratory result	Known Activity	Control Limits[d]	Acceptance
STW-1162[g]	08/01/08	Am-241	0.20 ± 0.06	0.00	0.00 - 0.10	Fail
STW-1162	08/01/08	Co-57	0.03 ± 0.16	0.00	0.00 - 5.00	Pass
STW-1162	08/01/08	Co-60	11.27 ± 0.23	11.60	8.10 - 15.10	Pass
STW-1162	08/01/08	Cs-134	17.93 ± 0.52	19.50	13.70 - 25.40	Pass
STW-1162	08/01/08	Cs-137	23.72 ± 0.43	23.60	16.50 - 30.70	Pass
STW-1162	08/01/08	Fe-55	43.36 ± 16.81	46.20	32.30 - 60.10	Pass
STW-1162	08/01/08	H-3	385.15 ± 8.93	341.00	239.00 - 443.00	Pass
STW-1162	08/01/08	Mn-54	13.87 ± 0.37	13.70	9.60 - 17.80	Pass
STW-1162[h]	08/01/08	Ni-63	10.77 ± 2.01	0.00	0.00 - 5.00	Fail
STW-1162[i]	08/01/08	Pu-238	0.33 ± 0.06	0.50	0.40 - 0.70	Fail
STW-1162	08/01/08	Pu-239/40	0.14 ± 0.15	0.00	0.00 - 0.20	Pass
STW-1162	08/01/08	Sr-90	6.49 ± 1.12	6.45	4.52 - 8.39	Pass
STW-1162[j]	08/01/08	Tc-99	1.80 ± 0.62	3.76	2.63 - 4.89	Fail
STW-1162	08/01/08	U-233/4	3.33 ± 0.18	3.44	2.41 - 4.47	Pass
STW-1162	08/01/08	U-238	3.38 ± 0.18	3.55	2.49 - 4.62	Pass
STW-1162	08/01/08	Zn-65	17.64 ± 0.61	17.10	12.00 - 22.20	Pass
STW-1163	08/01/08	Gr. Alpha	0.08 ± 0.04	0.00	0.00 - 0.56	Pass
STW-1163	08/01/08	Gr. Beta	0.12 ± 0.05	0.00	0.00 - 1.85	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.

[e] The results of a repeat analysis were still unacceptable. A spiked air filter was prepared (known activity 4.17 pCi/filter) to verify the methodology; results of the spike analysis were acceptable, 4.64 pCi/filter.

[f] Corrected result. An error in calculation was found.

[g] Included in the testing series as a "false positive". Result of reanalysis, 0.04 ± 0.01 Bq/L.

[h] Included in the testing series as a "false positive". Result of reanalysis, 3.78 ± 2.03 Bq/L.

[i] The reason for the deviation is unknown. Result of the original sample recount: 0.47 ± 0.07 Bq/L. The analysis was then repeated from the beginning. Result of reanalysis: 0.51 ± 0.07 Bq/L.

[j] The lower result was due to a higher than average background count used in the calculation. Average background result:, 4.11 ± 0.6

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-1143	03/24/08	Am-241	60.48 ± 3.52	50.1	29.3 - 68.7	Pass
STAP-1143	03/24/08	Co-60	650.72 ± 3.00	730.0	565.0 - 912.0	Pass
STAP-1143	03/24/08	Cs-134	467.50 ± 5.53	523.0	341.0 - 647.0	Pass
STAP-1143	03/24/08	Cs-137	1375.90 ± 25.41	1450.0	1090.0 - 1900.0	Pass
STAP-1143	03/24/08	Fe-55	145.60 ± 28.94	241.0	106.0 - 375.0	Pass
STAP-1143 [e]	03/24/08	Mn-54	0.00 ± 0.00	0.0	0.0 - 10.0	Pass
STAP-1143	03/24/08	Pu-238	53.65 ± 1.54	46.8	32.1 - 61.5	Pass
STAP-1143	03/24/08	Pu-239/40	70.44 ± 3.11	64.1	46.5 - 83.0	Pass
STAP-1143	03/24/08	Sr-90	157.60 ± 7.70	152.0	66.9 - 236.0	Pass
STAP-1143	03/24/08	U-233/4	62.15 ± 3.41	66.7	42.0 - 98.8	Pass
STAP-1143	03/24/08	U-238	64.11 ± 3.29	66.2	42.4 - 94.0	Pass
STAP-1143	03/24/08	Uranium	128.40 ± 3.29	136.0	69.5 - 216.0	Pass
STAP-1143	03/24/08	Zn-65	889.90 ± 15.90	872.0	604.0 - 1210.0	Pass
STAP-1144	03/24/08	Gr. Alpha	13.08 ± 1.09	8.8	4.56 - 13.2	Pass
STAP-1144	03/24/08	Gr. Beta	99.90 ± 3.09	92.2	56.80 - 135.0	Pass
STSO-1145	03/24/08	Ac-228	1269.02 ± 36.81	1180.0	757.0 - 1660.0	Pass
STSO-1145	03/24/08	Am-241	1268.50 ± 85.80	1230.0	735.0 - 1580.0	Pass
STSO-1145	03/24/08	Bi-212	1407.10 ± 56.64	1360.0	357.0 - 2030.0	Pass
STSO-1145	03/24/08	Bi-214	2145.50 ± 305.63	1790.0	1100.0 - 2570.0	Pass
STSO-1145	03/24/08	Co-60	5219.70 ± 90.30	5130.0	3730.0 - 6890.0	Pass
STSO-1145	03/24/08	Cs-134	5427.30 ± 102.94	5640.0	3630.0 - 6790.0	Pass
STSO-1145	03/24/08	Cs-137	6346.60 ± 201.80	6010.0	4600.0 - 7810.0	Pass
STSO-1145	03/24/08	K-40	11052.70 ± 181.80	11000.0	7980.0 - 14900.0	Pass
STSO-1145 [e]	03/24/08	Mn-54	0.00 ± 0.00	0.0	0.0 - 10.0	Pass
STSO-1145	03/24/08	Pb-212	1198.20 ± 96.58	1080.0	697.0 - 1520.0	Pass
STSO-1145	03/24/08	Pb-214	2253.30 ± 291.60	2020.0	1210.0 - 3010.0	Pass
STSO-1145	03/24/08	Sr-90	6407.00 ± 277.00	5360.0	1940.0 - 8750.0	Pass
STSO-1145	03/24/08	Th-234	2421.80 ± 321.00	2030.0	644.0 - 3870.0	Pass
STSO-1145 [f]	03/24/08	U-233/4	1227.93 ± 91.52	2050.0	1240.0 - 2580.0	Fail
STSO-1145	03/24/08	U-238	1319.90 ± 48.81	2030.0	1240.0 - 2580.0	Pass
STSO-1145	03/24/08	Uranium	2592.00 ± 140.50	4180.0	2380.0 - 5640.0	Pass
STSO-1145	03/24/08	Zn-65	2936.20 ± 73.50	2660.0	2110.0 - 3570.0	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-1146	03/24/08	Am-241	1261.50 ± 73.90	1260.0	718.0 - 1730.0	Pass
STVE-1146	03/24/08	Cm-244	1152.50 ± 57.44	1200.0	591.0 - 1870.0	Pass
STVE-1146	03/24/08	Co-60	912.41 ± 13.59	888.0	600.0 - 1280.0	Pass
STVE-1146	03/24/08	Cs-134	1547.70 ± 38.81	1540.0	882.0 - 2130.0	Pass
STVE-1146	03/24/08	Cs-137	1163.80 ± 20.62	1100.0	807.0 - 1530.0	Pass
STVE-1146	03/24/08	K-40	22186.00 ± 339.40	24600.0	17700.0 - 34800.0	Pass
STVE-1146 [e]	03/24/08	Mn-54	0.00 ± 0.00	0.0	0.0 - 10.0	Pass
STVE-1146	03/24/08	Sr-90	3825.90 ± 140.66	4130.0	2310.0 - 5480.0	Pass
STVE-1146	03/24/08	U-233/4	2753.30 ± 227.90	3070.0	2110.0 - 4070.0	Pass
STVE-1146	03/24/08	U-238	2697.10 ± 143.20	3050.0	2140.0 - 3850.0	Pass
STVE-1146	03/24/08	Uranium	5586.10 ± 455.20	6260.0	4300.0 - 8080.0	Pass
STVE-1146	03/24/08	Zn-65	1676.80 ± 43.00	1430.0	1030.0 - 1960.0	Pass
STW-1147	03/24/08	Am-241	97.56 ± 1.02	90.9	62.0 - 124.0	Pass
STW-1147	03/24/08	Co-60	1430.00 ± 33.33	1420.0	1240.0 - 1680.0	Pass
STW-1147	03/24/08	Cs-134	730.18 ± 33.39	751.0	555.0 - 862.0	Pass
STW-1147	03/24/08	Cs-137	1947.80 ± 13.80	1990.0	1690.0 - 2380.0	Pass
STW-1147	03/24/08	Fe-55	1422.70 ± 172.16	2080.0	1210.0 - 2780.0	Pass
STW-1147 [e]	03/24/08	Mn-54	0.00 ± 0.00	0.0	0.0 - 10.0	Pass
STW-1147	03/24/08	Pu-238	144.16 ± 4.54	135.0	102.0 - 168.0	Pass
STW-1147	03/24/08	Pu-239/40	82.16 ± 2.50	80.7	62.4 - 99.8	Pass
STW-1147	03/24/08	Sr-90	512.03 ± 43.37	512.0	325.0 - 684.0	Pass
STW-1147	03/24/08	U-233/4	74.40 ± 1.20	81.0	61.0 - 104.0	Pass
STW-1147	03/24/08	U-238	75.10 ± 1.35	80.3	61.3 - 99.5	Pass
STW-1147	03/24/08	Uranium	152.10 ± 2.55	165.0	119.0 - 220.0	Pass
STW-1147	03/24/08	Zn-65	708.90 ± 29.00	694.0	588.0 - 865.0	Pass
STW-1120	03/19/07	Uranium	339.60 ± 10.66	391.0	282.0 - 521.0	Pass
STW-1120	03/19/07	Zn-65	2009.00 ± 36.40	1910.0	1600.0 - 2410.0	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.

[e] Included in the testing series as a "false positive". No activity expected.

[f] The analysis was repeated by leaching and total dissolution methods. Total dissolution yielded results within expected range. Results of the reanalysis: U-233,4, 1655 ± 95 pCi/kg. U-238 1805 ± 97 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 2008

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 (339)	0.01	0.031 (270/270) (0.005-0.061)	37 2.0 miles NNW	0.032(54/54) (0.017-0.061)	Stations 48 & 53 0.033 (69/69) (0.014-0.075)	0
	Gamma (26) Be-7	-	0.091 (20/20) (0.062-0.150)	37 2.0 miles NNW	0.096 (4/4) (0.069-0.115)	0.087 (6/6) (0.056-0.115)	0
	I-131 (339)	0.07	- (0/270)	N/A	N/A	- (0/69)	0
External Radiation (mR/day)	Dosimeters (346)	-	0.115 (328/328) (0.010-0.248)	47 0.16 miles S	0.174 (8/8) (0.1.21-0.248)	Stations 39, 48 & 53 0.124 (18/18) (0.087-0.197)	0
Surface Water (pCi/l)	Gamma (24)		-(0/12)	N/A	N/A	JRR -(0/12)	0
	Tritium (24)	3000	13137 (12/12) (10079-16607)	SP 3.2 miles SSE	13137 (12/12) (10079-16607)	-(0/12)	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)	2000	-(0/28)	N/A	N/A	-(0/4)	0

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

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

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

Location of Facility: Coffey County, Kansas *Reporting Period: Annual 2008*

Medium of Pathway Sampled (Unit of Measurement)	Analysis and Total Number of Analysis Performed	ODCM Lower Limit of Detection (LLD)	All Indicator Locations ** Mean (f) ** Range	Indicator Location with Highest Annual Mean Name Distance and Direction	** Mean (f) ** Range	Control Locations ** Mean (f) ** Range	Number of Nonroutine Reported Measurements **
Drinking Water (pCi/l)	I-131 (24)	1	-(0/12)	N/A	N/A	BW-15 -(0/12)	0
	Gross Beta (24)	4	3.4 (12/12) (2.1-5.0)	IO-DW 26.1 miles SSE	3.4 (12/12) (2.1-5.0)	3.3 (12/12) (1.9-4.5)	0
	Gamma (24)		-(0/12)	N/A	N/A	-(0/12)	0
	Tritium (8)	2000	-(0/4)	N/A	N/A	-(0/4)	0
Shoreline Sediment (pCi/kg dry)	Gamma (5)					JRR	
	K-40	-	11851.7 (3/3) (10664-13846)	DC 0.8 miles WNW	12445.5 (2/2) (11045-13846)	10151 (2/2) (9671-10631)	0
	Co-60	-	60.9 (1/3)	DC 0.8 miles WNW	60.9 (1/2)	-(0/2)	0
	Cs-137	180	129.8 (2/3) (98.7-160.9)	DC 0.8 miles WNW	160.9 (1/2)	131.1 (1/2)	0
Fish (pCi/kg wet)	Gamma (18)					JRR	
	K-40	-	2957 (11/11) (2026.8-3733.5)	CCL 0.6 miles	2957 (11/11) (2026.8-3733.5)	3010.7 (7/7) (2512.4-3440.6)	0
	Tritium (18)	-	7828.5 (11/11) (3861-11140)	CCL 0.6 miles	7828.5 (11/11) (3861-11140)	-(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

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

Location of Facility: Coffey County, Kansas Reporting Period: Annual 2008

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 (21)					D-2	
	Be-7	-	785.4 (13/14) (381.2-1279.2)	N-1 2.4 miles W	843.8 (6/7) (424.1-1279.2)	756.7 (7/7) (476.9-1098.0)	0
	K-40	-	4454.2 (14/14) (2744.8-6494.2)	Q-6 2.4 miles NW	5086.8 (7/7) (3627.7-6494.2)	4967.8 (7/7) (3268.5-6417.1)	0
						NR-U1	
Crops (pCi/kg wet)	Gamma (3)						
	K-40	-	2765 (1/1)	NR-D1 8.9 miles S	2765 (1/1)	7657.6 (2/2) (2710-12605)	0
Bottom Sediment (pCi/kg dry)	Gamma (12)					JRR	
	K-40	-	11054.1 (10/10) (7307-16124)	DC 0.8 miles WNW	11863.0 (7/7) (7307-16124)	14128.5 (2/2) (13202-15055)	0
	Co-60	-	111.5 (2/10) (95.6-127.4)	DC 0.8 miles WNW	111.5 (2/7) (95.6-127.4)	- (0/2)	0
	Cs-137	-	133.8 (7/10) (59.6-216.5)	DC 0.8 miles WNW	162.8 (5/7) (70.2-216.5)	120.7 (1/2)	0

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

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

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

Location of Facility: Coffey County, Kansas Reporting Period: Annual 2008

Medium of Pathway Sampled (Unit of Measurement)	Analysis and Total Number of Analysis Performed	ODCM Lower Limit of Detection (LLD)	All Indicator Locations ** Mean (f) ** Range	Indicator Location with Highest Annual Mean Name Distance and Direction	** Mean (f) ** Range	Control Locations ** Mean (f) ** Range	Number of Nonroutine Reported Measurements **
Aquatic Vegetation (pCi/kg wet)	Gamma (3)					No Control	
	Be-7	-	512.6 (2/3) (316.0-709.2)	EEA 3.0 miles NNW	709.2 (1/1)		0
	K-40	-	2968.6 (3/3) (2124.7-3721.2)	EEA 3.0 miles NNW	3721.2 (1/1)		0
	Cs-137	-	34.8 (1/3)	EEA 3.0 miles NNW	34.8 (1/1)		0
Terrestrial Vegetation (pCi/kg wet)	Gamma (2)					No Control	
	Be-7	-	1577.6 (2/2) (688.1-2467.2)	MUDS 1.5 miles WNW	2467.2 (1/1)		0
	K-40		4761.2 (2/2) (4588.5-4933.9)	MUDS 1.5 miles WNW	4933.9 (1/1)		0
Soil (pCi/kg dry)	Gamma (2)					No Control	
	K-40	-	8538.1 (2/2) (6826-10250)	EEA 3.0 miles NNW	10250.0 (1/1)		0
	Cs-137	-	187.9 (2/2) (126.2-249.5)	EEA 3.0 miles NNW	249.5 (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

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

Location of Facility: Coffey County, Kansas Reporting Period: Annual 2008

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 **
Deer (pCi/kg wet)	Gamma (1)					No Control	
	K-40	-	3203.0 (1/1)	A1.6 1.6 miles N	3203.0 (1/1)		0
	Tritium (1)	-	243 (1/1)	A1.6 1.6 miles N	243 (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
27-DEC-07	03-JAN-08	292	0.039 +/- 0.004	< 0.020	
03-JAN-08	10-JAN-08	290	0.027 +/- 0.004	< 0.018	
03-JAN-08	10-JAN-08	290	0.030 +/- 0.004		Duplicate
10-JAN-08	16-JAN-08	254	0.048 +/- 0.005	< 0.027	
16-JAN-08	23-JAN-08	317	0.035 +/- 0.004	< 0.015	
23-JAN-08	30-JAN-08	311	0.040 +/- 0.004	< 0.018	
30-JAN-08	07-FEB-08	337	0.035 +/- 0.004	< 0.013	
07-FEB-08	13-FEB-08	266	0.034 +/- 0.004	< 0.014	
13-FEB-08	20-FEB-08	52	0.033 +/- 0.016	< 0.057	
20-FEB-08	27-FEB-08	303	0.029 +/- 0.004	< 0.012	
27-FEB-08	05-MAR-08	292	0.025 +/- 0.004	< 0.015	
05-MAR-08	12-MAR-08	313	0.035 +/- 0.004	< 0.018	
12-MAR-08	19-MAR-08	306	0.024 +/- 0.004	< 0.010	
12-MAR-08	19-MAR-08	306	0.020 +/- 0.003		Duplicate
19-MAR-08	26-MAR-08	306	0.021 +/- 0.004	< 0.008	
26-MAR-08	02-APR-08	295	0.020 +/- 0.004	< 0.013	
02-APR-08	09-APR-08	297	0.021 +/- 0.004	< 0.013	
09-APR-08	16-APR-08	291	0.020 +/- 0.004	< 0.017	
16-APR-08	23-APR-08	299	0.028 +/- 0.004	< 0.009	
23-APR-08	30-APR-08	307	0.025 +/- 0.004	< 0.010	
30-APR-08	08-MAY-08	352	0.019 +/- 0.003	< 0.007	
08-MAY-08	15-MAY-08	295	0.014 +/- 0.003	< 0.016	
08-MAY-08	15-MAY-08	295	0.016 +/- 0.003		Duplicate
15-MAY-08	21-MAY-08	268	0.030 +/- 0.004	< 0.011	
21-MAY-08	28-MAY-08	379	0.020 +/- 0.003	< 0.009	
28-MAY-08	04-JUN-08	295	0.024 +/- 0.004	< 0.015	
04-JUN-08	11-JUN-08	303	0.021 +/- 0.004	< 0.018	
11-JUN-08	18-JUN-08	309	0.021 +/- 0.003	< 0.010	
18-JUN-08	25-JUN-08	303	0.032 +/- 0.004	< 0.020	
25-JUN-08	02-JUL-08	290	0.029 +/- 0.004	< 0.018	
02-JUL-08	09-JUL-08	302	0.025 +/- 0.004	< 0.014	
09-JUL-08	16-JUL-08	300	0.026 +/- 0.003	< 0.015	
16-JUL-08	23-JUL-08	296	0.042 +/- 0.004	< 0.012	
23-JUL-08	30-JUL-08	302	0.032 +/- 0.003	< 0.016	
30-JUL-08	06-AUG-08	300	0.037 +/- 0.004	< 0.010	
06-AUG-08	13-AUG-08	301	0.042 +/- 0.004	< 0.013	
13-AUG-08	20-AUG-08	291	0.038 +/- 0.004	< 0.017	
20-AUG-08	27-AUG-08	303	0.033 +/- 0.004	< 0.047	
27-AUG-08	04-SEP-08	357	0.033 +/- 0.003	< 0.015	
04-SEP-08	10-SEP-08	249	0.032 +/- 0.004	< 0.015	

