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Volume II

U.S. DEPARTMENT OF ENERGY NEVADA OPERATIONS OFFICE ANNUAL SITE ENVIRONMENTAL REPORT - 1990

Volume II - Appendices

Editors: Elizabeth M. McDowell and Stuart C. Black

September 1991

Work Performed Under
Contract No. DE-AC08-89NV10630

prepared by:

Reynolds Electrical & Engineering Co., Inc.
Post Office Box 98521
Las Vegas, Nevada 89193-8521

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FOREWORD

These appendices contain 1990 NTS onsite and offsite milk environmental monitoring results. The onsite data presented are accompanied by summaries of statistical evaluations of the data. Other offsite data collected by the EPA are available from the U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Las Vegas, Nevada.

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APPENDIX A
ONSITE ^{238}PU, $^{239+240}$PU, GROSS BETA, AND GAMMA-EMITTING RADIONUCLIDES IN AIR

Lawrence E. Barker

Sampling locations, sampling dates (starting and ending), measured concentrations, and limits of detection for ^{238}Pu, $^{239+240}$Pu, gross beta, and gamma-emitting radionuclides in air appear in Attachments A.1, A.2, A.3, and A.4. Statistical analyses of these data appear below.

PLUTONIUM-238

More than 94 percent of the observed concentrations of ^{238}Pu were below limits of detection. However, statistical analysis of observed concentrations, without accounting for many being below the limit of detection, can be instructive. Descriptive statistics can be calculated using either the calculated concentrations or the greater of the observed concentration and the detection limits, although this will overestimate concentrations.

Using the observed concentrations, the arithmetic mean and standard deviation are, respectively, 3.2×10^{-18} and 9.9×10^{-18} μCi/mL (1.2×10^{-7} and 3.7×10^{-7} Bq/m^3). Since subtraction of background caused some observed concentrations to be negative, the geometric mean and standard deviation could not be calculated.

Using maxima of concentrations and detection limits, both geometric and arithmetic means were 1.5×10^{-17} μCi/mL (5.6×10^{-7} Bq/m^3). The geometric standard deviation calculated using the greater of detection limits and observed concentrations was 1.3. The arithmetic standard deviation calculated in the same manner was 6.0×10^{-18} μCi/mL (2.2×10^{-7} Bq/m^3).

In Figure A.1, observed concentrations (in units of 10^{-18} μCi/mL, chosen for visual instructiveness) are plotted versus normal scores. Were the data actually normally distributed, scatter about a straight line would be observed. Clearly, this does not hold, but negative concentrations (which occur due to subtraction of background) and positive concentrations each fall on a straight line, although with different slopes. In view of the poor fit of other common environmental distributions (like the lognormal distribution), it was decided that the normal distribution is a sufficiently accurate, although crude, approximation.

To simultaneously compare differences in sampling stations and weeks in which sampling ended (Week "1" is the first week of 1990, Week "2" is the second week of 1990, etc.), a two-way analysis of variance (ANOVA) was conducted, and the results are shown in Table in A.1.

The two-way ANOVA table indicates no difference between sampling stations, but does indicate time differences. To further investigate differences in time, a one-way ANOVA was conducted, and the results are summarized in Table A.2. Table A.2 indicates that concentrations of ^{238}Pu tended to be somewhat smaller during the middle of the year (Week 18 to Week 31).

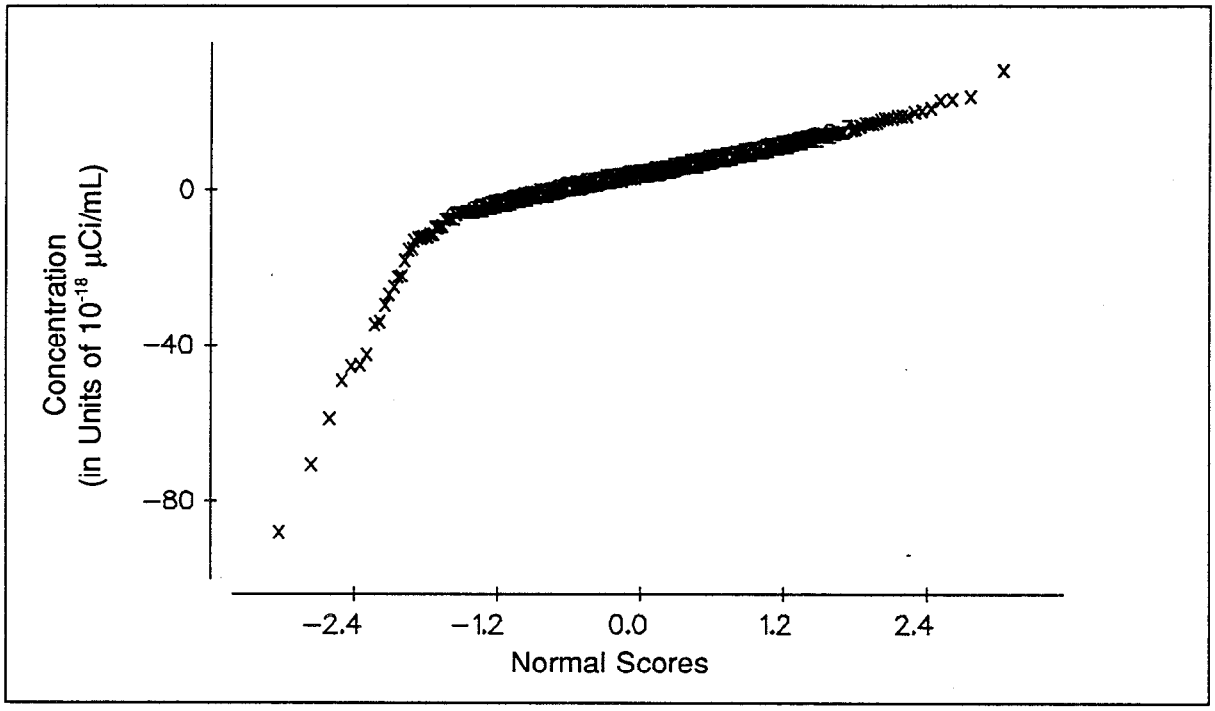


Figure A.1 ^{238}Pu versus Normal Scores

Table A.1 Two-Way Analysis of the Variance on ^{238}Pu Concentrations between Sampling Stations and Weeks (x 10^{18} µCi/mL)

Source	Degrees of Freedom	Sequential Sum of the Squares	Sum of the Squares	Mean Square	F-Statistic	p Value
Week	11	3333.63	3336.94	303.36	3.26	0.000
Sampling Station	51	5296.60	5296.60	103.85	1.12	0.277
Error	544	50639.27	50639.27	93.09		
Total	606	59269.49				

There is a slight visual suggestion that, except for the "mid-year slump," concentrations were increasing. However, Fisher's multiple comparison procedure, an extremely powerful method of multiple comparisons, showed no evidence of differences other than those discussed.

PLUTONIUM-239+240

Approximately 42 percent of the observed concentrations exceeded the limit of detection. Descriptive statistics can be calculated with either observed concentrations or the greater of the observed concentration and limit of detection, as mentioned above. The arithmetic mean

Table A.2 One-Way Analysis of the Variance of ^{238}Pu Concentrations between Weeks (x 10^{18} µCi/mL)

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Week	11	3333.6	303.1	3.23	0.000
Error	595	55776.2	93.7		
Total	606	59109.8			

Week	Number	Mean	Standard Deviation	Individual 95 Percent Confidence Intervals (CIs) for the Means Based on a Pooled Standard Deviation
1	49	0.891	6.898	(-----*-----)
6	51	3.966	7.337	(-----*-----)
10	51	3.527	7.697	(-----*-----)
14	52	5.689	7.044	(-----*-----)
18	51	2.196	4.814	(-----*-----)
23	43	-0.112	12.444	(-------*-------)
27	51	1.433	16.030	(-----*-----)
31	52	-0.932	17.387	(-----*-----)
36	52	5.856	5.670	(-----*-----)
40	51	3.930	9.732	(-----*-----)
44	52	4.002	5.214	(-----*-----)
49	52	6.915	5.633	(-----*-----)

Pooled Standard Deviation = 9.682

0.0 4.0 8.0

and standard deviation of observed $^{239+240}Pu$ concentrations were, respectively, 2.8 x 10^{-17} and 7.0 x 10^{-17} µCi/mL (1.0 x 10^{-9} and 2.6 x 10^{-9} Bq/m^3). Since subtraction of background caused some observed concentrations to be negative, the geometric mean and standard deviation could not be calculated for the total data set.

Calculating descriptive statistics using the greater of the observed concentration or the limit of detection yields an arithmetic mean and standard deviation of 3.0 x 10^{-17} and 7.0 x 10^{-17} µCi/mL (1.1 x 10^{-6} and 2.6 x 10^{-6} Bq/m^3), respectively. The geometric mean and standard deviation were, respectively, 1.2 x 10^{-17} µCi/mL and 3.0 (4.4 x 10^{-7} Bq/m^3 and 3.0). More than 90 percent of the observed concentrations were positive. An exploratory data analysis revealed that a lognormal distribution fits the positive observed concentrations fairly well. Natural logarithms of positive concentrations are plotted versus normal scores in Figure A.2. Were the distribution truly lognormal, scatter about a straight line would result. While this does not hold, the results are thought close enough for the lognormal distribution to provide an adequate approximation.

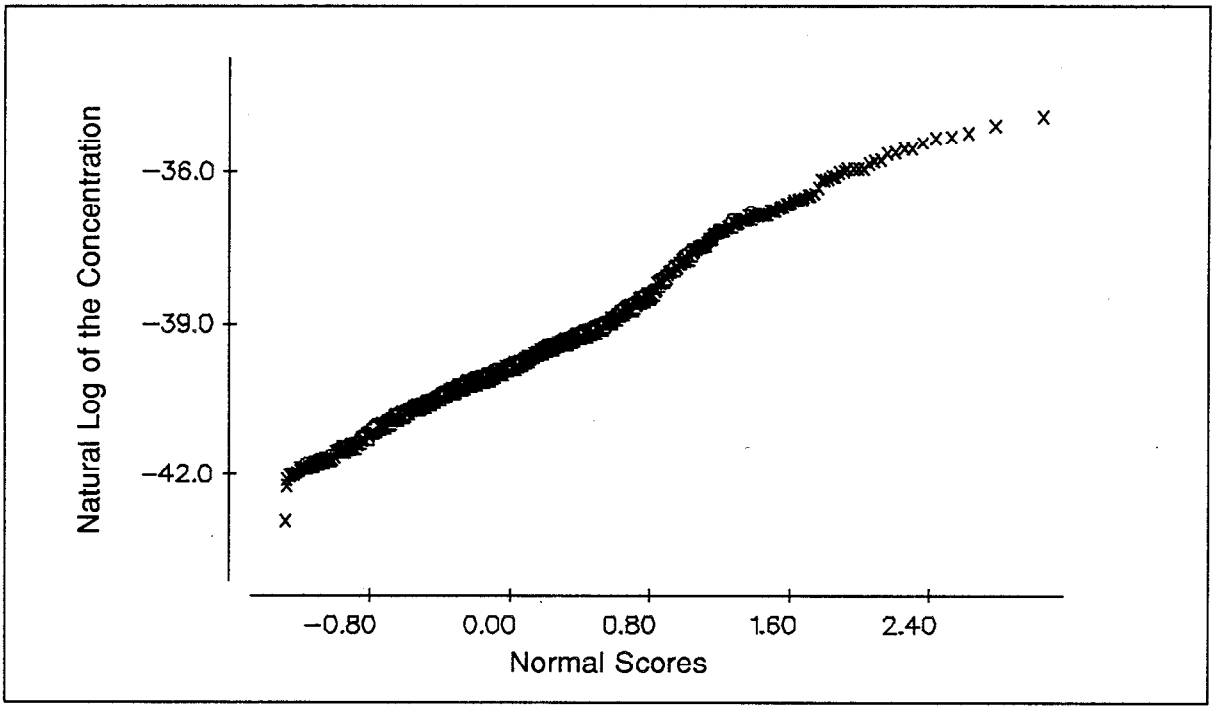


Figure A.2 Plot of the Natural Log of Positive ^{239}Pu Concentrations versus Normal Scores

Attempts to utilize the negative concentrations by adding a small amount to each concentration resulted in a poorer fit to the lognormal distribution. It is felt that ignoring the negative observations introduces a smaller bias than working with clearly non-normal data.

Hence, the remainder of the analysis is performed with the natural logarithms of the positive concentrations.

To simultaneously compare differences in sampling stations and weeks in which sampling ended (weeks numbered as above), a two-way ANOVA was conducted. The results of this analysis appear in Table A.3.

Table A.3 Two-Way Analysis of the Variance on the Natural Log of $^{239+240}$Pu Concentrations between Sampling Stations and Weeks

Source	Degrees of Freedom	Sequential Sum of the Squares	Sum of the Squares	Mean Square	F-Statistic	p Value
Week	11	38.552	47.433	4.312	5.12	0.000
Sampling Station	51	950.534	950.534	18.638	22.13	0.000
Error	495	416.833	416.833	0.842		
Total	557	1405.920				

This two-way ANOVA table shows that concentrations differ both over time and over sampling stations. To investigate this further, a one-way ANOVA with sampling station and week as independent variables was conducted.

Using Fisher's multiple comparison procedure, it was found that sampling stations could be broken down into three categories, those of "lesser," "medium," and "greater" $^{239+240}Pu$ concentrations, i.e.:

Category	Sampling Stations
Greater	Area 3 Complex
	9-300 Bunker
	BJY
	3-300 Bunker
	Area 3 Complex #2
	U3ah/at South
	U3ah/at East
	U3ah/at North
	U3ah/at West
Medium	Ue7ns
	EPA Farm
Lesser	All Others

Typically, sampling stations in the "greater concentration" category are those at which high degrees of contamination would be expected, such as the U3ah/at areas, where waste is stored. Sampling stations in the "lesser concentration" category are typically those at which lower concentrations might be expected. The higher concentration at the EPA Farm is puzzling, and no explanation is provided. Note that elevated levels of gross beta contamination were also found at the EPA Farm.

A one-way ANOVA using these categories as independent variables was carried out, and the results are shown in Table A.4. The ANOVA results in Table A.4 show that the three categories are clearly separated.

To compare differences over time, a one-way ANOVA with week (week numbers as above) as the independent variable was conducted, and the results appear in Table A.5.

The one-way ANOVA shows the difference in concentrations among weeks is not statistically significant at the five percent level. This seeming disagreement with the two-way ANOVA is attributable to this analysis not controlling for differences in sampling stations. A visual examination of the results suggests that, while concentrations might be varying over time, there is no obvious monotonic trend.

Table A.4 One-Way Analysis of the Variance on the Natural Log of $^{239+240}Pu$ Concentrations between Sampling Stations

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	2	809.34	404.67	376.47	0.000
Error	555	596.58	1.07		
Total	557	1405.92			

Level	N	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
Lesser	432	-40.065	1.078	(*)
Medium	22	-38.571	0.790	(----*----)
Greater	104	-36.991	0.895	(-*-)

Pooled Standard Deviation = 1.037

-40.0 -39.0 -38.0 -37.0

GROSS BETA

All observed concentrations of gross beta were above the limit of detection and therefore positive. The arithmetic mean and standard deviation of the concentrations were, respectively, 1.9×10^{-14} and 6.8×10^{-15} µCi/mL (7.0×10^{-4} and 2.5×10^{-4} Bq/m^3). The geometric mean and standard deviations were, respectively, 1.8×10^{-14} µCi/mL and 1.4 ($6.7 \times 10^{-4} \times 10^{10}$ Bq/m^3 and 1.4). If results from the Gate 200 station which were analyzed differently from those of any other sampling station are omitted, the means and standard deviations remain unchanged.

In Figure A.3, natural logarithms of gross beta concentrations are plotted versus normal scores. Again, were the distribution of gross beta concentrations actually lognormally distributed, scatter around a straight line would result. Here, a straight line fits the data quite well except for a few extreme concentrations, both large and small. It is thought that the lognormal distribution provides an adequate approximation to the concentrations' true distribution and is used for the remainder of the analysis.

Concentrations were compared over sampling stations by a one-way ANOVA, and the results may be seen in Table A.6.

Using Fisher's multiple comparison procedure it was found that sampling stations break down into three categories, those of "lesser," "medium," and "greater" gross beta concentrations, i.e.:

Table A.5 One-Way Analysis of the Variance on the Natural Log of $^{239+240}Pu$ Concentrations between Weeks

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Week	11	38.55	3.50	1.40	0.169
Error	546	1367.37	2.50		
Total	557	1405.92			

Week	N	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
1	46	-39.570	1.373	(-----*-----)
6	45	-39.360	1.676	(-----*-----)
10	46	-39.449	1.560	(-----*-----)
14	48	-39.413	1.637	(----*----)
18	51	-39.046	1.618	(----*----)
23	40	-39.132	1.553	(-----*-----)
27	49	-39.284	1.598	(----*----)
31	49	-39.248	1.491	(----*----)
36	46	-39.945	1.588	(----*----)
40	48	-39.297	1.686	(-----*-----)
44	49	-39.632	1.631	(----*----)
49	41	-39.888	1.538	(-----*-----)

Pooled Standard Deviation = 1.583

-40.00 -39.50 -39.00

Category	Sampling Stations
Greater	RWMS #1-9 RWMS Pit #3 E-MAD North E-MAD South U3ah/at N, E, S, W RWMS TP S, SE, SW, NW, N, NE EPA Farm
Medium	Gate 200
Lesser	All Others

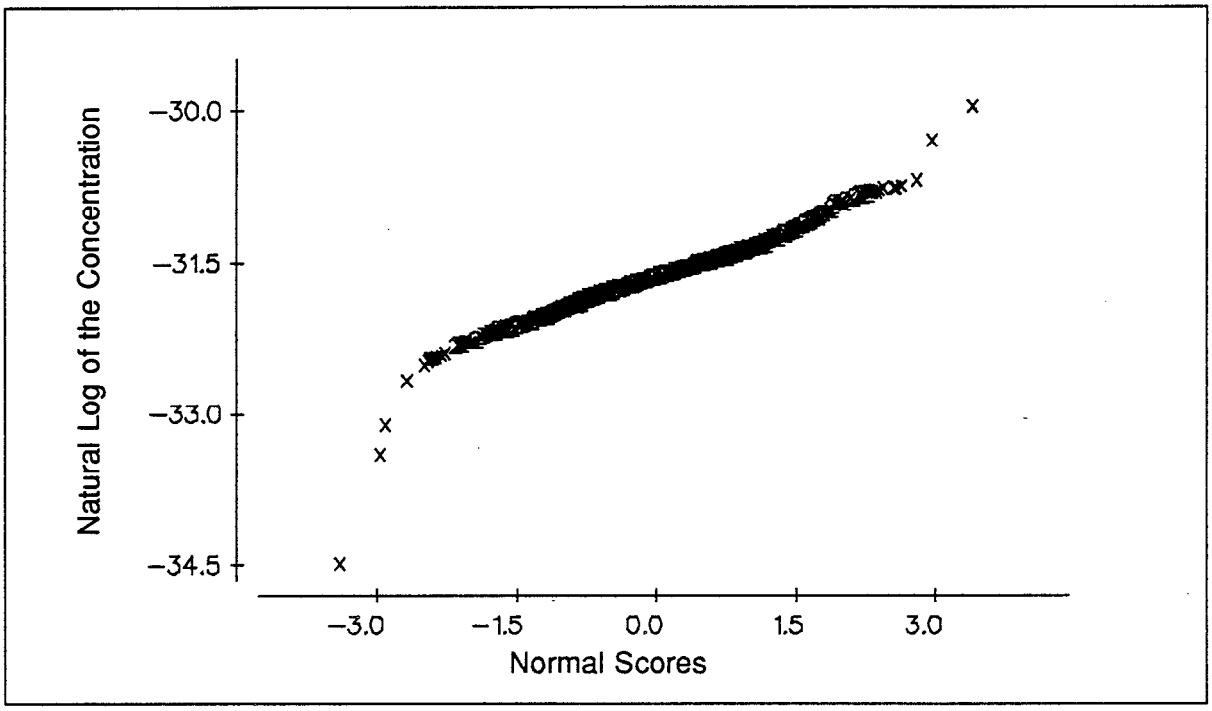


Figure A.3 Plot of the Natural Log of Gross Beta Concentrations versus Normal Scores

Typically, sampling stations in the "greater concentration" category are near waste storage areas and would be expected to have greater concentrations of gross beta. The inclusion of the EPA Farm in this category is puzzling. Note that the EPA Farm also exhibited elevated levels of $^{239+240}Pu$.

It is not surprising that Gate 200 falls between the "greater concentration" and "lesser concentration" categories. Normally, air samples from Gate 200 are immediately analyzed without allowing natural radon to decay. This provides quick notification of environmental problems should any occur. During 1990 a communications failure caused this practice to be followed sporadically. Hence, some samples were analyzed for gross beta immediately, yielding greater concentrations, and others were held until natural radon had decayed, yielding lesser concentrations.

A one-way ANOVA using these categories as independent variables was carried out, and the results appear in Table A.7.

The ANOVA shows that the "greater concentration" and "lesser concentration" categories are clearly separated. The distinction between Gate 200 "medium contamination" group and the remaining categories is less clear. It is maintained as a separate category since placing it in either "greater concentration" or "lesser concentration" categories would be arbitrary.

To examine the relation between concentrations and time, the natural logarithms of gross beta concentrations were averaged over all sampling locations from which samples were collected each week in 1990. In Figure A.4, these averages are plotted versus the appropriate week (weeks numbered as above). The graph clearly shows a dependency between the

Table A.6 One-Way Analysis of the Variance on the Natural Log of Gross Beta Concentrations between Sampling Stations

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Sampling Station	51	10.09	0.20	1.80	.000
Error	2675	293.98	0.11		
Total	2726	304.07			

Table A.7 One-Way Analysis of the Variance on the Natural Log of Gross Beta Concentrations between Categories of Sampling Stations

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	2	4.18	2.09	19.01	.000
Error	2724	299.88	0.11		
Total	2726	304.06			

Level	N	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
Lesser	1687	-31.68	0.33	(*)
Medium	53	-31.63	0.33	(----------*----------)
Greater	996	-31.60	0.32	(*)
Pooled Standard Deviation = 1.037				-32.0 -31.8 -31.6 -31.4

concentration and time. This was confirmed by von Neuman's test for trend[a], which was significant at the 0.011 level. Figure A.4 suggests an increasing trend late in the year. While concentrations might be increasing, it should be noted that an ARIMA $(1,0,0) \times (0,0,1)_6$ model[b] fits the data reasonably well. Although a model fit from only 52 averages should not

[a] Von Neuman's test defines "trend" to be a change in mean over time. According to this definition, a "trend" need not be either increasing or decreasing.

[b] For an explanation of the ARIMA model, see Box, George, and Gwilym Jenkins, Time Series Analysis: Forecasting and Control, 1976, Holden Day. The model was tested by applying von Neuman's test for trend and the Box-Pierce test for seasonality. Neither achieved the five percent level of significance.

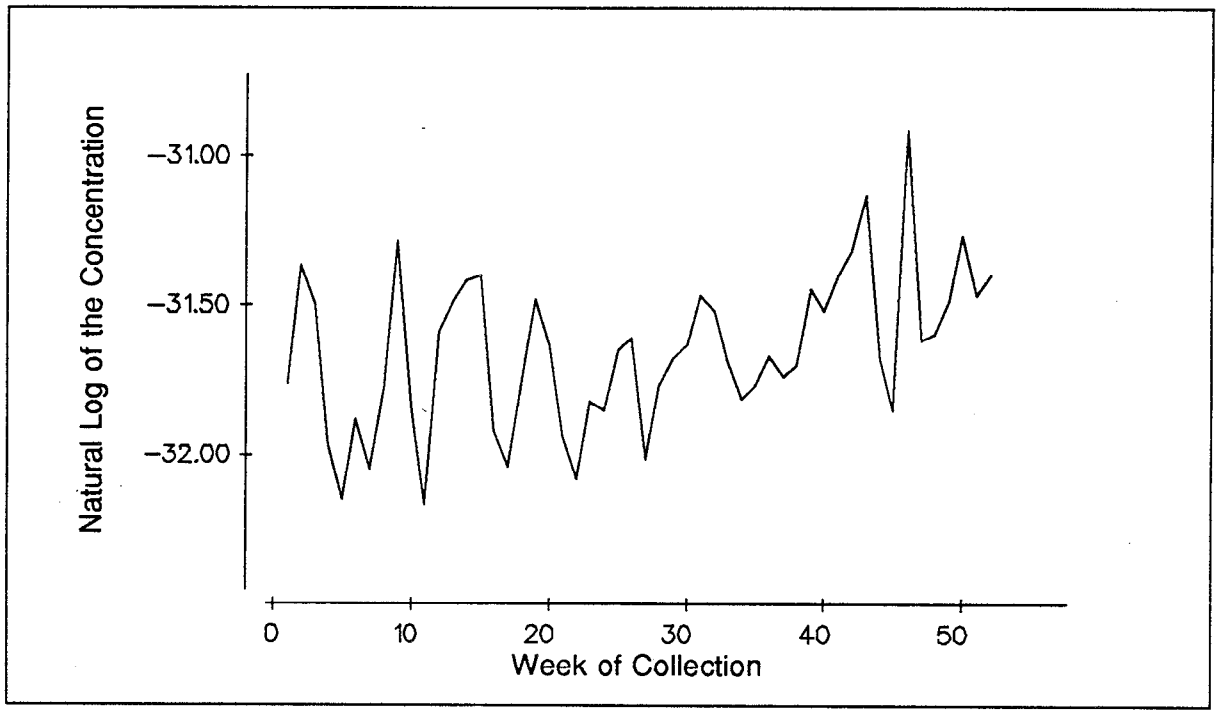


Figure A.4 Plot of the Average of the Natural Logs Across All Sampling Stations versus the Week of Data Collection

be treated as the true model, it does show a nonincreasing stochastic process can account for observed concentrations.

GAMMA-EMITTING RADIONUCLIDES

Other than naturally occurring ^{7}Be and radioisotopes of uranium, the only gamma-emitting radionuclides found in air samples are shown in Attachment A.4 of this Appendix. All these occurrences except one were in the first three months of 1990. The analytic procedure used was changed at the end of March. It is thought by Reynolds Electrical & Engineering Co., Inc., staff health physicists that, had the same procedure been in use throughout the year, these results would not have occurred. No further analysis of these data is possible.

Attachment A.1 ^{238}Pu in Air - 1990

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	01/02/90	02/05/90	7.2×10^{-18}	1.5×10^{-17}
Area 1, BJY	02/05/90	03/06/90	6.5×10^{-18}	1.7×10^{-17}
Area 1, BJY	03/05/90	04/02/90	4.2×10^{-18}	1.6×10^{-17}
Area 1, BJY	04/02/90	04/30/90	2.9×10^{-18}	2.0×10^{-17}
Area 1, BJY	04/30/90	06/05/90	5.1×10^{-18}	1.7×10^{-17}
Area 1, BJY	06/04/90	07/02/90	2.4×10^{-17}	3.2×10^{-17}
Area 1, BJY	07/02/90	07/30/90	1.4×10^{-17}	1.7×10^{-17}
Area 1, BJY	07/30/90	09/04/90	8.3×10^{-18}	1.2×10^{-17}
Area 1, BJY	09/04/90	10/02/90	4.7×10^{-18}	1.4×10^{-17}
Area 1, BJY	10/01/90	10/29/90	4.4×10^{-18}	9.6×10^{-18}
Area 1, BJY	10/29/90	12/03/90	2.3×10^{-17}	1.5×10^{-17}
Area 1, BJY	12/03/90	01/02/90	1.0×10^{-17}	1.4×10^{-17}
Area 1, Gravel Pit	01/02/90	02/05/90	3.8×10^{-18}	1.4×10^{-17}
Area 1, Gravel Pit	02/05/90	03/06/90	8.4×10^{-18}	1.4×10^{-17}
Area 1, Gravel Pit	03/05/90	04/02/90	1.7×10^{-17}	1.6×10^{-17}
Area 1, Gravel Pit	04/02/90	04/30/90	6.0×10^{-18}	1.8×10^{-17}
Area 1, Gravel Pit	04/30/90	06/05/90	-1.0×10^{-18}	1.3×10^{-17}
Area 1, Gravel Pit	07/02/90	07/30/90	2.1×10^{-17}	1.6×10^{-17}
Area 1, Gravel Pit	07/30/90	09/04/90	-4.2×10^{-18}	1.4×10^{-17}
Area 1, Gravel Pit	09/04/90	10/02/90	6.6×10^{-18}	2.5×10^{-17}
Area 1, Gravel Pit	10/01/90	10/29/90	1.0×10^{-17}	1.3×10^{-17}
Area 1, Gravel Pit	10/29/90	12/03/90	1.5×10^{-18}	1.3×10^{-17}
Area 1, Gravel Pit	12/03/90	01/02/90	4.7×10^{-18}	1.4×10^{-17}
Area 2, 2-1 Substation	01/02/90	02/05/90	1.1×10^{-18}	1.4×10^{-17}
Area 2, 2-1 Substation	02/05/90	03/06/90	-7.2×10^{-18}	1.6×10^{-17}
Area 2, 2-1 Substation	03/05/90	04/02/90	1.1×10^{-17}	1.9×10^{-17}
Area 2, 2-1 Substation	04/02/90	04/30/90	8.1×10^{-18}	1.8×10^{-17}
Area 2, 2-1 Substation	04/30/90	06/05/90	1.9×10^{-18}	1.4×10^{-17}
Area 2, 2-1 Substation	06/04/90	07/02/90	9.0×10^{-18}	2.2×10^{-17}
Area 2, 2-1 Substation	07/02/90	07/30/90	-3.7×10^{-18}	1.4×10^{-17}
Area 2, 2-1 Substation	07/30/90	09/04/90	1.2×10^{-17}	1.3×10^{-17}
Area 2, 2-1 Substation	09/04/90	10/02/90	9.4×10^{-18}	1.3×10^{-17}
Area 2, 2-1 Substation	10/01/90	10/29/90	8.9×10^{-18}	1.6×10^{-17}
Area 2, 2-1 Substation	10/29/90	12/03/90	-2.7×10^{-18}	1.1×10^{-17}
Area 2, 2-1 Substation	12/03/90	01/02/90	1.6×10^{-18}	1.5×10^{-17}
Area 2, Complex	01/02/90	02/05/90	2.9×10^{-18}	1.3×10^{-17}
Area 2, Complex	02/05/90	03/06/90	-1.1×10^{-17}	2.1×10^{-17}
Area 2, Complex	03/05/90	04/02/90	7.5×10^{-18}	1.4×10^{-17}
Area 2, Complex	04/02/90	04/30/90	3.1×10^{-17}	3.9×10^{-17}
Area 2, Complex	04/30/90	06/05/90	-1.5×10^{-18}	1.8×10^{-17}
Area 2, Complex	06/04/90	07/02/90	-9.4×10^{-19}	1.7×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Complex	07/02/90	07/30/90	7.7×10^{-18}	1.3×10^{-17}
Area 2, Complex	07/30/90	09/04/90	8.9×10^{-18}	1.0×10^{-17}
Area 2, Complex	09/05/90	10/02/90	1.5×10^{-17}	1.4×10^{-17}
Area 2, Complex	10/01/90	10/29/90	7.7×10^{-18}	1.8×10^{-17}
Area 2, Complex	10/29/90	12/03/90	1.2×10^{-17}	1.0×10^{-17}
Area 2, Complex	12/03/90	01/02/90	5.9×10^{-18}	1.4×10^{-17}
Area 3, 3-300 Bunker	01/02/90	02/05/90	6.3×10^{-18}	1.4×10^{-17}
Area 3, 3-300 Bunker	02/05/90	03/06/90	1.5×10^{-17}	1.9×10^{-17}
Area 3, 3-300 Bunker	03/05/90	04/02/90	1.0×10^{-17}	1.5×10^{-17}
Area 3, 3-300 Bunker	04/02/90	04/30/90	2.9×10^{-18}	1.5×10^{-17}
Area 3, 3-300 Bunker	04/30/90	06/05/90	-6.7×10^{-18}	1.3×10^{-17}
Area 3, 3-300 Bunker	06/04/90	07/02/90	5.7×10^{-18}	1.6×10^{-17}
Area 3, 3-300 Bunker	07/02/90	07/30/90	6.4×10^{-18}	1.3×10^{-17}
Area 3, 3-300 Bunker	07/30/90	09/04/90	4.2×10^{-18}	1.1×10^{-17}
Area 3, 3-300 Bunker	09/04/90	10/02/90	-4.7×10^{-18}	1.2×10^{-17}
Area 3, 3-300 Bunker	10/01/90	10/29/90	4.6×10^{-18}	1.2×10^{-17}
Area 3, 3-300 Bunker	10/29/90	12/03/90	4.2×10^{-19}	9.7×10^{-18}
Area 3, 3-300 Bunker	12/03/90	01/02/90	6.0×10^{-18}	1.2×10^{-17}
Area 3, U3ah/at East	02/05/90	03/06/90	2.4×10^{-18}	2.0×10^{-17}
Area 3, U3ah/at East	03/05/90	04/02/90	9.1×10^{-19}	1.6×10^{-17}
Area 3, U3ah/at East	04/02/90	04/30/90	-3.5×10^{-18}	2.3×10^{-17}
Area 3, U3ah/at East	06/04/90	07/02/90	9.4×10^{-18}	1.8×10^{-17}
Area 3, U3ah/at East	07/02/90	07/30/90	8.4×10^{-18}	1.3×10^{-17}
Area 3, U3ah/at East	07/30/90	09/04/90	5.7×10^{-18}	1.1×10^{-17}
Area 3, U3ah/at East	09/04/90	10/02/90	7.0×10^{-18}	1.3×10^{-17}
Area 3, U3ah/at East	10/01/90	10/29/90	1.1×10^{-17}	1.3×10^{-17}
Area 3, U3ah/at East	10/29/90	12/03/90	3.1×10^{-18}	1.0×10^{-17}
Area 3, U3ah/at East	12/03/90	01/02/90	2.6×10^{-18}	1.6×10^{-17}
Area 3, U3ah/at North	01/02/90	02/05/90	4.9×10^{-18}	1.3×10^{-17}
Area 3, U3ah/at North	02/05/90	03/06/90	9.7×10^{-18}	1.7×10^{-17}
Area 3, U3ah/at North	03/05/90	04/02/90	1.6×10^{-17}	1.9×10^{-17}
Area 3, U3ah/at North	04/02/90	04/30/90	1.1×10^{-17}	1.5×10^{-17}
Area 3, U3ah/at North	04/30/90	06/05/90	7.0×10^{-18}	1.7×10^{-17}
Area 3, U3ah/at North	06/04/90	07/02/90	1.5×10^{-17}	1.6×10^{-17}
Area 3, U3ah/at North	07/02/90	07/30/90	6.5×10^{-18}	1.7×10^{-17}
Area 3, U3ah/at North	07/30/90	09/04/90	3.6×10^{-18}	1.4×10^{-17}
Area 3, U3ah/at North	09/04/90	10/02/90	3.7×10^{-18}	1.4×10^{-17}
Area 3, U3ah/at North	10/01/90	10/29/90	3.0×10^{-18}	1.2×10^{-17}
Area 3, U3ah/at North	10/29/90	12/03/90	-7.6×10^{-19}	1.0×10^{-17}
Area 3, U3ah/at North	12/03/90	01/02/90	1.3×10^{-17}	1.9×10^{-17}
Area 3, U3ah/at South	02/05/90	03/06/90	1.9×10^{-17}	1.7×10^{-17}
Area 3, U3ah/at South	03/05/90	04/02/90	1.9×10^{-17}	2.3×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U3ah/at South	04/02/90	04/30/90	2.4×10^{-18}	1.7×10^{-17}
Area 3, U3ah/at South	04/30/90	06/05/90	8.5×10^{-18}	1.3×10^{-17}
Area 3, U3ah/at South	06/04/90	07/02/90	8.6×10^{-18}	2.2×10^{-17}
Area 3, U3ah/at South	07/02/90	07/30/90	1.1×10^{-17}	1.3×10^{-17}
Area 3, U3ah/at South	07/30/90	09/04/90	-2.5×10^{-17}	2.9×10^{-17}
Area 3, U3ah/at South	09/04/90	10/02/90	5.3×10^{-18}	1.5×10^{-17}
Area 3, U3ah/at South	10/01/90	10/29/90	1.0×10^{-17}	1.2×10^{-17}
Area 3, U3ah/at South	10/29/90	12/03/90	8.9×10^{-18}	1.0×10^{-17}
Area 3, U3ah/at South	12/03/90	01/02/90	1.8×10^{-17}	1.5×10^{-17}
Area 3, U3ah/at West	01/02/90	02/05/90	-1.2×10^{-17}	2.0×10^{-17}
Area 3, U3ah/at West	02/05/90	03/06/90	1.6×10^{-18}	2.7×10^{-18}
Area 3, U3ah/at West	03/05/90	04/02/90	8.3×10^{-18}	1.6×10^{-17}
Area 3, U3ah/at West	04/02/90	04/30/90	2.9×10^{-18}	1.7×10^{-17}
Area 3, U3ah/at West	04/30/90	06/05/90	6.6×10^{-18}	1.2×10^{-17}
Area 3, U3ah/at West	06/04/90	07/02/90	1.0×10^{-17}	1.5×10^{-17}
Area 3, U3ah/at West	07/02/90	07/30/90	-1.2×10^{-17}	1.9×10^{-17}
Area 3, U3ah/at West	07/30/90	09/04/90	4.9×10^{-18}	10.0×10^{-18}
Area 3, U3ah/at West	09/04/90	10/02/90	-2.1×10^{-18}	1.3×10^{-17}
Area 3, U3ah/at West	10/01/90	10/29/90	1.3×10^{-17}	1.1×10^{-17}
Area 3, U3ah/at West	10/29/90	12/03/90	4.5×10^{-18}	8.9×10^{-18}
Area 3, U3ah/at West	12/03/90	01/02/90	10.0×10^{-18}	1.4×10^{-17}
Area 3, Complex	01/02/90	02/05/90	3.7×10^{-18}	1.2×10^{-17}
Area 3, Complex	02/05/90	03/06/90	9.1×10^{-18}	1.6×10^{-17}
Area 3, Complex	03/05/90	04/02/90	1.5×10^{-18}	1.4×10^{-17}
Area 3, Complex	04/02/90	04/30/90	4.8×10^{-18}	1.3×10^{-17}
Area 3, Complex	04/30/90	06/05/90	-2.0×10^{-18}	1.2×10^{-17}
Area 3, Complex	06/04/90	07/02/90	5.4×10^{-18}	3.0×10^{-17}
Area 3, Complex	07/02/90	07/30/90	8.4×10^{-18}	1.5×10^{-17}
Area 3, Complex	07/30/90	09/04/90	7.4×10^{-18}	1.2×10^{-17}
Area 3, Complex	09/04/90	10/02/90	6.5×10^{-18}	1.3×10^{-17}
Area 3, Complex	10/01/90	10/29/90	9.2×10^{-18}	1.4×10^{-17}
Area 3, Complex	10/29/90	12/03/90	7.9×10^{-18}	9.1×10^{-18}
Area 3, Complex	12/03/90	01/02/90	1.2×10^{-17}	1.2×10^{-17}
Area 3, Complex No. 2	01/02/90	02/05/90	4.4×10^{-18}	2.3×10^{-17}
Area 3, Complex No. 2	02/05/90	03/06/90	5.1×10^{-18}	2.9×10^{-17}
Area 3, Complex No. 2	03/05/90	04/02/90	-1.2×10^{-17}	2.6×10^{-17}
Area 3, Complex No. 2	04/02/90	04/30/90	-1.6×10^{-18}	2.0×10^{-17}
Area 3, Complex No. 2	04/30/90	06/05/90	2.9×10^{-18}	1.1×10^{-17}
Area 3, Complex No. 2	06/04/90	07/02/90	1.4×10^{-17}	1.7×10^{-17}
Area 3, Complex No. 2	07/02/90	07/30/90	2.4×10^{-19}	1.3×10^{-17}
Area 3, Complex No. 2	07/30/90	09/04/90	4.5×10^{-18}	1.6×10^{-17}
Area 3, Complex No. 2	09/04/90	10/02/90	4.5×10^{-18}	1.2×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Complex No. 2	10/01/90	10/29/90	8.7×10^{-18}	1.8×10^{-17}
Area 3, Complex No. 2	10/29/90	12/03/90	9.5×10^{-18}	8.9×10^{-18}
Area 3, Complex No. 2	12/03/90	01/02/90	1.1×10^{-17}	1.4×10^{-17}
Area 5, DOD Yard	01/02/90	02/05/90	4.4×10^{-18}	1.1×10^{-17}
Area 5, DOD Yard	02/05/90	03/06/90	-1.1×10^{-18}	1.4×10^{-17}
Area 5, DOD Yard	03/05/90	04/02/90	1.4×10^{-17}	1.5×10^{-17}
Area 5, DOD Yard	04/02/90	04/30/90	3.8×10^{-18}	1.3×10^{-17}
Area 5, DOD Yard	04/30/90	06/05/90	9.6×10^{-18}	1.1×10^{-17}
Area 5, DOD Yard	06/04/90	07/02/90	1.5×10^{-18}	1.8×10^{-17}
Area 5, DOD Yard	07/02/90	07/30/90	4.6×10^{-18}	1.3×10^{-17}
Area 5, DOD Yard	07/30/90	09/04/90	5.7×10^{-18}	1.1×10^{-17}
Area 5, DOD Yard	09/04/90	10/02/90	5.3×10^{-18}	1.3×10^{-17}
Area 5, DOD Yard	10/01/90	10/29/90	4.0×10^{-18}	1.3×10^{-17}
Area 5, DOD Yard	10/29/90	12/03/90	3.8×10^{-19}	1.1×10^{-17}
Area 5, DOD Yard	12/03/90	01/02/90	1.3×10^{-18}	1.5×10^{-17}
Area 5, Gate 200	02/05/90	03/06/90	-6.8×10^{-19}	1.3×10^{-17}
Area 5, Gate 200	03/05/90	04/02/90	2.4×10^{-18}	1.6×10^{-17}
Area 5, Gate 200	04/02/90	04/30/90	4.3×10^{-18}	1.9×10^{-17}
Area 5, Gate 200	04/30/90	06/05/90	3.3×10^{-18}	1.2×10^{-17}
Area 5, Gate 200	06/04/90	07/02/90	-2.7×10^{-17}	3.0×10^{-17}
Area 5, Gate 200	07/02/90	07/30/90	1.5×10^{-19}	1.7×10^{-17}
Area 5, Gate 200	07/30/90	09/04/90	6.9×10^{-18}	1.4×10^{-17}
Area 5, Gate 200	09/04/90	10/02/90	4.5×10^{-18}	1.3×10^{-17}
Area 5, Gate 200	10/01/90	10/29/90	5.6×10^{-19}	1.6×10^{-17}
Area 5, Gate 200	10/29/90	12/03/90	-1.2×10^{-18}	1.1×10^{-17}
Area 5, Gate 200	12/03/90	01/02/90	2.4×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 1	01/02/90	02/05/90	7.8×10^{-19}	1.1×10^{-17}
Area 5, RWMS No. 1	02/05/90	03/06/90	-8.5×10^{-20}	1.6×10^{-17}
Area 5, RWMS No. 1	03/05/90	04/02/90	-4.0×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 1	04/02/90	04/30/90	-2.1×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 1	04/30/90	06/05/90	-2.7×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 1	06/04/90	07/02/90	-1.7×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 1	07/02/90	07/30/90	1.1×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 1	07/30/90	09/04/90	-3.7×10^{-18}	2.2×10^{-17}
Area 5, RWMS No. 1	09/04/90	10/02/90	7.2×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 1	10/01/90	10/29/90	4.7×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 1	10/29/90	12/03/90	2.8×10^{-18}	1.0×10^{-17}
Area 5, RWMS No. 1	12/03/90	01/02/90	1.4×10^{-17}	1.3×10^{-17}
Area 5, RWMS No. 2	01/02/90	02/05/90	2.2×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 2	02/05/90	03/06/90	4.6×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 2	03/05/90	04/02/90	-7.8×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 2	04/02/90	04/30/90	9.9×10^{-18}	1.5×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 2	04/30/90	06/05/90	-3.3×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 2	06/04/90	07/02/90	5.5×10^{-18}	1.7×10^{-17}
Area 5, RWMS No. 2	07/02/90	07/30/90	1.8×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 2	07/30/90	09/04/90	-4.5×10^{-17}	4.5×10^{-17}
Area 5, RWMS No. 2	09/04/90	10/02/90	4.1×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 2	10/01/90	10/29/90	1.3×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 2	10/29/90	12/03/90	6.5×10^{-18}	1.0×10^{-17}
Area 5, RWMS No. 2	12/03/90	01/02/90	-5.2×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 3	01/02/90	02/05/90	-1.6×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 3	02/05/90	03/06/90	-3.8×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 3	03/05/90	04/02/90	9.3×10^{-19}	1.5×10^{-17}
Area 5, RWMS No. 3	04/02/90	04/30/90	-3.5×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 3	04/30/90	06/05/90	8.7×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 3	06/04/90	07/02/90	2.4×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 3	07/02/90	07/30/90	4.1×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 3	07/30/90	09/04/90	8.9×10^{-18}	9.3×10^{-18}
Area 5, RWMS No. 3	09/04/90	10/02/90	4.1×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 3	10/01/90	10/29/90	3.3×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 3	10/29/90	12/03/90	3.0×10^{-18}	8.5×10^{-18}
Area 5, RWMS No. 3	12/03/90	01/02/90	8.1×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 4	01/02/90	02/05/90	2.6×10^{-19}	1.6×10^{-17}
Area 5, RWMS No. 4	02/05/90	03/06/90	7.5×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 4	03/05/90	04/02/90	1.2×10^{-17}	1.6×10^{-17}
Area 5, RWMS No. 4	04/02/90	04/30/90	1.1×10^{-17}	1.4×10^{-17}
Area 5, RWMS No. 4	04/30/90	06/05/90	-5.4×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 4	07/02/90	07/30/90	-7.0×10^{-17}	4.2×10^{-17}
Area 5, RWMS No. 4	07/30/90	09/04/90	5.1×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 4	09/04/90	10/02/90	-2.7×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 4	10/01/90	10/29/90	7.1×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 4	10/29/90	12/03/90	3.8×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 4	12/03/90	01/02/90	1.0×10^{-17}	1.7×10^{-17}
Area 5, RWMS No. 5	01/02/90	02/05/90	6.0×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 5	02/05/90	03/06/90	1.1×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 5	03/05/90	04/02/90	-2.1×10^{-19}	1.7×10^{-17}
Area 5, RWMS No. 5	04/02/90	04/30/90	5.0×10^{-19}	1.4×10^{-17}
Area 5, RWMS No. 5	04/30/90	06/05/90	3.2×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 5	06/04/90	07/02/90	-5.5×10^{-19}	1.6×10^{-17}
Area 5, RWMS No. 5	07/02/90	07/30/90	1.3×10^{-17}	1.5×10^{-17}
Area 5, RWMS No. 5	07/30/90	09/04/90	1.1×10^{-17}	1.6×10^{-17}
Area 5, RWMS No. 5	09/04/90	10/02/90	8.6×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 5	10/01/90	10/29/90	3.3×10^{-18}	2.4×10^{-17}
Area 5, RWMS No. 5	10/29/90	12/03/90	6.7×10^{-18}	1.2×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 5	12/03/90	01/02/90	-4.7×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 6	01/02/90	02/05/90	-1.0×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 6	02/05/90	03/06/90	3.5×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 6	03/05/90	04/02/90	2.9×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 6	04/02/90	04/30/90	1.2×10^{-17}	1.8×10^{-17}
Area 5, RWMS No. 6	04/30/90	06/05/90	2.2×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 6	06/04/90	07/02/90	-3.2×10^{-18}	1.7×10^{-17}
Area 5, RWMS No. 6	07/02/90	07/30/90	2.0×10^{-18}	1.7×10^{-17}
Area 5, RWMS No. 6	07/30/90	09/04/90	2.3×10^{-18}	1.1×10^{-17}
Area 5, RWMS No. 6	09/04/90	10/02/90	6.3×10^{-20}	1.2×10^{-17}
Area 5, RWMS No. 6	10/01/90	10/29/90	-2.0×10^{-18}	1.8×10^{-17}
Area 5, RWMS No. 6	10/29/90	12/03/90	4.1×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 6	12/03/90	01/02/90	7.3×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 7	01/02/90	02/05/90	2.8×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 7	02/05/90	03/06/90	-5.2×10^{-18}	2.1×10^{-17}
Area 5, RWMS No. 7	03/05/90	04/02/90	1.0×10^{-17}	1.6×10^{-17}
Area 5, RWMS No. 7	04/02/90	04/30/90	-1.2×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 7	04/30/90	06/05/90	2.5×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 7	06/04/90	07/02/90	2.3×10^{-18}	1.9×10^{-17}
Area 5, RWMS No. 7	07/02/90	07/30/90	2.6×10^{-18}	1.7×10^{-17}
Area 5, RWMS No. 7	07/30/90	09/04/90	-1.6×10^{-17}	2.2×10^{-17}
Area 5, RWMS No. 7	09/04/90	10/02/90	1.2×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 7	10/01/90	10/29/90	5.1×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 7	10/29/90	12/03/90	-9.0×10^{-19}	1.1×10^{-17}
Area 5, RWMS No. 7	12/03/90	01/02/90	3.0×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 8	01/02/90	02/05/90	-4.1×10^{-18}	1.9×10^{-17}
Area 5, RWMS No. 8	02/05/90	03/06/90	8.5×10^{-19}	1.7×10^{-17}
Area 5, RWMS No. 8	03/05/90	04/02/90	9.6×10^{-18}	2.0×10^{-17}
Area 5, RWMS No. 8	04/02/90	04/30/90	1.1×10^{-17}	1.9×10^{-17}
Area 5, RWMS No. 8	04/30/90	06/05/90	5.2×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 8	06/04/90	07/02/90	-1.7×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 8	07/02/90	07/30/90	3.9×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 8	07/30/90	09/04/90	-1.5×10^{-17}	1.9×10^{-17}
Area 5, RWMS No. 8	09/04/90	10/02/90	1.7×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 8	10/01/90	10/29/90	6.1×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 8	10/29/90	12/03/90	7.9×10^{-18}	1.1×10^{-17}
Area 5, RWMS No. 8	12/03/90	01/02/90	-1.6×10^{-18}	1.4×10^{-17}
Area 5, RWMS No. 9	01/02/90	02/05/90	-3.5×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 9	02/05/90	03/06/90	1.2×10^{-17}	1.5×10^{-17}
Area 5, RWMS No. 9	03/05/90	04/02/90	-1.1×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 9	04/02/90	04/30/90	1.4×10^{-17}	1.6×10^{-17}
Area 5, RWMS No. 9	04/30/90	06/05/90	6.3×10^{-18}	1.4×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 9	06/04/90	07/02/90	-2.6×10^{-18}	1.6×10^{-17}
Area 5, RWMS No. 9	07/02/90	07/30/90	9.0×10^{-18}	1.7×10^{-17}
Area 5, RWMS No. 9	07/30/90	09/04/90	8.8×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 9	09/04/90	10/02/90	1.1×10^{-17}	1.2×10^{-17}
Area 5, RWMS No. 9	10/01/90	10/29/90	1.4×10^{-17}	2.4×10^{-17}
Area 5, RWMS No. 9	10/29/90	12/03/90	2.4×10^{-18}	1.3×10^{-17}
Area 5, RWMS No. 9	12/03/90	01/02/90	5.8×10^{-18}	1.5×10^{-17}
Area 5, RWMS Pit No. 3	01/02/90	02/05/90	7.2×10^{-18}	1.2×10^{-17}
Area 5, RWMS Pit No. 3	02/05/90	03/06/90	4.7×10^{-19}	1.8×10^{-17}
Area 5, RWMS Pit No. 3	03/05/90	04/02/90	5.9×10^{-18}	1.6×10^{-17}
Area 5, RWMS Pit No. 3	04/02/90	04/30/90	1.1×10^{-17}	2.7×10^{-17}
Area 5, RWMS Pit No. 3	04/30/90	06/05/90	-2.7×10^{-18}	1.4×10^{-17}
Area 5, RWMS Pit No. 3	07/02/90	07/30/90	6.7×10^{-18}	1.2×10^{-17}
Area 5, RWMS Pit No. 3	07/30/90	09/04/90	-5.1×10^{-18}	1.2×10^{-17}
Area 5, RWMS Pit No. 3	09/04/90	10/02/90	1.9×10^{-18}	1.3×10^{-17}
Area 5, RWMS Pit No. 3	10/01/90	10/29/90	-3.7×10^{-18}	1.5×10^{-17}
Area 5, RWMS Pit No. 3	10/29/90	12/03/90	6.5×10^{-18}	1.2×10^{-17}
Area 5, RWMS Pit No. 3	12/03/90	01/02/90	1.4×10^{-17}	1.3×10^{-17}
Area 5, RWMS Pit No. 4	01/02/90	02/05/90	1.1×10^{-17}	1.6×10^{-17}
Area 5, RWMS Pit No. 4	02/05/90	03/06/90	3.7×10^{-18}	1.6×10^{-17}
Area 5, RWMS Pit No. 4	03/05/90	04/02/90	-2.1×10^{-18}	2.0×10^{-17}
Area 5, RWMS Pit No. 4	04/02/90	04/30/90	-5.7×10^{-18}	2.3×10^{-17}
Area 5, RWMS Pit No. 4	04/30/90	06/05/90	2.9×10^{-18}	1.2×10^{-17}
Area 5, RWMS Pit No. 4	06/04/90	07/02/90	4.0×10^{-18}	1.4×10^{-17}
Area 5, RWMS Pit No. 4	07/02/90	07/30/90	3.8×10^{-18}	1.4×10^{-17}
Area 5, RWMS Pit No. 4	07/30/90	09/04/90	1.2×10^{-17}	9.6×10^{-18}
Area 5, RWMS Pit No. 4	09/04/90	10/02/90	5.5×10^{-18}	1.5×10^{-17}
Area 5, RWMS Pit No. 4	10/01/90	10/29/90	-1.2×10^{-18}	2.1×10^{-17}
Area 5, RWMS Pit No. 4	10/29/90	12/03/90	8.0×10^{-18}	9.3×10^{-18}
Area 5, RWMS Pit No. 4	12/03/90	01/02/90	1.4×10^{-18}	1.1×10^{-17}
Area 5, RWMS TP North	01/02/90	02/05/90	1.2×10^{-19}	1.1×10^{-17}
Area 5, RWMS TP North	02/05/90	03/06/90	1.1×10^{-18}	1.4×10^{-17}
Area 5, RWMS TP North	03/05/90	04/02/90	4.3×10^{-18}	1.7×10^{-17}
Area 5, RWMS TP North	04/02/90	04/30/90	3.3×10^{-18}	2.2×10^{-17}
Area 5, RWMS TP North	04/30/90	06/05/90	1.1×10^{-18}	1.2×10^{-17}
Area 5, RWMS TP North	06/04/90	07/02/90	2.6×10^{-19}	1.4×10^{-17}
Area 5, RWMS TP North	07/02/90	07/30/90	7.5×10^{-19}	1.4×10^{-17}
Area 5, RWMS TP North	07/30/90	09/04/90	4.1×10^{-18}	1.0×10^{-17}
Area 5, RWMS TP North	09/04/90	10/02/90	2.2×10^{-18}	1.2×10^{-17}
Area 5, RWMS TP North	10/01/90	10/29/90	5.0×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP North	10/29/90	12/03/90	3.2×10^{-18}	1.0×10^{-17}
Area 5, RWMS TP North	12/03/90	01/02/90	4.8×10^{-18}	1.4×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Northeast	01/02/90	02/05/90	-5.4×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northeast	03/05/90	04/02/90	5.9×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northeast	04/02/90	04/30/90	1.3×10^{-18}	2.0×10^{-17}
Area 5, RWMS TP Northeast	04/30/90	06/05/90	5.3×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northeast	07/02/90	07/30/90	2.4×10^{-18}	1.7×10^{-17}
Area 5, RWMS TP Northeast	07/30/90	09/04/90	2.5×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northeast	09/4 /90	10/02/90	4.0×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northeast	10/01/90	10/29/90	-2.9×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northeast	10/29/90	12/03/90	-1.2×10^{-19}	9.3×10^{-18}
Area 5, RWMS TP Northeast	12/03/90	01/02/90	4.1×10^{-18}	1.4×10^{-17}
Area 5, RWMS TP Northwest	01/02/90	02/05/90	1.1×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northwest	02/05/90	03/06/90	7.9×10^{-18}	1.4×10^{-17}
Area 5, RWMS TP Northwest	03/05/90	04/02/90	4.8×10^{-18}	1.5×10^{-17}
Area 5, RWMS TP Northwest	04/02/90	04/30/90	9.5×10^{-18}	1.6×10^{-17}
Area 5, RWMS TP Northwest	04/30/90	06/05/90	3.3×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Northwest	06/04/90	07/02/90	-1.2×10^{-18}	1.4×10^{-17}
Area 5, RWMS TP Northwest	07/02/90	07/30/90	1.1×10^{-17}	2.0×10^{-17}
Area 5, RWMS TP Northwest	07/30/90	09/04/90	8.2×10^{-18}	1.4×10^{-17}
Area 5, RWMS TP Northwest	09/04/90	10/02/90	1.9×10^{-17}	1.3×10^{-17}
Area 5, RWMS TP Northwest	10/01/90	10/29/90	9.6×10^{-18}	1.5×10^{-17}
Area 5, RWMS TP Northwest	10/29/90	12/03/90	6.6×10^{-18}	1.0×10^{-17}
Area 5, RWMS TP Northwest	12/03/90	01/02/90	3.4×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP South	01/02/90	02/05/90	2.4×10^{-18}	1.5×10^{-17}
Area 5, RWMS TP South	02/05/90	03/06/90	2.2×10^{-18}	1.5×10^{-17}
Area 5, RWMS TP South	03/05/90	04/02/90	6.6×10^{-18}	1.4×10^{-17}
Area 5, RWMS TP South	04/02/90	04/30/90	1.4×10^{-17}	1.9×10^{-17}
Area 5, RWMS TP South	04/30/90	06/05/90	2.9×10^{-18}	1.2×10^{-17}
Area 5, RWMS TP South	06/04/90	07/02/90	-1.3×10^{-17}	2.5×10^{-17}
Area 5, RWMS TP South	07/02/90	07/30/90	7.9×10^{-18}	1.8×10^{-17}
Area 5, RWMS TP South	07/30/90	09/04/90	9.7×10^{-18}	1.2×10^{-17}
Area 5, RWMS TP South	09/04/90	10/02/90	-3.2×10^{-18}	1.2×10^{-17}
Area 5, RWMS TP South	10/01/90	10/29/90	-6.1×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP South	10/29/90	12/03/90	5.0×10^{-18}	8.1×10^{-18}
Area 5, RWMS TP South	12/03/90	01/02/90	3.6×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Southeast	01/02/90	02/05/90	-3.5×10^{-18}	1.8×10^{-17}
Area 5, RWMS TP Southeast	02/05/90	03/06/90	1.3×10^{-17}	1.6×10^{-17}
Area 5, RWMS TP Southeast	03/05/90	04/02/90	-5.9×10^{-18}	1.6×10^{-17}
Area 5, RWMS TP Southeast	04/02/90	04/30/90	2.4×10^{-17}	1.9×10^{-17}
Area 5, RWMS TP Southeast	04/30/90	06/05/90	-2.2×10^{-18}	1.2×10^{-17}
Area 5, RWMS TP Southeast	06/04/90	07/02/90	8.0×10^{-18}	1.6×10^{-17}
Area 5, RWMS TP Southeast	07/02/90	07/30/90	3.4×10^{-18}	1.4×10^{-17}
Area 5, RWMS TP Southeast	07/30/90	09/04/90	5.7×10^{-18}	1.1×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Southeast	09/04/90	10/02/90	1.2×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Southeast	10/01/90	10/29/90	-2.3×10^{-18}	1.3×10^{-17}
Area 5, RWMS TP Southeast	10/29/90	12/03/90	1.0×10^{-17}	8.3×10^{-18}
Area 5, RWMS TP Southeast	12/03/90	01/02/90	4.7×10^{-18}	1.1×10^{-17}
Area 5, RWMS TP Southwest	01/02/90	02/05/90	4.5×10^{-18}	1.0×10^{-17}
Area 5, RWMS TP Southwest	02/05/90	03/06/90	6.9×10^{-18}	1.5×10^{-17}
Area 5, RWMS TP Southwest	03/05/90	04/02/90	1.5×10^{-17}	1.5×10^{-17}
Area 5, RWMS TP Southwest	04/02/90	04/30/90	8.1×10^{-18}	2.0×10^{-17}
Area 5, RWMS TP Southwest	04/30/90	06/05/90	8.2×10^{-18}	1.1×10^{-17}
Area 5, RWMS TP Southwest	06/04/90	07/02/90	6.8×10^{-18}	2.2×10^{-17}
Area 5, RWMS TP Southwest	07/02/90	07/30/90	1.4×10^{-18}	1.8×10^{-17}
Area 5, RWMS TP Southwest	07/30/90	09/04/90	-8.8×10^{-17}	5.4×10^{-17}
Area 5, RWMS TP Southwest	09/04/90	10/02/90	2.1×10^{-18}	1.1×10^{-17}
Area 5, RWMS TP Southwest	10/01/90	10/29/90	6.8×10^{-18}	1.8×10^{-17}
Area 5, RWMS TP Southwest	10/29/90	12/03/90	9.0×10^{-18}	9.6×10^{-18}
Area 5, RWMS TP Southwest	12/03/90	01/02/90	1.9×10^{-17}	1.6×10^{-17}
Area 5, Well 5B	01/02/90	02/05/90	-1.8×10^{-18}	1.9×10^{-17}
Area 5, Well 5B	02/05/90	03/06/90	-5.4×10^{-18}	1.6×10^{-17}
Area 5, Well 5B	04/02/90	04/30/90	5.2×10^{-18}	1.4×10^{-17}
Area 5, Well 5B	04/30/90	06/05/90	6.5×10^{-18}	1.1×10^{-17}
Area 5, Well 5B	07/02/90	07/30/90	5.3×10^{-18}	1.4×10^{-17}
Area 5, Well 5B	07/30/90	09/04/90	9.3×10^{-18}	1.9×10^{-17}
Area 5, Well 5B	09/04/90	10/02/90	1.5×10^{-17}	1.4×10^{-17}
Area 5, Well 5B	10/01/90	10/29/90	2.9×10^{-18}	1.4×10^{-17}
Area 5, Well 5B	10/29/90	12/03/90	-5.9×10^{-19}	1.3×10^{-17}
Area 5, Well 5B	12/03/90	01/02/90	9.9×10^{-18}	1.5×10^{-17}
Area 6, CP-6	01/02/90	02/05/90	5.2×10^{-18}	1.2×10^{-17}
Area 6, CP-6	02/05/90	03/06/90	7.3×10^{-18}	1.5×10^{-17}
Area 6, CP-6	03/05/90	04/02/90	-2.5×10^{-18}	1.6×10^{-17}
Area 6, CP-6	04/02/90	04/30/90	-2.7×10^{-18}	2.1×10^{-17}
Area 6, CP-6	04/30/90	06/05/90	-1.8×10^{-18}	1.2×10^{-17}
Area 6, CP-6	06/04/90	07/02/90	2.3×10^{-18}	1.8×10^{-17}
Area 6, CP-6	07/30/90	09/04/90	1.3×10^{-17}	1.4×10^{-17}
Area 6, CP-6	09/04/90	10/02/90	1.0×10^{-17}	1.3×10^{-17}
Area 6, CP-6	10/01/90	10/29/90	1.7×10^{-17}	1.3×10^{-17}
Area 6, CP-6	10/29/90	12/03/90	-1.5×10^{-18}	1.0×10^{-17}
Area 6, CP-6	12/03/90	01/02/90	4.7×10^{-18}	1.3×10^{-17}
Area 6, Well 3 Complex	01/02/90	02/05/90	6.9×10^{-18}	2.1×10^{-17}
Area 6, Well 3 Complex	02/05/90	03/06/90	-8.5×10^{-19}	5.2×10^{-18}
Area 6, Well 3 Complex	03/05/90	04/02/90	9.2×10^{-18}	2.0×10^{-17}
Area 6, Well 3 Complex	04/02/90	04/30/90	4.8×10^{-18}	1.5×10^{-17}
Area 6, Well 3 Complex	04/30/90	06/05/90	3.6×10^{-18}	1.1×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well 3 Complex	06/04/90	07/02/90	-4.3×10^{-19}	1.5×10^{-17}
Area 6, Well 3 Complex	07/02/90	07/30/90	7.6×10^{-18}	1.3×10^{-17}
Area 6, Well 3 Complex	07/30/90	09/04/90	7.2×10^{-18}	1.0×10^{-17}
Area 6, Well 3 Complex	09/04/90	10/02/90	1.3×10^{-17}	1.3×10^{-17}
Area 6, Well 3 Complex	10/01/90	10/29/90	7.4×10^{-18}	1.2×10^{-17}
Area 6, Well 3 Complex	10/29/90	12/03/90	3.5×10^{-18}	1.0×10^{-18}
Area 6, Well 3 Complex	12/03/90	01/02/90	9.3×10^{-19}	1.2×10^{-17}
Area 6, Yucca Complex	01/02/90	02/05/90	3.3×10^{-18}	1.3×10^{-17}
Area 6, Yucca Complex	02/05/90	03/06/90	-4.0×10^{-19}	1.6×10^{-17}
Area 6, Yucca Complex	03/05/90	04/02/90	1.1×10^{-17}	1.4×10^{-17}
Area 6, Yucca Complex	04/02/90	04/30/90	-4.8×10^{-18}	2.1×10^{-17}
Area 6, Yucca Complex	04/30/90	06/05/90	-4.4×10^{-18}	1.4×10^{-17}
Area 6, Yucca Complex	06/04/90	07/02/90	9.6×10^{-19}	1.5×10^{-17}
Area 6, Yucca Complex	07/02/90	07/30/90	1.1×10^{-17}	1.4×10^{-17}
Area 6, Yucca Complex	07/30/90	09/04/90	-2.9×10^{-18}	1.1×10^{-17}
Area 6, Yucca Complex	09/04/90	10/02/90	1.1×10^{-18}	1.4×10^{-17}
Area 6, Yucca Complex	10/01/90	10/29/90	1.2×10^{-17}	1.1×10^{-17}
Area 6, Yucca Complex	10/29/90	12/03/90	2.3×10^{-18}	1.0×10^{-17}
Area 6, Yucca Complex	12/03/90	01/02/90	5.0×10^{-18}	1.3×10^{-17}
Area 7, Ue7ns	01/02/90	02/05/90	5.9×10^{-18}	1.4×10^{-17}
Area 7, Ue7ns	02/05/90	03/06/90	-5.8×10^{-18}	2.0×10^{-17}
Area 7, Ue7ns	03/05/90	04/02/90	-3.0×10^{-19}	1.5×10^{-17}
Area 7, Ue7ns	04/02/90	04/30/90	2.8×10^{-19}	1.5×10^{-17}
Area 7, Ue7ns	04/30/90	06/05/90	8.5×10^{-18}	1.8×10^{-17}
Area 7, Ue7ns	07/02/90	07/30/90	1.5×10^{-17}	2.0×10^{-17}
Area 7, Ue7ns	07/30/90	09/04/90	6.8×10^{-18}	5.4×10^{-17}
Area 7, Ue7ns	09/04/90	10/02/90	3.2×10^{-18}	2.8×10^{-17}
Area 7, Ue7ns	10/01/90	10/29/90	-7.0×10^{-19}	1.9×10^{-17}
Area 7, Ue7ns	10/29/90	12/03/90	2.3×10^{-18}	1.6×10^{-17}
Area 7, Ue7ns	12/03/90	01/02/90	1.3×10^{-17}	2.0×10^{-17}
Area 9, 9-300 Bunker	01/02/90	02/05/90	1.1×10^{-17}	1.5×10^{-17}
Area 9, 9-300 Bunker	02/05/90	03/06/90	6.0×10^{-18}	1.6×10^{-17}
Area 9, 9-300 Bunker	03/05/90	04/02/90	8.6×10^{-18}	1.7×10^{-17}
Area 9, 9-300 Bunker	04/02/90	04/30/90	2.8×10^{-19}	1.5×10^{-17}
Area 9, 9-300 Bunker	04/30/90	06/05/90	1.2×10^{-17}	1.2×10^{-17}
Area 9, 9-300 Bunker	06/04/90	07/02/90	-6.0×10^{-18}	1.6×10^{-17}
Area 9, 9-300 Bunker	07/02/90	07/30/90	7.0×10^{-18}	1.4×10^{-17}
Area 9, 9-300 Bunker	07/30/90	09/04/90	1.0×10^{-17}	1.1×10^{-17}
Area 9, 9-300 Bunker	09/04/90	10/02/90	7.4×10^{-18}	1.4×10^{-17}
Area 9, 9-300 Bunker	10/01/90	10/29/90	3.1×10^{-18}	1.1×10^{-17}
Area 9, 9-300 Bunker	10/29/90	12/03/90	2.0×10^{-17}	1.3×10^{-17}
Area 9, 9-300 Bunker	12/03/90	01/02/90	1.0×10^{-17}	1.2×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 10, Gate 700 South	01/02/90	02/05/90	-9.3×10^{-19}	1.2×10^{-17}
Area 10, Gate 700 South	02/05/90	03/06/90	2.8×10^{-18}	1.6×10^{-17}
Area 10, Gate 700 South	03/05/90	04/02/90	1.1×10^{-17}	1.8×10^{-17}
Area 10, Gate 700 South	04/02/90	04/30/90	2.8×10^{-18}	1.6×10^{-17}
Area 10, Gate 700 South	04/30/90	06/05/90	3.4×10^{-18}	1.2×10^{-17}
Area 10, Gate 700 South	06/04/90	07/02/90	1.3×10^{-17}	2.0×10^{-17}
Area 10, Gate 700 South	07/02/90	07/30/90	-1.3×10^{-17}	2.1×10^{-17}
Area 10, Gate 700 South	07/30/90	09/04/90	-7.3×10^{-18}	1.1×10^{-17}
Area 10, Gate 700 South	09/04/90	10/02/90	1.7×10^{-17}	1.4×10^{-17}
Area 10, Gate 700 South	10/01/90	10/29/90	1.5×10^{-17}	1.3×10^{-17}
Area 10, Gate 700 South	10/29/90	12/03/90	6.0×10^{-18}	10.0×10^{-18}
Area 10, Gate 700 South	12/03/90	01/02/90	1.4×10^{-18}	1.3×10^{-17}
Area 11, Gate 293	01/02/90	02/05/90	1.2×10^{-17}	1.3×10^{-17}
Area 11, Gate 293	02/05/90	03/06/90	6.8×10^{-19}	1.5×10^{-17}
Area 11, Gate 293	03/05/90	04/02/90	4.8×10^{-18}	1.6×10^{-17}
Area 11, Gate 293	04/02/90	04/30/90	-1.6×10^{-18}	1.4×10^{-17}
Area 11, Gate 293	04/30/90	06/05/90	4.1×10^{-18}	9.8×10^{-18}
Area 11, Gate 293	06/04/90	07/02/90	-4.9×10^{-17}	4.1×10^{-17}
Area 11, Gate 293	07/02/90	07/30/90	1.0×10^{-17}	1.3×10^{-17}
Area 11, Gate 293	07/30/90	09/04/90	4.1×10^{-18}	1.1×10^{-17}
Area 11, Gate 293	09/04/90	10/02/90	9.3×10^{-18}	1.4×10^{-17}
Area 11, Gate 293	10/01/90	10/29/90	-2.2×10^{-17}	2.5×10^{-17}
Area 11, Gate 293	10/29/90	12/03/90	9.0×10^{-19}	2.7×10^{-18}
Area 11, Gate 293	12/03/90	01/02/90	2.9×10^{-18}	1.2×10^{-17}
Area 12, Complex	01/02/90	02/05/90	-5.4×10^{-18}	1.8×10^{-17}
Area 12, Complex	02/05/90	03/06/90	1.7×10^{-17}	1.7×10^{-17}
Area 12, Complex	03/05/90	04/02/90	3.2×10^{-18}	1.7×10^{-17}
Area 12, Complex	04/02/90	04/30/90	1.2×10^{-17}	1.6×10^{-17}
Area 12, Complex	04/30/90	06/05/90	3.4×10^{-18}	1.1×10^{-17}
Area 12, Complex	06/04/90	07/02/90	-7.6×10^{-18}	1.6×10^{-17}
Area 12, Complex	07/02/90	07/30/90	3.4×10^{-18}	1.3×10^{-17}
Area 12, Complex	07/30/90	09/04/90	3.3×10^{-18}	1.1×10^{-17}
Area 12, Complex	09/04/90	10/02/90	6.3×10^{-18}	1.3×10^{-17}
Area 12, Complex	10/01/90	10/29/90	-4.3×10^{-17}	9.8×10^{-17}
Area 12, Complex	10/29/90	12/03/90	6.8×10^{-18}	1.0×10^{-17}
Area 12, Complex	12/03/90	01/02/90	1.1×10^{-17}	1.5×10^{-17}
Area 15, EPA Farm	01/02/90	02/05/90	-3.0×10^{-17}	2.6×10^{-17}
Area 15, EPA Farm	02/05/90	03/06/90	-1.2×10^{-17}	1.8×10^{-17}
Area 15, EPA Farm	03/05/90	04/02/90	4.0×10^{-18}	2.0×10^{-17}
Area 15, EPA Farm	04/02/90	04/30/90	7.4×10^{-18}	1.7×10^{-17}
Area 15, EPA Farm	04/30/90	06/05/90	8.0×10^{-18}	1.1×10^{-17}
Area 15, EPA Farm	06/04/90	07/02/90	-9.4×10^{-18}	1.7×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, EPA Farm	07/02/90	07/30/90	-1.0×10^{-17}	1.7×10^{-17}
Area 15, EPA Farm	07/30/90	09/04/90	4.2×10^{-18}	1.2×10^{-17}
Area 15, EPA Farm	09/04/90	10/02/90	8.8×10^{-19}	1.9×10^{-17}
Area 15, EPA Farm	10/01/90	10/29/90	1.2×10^{-17}	1.6×10^{-17}
Area 15, EPA Farm	10/29/90	12/03/90	-1.1×10^{-18}	1.1×10^{-17}
Area 15, EPA Farm	12/03/90	01/02/90	4.1×10^{-18}	1.4×10^{-17}
Area 15, PILEDRIVER	01/02/90	02/05/90	-1.3×10^{-18}	1.6×10^{-17}
Area 15, PILEDRIVER	02/05/90	03/06/90	1.0×10^{-17}	1.7×10^{-17}
Area 15, PILEDRIVER	03/05/90	04/02/90	-1.7×10^{-18}	1.8×10^{-17}
Area 15, PILEDRIVER	04/02/90	04/30/90	2.5×10^{-18}	1.8×10^{-17}
Area 15, PILEDRIVER	04/30/90	06/05/90	4.3×10^{-18}	1.2×10^{-17}
Area 15, PILEDRIVER	07/02/90	07/30/90	-5.9×10^{-17}	3.7×10^{-17}
Area 15, PILEDRIVER	07/30/90	09/04/90	-4.5×10^{-17}	2.9×10^{-17}
Area 15, PILEDRIVER	09/04/90	10/02/90	1.4×10^{-17}	1.7×10^{-17}
Area 15, PILEDRIVER	10/01/90	10/29/90	1.5×10^{-17}	1.3×10^{-17}
Area 15, PILEDRIVER	10/29/90	12/03/90	7.7×10^{-18}	1.2×10^{-17}
Area 15, PILEDRIVER	12/03/90	01/02/90	1.3×10^{-17}	1.6×10^{-17}
Area 16, 3545 Substation	01/02/90	02/05/90	8.5×10^{-18}	1.4×10^{-17}
Area 16, 3545 Substation	02/05/90	03/06/90	4.7×10^{-19}	7.0×10^{-18}
Area 16, 3545 Substation	03/05/90	04/02/90	5.4×10^{-18}	1.7×10^{-17}
Area 16, 3545 Substation	04/02/90	04/30/90	8.3×10^{-18}	1.4×10^{-17}
Area 16, 3545 Substation	04/30/90	06/05/90	2.5×10^{-19}	1.4×10^{-17}
Area 16, 3545 Substation	06/04/90	07/02/90	4.2×10^{-18}	1.6×10^{-17}
Area 16, 3545 Substation	07/02/90	07/30/90	1.6×10^{-18}	1.6×10^{-17}
Area 16, 3545 Substation	07/30/90	09/04/90	-3.9×10^{-19}	1.3×10^{-17}
Area 16, 3545 Substation	09/04/90	10/02/90	6.4×10^{-18}	1.2×10^{-17}
Area 16, 3545 Substation	10/01/90	10/29/90	-3.4×10^{-18}	1.5×10^{-17}
Area 16, 3545 Substation	10/29/90	12/03/90	3.5×10^{-19}	9.9×10^{-18}
Area 16, 3545 Substation	12/03/90	01/02/90	1.1×10^{-17}	1.2×10^{-17}
Area 19, Echo Peak	01/02/90	02/05/90	3.4×10^{-18}	1.2×10^{-17}
Area 19, Echo Peak	02/05/90	03/06/90	1.5×10^{-17}	1.8×10^{-17}
Area 19, Echo Peak	03/05/90	04/02/90	-3.4×10^{-18}	1.3×10^{-17}
Area 19, Echo Peak	04/02/90	04/30/90	5.7×10^{-18}	1.4×10^{-17}
Area 19, Echo Peak	04/30/90	06/05/90	3.5×10^{-18}	1.2×10^{-17}
Area 19, Echo Peak	06/04/90	07/02/90	-7.4×10^{-18}	2.2×10^{-17}
Area 19, Echo Peak	07/02/90	07/30/90	4.1×10^{-18}	1.3×10^{-17}
Area 19, Echo Peak	07/30/90	09/04/90	-4.1×10^{-19}	1.1×10^{-17}
Area 19, Echo Peak	09/04/90	10/02/90	4.2×10^{-18}	1.3×10^{-17}
Area 19, Echo Peak	10/01/90	10/29/90	1.4×10^{-17}	1.6×10^{-17}
Area 19, Echo Peak	10/29/90	12/03/90	-2.2×10^{-19}	9.7×10^{-18}
Area 19, Echo Peak	12/03/90	01/02/90	-4.5×10^{-19}	1.7×10^{-17}
Area 19, Pahute Substation	01/02/90	02/05/90	2.0×10^{-18}	1.6×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 19, Pahute Substation	02/05/90	03/06/90	2.1×10^{-17}	2.1×10^{-17}
Area 19, Pahute Substation	03/05/90	04/02/90	-3.6×10^{-18}	1.7×10^{-17}
Area 19, Pahute Substation	04/02/90	04/30/90	6.5×10^{-18}	1.8×10^{-17}
Area 19, Pahute Substation	04/30/90	06/05/90	-4.4×10^{-18}	1.0×10^{-17}
Area 19, Pahute Substation	07/02/90	07/30/90	1.8×10^{-18}	1.4×10^{-17}
Area 19, Pahute Substation	07/30/90	09/04/90	1.3×10^{-17}	1.3×10^{-17}
Area 19, Pahute Substation	09/04/90	10/02/90	1.9×10^{-17}	1.8×10^{-17}
Area 19, Pahute Substation	10/01/90	10/29/90	-4.6×10^{-18}	1.2×10^{-17}
Area 19, Pahute Substation	10/29/90	12/03/90	1.6×10^{-18}	1.0×10^{-17}
Area 19, Pahute Substation	12/03/90	01/02/90	1.8×10^{-17}	1.4×10^{-17}
Area 20, Dispensary	01/02/90	02/05/90	-9.4×10^{-19}	1.5×10^{-17}
Area 20, Dispensary	02/05/90	03/06/90	-5.3×10^{-18}	1.9×10^{-17}
Area 20, Dispensary	03/05/90	04/02/90	7.6×10^{-19}	1.7×10^{-17}
Area 20, Dispensary	04/02/90	04/30/90	8.4×10^{-18}	1.4×10^{-17}
Area 20, Dispensary	04/30/90	06/05/90	-2.5×10^{-18}	1.1×10^{-17}
Area 20, Dispensary	06/04/90	07/02/90	9.3×10^{-19}	1.4×10^{-17}
Area 20, Dispensary	07/02/90	07/30/90	1.0×10^{-17}	1.4×10^{-17}
Area 20, Dispensary	07/30/90	09/04/90	-2.3×10^{-17}	2.0×10^{-17}
Area 20, Dispensary	09/04/90	10/02/90	4.9×10^{-18}	1.3×10^{-17}
Area 20, Dispensary	10/01/90	10/29/90	3.5×10^{-19}	1.4×10^{-17}
Area 20, Dispensary	10/29/90	12/03/90	1.5×10^{-18}	1.4×10^{-17}
Area 20, Dispensary	12/03/90	01/02/90	8.8×10^{-18}	1.3×10^{-17}
Area 23, Building 790	01/02/90	02/05/90	6.9×10^{-18}	1.2×10^{-17}
Area 23, Building 790	02/05/90	03/06/90	7.4×10^{-18}	2.0×10^{-17}
Area 23, Building 790	03/05/90	04/02/90	-1.3×10^{-18}	1.4×10^{-17}
Area 23, Building 790	04/02/90	04/30/90	1.6×10^{-17}	1.8×10^{-17}
Area 23, Building 790	04/30/90	06/05/90	5.8×10^{-18}	1.3×10^{-17}
Area 23, Building 790	06/04/90	07/02/90	-3.4×10^{-17}	2.4×10^{-17}
Area 23, Building 790	07/02/90	07/30/90	2.4×10^{-18}	1.6×10^{-17}
Area 23, Building 790	07/30/90	09/04/90	1.7×10^{-18}	1.1×10^{-17}
Area 23, Building 790	09/04/90	10/02/90	2.2×10^{-18}	1.2×10^{-17}
Area 23, Building 790	10/01/90	10/29/90	1.1×10^{-17}	1.2×10^{-17}
Area 23, Building 790	10/29/90	12/03/90	9.4×10^{-19}	1.1×10^{-17}
Area 23, Building 790	12/03/90	01/02/90	7.0×10^{-18}	1.5×10^{-17}
Area 23, Building 790 No. 2	01/02/90	02/05/90	-9.8×10^{-18}	1.5×10^{-17}
Area 23, Building 790 No. 2	02/05/90	03/06/90	4.3×10^{-18}	1.3×10^{-17}
Area 23, Building 790 No. 2	03/05/90	04/02/90	3.2×10^{-18}	1.5×10^{-17}
Area 23, Building 790 No. 2	04/02/90	04/30/90	1.7×10^{-18}	1.6×10^{-17}
Area 23, Building 790 No. 2	04/30/90	06/05/90	6.7×10^{-18}	1.1×10^{-17}
Area 23, Building 790 No. 2	06/04/90	07/02/90	3.4×10^{-18}	2.0×10^{-17}
Area 23, Building 790 No. 2	07/02/90	07/30/90	-3.4×10^{-17}	2.9×10^{-17}
Area 23, Building 790 No. 2	07/30/90	09/04/90	6.0×10^{-18}	9.1×10^{-18}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Building 790 No. 2	09/04/90	10/02/90	3.7×10^{-18}	1.4×10^{-17}
Area 23, Building 790 No. 2	10/01/90	10/29/90	1.5×10^{-19}	1.8×10^{-17}
Area 23, Building 790 No. 2	10/29/90	12/03/90	-6.0×10^{-18}	1.2×10^{-17}
Area 23, Building 790 No. 2	12/03/90	01/02/90	1.7×10^{-17}	1.9×10^{-17}
Area 23, East Boundary	01/02/90	02/05/90	2.3×10^{-18}	1.6×10^{-17}
Area 23, East Boundary	02/05/90	03/06/90	5.3×10^{-18}	1.4×10^{-17}
Area 23, East Boundary	03/05/90	04/02/90	-5.5×10^{-18}	1.7×10^{-17}
Area 23, East Boundary	04/02/90	04/30/90	1.6×10^{-17}	1.6×10^{-17}
Area 23, East Boundary	04/30/90	06/05/90	-2.2×10^{-21}	1.4×10^{-17}
Area 23, East Boundary	07/02/90	07/30/90	8.5×10^{-18}	1.2×10^{-17}
Area 23, East Boundary	07/30/90	09/04/90	-1.3×10^{-18}	2.0×10^{-17}
Area 23, East Boundary	09/04/90	10/02/90	-1.3×10^{-18}	1.5×10^{-17}
Area 23, East Boundary	10/01/90	10/29/90	1.1×10^{-17}	1.4×10^{-17}
Area 23, East Boundary	10/29/90	12/03/90	3.9×10^{-18}	9.8×10^{-18}
Area 23, East Boundary	12/03/90	01/02/90	1.4×10^{-17}	1.5×10^{-17}
Area 23, H&S Building Roof	01/02/90	02/05/90	-4.8×10^{-18}	2.2×10^{-17}
Area 23, H&S Building Roof	02/05/90	03/06/90	1.6×10^{-17}	2.0×10^{-17}
Area 23, H&S Building Roof	03/05/90	04/02/90	7.6×10^{-18}	1.6×10^{-17}
Area 23, H&S Building Roof	04/02/90	04/30/90	1.5×10^{-18}	1.5×10^{-17}
Area 23, H&S Building Roof	04/30/90	06/05/90	5.8×10^{-18}	1.2×10^{-17}
Area 23, H&S Building Roof	06/04/90	07/02/90	4.5×10^{-18}	1.7×10^{-17}
Area 23, H&S Building Roof	07/02/90	07/30/90	1.6×10^{-17}	1.3×10^{-17}
Area 23, H&S Building Roof	07/30/90	09/04/90	-1.4×10^{-18}	1.2×10^{-17}
Area 23, H&S Building Roof	09/04/90	10/02/90	7.5×10^{-18}	1.2×10^{-17}
Area 23, H&S Building Roof	10/29/90	12/03/90	-3.8×10^{-18}	9.7×10^{-18}
Area 23, H&S Building Roof	12/03/90	01/02/90	4.4×10^{-18}	1.3×10^{-17}
Area 25, E-MAD North	01/02/90	02/05/90	-9.3×10^{-18}	2.2×10^{-17}
Area 25, E-MAD North	02/05/90	03/06/90	-1.8×10^{-18}	1.6×10^{-17}
Area 25, E-MAD North	03/05/90	04/02/90	-1.8×10^{-17}	3.0×10^{-17}
Area 25, E-MAD North	04/02/90	04/30/90	1.4×10^{-18}	1.9×10^{-17}
Area 25, E-MAD North	04/30/90	06/05/90	-1.0×10^{-17}	1.9×10^{-17}
Area 25, E-MAD North	06/04/90	07/02/90	2.8×10^{-19}	1.6×10^{-17}
Area 25, E-MAD North	07/02/90	07/30/90	1.2×10^{-17}	1.3×10^{-17}
Area 25, E-MAD North	07/30/90	09/04/90	2.5×10^{-18}	9.6×10^{-18}
Area 25, E-MAD North	09/04/90	10/02/90	1.3×10^{-17}	1.2×10^{-17}
Area 25, E-MAD North	10/01/90	10/29/90	4.0×10^{-18}	1.6×10^{-17}
Area 25, E-MAD North	10/29/90	12/03/90	2.4×10^{-18}	1.1×10^{-17}
Area 25, E-MAD North	12/03/90	01/02/90	1.6×10^{-18}	1.8×10^{-17}
Area 25, NRDS Warehouse	01/02/90	02/05/90	-1.6×10^{-18}	1.3×10^{-17}
Area 25, NRDS Warehouse	02/05/90	03/06/90	7.8×10^{-18}	1.5×10^{-17}
Area 25, NRDS Warehouse	03/05/90	04/02/90	1.4×10^{-17}	1.7×10^{-17}
Area 25, NRDS Warehouse	04/02/90	04/30/90	1.0×10^{-17}	1.7×10^{-17}

Attachment A.1 (^{238}Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, NRDS Warehouse	04/30/90	06/05/90	-3.9×10^{-18}	1.5×10^{-17}
Area 25, NRDS Warehouse	06/04/90	07/02/90	7.6×10^{-19}	1.7×10^{-17}
Area 25, NRDS Warehouse	07/02/90	07/30/90	2.3×10^{-18}	1.3×10^{-17}
Area 25, NRDS Warehouse	07/30/90	09/04/90	-5.6×10^{-19}	1.2×10^{-17}
Area 25, NRDS Warehouse	09/04/90	10/02/90	1.5×10^{-17}	1.3×10^{-17}
Area 25, NRDS Warehouse	10/01/90	10/29/90	1.2×10^{-17}	2.9×10^{-17}
Area 25, NRDS Warehouse	10/29/90	12/03/90	7.5×10^{-18}	1.1×10^{-17}
Area 25, NRDS Warehouse	12/03/90	01/02/90	9.5×10^{-18}	1.3×10^{-17}
Area 27, Cafeteria	01/02/90	02/05/90	-4.3×10^{-18}	1.3×10^{-17}
Area 27, Cafeteria	02/05/90	03/06/90	7.2×10^{-19}	1.9×10^{-17}
Area 27, Cafeteria	03/05/90	04/02/90	-5.4×10^{-19}	2.5×10^{-17}
Area 27, Cafeteria	04/02/90	04/30/90	1.6×10^{-18}	4.8×10^{-18}
Area 27, Cafeteria	04/30/90	06/05/90	-5.3×10^{-18}	1.6×10^{-17}
Area 27, Cafeteria	06/04/90	07/02/90	-2.5×10^{-18}	1.8×10^{-17}
Area 27, Cafeteria	07/02/90	07/30/90	-6.9×10^{-18}	1.8×10^{-17}
Area 27, Cafeteria	07/30/90	09/04/90	4.6×10^{-18}	1.2×10^{-17}
Area 27, Cafeteria	09/04/90	10/02/90	-8.1×10^{-19}	1.4×10^{-17}
Area 27, Cafeteria	10/01/90	10/29/90	-6.7×10^{-18}	1.5×10^{-17}
Area 27, Cafeteria	10/29/90	12/03/90	2.7×10^{-18}	1.2×10^{-17}
Area 27, Cafeteria	12/03/90	01/02/90	3.7×10^{-18}	1.3×10^{-17}

Attachment A.2 $^{239+240}Pu$ in Air - 1990

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	01/02/90	02/05/90	7.4×10^{-17}	6.2×10^{-18}
Area 1, BJY	02/05/90	03/06/90	5.2×10^{-17}	7.7×10^{-18}
Area 1, BJY	03/05/90	04/02/90	4.1×10^{-17}	6.5×10^{-18}
Area 1, BJY	04/02/90	04/30/90	-6.5×10^{-19}	9.2×10^{-18}
Area 1, BJY	04/30/90	06/05/90	1.9×10^{-16}	6.6×10^{-18}
Area 1, BJY	06/04/90	07/02/90	9.5×10^{-17}	1.9×10^{-17}
Area 1, BJY	07/02/90	07/30/90	3.5×10^{-17}	7.3×10^{-18}
Area 1, BJY	07/30/90	09/04/90	1.2×10^{-16}	5.8×10^{-18}
Area 1, BJY	09/04/90	10/02/90	5.7×10^{-17}	5.5×10^{-18}
Area 1, BJY	10/01/90	10/29/90	1.5×10^{-17}	3.0×10^{-18}
Area 1, BJY	10/29/90	12/03/90	9.1×10^{-18}	7.3×10^{-18}
Area 1, BJY	12/03/90	01/02/90	7.3×10^{-18}	6.2×10^{-18}
Area 1, Gravel Pit	01/02/90	02/05/90	9.8×10^{-19}	6.7×10^{-18}
Area 1, Gravel Pit	02/05/90	03/06/90	-5.0×10^{-19}	6.4×10^{-18}
Area 1, Gravel Pit	03/05/90	04/02/90	5.4×10^{-18}	7.0×10^{-18}
Area 1, Gravel Pit	04/02/90	04/30/90	6.9×10^{-18}	8.6×10^{-18}
Area 1, Gravel Pit	04/30/90	06/05/90	6.5×10^{-18}	5.4×10^{-18}
Area 1, Gravel Pit	07/02/90	07/30/90	-5.7×10^{-19}	7.2×10^{-18}
Area 1, Gravel Pit	07/30/90	09/04/90	5.0×10^{-18}	6.4×10^{-18}
Area 1, Gravel Pit	09/04/90	10/02/90	1.5×10^{-18}	1.1×10^{-17}
Area 1, Gravel Pit	10/01/90	10/29/90	2.9×10^{-18}	5.2×10^{-18}
Area 1, Gravel Pit	10/29/90	12/03/90	1.8×10^{-18}	5.1×10^{-18}
Area 1, Gravel Pit	12/03/90	01/02/90	9.5×10^{-19}	6.6×10^{-18}
Area 2, 2-1 Substation	01/02/90	02/05/90	-5.4×10^{-19}	6.0×10^{-18}
Area 2, 2-1 Substation	02/05/90	03/06/90	5.6×10^{-18}	7.2×10^{-18}
Area 2, 2-1 Substation	03/05/90	04/02/90	6.7×10^{-18}	6.8×10^{-18}
Area 2, 2-1 Substation	04/02/90	04/30/90	1.3×10^{-18}	8.8×10^{-18}
Area 2, 2-1 Substation	04/30/90	06/05/90	1.9×10^{-17}	6.4×10^{-18}
Area 2, 2-1 Substation	06/04/90	07/02/90	7.2×10^{-18}	1.2×10^{-17}
Area 2, 2-1 Substation	07/02/90	07/30/90	4.6×10^{-18}	5.9×10^{-18}
Area 2, 2-1 Substation	07/30/90	09/04/90	5.7×10^{-18}	5.7×10^{-18}
Area 2, 2-1 Substation	09/04/90	10/02/90	3.3×10^{-18}	6.0×10^{-18}
Area 2, 2-1 Substation	10/01/90	10/29/90	1.2×10^{-17}	8.2×10^{-18}
Area 2, 2-1 Substation	10/29/90	12/03/90	5.8×10^{-18}	4.8×10^{-18}
Area 2, 2-1 Substation	12/03/90	01/02/90	-5.1×10^{-19}	7.3×10^{-18}
Area 2, Complex	01/02/90	02/05/90	7.2×10^{-18}	5.9×10^{-18}
Area 2, Complex	02/05/90	03/06/90	1.9×10^{-17}	8.2×10^{-18}
Area 2, Complex	03/05/90	04/02/90	6.1×10^{-18}	6.2×10^{-18}
Area 2, Complex	04/02/90	04/30/90	2.6×10^{-17}	1.6×10^{-17}
Area 2, Complex	04/30/90	06/05/90	3.2×10^{-17}	7.7×10^{-18}
Area 2, Complex	06/04/90	07/02/90	7.0×10^{-18}	8.5×10^{-18}
Area 2, Complex	07/02/90	07/30/90	1.2×10^{-17}	5.3×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Complex	07/30/90	09/04/90	1.1×10^{-17}	4.5×10^{-18}
Area 2, Complex	09/04/90	10/02/90	1.9×10^{-18}	5.7×10^{-18}
Area 2, Complex	10/01/90	10/29/90	7.7×10^{-18}	9.2×10^{-18}
Area 2, Complex	10/29/90	12/03/90	7.8×10^{-18}	4.7×10^{-18}
Area 2, Complex	12/03/90	01/02/90	3.7×10^{-18}	6.4×10^{-18}
Area 3, 3-300 Bunker	01/02/90	02/05/90	2.4×10^{-16}	6.3×10^{-18}
Area 3, 3-300 Bunker	02/05/90	03/06/90	4.1×10^{-16}	8.4×10^{-18}
Area 3, 3-300 Bunker	03/05/90	04/02/90	8.0×10^{-17}	6.3×10^{-18}
Area 3, 3-300 Bunker	04/02/90	04/30/90	5.0×10^{-17}	6.5×10^{-18}
Area 3, 3-300 Bunker	04/30/90	06/05/90	2.0×10^{-16}	4.8×10^{-18}
Area 3, 3-300 Bunker	06/04/90	07/02/90	1.7×10^{-16}	7.8×10^{-18}
Area 3, 3-300 Bunker	07/02/90	07/30/90	1.1×10^{-16}	5.8×10^{-18}
Area 3, 3-300 Bunker	07/30/90	09/04/90	6.8×10^{-17}	5.1×10^{-18}
Area 3, 3-300 Bunker	09/04/90	10/02/90	4.7×10^{-17}	5.2×10^{-18}
Area 3, 3-300 Bunker	10/01/90	10/29/90	2.4×10^{-16}	5.0×10^{-18}
Area 3, 3-300 Bunker	10/29/90	12/03/90	8.1×10^{-17}	4.3×10^{-18}
Area 3, 3-300 Bunker	12/03/90	01/02/90	3.4×10^{-17}	5.3×10^{-18}
Area 3, U3ah/at East	02/05/90	03/06/90	1.0×10^{-16}	9.2×10^{-18}
Area 3, U3ah/at East	03/05/90	04/02/90	6.1×10^{-17}	6.9×10^{-18}
Area 3, U3ah/at East	04/02/90	04/30/90	8.1×10^{-17}	1.1×10^{-17}
Area 3, U3ah/at East	06/04/90	07/02/90	9.6×10^{-17}	9.1×10^{-18}
Area 3, U3ah/at East	07/02/90	07/30/90	3.8×10^{-17}	5.8×10^{-18}
Area 3, U3ah/at East	07/30/90	09/04/90	2.9×10^{-17}	5.3×10^{-18}
Area 3, U3ah/at East	09/04/90	10/02/90	9.9×10^{-18}	5.9×10^{-18}
Area 3, U3ah/at East	10/01/90	10/29/90	8.6×10^{-17}	5.8×10^{-18}
Area 3, U3ah/at East	10/29/90	12/03/90	7.8×10^{-17}	4.5×10^{-18}
Area 3, U3ah/at East	12/03/90	01/02/90	3.2×10^{-17}	7.1×10^{-18}
Area 3, U3ah/at North	01/02/90	02/05/90	9.5×10^{-17}	5.7×10^{-18}
Area 3, U3ah/at North	02/05/90	03/06/90	2.5×10^{-16}	7.9×10^{-18}
Area 3, U3ah/at North	03/05/90	04/02/90	1.3×10^{-16}	9.6×10^{-18}
Area 3, U3ah/at North	04/02/90	04/30/90	2.0×10^{-16}	7.1×10^{-18}
Area 3, U3ah/at North	04/30/90	06/05/90	6.8×10^{-16}	6.5×10^{-18}
Area 3, U3ah/at North	06/04/90	07/02/90	3.4×10^{-16}	8.0×10^{-18}
Area 3, U3ah/at North	07/02/90	07/30/90	1.1×10^{-16}	6.7×10^{-18}
Area 3, U3ah/at North	07/30/90	09/04/90	6.7×10^{-17}	6.9×10^{-18}
Area 3, U3ah/at North	09/04/90	10/02/90	5.5×10^{-17}	6.8×10^{-18}
Area 3, U3ah/at North	10/01/90	10/29/90	1.3×10^{-16}	5.2×10^{-18}
Area 3, U3ah/at North	10/29/90	12/03/90	1.3×10^{-16}	4.1×10^{-18}
Area 3, U3ah/at North	12/03/90	01/02/90	8.1×10^{-17}	8.9×10^{-18}
Area 3, U3ah/at South	02/05/90	03/06/90	1.3×10^{-16}	7.8×10^{-18}
Area 3, U3ah/at South	03/05/90	04/02/90	1.4×10^{-16}	0.0×10^{-18}
Area 3, U3ah/at South	04/02/90	04/30/90	1.9×10^{-17}	8.7×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U3ah/at South	04/30/90	06/05/90	2.9×10^{-16}	5.8×10^{-18}
Area 3, U3ah/at South	06/04/90	07/02/90	7.1×10^{-17}	1.0×10^{-17}
Area 3, U3ah/at South	07/02/90	07/30/90	6.0×10^{-17}	5.8×10^{-18}
Area 3, U3ah/at South	07/30/90	09/04/90	6.4×10^{-17}	1.0×10^{-17}
Area 3, U3ah/at South	09/04/90	10/02/90	8.6×10^{-17}	5.5×10^{-18}
Area 3, U3ah/at South	10/01/90	10/29/90	9.3×10^{-17}	5.7×10^{-18}
Area 3, U3ah/at South	10/29/90	12/03/90	1.1×10^{-16}	4.7×10^{-18}
Area 3, U3ah/at South	12/03/90	01/02/90	1.2×10^{-16}	7.0×10^{-18}
Area 3, U3ah/at West	01/02/90	02/05/90	9.9×10^{-17}	7.2×10^{-18}
Area 3, U3ah/at West	02/05/90	03/06/90	4.4×10^{-17}	1.2×10^{-18}
Area 3, U3ah/at West	03/05/90	04/02/90	2.2×10^{-16}	6.6×10^{-18}
Area 3, U3ah/at West	04/02/90	04/30/90	4.5×10^{-16}	8.3×10^{-18}
Area 3, U3ah/at West	04/30/90	06/05/90	3.6×10^{-16}	5.1×10^{-18}
Area 3, U3ah/at West	06/04/90	07/02/90	1.4×10^{-16}	7.1×10^{-18}
Area 3, U3ah/at West	07/02/90	07/30/90	5.7×10^{-16}	6.9×10^{-18}
Area 3, U3ah/at West	07/30/90	09/04/90	7.1×10^{-17}	4.2×10^{-18}
Area 3, U3ah/at West	09/04/90	10/02/90	7.2×10^{-17}	5.5×10^{-18}
Area 3, U3ah/at West	10/01/90	10/29/90	2.8×10^{-16}	4.6×10^{-18}
Area 3, U3ah/at West	10/29/90	12/03/90	9.4×10^{-17}	3.6×10^{-18}
Area 3, U3ah/at West	12/03/90	01/02/90	1.1×10^{-16}	6.4×10^{-18}
Area 3, Complex	01/02/90	02/05/90	2.5×10^{-17}	5.6×10^{-18}
Area 3, Complex	02/05/90	03/06/90	4.3×10^{-17}	6.9×10^{-18}
Area 3, Complex	03/05/90	04/02/90	3.2×10^{-17}	6.4×10^{-18}
Area 3, Complex	04/02/90	04/30/90	6.2×10^{-17}	6.0×10^{-18}
Area 3, Complex	04/30/90	06/05/90	4.7×10^{-17}	5.0×10^{-18}
Area 3, Complex	06/04/90	07/02/90	4.1×10^{-17}	1.2×10^{-17}
Area 3, Complex	07/02/90	07/30/90	5.4×10^{-17}	5.5×10^{-18}
Area 3, Complex	07/30/90	09/04/90	2.5×10^{-17}	5.6×10^{-18}
Area 3, Complex	09/04/90	10/02/90	3.9×10^{-17}	5.7×10^{-18}
Area 3, Complex	10/01/90	10/29/90	4.1×10^{-17}	6.1×10^{-18}
Area 3, Complex	10/29/90	12/03/90	5.4×10^{-17}	3.6×10^{-18}
Area 3, Complex	12/03/90	01/02/90	2.9×10^{-17}	5.2×10^{-18}
Area 3, Complex No. 2	01/02/90	02/05/90	8.8×10^{-17}	1.1×10^{-17}
Area 3, Complex No. 2	02/05/90	03/06/90	3.3×10^{-16}	1.5×10^{-17}
Area 3, Complex No. 2	03/05/90	04/02/90	2.0×10^{-16}	1.1×10^{-17}
Area 3, Complex No. 2	04/02/90	04/30/90	8.0×10^{-17}	1.0×10^{-17}
Area 3, Complex No. 2	04/30/90	06/05/90	1.2×10^{-16}	4.9×10^{-18}
Area 3, Complex No. 2	06/04/90	07/02/90	9.3×10^{-17}	8.0×10^{-18}
Area 3, Complex No. 2	07/02/90	07/30/90	7.2×10^{-17}	6.0×10^{-18}
Area 3, Complex No. 2	07/30/90	09/04/90	9.8×10^{-17}	5.8×10^{-18}
Area 3, Complex No. 2	09/04/90	10/02/90	5.3×10^{-17}	4.8×10^{-18}
Area 3, Complex No. 2	10/01/90	10/29/90	7.2×10^{-17}	9.3×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Complex No. 2	10/29/90	12/03/90	9.8×10^{-17}	3.8×10^{-18}
Area 3, Complex No. 2	12/03/90	01/02/90	1.6×10^{-17}	6.7×10^{-18}
Area 5, DOD Yard	01/02/90	02/05/90	2.4×10^{-18}	4.5×10^{-18}
Area 5, DOD Yard	02/05/90	03/06/90	-5.3×10^{-19}	6.3×10^{-18}
Area 5, DOD Yard	03/05/90	04/02/90	3.6×10^{-18}	6.3×10^{-18}
Area 5, DOD Yard	04/02/90	04/30/90	3.2×10^{-18}	5.8×10^{-18}
Area 5, DOD Yard	04/30/90	06/05/90	7.1×10^{-19}	5.2×10^{-18}
Area 5, DOD Yard	06/04/90	07/02/90	1.5×10^{-18}	9.2×10^{-18}
Area 5, DOD Yard	07/02/90	07/30/90	5.9×10^{-18}	5.9×10^{-18}
Area 5, DOD Yard	07/30/90	09/04/90	6.7×10^{-19}	5.0×10^{-18}
Area 5, DOD Yard	09/04/90	10/02/90	-5.2×10^{-19}	5.3×10^{-18}
Area 5, DOD Yard	10/01/90	10/29/90	7.1×10^{-19}	5.6×10^{-18}
Area 5, DOD Yard	10/29/90	12/03/90	1.8×10^{-18}	5.0×10^{-18}
Area 5, DOD Yard	12/03/90	01/02/90	4.1×10^{-18}	6.8×10^{-18}
Area 5, Gate 200	02/05/90	03/06/90	6.9×10^{-19}	5.8×10^{-18}
Area 5, Gate 200	03/05/90	04/02/90	-5.9×10^{-19}	7.3×10^{-18}
Area 5, Gate 200	04/02/90	04/30/90	1.8×10^{-17}	9.4×10^{-18}
Area 5, Gate 200	04/30/90	06/05/90	2.1×10^{-18}	5.8×10^{-18}
Area 5, Gate 200	06/04/90	07/02/90	-5.3×10^{-19}	1.1×10^{-17}
Area 5, Gate 200	07/02/90	07/30/90	8.3×10^{-18}	6.7×10^{-18}
Area 5, Gate 200	07/30/90	09/04/90	-4.0×10^{-19}	6.6×10^{-18}
Area 5, Gate 200	09/04/90	10/02/90	3.9×10^{-18}	5.2×10^{-18}
Area 5, Gate 200	10/01/90	10/29/90	2.8×10^{-18}	7.6×10^{-18}
Area 5, Gate 200	10/29/90	12/03/90	1.8×10^{-18}	5.0×10^{-18}
Area 5, Gate 200	12/03/90	01/02/90	-6.0×10^{-19}	6.2×10^{-18}
Area 5, RWMS No. 1	01/02/90	02/05/90	1.5×10^{-18}	4.6×10^{-18}
Area 5, RWMS No. 1	02/05/90	03/06/90	1.6×10^{-17}	6.5×10^{-18}
Area 5, RWMS No. 1	03/05/90	04/02/90	7.5×10^{-18}	6.4×10^{-18}
Area 5, RWMS No. 1	04/02/90	04/30/90	2.7×10^{-16}	6.4×10^{-18}
Area 5, RWMS No. 1	04/30/90	06/05/90	5.2×10^{-18}	5.3×10^{-18}
Area 5, RWMS No. 1	06/04/90	07/02/90	7.2×10^{-18}	7.1×10^{-18}
Area 5, RWMS No. 1	07/02/90	07/30/90	2.6×10^{-18}	7.3×10^{-18}
Area 5, RWMS No. 1	07/30/90	09/04/90	8.5×10^{-17}	8.0×10^{-18}
Area 5, RWMS No. 1	09/04/90	10/02/90	-5.4×10^{-19}	4.9×10^{-18}
Area 5, RWMS No. 1	10/01/90	10/29/90	3.5×10^{-18}	6.2×10^{-18}
Area 5, RWMS No. 1	10/29/90	12/03/90	3.5×10^{-18}	4.5×10^{-18}
Area 5, RWMS No. 1	12/03/90	01/02/90	3.3×10^{-18}	5.8×10^{-18}
Area 5, RWMS No. 2	01/02/90	02/05/90	1.7×10^{-18}	5.1×10^{-18}
Area 5, RWMS No. 2	02/05/90	03/06/90	7.9×10^{-18}	5.6×10^{-18}
Area 5, RWMS No. 2	03/05/90	04/02/90	6.5×10^{-19}	5.9×10^{-18}
Area 5, RWMS No. 2	04/02/90	04/30/90	7.1×10^{-18}	7.1×10^{-18}
Area 5, RWMS No. 2	04/30/90	06/05/90	4.4×10^{-18}	5.5×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 2	06/04/90	07/02/90	9.9×10^{-18}	7.8×10^{-18}
Area 5, RWMS No. 2	07/02/90	07/30/90	1.5×10^{-18}	4.8×10^{-18}
Area 5, RWMS No. 2	07/30/90	09/04/90	6.0×10^{-18}	1.5×10^{-17}
Area 5, RWMS No. 2	09/04/90	10/02/90	-5.5×10^{-19}	5.3×10^{-18}
Area 5, RWMS No. 2	10/01/90	10/29/90	1.7×10^{-18}	5.3×10^{-18}
Area 5, RWMS No. 2	10/29/90	12/03/90	5.4×10^{-17}	4.8×10^{-18}
Area 5, RWMS No. 2	12/03/90	01/02/90	2.3×10^{-18}	6.5×10^{-18}
Area 5, RWMS No. 3	01/02/90	02/05/90	2.3×10^{-18}	6.4×10^{-18}
Area 5, RWMS No. 3	02/05/90	03/06/90	2.5×10^{-18}	7.1×10^{-18}
Area 5, RWMS No. 3	03/05/90	04/02/90	9.7×10^{-19}	7.1×10^{-18}
Area 5, RWMS No. 3	04/02/90	04/30/90	2.0×10^{-17}	7.1×10^{-18}
Area 5, RWMS No. 3	04/30/90	06/05/90	1.6×10^{-17}	5.4×10^{-18}
Area 5, RWMS No. 3	06/04/90	07/02/90	1.7×10^{-17}	7.2×10^{-18}
Area 5, RWMS No. 3	07/02/90	07/30/90	4.0×10^{-18}	5.3×10^{-18}
Area 5, RWMS No. 3	07/30/90	09/04/90	8.5×10^{-18}	4.1×10^{-18}
Area 5, RWMS No. 3	09/04/90	10/02/90	9.5×10^{-19}	6.6×10^{-18}
Area 5, RWMS No. 3	10/01/90	10/29/90	5.1×10^{-18}	5.1×10^{-18}
Area 5, RWMS No. 3	10/29/90	12/03/90	2.7×10^{-18}	3.6×10^{-18}
Area 5, RWMS No. 3	12/03/90	01/02/90	-4.8×10^{-19}	5.8×10^{-18}
Area 5, RWMS No. 4	01/02/90	02/05/90	9.4×10^{-19}	6.6×10^{-18}
Area 5, RWMS No. 4	02/05/90	03/06/90	4.1×10^{-18}	7.1×10^{-18}
Area 5, RWMS No. 4	03/05/90	04/02/90	9.3×10^{-19}	6.9×10^{-18}
Area 5, RWMS No. 4	04/02/90	04/30/90	7.7×10^{-19}	6.1×10^{-18}
Area 5, RWMS No. 4	04/30/90	06/05/90	1.2×10^{-17}	6.2×10^{-18}
Area 5, RWMS No. 4	07/02/90	07/30/90	1.1×10^{-17}	1.2×10^{-17}
Area 5, RWMS No. 4	07/30/90	09/04/90	2.0×10^{-18}	5.6×10^{-18}
Area 5, RWMS No. 4	09/04/90	10/02/90	4.1×10^{-18}	7.1×10^{-18}
Area 5, RWMS No. 4	10/01/90	10/29/90	-5.2×10^{-19}	6.4×10^{-18}
Area 5, RWMS No. 4	10/29/90	12/03/90	1.0×10^{-18}	6.5×10^{-18}
Area 5, RWMS No. 4	12/03/90	01/02/90	-5.4×10^{-19}	8.1×10^{-18}
Area 5, RWMS No. 5	01/02/90	02/05/90	2.7×10^{-18}	7.4×10^{-18}
Area 5, RWMS No. 5	02/05/90	03/06/90	7.5×10^{-19}	6.1×10^{-18}
Area 5, RWMS No. 5	03/05/90	04/02/90	3.8×10^{-18}	6.7×10^{-18}
Area 5, RWMS No. 5	04/02/90	04/30/90	2.3×10^{-18}	6.5×10^{-18}
Area 5, RWMS No. 5	04/30/90	06/05/90	6.2×10^{-18}	6.1×10^{-18}
Area 5, RWMS No. 5	06/04/90	07/02/90	1.1×10^{-18}	7.5×10^{-18}
Area 5, RWMS No. 5	07/02/90	07/30/90	2.4×10^{-18}	6.7×10^{-18}
Area 5, RWMS No. 5	07/30/90	09/04/90	1.4×10^{-18}	7.9×10^{-18}
Area 5, RWMS No. 5	09/04/90	10/02/90	2.4×10^{-18}	6.7×10^{-18}
Area 5, RWMS No. 5	10/01/90	10/29/90	4.9×10^{-18}	1.2×10^{-17}
Area 5, RWMS No. 5	10/29/90	12/03/90	4.7×10^{-18}	5.7×10^{-18}
Area 5, RWMS No. 5	12/03/90	01/02/90	-4.8×10^{-19}	6.2×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 6	01/02/90	02/05/90	2.0×10^{-18}	5.8×10^{-18}
Area 5, RWMS No. 6	02/05/90	03/06/90	2.2×10^{-18}	6.4×10^{-18}
Area 5, RWMS No. 6	03/05/90	04/02/90	7.0×10^{-19}	6.2×10^{-18}
Area 5, RWMS No. 6	04/02/90	04/30/90	7.0×10^{-18}	8.6×10^{-18}
Area 5, RWMS No. 6	04/30/90	06/05/90	3.9×10^{-18}	5.0×10^{-18}
Area 5, RWMS No. 6	06/04/90	07/02/90	5.2×10^{-18}	6.5×10^{-18}
Area 5, RWMS No. 6	07/02/90	07/30/90	-5.1×10^{-19}	8.2×10^{-18}
Area 5, RWMS No. 6	07/30/90	09/04/90	6.7×10^{-19}	5.0×10^{-18}
Area 5, RWMS No. 6	09/04/90	10/02/90	1.5×10^{-18}	4.7×10^{-18}
Area 5, RWMS No. 6	10/01/90	10/29/90	1.6×10^{-18}	9.5×10^{-18}
Area 5, RWMS No. 6	10/29/90	12/03/90	2.1×10^{-18}	5.7×10^{-18}
Area 5, RWMS No. 6	12/03/90	01/02/90	7.4×10^{-19}	5.6×10^{-18}
Area 5, RWMS No. 7	01/02/90	02/05/90	5.2×10^{-18}	5.2×10^{-18}
Area 5, RWMS No. 7	02/05/90	03/06/90	1.2×10^{-17}	8.1×10^{-18}
Area 5, RWMS No. 7	03/05/90	04/02/90	5.6×10^{-18}	7.1×10^{-18}
Area 5, RWMS No. 7	04/02/90	04/30/90	5.2×10^{-18}	6.6×10^{-18}
Area 5, RWMS No. 7	04/30/90	06/05/90	1.0×10^{-17}	6.0×10^{-18}
Area 5, RWMS No. 7	06/04/90	07/02/90	7.0×10^{-18}	8.5×10^{-18}
Area 5, RWMS No. 7	07/02/90	07/30/90	6.9×10^{-18}	8.4×10^{-18}
Area 5, RWMS No. 7	07/30/90	09/04/90	3.2×10^{-18}	8.1×10^{-18}
Area 5, RWMS No. 7	09/04/90	10/02/90	1.9×10^{-18}	5.7×10^{-18}
Area 5, RWMS No. 7	10/01/90	10/29/90	3.7×10^{-18}	6.3×10^{-18}
Area 5, RWMS No. 7	10/29/90	12/03/90	7.2×10^{-19}	5.0×10^{-18}
Area 5, RWMS No. 7	12/03/90	01/02/90	8.0×10^{-18}	5.6×10^{-18}
Area 5, RWMS No. 8	01/02/90	02/05/90	3.0×10^{-18}	8.0×10^{-18}
Area 5, RWMS No. 8	02/05/90	03/06/90	4.4×10^{-18}	7.5×10^{-18}
Area 5, RWMS No. 8	03/05/90	04/02/90	1.6×10^{-18}	1.0×10^{-17}
Area 5, RWMS No. 8	04/02/90	04/30/90	1.4×10^{-18}	9.1×10^{-18}
Area 5, RWMS No. 8	04/30/90	06/05/90	7.9×10^{-18}	5.5×10^{-18}
Area 5, RWMS No. 8	06/04/90	07/02/90	3.8×10^{-18}	6.6×10^{-18}
Area 5, RWMS No. 8	07/02/90	07/30/90	9.7×10^{-19}	7.1×10^{-18}
Area 5, RWMS No. 8	07/30/90	09/04/90	2.2×10^{-17}	5.9×10^{-18}
Area 5, RWMS No. 8	09/04/90	10/02/90	6.5×10^{-19}	5.4×10^{-18}
Area 5, RWMS No. 8	10/01/90	10/29/90	9.4×10^{-19}	6.5×10^{-18}
Area 5, RWMS No. 8	10/29/90	12/03/90	4.3×10^{-18}	5.4×10^{-18}
Area 5, RWMS No. 8	12/03/90	01/02/90	-4.9×10^{-19}	5.6×10^{-18}
Area 5, RWMS No. 9	01/02/90	02/05/90	4.6×10^{-18}	5.8×10^{-18}
Area 5, RWMS No. 9	02/05/90	03/06/90	3.7×10^{-18}	6.6×10^{-18}
Area 5, RWMS No. 9	03/05/90	04/02/90	7.5×10^{-18}	6.3×10^{-18}
Area 5, RWMS No. 9	04/02/90	04/30/90	6.5×10^{-18}	8.0×10^{-18}
Area 5, RWMS No. 9	04/30/90	06/05/90	1.9×10^{-17}	6.7×10^{-18}
Area 5, RWMS No. 9	06/04/90	07/02/90	1.1×10^{-18}	7.4×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 9	07/02/90	07/30/90	3.2×10^{-18}	8.6×10^{-18}
Area 5, RWMS No. 9	07/30/90	09/04/90	9.0×10^{-18}	4.9×10^{-18}
Area 5, RWMS No. 9	09/04/90	10/02/90	5.7×10^{-19}	5.1×10^{-18}
Area 5, RWMS No. 9	10/01/90	10/29/90	-5.7×10^{-19}	1.3×10^{-17}
Area 5, RWMS No. 9	10/29/90	12/03/90	6.1×10^{-18}	5.9×10^{-18}
Area 5, RWMS No. 9	12/03/90	01/02/90	5.5×10^{-18}	6.9×10^{-18}
Area 5, RWMS Pit No. 3	01/02/90	02/05/90	-4.7×10^{-19}	5.5×10^{-18}
Area 5, RWMS Pit No. 3	02/05/90	03/06/90	3.2×10^{-18}	8.5×10^{-18}
Area 5, RWMS Pit No. 3	03/05/90	04/02/90	4.1×10^{-18}	7.3×10^{-18}
Area 5, RWMS Pit No. 3	04/02/90	04/30/90	-9.4×10^{-19}	1.2×10^{-17}
Area 5, RWMS Pit No. 3	04/30/90	06/05/90	2.8×10^{-18}	4.9×10^{-18}
Area 5, RWMS Pit No. 3	07/02/90	07/30/90	6.6×10^{-19}	5.4×10^{-18}
Area 5, RWMS Pit No. 3	07/30/90	09/04/90	9.7×10^{-18}	5.1×10^{-18}
Area 5, RWMS Pit No. 3	09/04/90	10/02/90	-5.3×10^{-19}	6.0×10^{-18}
Area 5, RWMS Pit No. 3	10/01/90	10/29/90	2.1×10^{-18}	6.1×10^{-18}
Area 5, RWMS Pit No. 3	10/29/90	12/03/90	2.2×10^{-18}	5.9×10^{-18}
Area 5, RWMS Pit No. 3	12/03/90	01/02/90	-4.8×10^{-19}	5.9×10^{-18}
Area 5, RWMS Pit No. 4	01/02/90	02/05/90	1.4×10^{-17}	8.3×10^{-18}
Area 5, RWMS Pit No. 4	02/05/90	03/06/90	3.8×10^{-18}	6.7×10^{-18}
Area 5, RWMS Pit No. 4	03/05/90	04/02/90	3.2×10^{-18}	8.7×10^{-18}
Area 5, RWMS Pit No. 4	04/02/90	04/30/90	6.7×10^{-18}	1.1×10^{-17}
Area 5, RWMS Pit No. 4	04/30/90	06/05/90	6.8×10^{-18}	5.5×10^{-18}
Area 5, RWMS Pit No. 4	06/04/90	07/02/90	5.2×10^{-18}	6.5×10^{-18}
Area 5, RWMS Pit No. 4	07/02/90	07/30/90	2.0×10^{-18}	5.8×10^{-18}
Area 5, RWMS Pit No. 4	07/30/90	09/04/90	4.3×10^{-18}	4.3×10^{-18}
Area 5, RWMS Pit No. 4	09/04/90	10/02/90	5.6×10^{-18}	7.0×10^{-18}
Area 5, RWMS Pit No. 4	10/01/90	10/29/90	1.8×10^{-18}	1.0×10^{-17}
Area 5, RWMS Pit No. 4	10/29/90	12/03/90	1.4×10^{-18}	4.1×10^{-18}
Area 5, RWMS Pit No. 4	12/03/90	01/02/90	5.5×10^{-19}	4.6×10^{-18}
Area 5, RWMS TP North	01/02/90	02/05/90	8.7×10^{-18}	4.7×10^{-18}
Area 5, RWMS TP North	02/05/90	03/06/90	9.4×10^{-19}	6.7×10^{-18}
Area 5, RWMS TP North	03/05/90	04/02/90	2.6×10^{-18}	7.3×10^{-18}
Area 5, RWMS TP North	04/02/90	04/30/90	2.1×10^{-17}	1.2×10^{-17}
Area 5, RWMS TP North	04/30/90	06/05/90	2.0×10^{-17}	5.4×10^{-18}
Area 5, RWMS TP North	06/04/90	07/02/90	6.7×10^{-18}	6.6×10^{-18}
Area 5, RWMS TP North	07/02/90	07/30/90	2.1×10^{-17}	6.5×10^{-18}
Area 5, RWMS TP North	07/30/90	09/04/90	2.5×10^{-18}	4.4×10^{-18}
Area 5, RWMS TP North	09/04/90	10/02/90	1.6×10^{-18}	4.9×10^{-18}
Area 5, RWMS TP North	10/01/90	10/29/90	3.3×10^{-18}	5.7×10^{-18}
Area 5, RWMS TP North	10/29/90	12/03/90	1.1×10^{-17}	4.2×10^{-18}
Area 5, RWMS TP North	12/03/90	01/02/90	4.2×10^{-18}	7.1×10^{-18}
Area 5, RWMS TP Northeast	01/02/90	02/05/90	3.5×10^{-18}	6.0×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Northeast	03/05/90	04/02/90	9.2×10^{-18}	5.7×10^{-18}
Area 5, RWMS TP Northeast	04/02/90	04/30/90	4.1×10^{-18}	1.1×10^{-17}
Area 5, RWMS TP Northeast	04/30/90	06/05/90	1.5×10^{-17}	6.5×10^{-18}
Area 5, RWMS TP Northeast	06/04/90	07/02/90	5.2×10^{-18}	2.7×10^{-17}
Area 5, RWMS TP Northeast	07/02/90	07/30/90	8.4×10^{-18}	6.8×10^{-18}
Area 5, RWMS TP Northeast	07/30/90	09/04/90	9.0×10^{-19}	5.9×10^{-18}
Area 5, RWMS TP Northeast	09/04/90	10/02/90	-5.1×10^{-19}	5.5×10^{-18}
Area 5, RWMS TP Northeast	10/01/90	10/29/90	-4.9×10^{-19}	5.0×10^{-18}
Area 5, RWMS TP Northeast	10/29/90	12/03/90	4.9×10^{-18}	4.1×10^{-18}
Area 5, RWMS TP Northeast	12/03/90	01/02/90	-4.5×10^{-19}	6.9×10^{-18}
Area 5, RWMS TP Northwest	01/02/90	02/05/90	5.9×10^{-18}	5.8×10^{-18}
Area 5, RWMS TP Northwest	02/05/90	03/06/90	6.1×10^{-18}	6.2×10^{-18}
Area 5, RWMS TP Northwest	03/05/90	04/02/90	8.8×10^{-18}	6.2×10^{-18}
Area 5, RWMS TP Northwest	04/02/90	04/30/90	1.2×10^{-18}	7.8×10^{-18}
Area 5, RWMS TP Northwest	04/30/90	06/05/90	2.9×10^{-17}	5.6×10^{-18}
Area 5, RWMS TP Northwest	06/04/90	07/02/90	2.3×10^{-18}	6.5×10^{-18}
Area 5, RWMS TP Northwest	07/02/90	07/30/90	1.1×10^{-18}	8.4×10^{-18}
Area 5, RWMS TP Northwest	07/30/90	09/04/90	8.9×10^{-18}	6.1×10^{-18}
Area 5, RWMS TP Northwest	09/04/90	10/02/90	-5.2×10^{-19}	5.5×10^{-18}
Area 5, RWMS TP Northwest	10/01/90	10/29/90	3.6×10^{-18}	6.3×10^{-18}
Area 5, RWMS TP Northwest	10/29/90	12/03/90	2.7×10^{-18}	4.6×10^{-18}
Area 5, RWMS TP Northwest	12/03/90	01/02/90	-4.4×10^{-19}	6.0×10^{-18}
Area 5, RWMS TP South	01/02/90	02/05/90	-4.9×10^{-19}	7.3×10^{-18}
Area 5, RWMS TP South	02/05/90	03/06/90	3.8×10^{-18}	6.7×10^{-18}
Area 5, RWMS TP South	03/05/90	04/02/90	3.5×10^{-18}	6.3×10^{-18}
Area 5, RWMS TP South	04/02/90	04/30/90	1.2×10^{-17}	9.6×10^{-18}
Area 5, RWMS TP South	04/30/90	06/05/90	1.5×10^{-17}	5.1×10^{-18}
Area 5, RWMS TP South	06/04/90	07/02/90	3.2×10^{-18}	8.7×10^{-18}
Area 5, RWMS TP South	07/02/90	07/30/90	1.5×10^{-17}	7.7×10^{-18}
Area 5, RWMS TP South	07/30/90	09/04/90	1.8×10^{-17}	5.6×10^{-18}
Area 5, RWMS TP South	09/04/90	10/02/90	1.7×10^{-18}	5.1×10^{-18}
Area 5, RWMS TP South	10/01/90	10/29/90	1.1×10^{-17}	5.7×10^{-18}
Area 5, RWMS TP South	10/29/90	12/03/90	8.4×10^{-18}	3.4×10^{-18}
Area 5, RWMS TP South	12/03/90	01/02/90	2.0×10^{-18}	5.5×10^{-18}
Area 5, RWMS TP Southeast	01/02/90	02/05/90	1.8×10^{-17}	7.1×10^{-18}
Area 5, RWMS TP Southeast	02/05/90	03/06/90	9.3×10^{-18}	7.5×10^{-18}
Area 5, RWMS TP Southeast	03/05/90	04/02/90	5.1×10^{-18}	6.6×10^{-18}
Area 5, RWMS TP Southeast	04/02/90	04/30/90	1.1×10^{-17}	1.0×10^{-17}
Area 5, RWMS TP Southeast	04/30/90	06/05/90	8.8×10^{-18}	5.3×10^{-18}
Area 5, RWMS TP Southeast	06/04/90	07/02/90	-5.0×10^{-19}	7.7×10^{-18}
Area 5, RWMS TP Southeast	07/02/90	07/30/90	2.0×10^{-17}	6.2×10^{-18}
Area 5, RWMS TP Southeast	07/30/90	09/04/90	1.1×10^{-17}	5.1×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Southeast	09/04/90	10/02/90	6.9×10^{-18}	5.7×10^{-18}
Area 5, RWMS TP Southeast	10/01/90	10/29/90	1.9×10^{-18}	5.5×10^{-18}
Area 5, RWMS TP Southeast	10/29/90	12/03/90	2.7×10^{-18}	3.5×10^{-18}
Area 5, RWMS TP Southeast	12/03/90	01/02/90	1.8×10^{-18}	5.1×10^{-18}
Area 5, RWMS TP Southwest	01/02/90	02/05/90	6.9×10^{-18}	4.3×10^{-18}
Area 5, RWMS TP Southwest	02/05/90	03/06/90	2.0×10^{-18}	5.8×10^{-18}
Area 5, RWMS TP Southwest	03/05/90	04/02/90	-5.7×10^{-19}	6.7×10^{-18}
Area 5, RWMS TP Southwest	04/02/90	04/30/90	1.4×10^{-18}	8.8×10^{-18}
Area 5, RWMS TP Southwest	04/30/90	06/05/90	1.8×10^{-17}	5.0×10^{-18}
Area 5, RWMS TP Southwest	06/04/90	07/02/90	1.2×10^{-18}	8.7×10^{-18}
Area 5, RWMS TP Southwest	07/02/90	07/30/90	8.7×10^{-18}	8.5×10^{-18}
Area 5, RWMS TP Southwest	07/30/90	09/04/90	1.0×10^{-17}	1.6×10^{-17}
Area 5, RWMS TP Southwest	09/04/90	10/02/90	4.3×10^{-18}	4.5×10^{-18}
Area 5, RWMS TP Southwest	10/01/90	10/29/90	1.6×10^{-18}	9.2×10^{-18}
Area 5, RWMS TP Southwest	10/29/90	12/03/90	2.3×10^{-18}	4.2×10^{-18}
Area 5, RWMS TP Southwest	12/03/90	01/02/90	4.9×10^{-18}	8.2×10^{-18}
Area 5, Well 5B	01/02/90	02/05/90	3.7×10^{-18}	9.3×10^{-18}
Area 5, Well 5B	02/05/90	03/06/90	9.7×10^{-19}	6.9×10^{-18}
Area 5, Well 5B	04/02/90	04/30/90	2.2×10^{-17}	6.2×10^{-18}
Area 5, Well 5B	04/30/90	06/05/90	4.7×10^{-18}	4.7×10^{-18}
Area 5, Well 5B	06/04/90	07/02/90	-5.3×10^{-19}	1.8×10^{-16}
Area 5, Well 5B	07/02/90	07/30/90	9.9×10^{-19}	6.8×10^{-18}
Area 5, Well 5B	07/30/90	09/04/90	2.1×10^{-18}	1.1×10^{-17}
Area 5, Well 5B	09/04/90	10/02/90	7.8×10^{-19}	5.9×10^{-18}
Area 5, Well 5B	10/01/90	10/29/90	1.0×10^{-18}	6.9×10^{-18}
Area 5, Well 5B	10/29/90	12/03/90	3.2×10^{-18}	5.6×10^{-18}
Area 5, Well 5B	12/03/90	01/02/90	3.8×10^{-18}	6.5×10^{-18}
Area 6, CP-6	01/02/90	02/05/90	5.7×10^{-18}	5.6×10^{-18}
Area 6, CP-6	02/05/90	03/06/90	4.9×10^{-18}	6.3×10^{-18}
Area 6, CP-6	03/05/90	04/02/90	8.9×10^{-18}	7.2×10^{-18}
Area 6, CP-6	04/02/90	04/30/90	5.0×10^{-18}	8.8×10^{-18}
Area 6, CP-6	04/30/90	06/05/90	9.7×10^{-18}	5.1×10^{-18}
Area 6, CP-6	06/04/90	07/02/90	5.0×10^{-18}	8.4×10^{-18}
Area 6, CP-6	07/02/90	07/30/90	4.5×10^{-18}	2.3×10^{-17}
Area 6, CP-6	07/30/90	09/04/90	7.3×10^{-18}	6.9×10^{-18}
Area 6, CP-6	09/04/90	10/02/90	1.9×10^{-18}	5.5×10^{-18}
Area 6, CP-6	10/01/90	10/29/90	2.1×10^{-17}	5.8×10^{-18}
Area 6, CP-6	10/29/90	12/03/90	3.0×10^{-18}	4.0×10^{-18}
Area 6, CP-6	12/03/90	01/02/90	4.4×10^{-18}	5.7×10^{-18}
Area 6, Well 3 Complex	01/02/90	02/05/90	7.5×10^{-18}	9.5×10^{-18}
Area 6, Well 3 Complex	02/05/90	03/06/90	3.9×10^{-18}	2.0×10^{-18}
Area 6, Well 3 Complex	03/05/90	04/02/90	8.1×10^{-18}	8.1×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well 3 Complex	04/02/90	04/30/90	4.7×10^{-17}	6.8×10^{-18}
Area 6, Well 3 Complex	04/30/90	06/05/90	6.8×10^{-19}	5.0×10^{-18}
Area 6, Well 3 Complex	06/04/90	07/02/90	7.8×10^{-18}	6.4×10^{-18}
Area 6, Well 3 Complex	07/02/90	07/30/90	1.5×10^{-17}	5.9×10^{-18}
Area 6, Well 3 Complex	07/30/90	09/04/90	7.7×10^{-18}	4.6×10^{-18}
Area 6, Well 3 Complex	09/04/90	10/02/90	8.1×10^{-18}	5.7×10^{-18}
Area 6, Well 3 Complex	10/01/90	10/29/90	5.2×10^{-17}	5.2×10^{-18}
Area 6, Well 3 Complex	10/29/90	12/03/90	2.7×10^{-18}	4.7×10^{-18}
Area 6, Well 3 Complex	12/03/90	01/02/90	8.0×10^{-18}	4.9×10^{-18}
Area 6, Yucca Complex	01/02/90	02/05/90	1.3×10^{-17}	5.6×10^{-18}
Area 6, Yucca Complex	02/05/90	03/06/90	1.8×10^{-17}	7.5×10^{-18}
Area 6, Yucca Complex	03/05/90	04/02/90	2.6×10^{-17}	6.7×10^{-18}
Area 6, Yucca Complex	04/02/90	04/30/90	-5.5×10^{-19}	8.7×10^{-18}
Area 6, Yucca Complex	04/30/90	06/05/90	1.9×10^{-17}	5.1×10^{-18}
Area 6, Yucca Complex	06/04/90	07/02/90	9.3×10^{-18}	6.4×10^{-18}
Area 6, Yucca Complex	07/02/90	07/30/90	1.2×10^{-17}	5.8×10^{-18}
Area 6, Yucca Complex	07/30/90	09/04/90	9.3×10^{-18}	4.9×10^{-18}
Area 6, Yucca Complex	09/04/90	10/02/90	9.3×10^{-18}	6.4×10^{-18}
Area 6, Yucca Complex	10/01/90	10/29/90	3.8×10^{-17}	4.4×10^{-18}
Area 6, Yucca Complex	10/29/90	12/03/90	1.3×10^{-17}	4.7×10^{-18}
Area 6, Yucca Complex	12/03/90	01/02/90	9.5×10^{-18}	5.8×10^{-18}
Area 7, Ue7ns	01/02/90	02/05/90	1.6×10^{-17}	6.2×10^{-18}
Area 7, Ue7ns	02/05/90	03/06/90	1.1×10^{-17}	7.5×10^{-18}
Area 7, Ue7ns	03/05/90	04/02/90	9.2×10^{-18}	6.5×10^{-18}
Area 7, Ue7ns	04/02/90	04/30/90	8.3×10^{-18}	6.8×10^{-18}
Area 7, Ue7ns	04/30/90	06/05/90	4.1×10^{-17}	1.0×10^{-17}
Area 7, Ue7ns	07/02/90	07/30/90	1.6×10^{-17}	8.4×10^{-18}
Area 7, Ue7ns	07/30/90	09/04/90	-8.3×10^{-19}	2.7×10^{-17}
Area 7, Ue7ns	09/04/90	10/02/90	1.0×10^{-17}	1.2×10^{-17}
Area 7, Ue7ns	10/01/90	10/29/90	1.4×10^{-17}	8.4×10^{-18}
Area 7, Ue7ns	10/29/90	12/03/90	3.3×10^{-17}	7.2×10^{-18}
Area 7, Ue7ns	12/03/90	01/02/90	9.4×10^{-18}	9.2×10^{-18}
Area 9, 9-300 Bunker	01/02/90	02/05/90	2.8×10^{-17}	7.1×10^{-18}
Area 9, 9-300 Bunker	02/05/90	03/06/90	1.4×10^{-16}	7.3×10^{-18}
Area 9, 9-300 Bunker	03/05/90	04/02/90	9.3×10^{-17}	6.9×10^{-18}
Area 9, 9-300 Bunker	04/02/90	04/30/90	4.7×10^{-17}	6.6×10^{-18}
Area 9, 9-300 Bunker	04/30/90	06/05/90	2.3×10^{-16}	5.2×10^{-18}
Area 9, 9-300 Bunker	06/04/90	07/02/90	8.9×10^{-17}	6.3×10^{-18}
Area 9, 9-300 Bunker	07/02/90	07/30/90	9.8×10^{-17}	5.7×10^{-18}
Area 9, 9-300 Bunker	07/30/90	09/04/90	4.3×10^{-16}	4.9×10^{-18}
Area 9, 9-300 Bunker	09/04/90	10/02/90	1.2×10^{-16}	6.7×10^{-18}
Area 9, 9-300 Bunker	10/01/90	10/29/90	3.6×10^{-16}	4.6×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 9, 9-300 Bunker	10/29/90	12/03/90	5.0×10^{-16}	5.2×10^{-18}
Area 9, 9-300 Bunker	12/03/90	01/02/90	2.1×10^{-16}	5.6×10^{-18}
Area 10, Gate 700 South	01/02/90	02/05/90	3.0×10^{-18}	5.3×10^{-18}
Area 10, Gate 700 South	02/05/90	03/06/90	1.6×10^{-17}	7.3×10^{-18}
Area 10, Gate 700 South	03/05/90	04/02/90	4.2×10^{-17}	8.9×10^{-18}
Area 10, Gate 700 South	04/02/90	04/30/90	8.4×10^{-18}	6.9×10^{-18}
Area 10, Gate 700 South	04/30/90	06/05/90	4.4×10^{-18}	5.5×10^{-18}
Area 10, Gate 700 South	06/04/90	07/02/90	1.4×10^{-17}	1.1×10^{-17}
Area 10, Gate 700 South	07/02/90	07/30/90	8.9×10^{-18}	7.1×10^{-18}
Area 10, Gate 700 South	07/30/90	09/04/90	1.4×10^{-17}	4.7×10^{-18}
Area 10, Gate 700 South	09/04/90	10/02/90	1.2×10^{-17}	6.2×10^{-18}
Area 10, Gate 700 South	10/01/90	10/29/90	7.5×10^{-18}	6.1×10^{-18}
Area 10, Gate 700 South	10/29/90	12/03/90	6.3×10^{-18}	4.4×10^{-18}
Area 10, Gate 700 South	12/03/90	01/02/90	7.4×10^{-19}	5.7×10^{-18}
Area 11, Gate 293	01/02/90	02/05/90	7.6×10^{-19}	5.6×10^{-18}
Area 11, Gate 293	02/05/90	03/06/90	-5.5×10^{-19}	7.3×10^{-18}
Area 11, Gate 293	03/05/90	04/02/90	9.0×10^{-19}	6.6×10^{-18}
Area 11, Gate 293	04/02/90	04/30/90	7.0×10^{-18}	5.8×10^{-18}
Area 11, Gate 293	04/30/90	06/05/90	9.1×10^{-18}	4.4×10^{-18}
Area 11, Gate 293	06/04/90	07/02/90	7.8×10^{-17}	1.5×10^{-17}
Area 11, Gate 293	07/02/90	07/30/90	1.1×10^{-16}	5.4×10^{-18}
Area 11, Gate 293	07/30/90	09/04/90	5.7×10^{-18}	4.6×10^{-18}
Area 11, Gate 293	09/04/90	10/02/90	4.8×10^{-18}	6.1×10^{-18}
Area 11, Gate 293	10/01/90	10/29/90	1.0×10^{-17}	9.6×10^{-18}
Area 11, Gate 293	10/29/90	12/03/90	9.9×10^{-19}	1.2×10^{-18}
Area 11, Gate 293	12/03/90	01/02/90	1.8×10^{-18}	5.3×10^{-18}
Area 12, Complex	01/02/90	02/05/90	1.0×10^{-17}	7.0×10^{-18}
Area 12, Complex	02/05/90	03/06/90	1.2×10^{-18}	8.1×10^{-18}
Area 12, Complex	03/05/90	04/02/90	2.8×10^{-18}	7.7×10^{-18}
Area 12, Complex	04/02/90	04/30/90	2.8×10^{-18}	7.6×10^{-18}
Area 12, Complex	04/30/90	06/05/90	2.9×10^{-18}	5.1×10^{-18}
Area 12, Complex	06/04/90	07/02/90	4.9×10^{-18}	8.1×10^{-18}
Area 12, Complex	07/02/90	07/30/90	1.8×10^{-18}	5.3×10^{-18}
Area 12, Complex	07/30/90	09/04/90	3.9×10^{-18}	4.9×10^{-18}
Area 12, Complex	09/04/90	10/02/90	7.1×10^{-19}	5.7×10^{-18}
Area 12, Complex	10/01/90	10/29/90	-2.6×10^{-18}	4.4×10^{-17}
Area 12, Complex	10/29/90	12/03/90	1.5×10^{-18}	4.3×10^{-18}
Area 12, Complex	12/03/90	01/02/90	2.2×10^{-18}	6.1×10^{-18}
Area 15, EPA Farm	01/02/90	02/05/90	1.4×10^{-17}	7.5×10^{-18}
Area 15, EPA Farm	02/05/90	03/06/90	2.0×10^{-17}	7.2×10^{-18}
Area 15, EPA Farm	03/05/90	04/02/90	3.7×10^{-18}	9.9×10^{-18}
Area 15, EPA Farm	04/02/90	04/30/90	1.4×10^{-17}	8.1×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, EPA Farm	04/30/90	06/05/90	1.3×10^{-17}	4.4×10^{-18}
Area 15, EPA Farm	06/04/90	07/02/90	1.6×10^{-17}	7.5×10^{-18}
Area 15, EPA Farm	07/02/90	07/30/90	3.1×10^{-17}	6.1×10^{-18}
Area 15, EPA Farm	07/30/90	09/04/90	1.5×10^{-16}	4.9×10^{-18}
Area 15, EPA Farm	09/04/90	10/02/90	2.7×10^{-17}	9.6×10^{-18}
Area 15, EPA Farm	10/01/90	10/29/90	1.2×10^{-17}	7.3×10^{-18}
Area 15, EPA Farm	10/29/90	12/03/90	7.2×10^{-17}	4.7×10^{-18}
Area 15, EPA Farm	12/03/90	01/02/90	2.6×10^{-17}	5.8×10^{-18}
Area 15, PILEDRIVER	01/02/90	02/05/90	2.2×10^{-18}	6.2×10^{-18}
Area 15, PILEDRIVER	02/05/90	03/06/90	2.9×10^{-18}	8.0×10^{-18}
Area 15, PILEDRIVER	03/05/90	04/02/90	1.1×10^{-18}	7.9×10^{-18}
Area 15, PILEDRIVER	04/02/90	04/30/90	4.7×10^{-18}	8.0×10^{-18}
Area 15, PILEDRIVER	04/30/90	06/05/90	1.2×10^{-17}	5.7×10^{-18}
Area 15, PILEDRIVER	07/02/90	07/30/90	8.0×10^{-18}	9.6×10^{-18}
Area 15, PILEDRIVER	07/30/90	09/04/90	1.3×10^{-17}	7.4×10^{-18}
Area 15, PILEDRIVER	09/04/90	10/02/90	1.1×10^{-18}	7.4×10^{-18}
Area 15, PILEDRIVER	10/01/90	10/29/90	2.8×10^{-18}	5.2×10^{-18}
Area 15, PILEDRIVER	10/29/90	12/03/90	-4.3×10^{-19}	5.2×10^{-18}
Area 15, PILEDRIVER	12/03/90	01/02/90	1.2×10^{-18}	7.9×10^{-18}
Area 16, 3545 Substation	01/02/90	02/05/90	10.0×10^{-19}	6.8×10^{-18}
Area 16, 3545 Substation	02/05/90	03/06/90	4.6×10^{-18}	3.1×10^{-18}
Area 16, 3545 Substation	03/05/90	04/02/90	5.8×10^{-18}	7.3×10^{-18}
Area 16, 3545 Substation	04/02/90	04/30/90	2.1×10^{-18}	6.2×10^{-18}
Area 16, 3545 Substation	04/30/90	06/05/90	1.0×10^{-18}	6.7×10^{-18}
Area 16, 3545 Substation	06/04/90	07/02/90	-5.3×10^{-19}	7.0×10^{-18}
Area 16, 3545 Substation	07/02/90	07/30/90	2.2×10^{-18}	6.3×10^{-18}
Area 16, 3545 Substation	07/30/90	09/04/90	3.2×10^{-18}	5.5×10^{-18}
Area 16, 3545 Substation	09/04/90	10/02/90	5.6×10^{-19}	5.1×10^{-18}
Area 16, 3545 Substation	10/01/90	10/29/90	7.0×10^{-19}	5.6×10^{-18}
Area 16, 3545 Substation	10/29/90	12/03/90	2.5×10^{-18}	4.4×10^{-18}
Area 16, 3545 Substation	12/03/90	01/02/90	7.5×10^{-19}	5.5×10^{-18}
Area 19, Echo Peak	01/02/90	02/05/90	4.7×10^{-18}	5.8×10^{-18}
Area 19, Echo Peak	02/05/90	03/06/90	5.0×10^{-18}	8.6×10^{-18}
Area 19, Echo Peak	03/05/90	04/02/90	3.7×10^{-18}	4.8×10^{-18}
Area 19, Echo Peak	04/02/90	04/30/90	2.1×10^{-18}	6.1×10^{-18}
Area 19, Echo Peak	04/30/90	06/05/90	1.1×10^{-17}	5.8×10^{-18}
Area 19, Echo Peak	06/04/90	07/02/90	-6.2×10^{-19}	1.1×10^{-17}
Area 19, Echo Peak	07/02/90	07/30/90	3.4×10^{-18}	6.0×10^{-18}
Area 19, Echo Peak	07/30/90	09/04/90	3.7×10^{-18}	4.7×10^{-18}
Area 19, Echo Peak	09/04/90	10/02/90	3.2×10^{-18}	5.6×10^{-18}
Area 19, Echo Peak	10/01/90	10/29/90	6.9×10^{-18}	8.3×10^{-18}
Area 19, Echo Peak	10/29/90	12/03/90	-3.8×10^{-19}	4.4×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 19, Echo Peak	12/03/90	01/02/90	-4.8×10^{-19}	7.9×10^{-18}
Area 19, Pahute Substation	01/02/90	02/05/90	2.5×10^{-18}	6.8×10^{-18}
Area 19, Pahute Substation	02/05/90	03/06/90	3.8×10^{-18}	1.0×10^{-17}
Area 19, Pahute Substation	03/05/90	04/02/90	3.9×10^{-18}	6.9×10^{-18}
Area 19, Pahute Substation	04/02/90	04/30/90	1.2×10^{-18}	8.0×10^{-18}
Area 19, Pahute Substation	04/30/90	06/05/90	2.3×10^{-18}	4.2×10^{-18}
Area 19, Pahute Substation	06/04/90	07/02/90	-5.2×10^{-19}	2.7×10^{-17}
Area 19, Pahute Substation	07/02/90	07/30/90	2.0×10^{-18}	5.7×10^{-18}
Area 19, Pahute Substation	07/30/90	09/04/90	2.2×10^{-18}	6.1×10^{-18}
Area 19, Pahute Substation	09/04/90	10/02/90	3.4×10^{-18}	8.9×10^{-18}
Area 19, Pahute Substation	10/01/90	10/29/90	2.7×10^{-18}	5.0×10^{-18}
Area 19, Pahute Substation	10/29/90	12/03/90	1.6×10^{-18}	4.6×10^{-18}
Area 19, Pahute Substation	12/03/90	01/02/90	9.0×10^{-19}	6.4×10^{-18}
Area 20, Dispensary	01/02/90	02/05/90	9.6×10^{-18}	5.7×10^{-18}
Area 20, Dispensary	02/05/90	03/06/90	1.7×10^{-17}	7.2×10^{-18}
Area 20, Dispensary	03/05/90	04/02/90	4.8×10^{-18}	8.1×10^{-18}
Area 20, Dispensary	04/02/90	04/30/90	3.9×10^{-18}	6.7×10^{-18}
Area 20, Dispensary	04/30/90	06/05/90	1.1×10^{-17}	4.5×10^{-18}
Area 20, Dispensary	06/04/90	07/02/90	6.2×10^{-18}	6.2×10^{-18}
Area 20, Dispensary	07/02/90	07/30/90	3.7×10^{-18}	6.4×10^{-18}
Area 20, Dispensary	07/30/90	09/04/90	9.8×10^{-18}	5.8×10^{-18}
Area 20, Dispensary	09/04/90	10/02/90	2.0×10^{-18}	5.7×10^{-18}
Area 20, Dispensary	10/01/90	10/29/90	3.5×10^{-18}	6.0×10^{-18}
Area 20, Dispensary	10/29/90	12/03/90	7.1×10^{-18}	5.8×10^{-18}
Area 20, Dispensary	12/03/90	01/02/90	1.9×10^{-18}	5.5×10^{-18}
Area 23, Building 790	01/02/90	02/05/90	6.7×10^{-19}	5.2×10^{-18}
Area 23, Building 790	02/05/90	03/06/90	3.5×10^{-18}	9.2×10^{-18}
Area 23, Building 790	03/05/90	04/02/90	7.7×10^{-19}	6.2×10^{-18}
Area 23, Building 790	04/02/90	04/30/90	3.6×10^{-18}	9.3×10^{-18}
Area 23, Building 790	04/30/90	06/05/90	2.2×10^{-18}	5.9×10^{-18}
Area 23, Building 790	06/04/90	07/02/90	1.4×10^{-17}	8.0×10^{-18}
Area 23, Building 790	07/02/90	07/30/90	5.0×10^{-17}	6.0×10^{-18}
Area 23, Building 790	07/30/90	09/04/90	6.3×10^{-18}	4.4×10^{-18}
Area 23, Building 790	09/04/90	10/02/90	6.2×10^{-19}	5.2×10^{-18}
Area 23, Building 790	10/01/90	10/29/90	1.6×10^{-18}	4.7×10^{-18}
Area 23, Building 790	10/29/90	12/03/90	2.7×10^{-18}	4.6×10^{-18}
Area 23, Building 790	12/03/90	01/02/90	2.7×10^{-18}	7.1×10^{-18}
Area 23, Building 790 No. 2	01/02/90	02/05/90	8.2×10^{-18}	5.7×10^{-18}
Area 23, Building 790 No. 2	02/05/90	03/06/90	-5.6×10^{-19}	5.8×10^{-18}
Area 23, Building 790 No. 2	03/05/90	04/02/90	-5.9×10^{-19}	7.0×10^{-18}
Area 23, Building 790 No. 2	04/02/90	04/30/90	9.5×10^{-19}	6.9×10^{-18}
Area 23, Building 790 No. 2	04/30/90	06/05/90	3.8×10^{-18}	4.8×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Building 790 No. 2	06/04/90	07/02/90	8.6×10^{-18}	1.0×10^{-17}
Area 23, Building 790 No. 2	07/02/90	07/30/90	9.8×10^{-18}	9.3×10^{-18}
Area 23, Building 790 No. 2	07/30/90	09/04/90	3.7×10^{-18}	3.9×10^{-18}
Area 23, Building 790 No. 2	09/04/90	10/02/90	6.0×10^{-19}	5.3×10^{-18}
Area 23, Building 790 No. 2	10/01/90	10/29/90	5.8×10^{-18}	9.5×10^{-18}
Area 23, Building 790 No. 2	10/29/90	12/03/90	1.8×10^{-18}	5.1×10^{-18}
Area 23, Building 790 No. 2	12/03/90	01/02/90	5.1×10^{-18}	8.8×10^{-18}
Area 23, East Boundary	01/02/90	02/05/90	3.3×10^{-18}	8.4×10^{-18}
Area 23, East Boundary	02/05/90	03/06/90	8.2×10^{-19}	6.2×10^{-18}
Area 23, East Boundary	03/05/90	04/02/90	2.9×10^{-18}	7.9×10^{-18}
Area 23, East Boundary	04/02/90	04/30/90	2.9×10^{-18}	7.9×10^{-18}
Area 23, East Boundary	04/30/90	06/05/90	2.4×10^{-18}	6.3×10^{-18}
Area 23, East Boundary	07/02/90	07/30/90	1.7×10^{-18}	5.0×10^{-18}
Area 23, East Boundary	07/30/90	09/04/90	1.1×10^{-17}	6.4×10^{-18}
Area 23, East Boundary	09/04/90	10/02/90	3.5×10^{-17}	6.5×10^{-18}
Area 23, East Boundary	10/01/90	10/29/90	4.7×10^{-18}	6.0×10^{-18}
Area 23, East Boundary	10/29/90	12/03/90	1.5×10^{-18}	4.3×10^{-18}
Area 23, East Boundary	12/03/90	01/02/90	1.2×10^{-18}	7.7×10^{-18}
Area 23, H&S Building Roof	01/02/90	02/05/90	3.4×10^{-17}	7.4×10^{-18}
Area 23, H&S Building Roof	02/05/90	3/06/90	4.3×10^{-18}	1.1×10^{-17}
Area 23, H&S Building Roof	03/05/90	04/02/90	4.2×10^{-18}	7.3×10^{-18}
Area 23, H&S Building Roof	04/02/90	04/30/90	-4.9×10^{-19}	6.6×10^{-18}
Area 23, H&S Building Roof	04/30/90	06/05/90	6.5×10^{-19}	5.0×10^{-18}
Area 23, H&S Building Roof	06/04/90	07/02/90	1.4×10^{-18}	8.7×10^{-18}
Area 23, H&S Building Roof	07/02/90	07/30/90	-5.5×10^{-19}	5.9×10^{-18}
Area 23, H&S Building Roof	07/30/90	09/04/90	2.9×10^{-18}	5.2×10^{-18}
Area 23, H&S Building Roof	09/04/90	10/02/90	6.3×10^{-18}	5.2×10^{-18}
Area 23, H&S Building Roof	10/01/90	10/29/90	2.4×10^{-16}	3.7×10^{-17}
Area 23, H&S Building Roof	10/29/90	12/03/90	4.7×10^{-19}	3.9×10^{-18}
Area 23, H&S Building Roof	12/03/90	01/02/90	2.2×10^{-18}	6.2×10^{-18}
Area 25, E-MAD North	01/02/90	02/05/90	8.0×10^{-18}	7.9×10^{-18}
Area 25, E-MAD North	02/05/90	03/06/90	-6.3×10^{-19}	7.0×10^{-18}
Area 25, E-MAD North	03/05/90	04/02/90	1.8×10^{-17}	1.1×10^{-17}
Area 25, E-MAD North	04/02/90	04/30/90	1.2×10^{-18}	8.6×10^{-18}
Area 25, E-MAD North	04/30/90	06/05/90	4.8×10^{-18}	8.2×10^{-18}
Area 25, E-MAD North	06/04/90	07/02/90	2.8×10^{-18}	7.6×10^{-18}
Area 25, E-MAD North	07/02/90	07/30/90	7.6×10^{-19}	5.8×10^{-18}
Area 25, E-MAD North	07/30/90	09/04/90	5.2×10^{-19}	4.2×10^{-18}
Area 25, E-MAD North	09/04/90	10/02/90	6.0×10^{-19}	5.2×10^{-18}
Area 25, E-MAD North	10/01/90	10/29/90	1.5×10^{-17}	7.2×10^{-18}
Area 25, E-MAD North	10/29/90	12/03/90	-4.0×10^{-19}	4.3×10^{-18}
Area 25, E-MAD North	12/03/90	01/02/90	1.4×10^{-18}	8.6×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, NRDS Warehouse	01/02/90	02/05/90	4.3×10^{-18}	5.6×10^{-18}
Area 25, NRDS Warehouse	02/05/90	03/06/90	9.4×10^{-19}	7.0×10^{-18}
Area 25, NRDS Warehouse	03/05/90	04/02/90	-6.8×10^{-19}	7.4×10^{-18}
Area 25, NRDS Warehouse	04/02/90	04/30/90	1.3×10^{-18}	8.4×10^{-18}
Area 25, NRDS Warehouse	04/30/90	06/05/90	3.5×10^{-18}	6.0×10^{-18}
Area 25, NRDS Warehouse	06/04/90	07/02/90	3.1×10^{-18}	8.3×10^{-18}
Area 25, NRDS Warehouse	07/02/90	07/30/90	5.9×10^{-19}	5.0×10^{-18}
Area 25, NRDS Warehouse	07/30/90	09/04/90	-4.0×10^{-19}	6.1×10^{-18}
Area 25, NRDS Warehouse	09/04/90	10/02/90	7.5×10^{-19}	5.9×10^{-18}
Area 25, NRDS Warehouse	10/01/90	10/29/90	3.0×10^{-18}	1.6×10^{-17}
Area 25, NRDS Warehouse	10/29/90	12/03/90	1.8×10^{-18}	5.0×10^{-18}
Area 25, NRDS Warehouse	12/03/90	01/02/90	-4.9×10^{-19}	5.9×10^{-18}
Area 27, Cafeteria	01/02/90	02/05/90	4.1×10^{-18}	5.5×10^{-18}
Area 27, Cafeteria	02/05/90	03/06/90	-6.4×10^{-19}	7.5×10^{-18}
Area 27, Cafeteria	03/05/90	04/02/90	-8.5×10^{-19}	1.1×10^{-17}
Area 27, Cafeteria	04/02/90	04/30/90	2.3×10^{-19}	2.0×10^{-18}
Area 27, Cafeteria	04/30/90	06/05/90	4.3×10^{-18}	7.3×10^{-18}
Area 27, Cafeteria	06/04/90	07/02/90	1.4×10^{-18}	9.1×10^{-18}
Area 27, Cafeteria	07/02/90	07/30/90	3.5×10^{-17}	6.6×10^{-18}
Area 27, Cafeteria	07/30/90	09/04/90	6.9×10^{-18}	5.6×10^{-18}
Area 27, Cafeteria	09/04/90	10/02/90	4.6×10^{-18}	6.0×10^{-18}
Area 27, Cafeteria	10/01/90	10/29/90	2.7×10^{-17}	6.0×10^{-18}
Area 27, Cafeteria	10/29/90	12/03/90	3.1×10^{-18}	5.3×10^{-18}
Area 27, Cafeteria	12/03/90	01/02/90	7.0×10^{-19}	5.6×10^{-18}