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
10-SEP-08	17-SEP-08	301	0.024 +/- 0.003	< 0.011	
17-SEP-08	24-SEP-08	297	0.040 +/- 0.004	< 0.015	
24-SEP-08	01-OCT-08	295	0.046 +/- 0.004	< 0.012	
01-OCT-08	08-OCT-08	301	0.035 +/- 0.004	< 0.018	
08-OCT-08	15-OCT-08	307	0.031 +/- 0.004	< 0.013	
15-OCT-08	23-OCT-08	341	0.034 +/- 0.003	< 0.016	
23-OCT-08	29-OCT-08	254	0.025 +/- 0.004	< 0.019	
29-OCT-08	05-NOV-08	303	0.049 +/- 0.004	< 0.013	
05-NOV-08	13-NOV-08	347	0.020 +/- 0.003	< 0.018	
13-NOV-08	19-NOV-08	263	0.032 +/- 0.004	< 0.011	
19-NOV-08	26-NOV-08	302	0.034 +/- 0.004	< 0.017	
26-NOV-08	03-DEC-08	300	0.036 +/- 0.004	< 0.015	
03-DEC-08	11-DEC-08	350	0.033 +/- 0.003	< 0.019	
03-DEC-08	11-DEC-08	350	0.034 +/- 0.003		Duplicate
11-DEC-08	17-DEC-08	268	0.037 +/- 0.004	< 0.019	
17-DEC-08	26-DEC-08	378	0.047 +/- 0.004	< 0.017	
26-DEC-08	31-DEC-08	212	0.037 +/- 0.005	< 0.035	
31-DEC-08	07-JAN-09	291	0.040 +/- 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
27-DEC-07	03-JAN-08	302	0.041 +/- 0.004	< 0.019	
27-DEC-07	03-JAN-08	302	0.042 +/- 0.004		Duplicate
03-JAN-08	10-JAN-08	274	0.028 +/- 0.004	< 0.019	
10-JAN-08	16-JAN-08	259	0.041 +/- 0.005	< 0.027	
16-JAN-08	23-JAN-08	326	0.033 +/- 0.004	< 0.014	
23-JAN-08	30-JAN-08	300	0.036 +/- 0.004	< 0.019	
30-JAN-08	07-FEB-08	346	0.031 +/- 0.004	< 0.012	
07-FEB-08	13-FEB-08	260	0.041 +/- 0.004	< 0.015	
13-FEB-08	20-FEB-08	305	0.029 +/- 0.004	< 0.010	
13-FEB-08	20-FEB-08	305	0.032 +/- 0.004		Duplicate
20-FEB-08	27-FEB-08	311	0.027 +/- 0.004	< 0.012	
27-FEB-08	05-MAR-08	297	0.025 +/- 0.004	< 0.015	
05-MAR-08	12-MAR-08	307	0.034 +/- 0.004	< 0.019	
12-MAR-08	19-MAR-08	309	0.021 +/- 0.004	< 0.010	
19-MAR-08	26-MAR-08	315	0.019 +/- 0.003	< 0.007	
26-MAR-08	02-APR-08	301	0.018 +/- 0.003	< 0.012	
02-APR-08	09-APR-08	303	0.022 +/- 0.004	< 0.012	
09-APR-08	16-APR-08	297	0.019 +/- 0.003	< 0.017	
09-APR-08	16-APR-08	297	0.018 +/- 0.003		Duplicate
16-APR-08	23-APR-08	307	0.027 +/- 0.004	< 0.009	
23-APR-08	30-APR-08	309	0.030 +/- 0.004	< 0.010	
30-APR-08	08-MAY-08	339	0.005 +/- 0.002	< 0.007	
08-MAY-08	15-MAY-08	300	0.016 +/- 0.003	< 0.016	
15-MAY-08	21-MAY-08	263	0.031 +/- 0.004	< 0.012	
21-MAY-08	28-MAY-08	309	0.021 +/- 0.004	< 0.011	
28-MAY-08	04-JUN-08	291	0.029 +/- 0.004	< 0.015	
04-JUN-08	11-JUN-08	302	0.020 +/- 0.003	< 0.018	
11-JUN-08	18-JUN-08	305	0.021 +/- 0.004	< 0.010	
18-JUN-08	25-JUN-08	299	0.032 +/- 0.004	< 0.020	
18-JUN-08	25-JUN-08	299	0.030 +/- 0.004		Duplicate
25-JUN-08	02-JUL-08	298	0.028 +/- 0.004	< 0.018	
02-JUL-08	09-JUL-08	303	0.024 +/- 0.004	< 0.014	
09-JUL-08	16-JUL-08	301	0.025 +/- 0.003	< 0.015	
16-JUL-08	23-JUL-08	296	0.037 +/- 0.004	< 0.012	
23-JUL-08	30-JUL-08	304	0.035 +/- 0.004	< 0.016	
30-JUL-08	06-AUG-08	299	0.036 +/- 0.004	< 0.010	
06-AUG-08	13-AUG-08	305	0.041 +/- 0.004	< 0.013	
13-AUG-08	20-AUG-08	289	0.040 +/- 0.004	< 0.017	
20-AUG-08	27-AUG-08	296	0.032 +/- 0.004	< 0.034	
27-AUG-08	04-SEP-08	358	0.034 +/- 0.003	< 0.015	

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
04-SEP-08	10-SEP-08	249	0.033 +/- 0.004	< 0.015	
10-SEP-08	17-SEP-08	300	0.024 +/- 0.003	< 0.011	
17-SEP-08	24-SEP-08	298	0.041 +/- 0.004	< 0.015	
24-SEP-08	01-OCT-08	293	0.046 +/- 0.004	< 0.012	
01-OCT-08	08-OCT-08	299	0.035 +/- 0.004	< 0.019	
08-OCT-08	15-OCT-08	305	0.029 +/- 0.003	< 0.014	
15-OCT-08	23-OCT-08	340	0.037 +/- 0.004	< 0.016	
23-OCT-08	29-OCT-08	254	0.028 +/- 0.004	< 0.019	
29-OCT-08	05-NOV-08	296	0.054 +/- 0.004	< 0.014	
05-NOV-08	13-NOV-08	349	0.023 +/- 0.003	< 0.018	
13-NOV-08	19-NOV-08	265	0.032 +/- 0.004	< 0.011	
19-NOV-08	26-NOV-08	308	0.036 +/- 0.004	< 0.010	
26-NOV-08	03-DEC-08	303	0.041 +/- 0.004	< 0.015	
03-DEC-08	11-DEC-08	347	0.032 +/- 0.003	< 0.019	
11-DEC-08	17-DEC-08	268	0.034 +/- 0.004	< 0.019	
17-DEC-08	26-DEC-08	379	0.048 +/- 0.004	< 0.017	
26-DEC-08	31-DEC-08	218	0.041 +/- 0.005	< 0.034	
31-DEC-08	07-JAN-09	293	0.042 +/- 0.004	< 0.010	

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
27-DEC-07	03-JAN-08	310	0.039 +/- 0.004	< 0.019	
03-JAN-08	10-JAN-08	295	0.028 +/- 0.004	< 0.018	
10-JAN-08	16-JAN-08	254	0.045 +/- 0.005	< 0.027	
16-JAN-08	23-JAN-08	324	0.036 +/- 0.004	< 0.014	
23-JAN-08	30-JAN-08	305	0.034 +/- 0.004	< 0.019	
30-JAN-08	07-FEB-08	344	0.042 +/- 0.004	< 0.013	
07-FEB-08	13-FEB-08	262	0.033 +/- 0.004	< 0.015	
13-FEB-08	20-FEB-08	304	0.029 +/- 0.004	< 0.010	
20-FEB-08	27-FEB-08	306	0.026 +/- 0.004	< 0.012	
27-FEB-08	05-MAR-08	297	0.028 +/- 0.004	< 0.015	
27-FEB-08	05-MAR-08	297	0.028 +/- 0.004		Duplicate
05-MAR-08	12-MAR-08	302	0.033 +/- 0.004	< 0.019	
12-MAR-08	19-MAR-08	307	0.022 +/- 0.004	< 0.010	
19-MAR-08	26-MAR-08	305	0.019 +/- 0.004	< 0.008	
26-MAR-08	02-APR-08	293	0.019 +/- 0.004	< 0.013	
26-MAR-08	02-APR-08	293	0.016 +/- 0.003	< 0.013	
02-APR-08	09-APR-08	304	0.021 +/- 0.004	< 0.012	
09-APR-08	16-APR-08	302	0.018 +/- 0.003	< 0.017	
16-APR-08	23-APR-08	299	0.028 +/- 0.004	< 0.009	
23-APR-08	30-APR-08	305	0.025 +/- 0.004	< 0.010	
23-APR-08	30-APR-08	305	0.027 +/- 0.004		Duplicate
30-APR-08	08-MAY-08	348	0.018 +/- 0.003	< 0.007	
08-MAY-08	15-MAY-08	301	0.019 +/- 0.003	< 0.016	
15-MAY-08	21-MAY-08	266	0.029 +/- 0.004	< 0.011	
21-MAY-08	28-MAY-08	309	0.019 +/- 0.003	< 0.011	
28-MAY-08	04-JUN-08	293	0.029 +/- 0.004	< 0.015	
04-JUN-08	11-JUN-08	303	0.021 +/- 0.003	< 0.018	
11-JUN-08	18-JUN-08	308	0.022 +/- 0.004	< 0.010	
11-JUN-08	18-JUN-08	308	0.024 +/- 0.004		Duplicate
18-JUN-08	25-JUN-08	300	0.030 +/- 0.004	< 0.020	
25-JUN-08	02-JUL-08	293	0.029 +/- 0.004	< 0.018	
02-JUL-08	09-JUL-08	303	0.028 +/- 0.004	< 0.014	
09-JUL-08	16-JUL-08	302	0.022 +/- 0.003	< 0.015	
16-JUL-08	23-JUL-08	290	0.040 +/- 0.004	< 0.012	
23-JUL-08	30-JUL-08	302	0.037 +/- 0.004	< 0.016	
30-JUL-08	06-AUG-08	301	0.039 +/- 0.004	< 0.010	
06-AUG-08	13-AUG-08	303	0.042 +/- 0.004	< 0.013	
13-AUG-08	20-AUG-08	293	0.038 +/- 0.004	< 0.017	
20-AUG-08	27-AUG-08	300	0.033 +/- 0.004	< 0.044	
27-AUG-08	04-SEP-08	359	0.034 +/- 0.003	< 0.015	

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
04-SEP-08	10-SEP-08	248	0.034 +/- 0.004	< 0.015	
10-SEP-08	17-SEP-08	299	0.023 +/- 0.003	< 0.011	
17-SEP-08	24-SEP-08	298	0.039 +/- 0.004	< 0.015	
24-SEP-08	01-OCT-08	298	0.044 +/- 0.004	< 0.012	
01-OCT-08	08-OCT-08	299	0.034 +/- 0.004	< 0.019	
08-OCT-08	15-OCT-08	307	0.030 +/- 0.003	< 0.013	
15-OCT-08	23-OCT-08	342	0.035 +/- 0.003	< 0.016	
23-OCT-08	29-OCT-08	217	0.030 +/- 0.004	< 0.022	
29-OCT-08	05-NOV-08	299	0.053 +/- 0.004	< 0.013	
05-NOV-08	13-NOV-08	345	0.021 +/- 0.003	< 0.018	
13-NOV-08	19-NOV-08	267	0.033 +/- 0.004	< 0.011	
19-NOV-08	26-NOV-08	305	0.038 +/- 0.004	< 0.017	
26-NOV-08	03-DEC-08	302	0.041 +/- 0.004	< 0.015	
03-DEC-08	11-DEC-08	347	0.033 +/- 0.003	< 0.019	
11-DEC-08	17-DEC-08	277	0.033 +/- 0.004	< 0.018	
17-DEC-08	26-DEC-08	379	0.044 +/- 0.004	< 0.017	
26-DEC-08	31-DEC-08	223	0.036 +/- 0.005	< 0.033	
31-DEC-08	07-JAN-09	295	0.039 +/- 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
27-DEC-07	03-JAN-08	323	0.043 +/- 0.004	< 0.018	
03-JAN-08	10-JAN-08	281	0.028 +/- 0.004	< 0.019	
10-JAN-08	16-JAN-08	263	0.061 +/- 0.006	< 0.026	
10-JAN-08	16-JAN-08	263	0.052 +/- 0.005		ReCount
16-JAN-08	23-JAN-08	320	0.034 +/- 0.004	< 0.014	
23-JAN-08	30-JAN-08	302	0.039 +/- 0.004	< 0.019	
30-JAN-08	07-FEB-08	343	0.033 +/- 0.004	< 0.013	
07-FEB-08	13-FEB-08	266	0.034 +/- 0.004	< 0.014	
13-FEB-08	20-FEB-08	305	0.031 +/- 0.004	< 0.010	
20-FEB-08	27-FEB-08	300	0.029 +/- 0.004	< 0.012	
27-FEB-08	05-MAR-08	298	0.024 +/- 0.004	< 0.015	
05-MAR-08	12-MAR-08	311	0.029 +/- 0.004	< 0.019	
12-MAR-08	19-MAR-08	303	0.024 +/- 0.004	< 0.010	
19-MAR-08	26-MAR-08	309	0.024 +/- 0.004	< 0.007	
26-MAR-08	02-APR-08	308	0.017 +/- 0.003	< 0.012	
02-APR-08	09-APR-08	301	0.021 +/- 0.004	< 0.012	
09-APR-08	16-APR-08	292	0.020 +/- 0.004	< 0.017	
16-APR-08	23-APR-08	309	0.028 +/- 0.004	< 0.009	
23-APR-08	30-APR-08	328	0.024 +/- 0.003	< 0.009	
30-APR-08	08-MAY-08	352	0.025 +/- 0.003	< 0.007	
08-MAY-08	15-MAY-08	302	0.017 +/- 0.003	< 0.016	
15-MAY-08	21-MAY-08	275	0.034 +/- 0.004	< 0.011	
15-MAY-08	21-MAY-08	275	0.035 +/- 0.004	< 0.011	Duplicate
21-MAY-08	28-MAY-08	306	0.021 +/- 0.004	< 0.011	
28-MAY-08	04-JUN-08	300	0.028 +/- 0.004	< 0.015	
04-JUN-08	11-JUN-08	309	0.020 +/- 0.003	< 0.018	
11-JUN-08	18-JUN-08	322	0.021 +/- 0.003	< 0.009	
18-JUN-08	25-JUN-08	306	0.030 +/- 0.004	< 0.020	
25-JUN-08	02-JUL-08	302	0.027 +/- 0.004	< 0.018	
02-JUL-08	09-JUL-08	304	0.025 +/- 0.004	< 0.014	
09-JUL-08	16-JUL-08	308	0.025 +/- 0.003	< 0.014	
16-JUL-08	23-JUL-08	306	0.039 +/- 0.004	< 0.011	
23-JUL-08	30-JUL-08	307	0.033 +/- 0.003	< 0.016	
23-JUL-08	30-JUL-08	307	0.033 +/- 0.003		Duplicate
30-JUL-08	06-AUG-08	302	0.036 +/- 0.004	< 0.010	
06-AUG-08	13-AUG-08	309	0.040 +/- 0.004	< 0.013	
13-AUG-08	20-AUG-08	298	0.037 +/- 0.004	< 0.016	
20-AUG-08	27-AUG-08	302	0.033 +/- 0.004	< 0.041	
20-AUG-08	27-AUG-08	302	0.031 +/- 0.004		Duplicate
27-AUG-08	04-SEP-08	373	0.032 +/- 0.003	< 0.015	

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
04-SEP-08	10-SEP-08	250	0.034 +/- 0.004	< 0.015	
10-SEP-08	17-SEP-08	301	0.023 +/- 0.003	< 0.011	
17-SEP-08	24-SEP-08	306	0.038 +/- 0.004	< 0.015	
24-SEP-08	01-OCT-08	299	0.046 +/- 0.004	< 0.012	
01-OCT-08	08-OCT-08	307	0.029 +/- 0.003	< 0.018	
08-OCT-08	15-OCT-08	312	0.028 +/- 0.003	< 0.013	
15-OCT-08	23-OCT-08	388	0.035 +/- 0.003	< 0.014	
23-OCT-08	29-OCT-08	257	0.027 +/- 0.004	< 0.019	
29-OCT-08	05-NOV-08	304	0.055 +/- 0.004	< 0.013	
05-NOV-08	13-NOV-08	351	0.020 +/- 0.003	< 0.017	
13-NOV-08	19-NOV-08	264	0.033 +/- 0.004	< 0.011	
13-NOV-08	19-NOV-08	264	0.031 +/- 0.004		Duplicate
19-NOV-08	26-NOV-08	306	0.038 +/- 0.004	< 0.017	
26-NOV-08	03-DEC-08	300	0.043 +/- 0.004	< 0.015	
03-DEC-08	11-DEC-08	348	0.032 +/- 0.003	< 0.019	
11-DEC-08	17-DEC-08	267	0.038 +/- 0.004	< 0.019	
17-DEC-08	26-DEC-08	379	0.052 +/- 0.004	< 0.017	
26-DEC-08	31-DEC-08	223	0.037 +/- 0.005	< 0.033	
31-DEC-08	07-JAN-09	296	0.036 +/- 0.004	< 0.010	

Location: 048

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
27-DEC-07	03-JAN-08	306	0.040 +/- 0.004	< 0.019	
03-JAN-08	10-JAN-08	304	0.026 +/- 0.003	< 0.017	
10-JAN-08	16-JAN-08	255	0.045 +/- 0.005	< 0.027	
16-JAN-08	23-JAN-08	317	0.033 +/- 0.004	< 0.015	
23-JAN-08	30-JAN-08	301	0.035 +/- 0.004	< 0.019	
30-JAN-08	07-FEB-08	339	0.037 +/- 0.004	< 0.013	
07-FEB-08	13-FEB-08	261	0.036 +/- 0.004	< 0.015	
13-FEB-08	20-FEB-08	36	0.041 +/- 0.023	< 0.083	
20-FEB-08	27-FEB-08	321	0.030 +/- 0.004	< 0.012	
27-FEB-08	05-MAR-08	298	0.023 +/- 0.004	< 0.015	
05-MAR-08	12-MAR-08	318	0.032 +/- 0.004	< 0.018	
05-MAR-08	12-MAR-08	318	0.030 +/- 0.004		Duplicate
12-MAR-08	19-MAR-08	303	0.021 +/- 0.004	< 0.010	
19-MAR-08	26-MAR-08	305	0.021 +/- 0.004	< 0.008	
26-MAR-08	02-APR-08	293	0.015 +/- 0.003	< 0.013	
02-APR-08	09-APR-08	297	0.022 +/- 0.004	< 0.013	
09-APR-08	16-APR-08	300	0.022 +/- 0.004	< 0.017	
16-APR-08	23-APR-08	55	0.033 +/- 0.015	< 0.048	
23-APR-08	30-APR-08	307	0.022 +/- 0.003	< 0.010	
30-APR-08	08-MAY-08	340	0.020 +/- 0.003	< 0.007	
30-APR-08	08-MAY-08	340	0.021 +/- 0.003		Duplicate
08-MAY-08	15-MAY-08	303	0.014 +/- 0.003	< 0.016	
15-MAY-08	21-MAY-08	262	0.027 +/- 0.004	< 0.012	
21-MAY-08	28-MAY-08	308	0.022 +/- 0.004	< 0.011	
28-MAY-08	04-JUN-08	310	0.023 +/- 0.003	< 0.014	
04-JUN-08	11-JUN-08	300	0.019 +/- 0.003	< 0.018	
11-JUN-08	18-JUN-08	309	0.022 +/- 0.004	< 0.010	
18-JUN-08	25-JUN-08	300	0.033 +/- 0.004	< 0.020	
25-JUN-08	02-JUL-08	78	0.056 +/- 0.012	< 0.068	
02-JUL-08	09-JUL-08	300	0.027 +/- 0.004	< 0.014	
09-JUL-08	16-JUL-08	300	0.026 +/- 0.003	< 0.015	
16-JUL-08	23-JUL-08	272	0.041 +/- 0.004	< 0.013	
23-JUL-08	30-JUL-08	294	0.031 +/- 0.003	< 0.017	
30-JUL-08	06-AUG-08	299	0.036 +/- 0.004	< 0.010	
06-AUG-08	13-AUG-08	306	0.041 +/- 0.004	< 0.013	
20-AUG-08	27-AUG-08	279	0.033 +/- 0.004	< 0.043	
27-AUG-08	04-SEP-08	368	0.034 +/- 0.003	< 0.015	
04-SEP-08	10-SEP-08	248	0.035 +/- 0.004	< 0.015	
10-SEP-08	17-SEP-08	303	0.023 +/- 0.003	< 0.011	
17-SEP-08	24-SEP-08	296	0.041 +/- 0.004	< 0.015	