Attachment A.3 Gross Beta in Air - 1990

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	01/02/90	01/08/90	1.4×10^{-14}	1.6×10^{-15}
Area 1, BJY	01/08/90	01/16/90	1.4×10^{-14}	1.2×10^{-15}
Area 1, BJY	01/16/90	01/23/90	2.5×10^{-14}	1.4×10^{-15}
Area 1, BJY	01/23/90	01/29/90	1.1×10^{-14}	1.5×10^{-15}
Area 1, BJY	01/29/90	02/05/90	7.6×10^{-15}	1.3×10^{-15}
Area 1, BJY	02/05/90	02/12/90	1.3×10^{-14}	1.3×10^{-15}
Area 1, BJY	02/12/90	02/20/90	1.2×10^{-14}	1.2×10^{-15}
Area 1, BJY	02/20/90	02/26/90	1.3×10^{-14}	1.5×10^{-15}
Area 1, BJY	02/26/90	03/05/90	2.6×10^{-14}	1.3×10^{-15}
Area 1, BJY	03/05/90	03/12/90	1.7×10^{-14}	1.3×10^{-15}
Area 1, BJY	03/12/90	03/19/90	9.6×10^{-15}	1.3×10^{-15}
Area 1, BJY	03/19/90	03/26/90	1.5×10^{-14}	1.3×10^{-15}
Area 1, BJY	03/26/90	04/02/90	2.0×10^{-14}	1.3×10^{-15}
Area 1, BJY	04/02/90	04/09/90	1.9×10^{-14}	1.3×10^{-15}
Area 1, BJY	04/09/90	04/16/90	1.6×10^{-14}	1.3×10^{-15}
Area 1, BJY	04/16/90	04/23/90	1.2×10^{-14}	1.3×10^{-15}
Area 1, BJY	04/23/90	04/30/90	1.2×10^{-14}	1.3×10^{-15}
Area 1, BJY	04/30/90	05/07/90	1.5×10^{-14}	1.3×10^{-15}
Area 1, BJY	05/07/90	05/14/90	2.8×10^{-14}	2.6×10^{-15}
Area 1, BJY	05/14/90	05/21/90	1.6×10^{-14}	1.3×10^{-15}
Area 1, BJY	05/21/90	05/29/90	2.6×10^{-14}	1.2×10^{-15}
Area 1, BJY	05/29/90	06/05/90	1.1×10^{-14}	1.3×10^{-15}
Area 1, BJY	06/05/90	06/11/90	1.3×10^{-14}	1.6×10^{-15}
Area 1, BJY	06/11/90	06/18/90	1.5×10^{-14}	1.3×10^{-15}
Area 1, BJY	06/18/90	06/25/90	1.6×10^{-14}	1.3×10^{-15}
Area 1, BJY	06/25/90	07/02/90	1.6×10^{-14}	1.3×10^{-15}
Area 1, BJY	07/02/90	07/09/90	1.2×10^{-14}	1.3×10^{-15}
Area 1, BJY	07/09/90	07/16/90	1.6×10^{-14}	1.4×10^{-15}
Area 1, BJY	07/16/90	07/23/90	1.5×10^{-14}	1.3×10^{-15}
Area 1, BJY	07/23/90	07/30/90	1.8×10^{-14}	1.3×10^{-15}
Area 1, BJY	07/30/90	08/06/90	2.0×10^{-14}	1.3×10^{-15}
Area 1, BJY	08/06/90	08/13/90	1.8×10^{-14}	1.3×10^{-15}
Area 1, BJY	08/13/90	08/20/90	1.1×10^{-14}	1.4×10^{-15}
Area 1, BJY	08/20/90	08/27/90	1.4×10^{-14}	1.3×10^{-15}
Area 1, BJY	08/27/90	09/04/90	1.4×10^{-14}	1.1×10^{-15}
Area 1, BJY	09/04/90	09/10/90	1.7×10^{-14}	1.5×10^{-15}
Area 1, BJY	09/10/90	09/17/90	1.5×10^{-14}	1.3×10^{-15}
Area 1, BJY	09/17/90	09/24/90	1.8×10^{-14}	1.3×10^{-15}
Area 1, BJY	09/24/90	10/01/90	2.1×10^{-14}	1.3×10^{-15}
Area 1, BJY	10/01/90	10/08/90	1.9×10^{-14}	1.3×10^{-15}
Area 1, BJY	10/08/90	10/15/90	2.2×10^{-14}	1.4×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	10/15/90	10/22/90	2.1×10^{-14}	1.5×10^{-15}
Area 1, BJY	10/22/90	10/29/90	2.9×10^{-14}	1.5×10^{-15}
Area 1, BJY	10/29/90	11/05/90	1.4×10^{-14}	1.5×10^{-15}
Area 1, BJY	11/05/90	11/13/90	1.2×10^{-14}	1.3×10^{-15}
Area 1, BJY	11/13/90	11/19/90	2.9×10^{-14}	1.6×10^{-15}
Area 1, BJY	11/13/90	11/19/90	3.0×10^{-14}	1.6×10^{-15}
Area 1, BJY	11/19/90	11/26/90	1.6×10^{-14}	1.5×10^{-15}
Area 1, BJY	11/26/90	12/03/90	1.5×10^{-14}	1.4×10^{-15}
Area 1, BJY	12/03/90	12/10/90	1.9×10^{-14}	1.4×10^{-15}
Area 1, BJY	12/10/90	12/17/90	2.1×10^{-14}	1.6×10^{-15}
Area 1, BJY	12/17/90	12/24/90	1.8×10^{-14}	1.5×10^{-15}
Area 1, BJY	12/24/90	12/31/90	1.8×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	01/02/90	01/08/90	1.8×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	01/08/90	01/16/90	1.6×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	01/16/90	01/23/90	1.8×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	01/23/90	01/29/90	1.3×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	01/29/90	02/05/90	9.5×10^{-15}	1.2×10^{-15}
Area 1, Gravel Pit	02/05/90	02/12/90	1.2×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	02/12/90	02/20/90	1.2×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	02/20/90	02/27/90	1.5×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	02/27/90	03/05/90	1.3×10^{-14}	7.2×10^{-16}
Area 1, Gravel Pit	03/05/90	03/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	03/12/90	03/19/90	1.1×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	03/19/90	03/26/90	1.9×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	03/26/90	04/02/90	2.2×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	04/02/90	04/09/90	2.5×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	04/09/90	04/16/90	2.3×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	04/16/90	04/23/90	1.7×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	04/23/90	04/30/90	1.1×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	04/30/90	05/07/90	2.0×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	05/07/90	05/14/90	3.8×10^{-14}	2.8×10^{-15}
Area 1, Gravel Pit	05/14/90	05/21/90	1.9×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	05/21/90	05/29/90	1.1×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	05/29/90	06/04/90	1.2×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	06/04/90	06/11/90	1.2×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	06/11/90	06/19/90	1.5×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	06/19/90	06/25/90	2.0×10^{-14}	1.5×10^{-15}
Area 1, Gravel Pit	06/25/90	07/02/90	1.9×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	07/02/90	07/09/90	1.3×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	07/09/90	07/16/90	2.6×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	07/16/90	07/23/90	1.7×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	07/23/90	07/30/90	2.0×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Gravel Pit	07/30/90	08/05/90	2.2×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	08/05/90	08/14/90	2.1×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	08/14/90	08/20/90	1.6×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	08/20/90	08/28/90	1.4×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	08/28/90	09/04/90	2.7×10^{-14}	8.8×10^{-15}
Area 1, Gravel Pit	09/04/90	09/10/90	2.2×10^{-14}	2.7×10^{-15}
Area 1, Gravel Pit	09/10/90	09/17/90	1.5×10^{-14}	2.3×10^{-15}
Area 1, Gravel Pit	09/17/90	09/24/90	2.1×10^{-14}	2.4×10^{-15}
Area 1, Gravel Pit	09/24/90	10/01/90	2.3×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	10/08/90	10/16/90	2.3×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	10/16/90	10/22/90	2.0×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	10/22/90	10/29/90	2.8×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	10/29/90	11/06/90	1.6×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	11/06/90	11/13/90	1.5×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	11/13/90	11/19/90	3.7×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	11/13/90	11/19/90	3.5×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	11/19/90	11/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	11/26/90	12/03/90	1.5×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	12/03/90	12/10/90	2.2×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	12/10/90	12/17/90	2.4×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	12/17/90	12/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	12/24/90	12/31/90	2.1×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	01/02/90	01/08/90	1.7×10^{-14}	1.5×10^{-15}
Area 2, 2-1 Substation	01/08/90	01/16/90	1.7×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	01/16/90	01/23/90	2.3×10^{-14}	1.4×10^{-15}
Area 2, 2-1 Substation	01/23/90	01/29/90	1.1×10^{-14}	1.5×10^{-15}
Area 2, 2-1 Substation	01/29/90	02/05/90	8.5×10^{-15}	1.3×10^{-15}
Area 2, 2-1 Substation	02/05/90	02/12/90	1.4×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	02/12/90	02/20/90	1.2×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	02/20/90	02/26/90	1.8×10^{-14}	1.5×10^{-15}
Area 2, 2-1 Substation	02/26/90	03/05/90	2.8×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	03/05/90	03/12/90	1.5×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	03/12/90	03/19/90	1.2×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	03/19/90	03/26/90	2.0×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	03/26/90	04/02/90	2.5×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	04/02/90	04/09/90	2.4×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	04/09/90	04/16/90	2.3×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	04/16/90	04/23/90	1.5×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	04/23/90	04/30/90	1.4×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	04/30/90	05/07/90	1.5×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	05/07/90	05/14/90	4.0×10^{-14}	2.9×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, 2-1 Substation	05/14/90	05/21/90	2.1×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	05/21/90	05/29/90	1.9×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	05/29/90	06/05/90	1.2×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	06/05/90	06/11/90	1.4×10^{-14}	1.5×10^{-15}
Area 2, 2-1 Substation	06/11/90	06/18/90	1.5×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	06/18/90	06/25/90	2.3×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	06/25/90	07/02/90	1.8×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	07/02/90	07/09/90	1.6×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	07/09/90	07/16/90	1.8×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	07/16/90	07/23/90	1.7×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	07/23/90	07/30/90	2.1×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	07/30/90	08/06/90	2.3×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	08/06/90	08/13/90	2.2×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	08/13/90	08/20/90	1.7×10^{-14}	7.0×10^{-15}
Area 2, 2-1 Substation	08/20/90	08/27/90	1.4×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	08/27/90	09/04/90	1.6×10^{-14}	9.9×10^{-16}
Area 2, 2-1 Substation	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	09/10/90	09/17/90	1.5×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	09/24/90	10/01/90	2.3×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	10/01/90	10/08/90	2.3×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	10/08/90	10/15/90	2.4×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	10/15/90	10/22/90	2.7×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	10/22/90	10/29/90	2.1×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	10/29/90	11/05/90	1.7×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	11/05/90	11/13/90	1.5×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	11/13/90	11/19/90	3.8×10^{-14}	1.4×10^{-15}
Area 2, 2-1 Substation	11/13/90	11/19/90	3.9×10^{-14}	1.3×10^{-15}
Area 2, 2-1 Substation	11/19/90	11/26/90	1.9×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	11/26/90	12/03/90	2.1×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	12/03/90	12/11/90	2.3×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	12/10/90	12/17/90	2.5×10^{-14}	1.4×10^{-15}
Area 2, 2-1 Substation	12/17/90	12/24/90	2.1×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	12/24/90	12/31/90	2.4×10^{-14}	1.1×10^{-15}
Area 2, Complex	01/02/90	01/08/90	1.8×10^{-14}	1.6×10^{-15}
Area 2, Complex	01/08/90	01/16/90	1.8×10^{-14}	9.9×10^{-16}
Area 2, Complex	01/16/90	01/23/90	2.1×10^{-14}	1.1×10^{-15}
Area 2, Complex	01/23/90	01/29/90	1.1×10^{-14}	1.3×10^{-15}
Area 2, Complex	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 2, Complex	02/05/90	02/12/90	1.1×10^{-14}	1.1×10^{-15}
Area 2, Complex	02/12/90	02/20/90	1.0×10^{-14}	9.8×10^{-16}
Area 2, Complex	02/20/90	02/26/90	1.5×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Complex	02/26/90	03/05/90	2.7×10^{-14}	1.1×10^{-15}
Area 2, Complex	03/05/90	03/12/90	1.2×10^{-14}	1.1×10^{-15}
Area 2, Complex	03/12/90	03/19/90	9.4×10^{-15}	1.1×10^{-15}
Area 2, Complex	03/19/90	03/26/90	1.7×10^{-14}	1.1×10^{-15}
Area 2, Complex	03/26/90	04/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 2, Complex	04/02/90	04/09/90	2.2×10^{-14}	1.1×10^{-15}
Area 2, Complex	04/09/90	04/16/90	3.1×10^{-14}	2.7×10^{-15}
Area 2, Complex	05/14/90	05/21/90	2.1×10^{-14}	1.2×10^{-15}
Area 2, Complex	05/21/90	05/29/90	1.5×10^{-14}	1.1×10^{-15}
Area 2, Complex	05/29/90	06/05/90	1.3×10^{-14}	1.2×10^{-15}
Area 2, Complex	06/05/90	06/11/90	1.2×10^{-14}	1.4×10^{-15}
Area 2, Complex	06/11/90	06/18/90	1.5×10^{-14}	1.2×10^{-15}
Area 2, Complex	06/18/90	06/25/90	1.9×10^{-14}	1.2×10^{-15}
Area 2, Complex	06/25/90	07/02/90	1.7×10^{-14}	1.2×10^{-15}
Area 2, Complex	07/02/90	07/09/90	1.4×10^{-14}	1.2×10^{-15}
Area 2, Complex	07/09/90	07/16/90	1.7×10^{-14}	1.2×10^{-15}
Area 2, Complex	07/16/90	07/23/90	1.8×10^{-14}	1.2×10^{-15}
Area 2, Complex	07/23/90	07/30/90	1.8×10^{-14}	1.2×10^{-15}
Area 2, Complex	07/30/90	08/06/90	2.5×10^{-14}	1.2×10^{-15}
Area 2, Complex	08/06/90	08/13/90	2.2×10^{-14}	1.2×10^{-15}
Area 2, Complex	08/13/90	08/20/90	1.3×10^{-14}	1.2×10^{-15}
Area 2, Complex	08/20/90	08/27/90	1.4×10^{-14}	1.2×10^{-15}
Area 2, Complex	08/27/90	09/04/90	1.8×10^{-14}	1.0×10^{-15}
Area 2, Complex	09/04/90	09/10/90	1.5×10^{-14}	9.3×10^{-16}
Area 2, Complex	09/10/90	09/17/90	2.8×10^{-14}	2.0×10^{-15}
Area 2, Complex	09/17/90	09/24/90	1.9×10^{-14}	1.2×10^{-15}
Area 2, Complex	09/24/90	10/01/90	2.3×10^{-14}	1.2×10^{-15}
Area 2, Complex	10/01/90	10/08/90	2.1×10^{-14}	1.2×10^{-15}
Area 2, Complex	10/08/90	10/15/90	2.4×10^{-14}	1.2×10^{-15}
Area 2, Complex	10/15/90	10/22/90	2.7×10^{-14}	1.2×10^{-15}
Area 2, Complex	10/22/90	10/29/90	3.0×10^{-14}	1.2×10^{-15}
Area 2, Complex	10/29/90	11/05/90	1.5×10^{-14}	1.2×10^{-15}
Area 2, Complex	11/05/90	11/13/90	1.4×10^{-14}	1.1×10^{-15}
Area 2, Complex	11/13/90	11/19/90	3.5×10^{-14}	1.4×10^{-15}
Area 2, Complex	11/13/90	11/19/90	3.3×10^{-14}	1.4×10^{-15}
Area 2, Complex	11/19/90	11/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 2, Complex	11/26/90	12/03/90	1.5×10^{-14}	1.0×10^{-15}
Area 2, Complex	12/03/90	12/11/90	2.6×10^{-14}	1.4×10^{-15}
Area 2, Complex	12/10/90	12/17/90	2.1×10^{-14}	1.1×10^{-15}
Area 2, Complex	12/17/90	12/24/90	3.1×10^{-14}	1.6×10^{-15}
Area 2, Complex	12/24/90	12/31/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	01/02/90	01/08/90	1.7×10^{-14}	1.4×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, 3-300 Bunker	01/08/90	01/16/90	1.9×10^{-14}	1.0×10^{-15}
Area 3, 3-300 Bunker	01/16/90	01/23/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	01/23/90	01/29/90	1.3×10^{-14}	1.4×10^{-15}
Area 3, 3-300 Bunker	01/29/90	02/05/90	1.1×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	02/05/90	02/12/90	1.3×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	02/06/90	03/05/90	2.9×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	02/12/90	02/20/90	1.2×10^{-14}	1.0×10^{-15}
Area 3, 3-300 Bunker	02/20/90	02/26/90	1.6×10^{-14}	1.4×10^{-15}
Area 3, 3-300 Bunker	03/05/90	03/12/90	1.3×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	03/12/90	03/19/90	9.7×10^{-15}	1.2×10^{-15}
Area 3, 3-300 Bunker	03/19/90	03/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	03/26/90	04/02/90	2.4×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	04/02/90	04/09/90	2.3×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	04/09/90	04/16/90	2.6×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	04/23/90	04/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	05/07/90	05/14/90	1.6×10^{-14}	1.3×10^{-15}
Area 3, 3-300 Bunker	05/14/90	05/21/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	05/21/90	05/29/90	2.2×10^{-14}	1.0×10^{-15}
Area 3, 3-300 Bunker	05/29/90	06/05/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	06/05/90	06/11/90	1.4×10^{-14}	1.3×10^{-15}
Area 3, 3-300 Bunker	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	07/02/90	07/09/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	07/09/90	07/16/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	07/23/90	07/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	07/30/90	08/06/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	08/06/90	08/13/90	2.6×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	08/13/90	08/20/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	08/27/90	09/04/90	1.6×10^{-14}	9.5×10^{-16}
Area 3, 3-300 Bunker	09/04/90	09/10/90	1.6×10^{-14}	1.3×10^{-15}
Area 3, 3-300 Bunker	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	09/17/90	09/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	09/24/90	10/01/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	10/08/90	10/15/90	2.1×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	10/15/90	10/22/90	2.6×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	10/22/90	10/29/90	3.1×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, 3-300 Bunker	10/29/90	11/05/90	1.7×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	11/05/90	11/13/90	1.4×10^{-14}	1.0×10^{-15}
Area 3, 3-300 Bunker	11/13/90	11/19/90	3.7×10^{-14}	1.3×10^{-15}
Area 3, 3-300 Bunker	11/13/90	11/19/90	3.5×10^{-14}	1.3×10^{-15}
Area 3, 3-300 Bunker	11/19/90	11/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	11/26/90	12/03/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	12/03/90	12/10/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	12/10/90	12/17/90	2.6×10^{-14}	1.2×10^{-15}
Area 3, 3-300 Bunker	12/17/90	12/24/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, 3-300 Bunker	12/24/90	12/31/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	01/02/90	01/08/90	1.8×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at East	01/08/90	01/16/90	1.9×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at East	01/16/90	01/23/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	01/23/90	01/29/90	1.4×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at East	01/29/90	02/05/90	1.1×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	02/05/90	02/12/90	1.2×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	02/06/90	03/05/90	3.1×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	02/12/90	02/20/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	02/20/90	02/26/90	1.7×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at East	03/05/90	03/12/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	03/12/90	03/19/90	10.0×10^{-15}	1.2×10^{-15}
Area 3, U3ah/at East	03/19/90	03/26/90	2.2×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	03/26/90	04/02/90	2.3×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	04/02/90	04/09/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	04/09/90	04/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	04/16/90	04/23/90	8.0×10^{-15}	1.1×10^{-15}
Area 3, U3ah/at East	04/23/90	04/30/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	05/07/90	05/14/90	3.4×10^{-14}	2.2×10^{-15}
Area 3, U3ah/at East	05/14/90	05/21/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	05/21/90	05/29/90	1.8×10^{-14}	9.8×10^{-16}
Area 3, U3ah/at East	05/29/90	06/05/90	1.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	06/05/90	06/11/90	1.2×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at East	06/11/90	06/18/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	07/02/90	07/09/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	07/09/90	07/16/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	07/23/90	07/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	07/30/90	08/06/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	08/06/90	08/13/90	1.9×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U3ah/at East	08/13/90	08/20/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	08/27/90	09/04/90	1.7×10^{-14}	9.2×10^{-16}
Area 3, U3ah/at East	09/04/90	09/10/90	1.7×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	09/10/90	09/17/90	1.7×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at East	09/17/90	09/24/90	1.6×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at East	09/24/90	10/01/90	1.9×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at East	10/01/90	10/08/90	2.2×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at East	10/08/90	10/15/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	10/15/90	10/22/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	10/22/90	10/29/90	2.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	10/29/90	11/05/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	11/05/90	11/13/90	1.4×10^{-14}	9.6×10^{-16}
Area 3, U3ah/at East	11/13/90	11/19/90	3.6×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at East	11/13/90	11/19/90	3.3×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at East	11/19/90	11/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	11/26/90	12/03/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	12/03/90	12/10/90	1.9×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	12/10/90	12/17/90	2.5×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at East	12/17/90	12/24/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at East	12/24/90	12/31/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	01/02/90	01/08/90	1.6×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at North	01/08/90	01/16/90	2.0×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at North	01/16/90	01/23/90	1.9×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	01/23/90	01/29/90	1.2×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at North	01/29/90	02/05/90	1.1×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	02/05/90	02/12/90	1.6×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	02/12/90	02/20/90	1.2×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at North	02/20/90	02/26/90	1.5×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at North	02/26/90	03/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	03/05/90	03/12/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	03/12/90	03/19/90	1.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	03/19/90	03/26/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	04/02/90	04/09/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	04/09/90	04/16/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	05/07/90	05/14/90	3.3×10^{-14}	2.2×10^{-15}
Area 3, U3ah/at North	05/14/90	05/21/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	05/21/90	05/29/90	2.0×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U3ah/at North	05/29/90	06/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	06/05/90	06/11/90	1.4×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at North	06/11/90	06/18/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	06/25/90	07/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	07/02/90	07/09/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	07/09/90	07/16/90	1.7×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	07/16/90	07/23/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	07/23/90	07/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	07/30/90	08/06/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	08/13/90	08/20/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	08/27/90	09/04/90	1.6×10^{-14}	9.6×10^{-16}
Area 3, U3ah/at North	09/04/90	09/10/90	1.9×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at North	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	09/24/90	10/01/90	2.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	10/08/90	10/15/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	10/15/90	10/22/90	2.4×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	10/22/90	10/29/90	2.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at North	10/29/90	11/05/90	1.9×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	11/05/90	11/13/90	1.6×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at North	11/13/90	11/19/90	6.9×10^{-14}	2.5×10^{-15}
Area 3, U3ah/at North	11/13/90	11/19/90	7.8×10^{-14}	2.5×10^{-15}
Area 3, U3ah/at North	11/19/90	11/26/90	2.1×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	11/26/90	12/03/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	12/03/90	12/10/90	2.1×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	12/10/90	12/17/90	2.8×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	12/17/90	12/24/90	2.2×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at North	12/24/90	12/31/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	01/02/90	01/08/90	1.6×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at South	01/08/90	01/16/90	1.5×10^{-14}	9.9×10^{-16}
Area 3, U3ah/at South	01/16/90	01/23/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	01/23/90	01/29/90	1.2×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at South	01/29/90	02/05/90	1.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	02/05/90	02/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	02/06/90	03/05/90	2.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	02/12/90	02/20/90	1.2×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at South	02/20/90	02/26/90	1.6×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at South	03/05/90	03/12/90	1.2×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U3ah/at South	03/12/90	03/19/90	7.0×10^{-15}	1.1×10^{-15}
Area 3, U3ah/at South	03/19/90	03/26/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	03/26/90	04/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	04/02/90	04/09/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	04/23/90	04/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	04/30/90	05/07/90	1.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	05/07/90	05/14/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	05/14/90	05/21/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	05/21/90	05/29/90	1.6×10^{-14}	9.7×10^{-16}
Area 3, U3ah/at South	05/29/90	06/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	06/05/90	06/11/90	1.2×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at South	06/11/90	06/18/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	07/02/90	07/09/90	1.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	07/09/90	07/16/90	1.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	07/16/90	07/23/90	1.9×10^{-14}	1.5×10^{-15}
Area 3, U3ah/at South	07/23/90	07/30/90	1.9×10^{-14}	1.5×10^{-15}
Area 3, U3ah/at South	07/30/90	08/06/90	2.2×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at South	08/06/90	08/13/90	2.1×10^{-14}	1.5×10^{-15}
Area 3, U3ah/at South	08/13/90	08/20/90	1.7×10^{-14}	1.5×10^{-15}
Area 3, U3ah/at South	08/20/90	08/27/90	1.6×10^{-14}	1.5×10^{-15}
Area 3, U3ah/at South	08/27/90	09/04/90	1.6×10^{-14}	9.4×10^{-16}
Area 3, U3ah/at South	09/04/90	09/10/90	1.5×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at South	09/10/90	09/17/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	10/01/90	10/08/90	2.1×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at South	10/08/90	10/15/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	10/15/90	10/22/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	10/22/90	10/29/90	2.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	10/29/90	11/05/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	11/05/90	11/13/90	1.4×10^{-14}	9.7×10^{-16}
Area 3, U3ah/at South	11/13/90	11/19/90	1.9×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at South	11/13/90	11/19/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at South	11/19/90	11/26/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	11/26/90	12/03/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	12/03/90	12/10/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	12/10/90	12/17/90	2.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at South	12/17/90	12/24/90	2.2×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U3ah/at South	12/24/90	12/31/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	01/02/90	01/08/90	1.8×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at West	01/08/90	01/16/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	01/16/90	01/23/90	2.2×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	01/23/90	01/29/90	1.3×10^{-14}	1.4×10^{-15}
Area 3, U3ah/at West	01/29/90	02/05/90	1.0×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	02/05/90	02/12/90	1.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	02/12/90	02/20/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	02/20/90	02/26/90	2.2×10^{-14}	1.8×10^{-15}
Area 3, U3ah/at West	02/26/90	03/05/90	2.0×10^{-14}	9.8×10^{-16}
Area 3, U3ah/at West	03/05/90	03/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	03/19/90	03/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	03/26/90	04/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	04/02/90	04/09/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	04/23/90	04/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	04/30/90	05/07/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	05/07/90	05/14/90	3.5×10^{-14}	2.3×10^{-15}
Area 3, U3ah/at West	05/14/90	05/21/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	05/21/90	05/29/90	1.5×10^{-14}	2.5×10^{-15}
Area 3, U3ah/at West	05/29/90	06/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	06/05/90	06/11/90	1.3×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at West	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	06/18/90	06/25/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	07/02/90	07/09/90	1.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	07/09/90	07/16/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	07/30/90	08/06/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	08/06/90	08/13/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	08/13/90	08/20/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	08/27/90	09/04/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	09/04/90	09/10/90	1.7×10^{-14}	1.5×10^{-15}
Area 3, U3ah/at West	09/10/90	09/17/90	1.7×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	10/01/90	10/08/90	2.3×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	10/08/90	10/15/90	2.3×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U3ah/at West	10/15/90	10/22/90	2.5×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	10/22/90	10/29/90	3.0×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	10/29/90	11/05/90	1.6×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 3, U3ah/at West	11/13/90	11/19/90	4.0×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at West	11/13/90	11/19/90	3.7×10^{-14}	1.3×10^{-15}
Area 3, U3ah/at West	11/19/90	11/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	11/26/90	12/03/90	1.9×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	12/03/90	12/10/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	12/10/90	12/17/90	2.7×10^{-14}	1.2×10^{-15}
Area 3, U3ah/at West	12/17/90	12/24/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, U3ah/at West	12/24/90	12/31/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	01/02/90	01/08/90	1.5×10^{-14}	1.3×10^{-15}
Area 3, Complex	01/08/90	01/16/90	1.6×10^{-14}	9.9×10^{-16}
Area 3, Complex	01/16/90	01/23/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, Complex	01/23/90	01/29/90	1.2×10^{-14}	1.3×10^{-15}
Area 3, Complex	01/29/90	02/05/90	1.0×10^{-14}	1.1×10^{-15}
Area 3, Complex	02/05/90	02/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, Complex	02/06/90	03/05/90	3.3×10^{-14}	1.4×10^{-15}
Area 3, Complex	02/12/90	02/20/90	1.1×10^{-14}	9.9×10^{-16}
Area 3, Complex	02/20/90	02/26/90	1.6×10^{-14}	1.5×10^{-15}
Area 3, Complex	03/05/90	03/12/90	1.0×10^{-14}	9.6×10^{-16}
Area 3, Complex	03/12/90	03/19/90	9.2×10^{-15}	1.1×10^{-15}
Area 3, Complex	03/19/90	03/26/90	1.7×10^{-14}	1.1×10^{-15}
Area 3, Complex	03/26/90	04/02/90	4.2×10^{-15}	1.1×10^{-15}
Area 3, Complex	04/02/90	04/09/90	1.9×10^{-14}	9.7×10^{-16}
Area 3, Complex	04/09/90	04/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, Complex	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 3, Complex	04/23/90	04/30/90	1.2×10^{-14}	1.1×10^{-15}
Area 3, Complex	04/30/90	05/07/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex	05/07/90	05/14/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex	05/14/90	05/21/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex	05/21/90	05/29/90	1.3×10^{-14}	1.0×10^{-15}
Area 3, Complex	05/29/90	06/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	06/05/90	06/11/90	1.3×10^{-14}	1.3×10^{-15}
Area 3, Complex	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, Complex	06/18/90	06/25/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex	07/02/90	07/09/90	1.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	07/09/90	07/16/90	1.7×10^{-14}	1.2×10^{-15}
Area 3, Complex	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Complex	07/30/90	08/06/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/06/90	08/13/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/13/90	08/20/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/27/90	09/04/90	1.6×10^{-14}	9.6×10^{-16}
Area 3, Complex	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 3, Complex	09/10/90	09/17/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	10/08/90	10/15/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, Complex	10/15/90	10/22/90	2.8×10^{-14}	1.2×10^{-15}
Area 3, Complex	10/22/90	10/29/90	2.9×10^{-14}	1.1×10^{-15}
Area 3, Complex	10/29/90	11/05/90	1.6×10^{-14}	1.2×10^{-15}
Area 3, Complex	11/05/90	11/13/90	1.3×10^{-14}	1.0×10^{-15}
Area 3, Complex	11/13/90	11/19/90	3.5×10^{-14}	1.3×10^{-15}
Area 3, Complex	11/13/90	11/19/90	3.4×10^{-14}	1.3×10^{-15}
Area 3, Complex	11/19/90	11/26/90	1.9×10^{-14}	1.2×10^{-15}
Area 3, Complex	11/26/90	12/03/90	1.8×10^{-14}	1.2×10^{-15}
Area 3, Complex	12/03/90	12/10/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, Complex	12/10/90	12/17/90	2.7×10^{-14}	1.2×10^{-15}
Area 3, Complex	12/17/90	12/24/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	12/24/90	12/31/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	01/02/90	01/08/90	1.6×10^{-14}	1.5×10^{-15}
Area 3, Complex No. 2	01/08/90	01/16/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	01/16/90	01/23/90	2.6×10^{-14}	1.3×10^{-15}
Area 3, Complex No. 2	01/23/90	01/29/90	1.4×10^{-14}	1.5×10^{-15}
Area 3, Complex No. 2	01/29/90	02/05/90	6.3×10^{-15}	1.1×10^{-15}
Area 3, Complex No. 2	02/05/90	02/12/90	9.4×10^{-15}	1.2×10^{-15}
Area 3, Complex No. 2	02/12/90	02/20/90	1.6×10^{-14}	1.8×10^{-15}
Area 3, Complex No. 2	02/20/90	02/26/90	1.9×10^{-14}	2.2×10^{-15}
Area 3, Complex No. 2	03/05/90	03/12/90	1.4×10^{-14}	2.0×10^{-15}
Area 3, Complex No. 2	03/12/90	03/19/90	1.0×10^{-14}	1.9×10^{-15}
Area 3, Complex No. 2	03/26/90	04/02/90	2.4×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	04/02/90	04/09/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	04/16/90	04/23/90	1.7×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	04/23/90	04/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	04/30/90	05/07/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	05/07/90	05/14/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	05/14/90	05/21/90	2.0×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	05/21/90	05/29/90	1.6×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Complex No. 2	05/29/90	06/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	06/05/90	06/11/90	1.3×10^{-14}	1.3×10^{-15}
Area 3, Complex No. 2	06/11/90	06/18/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	07/02/90	07/09/90	1.4×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	07/09/90	07/16/90	2.3×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	07/30/90	08/06/90	2.2×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	08/06/90	08/13/90	2.4×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	08/13/90	08/20/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	08/27/90	09/04/90	1.5×10^{-14}	9.6×10^{-16}
Area 3, Complex No. 2	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 3, Complex No. 2	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	09/17/90	09/24/90	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	10/01/90	10/08/90	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	10/08/90	10/15/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	10/15/90	10/22/90	2.7×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	10/22/90	10/29/90	2.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	10/29/90	11/05/90	1.7×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	11/13/90	11/19/90	3.4×10^{-14}	1.3×10^{-15}
Area 3, Complex No. 2	11/13/90	11/19/90	3.3×10^{-14}	1.3×10^{-15}
Area 3, Complex No. 2	11/19/90	11/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	11/26/90	12/03/90	2.1×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	12/03/90	12/10/90	2.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	12/10/90	12/17/90	2.6×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	12/17/90	12/24/90	2.3×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	12/24/90	12/31/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	01/02/90	01/08/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	01/08/90	01/16/90	2.0×10^{-14}	9.6×10^{-16}
Area 5, DOD Yard	01/16/90	01/23/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	01/23/90	01/29/90	1.3×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	01/29/90	02/05/90	9.0×10^{-15}	1.1×10^{-15}
Area 5, DOD Yard	02/05/90	02/12/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	02/12/90	02/20/90	1.0×10^{-14}	9.5×10^{-16}
Area 5, DOD Yard	02/20/90	02/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	02/27/90	03/06/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	03/06/90	03/12/90	1.6×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, DOD Yard	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	03/19/90	03/26/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	03/26/90	04/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	04/02/90	04/09/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	04/09/90	04/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	04/23/90	04/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	05/07/90	05/14/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	05/14/90	05/22/90	1.7×10^{-14}	9.5×10^{-16}
Area 5, DOD Yard	05/22/90	05/29/90	1.4×10^{-14}	1.4×10^{-15}
Area 5, DOD Yard	05/29/90	06/04/90	1.2×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	06/04/90	06/11/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	06/11/90	06/18/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	06/18/90	06/25/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	07/02/90	07/09/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	07/09/90	07/16/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	07/30/90	08/05/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	08/06/90	08/13/90	2.0×10^{-14}	1.5×10^{-15}
Area 5, DOD Yard	08/13/90	08/20/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	08/27/90	09/04/90	1.7×10^{-14}	9.6×10^{-16}
Area 5, DOD Yard	09/04/90	09/10/90	2.0×10^{-14}	1.5×10^{-15}
Area 5, DOD Yard	09/10/90	09/17/90	1.7×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	09/24/90	10/01/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	10/15/90	10/22/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	10/23/90	10/29/90	3.3×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	10/29/90	11/05/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	11/05/90	11/13/90	1.6×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	11/13/90	11/19/90	4.6×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	11/13/90	11/19/90	4.3×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	11/19/90	11/26/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	11/26/90	12/03/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	12/03/90	12/10/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	12/10/90	12/17/90	3.0×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	12/17/90	12/24/90	2.4×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, DOD Yard	12/24/90	12/31/90	2.6×10^{-14}	9.4×10^{-16}
Area 5, Gate 200	01/02/90	01/08/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	01/08/90	01/16/90	1.8×10^{-14}	10.0×10^{-16}
Area 5, Gate 200	01/16/90	01/23/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	01/23/90	01/29/90	1.3×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	01/29/90	02/05/90	9.6×10^{-15}	1.1×10^{-15}
Area 5, Gate 200	02/05/90	02/12/90	1.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	02/12/90	02/20/90	3.0×10^{-14}	10.0×10^{-16}
Area 5, Gate 200	02/20/90	02/27/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	02/27/90	03/06/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	03/06/90	03/12/90	4.0×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	03/12/90	03/19/90	1.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	03/19/90	03/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	03/26/90	04/02/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	04/02/90	04/09/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	04/09/90	04/16/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	04/16/90	04/23/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	04/23/90	04/30/90	1.2×10^{-14}	1.5×10^{-15}
Area 5, Gate 200	04/30/90	05/07/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	05/07/90	05/14/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	05/14/90	05/22/90	1.5×10^{-14}	9.3×10^{-16}
Area 5, Gate 200	05/22/90	05/29/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	05/29/90	06/04/90	8.6×10^{-15}	1.3×10^{-15}
Area 5, Gate 200	06/11/90	06/18/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	06/18/90	06/25/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	06/25/90	07/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	07/02/90	07/09/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	07/09/90	07/16/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	07/23/90	07/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	07/23/90	07/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	07/30/90	08/05/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	08/06/90	08/13/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	08/13/90	08/20/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	08/27/90	09/04/90	1.5×10^{-14}	9.8×10^{-16}
Area 5, Gate 200	09/04/90	09/10/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	09/17/90	09/24/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	09/24/90	10/01/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	10/08/90	10/15/90	2.5×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Gate 200	10/15/90	10/22/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	10/23/90	10/29/90	3.2×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	11/05/90	11/13/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	11/13/90	11/19/90	3.8×10^{-14}	1.4×10^{-15}
Area 5, Gate 200	11/13/90	11/19/90	3.8×10^{-14}	1.4×10^{-15}
Area 5, Gate 200	11/19/90	11/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	11/26/90	12/03/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	12/03/90	12/10/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	12/10/90	12/17/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	12/17/90	12/24/90	1.7×10^{-14}	1.6×10^{-15}
Area 5, Gate 200	12/24/90	12/31/90	2.5×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 1	01/02/90	01/08/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	01/08/90	01/16/90	2.2×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 1	01/16/90	01/23/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	01/23/90	01/29/90	1.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	02/05/90	02/12/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	02/12/90	02/20/90	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 1	02/20/90	02/27/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	02/27/90	03/06/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	03/06/90	03/12/90	1.9×10^{-14}	1.8×10^{-15}
Area 5, RWMS No. 1	03/12/90	03/19/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	03/19/90	03/26/90	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	03/26/90	04/02/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	04/02/90	04/09/90	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	04/09/90	04/16/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	04/16/90	04/23/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	04/23/90	04/30/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	04/30/90	05/07/90	1.6×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 1	05/07/90	05/14/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	05/14/90	05/22/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	05/22/90	05/29/90	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	05/29/90	06/04/90	1.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 1	06/04/90	06/11/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	06/18/90	06/25/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	06/25/90	07/02/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	07/02/90	07/09/90	1.5×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 1	07/09/90	07/16/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	07/16/90	07/23/90	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	07/23/90	07/30/90	1.6×10^{-14}	9.8×10^{-16}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 1	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	08/06/90	08/13/90	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	08/13/90	08/20/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	08/20/90	08/27/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	08/27/90	09/04/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	09/04/90	09/10/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	09/10/90	09/17/90	2.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 1	09/17/90	09/24/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	09/24/90	10/01/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	10/01/90	10/08/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	10/15/90	10/22/90	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	10/23/90	10/29/90	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	10/29/90	11/05/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	11/05/90	11/13/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	11/13/90	11/19/90	4.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	11/13/90	11/19/90	4.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	11/19/90	11/26/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	11/26/90	12/03/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	12/03/90	12/10/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	12/10/90	12/17/90	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	12/17/90	12/24/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	12/24/90	12/31/90	2.7×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 2	01/02/90	01/08/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	01/08/90	01/16/90	2.1×10^{-14}	10.0×10^{-16}
Area 5, RWMS No. 2	01/16/90	01/23/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	01/23/90	01/29/90	1.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	02/05/90	02/12/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	02/12/90	02/20/90	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	02/20/90	02/27/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	02/27/90	03/06/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	03/06/90	03/12/90	1.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 2	03/12/90	03/19/90	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	03/19/90	03/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	03/26/90	04/02/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	04/02/90	04/09/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	04/09/90	04/16/90	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	04/16/90	04/23/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	04/23/90	04/30/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	04/30/90	05/07/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	05/07/90	05/14/90	2.0×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 2	05/14/90	05/22/90	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	05/22/90	05/29/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	05/29/90	06/04/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	06/04/90	06/11/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	06/11/90	06/18/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	07/02/90	07/09/90	1.3×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 2	07/09/90	07/16/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	07/16/90	07/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	07/23/90	07/30/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	07/30/90	08/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	08/13/90	08/20/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	08/27/90	09/04/90	1.7×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 2	09/04/90	09/10/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	09/10/90	09/17/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	09/17/90	09/24/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	09/24/90	10/01/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	10/08/90	10/15/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	10/15/90	10/22/90	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	10/23/90	10/29/90	3.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/05/90	11/13/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/13/90	11/19/90	4.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	11/13/90	11/19/90	4.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	11/19/90	11/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/26/90	12/03/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	12/03/90	12/10/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	12/10/90	12/17/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	12/17/90	12/24/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	12/24/90	12/31/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	01/02/90	01/08/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 3	01/08/90	01/16/90	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	01/16/90	01/23/90	2.1×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 3	01/23/90	01/29/90	1.8×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 3	01/29/90	02/05/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	02/05/90	02/12/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	02/12/90	02/20/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	02/20/90	02/27/90	1.9×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 3	02/27/90	03/06/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	03/06/90	03/12/90	1.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	03/19/90	03/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	04/02/90	04/09/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	04/16/90	04/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	04/23/90	04/30/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	04/30/90	05/07/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	05/07/90	05/14/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	05/14/90	05/22/90	1.8×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 3	05/22/90	05/29/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	05/29/90	06/04/90	1.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	06/04/90	06/11/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	06/11/90	06/18/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	06/25/90	07/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	07/02/90	07/09/90	1.4×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 3	07/09/90	07/16/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	07/30/90	08/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	08/06/90	08/13/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	08/13/90	08/20/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	08/27/90	09/04/90	1.7×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 3	09/04/90	09/10/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	09/17/90	09/24/90	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	10/01/90	10/08/90	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	10/08/90	10/15/90	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	10/15/90	10/22/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	10/23/90	10/29/90	2.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	11/05/90	11/13/90	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	11/13/90	11/19/90	4.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	11/13/90	11/19/90	4.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	11/19/90	11/26/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	11/26/90	12/03/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	12/03/90	12/10/90	2.2×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 3	12/10/90	12/17/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	12/17/90	12/24/90	6.5×10^{-15}	1.1×10^{-15}
Area 5, RWMS No. 3	12/24/90	12/31/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	01/02/90	01/08/90	1.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	01/08/90	01/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	01/16/90	01/23/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	01/23/90	01/29/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	01/29/90	02/05/90	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	02/05/90	02/12/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	02/12/90	02/20/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	02/20/90	02/27/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	02/27/90	03/06/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	03/06/90	03/12/90	1.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	03/19/90	03/26/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	03/26/90	04/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	04/02/90	04/09/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	04/09/90	04/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	04/23/90	04/30/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	04/30/90	05/07/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	05/07/90	05/14/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	05/14/90	05/22/90	1.9×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 4	05/22/90	05/29/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	05/29/90	06/04/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	06/04/90	06/11/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	06/11/90	06/18/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	06/18/90	06/25/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	06/25/90	07/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	07/02/90	07/09/90	1.2×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 4	07/09/90	07/16/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	07/16/90	07/23/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	07/23/90	07/30/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	07/30/90	08/05/90	2.2×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 4	08/06/90	08/13/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	08/14/90	08/20/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	08/20/90	08/27/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	08/27/90	09/04/90	1.7×10^{-14}	10.0×10^{-16}
Area 5, RWMS No. 4	09/04/90	09/10/90	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	09/17/90	09/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	09/24/90	10/01/90	2.1×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 4	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	10/08/90	10/15/90	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	10/15/90	10/22/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	10/23/90	10/29/90	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	10/29/90	11/05/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	11/05/90	11/13/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	11/13/90	11/19/90	4.2×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 4	11/13/90	11/19/90	4.2×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 4	11/19/90	11/26/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	11/26/90	12/03/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	12/03/90	12/10/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	12/10/90	12/17/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	12/17/90	12/24/90	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	12/24/90	12/31/90	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	01/02/90	01/08/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	01/08/90	01/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	01/16/90	01/23/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	01/23/90	01/29/90	1.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	01/29/90	02/05/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	02/05/90	02/12/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	02/12/90	02/20/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	02/20/90	02/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	02/27/90	03/06/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	03/06/90	03/12/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	03/19/90	03/26/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	03/26/90	04/02/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	04/02/90	04/09/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	04/16/90	04/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	04/23/90	04/30/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	05/07/90	05/14/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	05/14/90	05/22/90	1.9×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 5	05/22/90	05/29/90	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	05/29/90	06/04/90	1.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	06/04/90	06/11/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	06/11/90	06/18/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	06/18/90	06/25/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	07/02/90	07/09/90	1.2×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 5	07/09/90	07/16/90	1.6×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 5	07/16/90	07/23/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	08/06/90	08/13/90	1.8×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 5	08/13/90	08/20/90	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	08/20/90	08/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	08/27/90	09/04/90	1.6×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 5	09/04/90	09/10/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	09/24/90	10/01/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	10/01/90	10/08/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	10/08/90	10/15/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	10/15/90	10/22/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	10/23/90	10/29/90	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	10/29/90	11/05/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	11/13/90	11/19/90	4.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	11/13/90	11/19/90	4.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	11/26/90	12/03/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	12/03/90	12/10/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	12/10/90	12/17/90	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	12/17/90	12/24/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	12/24/90	12/31/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	01/02/90	01/08/90	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	01/08/90	01/16/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	01/16/90	01/23/90	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	01/23/90	01/29/90	1.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	01/29/90	02/05/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	02/05/90	02/12/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	02/12/90	02/20/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	02/20/90	02/27/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	02/27/90	03/06/90	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	03/06/90	03/12/90	1.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	03/12/90	03/19/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	03/19/90	03/26/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	03/26/90	04/02/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	04/02/90	04/09/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	04/09/90	04/16/90	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	04/16/90	04/23/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	04/23/90	04/30/90	1.3×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 6	04/30/90	05/07/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	05/07/90	05/14/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	05/14/90	05/22/90	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 6	05/22/90	05/29/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	05/29/90	06/04/90	1.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	06/04/90	06/11/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	06/11/90	06/18/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	07/02/90	07/09/90	8.1×10^{-15}	1.1×10^{-15}
Area 5, RWMS No. 6	07/09/90	07/16/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	08/06/90	08/13/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	08/13/90	08/20/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	08/20/90	08/27/90	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	08/27/90	09/04/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	09/04/90	09/10/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	09/10/90	09/17/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	09/17/90	09/24/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	09/24/90	10/01/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	10/01/90	10/08/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	10/08/90	10/15/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	10/15/90	10/22/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	10/23/90	10/29/90	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	10/29/90	11/05/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	11/13/90	11/19/90	4.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	11/13/90	11/19/90	4.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	11/19/90	11/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	11/26/90	12/03/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	12/03/90	12/10/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	12/10/90	12/17/90	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	12/17/90	12/24/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	12/24/90	12/31/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	01/02/90	01/08/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	01/08/90	01/16/90	2.2×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	01/16/90	01/23/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	01/23/90	01/29/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	01/29/90	02/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	02/05/90	02/12/90	1.6×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 7	02/12/90	02/20/90	1.2×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	02/20/90	02/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	02/27/90	03/06/90	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	03/06/90	03/12/90	1.8×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 7	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	03/19/90	03/26/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	04/02/90	04/09/90	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	04/09/90	04/16/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	04/23/90	04/30/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	05/07/90	05/14/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	05/14/90	05/22/90	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	05/22/90	05/29/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	05/29/90	06/04/90	1.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	06/04/90	06/11/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	06/11/90	06/18/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	06/25/90	07/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	07/02/90	07/09/90	1.4×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 7	07/09/90	07/16/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	08/06/90	08/13/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	08/13/90	08/20/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	08/20/90	08/27/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	08/27/90	09/04/90	1.7×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 7	09/04/90	09/10/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	09/17/90	09/24/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	09/24/90	10/01/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	10/01/90	10/08/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	10/15/90	10/22/90	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	10/23/90	10/29/90	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	10/29/90	11/05/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	11/05/90	11/13/90	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	11/13/90	11/19/90	4.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	11/13/90	11/19/90	4.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	11/19/90	11/26/90	1.9×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 7	11/26/90	12/03/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	12/03/90	12/10/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	12/10/90	12/17/90	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	12/17/90	12/24/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	12/24/90	12/31/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	01/02/90	01/08/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	01/08/90	01/16/90	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	01/16/90	01/23/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	01/23/90	01/29/90	1.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 8	01/29/90	02/05/90	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	02/05/90	02/12/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	02/12/90	02/20/90	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	02/20/90	02/27/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	02/27/90	03/06/90	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	03/06/90	03/12/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 8	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	03/19/90	03/26/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	04/02/90	04/09/90	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	04/09/90	04/16/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	04/16/90	04/23/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	04/23/90	04/30/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	04/30/90	05/07/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	05/07/90	05/14/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	05/14/90	05/22/90	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 8	05/22/90	05/29/90	2.5×10^{-14}	2.7×10^{-15}
Area 5, RWMS No. 8	05/29/90	06/04/90	1.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	06/04/90	06/11/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	07/02/90	07/09/90	1.4×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 8	07/09/90	07/16/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	07/16/90	07/23/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/06/90	08/13/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/13/90	08/20/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/20/90	08/27/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/27/90	09/04/90	1.6×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 8	09/04/90	09/10/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	09/10/90	09/17/90	1.9×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 8	09/17/90	09/24/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	09/24/90	10/01/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	10/01/90	10/08/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	10/15/90	10/22/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	10/23/90	10/29/90	3.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	11/13/90	11/19/90	3.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	11/13/90	11/19/90	4.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	11/26/90	12/03/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	12/03/90	12/10/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	12/10/90	12/17/90	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	12/17/90	12/24/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	12/24/90	12/31/90	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	01/02/90	01/08/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	01/08/90	01/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	01/16/90	01/23/90	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	01/23/90	01/29/90	1.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 9	01/29/90	02/05/90	1.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	02/05/90	02/12/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	02/12/90	02/20/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	02/20/90	02/27/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	02/27/90	03/06/90	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	03/06/90	03/12/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 9	03/12/90	03/19/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	03/19/90	03/26/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	03/26/90	04/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	04/02/90	04/09/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	04/09/90	04/16/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	04/23/90	04/30/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	05/07/90	05/14/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	05/14/90	05/22/90	1.7×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 9	05/22/90	05/29/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	05/29/90	06/04/90	1.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	06/04/90	06/11/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	06/11/90	06/18/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	06/18/90	06/25/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 9	07/02/90	07/09/90	1.3×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 9	07/09/90	07/16/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	07/16/90	07/23/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	07/30/90	08/05/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	08/06/90	08/13/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	08/13/90	08/20/90	2.4×10^{-15}	1.1×10^{-15}
Area 5, RWMS No. 9	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	08/27/90	09/04/90	1.6×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 9	09/04/90	09/10/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	09/10/90	09/17/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	09/17/90	09/24/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	09/24/90	10/01/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	10/01/90	10/08/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	10/08/90	10/15/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	10/15/90	10/22/90	3.1×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 9	10/23/90	10/29/90	3.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 9	10/29/90	11/05/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	11/05/90	11/13/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	11/13/90	11/19/90	4.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	11/13/90	11/19/90	4.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	11/26/90	12/03/90	9.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	12/03/90	12/10/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	12/10/90	12/17/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	12/17/90	12/24/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	12/24/90	12/31/90	3.6×10^{-14}	1.7×10^{-15}
Area 5, RWMS Pit No. 3	01/02/90	01/08/90	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	01/08/90	01/16/90	2.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS Pit No. 3	01/16/90	01/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	01/23/90	01/29/90	1.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	02/05/90	02/12/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	02/12/90	02/20/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	02/20/90	02/27/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	02/27/90	03/06/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	03/06/90	03/12/90	1.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS Pit No. 3	03/12/90	03/19/90	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	03/19/90	03/26/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	03/26/90	04/02/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	04/02/90	04/09/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	04/09/90	04/16/90	2.3×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS Pit No. 3	04/16/90	04/23/90	7.6×10^{-15}	2.3×10^{-15}
Area 5, RWMS Pit No. 3	04/30/90	05/07/90	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	05/07/90	05/14/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	05/14/90	05/22/90	1.8×10^{-14}	9.8×10^{-16}
Area 5, RWMS Pit No. 3	05/22/90	05/29/90	8.2×10^{-15}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	05/29/90	06/04/90	1.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	06/04/90	06/11/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	06/18/90	06/25/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	06/25/90	07/02/90	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	07/02/90	07/09/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	07/09/90	07/16/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	07/16/90	07/23/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	07/23/90	07/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	07/30/90	08/05/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	08/13/90	08/20/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	08/27/90	09/04/90	1.6×10^{-14}	9.7×10^{-16}
Area 5, RWMS Pit No. 3	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	09/17/90	09/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	09/24/90	10/01/90	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	10/15/90	10/22/90	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	10/23/90	10/29/90	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	10/29/90	11/05/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	11/05/90	11/13/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	11/13/90	11/19/90	4.0×10^{-14}	1.5×10^{-15}
Area 5, RWMS Pit No. 3	11/13/90	11/19/90	4.0×10^{-14}	1.5×10^{-15}
Area 5, RWMS Pit No. 3	11/19/90	11/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	11/26/90	12/03/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	12/03/90	12/10/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	12/10/90	12/17/90	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	12/17/90	12/24/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	01/02/90	01/08/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	01/08/90	01/16/90	2.1×10^{-14}	9.9×10^{-16}
Area 5, RWMS Pit No. 4	01/16/90	01/23/90	4.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	01/23/90	01/29/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	02/05/90	02/12/90	1.4×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS Pit No. 4	02/12/90	02/20/90	1.4×10^{-14}	9.9×10^{-16}
Area 5, RWMS Pit No. 4	02/20/90	02/27/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	02/27/90	03/06/90	3.1×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 4	03/06/90	03/12/90	2.2×10^{-14}	1.7×10^{-15}
Area 5, RWMS Pit No. 4	03/12/90	03/19/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	03/19/90	03/26/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	03/26/90	04/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	04/02/90	04/09/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	04/09/90	04/16/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	04/23/90	04/30/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	05/07/90	05/14/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	05/14/90	05/22/90	1.7×10^{-14}	9.8×10^{-16}
Area 5, RWMS Pit No. 4	05/22/90	05/29/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	05/29/90	06/04/90	1.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	06/04/90	06/11/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	07/02/90	07/09/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	07/09/90	07/16/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	07/23/90	07/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/13/90	08/20/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/20/90	08/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/27/90	09/04/90	1.6×10^{-14}	9.5×10^{-16}
Area 5, RWMS Pit No. 4	09/04/90	09/10/90	2.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS Pit No. 4	09/10/90	09/17/90	1.5×10^{-14}	9.5×10^{-16}
Area 5, RWMS Pit No. 4	09/17/90	09/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	09/24/90	10/01/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	10/08/90	10/15/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	10/15/90	10/22/90	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	10/23/90	10/29/90	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	10/29/90	11/05/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	11/05/90	11/13/90	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	11/13/90	11/19/90	3.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	11/13/90	11/19/90	4.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS Pit No. 4	11/26/90	12/03/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	12/03/90	12/10/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	12/10/90	12/17/90	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	12/17/90	12/24/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	01/02/90	01/08/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP North	01/08/90	01/16/90	1.9×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP North	01/16/90	01/23/90	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	01/23/90	01/29/90	1.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP North	01/29/90	02/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	02/05/90	02/12/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	02/12/90	02/20/90	1.2×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP North	02/20/90	02/27/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	02/27/90	03/06/90	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	03/06/90	03/12/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP North	03/12/90	03/19/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	03/19/90	03/26/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	03/26/90	04/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	04/02/90	04/09/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	04/16/90	04/23/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	04/23/90	04/30/90	8.3×10^{-15}	1.2×10^{-15}
Area 5, RWMS TP North	04/30/90	05/07/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	05/07/90	05/14/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	05/14/90	05/22/90	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP North	05/22/90	05/29/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	05/29/90	06/04/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	06/04/90	06/11/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	06/11/90	06/18/90	1.8×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP North	06/18/90	06/25/90	1.6×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP North	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	07/02/90	07/09/90	1.2×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP North	07/09/90	07/16/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	07/16/90	07/23/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	07/30/90	08/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	08/06/90	08/13/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	08/13/90	08/20/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	08/27/90	09/04/90	1.5×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP North	09/04/90	09/10/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	09/17/90	09/24/90	1.5×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP North	09/24/90	10/01/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	10/15/90	10/22/90	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	10/23/90	10/29/90	3.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	10/29/90	11/05/90	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP North	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP North	11/13/90	11/19/90	4.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	11/13/90	11/19/90	4.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP North	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	11/26/90	12/03/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	12/03/90	12/10/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	12/10/90	12/17/90	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP North	12/17/90	12/24/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	01/02/90	01/08/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northeast	01/08/90	01/16/90	2.1×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP Northeast	01/16/90	01/23/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	01/23/90	01/29/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	01/29/90	02/05/90	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northeast	02/05/90	02/12/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	02/12/90	02/20/90	1.2×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP Northeast	02/20/90	02/27/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	02/27/90	03/06/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	03/06/90	03/12/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northeast	03/12/90	03/19/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	03/19/90	03/26/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	03/26/90	04/02/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	04/02/90	04/09/90	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northeast	04/09/90	04/16/90	2.3×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP Northeast	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	04/23/90	04/30/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	04/30/90	05/07/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	05/07/90	05/14/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northeast	05/14/90	05/22/90	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP Northeast	05/22/90	05/29/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	05/29/90	06/04/90	1.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northeast	06/04/90	06/11/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	06/11/90	06/18/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	07/02/90	07/09/90	1.3×10^{-14}	1.7×10^{-15}
Area 5, RWMS TP Northeast	07/09/90	07/16/90	1.5×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Northeast	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	07/23/90	07/30/90	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP Northeast	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	08/06/90	08/13/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northeast	08/13/90	08/20/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	08/27/90	09/04/90	1.7×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP Northeast	09/04/90	09/10/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northeast	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	09/17/90	09/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	09/24/90	10/01/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	10/15/90	10/22/90	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northeast	10/23/90	10/29/90	3.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	11/05/90	11/13/90	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP Northeast	11/13/90	11/19/90	4.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northeast	11/13/90	11/19/90	4.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northeast	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	11/26/90	12/03/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	12/03/90	12/10/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	12/10/90	12/17/90	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northeast	12/17/90	12/24/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	01/02/90	01/08/90	1.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP Northwest	01/08/90	01/16/90	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP Northwest	01/16/90	01/23/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	01/23/90	01/29/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northwest	01/29/90	02/05/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	02/05/90	02/12/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	02/12/90	02/20/90	1.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northwest	02/20/90	02/27/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	02/27/90	03/06/90	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	03/06/90	03/12/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northwest	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	03/19/90	03/26/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	03/26/90	04/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	04/02/90	04/09/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	04/09/90	04/16/90	2.2×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP Northwest	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	04/23/90	04/30/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Northwest	05/07/90	05/14/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	05/14/90	05/22/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	05/22/90	05/29/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	05/29/90	06/04/90	1.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP Northwest	06/04/90	06/11/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	06/18/90	06/25/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	06/25/90	07/02/90	3.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	07/02/90	07/09/90	1.2×10^{-14}	1.8×10^{-15}
Area 5, RWMS TP Northwest	07/09/90	07/16/90	1.8×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP Northwest	07/16/90	07/23/90	1.8×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP Northwest	07/23/90	07/30/90	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northwest	07/30/90	08/05/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	08/06/90	08/13/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	08/13/90	08/20/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	08/20/90	08/27/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	08/27/90	09/04/90	1.6×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP Northwest	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northwest	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	09/17/90	09/24/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	09/24/90	10/01/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	10/08/90	10/15/90	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northwest	10/15/90	10/22/90	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Northwest	10/23/90	10/29/90	3.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	10/29/90	11/05/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	11/05/90	11/13/90	1.6×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP Northwest	11/13/90	11/19/90	4.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	11/13/90	11/19/90	4.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Northwest	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	11/26/90	12/03/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	12/03/90	12/10/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	12/10/90	12/17/90	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Northwest	12/17/90	12/24/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	01/02/90	01/08/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP South	01/08/90	01/16/90	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP South	01/16/90	01/23/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	01/23/90	01/29/90	1.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP South	01/29/90	02/05/90	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	02/05/90	02/12/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	02/12/90	02/20/90	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP South	02/20/90	02/27/90	1.9×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP South	02/27/90	03/06/90	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	03/06/90	03/12/90	1.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP South	03/12/90	03/19/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	03/19/90	03/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	03/26/90	04/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	04/02/90	04/09/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	04/09/90	04/16/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	04/16/90	04/23/90	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	04/23/90	04/30/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	04/30/90	05/07/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	05/07/90	05/14/90	2.0×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP South	05/14/90	05/22/90	1.5×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP South	05/22/90	05/29/90	1.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP South	05/29/90	06/04/90	1.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP South	06/04/90	06/11/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP South	06/11/90	06/18/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP South	06/18/90	06/25/90	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP South	06/25/90	07/02/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	07/02/90	07/09/90	1.3×10^{-14}	1.9×10^{-15}
Area 5, RWMS TP South	07/09/90	07/16/90	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP South	07/16/90	07/23/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	07/23/90	07/30/90	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP South	07/30/90	08/05/90	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	08/06/90	08/13/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	08/13/90	08/20/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	08/27/90	09/04/90	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS TP South	09/04/90	09/10/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	09/17/90	09/24/90	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP South	09/24/90	10/01/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	10/15/90	10/22/90	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	10/23/90	10/29/90	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	11/05/90	11/13/90	1.5×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP South	11/13/90	11/19/90	4.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	11/13/90	11/19/90	3.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP South	11/19/90	11/26/90	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP South	11/26/90	12/03/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	12/03/90	12/10/90	2.1×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP South	12/10/90	12/17/90	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP South	12/17/90	12/24/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	01/02/90	01/08/90	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southeast	01/08/90	01/16/90	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP Southeast	01/16/90	01/23/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	01/23/90	01/29/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southeast	01/29/90	02/05/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	02/05/90	02/12/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	02/12/90	02/20/90	1.3×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP Southeast	02/20/90	02/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	02/27/90	03/06/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	03/06/90	03/12/90	1.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southeast	03/12/90	03/19/90	9.4×10^{-15}	1.1×10^{-15}
Area 5, RWMS TP Southeast	03/19/90	03/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	03/26/90	04/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	04/02/90	04/09/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	04/09/90	04/16/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	04/30/90	05/07/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	05/07/90	05/14/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	05/14/90	05/22/90	1.7×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP Southeast	05/22/90	05/29/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	05/29/90	06/04/90	1.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP Southeast	06/04/90	06/11/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	06/11/90	06/18/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	06/18/90	06/25/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	07/02/90	07/09/90	1.1×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP Southeast	07/09/90	07/16/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	07/30/90	08/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	08/06/90	08/13/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southeast	08/13/90	08/20/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	08/27/90	09/04/90	1.4×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP Southeast	09/04/90	09/10/90	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southeast	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	10/01/90	10/08/90	1.8×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Southeast	10/08/90	10/15/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	10/15/90	10/22/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	10/23/90	10/29/90	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	10/29/90	11/05/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	11/05/90	11/13/90	1.6×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP Southeast	11/13/90	11/19/90	4.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southeast	11/13/90	11/19/90	3.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southeast	11/19/90	11/26/90	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP Southeast	11/26/90	12/03/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	12/03/90	12/10/90	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP Southeast	12/10/90	12/17/90	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southeast	12/17/90	12/24/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	01/02/90	01/08/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southwest	01/08/90	01/16/90	2.2×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP Southwest	01/16/90	01/23/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	01/23/90	01/29/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southwest	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	02/05/90	02/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	02/12/90	02/20/90	1.2×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP Southwest	02/20/90	02/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	02/27/90	03/06/90	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	03/06/90	03/12/90	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southwest	03/12/90	03/19/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	03/19/90	03/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	03/26/90	04/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	04/02/90	04/09/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	05/07/90	05/14/90	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	05/14/90	05/22/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	05/22/90	05/29/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southwest	05/29/90	06/04/90	1.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP Southwest	06/04/90	06/11/90	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	06/25/90	07/02/90	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	07/02/90	07/09/90	8.0×10^{-15}	1.8×10^{-15}
Area 5, RWMS TP Southwest	07/09/90	07/16/90	3.9×10^{-14}	3.0×10^{-15}
Area 5, RWMS TP Southwest	07/16/90	07/23/90	1.2×10^{-14}	7.4×10^{-16}
Area 5, RWMS TP Southwest	07/23/90	07/30/90	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	07/30/90	08/05/90	2.2×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP Southwest	08/06/90	08/13/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	08/13/90	08/20/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	08/20/90	08/27/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	08/27/90	09/04/90	1.4×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP Southwest	09/04/90	09/10/90	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	09/10/90	09/17/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	09/24/90	10/01/90	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	10/08/90	10/15/90	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	10/15/90	10/22/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	10/23/90	10/29/90	3.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	10/29/90	11/05/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	11/05/90	11/13/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP Southwest	11/13/90	11/19/90	3.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP Southwest	11/13/90	11/19/90	4.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP Southwest	11/19/90	11/26/90	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	11/26/90	12/03/90	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southwest	12/03/90	12/10/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP Southwest	12/10/90	12/17/90	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP Southwest	12/17/90	12/24/90	2.3×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	01/02/90	01/08/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	01/08/90	01/16/90	2.4×10^{-14}	9.8×10^{-16}
Area 5, Well 5B	01/16/90	01/23/90	2.1×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	01/23/90	01/29/90	1.4×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	01/29/90	02/05/90	1.3×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	02/05/90	02/12/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	02/12/90	02/20/90	1.2×10^{-14}	9.7×10^{-16}
Area 5, Well 5B	02/20/90	02/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	02/27/90	03/06/90	2.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	03/06/90	03/12/90	1.6×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	03/12/90	03/19/90	1.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	03/19/90	03/26/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	04/02/90	04/09/90	2.6×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	04/09/90	04/16/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	05/07/90	05/14/90	1.7×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	05/14/90	05/22/90	1.7×10^{-14}	9.8×10^{-16}
Area 5, Well 5B	05/22/90	05/29/90	2.1×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5B	05/29/90	06/04/90	1.2×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	06/04/90	06/11/90	1.7×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	07/02/90	07/09/90	1.4×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	07/09/90	07/16/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	07/30/90	08/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/06/90	08/13/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/13/90	08/20/90	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/27/90	09/04/90	1.5×10^{-14}	9.3×10^{-16}
Area 5, Well 5B	09/04/90	09/10/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	09/24/90	10/01/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/01/90	10/08/90	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/15/90	10/22/90	2.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/23/90	10/29/90	3.5×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/29/90	11/05/90	1.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	11/13/90	11/19/90	4.3×10^{-14}	1.4×10^{-15}
Area 5, Well 5B	11/13/90	11/19/90	4.7×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	11/19/90	11/26/90	1.9×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	11/26/90	12/03/90	2.5×10^{-14}	2.0×10^{-15}
Area 5, Well 5B	12/03/90	12/10/90	2.5×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	12/10/90	12/17/90	3.1×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	12/17/90	12/24/90	2.4×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	12/24/90	12/31/90	2.7×10^{-14}	1.2×10^{-15}
Area 6, CP-6	01/02/90	01/08/90	1.8×10^{-14}	1.3×10^{-15}
Area 6, CP-6	01/08/90	01/16/90	1.9×10^{-14}	10.0×10^{-16}
Area 6, CP-6	01/16/90	01/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, CP-6	01/23/90	01/29/90	1.4×10^{-14}	1.3×10^{-15}
Area 6, CP-6	01/29/90	02/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 6, CP-6	02/05/90	02/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 6, CP-6	02/06/90	03/05/90	2.9×10^{-14}	1.2×10^{-15}
Area 6, CP-6	02/12/90	02/20/90	1.1×10^{-14}	9.9×10^{-16}
Area 6, CP-6	02/20/90	02/26/90	1.8×10^{-14}	1.5×10^{-15}
Area 6, CP-6	03/05/90	03/12/90	1.4×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, CP-6	03/12/90	03/19/90	1.0×10^{-14}	1.1×10^{-15}
Area 6, CP-6	03/19/90	03/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, CP-6	03/26/90	04/02/90	2.4×10^{-14}	1.1×10^{-15}
Area 6, CP-6	04/02/90	04/09/90	2.6×10^{-14}	1.2×10^{-15}
Area 6, CP-6	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 6, CP-6	04/16/90	04/23/90	2.3×10^{-14}	7.3×10^{-15}
Area 6, CP-6	04/23/90	04/30/90	1.9×10^{-14}	1.2×10^{-15}
Area 6, CP-6	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, CP-6	05/07/90	05/14/90	1.6×10^{-14}	1.1×10^{-15}
Area 6, CP-6	05/14/90	05/21/90	1.9×10^{-14}	1.1×10^{-15}
Area 6, CP-6	05/21/90	05/29/90	1.2×10^{-14}	1.0×10^{-15}
Area 6, CP-6	05/29/90	06/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	06/05/90	06/11/90	1.3×10^{-14}	1.3×10^{-15}
Area 6, CP-6	06/11/90	06/18/90	1.3×10^{-14}	1.2×10^{-15}
Area 6, CP-6	06/18/90	06/25/90	1.8×10^{-14}	1.2×10^{-15}
Area 6, CP-6	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, CP-6	07/02/90	07/09/90	1.3×10^{-14}	1.2×10^{-15}
Area 6, CP-6	07/09/90	07/16/90	2.1×10^{-14}	1.3×10^{-15}
Area 6, CP-6	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, CP-6	07/23/90	07/30/90	8.0×10^{-15}	1.1×10^{-15}
Area 6, CP-6	07/30/90	08/06/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, CP-6	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	08/13/90	08/20/90	1.8×10^{-14}	1.4×10^{-15}
Area 6, CP-6	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, CP-6	08/27/90	09/04/90	1.7×10^{-14}	9.8×10^{-16}
Area 6, CP-6	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 6, CP-6	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 6, CP-6	09/17/90	09/24/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, CP-6	09/24/90	10/01/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, CP-6	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 6, CP-6	10/08/90	10/15/90	2.4×10^{-14}	1.1×10^{-15}
Area 6, CP-6	10/15/90	10/22/90	2.8×10^{-14}	1.2×10^{-15}
Area 6, CP-6	10/22/90	10/29/90	3.2×10^{-14}	1.2×10^{-15}
Area 6, CP-6	10/29/90	11/05/90	1.8×10^{-14}	1.2×10^{-15}
Area 6, CP-6	11/05/90	11/13/90	1.4×10^{-14}	1.0×10^{-15}
Area 6, CP-6	11/13/90	11/19/90	3.7×10^{-14}	1.3×10^{-15}
Area 6, CP-6	11/13/90	11/19/90	3.8×10^{-14}	1.3×10^{-15}
Area 6, CP-6	11/19/90	11/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 6, CP-6	11/26/90	12/03/90	1.8×10^{-14}	1.2×10^{-15}
Area 6, CP-6	12/03/90	12/10/90	1.9×10^{-14}	1.2×10^{-15}
Area 6, CP-6	12/10/90	12/17/90	3.0×10^{-14}	1.2×10^{-15}
Area 6, CP-6	12/17/90	12/24/90	2.2×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, CP-6	12/24/90	12/31/90	2.0×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	01/02/90	01/08/90	1.9×10^{-14}	4.4×10^{-15}
Area 6, Well 3 Complex	01/16/90	01/23/90	1.9×10^{-14}	1.2×10^{-15}
Area 6, Well 3 Complex	01/23/90	01/29/90	1.8×10^{-14}	1.4×10^{-15}
Area 6, Well 3 Complex	01/29/90	02/05/90	1.6×10^{-14}	1.3×10^{-15}
Area 6, Well 3 Complex	02/05/90	02/12/90	9.4×10^{-15}	1.4×10^{-15}
Area 6, Well 3 Complex	02/06/90	03/05/90	2.9×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	02/12/90	02/20/90	1.0×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	02/20/90	02/26/90	1.1×10^{-15}	9.9×10^{-17}
Area 6, Well 3 Complex	03/05/90	03/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	03/12/90	03/19/90	1.1×10^{-14}	1.3×10^{-15}
Area 6, Well 3 Complex	03/19/90	03/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	04/02/90	04/09/90	2.1×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	05/07/90	05/14/90	1.6×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	05/14/90	05/21/90	1.7×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	05/21/90	05/29/90	1.0×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	05/29/90	06/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	06/05/90	06/11/90	1.3×10^{-14}	1.3×10^{-15}
Area 6, Well 3 Complex	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	07/02/90	07/09/90	1.3×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	07/09/90	07/16/90	1.4×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	07/23/90	07/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	07/30/90	08/06/90	2.1×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	08/06/90	08/13/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	08/13/90	08/20/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	08/27/90	09/04/90	1.5×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 6, Well 3 Complex	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	09/17/90	09/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	10/08/90	10/15/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	10/15/90	10/22/90	2.7×10^{-14}	1.2×10^{-15}
Area 6, Well 3 Complex	10/22/90	10/29/90	3.3×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well 3 Complex	10/29/90	11/05/90	1.7×10^{-14}	1.2×10^{-15}
Area 6, Well 3 Complex	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	11/13/90	11/19/90	4.0×10^{-14}	1.3×10^{-15}
Area 6, Well 3 Complex	11/13/90	11/19/90	7.8×10^{-14}	1.3×10^{-15}
Area 6, Well 3 Complex	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	11/26/90	12/03/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	12/03/90	12/10/90	1.9×10^{-14}	1.2×10^{-15}
Area 6, Well 3 Complex	12/10/90	12/17/90	2.6×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	12/17/90	12/24/90	3.1×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	12/24/90	12/31/90	2.5×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	01/02/90	01/08/90	1.3×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	01/08/90	01/16/90	2.1×10^{-14}	10.0×10^{-16}
Area 6, Yucca Complex	01/16/90	01/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	01/23/90	01/29/90	1.7×10^{-14}	1.3×10^{-15}
Area 6, Yucca Complex	01/29/90	02/05/90	2.1×10^{-14}	1.4×10^{-15}
Area 6, Yucca Complex	02/05/90	02/12/90	7.2×10^{-15}	9.6×10^{-16}
Area 6, Yucca Complex	02/06/90	03/05/90	3.1×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	02/12/90	02/20/90	1.3×10^{-14}	9.9×10^{-16}
Area 6, Yucca Complex	02/20/90	02/26/90	1.6×10^{-14}	1.3×10^{-15}
Area 6, Yucca Complex	03/05/90	03/12/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	03/12/90	03/19/90	9.4×10^{-15}	9.6×10^{-16}
Area 6, Yucca Complex	03/19/90	03/26/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	04/02/90	04/09/90	2.3×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	04/16/90	04/23/90	1.6×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	04/23/90	04/30/90	1.2×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	04/30/90	05/07/90	1.7×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	05/07/90	05/14/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	05/14/90	05/21/90	1.9×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	05/21/90	05/29/90	9.7×10^{-15}	1.0×10^{-15}
Area 6, Yucca Complex	05/29/90	06/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	06/05/90	06/11/90	1.5×10^{-14}	1.3×10^{-15}
Area 6, Yucca Complex	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	07/02/90	07/09/90	1.2×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	07/09/90	07/16/90	1.1×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	07/30/90	08/06/90	2.1×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Yucca Complex	08/13/90	08/20/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	08/27/90	09/04/90	1.6×10^{-14}	9.5×10^{-16}
Area 6, Yucca Complex	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 6, Yucca Complex	09/10/90	09/17/90	1.8×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	09/24/90	10/01/90	2.2×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	10/08/90	10/15/90	2.6×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	10/15/90	10/22/90	2.6×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	10/22/90	10/29/90	3.3×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	10/29/90	11/05/90	1.9×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	11/05/90	11/13/90	1.6×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	11/13/90	11/19/90	4.2×10^{-14}	1.3×10^{-15}
Area 6, Yucca Complex	11/13/90	11/19/90	4.0×10^{-14}	1.3×10^{-15}
Area 6, Yucca Complex	11/19/90	11/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	11/26/90	12/03/90	1.9×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	12/03/90	12/10/90	2.2×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	12/10/90	12/17/90	2.5×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	12/17/90	12/24/90	2.1×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	12/24/90	12/31/90	2.6×10^{-14}	1.1×10^{-15}
Area 7, Ue7ns	01/02/90	01/08/90	1.5×10^{-14}	1.4×10^{-15}
Area 7, Ue7ns	01/08/90	01/16/90	1.7×10^{-14}	1.0×10^{-15}
Area 7, Ue7ns	01/16/90	01/23/90	3.3×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	01/23/90	01/29/90	1.3×10^{-14}	1.4×10^{-15}
Area 7, Ue7ns	01/29/90	02/05/90	9.3×10^{-15}	1.2×10^{-15}
Area 7, Ue7ns	02/05/90	02/12/90	1.3×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	02/12/90	02/20/90	1.1×10^{-14}	1.0×10^{-15}
Area 7, Ue7ns	02/20/90	02/26/90	1.5×10^{-14}	1.4×10^{-15}
Area 7, Ue7ns	02/26/90	03/05/90	2.8×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	03/05/90	03/12/90	1.2×10^{-14}	1.1×10^{-15}
Area 7, Ue7ns	03/12/90	03/19/90	1.1×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	03/19/90	03/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	03/26/90	04/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 7, Ue7ns	04/02/90	04/09/90	2.1×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	04/09/90	04/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 7, Ue7ns	04/16/90	04/23/90	1.3×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	04/23/90	04/30/90	1.5×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	04/30/90	05/07/90	1.4×10^{-14}	1.1×10^{-15}
Area 7, Ue7ns	05/07/90	05/14/90	3.2×10^{-14}	2.2×10^{-15}
Area 7, Ue7ns	05/14/90	05/21/90	1.6×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	05/21/90	05/29/90	1.4×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 7, Ue7ns	05/29/90	06/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 7, Ue7ns	06/05/90	06/11/90	1.3×10^{-14}	1.4×10^{-15}
Area 7, Ue7ns	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	06/18/90	06/25/90	3.2×10^{-15}	1.1×10^{-15}
Area 7, Ue7ns	06/25/90	07/02/90	2.0×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	07/02/90	07/09/90	1.1×10^{-14}	1.2×10^{-15}
Area 7, Ue7ns	07/09/90	07/16/90	1.3×10^{-14}	1.9×10^{-15}
Area 7, Ue7ns	07/16/90	07/23/90	1.9×10^{-14}	2.0×10^{-15}
Area 7, Ue7ns	07/23/90	07/30/90	1.8×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	07/30/90	08/06/90	2.1×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	08/06/90	08/13/90	2.0×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	08/13/90	08/20/90	2.2×10^{-14}	1.1×10^{-14}
Area 7, Ue7ns	08/20/90	08/27/90	1.5×10^{-14}	3.9×10^{-15}
Area 7, Ue7ns	08/27/90	09/04/90	1.7×10^{-14}	1.5×10^{-15}
Area 7, Ue7ns	09/04/90	09/10/90	1.9×10^{-14}	1.9×10^{-15}
Area 7, Ue7ns	09/10/90	09/17/90	1.7×10^{-14}	1.6×10^{-15}
Area 7, Ue7ns	09/17/90	09/24/90	1.9×10^{-14}	1.6×10^{-15}
Area 7, Ue7ns	09/24/90	10/01/90	2.4×10^{-14}	1.6×10^{-15}
Area 7, Ue7ns	10/01/90	10/08/90	2.2×10^{-14}	1.6×10^{-15}
Area 7, Ue7ns	10/08/90	10/15/90	2.2×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	10/15/90	10/22/90	2.6×10^{-14}	1.8×10^{-15}
Area 7, Ue7ns	10/22/90	10/29/90	4.4×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	10/29/90	11/05/90	2.0×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	11/05/90	11/13/90	1.4×10^{-14}	1.5×10^{-15}
Area 7, Ue7ns	11/13/90	11/19/90	3.2×10^{-14}	1.8×10^{-15}
Area 7, Ue7ns	11/13/90	11/19/90	3.0×10^{-14}	1.8×10^{-15}
Area 7, Ue7ns	11/19/90	11/26/90	1.9×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	11/26/90	12/03/90	1.8×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	12/03/90	12/10/90	1.5×10^{-14}	1.6×10^{-15}
Area 7, Ue7ns	12/10/90	12/17/90	2.9×10^{-14}	1.7×10^{-15}
Area 7, Ue7ns	12/17/90	12/24/90	2.1×10^{-14}	1.6×10^{-15}
Area 7, Ue7ns	12/24/90	12/31/90	2.2×10^{-14}	1.5×10^{-15}
Area 9, 9-300 Bunker	01/02/90	01/08/90	1.8×10^{-14}	1.5×10^{-15}
Area 9, 9-300 Bunker	01/08/90	01/16/90	2.0×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	01/16/90	01/23/90	2.8×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	01/23/90	01/29/90	1.2×10^{-14}	1.5×10^{-15}
Area 9, 9-300 Bunker	01/29/90	02/05/90	1.1×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	02/05/90	02/12/90	1.4×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	02/12/90	02/20/90	1.1×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	02/20/90	02/26/90	1.6×10^{-14}	1.5×10^{-15}
Area 9, 9-300 Bunker	02/26/90	03/05/90	3.0×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	03/05/90	03/12/90	1.3×10^{-14}	1.5×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 9, 9-300 Bunker	03/12/90	03/19/90	1.2×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	03/19/90	03/26/90	2.2×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	03/26/90	04/02/90	2.8×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	04/02/90	04/09/90	2.7×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	04/09/90	04/16/90	1.7×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	04/16/90	04/23/90	1.1×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	04/23/90	04/30/90	9.8×10^{-15}	1.1×10^{-15}
Area 9, 9-300 Bunker	04/30/90	05/07/90	1.4×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	05/07/90	05/14/90	2.9×10^{-14}	2.2×10^{-15}
Area 9, 9-300 Bunker	05/14/90	05/21/90	1.7×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	05/21/90	05/29/90	9.7×10^{-15}	1.0×10^{-15}
Area 9, 9-300 Bunker	05/29/90	06/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	06/05/90	06/11/90	1.1×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	06/11/90	06/18/90	1.4×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	07/02/90	07/09/90	1.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	07/09/90	07/16/90	1.4×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	07/16/90	07/23/90	1.6×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	07/23/90	07/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	07/30/90	08/06/90	2.0×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/13/90	08/20/90	1.6×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/27/90	09/04/90	1.5×10^{-14}	9.6×10^{-16}
Area 9, 9-300 Bunker	09/04/90	09/10/90	1.5×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	09/10/90	09/17/90	1.8×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	09/24/90	10/01/90	1.8×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	10/01/90	10/08/90	1.9×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	10/08/90	10/15/90	2.1×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	10/15/90	10/22/90	2.2×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	10/22/90	10/29/90	2.9×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	10/29/90	11/05/90	1.6×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	11/05/90	11/13/90	2.0×10^{-14}	1.6×10^{-15}
Area 9, 9-300 Bunker	11/13/90	11/19/90	3.2×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	11/13/90	11/19/90	3.7×10^{-14}	1.4×10^{-15}
Area 9, 9-300 Bunker	11/19/90	11/26/90	1.9×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	11/26/90	12/03/90	1.8×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	12/03/90	12/11/90	2.3×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	12/10/90	12/17/90	2.2×10^{-14}	1.4×10^{-15}
Area 9, 9-300 Bunker	12/17/90	12/24/90	2.1×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 9, 9-300 Bunker	12/24/90	12/31/90	2.2×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	01/02/90	01/08/90	1.7×10^{-14}	1.3×10^{-15}
Area 10, Gate 700 South	01/08/90	01/16/90	1.5×10^{-14}	1.0×10^{-15}
Area 10, Gate 700 South	01/16/90	01/23/90	2.4×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	01/23/90	01/29/90	1.2×10^{-14}	1.4×10^{-15}
Area 10, Gate 700 South	01/29/90	02/05/90	9.9×10^{-15}	1.2×10^{-15}
Area 10, Gate 700 South	02/05/90	02/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	02/12/90	02/20/90	1.1×10^{-14}	1.0×10^{-15}
Area 10, Gate 700 South	02/20/90	02/26/90	1.3×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	02/26/90	03/05/90	2.9×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	03/05/90	03/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	03/12/90	03/19/90	9.1×10^{-15}	1.1×10^{-15}
Area 10, Gate 700 South	03/19/90	03/26/90	1.6×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	03/26/90	04/02/90	2.1×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	04/02/90	04/09/90	2.1×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	04/09/90	04/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	04/16/90	04/23/90	1.3×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	04/23/90	04/30/90	2.0×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	04/30/90	05/07/90	1.5×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	05/07/90	05/14/90	3.3×10^{-14}	2.3×10^{-15}
Area 10, Gate 700 South	05/14/90	05/21/90	1.8×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	05/21/90	05/29/90	1.1×10^{-14}	1.0×10^{-15}
Area 10, Gate 700 South	05/29/90	06/05/90	1.2×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	06/05/90	06/11/90	1.5×10^{-14}	1.4×10^{-15}
Area 10, Gate 700 South	06/11/90	06/18/90	1.4×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	06/18/90	06/25/90	1.7×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	07/02/90	07/09/90	1.2×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	07/09/90	07/16/90	1.8×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	07/16/90	07/23/90	1.6×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	07/23/90	07/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	07/30/90	08/06/90	2.1×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	08/06/90	08/13/90	2.1×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	08/13/90	08/20/90	2.0×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	08/27/90	09/04/90	1.5×10^{-14}	9.9×10^{-16}
Area 10, Gate 700 South	09/04/90	09/10/90	1.6×10^{-14}	1.3×10^{-15}
Area 10, Gate 700 South	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	10/01/90	10/08/90	2.2×10^{-14}	1.1×10^{-15}
Area 10, Gate 700 South	10/08/90	10/15/90	2.3×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 10, Gate 700 South	10/15/90	10/22/90	2.6×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	10/22/90	10/29/90	3.2×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	10/29/90	11/05/90	1.7×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 10, Gate 700 South	11/13/90	11/19/90	3.5×10^{-14}	1.3×10^{-15}
Area 10, Gate 700 South	11/13/90	11/19/90	3.7×10^{-14}	1.4×10^{-15}
Area 10, Gate 700 South	11/19/90	11/26/90	1.9×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	11/26/90	12/03/90	1.7×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	12/03/90	12/11/90	2.0×10^{-14}	9.8×10^{-16}
Area 10, Gate 700 South	12/10/90	12/17/90	2.8×10^{-14}	1.6×10^{-15}
Area 10, Gate 700 South	12/17/90	12/24/90	2.3×10^{-14}	1.2×10^{-15}
Area 10, Gate 700 South	12/24/90	12/31/90	2.2×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	01/02/90	01/08/90	1.5×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	01/08/90	01/16/90	1.8×10^{-14}	9.6×10^{-16}
Area 11, Gate 293	01/16/90	01/23/90	2.1×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	01/23/90	01/29/90	1.4×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	01/29/90	02/05/90	1.0×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	02/05/90	02/12/90	1.4×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	02/06/90	03/05/90	2.9×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	02/12/90	02/20/90	1.1×10^{-14}	9.5×10^{-16}
Area 11, Gate 293	02/20/90	02/26/90	1.6×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	03/05/90	03/12/90	1.3×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	03/12/90	03/19/90	9.5×10^{-15}	1.1×10^{-15}
Area 11, Gate 293	03/19/90	03/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	03/26/90	04/02/90	2.1×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	04/02/90	04/09/90	2.2×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	04/16/90	04/23/90	1.5×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	04/23/90	04/30/90	1.0×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	04/30/90	05/07/90	1.6×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	05/07/90	05/14/90	1.6×10^{-14}	10.0×10^{-16}
Area 11, Gate 293	05/14/90	05/21/90	1.8×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	05/21/90	05/29/90	9.8×10^{-15}	9.7×10^{-16}
Area 11, Gate 293	05/29/90	06/05/90	9.9×10^{-15}	1.1×10^{-15}
Area 11, Gate 293	06/05/90	06/11/90	1.4×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	06/11/90	06/18/90	1.4×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	06/18/90	06/25/90	2.0×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	06/25/90	07/02/90	1.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/02/90	07/09/90	1.1×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/09/90	07/16/90	2.0×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 11, Gate 293	07/30/90	08/06/90	2.2×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	08/06/90	08/13/90	2.3×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	08/13/90	08/20/90	1.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	08/20/90	08/27/90	1.5×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	08/27/90	09/04/90	1.5×10^{-14}	9.2×10^{-16}
Area 11, Gate 293	09/04/90	09/10/90	1.8×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	09/17/90	09/24/90	1.6×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	09/24/90	10/01/9	2.1×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	10/01/90	10/08/90	2.0×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	10/08/90	10/15/90	2.3×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	10/15/90	10/22/90	2.2×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	10/22/90	10/29/90	2.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	10/29/90	11/05/90	1.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	11/05/90	11/13/90	1.6×10^{-14}	9.8×10^{-16}
Area 11, Gate 293	11/13/90	11/19/90	4.0×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	11/13/90	11/19/90	3.8×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	11/19/90	11/26/90	1.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	11/26/90	12/03/90	1.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/03/90	12/10/90	2.2×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/10/90	12/17/90	2.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/17/90	12/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/24/90	12/31/90	2.3×10^{-14}	1.0×10^{-15}
Area 12, Complex	01/02/90	01/08/90	1.4×10^{-14}	1.4×10^{-15}
Area 12, Complex	01/08/90	01/16/90	1.6×10^{-14}	1.0×10^{-15}
Area 12, Complex	01/16/90	01/23/90	1.6×10^{-14}	1.2×10^{-15}
Area 12, Complex	01/23/90	01/29/90	7.8×10^{-15}	1.4×10^{-15}
Area 12, Complex	01/29/90	02/05/90	9.0×10^{-15}	1.2×10^{-15}
Area 12, Complex	02/05/90	02/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 12, Complex	02/12/90	02/20/90	7.6×10^{-15}	1.0×10^{-15}
Area 12, Complex	02/20/90	02/27/90	1.5×10^{-14}	1.2×10^{-15}
Area 12, Complex	02/27/90	03/05/90	2.1×10^{-14}	1.3×10^{-15}
Area 12, Complex	03/05/90	03/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 12, Complex	03/12/90	03/19/90	1.0×10^{-14}	1.1×10^{-15}
Area 12, Complex	03/19/90	03/26/90	1.6×10^{-14}	$1:0 \times 10^{-15}$
Area 12, Complex	03/26/90	04/02/90	2.4×10^{-14}	1.3×10^{-15}
Area 12, Complex	04/02/90	04/09/90	2.1×10^{-14}	1.2×10^{-15}
Area 12, Complex	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 12, Complex	04/16/90	04/23/90	1.2×10^{-14}	1.1×10^{-15}
Area 12, Complex	04/23/90	04/30/90	9.4×10^{-15}	1.1×10^{-15}
Area 12, Complex	04/30/90	05/07/90	1.9×10^{-14}	1.1×10^{-15}
Area 12, Complex	05/07/90	05/14/90	3.0×10^{-14}	2.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Complex	05/14/90	05/21/90	1.9×10^{-14}	1.2×10^{-15}
Area 12, Complex	05/21/90	05/29/90	1.4×10^{-14}	1.0×10^{-15}
Area 12, Complex	05/29/90	06/04/90	1.2×10^{-14}	1.3×10^{-15}
Area 12, Complex	06/04/90	06/11/90	1.3×10^{-14}	1.2×10^{-15}
Area 12, Complex	06/11/90	06/19/90	1.4×10^{-14}	1.0×10^{-15}
Area 12, Complex	06/19/90	06/25/90	1.7×10^{-14}	1.3×10^{-15}
Area 12, Complex	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 12, Complex	07/02/90	07/09/90	1.2×10^{-14}	1.1×10^{-15}
Area 12, Complex	07/09/90	07/16/90	1.6×10^{-14}	1.2×10^{-15}
Area 12, Complex	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 12, Complex	07/23/90	07/30/90	1.6×10^{-14}	1.1×10^{-15}
Area 12, Complex	07/30/90	08/05/90	2.2×10^{-14}	1.2×10^{-15}
Area 12, Complex	08/05/90	08/14/90	1.8×10^{-14}	9.4×10^{-16}
Area 12, Complex	08/14/90	08/20/90	1.6×10^{-14}	1.4×10^{-15}
Area 12, Complex	08/20/90	08/28/90	1.5×10^{-14}	9.7×10^{-16}
Area 12, Complex	08/28/90	09/04/90	1.6×10^{-14}	1.1×10^{-15}
Area 12, Complex	09/04/90	09/10/90	1.5×10^{-14}	1.2×10^{-15}
Area 12, Complex	09/10/90	09/17/90	1.4×10^{-14}	1.2×10^{-15}
Area 12, Complex	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 12, Complex	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 12, Complex	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 12, Complex	10/08/90	10/16/90	2.3×10^{-14}	1.1×10^{-15}
Area 12, Complex	10/22/90	10/29/90	2.7×10^{-14}	1.1×10^{-15}
Area 12, Complex	10/29/90	11/06/90	1.6×10^{-14}	1.0×10^{-15}
Area 12, Complex	11/06/90	11/13/90	1.5×10^{-14}	1.2×10^{-15}
Area 12, Complex	11/13/90	11/19/90	3.0×10^{-14}	1.4×10^{-15}
Area 12, Complex	11/13/90	11/19/90	3.3×10^{-14}	1.4×10^{-15}
Area 12, Complex	11/19/90	11/26/90	1.6×10^{-14}	1.2×10^{-15}
Area 12, Complex	11/26/90	12/03/90	1.7×10^{-14}	1.2×10^{-15}
Area 12, Complex	12/03/90	12/10/90	2.1×10^{-14}	1.2×10^{-15}
Area 12, Complex	12/10/90	12/17/90	2.3×10^{-14}	1.1×10^{-15}
Area 12, Complex	12/17/90	12/24/90	1.8×10^{-14}	1.1×10^{-15}
Area 12, Complex	12/24/90	12/31/90	1.8×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	01/02/90	01/08/90	1.3×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	01/08/90	01/16/90	1.9×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	01/16/90	01/23/90	2.0×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	01/23/90	01/29/90	1.0×10^{-14}	1.5×10^{-15}
Area 15, EPA Farm	01/29/90	02/05/90	8.1×10^{-15}	1.3×10^{-15}
Area 15, EPA Farm	02/05/90	02/12/90	1.3×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	02/12/90	02/20/90	1.4×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	02/20/90	02/26/90	1.6×10^{-14}	1.5×10^{-15}
Area 15, EPA Farm	02/26/90	03/05/90	3.0×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, EPA Farm	03/05/90	03/12/90	1.5×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	03/12/90	03/19/90	1.3×10^{-14}	1.6×10^{-15}
Area 15, EPA Farm	03/19/90	03/26/90	1.5×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	03/26/90	04/02/90	2.5×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	04/02/90	04/09/90	2.4×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	04/09/90	04/16/90	2.5×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	04/16/90	04/23/90	1.4×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	04/23/90	04/30/90	9.8×10^{-15}	1.3×10^{-15}
Area 15, EPA Farm	04/30/90	05/07/90	1.9×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	05/07/90	05/14/90	3.5×10^{-14}	2.5×10^{-15}
Area 15, EPA Farm	05/14/90	05/21/90	1.9×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	05/21/90	05/29/90	1.2×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	05/29/90	06/05/90	1.4×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	06/05/90	06/11/90	1.4×10^{-14}	1.5×10^{-15}
Area 15, EPA Farm	06/11/90	06/18/90	1.6×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	06/18/90	06/25/90	2.2×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	06/25/90	07/02/90	1.9×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	07/02/90	07/09/90	1.6×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	07/09/90	07/16/90	2.2×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	07/16/90	07/23/90	1.9×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	07/23/90	07/30/90	2.1×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	07/30/90	08/06/90	2.2×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	08/06/90	08/13/90	2.2×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/13/90	08/20/90	1.8×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	08/20/90	08/27/90	1.7×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/27/90	09/04/90	1.7×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	09/04/90	09/10/90	1.8×10^{-14}	1.4×10^{-15}
Area 15, EPA Farm	09/10/90	09/17/90	1.6×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	09/17/90	09/24/90	1.8×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	09/24/90	10/01/90	2.3×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	10/01/90	10/08/90	2.2×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	10/08/90	10/15/90	2.5×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	10/15/90	10/22/90	2.7×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	10/22/90	10/29/90	3.3×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	10/29/90	11/05/90	1.7×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	11/05/90	11/13/90	1.5×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	11/13/90	11/19/90	2.8×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	11/13/90	11/19/90	2.8×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	11/19/90	11/26/90	2.6×10^{-14}	1.7×10^{-15}
Area 15, EPA Farm	11/26/90	12/03/90	1.9×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	12/03/90	12/11/90	2.5×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	12/10/90	12/17/90	2.6×10^{-14}	1.5×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, EPA Farm	12/17/90	12/24/90	2.4×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	12/24/90	12/31/90	2.4×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	01/02/90	01/08/90	1.7×10^{-14}	1.4×10^{-15}
Area 15, PILEDRIVER	01/08/90	01/16/90	1.4×10^{-14}	1.0×10^{-15}
Area 15, PILEDRIVER	01/16/90	01/23/90	1.6×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	01/23/90	01/29/90	1.2×10^{-14}	1.4×10^{-15}
Area 15, PILEDRIVER	01/29/90	02/05/90	8.9×10^{-15}	1.2×10^{-15}
Area 15, PILEDRIVER	02/05/90	02/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	02/12/90	02/20/90	9.5×10^{-15}	1.0×10^{-15}
Area 15, PILEDRIVER	02/20/90	02/26/90	1.4×10^{-14}	1.4×10^{-15}
Area 15, PILEDRIVER	02/26/90	03/05/90	2.8×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	03/05/90	03/12/90	1.1×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	03/12/90	03/19/90	9.2×10^{-15}	1.1×10^{-15}
Area 15, PILEDRIVER	03/19/90	03/26/90	1.8×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	04/02/90	04/09/90	2.3×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	04/09/90	04/16/90	2.1×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	04/16/90	04/23/90	1.5×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	04/23/90	04/30/90	1.1×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	04/30/90	05/07/90	1.0×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	05/07/90	05/14/90	3.1×10^{-14}	2.3×10^{-15}
Area 15, PILEDRIVER	05/14/90	05/21/90	1.8×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	05/21/90	05/29/90	9.5×10^{-15}	1.0×10^{-15}
Area 15, PILEDRIVER	05/29/90	06/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	06/05/90	06/11/90	1.7×10^{-14}	1.4×10^{-15}
Area 15, PILEDRIVER	06/11/90	06/18/90	1.4×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	07/02/90	07/09/90	1.3×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	07/09/90	07/16/90	1.3×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	07/16/90	07/23/90	1.6×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	07/23/90	07/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	07/30/90	08/06/90	2.0×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	08/06/90	08/13/90	1.9×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	08/13/90	08/20/90	1.5×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	08/20/90	08/27/90	1.5×10^{-14}	4.3×10^{-15}
Area 15, PILEDRIVER	08/27/90	09/04/90	1.7×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	09/04/90	09/10/90	1.8×10^{-14}	1.4×10^{-15}
Area 15, PILEDRIVER	09/10/90	09/17/90	1.3×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	09/17/90	09/24/90	1.5×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	09/24/90	10/01/90	2.1×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	10/01/90	10/08/90	1.9×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, PILEDRIVER	10/08/90	10/15/90	2.1×10^{-14}	1.3×10^{-15}
Area 15, PILEDRIVER	10/15/90	10/22/90	2.4×10^{-14}	1.3×10^{-15}
Area 15, PILEDRIVER	10/22/90	10/29/90	3.0×10^{-14}	1.2×10^{-15}
Area 15, PILEDRIVER	10/29/90	11/05/90	1.7×10^{-14}	1.3×10^{-15}
Area 15, PILEDRIVER	11/05/90	11/13/90	1.3×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	11/13/90	11/19/90	3.5×10^{-14}	1.4×10^{-15}
Area 15, PILEDRIVER	11/13/90	11/19/90	3.7×10^{-14}	1.5×10^{-15}
Area 15, PILEDRIVER	11/19/90	11/26/90	1.7×10^{-14}	1.3×10^{-15}
Area 15, PILEDRIVER	11/26/90	12/03/90	1.7×10^{-14}	1.3×10^{-15}
Area 15, PILEDRIVER	12/03/90	12/11/90	2.1×10^{-14}	1.1×10^{-15}
Area 15, PILEDRIVER	12/10/90	12/17/90	2.3×10^{-14}	1.4×10^{-15}
Area 15, PILEDRIVER	12/17/90	12/24/90	1.8×10^{-14}	1.3×10^{-15}
Area 15, PILEDRIVER	12/24/90	12/31/90	2.1×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	01/02/90	01/08/90	1.6×10^{-14}	1.4×10^{-15}
Area 16, 3545 Substation	01/08/90	01/16/90	1.3×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	01/16/90	01/23/90	1.7×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	01/23/90	01/29/90	1.2×10^{-14}	1.3×10^{-15}
Area 16, 3545 Substation	01/29/90	02/05/90	7.6×10^{-15}	1.2×10^{-15}
Area 16, 3545 Substation	02/05/90	02/12/90	1.3×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	02/12/90	02/20/90	1.0×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	02/20/90	02/27/90	1.6×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	02/27/90	03/05/90	2.5×10^{-14}	1.3×10^{-15}
Area 16, 3545 Substation	03/05/90	03/12/90	1.2×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	03/12/90	03/19/90	1.0×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	03/19/90	03/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	03/26/90	04/02/90	2.0×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	04/02/90	04/09/90	2.2×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	04/16/90	04/23/90	1.3×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	04/23/90	04/30/90	1.4×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	04/30/90	05/07/90	1.8×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	05/07/90	05/14/90	3.4×10^{-14}	2.3×10^{-15}
Area 16, 3545 Substation	05/14/90	05/21/90	2.1×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	05/21/90	05/29/90	1.3×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	05/29/90	06/04/90	1.1×10^{-14}	1.3×10^{-15}
Area 16, 3545 Substation	06/04/90	06/11/90	1.3×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	06/11/90	06/19/90	1.8×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	06/19/90	06/25/90	1.9×10^{-14}	1.4×10^{-15}
Area 16, 3545 Substation	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	07/02/90	07/09/90	1.0×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	07/09/90	07/16/90	1.9×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	07/16/90	07/23/90	1.8×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 16, 3545 Substation	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	07/30/90	08/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	08/05/90	08/14/90	2.0×10^{-14}	9.8×10^{-16}
Area 16, 3545 Substation	08/14/90	08/20/90	1.5×10^{-14}	1.4×10^{-15}
Area 16, 3545 Substation	08/20/90	08/28/90	1.3×10^{-14}	9.8×10^{-16}
Area 16, 3545 Substation	08/28/90	09/04/90	1.4×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	09/04/90	09/10/90	1.6×10^{-14}	1.3×10^{-15}
Area 16, 3545 Substation	09/10/90	09/17/90	1.4×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	09/17/90	09/24/90	1.5×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	09/24/90	10/01/90	2.2×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	10/08/90	10/16/90	2.3×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	10/16/90	10/22/90	2.8×10^{-14}	1.7×10^{-15}
Area 16, 3545 Substation	10/22/90	10/29/90	2.3×10^{-14}	9.5×10^{-16}
Area 16, 3545 Substation	10/29/90	11/06/90	1.6×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	11/06/90	11/19/90	2.0×10^{-14}	6.3×10^{-16}
Area 16, 3545 Substation	11/06/90	11/19/90	2.1×10^{-14}	6.3×10^{-16}
Area 16, 3545 Substation	11/19/90	11/26/90	1.7×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	11/26/90	12/03/90	1.7×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	12/03/90	12/10/90	2.0×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	12/10/90	12/17/90	2.4×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	12/17/90	12/24/90	1.7×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	12/24/90	12/31/90	2.0×10^{-14}	1.7×10^{-16}
Area 19, Echo Peak	01/08/90	01/22/90	1.1×10^{-14}	5.5×10^{-16}
Area 19, Echo Peak	01/22/90	01/29/90	8.1×10^{-15}	1.1×10^{-15}
Area 19, Echo Peak	01/29/90	02/05/90	8.4×10^{-15}	1.4×10^{-15}
Area 19, Echo Peak	02/05/90	02/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 19, Echo Peak	02/12/90	02/27/90	9.8×10^{-15}	4.6×10^{-16}
Area 19, Echo Peak	03/05/90	03/13/90	1.5×10^{-14}	5.5×10^{-16}
Area 19, Echo Peak	03/13/90	03/19/90	6.2×10^{-15}	1.3×10^{-15}
Area 19, Echo Peak	03/19/90	03/26/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	03/26/90	04/02/90	2.1×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	04/02/90	04/09/90	1.9×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	04/09/90	04/16/90	2.0×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	04/16/90	04/23/90	1.2×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	05/07/90	05/14/90	3.2×10^{-14}	2.1×10^{-15}
Area 19, Echo Peak	05/14/90	05/21/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	05/21/90	05/29/90	8.4×10^{-15}	9.9×10^{-16}
Area 19, Echo Peak	05/29/90	06/04/90	8.6×10^{-15}	1.3×10^{-15}
Area 19, Echo Peak	06/04/90	06/11/90	1.2×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 19, Echo Peak	06/11/90	06/19/90	1.2×10^{-14}	9.7×10^{-16}
Area 19, Echo Peak	06/19/90	06/25/90	1.6×10^{-14}	1.3×10^{-15}
Area 19, Echo Peak	06/25/90	07/02/90	1.6×10^{-14}	5.4×10^{-15}
Area 19, Echo Peak	07/02/90	07/09/90	1.2×10^{-14}	1.3×10^{-15}
Area 19, Echo Peak	07/09/90	07/16/90	1.3×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	07/16/90	07/23/90	1.5×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	07/23/90	07/30/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	07/30/90	08/05/90	3.0×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	08/05/90	08/14/90	1.7×10^{-14}	9.3×10^{-16}
Area 19, Echo Peak	08/14/90	08/20/90	1.6×10^{-14}	1.3×10^{-15}
Area 19, Echo Peak	08/20/90	08/28/90	1.3×10^{-14}	9.3×10^{-16}
Area 19, Echo Peak	08/28/90	09/04/90	1.3×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	09/04/90	09/10/90	1.6×10^{-14}	1.2×10^{-15}
Area 19, Echo Peak	09/10/90	09/17/90	1.2×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	09/24/90	10/01/90	1.8×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	10/01/90	10/08/90	1.8×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	10/08/90	10/16/90	2.0×10^{-14}	9.9×10^{-16}
Area 19, Echo Peak	10/16/90	10/22/90	2.0×10^{-14}	1.3×10^{-15}
Area 19, Echo Peak	10/22/90	10/29/90	2.4×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	10/29/90	11/06/90	1.3×10^{-14}	9.9×10^{-16}
Area 19, Echo Peak	11/06/90	11/13/90	1.2×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	11/13/90	11/19/90	2.8×10^{-14}	1.3×10^{-15}
Area 19, Echo Peak	11/13/90	11/19/90	3.1×10^{-14}	1.3×10^{-15}
Area 19, Echo Peak	11/19/90	11/26/90	1.5×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	11/26/90	12/03/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	12/03/90	12/10/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	12/10/90	12/17/90	2.2×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	12/17/90	12/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	12/24/90	12/31/90	1.8×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	01/02/90	01/08/90	1.2×10^{-14}	1.4×10^{-15}
Area 19, Pahute Substation	01/08/90	01/16/90	1.1×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	01/16/90	01/22/90	1.7×10^{-14}	1.5×10^{-15}
Area 19, Pahute Substation	01/22/90	01/29/90	9.6×10^{-15}	1.2×10^{-15}
Area 19, Pahute Substation	01/29/90	02/05/90	9.1×10^{-15}	1.2×10^{-15}
Area 19, Pahute Substation	02/05/90	02/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	02/12/90	02/20/90	8.3×10^{-15}	1.7×10^{-15}
Area 19, Pahute Substation	02/20/90	02/27/90	1.5×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	02/27/90	03/05/90	2.7×10^{-14}	1.4×10^{-15}
Area 19, Pahute Substation	03/05/90	03/12/90	1.1×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	03/12/90	03/19/90	9.3×10^{-15}	1.2×10^{-15}
Area 19, Pahute Substation	03/19/90	03/26/90	1.7×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 19, Pahute Substation	03/26/90	04/02/90	2.3×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	04/02/90	04/09/90	2.1×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	04/16/90	04/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	04/23/90	04/30/90	1.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	04/30/90	05/07/90	1.6×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	05/07/90	05/14/90	3.3×10^{-14}	2.2×10^{-15}
Area 19, Pahute Substation	05/14/90	05/21/90	1.9×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	05/21/90	05/29/90	8.8×10^{-15}	1.0×10^{-15}
Area 19, Pahute Substation	05/29/90	06/04/90	9.7×10^{-15}	1.3×10^{-15}
Area 19, Pahute Substation	06/04/90	06/11/90	1.2×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	06/11/90	06/19/90	1.3×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	06/19/90	06/25/90	1.9×10^{-14}	1.3×10^{-15}
Area 19, Pahute Substation	06/25/90	07/02/90	1.7×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	07/02/90	07/09/90	1.2×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	07/09/90	07/16/90	8.8×10^{-15}	1.1×10^{-15}
Area 19, Pahute Substation	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	07/23/90	07/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	07/30/90	08/05/90	2.1×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	08/05/90	08/14/90	1.1×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	08/20/90	08/28/90	1.4×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	08/28/90	09/04/90	1.5×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	09/04/90	09/10/90	1.7×10^{-14}	1.3×10^{-15}
Area 19, Pahute Substation	09/10/90	09/17/90	1.5×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	09/24/90	10/01/90	2.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	10/01/90	10/08/90	2.3×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	10/08/90	10/16/90	2.1×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	10/16/90	10/22/90	2.1×10^{-14}	1.4×10^{-15}
Area 19, Pahute Substation	10/22/90	10/29/90	2.9×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	10/29/90	11/06/90	1.5×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	11/06/90	11/13/90	1.5×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	11/13/90	11/19/90	3.2×10^{-14}	1.4×10^{-15}
Area 19, Pahute Substation	11/13/90	11/19/90	2.8×10^{-14}	1.4×10^{-15}
Area 19, Pahute Substation	11/19/90	11/26/90	1.6×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	11/26/90	12/03/90	1.4×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	12/03/90	12/10/90	1.8×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	12/10/90	12/17/90	2.1×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	12/17/90	12/24/90	2.0×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	12/24/90	12/31/90	1.8×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	01/02/90	01/08/90	9.1×10^{-15}	8.1×10^{-16}
Area 20, Dispensary	01/08/90	01/16/90	1.2×10^{-14}	9.7×10^{-16}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Dispensary	01/16/90	01/22/90	1.6×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	01/22/90	01/29/90	1.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	01/29/90	02/05/90	8.3×10^{-15}	1.1×10^{-15}
Area 20, Dispensary	02/05/90	02/12/90	9.2×10^{-15}	1.1×10^{-15}
Area 20, Dispensary	02/12/90	02/20/90	1.1×10^{-14}	9.6×10^{-16}
Area 20, Dispensary	02/20/90	02/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	02/27/90	03/05/90	2.6×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	03/05/90	03/12/90	1.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	03/12/90	03/19/90	1.0×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	03/19/90	03/26/90	1.6×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	03/26/90	04/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	04/02/90	04/09/90	2.0×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	04/09/90	04/16/90	2.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	04/16/90	04/23/90	1.4×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	04/23/90	04/30/90	1.2×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	05/07/90	05/14/90	3.2×10^{-14}	2.2×10^{-15}
Area 20, Dispensary	05/14/90	05/21/90	1.8×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	05/21/90	05/29/90	1.3×10^{-14}	9.8×10^{-16}
Area 20, Dispensary	05/29/90	06/04/90	1.1×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	06/04/90	06/11/90	1.4×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	06/11/90	06/19/90	1.1×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	06/19/90	06/25/90	1.7×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	06/25/90	07/02/90	1.6×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	07/02/90	07/09/90	1.4×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	07/09/90	07/16/90	1.5×10^{-14}	1.4×10^{-15}
Area 20, Dispensary	07/16/90	07/23/90	1.5×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	07/23/90	07/30/90	1.7×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	07/30/90	08/05/90	2.2×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	08/05/90	08/14/90	1.7×10^{-14}	9.1×10^{-16}
Area 20, Dispensary	08/14/90	08/20/90	1.5×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	08/20/90	08/28/90	1.4×10^{-14}	9.3×10^{-16}
Area 20, Dispensary	08/28/90	09/04/90	1.5×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	09/04/90	09/10/90	1.6×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	09/10/90	09/17/90	1.3×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	09/17/90	09/24/90	2.2×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	09/24/90	10/01/90	2.0×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	10/01/90	10/08/90	2.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	10/08/90	10/16/90	1.7×10^{-14}	9.7×10^{-16}
Area 20, Dispensary	10/16/90	10/22/90	2.3×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	10/22/90	10/29/90	2.4×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	10/29/90	11/06/90	2.1×10^{-14}	2.6×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Dispensary	11/06/90	11/13/90	1.2×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	11/13/90	11/19/90	3.0×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	11/13/90	11/19/90	2.9×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	11/19/90	11/26/90	1.5×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	11/26/90	12/03/90	1.3×10^{-14}	2.7×10^{-15}
Area 20, Dispensary	12/03/90	12/10/90	1.6×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	12/10/90	12/17/90	2.5×10^{-14}	1.9×10^{-15}
Area 20, Dispensary	12/17/90	12/24/90	2.1×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	12/24/90	12/31/90	2.0×10^{-14}	1.1×10^{-15}
Area 23, Building 790	01/02/90	01/08/90	1.5×10^{-14}	1.3×10^{-15}
Area 23, Building 790	01/08/90	01/16/90	2.0×10^{-14}	9.6×10^{-16}
Area 23, Building 790	01/16/90	01/23/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790	01/23/90	01/29/90	1.5×10^{-14}	1.3×10^{-15}
Area 23, Building 790	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790	02/05/90	02/12/90	1.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790	02/12/90	02/20/90	1.0×10^{-14}	9.6×10^{-16}
Area 23, Building 790	02/20/90	02/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, Building 790	02/27/90	03/06/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790	03/06/90	03/12/90	1.3×10^{-14}	1.3×10^{-15}
Area 23, Building 790	03/12/90	03/19/90	9.3×10^{-15}	1.1×10^{-15}
Area 23, Building 790	03/19/90	03/26/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790	03/26/90	04/02/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790	04/02/90	04/09/90	2.0×10^{-14}	1.1×10^{-15}
Area 23, Building 790	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790	04/16/90	04/23/90	1.4×10^{-14}	1.2×10^{-15}
Area 23, Building 790	04/23/90	04/30/90	9.7×10^{-15}	1.1×10^{-15}
Area 23, Building 790	04/30/90	05/07/90	1.5×10^{-14}	1.0×10^{-15}
Area 23, Building 790	05/07/90	05/14/90	1.7×10^{-14}	1.2×10^{-15}
Area 23, Building 790	05/14/90	05/22/90	2.2×10^{-14}	1.2×10^{-15}
Area 23, Building 790	05/22/90	05/29/90	8.4×10^{-15}	9.0×10^{-16}
Area 23, Building 790	05/29/90	06/04/90	1.0×10^{-14}	1.3×10^{-15}
Area 23, Building 790	06/04/90	06/11/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790	06/11/90	06/18/90	1.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790	06/25/90	07/02/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, Building 790	07/02/90	07/09/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790	07/09/90	07/16/90	7.9×10^{-15}	1.4×10^{-15}
Area 23, Building 790	07/16/90	07/23/90	1.7×10^{-14}	1.1×10^{-15}
Area 23, Building 790	07/23/90	07/30/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, Building 790	07/30/90	08/05/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790	08/06/90	08/13/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790	08/13/90	08/20/90	2.3×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Building 790	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790	08/27/90	09/04/90	1.4×10^{-14}	9.2×10^{-16}
Area 23, Building 790	09/04/90	09/10/90	1.7×10^{-14}	1.2×10^{-15}
Area 23, Building 790	09/10/90	09/17/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790	09/17/90	09/24/90	1.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790	10/01/90	10/08/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790	10/08/90	10/15/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790	10/15/90	10/22/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790	10/23/90	10/29/90	3.0×10^{-14}	1.1×10^{-15}
Area 23, Building 790	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790	11/05/90	11/13/90	1.5×10^{-14}	9.9×10^{-16}
Area 23, Building 790	11/13/90	11/19/90	4.0×10^{-14}	1.3×10^{-15}
Area 23, Building 790	11/13/90	11/19/90	3.7×10^{-14}	1.3×10^{-15}
Area 23, Building 790	11/19/90	11/26/90	1.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790	11/26/90	12/03/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, Building 790	12/03/90	12/10/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790	12/10/90	12/17/90	2.7×10^{-14}	1.1×10^{-15}
Area 23, Building 790	12/17/90	12/24/90	2.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790	12/24/90	12/31/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	01/02/90	01/08/90	1.6×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	01/08/90	01/16/90	2.0×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	01/16/90	01/23/90	1.8×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	01/23/90	01/29/90	1.3×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	01/29/90	02/05/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	02/05/90	02/12/90	1.2×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	02/12/90	02/20/90	1.2×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	02/20/90	02/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	02/27/90	03/06/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	03/06/90	03/12/90	1.5×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	03/19/90	03/26/90	2.0×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	03/26/90	04/02/90	2.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	04/02/90	04/09/90	2.2×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	04/09/90	04/16/90	2.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	04/16/90	04/23/90	1.4×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	04/30/90	05/07/90	1.8×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	05/07/90	05/14/90	1.8×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	05/14/90	05/22/90	1.8×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	05/22/90	05/29/90	1.2×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	05/29/90	06/04/90	1.0×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Building 790 No. 2	06/04/90	06/11/90	1.3×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	06/11/90	06/18/90	1.6×10^{-14}	3.0×10^{-15}
Area 23, Building 790 No. 2	06/18/90	06/25/90	2.0×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	06/25/90	07/02/90	1.6×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	07/02/90	07/09/90	1.3×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	07/09/90	07/16/90	1.5×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	07/16/90	07/23/90	2.2×10^{-14}	1.4×10^{-15}
Area 23, Building 790 No. 2	07/23/90	07/30/90	1.7×10^{-14}	9.9×10^{-16}
Area 23, Building 790 No. 2	07/30/90	08/05/90	2.3×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	08/06/90	08/13/90	2.0×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	08/13/90	08/20/90	1.9×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	08/20/90	08/27/90	1.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	08/27/90	09/04/90	1.6×10^{-14}	9.9×10^{-16}
Area 23, Building 790 No. 2	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	09/10/90	09/17/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	09/17/90	09/24/90	2.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	09/24/90	10/01/90	2.4×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	10/01/90	10/08/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	10/08/90	10/15/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	10/15/90	10/22/90	1.1×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	10/23/90	10/29/90	2.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	10/29/90	11/05/90	9.6×10^{-15}	1.1×10^{-15}
Area 23, Building 790 No. 2	11/05/90	11/13/90	6.2×10^{-15}	1.1×10^{-15}
Area 23, Building 790 No. 2	11/05/90	11/13/90	6.9×10^{-15}	1.1×10^{-15}
Area 23, Building 790 No. 2	11/13/90	11/19/90	1.7×10^{-14}	1.4×10^{-15}
Area 23, Building 790 No. 2	11/13/90	11/19/90	4.0×10^{-14}	1.4×10^{-15}
Area 23, Building 790 No. 2	11/19/90	11/26/90	8.7×10^{-15}	1.2×10^{-15}
Area 23, Building 790 No. 2	11/26/90	12/03/90	9.5×10^{-15}	1.2×10^{-15}
Area 23, Building 790 No. 2	12/10/90	12/17/90	2.6×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	12/17/90	12/24/90	2.5×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	12/24/90	12/31/90	2.6×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	01/02/90	01/08/90	1.6×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	01/08/90	01/16/90	1.8×10^{-14}	9.6×10^{-16}
Area 23, East Boundary	01/16/90	01/23/90	2.3×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	01/23/90	01/29/90	1.3×10^{-14}	1.3×10^{-15}
Area 23, East Boundary	01/29/90	02/05/90	9.9×10^{-15}	1.1×10^{-15}
Area 23, East Boundary	02/05/90	02/12/90	1.2×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	02/12/90	02/20/90	9.9×10^{-15}	9.5×10^{-16}
Area 23, East Boundary	02/20/90	02/27/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	02/27/90	03/06/90	2.5×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	03/06/90	03/12/90	1.5×10^{-14}	1.3×10^{-15}
Area 23, East Boundary	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, East Boundary	03/19/90	03/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	03/26/90	04/02/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	04/02/90	04/09/90	2.2×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	04/16/90	04/23/90	1.2×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	04/30/90	05/07/90	1.6×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	05/07/90	05/14/90	1.7×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	05/14/90	05/22/90	1.8×10^{-14}	9.8×10^{-16}
Area 23, East Boundary	05/22/90	05/29/90	1.1×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	05/29/90	06/04/90	1.0×10^{-14}	1.3×10^{-15}
Area 23, East Boundary	06/04/90	06/11/90	1.4×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	06/11/90	06/18/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	06/18/90	06/25/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	07/02/90	07/09/90	1.2×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	07/09/90	07/16/90	1.5×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	07/16/90	07/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	07/23/90	07/30/90	2.0×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	07/30/90	08/05/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	08/06/90	08/13/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	08/13/90	08/20/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	08/20/90	08/27/90	1.4×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	08/27/90	09/04/90	1.4×10^{-14}	9.7×10^{-16}
Area 23, East Boundary	09/04/90	09/10/90	1.5×10^{-14}	1.3×10^{-15}
Area 23, East Boundary	09/10/90	09/17/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	09/24/90	10/01/90	2.5×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	10/15/90	10/22/90	2.4×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	10/23/90	10/29/90	3.2×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	10/29/90	11/05/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	11/05/90	11/13/90	1.6×10^{-14}	1.0×10^{-15}
Area 23, East Boundary	11/13/90	11/19/90	4.1×10^{-14}	1.4×10^{-15}
Area 23, East Boundary	11/13/90	11/19/90	3.9×10^{-14}	1.4×10^{-15}
Area 23, East Boundary	11/19/90	11/26/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, East Boundary	11/26/90	12/03/90	2.2×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	12/03/90	12/10/90	2.3×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	12/10/90	12/17/90	2.9×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	12/17/90	12/24/90	2.1×10^{-14}	1.2×10^{-15}
Area 23, East Boundary	12/24/90	12/31/90	2.4×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, H&S Building Roof	01/02/90	01/08/90	1.5×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	01/08/90	01/16/90	2.0×10^{-14}	9.7×10^{-16}
Area 23, H&S Building Roof	01/16/90	01/23/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	01/23/90	01/29/90	1.3×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	01/29/90	02/05/90	9.5×10^{-15}	1.1×10^{-15}
Area 23, H&S Building Roof	02/05/90	02/12/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	02/12/90	02/20/90	1.0×10^{-14}	9.7×10^{-16}
Area 23, H&S Building Roof	02/20/90	02/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	02/27/90	03/06/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	03/06/90	03/12/90	1.5×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	03/12/90	03/19/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	03/19/90	03/26/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	03/26/90	04/02/90	2.0×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	04/02/90	04/09/90	1.7×10^{-14}	8.3×10^{-16}
Area 23, H&S Building Roof	04/09/90	04/16/90	2.4×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	04/16/90	04/23/90	1.1×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	04/23/90	04/30/90	1.0×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	04/30/90	05/07/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	05/07/90	05/14/90	1.5×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	05/14/90	05/22/90	2.3×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	05/22/90	05/29/90	9.7×10^{-15}	1.0×10^{-15}
Area 23, H&S Building Roof	05/29/90	06/04/90	1.0×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	06/04/90	06/11/90	1.4×10^{-14}	1.0×10^{-15}
Area 23, H&S Building Roof	06/11/90	06/18/90	1.4×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	06/18/90	06/25/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	06/25/90	07/02/90	2.3×10^{-14}	1.4×10^{-15}
Area 23, H&S Building Roof	07/02/90	07/09/90	1.0×10^{-14}	9.7×10^{-16}
Area 23, H&S Building Roof	07/09/90	07/16/90	1.3×10^{-14}	1.0×10^{-15}
Area 23, H&S Building Roof	07/16/90	07/23/90	1.6×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	07/23/90	07/30/90	2.2×10^{-14}	3.6×10^{-15}
Area 23, H&S Building Roof	08/06/90	08/13/90	2.0×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	08/13/90	08/20/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	08/20/90	08/27/90	1.5×10^{-14}	1.0×10^{-15}
Area 23, H&S Building Roof	08/27/90	09/04/90	1.4×10^{-14}	9.2×10^{-16}
Area 23, H&S Building Roof	09/04/90	09/10/90	1.6×10^{-14}	1.2×10^{-15}
Area 23, H&S Building Roof	09/10/90	09/17/90	1.6×10^{-14}	1.0×10^{-15}
Area 23, H&S Building Roof	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	09/24/90	10/01/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	10/01/90	10/08/90	1.9×10^{-14}	1.0×10^{-15}
Area 23, H&S Building Roof	10/08/90	10/15/90	2.3×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	10/15/90	10/22/90	2.5×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	10/23/90	10/29/90	3.0×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, H&S Building Roof	10/29/90	11/05/90	1.8×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	11/05/90	11/13/90	1.5×10^{-14}	9.7×10^{-16}
Area 23, H&S Building Roof	11/13/90	11/19/90	3.6×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	11/13/90	11/19/90	3.6×10^{-14}	1.3×10^{-15}
Area 23, H&S Building Roof	11/19/90	11/26/90	2.0×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	11/26/90	12/03/90	1.9×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	12/03/90	12/10/90	2.0×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	12/10/90	12/17/90	2.5×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	12/17/90	12/24/90	2.1×10^{-14}	1.1×10^{-15}
Area 23, H&S Building Roof	12/24/90	12/31/90	2.2×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	01/02/90	01/08/90	1.9×10^{-14}	1.5×10^{-15}
Area 25, E-MAD North	01/08/90	01/16/90	1.8×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	01/16/90	01/23/90	2.1×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	01/23/90	01/29/90	1.2×10^{-14}	1.5×10^{-15}
Area 25, E-MAD North	01/29/90	02/05/90	2.1×10^{-14}	8.5×10^{-15}
Area 25, E-MAD North	02/05/90	02/12/90	1.2×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	02/12/90	02/20/90	1.4×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	02/20/90	02/27/90	2.1×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	02/27/90	03/06/90	2.6×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	03/06/90	03/12/90	1.8×10^{-14}	1.5×10^{-15}
Area 25, E-MAD North	03/12/90	03/19/90	1.2×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	03/19/90	03/26/90	2.3×10^{-14}	1.4×10^{-15}
Area 25, E-MAD North	03/26/90	04/02/90	2.5×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	04/02/90	04/09/90	2.8×10^{-14}	1.4×10^{-15}
Area 25, E-MAD North	04/09/90	04/16/90	2.7×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	04/16/90	04/23/90	1.5×10^{-14}	1.4×10^{-15}
Area 25, E-MAD North	04/23/90	04/30/90	1.3×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	04/30/90	05/07/90	2.0×10^{-14}	1.4×10^{-15}
Area 25, E-MAD North	05/07/90	05/14/90	2.1×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	05/14/90	05/22/90	2.0×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	05/29/90	06/04/90	1.4×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	06/04/90	06/11/90	1.6×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	06/11/90	06/18/90	1.3×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	06/18/90	06/25/90	1.7×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	07/02/90	07/09/90	1.5×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	07/09/90	07/16/90	1.4×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	07/16/90	07/23/90	1.6×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	07/30/90	08/05/90	2.1×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	08/06/90	08/13/90	2.0×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	08/13/90	08/20/90	1.6×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, E-MAD North	08/20/90	08/27/90	1.5×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	08/27/90	09/04/90	1.5×10^{-14}	9.7×10^{-16}
Area 25, E-MAD North	09/04/90	09/10/90	1.6×10^{-14}	1.3×10^{-15}
Area 25, E-MAD North	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	09/17/90	09/24/90	1.9×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	09/24/90	10/01/90	2.3×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	10/01/90	10/08/90	3.4×10^{-14}	2.0×10^{-15}
Area 25, E-MAD North	10/08/90	10/15/90	2.5×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	10/15/90	10/22/90	2.8×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	10/23/90	10/29/90	3.0×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	10/29/90	11/05/90	1.7×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	11/05/90	11/13/90	1.3×10^{-14}	1.0×10^{-15}
Area 25, E-MAD North	11/13/90	11/19/90	3.6×10^{-14}	1.4×10^{-15}
Area 25, E-MAD North	11/13/90	11/19/90	3.8×10^{-14}	1.4×10^{-15}
Area 25, E-MAD North	11/19/90	11/26/90	1.8×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	11/26/90	12/03/90	1.9×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	12/03/90	12/10/90	2.0×10^{-14}	2.0×10^{-15}
Area 25, E-MAD North	12/10/90	12/17/90	2.5×10^{-14}	1.1×10^{-15}
Area 25, E-MAD North	12/17/90	12/24/90	2.1×10^{-14}	1.2×10^{-15}
Area 25, E-MAD North	12/24/90	12/31/90	2.3×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	01/02/90	01/08/90	1.6×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	01/08/90	01/16/90	2.0×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	01/16/90	01/23/90	1.8×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	01/23/90	01/29/90	1.2×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	01/29/90	02/05/90	1.1×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	02/05/90	02/12/90	1.2×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	02/12/90	02/20/90	1.2×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	02/20/90	02/27/90	1.6×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	02/27/90	03/06/90	2.5×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	03/06/90	03/12/90	1.6×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	03/12/90	03/19/90	9.5×10^{-15}	1.5×10^{-15}
Area 25, NRDS Warehouse	03/19/90	03/26/90	2.1×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	03/26/90	04/02/90	2.2×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	04/02/90	04/09/90	2.4×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	04/09/90	04/16/90	2.2×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	04/16/90	04/23/90	1.3×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	04/23/90	04/30/90	1.1×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	04/30/90	05/07/90	1.7×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	05/07/90	05/14/90	1.8×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	05/14/90	05/22/90	2.3×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	05/22/90	05/29/90	1.1×10^{-14}	9.0×10^{-16}
Area 25, NRDS Warehouse	05/29/90	06/04/90	1.1×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, NRDS Warehouse	06/04/90	06/11/90	1.5×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	06/11/90	06/18/90	1.4×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	06/18/90	06/25/90	2.2×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	06/25/90	07/02/90	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	07/02/90	07/09/90	1.2×10^{-14}	9.7×10^{-16}
Area 25, NRDS Warehouse	07/09/90	07/16/90	1.9×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	07/16/90	07/23/90	1.9×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	07/23/90	07/30/90	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	07/30/90	08/05/90	2.0×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	08/06/90	08/13/90	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/13/90	08/20/90	1.7×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	08/20/90	08/27/90	1.6×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/27/90	09/04/90	1.6×10^{-14}	9.8×10^{-16}
Area 25, NRDS Warehouse	09/04/90	09/10/90	1.8×10^{-14}	1.3×10^{-15}
Area 25, NRDS Warehouse	09/10/90	09/17/90	1.6×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	09/17/90	09/24/90	1.6×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	09/24/90	10/01/90	2.4×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	10/01/90	10/08/90	2.0×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	10/08/90	10/15/90	2.7×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	10/15/90	10/22/90	2.8×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	10/23/90	10/29/90	3.1×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	10/29/90	11/05/90	1.3×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	11/05/90	11/13/90	1.5×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	11/13/90	11/19/90	3.7×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	11/13/90	11/19/90	3.5×10^{-14}	1.4×10^{-15}
Area 25, NRDS Warehouse	11/19/90	11/26/90	1.5×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	11/26/90	12/03/90	1.7×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	12/03/90	12/10/90	2.2×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	12/10/90	12/17/90	2.3×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	12/17/90	12/24/90	1.9×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	12/24/90	12/31/90	2.5×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	01/02/90	01/08/90	1.5×10^{-14}	1.5×10^{-15}
Area 27, Cafeteria	01/08/90	01/16/90	1.9×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	01/16/90	01/23/90	1.5×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	01/23/90	01/29/90	1.1×10^{-14}	1.5×10^{-15}
Area 27, Cafeteria	01/29/90	02/05/90	1.0×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	02/05/90	02/12/90	1.2×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	02/12/90	02/20/90	1.1×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	02/20/90	02/27/90	1.7×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	02/27/90	03/06/90	2.7×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	03/06/90	03/12/90	3.0×10^{-14}	5.2×10^{-15}
Area 27, Cafeteria	03/12/90	03/19/90	1.3×10^{-14}	1.5×10^{-15}

Attachment A.3 (Gross Beta in Air - 1990, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 27, Cafeteria	03/19/90	03/26/90	2.1×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	03/26/90	04/02/90	2.7×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	04/02/90	04/09/90	2.5×10^{-14}	1.4×10^{-15}
Area 27, Cafeteria	04/09/90	04/16/90	2.5×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	04/16/90	04/23/90	1.4×10^{-14}	1.4×10^{-15}
Area 27, Cafeteria	04/23/90	04/30/90	1.3×10^{-15}	1.3×10^{-16}
Area 27, Cafeteria	04/30/90	05/07/90	1.8×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	05/07/90	05/14/90	2.1×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	05/14/90	05/22/90	2.1×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	05/22/90	05/29/90	1.2×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	05/29/90	06/04/90	1.4×10^{-14}	1.6×10^{-15}
Area 27, Cafeteria	06/04/90	06/11/90	1.4×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	06/11/90	06/18/90	1.3×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	06/18/90	06/25/90	1.8×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	06/25/90	07/02/90	2.1×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	07/02/90	07/09/90	1.3×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	07/09/90	07/16/90	5.7×10^{-15}	1.4×10^{-15}
Area 27, Cafeteria	07/16/90	07/23/90	3.5×10^{-14}	1.4×10^{-15}
Area 27, Cafeteria	07/23/90	07/30/90	2.0×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	07/30/90	08/05/90	2.5×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	08/06/90	08/13/90	2.4×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	08/13/90	08/20/90	1.6×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	08/20/90	08/27/90	2.0×10^{-14}	1.5×10^{-15}
Area 27, Cafeteria	08/27/90	09/04/90	1.6×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	09/04/90	09/10/90	1.9×10^{-14}	1.4×10^{-15}
Area 27, Cafeteria	09/10/90	09/17/90	1.8×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	09/17/90	09/24/90	1.4×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	09/24/90	10/01/90	2.7×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	10/01/90	10/08/90	1.2×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	10/08/90	10/15/90	2.7×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	10/15/90	10/22/90	2.8×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	10/23/90	10/29/90	3.3×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	10/29/90	11/05/90	2.2×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	11/05/90	11/13/90	1.7×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	11/13/90	11/19/90	4.6×10^{-14}	1.6×10^{-15}
Area 27, Cafeteria	11/13/90	11/19/90	4.1×10^{-14}	1.6×10^{-15}
Area 27, Cafeteria	11/19/90	11/26/90	2.0×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	11/26/90	12/03/90	2.1×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	12/03/90	12/10/90	2.4×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	12/10/90	12/17/90	2.8×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	12/17/90	12/24/90	3.7×10^{-14}	1.4×10^{-15}