Air Particulate and Charcoal Filters

Location: 048

Collection Start Date	Collection End Date	Volume m^3	Gross Beta Concentration (pCi/m^3)	I-131 Concentration (pCi/m^3)	Duplicate Analysis
17-SEP-08	24-SEP-08	296	0.037 +/- 0.004		Duplicate
24-SEP-08	01-OCT-08	294	0.046 +/- 0.004	< 0.012	
01-OCT-08	08-OCT-08	300	0.034 +/- 0.004	< 0.018	
08-OCT-08	15-OCT-08	305	0.026 +/- 0.003	< 0.014	
15-OCT-08	23-OCT-08	337	0.036 +/- 0.003	< 0.016	
23-OCT-08	29-OCT-08	254	0.028 +/- 0.004	< 0.019	
29-OCT-08	05-NOV-08	300	0.041 +/- 0.004	< 0.013	
05-NOV-08	13-NOV-08	351	0.019 +/- 0.003	< 0.017	
13-NOV-08	19-NOV-08	264	0.030 +/- 0.004	< 0.011	
19-NOV-08	26-NOV-08	304	0.034 +/- 0.004	< 0.014	
26-NOV-08	03-DEC-08	304	0.034 +/- 0.004	< 0.015	
26-NOV-08	03-DEC-08	304	0.037 +/- 0.004		Duplicate
03-DEC-08	11-DEC-08	341	0.030 +/- 0.003	< 0.019	
11-DEC-08	17-DEC-08	256	0.039 +/- 0.004	< 0.020	
17-DEC-08	26-DEC-08	378	0.046 +/- 0.004	< 0.017	

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
27-DEC-07	03-JAN-08	310	0.041 +/- 0.004	< 0.019	
03-JAN-08	10-JAN-08	296	0.031 +/- 0.004	< 0.018	
10-JAN-08	16-JAN-08	252	0.042 +/- 0.005	< 0.027	
16-JAN-08	23-JAN-08	323	0.035 +/- 0.004	< 0.014	
16-JAN-08	23-JAN-08	323	0.034 +/- 0.004		Duplicate
23-JAN-08	30-JAN-08	305	0.040 +/- 0.004	< 0.019	
30-JAN-08	07-FEB-08	346	0.037 +/- 0.004	< 0.012	
07-FEB-08	13-FEB-08	259	0.032 +/- 0.004	< 0.015	
13-FEB-08	20-FEB-08	305	0.029 +/- 0.004	< 0.010	
20-FEB-08	27-FEB-08	307	0.029 +/- 0.004	< 0.012	
27-FEB-08	05-MAR-08	297	0.023 +/- 0.004	< 0.015	
05-MAR-08	12-MAR-08	306	0.040 +/- 0.004	< 0.019	
12-MAR-08	19-MAR-08	306	0.024 +/- 0.004	< 0.010	
19-MAR-08	26-MAR-08	309	0.019 +/- 0.004	< 0.007	
26-MAR-08	02-APR-08	297	0.017 +/- 0.003	< 0.013	
02-APR-08	09-APR-08	303	0.022 +/- 0.004	< 0.012	
09-APR-08	16-APR-08	301	0.018 +/- 0.003	< 0.017	
16-APR-08	23-APR-08	303	0.027 +/- 0.004	< 0.009	
23-APR-08	30-APR-08	310	0.027 +/- 0.004	< 0.010	
30-APR-08	08-MAY-08	352	0.024 +/- 0.003	< 0.007	
08-MAY-08	15-MAY-08	301	0.024 +/- 0.004	< 0.016	
15-MAY-08	21-MAY-08	348	0.028 +/- 0.003	< 0.009	
21-MAY-08	28-MAY-08	302	0.022 +/- 0.004	< 0.011	
28-MAY-08	04-JUN-08	291	0.027 +/- 0.004	< 0.015	
04-JUN-08	11-JUN-08	304	0.021 +/- 0.003	< 0.018	
11-JUN-08	18-JUN-08	313	0.022 +/- 0.003	< 0.009	
18-JUN-08	25-JUN-08	292	0.032 +/- 0.004	< 0.021	
25-JUN-08	02-JUL-08	298	0.026 +/- 0.004	< 0.018	
02-JUL-08	09-JUL-08	303	0.029 +/- 0.004	< 0.014	
09-JUL-08	16-JUL-08	300	0.025 +/- 0.003	< 0.015	
16-JUL-08	23-JUL-08	297	0.042 +/- 0.004	< 0.012	
23-JUL-08	30-JUL-08	300	0.033 +/- 0.004	< 0.016	
30-JUL-08	06-AUG-08	302	0.035 +/- 0.004	< 0.010	
06-AUG-08	13-AUG-08	305	0.038 +/- 0.004	< 0.013	
13-AUG-08	20-AUG-08	297	0.034 +/- 0.004	< 0.016	
20-AUG-08	27-AUG-08	300	0.028 +/- 0.003	< 0.055	
27-AUG-08	04-SEP-08	367	0.033 +/- 0.003	< 0.015	
04-SEP-08	10-SEP-08	253	0.035 +/- 0.004	< 0.015	
10-SEP-08	17-SEP-08	301	0.023 +/- 0.003	< 0.011	
17-SEP-08	24-SEP-08	312	0.042 +/- 0.004	< 0.014	

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
24-SEP-08	01-OCT-08	310	0.044 +/- 0.004	< 0.012	
01-OCT-08	08-OCT-08	302	0.034 +/- 0.004	< 0.018	
08-OCT-08	15-OCT-08	310	0.026 +/- 0.003	< 0.013	
15-OCT-08	23-OCT-08	346	0.036 +/- 0.003	< 0.016	
23-OCT-08	29-OCT-08	261	0.026 +/- 0.004	< 0.018	
29-OCT-08	05-NOV-08	315	0.054 +/- 0.004	< 0.013	
05-NOV-08	13-NOV-08	352	0.020 +/- 0.003	< 0.017	
13-NOV-08	19-NOV-08	269	0.032 +/- 0.004	< 0.011	
19-NOV-08	26-NOV-08	314	0.035 +/- 0.004	< 0.020	
26-NOV-08	03-DEC-08	304	0.037 +/- 0.004	< 0.015	
03-DEC-08	11-DEC-08	350	0.039 +/- 0.004	< 0.019	
11-DEC-08	17-DEC-08	268	0.036 +/- 0.004	< 0.019	
17-DEC-08	26-DEC-08	377	0.046 +/- 0.004	< 0.017	
26-DEC-08	31-DEC-08	225	0.038 +/- 0.005	< 0.033	
31-DEC-08	07-JAN-09	301	0.041 +/- 0.004	< 0.010	

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
04-SEP-08	10-SEP-08	251	0.034 +/- 0.004	< 0.011	
10-SEP-08	17-SEP-08	305	0.024 +/- 0.003	< 0.019	
17-SEP-08	24-SEP-08	298	0.040 +/- 0.004	< 0.018	
24-SEP-08	01-OCT-08	301	0.046 +/- 0.004	< 0.016	
01-OCT-08	08-OCT-08	299	0.033 +/- 0.004	< 0.015	
01-OCT-08	08-OCT-08	299	0.035 +/- 0.004		Duplicate
08-OCT-08	15-OCT-08	306	0.028 +/- 0.003	< 0.014	
15-OCT-08	23-OCT-08	343	0.035 +/- 0.003	< 0.017	
23-OCT-08	29-OCT-08	258	0.024 +/- 0.004	< 0.027	
29-OCT-08	05-NOV-08	305	0.052 +/- 0.004	< 0.020	
05-NOV-08	13-NOV-08	346	0.023 +/- 0.003	< 0.018	
13-NOV-08	19-NOV-08	269	0.031 +/- 0.004	< 0.019	
19-NOV-08	26-NOV-08	306	0.035 +/- 0.004	< 0.020	
26-NOV-08	03-DEC-08	303	0.038 +/- 0.004	< 0.015	
03-DEC-08	11-DEC-08	349	0.030 +/- 0.003	< 0.015	
11-DEC-08	17-DEC-08	267	0.036 +/- 0.004	< 0.018	
17-DEC-08	26-DEC-08	380	0.051 +/- 0.004	< 0.014	
26-DEC-08	31-DEC-08	45	0.075 +/- 0.018	< 0.164	
31-DEC-08	07-JAN-09	293	0.038 +/- 0.004	< 0.010	

Quarterly Air Particulate - Gamma

Location: 002

02-APR-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.079+/-	0.012
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

02-JUL-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.15+/-	0.019
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

01-OCT-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.082+/-	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**

Quarterly Air Particulate - Gamma

Location: 002

31-DEC-08

Nuclide	Concentration (pCi/m^3)		
BE-7	.062+/-	0.014	
BE-7	.07+/-	0.014	*
MN-54	<	0.001	*
MN-54	<	0.001	
CO-58	<	0.001	*
CO-58	<	0.001	
FE-59	<	0.002	*
FE-59	<	0.002	
CO-60	<	0.001	*
CO-60	<	0.001	
ZN-65	<	0.001	*
ZN-65	<	0.001	
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	

* Duplicate Analysis

Location: 018

02-APR-08

Nuclide	Concentration (pCi/m³)	
BE-7	.078+/-	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

02-JUL-08

Nuclide	Concentration (pCi/m³)	
BE-7	.099+/-	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

01-OCT-08

Nuclide	Concentration (pCi/m³)	
BE-7	.099+/-	0.017
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

31-DEC-08

Nuclide	Concentration (pCi/m³)	
BE-7	.076+/-	0.012
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

02-APR-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.087+/-	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

02-JUL-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.102+/-	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

01-OCT-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.102+/-	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

31-DEC-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.074+/-	0.017
MN-54	<	0.001
CO-58	<	0.001
FE-59	<	0.001
CO-60	<	0.001
ZN-65	<	0.001
ZR-NB-95	<	0.001
CS-134	<	0.001
CS-137	<	0.001

*** Duplicate Analysis**

Quarterly Air Particulate - Gamma

Location: 037

02-APR-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.092+/-	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

02-JUL-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.115+/-	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

01-OCT-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.106+/-	0.018
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

31-DEC-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.069+/-	0.012
MN-54	<	0.001
CO-58	<	0.001
FE-59	<	0.001
CO-60	<	0.001
ZN-65	<	0.001
ZR-NB-95	<	0.001
CS-134	<	0.001
CS-137	<	0.001

*** Duplicate Analysis**

Quarterly Air Particulate - Gamma

Location: 048

02-APR-08 Nuclide	Concentration (pCi/m^3)		
BE-7	.069+/-	0.012	*
BE-7	.085+/-	0.015	
MN-54	<	0.001	*
MN-54	<	0.001	
CO-58	<	0.001	*
CO-58	<	0.001	
FE-59	<	0.001	*
FE-59	<	0.001	
CO-60	<	0.001	*
CO-60	<	0.001	
ZN-65	<	0.002	*
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	

02-JUL-08 Nuclide	Concentration (pCi/m^3)	
BE-7	.111+/-	0.018
MN-54	<	0.001
CO-58	<	0.001
FE-59	<	0.001
CO-60	<	0.001
ZN-65	<	0.001
ZR-NB-95	<	0.001
CS-134	<	0.001
CS-137	<	0.001

01-OCT-08 Nuclide	Concentration (pCi/m^3)	
BE-7	.08+/-	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

*** Duplicate Analysis**

Quarterly Air Particulate - Gamma

Location: 048

26-DEC-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.056+/-	0.015
MN-54	<	0.001
CO-58	<	0.001
FE-59	<	0.002
CO-60	<	0.001
ZN-65	<	0.001
ZR-NB-95	<	0.001
CS-134	<	0.001
CS-137	<	0.001

* Duplicate Analysis

Quarterly Air Particulate - Gamma

Location: 049

02-APR-08

Nuclide	Concentration (pCi/m³)	
BE-7	.084+/-	0.012
MN-54	<	0.001
CO-58	<	0.001
FE-59	<	0.001
CO-60	<	0.001
ZN-65	<	0.001
ZR-NB-95	<	0.001
CS-134	<	0.001
CS-137	<	0.001

02-JUL-08

Nuclide	Concentration (pCi/m³)	
BE-7	.103+/-	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

01-OCT-08

Nuclide	Concentration (pCi/m³)	
BE-7	.087+/-	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

31-DEC-08

Nuclide	Concentration (pCi/m³)	
BE-7	.07+/-	0.015
MN-54	<	0.001
CO-58	<	0.001
FE-59	<	0.002
CO-60	<	0.001
ZN-65	<	0.001
ZR-NB-95	<	0.001
CS-134	<	0.001
CS-137	<	0.001

*** Duplicate Analysis**

Quarterly Air Particulate - Gamma

Location: 053

01-OCT-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.115+/-	0.037
MN-54	<	0.004
CO-58	<	0.003
FE-59	<	0.006
CO-60	<	0.003
ZN-65	<	0.006
ZR-NB-95	<	0.002
CS-134	<	0.003
CS-137	<	0.002

31-DEC-08

Nuclide	Concentration (pCi/m^3)	
BE-7	.075+/-	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**

Exposure Pathway - Waterborne
Surface Water

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)	Duplicate Analysis
24-JAN-08	MN-54	< 4.200	
24-JAN-08	CO-58	< 5.400	
24-JAN-08	FE-59	< 4.600	
24-JAN-08	CO-60	< 4.100	
24-JAN-08	ZN-65	< 6.400	
24-JAN-08	ZR-NB-95	< 4.200	
24-JAN-08	I-131	< 5.800	
24-JAN-08	CS-134	< 4.300	
24-JAN-08	CS-137	< 4.200	
24-JAN-08	BA-LA-140	< 2.600	
24-JAN-08	H-3	< 183.000	
14-FEB-08	MN-54	< 3.500	
14-FEB-08	CO-58	< 6.300	
14-FEB-08	FE-59	< 10.200	
14-FEB-08	CO-60	< 4.800	
14-FEB-08	ZN-65	< 4.100	
14-FEB-08	ZR-NB-95	< 3.100	
14-FEB-08	I-131	< 6.900	
14-FEB-08	CS-134	< 3.500	
14-FEB-08	CS-137	< 5.200	
14-FEB-08	BA-LA-140	< 3.100	
14-FEB-08	H-3	< 175.000	
13-MAR-08	MN-54	< 1.900	
13-MAR-08	CO-58	< 1.600	
13-MAR-08	FE-59	< 5.200	
13-MAR-08	CO-60	< 1.800	
13-MAR-08	ZN-65	< 4.500	
13-MAR-08	ZR-NB-95	< 3.300	
13-MAR-08	I-131	< 5.400	
13-MAR-08	CS-134	< 3.000	
13-MAR-08	CS-137	< 2.700	
13-MAR-08	BA-LA-140	< 1.800	
13-MAR-08	H-3	< 150.000	
10-APR-08	MN-54	< 4.100	
10-APR-08	CO-58	< 3.100	
10-APR-08	FE-59	< 6.700	
10-APR-08	CO-60	< 2.000	
10-APR-08	ZN-65	< 8.800	
10-APR-08	ZR-NB-95	< 3.600	
10-APR-08	I-131	< 11.200	

Exposure Pathway - Waterborne
Surface Water

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)	Duplicate Analysis
10-APR-08	CS-134	< 4.200	
10-APR-08	CS-137	< 3.300	
10-APR-08	BA-LA-140	< 7.900	
10-APR-08	H-3	< 150.000	
08-MAY-08	MN-54	< 2.800	
08-MAY-08	CO-58	< 2.600	
08-MAY-08	FE-59	< 5.800	
08-MAY-08	CO-60	< 2.200	
08-MAY-08	ZN-65	< 3.800	
08-MAY-08	ZR-NB-95	< 3.500	
08-MAY-08	I-131	< 6.200	
08-MAY-08	CS-134	< 2.700	
08-MAY-08	CS-137	< 3.200	
08-MAY-08	BA-LA-140	< 2.700	
08-MAY-08	H-3	< 143.000	
12-JUN-08	MN-54	< 3.600	
12-JUN-08	CO-58	< 3.300	
12-JUN-08	FE-59	< 4.000	
12-JUN-08	CO-60	< 3.800	
12-JUN-08	ZN-65	< 7.300	
12-JUN-08	ZR-NB-95	< 5.400	
12-JUN-08	I-131	< 8.400	
12-JUN-08	CS-134	< 4.500	
12-JUN-08	CS-137	< 5.100	
12-JUN-08	BA-LA-140	< 6.300	
12-JUN-08	H-3	< 168.000	
17-JUL-08	MN-54	< 2.300	Duplicate
17-JUL-08	MN-54	< 2.500	
17-JUL-08	CO-58	< 1.900	Duplicate
17-JUL-08	CO-58	< 2.500	
17-JUL-08	FE-59	< 2.600	Duplicate
17-JUL-08	FE-59	< 5.800	
17-JUL-08	CO-60	< 2.000	Duplicate
17-JUL-08	CO-60	< 3.400	
17-JUL-08	ZN-65	< 6.100	Duplicate
17-JUL-08	ZN-65	< 3.400	
17-JUL-08	ZR-NB-95	< 2.300	Duplicate
17-JUL-08	ZR-NB-95	< 3.000	
17-JUL-08	I-131	< 3.600	Duplicate
17-JUL-08	I-131	< 5.900	

Exposure Pathway - Waterborne
Surface Water

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)	Duplicate Analysis
17-JUL-08	CS-134	< 2.300	Duplicate
17-JUL-08	CS-134	< 3.500	
17-JUL-08	CS-137	< 1.200	Duplicate
17-JUL-08	CS-137	< 3.300	
17-JUL-08	BA-LA-140	< 2.400	Duplicate
17-JUL-08	BA-LA-140	< 3.800	
17-JUL-08	H-3	< 143.000	Duplicate
17-JUL-08	H-3	< 143.000	
14-AUG-08	MN-54	< 2.700	Duplicate
14-AUG-08	MN-54	< 3.200	
14-AUG-08	CO-58	< 1.900	Duplicate
14-AUG-08	CO-58	< 3.600	
14-AUG-08	FE-59	< 4.500	Duplicate
14-AUG-08	FE-59	< 5.200	
14-AUG-08	CO-60	< 2.300	Duplicate
14-AUG-08	CO-60	< 2.800	
14-AUG-08	ZN-65	< 3.100	Duplicate
14-AUG-08	ZN-65	< 4.900	
14-AUG-08	ZR-NB-95	< 2.800	Duplicate
14-AUG-08	ZR-NB-95	< 2.900	
14-AUG-08	I-131	< 4.100	Duplicate
14-AUG-08	I-131	< 6.300	
14-AUG-08	CS-134	< 2.400	Duplicate
14-AUG-08	CS-134	< 2.100	
14-AUG-08	CS-137	< 2.300	Duplicate
14-AUG-08	CS-137	< 3.000	
14-AUG-08	BA-LA-140	< 3.800	Duplicate
14-AUG-08	BA-LA-140	< 3.300	
14-AUG-08	H-3	< 147.000	Duplicate
14-AUG-08	H-3	< 147.000	
11-SEP-08	MN-54	< 3.000	
11-SEP-08	CO-58	< 4.300	
11-SEP-08	FE-59	< 6.700	
11-SEP-08	CO-60	< 4.100	
11-SEP-08	ZN-65	< 4.000	
11-SEP-08	ZR-NB-95	< 2.700	
11-SEP-08	I-131	< 8.800	
11-SEP-08	CS-134	< 4.100	
11-SEP-08	CS-137	< 4.400	
11-SEP-08	BA-LA-140	< 2.900	

Exposure Pathway - Waterborne
Surface Water

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)	Duplicate Analysis
11-SEP-08	H-3	< 155.000	
16-OCT-08	MN-54	< 3.700	Duplicate
16-OCT-08	MN-54	< 2.300	
16-OCT-08	CO-58	< 3.400	Duplicate
16-OCT-08	CO-58	< 2.500	
16-OCT-08	FE-59	< 7.700	Duplicate
16-OCT-08	FE-59	< 6.600	
16-OCT-08	CO-60	< 3.000	Duplicate
16-OCT-08	CO-60	< 2.600	
16-OCT-08	ZN-65	< 3.500	Duplicate
16-OCT-08	ZN-65	< 5.200	
16-OCT-08	ZR-NB-95	< 2.200	Duplicate
16-OCT-08	ZR-NB-95	< 3.600	
16-OCT-08	I-131	< 7.600	Duplicate
16-OCT-08	I-131	< 4.200	
16-OCT-08	CS-134	< 3.700	Duplicate
16-OCT-08	CS-134	< 2.500	
16-OCT-08	CS-137	< 2.900	Duplicate
16-OCT-08	CS-137	< 3.200	
16-OCT-08	BA-LA-140	< 1.900	Duplicate
16-OCT-08	BA-LA-140	< 2.000	
16-OCT-08	H-3	< 150.000	Duplicate
16-OCT-08	H-3	< 150.000	
13-NOV-08	MN-54	< 3.200	
13-NOV-08	CO-58	< 3.000	
13-NOV-08	FE-59	< 5.600	
13-NOV-08	CO-60	< 4.700	
13-NOV-08	ZN-65	< 8.300	
13-NOV-08	ZR-NB-95	< 4.700	
13-NOV-08	I-131	< 7.700	
13-NOV-08	CS-134	< 3.200	
13-NOV-08	CS-137	< 4.300	
13-NOV-08	BA-LA-140	< 4.400	
13-NOV-08	H-3	< 144.000	
11-DEC-08	MN-54	< 2.800	
11-DEC-08	CO-58	< 3.100	
11-DEC-08	FE-59	< 4.800	
11-DEC-08	CO-60	< 2.400	
11-DEC-08	ZN-65	< 6.800	
11-DEC-08	ZR-NB-95	< 2.400	