Attachment A.4 Gamma-Emitting Radionuclides in Air - 1990

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (s)	Isotope
Area 3, U3ah/at East	03/19/90	03/26/90	1.1×10^{-14}	1.2×10^{-14}	^{131}I
Area 5, RWMS No. 2	06/11/90	06/18/90	3.1×10^{-14}	2.4×10^{-14}	^{208}Tl
Area 5, RWMS No. 4	01/23/90	01/29/90	2.9×10^{-14}	3.1×10^{-14}	^{228}Ac
Area 10, Gate 700	01/02/90	01/08/90	2.3×10^{-13}	3.6×10^{-13}	^{231}Pa
Area 15, EPA Farm	02/12/90	02/20/90	3.0×10^{-14}	2.7×10^{-14}	^{228}Ac
Area 15, PILEDRIVER	08/06/90	08/13/90	9.5×10^{-14}	4.2×10^{-14}	^{238}U
Area 19, Pahute Substation	01/16/90	01/22/90	1.7×10^{-13}	4.0×10^{-14}	^{133}Xe

APPENDIX B
ONSITE TRITIUM IN AIR

Robert R. Kinnison

Seventeen samplers for airborne tritiated water vapor were placed at locations on the NTS as described in Volume I, Section 5. Table B.1 displays the sampling locations, dates of sampling, observed concentration, analytic standard deviation, and detection limit for the 383 analyses performed in 1990. These data differ somewhat from that reported for 1989 in that in 1989 approximately 16 percent of the values were reported only as a detection limit and only about 6 percent of the 1990 values are below the detection limit. This reflects a change in the Reynolds Electrical & Engineering Company, Inc., Health Physics Department Laboratory policy, i.e., to report all calculated values whether or not they are below the detection limit, and an improvement in the way sample volumes are measured. For 1990 both the calculated value and the detection limit are reported for all samples, thus it is unnecessary to use the special procedures for estimation with missing values that were used in 1989, and a more traditional statistical analysis of the data is possible. The simple descriptive statistics for all the data combined are:

Number of data values = 383
Arithmetic mean = 6.94×10^{-12} µCi/mL
Median = 4.10×10^{-12}
Standard deviation = 10.86×10^{-12}
Minimum value = -0.30×10^{-12}
Maximum value = 134.80×10^{-12}

Table B.1 Tritiated Water Vapor in Air Sampling Results - 1990

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 1, BJY	01/02/90	01/17/90	1.8×10^{-12}	4.4×10^{-13}	8.6×10^{-13}
Area 1, BJY	01/17/90	01/30/90	3.6×10^{-12}	3.5×10^{-13}	6.4×10^{-13}
Area 1, BJY	01/30/90	02/13/90	1.9×10^{-12}	4.9×10^{-13}	9.6×10^{-13}
Area 1, BJY	02/13/90	03/01/90	2.2×10^{-12}	3.3×10^{-13}	6.1×10^{-13}
Area 1, BJY	03/01/90	03/20/90	6.4×10^{-13}	4.0×10^{-13}	8.0×10^{-13}
Area 1, BJY	03/20/90	04/03/90	4.2×10^{-13}	3.3×10^{-13}	6.8×10^{-13}
Area 1, BJY	04/03/90	04/17/90	2.9×10^{-12}	2.7×10^{-13}	4.8×10^{-13}
Area 1, BJY	04/17/90	05/01/90	2.9×10^{-12}	5.2×10^{-13}	1.0×10^{-12}
Area 1, BJY	05/01/90	05/16/90	1.4×10^{-12}	2.0×10^{-13}	3.7×10^{-13}
Area 1, BJY	05/16/90	05/31/90	1.1×10^{-12}	4.3×10^{-13}	8.5×10^{-13}
Area 1, BJY	05/31/90	06/14/90	2.7×10^{-12}	3.9×10^{-13}	7.3×10^{-13}
Area 1, BJY	06/14/90	06/26/90	1.7×10^{-12}	1.8×10^{-13}	3.3×10^{-13}
Area 1, BJY	06/26/90	07/11/90	1.1×10^{-12}	3.2×10^{-13}	6.2×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	µCi/mL Detection Limit
Area 1, BJY	07/11/90	07/24/90	9.0×10^{-13}	4.0×10^{-13}	8.1×10^{-13}
Area 1, BJY	07/24/90	08/07/90	2.2×10^{-12}	3.7×10^{-13}	7.0×10^{-13}
Area 1, BJY	08/07/90	08/23/90	1.5×10^{-12}	3.1×10^{-13}	6.0×10^{-13}
Area 1, BJY	08/23/90	09/06/90	1.7×10^{-12}	2.9×10^{-13}	5.5×10^{-13}
Area 1, BJY	09/06/90	09/19/90	6.6×10^{-12}	4.7×10^{-13}	8.0×10^{-13}
Area 1, BJY	09/19/90	10/03/90	7.2×10^{-12}	9.7×10^{-13}	1.8×10^{-12}
Area 1, BJY	10/03/90	10/19/90	1.9×10^{-12}	4.5×10^{-13}	8.9×10^{-13}
Area 1, BJY	10/19/90	11/07/90	7.7×10^{-13}	2.8×10^{-13}	5.6×10^{-13}
Area 1, BJY	11/07/90	11/28/90	1.8×10^{-12}	3.4×10^{-13}	6.5×10^{-13}
Area 1, BJY	11/28/90	12/12/90	7.4×10^{-12}	5.6×10^{-13}	9.8×10^{-13}
Area 1, BJY	12/12/90	12/27/90	9.7×10^{-13}	1.5×10^{-13}	2.8×10^{-13}
Area 5, RWMS No. 1	01/02/90	01/17/90	4.8×10^{-12}	5.1×10^{-13}	9.4×10^{-13}
Area 5, RWMS No. 1	01/17/90	01/30/90	6.4×10^{-12}	3.8×10^{-13}	6.3×10^{-13}
Area 5, RWMS No. 1	01/30/90	02/13/90	3.7×10^{-12}	4.3×10^{-13}	8.0×10^{-13}
Area 5, RWMS No. 1	02/13/90	03/01/90	3.6×10^{-12}	2.4×10^{-13}	4.1×10^{-13}
Area 5, RWMS No. 1	03/01/90	03/20/90	2.3×10^{-12}	1.5×10^{-13}	2.5×10^{-13}
Area 5, RWMS No. 1	03/20/90	04/04/90	2.1×10^{-12}	1.8×10^{-13}	3.3×10^{-13}
Area 5, RWMS No. 1	04/04/90	04/18/90	5.5×10^{-12}	2.8×10^{-13}	4.4×10^{-13}
Area 5, RWMS No. 1	04/18/90	05/04/90	1.3×10^{-11}	2.8×10^{-13}	3.3×10^{-13}
Area 5, RWMS No. 1	05/04/90	05/18/90	3.5×10^{-12}	2.1×10^{-13}	3.6×10^{-13}
Area 5, RWMS No. 1	05/18/90	05/31/90	1.8×10^{-12}	3.7×10^{-13}	7.2×10^{-13}
Area 5, RWMS No. 1	05/31/90	06/14/90	1.7×10^{-12}	2.4×10^{-13}	4.4×10^{-13}
Area 5, RWMS No. 1	06/14/90	06/27/90	3.1×10^{-12}	1.3×10^{-13}	2.0×10^{-13}
Area 5, RWMS No. 1	06/27/90	07/11/90	5.8×10^{-12}	2.5×10^{-13}	3.8×10^{-13}
Area 5, RWMS No. 1	07/11/90	07/24/90	1.7×10^{-12}	1.8×10^{-13}	3.2×10^{-13}
Area 5, RWMS No. 1	07/24/90	08/08/90	2.9×10^{-12}	1.4×10^{-13}	2.3×10^{-13}
Area 5, RWMS No. 1	08/08/90	08/22/90	2.4×10^{-12}	2.4×10^{-13}	4.4×10^{-13}
Area 5, RWMS No. 1	08/22/90	09/07/90	2.8×10^{-12}	2.6×10^{-13}	4.6×10^{-13}
Area 5, RWMS No. 1	09/07/90	09/19/90	4.4×10^{-12}	2.0×10^{-13}	3.1×10^{-13}
Area 5, RWMS No. 1	09/19/90	10/04/90	1.1×10^{-12}	2.6×10^{-13}	5.0×10^{-13}
Area 5, RWMS No. 1	10/04/90	10/18/90	5.0×10^{-12}	1.8×10^{-13}	2.7×10^{-13}
Area 5, RWMS No. 1	10/18/90	11/07/90	5.5×10^{-12}	1.7×10^{-13}	2.4×10^{-13}
Area 5, RWMS No. 1	11/07/90	11/28/90	9.7×10^{-12}	2.4×10^{-13}	3.0×10^{-13}
Area 5, RWMS No. 1	11/28/90	12/12/90	1.3×10^{-11}	2.7×10^{-13}	3.1×10^{-13}
Area 5, RWMS No. 1	12/12/90	12/27/90	1.0×10^{-11}	3.2×10^{-13}	4.4×10^{-13}
Area 5, RWMS No. 2	01/02/90	01/17/90	5.9×10^{-12}	5.4×10^{-13}	9.8×10^{-13}
Area 5, RWMS No. 2	01/17/90	01/30/90	6.0×10^{-12}	4.3×10^{-13}	7.3×10^{-13}
Area 5, RWMS No. 2	01/30/90	02/13/90	2.9×10^{-12}	3.7×10^{-13}	7.0×10^{-13}
Area 5, RWMS No. 2	02/13/90	03/01/90	3.0×10^{-12}	2.6×10^{-13}	4.6×10^{-13}
Area 5, RWMS No. 2	03/20/90	04/04/90	5.9×10^{-12}	1.3×10^{-12}	2.4×10^{-12}
Area 5, RWMS No. 2	04/04/90	04/18/90	4.0×10^{-12}	3.2×10^{-13}	5.7×10^{-13}
Area 5, RWMS No. 2	04/18/90	05/04/90	3.7×10^{-12}	3.0×10^{-13}	5.3×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 5, RWMS No. 2	05/04/90	05/18/90	5.0×10^{-12}	2.7×10^{-13}	4.5×10^{-13}
Area 5, RWMS No. 2	05/18/90	05/31/90	2.6×10^{-12}	5.7×10^{-13}	1.1×10^{-12}
Area 5, RWMS No. 2	05/31/90	06/14/90	3.1×10^{-12}	3.3×10^{-13}	6.1×10^{-13}
Area 5, RWMS No. 2	06/14/90	06/27/90	4.1×10^{-12}	1.7×10^{-13}	2.5×10^{-13}
Area 5, RWMS No. 2	06/27/90	07/11/90	5.3×10^{-12}	3.1×10^{-13}	5.2×10^{-13}
Area 5, RWMS No. 2	07/11/90	07/24/90	3.6×10^{-12}	3.4×10^{-13}	6.1×10^{-13}
Area 5, RWMS No. 2	07/24/90	08/08/90	6.9×10^{-12}	2.9×10^{-13}	4.5×10^{-13}
Area 5, RWMS No. 2	08/08/90	08/22/90	3.8×10^{-12}	3.1×10^{-13}	5.5×10^{-13}
Area 5, RWMS No. 2	08/22/90	09/07/90	7.9×10^{-12}	5.0×10^{-13}	8.3×10^{-13}
Area 5, RWMS No. 2	09/07/90	09/19/90	4.7×10^{-12}	2.6×10^{-13}	4.2×10^{-13}
Area 5, RWMS No. 2	09/19/90	10/04/90	5.8×10^{-12}	5.1×10^{-13}	9.1×10^{-13}
Area 5, RWMS No. 2	10/04/90	10/18/90	6.5×10^{-12}	2.8×10^{-13}	4.2×10^{-13}
Area 5, RWMS No. 2	10/18/90	11/07/90	7.8×10^{-12}	2.9×10^{-13}	4.2×10^{-13}
Area 5, RWMS No. 2	11/07/90	11/28/90	1.4×10^{-11}	4.1×10^{-13}	5.6×10^{-13}
Area 5, RWMS No. 2	11/28/90	12/12/90	1.2×10^{-11}	3.7×10^{-13}	5.1×10^{-13}
Area 5, RWMS No. 2	12/12/90	12/27/90	7.6×10^{-12}	3.4×10^{-13}	5.3×10^{-13}
Area 5, RWMS No. 3	01/02/90	01/17/90	8.4×10^{-12}	5.4×10^{-13}	9.6×10^{-13}
Area 5, RWMS No. 3	03/01/90	03/20/90	1.8×10^{-12}	2.6×10^{-13}	4.9×10^{-13}
Area 5, RWMS No. 3	04/04/90	04/18/90	2.3×10^{-12}	1.9×10^{-13}	3.3×10^{-13}
Area 5, RWMS No. 3	04/18/90	05/04/90	3.2×10^{-12}	3.3×10^{-13}	6.1×10^{-13}
Area 5, RWMS No. 3	05/04/90	05/18/90	2.9×10^{-12}	2.5×10^{-13}	4.4×10^{-13}
Area 5, RWMS No. 3	05/18/90	05/31/90	3.1×10^{-12}	3.9×10^{-13}	7.1×10^{-13}
Area 5, RWMS No. 3	05/31/90	06/14/90	4.4×10^{-12}	3.2×10^{-13}	5.4×10^{-13}
Area 5, RWMS No. 3	06/14/90	06/27/90	2.8×10^{-12}	2.1×10^{-13}	3.6×10^{-13}
Area 5, RWMS No. 3	06/27/90	07/11/90	4.8×10^{-12}	2.6×10^{-13}	4.3×10^{-13}
Area 5, RWMS No. 3	07/11/90	07/24/90	6.0×10^{-12}	7.6×10^{-13}	1.4×10^{-12}
Area 5, RWMS No. 3	07/24/90	08/08/90	4.8×10^{-12}	3.0×10^{-13}	5.1×10^{-13}
Area 5, RWMS No. 3	08/08/90	08/22/90	6.7×10^{-12}	5.7×10^{-13}	1.0×10^{-12}
Area 5, RWMS No. 3	08/22/90	09/07/90	6.2×10^{-12}	6.0×10^{-13}	1.1×10^{-12}
Area 5, RWMS No. 3	09/07/90	09/19/90	8.3×10^{-12}	2.8×10^{-13}	4.0×10^{-13}
Area 5, RWMS No. 3	09/19/90	10/04/90	4.2×10^{-12}	5.2×10^{-13}	9.7×10^{-13}
Area 5, RWMS No. 3	10/04/90	10/18/90	7.7×10^{-12}	3.4×10^{-13}	5.1×10^{-13}
Area 5, RWMS No. 3	10/18/90	11/07/90	5.0×10^{-12}	2.9×10^{-13}	4.9×10^{-13}
Area 5, RWMS No. 3	11/07/90	11/28/90	8.6×10^{-12}	3.9×10^{-13}	6.1×10^{-13}
Area 5, RWMS No. 3	11/28/90	12/12/90	1.1×10^{-11}	3.7×10^{-13}	5.3×10^{-13}
Area 5, RWMS No. 3	12/12/90	12/27/90	1.4×10^{-11}	4.0×10^{-13}	5.4×10^{-13}
Area 5, RWMS No. 4	01/02/90	01/17/90	5.6×10^{-12}	5.4×10^{-13}	9.9×10^{-13}
Area 5, RWMS No. 4	01/17/90	01/30/90	3.2×10^{-12}	2.9×10^{-13}	5.1×10^{-13}
Area 5, RWMS No. 4	01/30/90	02/13/90	4.5×10^{-12}	4.6×10^{-13}	8.6×10^{-13}
Area 5, RWMS No. 4	02/13/90	03/01/90	4.9×10^{-12}	3.5×10^{-13}	6.1×10^{-13}
Area 5, RWMS No. 4	03/01/90	03/20/90	5.0×10^{-13}	9.9×10^{-14}	1.9×10^{-13}
Area 5, RWMS No. 4	03/20/90	04/04/90	3.1×10^{-12}	3.9×10^{-13}	7.2×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 5, RWMS No. 4	04/04/90	04/18/90	8.2×10^{-12}	7.0×10^{-13}	1.2×10^{-12}
Area 5, RWMS No. 4	04/18/90	05/04/90	3.1×10^{-11}	3.5×10^{-12}	6.4×10^{-12}
Area 5, RWMS No. 4	05/04/90	05/18/90	1.0×10^{-11}	7.8×10^{-13}	1.4×10^{-12}
Area 5, RWMS No. 4	05/18/90	05/31/90	7.7×10^{-12}	5.1×10^{-13}	8.6×10^{-13}
Area 5, RWMS No. 4	05/31/90	06/14/90	6.7×10^{-12}	4.5×10^{-13}	7.6×10^{-13}
Area 5, RWMS No. 4	06/14/90	06/27/90	1.0×10^{-11}	5.2×10^{-13}	8.3×10^{-13}
Area 5, RWMS No. 4	06/27/90	07/11/90	1.1×10^{-11}	5.2×10^{-13}	8.2×10^{-13}
Area 5, RWMS No. 4	07/11/90	07/24/90	5.4×10^{-12}	8.3×10^{-13}	1.6×10^{-12}
Area 5, RWMS No. 4	07/24/90	08/08/90	3.5×10^{-11}	2.0×10^{-12}	3.4×10^{-12}
Area 5, RWMS No. 4	08/08/90	08/22/90	4.9×10^{-12}	4.6×10^{-13}	8.3×10^{-13}
Area 5, RWMS No. 4	08/22/90	09/07/90	3.7×10^{-12}	4.0×10^{-13}	7.3×10^{-13}
Area 5, RWMS No. 4	09/07/90	09/19/90	1.2×10^{-11}	3.5×10^{-13}	4.6×10^{-13}
Area 5, RWMS No. 4	09/19/90	10/04/90	3.3×10^{-12}	4.8×10^{-13}	9.0×10^{-13}
Area 5, RWMS No. 4	10/04/90	10/18/90	4.4×10^{-12}	2.6×10^{-13}	4.3×10^{-13}
Area 5, RWMS No. 4	10/18/90	11/07/90	3.2×10^{-12}	2.5×10^{-13}	4.3×10^{-13}
Area 5, RWMS No. 4	11/07/90	11/28/90	2.5×10^{-12}	1.2×10^{-13}	1.9×10^{-13}
Area 5, RWMS No. 4	11/28/90	12/12/90	5.5×10^{-12}	3.1×10^{-13}	5.2×10^{-13}
Area 5, RWMS No. 4	12/12/90	12/27/90	9.1×10^{-12}	3.7×10^{-13}	5.6×10^{-13}
Area 5, RWMS No. 5	01/02/90	01/17/90	2.7×10^{-12}	5.0×10^{-13}	9.7×10^{-13}
Area 5, RWMS No. 5	01/17/90	01/30/90	5.9×10^{-12}	4.0×10^{-13}	6.8×10^{-13}
Area 5, RWMS No. 5	01/30/90	02/13/90	3.6×10^{-12}	5.2×10^{-13}	9.9×10^{-13}
Area 5, RWMS No. 5	02/13/90	03/01/90	2.4×10^{-11}	5.4×10^{-13}	6.4×10^{-13}
Area 5, RWMS No. 5	03/01/90	03/20/90	3.1×10^{-12}	4.3×10^{-13}	8.1×10^{-13}
Area 5, RWMS No. 5	03/20/90	04/04/90	2.1×10^{-12}	3.2×10^{-13}	6.0×10^{-13}
Area 5, RWMS No. 5	04/04/90	04/18/90	1.1×10^{-11}	3.7×10^{-13}	5.1×10^{-13}
Area 5, RWMS No. 5	04/18/90	05/04/90	6.8×10^{-12}	6.9×10^{-13}	1.2×10^{-12}
Area 5, RWMS No. 5	05/04/90	05/18/90	8.7×10^{-12}	4.3×10^{-13}	6.8×10^{-13}
Area 5, RWMS No. 5	05/18/90	05/31/90	6.6×10^{-12}	5.1×10^{-13}	8.9×10^{-13}
Area 5, RWMS No. 5	05/31/90	06/14/90	1.2×10^{-11}	6.2×10^{-13}	1.0×10^{-12}
Area 5, RWMS No. 5	06/14/90	06/27/90	9.3×10^{-12}	3.5×10^{-13}	5.2×10^{-13}
Area 5, RWMS No. 5	06/27/90	07/11/90	1.3×10^{-11}	5.9×10^{-13}	9.1×10^{-13}
Area 5, RWMS No. 5	07/11/90	07/24/90	8.0×10^{-12}	2.8×10^{-13}	3.9×10^{-13}
Area 5, RWMS No. 5	07/24/90	08/08/90	5.8×10^{-12}	2.2×10^{-13}	3.3×10^{-13}
Area 5, RWMS No. 5	08/08/90	08/22/90	6.4×10^{-12}	3.6×10^{-13}	5.8×10^{-13}
Area 5, RWMS No. 5	08/22/90	09/07/90	6.5×10^{-12}	3.9×10^{-13}	6.5×10^{-13}
Area 5, RWMS No. 5	09/07/90	09/19/90	4.3×10^{-12}	1.6×10^{-13}	2.3×10^{-13}
Area 5, RWMS No. 5	09/19/90	10/04/90	4.0×10^{-12}	3.5×10^{-13}	6.2×10^{-13}
Area 5, RWMS No. 5	10/04/90	10/18/90	5.9×10^{-12}	2.3×10^{-13}	3.4×10^{-13}
Area 5, RWMS No. 5	10/18/90	11/07/90	5.3×10^{-12}	2.3×10^{-13}	3.4×10^{-13}
Area 5, RWMS No. 5	11/07/90	11/28/90	1.1×10^{-11}	3.4×10^{-13}	4.7×10^{-13}
Area 5, RWMS No. 5	11/28/90	12/12/90	9.9×10^{-12}	3.2×10^{-13}	4.5×10^{-13}
Area 5, RWMS No. 5	12/12/90	12/27/90	1.4×10^{-11}	3.9×10^{-13}	5.1×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 5, RWMS No. 6	01/02/90	01/17/90	5.5×10^{-12}	5.3×10^{-13}	9.9×10^{-13}
Area 5, RWMS No. 6	01/17/90	01/30/90	5.7×10^{-12}	4.8×10^{-13}	8.5×10^{-13}
Area 5, RWMS No. 6	01/30/90	02/13/90	3.6×10^{-12}	5.1×10^{-13}	9.7×10^{-13}
Area 5, RWMS No. 6	02/13/90	03/01/90	1.0×10^{-11}	4.8×10^{-13}	7.5×10^{-13}
Area 5, RWMS No. 6	03/01/90	03/20/90	3.3×10^{-12}	3.9×10^{-13}	7.2×10^{-13}
Area 5, RWMS No. 6	03/20/90	04/04/90	3.5×10^{-13}	5.6×10^{-14}	1.1×10^{-13}
Area 5, RWMS No. 6	04/04/90	04/18/90	3.7×10^{-12}	2.5×10^{-13}	4.3×10^{-13}
Area 5, RWMS No. 6	04/18/90	05/04/90	3.0×10^{-12}	5.0×10^{-13}	9.6×10^{-13}
Area 5, RWMS No. 6	05/04/90	05/18/90	6.5×10^{-12}	2.1×10^{-13}	3.0×10^{-13}
Area 5, RWMS No. 6	05/18/90	05/31/90	5.3×10^{-12}	3.7×10^{-13}	6.3×10^{-13}
Area 5, RWMS No. 6	05/31/90	06/14/90	8.4×10^{-12}	4.9×10^{-13}	8.2×10^{-13}
Area 5, RWMS No. 6	06/14/90	06/27/90	1.1×10^{-11}	3.5×10^{-13}	4.7×10^{-13}
Area 5, RWMS No. 6	07/11/90	07/24/90	3.4×10^{-12}	2.2×10^{-13}	3.7×10^{-13}
Area 5, RWMS No. 6	07/24/90	08/08/90	6.6×10^{-12}	3.5×10^{-13}	5.7×10^{-13}
Area 5, RWMS No. 6	08/08/90	08/22/90	8.6×10^{-12}	5.6×10^{-13}	9.5×10^{-13}
Area 5, RWMS No. 6	08/22/90	09/07/90	6.3×10^{-12}	4.0×10^{-13}	6.6×10^{-13}
Area 5, RWMS No. 6	09/07/90	09/19/90	1.4×10^{-11}	3.0×10^{-13}	3.4×10^{-13}
Area 5, RWMS No. 6	09/19/90	10/04/90	5.9×10^{-12}	4.8×10^{-13}	8.5×10^{-13}
Area 5, RWMS No. 6	10/04/90	10/18/90	6.1×10^{-12}	2.5×10^{-13}	3.7×10^{-13}
Area 5, RWMS No. 6	10/18/90	11/07/90	9.6×10^{-12}	2.7×10^{-13}	3.5×10^{-13}
Area 5, RWMS No. 6	11/07/90	11/28/90	3.5×10^{-12}	1.3×10^{-13}	1.9×10^{-13}
Area 5, RWMS No. 6	11/28/90	12/12/90	1.3×10^{-11}	3.3×10^{-13}	4.2×10^{-13}
Area 5, RWMS No. 6	12/12/90	12/27/90	2.1×10^{-11}	4.3×10^{-13}	4.9×10^{-13}
Area 5, RWMS No. 7	01/02/90	01/17/90	5.2×10^{-12}	4.5×10^{-13}	8.1×10^{-13}
Area 5, RWMS No. 7	01/17/90	01/30/90	6.5×10^{-12}	4.7×10^{-13}	8.0×10^{-13}
Area 5, RWMS No. 7	01/30/90	02/13/90	5.1×10^{-12}	5.4×10^{-13}	1.0×10^{-12}
Area 5, RWMS No. 7	02/13/90	03/01/90	9.0×10^{-12}	4.7×10^{-13}	7.4×10^{-13}
Area 5, RWMS No. 7	03/01/90	03/20/90	6.0×10^{-12}	4.7×10^{-13}	8.1×10^{-13}
Area 5, RWMS No. 7	04/18/90	05/04/90	5.9×10^{-12}	4.4×10^{-13}	7.6×10^{-13}
Area 5, RWMS No. 7	05/04/90	05/18/90	3.4×10^{-12}	1.8×10^{-13}	2.9×10^{-13}
Area 5, RWMS No. 7	05/18/90	05/31/90	4.5×10^{-12}	5.0×10^{-13}	9.3×10^{-13}
Area 5, RWMS No. 7	05/31/90	06/14/90	2.7×10^{-12}	2.0×10^{-13}	3.6×10^{-13}
Area 5, RWMS No. 7	06/14/90	06/27/90	8.9×10^{-13}	7.6×10^{-14}	1.3×10^{-13}
Area 5, RWMS No. 7	06/27/90	07/11/90	6.9×10^{-12}	2.3×10^{-13}	3.3×10^{-13}
Area 5, RWMS No. 7	07/11/90	07/24/90	9.0×10^{-12}	5.4×10^{-13}	8.9×10^{-13}
Area 5, RWMS No. 7	07/24/90	08/08/90	1.8×10^{-11}	4.1×10^{-13}	5.0×10^{-13}
Area 5, RWMS No. 7	08/08/90	08/22/90	1.4×10^{-11}	5.7×10^{-13}	8.7×10^{-13}
Area 5, RWMS No. 7	08/22/90	09/07/90	1.9×10^{-11}	5.7×10^{-13}	7.7×10^{-13}
Area 5, RWMS No. 7	09/07/90	09/19/90	1.0×10^{-11}	3.9×10^{-13}	5.8×10^{-13}
Area 5, RWMS No. 7	09/19/90	10/04/90	2.0×10^{-11}	6.8×10^{-13}	9.7×10^{-13}
Area 5, RWMS No. 7	10/04/90	10/18/90	1.7×10^{-11}	3.8×10^{-13}	4.5×10^{-13}
Area 5, RWMS No. 7	10/18/90	11/07/90	6.4×10^{-12}	2.6×10^{-13}	3.9×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 5, RWMS No. 7	11/07/90	11/28/90	3.7×10^{-11}	5.4×10^{-13}	5.2×10^{-13}
Area 5, RWMS No. 7	11/28/90	12/12/90	4.4×10^{-11}	5.8×10^{-13}	5.1×10^{-13}
Area 5, RWMS No. 7	12/12/90	12/27/90	7.0×10^{-12}	2.4×10^{-13}	3.3×10^{-13}
Area 5, RWMS No. 8	01/02/90	01/17/90	3.5×10^{-12}	4.1×10^{-13}	7.6×10^{-13}
Area 5, RWMS No. 8	01/17/90	01/30/90	3.3×10^{-12}	4.3×10^{-13}	8.1×10^{-13}
Area 5, RWMS No. 8	01/30/90	02/13/90	2.3×10^{-12}	1.7×10^{-13}	3.0×10^{-13}
Area 5, RWMS No. 8	02/13/90	03/01/90	3.9×10^{-12}	3.9×10^{-13}	7.0×10^{-13}
Area 5, RWMS No. 8	03/01/90	03/20/90	2.2×10^{-12}	2.4×10^{-13}	4.3×10^{-13}
Area 5, RWMS No. 8	03/20/90	04/04/90	3.4×10^{-12}	4.0×10^{-13}	7.5×10^{-13}
Area 5, RWMS No. 8	04/04/90	04/18/90	4.8×10^{-12}	3.9×10^{-13}	6.8×10^{-13}
Area 5, RWMS No. 8	04/18/90	05/04/90	3.3×10^{-11}	2.1×10^{-12}	3.5×10^{-12}
Area 5, RWMS No. 8	05/04/90	05/18/90	3.2×10^{-12}	2.6×10^{-13}	4.6×10^{-13}
Area 5, RWMS No. 8	05/18/90	05/31/90	2.0×10^{-12}	2.4×10^{-13}	4.5×10^{-13}
Area 5, RWMS No. 8	06/14/90	06/27/90	3.0×10^{-12}	2.6×10^{-13}	4.7×10^{-13}
Area 5, RWMS No. 8	06/27/90	07/11/90	4.2×10^{-12}	2.8×10^{-13}	4.7×10^{-13}
Area 5, RWMS No. 8	07/11/90	07/24/90	6.0×10^{-12}	4.3×10^{-13}	7.4×10^{-13}
Area 5, RWMS No. 8	07/24/90	08/08/90	1.0×10^{-11}	3.9×10^{-13}	5.9×10^{-13}
Area 5, RWMS No. 8	08/08/90	08/22/90	5.9×10^{-12}	5.6×10^{-13}	9.9×10^{-13}
Area 5, RWMS No. 8	08/22/90	09/07/90	2.6×10^{-12}	2.5×10^{-13}	4.4×10^{-13}
Area 5, RWMS No. 8	09/07/90	09/19/90	2.0×10^{-11}	4.7×10^{-13}	5.7×10^{-13}
Area 5, RWMS No. 8	09/19/90	10/04/90	9.8×10^{-12}	5.5×10^{-13}	9.0×10^{-13}
Area 5, RWMS No. 8	10/04/90	10/18/90	1.2×10^{-11}	3.7×10^{-13}	4.9×10^{-13}
Area 5, RWMS No. 8	10/18/90	11/07/90	2.3×10^{-11}	4.6×10^{-13}	5.3×10^{-13}
Area 5, RWMS No. 8	11/07/90	11/28/90	1.8×10^{-11}	5.4×10^{-13}	7.4×10^{-13}
Area 5, RWMS No. 8	11/28/90	12/12/90	9.5×10^{-14}	2.4×10^{-15}	3.1×10^{-15}
Area 5, RWMS No. 8	12/12/90	12/27/90	2.4×10^{-11}	7.7×10^{-13}	1.1×10^{-12}
Area 5, RWMS No. 9	01/02/90	01/17/90	6.6×10^{-12}	4.5×10^{-13}	7.7×10^{-13}
Area 5, RWMS No. 9	01/17/90	01/30/90	5.0×10^{-12}	3.2×10^{-13}	5.4×10^{-13}
Area 5, RWMS No. 9	01/30/90	02/13/90	7.4×10^{-12}	6.8×10^{-13}	1.2×10^{-12}
Area 5, RWMS No. 9	02/13/90	03/01/90	6.0×10^{-12}	3.2×10^{-13}	5.2×10^{-13}
Area 5, RWMS No. 9	03/01/90	03/20/90	4.8×10^{-12}	3.2×10^{-13}	5.3×10^{-13}
Area 5, RWMS No. 9	03/20/90	04/04/90	5.4×10^{-12}	3.6×10^{-13}	6.2×10^{-13}
Area 5, RWMS No. 9	04/04/90	04/18/90	8.5×10^{-12}	4.0×10^{-13}	6.3×10^{-13}
Area 5, RWMS No. 9	04/18/90	05/04/90	3.9×10^{-12}	2.5×10^{-13}	4.2×10^{-13}
Area 5, RWMS No. 9	05/04/90	05/18/90	3.1×10^{-12}	1.3×10^{-13}	2.0×10^{-13}
Area 5, RWMS No. 9	05/31/90	06/14/90	2.8×10^{-12}	2.0×10^{-13}	3.4×10^{-13}
Area 5, RWMS No. 9	06/14/90	06/27/90	3.0×10^{-13}	5.2×10^{-14}	1.0×10^{-13}
Area 5, RWMS No. 9	06/27/90	07/11/90	6.2×10^{-12}	2.3×10^{-13}	3.5×10^{-13}
Area 5, RWMS No. 9	07/11/90	07/24/90	7.3×10^{-12}	6.5×10^{-13}	1.1×10^{-12}
Area 5, RWMS No. 9	07/24/90	08/08/90	1.1×10^{-11}	3.7×10^{-13}	5.2×10^{-13}
Area 5, RWMS No. 9	08/08/90	08/22/90	6.4×10^{-12}	3.8×10^{-13}	6.3×10^{-13}
Area 5, RWMS No. 9	08/22/90	09/07/90	1.5×10^{-11}	6.0×10^{-13}	8.8×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 5, RWMS No. 9	09/07/90	09/19/90	1.6×10^{-12}	2.2×10^{-13}	4.2×10^{-13}
Area 5, RWMS No. 9	09/19/90	10/04/90	6.5×10^{-12}	4.2×10^{-13}	7.2×10^{-13}
Area 5, RWMS No. 9	10/04/90	10/18/90	1.4×10^{-11}	1.1×10^{-12}	1.9×10^{-12}
Area 5, RWMS No. 9	10/18/90	11/07/90	2.1×10^{-11}	1.0×10^{-12}	1.6×10^{-12}
Area 5, RWMS No. 9	11/07/90	11/28/90	4.3×10^{-11}	1.2×10^{-12}	1.7×10^{-12}
Area 5, RWMS No. 9	11/28/90	12/12/90	3.6×10^{-11}	4.8×10^{-13}	4.2×10^{-13}
Area 5, RWMS No. 9	12/12/90	12/27/90	2.9×10^{-11}	5.1×10^{-13}	5.3×10^{-13}
Area 10, Gate 700 South	01/02/90	01/17/90	9.0×10^{-13}	3.9×10^{-13}	7.8×10^{-13}
Area 10, Gate 700 South	01/30/90	02/13/90	8.8×10^{-13}	4.6×10^{-13}	9.2×10^{-13}
Area 10, Gate 700 South	02/13/90	03/01/90	1.2×10^{-12}	2.2×10^{-13}	4.2×10^{-13}
Area 10, Gate 700 South	03/01/90	03/20/90	3.6×10^{-12}	2.5×10^{-13}	4.3×10^{-13}
Area 10, Gate 700 South	03/20/90	04/03/90	-2.2×10^{-14}	1.9×10^{-13}	3.8×10^{-13}
Area 10, Gate 700 South	04/03/90	04/17/90	1.1×10^{-12}	2.3×10^{-13}	4.4×10^{-13}
Area 10, Gate 700 South	04/17/90	05/01/90	3.0×10^{-12}	2.8×10^{-13}	5.0×10^{-13}
Area 10, Gate 700 South	05/01/90	05/16/90	1.3×10^{-11}	3.0×10^{-13}	3.7×10^{-13}
Area 10, Gate 700 South	05/16/90	05/31/90	9.3×10^{-13}	2.8×10^{-13}	5.5×10^{-13}
Area 10, Gate 700 South	05/31/90	06/14/90	9.8×10^{-13}	2.8×10^{-13}	5.6×10^{-13}
Area 10, Gate 700 South	06/14/90	06/26/90	7.8×10^{-13}	8.3×10^{-14}	1.5×10^{-13}
Area 10, Gate 700 South	06/26/90	07/11/90	3.9×10^{-12}	1.1×10^{-12}	2.1×10^{-12}
Area 10, Gate 700 South	07/11/90	07/24/90	9.5×10^{-14}	1.5×10^{-13}	3.0×10^{-13}
Area 10, Gate 700 South	07/24/90	08/07/90	4.5×10^{-13}	1.0×10^{-13}	2.0×10^{-13}
Area 10, Gate 700 South	08/07/90	08/23/90	1.8×10^{-12}	2.3×10^{-13}	4.3×10^{-13}
Area 10, Gate 700 South	08/23/90	09/06/90	1.1×10^{-12}	1.1×10^{-13}	1.9×10^{-13}
Area 10, Gate 700 South	09/06/90	09/19/90	1.7×10^{-12}	1.9×10^{-13}	3.5×10^{-13}
Area 10, Gate 700 South	09/19/90	10/03/90	1.6×10^{-12}	2.2×10^{-13}	4.1×10^{-13}
Area 10, Gate 700 South	10/03/90	10/19/90	5.7×10^{-13}	1.4×10^{-13}	2.7×10^{-13}
Area 10, Gate 700 South	10/19/90	11/07/90	3.6×10^{-13}	4.4×10^{-14}	8.1×10^{-14}
Area 10, Gate 700 South	11/07/90	11/28/90	4.8×10^{-13}	1.7×10^{-13}	3.3×10^{-13}
Area 10, Gate 700 South	11/28/90	12/12/90	1.4×10^{-12}	1.2×10^{-13}	2.2×10^{-13}
Area 10, Gate 700 South	12/12/90	12/27/90	7.8×10^{-13}	1.9×10^{-13}	3.7×10^{-13}
Area 12, Complex	01/02/90	01/17/90	4.0×10^{-12}	3.7×10^{-13}	6.7×10^{-13}
Area 12, Complex	01/17/90	01/30/90	2.4×10^{-12}	2.9×10^{-13}	5.4×10^{-13}
Area 12, Complex	02/13/90	03/01/90	2.8×10^{-12}	2.9×10^{-13}	5.3×10^{-13}
Area 12, Complex	03/01/90	03/20/90	1.5×10^{-12}	1.5×10^{-13}	2.7×10^{-13}
Area 12, Complex	03/20/90	04/03/90	1.6×10^{-12}	2.7×10^{-13}	5.1×10^{-13}
Area 12, Complex	04/03/90	04/17/90	5.9×10^{-13}	1.9×10^{-13}	3.7×10^{-13}
Area 12, Complex	04/17/90	05/01/90	1.8×10^{-12}	3.8×10^{-13}	7.3×10^{-13}
Area 12, Complex	05/01/90	05/16/90	2.6×10^{-12}	2.0×10^{-13}	3.5×10^{-13}
Area 12, Complex	05/16/90	05/31/90	1.4×10^{-12}	3.9×10^{-13}	7.7×10^{-13}
Area 12, Complex	05/31/90	06/14/90	1.7×10^{-12}	3.0×10^{-13}	5.7×10^{-13}
Area 12, Complex	06/14/90	06/26/90	2.6×10^{-12}	1.5×10^{-13}	2.5×10^{-13}
Area 12, Complex	07/11/90	07/24/90	7.9×10^{-13}	2.4×10^{-13}	4.7×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 12, Complex	07/24/90	08/07/90	9.7×10^{-13}	2.0×10^{-13}	4.0×10^{-13}
Area 12, Complex	08/07/90	08/23/90	3.3×10^{-12}	5.1×10^{-13}	9.7×10^{-13}
Area 12, Complex	08/23/90	09/06/90	3.1×10^{-12}	4.9×10^{-13}	9.3×10^{-13}
Area 12, Complex	09/06/90	09/19/90	3.5×10^{-12}	2.6×10^{-13}	4.5×10^{-13}
Area 12, Complex	09/19/90	10/03/90	2.9×10^{-12}	6.7×10^{-13}	1.3×10^{-12}
Area 12, Complex	10/03/90	10/19/90	1.5×10^{-12}	3.9×10^{-13}	7.6×10^{-13}
Area 12, Complex	10/19/90	11/07/90	1.3×10^{-12}	1.7×10^{-13}	3.3×10^{-13}
Area 12, Complex	12/12/90	12/27/90	6.9×10^{-13}	2.3×10^{-13}	4.5×10^{-13}
Area 15, EPA Farm	01/02/90	01/17/90	8.9×10^{-12}	3.1×10^{-13}	4.4×10^{-13}
Area 15, EPA Farm	01/17/90	01/30/90	2.0×10^{-11}	4.7×10^{-13}	5.8×10^{-13}
Area 15, EPA Farm	01/30/90	02/13/90	9.2×10^{-12}	4.1×10^{-13}	6.7×10^{-13}
Area 15, EPA Farm	02/13/90	03/01/90	1.2×10^{-11}	4.4×10^{-13}	6.4×10^{-13}
Area 15, EPA Farm	03/01/90	03/20/90	1.1×10^{-11}	5.1×10^{-13}	8.0×10^{-13}
Area 15, EPA Farm	03/20/90	04/03/90	9.1×10^{-12}	4.2×10^{-13}	6.5×10^{-13}
Area 15, EPA Farm	04/03/90	04/17/90	2.3×10^{-11}	6.8×10^{-13}	9.2×10^{-13}
Area 15, EPA Farm	04/17/90	05/01/90	1.3×10^{-11}	5.5×10^{-13}	8.5×10^{-13}
Area 15, EPA Farm	05/01/90	05/16/90	2.5×10^{-12}	2.5×10^{-13}	4.5×10^{-13}
Area 15, EPA Farm	05/16/90	05/31/90	4.2×10^{-12}	4.3×10^{-13}	7.8×10^{-13}
Area 15, EPA Farm	05/31/90	06/14/90	8.4×10^{-12}	4.7×10^{-13}	7.7×10^{-13}
Area 15, EPA Farm	06/14/90	06/26/90	5.4×10^{-12}	2.4×10^{-13}	3.6×10^{-13}
Area 15, EPA Farm	06/26/90	07/11/90	9.0×10^{-12}	4.2×10^{-13}	6.7×10^{-13}
Area 15, EPA Farm	07/11/90	07/24/90	2.6×10^{-12}	5.1×10^{-13}	9.8×10^{-13}
Area 15, EPA Farm	07/24/90	08/07/90	7.7×10^{-12}	3.3×10^{-13}	5.0×10^{-13}
Area 15, EPA Farm	08/07/90	08/23/90	1.1×10^{-11}	5.0×10^{-13}	7.6×10^{-13}
Area 15, EPA Farm	08/23/90	09/06/90	1.1×10^{-11}	6.1×10^{-13}	9.9×10^{-13}
Area 15, EPA Farm	09/06/90	09/19/90	6.1×10^{-12}	1.9×10^{-13}	2.7×10^{-13}
Area 15, EPA Farm	09/19/90	10/03/90	1.6×10^{-11}	9.6×10^{-13}	1.6×10^{-12}
Area 15, EPA Farm	10/03/90	10/19/90	1.4×10^{-11}	4.7×10^{-13}	6.5×10^{-13}
Area 15, EPA Farm	10/19/90	11/07/90	1.2×10^{-11}	3.9×10^{-13}	5.6×10^{-13}
Area 15, EPA Farm	11/07/90	11/28/90	1.3×10^{-11}	4.4×10^{-13}	6.3×10^{-13}
Area 15, EPA Farm	11/28/90	12/12/90	1.3×10^{-11}	3.3×10^{-13}	4.2×10^{-13}
Area 15, EPA Farm	12/12/90	12/27/90	8.7×10^{-12}	3.5×10^{-13}	5.2×10^{-13}
Area 23, H&S Roof	01/02/90	01/17/90	4.9×10^{-11}	5.1×10^{-13}	4.5×10^{-13}
Area 23, H&S Roof	01/30/90	02/13/90	6.5×10^{-11}	7.0×10^{-13}	6.3×10^{-13}
Area 23, H&S Roof	02/13/90	03/01/90	8.9×10^{-13}	1.8×10^{-13}	3.4×10^{-13}
Area 23, H&S Roof	03/20/90	04/03/90	-1.4×10^{-13}	1.9×10^{-13}	3.9×10^{-13}
Area 23, H&S Roof	04/03/90	04/17/90	1.3×10^{-10}	7.3×10^{-13}	3.1×10^{-13}
Area 23, H&S Roof	04/17/90	05/01/90	7.8×10^{-13}	1.5×10^{-13}	2.9×10^{-13}
Area 23, H&S Roof	05/01/90	05/16/90	2.1×10^{-11}	2.5×10^{-13}	2.1×10^{-13}
Area 23, H&S Roof	05/16/90	05/31/90	3.8×10^{-13}	2.4×10^{-13}	4.9×10^{-13}
Area 23, H&S Roof	05/31/90	06/14/90	4.2×10^{-11}	4.6×10^{-13}	3.5×10^{-13}
Area 23, H&S Roof	06/14/90	06/26/90	5.7×10^{-13}	7.5×10^{-14}	1.4×10^{-13}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 23, H&S Roof	06/26/90	07/11/90	2.7×10^{-12}	2.0×10^{-13}	3.4×10^{-13}
Area 23, H&S Roof	07/11/90	07/24/90	2.0×10^{-13}	2.0×10^{-13}	4.0×10^{-13}
Area 23, H&S Roof	07/24/90	08/07/90	7.3×10^{-12}	1.3×10^{-12}	2.5×10^{-12}
Area 23, H&S Roof	08/07/90	08/23/90	1.8×10^{-12}	1.6×10^{-13}	2.9×10^{-13}
Area 23, H&S Roof	08/23/90	09/06/90	7.9×10^{-13}	3.2×10^{-13}	6.3×10^{-13}
Area 23, H&S Roof	09/06/90	09/19/90	2.6×10^{-12}	1.6×10^{-13}	2.7×10^{-13}
Area 23, H&S Roof	09/19/90	10/03/90	5.5×10^{-13}	3.2×10^{-13}	6.4×10^{-13}
Area 23, H&S Roof	10/03/90	10/19/90	2.1×10^{-13}	1.7×10^{-13}	3.4×10^{-13}
Area 23, H&S Roof	10/19/90	11/07/90	5.3×10^{-13}	1.4×10^{-13}	2.7×10^{-13}
Area 23, H&S Roof	11/07/90	11/28/90	4.1×10^{-12}	1.8×10^{-13}	2.8×10^{-13}
Area 23, H&S Roof	11/28/90	12/12/90	6.0×10^{-13}	7.7×10^{-14}	1.4×10^{-13}
Area 23, H&S Roof	12/12/90	12/27/90	2.3×10^{-12}	1.9×10^{-13}	3.4×10^{-13}
Area 23, East Boundary	01/02/90	01/17/90	2.1×10^{-12}	6.3×10^{-13}	1.2×10^{-12}
Area 23, East Boundary	01/17/90	01/30/90	8.2×10^{-11}	9.3×10^{-13}	7.1×10^{-13}
Area 23, East Boundary	02/13/90	03/01/90	1.7×10^{-12}	3.7×10^{-13}	7.2×10^{-13}
Area 23, East Boundary	03/01/90	03/20/90	6.9×10^{-12}	1.6×10^{-13}	1.9×10^{-13}
Area 23, East Boundary	03/20/90	04/03/90	-2.9×10^{-13}	3.4×10^{-13}	7.1×10^{-13}
Area 23, East Boundary	04/03/90	04/17/90	1.7×10^{-11}	4.4×10^{-13}	5.6×10^{-13}
Area 23, East Boundary	04/17/90	05/01/90	1.8×10^{-12}	4.4×10^{-13}	8.6×10^{-13}
Area 23, East Boundary	05/01/90	05/16/90	7.1×10^{-13}	2.4×10^{-13}	4.7×10^{-13}
Area 23, East Boundary	05/16/90	05/31/90	1.8×10^{-13}	4.1×10^{-13}	8.3×10^{-13}
Area 23, East Boundary	05/31/90	06/14/90	1.3×10^{-12}	3.6×10^{-13}	7.1×10^{-13}
Area 23, East Boundary	06/14/90	06/26/90	8.0×10^{-13}	1.5×10^{-13}	2.8×10^{-13}
Area 23, East Boundary	06/26/90	07/11/90	3.3×10^{-12}	3.2×10^{-13}	5.9×10^{-13}
Area 23, East Boundary	07/24/90	08/07/90	5.0×10^{-13}	3.4×10^{-13}	6.7×10^{-13}
Area 23, East Boundary	08/07/90	08/23/90	3.5×10^{-12}	3.0×10^{-13}	5.4×10^{-13}
Area 23, East Boundary	08/23/90	09/06/90	3.4×10^{-12}	6.7×10^{-13}	1.3×10^{-12}
Area 23, East Boundary	09/06/90	09/19/90	6.3×10^{-12}	4.6×10^{-13}	8.0×10^{-13}
Area 23, East Boundary	10/03/90	10/19/90	1.6×10^{-12}	5.6×10^{-13}	1.1×10^{-12}
Area 23, East Boundary	10/19/90	11/07/90	3.6×10^{-16}	2.9×10^{-15}	5.9×10^{-15}
Area 23, East Boundary	11/28/90	12/12/90	2.7×10^{-13}	2.3×10^{-13}	4.7×10^{-13}
Area 23, East Boundary	12/12/90	12/27/90	2.2×10^{-12}	2.8×10^{-13}	5.1×10^{-13}
Area 23, Building 790, No. 2	01/02/90	01/17/90	3.0×10^{-12}	9.1×10^{-13}	1.8×10^{-12}
Area 23, Building 790, No. 2	01/17/90	01/30/90	8.6×10^{-12}	8.4×10^{-13}	1.5×10^{-12}
Area 23, Building 790, No. 2	01/30/90	02/13/90	2.1×10^{-12}	7.4×10^{-13}	1.5×10^{-12}
Area 23, Building 790, No. 2	02/13/90	03/01/90	1.4×10^{-12}	4.5×10^{-13}	8.8×10^{-13}
Area 23, Building 790, No. 2	03/01/90	03/20/90	6.6×10^{-13}	4.1×10^{-13}	8.2×10^{-13}
Area 23, Building 790, No. 2	03/20/90	04/03/90	-1.4×10^{-13}	4.5×10^{-13}	9.2×10^{-13}
Area 23, Building 790, No. 2	04/03/90	04/17/90	7.5×10^{-12}	5.1×10^{-13}	8.7×10^{-13}
Area 23, Building 790, No. 2	04/17/90	05/01/90	1.1×10^{-12}	2.6×10^{-13}	5.2×10^{-13}
Area 23, Building 790, No. 2	05/01/90	05/16/90	1.5×10^{-12}	4.3×10^{-13}	8.3×10^{-13}
Area 23, Building 790, No. 2	05/16/90	05/31/90	3.5×10^{-13}	6.0×10^{-13}	1.2×10^{-12}

Table B.1 (Tritiated Water Vapor in Air Sampling Results, cont.)

Sampling Location	Sampling Dates Start	Sampling Dates End	µCi/mL Concentration	µCi/mL Standard Deviation (1s)	Detection Limit
Area 23, Building 790, No. 2	05/31/90	06/14/90	2.5×10^{-12}	5.5×10^{-13}	1.1×10^{-12}
Area 23, Building 790, No. 2	06/14/90	06/26/90	6.1×10^{-12}	5.5×10^{-13}	9.7×10^{-13}
Area 23, Building 790, No. 2	06/26/90	07/11/90	2.6×10^{-13}	3.9×10^{-13}	8.0×10^{-13}
Area 23, Building 790, No. 2	08/07/90	08/23/90	1.2×10^{-12}	5.6×10^{-13}	1.1×10^{-12}
Area 23, Building 790, No. 2	08/23/90	09/06/90	4.1×10^{-12}	3.3×10^{-13}	5.7×10^{-13}
Area 23, Building 790, No. 2	09/06/90	09/19/90	1.2×10^{-12}	1.9×10^{-13}	3.7×10^{-13}
Area 23, Building 790, No. 2	09/19/90	10/03/90	3.5×10^{-12}	3.7×10^{-13}	6.7×10^{-13}
Area 23, Building 790, No. 2	10/03/90	10/19/90	5.7×10^{-13}	3.0×10^{-13}	5.9×10^{-13}
Area 23, Building 790, No. 2	10/19/90	11/07/90	1.5×10^{-12}	2.2×10^{-13}	4.2×10^{-13}
Area 23, Building 790, No. 2	11/07/90	11/28/90	3.1×10^{-13}	1.3×10^{-13}	2.6×10^{-13}
Area 23, Building 790, No. 2	11/28/90	12/12/90	6.5×10^{-12}	3.7×10^{-13}	6.1×10^{-13}
Area 23, Building 790, No. 2	12/12/90	12/27/90	4.3×10^{-13}	1.1×10^{-13}	2.0×10^{-13}
Area 25, E-MAD North	01/02/90	01/17/90	4.2×10^{-13}	3.3×10^{-13}	6.7×10^{-13}
Area 25, E-MAD North	01/17/90	01/30/90	5.9×10^{-13}	2.2×10^{-13}	4.4×10^{-13}
Area 25, E-MAD North	01/30/90	02/13/90	1.6×10^{-12}	4.9×10^{-13}	9.7×10^{-13}
Area 25, E-MAD North	02/13/90	03/01/90	2.1×10^{-11}	3.9×10^{-13}	4.1×10^{-13}
Area 25, E-MAD North	03/20/90	04/03/90	-6.6×10^{-14}	1.3×10^{-13}	2.8×10^{-13}
Area 25, E-MAD North	04/03/90	04/17/90	1.5×10^{-11}	3.2×10^{-13}	3.8×10^{-13}
Area 25, E-MAD North	04/17/90	05/01/90	1.1×10^{-11}	2.4×10^{-13}	2.9×10^{-13}
Area 25, E-MAD North	05/04/90	05/18/90	6.6×10^{-12}	3.2×10^{-13}	5.0×10^{-13}
Area 25, E-MAD North	05/18/90	05/31/90	4.8×10^{-12}	5.7×10^{-13}	1.0×10^{-12}
Area 25, E-MAD North	05/31/90	06/13/90	2.4×10^{-12}	2.6×10^{-13}	4.7×10^{-13}
Area 25, E-MAD North	06/14/90	06/27/90	3.8×10^{-13}	1.3×10^{-13}	2.6×10^{-13}
Area 25, E-MAD North	06/27/90	07/11/90	4.6×10^{-14}	2.3×10^{-13}	4.6×10^{-13}
Area 25, E-MAD North	07/11/90	07/24/90	1.1×10^{-12}	2.3×10^{-13}	4.4×10^{-13}
Area 25, E-MAD North	07/24/90	08/08/90	5.9×10^{-12}	2.4×10^{-13}	3.6×10^{-13}
Area 25, E-MAD North	08/08/90	08/22/90	8.3×10^{-13}	2.1×10^{-13}	4.2×10^{-13}
Area 25, E-MAD North	08/22/90	09/07/90	1.4×10^{-11}	4.4×10^{-13}	6.0×10^{-13}
Area 25, E-MAD North	09/07/90	09/19/90	7.8×10^{-12}	3.8×10^{-13}	6.0×10^{-13}
Area 25, E-MAD North	09/19/90	10/04/90	9.0×10^{-12}	4.3×10^{-13}	6.7×10^{-13}
Area 25, E-MAD North	10/04/90	10/18/90	3.3×10^{-12}	2.1×10^{-13}	3.4×10^{-13}
Area 25, E-MAD North	10/18/90	11/07/90	2.3×10^{-12}	1.7×10^{-13}	2.9×10^{-13}
Area 25, E-MAD North	11/28/90	12/12/90	6.9×10^{-12}	2.8×10^{-13}	4.2×10^{-13}
Area 25, E-MAD North	12/12/90	12/27/90	1.1×10^{-12}	8.5×10^{-14}	1.5×10^{-13}

Figures B.1 through B.17 are time series plots of the data in Table B.1, one figure for each sampling location. The data values are represented by an "x," the solid line shows the detection limit, and the dotted lines give the approximate upper and lower 95 percent confidence intervals for the data (calculated as the data value plus or minus twice the analytical standard deviation). The data have all been multiplied by 10^{12} in order to facilitate numbering the axes. The abscissa gives the time that sampling stopped in terms of month of the year and fraction of the month. Figure B.18 shows all the data combined in one plot; this

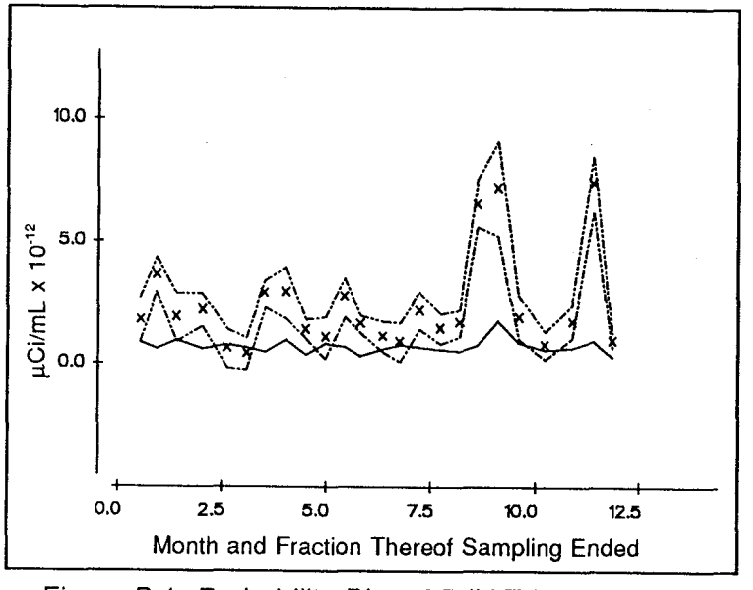


Figure B.1 Probability Plot of BJY Tritium Results

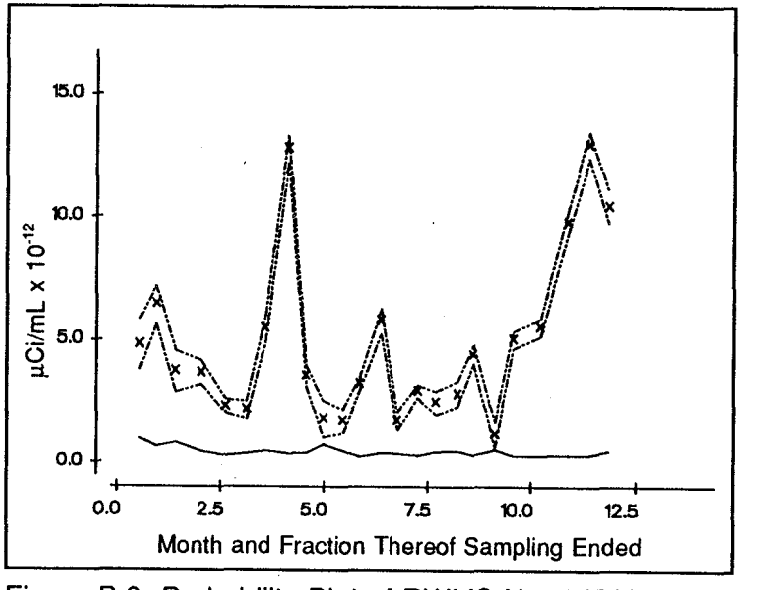


Figure B.2 Probability Plot of RWMS No. 1 Tritium Results

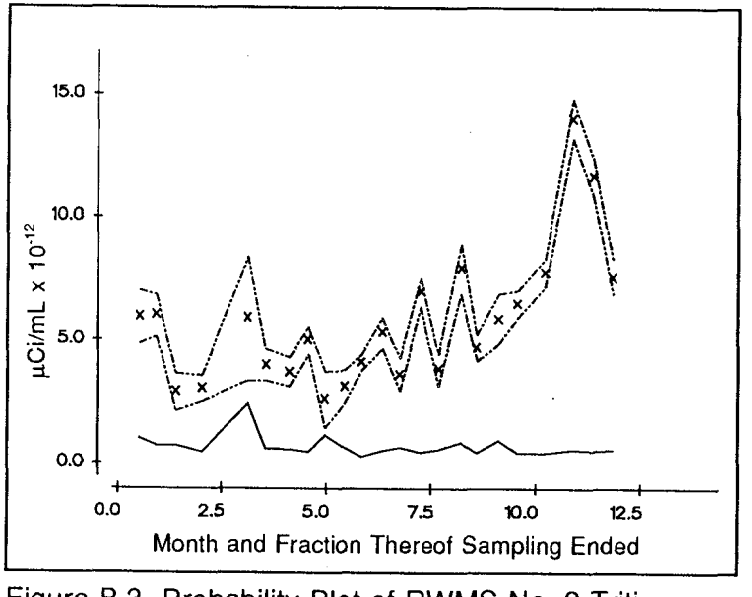


Figure B.3 Probability Plot of RWMS No. 2 Tritium Results

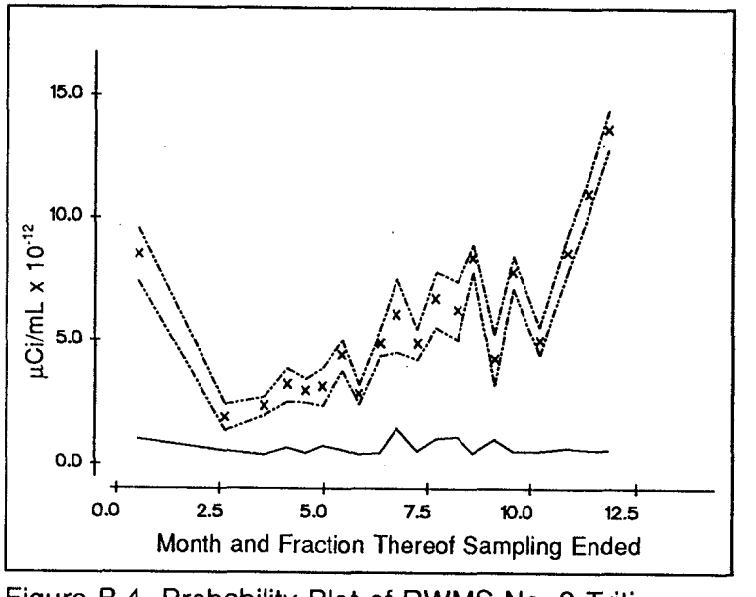


Figure B.4 Probability Plot of RWMS No. 3 Tritium Results

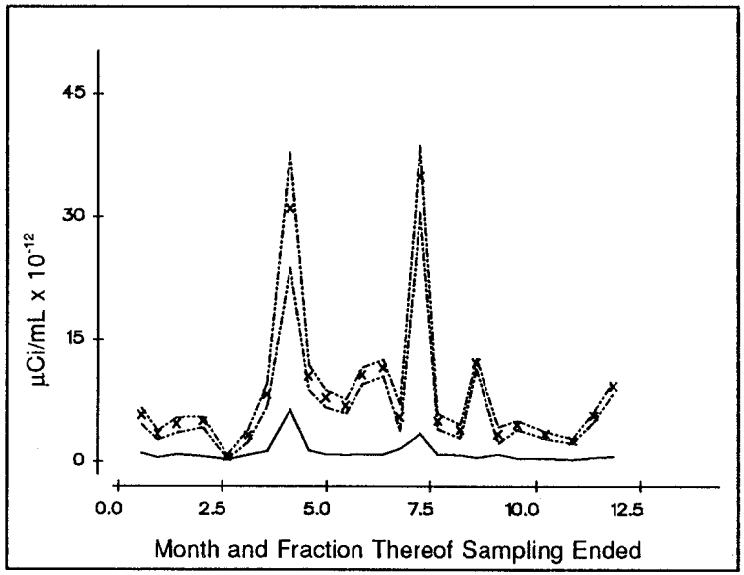


Figure B.5 Probability Plot of RWMS No. 4 Tritium Results

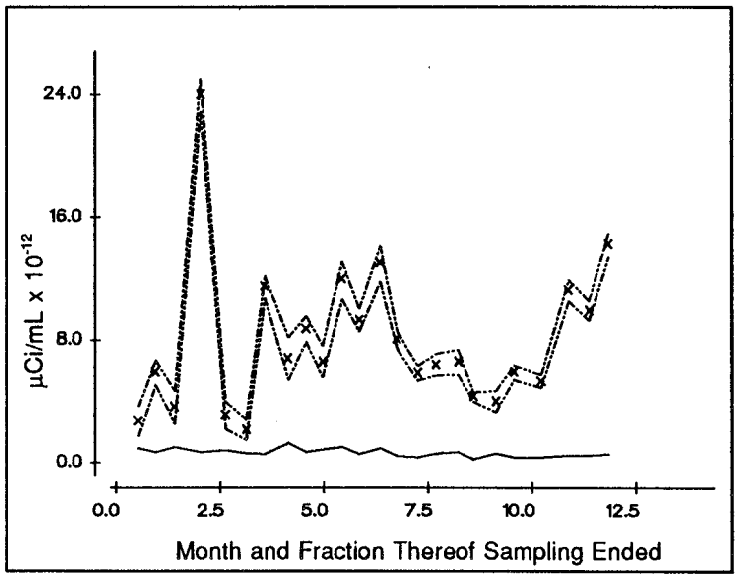


Figure B.6 Probability Plot of RWMS No. 5 Tritium Results

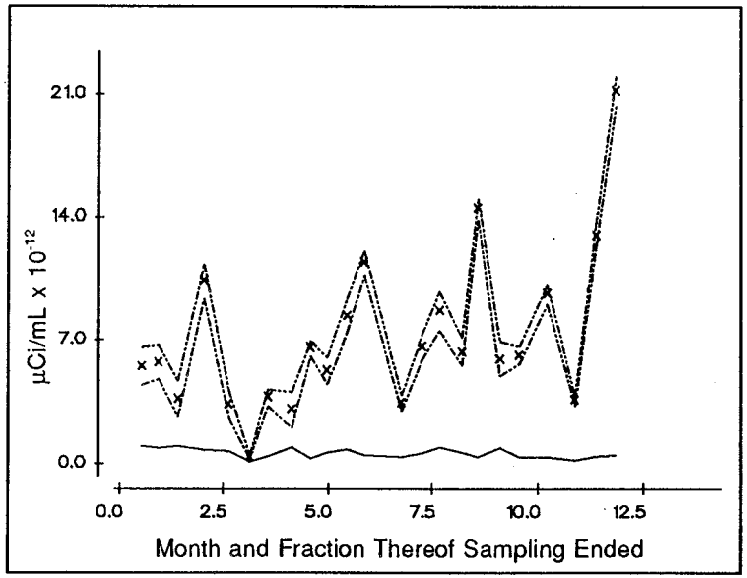


Figure B.7 Probability Plot of RWMS No. 6 Tritium Results

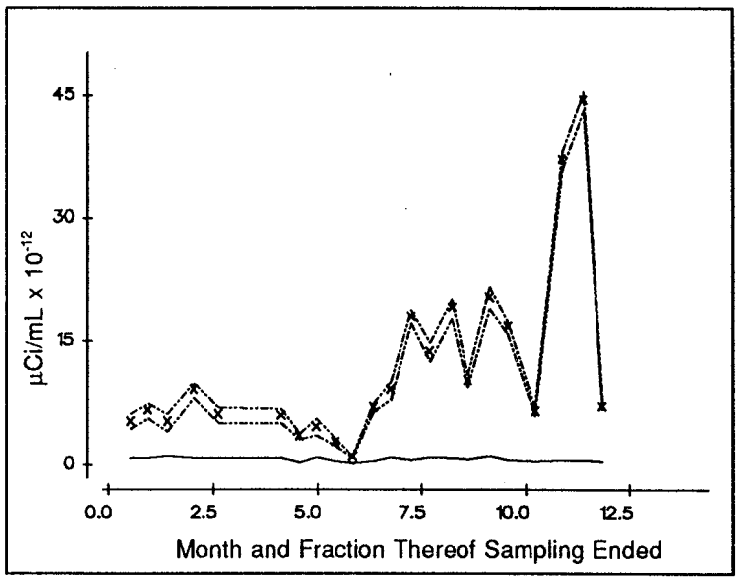


Figure B.8 Probability Plot of RWMS No. 7 Tritium Results

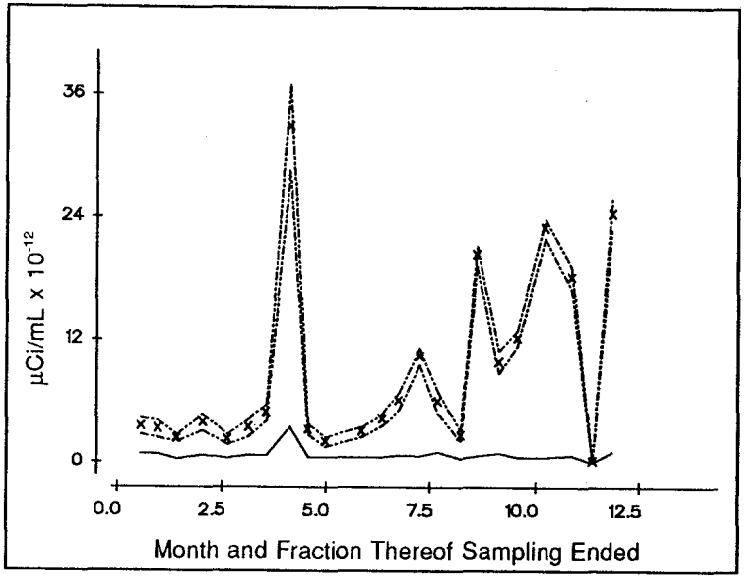


Figure B.9 Probability Plot of RWMS No. 8 Tritium Results

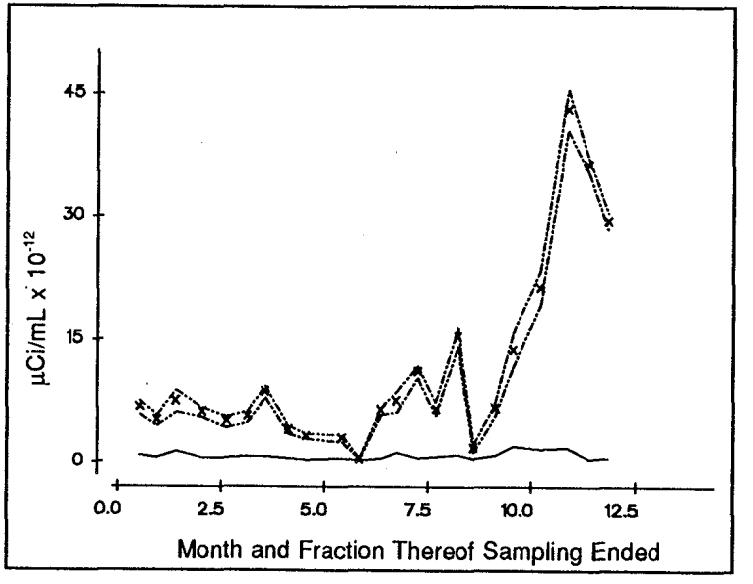


Figure B.10 Probability Plot of RWMS No. 9 Tritium Results

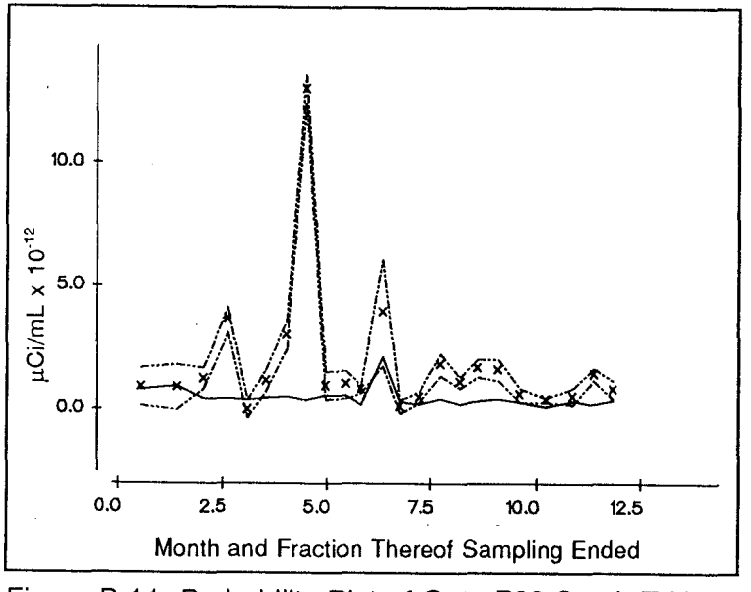


Figure B.11 Probability Plot of Gate 700 South Tritium Results

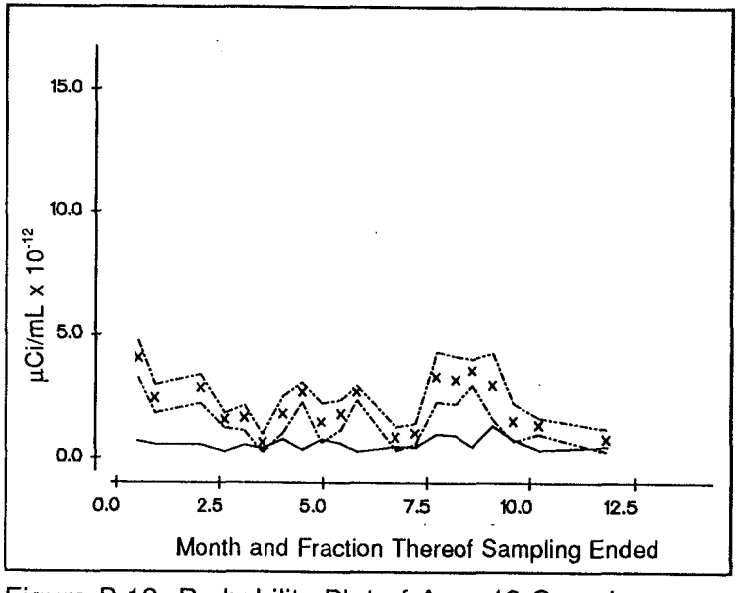


Figure B.12 Probability Plot of Area 12 Complex Tritium Results

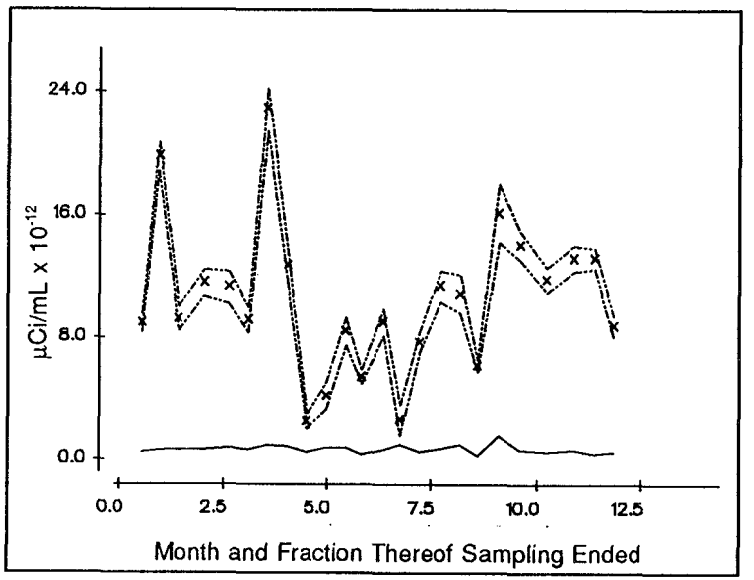


Figure B.13 Probability Plot of EPA Farm Tritium Results

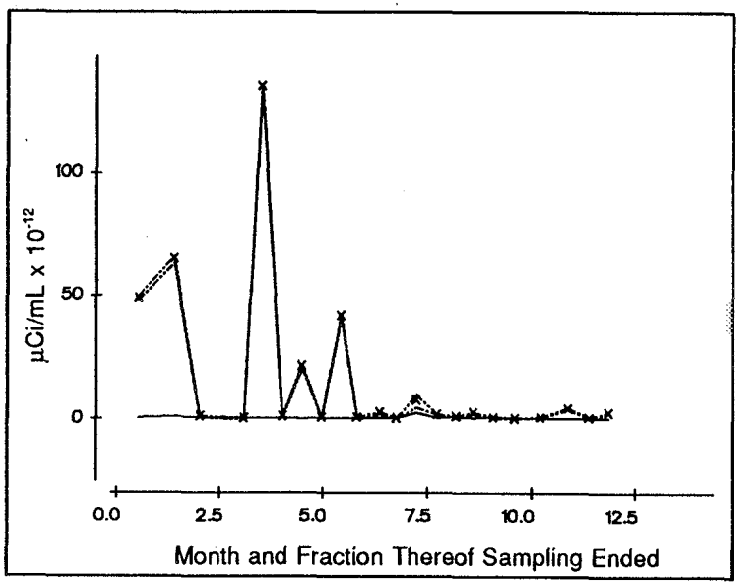


Figure B.14 Probability Plot of H&S Roof Tritium Results

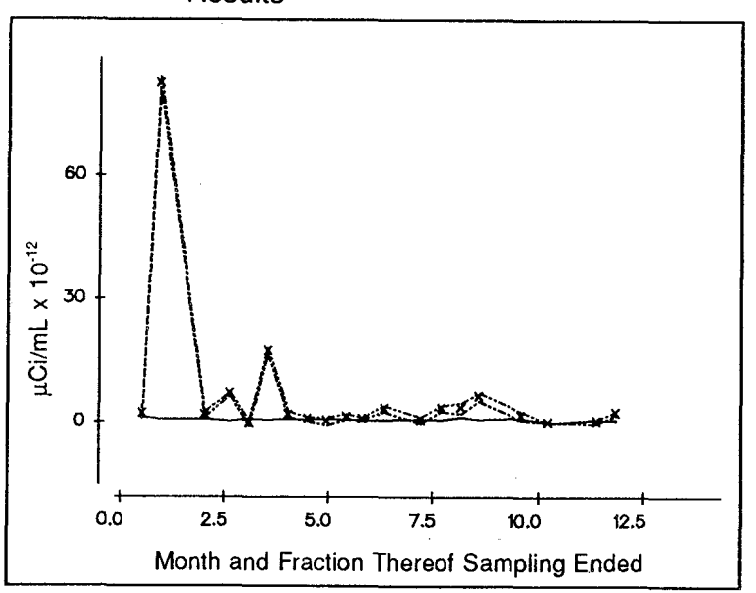


Figure B.15 Probability Plot of Area 23 East Boundary Tritium Results

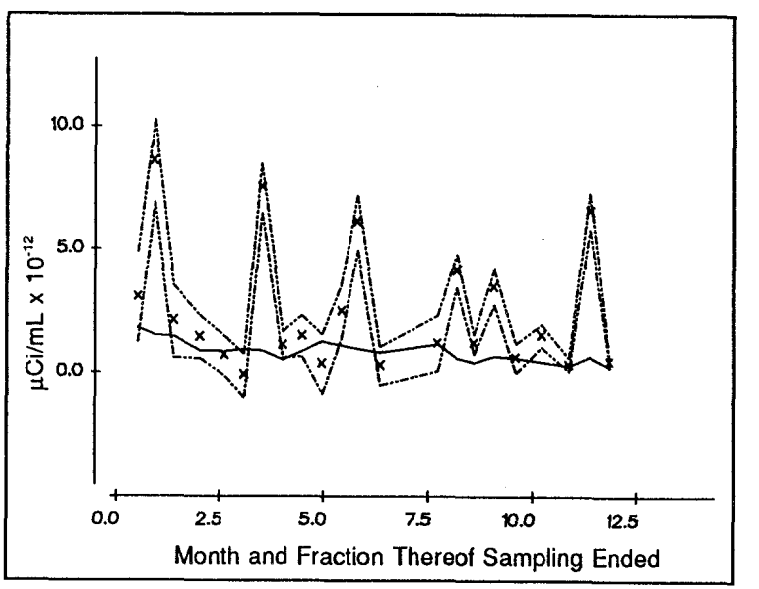


Figure B.16 Probability Plot of Building 790 No. 2 Tritium Results

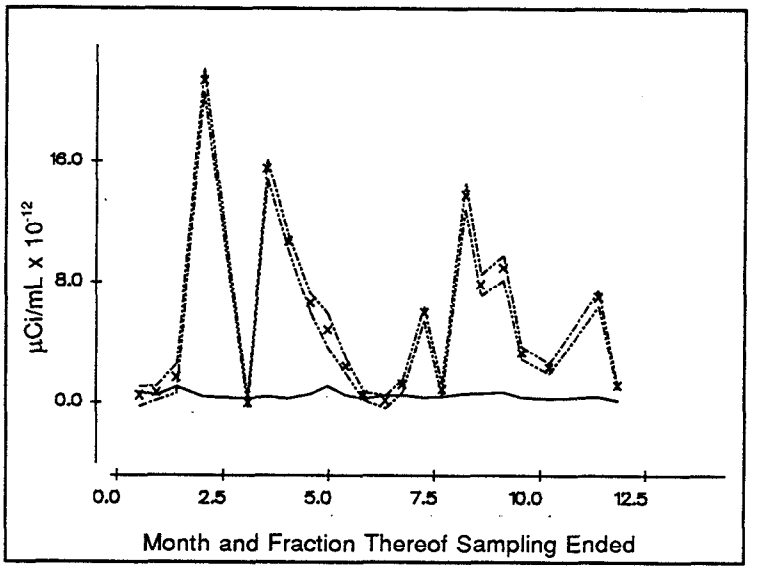


Figure B.17 Probability Plot of E-MAD North Tritium Results

plot does not contain any confidence intervals or detection limits, and a few of the highest values have been deleted. In Figure B.18 the data points are represented by dots. A number represents a plotting position with two or more data points at the same location. These plots seem to show occasional values that are higher than most values. The statistical analysis of these data, described following the figures, indicates that the data are log-normally distributed and a logarithmic transformation will cause those occasional high values to appear less remarkable.

Because of the range of data values, several different ordinate scalings are used in Figures B.1 to B.18. These scalings should be reviewed before comparing the patterns in different figures.

DATA ANALYSIS

An examination of the figures shows two items of note. First, Figures B.14 and B.15 each have a single value, early in the year, that is much higher than the values in all the remaining data. Second, Figures B.3, B.4, and B.10 seem to indicate a trend of values increasing with time. Also, an examination of Figure B.18 shows a pattern of most of the data values near zero with the number of data values decreasing as concentration values increase, suggestive of a lognormal data distribution. Since statistical tests for trend and outliers are dependent on the data distribution, the distribution will be discussed first.

The data distribution for each sampling location was tested for consistency to a normal and a lognormal density function using probability plotting and the correlation coefficient goodness-of-fit test, which is asymptotically equivalent to the Shapiro-Wilk test. Figure B.19 is a typical probability plot of the tritium in air data, a time series plot of the same data was shown in Figure B.7. Figure B.19 shows a curvature increasing towards the right, which

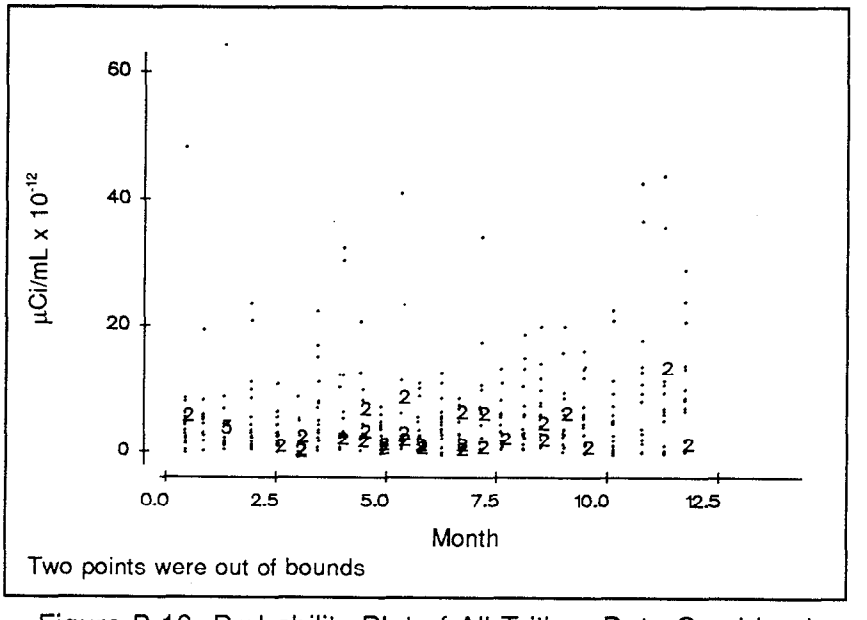


Figure B.18 Probability Plot of All Tritium Data Combined

suggest that the logarithm of the data should be used. The lowest point at the lower left corner of this figure does not appear to be unusual. The correlation test indicates that these data are not distributed normally, which is the expected result because of the clearly defined curvature of the data shown in Figure B.19. The same procedure was repeated using the natural logarithms of the data and the resulting plot is shown in Figure B.20. This figure now shows the data falling on a straight line except for the one data point in the lower left of the plot, which is now remarkably divergent from the remaining data in this set. The correlation coefficient test for goodness of fit indicates a lack of fit for this logarithmically transformed data. However, when the lower left-hand data point is removed, the transformed data show a very good fit to a normal distribution. Thus, the conclusion of these tests is that this data set has a lognormal data distribution, with one low outlier. This goodness-of-fit process was repeated for the data from each sampling location. Most of the data sets are not fit by a normal distribution; only the data for RWMS No. 3, Area 12 Complex, and the EPA Farm can be fit with a normal distribution. If low outliers are removed, all the data sets are fit by a lognormal distribution, thus this was chosen as the distribution for statistical testing of the data. Six of the sampling locations had one low outlier each. These stations were RWMS Nos. 4, 6, 8, and 9; the Area 23 East Boundary; and E-MAD. The distinctly high values indicated in Figures B.14 and B.15 are not remarkable when working with logarithms of the data, and thus do not seem to be high outliers.

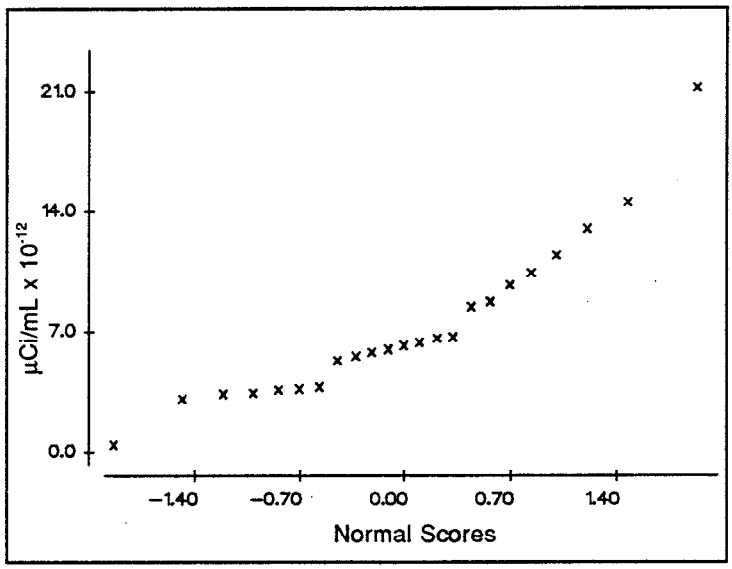


Figure B.19 Normal Probability Plot of RWMS No. 6 Tritium Results

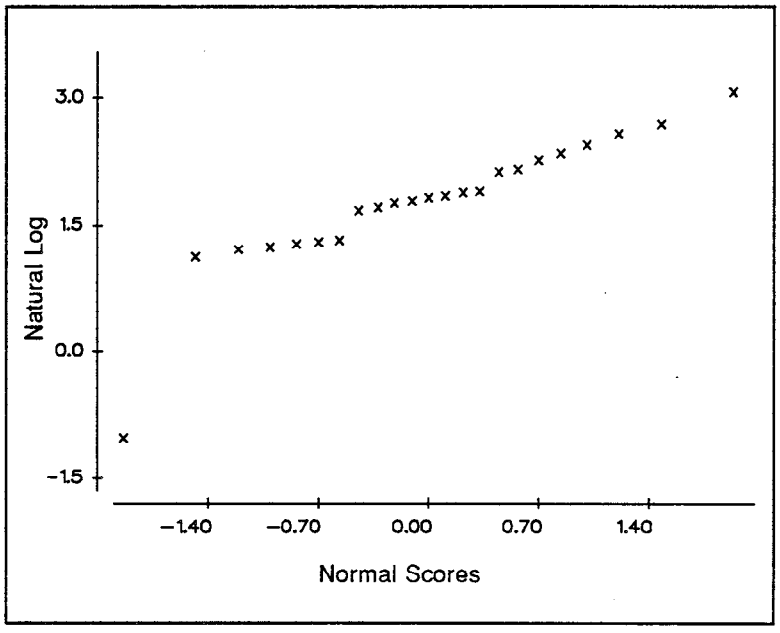


Figure B.20 Lognormal Probability Plot of RWMS No. 6 Tritium Results

After the outliers are removed from the data, simple descriptive statistics can be used to summarize the data for each sampling station. Table B.2 gives these statistics. The first and third quartiles of the data are defined so that one quarter of the data have values lower than the first quartile and one quarter of the data have values higher than the third quartile. Note that the medians are smaller than the means, and the medians are closer to the first quartile than to the third quartile. This is typical of lognormally distributed data.

The von Neuman mean square of successive difference test was

Table B.2 Descriptive Statistics by Sampling Station

Station	Number	μCi/mL x 10^{-12} Mean	Standard Deviation	Median	1st Quartile	3rd Quartile
H&S Roof	22	15.33	32.26	1.34	0.55	10.76
East Boundary	19	7.16	18.65	1.79	0.71	3.48
Building 790	22	2.46	2.55	1.44	0.54	3.63
RWMS No. 1	24	4.81	3.40	3.67	2.30	5.69
RWMS No. 2	23	5.71	2.79	5.30	3.68	6.94
RWMS No. 3	20	5.79	3.08	4.90	3.11	8.19
RWMS No. 4	23	8.51	8.19	5.52	3.73	10.34
RWMS No. 5	24	7.93	4.79	6.55	4.52	10.89
RWMS No. 6	22	7.52	4.44	6.22	3.69	9.79
RWMS No. 7	22	11.69	10.90	6.96	5.14	16.90
RWMS No. 8	22	9.14	8.86	4.50	3.18	13.62
RWMS No. 9	22	11.42	11.20	6.53	4.96	14.02
BJY	24	2.38	1.96	1.78	1.09	2.83
Area 12 Complex	20	2.05	1.01	1.75	1.32	2.89
EPA Farm	24	10.42	4.85	10.01	7.85	13.02
Gate 700	23	1.77	2.65	0.98	0.57	1.6
E-MAD	21	5.52	5.81	3.30	0.94	8.37
All	377	7.05	10.91	4.17	1.92	8.07

used to statistically test for the presence of a trend over the year in the data sets for each of the sampling locations. This test was used because it can detect any type of trend. The commonly used linear regression test for trend can only test for a linear trend. To avoid the simultaneous inference problem when performing many statistical analyses in parallel, the Bonferroni inequality was used to set the critical value for each trend test. These statistical tests indicated that only the data from RWMS No. 9 had an annual trend, as shown in Figure B.10, which suggested a distinct increase in concentrations during the last quarter of the year, but otherwise concentrations were unremarkable. Since this trend in the data from a single sampling location did not adversely affect the lognormality of the data, it was ignored for the comparison of locations discussed below.

The final statistical test on this data was a one-way analysis of variance to test for differences between group means. The data were scaled by multiplying by 10^{12}, then logarithmically transformed before this test because the distribution is lognormally distributed. Also, the six low outliers and the negative values were removed. The output of this procedure is given in Table B.3. Note that the mean values and confidence intervals are of the natural logarithms of the data, thus exponential transform action gives the data median and the confidence interval of the median. The analysis of variance table shows strong evidence of differences between group means, and the plot of confidence intervals suggests how the means are grouped. The analysis of variance "groupings" denotes the mean data values that are statistically similar; any geographical meaning to these groupings is secondary and

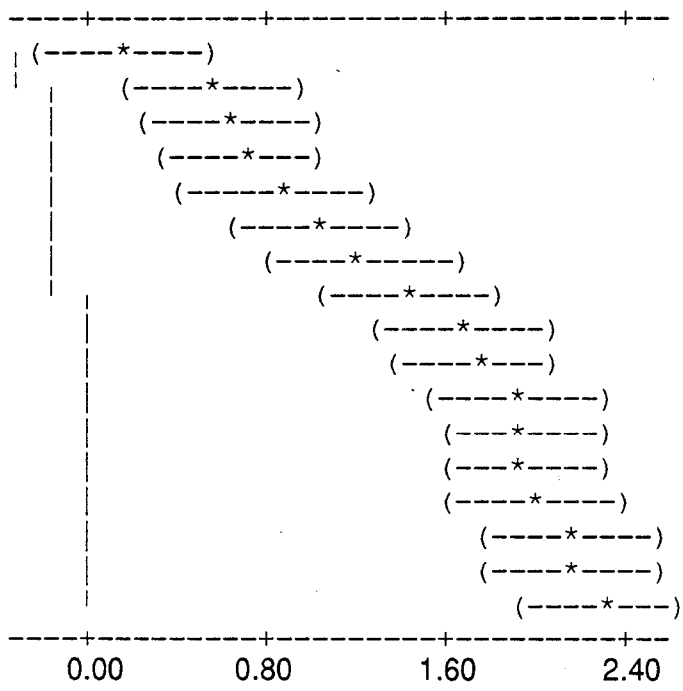
Table B.3 Analysis of Variance on the Natural Log of Tritium in Air Concentrations

Source	Degree of Freedom	Sum of Square	Mean Square	F-Statistic	p Value
Station	16	157.341	9.834	11.50	0.000
Error	355	303.566	0.855		
Total	371	460.907			

Station	N	Mean Ln	Deviation
Gate 700	22	0.1070	0.9837
Bldg. 790	21	0.4483	1.0790
Complex	20	0.5820	0.5628
BJY	24	0.6061	0.7258
East Boundary	18	0.7661	1.4569
H&S Roof	21	0.9248	1.9775
E-MAD	20	1.1558	1.2484
RWMS No. 1	24	1.3571	0.6665
RWMS No. 3	20	1.6220	0.5389
RWMS No. 2	23	1.6468	0.4386
RWMS No. 8	22	1.8169	0.8841
RWMS No. 4	23	1.8687	0.6852
RWMS No. 6	22	1.8772	0.5302
RWMS No. 5	24	1.9140	0.5748
RWMS No. 9	22	2.0805	0.8319
RWMS No. 7	22	2.1078	0.8802
EPA Farm	24	2.2207	0.5482

Pooled Standard Deviation = 0.9247

Standard Individual 95 Percent Confidence Intervals for the Mean Ln Based on a Pooled Standard Deviation



interpretive. Tukey's multiple comparison procedure was used to simultaneously compare all means for equality. This process identified three overlapping groupings of the location means, indicated by the vertical lines added to the right of the standard deviation column. The list of "stations" has been rearranged by increasing magnitude of the means to facilitate the comparison of the means. The lowest two means form a group which overlaps with the next group. The second group spans from Building 790 to RWMS No. 1; the first two groups are mostly the non-RWMS sampling points. The third group spans from the Health and Safety (H&S) Building roof through the EPA Farm and is mostly composed of the RWMS sites that have known sources of tritium. The EPA Farm was used about 15 years ago to experimentally determine the biological transport of tritium in animals, but tritium residuals should be low after a few years. The Engine Maintenance Assembly and Disassembly (E-MAD) building, originally used to assemble and disassemble nuclear rocket engines, is also

a known source of radioactivity. The inclusion of the H&S Building roof in this group may be due to the few high values indicated in Figure B.14. This building contains the radiological analytical laboratories and fume hoods in which samples are prepared for counting, and the preparation of tritiated samples for analysis could result in effluent to the roof through the hood exhaust systems.

In Table B.3, the "p" value gives the probability associated with the F-statistic, and is the probability that there are no significant differences between the station means. Since the p value is very small, the statistical conclusion is that there are differences between the station means, as was discussed in the previous paragraph.

APPENDIX C
ONSITE ^{238}Pu, $^{239+240}Pu$, ^{90}Sr, GROSS ALPHA AND BETA, GAMMA-EMITTING RADIONUCLIDES, AND TRITIUM IN WATER

Lawrence E. Barker

Sampling locations, sampling dates, measured concentrations, and limits of detection for ^{90}Sr, gross alpha, ^{238}Pu, $^{239+240}Pu$, and gross beta in water appear in Attachments C.1 through C.6 following this text. Statistical analyses of these data are presented below.

STRONTIUM-90

More than 85 percent of the observed concentrations of ^{90}Sr were below the limits of detection. Also, each of the analyses performed on water samples resulted in some data that were below the limits of detection, as noted in the following sections. However, analyses performed with the actual data, including those observations that were below the limit of detection, can be informative. Such analyses are presented here.

No distribution was found that fit the ^{90}Sr concentrations very well. In view of the ubiquity of the lognormal distribution in environmental measurements, the remainder of the analysis was done using the natural logarithms of the positive concentrations. In the other analyses described below, the lognormal transformation of the data was also used.

Descriptive statistics can be calculated, using either the observed concentrations or the greater of either the observed concentration or the detection limits, although this will bias the result. Using observed concentrations, the arithmetic mean and standard deviation are, respectively, 2.9×10^{-10} and 9.2×10^{-10} μCi/mL (1.1×10^{-4} and 3.4×10^{-4} Bq/L). Since subtraction of background made some observed concentrations negative, the geometric mean and standard deviation were not calculated.

Calculating descriptive statistics from the larger of observed concentrations and detection limits, the arithmetic mean and standard deviation were, respectively, 4.3×10^{-10} and 8.6×10^{-11} μCi/mL (1.6×10^{-2} and 3.2×10^{-2} Bq/L). The geometric mean and standard deviation were, respectively, 2.0×10^{-10} μCi/mL and 2.6×10^{-3} (7.4×10^{-3} Bq/L and 2.6×10^{-3}).

The water sources sampled were divided into the categories of open reservoirs, potable water, supply wells, sewage lagoons, natural springs, and containment ponds. To compare concentrations among categories, a one-way analysis of variance (ANOVA) was carried out. The results of this analysis are shown in Table C.1.

Table C.1 indicates that concentrations differ among categories. Fisher's multiple comparison procedure was used to identify differences. It was found that water categories can be divided into two classes; a "greater concentration," consisting of containment ponds and natural springs, and a "lesser concentration" class consisting of everything else.

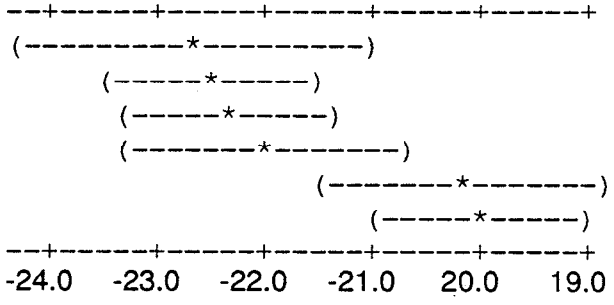
Table C.1 One-Way Analysis of the Variance on the Natural Log of ^{90}Sr Concentrations between Types of Water Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	5	39.01	7.80	5.85	0.001
Error	24	31.98	1.33		
Total	29	71.00			

Level	Number	Mean Ln	Standard Deviation
1	4	-23.674	0.881
2	6	-23.475	1.154
3	7	-23.381	0.382
4	3	-23.032	0.373
5	3	-21.259	1.569
6	7	-20.927	1.679

Pooled Standard Deviation = 1.154

Individual 95 Percent Confidence Intervals (CIs) for the Mean Lns Based on a Pooled Standard Deviation



KEY

Level	Category
1	Open Reservoirs
2	Potable Water
3	Supply Wells
4	Sewage Lagoons
5	Natural Spring
6	Containment Ponds

Water from tunnels in Rainier Mesa drains into the containment ponds. In view of experimental activity in these tunnels, elevated concentrations of ^{90}Sr are not surprising. The high concentration of ^{90}Sr in natural springs is attributable to a single observed concentration of 3.5×10^{-9} µCi/mL (1.3×10^{-1} Bq/L), which occurred on July 6 at Reitman Seep. The water for this sample was obtained by digging in Reitman Seep's dry bed, and hence might not be from the same population as the other observations. If this unusual observation is rejected as invalid, natural springs fall back into the "lesser concentration" class. These results should be compared with those for $^{239+240}Pu$.

GROSS ALPHA

Approximately 15 percent of the observed gross alpha concentrations were less than the limit of detection.

Concentrations can be described by noting that the arithmetic mean and standard deviation of the concentrations are, respectively, 1.1×10^{-8} and 3.5×10^{-8} μCi/mL (4.1×10^{-1} and 1.3 Bq/L). These are somewhat misleading as the arithmetic mean is very sensitive to outlying observations. Three concentrations, all from containment ponds, exceed 10^{-7} μCi/mL (3.7 Bq/L). Omitting these values, the arithmetic mean and standard deviation are, in order, 6.1×10^{-9} and 7.6×10^{-9} μCi/mL (2.3×10^{-1} and 2.8×10^{-1} Bq/L).

Subtracting background concentrations resulted in a single negative observation; -4.0×10^{-11} μCi/mL (-1.4×10^{-3} Bq/L). Omitting this observation, the remaining concentrations have an approximately lognormal distribution. This can be seen in Figure C.1, where natural logarithms of concentrations are plotted versus normal scores. Were the distribution actually lognormal, all points would fall on or near a straight line. The curvature in this plot is too strong for the data to actually have a lognormal distribution; however, when water sources are divided by categories (as above), the resulting plots display little nonlinearity. Hence, it is thought the lognormal approximation is adequate.

Concentrations among the six categories were compared by a one-way ANOVA, and the results may be seen in Table C.2.

Table C.2 was calculated from the natural logarithms of concentrations in μCi/mL. Exponentiating the mean for each category provides the median of the concentrations. For example, exp(-17.765) μCi/mL $\approx 2.0 \times 10^{-8}$ μCi/mL (7.1×10^{-1} Bq/L) and is the estimate of the median concentration from containment ponds.

Table C.2 indicates contamination levels differ among the categories. Fisher's multiple comparison procedure was used to determine which categories differ. The only difference found statistically significant at the five percent level was that between containment ponds and other water sources. Fisher's procedure, not being a conservative test, makes it likely that no other differences exist.

Since water from the tunnels drains into the containment ponds, greater gross alpha contamination is not surprising.

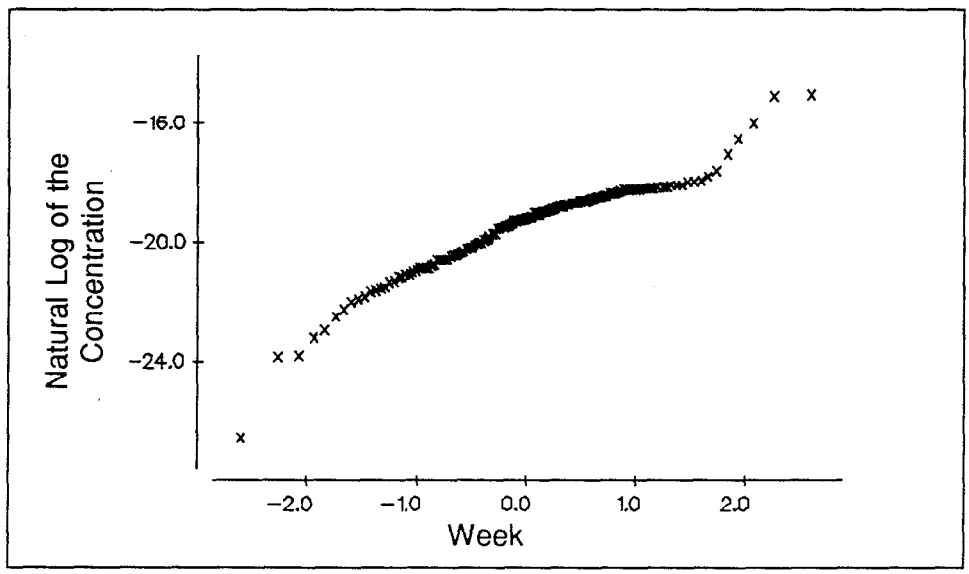


Figure C.1 Plot of the Natural Log of Gross Alpha Concentrations in Water versus Normal Scores

Table C.2 One-Way Analysis of the Variance on the Natural Log of Gross Alpha Concentrations between Types of Water Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	4	66.63	16.66	7.84	0.000
Error	132	280.32	2.12		
Total	136	346.95			

Level	Number	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
1	57	-20.161	1.713	(--*--)
2	22	-19.444	1.262	(----*----)
3	38	-19.277	1.030	(---*---)
4	7	-19.190	1.358	(-------*-------)
5	13	-17.765	1.638	(----*----)

Pooled Standard Deviation = 1.457

-20.0 -19.0 -18.0 -17.0 -16.0

All sampling at containment ponds occurred during the early weeks of the year. This made it difficult to separate time trends in containment pond contamination, if any, from natural variation in concentrations. A visual inspection of concentrations from water sources other than containment ponds, presented in Figure C.2, shows no evidence of time trends in concentrations. In Figure C.2 natural logarithms of concentrations are plotted versus the week of 1990 (the first week is Week "1," the second week is Week "2," etc.).

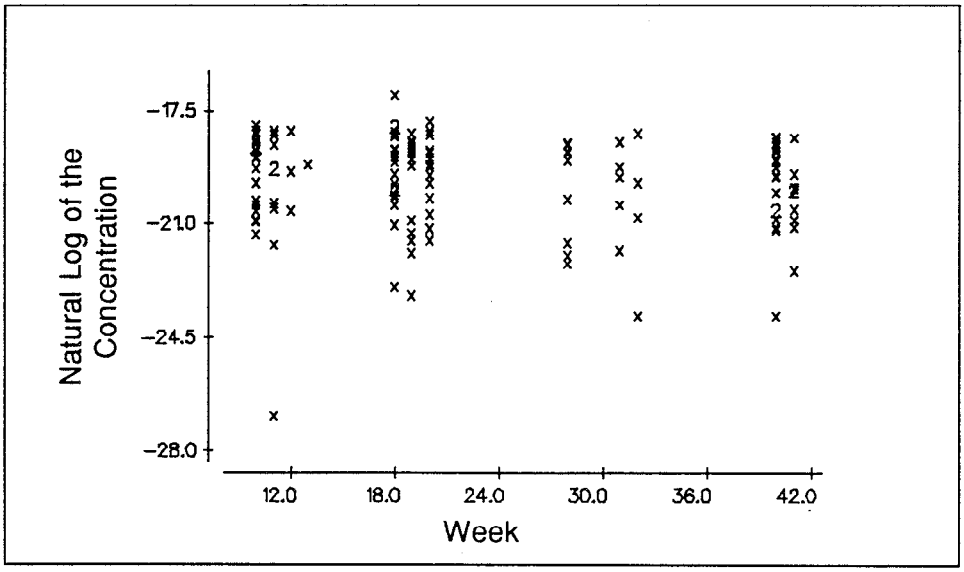


Figure C.2 Plot of the Natural Log of Non-Containment Pond Concentrations versus the Week of Collection

PLUTONIUM-238

Approximately eight percent of the observed concentrations of ^{238}Pu in water were greater than the detection limits. The observed concentrations have an arithmetic mean of 4.5×10^{-11} μCi/mL (1.7×10^{-3} Bq/L) and an arithmetic standard deviation of 2.0×10^{-10} μCi/mL (7.4×10^{-3} Bq/L). The geometric mean and standard deviation could not be calculated as many of the observed concentrations are negative due to subtracting of background concentrations. The greater of the observed concentration and limit of detection may be used to calculate descriptive statistics. This yields an arithmetic mean and standard deviation of, respectively, 1.1×10^{-10} and 2.0×10^{-10} μCi/mL (4.1×10^{-3} and 7.4×10^{-3} Bq/L). The geometric mean and standard deviation are, respectively, 8.3×10^{-11} μCi/mL and 1.5 (3.1×10^{-8} Bq/L and 1.5).

Neither a normal nor a lognormal distribution fits the data very well. Because many environmental phenomena have lognormal distributions, the analysis is carried out using the natural logarithms of the positive concentrations. Water sources were divided into the same categories as above. A one-way analyses of variance showed no evidence of differences within these categories. To compare concentrations among categories, a one-way ANOVA was carried out, and the results are listed in Table C.3.

The level numbers in the table refer to the same categories as above. Table C.3 indicates that the categories differ in concentrations. Fisher's multiple comparison procedure found the only difference statistically significant at the five percent level to be that between containment ponds and the other sources.

As stated, water from tunnels in Rainier Mesa drains into containment ponds. In view of the experimental activities conducted in the tunnels, greater concentrations are not surprising.

Table C.3 One-Way Analysis of the Variance on the Natural Log of ^{238}Pu Concentrations between Types of Water Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	5	23.03	4.61	4.01	0.002
Error	142	162.91	1.15		
Total	147	185.94			

Level	Number	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
1	7	-24.834	1.003	(-------*--------)
2	23	-24.483	0.808	(---*---)
3	42	-24.430	0.949	(-*-)
4	16	-24.420	1.003	(--*--)
5	35	-24.363	1.042	(-*-)
6	25	-23.421	1.494	(--*--)

Pooled Standard Deviation = 1.071

-25.5 -25 -24.5 -24.0 -23.5 -23.0

To examine the data for time trends, the natural logarithms of concentrations were plotted versus the week of data collection. That is, the first week of 1990 was Week "1," the second week was Week "2", etc. This is displayed in Figure C.3. Numbers in Figure C.3 indicate points plotted atop one another, with the number indicating the number of points. The symbol "+" denotes ten or more points. No visual evidence of any time trend was found.

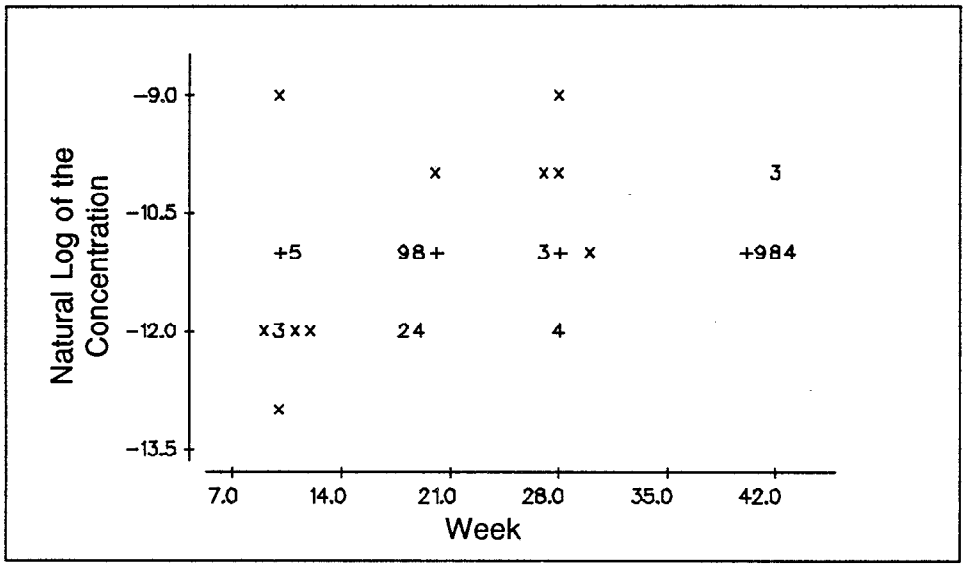


Figure C.3 Plot of the Natural Log of Concentrations of ^{238}Pu in Water versus the Week of Collection

PLUTONIUM-239+240

Approximately 22 percent of the observed concentrations of $^{239+240}Pu$ in water were greater than detection limits. The observed concentrations have an arithmetic mean of 3.9×10^{-10} µCi/mL (1.4×10^{-2} Bq/L) and an arithmetic standard deviation of 2.3×10^{-9} µCi/mL (8.5×10^{-2} Bq/L). The geometric mean and standard deviation could not be calculated as 32 percent of the observed concentrations were negative due to subtracting of background concentrations.

The greater of the observed concentration and limit of detection yielded an arithmetic mean and standard deviation of, respectively, 4.2×10^{-10} and 2.3×10^{-9} µCi/mL (1.6×10^{-2} and 8.5×10^{-2} Bq/L). The geometric mean and standard deviation are, respectively, 4.9×10^{-11} µCi/mL and 3.5 (1.8×10^{-3} Bq/L and 1.5).

Due to the subtracting of background concentrations, approximately 32 percent of the observations were negative. An exploratory data analysis revealed a lognormal distribution crudely fit the data if 2.6×10^{-11} µCi/mL (9.6×10^{-4} Bq/L) were added to each concentration. In Figure C.4 natural logarithms of concentrations plus this constant are plotted versus normal scores. Were the data actually lognormally distributed, a scatter about a straight line would result. Although this clearly does not happen here, it is thought that the lognormal distribution approximates the true distribution well enough and is used for the remainder of the analysis.

Using the same categories of water sources as above, a one-way ANOVA was carried out to compare concentrations among categories. The results of this analysis are shown in Table C.4.

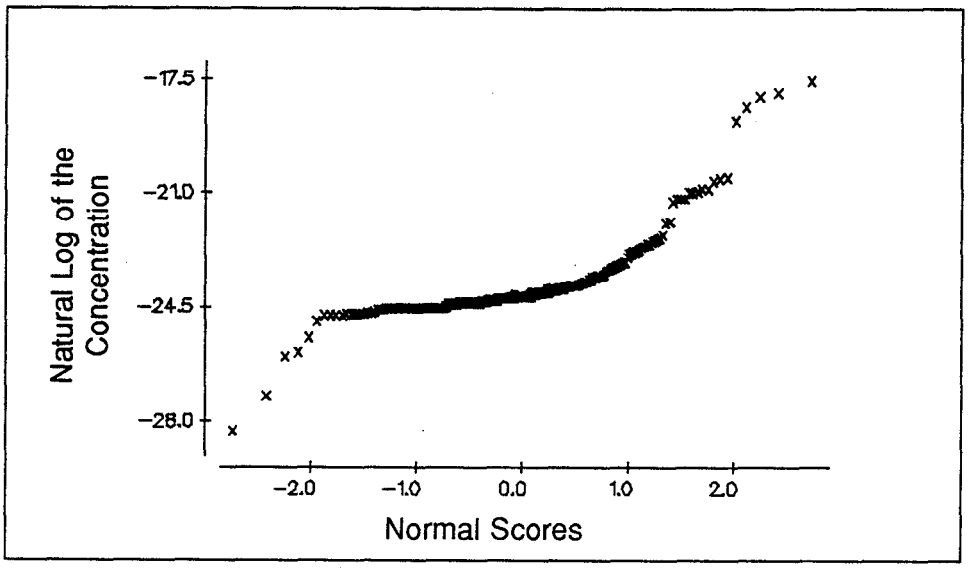


Figure C.4 Plot of the Natural Log of $^{239+240}Pu$ Concentrations (plus 2.6 x 10^{-11}) in Water versus Normal Scores

The level catagories used were the same as those used previously, and Table C.4 indicates concentrations differ among categories. Fisher's multiple comparison procedure was used to identify differences. It was found that categories of water supply can be divided into two classes, a "greater concentration" and a "lesser concentration" class. The "greater concentration" class consists of containment ponds and natural springs. The "lesser concentration" class consists of everything else.

Table C.4 One-Way Analysis of the Variance on the Natural Log of $^{239+240}Pu$ Concentrations between Types of Water Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	5	157.73	31.55	29.25	0.000
Error	211	227.60	1.08		
Total	216	385.32			

Level	Number	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
1	12	-24.370	0.371	(----*----)
2	56	-24.277	0.395	(--*--)
3	55	-24.246	0.913	(--*--)
4	36	-24.136	0.519	(--*--)
5	22	-23.362	1.396	(---*---)
6	36	-21.959	1.868	(--*--)

Pooled Standard Deviation = 1.039

-25.0 -24.0 -23.0 -22.0 -21.0

Since water from tunnels in Rainier Mesa drains into containment ponds, elevated $^{239+240}Pu$ concentrations are not surprising. The high concentration of $^{239+240}Pu$ in natural springs is attributable to a single observed concentration of 1.0×10^{-8} µCi/mL (3.7×10^{-1} Bq/L), which occurred on July 6 at Reitmann Seep. The water for this sample was obtained by digging in Reitmann Seep's dry bed, and hence might not be from the same population as the other observations. If this unusual observation is rejected as invalid, natural springs fall back into the "lesser concentration" class. These results may be compared with those for ^{90}Sr.

To examine the data for time trends, natural logarithms of concentrations were plotted versus the week of data collection, with weeks numbered as above. This analysis is displayed in Figure C.5. The numbers in Figure C.5 indicate points plotted atop one another, with the number indicating the number of points. No visual evidence of any time trend was found.

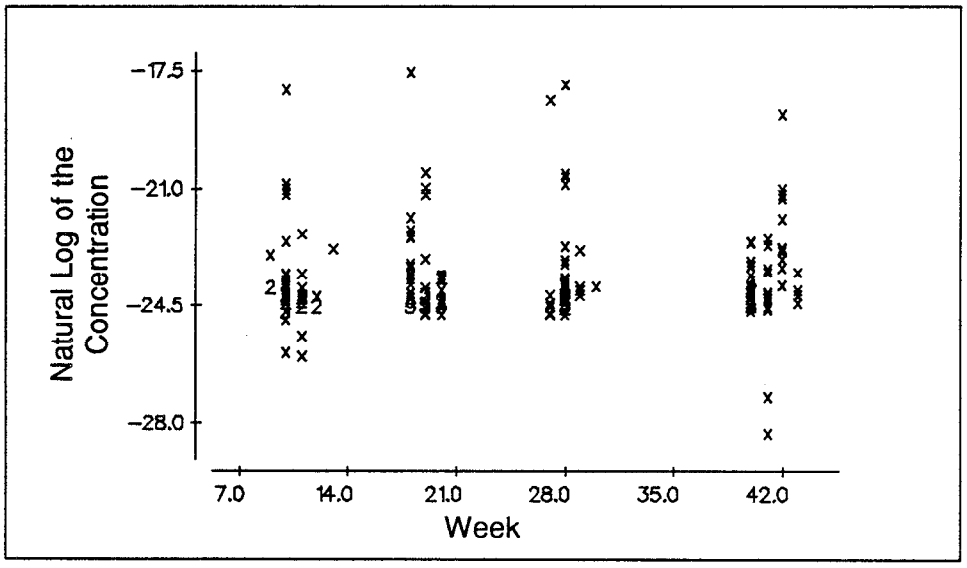


Figure C.5 Plot of the Natural Log of $^{239+240}Pu$ Concentrations (plus 2.6×10^{-11}) in Water versus the Week of Collection

GROSS BETA

Approximately eight percent of the observed gross beta concentrations were less than the limit of detection. These concentrations can be described by noting that the arithmetic mean and standard deviation are, respectively, 2.9×10^{-8} and 1.1×10^{-7} µCi/mL (1.1 and 4.1 Bq/L). Subtracting background concentrations gave approximately two percent negative concentrations. Hence, the geometric mean and standard deviation were not calculated.

An exploratory data analysis revealed that the distribution of the positive concentrations could be crudely approximated by a lognormal distribution. Attempts to account for negative observations by adding a small quantity to each concentration prior to taking logarithms resulted in a distribution less like the lognormal. In view of the small number of negative concentrations, no serious loss of information results if they are not used.

A plot of natural logarithms of positive concentrations versus normal scores is presented in Figure C.6. Were the distribution actually lognormal, the points would scatter about a straight line. Clearly, this is not the case. However, except for the very small values, the scatter is

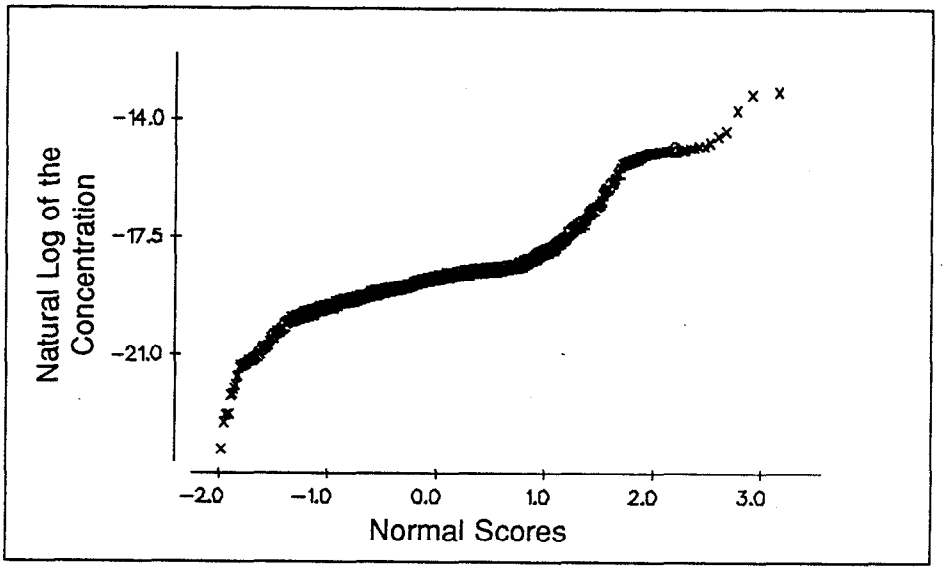


Figure C.6 Plot of the Natural Log of Positive Gross Beta Concentrations in Water versus Normal Scores

thought linear enough to justify the lognormal approximation. All calculations which follow were done with natural logarithms of positive concentrations.

Gross beta in water is evaluated weekly. It is thought plausible that time trends might exist. As a preliminary investigative tool, the natural logarithms of concentrations were plotted versus week of data collection in Figure C.7 (weeks numbered as above). It is not visually obvious from Figure C.7 whether a trend exists. A statistical analysis, presented below, indicated no difference in concentrations over weeks.

With the water sources divided into categories as before, a two-way ANOVA, with category and week as independent variables, was carried out, and the results are shown in Table C.5.

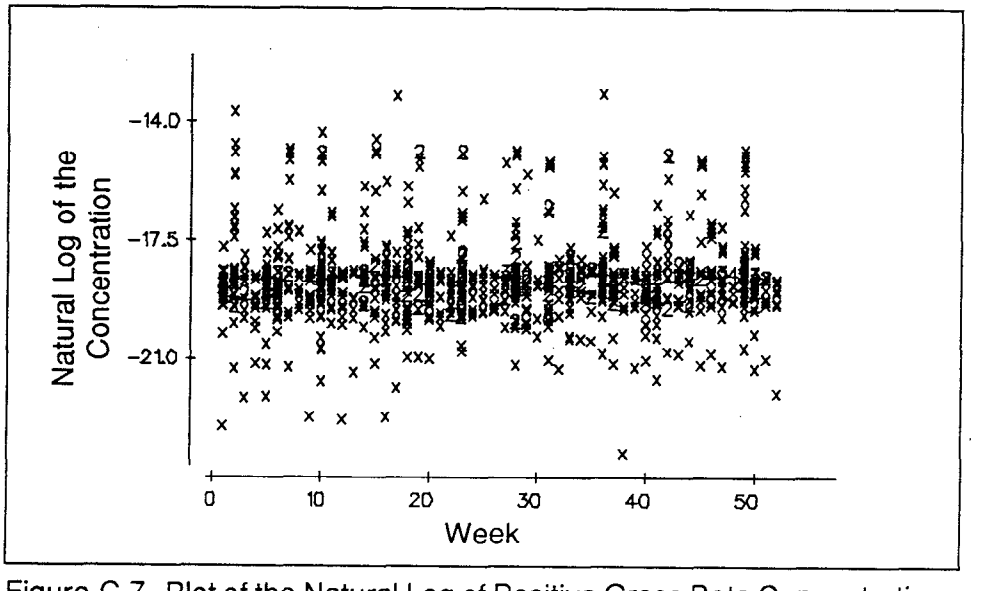


Figure C.7 Plot of the Natural Log of Positive Gross Beta Concentrations in Water versus the Week of Collection

Table C.5 Two-Way Analysis of the Variance of the Natural Log of Gross Beta Concentrations between Types of Water Samples and the Week of Collection

Source	Degrees of Freedom	Sequential Sum of the Squares	Sum of the Squares	Mean Square	F-Statistic	p Value
Week	51	183.398	28.266	0.554	0.72	0.929
Category	5	669.465	669.465	133.893	174.14	0.000
Error	920	707.386	707.386	0.769		
Total	976	1560.249				

Table C.5 indicates that gross beta concentration varies between categories, but not between weeks. To further examine the differences among categories, a one-way ANOVA was conducted. The results of this analysis are shown in Table C.6.

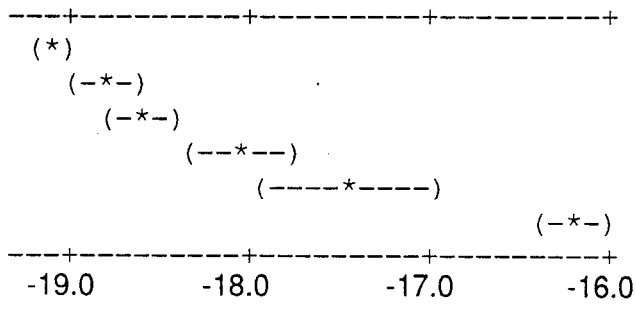
The six levels are the same as used before. Fisher's multiple comparison procedure indicates water supply categories can be divided into four groups by their gross beta concentrations. Members of a group have concentrations close enough so observed differences can be plausibly accounted for by sampling variation. Categories not in the same group have

Table C.6 One-Way Analysis of the Variance of the Natural Log of Gross Beta Concentrations between Types of Water Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	5	824.597	164.919	217.68	0.000
Error	971	735.652	0.758		
Total	976	1560.249			

Level	Number	Mean Ln	Standard Deviation
1	445	-19.180	0.835
2	167	-18.805	0.710
3	175	-18.786	0.667
4	68	-18.073	0.920
5	13	-17.580	0.480
6	109	-16.197	1.379

Pooled Standard Deviation = 0.870



concentrations that differ too much to explain in this manner. From the least to greatest mean natural logarithm of concentration, these groups are:

- Potable water.
- Supply wells and open reservoirs.
- Natural springs and sewage lagoons.
- Containment ponds.

It is not surprising that potable water should have a smaller gross beta concentration than other categories. In view of experimental activities in the tunnels in Ranier Mesa, it is not surprising that containment ponds have the greatest. It is not clear why supply wells and open reservoirs, or natural springs and sewage lagoons, should be linked. Neither is it clear why the concentration of gross beta in supply wells and open reservoirs should be lesser than that in natural springs and sewage lagoons.

GAMMA-EMITTING RADIONUCLIDES

The following gamma-emitting radionuclides, other than naturally occurring radionuclides or radioisotopes of uranium were found in water samples:

Radionuclide	Number of Samples Containing the Isotope	Radionuclide	Number of Samples Containing the Isotope
^{228}Ac	1	^{106}Ru	7
^{139}Ce	1	^{125}Sb	2
^{141}Ce	1	^{126}Sb	1
^{137}Cs	36	^{208}Tl	9
^{131}I	4	^{97}Zr	1
^{103}Ru	2		

Only ^{137}Cs occurred often enough for statistical analysis to be meaningful. An analysis of ^{137}Cs data follows.

The arithmetic mean and standard deviation of observed concentration of ^{137}Cs were, respectively, 6.8×10^{-7} and 3.4×10^{-6} µCi/mL (2.5×10^{1} and $1.2^{2} \times 10$ Bq/L). The geometric mean and standard deviation were, respectively, 9.6×10^{-8} µCi/mL and 3.1 (3.6 Bq/L and 3.1).

An exploratory data analysis indicated that ^{137}Cs concentrations were, at least approximately, lognormally distributed. Concentrations were compared among sampling locations by an ANOVA on the natural logarithms of concentrations. These data are shown in Table C.7.

Although the ANOVA indicates differences exist in concentrations among the six sampling stations at which ^{137}Cs was found, Fisher's multiple comparison procedure (the least conservative multiple comparison procedure in general use) fails to identify differences among them. Therefore, it is possible to say that differences exist, but it is not possible to say where those differences are.

TRITIUM

Exploratory data analysis revealed tritium levels in containment ponds are different populations than tritium levels in other water sources, so they were analyzed separately.

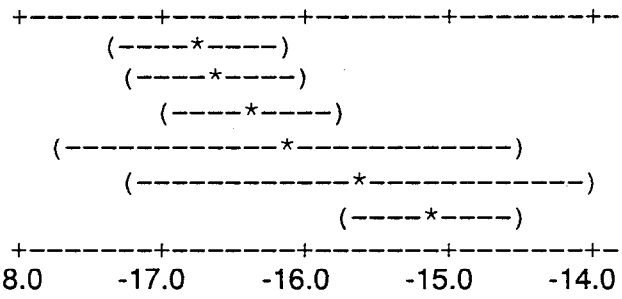
Table C.7 One-Way Analysis of the Variance on the Natural Log of ^{137}Cs Concentrations between Types of Water Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Sampling Station	5	17.391	3.478	3.81	0.009
Error	30	27.361	0.912		
Total	35	44.752			

Level	Number	Mean Ln	Standard Deviation
1	8	-16.811	0.220
2	7	-16.757	0.286
3	8	-16.395	0.563
4	1	-16.180	0.000
5	1	-15.631	0.000
6	11	-15.170	1.559

Pooled Standard Deviation = 0.955

Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation



KEY

Level	Sampling Station
1	T Tunnel #2
2	T Tunnel Effluent
3	T Tunnel #1
4	Topopah Spring
5	N Tunnel Effluent
6	E Tunnel Effluent

Water from Sources Other than Containment Ponds

Approximately 88 percent of the observed concentrations of tritium in water other than containment ponds were less than the limits of detection. Approximately 36 percent, due to subtraction of background concentrations, were negative.

The arithmetic mean and standard deviation of the observed concentrations were, respectively, 7.6×10^{-8} and 3.3×10^{-7} μCi/mL (2.8 and 1.2×10^{1} Bq/L). Due to negative observations, no geometric mean was calculated. Using the greater of either the observed concentration or the limit of detection, the arithmetic mean and standard deviation were, respectively, 3.2×10^{-7} and 2.6×10^{-7} μCi/mL (1.2×10^{1} and 9.6 Bq/L). The geometric mean and standard deviation were, respectively, 3.0×10^{-7} μCi/mL and 1.4 (11 Bq/L and 1.4).

Figure C.8 is a plot of tritium concentrations versus normal scores. Were tritium concentrations normally distributed, Figure C.8 would display scatter about a straight line.

With the exception of a few large concentrations, this is approximately true. If concentrations are divided according to sampling location, it remains true that plots of concentrations versus normal scores are approximately straight.

It is well known that environmental phenomena are usually lognormally distributed. However, the normal distribution fits these data better than the lognormal. This remains true whether negative concentrations are dealt with by ignoring them or by adding a small concentration to all observations. Hence, the analysis is carried out with actual tritium concentrations rather than the more usual natural logarithm of the concentrations.

Water sources are divided into the categories of potable water, supply wells, open reservoirs, natural springs, and sewage lagoons. A one-way ANOVA, with the category or water source as the independent variable was carried out, and the results are shown in Table C.8.

Table C.8 reveals that differences in tritium concentrations among these sources are small enough to plausibly attribute to sampling variation.

To study the effect of time, a one-way ANOVA was conducted using week of sample collection as independent variable, and the results are shown in Table C.9.

Table C.9 shows that concentrations vary among weeks of sample collection. In Figure C.9, arithmetic mean concentrations from all sources other than containment ponds is plotted versus the week of sample collection, with weeks numbered as above. Figure C.9 clearly shows that concentrations vary over time. The main source of this variation is elevated concentrations for a few weeks during the early part of the year. A secondary source is a possible declining trend during the year's final few weeks. Although this possible trend is suggested by Figure C.9, a separate ANOVA (not reported in detail) that only looked at the final few weeks of 1990 found no differences among weeks which were statistically significant at the five percent level.

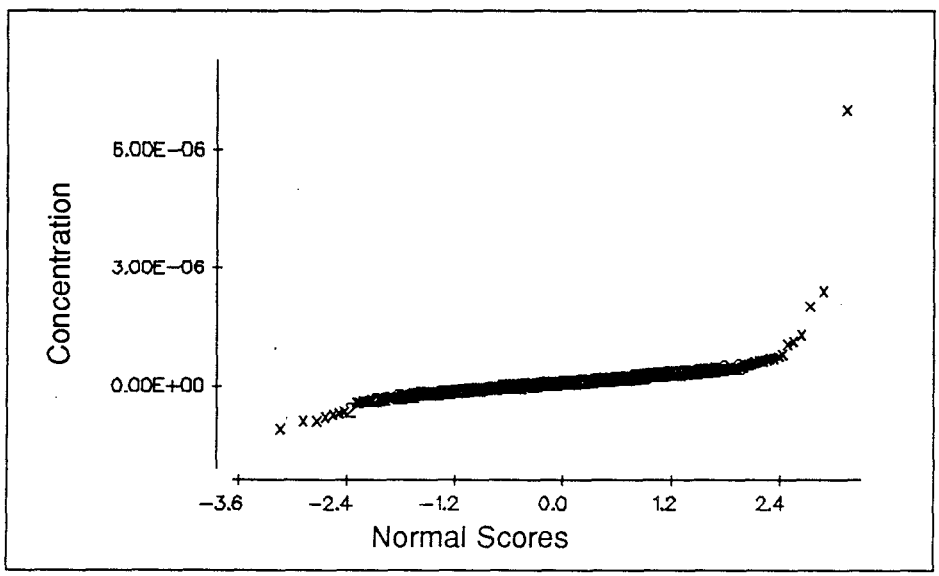


Figure C.8 Plot of Tritium Concentrations in Water versus Normal Scores

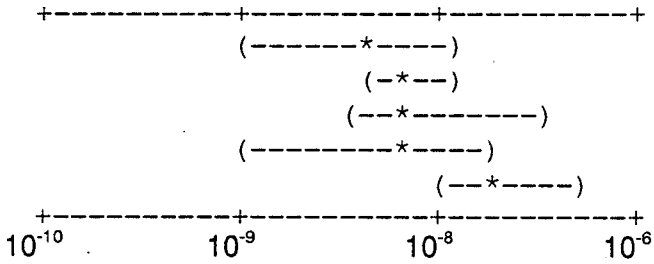
Table C.8 One-Way Analysis of the Variance on Tritium Concentrations between Types of Water Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	4	5.04×10^{-10}	1.26×10^{-10}	1.10	0.353
Error	881	1.01×10^{-7}	1.15×10^{-10}		
Total	885	1.01×10^{-7}			

Level	Number	Mean Ln	Standard Deviation
1	174	4.8×10^{-8}	2.3×10^{-7}
2	465	7.8×10^{-8}	4.1×10^{-7}
3	165	8.3×10^{-8}	2.1×10^{-7}
4	69	8.5×10^{-8}	2.3×10^{-7}
5	13	2.9×10^{-7}	1.7×10^{-7}

Pooled Standard Deviation = 3.3×10^{-7}

Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation



KEY

Level	Category
1	Open Reservoirs
2	Potable Water
3	Supply Wells
4	Natural Springs
5	Sewage Lagoons

Table C.9 One-Way Analysis of the Variance on Tritium Concentrations between Weeks of Collection

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Week	51	2.11×10^{-7}	4.14×10^{-9}	4.21	0.000
Error	834	8.20×10^{-7}	9.83×10^{-10}		
Total	885	1.03×10^{-6}			

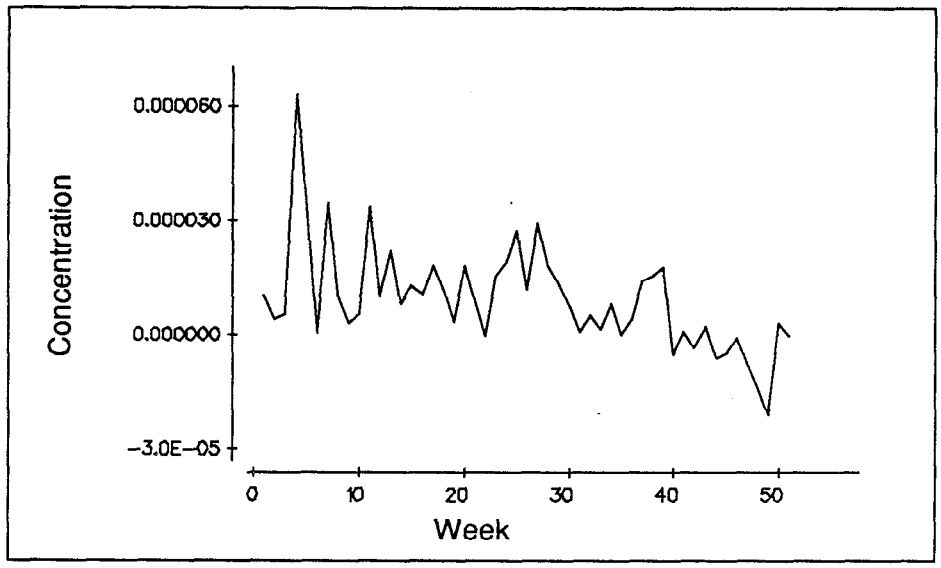


Figure C.9 Plot of the Arithmetic Mean of HTO Concentrations in Water from Non-Containment Pond Sources

Water from Containment Ponds

More than 95 percent of the observed concentrations of tritium in water from containment ponds exceeded the limits of detection. Only one observed concentration, after background concentrations were subtracted, was negative. If the single negative observation is ignored, arithmetic and geometric means and standard deviations do not depend on whether actual observations or the maximum of observed concentrations and limits of detection were used. Accordingly, the arithmetic mean and standard deviation were, respectively, 2.3×10^{-3} and 2.8×10^{-3} μCi/mL (8.5×10^{4} and 1.0×10^{5} Bq/L).

To determine the observations' distribution, it is necessary to break observations down by sampling location. That is, observations from multiple locations differ so much that a single model cannot be identified. In Figure C.10, the natural logarithms of concentrations of tritium

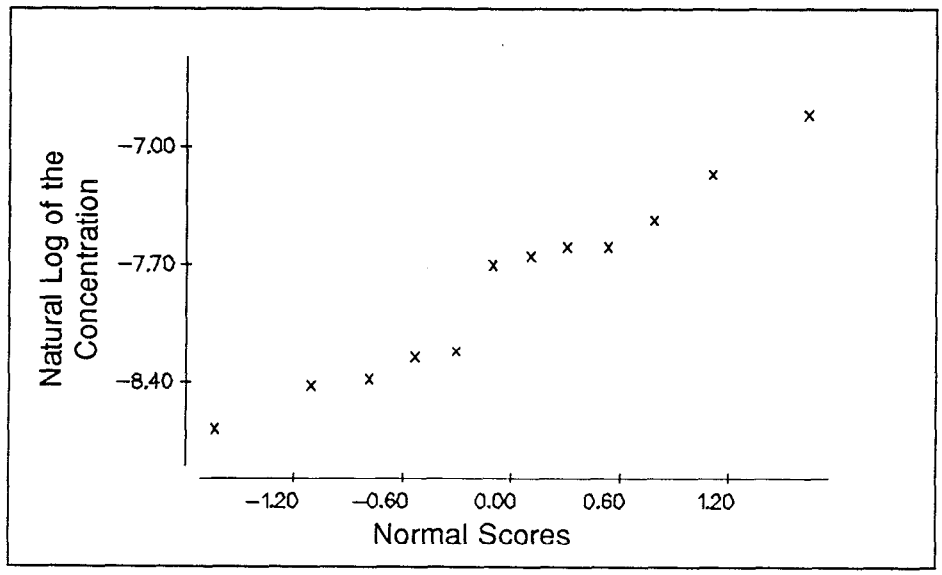


Figure C.10 Plot of the Natural Log of Concentrations in N Tunnel Liquid Effluent versus Normal Scores

in N Tunnel effluent are plotted versus normal scores. Results from other sampling stations are crudely similar and not reproduced. Were concentrations lognormally distributed, Figure C.10 would display scatter about a straight line. Although this does not occur, Figure C.10 is thought "straight" enough for the lognormal distribution to be an adequate approximation of the true distribution. The remainder of the analysis is carried out using natural logarithms of concentrations (ignoring the single negative value). To compare sampling locations, an ANOVA was conducted, the results of which appear in Table C.10.

Fisher's multiple comparison procedure shows that these sources can be broken down into four well-separated categories. These are:

Category	Water Sources
1	H&S Sump
2	Yucca Waste Pond
3	All sources not covered by other categories
4	T Tunnel #1, #2, and T Tunnel effluent

To confirm this, an ANOVA was conducted using the four categories as independent variables, and the data are summarized in Table C.11.

The ANOVA table shows the four categories are clearly separated. It is not surprising that H&S Sump and Yucca Waste Pond should have lesser concentrations of tritium since they are not as directly connected to tunnel activities as the other containment ponds. The nature of experiments conducted in T Tunnel makes the greater concentration of tritium there not surprising.

In order to compare concentrations over time, a one-way ANOVA was conducted with the week of 1990 in which sampling occurred as the independent variable. These data are shown in Table C.12.

Table C.12 clearly shows that concentration varied over time. Unlike other water sources, containment ponds are not sampled weekly. Further, the number of observations varies widely among weeks. Accordingly, a graphic similar to Figure C.10 is not presented, since interpretation would be difficult.

Table C.10 One-Way Analysis of the Variance on the Natural Log of Tritium Concentrations between Containment Pond Sampling Stations

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Sampling Station	9	970.331	107.815	263.16	0.000
Error	101	41.379	0.410		
Total	110	1011.709			

Table C.10 (One-Way Analysis of the Variance on the Natural Log of Tritium Concentrations between Containment Pond Sampling Stations, cont.)

Sampling Station	Number	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
				+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
615	3	-15.879	0.289	(-*-)
613	12	-14.338	0.832	(*)
609	12	-7.962	0.516	(*)
610	12	-7.866	0.432	(*)
612	12	-7.825	0.562	(*)
616	12	-7.785	0.388	(*)
614	12	-6.562	0.310	(*)
606	12	-5.462	1.415	(*)
608	12	-5.103	0.156	(*)
607	12	-5.061	0.103	(*)
				+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
				-15.0 -10.0 -5.0

Pooled Standard Deviation = 0.640

KEY

Sampling Station	Location
615	H&S Sump
613	Yucca Waste Pond
609	N Tunnel #1
610	N Tunnel #2
612	N Tunnel Effluent
616	N Tunnel #3
614	E Tunnel Effluent
606	T Tunnel #1
608	T Tunnel Effluent
607	T Tunnel #2

Table C.11 One-Way Analysis of the Variance on the Natural Log of Tritium Concentrations between Category of Containment Pond

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Category	3	952.785	317.595	576.71	0.000
Error	107	58.925	0.551		
Total	110	1011.709			

Table C.11 (One-Way Analysis of the Variance on the Natural Log of Tritium Concentrations between Category of Containment Pond, cont.)

Category	Number	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
1	3	-15.879	0.289	(-*-)
2	12	-14.338	0.832	(*)
3	60	-7.600	0.683	(*)
4	36	-5.209	0.821	(*)
				-15.0 -10.0 -5.0

Pooled Standard Deviation = 0.742

Table C.12 One-Way Analysis of the Variance on the Natural Log of Tritium Concentrations between the Week of Collection

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Week	23	518.88	22.56	3.98	0.000
Error	87	492.83	5.66		
Total	110	1011.71			

Week	Number	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
2	9	-7.304	2.861	(--*--)
6	1	-13.881	0.000	(---------*---------)
7	8	-6.353	1.003	(--*--)
10	8	-6.522	1.149	(--*--)
11	1	-13.473	0.000	(---------*---------)
14	5	-7.566	0.428	(---*---)
15	3	-5.098	0.017	(----*----)
16	1	-13.493	0.000	(---------*---------)
17	1	-16.209	0.000	(---------*---------)
18	5	-7.993	0.761	(---*---)
19	4	-7.199	4.139	(-----*-----)
23	8	-6.875	1.635	(--*--)
25	1	-14.105	0.000	(---------*---------)
28	8	-6.807	1.547	(--*--)
29	1	-14.673	0.000	(---------*---------)
31	9	-7.804	2.931	(--*--)
33	1	-15.670	0.000	(---------*---------)
				-15.0 -10.0 -5.0

Table C.12 (One-Way Analysis of the Variance on the Natural Log of Tritium Concentrations between the Week of Collection, cont.)

Week	Number	Mean Ln	Standard Deviation	Individual 95 Percent CIs for the Mean Ln Based on a Pooled Standard Deviation
36	9	-7.584	2.864	(--*--)
37	1	-15.759	0.000	(---------*---------)
41	1	-14.626	0.000	(---------*---------)
42	8	-6.525	1.452	(--*--)
45	5	-8.562	4.821	(---*---)
46	4	-7.567	0.080	(-----*-----)
49	9	-7.397	3.145	(--*--)

Pooled Standard Deviation = 2.380

-15.0 -10.0 -5.0

A visual inspection of the above shows no suggestion of any monotonic trend in concentrations. Changes over time in concentration can be plausibly attributed to changes in the types of experiments being conducted in the tunnels in Rainier Mesa.

Attachment C.1 ^{90}Sr in Water - 1990

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	07/09/90	-1.0×10^{-11}	5.5×10^{-11}
Area 2, Mud Plant Reservoir	07/10/90	-4.0×10^{-11}	1.2×10^{-10}
Area 2, Restroom	07/09/90	-5.5×10^{-11}	7.6×10^{-11}
Area 2, Well 2	07/10/90	-1.3×10^{-10}	1.8×10^{-10}
Area 2, Well 2 Reservoir	07/10/90	-7.3×10^{-11}	1.4×10^{-10}
Area 3, Cafeteria	07/09/90	3.8×10^{-11}	7.0×10^{-11}
Area 3, Mud Plant Reservoir	07/13/90	5.3×10^{-11}	1.7×10^{-10}
Area 3, Well A Reservoir	07/13/90	-9.6×10^{-10}	1.3×10^{-10}
Area 5, Cane Spring	07/12/90	-1.8×10^{-11}	1.5×10^{-10}
Area 5, Ue5c Reservoir	07/05/90	-8.6×10^{-11}	1.7×10^{-10}
Area 5, Well 5B Reservoir	07/05/90	-1.7×10^{-10}	1.5×10^{-10}
Area 5, Well 5C	07/12/90	-5.5×10^{-11}	1.6×10^{-10}
Area 5, Well Ue5c	07/12/90	6.3×10^{-11}	1.4×10^{-10}
Area 6, Bottled Water	07/09/90	5.7×10^{-11}	7.2×10^{-11}
Area 6, Cafeteria	07/09/90	5.2×10^{-10}	8.6×10^{-10}
Area 6, Decontamination Facility	07/17/90	4.6×10^{-10}	1.6×10^{-10}
Area 6, Sewage	07/12/90	1.3×10^{-10}	1.6×10^{-10}
Area 6, Well 3 Reservoir	07/10/90	-1.0×10^{-10}	1.5×10^{-10}
Area 6, Well 4	07/10/90	7.1×10^{-11}	1.4×10^{-10}
Area 6, Well C	07/10/90	-3.8×10^{-11}	1.0×10^{-10}
Area 6, Well C1	07/10/90	-6.4×10^{-12}	1.0×10^{-10}
Area 6, Well C1 Reservoir	07/05/90	-2.0×10^{-10}	1.7×10^{-10}
Area 7, Reitmann Seep	07/06/90	3.5×10^{-9}	2.0×10^{-10}
Area 12, Cafeteria	07/09/90	9.0×10^{-10}	1.9×10^{-10}
Area 12, Captain Jack Spring	07/12/90	1.8×10^{-10}	1.9×10^{-10}
Area 12, E Tunnel Effluent	07/12/90	4.1×10^{-9}	1.5×10^{-10}
Area 12, N Tunnel Effluent	07/12/90	-9.5×10^{-12}	1.6×10^{-10}
Area 12, N Tunnel Pond No. 3	07/12/90	1.7×10^{-10}	1.2×10^{-10}
Area 12, N Tunnel Pond No. 2	07/12/90	4.9×10^{-11}	1.4×10^{-10}
Area 12, Sewage	07/12/90	1.1×10^{-10}	1.5×10^{-10}
Area 12, T Tunnel Effluent	07/12/90	2.2×10^{-9}	1.5×10^{-10}
Area 12, T Tunnel Pond No. 2	07/12/90	2.5×10^{-9}	1.3×10^{-10}
Area 12, T Tunnel Pond No. 1	07/12/90	2.7×10^{-9}	1.3×10^{-10}
Area 12, White Rock Spring	07/23/90	-8.9×10^{-12}	1.5×10^{-10}
Area 15, Well Ue15d	07/10/90	-1.1×10^{-10}	2.0×10^{-10}
Area 16, Tippipah Spring	07/13/90	3.3×10^{-10}	2.4×10^{-10}
Area 16, Well 16d	07/10/90	-9.3×10^{-11}	1.1×10^{-10}
Area 18, Camp 17 Reservoir	07/17/90	-8.7×10^{-12}	1.5×10^{-10}
Area 18, Well 8	07/10/90	3.4×10^{-11}	1.3×10^{-10}
Area 19, Well U19c	07/10/90	6.3×10^{-11}	1.6×10^{-10}
Area 19, Well U19c Reservoir	07/90/90	1.8×10^{-10}	2.3×10^{-10}
Area 20, Water Well	07/10/90	9.3×10^{-11}	1.3×10^{-10}

Attachment C.1 (^{90}Sr in Water - 1990, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Well 20A Reservoir	07/17/90	2.2×10^{-11}	1.9×10^{-10}
Area 23, Army Well No. 1	07/12/90	-4.7×10^{-11}	1.5×10^{-10}
Area 23, Cafeteria	07/09/90	1.8×10^{-11}	1.5×10^{-10}
Area 23, Sewage	07/10/90	6.5×10^{-11}	1.3×10^{-10}
Area 23, Swimming Pool	07/10/90	-5.8×10^{-11}	1.3×10^{-10}
Area 25, Building 4221	07/09/90	-3.4×10^{-11}	1.4×10^{-10}
Area 25, Well J-11 Reservoir	07/05/90	-1.8×10^{-10}	1.5×10^{-10}
Area 25, Well J-12	07/12/90	1.1×10^{-10}	2.3×10^{-10}
Area 25, Well J-12 Reservoir	07/05/90	3.6×10^{-11}	1.6×10^{-10}
Area 25, Well J-13	07/12/90	8.9×10^{-11}	1.4×10^{-10}
Area 27, Cafeteria	07/09/90	3.7×10^{-11}	1.5×10^{-10}

Attachment C.2 Gross Alpha in Water - 1990

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	03/12/90	1.4×10^{-8}	4.0×10^{-9}
Area 1, Building 101	05/07/90	1.0×10^{-8}	1.6×10^{-9}
Area 1, Building 101	07/09/90	6.9×10^{-9}	1.7×10^{-9}
Area 1, Building 101	08/05/90	4.4×10^{-9}	5.8×10^{-10}
Area 1, Building 101	10/01/90	5.3×10^{-9}	7.5×10^{-10}
Area 1, Building 101	10/08/90	1.1×10^{-8}	1.1×10^{-9}
Area 2, Mud Plant Reservoir	05/02/90	3.5×10^{-9}	1.2×10^{-9}
Area 2, Rest Room	03/12/90	3.5×10^{-10}	6.5×10^{-10}
Area 2, Rest Room	05/07/90	4.0×10^{-10}	6.9×10^{-10}
Area 2, Rest Room	07/09/90	3.7×10^{-10}	5.9×10^{-10}
Area 2, Rest Room	08/06/90	8.8×10^{-10}	6.5×10^{-10}
Area 2, Rest Room	10/01/90	1.1×10^{-9}	8.1×10^{-10}
Area 2, Rest Room	10/08/90	8.0×10^{-10}	8.1×10^{-10}
Area 2, Well 2	03/05/90	2.7×10^{-9}	8.1×10^{-10}
Area 2, Well 2	05/16/90	3.3×10^{-9}	1.0×10^{-9}
Area 2, Well 2 Reservoir	05/02/90	2.2×10^{-9}	1.2×10^{-9}
Area 3, Cafeteria	03/12/90	4.2×10^{-9}	2.7×10^{-9}
Area 3, Cafeteria	05/07/90	7.9×10^{-9}	2.4×10^{-9}
Area 3, Cafeteria	07/09/90	9.2×10^{-9}	2.3×10^{-9}
Area 3, Cafeteria	08/06/90	1.2×10^{-8}	2.6×10^{-9}
Area 3, Cafeteria	10/01/90	6.4×10^{-10}	6.0×10^{-10}
Area 3, Cafeteria	10/08/90	2.3×10^{-9}	8.5×10^{-10}
Area 3, Mud Plant Reservoir	03/08/90	7.7×10^{-9}	1.2×10^{-9}
Area 3, Mud Plant Reservoir	05/04/90	1.6×10^{-8}	1.5×10^{-9}
Area 3, Well A Reservoir	03/08/90	7.0×10^{-9}	1.3×10^{-9}
Area 3, Well A Reservoir	05/04/90	6.1×10^{-9}	1.2×10^{-9}
Area 5, Cane Spring	05/03/90	2.1×10^{-9}	1.3×10^{-9}
Area 5, Ue5c Reservoir	05/04/90	7.7×10^{-9}	1.1×10^{-9}
Area 5, Well 5B Reservoir	05/04/90	1.3×10^{-8}	1.6×10^{-9}
Area 5, Well 5C	03/05/90	9.2×10^{-9}	1.3×10^{-9}
Area 5, Well 5C	05/16/90	6.6×10^{-9}	1.3×10^{-9}
Area 5, Well 5C	10/04/90	1.2×10^{-8}	1.2×10^{-9}
Area 5, Well Ue5c	03/05/90	7.5×10^{-9}	1.4×10^{-9}
Area 5, Well Ue5c	05/16/90	2.7×10^{-9}	9.5×10^{-10}
Area 6, Bottled Water	03/12/90	-3.8×10^{-11}	4.2×10^{-10}
Area 6, Bottled Water	05/07/90	4.3×10^{-11}	5.1×10^{-10}
Area 6, Bottled Water	07/09/90	1.7×10^{-10}	3.8×10^{-10}
Area 6, Bottled Water	08/06/90	3.3×10^{-12}	3.7×10^{-10}
Area 6, Bottled Water	10/01/90	4.1×10^{-12}	5.3×10^{-10}
Area 6, Bottled Water	10/08/90	1.3×10^{-10}	4.3×10^{-10}
Area 6, Cafeteria	03/12/90	8.9×10^{-9}	2.3×10^{-9}
Area 6, Cafeteria	05/07/90	9.1×10^{-9}	2.2×10^{-9}

Attachment C.2 (Gross Alpha in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Cafeteria	07/09/90	6.8×10^{-9}	3.0×10^{-9}
Area 6, Cafeteria	08/06/90	2.7×10^{-9}	7.3×10^{-10}
Area 6, Cafeteria	10/01/90	3.4×10^{-9}	1.3×10^{-9}
Area 6, Cafeteria	10/08/90	1.1×10^{-9}	7.0×10^{-10}
Area 6, Well 3 Reservoir	03/08/90	1.0×10^{-8}	1.8×10^{-9}
Area 6, Well 3 Reservoir	05/04/90	1.5×10^{-8}	2.1×10^{-9}
Area 6, Well 4	03/05/90	5.9×10^{-9}	8.8×10^{-10}
Area 6, Well 4	05/16/90	7.2×10^{-9}	7.7×10^{-10}
Area 6, Well 4	10/04/90	1.1×10^{-8}	9.5×10^{-10}
Area 6, Well C	03/05/90	1.2×10^{-8}	2.3×10^{-9}
Area 6, Well C	05/16/90	1.9×10^{-8}	3.2×10^{-9}
Area 6, Well C	10/04/90	7.0×10^{-9}	7.2×10^{-10}
Area 6, Well C1	03/05/90	1.3×10^{-8}	2.4×10^{-9}
Area 6, Well C1	05/16/90	1.4×10^{-8}	2.8×10^{-9}
Area 6, Well C1	10/04/90	5.3×10^{-9}	6.7×10^{-10}
Area 6, Well C1 Reservoir	03/08/90	6.0×10^{-9}	9.3×10^{-10}
Area 6, Well C1 Reservoir	05/04/90	1.2×10^{-8}	1.9×10^{-9}
Area 7, Reitmann Seep	05/03/90	4.0×10^{-8}	8.3×10^{-9}
Area 12, Cafeteria	03/12/90	1.2×10^{-9}	1.1×10^{-9}
Area 12, Cafeteria	05/07/90	2.7×10^{-10}	6.4×10^{-10}
Area 12, Cafeteria	07/09/90	2.4×10^{-10}	6.6×10^{-10}
Area 12, Cafeteria	08/05/90	2.8×10^{-10}	6.3×10^{-10}
Area 12, Cafeteria	10/01/90	5.7×10^{-10}	8.3×10^{-10}
Area 12, Cafeteria	10/08/90	6.3×10^{-10}	8.3×10^{-10}
Area 12, Captain Jack Spring	05/08/90	6.7×10^{-9}	6.5×10^{-10}
Area 12, E Tunnel Effluent	03/09/90	2.7×10^{-7}	1.5×10^{-8}
Area 12, E Tunnel Effluent	05/03/90	6.6×10^{-8}	1.0×10^{-8}
Area 12, Gold Meadows	05/02/90	2.5×10^{-9}	1.1×10^{-9}
Area 12, N Tunnel Effluent	03/09/90	1.0×10^{-8}	1.0×10^{-8}
Area 12, N Tunnel Effluent	05/03/90	2.3×10^{-8}	1.1×10^{-8}
Area 12, N Tunnel Pond No. 1	03/09/90	3.0×10^{-7}	1.7×10^{-8}
Area 12, N Tunnel Pond No. 1	03/09/90	1.2×10^{-8}	8.7×10^{-9}
Area 12, N Tunnel Pond No. 1	05/03/90	1.3×10^{-8}	1.1×10^{-8}
Area 12, N Tunnel Pond No. 2	05/03/90	6.0×10^{-9}	9.5×10^{-9}
Area 12, N Tunnel Pond No. 2	05/03/90	1.2×10^{-8}	9.5×10^{-9}
Area 12, N Tunnel Pond No. 3	03/09/90	1.2×10^{-7}	1.4×10^{-8}
Area 12, T Tunnel Effluent	03/09/90	4.7×10^{-9}	8.7×10^{-9}
Area 12, T Tunnel Pond No. 1	03/09/90	3.9×10^{-9}	8.7×10^{-9}
Area 12, T Tunnel Pond No. 2	03/09/90	1.6×10^{-9}	8.7×10^{-9}
Area 12, White Rock Spring	05/03/90	1.2×10^{-8}	1.9×10^{-9}
Area 15, Well Ue15d	03/05/90	1.6×10^{-8}	1.5×10^{-9}
Area 15, Well Ue15d	05/16/90	1.2×10^{-8}	2.0×10^{-9}

Attachment C.2 (Gross Alpha in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 16, Tippipah Spring	05/08/90	4.5×10^{-9}	7.7×10^{-10}
Area 16, Well 16d	03/05/90	7.9×10^{-9}	1.3×10^{-9}
Area 16, Well 16d	05/16/90	5.7×10^{-9}	1.3×10^{-9}
Area 16, Well 16d	10/04/90	8.5×10^{-9}	8.1×10^{-10}
Area 18, Camp 17 Reservoir	05/02/90	7.0×10^{-10}	7.0×10^{-10}
Area 18, Well 8	03/05/90	7.9×10^{-10}	6.3×10^{-10}
Area 18, Well 8	05/16/90	4.1×10^{-10}	5.7×10^{-10}
Area 18, Well 8	10/04/90	1.1×10^{-9}	6.4×10^{-10}
Area 18, Well 8 Reservoir	05/02/90	6.5×10^{-11}	7.9×10^{-10}
Area 19, Well U19c	03/05/90	1.5×10^{-9}	6.4×10^{-10}
Area 19, Well U19c	05/16/90	1.6×10^{-9}	5.5×10^{-10}
Area 19, Well U19c Reservoir	05/02/90	1.3×10^{-9}	6.9×10^{-10}
Area 20, Water Well	03/05/90	7.9×10^{-9}	1.2×10^{-9}
Area 20, Water Well	05/16/90	4.4×10^{-9}	7.3×10^{-10}
Area 20, Water Well	10/04/90	9.5×10^{-9}	9.5×10^{-10}
Area 20, Well 20A Reservoir	05/02/90	5.2×10^{-9}	8.1×10^{-10}
Area 23, Army Well No. 1	03/05/90	4.1×10^{-9}	1.2×10^{-9}
Area 23, Army Well No. 1	05/16/90	4.7×10^{-9}	1.3×10^{-9}
Area 23, Army Well No. 1	10/04/90	7.8×10^{-9}	1.2×10^{-9}
Area 23, Cafeteria	03/12/90	4.1×10^{-9}	1.2×10^{-9}
Area 23, Cafeteria	03/19/90	3.7×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	05/07/90	5.7×10^{-9}	1.3×10^{-9}
Area 23, Cafeteria	07/09/90	8.6×10^{-9}	1.2×10^{-9}
Area 23, Cafeteria	08/05/90	9.5×10^{-9}	1.2×10^{-9}
Area 23, Cafeteria	10/01/90	4.3×10^{-9}	1.2×10^{-9}
Area 23, Cafeteria	10/08/90	3.5×10^{-9}	1.3×10^{-9}
Area 23, Swimming Pool	03/29/90	4.8×10^{-9}	1.6×10^{-9}
Area 23, Swimming Pool	05/04/90	7.4×10^{-9}	1.5×10^{-9}
Area 25, Building 4221	03/12/90	1.4×10^{-9}	8.1×10^{-10}
Area 25, Building 4221	03/19/90	1.1×10^{-9}	7.5×10^{-10}
Area 25, Building 4221	05/07/90	7.8×10^{-10}	8.5×10^{-10}
Area 25, Building 4221	07/09/90	1.5×10^{-9}	5.9×10^{-10}
Area 25, Building 4221	08/05/90	1.3×10^{-9}	7.2×10^{-10}
Area 25, Building 4221	10/01/90	1.9×10^{-9}	9.8×10^{-10}
Area 25, Building 4221	10/08/90	2.0×10^{-9}	9.4×10^{-10}
Area 25, Well J-11 Reservoir	03/08/90	4.9×10^{-10}	7.8×10^{-10}
Area 25, Well J-11 Reservoir	05/04/90	1.7×10^{-9}	8.5×10^{-10}
Area 25, Well J-12	03/05/90	7.6×10^{-10}	7.1×10^{-10}
Area 25, Well J-12	05/16/90	9.6×10^{-10}	7.1×10^{-10}
Area 25, Well J-12	10/04/90	8.1×10^{-10}	7.3×10^{-10}
Area 25, Well J-12 Reservoir	03/08/90	1.1×10^{-9}	7.1×10^{-10}
Area 25, Well J-12 Reservoir	05/04/90	1.8×10^{-9}	8.0×10^{-10}

Attachment C.2 (Gross Alpha in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Well J-13	03/05/90	1.3×10^{-9}	7.0×10^{-10}
Area 25, Well J-13	05/16/90	5.9×10^{-10}	7.1×10^{-10}
Area 25, Well J-13	10/04/90	3.1×10^{-9}	7.4×10^{-10}
Area 27, Cafeteria	03/12/90	1.2×10^{-8}	2.3×10^{-9}
Area 27, Cafeteria	03/19/90	1.4×10^{-8}	2.3×10^{-9}
Area 27, Cafeteria	05/07/90	1.3×10^{-8}	2.4×10^{-9}
Area 27, Cafeteria	07/09/90	5.4×10^{-9}	2.1×10^{-9}
Area 27, Cafeteria	08/05/90	3.2×10^{-9}	6.4×10^{-10}
Area 27, Cafeteria	10/01/90	5.6×10^{-9}	1.6×10^{-9}
Area 27, Cafeteria	10/08/90	2.1×10^{-9}	7.5×10^{-10}
Area 29, Topopah Spring	05/09/90	5.3×10^{-10}	5.7×10^{-10}

Attachment C.3 ^{238}Pu in Water - 1990

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	03/05/90	-1.9×10^{-11}	9.4×10^{-11}
Area 1, Building 101	05/07/90	-1.5×10^{-11}	7.6×10^{-11}
Area 1, Building 101	07/09/90	1.2×10^{-11}	1.0×10^{-10}
Area 1, Building 101	10/01/90	2.3×10^{-11}	6.1×10^{-11}
Area 2, Mud Plant Reservoir	07/10/90	1.8×10^{-11}	6.5×10^{-11}
Area 2, Mud Plant Reservoir	10/22/90	6.2×10^{-11}	6.2×10^{-11}
Area 2, Restroom	03/12/90	1.0×10^{-11}	8.3×10^{-11}
Area 2, Restroom	05/07/90	4.8×10^{-11}	7.0×10^{-11}
Area 2, Restroom	07/09/90	-9.3×10^{-12}	6.2×10^{-11}
Area 2, Restroom	10/01/90	3.4×10^{-11}	6.3×10^{-11}
Area 2, Well 2	03/05/90	2.0×10^{-11}	6.3×10^{-11}
Area 2, Well 2	05/16/90	2.9×10^{-11}	7.6×10^{-11}
Area 2, Well 2	07/10/90	3.6×10^{-11}	9.7×10^{-11}
Area 2, Well 2	10/04/90	5.2×10^{-11}	6.1×10^{-11}
Area 2, Well 2 Reservoir	05/02/90	4.8×10^{-11}	1.1×10^{-10}
Area 2, Well 2 Reservoir	07/10/90	-2.0×10^{-11}	8.1×10^{-11}
Area 2, Well 2 Reservoir	10/18/90	2.1×10^{-11}	8.0×10^{-11}
Area 3, Cafeteria	03/12/90	-2.1×10^{-11}	7.9×10^{-11}
Area 3, Cafeteria	05/07/90	-3.8×10^{-12}	7.1×10^{-11}
Area 3, Cafeteria	07/09/90	-1.1×10^{-11}	9.8×10^{-11}
Area 3, Cafeteria	10/01/90	2.9×10^{-11}	6.0×10^{-11}
Area 3, Mud Plant Reservoir	03/08/90	6.2×10^{-12}	6.6×10^{-11}
Area 3, Mud Plant Reservoir	05/04/90	8.1×10^{-12}	6.6×10^{-11}
Area 3, Mud Plant Reservoir	07/13/90	-2.2×10^{-10}	1.4×10^{-10}
Area 3, Mud Plant Reservoir	10/22/90	4.6×10^{-11}	6.8×10^{-11}
Area 3, Well A Reservoir	03/08/90	6.7×10^{-12}	7.4×10^{-11}
Area 3, Well A Reservoir	05/04/90	-5.8×10^{-12}	1.2×10^{-10}
Area 3, Well A Reservoir	07/13/90	5.7×10^{-11}	6.5×10^{-11}
Area 3, Well A Reservoir	10/22/90	5.5×10^{-11}	5.7×10^{-11}
Area 5, Cane Spring	03/06/90	2.4×10^{-11}	8.2×10^{-11}
Area 5, Cane Spring	05/03/90	2.1×10^{-11}	7.2×10^{-11}
Area 5, Cane Spring	07/12/90	1.8×10^{-11}	6.7×10^{-11}
Area 5, Cane Spring	10/11/90	3.9×10^{-11}	1.3×10^{-10}
Area 5, Ue5c Reservoir	05/04/90	4.9×10^{-11}	7.1×10^{-11}
Area 5, Ue5c Reservoir	07/05/90	-1.5×10^{-11}	6.0×10^{-11}
Area 5, Ue5c Reservoir	10/09/90	4.0×10^{-11}	6.2×10^{-11}
Area 5, Well 5C	03/05/90	4.7×10^{-12}	7.6×10^{-11}
Area 5, Well 5C	05/16/90	-2.1×10^{-11}	8.6×10^{-11}
Area 5, Well 5C	07/12/90	6.2×10^{-11}	1.1×10^{-10}
Area 5, Well 5C	10/04/90	9.7×10^{-11}	6.2×10^{-11}
Area 5, Well 5B Reservoir	03/14/90	3.9×10^{-12}	7.0×10^{-11}
Area 5, Well 5B Reservoir	05/04/90	-1.8×10^{-11}	7.3×10^{-11}

Attachment C.3 (^{238}Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5B Reservoir	07/05/90	4.8×10^{-11}	5.7×10^{-11}
Area 5, Well Ue5c	03/05/90	3.0×10^{-13}	8.2×10^{-11}
Area 5, Well Ue5c	05/16/90	1.6×10^{-11}	7.2×10^{-11}
Area 5, Well Ue5c	07/12/90	-1.0×10^{-11}	9.0×10^{-11}
Area 5, Well Ue5c	10/04/90	3.6×10^{-11}	6.5×10^{-11}
Area 6, Bottled Water	03/12/90	2.4×10^{-11}	7.2×10^{-11}
Area 6, Bottled Water	05/07/90	-4.8×10^{-11}	8.3×10^{-11}
Area 6, Bottled Water	10/01/90	1.3×10^{-11}	7.0×10^{-11}
Area 6, Cafeteria	03/12/90	7.6×10^{-11}	8.0×10^{-11}
Area 6, Cafeteria	05/07/90	-1.6×10^{-13}	1.1×10^{-10}
Area 6, Cafeteria	07/09/90	3.2×10^{-11}	7.5×10^{-11}
Area 6, Cafeteria	10/01/90	7.0×10^{-11}	6.5×10^{-11}
Area 6, Decontamination	05/10/90	4.7×10^{-11}	1.2×10^{-10}
Area 6, Decontamination	07/17/90	-1.4×10^{-11}	8.0×10^{-11}
Area 6, Decontamination	10/10/90	6.2×10^{-11}	1.1×10^{-10}
Area 6, Sewage	03/14/90	1.0×10^{-11}	7.7×10^{-11}
Area 6, Sewage	05/10/90	-2.1×10^{-11}	7.9×10^{-11}
Area 6, Sewage	07/12/90	3.3×10^{-11}	7.6×10^{-11}
Area 6, Sewage	10/12/90	1.9×10^{-11}	5.8×10^{-11}
Area 6, Well 3 Reservoir	03/08/90	1.1×10^{-11}	7.2×10^{-11}
Area 6, Well 3 Reservoir	07/10/90	1.1×10^{-10}	6.8×10^{-11}
Area 6, Well 3 Reservoir	10/22/90	4.3×10^{-11}	5.8×10^{-11}
Area 6, Well 4	03/05/90	-3.2×10^{-11}	7.1×10^{-11}
Area 6, Well 4	05/16/90	1.9×10^{-11}	7.1×10^{-11}
Area 6, Well 4	07/10/90	7.1×10^{-12}	7.4×10^{-11}
Area 6, Well 4	10/04/90	3.1×10^{-11}	6.1×10^{-11}
Area 6, Well C	03/05/90	1.1×10^{-11}	6.8×10^{-11}
Area 6, Well C	05/16/90	1.5×10^{-10}	7.8×10^{-11}
Area 6, Well C	07/10/90	3.4×10^{-11}	7.9×10^{-11}
Area 6, Well C	10/04/90	2.6×10^{-11}	5.4×10^{-11}
Area 6, Well C1	03/05/90	-2.3×10^{-11}	7.1×10^{-11}
Area 6, Well C1	05/16/90	2.6×10^{-11}	7.9×10^{-11}
Area 6, Well C1	07/10/90	1.3×10^{-11}	7.4×10^{-11}
Area 6, Well C1	10/04/90	-2.4×10^{-11}	7.0×10^{-11}
Area 6, Well C1 Reservoir	03/08/90	3.8×10^{-11}	1.0×10^{-10}
Area 6, Well C1 Reservoir	05/04/90	-9.6×10^{-12}	7.0×10^{-11}
Area 6, Well C1 Reservoir	07/05/90	-1.8×10^{-11}	9.7×10^{-11}
Area 6, Well C1 Reservoir	10/10/90	6.4×10^{-11}	6.9×10^{-11}
Area 7, Reitmann Seep	07/06/90	8.8×10^{-11}	1.4×10^{-10}
Area 7, Reitmann Seep	10/10/90	3.4×10^{-11}	6.9×10^{-11}
Area 12, Cafeteria	03/05/90	-3.6×10^{-11}	7.8×10^{-11}
Area 12, Cafeteria	05/07/90	-7.2×10^{-12}	9.7×10^{-11}

Attachment C.3 (^{238}Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Cafeteria	07/09/90	3.2×10^{-11}	8.4×10^{-11}
Area 12, Cafeteria	10/01/90	4.4×10^{-11}	6.6×10^{-11}
Area 12, Captain Jack Spring	05/08/90	4.0×10^{-11}	7.4×10^{-11}
Area 12, Captain Jack Spring	07/12/90	8.1×10^{-11}	6.5×10^{-11}
Area 12, Captain Jack Spring	10/10/90	-1.3×10^{-10}	1.4×10^{-10}
Area 12, E Tunnel Effluent	03/09/90	1.8×10^{-9}	8.5×10^{-11}
Area 12, E Tunnel Effluent	10/16/90	9.5×10^{-10}	1.9×10^{-10}
Area 12, E TunneL Effluent	07/12/90	2.1×10^{-9}	7.3×10^{-11}
Area 12, Gold Meadows	05/02/90	1.8×10^{-12}	7.5×10^{-11}
Area 12, N Tunnel Effluent	03/09/90	-4.3×10^{-11}	1.1×10^{-10}
Area 12, N Tunnel Effluent	07/12/90	6.0×10^{-11}	6.4×10^{-11}
Area 12, N Tunnel Effluent	10/16/90	7.7×10^{-11}	1.4×10^{-10}
Area 12, N Tunnel Pond No. 1	07/12/90	4.3×10^{-11}	6.8×10^{-11}
Area 12, N Tunnel Pond No. 1	05/03/90	-2.0×10^{-11}	1.1×10^{-10}
Area 12, N Tunnel Pond No. 1	03/09/90	5.9×10^{-11}	7.2×10^{-11}
Area 12, N Tunnel Pond No. 1	10/16/90	2.3×10^{-11}	1.5×10^{-10}
Area 12, N Tunnel Pond No. 2	10/16/90	1.6×10^{-11}	1.3×10^{-10}
Area 12, N Tunnel Pond No. 2	07/12/90	3.1×10^{-11}	7.1×10^{-11}
Area 12, N Tunnel Pond No. 2	05/03/90	-6.2×10^{-13}	1.1×10^{-10}
Area 12, N Tunnel Pond No. 2	03/09/90	2.9×10^{-11}	7.3×10^{-11}
Area 12, N Tunnel Pond No. 3	10/18/90	5.3×10^{-11}	1.1×10^{-10}
Area 12, N Tunnel Pond No. 3	03/09/90	-2.1×10^{-11}	1.0×10^{-10}
Area 12, N Tunnel Pond No. 3	07/12/90	1.8×10^{-11}	5.7×10^{-11}
Area 12, Sewage	10/18/90	6.9×10^{-11}	7.1×10^{-11}
Area 12, Sewage	05/11/90	7.4×10^{-12}	6.8×10^{-11}
Area 12, Sewage	07/12/90	3.6×10^{-12}	6.0×10^{-11}
Area 12, T Tunnel Effluent	10/16/90	8.1×10^{-11}	1.3×10^{-10}
Area 12, T Tunnel Effluent	07/12/90	7.0×10^{-11}	6.1×10^{-11}
Area 12, T Tunnel Effluent	05/09/90	4.9×10^{-11}	7.2×10^{-11}
Area 12, T Tunnel Pond No. 1	10/16/90	1.8×10^{-10}	1.8×10^{-10}
Area 12, T Tunnel Pond No. 1	05/09/90	1.4×10^{-12}	7.3×10^{-11}
Area 12, T Tunnel Pond No. 1	05/09/90	7.9×10^{-11}	7.7×10^{-11}
Area 12, T Tunnel Pond No. 2	10/16/90	1.7×10^{-10}	1.4×10^{-10}
Area 12, T Tunnel Pond No. 2	03/09/90	5.0×10^{-11}	6.7×10^{-11}
Area 12, T Tunnel Pond No. 2	07/12/90	5.6×10^{-11}	6.7×10^{-11}
Area 12, T Tunnel Pond No. 2	07/12/90	5.3×10^{-11}	6.7×10^{-11}
Area 12, White Rock Spring	05/03/90	3.3×10^{-11}	7.1×10^{-11}
Area 12, White Rock Spring	07/23/90	5.0×10^{-11}	10.0×10^{-11}
Area 12, White Rock Spring	10/10/90	1.9×10^{-11}	6.2×10^{-11}
Area 15, Well Ue15d	03/05/90	1.9×10^{-11}	6.6×10^{-11}
Area 15, Well Ue15d	05/16/90	6.9×10^{-11}	5.4×10^{-11}
Area 15, Well Ue15d	07/10/90	2.2×10^{-11}	9.9×10^{-11}

Attachment C.3 (^{238}Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, Well Ue15d	10/04/90	2.0×10^{-11}	5.6×10^{-11}
Area 16, Tippipah Spring	03/13/90	-5.8×10^{-12}	1.0×10^{-10}
Area 16, Tippipah Spring	05/08/90	9.9×10^{-12}	8.0×10^{-11}
Area 16, Tippipah Spring	07/13/90	1.7×10^{-11}	6.7×10^{-11}
Area 16, Well 16d	03/05/90	3.3×10^{-11}	5.8×10^{-11}
Area 16, Well 16d	05/16/90	1.7×10^{-11}	6.8×10^{-11}
Area 16, Well 16d	07/10/90	2.2×10^{-11}	1.5×10^{-10}
Area 16, Well 16d	10/04/90	2.9×10^{-11}	5.6×10^{-11}
Area 18, Camp 17 Reservoir	03/01/90	9.5×10^{-12}	10.0×10^{-11}
Area 18, Camp 17 Reservoir	05/02/90	-6.5×10^{-11}	1.1×10^{-10}
Area 18, Camp 17 Reservoir	07/17/90	-1.5×10^{-11}	8.9×10^{-11}
Area 18, Camp 17 Reservoir	10/05/90	-7.5×10^{-11}	1.1×10^{-10}
Area 18, Well 8	05/16/90	2.4×10^{-11}	7.7×10^{-11}
Area 18, Well 8	07/10/90	2.3×10^{-11}	8.6×10^{-11}
Area 18, Well 8	10/04/90	4.4×10^{-11}	6.0×10^{-11}
Area 18, Well 8 Reservoir	05/02/90	3.4×10^{-11}	8.7×10^{-11}
Area 18, Well 8 Reservoir	10/05/90	3.7×10^{-11}	6.3×10^{-11}
Area 19, Well U19c	03/05/90	-8.5×10^{-13}	8.5×10^{-11}
Area 19, Well U19c	05/16/90	-1.3×10^{-11}	7.3×10^{-11}
Area 19, Well U19c	07/10/90	-8.1×10^{-11}	1.0×10^{-10}
Area 19, Well U19c	10/04/90	2.6×10^{-11}	6.7×10^{-11}
Area 19, Well U19c Reservoir	05/02/90	6.6×10^{-11}	1.0×10^{-10}
Area 19, Well U19c Reservoir	07/17/90	-7.2×10^{-12}	1.0×10^{-10}
Area 19, Well U19c Reservoir	10/04/90	4.3×10^{-11}	5.5×10^{-11}
Area 20, Water Well	03/05/90	1.6×10^{-11}	6.9×10^{-11}
Area 20, Water Well	05/16/90	1.6×10^{-11}	8.1×10^{-11}
Area 20, Water Well	07/10/90	2.6×10^{-11}	8.8×10^{-11}
Area 20, Water Well	10/04/90	3.1×10^{-11}	7.1×10^{-11}
Area 20, Well 20A Reservoir	03/05/90	1.0×10^{-11}	9.0×10^{-11}
Area 20, Well 20A Reservoir	07/17/90	-7.6×10^{-12}	7.9×10^{-11}
Area 20, Well 20A Reservoir	10/04/90	5.2×10^{-11}	7.6×10^{-11}
Area 23, Army Well No. 1	03/05/90	-2.7×10^{-11}	8.7×10^{-11}
Area 23, Army Well No. 1	05/16/90	-2.7×10^{-11}	7.1×10^{-11}
Area 23, Army Well No. 1	07/12/90	7.1×10^{-11}	1.1×10^{-10}
Area 23, Army Well No. 1	10/04/90	5.6×10^{-11}	6.0×10^{-11}
Area 23, Cafeteria	03/19/90	-2.7×10^{-11}	7.2×10^{-11}
Area 23, Cafeteria	05/07/90	3.4×10^{-11}	7.8×10^{-11}
Area 23, Cafeteria	07/09/90	1.1×10^{-11}	8.3×10^{-11}
Area 23, Cafeteria	10/01/90	3.0×10^{-11}	6.7×10^{-11}
Area 23, Sewage	03/16/90	2.8×10^{-11}	6.8×10^{-11}
Area 23, Sewage	05/10/90	-1.5×10^{-11}	7.9×10^{-11}
Area 23, Sewage	07/10/90	-4.1×10^{-11}	8.6×10^{-11}

Attachment C.3 (^{238}Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Sewage	10/12/90	-3.0×10^{-11}	6.4×10^{-11}
Area 23, Swimming Pool	05/04/90	1.9×10^{-11}	6.9×10^{-11}
Area 23, Swimming Pool	07/10/90	1.0×10^{-12}	6.5×10^{-11}
Area 23, Swimming Pool	10/10/90	8.5×10^{-11}	6.3×10^{-11}
Area 25, Building 4221	03/19/90	3.7×10^{-12}	6.9×10^{-11}
Area 25, Building 4221	05/07/90	3.1×10^{-11}	7.4×10^{-11}
Area 25, Building 4221	07/09/90	3.2×10^{-12}	7.5×10^{-11}
Area 25, Building 4221	10/01/90	2.2×10^{-11}	5.4×10^{-11}
Area 25, Well J-12	03/05/90	-8.7×10^{-12}	8.2×10^{-11}
Area 25, Well J-12	05/16/90	2.7×10^{-11}	6.0×10^{-11}
Area 25, Well J-12	07/12/90	1.4×10^{-11}	1.1×10^{-10}
Area 25, Well J-12	10/04/90	3.6×10^{-11}	6.3×10^{-11}
Area 25, Well J-12 Reservoir	03/08/90	1.6×10^{-11}	7.6×10^{-11}
Area 25, Well J-12 Reservoir	05/04/90	2.1×10^{-11}	7.0×10^{-11}
Area 25, Well J-12 Reservoir	07/05/90	1.2×10^{-11}	7.1×10^{-11}
Area 25, Well J-13	03/05/90	-2.4×10^{-11}	1.2×10^{-10}
Area 25, Well J-13	05/16/90	2.8×10^{-11}	8.3×10^{-11}
Area 25, Well J-13	07/12/90	5.3×10^{-11}	9.2×10^{-11}
Area 25, Well J-13	10/04/90	-7.1×10^{-12}	6.6×10^{-11}
Area 25, Well J-13 Reservoir	05/04/90	6.3×10^{-11}	7.5×10^{-11}
Area 25, Well J-13 Reservoir	07/05/90	1.4×10^{-10}	7.4×10^{-11}
Area 25, Well J-13 Reservoir	10/09/90	1.9×10^{-11}	7.5×10^{-11}
Area 27, Cafeteria	03/19/90	-2.0×10^{-11}	1.2×10^{-10}
Area 27, Cafeteria	05/07/90	2.2×10^{-11}	7.9×10^{-11}
Area 27, Cafeteria	07/09/90	2.7×10^{-11}	7.2×10^{-11}
Area 27, Cafeteria	10/01/90	5.5×10^{-11}	6.0×10^{-11}
Area 29, Topopah Spring	03/15/90	-1.4×10^{-11}	6.6×10^{-11}
Area 29, Topopah Spring	05/09/90	7.4×10^{-12}	7.3×10^{-11}
Area 29, Topopah Spring	10/17/90	8.0×10^{-11}	6.5×10^{-11}

Attachment C.4 $^{239+240}Pu$ in Water - 1990

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	03/05/90	5.8×10^{-12}	3.2×10^{-11}
Area 1, Building 101	05/07/90	4.7×10^{-12}	2.8×10^{-11}
Area 1, Building 101	07/09/90	8.8×10^{-12}	4.0×10^{-11}
Area 1, Building 101	10/01/90	4.8×10^{-11}	2.0×10^{-11}
Area 2, Mud Plant Reservoir	03/14/90	3.5×10^{-11}	7.8×10^{-11}
Area 2, Mud Plant Reservoir	07/10/90	3.7×10^{-12}	2.4×10^{-11}
Area 2, Mud Plant Reservoir	10/22/90	5.3×10^{-12}	2.1×10^{-11}
Area 2, Restroom	03/12/90	4.6×10^{-12}	3.0×10^{-11}
Area 2, Restroom	05/07/90	-7.9×10^{-12}	2.6×10^{-11}
Area 2, Restroom	07/09/90	4.9×10^{-12}	2.0×10^{-11}
Area 2, Restroom	10/01/90	9.2×10^{-12}	2.2×10^{-11}
Area 2, Well 2	03/05/90	3.2×10^{-12}	2.3×10^{-11}
Area 2, Well 2	05/16/90	2.8×10^{-11}	2.9×10^{-11}
Area 2, Well 2	07/10/90	8.1×10^{-13}	3.5×10^{-11}
Area 2, Well 2	10/04/90	-3.5×10^{-12}	2.2×10^{-11}
Area 2, Well 2 Reservoir	03/14/90	-2.1×10^{-11}	9.8×10^{-11}
Area 2, Well 2 Reservoir	05/02/90	-4.0×10^{-12}	5.1×10^{-11}
Area 2, Well 2 Reservoir	07/10/90	1.1×10^{-11}	3.0×10^{-11}
Area 2, Well 2 Reservoir	10/18/90	4.5×10^{-11}	3.1×10^{-11}
Area 3, Cafeteria	03/12/90	-4.3×10^{-12}	2.5×10^{-11}
Area 3, Cafeteria	05/07/90	-3.9×10^{-12}	2.5×10^{-11}
Area 3, Cafeteria	07/09/90	2.4×10^{-11}	3.4×10^{-11}
Area 3, Cafeteria	10/01/90	1.3×10^{-10}	2.0×10^{-11}
Area 3, Mud Plant Reservoir	03/08/90	1.3×10^{-10}	2.2×10^{-11}
Area 3, Mud Plant Reservoir	05/04/90	4.8×10^{-11}	2.3×10^{-11}
Area 3, Mud Plant Reservoir	07/13/90	5.6×10^{-11}	4.1×10^{-11}
Area 3, Mud Plant Reservoir	10/22/90	3.7×10^{-11}	2.6×10^{-11}
Area 3, Well A Reservoir	03/08/90	-7.8×10^{-12}	2.4×10^{-11}
Area 3, Well A Reservoir	05/04/90	1.8×10^{-11}	4.6×10^{-11}
Area 3, Well A Reservoir	07/13/90	-6.9×10^{-14}	2.3×10^{-11}
Area 3, Well A Reservoir	10/22/90	-5.1×10^{-13}	2.0×10^{-11}
Area 5, Cane Spring	03/06/90	-4.3×10^{-12}	3.0×10^{-11}
Area 5, Cane Spring	05/03/90	7.5×10^{-12}	2.5×10^{-11}
Area 5, Cane Spring	07/12/90	2.9×10^{-12}	2.2×10^{-11}
Area 5, Cane Spring	10/11/90	-6.0×10^{-12}	4.6×10^{-11}
Area 5, Ue5c Reservoir	05/04/90	-4.1×10^{-12}	2.6×10^{-11}
Area 5, Ue5c Reservoir	07/05/90	5.1×10^{-12}	1.9×10^{-11}
Area 5, Ue5c Reservoir	10/09/90	5.5×10^{-12}	2.0×10^{-11}
Area 5, Well 5B Reservoir	03/14/90	3.2×10^{-12}	2.4×10^{-11}
Area 5, Well 5B Reservoir	05/04/90	-4.2×10^{-13}	2.4×10^{-11}
Area 5, Well 5B Reservoir	07/05/90	8.1×10^{-13}	1.9×10^{-11}
Area 5, Well 5B Reservoir	10/09/90	-2.5×10^{-11}	1.3×10^{-10}

Attachment C.4 ($^{239+240}$Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5C	03/05/90	4.4×10^{-12}	2.6×10^{-11}
Area 5, Well 5C	05/16/90	1.3×10^{-12}	2.7×10^{-11}
Area 5, Well 5C	07/12/90	2.9×10^{-12}	4.7×10^{-11}
Area 5, Well 5C	10/04/90	1.7×10^{-11}	2.3×10^{-11}
Area 5, Well Ue5c	03/05/90	-7.9×10^{-12}	2.8×10^{-11}
Area 5, Well Ue5c	05/16/90	2.6×10^{-11}	2.2×10^{-11}
Area 5, Well Ue5c	07/12/90	7.0×10^{-13}	3.4×10^{-11}
Area 5, Well Ue5c	10/04/90	-2.2×10^{-13}	2.2×10^{-11}
Area 6, Bottled Water	03/12/90	2.8×10^{-12}	2.5×10^{-11}
Area 6, Bottled Water	05/07/90	5.3×10^{-12}	3.0×10^{-11}
Area 6, Bottled Water	07/09/90	-3.8×10^{-12}	2.7×10^{-10}
Area 6, Bottled Water	10/01/90	1.2×10^{-10}	2.6×10^{-11}
Area 6, Cafeteria	03/12/90	-4.4×10^{-12}	2.8×10^{-11}
Area 6, Cafeteria	05/07/90	-4.1×10^{-12}	4.9×10^{-11}
Area 6, Cafeteria	07/09/90	2.6×10^{-11}	2.8×10^{-11}
Area 6, Cafeteria	10/01/90	5.7×10^{-11}	2.3×10^{-11}
Area 6, Decontamination	03/14/90	1.7×10^{-10}	2.1×10^{-10}
Area 6, Decontamination	05/10/90	6.6×10^{-11}	4.9×10^{-11}
Area 6, Decontamination	07/17/90	9.5×10^{-11}	3.3×10^{-11}
Area 6, Decontamination	10/10/90	1.2×10^{-13}	4.1×10^{-11}
Area 6, Sewage	03/14/90	1.6×10^{-14}	2.7×10^{-11}
Area 6, Sewage	05/10/90	-2.9×10^{-13}	2.7×10^{-11}
Area 6, Sewage	07/12/90	5.1×10^{-12}	2.9×10^{-11}
Area 6, Sewage	10/12/90	-3.6×10^{-12}	2.0×10^{-11}
Area 6, Well 3 Reservoir	03/08/90	7.4×10^{-12}	2.6×10^{-11}
Area 6, Well 3 Reservoir	05/04/90	3.5×10^{-11}	8.0×10^{-11}
Area 6, Well 3 Reservoir	07/10/90	8.3×10^{-12}	2.6×10^{-11}
Area 6, Well 3 Reservoir	10/22/90	8.9×10^{-12}	2.1×10^{-11}
Area 6, Well 4	03/05/90	4.6×10^{-12}	2.6×10^{-11}
Area 6, Well 4	05/16/90	3.4×10^{-15}	2.5×10^{-11}
Area 6, Well 4	07/10/90	8.6×10^{-12}	2.6×10^{-11}
Area 6, Well 4	10/04/90	-4.1×10^{-13}	2.0×10^{-11}
Area 6, Well C	03/05/90	-3.7×10^{-12}	2.3×10^{-11}
Area 6, Well C	05/16/90	2.5×10^{-11}	3.0×10^{-11}
Area 6, Well C	07/10/90	4.4×10^{-12}	2.9×10^{-11}
Area 6, Well C	10/04/90	2.3×10^{-12}	1.9×10^{-11}
Area 6, Well C1	03/05/90	-2.6×10^{-13}	2.2×10^{-11}
Area 6, Well C1	05/16/90	3.1×10^{-11}	2.8×10^{-11}
Area 6, Well C1	07/10/90	-5.0×10^{-13}	2.7×10^{-11}
Area 6, Well C1	10/04/90	5.2×10^{-11}	2.5×10^{-11}
Area 6, Well C1 Reservoir	03/08/90	-1.1×10^{-11}	4.3×10^{-11}
Area 6, Well C1 Reservoir	05/04/90	6.6×10^{-12}	2.4×10^{-11}

Attachment C.4 ($^{239+240}$Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well C1 Reservoir	07/05/90	-3.8×10^{-12}	3.4×10^{-11}
Area 6, Well C1 Reservoir	10/10/90	7.8×10^{-12}	2.5×10^{-11}
Area 7, Reitmann Seep	03/01/90	8.0×10^{-11}	7.2×10^{-11}
Area 7, Reitmann Seep	05/03/90	3.0×10^{-10}	3.2×10^{-10}
Area 7, Reitmann Seep	07/06/90	1.0×10^{-8}	5.6×10^{-11}
Area 7, Reitmann Seep	10/10/90	1.4×10^{-10}	2.4×10^{-11}
Area 12, Cafeteria	03/05/90	3.2×10^{-12}	2.4×10^{-11}
Area 12, Cafeteria	05/07/90	-3.8×10^{-12}	4.3×10^{-11}
Area 12, Cafeteria	07/09/90	-4.0×10^{-12}	3.5×10^{-11}
Area 12, Cafeteria	10/01/90	1.5×10^{-11}	2.5×10^{-11}
Area 12, Captain Jack Spring	03/09/90	3.5×10^{-11}	2.4×10^{-10}
Area 12, Captain Jack Spring	05/08/90	-3.8×10^{-12}	2.5×10^{-11}
Area 12, Captain Jack Spring	07/12/90	1.1×10^{-10}	2.3×10^{-11}
Area 12, Captain Jack Spring	10/10/90	1.2×10^{-10}	4.2×10^{-11}
Area 12, E Tunnel Effluent	03/09/90	1.4×10^{-8}	2.6×10^{-11}
Area 12, E Tunnel Effluent	05/03/90	1.9×10^{-10}	1.5×10^{-10}
Area 12, E Tunnel Effluent	07/12/90	1.6×10^{-8}	2.3×10^{-11}
Area 12, E Tunnel Effluent	10/16/90	6.7×10^{-9}	8.9×10^{-11}
Area 12, Gold Meadows	05/02/90	4.7×10^{-11}	2.6×10^{-11}
Area 12, N Tunnel Effluent	03/09/90	2.2×10^{-11}	4.1×10^{-11}
Area 12, N Tunnel Effluent	05/03/90	2.4×10^{-8}	1.0×10^{-10}
Area 12, N Tunnel Effluent	07/12/90	1.4×10^{-11}	2.3×10^{-11}
Area 12, N Tunnel Effluent	10/16/90	6.8×10^{-11}	5.8×10^{-11}
Area 12, N Tunnel Pond No. 1	10/16/90	1.0×10^{-10}	6.1×10^{-11}
Area 12, N Tunnel Pond No. 1	05/03/90	-4.4×10^{-12}	4.8×10^{-11}
Area 12, N Tunnel Pond No. 1	07/12/90	3.7×10^{-13}	2.5×10^{-11}
Area 12, N Tunnel Pond No. 1	03/09/90	1.5×10^{-11}	2.6×10^{-11}
Area 12, N Tunnel Pond No. 2	05/03/90	1.6×10^{-10}	3.6×10^{-11}
Area 12, N Tunnel Pond No. 2	03/09/90	1.1×10^{-11}	2.6×10^{-11}
Area 12, N Tunnel Pond No. 2	07/12/90	2.3×10^{-11}	2.5×10^{-11}
Area 12, N Tunnel Pond No. 2	10/16/90	1.1×10^{-10}	5.2×10^{-11}
Area 12, N Tunnel Pond No. 3	03/09/90	3.2×10^{-11}	3.9×10^{-11}
Area 12, N Tunnel Pond No. 3	05/03/90	5.7×10^{-11}	7.3×10^{-11}
Area 12, N Tunnel Pond No. 3	10/18/90	8.9×10^{-11}	3.3×10^{-11}
Area 12, N Tunnel Pond No. 3	07/12/90	6.5×10^{-11}	1.9×10^{-11}
Area 12, Sewage	03/14/90	-1.7×10^{-11}	7.4×10^{-11}
Area 12, Sewage	05/11/90	3.3×10^{-12}	2.4×10^{-11}
Area 12, Sewage	07/12/90	-4.7×10^{-13}	2.1×10^{-11}
Area 12, Sewage	10/18/90	1.6×10^{-11}	2.6×10^{-11}
Area 12, T Tunnel Effluent	03/09/90	7.3×10^{-10}	1.0×10^{-10}
Area 12, T Tunnel Effluent	05/09/90	7.7×10^{-10}	2.6×10^{-11}
Area 12, T Tunnel Effluent	07/12/90	1.1×10^{-9}	2.2×10^{-11}

Attachment C.4 ($^{239+240}$Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, T Tunnel Effluent	10/16/90	5.7×10^{-10}	5.4×10^{-11}
Area 12, T Tunnel Pond No. 1	03/09/90	6.2×10^{-10}	1.3×10^{-10}
Area 12, T Tunnel Pond No. 1	05/09/90	6.2×10^{-10}	2.7×10^{-11}
Area 12, T Tunnel Pond No. 1	07/12/90	1.1×10^{-9}	2.4×10^{-11}
Area 12, T Tunnel Pond No. 1	10/16/90	6.0×10^{-10}	7.8×10^{-11}
Area 12, T Tunnel Pond No. 2	05/09/90	1.2×10^{-9}	2.9×10^{-11}
Area 12, T Tunnel Pond No. 2	03/09/90	8.3×10^{-10}	2.4×10^{-11}
Area 12, T Tunnel Pond No. 2	10/16/90	7.4×10^{-10}	5.9×10^{-11}
Area 12, T Tunnel Pond No. 2	07/12/90	8.5×10^{-10}	2.4×10^{-11}
Area 12, White Rock Spring	05/03/90	2.5×10^{-11}	2.5×10^{-11}
Area 12, White Rock Spring	07/23/90	1.4×10^{-11}	3.9×10^{-11}
Area 15, Well Ue15d	03/05/90	6.9×10^{-12}	2.3×10^{-11}
Area 15, Well Ue15d	05/16/90	-1.2×10^{-12}	1.8×10^{-11}
Area 15, Well Ue15d	07/10/90	1.9×10^{-11}	3.7×10^{-11}
Area 15, Well Ue15d	10/04/90	-6.4×10^{-12}	2.0×10^{-11}
Area 12, White Rock Spring	10/10/90	3.7×10^{-11}	2.1×10^{-11}
Area 16, Tippipah Spring	03/13/90	2.3×10^{-12}	4.0×10^{-11}
Area 16, Tippipah Spring	05/08/90	5.1×10^{-12}	2.9×10^{-11}
Area 16, Tippipah Spring	07/13/90	1.6×10^{-11}	2.5×10^{-11}
Area 16, Well 16d	03/05/90	-6.6×10^{-12}	2.0×10^{-11}
Area 16, Well 16d	05/16/90	-4.1×10^{-12}	2.4×10^{-11}
Area 16, Well 16d	07/10/90	1.9×10^{-11}	7.0×10^{-11}
Area 16, Well 16d	10/04/90	2.5×10^{-12}	2.0×10^{-11}
Area 18, Camp 17 Reservoir	03/01/90	1.3×10^{-11}	3.7×10^{-11}
Area 18, Camp 17 Reservoir	05/02/90	-3.9×10^{-12}	3.7×10^{-11}
Area 18, Camp 17 Reservoir	07/17/90	5.6×10^{-12}	3.1×10^{-11}
Area 18, Camp 17 Reservoir	10/05/90	-4.3×10^{-12}	4.4×10^{-11}
Area 18, Well 8	03/05/90	-2.0×10^{-11}	9.9×10^{-11}
Area 18, Well 8	05/16/90	8.7×10^{-12}	3.1×10^{-11}
Area 18, Well 8	07/10/90	2.1×10^{-11}	3.2×10^{-11}
Area 18, Well 8	10/04/90	-3.7×10^{-12}	2.2×10^{-11}
Area 18, Well 8 Reservoir	03/01/90	1.2×10^{-11}	9.9×10^{-11}
Area 18, Well 8 Reservoir	05/02/90	1.5×10^{-10}	3.1×10^{-11}
Area 18, Well 8 Reservoir	10/05/90	-3.6×10^{-12}	2.4×10^{-11}
Area 19, Well U19c	03/05/90	-3.8×10^{-12}	3.5×10^{-11}
Area 19, Well U19c	05/16/90	-3.7×10^{-12}	2.6×10^{-11}
Area 19, Well U19c	07/10/90	-4.6×10^{-12}	2.9×10^{-11}
Area 19, Well U19c	10/04/90	4.2×10^{-12}	2.5×10^{-11}
Area 19, Well U19c Reservoir	03/05/90	1.8×10^{-11}	1.4×10^{-10}
Area 19, Well U19c Reservoir	05/02/90	2.9×10^{-12}	4.4×10^{-11}
Area 19, Well U19c Reservoir	07/17/90	1.4×10^{-11}	3.6×10^{-11}
Area 19, Well U19c Reservoir	10/04/90	1.3×10^{-11}	1.9×10^{-11}

Attachment C.4 ($^{239+240}$Pu in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Water Well	03/05/90	-3.7×10^{-12}	2.5×10^{-11}
Area 20, Water Well	05/16/90	4.3×10^{-13}	2.7×10^{-11}
Area 20, Water Well	07/10/90	5.9×10^{-12}	3.3×10^{-11}
Area 20, Water Well	10/04/90	-3.9×10^{-12}	2.4×10^{-11}
Area 20, Well 20A Reservoir	03/05/90	8.3×10^{-13}	2.9×10^{-11}
Area 20, Well 20A Reservoir	07/17/90	9.8×10^{-12}	2.8×10^{-11}
Area 20, Well 20A Reservoir	10/04/90	3.2×10^{-11}	2.8×10^{-11}
Area 23, Army Well No. 1	03/05/90	8.2×10^{-13}	2.9×10^{-11}
Area 23, Army Well No. 1	05/16/90	9.1×10^{-12}	2.3×10^{-11}
Area 23, Army Well No. 1	07/12/90	1.1×10^{-11}	4.8×10^{-11}
Area 23, Army Well No. 1	10/04/90	5.2×10^{-12}	1.9×10^{-11}
Area 23, Cafeteria	03/19/90	-4.0×10^{-12}	2.6×10^{-11}
Area 23, Cafeteria	05/07/90	8.5×10^{-12}	2.8×10^{-11}
Area 23, Cafeteria	07/09/90	-3.9×10^{-12}	3.3×10^{-11}
Area 23, Cafeteria	10/01/90	1.8×10^{-11}	2.4×10^{-11}
Area 23, Sewage	03/16/90	-2.0×10^{-13}	2.5×10^{-11}
Area 23, Sewage	05/10/90	1.2×10^{-11}	2.7×10^{-11}
Area 23, Sewage	07/10/90	8.2×10^{-15}	2.6×10^{-11}
Area 23, Sewage	10/12/90	2.2×10^{-12}	2.0×10^{-11}
Area 23, Swimming Pool	03/29/90	1.0×10^{-10}	2.1×10^{-10}
Area 23, Swimming Pool	05/04/90	-4.2×10^{-12}	2.4×10^{-11}
Area 23, Swimming Pool	07/10/90	-1.3×10^{-13}	2.4×10^{-11}
Area 23, Swimming Pool	10/10/90	4.2×10^{-11}	2.4×10^{-11}
Area 25, Building 4221	03/19/90	3.2×10^{-12}	2.3×10^{-11}
Area 25, Building 4221	05/07/90	3.6×10^{-12}	2.5×10^{-11}
Area 25, Building 4221	07/09/90	9.6×10^{-12}	2.8×10^{-11}
Area 25, Building 4221	10/01/90	7.5×10^{-12}	1.9×10^{-11}
Area 25, Well J-11 Reservoir	05/04/90	6.6×10^{-14}	2.8×10^{-11}
Area 25, Well J-11 Reservoir	07/05/90	8.4×10^{-12}	3.0×10^{-11}
Area 25, Well J-11 Reservoir	10/09/90	9.6×10^{-13}	2.9×10^{-11}
Area 25, Well J-12	03/05/90	1.4×10^{-11}	2.7×10^{-11}
Area 25, Well J-12	05/16/90	9.9×10^{-13}	2.0×10^{-11}
Area 25, Well J-12	07/12/90	-4.6×10^{-12}	4.5×10^{-11}
Area 25, Well J-12	10/04/90	1.5×10^{-11}	2.4×10^{-11}
Area 25, Well J-12 Reservoir	03/08/90	-7.8×10^{-12}	2.5×10^{-11}
Area 25, Well J-12 Reservoir	05/04/90	-2.5×10^{-13}	2.4×10^{-11}
Area 25, Well J-12 Reservoir	07/05/90	-7.6×10^{-12}	2.5×10^{-11}
Area 25, Well J-12 Reservoir	10/09/90	-2.4×10^{-11}	1.2×10^{-10}
Area 25, Well J-13	03/05/90	4.1×10^{-12}	4.7×10^{-11}
Area 25, Well J-13	05/16/90	-3.7×10^{-12}	2.7×10^{-11}
Area 25, Well J-13	07/12/90	1.2×10^{-11}	3.5×10^{-11}
Area 25, Well J-13	10/04/90	1.9×10^{-11}	2.4×10^{-11}

Attachment C.4 ($^{239+240}$Pu in Water, cont.)