Exposure Pathway - Waterborne
Surface Water

Location JRR

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)	Duplicate Analysis
11-DEC-08	I-131	< 5.700	
11-DEC-08	CS-134	< 3.900	
11-DEC-08	CS-137	< 3.500	
11-DEC-08	BA-LA-140	< 2.200	
11-DEC-08	H-3	< 144.000	

Exposure Pathway - Waterborne
Surface Water

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)	Duplicate Analysis
24-JAN-08	MN-54	< 4.400	
24-JAN-08	CO-58	< 3.000	
24-JAN-08	FE-59	< 8.000	
24-JAN-08	CO-60	< 4.200	
24-JAN-08	ZN-65	< 4.000	
24-JAN-08	ZR-NB-95	< 2.100	
24-JAN-08	I-131	< 6.100	
24-JAN-08	CS-134	< 3.900	
24-JAN-08	CS-137	< 5.000	
24-JAN-08	BA-LA-140	< 5.300	
24-JAN-08	H-3	13150.000 +/- 322.000	
14-FEB-08	MN-54	< 4.600	
14-FEB-08	CO-58	< 3.700	
14-FEB-08	FE-59	< 6.100	
14-FEB-08	CO-60	< 2.600	
14-FEB-08	ZN-65	< 11.100	
14-FEB-08	ZR-NB-95	< 5.600	
14-FEB-08	I-131	< 6.300	
14-FEB-08	CS-134	< 4.000	
14-FEB-08	CS-137	< 2.000	
14-FEB-08	BA-LA-140	< 3.600	
14-FEB-08	H-3	15848.000 +/- 367.000	
13-MAR-08	MN-54	< 2.900	
13-MAR-08	CO-58	< 3.800	
13-MAR-08	FE-59	< 5.000	
13-MAR-08	CO-60	< 3.300	
13-MAR-08	ZN-65	< 4.000	
13-MAR-08	ZR-NB-95	< 4.200	
13-MAR-08	I-131	< 9.300	
13-MAR-08	CS-134	< 4.600	
13-MAR-08	CS-137	< 4.300	
13-MAR-08	BA-LA-140	< 7.300	
13-MAR-08	H-3	16130.000 +/- 360.000	
10-APR-08	MN-54	< 2.600	
10-APR-08	CO-58	< 2.400	
10-APR-08	FE-59	< 6.500	
10-APR-08	CO-60	< 3.300	
10-APR-08	ZN-65	< 3.300	
10-APR-08	ZR-NB-95	< 4.700	
10-APR-08	I-131	< 7.100	

Exposure Pathway - Waterborne
Surface Water

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)	Duplicate Analysis
10-APR-08	CS-134	< 5.000	
10-APR-08	CS-137	< 4.200	
10-APR-08	BA-LA-140	< 7.600	
10-APR-08	H-3	16607.000 +/- 365.000	
08-MAY-08	MN-54	< 4.200	
08-MAY-08	CO-58	< 3.200	
08-MAY-08	FE-59	< 10.800	
08-MAY-08	CO-60	< 2.000	
08-MAY-08	ZN-65	< 4.400	
08-MAY-08	ZR-NB-95	< 4.000	
08-MAY-08	I-131	< 9.200	
08-MAY-08	CS-134	< 4.100	
08-MAY-08	CS-137	< 2.700	
08-MAY-08	BA-LA-140	< 6.600	
08-MAY-08	H-3	15579.000 +/- 351.000	
12-JUN-08	MN-54	< 4.200	
12-JUN-08	CO-58	< 4.000	
12-JUN-08	FE-59	< 4.000	
12-JUN-08	CO-60	< 2.600	
12-JUN-08	ZN-65	< 6.000	
12-JUN-08	ZR-NB-95	< 5.000	
12-JUN-08	I-131	< 9.800	
12-JUN-08	CS-134	< 5.400	
12-JUN-08	CS-137	< 5.000	
12-JUN-08	BA-LA-140	< 5.500	
12-JUN-08	H-3	13872.000 +/- 343.000	
17-JUL-08	MN-54	< 1.800	
17-JUL-08	CO-58	< 2.900	
17-JUL-08	FE-59	< 4.200	
17-JUL-08	CO-60	< 2.600	
17-JUL-08	ZN-65	< 5.000	
17-JUL-08	ZR-NB-95	< 5.100	
17-JUL-08	I-131	< 4.500	
17-JUL-08	CS-134	< 2.200	
17-JUL-08	CS-137	< 2.900	
17-JUL-08	BA-LA-140	< 2.400	
17-JUL-08	H-3	12782.000 +/- 319.000	
14-AUG-08	MN-54	< 1.700	
14-AUG-08	CO-58	< 2.400	
14-AUG-08	FE-59	< 3.600	

Exposure Pathway - Waterborne
Surface Water

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)		Duplicate Analysis
14-AUG-08	CO-60		< 2.200	
14-AUG-08	ZN-65		< 4.800	
14-AUG-08	ZR-NB-95		< 3.500	
14-AUG-08	I-131		< 3.600	
14-AUG-08	CS-134		< 2.100	
14-AUG-08	CS-137		< 2.500	
14-AUG-08	BA-LA-140		< 2.300	
14-AUG-08	H-3	11322.000	+/- 298.000	
11-SEP-08	MN-54		< 5.600	
11-SEP-08	CO-58		< 4.800	
11-SEP-08	FE-59		< 14.100	
11-SEP-08	CO-60		< 4.300	
11-SEP-08	ZN-65		< 6.100	
11-SEP-08	ZR-NB-95		< 4.600	
11-SEP-08	I-131		< 10.900	
11-SEP-08	CS-134		< 4.700	
11-SEP-08	CS-137		< 4.900	
11-SEP-08	BA-LA-140		< 3.100	
11-SEP-08	H-3	11069.000	+/- 316.000	
16-OCT-08	MN-54		< 2.600	
16-OCT-08	CO-58		< 2.600	
16-OCT-08	FE-59		< 3.700	
16-OCT-08	CO-60		< 2.400	
16-OCT-08	ZN-65		< 4.300	
16-OCT-08	ZR-NB-95		< 3.400	
16-OCT-08	I-131		< 3.800	
16-OCT-08	CS-134		< 2.400	
16-OCT-08	CS-137		< 1.700	
16-OCT-08	BA-LA-140		< 2.100	
16-OCT-08	H-3	10518.000	+/- 295.000	
13-NOV-08	MN-54		< 3.200	
13-NOV-08	CO-58		< 2.500	
13-NOV-08	FE-59		< 4.000	
13-NOV-08	CO-60		< 3.700	
13-NOV-08	ZN-65		< 5.400	
13-NOV-08	ZR-NB-95		< 2.700	
13-NOV-08	I-131		< 5.000	
13-NOV-08	CS-134		< 3.400	
13-NOV-08	CS-137		< 3.600	
13-NOV-08	BA-LA-140		< 2.300	

Exposure Pathway - Waterborne
Surface Water

Location SP

Collection Date	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Liter)		Duplicate Analysis
13-NOV-08	H-3	10079.000	+/- 292.000	
11-DEC-08	MN-54	<	3.500	
11-DEC-08	CO-58	<	3.700	
11-DEC-08	FE-59	<	6.100	
11-DEC-08	CO-60	<	5.200	
11-DEC-08	ZN-65	<	3.700	
11-DEC-08	ZR-NB-95	<	5.000	
11-DEC-08	I-131	<	6.700	
11-DEC-08	CS-134	<	3.400	
11-DEC-08	CS-137	<	5.700	
11-DEC-08	BA-LA-140	<	3.700	
11-DEC-08	H-3	10694.000	+/- 303.000	

Exposure Pathway - Waterborne
Ground Water

Location B-12

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 1.700	
14-FEB-08	CO-58	< 1.500	
14-FEB-08	FE-59	< 4.000	
14-FEB-08	CO-60	< 3.000	
14-FEB-08	ZN-65	< 4.100	
14-FEB-08	ZR-NB-95	< 2.600	
14-FEB-08	CS-134	< 3.100	
14-FEB-08	CS-137	< 1.900	
14-FEB-08	BA-LA-140	< 2.700	
14-FEB-08	H-3	< 175.000	
14-FEB-08	I-131 (CHEM)	< 0.353	
30-MAY-08	MN-54	< 2.800	
30-MAY-08	CO-58	< 2.300	
30-MAY-08	FE-59	< 3.800	
30-MAY-08	CO-60	< 1.100	
30-MAY-08	ZN-65	< 5.500	
30-MAY-08	ZR-NB-95	< 2.700	
30-MAY-08	CS-134	< 2.200	
30-MAY-08	CS-137	< 2.900	
30-MAY-08	BA-LA-140	< 2.600	
30-MAY-08	H-3	< 166.000	
30-MAY-08	I-131 (CHEM)	< 0.437	
22-AUG-08	MN-54	< 2.600	
22-AUG-08	CO-58	< 1.800	
22-AUG-08	FE-59	< 5.500	
22-AUG-08	CO-60	< 2.100	
22-AUG-08	ZN-65	< 4.300	
22-AUG-08	ZR-NB-95	< 2.500	
22-AUG-08	CS-134	< 2.600	
22-AUG-08	CS-137	< 2.300	
22-AUG-08	BA-LA-140	< 2.500	
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.317	
21-NOV-08	MN-54	< 2.000	
21-NOV-08	CO-58	< 2.600	
21-NOV-08	FE-59	< 4.900	
21-NOV-08	CO-60	< 2.600	
21-NOV-08	ZN-65	< 3.900	
21-NOV-08	ZR-NB-95	< 2.000	
21-NOV-08	CS-134	< 2.200	
21-NOV-08	CS-137	< 2.200	

Exposure Pathway - Waterborne
Ground Water

Location B-12

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
21-NOV-08	BA-LA-140	< 2.400	
21-NOV-08	H-3	< 148.000	
21-NOV-08	I-131 (CHEM)	< 0.236	

Exposure Pathway - Waterborne
Ground Water

Location C-10

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 2.500	
14-FEB-08	CO-58	< 4.500	
14-FEB-08	FE-59	< 6.400	
14-FEB-08	CO-60	< 6.100	
14-FEB-08	ZN-65	< 6.400	
14-FEB-08	ZR-NB-95	< 6.300	
14-FEB-08	CS-134	< 5.800	
14-FEB-08	CS-137	< 6.400	
14-FEB-08	BA-LA-140	< 6.800	
14-FEB-08	H-3	< 175.000	
14-FEB-08	I-131 (CHEM)	< 0.374	
30-MAY-08	MN-54	< 2.500	
30-MAY-08	CO-58	< 2.300	
30-MAY-08	FE-59	< 5.700	
30-MAY-08	CO-60	< 3.400	
30-MAY-08	ZN-65	< 6.100	
30-MAY-08	ZR-NB-95	< 2.800	
30-MAY-08	CS-134	< 3.000	
30-MAY-08	CS-137	< 1.900	
30-MAY-08	BA-LA-140	< 2.900	
30-MAY-08	H-3	< 166.000	
30-MAY-08	I-131 (CHEM)	< 0.436	
22-AUG-08	MN-54	< 4.000	
22-AUG-08	CO-58	< 4.600	
22-AUG-08	FE-59	< 5.900	
22-AUG-08	CO-60	< 2.800	
22-AUG-08	ZN-65	< 9.000	
22-AUG-08	ZR-NB-95	< 3.500	
22-AUG-08	CS-134	< 3.900	
22-AUG-08	CS-137	< 5.500	
22-AUG-08	BA-LA-140	< 5.700	
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.309	
21-NOV-08	MN-54	< 2.000	
21-NOV-08	CO-58	< 2.100	
21-NOV-08	FE-59	< 3.000	
21-NOV-08	CO-60	< 1.500	
21-NOV-08	ZN-65	< 2.300	
21-NOV-08	ZR-NB-95	< 3.100	
21-NOV-08	CS-134	< 2.700	
21-NOV-08	CS-137	< 2.600	

Exposure Pathway - Waterborne
Ground Water

Location C-10

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
21-NOV-08	BA-LA-140	< 2.800	
21-NOV-08	H-3	< 148.000	
21-NOV-08	I-131 (CHEM)	< 0.343	

Exposure Pathway - Waterborne
Ground Water

Location C-49

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 2.900	
14-FEB-08	CO-58	< 2.600	
14-FEB-08	FE-59	< 3.100	
14-FEB-08	CO-60	< 2.600	
14-FEB-08	ZN-65	< 3.300	
14-FEB-08	ZR-NB-95	< 3.400	
14-FEB-08	CS-134	< 3.500	
14-FEB-08	CS-137	< 2.900	
14-FEB-08	BA-LA-140	< 2.800	
14-FEB-08	H-3	< 151.000	
14-FEB-08	I-131 (CHEM)	< 0.406	
30-MAY-08	MN-54	< 2.100	
30-MAY-08	CO-58	< 2.900	
30-MAY-08	FE-59	< 5.900	
30-MAY-08	CO-60	< 2.800	
30-MAY-08	ZN-65	< 2.200	
30-MAY-08	ZR-NB-95	< 3.400	
30-MAY-08	CS-134	< 4.100	
30-MAY-08	CS-137	< 3.200	
30-MAY-08	BA-LA-140	< 2.300	
30-MAY-08	H-3	< 164.000	
30-MAY-08	I-131 (CHEM)	< 0.468	
22-AUG-08	MN-54	< 1.200	
22-AUG-08	CO-58	< 1.800	
22-AUG-08	FE-59	< 7.000	
22-AUG-08	CO-60	< 3.600	
22-AUG-08	ZN-65	< 3.500	
22-AUG-08	ZR-NB-95	< 2.500	
22-AUG-08	CS-134	< 2.800	
22-AUG-08	CS-137	< 2.700	
22-AUG-08	BA-LA-140	< 4.800	
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.272	
21-NOV-08	MN-54	< 2.100	
21-NOV-08	CO-58	< 2.200	
21-NOV-08	FE-59	< 3.800	
21-NOV-08	CO-60	< 1.700	
21-NOV-08	ZN-65	< 4.200	
21-NOV-08	ZR-NB-95	< 2.500	
21-NOV-08	CS-134	< 3.200	
21-NOV-08	CS-137	< 2.300	

Exposure Pathway - Waterborne
Ground Water

Location C-49

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
21-NOV-08	BA-LA-140	< 2.200	
21-NOV-08	H-3	< 148.000	
21-NOV-08	I-131 (CHEM)	< 0.253	

Exposure Pathway - Waterborne
Ground Water

Location F-1

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 2.200	
14-FEB-08	CO-58	< 1.000	
14-FEB-08	FE-59	< 6.300	
14-FEB-08	CO-60	< 2.500	
14-FEB-08	ZN-65	< 4.200	
14-FEB-08	ZR-NB-95	< 2.100	
14-FEB-08	CS-134	< 2.300	
14-FEB-08	CS-137	< 1.900	
14-FEB-08	BA-LA-140	< 2.800	
14-FEB-08	H-3	< 175.000	
14-FEB-08	I-131 (CHEM)	< 0.359	
30-MAY-08	MN-54	< 1.800	
30-MAY-08	CO-58	< 2.800	
30-MAY-08	FE-59	< 4.000	
30-MAY-08	CO-60	< 1.000	
30-MAY-08	ZN-65	< 3.900	
30-MAY-08	ZR-NB-95	< 2.800	
30-MAY-08	CS-134	< 3.100	
30-MAY-08	CS-137	< 3.200	
30-MAY-08	BA-LA-140	< 2.700	
30-MAY-08	H-3	< 166.000	
30-MAY-08	I-131 (CHEM)	< 0.429	
22-AUG-08	MN-54	< 1.600	
22-AUG-08	CO-58	< 2.700	
22-AUG-08	FE-59	< 4.000	
22-AUG-08	CO-60	< 2.400	
22-AUG-08	ZN-65	< 3.000	
22-AUG-08	ZR-NB-95	< 3.200	
22-AUG-08	CS-134	< 2.800	
22-AUG-08	CS-137	< 2.300	
22-AUG-08	BA-LA-140	< 3.900	
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.491	
21-NOV-08	MN-54	< 1.800	
21-NOV-08	CO-58	< 2.200	
21-NOV-08	FE-59	< 3.000	
21-NOV-08	CO-60	< 1.600	
21-NOV-08	ZN-65	< 5.600	
21-NOV-08	ZR-NB-95	< 2.600	
21-NOV-08	CS-134	< 2.400	
21-NOV-08	CS-137	< 3.100	

Exposure Pathway - Waterborne
Ground Water

Location F-1

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
21-NOV-08	BA-LA-140	< 3.000	
21-NOV-08	H-3	< 148.000	
21-NOV-08	I-131 (CHEM)	< 0.336	

Exposure Pathway - Waterborne
Ground Water

Location G-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 3.900	
14-FEB-08	CO-58	< 3.800	
14-FEB-08	FE-59	< 6.000	
14-FEB-08	CO-60	< 3.000	
14-FEB-08	ZN-65	< 9.600	
14-FEB-08	ZR-NB-95	< 5.000	
14-FEB-08	CS-134	< 4.400	
14-FEB-08	CS-137	< 3.800	
14-FEB-08	BA-LA-140	< 3.000	
14-FEB-08	H-3	< 151.000	
14-FEB-08	I-131 (CHEM)	< 0.278	
30-MAY-08	MN-54	< 3.400	
30-MAY-08	CO-58	< 1.600	
30-MAY-08	FE-59	< 7.100	
30-MAY-08	CO-60	< 2.900	
30-MAY-08	ZN-65	< 6.500	
30-MAY-08	ZR-NB-95	< 3.300	
30-MAY-08	CS-134	< 3.500	
30-MAY-08	CS-137	< 2.900	
30-MAY-08	BA-LA-140	< 3.700	
30-MAY-08	H-3	< 166.000	
30-MAY-08	I-131 (CHEM)	< 0.353	
22-AUG-08	MN-54	< 2.500	
22-AUG-08	CO-58	< 1.600	
22-AUG-08	FE-59	< 2.600	
22-AUG-08	CO-60	< 2.600	
22-AUG-08	ZN-65	< 4.900	
22-AUG-08	ZR-NB-95	< 4.100	
22-AUG-08	CS-134	< 2.900	
22-AUG-08	CS-137	< 3.500	
22-AUG-08	BA-LA-140	< 3.500	
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.444	
21-NOV-08	MN-54	< 2.800	
21-NOV-08	CO-58	< 3.500	
21-NOV-08	FE-59	< 6.200	
21-NOV-08	CO-60	< 3.000	
21-NOV-08	ZN-65	< 5.600	
21-NOV-08	ZR-NB-95	< 3.200	
21-NOV-08	CS-134	< 3.100	
21-NOV-08	CS-137	< 2.500	

Exposure Pathway - Waterborne
Ground Water

Location G-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
21-NOV-08	BA-LA-140	< 3.400	
21-NOV-08	H-3	< 148.000	
21-NOV-08	I-131 (CHEM)	< 0.439	

Exposure Pathway - Waterborne
Ground Water

Location J-1

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 4.100	
14-FEB-08	CO-58	< 3.900	
14-FEB-08	FE-59	< 8.700	
14-FEB-08	CO-60	< 3.200	
14-FEB-08	ZN-65	< 5.500	
14-FEB-08	ZR-NB-95	< 8.800	
14-FEB-08	CS-134	< 7.100	
14-FEB-08	CS-137	< 7.100	
14-FEB-08	BA-LA-140	< 4.900	
14-FEB-08	H-3	< 175.000	
14-FEB-08	I-131 (CHEM)	< 0.343	
29-MAY-08	MN-54	< 3.300	
29-MAY-08	CO-58	< 2.500	
29-MAY-08	FE-59	< 3.000	
29-MAY-08	CO-60	< 1.900	
29-MAY-08	ZN-65	< 4.600	
29-MAY-08	ZR-NB-95	< 2.300	
29-MAY-08	CS-134	< 2.800	
29-MAY-08	CS-137	< 3.600	
29-MAY-08	BA-LA-140	< 2.700	
29-MAY-08	H-3	< 166.000	
29-MAY-08	I-131 (CHEM)	< 0.303	
22-AUG-08	MN-54	< 4.800	
22-AUG-08	CO-58	< 3.200	
22-AUG-08	FE-59	< 5.100	
22-AUG-08	CO-60	< 3.400	
22-AUG-08	ZN-65	< 5.700	
22-AUG-08	ZR-NB-95	< 5.500	
22-AUG-08	CS-134	< 4.700	
22-AUG-08	CS-137	< 4.800	
22-AUG-08	BA-LA-140	< 3.600	
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.252	
19-NOV-08	MN-54	< 1.900	
19-NOV-08	CO-58	< 2.800	
19-NOV-08	FE-59	< 4.700	
19-NOV-08	CO-60	< 2.400	
19-NOV-08	ZN-65	< 5.700	
19-NOV-08	ZR-NB-95	< 3.600	
19-NOV-08	CS-134	< 3.000	
19-NOV-08	CS-137	< 2.200	

Exposure Pathway - Waterborne
Ground Water

Location J-1

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
19-NOV-08	BA-LA-140	< 1.600	
19-NOV-08	H-3	< 148.000	
19-NOV-08	I-131 (CHEM)	< 0.286	

Exposure Pathway - Waterborne
Ground Water

Location J-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 3.500	
14-FEB-08	CO-58	< 2.300	
14-FEB-08	FE-59	< 4.500	
14-FEB-08	CO-60	< 3.700	
14-FEB-08	ZN-65	< 5.000	
14-FEB-08	ZR-NB-95	< 5.400	
14-FEB-08	CS-134	< 3.800	
14-FEB-08	CS-137	< 4.700	
14-FEB-08	BA-LA-140	< 4.400	
14-FEB-08	H-3	< 151.000	
14-FEB-08	I-131 (CHEM)	< 0.222	
30-MAY-08	MN-54	< 4.000	
30-MAY-08	CO-58	< 3.900	
30-MAY-08	FE-59	< 4.700	
30-MAY-08	CO-60	< 3.500	
30-MAY-08	ZN-65	< 6.000	
30-MAY-08	ZR-NB-95	< 4.500	
30-MAY-08	CS-134	< 2.800	
30-MAY-08	CS-137	< 2.800	
30-MAY-08	BA-LA-140	< 3.400	
30-MAY-08	H-3	< 166.000	
30-MAY-08	I-131 (CHEM)	< 0.328	
22-AUG-08	MN-54	< 4.100	
22-AUG-08	CO-58	< 2.300	
22-AUG-08	FE-59	< 7.600	
22-AUG-08	CO-60	< 2.800	
22-AUG-08	ZN-65	< 6.000	
22-AUG-08	ZR-NB-95	< 4.300	
22-AUG-08	CS-134	< 3.900	
22-AUG-08	CS-137	< 5.300	
22-AUG-08	BA-LA-140	< 3.900	
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.446	
21-NOV-08	MN-54	< 2.000	Duplicate
21-NOV-08	MN-54	< 2.800	
21-NOV-08	CO-58	< 3.200	Duplicate
21-NOV-08	CO-58	< 2.900	
21-NOV-08	FE-59	< 4.000	Duplicate
21-NOV-08	FE-59	< 5.100	
21-NOV-08	CO-60	< 3.800	Duplicate
21-NOV-08	CO-60	< 4.200	

Exposure Pathway - Waterborne
Ground Water

Location J-2

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
21-NOV-08	ZN-65	< 7.100	Duplicate
21-NOV-08	ZN-65	< 8.000	
21-NOV-08	ZR-NB-95	< 2.700	Duplicate
21-NOV-08	ZR-NB-95	< 3.000	
21-NOV-08	CS-134	< 3.200	Duplicate
21-NOV-08	CS-134	< 4.200	
21-NOV-08	CS-137	< 4.000	Duplicate
21-NOV-08	CS-137	< 3.900	
21-NOV-08	BA-LA-140	< 4.100	Duplicate
21-NOV-08	BA-LA-140	< 2.800	
21-NOV-08	H-3	< 148.000	Duplicate
21-NOV-08	H-3	< 148.000	
21-NOV-08	I-131 (CHEM)	< 0.341	Duplicate
21-NOV-08	I-131 (CHEM)	< 0.353	

Exposure Pathway - Waterborne
Ground Water

Location L-49

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
14-FEB-08	MN-54	< 2.300	
14-FEB-08	CO-58	< 1.900	
14-FEB-08	FE-59	< 5.800	
14-FEB-08	CO-60	< 3.000	
14-FEB-08	ZN-65	< 5.000	
14-FEB-08	ZR-NB-95	< 3.100	
14-FEB-08	CS-134	< 3.700	
14-FEB-08	CS-137	< 2.600	
14-FEB-08	BA-LA-140	< 2.300	
14-FEB-08	H-3	< 151.000	
14-FEB-08	I-131 (CHEM)	< 0.320	
30-MAY-08	MN-54	< 3.200	Duplicate
30-MAY-08	MN-54	< 3.600	
30-MAY-08	CO-58	< 3.000	Duplicate
30-MAY-08	CO-58	< 3.500	
30-MAY-08	FE-59	< 7.600	Duplicate
30-MAY-08	FE-59	< 7.000	
30-MAY-08	CO-60	< 2.100	Duplicate
30-MAY-08	CO-60	< 2.700	
30-MAY-08	ZN-65	< 5.000	Duplicate
30-MAY-08	ZN-65	< 3.700	
30-MAY-08	ZR-NB-95	< 2.200	Duplicate
30-MAY-08	ZR-NB-95	< 5.200	
30-MAY-08	CS-134	< 3.200	Duplicate
30-MAY-08	CS-134	< 3.400	
30-MAY-08	CS-137	< 3.300	Duplicate
30-MAY-08	CS-137	< 5.200	
30-MAY-08	BA-LA-140	< 2.700	Duplicate
30-MAY-08	BA-LA-140	< 3.400	
30-MAY-08	H-3	< 166.000	Duplicate
30-MAY-08	H-3	< 166.000	
30-MAY-08	I-131 (CHEM)	< 0.284	Duplicate
30-MAY-08	I-131 (CHEM)	< 0.297	
22-AUG-08	MN-54	< 2.200	Duplicate
22-AUG-08	MN-54	< 2.800	
22-AUG-08	CO-58	< 1.500	Duplicate
22-AUG-08	CO-58	< 2.400	
22-AUG-08	FE-59	< 2.800	Duplicate
22-AUG-08	FE-59	< 3.800	
22-AUG-08	CO-60	< 2.600	Duplicate
22-AUG-08	CO-60	< 3.400	

Exposure Pathway - Waterborne
Ground Water

Location L-49

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
22-AUG-08	ZN-65	< 4.400	Duplicate
22-AUG-08	ZN-65	< 1.700	
22-AUG-08	ZR-NB-95	< 2.700	Duplicate
22-AUG-08	ZR-NB-95	< 2.000	
22-AUG-08	CS-134	< 2.900	Duplicate
22-AUG-08	CS-134	< 2.900	
22-AUG-08	CS-137	< 2.400	Duplicate
22-AUG-08	CS-137	< 3.200	
22-AUG-08	BA-LA-140	< 2.900	Duplicate
22-AUG-08	BA-LA-140	< 4.200	
22-AUG-08	H-3	< 151.000	Duplicate
22-AUG-08	H-3	< 151.000	
22-AUG-08	I-131 (CHEM)	< 0.365	Duplicate
22-AUG-08	I-131 (CHEM)	< 0.435	
21-NOV-08	MN-54	< 2.600	
21-NOV-08	CO-58	< 4.000	
21-NOV-08	FE-59	< 6.400	
21-NOV-08	CO-60	< 3.500	
21-NOV-08	ZN-65	< 6.700	
21-NOV-08	ZR-NB-95	< 3.800	
21-NOV-08	CS-134	< 4.100	
21-NOV-08	CS-137	< 5.000	
21-NOV-08	BA-LA-140	< 5.600	
21-NOV-08	H-3	< 148.000	
21-NOV-08	I-131 (CHEM)	< 0.401	

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-FEB-08	MN-54	< 2.000	
07-FEB-08	CO-58	< 1.400	
07-FEB-08	FE-59	< 3.600	
07-FEB-08	CO-60	< 2.500	
07-FEB-08	ZN-65	< 2.500	
07-FEB-08	ZR-NB-95	< 3.000	
07-FEB-08	CS-134	< 2.400	
07-FEB-08	CS-137	< 2.400	
07-FEB-08	BA-LA-140	< 3.400	
07-FEB-08	GROSS BETA	4.088 +/- 1.128	
07-FEB-08	I-131 (CHEM)	< 0.354	
05-MAR-08	MN-54	< 5.500	
05-MAR-08	CO-58	< 2.800	
05-MAR-08	FE-59	< 8.000	
05-MAR-08	CO-60	< 2.700	
05-MAR-08	ZN-65	< 3.400	
05-MAR-08	ZR-NB-95	< 3.900	
05-MAR-08	CS-134	< 2.900	
05-MAR-08	CS-137	< 6.200	
05-MAR-08	BA-LA-140	< 5.400	
05-MAR-08	GROSS BETA	1.904 +/- 0.596	
05-MAR-08	I-131 (CHEM)	< 0.463	
01-APR-08	MN-54	< 2.600	
01-APR-08	CO-58	< 2.300	
01-APR-08	FE-59	< 6.200	
01-APR-08	CO-60	< 2.800	
01-APR-08	ZN-65	< 5.100	
01-APR-08	ZR-NB-95	< 2.300	
01-APR-08	CS-134	< 3.300	
01-APR-08	CS-137	< 3.400	
01-APR-08	BA-LA-140	< 1.600	
01-APR-08	GROSS BETA	3.352 +/- 1.104	
01-APR-08	I-131 (CHEM)	< 0.349	
07-MAY-08	MN-54	< 2.600	
07-MAY-08	CO-58	< 1.600	
07-MAY-08	FE-59	< 6.300	
07-MAY-08	CO-60	< 2.600	
07-MAY-08	ZN-65	< 4.600	
07-MAY-08	ZR-NB-95	< 3.300	
07-MAY-08	CS-134	< 2.200	

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-MAY-08	CS-137	< 3.300	
07-MAY-08	BA-LA-140	< 2.300	
07-MAY-08	GROSS BETA	4.358 +/- 1.087	
07-MAY-08	I-131 (CHEM)	< 0.314	
04-JUN-08	MN-54	< 4.300	
04-JUN-08	CO-58	< 3.000	
04-JUN-08	FE-59	< 9.800	
04-JUN-08	CO-60	< 2.200	
04-JUN-08	ZN-65	< 6.800	
04-JUN-08	ZR-NB-95	< 3.200	
04-JUN-08	CS-134	< 5.600	
04-JUN-08	CS-137	< 5.200	
04-JUN-08	BA-LA-140	< 5.300	
04-JUN-08	GROSS BETA	3.604 +/- 1.020	
04-JUN-08	I-131 (CHEM)	< 0.438	
02-JUL-08	MN-54	< 3.100	
02-JUL-08	CO-58	< 3.500	
02-JUL-08	FE-59	< 6.100	
02-JUL-08	CO-60	< 3.400	
02-JUL-08	ZN-65	< 5.900	
02-JUL-08	ZR-NB-95	< 3.400	
02-JUL-08	CS-134	< 3.500	
02-JUL-08	CS-137	< 2.000	
02-JUL-08	BA-LA-140	< 4.300	
02-JUL-08	GROSS BETA	2.692 +/- 0.494	
02-JUL-08	I-131 (CHEM)	< 0.349	
06-AUG-08	MN-54	< 2.800	
06-AUG-08	MN-54	< 2.800	Duplicate
06-AUG-08	CO-58	< 2.700	
06-AUG-08	CO-58	< 2.400	Duplicate
06-AUG-08	FE-59	< 3.700	
06-AUG-08	FE-59	< 3.100	Duplicate
06-AUG-08	CO-60	< 2.100	
06-AUG-08	CO-60	< 2.200	Duplicate
06-AUG-08	ZN-65	< 5.900	
06-AUG-08	ZN-65	< 3.100	Duplicate
06-AUG-08	ZR-NB-95	< 2.300	
06-AUG-08	ZR-NB-95	< 3.000	Duplicate
06-AUG-08	CS-134	< 2.700	
06-AUG-08	CS-134	< 2.700	Duplicate

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
06-AUG-08	CS-137	< 2.400	
06-AUG-08	CS-137	< 2.500	Duplicate
06-AUG-08	BA-LA-140	< 2.200	
06-AUG-08	BA-LA-140	< 1.900	Duplicate
06-AUG-08	GROSS BETA	4.455 +/- 1.134	
06-AUG-08	GROSS BETA	3.832 +/- 1.030	Duplicate
06-AUG-08	I-131 (CHEM)	< 0.292	
06-AUG-08	I-131 (CHEM)	< 0.308	Duplicate
03-SEP-08	MN-54	< 2.900	
03-SEP-08	CO-58	< 3.900	
03-SEP-08	FE-59	< 4.000	
03-SEP-08	CO-60	< 3.500	
03-SEP-08	ZN-65	< 2.400	
03-SEP-08	ZR-NB-95	< 3.500	
03-SEP-08	CS-134	< 3.500	
03-SEP-08	CS-137	< 2.200	
03-SEP-08	BA-LA-140	< 3.400	
03-SEP-08	GROSS BETA	3.399 +/- 1.782	
03-SEP-08	I-131 (CHEM)	< 0.277	
01-OCT-08	MN-54	< 4.300	
01-OCT-08	CO-58	< 5.100	
01-OCT-08	FE-59	< 4.800	
01-OCT-08	CO-60	< 4.500	
01-OCT-08	ZN-65	< 4.300	
01-OCT-08	ZR-NB-95	< 4.800	
01-OCT-08	CS-134	< 4.900	
01-OCT-08	CS-137	< 6.000	
01-OCT-08	BA-LA-140	< 2.700	
01-OCT-08	GROSS BETA	2.683 +/- 0.639	
01-OCT-08	I-131 (CHEM)	< 0.248	
05-NOV-08	MN-54	< 0.600	
05-NOV-08	CO-58	< 0.900	
05-NOV-08	FE-59	< 1.900	
05-NOV-08	CO-60	< 1.300	
05-NOV-08	ZN-65	< 1.700	
05-NOV-08	ZR-NB-95	< 1.100	
05-NOV-08	CS-134	< 0.900	
05-NOV-08	CS-137	< 1.000	
05-NOV-08	BA-LA-140	< 0.800	
05-NOV-08	GROSS BETA	3.328 +/- 0.701	

Exposure Pathway - Waterborne
Drinking Water

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
05-NOV-08	I-131 (CHEM)	< 0.300	
03-DEC-08	MN-54	< 4.100	
03-DEC-08	CO-58	< 5.000	
03-DEC-08	FE-59	< 6.200	
03-DEC-08	CO-60	< 5.700	
03-DEC-08	ZN-65	< 5.200	
03-DEC-08	ZR-NB-95	< 5.300	
03-DEC-08	CS-134	< 5.200	
03-DEC-08	CS-137	< 3.900	
03-DEC-08	BA-LA-140	< 4.100	
03-DEC-08	GROSS BETA	3.365 +/- 1.005	
03-DEC-08	I-131 (CHEM)	< 0.403	
07-JAN-09	MN-54	< 3.000	
07-JAN-09	CO-58	< 3.800	
07-JAN-09	FE-59	< 8.000	
07-JAN-09	CO-60	< 4.800	
07-JAN-09	ZN-65	< 4.500	
07-JAN-09	ZR-NB-95	< 3.000	
07-JAN-09	CS-134	< 4.700	
07-JAN-09	CS-137	< 4.600	
07-JAN-09	BA-LA-140	< 1.900	
07-JAN-09	GROSS BETA	2.634 +/- 1.130	
07-JAN-09	I-131 (CHEM)	< 0.189	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-FEB-08	MN-54	< 2.100	
07-FEB-08	CO-58	< 3.200	
07-FEB-08	FE-59	< 4.100	
07-FEB-08	CO-60	< 2.000	
07-FEB-08	ZN-65	< 4.800	
07-FEB-08	ZR-NB-95	< 2.900	
07-FEB-08	CS-134	< 3.300	
07-FEB-08	CS-137	< 3.900	
07-FEB-08	BA-LA-140	< 3.000	
07-FEB-08	GROSS BETA	3.159 +/- 1.093	
07-FEB-08	I-131 (CHEM)	< 0.354	
05-MAR-08	MN-54	< 3.900	
05-MAR-08	CO-58	< 2.800	
05-MAR-08	FE-59	< 5.200	
05-MAR-08	CO-60	< 4.400	
05-MAR-08	ZN-65	< 5.300	
05-MAR-08	ZR-NB-95	< 3.200	
05-MAR-08	CS-134	< 5.600	
05-MAR-08	CS-137	< 2.300	
05-MAR-08	BA-LA-140	< 7.000	
05-MAR-08	GROSS BETA	2.107 +/- 0.644	
05-MAR-08	I-131 (CHEM)	< 0.318	
01-APR-08	MN-54	< 2.600	
01-APR-08	CO-58	< 2.100	
01-APR-08	FE-59	< 4.100	
01-APR-08	CO-60	< 1.600	
01-APR-08	ZN-65	< 1.600	
01-APR-08	ZR-NB-95	< 3.100	
01-APR-08	CS-134	< 3.100	
01-APR-08	CS-137	< 3.800	
01-APR-08	BA-LA-140	< 1.800	
01-APR-08	GROSS BETA	2.863 +/- 1.005	
01-APR-08	I-131 (CHEM)	< 0.363	
07-MAY-08	MN-54	< 4.100	
07-MAY-08	CO-58	< 3.100	
07-MAY-08	FE-59	< 4.000	
07-MAY-08	CO-60	< 3.800	
07-MAY-08	ZN-65	< 4.900	
07-MAY-08	ZR-NB-95	< 5.300	
07-MAY-08	CS-134	< 5.500	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
07-MAY-08	CS-137	< 3.600	
07-MAY-08	BA-LA-140	< 7.000	
07-MAY-08	GROSS BETA	2.392 +/- 1.037	
07-MAY-08	I-131 (CHEM)	< 0.368	
04-JUN-08	MN-54	< 2.700	
04-JUN-08	CO-58	< 2.800	
04-JUN-08	FE-59	< 7.000	
04-JUN-08	CO-60	< 3.400	
04-JUN-08	ZN-65	< 8.100	
04-JUN-08	ZR-NB-95	< 3.600	
04-JUN-08	CS-134	< 5.500	
04-JUN-08	CS-137	< 3.900	
04-JUN-08	BA-LA-140	< 5.300	
04-JUN-08	GROSS BETA	4.369 +/- 1.112	
04-JUN-08	I-131 (CHEM)	< 0.314	
02-JUL-08	MN-54	< 2.400	
02-JUL-08	CO-58	< 1.600	
02-JUL-08	FE-59	< 3.600	
02-JUL-08	CO-60	< 2.400	
02-JUL-08	ZN-65	< 6.700	
02-JUL-08	ZR-NB-95	< 1.800	
02-JUL-08	CS-134	< 2.700	
02-JUL-08	CS-137	< 3.200	
02-JUL-08	BA-LA-140	< 3.400	
02-JUL-08	GROSS BETA	3.046 +/- 0.535	
02-JUL-08	I-131 (CHEM)	< 0.381	
06-AUG-08	MN-54	< 2.100	
06-AUG-08	CO-58	< 4.500	
06-AUG-08	FE-59	< 5.100	
06-AUG-08	CO-60	< 3.000	
06-AUG-08	ZN-65	< 4.200	
06-AUG-08	ZR-NB-95	< 3.100	
06-AUG-08	CS-134	< 1.900	
06-AUG-08	CS-137	< 2.300	
06-AUG-08	BA-LA-140	< 3.600	
06-AUG-08	GROSS BETA	3.497 +/- 1.114	
06-AUG-08	I-131 (CHEM)	< 0.238	
03-SEP-08	MN-54	< 2.100	
03-SEP-08	MN-54	< 2.000	Duplicate
03-SEP-08	CO-58	< 1.900	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
03-SEP-08	CO-58	< 1.700	Duplicate
03-SEP-08	FE-59	< 3.300	
03-SEP-08	FE-59	< 3.700	Duplicate
03-SEP-08	CO-60	< 2.400	
03-SEP-08	CO-60	< 2.000	Duplicate
03-SEP-08	ZN-65	< 2.800	
03-SEP-08	ZN-65	< 3.800	Duplicate
03-SEP-08	ZR-NB-95	< 3.600	
03-SEP-08	ZR-NB-95	< 2.100	Duplicate
03-SEP-08	CS-134	< 2.500	
03-SEP-08	CS-134	< 2.400	Duplicate
03-SEP-08	CS-137	< 2.900	
03-SEP-08	CS-137	< 2.000	Duplicate
03-SEP-08	BA-LA-140	< 1.700	
03-SEP-08	BA-LA-140	< 2.500	Duplicate
03-SEP-08	GROSS BETA	4.263 +/- 2.011	
03-SEP-08	GROSS BETA	< 3.656	Duplicate
03-SEP-08	I-131 (CHEM)	< 0.389	
03-SEP-08	I-131 (CHEM)	< 0.367	Duplicate
01-OCT-08	MN-54	< 2.300	
01-OCT-08	CO-58	< 2.800	
01-OCT-08	FE-59	< 4.900	
01-OCT-08	CO-60	< 2.500	
01-OCT-08	ZN-65	< 5.500	
01-OCT-08	ZR-NB-95	< 2.000	
01-OCT-08	CS-134	< 3.100	
01-OCT-08	CS-137	< 3.100	
01-OCT-08	BA-LA-140	< 3.800	
01-OCT-08	GROSS BETA	2.930 +/- 0.681	
01-OCT-08	I-131 (CHEM)	< 0.375	
05-NOV-08	MN-54	< 1.000	
05-NOV-08	CO-58	< 1.100	
05-NOV-08	FE-59	< 2.600	
05-NOV-08	CO-60	< 1.300	
05-NOV-08	ZN-65	< 2.400	
05-NOV-08	ZR-NB-95	< 0.900	
05-NOV-08	CS-134	< 1.000	
05-NOV-08	CS-137	< 1.000	
05-NOV-08	BA-LA-140	< 0.700	
05-NOV-08	GROSS BETA	2.251 +/- 0.625	