Sampling Location	Sampling Dates	μCi/mL Concentration	μCi/mL Standard Deviation (s)
Area 27, Cafeteria	03/19/90	-4.3×10^{-12}	5.0×10^{-11}
Area 27, Cafeteria	05/07/90	-3.9×10^{-12}	2.8×10^{-11}
Area 27, Cafeteria	07/09/90	9.5×10^{-12}	2.8×10^{-11}
Area 27, Cafeteria	10/01/90	6.1×10^{-12}	2.1×10^{-11}
Area 29, Topopah Spring	03/15/90	1.3×10^{-11}	2.2×10^{-11}
Area 29, Topopah Spring	05/09/90	-4.6×10^{-12}	2.5×10^{-11}
Area 29, Topopah Spring	10/17/90	2.8×10^{-10}	2.3×10^{-11}

Attachment C.5 Gross Beta in Water - 1990

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	01/02/90	9.2×10^{-9}	1.1×10^{-9}
Area 1, Building 101	01/08/90	6.5×10^{-9}	9.6×10^{-10}
Area 1, Building 101	01/16/90	9.3×10^{-9}	1.9×10^{-9}
Area 1, Building 101	01/23/90	2.3×10^{-9}	9.9×10^{-10}
Area 1, Building 101	01/29/90	7.8×10^{-9}	1.1×10^{-9}
Area 1, Building 101	02/05/90	7.5×10^{-9}	1.0×10^{-9}
Area 1, Building 101	02/12/90	6.2×10^{-9}	1.1×10^{-9}
Area 1, Building 101	02/28/90	7.8×10^{-9}	1.1×10^{-9}
Area 1, Building 101	03/05/90	8.1×10^{-9}	1.0×10^{-9}
Area 1, Building 101	03/12/90	7.8×10^{-9}	1.0×10^{-9}
Area 1, Building 101	03/19/90	8.6×10^{-9}	1.1×10^{-9}
Area 1, Building 101	03/26/90	4.5×10^{-9}	1.1×10^{-9}
Area 1, Building 101	04/02/90	8.2×10^{-9}	1.0×10^{-9}
Area 1, Building 101	04/09/90	6.6×10^{-9}	1.1×10^{-9}
Area 1, Building 101	04/16/90	8.3×10^{-9}	1.0×10^{-9}
Area 1, Building 101	04/23/90	9.0×10^{-9}	1.0×10^{-9}
Area 1, Building 101	04/30/90	8.8×10^{-9}	1.1×10^{-9}
Area 1, Building 101	05/07/90	8.3×10^{-9}	1.6×10^{-9}
Area 1, Building 101	05/14/90	7.7×10^{-9}	1.1×10^{-9}
Area 1, Building 101	05/21/90	7.6×10^{-9}	1.1×10^{-9}
Area 1, Building 101	05/29/90	5.2×10^{-9}	1.8×10^{-9}
Area 1, Building 101	06/04/90	4.8×10^{-9}	1.0×10^{-9}
Area 1, Building 101	06/11/90	7.2×10^{-9}	9.9×10^{-10}
Area 1, Building 101	06/19/90	5.4×10^{-9}	9.9×10^{-10}
Area 1, Building 101	06/25/90	6.3×10^{-9}	1.0×10^{-9}
Area 1, Building 101	07/02/90	4.2×10^{-9}	1.0×10^{-9}
Area 1, Building 101	07/09/90	5.5×10^{-9}	2.4×10^{-9}
Area 1, Building 101	07/16/90	7.7×10^{-9}	9.6×10^{-10}
Area 1, Building 101	07/23/90	8.0×10^{-9}	1.1×10^{-9}
Area 1, Building 101	07/30/90	6.9×10^{-9}	1.0×10^{-9}
Area 1, Building 101	08/05/90	3.3×10^{-9}	9.1×10^{-10}
Area 1, Building 101	08/14/90	8.7×10^{-9}	9.7×10^{-10}
Area 1, Building 101	08/20/90	7.1×10^{-9}	1.0×10^{-9}
Area 1, Building 101	08/28/90	1.0×10^{-8}	9.5×10^{-10}
Area 1, Building 101	09/04/90	9.0×10^{-9}	9.5×10^{-10}
Area 1, Building 101	09/10/90	7.9×10^{-9}	9.9×10^{-10}
Area 1, Building 101	09/17/90	8.8×10^{-9}	9.9×10^{-10}
Area 1, Building 101	09/24/90	8.6×10^{-9}	9.6×10^{-10}
Area 1, Building 101	10/01/90	4.5×10^{-9}	9.5×10^{-10}
Area 1, Building 101	10/08/90	5.7×10^{-9}	1.0×10^{-9}
Area 1, Building 101	10/16/90	9.4×10^{-9}	1.1×10^{-9}
Area 1, Building 101	10/22/90	9.5×10^{-9}	1.1×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	10/29/90	1.1×10^{-8}	1.1×10^{-9}
Area 1, Building 101	11/06/90	1.0×10^{-8}	1.1×10^{-9}
Area 1, Building 101	11/13/90	3.7×10^{-9}	9.8×10^{-10}
Area 1, Building 101	11/19/90	6.9×10^{-9}	1.0×10^{-9}
Area 1, Building 101	11/26/90	9.6×10^{-9}	1.0×10^{-9}
Area 1, Building 101	12/03/90	1.0×10^{-8}	1.1×10^{-9}
Area 1, Building 101	12/10/90	9.3×10^{-9}	9.7×10^{-10}
Area 1, Building 101	12/17/90	8.6×10^{-9}	9.9×10^{-10}
Area 2, Mud Plant Reservoir	01/08/90	8.6×10^{-9}	1.0×10^{-9}
Area 2, Mud Plant Reservoir	02/01/90	7.5×10^{-9}	9.5×10^{-10}
Area 2, Mud Plant Reservoir	03/14/90	9.2×10^{-9}	1.1×10^{-9}
Area 2, Mud Plant Reservoir	04/03/90	7.6×10^{-9}	9.9×10^{-10}
Area 2, Mud Plant Reservoir	05/02/90	1.0×10^{-8}	1.0×10^{-9}
Area 2, Mud Plant Reservoir	06/01/90	6.6×10^{-9}	9.6×10^{-10}
Area 2, Mud Plant Reservoir	07/10/90	6.9×10^{-9}	9.5×10^{-10}
Area 2, Mud Plant Reservoir	08/01/90	7.1×10^{-9}	1.1×10^{-9}
Area 2, Mud Plant Reservoir	09/05/90	7.0×10^{-9}	9.2×10^{-10}
Area 2, Mud Plant Reservoir	10/22/90	8.4×10^{-9}	1.1×10^{-9}
Area 2, Mud Plant Reservoir	11/01/90	8.7×10^{-9}	1.0×10^{-9}
Area 2, Mud Plant Reservoir	12/05/90	9.0×10^{-9}	1.0×10^{-9}
Area 2, Restroom	01/02/90	3.8×10^{-9}	9.7×10^{-10}
Area 2, Restroom	01/08/90	3.6×10^{-9}	9.5×10^{-10}
Area 2, Restroom	01/16/90	4.4×10^{-9}	1.7×10^{-9}
Area 2, Restroom	01/23/90	3.9×10^{-9}	8.6×10^{-10}
Area 2, Restroom	01/29/90	3.4×10^{-9}	9.4×10^{-10}
Area 2, Restroom	02/05/90	3.4×10^{-9}	9.9×10^{-10}
Area 2, Restroom	02/12/90	9.4×10^{-9}	8.6×10^{-10}
Area 2, Restroom	02/20/90	3.2×10^{-9}	1.0×10^{-9}
Area 2, Restroom	02/26/90	3.8×10^{-9}	9.1×10^{-10}
Area 2, Restroom	03/05/90	3.9×10^{-9}	9.7×10^{-10}
Area 2, Restroom	03/12/90	3.5×10^{-9}	1.0×10^{-9}
Area 2, Restroom	03/19/90	3.4×10^{-9}	1.1×10^{-9}
Area 2, Restroom	03/26/90	2.5×10^{-9}	9.4×10^{-10}
Area 2, Restroom	04/02/90	3.7×10^{-9}	9.8×10^{-10}
Area 2, Restroom	04/09/90	3.0×10^{-9}	9.7×10^{-10}
Area 2, Restroom	04/16/90	2.8×10^{-9}	1.0×10^{-9}
Area 2, Restroom	04/23/90	3.1×10^{-9}	9.4×10^{-10}
Area 2, Restroom	04/30/90	2.7×10^{-9}	1.0×10^{-9}
Area 2, Restroom	05/07/90	3.2×10^{-9}	9.1×10^{-10}
Area 2, Restroom	05/14/90	2.6×10^{-9}	9.7×10^{-10}
Area 2, Restroom	05/21/90	2.9×10^{-9}	9.3×10^{-10}
Area 2, Restroom	05/29/90	2.8×10^{-9}	9.3×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Restroom	06/05/90	2.6×10^{-9}	8.8×10^{-10}
Area 2, Restroom	06/11/90	2.7×10^{-9}	9.1×10^{-10}
Area 2, Restroom	06/18/90	3.1×10^{-9}	8.7×10^{-10}
Area 2, Restroom	06/25/90	3.2×10^{-9}	9.7×10^{-10}
Area 2, Restroom	07/02/90	3.1×10^{-9}	9.1×10^{-10}
Area 2, Restroom	07/09/90	2.3×10^{-9}	9.3×10^{-10}
Area 2, Restroom	07/16/90	2.2×10^{-9}	9.9×10^{-10}
Area 2, Restroom	07/23/90	2.5×10^{-9}	9.8×10^{-10}
Area 2, Restroom	07/30/90	2.4×10^{-9}	9.2×10^{-10}
Area 2, Restroom	08/06/90	4.5×10^{-9}	9.4×10^{-10}
Area 2, Restroom	08/13/90	2.9×10^{-9}	9.1×10^{-10}
Area 2, Restroom	08/20/90	4.7×10^{-9}	9.3×10^{-10}
Area 2, Restroom	08/27/90	4.9×10^{-9}	8.8×10^{-10}
Area 2, Restroom	09/04/90	4.8×10^{-9}	8.9×10^{-10}
Area 2, Restroom	09/10/90	5.5×10^{-9}	9.4×10^{-10}
Area 2, Restroom	09/17/90	3.7×10^{-9}	9.0×10^{-10}
Area 2, Restroom	09/24/90	3.7×10^{-9}	8.9×10^{-10}
Area 2, Restroom	10/01/90	3.8×10^{-9}	1.0×10^{-9}
Area 2, Restroom	10/08/90	4.1×10^{-9}	9.8×10^{-10}
Area 2, Restroom	10/18/90	1.2×10^{-8}	1.6×10^{-9}
Area 2, Restroom	10/22/90	3.7×10^{-9}	9.8×10^{-10}
Area 2, Restroom	10/29/90	3.8×10^{-9}	9.8×10^{-10}
Area 2, Restroom	11/05/90	4.1×10^{-9}	1.0×10^{-9}
Area 2, Restroom	11/13/90	4.0×10^{-9}	9.4×10^{-10}
Area 2, Restroom	11/19/90	3.7×10^{-9}	9.7×10^{-10}
Area 2, Restroom	11/26/90	4.2×10^{-9}	9.4×10^{-10}
Area 2, Restroom	12/03/90	4.6×10^{-9}	1.0×10^{-9}
Area 2, Restroom	12/11/90	3.8×10^{-9}	8.8×10^{-10}
Area 2, Restroom	12/17/90	4.2×10^{-9}	9.4×10^{-10}
Area 2, Restroom	12/24/90	4.0×10^{-9}	9.4×10^{-10}
Area 2, Well 2	01/04/90	7.1×10^{-9}	8.9×10^{-10}
Area 2, Well 2	02/07/90	6.8×10^{-9}	1.1×10^{-9}
Area 2, Well 2	03/05/90	7.0×10^{-9}	1.0×10^{-9}
Area 2, Well 2	04/20/90	6.3×10^{-9}	9.9×10^{-10}
Area 2, Well 2	05/16/90	5.2×10^{-9}	9.3×10^{-10}
Area 2, Well 2	06/07/90	5.1×10^{-9}	1.1×10^{-9}
Area 2, Well 2	07/10/90	5.6×10^{-9}	1.2×10^{-9}
Area 2, Well 2	08/16/90	7.2×10^{-9}	9.3×10^{-10}
Area 2, Well 2	09/10/90	7.4×10^{-9}	8.5×10^{-10}
Area 2, Well 2	10/04/90	7.8×10^{-9}	9.4×10^{-10}
Area 2, Well 2	11/21/90	8.1×10^{-9}	1.1×10^{-9}
Area 2, Well 2	12/10/90	7.1×10^{-9}	1.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Well 2 Reservoir	01/09/90	5.4×10^{-9}	9.8×10^{-10}
Area 2, Well 2 Reservoir	02/01/90	7.5×10^{-9}	9.9×10^{-10}
Area 2, Well 2 Reservoir	03/14/90	6.8×10^{-9}	1.1×10^{-9}
Area 2, Well 2 Reservoir	04/03/90	3.8×10^{-9}	9.7×10^{-10}
Area 2, Well 2 Reservoir	05/02/90	7.8×10^{-9}	1.0×10^{-9}
Area 2, Well 2 Reservoir	06/01/90	5.8×10^{-9}	9.7×10^{-10}
Area 2, Well 2 Reservoir	07/10/90	6.7×10^{-9}	9.8×10^{-10}
Area 2, Well 2 Reservoir	08/13/90	7.8×10^{-9}	9.4×10^{-10}
Area 2, Well 2 Reservoir	09/05/90	9.4×10^{-9}	9.5×10^{-10}
Area 2, Well 2 Reservoir	10/18/90	8.9×10^{-9}	1.1×10^{-9}
Area 2, Well 2 Reservoir	11/01/90	8.4×10^{-9}	1.0×10^{-9}
Area 2, Well 2 Reservoir	12/05/90	9.4×10^{-9}	9.6×10^{-10}
Area 3, Cafeteria	01/02/90	9.2×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	01/08/90	8.7×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	01/16/90	1.2×10^{-8}	1.1×10^{-9}
Area 3, Cafeteria	01/23/90	4.7×10^{-9}	9.2×10^{-10}
Area 3, Cafeteria	01/29/90	1.0×10^{-8}	1.1×10^{-9}
Area 3, Cafeteria	02/05/90	9.6×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	02/12/90	1.5×10^{-8}	8.6×10^{-10}
Area 3, Cafeteria	02/20/90	5.8×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	02/26/90	9.3×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	03/05/90	9.8×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	03/12/90	9.2×10^{-9}	1.2×10^{-9}
Area 3, Cafeteria	03/19/90	8.9×10^{-9}	1.2×10^{-9}
Area 3, Cafeteria	03/26/90	1.0×10^{-8}	1.2×10^{-9}
Area 3, Cafeteria	04/02/90	1.0×10^{-8}	1.1×10^{-9}
Area 3, Cafeteria	04/09/90	1.2×10^{-8}	1.1×10^{-9}
Area 3, Cafeteria	04/16/90	6.0×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	04/23/90	1.0×10^{-8}	1.1×10^{-9}
Area 3, Cafeteria	04/30/90	9.8×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	05/07/90	7.4×10^{-9}	2.2×10^{-9}
Area 3, Cafeteria	05/14/90	8.3×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	05/21/90	8.3×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	05/29/90	8.5×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	06/05/90	8.2×10^{-9}	9.2×10^{-10}
Area 3, Cafeteria	06/11/90	8.7×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	06/18/90	9.8×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	06/25/90	8.5×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	07/02/90	8.2×10^{-9}	9.8×10^{-10}
Area 3, Cafeteria	07/09/90	9.3×10^{-9}	2.7×10^{-9}
Area 3, Cafeteria	07/16/90	7.8×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	07/23/90	7.0×10^{-9}	1.1×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	μCi/mL Concentration	μCi/mL Standard Deviation (s)
Area 3, Cafeteria	07/30/90	7.7×10^{-9}	1.1×10^{-9}
Area 3, Cafeteria	08/06/90	1.5×10^{-8}	3.4×10^{-9}
Area 3, Cafeteria	08/13/90	1.0×10^{-8}	1.0×10^{-9}
Area 3, Cafeteria	08/20/90	1.1×10^{-8}	10.0×10^{-10}
Area 3, Cafeteria	08/27/90	1.1×10^{-8}	9.9×10^{-10}
Area 3, Cafeteria	09/04/90	9.1×10^{-9}	9.8×10^{-10}
Area 3, Cafeteria	09/10/90	9.3×10^{-9}	9.8×10^{-10}
Area 3, Cafeteria	09/17/90	9.1×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	09/24/90	8.7×10^{-9}	9.8×10^{-10}
Area 3, Cafeteria	10/01/90	1.5×10^{-9}	8.9×10^{-10}
Area 3, Cafeteria	10/08/90	2.9×10^{-9}	9.7×10^{-10}
Area 3, Cafeteria	10/18/90	4.7×10^{-9}	1.4×10^{-9}
Area 3, Cafeteria	10/22/90	1.0×10^{-8}	1.1×10^{-9}
Area 3, Cafeteria	10/29/90	8.9×10^{-9}	1.2×10^{-9}
Area 3, Cafeteria	11/05/90	8.4×10^{-9}	1.2×10^{-9}
Area 3, Cafeteria	11/13/90	9.5×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	11/19/90	8.9×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	11/26/90	9.6×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	12/03/90	1.1×10^{-8}	1.1×10^{-9}
Area 3, Cafeteria	12/11/90	9.5×10^{-9}	9.7×10^{-10}
Area 3, Cafeteria	12/17/90	9.0×10^{-9}	1.0×10^{-9}
Area 3, Cafeteria	12/24/90	8.1×10^{-9}	1.1×10^{-9}
Area 3, Mud Plant Reservoir	01/09/90	1.0×10^{-8}	1.0×10^{-9}
Area 3, Mud Plant Reservoir	02/01/90	8.8×10^{-9}	9.6×10^{-10}
Area 3, Mud Plant Reservoir	03/08/90	1.0×10^{-8}	1.0×10^{-9}
Area 3, Mud Plant Reservoir	04/20/90	1.3×10^{-8}	1.1×10^{-9}
Area 3, Mud Plant Reservoir	05/04/90	1.2×10^{-8}	1.4×10^{-9}
Area 3, Mud Plant Reservoir	06/21/90	1.1×10^{-8}	9.8×10^{-10}
Area 3, Mud Plant Reservoir	07/13/90	9.2×10^{-9}	1.0×10^{-9}
Area 3, Mud Plant Reservoir	08/01/90	1.0×10^{-8}	1.1×10^{-9}
Area 3, Mud Plant Reservoir	09/05/90	1.1×10^{-8}	9.3×10^{-10}
Area 3, Mud Plant Reservoir	10/22/90	1.2×10^{-8}	1.0×10^{-9}
Area 3, Mud Plant Reservoir	11/02/90	1.4×10^{-8}	1.0×10^{-9}
Area 3, Mud Plant Reservoir	12/05/90	1.3×10^{-8}	1.0×10^{-9}
Area 3, Well A Reservoir	01/09/90	8.7×10^{-9}	1.0×10^{-9}
Area 3, Well A Reservoir	02/01/90	6.8×10^{-9}	9.8×10^{-10}
Area 3, Well A Reservoir	03/08/90	8.2×10^{-9}	1.0×10^{-9}
Area 3, Well A Reservoir	04/20/90	1.6×10^{-8}	1.1×10^{-9}
Area 3, Well A Reservoir	05/04/90	9.2×10^{-9}	1.0×10^{-9}
Area 3, Well A Reservoir	06/08/90	7.8×10^{-9}	1.1×10^{-9}
Area 3, Well A Reservoir	07/13/90	9.7×10^{-9}	1.0×10^{-9}
Area 3, Well A Reservoir	08/01/90	8.7×10^{-9}	1.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Well A Reservoir	09/05/90	1.1×10^{-8}	9.4×10^{-10}
Area 3, Well A Reservoir	10/22/90	1.3×10^{-8}	1.0×10^{-9}
Area 3, Well A Reservoir	11/01/90	1.3×10^{-8}	1.1×10^{-9}
Area 3, Well A Reservoir	12/05/90	1.2×10^{-8}	9.7×10^{-10}
Area 5, Cane Spring	01/08/90	7.5×10^{-9}	1.1×10^{-9}
Area 5, Cane Spring	02/08/90	5.8×10^{-9}	2.0×10^{-8}
Area 5, Cane Spring	03/06/90	5.6×10^{-9}	1.1×10^{-9}
Area 5, Cane Spring	04/17/90	8.4×10^{-9}	1.0×10^{-9}
Area 5, Cane Spring	05/03/90	6.7×10^{-9}	1.0×10^{-9}
Area 5, Cane Spring	06/01/90	7.5×10^{-9}	1.1×10^{-9}
Area 5, Cane Spring	07/12/90	6.1×10^{-9}	1.1×10^{-9}
Area 5, Cane Spring	08/10/90	8.8×10^{-9}	1.1×10^{-9}
Area 5, Cane Spring	09/26/90	8.2×10^{-9}	9.0×10^{-10}
Area 5, Cane Spring	10/11/90	1.4×10^{-8}	1.7×10^{-9}
Area 5, Cane Spring	11/16/90	8.3×10^{-9}	9.7×10^{-10}
Area 5, Cane Spring	12/06/90	7.5×10^{-9}	1.0×10^{-9}
Area 5, Ue5c Reservoir	01/04/90	1.0×10^{-8}	1.0×10^{-9}
Area 5, Ue5c Reservoir	01/08/90	9.1×10^{-9}	9.6×10^{-10}
Area 5, Ue5c Reservoir	02/01/90	8.5×10^{-9}	9.9×10^{-10}
Area 5, Ue5c Reservoir	03/14/90	7.0×10^{-9}	1.0×10^{-9}
Area 5, Ue5c Reservoir	04/03/90	8.2×10^{-9}	1.2×10^{-9}
Area 5, Ue5c Reservoir	05/04/90	7.5×10^{-9}	1.1×10^{-9}
Area 5, Ue5c Reservoir	06/08/90	7.3×10^{-9}	1.1×10^{-9}
Area 5, Ue5c Reservoir	07/05/90	5.7×10^{-9}	9.4×10^{-10}
Area 5, Ue5c Reservoir	08/01/90	7.2×10^{-9}	1.1×10^{-9}
Area 5, Ue5c Reservoir	09/04/90	1.2×10^{-8}	1.7×10^{-9}
Area 5, Ue5c Reservoir	10/09/90	8.8×10^{-9}	9.7×10^{-10}
Area 5, Ue5c Reservoir	11/01/90	9.6×10^{-9}	1.0×10^{-9}
Area 5, Ue5c Reservoir	12/05/90	8.5×10^{-9}	9.2×10^{-10}
Area 5, Well 5B Reservoir	01/04/90	8.1×10^{-9}	1.0×10^{-9}
Area 5, Well 5B Reservoir	02/01/90	8.1×10^{-9}	9.6×10^{-10}
Area 5, Well 5B Reservoir	03/14/90	8.2×10^{-9}	1.0×10^{-9}
Area 5, Well 5B Reservoir	04/03/90	9.2×10^{-9}	1.2×10^{-9}
Area 5, Well 5B Reservoir	05/04/90	8.6×10^{-9}	1.1×10^{-9}
Area 5, Well 5B Reservoir	06/08/90	7.9×10^{-9}	1.0×10^{-9}
Area 5, Well 5B Reservoir	07/05/90	9.9×10^{-9}	9.8×10^{-10}
Area 5, Well 5B Reservoir	08/01/90	8.1×10^{-9}	1.1×10^{-9}
Area 5, Well 5B Reservoir	09/04/90	1.0×10^{-8}	1.6×10^{-9}
Area 5, Well 5B Reservoir	10/09/90	8.6×10^{-9}	1.0×10^{-9}
Area 5, Well 5B Reservoir	11/01/90	9.3×10^{-9}	1.0×10^{-9}
Area 5, Well 5B Reservoir	12/05/90	10.0×10^{-9}	9.6×10^{-10}
Area 5, Well 5C	01/04/90	6.9×10^{-9}	8.5×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5C	02/07/90	5.5×10^{-9}	1.1×10^{-9}
Area 5, Well 5C	03/05/90	8.7×10^{-9}	1.1×10^{-9}
Area 5, Well 5C	04/20/90	8.1×10^{-9}	9.5×10^{-10}
Area 5, Well 5C	05/16/90	7.0×10^{-9}	1.0×10^{-9}
Area 5, Well 5C	06/05/90	8.3×10^{-9}	1.0×10^{-9}
Area 5, Well 5C	07/12/90	7.5×10^{-9}	1.3×10^{-9}
Area 5, Well 5C	08/16/90	8.1×10^{-9}	9.6×10^{-10}
Area 5, Well 5C	09/10/90	8.3×10^{-9}	8.5×10^{-10}
Area 5, Well 5C	10/04/90	7.7×10^{-9}	9.8×10^{-10}
Area 5, Well 5C	11/21/90	1.0×10^{-8}	1.0×10^{-9}
Area 5, Well 5C	12/10/90	9.4×10^{-9}	1.1×10^{-9}
Area 5, Well Ue5c	02/07/90	6.7×10^{-9}	1.0×10^{-9}
Area 5, Well Ue5c	03/05/90	1.3×10^{-8}	1.7×10^{-9}
Area 5, Well Ue5c	04/20/90	7.3×10^{-9}	1.0×10^{-9}
Area 5, Well Ue5c	05/16/90	6.4×10^{-9}	10.0×10^{-10}
Area 5, Well Ue5c	06/05/90	6.0×10^{-9}	9.3×10^{-10}
Area 5, Well Ue5c	07/12/90	7.3×10^{-9}	1.3×10^{-9}
Area 5, Well Ue5c	08/16/90	5.7×10^{-9}	9.4×10^{-10}
Area 5, Well Ue5c	09/10/90	7.5×10^{-9}	8.4×10^{-10}
Area 5, Well Ue5c	10/04/90	7.7×10^{-9}	9.5×10^{-10}
Area 5, Well Ue5c	11/21/90	9.0×10^{-9}	1.0×10^{-9}
Area 5, Well Ue5c	12/10/90	8.5×10^{-9}	1.0×10^{-9}
Area 6, Bottled Water	01/02/90	1.0×10^{-10}	7.8×10^{-10}
Area 6, Bottled Water	01/08/90	5.7×10^{-10}	8.2×10^{-10}
Area 6, Bottled Water	01/16/90	2.3×10^{-10}	8.1×10^{-10}
Area 6, Bottled Water	01/23/90	6.6×10^{-10}	6.7×10^{-7}
Area 6, Bottled Water	01/29/90	2.5×10^{-10}	7.7×10^{-10}
Area 6, Bottled Water	02/05/90	-3.5×10^{-10}	9.5×10^{-10}
Area 6, Bottled Water	02/12/90	-2.5×10^{-10}	9.2×10^{-10}
Area 6, Bottled Water	02/20/90	-3.5×10^{-11}	9.5×10^{-10}
Area 6, Bottled Water	02/26/90	1.3×10^{-10}	9.0×10^{-10}
Area 6, Bottled Water	03/05/90	-5.4×10^{-11}	8.7×10^{-10}
Area 6, Bottled Water	03/12/90	-2.9×10^{-10}	9.5×10^{-10}
Area 6, Bottled Water	03/19/90	1.3×10^{-10}	9.3×10^{-10}
Area 6, Bottled Water	03/26/90	5.1×10^{-10}	9.0×10^{-10}
Area 6, Bottled Water	04/02/90	-1.1×10^{-10}	9.1×10^{-10}
Area 6, Bottled Water	04/09/90	-2.9×10^{-10}	9.1×10^{-10}
Area 6, Bottled Water	04/16/90	1.3×10^{-10}	8.9×10^{-10}
Area 6, Bottled Water	04/23/90	3.1×10^{-10}	8.3×10^{-10}
Area 6, Bottled Water	04/30/90	-2.2×10^{-10}	8.7×10^{-10}
Area 6, Bottled Water	05/07/90	7.8×10^{-10}	8.4×10^{-10}
Area 6, Bottled Water	05/14/90	-4.7×10^{-10}	8.1×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	05/21/90	-1.1×10^{-9}	8.7×10^{-10}
Area 6, Bottled Water	05/29/90	-4.8×10^{-10}	7.9×10^{-10}
Area 6, Bottled Water	06/05/90	-4.8×10^{-10}	7.6×10^{-10}
Area 6, Bottled Water	06/11/90	-5.0×10^{-10}	8.0×10^{-10}
Area 6, Bottled Water	06/18/90	-3.6×10^{-10}	6.0×10^{-10}
Area 6, Bottled Water	06/25/90	-4.5×10^{-10}	8.1×10^{-10}
Area 6, Bottled Water	07/02/90	-4.7×10^{-10}	8.3×10^{-10}
Area 6, Bottled Water	07/09/90	-6.2×10^{-10}	7.9×10^{-10}
Area 6, Bottled Water	07/16/90	-3.6×10^{-10}	8.3×10^{-10}
Area 6, Bottled Water	07/23/90	-5.7×10^{-10}	8.4×10^{-10}
Area 6, Bottled Water	07/30/90	-6.7×10^{-10}	7.9×10^{-10}
Area 6, Bottled Water	08/06/90	5.6×10^{-10}	7.6×10^{-10}
Area 6, Bottled Water	08/13/90	1.3×10^{-9}	1.0×10^{-9}
Area 6, Bottled Water	08/20/90	1.3×10^{-9}	7.9×10^{-10}
Area 6, Bottled Water	08/27/90	1.3×10^{-9}	7.5×10^{-10}
Area 6, Bottled Water	09/04/90	9.0×10^{-10}	7.9×10^{-10}
Area 6, Bottled Water	09/10/90	6.6×10^{-10}	7.7×10^{-10}
Area 6, Bottled Water	09/17/90	4.7×10^{-11}	7.1×10^{-10}
Area 6, Bottled Water	09/24/90	5.9×10^{-10}	7.9×10^{-10}
Area 6, Bottled Water	10/01/90	7.4×10^{-10}	8.7×10^{-10}
Area 6, Bottled Water	10/08/90	4.0×10^{-10}	7.7×10^{-10}
Area 6, Bottled Water	10/18/90	9.3×10^{-10}	1.3×10^{-9}
Area 6, Bottled Water	10/22/90	8.9×10^{-10}	8.7×10^{-10}
Area 6, Bottled Water	10/29/90	1.3×10^{-9}	9.0×10^{-10}
Area 6, Bottled Water	11/05/90	6.4×10^{-10}	9.0×10^{-10}
Area 6, Bottled Water	11/13/90	9.0×10^{-10}	8.5×10^{-10}
Area 6, Bottled Water	11/19/90	6.0×10^{-10}	7.7×10^{-10}
Area 6, Bottled Water	11/26/90	-1.5×10^{-10}	8.5×10^{-10}
Area 6, Bottled Water	12/03/90	1.0×10^{-9}	8.3×10^{-10}
Area 6, Bottled Water	12/11/90	5.7×10^{-10}	8.1×10^{-10}
Area 6, Bottled Water	12/17/90	7.6×10^{-10}	7.7×10^{-10}
Area 6, Bottled Water	12/24/90	2.8×10^{-10}	8.8×10^{-10}
Area 6, Cafeteria	01/02/90	1.0×10^{-8}	1.0×10^{-9}
Area 6, Cafeteria	01/08/90	9.9×10^{-9}	9.8×10^{-10}
Area 6, Cafeteria	01/16/90	1.2×10^{-8}	1.1×10^{-9}
Area 6, Cafeteria	01/23/90	9.2×10^{-9}	8.2×10^{-7}
Area 6, Cafeteria	01/29/90	1.0×10^{-8}	1.1×10^{-9}
Area 6, Cafeteria	02/05/90	9.7×10^{-9}	1.2×10^{-9}
Area 6, Cafeteria	02/12/90	9.1×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	02/20/90	9.0×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	02/26/90	9.2×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	03/05/90	8.8×10^{-9}	1.1×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Cafeteria	03/12/90	6.6×10^{-9}	2.5×10^{-9}
Area 6, Cafeteria	03/19/90	1.0×10^{-8}	1.1×10^{-9}
Area 6, Cafeteria	03/26/90	9.4×10^{-9}	1.2×10^{-9}
Area 6, Cafeteria	04/02/90	1.0×10^{-8}	1.2×10^{-9}
Area 6, Cafeteria	04/09/90	8.4×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	04/16/90	5.3×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	04/23/90	9.4×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	04/30/90	9.9×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	05/07/90	9.1×10^{-9}	1.7×10^{-9}
Area 6, Cafeteria	05/14/90	9.4×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	05/21/90	1.0×10^{-8}	1.2×10^{-9}
Area 6, Cafeteria	05/29/90	7.9×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	06/05/90	9.4×10^{-9}	9.4×10^{-10}
Area 6, Cafeteria	06/11/90	8.2×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	06/18/90	8.4×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	06/25/90	3.0×10^{-9}	9.9×10^{-10}
Area 6, Cafeteria	07/02/90	9.0×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	07/09/90	6.0×10^{-9}	4.7×10^{-9}
Area 6, Cafeteria	07/16/90	7.1×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	07/23/90	6.8×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	07/30/90	8.1×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	08/06/90	1.3×10^{-8}	3.5×10^{-9}
Area 6, Cafeteria	08/13/90	9.7×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	08/20/90	1.1×10^{-8}	1.0×10^{-9}
Area 6, Cafeteria	08/27/90	1.1×10^{-8}	1.1×10^{-9}
Area 6, Cafeteria	09/04/90	8.9×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	09/10/90	6.4×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	09/17/90	9.8×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	09/24/90	9.5×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	10/01/90	4.8×10^{-9}	9.9×10^{-10}
Area 6, Cafeteria	10/08/90	1.4×10^{-9}	9.1×10^{-10}
Area 6, Cafeteria	10/18/90	9.1×10^{-9}	1.6×10^{-9}
Area 6, Cafeteria	10/22/90	9.7×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	10/29/90	8.9×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	11/05/90	8.3×10^{-9}	1.1×10^{-9}
Area 6, Cafeteria	11/13/90	9.9×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	11/19/90	1.0×10^{-8}	1.1×10^{-9}
Area 6, Cafeteria	11/26/90	9.8×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	12/03/90	1.0×10^{-8}	1.1×10^{-9}
Area 6, Cafeteria	12/11/90	9.2×10^{-9}	9.9×10^{-10}
Area 6, Cafeteria	12/17/90	7.6×10^{-9}	1.0×10^{-9}
Area 6, Cafeteria	12/24/90	7.6×10^{-9}	1.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Decontamination Pad	01/10/90	1.7×10^{-7}	5.7×10^{-8}
Area 6, Decontamination Pad	02/08/90	6.2×10^{-8}	5.2×10^{-8}
Area 6, Decontamination Pad	03/14/90	5.8×10^{-8}	5.1×10^{-8}
Area 6, Decontamination Pad	04/20/90	1.4×10^{-7}	5.1×10^{-8}
Area 6, Decontamination Pad	05/10/90	2.3×10^{-7}	5.0×10^{-8}
Area 6, Decontamination Pad	06/21/90	9.1×10^{-8}	5.1×10^{-8}
Area 6, Decontamination Pad	07/17/90	1.8×10^{-7}	4.9×10^{-8}
Area 6, Decontamination Pad	08/01/90	6.8×10^{-8}	2.8×10^{-8}
Area 6, Decontamination Pad	09/05/90	1.9×10^{-6}	6.4×10^{-7}
Area 6, Decontamination Pad	10/10/90	7.6×10^{-8}	2.6×10^{-8}
Area 6, Decontamination Pad	11/08/90	2.8×10^{-7}	2.8×10^{-8}
Area 6, Decontamination Pad	12/05/90	1.2×10^{-7}	4.9×10^{-8}
Area 6, Sewage	03/14/90	5.2×10^{-8}	1.8×10^{-9}
Area 6, Sewage	05/10/90	3.8×10^{-8}	1.3×10^{-9}
Area 6, Sewage	07/12/90	4.4×10^{-8}	2.6×10^{-9}
Area 6, Sewage	10/12/90	3.5×10^{-8}	1.1×10^{-9}
Area 6, Well 3 Reservoir	01/04/90	7.4×10^{-9}	9.5×10^{-10}
Area 6, Well 3 Reservoir	02/01/90	6.9×10^{-9}	9.5×10^{-10}
Area 6, Well 3 Reservoir	03/08/90	9.9×10^{-10}	2.7×10^{-10}
Area 6, Well 3 Reservoir	04/20/90	1.1×10^{-8}	1.1×10^{-9}
Area 6, Well 3 Reservoir	05/04/90	1.2×10^{-8}	1.4×10^{-9}
Area 6, Well 3 Reservoir	06/08/90	1.8×10^{-8}	1.4×10^{-9}
Area 6, Well 3 Reservoir	07/10/90	7.2×10^{-9}	9.5×10^{-10}
Area 6, Well 3 Reservoir	08/01/90	1.1×10^{-8}	1.0×10^{-9}
Area 6, Well 3 Reservoir	09/05/90	1.1×10^{-8}	9.2×10^{-10}
Area 6, Well 3 Reservoir	10/22/90	1.3×10^{-8}	1.0×10^{-9}
Area 6, Well 3 Reservoir	11/01/90	1.4×10^{-8}	1.0×10^{-9}
Area 6, Well 3 Reservoir	12/05/90	1.3×10^{-8}	9.3×10^{-10}
Area 6, Well 4	01/04/90	7.7×10^{-9}	9.6×10^{-10}
Area 6, Well 4	02/07/90	5.9×10^{-9}	1.1×10^{-9}
Area 6, Well 4	03/05/90	6.7×10^{-9}	1.1×10^{-9}
Area 6, Well 4	04/26/90	6.9×10^{-9}	1.0×10^{-9}
Area 6, Well 4	05/16/90	5.6×10^{-9}	9.9×10^{-10}
Area 6, Well 4	06/07/90	6.8×10^{-9}	1.1×10^{-9}
Area 6, Well 4	07/10/90	5.6×10^{-9}	1.3×10^{-9}
Area 6, Well 4	08/16/90	7.6×10^{-9}	9.7×10^{-10}
Area 6, Well 4	09/10/90	7.4×10^{-9}	8.4×10^{-10}
Area 6, Well 4	10/04/90	8.7×10^{-9}	9.3×10^{-10}
Area 6, Well 4	11/21/90	8.5×10^{-9}	1.0×10^{-9}
Area 6, Well 4	12/10/90	9.4×10^{-9}	9.9×10^{-10}
Area 6, Well C	02/07/90	1.5×10^{-8}	1.1×10^{-9}
Area 6, Well C	03/05/90	1.2×10^{-8}	2.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well C	04/26/90	1.8×10^{-8}	1.1×10^{-9}
Area 6, Well C	05/16/90	1.3×10^{-8}	3.7×10^{-9}
Area 6, Well C	06/07/90	1.6×10^{-8}	1.2×10^{-9}
Area 6, Well C	07/10/90	1.6×10^{-8}	1.3×10^{-9}
Area 6, Well C	08/16/90	1.7×10^{-8}	9.8×10^{-10}
Area 6, Well C	09/10/90	1.7×10^{-8}	9.1×10^{-10}
Area 6, Well C	10/04/90	4.7×10^{-9}	9.4×10^{-10}
Area 6, Well C	10/04/90	3.8×10^{-9}	9.0×10^{-10}
Area 6, Well C	11/21/90	1.9×10^{-8}	1.1×10^{-9}
Area 6, Well C	12/10/90	1.8×10^{-8}	1.1×10^{-9}
Area 6, Well C1	02/07/90	1.7×10^{-8}	1.1×10^{-9}
Area 6, Well C1	03/05/90	1.3×10^{-8}	3.1×10^{-9}
Area 6, Well C1	05/16/90	1.4×10^{-8}	2.9×10^{-9}
Area 6, Well C1	06/07/90	1.6×10^{-8}	1.2×10^{-9}
Area 6, Well C1	07/10/90	1.5×10^{-8}	1.3×10^{-9}
Area 6, Well C1	08/16/90	1.6×10^{-8}	1.1×10^{-9}
Area 6, Well C1	09/10/90	1.8×10^{-8}	8.9×10^{-10}
Area 6, Well C1	10/04/90	4.9×10^{-9}	8.9×10^{-10}
Area 6, Well C1	10/04/90	5.1×10^{-9}	9.0×10^{-10}
Area 6, Well C1	11/21/90	2.0×10^{-8}	1.1×10^{-9}
Area 6, Well C1	12/10/90	1.9×10^{-8}	1.1×10^{-9}
Area 6, Well C1 Reservoir	01/04/90	7.1×10^{-9}	9.6×10^{-10}
Area 6, Well C1 Reservoir	02/01/90	1.8×10^{-8}	1.1×10^{-9}
Area 6, Well C1 Reservoir	03/08/90	5.5×10^{-9}	1.1×10^{-9}
Area 6, Well C1 Reservoir	04/20/90	1.5×10^{-8}	1.1×10^{-9}
Area 6, Well C1 Reservoir	05/04/90	1.1×10^{-8}	1.2×10^{-9}
Area 6, Well C1 Reservoir	06/08/90	1.2×10^{-8}	1.2×10^{-9}
Area 6, Well C1 Reservoir	07/05/90	1.0×10^{-8}	1.0×10^{-9}
Area 6, Well C1 Reservoir	08/01/90	8.8×10^{-9}	1.2×10^{-9}
Area 6, Well C1 Reservoir	09/05/90	1.3×10^{-8}	1.0×10^{-9}
Area 6, Well C1 Reservoir	10/10/90	1.1×10^{-8}	1.0×10^{-9}
Area 6, Well C1 Reservoir	11/01/90	1.2×10^{-8}	1.0×10^{-9}
Area 6, Well C1 Reservoir	12/05/90	1.2×10^{-8}	1.0×10^{-9}
Area 6, Yucca Stream No. 2	04/20/90	2.1×10^{-8}	1.7×10^{-9}
Area 7, Reitmann Seep	01/08/90	2.8×10^{-8}	1.0×10^{-9}
Area 7, Reitmann Seep	02/22/90	3.3×10^{-8}	1.1×10^{-9}
Area 7, Reitmann Seep	03/01/90	1.9×10^{-8}	9.5×10^{-10}
Area 7, Reitmann Seep	04/03/90	6.0×10^{-8}	1.8×10^{-9}
Area 7, Reitmann Seep	05/03/90	7.9×10^{-8}	8.3×10^{-9}
Area 7, Reitmann Seep	06/05/90	1.1×10^{-7}	3.7×10^{-9}
Area 7, Reitmann Seep	07/06/90	2.5×10^{-7}	2.7×10^{-8}
Area 7, Reitmann Seep	08/01/90	7.0×10^{-8}	6.3×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 7, Reitmann Seep	09/05/90	1.7×10^{-8}	9.9×10^{-10}
Area 7, Reitmann Seep	10/10/90	3.2×10^{-8}	1.0×10^{-9}
Area 7, Reitmann Seep	11/01/90	5.4×10^{-8}	1.6×10^{-9}
Area 7, Reitmann Seep	12/05/90	6.7×10^{-8}	1.9×10^{-9}
Area 12, Cafeteria	01/02/90	4.3×10^{-9}	9.3×10^{-10}
Area 12, Cafeteria	01/08/90	3.6×10^{-9}	9.1×10^{-10}
Area 12, Cafeteria	01/16/90	5.2×10^{-9}	1.7×10^{-9}
Area 12, Cafeteria	01/23/90	1.8×10^{-9}	9.0×10^{-10}
Area 12, Cafeteria	01/29/90	4.1×10^{-9}	9.1×10^{-10}
Area 12, Cafeteria	02/05/90	3.9×10^{-9}	9.4×10^{-10}
Area 12, Cafeteria	02/12/90	5.7×10^{-9}	1.0×10^{-9}
Area 12, Cafeteria	02/20/90	3.9×10^{-9}	9.7×10^{-10}
Area 12, Cafeteria	02/28/90	3.0×10^{-9}	9.9×10^{-10}
Area 12, Cafeteria	03/05/90	4.0×10^{-10}	8.8×10^{-10}
Area 12, Cafeteria	03/12/90	3.2×10^{-9}	9.7×10^{-10}
Area 12, Cafeteria	03/19/90	3.6×10^{-9}	9.9×10^{-10}
Area 12, Cafeteria	03/26/90	3.2×10^{-9}	9.5×10^{-10}
Area 12, Cafeteria	04/02/90	3.4×10^{-9}	9.1×10^{-10}
Area 12, Cafeteria	04/09/90	3.0×10^{-9}	9.5×10^{-10}
Area 12, Cafeteria	04/16/90	1.6×10^{-9}	8.5×10^{-10}
Area 12, Cafeteria	04/23/90	4.7×10^{-9}	9.0×10^{-10}
Area 12, Cafeteria	04/30/90	3.6×10^{-9}	9.6×10^{-10}
Area 12, Cafeteria	05/07/90	3.4×10^{-9}	8.7×10^{-10}
Area 12, Cafeteria	05/14/90	2.7×10^{-9}	9.4×10^{-10}
Area 12, Cafeteria	05/21/90	2.6×10^{-9}	9.5×10^{-10}
Area 12, Cafeteria	05/29/90	2.9×10^{-9}	9.0×10^{-10}
Area 12, Cafeteria	06/04/90	2.6×10^{-9}	9.3×10^{-10}
Area 12, Cafeteria	06/11/90	3.0×10^{-9}	8.9×10^{-10}
Area 12, Cafeteria	06/19/90	3.0×10^{-9}	8.9×10^{-10}
Area 12, Cafeteria	06/25/90	3.4×10^{-9}	9.3×10^{-10}
Area 12, Cafeteria	07/02/90	1.9×10^{-9}	8.8×10^{-10}
Area 12, Cafeteria	07/09/90	1.9×10^{-9}	1.1×10^{-9}
Area 12, Cafeteria	07/16/90	3.4×10^{-9}	9.6×10^{-10}
Area 12, Cafeteria	07/23/90	1.5×10^{-9}	8.5×10^{-10}
Area 12, Cafeteria	07/30/90	2.6×10^{-9}	9.8×10^{-10}
Area 12, Cafeteria	08/05/90	3.9×10^{-9}	9.0×10^{-10}
Area 12, Cafeteria	08/14/90	3.5×10^{-9}	9.4×10^{-10}
Area 12, Cafeteria	08/20/90	5.7×10^{-9}	9.2×10^{-10}
Area 12, Cafeteria	08/28/90	4.7×10^{-9}	8.9×10^{-10}
Area 12, Cafeteria	09/04/90	4.3×10^{-9}	9.1×10^{-10}
Area 12, Cafeteria	09/10/90	3.9×10^{-9}	9.2×10^{-10}
Area 12, Cafeteria	09/17/90	3.2×10^{-9}	8.0×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Cafeteria	09/24/90	3.5×10^{-9}	8.9×10^{-10}
Area 12, Cafeteria	10/01/90	4.1×10^{-9}	9.6×10^{-10}
Area 12, Cafeteria	10/08/90	4.3×10^{-9}	1.0×10^{-9}
Area 12, Cafeteria	10/16/90	3.4×10^{-9}	1.0×10^{-9}
Area 12, Cafeteria	10/22/90	4.4×10^{-9}	1.0×10^{-9}
Area 12, Cafeteria	10/29/90	3.8×10^{-9}	1.0×10^{-9}
Area 12, Cafeteria	11/06/90	3.3×10^{-9}	1.0×10^{-9}
Area 12, Cafeteria	11/13/90	7.9×10^{-9}	9.8×10^{-10}
Area 12, Cafeteria	11/19/90	5.2×10^{-9}	9.2×10^{-10}
Area 12, Cafeteria	11/26/90	4.0×10^{-9}	8.9×10^{-10}
Area 12, Cafeteria	12/03/90	3.6×10^{-9}	9.1×10^{-10}
Area 12, Cafeteria	12/10/90	3.8×10^{-9}	9.3×10^{-10}
Area 12, Cafeteria	12/17/90	3.8×10^{-9}	9.6×10^{-10}
Area 12, Cafeteria	12/24/90	3.9×10^{-9}	1.0×10^{-9}
Area 12, Captain Jack Spring	03/09/90	8.4×10^{-9}	1.0×10^{-9}
Area 12, Captain Jack Spring	04/19/90	8.0×10^{-9}	9.9×10^{-10}
Area 12, Captain Jack Spring	05/08/90	5.3×10^{-9}	9.1×10^{-10}
Area 12, Captain Jack Spring	06/07/90	8.0×10^{-9}	1.1×10^{-9}
Area 12, Captain Jack Spring	07/12/90	1.1×10^{-8}	9.7×10^{-10}
Area 12, Captain Jack Spring	08/15/90	8.0×10^{-9}	9.7×10^{-10}
Area 12, Captain Jack Spring	09/26/90	8.8×10^{-9}	1.0×10^{-9}
Area 12, Captain Jack Spring	10/10/90	9.7×10^{-9}	1.0×10^{-9}
Area 12, Captain Jack Spring	12/07/90	7.1×10^{-9}	9.5×10^{-10}
Area 12, E Tunnel Effluent	01/10/90	1.8×10^{-7}	4.7×10^{-8}
Area 12, E Tunnel Effluent	02/14/90	1.5×10^{-7}	4.2×10^{-8}
Area 12, E Tunnel Effluent	03/09/90	6.1×10^{-7}	2.5×10^{-8}
Area 12, E Tunnel Effluent	04/03/90	1.3×10^{-7}	4.1×10^{-8}
Area 12, E Tunnel Effluent	05/03/90	1.3×10^{-7}	2.2×10^{-8}
Area 12, E Tunnel Effluent	06/06/90	5.8×10^{-8}	4.1×10^{-8}
Area 12, E Tunnel Effluent	07/12/90	1.2×10^{-7}	4.0×10^{-8}
Area 12, E Tunnel Effluent	08/02/90	6.0×10^{-8}	2.3×10^{-8}
Area 12, E Tunnel Effluent	09/07/90	1.3×10^{-7}	4.0×10^{-8}
Area 12, E Tunnel Effluent	10/16/90	1.7×10^{-7}	2.2×10^{-8}
Area 12, E Tunnel Effluent	11/09/90	1.0×10^{-7}	2.2×10^{-8}
Area 12, E Tunnel Effluent	12/05/90	9.2×10^{-8}	4.1×10^{-8}
Area 12, Gold Meadows	04/11/90	1.1×10^{-7}	1.3×10^{-9}
Area 12, Gold Meadows	05/02/90	3.2×10^{-8}	9.7×10^{-10}
Area 12, Gold Meadows	06/01/90	3.0×10^{-8}	9.7×10^{-10}
Area 12, N Tunnel Effluent	01/10/90	5.0×10^{-8}	4.7×10^{-8}
Area 12, N Tunnel Effluent	02/14/90	2.9×10^{-6}	4.2×10^{-8}
Area 12, N Tunnel Effluent	03/09/90	2.3×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Effluent	04/03/90	8.0×10^{-9}	4.2×10^{-8}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, N Tunnel Effluent	05/03/90	3.0×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Effluent	06/06/90	-2.7×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Effluent	07/12/90	3.7×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Effluent	08/02/90	1.2×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Effluent	09/07/90	3.8×10^{-8}	3.9×10^{-8}
Area 12, N Tunnel Effluent	10/16/90	4.8×10^{-8}	2.2×10^{-8}
Area 12, N Tunnel Effluent	11/16/90	4.0×10^{-8}	2.2×10^{-8}
Area 12, N Tunnel Effluent	12/05/90	3.7×10^{-7}	4.1×10^{-8}
Area 12, N Tunnel Pond No. 1	01/10/90	6.5×10^{-8}	4.9×10^{-8}
Area 12, N Tunnel Pond No. 1	02/14/90	3.7×10^{-8}	4.3×10^{-8}
Area 12, N Tunnel Pond No. 1	03/09/90	1.8×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Pond No. 1	04/03/90	3.6×10^{-8}	4.2×10^{-8}
Area 12, N Tunnel Pond No. 1	05/03/90	1.7×10^{-8}	2.2×10^{-8}
Area 12, N Tunnel Pond No. 1	06/06/90	4.6×10^{-8}	4.3×10^{-8}
Area 12, N Tunnel Pond No. 1	07/12/90	1.0×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 1	08/02/90	1.1×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Pond No. 1	09/07/90	5.9×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 1	10/16/90	2.0×10^{-8}	2.2×10^{-8}
Area 12, N Tunnel Pond No. 1	11/16/90	3.2×10^{-8}	2.2×10^{-8}
Area 12, N Tunnel Pond No. 1	12/05/90	3.2×10^{-7}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 2	01/10/90	5.3×10^{-8}	4.7×10^{-8}
Area 12, N Tunnel Pond No. 2	02/14/90	3.8×10^{-8}	4.3×10^{-8}
Area 12, N Tunnel Pond No. 2	03/09/90	1.1×10^{-7}	2.4×10^{-8}
Area 12, N Tunnel Pond No. 2	04/03/90	2.2×10^{-8}	4.2×10^{-8}
Area 12, N Tunnel Pond No. 2	05/03/90	1.4×10^{-8}	2.4×10^{-8}
Area 12, N Tunnel Pond No. 2	06/06/90	5.2×10^{-8}	4.1×10^{-8}
Area 12, N Tunnel Pond No. 2	07/12/90	1.0×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 2	08/02/90	1.1×10^{-8}	4.3×10^{-8}
Area 12, N Tunnel Pond No. 2	09/07/90	4.4×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 2	10/16/90	1.5×10^{-8}	2.1×10^{-8}
Area 12, N Tunnel Pond No. 2	11/16/90	2.8×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Pond No. 2	12/05/90	1.7×10^{-8}	4.1×10^{-8}
Area 12, N Tunnel Pond No. 3	01/10/90	4.0×10^{-8}	4.7×10^{-8}
Area 12, N Tunnel Pond No. 3	02/14/90	5.8×10^{-10}	4.3×10^{-8}
Area 12, N Tunnel Pond No. 3	03/09/90	2.7×10^{-7}	2.7×10^{-8}
Area 12, N Tunnel Pond No. 3	04/03/90	2.4×10^{-8}	4.3×10^{-8}
Area 12, N Tunnel Pond No. 3	05/03/90	1.9×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Pond No. 3	06/06/90	1.1×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 3	07/12/90	3.0×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 3	08/02/90	2.9×10^{-9}	2.4×10^{-8}
Area 12, N Tunnel Pond No. 3	09/07/90	6.5×10^{-8}	4.0×10^{-8}
Area 12, N Tunnel Pond No. 3	10/18/90	2.9×10^{-8}	2.2×10^{-8}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, N Tunnel Pond No. 3	11/16/90	4.2×10^{-8}	2.3×10^{-8}
Area 12, N Tunnel Pond No. 3	12/05/90	1.9×10^{-8}	4.2×10^{-8}
Area 12, Sewage	03/14/90	1.8×10^{-8}	1.1×10^{-9}
Area 12, Sewage	05/11/90	2.3×10^{-8}	1.0×10^{-9}
Area 12, Sewage	07/12/90	2.4×10^{-8}	1.0×10^{-9}
Area 12, Sewage	10/18/90	2.7×10^{-8}	1.1×10^{-9}
Area 12, T Tunnel Effluent	01/10/90	4.3×10^{-7}	4.8×10^{-8}
Area 12, T Tunnel Effluent	02/14/90	3.8×10^{-7}	4.2×10^{-8}
Area 12, T Tunnel Effluent	03/09/90	3.3×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Effluent	04/11/90	3.7×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Effluent	05/09/90	2.9×10^{-7}	4.2×10^{-8}
Area 12, T Tunnel Effluent	06/06/90	3.5×10^{-7}	4.0×10^{-8}
Area 12, T Tunnel Effluent	07/12/90	3.2×10^{-7}	4.0×10^{-8}
Area 12, T Tunnel Effluent	08/02/90	2.7×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Effluent	09/07/90	3.1×10^{-7}	4.0×10^{-8}
Area 12, T Tunnel Effluent	10/16/90	3.1×10^{-7}	2.2×10^{-8}
Area 12, T Tunnel Effluent	11/09/90	2.6×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Effluent	12/05/90	2.6×10^{-7}	4.0×10^{-8}
Area 12, T Tunnel Pond No. 1	01/10/90	1.1×10^{-6}	4.9×10^{-8}
Area 12, T Tunnel Pond No. 1	02/14/90	3.4×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Pond No. 1	03/09/90	3.2×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Pond No. 1	04/11/90	5.2×10^{-7}	4.2×10^{-8}
Area 12, T Tunnel Pond No. 1	05/09/90	3.5×10^{-7}	4.3×10^{-8}
Area 12, T Tunnel Pond No. 1	06/06/90	3.3×10^{-7}	4.0×10^{-8}
Area 12, T Tunnel Pond No. 1	07/12/90	3.6×10^{-7}	4.0×10^{-8}
Area 12, T Tunnel Pond No. 1	08/02/90	2.2×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Pond No. 1	09/07/90	2.6×10^{-7}	3.9×10^{-8}
Area 12, T Tunnel Pond No. 1	10/16/90	3.1×10^{-7}	2.1×10^{-8}
Area 12, T Tunnel Pond No. 1	11/09/90	2.4×10^{-7}	2.2×10^{-8}
Area 12, T Tunnel Pond No. 1	12/05/90	2.1×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Pond No. 2	01/10/90	3.5×10^{-7}	4.7×10^{-8}
Area 12, T Tunnel Pond No. 2	02/14/90	2.7×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Pond No. 2	03/09/90	3.2×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Pond No. 2	04/11/90	3.4×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Pond No. 2	05/09/90	3.5×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Pond No. 2	06/06/90	3.5×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Pond No. 2	07/12/90	3.5×10^{-7}	4.1×10^{-8}
Area 12, T Tunnel Pond No. 2	08/02/90	2.5×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Pond No. 2	09/07/90	2.4×10^{-7}	4.0×10^{-8}
Area 12, T Tunnel Pond No. 2	10/16/90	3.1×10^{-7}	2.2×10^{-8}
Area 12, T Tunnel Pond No. 2	11/09/90	2.4×10^{-7}	2.3×10^{-8}
Area 12, T Tunnel Pond No. 2	12/05/90	2.3×10^{-7}	4.1×10^{-8}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, White Rock Spring	01/09/90	3.5×10^{-9}	9.5×10^{-10}
Area 12, White Rock Spring	02/01/90	1.3×10^{-8}	1.0×10^{-9}
Area 12, White Rock Spring	03/01/90	1.0×10^{-8}	1.1×10^{-9}
Area 12, White Rock Spring	04/09/90	1.5×10^{-8}	1.1×10^{-9}
Area 12, White Rock Spring	05/03/90	2.3×10^{-8}	2.1×10^{-9}
Area 12, White Rock Spring	06/08/90	1.5×10^{-8}	1.1×10^{-9}
Area 12, White Rock Spring	07/23/90	2.6×10^{-8}	1.2×10^{-9}
Area 12, White Rock Spring	08/07/90	1.1×10^{-8}	1.1×10^{-9}
Area 12, White Rock Spring	09/25/90	1.0×10^{-8}	9.5×10^{-10}
Area 12, White Rock Spring	10/10/90	1.0×10^{-8}	1.0×10^{-9}
Area 12, White Rock Spring	11/09/90	2.5×10^{-8}	1.1×10^{-9}
Area 12, White Rock Spring	12/03/90	1.3×10^{-8}	1.1×10^{-9}
Area 15, Well Ue15d	01/04/90	2.1×10^{-8}	8.8×10^{-10}
Area 15, Well Ue15d	02/07/90	2.1×10^{-8}	1.1×10^{-9}
Area 15, Well Ue15d	03/05/90	1.9×10^{-8}	1.1×10^{-9}
Area 15, Well Ue15d	04/20/90	2.2×10^{-8}	1.1×10^{-9}
Area 15, Well Ue15d	05/16/90	1.2×10^{-8}	2.4×10^{-9}
Area 15, Well Ue15d	06/07/90	1.8×10^{-8}	1.1×10^{-9}
Area 15, Well Ue15d	07/10/90	1.0×10^{-8}	1.2×10^{-9}
Area 15, Well Ue15d	08/16/90	2.1×10^{-8}	9.5×10^{-10}
Area 15, Well Ue15d	09/10/90	1.9×10^{-8}	8.6×10^{-10}
Area 15, Well Ue15d	10/04/90	2.2×10^{-8}	9.6×10^{-10}
Area 15, Well Ue15d	11/21/90	2.2×10^{-8}	1.0×10^{-9}
Area 15, Well Ue15d	12/10/90	2.1×10^{-8}	1.1×10^{-9}
Area 16, Tippipah Spring	01/10/90	3.5×10^{-8}	4.8×10^{-8}
Area 16, Tippipah Spring	02/08/90	-4.2×10^{-9}	2.0×10^{-8}
Area 16, Tippipah Spring	03/13/90	5.0×10^{-9}	1.0×10^{-9}
Area 16, Tippipah Spring	04/09/90	4.5×10^{-9}	1.0×10^{-9}
Area 16, Tippipah Spring	05/08/90	6.8×10^{-9}	9.8×10^{-10}
Area 16, Tippipah Spring	06/01/90	6.1×10^{-9}	9.7×10^{-10}
Area 16, Tippipah Spring	07/13/90	6.4×10^{-9}	1.0×10^{-9}
Area 16, Tippipah Spring	08/03/90	6.4×10^{-9}	1.0×10^{-9}
Area 16, Tippipah Spring	09/07/90	8.0×10^{-9}	9.2×10^{-10}
Area 16, Tippipah Spring	10/09/90	5.5×10^{-9}	9.9×10^{-10}
Area 16, Tippipah Spring	11/01/90	8.6×10^{-9}	9.9×10^{-10}
Area 16, Tippipah Spring	12/06/90	7.1×10^{-9}	9.7×10^{-10}
Area 16, Well 16d	01/04/90	8.3×10^{-9}	9.5×10^{-10}
Area 16, Well 16d	02/07/90	7.9×10^{-9}	1.1×10^{-9}
Area 16, Well 16d	03/05/90	7.0×10^{-9}	1.1×10^{-9}
Area 16, Well 16d	04/20/90	9.2×10^{-9}	1.1×10^{-9}
Area 16, Well 16d	05/16/90	5.1×10^{-9}	1.0×10^{-9}
Area 16, Well 16d	06/07/90	8.3×10^{-9}	1.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 16, Well 16d	07/10/90	6.9×10^{-9}	1.3×10^{-9}
Area 16, Well 16d	08/16/90	9.2×10^{-9}	9.7×10^{-10}
Area 16, Well 16d	09/10/90	1.0×10^{-8}	8.7×10^{-10}
Area 16, Well 16d	10/04/90	5.5×10^{-9}	9.0×10^{-10}
Area 16, Well 16d	11/21/90	9.0×10^{-9}	1.0×10^{-9}
Area 16, Well 16d	12/10/90	8.8×10^{-9}	1.1×10^{-9}
Area 18, Camp 17 Reservoir	01/16/90	1.7×10^{-8}	9.3×10^{-10}
Area 18, Camp 17 Reservoir	02/02/90	4.5×10^{-9}	9.5×10^{-10}
Area 18, Camp 17 Reservoir	03/01/90	4.5×10^{-9}	1.1×10^{-9}
Area 18, Camp 17 Reservoir	04/03/90	7.4×10^{-9}	1.0×10^{-9}
Area 18, Camp 17 Reservoir	05/02/90	3.2×10^{-9}	9.5×10^{-10}
Area 18, Camp 17 Reservoir	06/01/90	3.9×10^{-9}	9.2×10^{-10}
Area 18, Camp 17 Reservoir	07/17/90	1.8×10^{-9}	1.0×10^{-9}
Area 18, Camp 17 Reservoir	08/03/90	5.9×10^{-9}	1.0×10^{-9}
Area 18, Camp 17 Reservoir	09/07/90	4.1×10^{-9}	9.0×10^{-10}
Area 18, Camp 17 Reservoir	10/05/90	5.8×10^{-9}	1.1×10^{-9}
Area 18, Camp 17 Reservoir	11/01/90	4.3×10^{-9}	1.0×10^{-9}
Area 18, Camp 17 Reservoir	12/03/90	5.5×10^{-9}	9.9×10^{-10}
Area 18, Well 8	01/04/90	3.7×10^{-9}	1.2×10^{-9}
Area 18, Well 8	02/07/90	2.5×10^{-9}	9.5×10^{-10}
Area 18, Well 8	03/05/90	2.7×10^{-9}	9.9×10^{-10}
Area 18, Well 8	04/03/90	6.4×10^{-9}	1.0×10^{-9}
Area 18, Well 8	04/26/90	3.2×10^{-9}	9.4×10^{-10}
Area 18, Well 8	05/16/90	3.9×10^{-9}	8.6×10^{-10}
Area 18, Well 8	06/07/90	3.8×10^{-9}	9.5×10^{-10}
Area 18, Well 8	07/10/90	2.2×10^{-9}	1.2×10^{-9}
Area 18, Well 8	08/16/90	4.4×10^{-9}	9.2×10^{-10}
Area 18, Well 8	09/10/90	4.0×10^{-9}	8.5×10^{-10}
Area 18, Well 8	10/04/90	3.8×10^{-9}	9.2×10^{-10}
Area 18, Well 8	11/21/90	4.8×10^{-9}	9.7×10^{-10}
Area 18, Well 8	12/10/90	4.7×10^{-9}	1.0×10^{-9}
Area 18, Well 8 Reservoir	01/16/90	3.1×10^{-9}	9.9×10^{-10}
Area 18, Well 8 Reservoir	02/02/90	4.0×10^{-9}	9.2×10^{-10}
Area 18, Well 8 Reservoir	03/01/90	5.1×10^{-9}	9.9×10^{-10}
Area 18, Well 8 Reservoir	05/02/90	5.0×10^{-9}	1.1×10^{-9}
Area 18, Well 8 Reservoir	06/01/90	4.8×10^{-9}	9.3×10^{-10}
Area 18, Well 8 Reservoir	10/05/90	9.8×10^{-9}	9.4×10^{-10}
Area 18, Well 8 Reservoir	12/05/90	8.7×10^{-9}	9.9×10^{-10}
Area 19, Well U19c	01/04/90	4.6×10^{-9}	8.8×10^{-10}
Area 19, Well U19c	02/07/90	2.4×10^{-9}	1.0×10^{-9}
Area 19, Well U19c	03/05/90	1.0×10^{-9}	1.0×10^{-9}
Area 19, Well U19c	04/26/90	2.3×10^{-9}	9.0×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 19, Well U19c	05/16/90	7.7×10^{-10}	8.8×10^{-10}
Area 19, Well U19c	06/07/90	1.1×10^{-9}	9.4×10^{-10}
Area 19, Well U19c	07/10/90	6.5×10^{-10}	1.0×10^{-9}
Area 19, Well U19c	08/16/90	1.4×10^{-9}	9.3×10^{-10}
Area 19, Well U19c	09/10/90	1.4×10^{-9}	8.6×10^{-10}
Area 19, Well U19c	10/04/90	2.1×10^{-9}	9.2×10^{-10}
Area 19, Well U19c	11/21/90	2.6×10^{-9}	9.3×10^{-10}
Area 19, Well U19c	12/10/90	1.6×10^{-9}	9.9×10^{-10}
Area 19, Well U19c Reservoir	01/09/90	7.9×10^{-9}	9.6×10^{-10}
Area 19, Well U19c Reservoir	02/02/90	1.2×10^{-9}	8.4×10^{-10}
Area 19, Well U19c Reservoir	03/05/90	1.4×10^{-9}	9.5×10^{-10}
Area 19, Well U19c Reservoir	04/09/90	1.4×10^{-9}	9.6×10^{-10}
Area 19, Well U19c Reservoir	05/02/90	8.0×10^{-10}	1.0×10^{-9}
Area 19, Well U19c Reservoir	06/04/90	9.4×10^{-10}	8.9×10^{-10}
Area 19, Well U19c Reservoir	07/17/90	3.0×10^{-9}	1.0×10^{-9}
Area 19, Well U19c Reservoir	08/03/90	7.3×10^{-10}	1.0×10^{-9}
Area 19, Well U19c Reservoir	09/07/90	2.6×10^{-9}	8.9×10^{-10}
Area 19, Well U19c Reservoir	10/04/90	2.1×10^{-9}	8.9×10^{-10}
Area 19, Well U19c Reservoir	11/01/90	3.1×10^{-9}	9.8×10^{-10}
Area 19, Well U19c Reservoir	12/03/90	2.8×10^{-9}	9.6×10^{-10}
Area 20, Water Well	01/04/90	1.6×10^{-9}	8.4×10^{-10}
Area 20, Water Well	02/07/90	3.5×10^{-8}	1.1×10^{-9}
Area 20, Water Well	03/05/90	1.2×10^{-8}	1.1×10^{-9}
Area 20, Water Well	04/26/90	2.3×10^{-9}	9.9×10^{-10}
Area 20, Water Well	05/16/90	3.7×10^{-9}	9.7×10^{-10}
Area 20, Water Well	06/07/90	4.7×10^{-9}	1.0×10^{-9}
Area 20, Water Well	07/10/90	2.4×10^{-8}	1.3×10^{-9}
Area 20, Water Well	08/16/90	1.6×10^{-8}	9.4×10^{-10}
Area 20, Water Well	09/10/90	4.2×10^{-9}	9.1×10^{-10}
Area 20, Water Well	10/04/90	1.1×10^{-8}	1.0×10^{-9}
Area 20, Water Well	11/21/90	3.8×10^{-8}	1.0×10^{-9}
Area 20, Water Well	12/10/90	5.7×10^{-9}	1.0×10^{-9}
Area 20, Well 20A Reservoir	01/09/90	1.1×10^{-8}	1.1×10^{-9}
Area 20, Well 20A Reservoir	02/02/90	3.1×10^{-8}	1.0×10^{-9}
Area 20, Well 20A Reservoir	03/05/90	2.4×10^{-8}	1.2×10^{-9}
Area 20, Well 20A Reservoir	04/09/90	6.6×10^{-10}	8.9×10^{-10}
Area 20, Well 20A Reservoir	05/02/90	2.4×10^{-9}	9.8×10^{-10}
Area 20, Well 20A Reservoir	06/04/90	2.4×10^{-9}	9.3×10^{-10}
Area 20, Well 20A Reservoir	07/17/90	1.2×10^{-8}	1.0×10^{-9}
Area 20, Well 20A Reservoir	08/03/90	2.0×10^{-9}	1.0×10^{-9}
Area 20, Well 20A Reservoir	09/07/90	8.0×10^{-9}	9.6×10^{-10}
Area 20, Well 20A Reservoir	10/04/90	1.5×10^{-8}	9.5×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Well 20A Reservoir	11/01/90	1.2×10^{-8}	1.0×10^{-9}
Area 20, Well 20A Reservoir	12/03/90	2.3×10^{-8}	1.1×10^{-9}
Area 23, Army Well No. 1	01/04/90	7.6×10^{-9}	8.7×10^{-10}
Area 23, Army Well No. 1	02/07/90	5.8×10^{-9}	1.0×10^{-9}
Area 23, Army Well No. 1	03/05/90	6.7×10^{-9}	1.0×10^{-9}
Area 23, Army Well No. 1	04/20/90	6.0×10^{-9}	9.4×10^{-10}
Area 23, Army Well No. 1	05/16/90	6.2×10^{-9}	9.8×10^{-10}
Area 23, Army Well No. 1	06/05/90	5.2×10^{-9}	9.8×10^{-10}
Area 23, Army Well No. 1	07/12/90	6.0×10^{-9}	1.3×10^{-9}
Area 23, Army Well No. 1	08/16/90	6.7×10^{-9}	9.5×10^{-10}
Area 23, Army Well No. 1	09/10/90	6.2×10^{-9}	8.5×10^{-10}
Area 23, Army Well No. 1	10/04/90	7.5×10^{-9}	9.5×10^{-10}
Area 23, Army Well No. 1	11/21/90	7.7×10^{-9}	9.5×10^{-10}
Area 23, Army Well No. 1	12/10/90	7.6×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	01/02/90	4.7×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	01/08/90	2.2×10^{-9}	9.2×10^{-10}
Area 23, Cafeteria	01/16/90	2.4×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	01/23/90	3.3×10^{-9}	8.4×10^{-10}
Area 23, Cafeteria	01/29/90	6.3×10^{-10}	8.7×10^{-10}
Area 23, Cafeteria	02/05/90	2.7×10^{-9}	9.9×10^{-10}
Area 23, Cafeteria	02/12/90	2.6×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	02/20/90	5.2×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	02/27/90	2.4×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	03/06/90	2.6×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	03/12/90	2.1×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	03/19/90	2.1×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	03/19/90	2.6×10^{-9}	9.8×10^{-10}
Area 23, Cafeteria	04/02/90	3.9×10^{-9}	9.8×10^{-10}
Area 23, Cafeteria	04/09/90	2.5×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	04/16/90	2.2×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	04/23/90	4.0×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	04/30/90	1.8×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	05/07/90	3.4×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	05/14/90	2.4×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	05/22/90	2.0×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	05/29/90	2.8×10^{-9}	8.7×10^{-10}
Area 23, Cafeteria	06/04/90	2.8×10^{-9}	9.5×10^{-10}
Area 23, Cafeteria	06/11/90	3.2×10^{-9}	9.5×10^{-10}
Area 23, Cafeteria	06/18/90	4.3×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	06/25/90	3.9×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	07/02/90	4.6×10^{-9}	9.8×10^{-10}
Area 23, Cafeteria	07/09/90	5.5×10^{-9}	1.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Cafeteria	07/16/90	2.2×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	07/16/90	5.7×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	07/30/90	2.7×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	08/05/90	7.9×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	08/13/90	4.8×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	08/20/90	8.2×10^{-9}	9.7×10^{-10}
Area 23, Cafeteria	08/27/90	3.1×10^{-9}	1.5×10^{-9}
Area 23, Cafeteria	09/04/90	5.2×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	09/10/90	8.1×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	09/17/90	6.5×10^{-9}	9.7×10^{-10}
Area 23, Cafeteria	09/24/90	4.1×10^{-9}	9.6×10^{-10}
Area 23, Cafeteria	10/01/90	3.0×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	10/08/90	4.5×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	10/15/90	3.4×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	10/22/90	7.4×10^{-9}	1.1×10^{-9}
Area 23, Cafeteria	10/29/90	6.0×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	11/05/90	5.0×10^{-9}	9.6×10^{-10}
Area 23, Cafeteria	11/13/90	5.8×10^{-9}	9.3×10^{-10}
Area 23, Cafeteria	11/19/90	4.7×10^{-9}	9.5×10^{-10}
Area 23, Cafeteria	11/26/90	5.3×10^{-9}	9.4×10^{-10}
Area 23, Cafeteria	12/03/90	5.1×10^{-9}	1.0×10^{-9}
Area 23, Cafeteria	12/10/90	3.1×10^{-9}	9.5×10^{-10}
Area 23, Cafeteria	12/17/90	4.5×10^{-9}	9.6×10^{-10}
Area 23, Cafeteria	12/24/90	5.8×10^{-9}	9.5×10^{-10}
Area 23, H&S Sump	04/25/90	1.8×10^{-6}	1.1×10^{-8}
Area 23, H&S Sump	08/17/90	1.5×10^{-8}	2.0×10^{-9}
Area 23, H&S Sump	09/12/90	2.1×10^{-8}	9.3×10^{-10}
Area 23, Sewage	03/06/90	1.4×10^{-8}	1.0×10^{-9}
Area 23, Sewage	05/10/90	1.6×10^{-8}	1.2×10^{-9}
Area 23, Sewage	07/10/90	1.1×10^{-8}	1.2×10^{-9}
Area 23, Sewage	10/12/90	1.4×10^{-8}	1.0×10^{-9}
Area 23, Swimming Pool	03/29/90	4.3×10^{-9}	1.0×10^{-9}
Area 23, Swimming Pool	04/03/90	1.9×10^{-9}	1.1×10^{-9}
Area 23, Swimming Pool	05/04/90	3.0×10^{-9}	1.1×10^{-9}
Area 23, Swimming Pool	06/08/90	3.3×10^{-9}	1.1×10^{-9}
Area 23, Swimming Pool	07/10/90	5.3×10^{-9}	1.1×10^{-9}
Area 23, Swimming Pool	08/07/90	2.7×10^{-9}	1.1×10^{-9}
Area 23, Swimming Pool	09/11/90	4.9×10^{-9}	9.9×10^{-10}
Area 23, Swimming Pool	10/10/90	5.0×10^{-9}	9.2×10^{-10}
Area 23, Swimming Pool	11/26/90	6.8×10^{-9}	9.9×10^{-10}
Area 23, Swimming Pool	12/05/90	6.6×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	01/02/90	6.3×10^{-9}	9.9×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Building 4221	01/08/90	4.9×10^{-9}	9.4×10^{-10}
Area 25, Building 4221	01/16/90	5.2×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	01/23/90	5.0×10^{-9}	7.8×10^{-7}
Area 25, Building 4221	01/29/90	4.7×10^{-9}	9.3×10^{-10}
Area 25, Building 4221	02/05/90	5.3×10^{-9}	9.8×10^{-10}
Area 25, Building 4221	02/12/90	2.9×10^{-9}	9.7×10^{-10}
Area 25, Building 4221	02/20/90	5.0×10^{-9}	9.7×10^{-10}
Area 25, Building 4221	02/27/90	4.2×10^{-9}	9.7×10^{-10}
Area 25, Building 4221	03/06/90	4.0×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	03/12/90	5.7×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	03/19/90	5.4×10^{-9}	9.4×10^{-10}
Area 25, Building 4221	03/19/90	4.7×10^{-9}	9.6×10^{-10}
Area 25, Building 4221	04/02/90	4.0×10^{-9}	1.2×10^{-9}
Area 25, Building 4221	04/09/90	6.0×10^{-9}	1.2×10^{-9}
Area 25, Building 4221	04/16/90	4.4×10^{-9}	1.2×10^{-9}
Area 25, Building 4221	04/23/90	4.9×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	04/30/90	2.2×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	05/07/90	5.3×10^{-9}	9.5×10^{-10}
Area 25, Building 4221	05/14/90	4.3×10^{-9}	1.2×10^{-9}
Area 25, Building 4221	05/22/90	4.8×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	05/29/90	3.5×10^{-9}	9.9×10^{-10}
Area 25, Building 4221	06/04/90	3.9×10^{-9}	9.2×10^{-10}
Area 25, Building 4221	06/11/90	4.8×10^{-9}	9.3×10^{-10}
Area 25, Building 4221	06/18/90	4.4×10^{-9}	9.4×10^{-10}
Area 25, Building 4221	06/25/90	5.2×10^{-9}	9.4×10^{-10}
Area 25, Building 4221	07/02/90	4.7×10^{-9}	9.6×10^{-10}
Area 25, Building 4221	07/09/90	4.0×10^{-9}	9.2×10^{-10}
Area 25, Building 4221	07/16/90	3.2×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	07/16/90	5.1×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	07/30/90	5.1×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	08/05/90	5.1×10^{-9}	9.2×10^{-10}
Area 25, Building 4221	08/13/90	5.4×10^{-9}	9.4×10^{-10}
Area 25, Building 4221	08/20/90	7.1×10^{-9}	9.5×10^{-10}
Area 25, Building 4221	08/27/90	5.3×10^{-9}	1.5×10^{-9}
Area 25, Building 4221	09/04/90	5.8×10^{-9}	9.1×10^{-10}
Area 25, Building 4221	09/10/90	5.9×10^{-9}	9.5×10^{-10}
Area 25, Building 4221	09/17/90	9.2×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	09/24/90	5.5×10^{-9}	8.9×10^{-10}
Area 25, Building 4221	10/01/90	6.3×10^{-9}	9.2×10^{-10}
Area 25, Building 4221	10/08/90	5.0×10^{-9}	9.6×10^{-10}
Area 25, Building 4221	10/15/90	4.5×10^{-9}	9.6×10^{-10}
Area 25, Building 4221	10/22/90	3.8×10^{-9}	9.8×10^{-10}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Building 4221	10/29/90	6.3×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	11/05/90	5.5×10^{-9}	1.0×10^{-9}
Area 25, Building 4221	11/13/90	5.2×10^{-9}	9.7×10^{-10}
Area 25, Building 4221	11/19/90	4.9×10^{-9}	9.6×10^{-10}
Area 25, Building 4221	11/26/90	7.2×10^{-9}	9.3×10^{-10}
Area 25, Building 4221	12/03/90	4.2×10^{-9}	9.8×10^{-10}
Area 25, Building 4221	12/10/90	5.1×10^{-9}	8.9×10^{-10}
Area 25, Building 4221	12/17/90	6.0×10^{-9}	9.7×10^{-10}
Area 25, Building 4221	12/24/90	5.5×10^{-9}	9.8×10^{-10}
Area 25, Well J-11 Reservoir	01/04/90	6.4×10^{-9}	9.5×10^{-10}
Area 25, Well J-11 Reservoir	02/02/90	5.8×10^{-9}	9.7×10^{-10}
Area 25, Well J-11 Reservoir	03/08/90	5.3×10^{-9}	1.0×10^{-9}
Area 25, Well J-11 Reservoir	04/03/90	6.5×10^{-9}	9.8×10^{-10}
Area 25, Well J-11 Reservoir	05/04/90	6.7×10^{-9}	1.0×10^{-9}
Area 25, Well J-11 Reservoir	06/13/90	6.7×10^{-9}	9.7×10^{-10}
Area 25, Well J-11 Reservoir	07/05/90	7.2×10^{-9}	9.7×10^{-10}
Area 25, Well J-11 Reservoir	08/07/90	6.0×10^{-9}	1.0×10^{-9}
Area 25, Well J-11 Reservoir	09/05/90	6.5×10^{-9}	1.0×10^{-9}
Area 25, Well J-11 Reservoir	10/09/90	6.9×10^{-9}	9.4×10^{-10}
Area 25, Well J-11 Reservoir	11/02/90	7.1×10^{-9}	1.0×10^{-9}
Area 25, Well J-11 Reservoir	12/05/90	7.5×10^{-9}	1.0×10^{-9}
Area 25, Well J-12	01/04/90	6.1×10^{-9}	8.6×10^{-10}
Area 25, Well J-12	02/07/90	4.5×10^{-9}	1.1×10^{-9}
Area 25, Well J-12	03/05/90	4.7×10^{-9}	9.8×10^{-10}
Area 25, Well J-12	04/20/90	1.2×10^{-8}	9.7×10^{-10}
Area 25, Well J-12	05/16/90	5.0×10^{-9}	9.8×10^{-10}
Area 25, Well J-12	06/05/90	4.5×10^{-9}	9.0×10^{-10}
Area 25, Well J-12	07/12/90	2.2×10^{-9}	1.2×10^{-9}
Area 25, Well J-12	08/16/90	5.9×10^{-9}	9.3×10^{-10}
Area 25, Well J-12	09/10/90	5.2×10^{-9}	8.2×10^{-10}
Area 25, Well J-12	10/04/90	4.8×10^{-9}	9.1×10^{-10}
Area 25, Well J-12	11/21/90	6.6×10^{-9}	9.7×10^{-10}
Area 25, Well J-12	12/10/90	5.8×10^{-9}	1.1×10^{-9}
Area 25, Well J-12 Reservoir	01/04/90	5.9×10^{-9}	9.2×10^{-10}
Area 25, Well J-12 Reservoir	02/02/90	7.2×10^{-9}	9.7×10^{-10}
Area 25, Well J-12 Reservoir	03/08/90	5.5×10^{-9}	1.0×10^{-9}
Area 25, Well J-12 Reservoir	04/03/90	7.6×10^{-9}	1.2×10^{-9}
Area 25, Well J-12 Reservoir	05/04/90	4.9×10^{-9}	9.4×10^{-10}
Area 25, Well J-12 Reservoir	06/13/90	6.6×10^{-9}	1.1×10^{-9}
Area 25, Well J-12 Reservoir	07/05/90	7.3×10^{-9}	9.8×10^{-10}
Area 25, Well J-12 Reservoir	08/01/90	7.8×10^{-9}	1.1×10^{-9}
Area 25, Well J-12 Reservoir	09/05/90	3.4×10^{-8}	1.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Well J-12 Reservoir	09/05/90	3.4×10^{-8}	9.8×10^{-10}
Area 25, Well J-12 Reservoir	10/09/90	3.9×10^{-9}	9.6×10^{-10}
Area 25, Well J-12 Reservoir	11/02/90	6.8×10^{-9}	1.0×10^{-9}
Area 25, Well J-12 Reservoir	12/05/90	5.7×10^{-9}	9.3×10^{-10}
Area 25, Well J-13	01/04/90	5.2×10^{-9}	8.4×10^{-10}
Area 25, Well J-13	02/07/90	1.7×10^{-9}	1.0×10^{-9}
Area 25, Well J-13	03/05/90	4.5×10^{-9}	9.8×10^{-10}
Area 25, Well J-13	04/20/90	4.9×10^{-9}	9.3×10^{-10}
Area 25, Well J-13	05/16/90	4.4×10^{-9}	9.3×10^{-10}
Area 25, Well J-13	06/05/90	3.9×10^{-9}	9.3×10^{-10}
Area 25, Well J-13	07/12/90	4.8×10^{-9}	1.3×10^{-9}
Area 25, Well J-13	08/16/90	5.7×10^{-9}	1.0×10^{-9}
Area 25, Well J-13	09/10/90	5.5×10^{-9}	8.2×10^{-10}
Area 25, Well J-13	10/04/90	4.7×10^{-9}	9.1×10^{-10}
Area 25, Well J-13	11/21/90	4.7×10^{-9}	9.4×10^{-10}
Area 25, Well J-13	12/10/90	6.2×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	01/02/90	9.2×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	01/08/90	5.3×10^{-9}	9.4×10^{-10}
Area 27, Cafeteria	01/16/90	7.9×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	01/23/90	8.1×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	01/29/90	1.1×10^{-8}	1.1×10^{-9}
Area 27, Cafeteria	02/05/90	9.7×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	02/12/90	9.6×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	02/20/90	9.6×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	02/27/90	9.6×10^{-9}	1.2×10^{-9}
Area 27, Cafeteria	03/06/90	9.4×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	03/12/90	9.2×10^{-9}	2.4×10^{-9}
Area 27, Cafeteria	03/19/90	9.2×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	03/19/90	9.7×10^{-9}	2.9×10^{-9}
Area 27, Cafeteria	04/02/90	1.0×10^{-8}	1.1×10^{-9}
Area 27, Cafeteria	04/09/90	9.1×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	04/16/90	1.1×10^{-8}	1.2×10^{-9}
Area 27, Cafeteria	04/23/90	1.3×10^{-8}	1.1×10^{-9}
Area 27, Cafeteria	04/30/90	5.4×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	05/07/90	8.5×10^{-9}	2.8×10^{-9}
Area 27, Cafeteria	05/14/90	8.7×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	05/22/90	9.7×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	05/29/90	1.0×10^{-8}	1.0×10^{-9}
Area 27, Cafeteria	06/04/90	9.6×10^{-9}	9.7×10^{-10}
Area 27, Cafeteria	06/11/90	9.6×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	06/18/90	7.2×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	06/25/90	9.8×10^{-9}	1.0×10^{-9}