Exposure Pathway - Waterborne
Drinking Water

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
05-NOV-08	I-131 (CHEM)	< 0.288	
03-DEC-08	MN-54	< 4.200	
03-DEC-08	CO-58	< 2.600	
03-DEC-08	FE-59	< 6.300	
03-DEC-08	CO-60	< 3.700	
03-DEC-08	ZN-65	< 8.000	
03-DEC-08	ZR-NB-95	< 4.000	
03-DEC-08	CS-134	< 3.000	
03-DEC-08	CS-137	< 2.600	
03-DEC-08	BA-LA-140	< 2.500	
03-DEC-08	GROSS BETA	4.288 +/- 1.202	
03-DEC-08	I-131 (CHEM)	< 0.273	
07-JAN-09	MN-54	< 3.200	
07-JAN-09	CO-58	< 2.500	
07-JAN-09	FE-59	< 2.800	
07-JAN-09	CO-60	< 1.900	
07-JAN-09	ZN-65	< 5.100	
07-JAN-09	ZR-NB-95	< 2.700	
07-JAN-09	CS-134	< 2.500	
07-JAN-09	CS-137	< 2.800	
07-JAN-09	BA-LA-140	< 1.800	
07-JAN-09	GROSS BETA	5.049 +/- 1.310	
07-JAN-09	I-131 (CHEM)	< 0.200	

Exposure Pathway - Waterborne
Drinking Water
Quarterly Tritium Analysis

Location BW-15

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
01-APR-08	H-3	<177.000	
02-JUL-08	H-3	<171.000	
01-OCT-08	H-3	<154.000	
01-JAN-09	H-3	<133.000	
01-JAN-09	H-3	<133.000	Duplicate

Exposure Pathway - Waterborne
Drinking Water
Quarterly Tritium Analysis

Location IO-DW

Collection Date	Nuclide	Concentration (pCi/Liter)	Duplicate Analysis
01-APR-08	H-3	<177.000	
02-JUL-08	H-3	<171.000	
01-OCT-08	H-3	<154.000	
01-JAN-09	H-3	<133.000	

Exposure Pathway - Waterborne
Shoreline Sediment

Location DC

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
08-MAY-08	K-40	11045.000 +/- 556.300	
08-MAY-08	MN-54	< 24.900	
08-MAY-08	CO-58	< 12.400	
08-MAY-08	FE-59	< 26.800	
08-MAY-08	CO-60	< 16.000	
08-MAY-08	ZN-65	< 31.800	
08-MAY-08	CS-134	< 16.700	
08-MAY-08	CS-137	< 22.800	
19-SEP-08	K-40	13846.000 +/-1172.000	
19-SEP-08	MN-54	< 60.900	
19-SEP-08	CO-58	< 56.800	
19-SEP-08	FE-59	< 83.900	
19-SEP-08	CO-60	60.900 +/- 31.100	
19-SEP-08	ZN-65	< 124.100	
19-SEP-08	CS-134	< 28.700	
19-SEP-08	CS-137	160.900 +/- 57.200	

Exposure Pathway - Waterborne
Shoreline Sediment

Location JRR

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
26-JUN-08	K-40	10631.000 +/- 819.800	
26-JUN-08	MN-54	< 38.500	
26-JUN-08	CO-58	< 36.800	
26-JUN-08	FE-59	< 62.700	
26-JUN-08	CO-60	< 14.800	
26-JUN-08	ZN-65	< 73.800	
26-JUN-08	CS-134	< 22.100	
26-JUN-08	CS-137	131.100 +/- 41.600	
17-OCT-08	K-40	9670.900 +/- 679.800	
17-OCT-08	MN-54	< 31.000	
17-OCT-08	CO-58	< 32.400	
17-OCT-08	FE-59	< 45.400	
17-OCT-08	CO-60	< 19.800	
17-OCT-08	ZN-65	< 45.300	
17-OCT-08	CS-134	< 16.300	
17-OCT-08	CS-137	< 26.700	

Exposure Pathway - Waterborne
Shoreline Sediment

Location SC

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
25-JUN-08	K-40	10664.000 +/- 570.000	
25-JUN-08	MN-54	< 22.700	
25-JUN-08	CO-58	< 23.300	
25-JUN-08	FE-59	< 46.700	
25-JUN-08	CO-60	< 8.700	
25-JUN-08	ZN-65	< 51.000	
25-JUN-08	CS-134	< 14.600	
25-JUN-08	CS-137	98.700 +/- 30.600	

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
08-MAY-08	COMMON CARP	K-40	3464.100 +/- 412.800	
08-MAY-08	COMMON CARP	MN-54	< 11.200	
08-MAY-08	COMMON CARP	CO-58	< 7.500	
08-MAY-08	COMMON CARP	FE-59	< 23.700	
08-MAY-08	COMMON CARP	CO-60	< 12.100	
08-MAY-08	COMMON CARP	ZN-65	< 28.700	
08-MAY-08	COMMON CARP	CS-134	< 11.700	
08-MAY-08	COMMON CARP	CS-137	< 9.100	
08-MAY-08	COMMON CARP	H-3	10603.000 +/- 250.000	
08-MAY-08	SMALLMOUTH BASS	K-40	3733.500 +/- 609.000	
08-MAY-08	SMALLMOUTH BASS	MN-54	< 12.900	
08-MAY-08	SMALLMOUTH BASS	CO-58	< 23.800	
08-MAY-08	SMALLMOUTH BASS	FE-59	< 46.300	
08-MAY-08	SMALLMOUTH BASS	CO-60	< 21.300	
08-MAY-08	SMALLMOUTH BASS	ZN-65	< 27.900	
08-MAY-08	SMALLMOUTH BASS	CS-134	< 16.000	
08-MAY-08	SMALLMOUTH BASS	CS-137	< 15.400	
08-MAY-08	SMALLMOUTH BASS	H-3	11140.000 +/- 262.000	
08-MAY-08	SMALLMOUTH BUFFALO	K-40	3494.500 +/- 550.600	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	K-40	3516.600 +/- 390.800	
08-MAY-08	SMALLMOUTH BUFFALO	MN-54	< 20.100	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	MN-54	< 13.900	
08-MAY-08	SMALLMOUTH BUFFALO	CO-58	< 21.700	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	CO-58	< 9.200	
08-MAY-08	SMALLMOUTH BUFFALO	FE-59	< 42.900	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	FE-59	< 17.900	
08-MAY-08	SMALLMOUTH BUFFALO	CO-60	< 9.600	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	CO-60	< 11.700	
08-MAY-08	SMALLMOUTH BUFFALO	ZN-65	< 25.200	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	ZN-65	< 7.600	
08-MAY-08	SMALLMOUTH BUFFALO	CS-134	< 15.300	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	CS-134	< 12.600	
08-MAY-08	SMALLMOUTH BUFFALO	CS-137	< 15.500	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	CS-137	< 10.900	
08-MAY-08	SMALLMOUTH BUFFALO	H-3	9775.000 +/- 227.000	Duplicate
08-MAY-08	SMALLMOUTH BUFFALO	H-3	9721.000 +/- 227.000	
08-MAY-08	WHITE BASS	K-40	2912.100 +/- 376.200	
08-MAY-08	WHITE BASS	MN-54	< 13.600	
08-MAY-08	WHITE BASS	CO-58	< 13.400	
08-MAY-08	WHITE BASS	FE-59	< 16.700	
08-MAY-08	WHITE BASS	CO-60	< 10.200	

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
08-MAY-08	WHITE BASS	ZN-65	< 15.400	
08-MAY-08	WHITE BASS	CS-134	< 13.000	
08-MAY-08	WHITE BASS	CS-137	< 14.800	
08-MAY-08	WHITE BASS	H-3	11021.000 +/- 262.000	
08-MAY-08	WIPER	K-40	3362.500 +/- 482.800	
08-MAY-08	WIPER	MN-54	< 20.100	
08-MAY-08	WIPER	CO-58	< 13.100	
08-MAY-08	WIPER	FE-59	< 40.600	
08-MAY-08	WIPER	CO-60	< 14.500	
08-MAY-08	WIPER	ZN-65	< 38.800	
08-MAY-08	WIPER	CS-134	< 20.800	
08-MAY-08	WIPER	CS-137	< 14.300	
08-MAY-08	WIPER	H-3	9767.000 +/- 233.000	
17-OCT-08	SMALLMOUTH BUFFALO	K-40	2829.500 +/- 379.800	
17-OCT-08	SMALLMOUTH BUFFALO	MN-54	< 11.800	
17-OCT-08	SMALLMOUTH BUFFALO	CO-58	< 10.300	
17-OCT-08	SMALLMOUTH BUFFALO	FE-59	< 22.000	
17-OCT-08	SMALLMOUTH BUFFALO	CO-60	< 14.500	
17-OCT-08	SMALLMOUTH BUFFALO	ZN-65	< 17.200	
17-OCT-08	SMALLMOUTH BUFFALO	CS-134	< 6.900	
17-OCT-08	SMALLMOUTH BUFFALO	CS-137	< 10.100	
17-OCT-08	SMALLMOUTH BUFFALO	H-3	6215.000 +/- 195.000	
17-OCT-08	WHITE BASS	K-40	2754.100 +/- 362.200	
17-OCT-08	WHITE BASS	MN-54	< 8.600	
17-OCT-08	WHITE BASS	CO-58	< 6.600	
17-OCT-08	WHITE BASS	FE-59	< 27.500	
17-OCT-08	WHITE BASS	CO-60	< 12.200	
17-OCT-08	WHITE BASS	ZN-65	< 28.400	
17-OCT-08	WHITE BASS	CS-134	< 7.500	
17-OCT-08	WHITE BASS	CS-137	< 10.900	
17-OCT-08	WHITE BASS	H-3	6937.000 +/- 223.000	
17-OCT-08	WIPER	K-40	2880.300 +/- 362.200	
17-OCT-08	WIPER	MN-54	< 9.600	
17-OCT-08	WIPER	CO-58	< 5.900	
17-OCT-08	WIPER	FE-59	< 23.500	
17-OCT-08	WIPER	CO-60	< 12.000	
17-OCT-08	WIPER	ZN-65	< 18.600	
17-OCT-08	WIPER	CS-134	< 9.800	
17-OCT-08	WIPER	CS-137	< 9.800	
17-OCT-08	WIPER	H-3	6539.000 +/- 221.000	
21-OCT-08	BLUE CATFISH	K-40	2395.000 +/- 328.900	

Exposure Pathway - Ingestion
Fish

Location CCL

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
21-OCT-08	BLUE CATFISH	MN-54	< 10.800	
21-OCT-08	BLUE CATFISH	CO-58	< 10.900	
21-OCT-08	BLUE CATFISH	FE-59	< 29.400	
21-OCT-08	BLUE CATFISH	CO-60	< 12.100	
21-OCT-08	BLUE CATFISH	ZN-65	< 12.400	
21-OCT-08	BLUE CATFISH	CS-134	< 12.100	
21-OCT-08	BLUE CATFISH	CS-137	< 8.000	
21-OCT-08	BLUE CATFISH	H-3	5432.000 +/- 195.000	
29-OCT-08	WALLEYE	K-40	2652.500 +/- 360.800	
29-OCT-08	WALLEYE	MN-54	< 11.300	
29-OCT-08	WALLEYE	CO-58	< 14.700	
29-OCT-08	WALLEYE	FE-59	< 43.300	
29-OCT-08	WALLEYE	CO-60	< 13.800	
29-OCT-08	WALLEYE	ZN-65	< 18.100	
29-OCT-08	WALLEYE	CS-134	< 13.300	
29-OCT-08	WALLEYE	CS-137	< 10.800	
29-OCT-08	WALLEYE	H-3	4877.000 +/- 194.000	
29-OCT-08	WHITE CRAPPIE	K-40	2125.600 +/- 313.700	Duplicate
29-OCT-08	WHITE CRAPPIE	K-40	2026.800 +/- 417.800	
29-OCT-08	WHITE CRAPPIE	MN-54	< 8.800	Duplicate
29-OCT-08	WHITE CRAPPIE	MN-54	< 18.500	
29-OCT-08	WHITE CRAPPIE	CO-58	< 18.000	Duplicate
29-OCT-08	WHITE CRAPPIE	CO-58	< 15.400	
29-OCT-08	WHITE CRAPPIE	FE-59	< 39.000	Duplicate
29-OCT-08	WHITE CRAPPIE	FE-59	< 71.700	
29-OCT-08	WHITE CRAPPIE	CO-60	< 16.500	Duplicate
29-OCT-08	WHITE CRAPPIE	CO-60	< 20.100	
29-OCT-08	WHITE CRAPPIE	ZN-65	< 11.600	Duplicate
29-OCT-08	WHITE CRAPPIE	ZN-65	< 37.100	
29-OCT-08	WHITE CRAPPIE	CS-134	< 13.300	Duplicate
29-OCT-08	WHITE CRAPPIE	CS-134	< 10.600	
29-OCT-08	WHITE CRAPPIE	CS-137	< 12.600	Duplicate
29-OCT-08	WHITE CRAPPIE	CS-137	< 17.100	
29-OCT-08	WHITE CRAPPIE	H-3	3801.000 +/- 166.000	Duplicate
29-OCT-08	WHITE CRAPPIE	H-3	3861.000 +/- 167.000	

Location JRR

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
30-MAY-08	BIGMOUTH BUFFALO	K-40	3115.400 +/- 442.900	
30-MAY-08	BIGMOUTH BUFFALO	MN-54	< 13.500	
30-MAY-08	BIGMOUTH BUFFALO	CO-58	< 7.200	
30-MAY-08	BIGMOUTH BUFFALO	FE-59	< 23.500	
30-MAY-08	BIGMOUTH BUFFALO	CO-60	< 16.800	
30-MAY-08	BIGMOUTH BUFFALO	ZN-65	< 14.600	
30-MAY-08	BIGMOUTH BUFFALO	CS-134	< 15.500	
30-MAY-08	BIGMOUTH BUFFALO	CS-137	< 16.900	
30-MAY-08	BIGMOUTH BUFFALO	H-3	< 120.000	
30-MAY-08	CHANNEL CATFISH	K-40	3440.600 +/- 578.100	
30-MAY-08	CHANNEL CATFISH	MN-54	< 18.200	
30-MAY-08	CHANNEL CATFISH	CO-58	< 13.200	
30-MAY-08	CHANNEL CATFISH	FE-59	< 24.500	
30-MAY-08	CHANNEL CATFISH	CO-60	< 15.100	
30-MAY-08	CHANNEL CATFISH	ZN-65	< 18.700	
30-MAY-08	CHANNEL CATFISH	CS-134	< 11.300	
30-MAY-08	CHANNEL CATFISH	CS-137	< 18.600	
30-MAY-08	CHANNEL CATFISH	H-3	< 141.000	
30-MAY-08	COMMON CARP	K-40	3237.400 +/- 495.600	
30-MAY-08	COMMON CARP	MN-54	< 19.800	
30-MAY-08	COMMON CARP	CO-58	< 17.600	
30-MAY-08	COMMON CARP	FE-59	< 31.900	
30-MAY-08	COMMON CARP	CO-60	< 18.400	
30-MAY-08	COMMON CARP	ZN-65	< 26.800	
30-MAY-08	COMMON CARP	CS-134	< 18.100	
30-MAY-08	COMMON CARP	CS-137	< 15.700	
30-MAY-08	COMMON CARP	H-3	< 136.000	
30-MAY-08	WHITE CRAPPIE	K-40	2817.400 +/- 465.700	
30-MAY-08	WHITE CRAPPIE	MN-54	< 18.100	
30-MAY-08	WHITE CRAPPIE	CO-58	< 11.800	
30-MAY-08	WHITE CRAPPIE	FE-59	< 26.900	
30-MAY-08	WHITE CRAPPIE	CO-60	< 14.600	
30-MAY-08	WHITE CRAPPIE	ZN-65	< 21.000	
30-MAY-08	WHITE CRAPPIE	CS-134	< 16.600	
30-MAY-08	WHITE CRAPPIE	CS-137	< 18.300	
30-MAY-08	WHITE CRAPPIE	H-3	< 131.000	
14-NOV-08	CHANNEL CATFISH	K-40	3051.700 +/- 470.200	
14-NOV-08	CHANNEL CATFISH	MN-54	< 21.200	
14-NOV-08	CHANNEL CATFISH	CO-58	< 26.700	
14-NOV-08	CHANNEL CATFISH	FE-59	< 48.300	
14-NOV-08	CHANNEL CATFISH	CO-60	< 18.600	

Exposure Pathway - Ingestion
Fish

Location JRR

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
14-NOV-08	CHANNEL CATFISH	ZN-65	< 22.600	
14-NOV-08	CHANNEL CATFISH	CS-134	< 19.400	
14-NOV-08	CHANNEL CATFISH	CS-137	< 13.700	
14-NOV-08	CHANNEL CATFISH	H-3	< 114.000	
14-NOV-08	COMMON CARP	K-40	2512.400 +/- 503.300	
14-NOV-08	COMMON CARP	MN-54	< 19.100	
14-NOV-08	COMMON CARP	CO-58	< 17.100	
14-NOV-08	COMMON CARP	FE-59	< 64.900	
14-NOV-08	COMMON CARP	CO-60	< 18.800	
14-NOV-08	COMMON CARP	ZN-65	< 26.400	
14-NOV-08	COMMON CARP	CS-134	< 10.700	
14-NOV-08	COMMON CARP	CS-137	< 16.900	
14-NOV-08	COMMON CARP	H-3	< 142.000	
14-NOV-08	SMALLMOUTH BUFFALO	K-40	2900.300 +/- 367.500	
14-NOV-08	SMALLMOUTH BUFFALO	MN-54	< 15.300	
14-NOV-08	SMALLMOUTH BUFFALO	CO-58	< 11.400	
14-NOV-08	SMALLMOUTH BUFFALO	FE-59	< 28.500	
14-NOV-08	SMALLMOUTH BUFFALO	CO-60	< 14.800	
14-NOV-08	SMALLMOUTH BUFFALO	ZN-65	< 15.300	
14-NOV-08	SMALLMOUTH BUFFALO	CS-134	< 12.200	
14-NOV-08	SMALLMOUTH BUFFALO	CS-137	< 12.200	
14-NOV-08	SMALLMOUTH BUFFALO	H-3	< 113.000	