Attachment C.5 (Gross Beta in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 27, Cafeteria	07/02/90	1.0×10^{-8}	1.0×10^{-9}
Area 27, Cafeteria	07/09/90	4.9×10^{-9}	3.2×10^{-9}
Area 27, Cafeteria	07/16/90	8.8×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	07/16/90	8.8×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	07/30/90	9.3×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	08/05/90	2.7×10^{-9}	9.5×10^{-10}
Area 27, Cafeteria	08/13/90	9.7×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	08/20/90	1.2×10^{-8}	1.0×10^{-9}
Area 27, Cafeteria	08/27/90	1.1×10^{-8}	1.6×10^{-9}
Area 27, Cafeteria	09/04/90	1.1×10^{-8}	1.0×10^{-9}
Area 27, Cafeteria	09/10/90	7.4×10^{-9}	9.9×10^{-10}
Area 27, Cafeteria	09/17/90	5.3×10^{-9}	9.8×10^{-10}
Area 27, Cafeteria	09/24/90	8.8×10^{-9}	9.5×10^{-10}
Area 27, Cafeteria	10/01/90	5.9×10^{-9}	9.6×10^{-10}
Area 27, Cafeteria	10/08/90	2.1×10^{-9}	9.4×10^{-10}
Area 27, Cafeteria	10/15/90	9.5×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	10/22/90	4.5×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	10/29/90	9.7×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	11/05/90	9.6×10^{-9}	1.0×10^{-9}
Area 27, Cafeteria	11/13/90	1.1×10^{-8}	1.0×10^{-9}
Area 27, Cafeteria	11/19/90	1.0×10^{-8}	1.0×10^{-9}
Area 27, Cafeteria	11/26/90	9.6×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	12/03/90	1.1×10^{-8}	1.1×10^{-9}
Area 27, Cafeteria	12/10/90	9.3×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	12/17/90	8.9×10^{-9}	1.1×10^{-9}
Area 27, Cafeteria	12/24/90	7.4×10^{-9}	9.7×10^{-10}
Area 29, Topopah Spring	02/09/90	1.0×10^{-8}	1.0×10^{-9}
Area 29, Topopah Spring	03/15/90	9.8×10^{-9}	9.9×10^{-10}
Area 29, Topopah Spring	04/11/90	1.3×10^{-8}	1.0×10^{-9}
Area 29, Topopah Spring	05/09/90	7.9×10^{-9}	1.0×10^{-9}
Area 29, Topopah Spring	06/06/90	1.1×10^{-8}	9.7×10^{-10}
Area 29, Topopah Spring	08/23/90	1.5×10^{-8}	9.5×10^{-10}
Area 29, Topopah Spring	09/12/90	1.0×10^{-7}	2.8×10^{-9}
Area 29, Topopah Spring	10/17/90	3.8×10^{-8}	1.2×10^{-9}
Area 29, Topopah Spring	12/06/90	1.5×10^{-8}	1.0×10^{-9}

Attachment C.6 Gamma-Emitting Radionuclides in Water - 1990

Sampling Location	Sampling Date	µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 6, Decontamination Pond	04/20/90	4.0×10^{-8}	1.9×10^{-8}	^{208}Tl
Area 6, Decontamination Pond	04/20/90	1.2×10^{-7}	5.2×10^{-8}	^{131}I
Area 6, Decontamination Pond	05/10/90	4.1×10^{-8}	3.2×10^{-8}	^{208}Tl
Area 6, Decontamination Pond	07/17/90	1.1×10^{-7}	4.0×10^{-8}	^{131}I
Area 6, Decontamination Pond	09/05/90	7.7×10^{-6}	5.8×10^{-6}	^{208}Tl
Area 6, Decontamination Pond	11/08/90	3.6×10^{-7}	9.7×10^{-8}	^{131}I
Area 6, Decontamination Pond	11/08/90	1.4×10^{-7}	7.7×10^{-8}	^{141}Ce
Area 6, Decontamination Pond	12/05/90	1.5×10^{-7}	6.0×10^{-8}	^{131}I
Area 6, Decontamination Pond	12/05/90	7.8×10^{-8}	4.9×10^{-8}	^{103}Ru
Area 12, E Tunnel Effluent	01/10/90	1.8×10^{-7}	2.9×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	02/14/90	2.7×10^{-8}	6.2×10^{-8}	^{126}Sb
Area 12, E Tunnel Effluent	02/14/90	1.3×10^{-7}	3.9×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	04/03/90	4.7×10^{-7}	3.4×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	04/03/90	5.4×10^{-7}	1.3×10^{-7}	^{208}Tl
Area 12, E Tunnel Effluent	05/03/90	2.1×10^{-5}	7.6×10^{-6}	^{137}Cs
Area 12, E Tunnel Effluent	06/06/90	1.0×10^{-7}	3.7×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	07/12/90	7.8×10^{-8}	4.0×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	08/02/90	2.0×10^{-7}	2.8×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	09/07/90	1.8×10^{-7}	4.8×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	09/07/90	3.7×10^{-8}	3.1×10^{-8}	^{139}Ce
Area 12, E Tunnel Effluent	10/16/90	4.0×10^{-7}	3.8×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	11/09/90	1.1×10^{-7}	6.0×10^{-8}	^{137}Cs
Area 12, E Tunnel Effluent	12/05/90	1.1×10^{-7}	3.3×10^{-8}	^{137}Cs
Area 12, N Tunnel Effluent	09/07/90	5.3×10^{-8}	5.9×10^{-8}	^{208}Tl
Area 12, N Tunnel Effluent	12/05/90	1.6×10^{-7}	4.9×10^{-8}	^{137}Cs
Area 12, N Tunnel Pond No. 2	04/03/90	6.9×10^{-7}	1.3×10^{-7}	^{208}Tl
Area 12, N Tunnel Pond No. 3	04/03/90	3.1×10^{-8}	2.1×10^{-8}	^{208}Tl
Area 12, N Tunnel Pond No. 3	12/05/90	3.8×10^{-8}	5.1×10^{-8}	^{208}Tl
Area 12, T Tunnel Effluent	01/10/90	5.6×10^{-8}	4.3×10^{-8}	^{137}Cs
Area 12, T Tunnel Effluent	02/14/90	4.6×10^{-7}	2.3×10^{-7}	^{106}Ru
Area 12, T Tunnel Effluent	04/11/90	6.7×10^{-8}	2.3×10^{-8}	^{137}Cs
Area 12, T Tunnel Effluent	04/11/90	3.4×10^{-8}	2.3×10^{-8}	^{103}Ru
Area 12, T Tunnel Effluent	05/09/90	3.8×10^{-8}	1.5×10^{-8}	^{137}Cs
Area 12, T Tunnel Effluent	06/06/90	5.6×10^{-8}	4.0×10^{-8}	^{137}Cs
Area 12, T Tunnel Effluent	06/06/90	9.4×10^{-8}	1.3×10^{-7}	^{228}Ac
Area 12, T Tunnel Effluent	07/12/90	3.5×10^{-8}	3.1×10^{-8}	^{137}Cs
Area 12, T Tunnel Effluent	09/07/90	5.0×10^{-8}	2.5×10^{-8}	^{137}Cs
Area 12, T Tunnel Effluent	10/16/90	7.2×10^{-7}	3.5×10^{-7}	^{106}Ru
Area 12, T Tunnel Effluent	10/16/90	7.9×10^{-8}	3.4×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	01/10/90	1.8×10^{-7}	4.1×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	01/10/90	1.1×10^{-6}	4.1×10^{-7}	^{106}Ru
Area 12, T Tunnel Pond No. 1	02/14/90	2.7×10^{-7}	2.6×10^{-7}	^{106}Ru

Attachment C.6 Gamma-Emitting Radionuclides in Water - 1990

Sampling Location	Sampling Date	µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 12, T Tunnel Pond No. 1	04/11/90	1.4×10^{-7}	3.4×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	05/09/90	3.7×10^{-8}	3.6×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	05/09/90	5.2×10^{-8}	3.7×10^{-8}	^{208}Tl
Area 12, T Tunnel Pond No. 1	07/12/90	5.0×10^{-8}	3.0×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	09/07/90	5.8×10^{-8}	3.5×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	10/16/90	1.1×10^{-7}	2.4×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	11/09/90	5.3×10^{-8}	5.3×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 1	12/05/90	6.7×10^{-8}	4.2×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	01/10/90	2.6×10^{-7}	1.2×10^{-7}	^{106}Ru
Area 12, T Tunnel Pond No. 2	01/10/90	4.5×10^{-8}	8.9×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	02/14/90	5.1×10^{-7}	2.4×10^{-7}	^{106}Ru
Area 12, T Tunnel Pond No. 2	02/14/90	4.0×10^{-8}	3.9×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	04/11/90	5.7×10^{-7}	1.8×10^{-7}	^{106}Ru
Area 12, T Tunnel Pond No. 2	04/11/90	4.5×10^{-8}	3.0×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	05/09/90	4.8×10^{-8}	3.0×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	06/06/90	1.0×10^{-7}	7.0×10^{-8}	^{125}Sb
Area 12, T Tunnel Pond No. 2	06/06/90	4.6×10^{-8}	3.8×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	07/12/90	6.9×10^{-8}	1.1×10^{-7}	^{125}Sb
Area 12, T Tunnel Pond No. 2	07/12/90	5.8×10^{-8}	5.2×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	08/02/90	1.5×10^{-6}	2.0×10^{-6}	^{97}Zr
Area 12, T Tunnel Pond No. 2	10/16/90	8.1×10^{-8}	3.0×10^{-8}	^{137}Cs
Area 12, T Tunnel Pond No. 2	12/05/90	4.7×10^{-8}	4.3×10^{-8}	^{137}Cs
Area 29, Topopah Spring	09/12/90	9.4×10^{-8}	2.9×10^{-8}	^{137}Cs

Attachment C.7 Tritium in Water - 1990

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	01/08/90	-5.0×10^{-8}	2.8×10^{-7}
Area 1, Building 101	01/16/90	4.9×10^{-7}	3.5×10^{-7}
Area 1, Building 101	01/23/90	2.4×10^{-8}	2.8×10^{-7}
Area 1, Building 101	01/29/90	8.3×10^{-8}	3.5×10^{-7}
Area 1, Building 101	02/05/90	6.8×10^{-8}	2.8×10^{-7}
Area 1, Building 101	02/12/90	3.2×10^{-7}	3.4×10^{-7}
Area 1, Building 101	02/20/90	6.9×10^{-9}	2.8×10^{-7}
Area 1, Building 101	02/28/90	1.1×10^{-7}	2.9×10^{-7}
Area 1, Building 101	03/05/90	2.7×10^{-7}	2.9×10^{-7}
Area 1, Building 101	03/12/90	7.3×10^{-9}	2.8×10^{-7}
Area 1, Building 101	03/19/90	2.0×10^{-7}	2.8×10^{-7}
Area 1, Building 101	03/26/90	1.6×10^{-8}	2.7×10^{-8}
Area 1, Building 101	04/02/90	7.7×10^{-8}	2.7×10^{-7}
Area 1, Building 101	04/09/90	7.8×10^{-8}	2.7×10^{-7}
Area 1, Building 101	04/16/90	2.3×10^{-7}	2.9×10^{-7}
Area 1, Building 101	04/23/90	3.0×10^{-7}	2.9×10^{-7}
Area 1, Building 101	04/30/90	2.2×10^{-7}	2.6×10^{-7}
Area 1, Building 101	05/07/90	1.9×10^{-7}	2.9×10^{-7}
Area 1, Building 101	05/14/90	1.9×10^{-7}	2.7×10^{-7}
Area 1, Building 101	05/21/90	1.3×10^{-7}	2.9×10^{-7}
Area 1, Building 101	05/29/90	-1.0×10^{-7}	2.9×10^{-7}
Area 1, Building 101	06/04/90	-1.1×10^{-7}	2.8×10^{-7}
Area 1, Building 101	06/11/90	8.1×10^{-8}	2.9×10^{-7}
Area 1, Building 101	06/19/90	4.9×10^{-7}	2.8×10^{-7}
Area 1, Building 101	06/25/90	9.3×10^{-8}	2.7×10^{-7}
Area 1, Building 101	07/02/90	4.2×10^{-7}	2.7×10^{-7}
Area 1, Building 101	07/09/90	1.6×10^{-7}	2.8×10^{-7}
Area 1, Building 101	07/16/90	5.1×10^{-8}	2.9×10^{-7}
Area 1, Building 101	07/23/90	-1.1×10^{-7}	2.9×10^{-7}
Area 1, Building 101	07/30/90	-5.6×10^{-8}	3.0×10^{-7}
Area 1, Building 101	08/05/90	1.3×10^{-7}	2.9×10^{-7}
Area 1, Building 101	08/14/90	2.1×10^{-8}	2.8×10^{-7}
Area 1, Building 101	08/20/90	-3.8×10^{-8}	2.8×10^{-7}
Area 1, Building 101	08/28/90	-4.5×10^{-8}	3.0×10^{-7}
Area 1, Building 101	09/04/90	-2.6×10^{-7}	2.9×10^{-7}
Area 1, Building 101	09/10/90	1.3×10^{-7}	3.0×10^{-7}
Area 1, Building 101	09/17/90	4.9×10^{-8}	3.0×10^{-7}
Area 1, Building 101	09/24/90	-5.2×10^{-8}	4.6×10^{-7}
Area 1, Building 101	10/01/90	-1.2×10^{-7}	3.1×10^{-7}
Area 1, Building 101	10/08/90	3.1×10^{-8}	2.8×10^{-7}
Area 1, Building 101	10/16/90	2.4×10^{-10}	2.9×10^{-7}
Area 1, Building 101	10/22/90	2.8×10^{-7}	3.0×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	μCi/mL Concentration	μCi/mL Standard Deviation (s)
Area 1, Building 101	10/29/90	7.0×10^{-8}	3.9×10^{-7}
Area 1, Building 101	11/06/90	7.6×10^{-8}	2.7×10^{-7}
Area 1, Building 101	11/13/90	2.9×10^{-8}	3.0×10^{-7}
Area 1, Building 101	11/19/90	-2.8×10^{-7}	2.8×10^{-7}
Area 1, Building 101	11/26/90	-1.7×10^{-7}	2.9×10^{-7}
Area 1, Building 101	12/03/90	-2.6×10^{-8}	3.1×10^{-7}
Area 1, Building 101	12/10/90	-4.4×10^{-7}	3.0×10^{-7}
Area 1, Building 101	12/17/90	-1.9×10^{-7}	3.0×10^{-7}
Area 2, Mud Plant Reservoir	01/08/90	2.2×10^{-7}	3.5×10^{-7}
Area 2, Mud Plant Reservoir	02/01/90	1.6×10^{-7}	3.0×10^{-7}
Area 2, Mud Plant Reservoir	03/14/90	6.4×10^{-7}	2.9×10^{-7}
Area 2, Mud Plant Reservoir	04/03/90	7.7×10^{-8}	2.8×10^{-7}
Area 2, Mud Plant Reservoir	05/02/90	-2.0×10^{-8}	2.7×10^{-7}
Area 2, Mud Plant Reservoir	06/01/90	1.9×10^{-7}	2.9×10^{-7}
Area 2, Mud Plant Reservoir	07/10/90	2.8×10^{-7}	2.6×10^{-7}
Area 2, Mud Plant Reservoir	08/01/90	1.8×10^{-7}	2.9×10^{-7}
Area 2, Mud Plant Reservoir	09/05/90	2.8×10^{-8}	2.8×10^{-7}
Area 2, Mud Plant Reservoir	10/22/90	1.1×10^{-7}	3.0×10^{-7}
Area 2, Mud Plant Reservoir	11/01/90	2.1×10^{-7}	2.8×10^{-7}
Area 2, Mud Plant Reservoir	12/05/90	-2.6×10^{-7}	3.0×10^{-7}
Area 2, Restroom	01/02/90	-6.9×10^{-8}	2.9×10^{-7}
Area 2, Restroom	01/08/90	2.2×10^{-7}	3.5×10^{-7}
Area 2, Restroom	01/16/90	9.6×10^{-8}	2.8×10^{-7}
Area 2, Restroom	01/23/90	1.3×10^{-7}	2.8×10^{-7}
Area 2, Restroom	01/29/90	-1.4×10^{-7}	3.5×10^{-7}
Area 2, Restroom	02/05/90	1.6×10^{-7}	3.5×10^{-7}
Area 2, Restroom	02/12/90	4.6×10^{-7}	3.4×10^{-7}
Area 2, Restroom	02/20/90	4.8×10^{-8}	2.8×10^{-7}
Area 2, Restroom	02/26/90	-3.4×10^{-8}	2.8×10^{-7}
Area 2, Restroom	03/05/90	1.5×10^{-7}	2.9×10^{-7}
Area 2, Restroom	03/12/90	1.5×10^{-8}	2.8×10^{-7}
Area 2, Restroom	03/19/90	7.3×10^{-8}	2.8×10^{-7}
Area 2, Restroom	03/26/90	7.7×10^{-7}	3.0×10^{-7}
Area 2, Restroom	04/02/90	1.0×10^{-7}	2.7×10^{-7}
Area 2, Restroom	04/09/90	8.5×10^{-8}	2.7×10^{-7}
Area 2, Restroom	04/16/90	8.0×10^{-8}	2.9×10^{-7}
Area 2, Restroom	04/23/90	2.2×10^{-7}	2.9×10^{-7}
Area 2, Restroom	04/30/90	4.5×10^{-7}	2.6×10^{-7}
Area 2, Restroom	05/07/90	-6.5×10^{-8}	2.9×10^{-7}
Area 2, Restroom	05/14/90	8.7×10^{-8}	2.7×10^{-7}
Area 2, Restroom	05/21/90	1.7×10^{-7}	2.9×10^{-7}
Area 2, Restroom	05/29/90	-1.4×10^{-7}	2.9×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Restroom	06/05/90	1.0×10^{-7}	3.0×10^{-7}
Area 2, Restroom	06/11/90	2.6×10^{-7}	2.9×10^{-7}
Area 2, Restroom	06/18/90	2.6×10^{-7}	2.8×10^{-7}
Area 2, Restroom	06/25/90	1.3×10^{-7}	2.7×10^{-7}
Area 2, Restroom	07/02/90	1.1×10^{-8}	2.9×10^{-7}
Area 2, Restroom	07/09/90	3.5×10^{-7}	2.8×10^{-7}
Area 2, Restroom	07/16/90	8.5×10^{-8}	2.7×10^{-7}
Area 2, Restroom	07/23/90	5.3×10^{-8}	2.7×10^{-7}
Area 2, Restroom	07/30/90	-3.2×10^{-7}	3.0×10^{-7}
Area 2, Restroom	08/06/90	9.0×10^{-8}	2.7×10^{-7}
Area 2, Restroom	08/13/90	-3.4×10^{-9}	2.8×10^{-7}
Area 2, Restroom	08/20/90	1.2×10^{-7}	2.8×10^{-7}
Area 2, Restroom	08/27/90	-6.3×10^{-8}	3.0×10^{-7}
Area 2, Restroom	09/04/90	2.1×10^{-7}	2.7×10^{-7}
Area 2, Restroom	09/10/90	6.8×10^{-8}	3.0×10^{-7}
Area 2, Restroom	09/17/90	2.3×10^{-7}	3.0×10^{-7}
Area 2, Restroom	09/24/90	4.6×10^{-7}	4.6×10^{-7}
Area 2, Restroom	10/01/90	-3.7×10^{-8}	3.1×10^{-7}
Area 2, Restroom	10/08/90	1.7×10^{-7}	3.1×10^{-7}
Area 2, Restroom	10/18/90	-3.9×10^{-7}	3.0×10^{-7}
Area 2, Restroom	10/22/90	2.6×10^{-8}	3.0×10^{-7}
Area 2, Restroom	10/29/90	-1.9×10^{-7}	3.9×10^{-7}
Area 2, Restroom	11/05/90	2.7×10^{-8}	2.7×10^{-7}
Area 2, Restroom	11/13/90	1.3×10^{-7}	3.0×10^{-7}
Area 2, Restroom	11/19/90	-1.2×10^{-7}	2.8×10^{-7}
Area 2, Restroom	11/26/90	-3.1×10^{-7}	2.9×10^{-7}
Area 2, Restroom	12/03/90	-3.0×10^{-8}	2.9×10^{-7}
Area 2, Restroom	12/11/90	-3.3×10^{-8}	3.0×10^{-7}
Area 2, Restroom	12/17/90	-5.0×10^{-8}	2.9×10^{-7}
Area 2, Restroom	12/24/90	9.1×10^{-7}	3.1×10^{-7}
Area 2, Well 2	01/04/90	-5.7×10^{-8}	2.9×10^{-7}
Area 2, Well 2	02/07/90	-2.2×10^{-7}	3.5×10^{-7}
Area 2, Well 2	03/05/90	-2.0×10^{-7}	3.0×10^{-7}
Area 2, Well 2	04/20/90	1.6×10^{-7}	2.9×10^{-7}
Area 2, Well 2	05/16/90	2.4×10^{-7}	2.8×10^{-7}
Area 2, Well 2	06/07/90	3.5×10^{-7}	3.0×10^{-7}
Area 2, Well 2	07/10/90	4.7×10^{-8}	2.8×10^{-7}
Area 2, Well 2	08/16/90	7.6×10^{-9}	3.1×10^{-7}
Area 2, Well 2	09/10/90	6.0×10^{-8}	3.0×10^{-7}
Area 2, Well 2	10/04/90	-1.1×10^{-8}	2.8×10^{-7}
Area 2, Well 2	11/21/90	-1.6×10^{-7}	2.6×10^{-7}
Area 2, Well 2	12/10/90	4.4×10^{-8}	3.0×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Well 2 Reservoir	01/09/90	-1.4×10^{-7}	3.6×10^{-7}
Area 2, Well 2 Reservoir	02/01/90	5.5×10^{-8}	3.0×10^{-7}
Area 2, Well 2 Reservoir	03/14/90	1.1×10^{-7}	2.9×10^{-7}
Area 2, Well 2 Reservoir	04/03/90	6.7×10^{-9}	2.8×10^{-7}
Area 2, Well 2 Reservoir	05/02/90	1.9×10^{-7}	2.7×10^{-7}
Area 2, Well 2 Reservoir	06/01/90	6.6×10^{-8}	2.9×10^{-7}
Area 2, Well 2 Reservoir	07/10/90	3.9×10^{-7}	2.6×10^{-7}
Area 2, Well 2 Reservoir	08/13/90	4.1×10^{-8}	2.8×10^{-7}
Area 2, Well 2 Reservoir	09/05/90	-3.8×10^{-8}	2.8×10^{-7}
Area 2, Well 2 Reservoir	10/18/90	-1.5×10^{-7}	3.0×10^{-7}
Area 2, Well 2 Reservoir	11/01/90	-1.1×10^{-7}	2.8×10^{-7}
Area 2, Well 2 Reservoir	12/05/90	-2.1×10^{-7}	3.0×10^{-7}
Area 3, Cafeteria	01/02/90	1.6×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	01/08/90	5.9×10^{-8}	3.5×10^{-7}
Area 3, Cafeteria	01/16/90	1.8×10^{-8}	2.8×10^{-7}
Area 3, Cafeteria	01/23/90	2.0×10^{-7}	2.8×10^{-7}
Area 3, Cafeteria	01/29/90	7.7×10^{-8}	3.5×10^{-7}
Area 3, Cafeteria	02/05/90	5.9×10^{-8}	3.5×10^{-7}
Area 3, Cafeteria	02/12/90	1.1×10^{-7}	3.4×10^{-7}
Area 3, Cafeteria	02/20/90	1.5×10^{-7}	2.8×10^{-7}
Area 3, Cafeteria	02/26/90	-2.0×10^{-8}	2.8×10^{-7}
Area 3, Cafeteria	03/05/90	1.4×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	03/12/90	1.7×10^{-7}	2.8×10^{-7}
Area 3, Cafeteria	03/19/90	2.2×10^{-8}	2.8×10^{-7}
Area 3, Cafeteria	03/26/90	-2.0×10^{-9}	2.7×10^{-8}
Area 3, Cafeteria	04/02/90	2.8×10^{-7}	2.7×10^{-7}
Area 3, Cafeteria	04/09/90	8.1×10^{-8}	2.7×10^{-7}
Area 3, Cafeteria	04/16/90	5.5×10^{-8}	2.9×10^{-7}
Area 3, Cafeteria	04/23/90	1.8×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	04/30/90	2.2×10^{-7}	2.6×10^{-7}
Area 3, Cafeteria	05/07/90	-3.2×10^{-8}	2.9×10^{-7}
Area 3, Cafeteria	05/14/90	3.4×10^{-8}	2.7×10^{-7}
Area 3, Cafeteria	05/21/90	1.8×10^{-8}	2.9×10^{-7}
Area 3, Cafeteria	05/29/90	-1.7×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	06/05/90	-6.4×10^{-8}	3.0×10^{-7}
Area 3, Cafeteria	06/11/90	1.1×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	06/18/90	3.0×10^{-7}	2.8×10^{-7}
Area 3, Cafeteria	06/25/90	-4.8×10^{-8}	2.7×10^{-7}
Area 3, Cafeteria	07/02/90	3.1×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	07/09/90	2.2×10^{-7}	2.8×10^{-7}
Area 3, Cafeteria	07/16/90	1.2×10^{-7}	2.7×10^{-7}
Area 3, Cafeteria	07/23/90	1.8×10^{-7}	2.7×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Cafeteria	07/30/90	-1.1×10^{-8}	3.0×10^{-7}
Area 3, Cafeteria	08/06/90	2.3×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	08/13/90	2.7×10^{-8}	2.8×10^{-7}
Area 3, Cafeteria	08/20/90	8.2×10^{-8}	2.8×10^{-7}
Area 3, Cafeteria	08/27/90	-1.6×10^{-7}	3.0×10^{-7}
Area 3, Cafeteria	09/04/90	6.2×10^{-8}	2.7×10^{-7}
Area 3, Cafeteria	09/10/90	6.0×10^{-8}	3.0×10^{-7}
Area 3, Cafeteria	09/17/90	2.1×10^{-7}	3.0×10^{-7}
Area 3, Cafeteria	09/24/90	1.9×10^{-7}	4.6×10^{-7}
Area 3, Cafeteria	10/01/90	-1.7×10^{-7}	3.1×10^{-7}
Area 3, Cafeteria	10/08/90	5.7×10^{-8}	3.1×10^{-7}
Area 3, Cafeteria	10/18/90	-2.4×10^{-7}	3.0×10^{-7}
Area 3, Cafeteria	10/22/90	3.2×10^{-7}	3.0×10^{-7}
Area 3, Cafeteria	10/29/90	8.1×10^{-8}	3.9×10^{-7}
Area 3, Cafeteria	11/05/90	-4.5×10^{-8}	2.7×10^{-7}
Area 3, Cafeteria	11/13/90	4.3×10^{-8}	3.0×10^{-7}
Area 3, Cafeteria	11/19/90	-1.0×10^{-7}	2.8×10^{-7}
Area 3, Cafeteria	11/26/90	3.1×10^{-8}	2.9×10^{-7}
Area 3, Cafeteria	12/03/90	-3.5×10^{-7}	2.9×10^{-7}
Area 3, Cafeteria	12/11/90	2.1×10^{-7}	3.0×10^{-7}
Area 3, Cafeteria	12/17/90	1.1×10^{-8}	2.9×10^{-7}
Area 3, Cafeteria	12/24/90	-6.9×10^{-7}	3.1×10^{-7}
Area 3, Mud Plant Reservoir	01/09/90	-2.4×10^{-7}	3.5×10^{-7}
Area 3, Mud Plant Reservoir	02/01/90	-6.9×10^{-8}	3.0×10^{-7}
Area 3, Mud Plant Reservoir	03/08/90	-1.1×10^{-8}	3.0×10^{-7}
Area 3, Mud Plant Reservoir	04/20/90	1.3×10^{-8}	2.7×10^{-7}
Area 3, Mud Plant Reservoir	05/04/90	3.3×10^{-7}	2.9×10^{-7}
Area 3, Mud Plant Reservoir	06/21/90	-1.1×10^{-7}	2.7×10^{-7}
Area 3, Mud Plant Reservoir	07/13/90	2.3×10^{-7}	2.7×10^{-7}
Area 3, Mud Plant Reservoir	08/01/90	2.1×10^{-7}	2.9×10^{-7}
Area 3, Mud Plant Reservoir	09/05/90	9.0×10^{-8}	2.8×10^{-7}
Area 3, Mud Plant Reservoir	10/22/90	3.0×10^{-8}	3.0×10^{-7}
Area 3, Mud Plant Reservoir	11/02/90	-5.3×10^{-8}	2.8×10^{-7}
Area 3, Mud Plant Reservoir	12/05/90	-2.2×10^{-7}	3.0×10^{-7}
Area 3, Well A Reservoir	01/09/90	9.9×10^{-8}	3.5×10^{-7}
Area 3, Well A Reservoir	02/01/90	-4.7×10^{-8}	3.0×10^{-7}
Area 3, Well A Reservoir	03/08/90	-4.8×10^{-8}	3.0×10^{-7}
Area 3, Well A Reservoir	04/20/90	-1.2×10^{-7}	2.7×10^{-7}
Area 3, Well A Reservoir	05/04/90	-6.5×10^{-8}	2.9×10^{-7}
Area 3, Well A Reservoir	06/08/90	3.7×10^{-7}	2.9×10^{-7}
Area 3, Well A Reservoir	07/13/90	1.3×10^{-7}	2.7×10^{-7}
Area 3, Well A Reservoir	08/01/90	2.0×10^{-7}	2.9×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Well A Reservoir	09/05/90	2.7×10^{-7}	2.8×10^{-7}
Area 3, Well A Reservoir	10/22/90	3.4×10^{-8}	3.0×10^{-7}
Area 3, Well A Reservoir	11/01/90	8.8×10^{-8}	2.8×10^{-7}
Area 3, Well A Reservoir	12/05/90	-3.7×10^{-7}	3.0×10^{-7}
Area 5, Cane Spring	01/08/90	-1.5×10^{-7}	3.5×10^{-7}
Area 5, Cane Spring	02/08/90	6.1×10^{-8}	2.9×10^{-7}
Area 5, Cane Spring	03/06/90	-1.9×10^{-7}	3.0×10^{-7}
Area 5, Cane Spring	04/17/90	1.1×10^{-7}	2.9×10^{-7}
Area 5, Cane Spring	05/03/90	1.1×10^{-7}	2.9×10^{-7}
Area 5, Cane Spring	06/01/90	-2.0×10^{-7}	2.8×10^{-7}
Area 5, Cane Spring	07/12/90	5.4×10^{-8}	2.9×10^{-7}
Area 5, Cane Spring	08/10/90	1.6×10^{-7}	2.7×10^{-7}
Area 5, Cane Spring	09/26/90	1.8×10^{-7}	3.0×10^{-7}
Area 5, Cane Spring	10/11/90	-1.9×10^{-7}	2.9×10^{-7}
Area 5, Cane Spring	11/16/90	-1.0×10^{-7}	3.0×10^{-7}
Area 5, Cane Spring	12/06/90	1.4×10^{-7}	2.7×10^{-7}
Area 5, Ue5c Reservoir	01/04/90	1.1×10^{-7}	2.9×10^{-7}
Area 5, Ue5c Reservoir	01/08/90	3.3×10^{-9}	3.5×10^{-7}
Area 5, Ue5c Reservoir	02/01/90	-2.2×10^{-8}	3.0×10^{-7}
Area 5, Ue5c Reservoir	03/14/90	1.1×10^{-6}	2.9×10^{-7}
Area 5, Ue5c Reservoir	04/03/90	5.4×10^{-7}	2.8×10^{-7}
Area 5, Ue5c Reservoir	05/04/90	-6.8×10^{-8}	2.9×10^{-7}
Area 5, Ue5c Reservoir	06/08/90	6.3×10^{-7}	2.9×10^{-7}
Area 5, Ue5c Reservoir	07/05/90	3.6×10^{-7}	2.7×10^{-7}
Area 5, Ue5c Reservoir	08/01/90	-1.4×10^{-8}	2.8×10^{-7}
Area 5, Ue5c Reservoir	09/04/90	1.4×10^{-8}	2.7×10^{-7}
Area 5, Ue5c Reservoir	10/09/90	1.4×10^{-7}	2.7×10^{-7}
Area 5, Ue5c Reservoir	11/01/90	7.4×10^{-8}	2.8×10^{-7}
Area 5, Ue5c Reservoir	12/05/90	-2.0×10^{-7}	3.0×10^{-7}
Area 5, Well 5B Reservoir	01/04/90	8.3×10^{-8}	2.9×10^{-7}
Area 5, Well 5B Reservoir	02/01/90	-2.9×10^{-8}	3.0×10^{-7}
Area 5, Well 5B Reservoir	03/14/90	1.3×10^{-6}	2.9×10^{-7}
Area 5, Well 5B Reservoir	04/03/90	-2.1×10^{-7}	2.8×10^{-7}
Area 5, Well 5B Reservoir	05/04/90	-2.9×10^{-8}	2.9×10^{-7}
Area 5, Well 5B Reservoir	06/08/90	2.6×10^{-7}	2.9×10^{-7}
Area 5, Well 5B Reservoir	07/05/90	2.0×10^{-7}	2.7×10^{-7}
Area 5, Well 5B Reservoir	08/01/90	-10.0×10^{-8}	2.8×10^{-7}
Area 5, Well 5B Reservoir	09/04/90	-4.5×10^{-8}	2.7×10^{-7}
Area 5, Well 5B Reservoir	10/09/90	2.1×10^{-8}	2.7×10^{-7}
Area 5, Well 5B Reservoir	11/01/90	-4.9×10^{-8}	2.8×10^{-7}
Area 5, Well 5B Reservoir	12/05/90	-3.2×10^{-7}	3.0×10^{-7}
Area 5, Well 5C	01/04/90	-2.9×10^{-8}	2.9×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5C	02/07/90	2.1×10^{-7}	2.8×10^{-7}
Area 5, Well 5C	03/05/90	-1.5×10^{-8}	3.0×10^{-7}
Area 5, Well 5C	04/20/90	4.7×10^{-8}	2.9×10^{-7}
Area 5, Well 5C	05/16/90	1.3×10^{-7}	2.8×10^{-7}
Area 5, Well 5C	06/05/90	8.9×10^{-8}	2.9×10^{-7}
Area 5, Well 5C	07/12/90	1.2×10^{-7}	2.7×10^{-7}
Area 5, Well 5C	08/16/90	-1.1×10^{-7}	3.1×10^{-7}
Area 5, Well 5C	09/10/90	2.0×10^{-7}	3.0×10^{-7}
Area 5, Well 5C	10/04/90	4.0×10^{-8}	3.3×10^{-7}
Area 5, Well 5C	11/21/90	-1.1×10^{-7}	2.6×10^{-7}
Area 5, Well 5C	12/10/90	7.9×10^{-8}	3.0×10^{-7}
Area 5, Well Ue5c	02/07/90	-1.6×10^{-7}	3.5×10^{-7}
Area 5, Well Ue5c	03/05/90	-4.7×10^{-8}	3.0×10^{-7}
Area 5, Well Ue5c	04/20/90	1.3×10^{-7}	2.9×10^{-7}
Area 5, Well Ue5c	05/16/90	-1.1×10^{-6}	2.8×10^{-7}
Area 5, Well Ue5c	06/05/90	1.6×10^{-7}	2.9×10^{-7}
Area 5, Well Ue5c	07/12/90	7.5×10^{-8}	2.7×10^{-7}
Area 5, Well Ue5c	08/16/90	-6.0×10^{-8}	3.1×10^{-7}
Area 5, Well Ue5c	09/10/90	4.0×10^{-7}	3.0×10^{-7}
Area 5, Well Ue5c	10/04/90	1.3×10^{-7}	2.8×10^{-7}
Area 5, Well Ue5c	11/21/90	-1.1×10^{-7}	2.6×10^{-7}
Area 5, Well Ue5c	12/10/90	6.3×10^{-8}	3.0×10^{-7}
Area 6, Bottled Water	01/02/90	8.3×10^{-8}	2.9×10^{-7}
Area 6, Bottled Water	01/08/90	1.5×10^{-8}	3.0×10^{-7}
Area 6, Bottled Water	01/16/90	2.6×10^{-7}	3.5×10^{-7}
Area 6, Bottled Water	01/23/90	3.9×10^{-8}	2.8×10^{-7}
Area 6, Bottled Water	01/29/90	3.0×10^{-7}	3.5×10^{-7}
Area 6, Bottled Water	02/05/90	-1.7×10^{-7}	3.5×10^{-7}
Area 6, Bottled Water	02/12/90	2.0×10^{-7}	3.4×10^{-7}
Area 6, Bottled Water	02/20/90	1.3×10^{-7}	2.8×10^{-7}
Area 6, Bottled Water	02/26/90	2.7×10^{-8}	2.8×10^{-7}
Area 6, Bottled Water	03/05/90	2.8×10^{-7}	2.9×10^{-7}
Area 6, Bottled Water	03/12/90	1.7×10^{-7}	2.8×10^{-7}
Area 6, Bottled Water	03/19/90	2.9×10^{-7}	2.8×10^{-7}
Area 6, Bottled Water	03/26/90	2.7×10^{-9}	2.7×10^{-8}
Area 6, Bottled Water	04/02/90	1.7×10^{-7}	2.7×10^{-7}
Area 6, Bottled Water	04/09/90	1.7×10^{-7}	2.7×10^{-7}
Area 6, Bottled Water	04/16/90	2.1×10^{-7}	2.9×10^{-7}
Area 6, Bottled Water	04/23/90	4.0×10^{-8}	2.9×10^{-7}
Area 6, Bottled Water	04/30/90	3.0×10^{-7}	2.6×10^{-7}
Area 6, Bottled Water	05/07/90	-5.4×10^{-8}	2.9×10^{-7}
Area 6, Bottled Water	05/14/90	-1.1×10^{-7}	2.7×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	05/21/90	-3.6×10^{-9}	2.9×10^{-7}
Area 6, Bottled Water	05/29/90	7.2×10^{-9}	2.9×10^{-7}
Area 6, Bottled Water	06/05/90	1.4×10^{-7}	3.0×10^{-7}
Area 6, Bottled Water	06/11/90	1.9×10^{-7}	2.9×10^{-7}
Area 6, Bottled Water	06/18/90	4.1×10^{-7}	2.8×10^{-7}
Area 6, Bottled Water	06/25/90	2.1×10^{-8}	2.7×10^{-7}
Area 6, Bottled Water	07/02/90	3.4×10^{-7}	2.9×10^{-7}
Area 6, Bottled Water	07/09/90	1.9×10^{-7}	2.8×10^{-7}
Area 6, Bottled Water	07/16/90	1.9×10^{-7}	2.7×10^{-7}
Area 6, Bottled Water	07/23/90	1.4×10^{-7}	2.7×10^{-7}
Area 6, Bottled Water	07/30/90	2.6×10^{-8}	3.0×10^{-7}
Area 6, Bottled Water	08/06/90	5.6×10^{-8}	2.9×10^{-7}
Area 6, Bottled Water	08/13/90	-4.1×10^{-8}	2.8×10^{-7}
Area 6, Bottled Water	08/20/90	-5.8×10^{-8}	2.8×10^{-7}
Area 6, Bottled Water	08/27/90	-1.1×10^{-7}	3.0×10^{-7}
Area 6, Bottled Water	09/04/90	1.6×10^{-7}	2.7×10^{-7}
Area 6, Bottled Water	09/10/90	1.2×10^{-7}	3.0×10^{-7}
Area 6, Bottled Water	09/17/90	1.1×10^{-7}	3.0×10^{-7}
Area 6, Bottled Water	09/24/90	4.1×10^{-7}	4.6×10^{-7}
Area 6, Bottled Water	10/01/90	-2.3×10^{-7}	3.1×10^{-7}
Area 6, Bottled Water	10/08/90	1.4×10^{-7}	3.1×10^{-7}
Area 6, Bottled Water	10/18/90	1.7×10^{-7}	2.7×10^{-7}
Area 6, Bottled Water	10/22/90	7.5×10^{-8}	3.0×10^{-7}
Area 6, Bottled Water	10/29/90	-1.4×10^{-7}	3.9×10^{-7}
Area 6, Bottled Water	11/05/90	-3.1×10^{-8}	2.7×10^{-7}
Area 6, Bottled Water	11/13/90	-1.3×10^{-7}	3.0×10^{-7}
Area 6, Bottled Water	11/19/90	1.0×10^{-7}	3.0×10^{-7}
Area 6, Bottled Water	11/26/90	-6.2×10^{-8}	2.9×10^{-7}
Area 6, Bottled Water	12/03/90	-1.8×10^{-7}	2.9×10^{-7}
Area 6, Bottled Water	12/11/90	3.0×10^{-8}	3.0×10^{-7}
Area 6, Bottled Water	12/17/90	-1.0×10^{-7}	2.9×10^{-7}
Area 6, Bottled Water	12/24/90	9.0×10^{-7}	3.1×10^{-7}
Area 6, Cafeteria	01/02/90	4.7×10^{-8}	2.9×10^{-7}
Area 6, Cafeteria	01/08/90	1.8×10^{-8}	3.0×10^{-7}
Area 6, Cafeteria	01/16/90	5.7×10^{-8}	3.5×10^{-7}
Area 6, Cafeteria	01/23/90	9.6×10^{-8}	2.8×10^{-7}
Area 6, Cafeteria	01/29/90	2.7×10^{-7}	3.5×10^{-7}
Area 6, Cafeteria	02/05/90	7.5×10^{-8}	3.5×10^{-7}
Area 6, Cafeteria	02/12/90	4.4×10^{-7}	3.4×10^{-7}
Area 6, Cafeteria	02/20/90	2.4×10^{-7}	2.8×10^{-7}
Area 6, Cafeteria	02/26/90	6.5×10^{-8}	2.8×10^{-7}
Area 6, Cafeteria	03/05/90	2.7×10^{-7}	2.9×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Cafeteria	03/12/90	2.9×10^{-7}	2.8×10^{-7}
Area 6, Cafeteria	03/19/90	3.3×10^{-7}	2.8×10^{-7}
Area 6, Cafeteria	03/26/90	7.2×10^{-7}	3.0×10^{-7}
Area 6, Cafeteria	04/02/90	1.7×10^{-7}	2.7×10^{-7}
Area 6, Cafeteria	04/09/90	3.4×10^{-8}	2.7×10^{-7}
Area 6, Cafeteria	04/16/90	2.2×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	04/23/90	4.7×10^{-8}	2.9×10^{-7}
Area 6, Cafeteria	04/30/90	4.8×10^{-7}	2.6×10^{-7}
Area 6, Cafeteria	05/07/90	1.2×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	05/14/90	2.5×10^{-7}	2.7×10^{-7}
Area 6, Cafeteria	05/21/90	3.1×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	05/29/90	-1.6×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	06/05/90	7.9×10^{-8}	3.0×10^{-7}
Area 6, Cafeteria	06/11/90	1.8×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	06/18/90	3.0×10^{-7}	2.8×10^{-7}
Area 6, Cafeteria	06/25/90	3.2×10^{-7}	2.7×10^{-7}
Area 6, Cafeteria	07/02/90	1.3×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	07/09/90	7.2×10^{-8}	2.8×10^{-7}
Area 6, Cafeteria	07/16/90	3.2×10^{-7}	2.7×10^{-7}
Area 6, Cafeteria	07/23/90	1.8×10^{-7}	2.7×10^{-7}
Area 6, Cafeteria	07/30/90	-1.7×10^{-7}	3.0×10^{-7}
Area 6, Cafeteria	08/06/90	2.8×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	08/13/90	-3.8×10^{-8}	2.8×10^{-7}
Area 6, Cafeteria	08/20/90	-1.1×10^{-7}	2.8×10^{-7}
Area 6, Cafeteria	08/27/90	2.6×10^{-10}	3.0×10^{-7}
Area 6, Cafeteria	09/04/90	8.3×10^{-8}	2.7×10^{-7}
Area 6, Cafeteria	09/10/90	9.0×10^{-8}	3.0×10^{-7}
Area 6, Cafeteria	09/17/90	2.3×10^{-7}	3.0×10^{-7}
Area 6, Cafeteria	09/24/90	1.4×10^{-7}	4.6×10^{-7}
Area 6, Cafeteria	10/01/90	-6.6×10^{-8}	3.1×10^{-7}
Area 6, Cafeteria	10/08/90	-1.5×10^{-8}	3.1×10^{-7}
Area 6, Cafeteria	10/18/90	1.1×10^{-7}	2.7×10^{-7}
Area 6, Cafeteria	10/22/90	2.4×10^{-7}	3.0×10^{-7}
Area 6, Cafeteria	10/29/90	-1.9×10^{-7}	3.9×10^{-7}
Area 6, Cafeteria	11/05/90	-1.7×10^{-8}	2.7×10^{-7}
Area 6, Cafeteria	11/13/90	-2.5×10^{-8}	3.0×10^{-7}
Area 6, Cafeteria	11/19/90	1.8×10^{-8}	3.0×10^{-7}
Area 6, Cafeteria	11/26/90	-2.5×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	12/03/90	-3.1×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	12/11/90	-1.1×10^{-8}	3.0×10^{-7}
Area 6, Cafeteria	12/17/90	-2.2×10^{-7}	2.9×10^{-7}
Area 6, Cafeteria	12/24/90	7.9×10^{-7}	3.1×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Decontamination Pad	01/10/90	4.9×10^{-7}	3.6×10^{-7}
Area 6, Decontamination Pad	02/08/90	9.4×10^{-7}	2.9×10^{-7}
Area 6, Decontamination Pad	03/14/90	1.4×10^{-6}	2.9×10^{-7}
Area 6, Decontamination Pad	04/20/90	1.4×10^{-6}	2.7×10^{-7}
Area 6, Decontamination Pad	05/10/90	1.5×10^{-6}	2.8×10^{-7}
Area 6, Decontamination Pad	06/21/90	7.5×10^{-7}	2.7×10^{-7}
Area 6, Decontamination Pad	07/17/90	4.2×10^{-7}	2.7×10^{-7}
Area 6, Decontamination Pad	08/01/90	6.8×10^{-7}	2.8×10^{-7}
Area 6, Decontamination Pad	09/05/90	6.4×10^{-7}	2.9×10^{-7}
Area 6, Decontamination Pad	10/10/90	4.4×10^{-7}	2.9×10^{-7}
Area 6, Decontamination Pad	11/08/90	7.3×10^{-8}	2.9×10^{-7}
Area 6, Decontamination Pad	12/05/90	3.1×10^{-7}	2.7×10^{-7}
Area 6, Sewage	03/14/90	1.7×10^{-7}	2.9×10^{-7}
Area 6, Sewage	05/10/90	2.5×10^{-7}	2.7×10^{-7}
Area 6, Sewage	07/12/90	1.2×10^{-7}	2.9×10^{-7}
Area 6, Sewage	10/12/90	-1.1×10^{-7}	3.2×10^{-7}
Area 6, Well 3 Reservoir	01/04/90	1.1×10^{-7}	2.9×10^{-7}
Area 6, Well 3 Reservoir	02/01/90	1.5×10^{-8}	3.0×10^{-7}
Area 6, Well 3 Reservoir	03/08/90	-1.9×10^{-7}	3.0×10^{-7}
Area 6, Well 3 Reservoir	04/20/90	-4.4×10^{-8}	2.7×10^{-7}
Area 6, Well 3 Reservoir	05/04/90	7.2×10^{-9}	2.9×10^{-7}
Area 6, Well 3 Reservoir	06/08/90	4.0×10^{-7}	2.9×10^{-7}
Area 6, Well 3 Reservoir	07/10/90	2.9×10^{-7}	2.6×10^{-7}
Area 6, Well 3 Reservoir	08/01/90	2.2×10^{-8}	2.9×10^{-7}
Area 6, Well 3 Reservoir	09/05/90	-1.1×10^{-7}	2.8×10^{-7}
Area 6, Well 3 Reservoir	10/22/90	-2.9×10^{-8}	3.0×10^{-7}
Area 6, Well 3 Reservoir	11/01/90	7.4×10^{-8}	2.8×10^{-7}
Area 6, Well 3 Reservoir	12/05/90	-2.4×10^{-7}	3.0×10^{-7}
Area 6, Well 4	01/04/90	2.5×10^{-7}	2.9×10^{-7}
Area 6, Well 4	02/07/90	7.2×10^{-8}	3.5×10^{-7}
Area 6, Well 4	03/05/90	1.8×10^{-7}	2.7×10^{-7}
Area 6, Well 4	04/26/90	3.3×10^{-7}	2.6×10^{-7}
Area 6, Well 4	05/16/90	4.1×10^{-7}	2.8×10^{-7}
Area 6, Well 4	06/07/90	3.3×10^{-7}	3.0×10^{-7}
Area 6, Well 4	07/10/90	1.8×10^{-7}	2.7×10^{-7}
Area 6, Well 4	08/16/90	-3.4×10^{-8}	3.0×10^{-7}
Area 6, Well 4	09/10/90	1.9×10^{-7}	3.0×10^{-7}
Area 6, Well 4	10/04/90	-2.4×10^{-7}	3.3×10^{-7}
Area 6, Well 4	11/21/90	2.0×10^{-8}	2.6×10^{-7}
Area 6, Well 4	12/10/90	-2.3×10^{-7}	2.8×10^{-7}
Area 6, Well C	02/07/90	-5.2×10^{-8}	3.5×10^{-7}
Area 6, Well C	03/05/90	-3.1×10^{-7}	3.0×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well C	04/26/90	3.5×10^{-7}	2.6×10^{-7}
Area 6, Well C	05/16/90	2.0×10^{-7}	2.8×10^{-7}
Area 6, Well C	06/07/90	5.9×10^{-7}	3.0×10^{-7}
Area 6, Well C	07/10/90	2.6×10^{-7}	2.9×10^{-7}
Area 6, Well C	08/16/90	-2.3×10^{-8}	3.1×10^{-7}
Area 6, Well C	09/10/90	7.5×10^{-9}	3.0×10^{-7}
Area 6, Well C	10/04/90	-1.2×10^{-8}	3.3×10^{-7}
Area 6, Well C	11/21/90	6.3×10^{-7}	2.6×10^{-7}
Area 6, Well C	12/10/90	5.3×10^{-7}	3.0×10^{-7}
Area 6, Well C1	02/07/90	-2.1×10^{-7}	3.5×10^{-7}
Area 6, Well C1	03/05/90	5.5×10^{-8}	3.0×10^{-7}
Area 6, Well C1	05/16/90	2.5×10^{-7}	2.8×10^{-7}
Area 6, Well C1	06/07/90	4.4×10^{-7}	3.0×10^{-7}
Area 6, Well C1	07/10/90	1.8×10^{-7}	2.9×10^{-7}
Area 6, Well C1	08/16/90	-1.3×10^{-7}	3.1×10^{-7}
Area 6, Well C1	09/10/90	-4.1×10^{-8}	3.0×10^{-7}
Area 6, Well C1	10/04/90	1.7×10^{-7}	3.3×10^{-7}
Area 6, Well C1	11/21/90	-1.8×10^{-7}	2.6×10^{-7}
Area 6, Well C1	12/10/90	2.3×10^{-7}	3.0×10^{-7}
Area 6, Well C1 Reservoir	01/04/90	2.6×10^{-7}	2.9×10^{-7}
Area 6, Well C1 Reservoir	02/01/90	3.6×10^{-9}	3.0×10^{-7}
Area 6, Well C1 Reservoir	03/08/90	7.0×10^{-8}	3.0×10^{-7}
Area 6, Well C1 Reservoir	04/20/90	-1.3×10^{-7}	2.7×10^{-7}
Area 6, Well C1 Reservoir	05/04/90	2.5×10^{-8}	2.9×10^{-7}
Area 6, Well C1 Reservoir	06/08/90	3.6×10^{-7}	2.9×10^{-7}
Area 6, Well C1 Reservoir	07/05/90	2.5×10^{-7}	2.7×10^{-7}
Area 6, Well C1 Reservoir	08/01/90	-1.7×10^{-8}	2.8×10^{-7}
Area 6, Well C1 Reservoir	09/05/90	2.6×10^{-8}	2.9×10^{-7}
Area 6, Well C1 Reservoir	10/10/90	-2.0×10^{-8}	3.3×10^{-7}
Area 6, Well C1 Reservoir	11/01/90	-1.5×10^{-7}	2.8×10^{-7}
Area 6, Well C1 Reservoir	12/05/90	-4.3×10^{-7}	3.0×10^{-7}
Area 6, Yucca Steam No. 2	04/20/90	2.4×10^{-7}	2.7×10^{-7}
Area 7, Reitmann Seep	01/08/90	3.3×10^{-8}	3.5×10^{-7}
Area 7, Reitmann Seep	02/22/90	9.5×10^{-8}	2.8×10^{-7}
Area 7, Reitmann Seep	03/01/90	-3.4×10^{-9}	2.7×10^{-7}
Area 7, Reitmann Seep	04/03/90	2.8×10^{-7}	2.7×10^{-7}
Area 7, Reitmann Seep	05/03/90	-1.3×10^{-7}	2.9×10^{-7}
Area 7, Reitmann Seep	06/05/90	-2.1×10^{-7}	2.8×10^{-7}
Area 7, Reitmann Seep	07/06/90	4.9×10^{-7}	2.7×10^{-7}
Area 7, Reitmann Seep	08/01/90	7.9×10^{-8}	2.9×10^{-7}
Area 7, Reitmann Seep	09/05/90	1.1×10^{-7}	2.8×10^{-7}
Area 7, Reitmann Seep	10/10/90	-1.6×10^{-7}	3.3×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 7, Reitmann Seep	11/01/90	7.0×10^{-9}	2.8×10^{-7}
Area 7, Reitmann Seep	12/05/90	-2.4×10^{-7}	3.0×10^{-7}
Area 12, Cafeteria	01/02/90	1.2×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	01/08/90	1.3×10^{-7}	3.5×10^{-7}
Area 12, Cafeteria	01/16/90	8.2×10^{-8}	2.8×10^{-7}
Area 12, Cafeteria	01/23/90	-1.3×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	01/29/90	1.0×10^{-7}	3.5×10^{-7}
Area 12, Cafeteria	02/05/90	1.0×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	02/12/90	4.5×10^{-7}	3.4×10^{-7}
Area 12, Cafeteria	02/20/90	3.1×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	02/28/90	-1.5×10^{-8}	2.9×10^{-7}
Area 12, Cafeteria	03/05/90	1.6×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	03/12/90	1.3×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	03/19/90	8.7×10^{-8}	2.8×10^{-7}
Area 12, Cafeteria	03/26/90	4.6×10^{-8}	2.7×10^{-8}
Area 12, Cafeteria	04/02/90	3.5×10^{-7}	2.7×10^{-7}
Area 12, Cafeteria	04/09/90	1.7×10^{-7}	2.7×10^{-7}
Area 12, Cafeteria	04/16/90	4.0×10^{-8}	2.9×10^{-7}
Area 12, Cafeteria	04/23/90	3.4×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	04/30/90	3.5×10^{-7}	2.6×10^{-7}
Area 12, Cafeteria	05/07/90	2.2×10^{-8}	2.9×10^{-7}
Area 12, Cafeteria	05/14/90	2.5×10^{-7}	2.7×10^{-7}
Area 12, Cafeteria	05/21/90	1.3×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	05/29/90	-1.4×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	06/04/90	-2.9×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	06/11/90	2.8×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	06/19/90	2.7×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	06/25/90	3.4×10^{-8}	2.7×10^{-7}
Area 12, Cafeteria	07/02/90	3.9×10^{-7}	2.7×10^{-7}
Area 12, Cafeteria	07/09/90	1.5×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	07/16/90	1.8×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	07/23/90	-1.3×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	07/30/90	-1.5×10^{-7}	3.0×10^{-7}
Area 12, Cafeteria	08/05/90	8.3×10^{-8}	2.7×10^{-7}
Area 12, Cafeteria	08/14/90	1.9×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	08/20/90	-1.1×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	08/28/90	-6.3×10^{-8}	3.0×10^{-7}
Area 12, Cafeteria	09/04/90	-2.2×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	09/10/90	-1.1×10^{-7}	3.0×10^{-7}
Area 12, Cafeteria	09/17/90	2.8×10^{-7}	3.0×10^{-7}
Area 12, Cafeteria	09/24/90	7.5×10^{-8}	4.6×10^{-7}
Area 12, Cafeteria	10/01/90	-5.5×10^{-8}	3.1×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Cafeteria	10/08/90	-4.5×10^{-8}	2.8×10^{-7}
Area 12, Cafeteria	10/16/90	3.4×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	10/22/90	-3.8×10^{-9}	3.0×10^{-7}
Area 12, Cafeteria	10/29/90	-1.1×10^{-7}	3.9×10^{-7}
Area 12, Cafeteria	11/06/90	1.7×10^{-7}	2.7×10^{-7}
Area 12, Cafeteria	11/13/90	2.5×10^{-10}	3.0×10^{-7}
Area 12, Cafeteria	11/19/90	-2.9×10^{-7}	2.8×10^{-7}
Area 12, Cafeteria	11/26/90	-1.2×10^{-7}	2.9×10^{-7}
Area 12, Cafeteria	12/03/90	1.9×10^{-7}	3.1×10^{-7}
Area 12, Cafeteria	12/10/90	-3.8×10^{-7}	3.0×10^{-7}
Area 12, Cafeteria	12/17/90	8.2×10^{-8}	3.0×10^{-7}
Area 12, Cafeteria	12/24/90	7.2×10^{-7}	3.1×10^{-7}
Area 12, Captain Jack Spring	03/09/90	2.2×10^{-7}	2.7×10^{-7}
Area 12, Captain Jack Spring	04/19/90	2.0×10^{-7}	2.9×10^{-7}
Area 12, Captain Jack Spring	05/08/90	7.9×10^{-8}	3.0×10^{-7}
Area 12, Captain Jack Spring	06/07/90	3.6×10^{-7}	2.9×10^{-7}
Area 12, Captain Jack Spring	07/12/90	3.5×10^{-7}	2.7×10^{-7}
Area 12, Captain Jack Spring	08/15/90	-1.4×10^{-7}	3.0×10^{-7}
Area 12, Captain Jack Spring	09/26/90	3.7×10^{-7}	3.0×10^{-7}
Area 12, Captain Jack Spring	10/10/90	1.2×10^{-7}	2.8×10^{-7}
Area 12, Captain Jack Spring	12/07/90	7.9×10^{-8}	2.7×10^{-7}
Area 12, E Tunnel Effluent	01/10/90	1.8×10^{-3}	3.6×10^{-7}
Area 12, E Tunnel Effluent	02/14/90	1.5×10^{-3}	3.4×10^{-7}
Area 12, E Tunnel Effluent	03/09/90	1.5×10^{-3}	2.8×10^{-7}
Area 12, E Tunnel Effluent	04/03/90	1.1×10^{-3}	2.8×10^{-7}
Area 12, E Tunnel Effluent	05/03/90	1.2×10^{-3}	2.9×10^{-7}
Area 12, E Tunnel Effluent	06/06/90	1.1×10^{-3}	2.8×10^{-7}
Area 12, E Tunnel Effluent	07/12/90	1.0×10^{-3}	2.7×10^{-7}
Area 12, E Tunnel Effluent	08/02/90	1.0×10^{-3}	2.9×10^{-7}
Area 12, E Tunnel Effluent	09/07/90	1.1×10^{-3}	2.8×10^{-7}
Area 12, E Tunnel Effluent	10/16/90	2.1×10^{-3}	2.7×10^{-7}
Area 12, E Tunnel Effluent	11/09/90	2.1×10^{-3}	2.9×10^{-7}
Area 12, E Tunnel Effluent	12/05/90	2.2×10^{-3}	2.7×10^{-7}
Area 12, Gold Meadows	04/11/90	1.7×10^{-7}	2.7×10^{-7}
Area 12, Gold Meadows	05/02/90	2.3×10^{-7}	2.7×10^{-7}
Area 12, Gold Meadows	06/01/90	2.2×10^{-7}	2.9×10^{-7}
Area 12, N Tunnel Effluent	01/10/90	5.0×10^{-4}	3.6×10^{-7}
Area 12, N Tunnel Effluent	02/14/90	7.7×10^{-4}	3.0×10^{-7}
Area 12, N Tunnel Effluent	03/09/90	5.9×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Effluent	04/03/90	4.8×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Effluent	05/03/90	2.3×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Effluent	06/06/90	2.6×10^{-4}	2.8×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, N Tunnel Effluent	07/12/90	2.2×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Effluent	08/02/90	1.7×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Effluent	09/07/90	2.7×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Effluent	10/16/90	4.5×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Effluent	11/16/90	5.0×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Effluent	12/05/90	1.1×10^{-3}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 1	01/10/90	5.4×10^{-4}	3.6×10^{-7}
Area 12, N Tunnel Pond No. 1	02/14/90	7.7×10^{-4}	3.4×10^{-7}
Area 12, N Tunnel Pond No. 1	03/09/90	5.6×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 1	04/03/90	3.7×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 1	05/03/90	2.0×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 1	06/06/90	2.9×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 1	07/12/90	2.7×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 1	08/02/90	1.6×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 1	09/07/90	3.8×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 1	10/16/90	4.3×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 1	11/16/90	5.6×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 1	12/05/90	1.6×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 2	01/10/90	5.2×10^{-4}	3.6×10^{-7}
Area 12, N Tunnel Pond No. 2	02/14/90	7.0×10^{-4}	3.0×10^{-7}
Area 12, N Tunnel Pond No. 2	03/09/90	5.3×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 2	04/03/90	3.8×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 2	05/03/90	2.0×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 2	06/06/90	2.4×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 2	07/12/90	3.1×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 2	08/02/90	2.0×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 2	09/07/90	3.1×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 2	10/16/90	4.4×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 2	11/16/90	5.5×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 2	12/05/90	6.0×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 3	01/10/90	6.9×10^{-4}	3.6×10^{-7}
Area 12, N Tunnel Pond No. 3	02/14/90	7.5×10^{-4}	3.0×10^{-7}
Area 12, N Tunnel Pond No. 3	03/09/90	5.1×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 3	04/03/90	5.1×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 3	05/03/90	3.8×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 3	06/06/90	2.1×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 3	07/12/90	4.2×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 3	08/02/90	2.3×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 3	09/07/90	3.6×10^{-4}	2.8×10^{-7}
Area 12, N Tunnel Pond No. 3	10/18/90	3.0×10^{-4}	2.7×10^{-7}
Area 12, N Tunnel Pond No. 3	11/16/90	4.7×10^{-4}	2.9×10^{-7}
Area 12, N Tunnel Pond No. 3	12/05/90	5.0×10^{-4}	2.7×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Sewage	03/14/90	4.0×10^{-7}	2.9×10^{-7}
Area 12, Sewage	05/11/90	3.8×10^{-7}	2.7×10^{-7}
Area 12, Sewage	07/12/90	4.9×10^{-7}	2.6×10^{-7}
Area 12, Sewage	10/18/90	4.2×10^{-7}	3.0×10^{-7}
Area 12, T Tunnel Effluent	01/10/90	4.3×10^{-3}	3.6×10^{-7}
Area 12, T Tunnel Effluent	02/14/90	5.6×10^{-3}	3.4×10^{-7}
Area 12, T Tunnel Effluent	03/09/90	5.6×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Effluent	04/11/90	6.2×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Effluent	05/09/90	5.7×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Effluent	06/06/90	6.4×10^{-3}	2.9×10^{-7}
Area 12, T Tunnel Effluent	07/12/90	7.0×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Effluent	08/02/90	6.9×10^{-3}	2.9×10^{-7}
Area 12, T Tunnel Effluent	09/07/90	6.6×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Effluent	10/16/90	7.3×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Effluent	11/09/90	5.2×10^{-3}	2.9×10^{-7}
Area 12, T Tunnel Effluent	12/05/90	6.9×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 1	01/10/90	5.7×10^{-3}	3.6×10^{-7}
Area 12, T Tunnel Pond No. 1	02/14/90	5.6×10^{-3}	3.4×10^{-7}
Area 12, T Tunnel Pond No. 1	03/09/90	5.6×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 1	04/11/90	6.1×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 1	05/09/90	6.1×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 1	06/06/90	6.9×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 1	07/12/90	6.4×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 1	08/02/90	7.2×10^{-3}	2.9×10^{-7}
Area 12, T Tunnel Pond No. 1	09/07/90	6.6×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 1	10/16/90	7.4×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 1	11/09/90	4.8×10^{-5}	2.9×10^{-7}
Area 12, T Tunnel Pond No. 1	12/05/90	7.1×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 2	01/10/90	5.3×10^{-3}	3.6×10^{-7}
Area 12, T Tunnel Pond No. 2	02/14/90	5.8×10^{-3}	3.0×10^{-7}
Area 12, T Tunnel Pond No. 2	03/09/90	5.5×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 2	04/11/90	6.0×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 2	05/09/90	6.0×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 2	06/06/90	6.9×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 2	07/12/90	6.4×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 2	08/02/90	7.1×10^{-3}	2.9×10^{-7}
Area 12, T Tunnel Pond No. 2	09/07/90	6.6×10^{-3}	2.8×10^{-7}
Area 12, T Tunnel Pond No. 2	10/16/90	7.3×10^{-3}	2.7×10^{-7}
Area 12, T Tunnel Pond No. 2	11/09/90	6.5×10^{-3}	2.9×10^{-7}
Area 12, T Tunnel Pond No. 2	12/05/90	6.9×10^{-3}	2.7×10^{-7}
Area 12, White Rock Spring	01/09/90	-5.0×10^{-8}	3.6×10^{-7}
Area 12, White Rock Spring	02/01/90	7.3×10^{-8}	3.0×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, White Rock Spring	03/01/90	1.4×10^{-7}	2.7×10^{-7}
Area 12, White Rock Spring	04/09/90	2.8×10^{-7}	2.7×10^{-7}
Area 12, White Rock Spring	05/03/90	3.6×10^{-8}	2.9×10^{-7}
Area 12, White Rock Spring	06/08/90	2.3×10^{-7}	2.9×10^{-7}
Area 12, White Rock Spring	07/23/90	2.2×10^{-7}	2.9×10^{-7}
Area 12, White Rock Spring	08/07/90	-1.9×10^{-7}	2.8×10^{-7}
Area 12, White Rock Spring	09/25/90	6.4×10^{-8}	4.6×10^{-7}
Area 12, White Rock Spring	10/10/90	-1.1×10^{-7}	2.8×10^{-7}
Area 12, White Rock Spring	11/09/90	8.3×10^{-8}	3.0×10^{-7}
Area 12, White Rock Spring	12/03/90	-3.0×10^{-7}	2.9×10^{-7}
Area 15, Well Ue15d	01/04/90	2.4×10^{-7}	2.9×10^{-7}
Area 15, Well Ue15d	02/07/90	-2.6×10^{-8}	3.5×10^{-7}
Area 15, Well Ue15d	03/05/90	2.2×10^{-7}	3.0×10^{-7}
Area 15, Well Ue15d	04/20/90	3.2×10^{-7}	2.9×10^{-7}
Area 15, Well Ue15d	05/16/90	3.6×10^{-7}	2.8×10^{-7}
Area 15, Well Ue15d	06/07/90	3.8×10^{-7}	3.0×10^{-7}
Area 15, Well Ue15d	07/10/90	1.8×10^{-7}	2.8×10^{-7}
Area 15, Well Ue15d	08/16/90	6.4×10^{-8}	3.1×10^{-7}
Area 15, Well Ue15d	09/10/90	2.3×10^{-7}	3.0×10^{-7}
Area 15, Well Ue15d	10/04/90	1.8×10^{-7}	2.8×10^{-7}
Area 15, Well Ue15d	11/21/90	2.0×10^{-8}	2.6×10^{-7}
Area 15, Well Ue15d	12/10/90	1.5×10^{-7}	3.0×10^{-7}
Area 16, Tippipah Spring	01/10/90	3.0×10^{-8}	3.6×10^{-7}
Area 16, Tippipah Spring	02/08/90	7.1×10^{-8}	2.9×10^{-7}
Area 16, Tippipah Spring	03/13/90	6.8×10^{-7}	2.7×10^{-7}
Area 16, Tippipah Spring	04/09/90	9.5×10^{-8}	2.7×10^{-7}
Area 16, Tippipah Spring	05/08/90	-1.2×10^{-7}	3.0×10^{-7}
Area 16, Tippipah Spring	06/01/90	-4.1×10^{-8}	2.8×10^{-7}
Area 16, Tippipah Spring	07/13/90	2.0×10^{-8}	2.7×10^{-7}
Area 16, Tippipah Spring	08/03/90	-1.6×10^{-7}	2.8×10^{-7}
Area 16, Tippipah Spring	09/07/90	5.6×10^{-8}	3.0×10^{-7}
Area 16, Tippipah Spring	10/09/90	1.6×10^{-7}	2.8×10^{-7}
Area 16, Tippipah Spring	11/01/90	6.7×10^{-8}	2.8×10^{-7}
Area 16, Tippipah Spring	12/06/90	1.3×10^{-7}	2.7×10^{-7}
Area 16, Well 16d	01/04/90	1.4×10^{-7}	2.9×10^{-7}
Area 16, Well 16d	02/07/90	-1.3×10^{-8}	3.5×10^{-7}
Area 16, Well 16d	03/05/90	-4.8×10^{-8}	2.7×10^{-7}
Area 16, Well 16d	04/20/90	1.4×10^{-7}	2.9×10^{-7}
Area 16, Well 16d	05/16/90	3.0×10^{-7}	2.8×10^{-7}
Area 16, Well 16d	06/07/90	3.1×10^{-7}	3.0×10^{-7}
Area 16, Well 16d	07/10/90	2.0×10^{-8}	2.7×10^{-7}
Area 16, Well 16d	08/16/90	8.6×10^{-8}	3.0×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 16, Well 16d	09/10/90	-5.2×10^{-8}	3.0×10^{-7}
Area 16, Well 16d	10/04/90	9.5×10^{-8}	3.3×10^{-7}
Area 16, Well 16d	11/21/90	-4.6×10^{-8}	2.6×10^{-7}
Area 16, Well 16d	12/10/90	-2.4×10^{-7}	2.8×10^{-7}
Area 18, Camp 17 Reservoir	01/16/90	2.4×10^{-7}	2.8×10^{-7}
Area 18, Camp 17 Reservoir	02/02/90	2.6×10^{-8}	3.4×10^{-7}
Area 18, Camp 17 Reservoir	03/01/90	8.8×10^{-8}	2.7×10^{-7}
Area 18, Camp 17 Reservoir	04/03/90	7.4×10^{-8}	2.7×10^{-7}
Area 18, Camp 17 Reservoir	05/02/90	-5.7×10^{-8}	2.7×10^{-7}
Area 18, Camp 17 Reservoir	06/01/90	2.5×10^{-7}	2.9×10^{-7}
Area 18, Camp 17 Reservoir	07/17/90	1.4×10^{-7}	2.8×10^{-7}
Area 18, Camp 17 Reservoir	08/03/90	9.3×10^{-8}	2.8×10^{-7}
Area 18, Camp 17 Reservoir	09/07/90	-4.1×10^{-8}	3.0×10^{-7}
Area 18, Camp 17 Reservoir	10/05/90	-5.9×10^{-8}	2.7×10^{-7}
Area 18, Camp 17 Reservoir	11/01/90	3.5×10^{-9}	2.8×10^{-7}
Area 18, Camp 17 Reservoir	12/03/90	-2.4×10^{-7}	2.9×10^{-7}
Area 18, Well 8	01/04/90	1.1×10^{-7}	2.9×10^{-7}
Area 18, Well 8	02/07/90	2.3×10^{-8}	3.5×10^{-7}
Area 18, Well 8	03/05/90	2.9×10^{-8}	3.0×10^{-7}
Area 18, Well 8	04/03/90	-1.6×10^{-7}	2.8×10^{-7}
Area 18, Well 8	04/26/90	6.1×10^{-8}	2.6×10^{-7}
Area 18, Well 8	05/16/90	4.0×10^{-7}	2.8×10^{-7}
Area 18, Well 8	06/07/90	1.5×10^{-7}	3.0×10^{-7}
Area 18, Well 8	07/10/90	-5.1×10^{-8}	2.7×10^{-7}
Area 18, Well 8	08/16/90	-1.1×10^{-8}	3.0×10^{-7}
Area 18, Well 8	09/10/90	2.6×10^{-10}	3.0×10^{-7}
Area 18, Well 8	10/04/90	-2.9×10^{-7}	3.3×10^{-7}
Area 18, Well 8	11/21/90	-2.7×10^{-7}	2.6×10^{-7}
Area 18, Well 8	12/10/90	-3.0×10^{-8}	2.8×10^{-7}
Area 18, Well 8 Reservoir	01/16/90	1.0×10^{-7}	2.8×10^{-7}
Area 18, Well 8 Reservoir	02/02/90	-2.1×10^{-7}	3.4×10^{-7}
Area 18, Well 8 Reservoir	03/01/90	-1.5×10^{-7}	2.7×10^{-7}
Area 18, Well 8 Reservoir	05/02/90	3.4×10^{-8}	2.7×10^{-7}
Area 18, Well 8 Reservoir	06/01/90	1.5×10^{-7}	2.9×10^{-7}
Area 18, Well 8 Reservoir	10/05/90	2.2×10^{-7}	2.7×10^{-7}
Area 18, Well 8 Reservoir	12/05/90	5.8×10^{-8}	2.7×10^{-7}
Area 19, Well U19c	01/04/90	1.2×10^{-7}	2.9×10^{-7}
Area 19, Well U19c	02/07/90	3.9×10^{-8}	3.5×10^{-7}
Area 19, Well U19c	03/05/90	5.3×10^{-7}	2.7×10^{-7}
Area 19, Well U19c	04/26/90	4.7×10^{-7}	2.9×10^{-7}
Area 19, Well U19c	05/16/90	2.9×10^{-7}	2.8×10^{-7}
Area 19, Well U19c	06/07/90	3.4×10^{-7}	3.0×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 19, Well U19c	07/10/90	3.8×10^{-7}	2.6×10^{-7}
Area 19, Well U19c	08/16/90	1.4×10^{-7}	3.0×10^{-7}
Area 19, Well U19c	09/10/90	3.0×10^{-7}	3.0×10^{-7}
Area 19, Well U19c	10/04/90	3.5×10^{-8}	2.8×10^{-7}
Area 19, Well U19c	11/21/90	-1.1×10^{-7}	2.6×10^{-7}
Area 19, Well U19c	12/10/90	2.5×10^{-7}	3.0×10^{-7}
Area 19, Well U19c Reservoir	01/09/90	4.0×10^{-8}	3.6×10^{-7}
Area 19, Well U19c Reservoir	02/02/90	6.9×10^{-8}	3.4×10^{-7}
Area 19, Well U19c Reservoir	03/05/90	2.3×10^{-7}	2.9×10^{-7}
Area 19, Well U19c Reservoir	04/09/90	1.6×10^{-7}	2.7×10^{-7}
Area 19, Well U19c Reservoir	05/02/90	1.4×10^{-7}	2.7×10^{-7}
Area 19, Well U19c Reservoir	06/04/90	-2.1×10^{-7}	2.8×10^{-7}
Area 19, Well U19c Reservoir	07/17/90	2.4×10^{-7}	2.8×10^{-7}
Area 19, Well U19c Reservoir	08/03/90	1.2×10^{-7}	2.8×10^{-7}
Area 19, Well U19c Reservoir	09/07/90	7.5×10^{-8}	3.0×10^{-7}
Area 19, Well U19c Reservoir	10/04/90	-1.1×10^{-7}	2.8×10^{-7}
Area 19, Well U19c Reservoir	11/01/90	1.4×10^{-7}	2.8×10^{-7}
Area 19, Well U19c Reservoir	12/03/90	-3.0×10^{-7}	2.9×10^{-7}
Area 20, Water Well	01/04/90	1.1×10^{-7}	2.9×10^{-7}
Area 20, Water Well	02/07/90	-2.6×10^{-8}	3.5×10^{-7}
Area 20, Water Well	03/05/90	2.5×10^{-7}	2.7×10^{-7}
Area 20, Water Well	04/26/90	2.7×10^{-7}	2.9×10^{-7}
Area 20, Water Well	05/16/90	3.9×10^{-7}	2.8×10^{-7}
Area 20, Water Well	06/07/90	8.1×10^{-8}	3.0×10^{-7}
Area 20, Water Well	07/10/90	6.4×10^{-8}	2.7×10^{-7}
Area 20, Water Well	08/16/90	1.0×10^{-7}	3.0×10^{-7}
Area 20, Water Well	09/10/90	6.4×10^{-8}	3.0×10^{-7}
Area 20, Water Well	10/04/90	-1.4×10^{-7}	3.3×10^{-7}
Area 20, Water Well	11/21/90	8.5×10^{-8}	2.6×10^{-7}
Area 20, Water Well	12/10/90	-2.2×10^{-7}	2.8×10^{-7}
Area 20, Well 20a Reservoir	01/09/90	1.7×10^{-7}	3.6×10^{-7}
Area 20, Well 20a Reservoir	02/02/90	-2.3×10^{-8}	3.4×10^{-7}
Area 20, Well 20a Reservoir	03/05/90	2.9×10^{-7}	2.9×10^{-7}
Area 20, Well 20a Reservoir	04/09/90	2.7×10^{-7}	2.7×10^{-7}
Area 20, Well 20a Reservoir	05/02/90	1.1×10^{-7}	2.7×10^{-7}
Area 20, Well 20a Reservoir	06/04/90	-1.1×10^{-7}	2.8×10^{-7}
Area 20, Well 20a Reservoir	07/17/90	2.6×10^{-7}	2.8×10^{-7}
Area 20, Well 20a Reservoir	08/03/90	5.1×10^{-8}	2.8×10^{-7}
Area 20, Well 20a Reservoir	09/07/90	1.5×10^{-8}	3.0×10^{-7}
Area 20, Well 20a Reservoir	10/04/90	8.0×10^{-8}	2.8×10^{-7}
Area 20, Well 20a Reservoir	11/01/90	3.2×10^{-8}	2.8×10^{-7}
Area 20, Well 20a Reservoir	12/03/90	-2.8×10^{-7}	2.9×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Army Well No. 1	01/04/90	3.9×10^{-8}	2.9×10^{-7}
Area 23, Army Well No. 1	02/07/90	-5.4×10^{-8}	2.8×10^{-7}
Area 23, Army Well No. 1	03/05/90	-4.7×10^{-8}	3.0×10^{-7}
Area 23, Army Well No. 1	04/20/90	5.8×10^{-8}	2.9×10^{-7}
Area 23, Army Well No. 1	05/16/90	2.7×10^{-7}	2.8×10^{-7}
Area 23, Army Well No. 1	06/05/90	8.5×10^{-8}	2.9×10^{-7}
Area 23, Army Well No. 1	07/12/90	2.4×10^{-8}	2.7×10^{-7}
Area 23, Army Well No. 1	08/16/90	1.1×10^{-7}	3.1×10^{-7}
Area 23, Army Well No. 1	09/10/90	1.6×10^{-7}	3.0×10^{-7}
Area 23, Army Well No. 1	10/04/90	-3.1×10^{-7}	2.8×10^{-7}
Area 23, Army Well No. 1	11/21/90	-3.3×10^{-8}	2.6×10^{-7}
Area 23, Army Well No. 1	12/10/90	1.9×10^{-7}	3.0×10^{-7}
Area 23, Cafeteria	01/02/90	2.9×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	01/08/90	1.1×10^{-7}	3.0×10^{-7}
Area 23, Cafeteria	01/16/90	-1.0×10^{-8}	3.5×10^{-7}
Area 23, Cafeteria	01/23/90	2.0×10^{-6}	2.8×10^{-7}
Area 23, Cafeteria	01/29/90	7.0×10^{-6}	3.5×10^{-7}
Area 23, Cafeteria	02/05/90	-4.6×10^{-8}	3.4×10^{-7}
Area 23, Cafeteria	02/12/90	4.6×10^{-7}	3.4×10^{-7}
Area 23, Cafeteria	02/20/90	-1.7×10^{-7}	2.8×10^{-7}
Area 23, Cafeteria	02/27/90	6.6×10^{-8}	2.9×10^{-7}
Area 23, Cafeteria	03/06/90	1.7×10^{-7}	3.0×10^{-7}
Area 23, Cafeteria	03/12/90	1.7×10^{-7}	2.8×10^{-7}
Area 23, Cafeteria	03/19/90	-1.8×10^{-8}	2.8×10^{-7}
Area 23, Cafeteria	03/19/90	-4.4×10^{-9}	2.7×10^{-8}
Area 23, Cafeteria	04/02/90	1.4×10^{-7}	2.7×10^{-7}
Area 23, Cafeteria	04/09/90	1.6×10^{-7}	2.7×10^{-7}
Area 23, Cafeteria	04/16/90	4.4×10^{-8}	2.9×10^{-7}
Area 23, Cafeteria	04/23/90	1.8×10^{-8}	2.9×10^{-7}
Area 23, Cafeteria	04/30/90	2.0×10^{-7}	2.6×10^{-7}
Area 23, Cafeteria	05/07/90	1.1×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	05/14/90	2.0×10^{-7}	2.7×10^{-7}
Area 23, Cafeteria	05/22/90	-6.5×10^{-8}	2.9×10^{-7}
Area 23, Cafeteria	05/29/90	-6.9×10^{-8}	2.9×10^{-7}
Area 23, Cafeteria	06/04/90	-2.1×10^{-7}	2.8×10^{-7}
Area 23, Cafeteria	06/11/90	4.0×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	06/18/90	2.9×10^{-7}	2.8×10^{-7}
Area 23, Cafeteria	06/25/90	1.8×10^{-7}	2.7×10^{-7}
Area 23, Cafeteria	07/02/90	3.4×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	07/09/90	2.0×10^{-7}	2.8×10^{-7}
Area 23, Cafeteria	07/16/90	-2.2×10^{-8}	2.9×10^{-7}
Area 23, Cafeteria	07/16/90	1.3×10^{-7}	2.7×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Cafeteria	07/30/90	2.6×10^{-10}	3.0×10^{-7}
Area 23, Cafeteria	08/05/90	1.6×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	08/13/90	-1.4×10^{-8}	2.8×10^{-7}
Area 23, Cafeteria	08/20/90	2.6×10^{-8}	3.0×10^{-7}
Area 23, Cafeteria	08/27/90	2.9×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	09/04/90	2.5×10^{-7}	2.7×10^{-7}
Area 23, Cafeteria	09/10/90	1.0×10^{-7}	2.7×10^{-7}
Area 23, Cafeteria	09/17/90	-4.5×10^{-8}	2.7×10^{-7}
Area 23, Cafeteria	09/24/90	1.4×10^{-7}	3.6×10^{-7}
Area 23, Cafeteria	10/01/90	-6.3×10^{-8}	3.1×10^{-7}
Area 23, Cafeteria	10/08/90	8.3×10^{-8}	2.8×10^{-7}
Area 23, Cafeteria	10/15/90	-2.5×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	10/22/90	-3.5×10^{-7}	3.8×10^{-7}
Area 23, Cafeteria	10/29/90	-2.2×10^{-7}	2.8×10^{-7}
Area 23, Cafeteria	11/05/90	-2.1×10^{-7}	3.9×10^{-7}
Area 23, Cafeteria	11/13/90	-1.1×10^{-8}	3.0×10^{-7}
Area 23, Cafeteria	11/19/90	-1.3×10^{-7}	2.8×10^{-7}
Area 23, Cafeteria	11/26/90	-1.8×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	12/03/90	-4.1×10^{-7}	2.9×10^{-7}
Area 23, Cafeteria	12/10/90	4.5×10^{-8}	2.7×10^{-7}
Area 23, Cafeteria	12/17/90	3.8×10^{-7}	3.0×10^{-7}
Area 23, Cafeteria	12/24/90	-6.5×10^{-7}	3.1×10^{-7}
Area 23, H&S Sump	04/25/90	9.1×10^{-8}	2.7×10^{-7}
Area 23, H&S Sump	08/17/90	1.6×10^{-7}	3.0×10^{-7}
Area 23, H&S Sump	09/12/90	1.4×10^{-7}	3.0×10^{-7}
Area 23, H&S Sump	12/05/90	-2.1×10^{-7}	3.0×10^{-7}
Area 23, Sewage	03/16/90	3.4×10^{-7}	2.7×10^{-7}
Area 23, Sewage	05/10/90	1.3×10^{-7}	2.7×10^{-7}
Area 23, Sewage	07/10/90	1.4×10^{-7}	2.6×10^{-7}
Area 23, Sewage	10/12/90	1.3×10^{-7}	3.2×10^{-7}
Area 23, Swimming Pool	03/29/90	1.9×10^{-8}	2.7×10^{-8}
Area 23, Swimming Pool	04/03/90	-1.8×10^{-7}	2.8×10^{-7}
Area 23, Swimming Pool	05/04/90	-6.1×10^{-8}	2.9×10^{-7}
Area 23, Swimming Pool	06/08/90	7.4×10^{-7}	3.0×10^{-7}
Area 23, Swimming Pool	07/10/90	3.8×10^{-7}	2.6×10^{-7}
Area 23, Swimming Pool	08/07/90	-1.6×10^{-7}	2.8×10^{-7}
Area 23, Swimming Pool	09/11/90	2.1×10^{-7}	3.0×10^{-7}
Area 23, Swimming Pool	10/10/90	-2.1×10^{-7}	3.3×10^{-7}
Area 23, Swimming Pool	11/26/90	9.8×10^{-8}	2.6×10^{-7}
Area 23, Swimming Pool	12/05/90	-3.0×10^{-7}	3.0×10^{-7}
Area 25, Building 4221	01/02/90	9.4×10^{-8}	2.9×10^{-7}
Area 25, Building 4221	01/08/90	5.1×10^{-8}	3.0×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Building 4221	01/16/90	3.4×10^{-9}	3.5×10^{-7}
Area 25, Building 4221	01/23/90	2.1×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	01/29/90	1.8×10^{-7}	3.5×10^{-7}
Area 25, Building 4221	02/05/90	7.2×10^{-8}	3.4×10^{-7}
Area 25, Building 4221	02/12/90	3.1×10^{-7}	3.4×10^{-7}
Area 25, Building 4221	02/20/90	2.4×10^{-8}	2.8×10^{-7}
Area 25, Building 4221	02/27/90	7.7×10^{-8}	2.9×10^{-7}
Area 25, Building 4221	03/06/90	-1.4×10^{-7}	3.0×10^{-7}
Area 25, Building 4221	03/12/90	1.5×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	03/19/90	3.7×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	03/19/90	-1.1×10^{-8}	2.7×10^{-8}
Area 25, Building 4221	04/02/90	1.4×10^{-7}	2.7×10^{-7}
Area 25, Building 4221	04/09/90	1.2×10^{-7}	2.7×10^{-7}
Area 25, Building 4221	04/16/90	2.2×10^{-8}	2.9×10^{-7}
Area 25, Building 4221	04/23/90	8.3×10^{-8}	2.9×10^{-7}
Area 25, Building 4221	04/30/90	1.3×10^{-7}	2.6×10^{-7}
Area 25, Building 4221	05/07/90	-2.5×10^{-8}	2.9×10^{-7}
Area 25, Building 4221	05/14/90	4.7×10^{-8}	2.7×10^{-7}
Area 25, Building 4221	05/22/90	8.3×10^{-8}	2.9×10^{-7}
Area 25, Building 4221	05/29/90	1.7×10^{-7}	2.9×10^{-7}
Area 25, Building 4221	06/04/90	-2.1×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	06/11/90	3.0×10^{-7}	2.9×10^{-7}
Area 25, Building 4221	06/18/90	2.7×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	06/25/90	1.5×10^{-7}	2.7×10^{-7}
Area 25, Building 4221	07/02/90	3.2×10^{-7}	2.9×10^{-7}
Area 25, Building 4221	07/09/90	1.7×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	07/16/90	-2.0×10^{-8}	2.7×10^{-7}
Area 25, Building 4221	07/16/90	2.2×10^{-7}	2.9×10^{-7}
Area 25, Building 4221	07/30/90	3.7×10^{-9}	3.0×10^{-7}
Area 25, Building 4221	08/05/90	1.2×10^{-7}	2.9×10^{-7}
Area 25, Building 4221	08/13/90	-3.1×10^{-8}	2.8×10^{-7}
Area 25, Building 4221	08/20/90	1.6×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	09/04/90	3.5×10^{-7}	2.7×10^{-7}
Area 25, Building 4221	09/10/90	1.5×10^{-7}	2.7×10^{-7}
Area 25, Building 4221	09/17/90	7.6×10^{-8}	2.7×10^{-7}
Area 25, Building 4221	09/24/90	5.8×10^{-9}	4.6×10^{-7}
Area 25, Building 4221	10/01/90	1.1×10^{-8}	3.1×10^{-7}
Area 25, Building 4221	10/08/90	-1.0×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	10/15/90	-1.8×10^{-7}	2.9×10^{-7}
Area 25, Building 4221	10/22/90	-2.3×10^{-7}	3.8×10^{-7}
Area 25, Building 4221	10/29/90	-3.0×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	11/05/90	-2.4×10^{-7}	3.9×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Building 4221	11/13/90	5.0×10^{-8}	3.0×10^{-7}
Area 25, Building 4221	11/19/90	-2.1×10^{-7}	2.8×10^{-7}
Area 25, Building 4221	11/26/90	-1.4×10^{-8}	2.9×10^{-7}
Area 25, Building 4221	12/03/90	-2.2×10^{-7}	2.9×10^{-7}
Area 25, Building 4221	12/10/90	3.1×10^{-8}	2.7×10^{-7}
Area 25, Building 4221	12/17/90	-1.1×10^{-7}	3.0×10^{-7}
Area 25, Building 4221	12/24/90	7.4×10^{-7}	3.1×10^{-7}
Area 25, Well J-11 Reservoir	01/04/90	2.4×10^{-7}	2.9×10^{-7}
Area 25, Well J-11 Reservoir	02/02/90	-1.1×10^{-7}	3.4×10^{-7}
Area 25, Well J-11 Reservoir	03/08/90	8.1×10^{-8}	3.0×10^{-7}
Area 25, Well J-11 Reservoir	04/03/90	-2.2×10^{-7}	2.8×10^{-7}
Area 25, Well J-11 Reservoir	05/04/90	4.0×10^{-8}	2.9×10^{-7}
Area 25, Well J-11 Reservoir	06/13/90	7.2×10^{-8}	2.9×10^{-7}
Area 25, Well J-11 Reservoir	07/05/90	1.1×10^{-7}	2.7×10^{-7}
Area 25, Well J-11 Reservoir	08/07/90	-3.1×10^{-8}	2.8×10^{-7}
Area 25, Well J-11 Reservoir	09/05/90	3.0×10^{-8}	2.9×10^{-7}
Area 25, Well J-11 Reservoir	10/09/90	1.1×10^{-7}	2.7×10^{-7}
Area 25, Well J-11 Reservoir	11/02/90	2.7×10^{-7}	2.8×10^{-7}
Area 25, Well J-11 Reservoir	12/05/90	-3.4×10^{-7}	3.0×10^{-7}
Area 25, Well J-12	01/04/90	1.2×10^{-7}	2.9×10^{-7}
Area 25, Well J-12	02/07/90	-3.6×10^{-8}	3.5×10^{-7}
Area 25, Well J-12	03/05/90	-1.3×10^{-7}	2.7×10^{-7}
Area 25, Well J-12	04/20/90	1.9×10^{-7}	2.9×10^{-7}
Area 25, Well J-12	05/16/90	5.5×10^{-7}	2.8×10^{-7}
Area 25, Well J-12	06/05/90	-1.1×10^{-8}	2.9×10^{-7}
Area 25, Well J-12	07/12/90	1.7×10^{-7}	2.7×10^{-7}
Area 25, Well J-12	08/16/90	6.8×10^{-8}	3.1×10^{-7}
Area 25, Well J-12	09/10/90	3.0×10^{-8}	3.0×10^{-7}
Area 25, Well J-12	10/04/90	2.0×10^{-8}	3.3×10^{-7}
Area 25, Well J-12	11/21/90	-1.6×10^{-7}	2.6×10^{-7}
Area 25, Well J-12	12/10/90	3.3×10^{-7}	3.0×10^{-7}
Area 25, Well J-12 Reservoir	01/04/90	7.9×10^{-8}	2.9×10^{-7}
Area 25, Well J-12 Reservoir	02/02/90	9.8×10^{-9}	3.4×10^{-7}
Area 25, Well J-12 Reservoir	03/08/90	-4.0×10^{-8}	3.0×10^{-7}
Area 25, Well J-12 Reservoir	04/03/90	-6.4×10^{-8}	2.8×10^{-7}
Area 25, Well J-12 Reservoir	05/04/90	2.5×10^{-8}	2.9×10^{-7}
Area 25, Well J-12 Reservoir	06/13/90	1.1×10^{-7}	2.9×10^{-7}
Area 25, Well J-12 Reservoir	07/05/90	2.9×10^{-7}	2.7×10^{-7}
Area 25, Well J-12 Reservoir	08/01/90	7.9×10^{-8}	2.8×10^{-7}
Area 25, Well J-12 Reservoir	09/05/90	1.7×10^{-7}	2.9×10^{-7}
Area 25, Well J-12 Reservoir	10/09/90	1.1×10^{-7}	2.7×10^{-7}
Area 25, Well J-12 Reservoir	11/02/90	-5.6×10^{-8}	2.8×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Well J-12 Reservoir	12/05/90	-3.7×10^{-7}	3.0×10^{-7}
Area 25, Well J-13	01/04/90	6.5×10^{-8}	2.9×10^{-7}
Area 25, Well J-13	02/07/90	1.5×10^{-7}	2.8×10^{-7}
Area 25, Well J-13	03/05/90	-5.1×10^{-8}	3.0×10^{-7}
Area 25, Well J-13	04/20/90	2.2×10^{-7}	2.9×10^{-7}
Area 25, Well J-13	05/16/90	4.2×10^{-7}	2.8×10^{-7}
Area 25, Well J-13	06/05/90	-1.2×10^{-7}	2.9×10^{-7}
Area 25, Well J-13	07/12/90	2.2×10^{-7}	2.7×10^{-7}
Area 25, Well J-13	08/16/90	2.3×10^{-8}	3.1×10^{-7}
Area 25, Well J-13	09/10/90	7.5×10^{-9}	3.0×10^{-7}
Area 25, Well J-13	10/04/90	-1.5×10^{-7}	2.8×10^{-7}
Area 25, Well J-13	11/21/90	1.2×10^{-7}	2.6×10^{-7}
Area 25, Well J-13	12/10/90	-5.0×10^{-8}	3.0×10^{-7}
Area 27, Cafeteria	01/02/90	4.0×10^{-8}	2.9×10^{-7}
Area 27, Cafeteria	01/08/90	7.4×10^{-8}	3.0×10^{-7}
Area 27, Cafeteria	01/16/90	-1.7×10^{-7}	3.5×10^{-7}
Area 27, Cafeteria	01/23/90	7.0×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	01/29/90	1.5×10^{-7}	3.5×10^{-7}
Area 27, Cafeteria	02/05/90	4.3×10^{-8}	3.4×10^{-7}
Area 27, Cafeteria	02/12/90	3.9×10^{-7}	3.4×10^{-7}
Area 27, Cafeteria	02/20/90	1.4×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	02/27/90	1.7×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	03/06/90	7.7×10^{-8}	3.0×10^{-7}
Area 27, Cafeteria	03/12/90	2.1×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	03/19/90	6.2×10^{-8}	2.8×10^{-7}
Area 27, Cafeteria	03/19/90	1.3×10^{-8}	2.7×10^{-8}
Area 27, Cafeteria	04/02/90	9.8×10^{-8}	2.7×10^{-7}
Area 27, Cafeteria	04/09/90	-2.7×10^{-8}	2.7×10^{-7}
Area 27, Cafeteria	04/16/90	1.1×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	04/23/90	-1.2×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	04/30/90	1.9×10^{-7}	2.6×10^{-7}
Area 27, Cafeteria	05/07/90	-2.9×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	05/14/90	1.4×10^{-7}	2.7×10^{-7}
Area 27, Cafeteria	05/22/90	6.1×10^{-8}	2.9×10^{-7}
Area 27, Cafeteria	05/29/90	7.2×10^{-8}	2.9×10^{-7}
Area 27, Cafeteria	06/04/90	-1.4×10^{-8}	2.8×10^{-7}
Area 27, Cafeteria	06/11/90	3.1×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	06/18/90	2.7×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	06/25/90	2.1×10^{-7}	2.7×10^{-7}
Area 27, Cafeteria	07/02/90	4.6×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	07/09/90	2.3×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	07/16/90	1.5×10^{-8}	2.9×10^{-7}

Attachment C.7 (Tritium in Water, cont.)