Exposure Pathway - Ingestion
Food/Garden

Location D-2

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
28-MAY-08	HORSERADISH LEAVES	BE-7	650.900 +/- 222.000	
28-MAY-08	HORSERADISH LEAVES	K-40	4161.400 +/- 644.500	
28-MAY-08	HORSERADISH LEAVES	MN-54	< 16.400	
28-MAY-08	HORSERADISH LEAVES	CO-58	< 16.700	
28-MAY-08	HORSERADISH LEAVES	FE-59	< 33.000	
28-MAY-08	HORSERADISH LEAVES	CO-60	< 15.200	
28-MAY-08	HORSERADISH LEAVES	ZN-65	< 67.000	
28-MAY-08	HORSERADISH LEAVES	ZR-NB-95	< 26.100	
28-MAY-08	HORSERADISH LEAVES	I-131	< 27.000	
28-MAY-08	HORSERADISH LEAVES	CS-134	< 21.200	
28-MAY-08	HORSERADISH LEAVES	CS-137	< 14.600	
25-JUN-08	HORSERADISH LEAVES	BE-7	964.200 +/- 143.300	
25-JUN-08	HORSERADISH LEAVES	K-40	4668.500 +/- 390.400	
25-JUN-08	HORSERADISH LEAVES	MN-54	< 9.200	
25-JUN-08	HORSERADISH LEAVES	CO-58	< 10.400	
25-JUN-08	HORSERADISH LEAVES	FE-59	< 21.800	
25-JUN-08	HORSERADISH LEAVES	CO-60	< 9.400	
25-JUN-08	HORSERADISH LEAVES	ZN-65	< 27.300	
25-JUN-08	HORSERADISH LEAVES	ZR-NB-95	< 9.500	
25-JUN-08	HORSERADISH LEAVES	I-131	< 15.200	
25-JUN-08	HORSERADISH LEAVES	CS-134	< 8.500	
25-JUN-08	HORSERADISH LEAVES	CS-137	< 6.500	
30-JUL-08	HORSERADISH LEAVES	BE-7	603.500 +/- 265.500	
30-JUL-08	HORSERADISH LEAVES	K-40	6417.100 +/- 641.400	
30-JUL-08	HORSERADISH LEAVES	MN-54	< 19.100	
30-JUL-08	HORSERADISH LEAVES	CO-58	< 19.000	
30-JUL-08	HORSERADISH LEAVES	FE-59	< 33.400	
30-JUL-08	HORSERADISH LEAVES	CO-60	< 24.200	
30-JUL-08	HORSERADISH LEAVES	ZN-65	< 32.800	
30-JUL-08	HORSERADISH LEAVES	ZR-NB-95	< 23.500	
30-JUL-08	HORSERADISH LEAVES	I-131	< 49.200	
30-JUL-08	HORSERADISH LEAVES	CS-134	< 13.600	
30-JUL-08	HORSERADISH LEAVES	CS-137	< 29.100	
27-AUG-08	HORSERADISH LEAVES	BE-7	1098.000 +/- 183.100	
27-AUG-08	HORSERADISH LEAVES	K-40	3987.800 +/- 393.000	
27-AUG-08	HORSERADISH LEAVES	MN-54	< 11.500	
27-AUG-08	HORSERADISH LEAVES	CO-58	< 8.300	
27-AUG-08	HORSERADISH LEAVES	FE-59	< 15.500	
27-AUG-08	HORSERADISH LEAVES	CO-60	< 12.800	
27-AUG-08	HORSERADISH LEAVES	ZN-65	< 17.400	
27-AUG-08	HORSERADISH LEAVES	ZR-NB-95	< 9.700	

Exposure Pathway - Ingestion
Food/Garden

Location D-2

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
27-AUG-08	HORSERADISH LEAVES	I-131	< 14.500	
27-AUG-08	HORSERADISH LEAVES	CS-134	< 7.700	
27-AUG-08	HORSERADISH LEAVES	CS-137	< 9.800	
17-SEP-08	HORSERADISH LEAVES	BE-7	476.900 +/- 165.700	
17-SEP-08	HORSERADISH LEAVES	K-40	3268.500 +/- 390.600	
17-SEP-08	HORSERADISH LEAVES	MN-54	< 11.500	
17-SEP-08	HORSERADISH LEAVES	CO-58	< 10.800	
17-SEP-08	HORSERADISH LEAVES	FE-59	< 20.700	
17-SEP-08	HORSERADISH LEAVES	CO-60	< 13.800	
17-SEP-08	HORSERADISH LEAVES	ZN-65	< 19.200	
17-SEP-08	HORSERADISH LEAVES	ZR-NB-95	< 9.500	
17-SEP-08	HORSERADISH LEAVES	I-131	< 17.500	
17-SEP-08	HORSERADISH LEAVES	CS-134	< 9.100	
17-SEP-08	HORSERADISH LEAVES	CS-137	< 10.000	
17-OCT-08	HORSERADISH LEAVES	BE-7	632.900 +/- 193.900	
17-OCT-08	HORSERADISH LEAVES	K-40	6310.800 +/- 552.200	
17-OCT-08	HORSERADISH LEAVES	MN-54	< 10.300	
17-OCT-08	HORSERADISH LEAVES	CO-58	< 16.300	
17-OCT-08	HORSERADISH LEAVES	FE-59	< 38.600	
17-OCT-08	HORSERADISH LEAVES	CO-60	< 17.400	
17-OCT-08	HORSERADISH LEAVES	ZN-65	< 41.300	
17-OCT-08	HORSERADISH LEAVES	ZR-NB-95	< 16.200	
17-OCT-08	HORSERADISH LEAVES	I-131	< 29.700	
17-OCT-08	HORSERADISH LEAVES	CS-134	< 16.100	
17-OCT-08	HORSERADISH LEAVES	CS-137	< 21.400	
13-NOV-08	HORSERADISH LEAVES	BE-7	870.500 +/- 196.600	
13-NOV-08	HORSERADISH LEAVES	K-40	5960.800 +/- 523.000	
13-NOV-08	HORSERADISH LEAVES	MN-54	< 15.400	
13-NOV-08	HORSERADISH LEAVES	CO-58	< 14.100	
13-NOV-08	HORSERADISH LEAVES	FE-59	< 30.800	
13-NOV-08	HORSERADISH LEAVES	CO-60	< 12.500	
13-NOV-08	HORSERADISH LEAVES	ZN-65	< 35.100	
13-NOV-08	HORSERADISH LEAVES	ZR-NB-95	< 17.900	
13-NOV-08	HORSERADISH LEAVES	I-131	< 18.300	
13-NOV-08	HORSERADISH LEAVES	CS-134	< 18.100	
13-NOV-08	HORSERADISH LEAVES	CS-137	< 15.600	

Exposure Pathway - Ingestion
Food/Garden

Location N-1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
28-MAY-08	HORSERADISH LEAVES	BE-7	627.200 +/- 153.600	
28-MAY-08	HORSERADISH LEAVES	K-40	3348.500 +/- 414.700	
28-MAY-08	HORSERADISH LEAVES	MN-54	< 14.600	
28-MAY-08	HORSERADISH LEAVES	CO-58	< 16.300	
28-MAY-08	HORSERADISH LEAVES	FE-59	< 15.100	
28-MAY-08	HORSERADISH LEAVES	CO-60	< 11.000	
28-MAY-08	HORSERADISH LEAVES	ZN-65	< 22.200	
28-MAY-08	HORSERADISH LEAVES	ZR-NB-95	< 13.700	
28-MAY-08	HORSERADISH LEAVES	I-131	< 23.800	
28-MAY-08	HORSERADISH LEAVES	CS-134	< 11.900	
28-MAY-08	HORSERADISH LEAVES	CS-137	< 15.200	
25-JUN-08	HORSERADISH LEAVES	BE-7	1263.800 +/- 188.800	
25-JUN-08	HORSERADISH LEAVES	K-40	3630.700 +/- 349.000	
25-JUN-08	HORSERADISH LEAVES	MN-54	< 7.200	
25-JUN-08	HORSERADISH LEAVES	CO-58	< 8.900	
25-JUN-08	HORSERADISH LEAVES	FE-59	< 15.900	
25-JUN-08	HORSERADISH LEAVES	CO-60	< 12.800	
25-JUN-08	HORSERADISH LEAVES	ZN-65	< 17.400	
25-JUN-08	HORSERADISH LEAVES	ZR-NB-95	< 6.200	
25-JUN-08	HORSERADISH LEAVES	I-131	< 11.000	
25-JUN-08	HORSERADISH LEAVES	CS-134	< 6.000	
25-JUN-08	HORSERADISH LEAVES	CS-137	< 10.500	
30-JUL-08	HORSERADISH LEAVES	BE-7	1279.200 +/- 205.700	
30-JUL-08	HORSERADISH LEAVES	K-40	4404.800 +/- 493.700	
30-JUL-08	HORSERADISH LEAVES	MN-54	< 19.300	
30-JUL-08	HORSERADISH LEAVES	CO-58	< 15.500	
30-JUL-08	HORSERADISH LEAVES	FE-59	< 40.200	
30-JUL-08	HORSERADISH LEAVES	CO-60	< 11.600	
30-JUL-08	HORSERADISH LEAVES	ZN-65	< 23.900	
30-JUL-08	HORSERADISH LEAVES	ZR-NB-95	< 15.700	
30-JUL-08	HORSERADISH LEAVES	I-131	< 21.400	
30-JUL-08	HORSERADISH LEAVES	CS-134	< 14.800	
30-JUL-08	HORSERADISH LEAVES	CS-137	< 16.700	
28-AUG-08	HORSERADISH LEAVES	BE-7	424.100 +/- 198.500	
28-AUG-08	HORSERADISH LEAVES	K-40	4724.300 +/- 466.400	
28-AUG-08	HORSERADISH LEAVES	MN-54	< 10.300	
28-AUG-08	HORSERADISH LEAVES	CO-58	< 8.000	
28-AUG-08	HORSERADISH LEAVES	FE-59	< 29.100	
28-AUG-08	HORSERADISH LEAVES	CO-60	< 18.500	
28-AUG-08	HORSERADISH LEAVES	ZN-65	< 17.900	
28-AUG-08	HORSERADISH LEAVES	ZR-NB-95	< 17.100	

Exposure Pathway - Ingestion
Food/Garden

Location N-1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
28-AUG-08	HORSERADISH LEAVES	I-131	< 13.300	
28-AUG-08	HORSERADISH LEAVES	CS-134	< 7.100	
28-AUG-08	HORSERADISH LEAVES	CS-137	< 11.400	
17-SEP-08	HORSERADISH LEAVES	BE-7	657.000 +/- 211.100	
17-SEP-08	HORSERADISH LEAVES	K-40	4531.000 +/- 421.800	
17-SEP-08	HORSERADISH LEAVES	MN-54	< 8.500	
17-SEP-08	HORSERADISH LEAVES	CO-58	< 12.700	
17-SEP-08	HORSERADISH LEAVES	FE-59	< 26.200	
17-SEP-08	HORSERADISH LEAVES	CO-60	< 14.400	
17-SEP-08	HORSERADISH LEAVES	ZN-65	< 25.500	
17-SEP-08	HORSERADISH LEAVES	ZR-NB-95	< 9.100	
17-SEP-08	HORSERADISH LEAVES	I-131	< 13.200	
17-SEP-08	HORSERADISH LEAVES	CS-134	< 9.800	
17-SEP-08	HORSERADISH LEAVES	CS-137	< 6.600	
17-OCT-08	HORSERADISH LEAVES	BE-7	< 174.300	
17-OCT-08	HORSERADISH LEAVES	K-40	2744.800 +/- 380.000	
17-OCT-08	HORSERADISH LEAVES	MN-54	< 17.500	
17-OCT-08	HORSERADISH LEAVES	CO-58	< 7.900	
17-OCT-08	HORSERADISH LEAVES	FE-59	< 27.400	
17-OCT-08	HORSERADISH LEAVES	CO-60	< 13.500	
17-OCT-08	HORSERADISH LEAVES	ZN-65	< 21.800	
17-OCT-08	HORSERADISH LEAVES	ZR-NB-95	< 18.700	
17-OCT-08	HORSERADISH LEAVES	I-131	< 22.800	
17-OCT-08	HORSERADISH LEAVES	CS-134	< 16.500	
17-OCT-08	HORSERADISH LEAVES	CS-137	< 22.100	
13-NOV-08	HORSERADISH LEAVES	BE-7	811.200 +/- 198.700	
13-NOV-08	HORSERADISH LEAVES	K-40	3367.500 +/- 394.900	
13-NOV-08	HORSERADISH LEAVES	MN-54	< 14.100	
13-NOV-08	HORSERADISH LEAVES	CO-58	< 7.700	
13-NOV-08	HORSERADISH LEAVES	FE-59	< 22.400	
13-NOV-08	HORSERADISH LEAVES	CO-60	< 10.300	
13-NOV-08	HORSERADISH LEAVES	ZN-65	< 31.700	
13-NOV-08	HORSERADISH LEAVES	ZR-NB-95	< 15.500	
13-NOV-08	HORSERADISH LEAVES	I-131	< 18.800	
13-NOV-08	HORSERADISH LEAVES	CS-134	< 12.600	
13-NOV-08	HORSERADISH LEAVES	CS-137	< 14.400	

Exposure Pathway - Ingestion
Food/Garden

Location Q-6

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
29-MAY-08	RHUBARB	BE-7	741.900 +/- 261.000	
29-MAY-08	RHUBARB	K-40	3627.700 +/- 521.600	
29-MAY-08	RHUBARB	MN-54	< 16.100	
29-MAY-08	RHUBARB	CO-58	< 13.000	
29-MAY-08	RHUBARB	FE-59	< 22.500	
29-MAY-08	RHUBARB	CO-60	< 12.800	
29-MAY-08	RHUBARB	ZN-65	< 15.700	
29-MAY-08	RHUBARB	ZR-NB-95	< 8.500	
29-MAY-08	RHUBARB	I-131	< 22.700	
29-MAY-08	RHUBARB	CS-134	< 19.500	
29-MAY-08	RHUBARB	CS-137	< 15.300	
25-JUN-08	RHUBARB	BE-7	786.500 +/- 163.900	
25-JUN-08	RHUBARB	K-40	4951.200 +/- 433.300	
25-JUN-08	RHUBARB	MN-54	< 8.700	
25-JUN-08	RHUBARB	CO-58	< 10.800	
25-JUN-08	RHUBARB	FE-59	< 22.900	
25-JUN-08	RHUBARB	CO-60	< 10.800	
25-JUN-08	RHUBARB	ZN-65	< 29.700	
25-JUN-08	RHUBARB	ZR-NB-95	< 18.700	
25-JUN-08	RHUBARB	I-131	< 10.900	
25-JUN-08	RHUBARB	CS-134	< 7.900	
25-JUN-08	RHUBARB	CS-137	< 12.600	
30-JUL-08	SQUASH LEAVES	BE-7	961.700 +/- 229.200	
30-JUL-08	SQUASH LEAVES	K-40	5255.600 +/- 523.200	
30-JUL-08	SQUASH LEAVES	MN-54	< 14.500	
30-JUL-08	SQUASH LEAVES	CO-58	< 19.300	
30-JUL-08	SQUASH LEAVES	FE-59	< 24.600	
30-JUL-08	SQUASH LEAVES	CO-60	< 18.500	
30-JUL-08	SQUASH LEAVES	ZN-65	< 37.300	
30-JUL-08	SQUASH LEAVES	ZR-NB-95	< 19.500	
30-JUL-08	SQUASH LEAVES	I-131	< 38.900	
30-JUL-08	SQUASH LEAVES	CS-134	< 19.100	
30-JUL-08	SQUASH LEAVES	CS-137	< 24.100	
28-AUG-08	HORSERADISH LEAVES	BE-7	888.400 +/- 195.800	
28-AUG-08	HORSERADISH LEAVES	K-40	6494.200 +/- 516.100	
28-AUG-08	HORSERADISH LEAVES	MN-54	< 16.300	
28-AUG-08	HORSERADISH LEAVES	CO-58	< 10.800	
28-AUG-08	HORSERADISH LEAVES	FE-59	< 32.900	
28-AUG-08	HORSERADISH LEAVES	CO-60	< 14.800	
28-AUG-08	HORSERADISH LEAVES	ZN-65	< 21.600	
28-AUG-08	HORSERADISH LEAVES	ZR-NB-95	< 12.300	

Exposure Pathway - Ingestion
Food/Garden

Location Q-6

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
28-AUG-08	HORSERADISH LEAVES	I-131	< 28.000	
28-AUG-08	HORSERADISH LEAVES	CS-134	< 11.200	
28-AUG-08	HORSERADISH LEAVES	CS-137	< 17.500	
17-SEP-08	HORSERADISH LEAVES	BE-7	662.000 +/- 188.500	
17-SEP-08	HORSERADISH LEAVES	K-40	4573.700 +/- 448.500	
17-SEP-08	HORSERADISH LEAVES	MN-54	< 13.600	
17-SEP-08	HORSERADISH LEAVES	CO-58	< 7.600	
17-SEP-08	HORSERADISH LEAVES	FE-59	< 24.800	
17-SEP-08	HORSERADISH LEAVES	CO-60	< 12.100	
17-SEP-08	HORSERADISH LEAVES	ZN-65	< 26.400	
17-SEP-08	HORSERADISH LEAVES	ZR-NB-95	< 10.300	
17-SEP-08	HORSERADISH LEAVES	I-131	< 20.400	
17-SEP-08	HORSERADISH LEAVES	CS-134	< 7.100	
17-SEP-08	HORSERADISH LEAVES	CS-137	< 12.600	
17-OCT-08	HORSERADISH LEAVES	BE-7	381.200 +/- 161.600	
17-OCT-08	HORSERADISH LEAVES	K-40	5783.500 +/- 502.400	
17-OCT-08	HORSERADISH LEAVES	MN-54	< 10.700	
17-OCT-08	HORSERADISH LEAVES	CO-58	< 11.800	
17-OCT-08	HORSERADISH LEAVES	FE-59	< 23.700	
17-OCT-08	HORSERADISH LEAVES	CO-60	< 11.800	
17-OCT-08	HORSERADISH LEAVES	ZN-65	< 22.900	
17-OCT-08	HORSERADISH LEAVES	ZR-NB-95	< 12.200	
17-OCT-08	HORSERADISH LEAVES	I-131	< 23.100	
17-OCT-08	HORSERADISH LEAVES	CS-134	< 15.300	
17-OCT-08	HORSERADISH LEAVES	CS-137	< 14.300	
13-NOV-08	HORSERADISH LEAVES	BE-7	726.400 +/- 212.900	
13-NOV-08	HORSERADISH LEAVES	K-40	4921.800 +/- 557.600	
13-NOV-08	HORSERADISH LEAVES	MN-54	< 21.400	
13-NOV-08	HORSERADISH LEAVES	CO-58	< 17.600	
13-NOV-08	HORSERADISH LEAVES	FE-59	< 24.700	
13-NOV-08	HORSERADISH LEAVES	CO-60	< 12.900	
13-NOV-08	HORSERADISH LEAVES	ZN-65	< 26.400	
13-NOV-08	HORSERADISH LEAVES	ZR-NB-95	< 13.000	
13-NOV-08	HORSERADISH LEAVES	I-131	< 35.500	
13-NOV-08	HORSERADISH LEAVES	CS-134	< 17.400	
13-NOV-08	HORSERADISH LEAVES	CS-137	< 17.500	

Exposure Pathway - Ingestion
Feed and Forage

Location NR-D1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
13-OCT-08	NON-IRRIGATED CORN	BE-7	< 53.200	
13-OCT-08	NON-IRRIGATED CORN	K-40	2765.000 +/- 187.200	
13-OCT-08	NON-IRRIGATED CORN	MN-54	< 6.200	
13-OCT-08	NON-IRRIGATED CORN	CO-58	< 2.700	
13-OCT-08	NON-IRRIGATED CORN	FE-59	< 11.100	
13-OCT-08	NON-IRRIGATED CORN	CO-60	< 7.400	
13-OCT-08	NON-IRRIGATED CORN	ZN-65	< 3.900	
13-OCT-08	NON-IRRIGATED CORN	ZR-NB-95	< 6.600	
13-OCT-08	NON-IRRIGATED CORN	I-131	< 11.300	
13-OCT-08	NON-IRRIGATED CORN	CS-134	< 3.700	
13-OCT-08	NON-IRRIGATED CORN	CS-137	< 3.200	

Exposure Pathway - Ingestion
Feed and Forage

Location NR-U1

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
02-OCT-08	NON-IRRIGATED CORN	BE-7	< 116.200	
02-OCT-08	NON-IRRIGATED CORN	K-40	2710.200 +/- 336.000	
02-OCT-08	NON-IRRIGATED CORN	MN-54	< 13.800	
02-OCT-08	NON-IRRIGATED CORN	CO-58	< 15.400	
02-OCT-08	NON-IRRIGATED CORN	FE-59	< 30.000	
02-OCT-08	NON-IRRIGATED CORN	CO-60	< 12.900	
02-OCT-08	NON-IRRIGATED CORN	ZN-65	< 17.000	
02-OCT-08	NON-IRRIGATED CORN	ZR-NB-95	< 11.000	
02-OCT-08	NON-IRRIGATED CORN	I-131	< 26.800	
02-OCT-08	NON-IRRIGATED CORN	CS-134	< 6.200	
02-OCT-08	NON-IRRIGATED CORN	CS-137	< 15.200	
27-OCT-08	NON-IRRIGATED SOYBEANS	BE-7	< 99.700	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	BE-7	< 134.000	
27-OCT-08	NON-IRRIGATED SOYBEANS	K-40	11938.000 +/- 470.200	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	K-40	12605.000 +/- 488.400	
27-OCT-08	NON-IRRIGATED SOYBEANS	MN-54	< 9.200	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	MN-54	< 13.300	
27-OCT-08	NON-IRRIGATED SOYBEANS	CO-58	< 11.800	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	CO-58	< 6.200	
27-OCT-08	NON-IRRIGATED SOYBEANS	FE-59	< 34.700	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	FE-59	< 34.300	
27-OCT-08	NON-IRRIGATED SOYBEANS	CO-60	< 10.500	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	CO-60	< 12.700	
27-OCT-08	NON-IRRIGATED SOYBEANS	ZN-65	< 15.200	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	ZN-65	< 18.400	
27-OCT-08	NON-IRRIGATED SOYBEANS	ZR-NB-95	< 9.300	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	ZR-NB-95	< 13.500	
27-OCT-08	NON-IRRIGATED SOYBEANS	I-131	< 43.300	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	I-131	< 57.700	
27-OCT-08	NON-IRRIGATED SOYBEANS	CS-134	< 8.600	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	CS-134	< 10.000	
27-OCT-08	NON-IRRIGATED SOYBEANS	CS-137	< 7.600	Duplicate
27-OCT-08	NON-IRRIGATED SOYBEANS	CS-137	< 9.200	

Exposure Pathway - Aquatic
Bottom Sediment

Location DC

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
08-MAY-08	K-40	16124.000 +/- 963.800	
08-MAY-08	MN-54	< 39.900	
08-MAY-08	CO-58	< 26.200	
08-MAY-08	FE-59	< 51.600	
08-MAY-08	CO-60	127.400 +/- 36.200	
08-MAY-08	ZN-65	< 75.100	
08-MAY-08	CS-134	< 25.500	
08-MAY-08	CS-137	216.500 +/- 51.900	
19-SEP-08	K-40	11114.000 +/- 620.300	
19-SEP-08	MN-54	< 27.700	
19-SEP-08	CO-58	< 24.000	
19-SEP-08	FE-59	< 22.000	
19-SEP-08	CO-60	< 14.700	
19-SEP-08	ZN-65	< 35.700	
19-SEP-08	CS-134	< 10.800	
19-SEP-08	CS-137	< 25.100	

Exposure Pathway - Aquatic
Bottom Sediment

Location DC-A

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
26-JUN-08	K-40	14704.000 +/- 1222.000	
26-JUN-08	MN-54	< 64.000	
26-JUN-08	CO-58	< 54.100	
26-JUN-08	FE-59	< 84.300	
26-JUN-08	CO-60	95.600 +/- 33.700	
26-JUN-08	ZN-65	< 89.300	
26-JUN-08	CS-134	< 41.400	
26-JUN-08	CS-137	150.900 +/- 79.400	

Exposure Pathway - Aquatic
Bottom Sediment

Location DC-B

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
26-JUN-08	K-40	12762.000 +/- 1249.000	
26-JUN-08	MN-54	< 49.300	
26-JUN-08	CO-58	< 62.600	
26-JUN-08	FE-59	< 118.600	
26-JUN-08	CO-60	< 45.900	
26-JUN-08	ZN-65	< 66.900	
26-JUN-08	CS-134	< 38.800	
26-JUN-08	CS-137	193.500 +/- 77.500	

Exposure Pathway - Aquatic
Bottom Sediment

Location DC-C

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
26-JUN-08	K-40	7270.300 +/- 698.700	Duplicate
26-JUN-08	K-40	7307.200 +/- 714.400	
26-JUN-08	MN-54	< 29.600	Duplicate
26-JUN-08	MN-54	< 32.400	
26-JUN-08	CO-58	< 31.800	Duplicate
26-JUN-08	CO-58	< 32.400	
26-JUN-08	FE-59	< 66.800	Duplicate
26-JUN-08	FE-59	< 47.600	
26-JUN-08	CO-60	< 29.900	Duplicate
26-JUN-08	CO-60	< 25.000	
26-JUN-08	ZN-65	< 50.000	Duplicate
26-JUN-08	ZN-65	< 67.500	
26-JUN-08	CS-134	< 19.100	Duplicate
26-JUN-08	CS-134	< 23.600	
26-JUN-08	CS-137	76.300 +/- 39.600	Duplicate
26-JUN-08	CS-137	70.200 +/- 34.300	

Exposure Pathway - Aquatic
Bottom Sediment

Location DC-D

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
26-JUN-08	K-40	13097.000 +/- 1352.000	
26-JUN-08	MN-54	< 52.000	
26-JUN-08	CO-58	< 48.100	
26-JUN-08	FE-59	< 66.700	
26-JUN-08	CO-60	< 47.500	
26-JUN-08	ZN-65	< 97.200	
26-JUN-08	CS-134	< 35.700	
26-JUN-08	CS-137	183.100 +/- 77.400	

Exposure Pathway - Aquatic
Bottom Sediment

Location DC-E

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
26-JUN-08	K-40	7932.800 +/- 758.500	
26-JUN-08	MN-54	< 29.600	
26-JUN-08	CO-58	< 31.700	
26-JUN-08	FE-59	< 59.200	
26-JUN-08	CO-60	< 19.500	
26-JUN-08	ZN-65	< 66.700	
26-JUN-08	CS-134	< 25.400	
26-JUN-08	CS-137	< 30.400	

Exposure Pathway - Aquatic
Bottom Sediment

Location EEA

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
22-APR-08	K-40	10267.000 +/- 878.100	
22-APR-08	MN-54	< 28.500	
22-APR-08	CO-58	< 20.000	
22-APR-08	FE-59	< 84.200	
22-APR-08	CO-60	< 31.500	
22-APR-08	ZN-65	< 78.700	
22-APR-08	CS-134	< 31.900	
22-APR-08	CS-137	59.600 +/- 33.500	
13-MAY-08	K-40	9582.800 +/- 572.500	
13-MAY-08	MN-54	< 23.200	
13-MAY-08	CO-58	< 23.100	
13-MAY-08	FE-59	< 21.900	
13-MAY-08	CO-60	< 13.500	
13-MAY-08	ZN-65	< 43.400	
13-MAY-08	CS-134	< 13.600	
13-MAY-08	CS-137	63.100 +/- 30.100	

Exposure Pathway - Aquatic
Bottom Sediment

Location JRR

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
26-JUN-08	K-40	15055.000 +/- 1320.000	
26-JUN-08	MN-54	< 75.800	
26-JUN-08	CO-58	< 50.900	
26-JUN-08	FE-59	< 130.200	
26-JUN-08	CO-60	< 35.600	
26-JUN-08	ZN-65	< 80.600	
26-JUN-08	CS-134	< 48.600	
26-JUN-08	CS-137	120.700 +/- 56.000	
14-NOV-08	K-40	13202.000 +/- 715.800	
14-NOV-08	MN-54	< 27.700	
14-NOV-08	CO-58	< 42.300	
14-NOV-08	FE-59	< 104.800	
14-NOV-08	CO-60	< 17.500	
14-NOV-08	ZN-65	< 53.000	
14-NOV-08	CS-134	< 22.500	
14-NOV-08	CS-137	< 26.600	

Exposure Pathway - Aquatic
Bottom Sediment

Location MUDS

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
22-APR-08	K-40	7650.100 +/- 549.500	
22-APR-08	MN-54	< 25.200	
22-APR-08	CO-58	< 18.900	
22-APR-08	FE-59	< 58.700	
22-APR-08	CO-60	< 9.000	
22-APR-08	ZN-65	< 40.000	
22-APR-08	CS-134	< 16.500	
22-APR-08	CS-137	< 17.800	

Exposure Pathway - Aquatic Vegetation

Location DC-ALT

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Sample
26-JUN-08	AMERICAN PONDWEED	BE-7	< 105.000	
26-JUN-08	AMERICAN PONDWEED	K-40	2124.700 +/- 259.900	
26-JUN-08	AMERICAN PONDWEED	MN-54	< 9.000	
26-JUN-08	AMERICAN PONDWEED	CO-58	< 8.700	
26-JUN-08	AMERICAN PONDWEED	FE-59	< 17.400	
26-JUN-08	AMERICAN PONDWEED	CO-60	< 7.000	
26-JUN-08	AMERICAN PONDWEED	ZN-65	< 12.500	
26-JUN-08	AMERICAN PONDWEED	ZR-NB-95	< 5.300	
26-JUN-08	AMERICAN PONDWEED	I-131	< 14.400	
26-JUN-08	AMERICAN PONDWEED	CS-134	< 4.800	
26-JUN-08	AMERICAN PONDWEED	CS-137	< 10.300	

Exposure Pathway - Aquatic Vegetation

Location EEA

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Sample
11-JUN-08	WATER PLANTAIN	BE-7	709.200 +/- 150.100	
11-JUN-08	WATER PLANTAIN	K-40	3721.200 +/- 313.800	
11-JUN-08	WATER PLANTAIN	MN-54	< 13.600	
11-JUN-08	WATER PLANTAIN	CO-58	< 11.600	
11-JUN-08	WATER PLANTAIN	FE-59	< 19.400	
11-JUN-08	WATER PLANTAIN	CO-60	< 12.400	
11-JUN-08	WATER PLANTAIN	ZN-65	< 26.700	
11-JUN-08	WATER PLANTAIN	ZR-NB-95	< 12.300	
11-JUN-08	WATER PLANTAIN	I-131	< 31.700	
11-JUN-08	WATER PLANTAIN	CS-134	< 12.400	
11-JUN-08	WATER PLANTAIN	CS-137	34.800 +/- 19.500	

Exposure Pathway - Aquatic Vegetation

Location MUDS

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Sample
10-JUN-08	PONDWEED	BE-7	316.000 +/- 123.200	
10-JUN-08	PONDWEED	K-40	3059.800 +/- 281.000	
10-JUN-08	PONDWEED	MN-54	< 10.200	
10-JUN-08	PONDWEED	CO-58	< 11.200	
10-JUN-08	PONDWEED	FE-59	< 21.100	
10-JUN-08	PONDWEED	CO-60	< 8.300	
10-JUN-08	PONDWEED	ZN-65	< 15.000	
10-JUN-08	PONDWEED	ZR-NB-95	< 10.600	
10-JUN-08	PONDWEED	I-131	< 22.700	
10-JUN-08	PONDWEED	CS-134	< 8.600	
10-JUN-08	PONDWEED	CS-137	< 10.500	

Exposure Pathway - Terrestrial
Vegetation

Location EEA

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
28-MAY-08	PASTURAGE	BE-7	688.100 +/- 154.600	
28-MAY-08	PASTURAGE	K-40	4588.500 +/- 409.600	
28-MAY-08	PASTURAGE	MN-54	< 11.500	
28-MAY-08	PASTURAGE	CO-58	< 4.700	
28-MAY-08	PASTURAGE	FE-59	< 12.800	
28-MAY-08	PASTURAGE	CO-60	< 11.500	
28-MAY-08	PASTURAGE	ZN-65	< 22.900	
28-MAY-08	PASTURAGE	ZR-NB-95	< 11.700	
28-MAY-08	PASTURAGE	I-131	< 23.300	
28-MAY-08	PASTURAGE	CS-134	< 12.300	
28-MAY-08	PASTURAGE	CS-137	< 11.100	

Exposure Pathway - Terrestrial
Vegetation

Location MUDS

Collection Date	Sample Description	Nuclide	Gamma Spectrum Concentration (pCi/Kg Wet)	Duplicate Analysis
10-JUN-08	PASTURAGE	BE-7	2467.200 +/- 207.200	
10-JUN-08	PASTURAGE	K-40	4933.900 +/- 340.400	
10-JUN-08	PASTURAGE	MN-54	< 8.900	
10-JUN-08	PASTURAGE	CO-58	< 11.100	
10-JUN-08	PASTURAGE	FE-59	< 13.100	
10-JUN-08	PASTURAGE	CO-60	< 8.800	
10-JUN-08	PASTURAGE	ZN-65	< 21.500	
10-JUN-08	PASTURAGE	ZR-NB-95	< 7.900	
10-JUN-08	PASTURAGE	I-131	< 34.000	
10-JUN-08	PASTURAGE	CS-134	< 7.700	
10-JUN-08	PASTURAGE	CS-137	< 13.800	

Exposure Pathway - Terrestrial
Soil

Location EEA

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
13-MAY-08	K-40	10250.000 +/- 662.600	
13-MAY-08	MN-54	< 27.900	
13-MAY-08	CO-58	< 26.600	
13-MAY-08	FE-59	< 33.400	
13-MAY-08	CO-60	< 7.600	
13-MAY-08	ZN-65	< 34.700	
13-MAY-08	CS-134	< 15.500	
13-MAY-08	CS-137	249.500 +/- 37.900	

Exposure Pathway - Terrestrial
Soil

Location MUDS

Collection Date	Nuclide	Gamma Spectrum Concentration (pCi/Kg Dry)	Duplicate Analysis
10-JUN-08	K-40	6826.100 +/- 538.500	
10-JUN-08	MN-54	< 22.200	
10-JUN-08	CO-58	< 15.800	
10-JUN-08	FE-59	< 16.600	
10-JUN-08	CO-60	< 10.800	
10-JUN-08	ZN-65	< 42.100	
10-JUN-08	CS-134	< 9.500	
10-JUN-08	CS-137	126.200 +/- 29.200	

Exposure Pathway - Ingestion
Deer

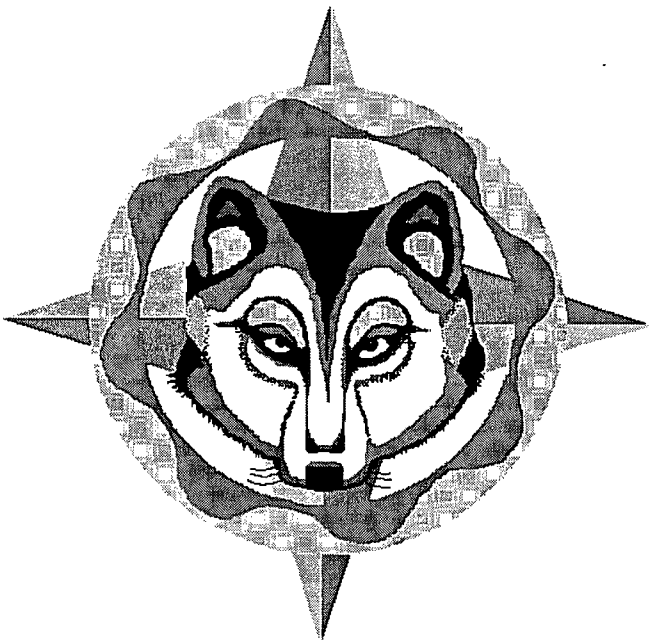
Location A1.6

Collection Date	Sample Description	Nuclide	Gamma Spectrum & H-3 Concentration (pCi/Kg Wet)	Duplicate Analysis
30-APR-08	DEER MEAT	K-40	3203.000 +/- 278.200	
30-APR-08	DEER MEAT	MN-54	< 9.400	
30-APR-08	DEER MEAT	CO-58	< 8.400	
30-APR-08	DEER MEAT	FE-59	< 18.500	
30-APR-08	DEER MEAT	CO-60	< 7.300	
30-APR-08	DEER MEAT	ZN-65	< 12.500	
30-APR-08	DEER MEAT	CS-134	< 8.800	
30-APR-08	DEER MEAT	CS-137	< 8.300	
30-APR-08	DEER MEAT	H-3	243.000 +/- 64.000	

WOLF CREEK GENERATING STATION

2008 LAND USE CENSUS REPORT

Revision 1



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EXECUTIVE SUMMARY

The 2008 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-07-001.

The annual Land Use Census of rural residents within five miles of the Wolf Creek Generating Station (WCGS) has been completed for 2008 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.

Changes may be necessary for the Radiological Environmental Monitoring Program (REMP) broadleaf vegetation sample locations for 2009. The two broadleaf vegetation locations with the highest calculated annual average D/Q rankings are Q2.35-MILA1619 and L2.39-NARD1309. AP 07B-004 specifies that an "alternate location may be used to provide continued monitoring". The third-ranked garden is N2.38-RODR9. Prior to the 2009 growing season the residents should be contacted and based upon their cooperation, the program should be changed accordingly.

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 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 fifteen 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.

The nearest occupied residences in each sector remained the same as last year.

Seven 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

2008 Land Use Census Data

Location of Nearest:

Sector	Residence	Milking Animals	Broadleaf Garden
A	A2.60-17TE1520	None	A4.91-OXRD1940
B	B1.86-PLRD16XX	None	B3.53-QURD1755
C	C1.92-16RD1655	None	C3.16-QURD1712
D	D2.03-QULA1571	None	D3.00-16RD1829
E	E1.77-QULA1485	None	None
F	F1.76-14RD1730	None	F2.44-RERD1391
G	G3.03-13RD1820	None	G3.66-12RD1814
H	H3.09-12RD1711	None	H3.30-QURD1175
J	J3.70-11RD1540	None	J3.80-11RD1535
K	K2.70-12LA1439	None	None
L	L2.10-NARD1339	None	L2.39-NARD1309
M	M2.47-14RD1322	None	M3.78-LYRD1390
N	N1.71-NARD1441	None	N2.38-RODR9
P	P2.76-HW751534	None	P2.99-SOST100
Q	Q2.35-MILA1619	None	Q2.35-MILA1619
R	R2.08-NALN1650	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	2007 NEAREST RESIDENCE	2008 NEAREST RESIDENCE
A	A2.60-17TE1520	A2.60-17TE1520
B	B1.86-PLRD16XX	B1.86-PLRD16XX
C	C1.92-16RD1655	C1.92-16RD1655
D	D2.03-QULA1571	D2.03-QULA1571
E	E1.77-QULA1485	E1.77-QULA1485
F	F1.76-14RD1730	F1.76-14RD1730
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	M2.47-14RD1322	M2.47-14RD1322
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	R2.08-NALN1650

NOTE: Entries underlined indicate changes from the 2007 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

2008 Land Use Census Milk and Garden Data

SECTOR	2007 MILKING ANIMALS	2008 MILKING ANIMALS	2007 CLOSEST GARDEN PRODUCING BROADLEAF VEGETATION	2008 CLOSEST GARDEN PRODUCING BROADLEAF VEGETATION
A	None	None	None	A4.91-OXRD1940
B	None	None	B4.09-18RD1739	B3.53-QURD1755
C	None	None	C1.92-16RD1655	C3.16-QURD1712
D	None	None	D3.00-16RD1829	D3.00-16RD1829
E	None	None	None	None
F	None	None	F2.44-RERD1391	F2.44-RERD1391
G	None	None	G3.77-12RD1831	G3.66-12RD1814
H	None	None	H3.30-QURD1175	H3.30-QURD1175
J	None	None	J3.80-11RD1535	J3.80-11RD1535
K	None	None	K4.10-NARD1120	None
L	None	None	L2.39-NARD1309	L2.39-NARD1309
M	None	None	M3.10-13LA1290	M3.78-LYRD1390
N	None	None	N2.38-RODR9	N2.38-RODR9
P	None	None	P2.76-HW751534	P2.99-SOST100
Q	None	None	Q2.35-MILA1619	Q2.35-MILA1619
R	None	None	None	None

NOTE: Underlined entries indicate changes from the 2007 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			FROM SA-07-001						
	DIST	CALC	NEAR	NEAR	FAR	FAR		SECTOR	D/Q * 20%
SECTOR	(MI)	(METERS)	DIST	D / Q	DIST	D / Q	CALC	RANKING	
A	4.91	7902	7000	6.95E-10	8000	5.61E-10	5.74E-10	4	6.89E-10
B	3.53	5681	5000	6.27E-10	6000	4.61E-10	5.14E-10	6	6.17E-10
C	3.16	5086	5000	2.77E-10	6000	2.03E-10	2.71E-10	11	3.25E-10
D	3.00	4828	4000	2.71E-10	5000	1.85E-10	2.00E-10	13	2.40E-10
E	0	0							
F	2.44	3927	3000	6.99E-10	4000	4.20E-10	4.40E-10	9	5.28E-10
G	3.66	5890	5000	4.70E-10	6000	3.46E-10	3.60E-10	10	4.32E-10
H	3.30	5311	5000	5.66E-10	6000	4.16E-10	5.19E-10	5	6.23E-10
J	3.80	6116	6000	4.62E-10	7000	3.43E-10	4.48E-10	8	5.38E-10
K	0	0							
L	2.39	3846	3000	1.15E-09	4000	6.91E-10	7.62E-10	2	9.14E-10
M	3.78	6083	6000	2.56E-10	7000	1.90E-10	2.51E-10	12	3.01E-10
N	2.38	3830	3000	1.11E-09	4000	6.67E-10	7.42E-10	3	8.90E-10
P	2.99	4812	4000	6.23E-10	5000	4.24E-10	4.61E-10	7	5.53E-10
Q	2.35	3782	3000	1.45E-09	4000	8.68E-10	9.95E-10	1	1.19E-09
R	0	0							

Originated by: Teresa L. Rice Date: 12-10-2008

Verified by: Ryk L Ingalsbe Date: 12-10-2008