Sampling Location	Sampling Dates	μCi/mL Concentration	μCi/mL Standard Deviation (s)
Area 27, Cafeteria	07/16/90	1.9×10^{-7}	2.7×10^{-7}
Area 27, Cafeteria	07/30/90	-2.1×10^{-7}	3.0×10^{-7}
Area 27, Cafeteria	08/05/90	1.9×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	08/13/90	1.1×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	08/20/90	2.9×10^{-7}	3.0×10^{-7}
Area 27, Cafeteria	08/27/90	1.6×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	09/04/90	8.6×10^{-8}	2.7×10^{-7}
Area 27, Cafeteria	09/10/90	6.6×10^{-8}	2.7×10^{-7}
Area 27, Cafeteria	09/17/90	3.1×10^{-7}	2.7×10^{-7}
Area 27, Cafeteria	09/24/90	2.0×10^{-7}	4.6×10^{-7}
Area 27, Cafeteria	10/01/90	-1.9×10^{-7}	3.1×10^{-7}
Area 27, Cafeteria	10/08/90	-1.5×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	10/15/90	7.9×10^{-8}	2.9×10^{-7}
Area 27, Cafeteria	10/22/90	-5.9×10^{-8}	3.8×10^{-7}
Area 27, Cafeteria	10/29/90	-4.4×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	11/05/90	-3.1×10^{-7}	3.9×10^{-7}
Area 27, Cafeteria	11/13/90	-6.8×10^{-8}	3.0×10^{-7}
Area 27, Cafeteria	11/19/90	-3.2×10^{-7}	2.8×10^{-7}
Area 27, Cafeteria	11/26/90	-1.7×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	12/03/90	-4.2×10^{-7}	2.9×10^{-7}
Area 27, Cafeteria	12/10/90	1.0×10^{-7}	2.7×10^{-7}
Area 27, Cafeteria	12/17/90	3.4×10^{-7}	3.0×10^{-7}
Area 27, Cafeteria	12/24/90	-6.5×10^{-7}	3.1×10^{-7}
Area 29, Topopah Spring	02/09/90	2.5×10^{-7}	3.0×10^{-7}
Area 29, Topopah Spring	03/15/90	1.1×10^{-7}	2.7×10^{-7}
Area 29, Topopah Spring	04/11/90	6.4×10^{-8}	2.7×10^{-7}
Area 29, Topopah Spring	05/09/90	-2.2×10^{-7}	3.0×10^{-7}
Area 29, Topopah Spring	06/06/90	2.7×10^{-7}	2.9×10^{-7}
Area 29, Topopah Spring	08/23/90	6.1×10^{-7}	3.0×10^{-7}
Area 29, Topopah Spring	09/12/90	1.1×10^{-6}	3.0×10^{-7}
Area 29, Topopah Spring	10/17/90	-2.2×10^{-7}	3.0×10^{-7}
Area 29, Topopah Spring	12/06/90	-2.7×10^{-8}	2.7×10^{-7}

APPENDIX D
SUMMARY OF 1990 RESULTS FOR THE OFFSITE STANDBY MILK SURVEILLANCE NETWORK

A complete listing of milk sampling data from the EPA Environmental Monitoring Systems Laboratory, Las Vegas, monitoring program appears in the 1990 EPA Offsite Environmental Monitoring Report, along with a statistical treatment of this data. Table D.1 contains the results from samples collected in the Offsite Standby Milk Surveillance Network obtained in 1990.

Table D.1 Summary of Results for the Offsite Standby Milk Surveillance Network - 1990

Sampling Location	Collection Date in 1990	Concentration ± 1s (MDC) ^{3}H x 10^{-9} µCi/mL[a]	^{89}Sr x 10^{-9} µCi/mL[a]	^{90}Sr x 10^{-9} µCi/mL[a]
Taylor, AZ Sunrise Dairy	07/31	280 ± 120 (370)	0.85 ± -0.93 (1.4)	-0.089 ± -0.32 (1.4)
Tucson, AZ University of Arizona	07/22	-64 ± 120 (420)	0.043 ± 0.92 (1.5)	0.34 ± 0.32 (1.4)
Little Rock, AR Bordens	07/01	-16 ± 120 (420)	-0.31 ± 1.3 (1.5)	3.2 ± 0.48 (1.4)[b]
Russellville, AR Arkansas Tech University	07/26	40 ± 110 (370)	0.71 ± 1.2 (1.5)	1.6 ± 0.41 (1.4)[b]
Bakersfield, CA Favorite Foods, Inc.	07/31	240 ± 120 (380)	-0.35 ± 0.80 (1.3)	0.59 ± 0.31 (1.3)
Orland, CA Meadow Glen/Jerseyland Cheese	08/01	270 ± 120 (380)	0.37 ± 0.96 (1.3)	0.69 ± 0.3 (1.3)
Willows, CA Glenn Milk Producers Association	08/01	78 ± 110 (370)	0.41 ± 0.84 (1.3)	0.61 ± 0.33 (1.3)
Canon City, CO Juniper Valley Farms Dairy	08/13	190 ± 110 (370)	1.3 ± 1.1 (1.3)	0.44 ± 0.42 (1.5)
Delta, CO Meadow Gold Dairy	07/25	180 ± 110 (370)	0.24 ± 0.99 (1.5)	0.51 ± 0.33 (1.4)

(a) Or multiply the concentrations by 3.7×10^{7} Bq/L for international units.
(b) Concentration is greater than the Minimum Detectable Concentration.

Table D.1 (Summary of Results for the Offsite Standby Milk Surveillance Network - 1990, cont.)

Sampling Location	Collection Date in 1990	Concentration ± 1s (MDC) ^{3}H x 10^{-9} µCi/mL[a]	^{89}Sr x 10^{-9} µCi/mL[a]	^{90}Sr x 10^{-9} µCi/mL[a]
Quincy, IL Prairie Farms Dairy	07/31	240 ± 110 (360)	0.61 ± 0.93 (1.3)	0.81 ± 0.35 (1.4)
Boise, ID Meadow Gold Dairies	08/31	380 ± 110 (360)[b]	-1.2 ± 1.8 (2.6)	1.7 ± 0.45 (1.6)[b]
Idaho Falls, ID Reeds Dairy	08/29	120 ± 110 (370)	-1.5 ± 1.6 (2.5)	0.94 ± 0.39 (1.6)
Dubuque, IA Swiss Valley Farms, Inc.	07/23	120 ± 130 (440)	0.83 ± 0.91 (1.1)	1.4 ± 0.41 (1.4)
Ellis, KS Mid-America Dairy	06/26	140 ± 130 (440)	0.43 ± 1.1 (1.5)	1.2 ± 0.39 (1.4)
Sabetha, KS Mid-America Dairymen	06/19	440 ± 140 (440)	0.21 ± 1.1 (1.6)	1.2 ± 0.37 (1.4)
Baton Rouge, LA Borden's	09/05	80 ± 110 (360)	-0.94 ± 1.9 (2.5)	2.2 ± 0.49 (1.6)[b]
Monroe, LA Borden's Dairy	09/25	240 ± 120 (370)	[c]	0.67 ± 0.47 (1.8)
New Orleans, LA Brown's Velvet Dairy	09/07	98 ± 110 (360)	[c]	2.6 ± 0.50 (1.5)[b]
Fosston, MN Land O' Lakes Inc.	07/30	51 ± 110 (370)	0.70 ± 1.1 (1.4)	1 ± 0.38 (1.4)
Rochester, MN Assoc. Milk Prod. Inc. (AMPI)	08/15	270 ± 120 (380)	-2.3 ± 1.8 (2.3)	2.4 ± 0.47 (1.5)[b]
Aurora, MO Mid-America Dairy Inc.	07/24	72 ± 120 (420)	-1.3 ± 1.5 (1.8)	3.1 ± 0.51 (1.5)[b]
Chillicothe, MO Mid-America Dairymen	07/05	220 ± 120 (420)	-0.063 ± 1.1 (1.3)	2.1 ± 0.41 (1.4)[b]
Billings, MT Meadow Gold Dairy	09/11	92 ± 120 (380)	-0.88 ± 1.7 (2.1)	1.8 ± 0.46 (1.5)[b]
Havre, MT Vita-Rich Dairy	09/10	240 ± 110 (360)	[c]	0.31 ± 0.45 (1.6)

(a) Or multiply the concentrations by 3.7 x 10^{-7} Bq/L for international units.
(b) Concentration is greater than the MDC.
(c) Sample not analyzed.

Table D.1 (Summary of Results for the Offsite Standby Milk Surveillance Network - 1990, cont.)

Sampling Location	Collection Date in 1990	Concentration ± 1s (MDC) ^{3}H x 10^{-9} µCi/mL[a]	^{89}Sr x 10^{-9} µCi/mL[a]	^{90}Sr x 10^{-9} µCi/mL[a]
Norfolk, NE Gillette Dairy	06/06	24 ± 120 (410)	-1.2 ± 1.1 (1.4)	2.3 ± 0.39 (1.3)[b]
North Platte, NE Mid America Dairymen	06/12	59 ± 120 (420)	0.87 ± 1.3 (1.3)	2.9 ± 0.47 (1.3)[b]
Albuquerque, NM Borden's Valley Gold	10/29	240 ± 160 (530)	0.093 ± 1.2 (1.5)	0.78 ± 0.41 (1.5)
La Plata, NM River Edge Dairy	07/02	400 ± 140 (440)	-1 ± 0.87 (1.4)	0.79 ± 0.32 (1.4)
Bismarck, ND Bridgeman Creamery, Inc.	05/23	210 ± 130 (440)	-0.99 ± 1.6 (1.8)	2.2 ± 0.44 (1.4)[b]
Grand Forks, ND Minnesota Dairy	05/08	380 ± 140 (440)	1.8 ± 1.9 (2.8)	0.73 ± 0.36 (1.4)
Enid, OK Ampi Goldspot Division	07/18	27 ± 120 (420)	0.19 ± 0.90 (1.1)	1.9 ± 0.40 (1.4)[b]
McAlester, OK Jackie Brannon Correction Center	07/12	87 ± 120 (400)	-0.85 ± 0.88 (1.2)	1.6 ± 0.36 (1.4)[b]
Corvallis, OR Sunny Brook Dairy	08/16	100 ± 110 (360)	-0.71 ± 1.8 (2.4)	1.2 ± 0.46 (1.6)
Medford, OR Dairygold Farms	08/14	130 ± 110 (360)	0.83 ± 0.79 (1.1)	0.29 ± 0.34 (1.4)
Tillamook, OR Tillamook Co. Creamery	10/19	220 ± 140 (480)	0.70 ± 1.4 (1.9)	0.56 ± 0.42 (1.5)
Rapid City, SD Gillette Dairy-Black Hills Dairy	08/30	-110 ± 110 (360)	-2.3 ± 1.8 (2.6)	1.7 ± 0.44 (1.6)[b]
Sioux Falls, SD Land O'Lakes Inc.	06/07	440 ± 140 (440)	-0.86 ± 1.1 (1.4)	1.7 ± 0.38 (1.4)[b]
Beaver, UT Cache Valley Dairy	07/18	-62 ± 130 (440)	-0.29 ± 0.82 (1.2)	0.67 ± 0.34 (1.4)
Provo, UT BYU Dairy Products Lab.	07/18	-4.7 ± 120 (420)	-0.25 ± 0.76 (1.1)	0.80 ± 0.33 (1.4)

(a) Or multiply the concentrations by 3.7×10^{7} Bq/L for international units.
(b) Concentration is greater than the MDC.

Table D.1 (Summary of Results for the Offsite Standby Milk Surveillance Network - 1990, cont.)

Sampling Location	Collection Date in 1990	Concentration ± 1s (MDC) ^{3}H x 10^{-9} µCi/mL[a]	^{89}Sr x 10^{-9} µCi/mL[a]	^{90}Sr x 10^{-9} µCi/mL[a]
Seattle, WA				
Darigold, Inc.	10/24	150 ± 140 (440)	2 ± 1.7 (2.5)	-0.24 ± 0.47 (1.5)
Spokane, WA				
Darigold, Inc.	08/28	2.5 ± 110 (360)	-1.7 ± 3.3 (5.1)	2 ± 0.79 (3)
Sheridan, WY				
Mydland Dairy	06/11	400 ± 140 (440)	-0.46 ± 1.4 (1.7)	2.4 ± 0.42 (1.4)[b]

Samples from the following locations were analyzed by gamma spectoscopy only: in all cases only naturally occuring radionuclides were detected.

Sampling Location	Collection Date	Sampling Location	Collection Date
Duncan, AZ		San Jose, CA	
Lunt Dairy	07/22	Marquez Bros Mexican Cheese	07/26
Tempe, AZ		San Luis Obispo, CA	
United Dairymen of AZ	07/20	Cal Poly Univ. Dairy	07/25
Yuma, AZ		Saugus, CA	
Richard K Combs Dairy	07/22	Wayside Honor Ranch	07/27
Batesville, AR		Cresent City, CA	
Hills Valley Foods	07/05	Rumiano Cheese Co.	07/23
Fayetteville, AR		Soledad, CA	
University of Arkansas	07/11	Correction Training Inds.	10/24
Helendale, CA		Tracy, CA	
Osterkamp Dairy No. 2	07/27	Deuel Voc Inst.	07/31
Chino, CA		Manchester, CA	
CA Inst. for Men	07/23	Point Arena Dairies	07/25
Fernbridge, CA		Colorado Springs, CO	
Humboldt Creamery Assn.	07/25	Sinton Dairy, CO	07/12
Fresno, CA		Greeley, CO	
CA State Univ. Creamery	10/22	Meadow Gold Dairy	08/29
Holtville, CA		Denver, CO	
Schaffner & Son Dairy	07/24	Safeway Dairy Plant	07/24
Lompoc, CA		Ft. Collins, CO	
Federal Penitentiary Camp	07/31	Poudre Valley Creamery	11/08
Manteca, CA		Caldwell, ID	
A & J Foods, Inc.	07/31	Dairymens Creamery Assn.	09/06
Modesto, CA		Pocatello, ID	
Foster Farms, Jersey Dairy	08/01	Rowland's Meadowgold Dry	08/29
Petaluma, CA		Kimballton, IA	
Point Reyes Seashore Dairy	07/25	Assoc. Milk Pro. Inc. (AMPI)	07/23
Edding, CA		Lake Mills, IA	
Mccoll's Dairy Prod.	08/01	Lake Mills Coop Creamery	07/25

(a) Or multiply the concentrations by 3.7 x 10^{7} Bq/L for international units.
(b) Concentration is greater than the MDC.

Table D.1 (Summary of Results for the Offsite Standby Milk Surveillance Network - 1990, cont.)

(Samples from the following locations were analyzed by gamma spectoscopy only: in all cases only naturally occuring radionuclides were detected, cont.)

Sampling Location	Collection Date
Lemars, IA	
Wells Dairy	07/24
Manhattan, KS	
Kansas State University	06/12
Lafayette, LA	
Borden's	09/05
New Orleans, LA	
Walker Roemer Dairy	09/07
Shreveport, LA	
Foremost Dairy	09/14
Fergus Falls, MN	
Mid-America Dairymen	08/30
Browerville, MN	
Land O' Lakes, Inc.	08/28
Nicollet, MN	
Doug Schultz Farm	08/08
Jackson, MO	
Mid-America Dairymen Inc.	09/17
Jefferson City, MO	
Central Dairy, Co.	09/14
Bozeman, MT	
Country Classic-DBA-Darigold	09/10
Great Falls, MT	
Meadow Gold Dairy	09/10
Kalispell, MT	
Equity Supply Co.	09/06
Omaha, NE	
Roberts Dairy-Marshall Gr.	06/21
Chappell, NE	
Leprino Foods	07/30
Superior, NE	
Mid-America Dairymen	06/13
Fallon, NV	
Creamland Dairy	07/23
Logandale, NV	
Nevada Dairy	08/29
Reno, NV	
Model Dairy	07/23
Yerington, NV	
Valley Dairy	07/23
Devils Lake, ND	
Lake View Dairy	05/07
Fargo, ND	
Cass Clay Creamery	05/07
Claremore, OK	
Swan Bros. Dairy	07/24
Stillwater, OK	
OK State Univ. Dairy	10/29
Grants Pass, OR	
Valley of Rouge Dairy	08/14
Klamath Falls, OR	
Klamath Dairy Product	08/09
Cove, OR	
Sunny Cove Dairy	08/13
Myrtle Point, OR	
Safeway Stores Inc.	08/14
Redmond, OR	
Eberhard's Creamery Inc.	08/13
Ethan, SD	
Ethan Dairy Products	08/31
Ogden, UT	
Western Dairymen Co-op Inc.	09/13
Richfield, UT	
Ideal Dairy	06/22
Smithfield, UT	
Cache Valley Dairy	06/23
Moses Lake, WA	
Safeway Stores Inc.	08/29
Cheyenne, WY	
Dairy Gold Foods	09/10
Riverton, WY	
Western Dairyman Co-op Inc.	06/11
Thayne, WY	
Western Dairymen's Co-op	06/13

APPENDIX E
RADIOACTIVE NOBLE GASES IN AIR ONSITE

Robert R. Kinnison

The 1990 data consisted of krypton and xenon concentrations from seven permanent stations collected over the entire year, two test event sites collected for the first half of the year, two stations with data collected mostly during the last half of the year, and four sites with data collected for less than two months. The U19az stations are at the location of the HOUSTON event and U20az stations are at the location of the BARNWELL event. At event locations, sampling stations are placed at upwind and downwind locations, thus substantial differences between these stations are expected. These event locations are not considered environmental monitoring and thus will be included in the summary statistics tables but not in the statistical hypothesis testing. The event monitoring is discussed in detail in Section 5.1.1 of Volume I of this annual report. The information is comprised of (1) an alphabetic station description, (2) the dates sample collection started and ended, (3) the krypton and xenon concentrations in 10^{-12} μCi/mL with one analytic standard deviation (1s), and the analytic detection limit for xenon only. Table E.1 contains these data. An asterisk denotes a missing value. There are a number of the xenon data values that are negative; this occurs when the background count is higher than the sample count, since the tabled value is the sample minus the background. Thirty-five of the rows in Table E.1 are averages of replicate samples, these are discussed in the last section of this appendix.

Table E.1 Sample Results for ^{133}Xe and ^{85}Kr - 1990

Sampling Location	Sampling Dates Start	Sampling Dates End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 1, BJY	12/28/90	01/04/90	33.3	1.0	72.9	14.6	*
Area 1, BJY	01/09/90	01/16/90	23.4	0.8	-37.6	24.2	32.4
Area 1, BJY	01/16/90	01/22/90	21.0	0.9	*	*	*
Area 1, BJY	01/22/90	01/29/90	20.7	0.6	40.6	9.0	13.2
Area 1, BJY	01/30/90	02/06/90	143	1.0	738	28.0	70.1
Area 1, BJY	02/06/90	02/12/90	658	4.8	8970	50.5	43.8
Area 1, BJY	02/12/90	02/21/90	16.8	0.9	34.3	9.6	13.1
Area 1, BJY	02/21/90	02/28/90	23.7	0.6	22.5	6.8	9.1
Area 1, BJY	02/28/90	03/07/90	24.7	0.8	17.2	5.5	*
Area 1, BJY	03/09/90	03/14/90	20.6	0.6	-14.0	13.9	18.7
Area 1, BJY	03/14/90	03/21/90	19.9	0.9	1.8	5.3	7.0
Area 1, BJY	03/21/90	03/27/90	20.6	0.8	97.6	4.4	13.5
Area 1, BJY	03/27/90	04/06/90	27.6	0.9	6.8	6.8	9.4
Area 1, BJY	04/06/90	04/09/90	272	1.5	44.3	2.2	6.4
Area 1, BJY	04/09/90	04/16/90	*	*	14.1	7.8	10.9
Area 1, BJY	04/16/90	04/23/90	27.3	0.8	25.3	10.9	15.2
Area 1, BJY	04/23/90	04/30/90	22.3	0.9	-2.7	5.6	8.1
Area 1, BJY	04/30/90	05/07/90	21.8	0.8	-3.1	9.9	13.7
Area 1, BJY	05/07/90	05/14/90	22.1	1.1	-1.0	11.0	15.1

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr, cont.)

Sampling Location	Sampling Dates Start	End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 1, BJY	05/14/90	05/22/90	*	*	-20.1	28.7	38.3
Area 1, BJY	05/22/90	05/30/90	19.5	0.7	6.0	7.8	11.0
Area 1, BJY	05/30/90	06/05/90	24.0	0.9	225	28.0	36.4
Area 1, BJY	06/05/90	06/11/90	26.2	0.9	40.3	8.4	12.4
Area 1, BJY	06/11/90	06/19/90	13.2	0.6	-3.7	3.7	4.9
Area 1, BJY	06/19/90	06/26/90	18.6	1.0	*	*	45.1
Area 1, BJY	07/03/90	07/10/90	21.8	1.1	35.0	13.2	25.3
Area 1, BJY	07/10/90	07/17/90	17.2	1.0	-14.2	7.7	14.5
Area 1, BJY	07/17/90	07/24/90	23.4	1.0	74.0	15.4	30.9
Area 1, BJY	07/24/90	07/31/90	22.2	1.5	51.5	20.5	38.8
Area 1, BJY	08/15/90	08/21/90	21.8	1.0	382	72.0	138
Area 1, BJY	08/21/90	08/28/90	21.3	0.6	3.5	13.6	25.5
Area 1, BJY	08/28/90	09/05/90	21.4	0.8	61.3	66.0	125
Area 1, BJY	09/05/90	09/10/90	*	*	-51.2	54.5	102
Area 1, BJY	09/10/90	09/18/90	37.9	0.7	*	*	5.7
Area 1, BJY	09/18/90	09/26/90	20.7	0.7	-50.0	18.8	55.5
Area 1, BJY	09/26/90	10/03/90	23.7	0.7	*	*	*
Area 1, BJY	10/03/90	10/10/90	22.0	0.8	30.9	16.0	32.2
Area 1, BJY	10/10/90	10/15/90	25.5	0.8	29.6	5.8	11.8
Area 1, BJY	10/15/90	10/23/90	30.1	0.6	12.6	5.8	11.4
Area 1, BJY	10/23/90	10/30/90	23.8	0.6	4.8	2.7	5.4
Area 1, BJY	10/30/90	11/08/90	22.5	0.6	13.5	3.8	7.6
Area 1, BJY	11/08/90	11/14/90	27.7	0.8	16.5	4.2	8.7
Area 1, BJY	11/14/90	11/20/90	27.3	0.9	73.4	18.6	38.1
Area 1, BJY	11/20/90	11/27/90	*	*	8.7	9.9	650
Area 1, BJY	11/27/90	12/04/90	27.6	1.1	73.4	20.9	41.9
Area 1, BJY	12/04/90	12/11/90	25.7	0.6	19.0	4.8	9.8
Area 1, BJY	12/11/90	12/18/90	19.0	0.8	19.8	5.0	10.1
Area 1, BJY	12/18/90	12/27/90	23.9	1.0	11.6	9.9	19.3
Area 1, Gravel Pit	10/10/90	10/18/90	26.0	0.6	-6.5	4.2	7.9
Area 1, Gravel Pit	10/01/90	10/10/90	24.3	0.5	1.0	10.4	19.7
Area 1, Gravel Pit	06/05/90	06/12/90	20.5	0.9	25.2	8.6	12.4
Area 1, Gravel Pit	06/12/90	06/19/90	16.3	0.8	1030	5.5	8.6
Area 1, Gravel Pit	06/19/90	06/26/90	21.8	0.8	-10.6	4.8	6.5
Area 1, Gravel Pit	06/26/90	07/02/90	14.9	0.9	4.6	7.3	10.8
Area 1, Gravel Pit	05/30/90	06/05/90	38.0	1.2	168	22.5	28.6
Area 1, Gravel Pit	05/22/90	05/30/90	21.5	0.9	19.3	26.4	37.1
Area 1, Gravel Pit	05/01/90	05/08/90	465	1.6	239	8.4	23.4
Area 1, Gravel Pit	05/08/90	05/16/90	*	*	20.1	19.0	25.1
Area 1, Gravel Pit	05/16/90	05/22/90	*	*	9.2	4.8	6.4
Area 1, Gravel Pit	07/02/90	07/11/90	33.3	1.2	194	39.0	76.7
Area 1, Gravel Pit	07/11/90	07/18/90	7.9	0.9	52.6	10.1	19.9
Area 1, Gravel Pit	08/28/90	09/07/90	16.0	0.8	215	70.0	200
Area 1, Gravel Pit	09/11/90	09/26/90	18.7	0.6	-7.1	18.9	38.1
Area 1, Gravel Pit	09/26/90	10/01/90	15.7	0.6	-9.0	11.8	25.6
Area 1, Gravel Pit	08/20/90	08/28/90	29.0	0.9	95.8	17.9	34.1

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr, cont.)

Sampling Location	Sampling Dates Start	End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 1, Gravel Pit	08/05/90	08/14/90	21.6	1.0	13.4	9.3	17.8
Area 1, Gravel Pit	07/18/90	07/23/90	23.8	0.8	22.8	4.0	7.9
Area 1, Gravel Pit	07/23/90	08/01/90	22.9	0.9	56.4	17.4	34.6
Area 1, Gravel Pit	08/01/90	08/05/90	40.3	1.1	237	34.5	68.0
Area 1, Gravel Pit	04/24/90	05/01/90	21.9	1.1	-3.4	10.0	13.9
Area 1, Gravel Pit	04/17/90	04/24/90	25.5	0.8	0.2	20.5	29.6
Area 1, Gravel Pit	11/06/90	11/15/90	23.4	0.6	13.8	3.0	6.0
Area 1, Gravel Pit	10/30/90	11/06/90	22.7	0.8	22.8	6.1	12.3
Area 1, Gravel Pit	10/23/90	10/30/90	26.1	0.6	-2.0	4.4	9.0
Area 1, Gravel Pit	01/08/90	01/16/90	10.6	1.0	-14.3	63.0	86.8
Area 1, Gravel Pit	11/15/90	11/20/90	37.5	0.9	26.0	5.2	10.3
Area 1, Gravel Pit	11/20/90	11/27/90	20.4	0.9	41.8	37.7	75.5
Area 1, Gravel Pit	12/10/90	12/17/90	*	*	6.9	10.7	21.9
Area 1, Gravel Pit	12/04/90	12/10/90	21.3	0.9	-23.7	16.5	31.7
Area 1, Gravel Pit	11/27/90	12/04/90	24.9	0.6	9.0	6.2	12.3
Area 1, Gravel Pit	01/16/90	01/22/90	20.1	0.9	11.1	31.2	43.8
Area 1, Gravel Pit	01/22/90	01/29/90	31.1	1.2	178	42.0	55.2
Area 1, Gravel Pit	03/26/90	04/03/90	*	*	*	*	4.4
Area 1, Gravel Pit	04/03/90	04/10/90	34.3	0.7	415	16.5	48.8
Area 1, Gravel Pit	04/10/90	04/17/90	24.8	1.0	15.2	4.8	6.6
Area 1, Gravel Pit	03/12/90	03/19/90	23.0	0.6	46.6	19.4	26.1
Area 1, Gravel Pit	02/27/90	03/05/90	27.1	0.9	15.5	7.7	*
Area 1, Gravel Pit	01/30/90	02/05/90	22.4	0.8	74.8	16.8	22.7
Area 1, Gravel Pit	02/05/90	02/12/90	*	*	-13.4	10.6	*
Area 1, Gravel Pit	02/21/90	02/27/90	24.1	1.1	21.2	8.4	11.9
Area 1, Gravel Pit	12/17/90	12/27/90	*	*	5.5	6.1	11.7
Area 1, Gravel Pit	10/18/90	10/23/90	17.4	0.7	8.6	3.2	6.3
Area 1, Gravel Pit	03/19/90	03/26/90	54.2	0.9	152	6.5	18.2
Area 5, Gate 200	10/17/90	10/23/90	24.1	0.8	12.1	7.8	15.3
Area 5, Gate 200	10/23/90	10/30/90	25.0	0.8	9.1	3.0	6.1
Area 5, Gate 200	10/12/90	10/17/90	24.3	0.9	33.3	4.6	9.2
Area 5, Gate 200	09/26/90	10/01/90	24.2	0.8	8.8	16.4	31.9
Area 5, Gate 200	09/11/90	09/18/90	*	*	103	40.5	80.1
Area 5, Gate 200	09/18/90	09/26/90	13.7	1.4	-4.0	36.0	68.7
Area 5, Gate 200	10/30/90	11/06/90	27.1	0.7	19.7	4.9	9.9
Area 5, Gate 200	11/06/90	11/14/90	19.1	1.5	2310	4.5	19.2
Area 5, Gate 200	12/11/90	12/18/90	*	*	10.1	4.5	8.6
Area 5, Gate 200	12/18/90	12/27/90	*	*	19.7	5.9	12.1
Area 5, Gate 200	12/04/90	12/11/90	23.1	1.3	29.0	5.3	10.5
Area 5, Gate 200	11/27/90	12/04/90	25.4	0.8	5.3	3.4	7.0
Area 5, Gate 200	11/14/90	11/20/90	23.9	0.9	486	154	303
Area 5, Gate 200	09/05/90	09/11/90	29.3	0.7	821	92.0	179
Area 5, Gate 200	08/21/90	08/28/90	15.3	2.2	6.1	11.9	*
Area 5, Gate 200	06/13/90	06/18/90	32.1	0.8	10.4	4.5	6.4
Area 5, Gate 200	06/18/90	06/26/90	19.0	0.8	-18.8	11.1	15.1
Area 5, Gate 200	06/04/90	06/13/90	19.5	0.7	1.1	9.3	13.3

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr, cont.)

Sampling Location	Sampling Dates Start	End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 5, Gate 200	05/29/90	06/04/90	17.6	0.9	*	*	*
Area 5, Gate 200	01/08/90	01/16/90	18.7	0.8	-39.1	26.6	35.5
Area 5, Gate 200	05/22/90	05/29/90	22.2	1.0	-12.0	12.3	17.1
Area 5, Gate 200	06/26/90	07/03/90	26.8	0.8	299	21.5	42.8
Area 5, Gate 200	07/03/90	07/10/90	17.3	0.6	45.8	16.1	30.9
Area 5, Gate 200	07/31/90	08/08/90	30.2	0.9	107	36.0	49.8
Area 5, Gate 200	08/08/90	08/14/90	13.0	0.8	21.6	13.4	27.1
Area 5, Gate 200	07/24/90	07/31/90	17.5	0.8	51.6	15.0	29.2
Area 5, Gate 200	07/17/90	07/24/90	17.7	0.9	50.1	35.9	68.5
Area 5, Gate 200	07/10/90	07/17/90	37.7	0.9	-25.6	12.6	23.0
Area 5, Gate 200	12/28/89	01/03/90	23.9	0.7	58.8	30.1	*
Area 12, Camp	01/04/90	01/08/90	23.7	0.6	57.1	2.7	8.2
Area 12, Camp	01/08/90	01/16/90	71.8	0.9	3430	54.0	101
Area 12, Camp	01/16/90	01/22/90	26.9	1.1	-34.6	57.5	76.6
Area 12, Camp	01/22/90	01/29/90	30.6	1.3	189	15.0	*
Area 12, Camp	01/30/90	02/06/90	24.2	0.6	13.7	36.2	49.1
Area 12, Camp	02/06/90	02/12/90	25.3	1.3	53.2	17.2	23.8
Area 12, Camp	02/12/90	02/20/90	28.5	0.8	7.6	10.3	13.5
Area 12, Camp	02/20/90	02/28/90	23.3	0.9	43.4	6.4	8.0
Area 12, Camp	02/28/90	03/06/90	17.7	0.8	18.7	9.6	13.5
Area 12, Camp	03/06/90	03/13/90	25.8	0.7	-65.6	35.0	*
Area 12, Camp	03/13/90	03/20/90	27.1	0.8	113	16.5	22.1
Area 12, Camp	03/27/90	04/02/90	19.2	0.8	-5.4	8.0	11.6
Area 12, Camp	04/02/90	04/10/90	*	*	-39.6	6.4	9.7
Area 12, Camp	04/10/90	04/17/90	20.1	0.6	-2.8	6.0	8.5
Area 12, Camp	04/17/90	04/24/90	27.5	0.8	42.2	8.2	10.8
Area 12, Camp	04/24/90	05/02/90	*	*	3.4	11.1	15.8
Area 12, Camp	05/02/90	05/08/90	24.7	1.2	3.7	8.7	12.2
Area 12, Camp	05/08/90	05/15/90	19.8	0.8	8.6	10.7	14.6
Area 12, Camp	05/15/90	05/22/90	22.7	1.0	23.3	5.8	7.9
Area 12, Camp	05/22/90	05/30/90	*	*	31.3	9.9	13.4
Area 12, Camp	05/30/90	06/05/90	26.5	0.9	11.6	10.1	12.8
Area 12, Camp	06/05/90	06/12/90	13.9	0.8	-30.3	11.6	16.3
Area 12, Camp	06/12/90	06/19/90	21.6	0.8	5.9	3.5	5.1
Area 12, Camp	06/19/90	06/26/90	25.7	1.0	1.9	5.3	7.3
Area 12, Camp	06/26/90	07/02/90	18.4	0.9	4.4	6.8	9.8
Area 12, Camp	07/02/90	07/11/90	29.5	1.4	81.3	27.5	56.3
Area 12, Camp	07/11/90	07/18/90	10.9	0.8	-22.3	13.9	26.9
Area 12, Camp	07/18/90	07/23/90	30.4	0.9	60.5	18.5	37.0
Area 12, Camp	07/23/90	08/01/90	20.0	0.9	124	23.0	44.1
Area 12, Camp	08/05/90	08/14/90	9.6	0.9	-39.8	28.2	51.8
Area 12, Camp	08/14/90	08/20/90	22.8	0.9	57.9	17.5	34.1
Area 12, Camp	09/26/90	10/01/90	*	*	122	50.0	102
Area 12, Camp	10/01/90	10/08/90	21.5	0.6	13.5	13.5	26.9
Area 12, Camp	10/08/90	10/18/90	19.4	0.6	3.4	11.4	21.0
Area 12, Camp	10/18/90	10/23/90	23.6	0.8	5.5	5.2	9.8

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr, cont.)

Sampling Location	Sampling Dates Start	End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 12, Camp	10/23/90	10/30/90	24.9	0.7	9.0	4.0	7.9
Area 12, Camp	10/30/90	11/06/90	26.3	0.9	9.2	7.0	13.8
Area 12, Camp	11/06/90	11/15/90	23.4	0.9	672	174	360
Area 12, Camp	11/20/90	11/27/90	*	*	2.5	5.6	10.6
Area 12, Camp	11/27/90	12/04/90	17.9	1.0	*	*	*
Area 12, Camp	12/04/90	12/11/90	22.5	0.8	10.8	10.9	22.0
Area 12, Camp	12/11/90	12/18/90	25.6	0.8	7.2	3.5	7.3
Area 12, Camp	12/18/90	12/27/90	25.9	0.9	-4.1	6.2	11.7
Area 12, P Tunnel	01/10/90	01/19/90	85.9	1.0	419	35.5	*
Area 15, PILEDRIVER	12/27/89	01/04/90	29.3	2.0	49.5	44.0	*
Area 15, PILEDRIVER	01/08/90	01/16/90	16.9	1.4	-64.2	37.2	51.0
Area 15, PILEDRIVER	01/23/90	01/29/90	24.4	0.9	47.4	10.5	15.0
Area 15, PILEDRIVER	02/06/90	02/12/90	20.6	0.6	6.8	9.1	12.5
Area 15, PILEDRIVER	02/12/90	02/20/90	28.1	0.8	37.8	9.6	13.2
Area 15, PILEDRIVER	02/20/90	02/28/90	18.9	0.6	-0.4	5.5	7.9
Area 15, PILEDRIVER	02/28/90	03/06/90	21.6	0.8	8.5	6.2	8.0
Area 15, PILEDRIVER	03/06/90	03/13/90	120	0.9	84.9	4.3	*
Area 15, PILEDRIVER	03/13/90	03/20/90	31.8	0.9	191	7.5	23.0
Area 15, PILEDRIVER	03/27/90	04/06/90	24.9	0.6	8.7	6.3	8.7
Area 15, PILEDRIVER	04/06/90	04/10/90	*	*	-13.0	6.9	10.1
Area 15, PILEDRIVER	04/17/90	04/24/90	20.2	0.9	20.7	7.1	9.7
Area 15, PILEDRIVER	04/24/90	05/02/90	43.7	1.3	3.0	9.4	13.7
Area 15, PILEDRIVER	05/02/90	05/08/90	38.6	0.7	11.1	15.5	21.5
Area 15, PILEDRIVER	05/08/90	05/15/90	25.9	0.6	15.5	5.7	7.9
Area 15, PILEDRIVER	05/22/90	05/30/90	24.8	0.6	-6.7	3.5	7.0
Area 15, PILEDRIVER	05/30/90	06/05/90	18.5	0.6	-25.9	1.3	5.1
Area 15, PILEDRIVER	06/05/90	06/11/90	17.3	0.8	15.4	5.0	7.1
Area 15, PILEDRIVER	06/11/90	06/19/90	19.2	0.6	-3.3	3.8	5.4
Area 15, PILEDRIVER	06/19/90	06/26/90	21.4	0.6	11.0	5.3	7.6
Area 15, PILEDRIVER	06/26/90	07/03/90	23.5	1.3	370	30.5	60.9
Area 15, PILEDRIVER	07/03/90	07/10/90	21.2	0.6	11.1	4.3	0.4
Area 15, PILEDRIVER	07/10/90	07/17/90	15.7	0.7	12.4	6.8	13.3
Area 15, PILEDRIVER	07/17/90	07/24/90	27.3	0.8	469	46.0	88.0
Area 15, PILEDRIVER	07/24/90	07/31/90	20.0	0.6	72.8	15.4	31.5
Area 15, PILEDRIVER	08/16/90	08/21/90	30.8	0.9	*	*	*
Area 15, PILEDRIVER	08/21/90	08/28/90	23.8	2.0	121	35.9	66.4
Area 15, PILEDRIVER	08/28/90	09/05/90	39.2	1.0	340	25.0	49.3
Area 15, PILEDRIVER	09/05/90	09/10/90	15.7	1.0	230	65.5	131
Area 15, PILEDRIVER	09/10/90	09/18/90	21.2	0.7	350	94.0	192
Area 15, PILEDRIVER	09/18/90	09/26/90	20.1	0.8	-60.3	19.3	36.1
Area 15, PILEDRIVER	09/26/90	10/03/90	18.2	0.9	8.9	24.0	47.8
Area 15, PILEDRIVER	10/03/90	10/10/90	*	*	-69.3	13.9	25.6
Area 15, PILEDRIVER	10/18/90	10/23/90	*	*	16.2	4.7	9.3
Area 15, PILEDRIVER	10/23/90	11/02/90	15.1	0.8	-7.9	4.2	9.4
Area 15, PILEDRIVER	11/02/90	11/07/90	26.0	0.6	15.1	10.7	20.2
Area 15, PILEDRIVER	11/07/90	11/15/90	29.3	1.5	732	157	309

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr, cont.)

Sampling Location	Sampling Dates Start	End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 15, PILEDRIVER	11/15/90	11/20/90	24.0	1.0	24.3	10.5	21.1
Area 15, PILEDRIVER	11/20/90	11/27/90	24.1	0.8	*	*	*
Area 15, PILEDRIVER	11/27/90	12/04/90	36.8	1.0	17.0	17.0	34.0
Area 15, PILEDRIVER	12/04/90	12/11/90	21.6	1.1	24.8	6.1	12.2
Area 15, PILEDRIVER	12/11/90	12/18/90	18.3	0.6	1.1	2.5	5.0
Area 15, PILEDRIVER	12/18/90	12/27/90	25.5	0.8	-11.6	3.5	6.7
Area 19, U19az, P-86	11/13/90	11/18/90	28.3	2.2	42.5	8.5	17.1
Area 19, U19az, P-88	11/13/90	11/18/90	29.9	3.6	23.3	10.7	20.8
Area 19, U19az, P-92	11/13/90	11/18/90	20.8	2.3	11.9	4.0	7.4
Area 19, U19az #11	11/18/90	11/27/90	25.8	1.1	55.6	27.5	54.7
Area 19, U19az #8	11/27/90	12/05/90	34.9	0.9	113	33.5	63.0
Area 19, U19az #4	11/27/90	12/05/90	51.5	0.8	40.8	8.1	16.3
Area 19, U19az #4	11/18/90	11/27/90	71.7	1.0	16.3	4.8	9.7
Area 20, Camp	12/26/89	01/02/90	160	1.1	2790	21.5	24.4
Area 20, Camp	01/02/90	01/08/90	96.2	1.0	213	6.5	*
Area 20, Camp	01/08/90	01/16/90	39.0	0.9	144	21.5	28.4
Area 20, Camp	01/16/90	01/25/90	23.1	1.1	52.8	26.8	36.6
Area 20, Camp	01/30/90	02/06/90	25.3	1.1	31.8	32.3	42.8
Area 20, Camp	02/06/90	02/12/90	22.6	1.0	35.3	22.5	30.3
Area 20, Camp	02/12/90	02/21/90	27.3	1.3	24.4	14.3	20.1
Area 20, Camp	02/21/90	02/27/90	24.7	1.5	60.2	13.8	18.2
Area 20, Camp	02/27/90	03/06/90	45.2	0.9	5.7	6.2	8.2
Area 20, Camp	03/06/90	03/12/90	31.5	0.7	19.7	3.8	5.0
Area 20, Camp	03/12/90	03/19/90	39.9	1.2	221	27.0	35.2
Area 20, Camp	03/19/90	03/26/90	28.4	0.6	55.9	2.3	*
Area 20, Camp	03/26/90	04/04/90	18.6	0.6	-16.2	7.2	*
Area 20, Camp	04/17/90	04/23/90	48.8	1.5	28.5	11.5	15.8
Area 20, Camp	04/23/90	05/01/90	15.2	1.2	-2.4	3.3	4.8
Area 20, Camp	05/01/90	05/08/90	36.2	1.3	2.9	8.6	11.7
Area 20, Camp	05/08/90	05/14/90	29.1	1.3	12.5	6.1	8.3
Area 20, Camp	05/14/90	05/22/90	165	1.5	-11.3	9.9	13.1
Area 20, Camp	05/22/90	05/30/90	54.3	0.9	30.9	6.2	7.9
Area 20, Camp	06/04/90	06/12/90	23.3	2.4	19.9	9.3	13.0
Area 20, Camp	06/12/90	06/19/90	20.0	0.6	-4.2	3.6	4.8
Area 20, Camp	06/19/90	06/25/90	*	*	3.3	9.9	13.2
Area 20, Camp	06/25/90	07/02/90	20.2	0.9	-8.2	9.2	13.7
Area 20, Camp	07/02/90	07/11/90	25.1	3.3	147	34.0	67.4
Area 20, Camp	07/16/90	07/23/90	26.0	0.8	372	58.0	109
Area 20, Camp	07/23/90	08/01/90	27.6	0.8	189	37.0	72.6
Area 20, Camp	08/01/90	08/05/90	34.6	1.4	332	56.0	113
Area 20, Camp	08/05/90	08/14/90	8.3	0.9	-48.9	10.6	19.7
Area 20, Camp	08/20/90	08/28/90	38.4	0.8	35.9	7.7	15.2
Area 20, Camp	08/28/90	09/04/90	25.9	1.0	22.0	9.5	17.9
Area 20, Camp	09/11/90	09/18/90	17.3	0.7	253	242	453
Area 20, Camp	09/18/90	09/26/90	19.2	0.8	-19.0	22.5	42.7
Area 20, Camp	09/26/90	10/01/90	*	*	33.5	16.9	32.0

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr, cont.)

Sampling Location	Sampling Dates Start	End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 20, Camp	10/01/90	10/08/90	36.9	0.8	-14.2	12.2	24.1
Area 20, Camp	10/08/90	10/18/90	30.2	1.7	11.8	15.9	31.5
Area 20, Camp	10/18/90	10/23/90	31.4	0.9	-5.2	6.2	11.4
Area 20, Camp	10/23/90	10/31/90	27.7	0.8	6.1	3.3	7.9
Area 20, Camp	10/31/90	11/07/90	*	*	-13.3	8.5	16.3
Area 20, Camp	11/07/90	11/13/90	28.1	0.8	1.2	4.2	8.2
Area 20, Camp	11/13/90	11/19/90	43.5	0.9	24.3	7.5	14.8
Area 20, Camp	11/19/90	11/27/90	24.0	1.7	42.9	34.0	67.2
Area 20, Camp	11/27/90	12/04/90	23.1	0.9	1.5	9.6	18.5
Area 20, Camp	12/04/90	12/10/90	28.1	0.7	37.7	6.8	13.7
Area 20, Camp	12/10/90	12/17/90	25.8	0.9	32.6	7.2	14.5
Area 20, Camp	12/17/90	12/24/90	*	*	13.8	9.0	17.4
Area 20, U20az #2	04/10/90	04/17/90	4270	6.0	6220	20.0	23.2
Area 20, U20az #2	04/24/90	04/27/90	2340	3.0	520	3.5	6.2
Area 20, U20az #2	04/04/90	04/10/90	7480	6.5	25200	63.0	60.4
Area 20, U20az #2	05/08/90	05/16/90	351	1.6	*	*	*
Area 20, U20az #2	05/01/90	05/08/90	3730	4.5	1660	6.0	7.6
Area 20, U20az #2	04/27/90	05/01/90	13700	7.0	5310	12.0	10.4
Area 20, U20az #2	01/30/90	02/06/90	48000	19.9	413000	665.8	74.2
Area 20, U20az #2	02/06/90	02/12/90	15300	14.0	66000	144.5	52.9
Area 20, U20az #2	02/23/90	02/27/90	1380	3.8	935	17	41.8
Area 20, U20az #2	01/16/90	01/30/90	45000	23.9	953000	570	*
Area 20, U20az #2	01/08/90	01/16/90	18800	9.5	1100000	550	43.9
Area 20, U20az #2	03/26/90	04/04/90	11300	8.9	47600	129	9.4
Area 20, U20az #2	01/02/90	01/08/90	10900	20.5	1900000	602	*
Area 20, U20az #2	02/27/90	03/07/90	33400	13.0	43400	109	*
Area 20, U20az #2	12/27/89	01/02/90	27800	17.5	11200000	1380	28.8
Area 20, U20az #2	03/12/90	03/19/90	1990	3.0	4550	56.0	88.4
Area 20, U20az #2	03/19/90	03/26/90	1810	5.0	3010	20.5	38.9
Area 20, U20az #2	03/07/90	03/12/90	15300	19.0	8690	22.0	*
Area 20, U20az #7	04/04/90	04/10/90	351	1.6	151	3.5	10.2
Area 20, U20az #7	04/10/90	04/17/90	12900	11.5	*	*	*
Area 20, U20az #7	03/13/90	03/19/90	20.7	2.0	124	18.5	24.7
Area 20, U20az #7	03/19/90	03/26/90	49.8	0.9	117	18.0	24.3
Area 20, U20az #7	03/07/90	03/13/90	*	*	1480	25.5	49.2
Area 20, U20az #7	05/01/90	05/08/90	242	1.5	-26.9	17.2	22.4
Area 20, U20az #7	04/23/90	05/01/90	302	1.5	140	26.5	33.4
Area 20, U20az #7	04/17/90	04/23/90	240	1.5	227	7.0	19.7
Area 20, U20az #7	01/08/90	01/16/90	105	2.0	751	22.5	55.3
Area 20, U20az #7	01/16/90	01/30/90	56.0	1.0	682	16.0	44.0
Area 20, U20az #7	01/02/90	01/08/90	702	6.0	3600	26.5	29.0
Area 20, U20az #7	12/27/89	01/02/90	63500	33.5	267000	276	48.0
Area 20, U20az #7	01/30/90	02/05/90	181	1.2	935	24.0	52.7
Area 20, U20az #7	02/05/90	02/12/90	34.0	0.9	83.3	22.9	23.8
Area 20, U20az #7	02/20/90	02/27/90	51.2	0.9	310	61.5	78.7
Area 20, U20az #7	02/12/90	02/20/90	194	1.5	454	5.5	12.7

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr, cont.)

Sampling Location	Sampling Dates Start	End	Kr pCi/m³	Kr 1s	Xe pCi/m³	Xe 1s	Xe Detection Limit
Area 20, U20az #7	02/27/90	03/07/90	75.4	1.2	85.0	12.1	16.1
Area 20, U20az #7	05/08/90	05/14/90	97.5	1.4	50.2	5.8	7.3
Area 20, U20az #7	05/14/90	05/18/90	*	*	17.1	5.4	7.9
Area 20, U20bb #5	10/18/90	10/24/90	24.0	0.9	-7.7	7.1	13.2
Area 20, U20bb #5	10/24/90	10/31/90	21.7	0.8	2.1	3.7	7.5
Area 20, U20bb #5 @ 50'	10/13/90	10/18/90	19.1	0.9	17.1	9.3	18.4
Area 20, U20bb #6	10/31/90	11/07/90	32.9	0.8	25.0	7.2	14.6
Area 20, U20bb #6	10/23/90	10/31/90	12.1	0.9	9.7	4.8	10.0
Area 20, U20bb #6 @ 50' South	10/13/90	10/18/90	24.0	0.8	23.8	8.4	16.6
Area 20, U20e	07/13/90	07/23/90	25.5	1.0	-8.4	6.7	12.3
Area 25, E-MAD	12/26/89	01/04/90	28.9	0.6	31.4	8.8	*
Area 25, E-MAD	01/09/90	01/17/90	28.7	0.9	83.6	10.5	*
Area 25, E-MAD	05/22/90	05/29/90	22.9	1.0	8.3	5.7	8.5
Area 25, E-MAD	05/29/90	06/04/90	18.9	0.9	142	24.0	31.7
Area 25, E-MAD	06/04/90	06/13/90	26.0	0.9	-9.2	6.9	10.1
Area 25, E-MAD	06/13/90	06/18/90	18.9	0.8	-5.7	4.7	6.7
Area 25, E-MAD	06/18/90	06/26/90	*	*	-18.7	9.6	12.8
Area 25, E-MAD	06/26/90	07/03/90	*	*	33.3	11.9	34.2
Area 25, E-MAD	07/10/90	07/17/90	22.3	0.9	4.1	8.9	17.5
Area 25, E-MAD	07/17/90	07/24/90	31.1	1.2	352	33.0	62.7
Area 25, E-MAD	07/24/90	07/31/90	13.0	0.6	164	25.0	49.3
Area 25, E-MAD	08/08/90	08/14/90	17.2	0.8	-8.1	15.9	29.5
Area 25, E-MAD	08/21/90	08/28/90	16.6	0.6	107	11.0	22.1
Area 25, E-MAD	08/28/90	09/05/90	18.3	0.8	11.7	4.2	8.4
Area 25, E-MAD	09/05/90	09/11/90	17.7	0.9	-45.1	45.6	86.4
Area 25, E-MAD	09/11/90	09/17/90	21.4	0.6	89.5	89.5	175
Area 25, E-MAD	09/17/90	09/26/90	19.2	1.5	6.4	14.9	30.2
Area 25, E-MAD	09/26/90	10/01/90	21.7	0.8	21.0	12.5	24.2
Area 25, E-MAD	10/01/90	10/09/90	14.5	0.9	54.6	16.6	32.8
Area 25, E-MAD	10/09/90	10/16/90	19.0	0.8	2.5	6.8	13.0
Area 25, E-MAD	10/16/90	10/23/90	23.9	0.9	-11.0	4.2	7.8
Area 25, E-MAD	10/23/90	10/30/90	16.5	0.6	3.9	3.1	6.2
Area 25, E-MAD	11/08/90	11/14/90	27.2	1.2	37.6	6.1	12.0
Area 25, E-MAD	11/14/90	11/20/90	20.9	0.8	72.1	15.8	31.5
Area 25, E-MAD	11/20/90	11/27/90	26.7	0.8	*	*	*
Area 25, E-MAD	11/27/90	12/04/90	23.3	0.7	-3.8	3.3	6.4
Area 25, E-MAD	12/04/90	12/11/90	19.0	1.5	21.6	5.7	10.8
Area 25, E-MAD	12/11/90	12/17/90	23.3	0.6	12.6	4.8	9.1
Area 25, E-MAD	12/17/90	12/27/90	19.7	0.8	8.8	7.2	14.2

This is the first year in which actual computed levels are given for all samples. In previous years only the detection limit was given if the computed concentration was less than the detection limit. Because some analytic levels were also less than the background levels, some values are reported as negative concentrations. While negative concentrations have no

physical meaning, they are essential for calculating unbiased summary statistics. Figures E.1 through E.9 are time series plots of the xenon data in Table E.1 with one plot for each of the stations that were sampled for more than two months. The solid line in these plots gives the detection limit. Figure E.10 shows the data from all stations combined, but with the unusually high values deleted. (In these plots the numbers represent plotting locations where more than one data point are located.) Note that several ordinate scales are used among the plots in order to better visualize the patterns within the data and that the time scale for the U20az plots is different than the other plots and . All the ordinate values are in units of picocuries per cubic meter, the same units as used in Table E.1. The time used for the abscissa is the month and day that sampling ended converted into month and fraction of the month. The data for U20bb, U20e, T Tunnel, and U19az are not plotted. There is only one data point for U20e and T Tunnel. The data for U20bb covers only about a one-month time period and is divided into two series of three readings each, one series for each of two samplers. The eight data values for U19az were collected over less than a month. These data can easily be reviewed from Table E.1.

These ten figures give a graphical overview of the xenon data. The general pattern is one of a few high values, some intermediate values, and most of the data values are close to the detection limit. The figures for E-MAD and Gate 200 show a lapse in date from the middle of January to May. During this time period those samplers were moved to the U20az location.

The high values in January at the U20az sites and the nearby Area 20 camp can be explained. These samplers were placed on the site of the BARNWELL event, which provides an underground inventory of fission byproducts including noble gases. There was a large early winter storm in December 1989 which probably induced atmospheric pumping of the very mobile noble gases out of the BARNWELL event cavity. The occasional high values at the other sampling locations seem to occur randomly throughout the year, and no specific causes can be associated with them.

The pattern of data values shown in Figure E.10 (an increasing density of points as values approach the baseline) is suggestive of lognormal data distribution. Note that in this figure data values above 1000 have been excluded, and there were 22 such values. Before a statistical comparison of sampling locations can be attempted, the distribution must be determined and the outliers removed. Excluding the high values from the time series plots also allows one to see any patterns that may appear in the remaining data. The following figures repeat some of the figures above but with high values removed.

Figures E.11 and E.12 repeat the data in Figure E.8, but have the two highest values deleted. These two values are the first two values and can be attributed to the atmospheric pumping discussed above. Figure E.8 shows no pattern of data and detection limit values because of the compression of scale caused by the first data value, but Figure E.11 shows this pattern. Figure E.12 is a lognormal probability plot of the data in Figure E.11. It plots the natural logarithm of the data values on the ordinate and the expected quantiles or normal scores associated with each data value on the abscissa. Figure E.11 now suggests that some residual effect of the atmospheric pumping may have continued until the beginning of the third month. There appears to still be one high value in the middle of the third month, however; the probability plot of Figure E.12 shows that this value is consistent with the remaining data if a lognormal data distribution is assumed. In a probability plot a straight line indicates that the data have a distribution determined by that type of plot. These data form approximately a straight line suggesting that the data are lognormally distributed. This suggestion is statistically tested using the correlation coefficient "goodness of fit" test. The results of this

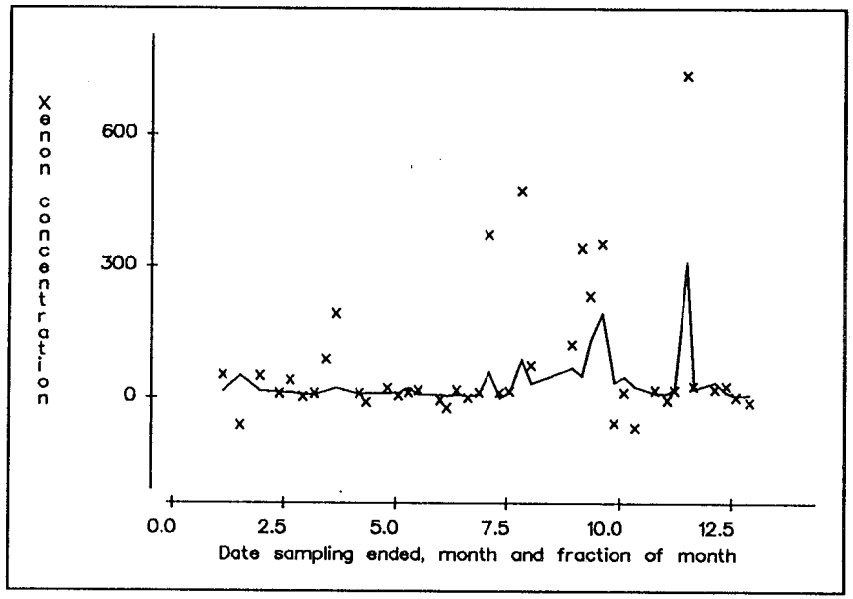


Figure E.1 Probability Plot of PILEDRIVER Xe Results (pCi/m^3)

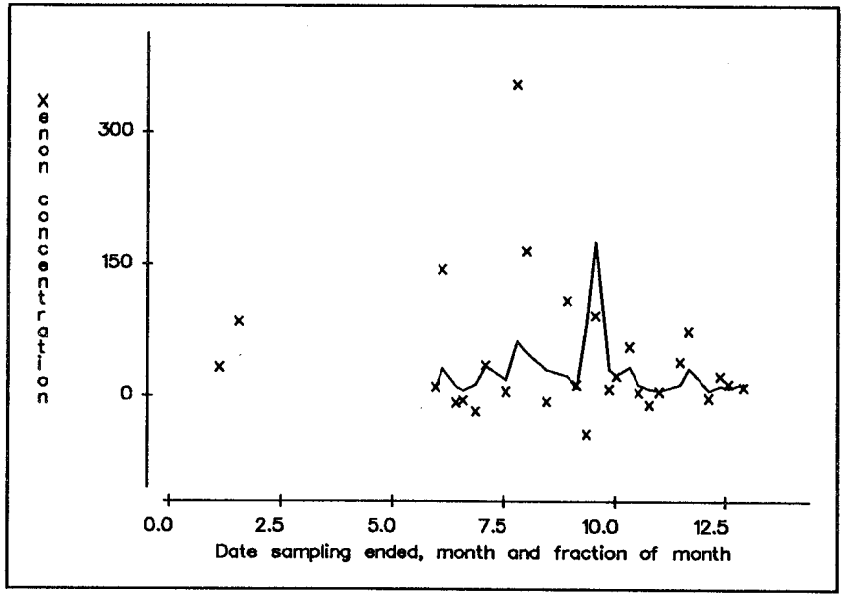


Figure E.2 Probability Plot of E-MAD Xe Results (pCi/m^3)

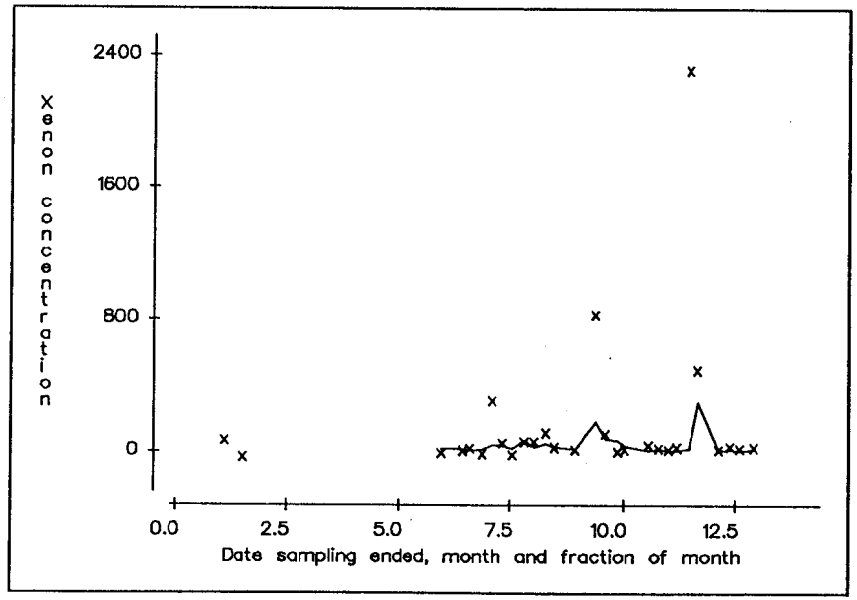


Figure E.3 Probability Plot of Gate 200 Xe Results (pCi/m^3)

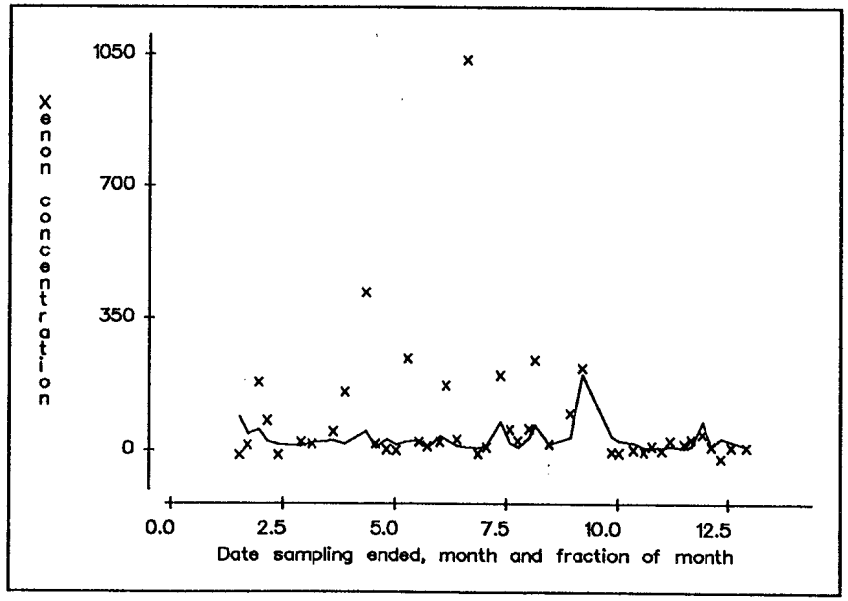


Figure E.4 Probability Plot of Gravel Pit Xe Results (pCi/m^3)

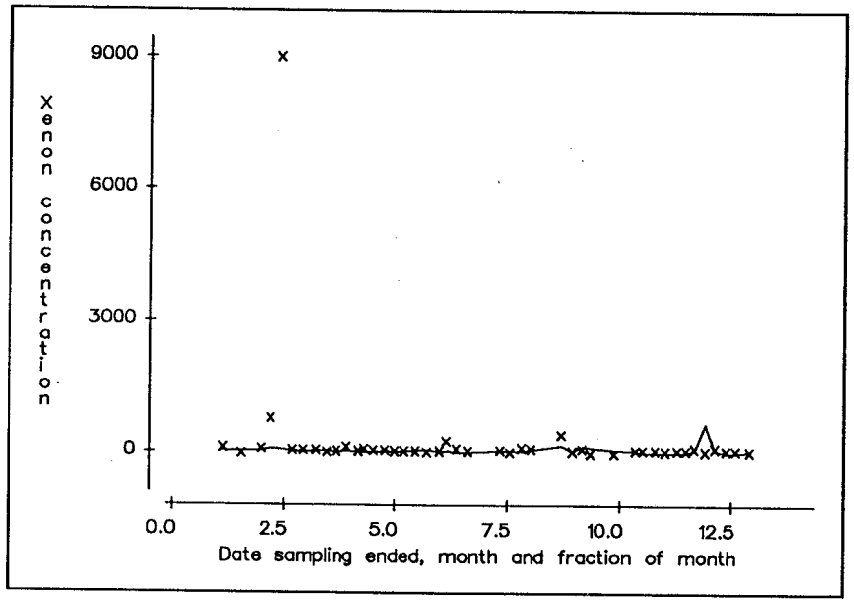


Figure E.5 Probability Plot of BJY Xe Results (pCi/m^3)

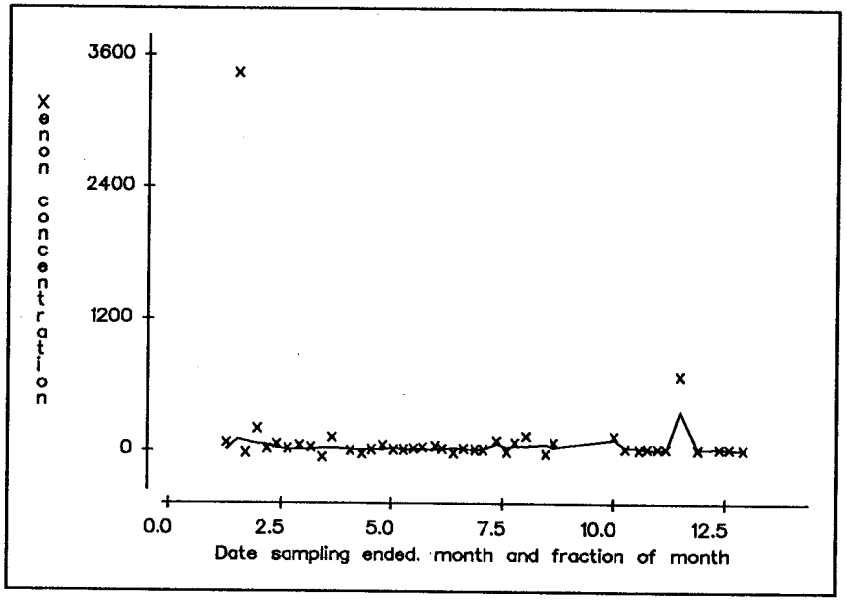


Figure E.6 Probability Plot of Area 12 Camp Xe Results (pCi/m^3)

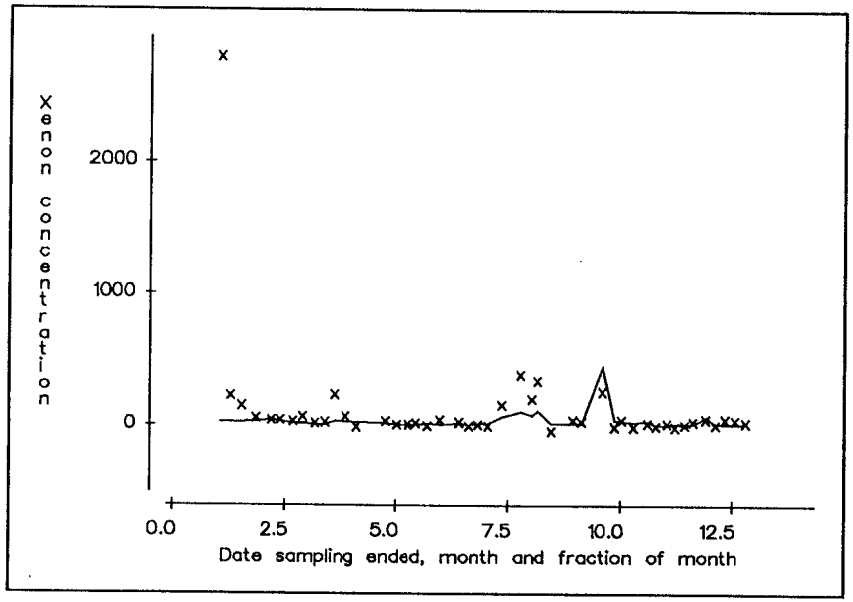


Figure E.7 Probability Plot of Area 20 Camp Xe Results (pCi/m^3)

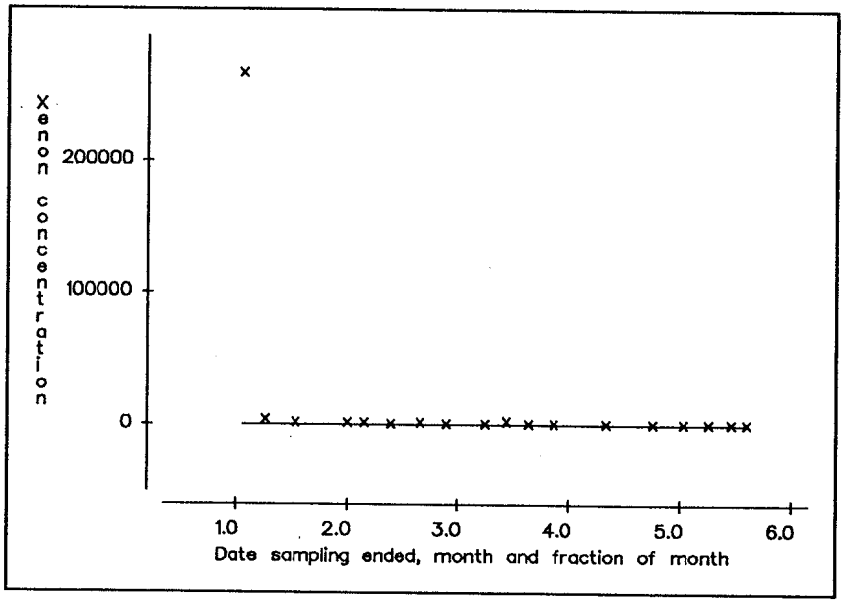


Figure E.8 Probability Plot of U20az #7 Xe Results (pCi/m^3)

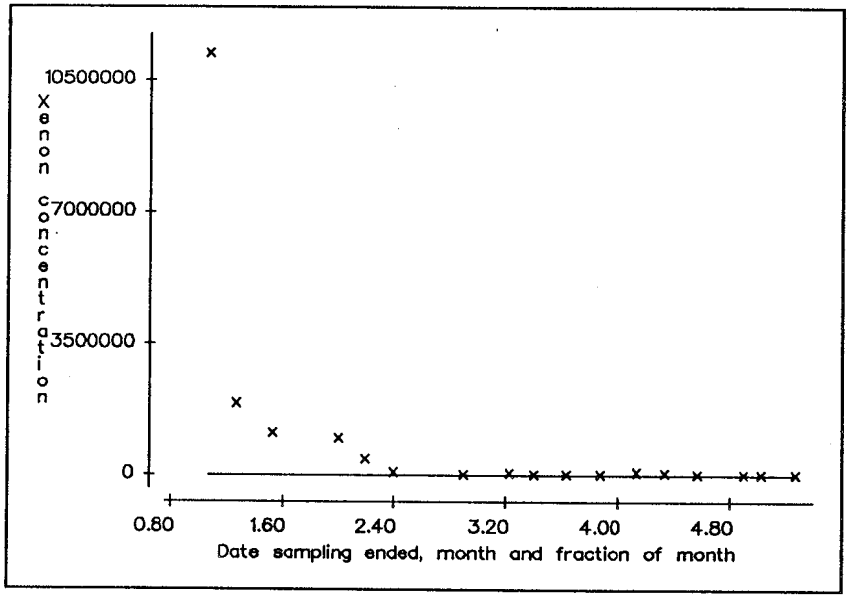


Figure E.9 Probability Plot of U20az #2 Xe Results (pCi/m^3)

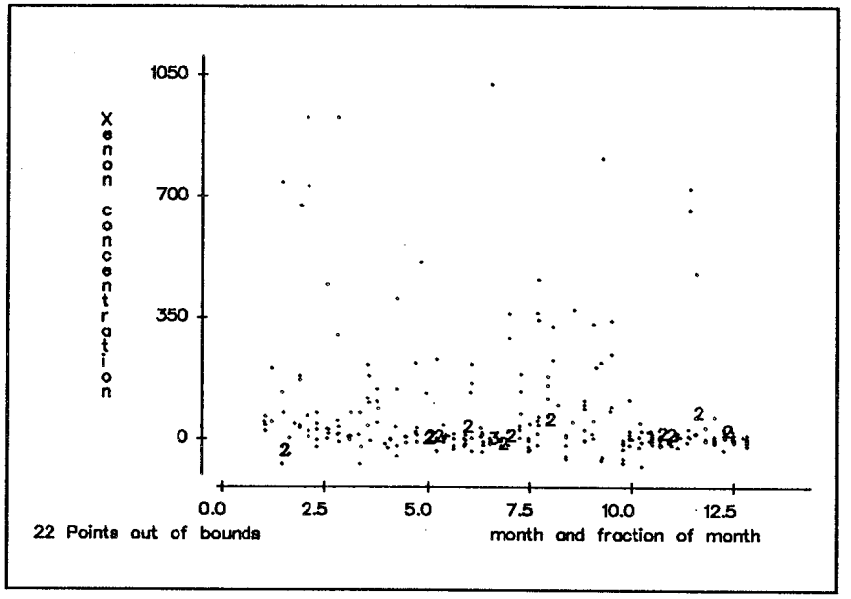


Figure E.10 Probability Plot of All 1990 Xenon Data (pCi/m^3)

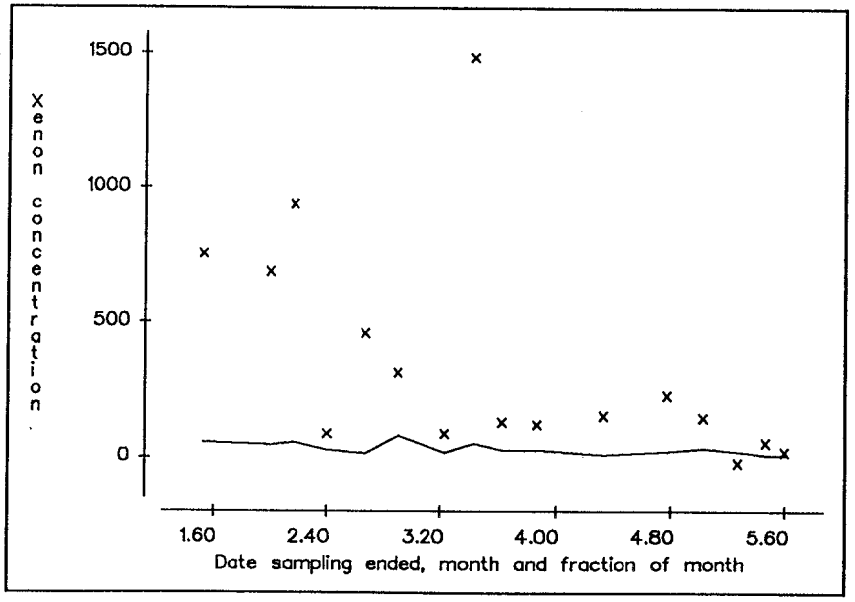


Figure E.11 Probability Plot of U20az #7 Xe Results (pCi/m^3), Two Highest Values Deleted

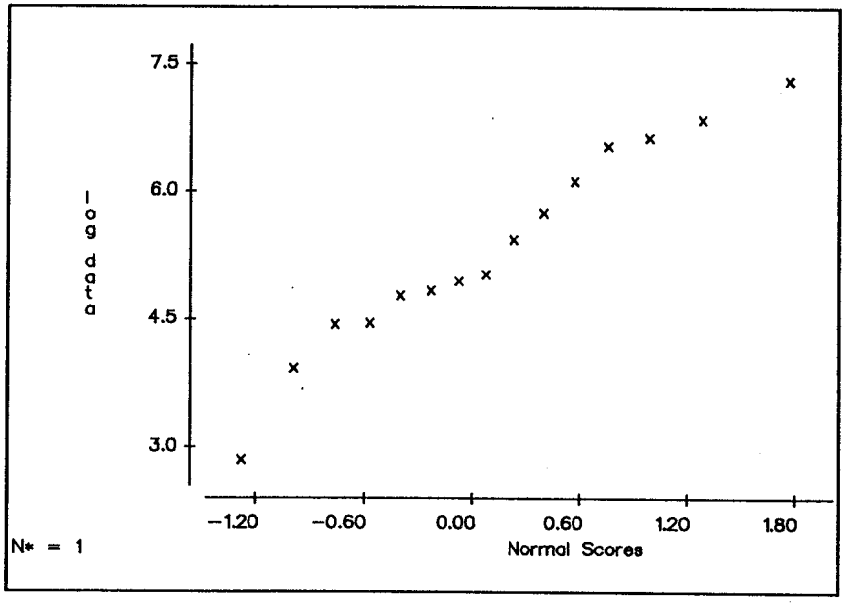


Figure E.12 Lognormal Probability Plot of U20az #7 Xe Results, Two Highest Values Removed

test suggest that there is between a 50 and 75 percent chance that these data are lognormally distributed. This is a strong acceptance criteria. The corresponding test for a normal density indicated less than a 0.5 percent probability of a fit to the distribution. The notation "N*=1" in the lower left corner of Figure E.12 indicates that the logarithm of the negative data value could not be calculated, and it was replaced by a missing value code.

Analyses similar to that discussed with Figures E.11 and E.12 was performed for all the sampling stations except those having less than two months of data. These analyses established that none of the data groups had a normal distribution, but all had a lognormal distribution if a few outliers were removed. Thus the statistical comparison for equality of groups was done using the logarithms of the data. When using logarithms, negative data values become missing values and thus are excluded from the analysis. At the Gravel Pit sampling station, there were two low outliers in the logarithmically transformed data that were removed to obtain a lognormal distribution. These were values very close to zero and thus had little influence on the summary statistics for that station. The BJY station data had one low and one high value removed before analysis. The Area 20 Camp data had one high and two low values removed. The plot of the U20az #2 data (Figure E.9) appears to have a high value, but all the data fit a lognormal distribution very well. This seems to be because the data are close to the form of an exponential decay curve, which becomes a straight line in the logarithmic scale. Exponential decay is typical of environmental diffusion and radiological decay of xenon, thus this data is showing a time trend.

Table E.2 gives the simple descriptive statistics for the xenon measurements by sampling location. The standard deviations given in this table are the "between data values" measurement of variability, they do not consider the "fuzziness" of the data measures by the analytical standard deviations. This table is divided into two parts; the first gives the statistics for the permanent environmental monitoring stations and the second gives the statistics for the special monitoring of the event locations. The outlier values, described in the discussion above of the data distribution, were deleted from the environmental data before computation of this table.

In Table E.2 the first quartile of the data is the point at which 25 percent of the data values are lower and 75 percent higher. Likewise, in the third quartile, 75 percent of the data values are lower and 25 percent higher. A comparison of the quartiles and medians shows that the medians are closer to the first quartile than to the third quartile, which indicates the data is skewed, a property of lognormal distributions. Note that the rows for U20az in this table have a different number of decimal places than the other rows. This is necessary because of the very different magnitudes of the data for this station.

The final statistical analysis was to test for differences between sampling stations. The logarithms of the data, with outliers removed, were used in order to satisfy the assumptions underlying the analysis of variance (ANOVA) procedures. A side issue must first be investigated: Should the analytical standard deviations be considered? This is equivalent to asking if the "fuzziness" in the data should be considered, where the fuzziness is measured by the analytic standard deviations reported in Table E.1. Statistically this is resolved by calculating the pooled, within-station mean square error of the data (the ANOVA replicate measurements error) and comparing this to the between-measurements mean square error. Since the natural logarithms of the data are to be used for this ANOVA, a corresponding transformation must be applied to the analytical standard deviations in Table E.1. Propagation of error theory shows that the coefficient of variation is the standard deviation of the logarithm

Table E.2 Descriptive Statistics of Xenon Data for 1990[a]

Environmental Stations	N	Mean	Median	Standard Deviation	1st Quartile	3rd Quartile	Maximum
PILEDRIVER	41	74.7	15.1	161	0.4	61.2	732
E-MAD	28	41.7	12.1	78.1	-2.2	67.7	352
Gate 200	28	157	19.7	458	5.5	57.0	2310
Gravel Pit	42	80.5	19.7	176	5.3	80.1	1030
BJY	42	50.2	18.1	130	2.4	46.1	738
Area 12 Camp	42	119	9.1	535	2.3	54.2	3430
Area 20 Camp	42	56.5	24.3	96.0	1.6	53.6	372
All	265	81.2	15.5	284	3.0	53.9	3430
Event-Related Stations							
U19az	7	43.3	40.8	34.5	16.3	55.6	113
T Tunnel	1	419	*	*	*	*	*
U20az RAM 7	16	349	145	416	84	625	1480
U20az RAM 2	17	928000	25200	2700000	3780	683000	11200000
U20bb RAM 5	3	19.5	23.8	8.5	*	*	25
U20bb RAM 6	3	3.8	2.10	12.5	*	*	17
U20e	1	-8.4	*	*	*	*	*

(a) Values in the table are in units of pCi/m^3.

of a data value. The square of this value is used because the ANOVA uses variances rather than standard deviations.

First the ANOVA was run on the logarithms of the data from the seven permanent stations with all negative values removed. The negative values were removed because the logarithms of negative numbers do not exist. Note that this ANOVA ignores the within-replicates error discussed in the previous paragraph. The changes in sample sizes in Table E.3 are due to the deleted data values. The standard deviations given in Table E.3 are the standard deviations calculated from the logarithms of the data for each station and thus should not be compared to those in Table E.2. The standard deviation of the logarithms of date estimates the coefficient of variation of the data. The statistical term "median" has been added to Table E.3 because exponentiation (finding the anti-logarithm) of the mean of the logarithms of the data gives the median of the original data. The p-value of 0.773 says that there is no statistical probability that the stations are not equal, and the graphic showing great overlapping of the group confidence intervals supports this conclusion.

If replicate analyses of the samples were available, there would be an additional line in the ANOVA table between the "error" and "total" lines. The error line measures the variability between different samples from the same station. The new line would measure variability between different analyses of each sample. Such replicate analyses are not available, but the

Table E.3 One-Way Analysis of the Variance on Xenon Concentrations Between Stations [ln (pCi/m^3)]

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Between Stations	6	7.14	1.19	0.55	0.773
Error	198	431.98	2.18		
Total	204	439.13			

Station	N	Log Median	Standard Deviation	Individual 95 Percent CI's for Mean Based on Pooled Standard Deviation
PILEDRIVER	31	3.501	1.59	(---------*---------)
E-MAD	21	3.301	1.377	(-----------*-----------)
Gate 200	23	3.583	1.777	(-----------*-----------)
Gravel Pit	33	3.664	1.390	(---------*---------)
BJY	32	3.429	1.203	(---------*---------)
Area 12 Camp	33	3.114	1.678	(---------*---------)
Area 20 Camp	32	3.623	1.284	(---------*---------)
				3.00 3.50 4.00

Pooled Standard Deviation = 1.477

analytic standard deviations in Table E.1 are measurements of the same source of errors. The transformed standard deviations from Table E.1 cannot be used in an analysis of variance because they have no degrees of freedom or equivalent, but their effect can be approximated. The sum of the analytical variances (after transformation) is an approximation of what would be the within-replicates sum of the squares if it were available, and the mean of these values approximates the corresponding mean square error. The 205 remaining transformed analytical variances have a sum of 137.51 and a mean of 0.67. Comparing this 0.67 to the error mean square of 2.18 in Table E.3 shows that the fuzziness in the data would account for about a quarter of the total error if it were included in the analysis. Since the only effect of including this fuzziness factor would be to reduce the significance and there is no significant differences before it is included, this additional step was not done.

KRYPTON DATA

The krypton data are reported in Table E.1 in the same way as the xenon data except that detection limits are not reported for krypton. Figures E.13 through E.23 are the krypton counterparts of Figures E.1 through E.10. As for xenon, no plots are given for the U19az, U20bb, and U20e stations because of too little data. These data are in the last rows of Table E.1.

In general these plots show a few high values, with most of the values around environmental levels. Figure E.13, the PILEDRIVER sampling location, shows one high value that has been reviewed by the REECo Health Physics Department and attributed to the BARNWELL event

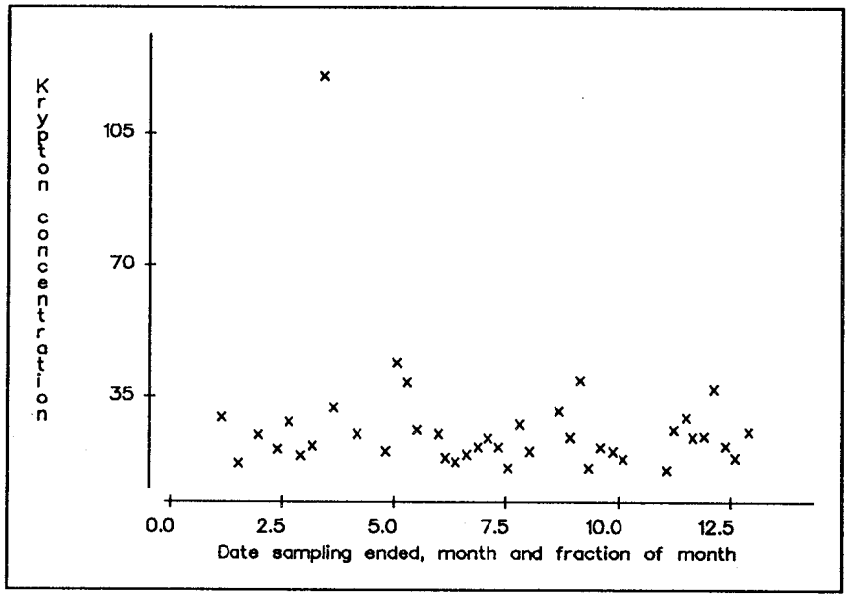


Figure E.13 Probability Plot of PILEDRIVER Kr Results (pCi/m^3)

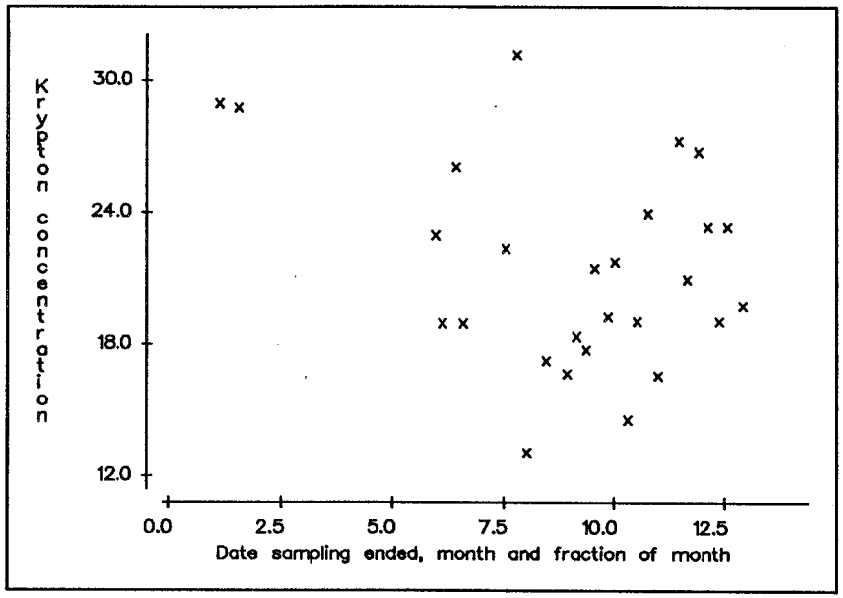


Figure E.14 Probability Plot of E-MAD Kr Results (pCi/m^3)

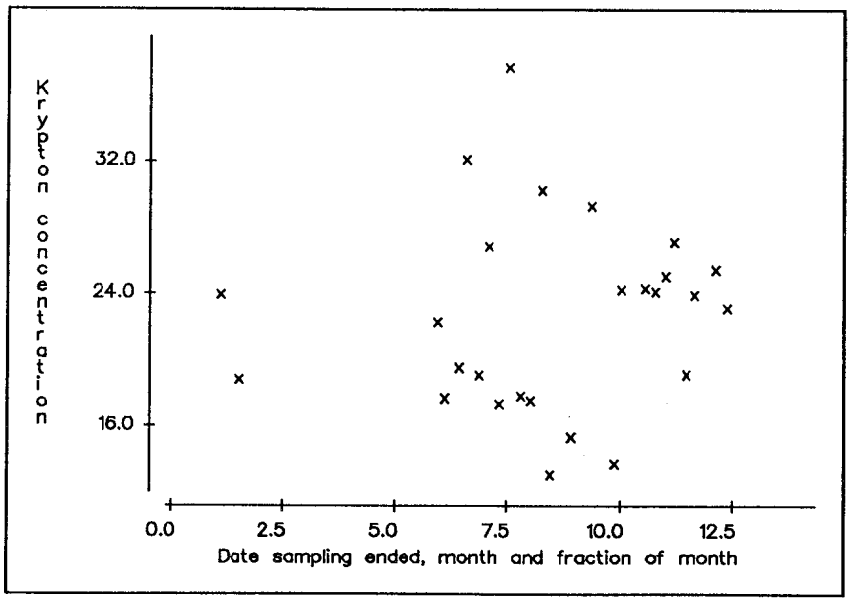


Figure E.15 Probability Plot of Gate 200 Kr Results (pCi/m^3)

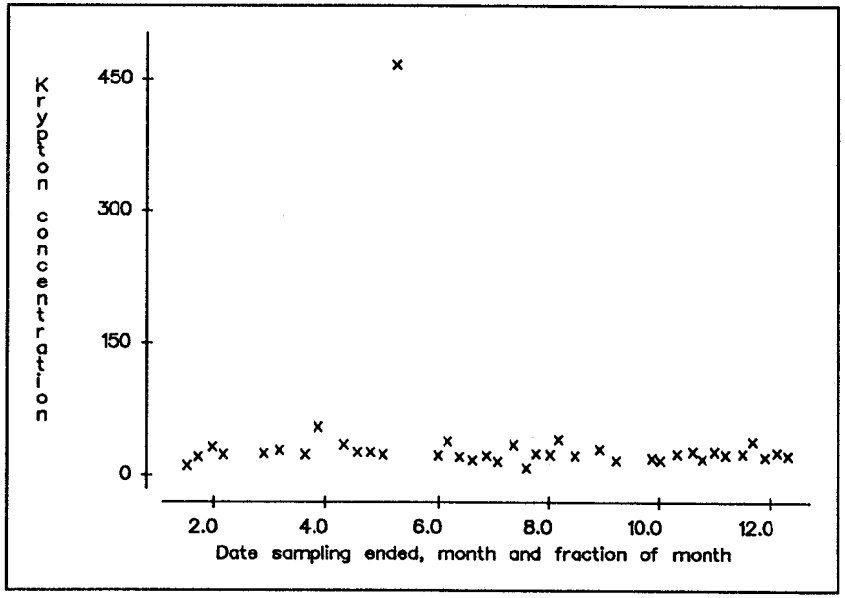


Figure E.16 Probability Plot of Gravel Pit Kr Results (pCi/m^3)

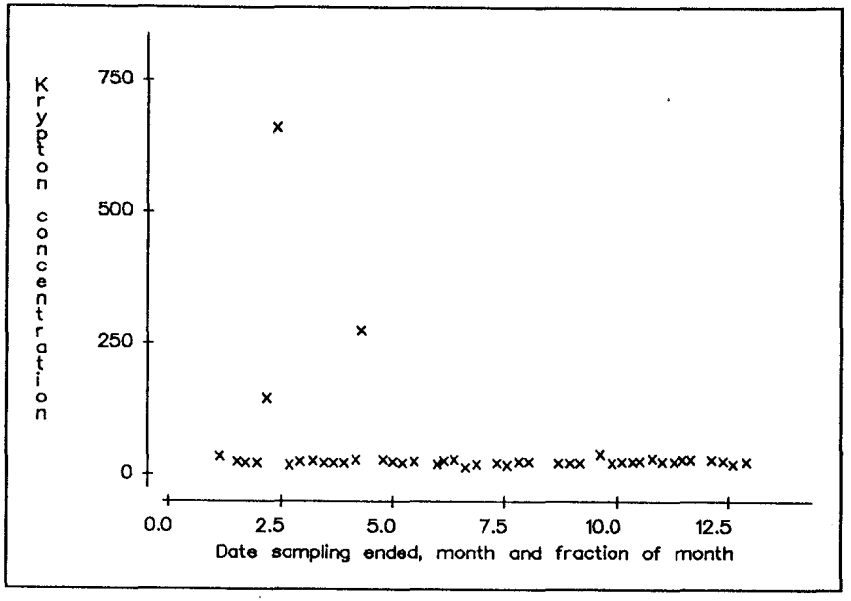


Figure E.17 Probability Plot of BJY Kr Results (pCi/m^3)

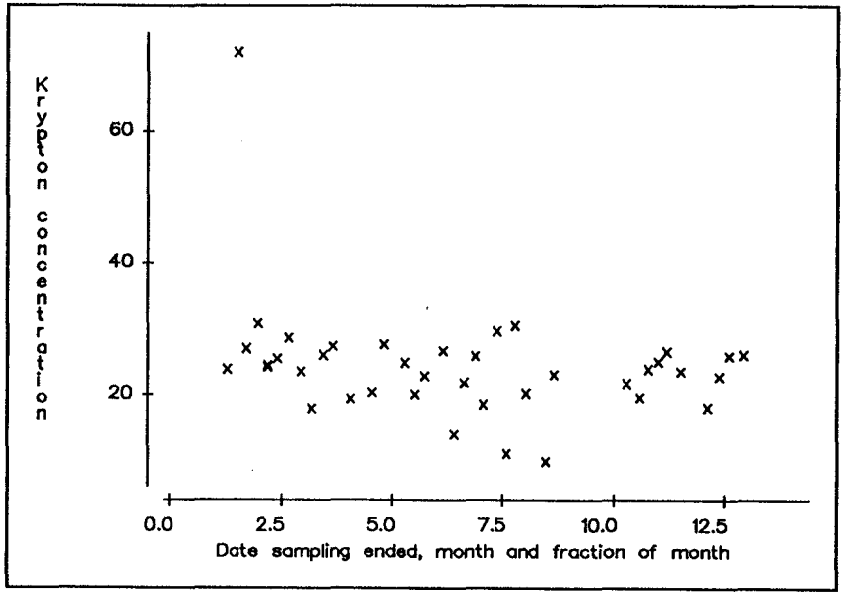


Figure E.18 Probability Plot of Area 12 Camp Kr Results (pCi/m^3)

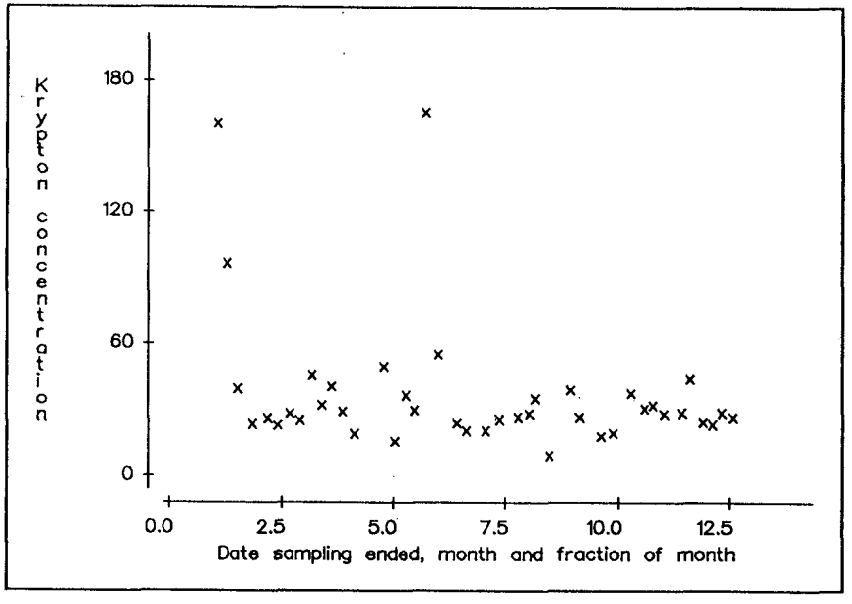


Figure E.19 Probability Plot of Area 20 Camp Kr Results (pCi/m^3)

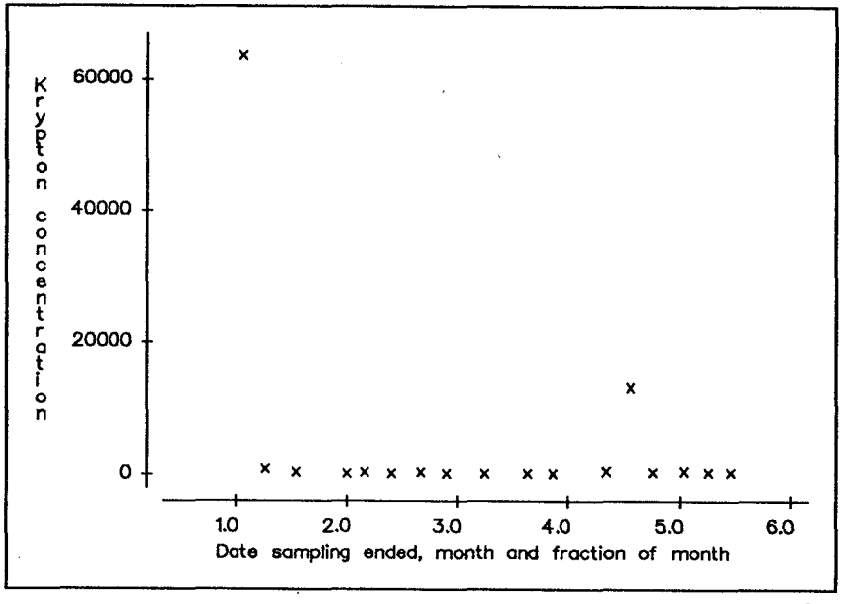


Figure E.20 Probability Plot of U20az #7 Kr Results (pCi/m^3)

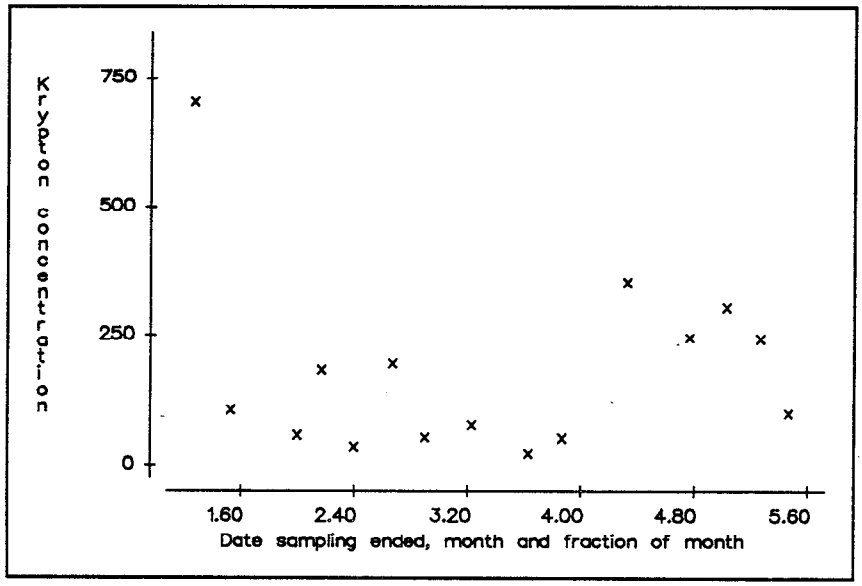


Figure E.21 Probability Plot of U20az #7 Kr Results (pCi/m^3), Two High Values Deleted

(U20az) on December 8, 1989. The remaining data for this location seem to be consistently in the environmental background range. Figures E.14 and E.15, E-MAD and Gate 200, show only random variability in the environmental range. The lack of data from January to July represents the period during which the sampling apparatus from these stations was temporarily moved to the U20az site. Figures E.16 through E.19 are similar to Figure E.13, with most data within the environmental range but a few high values with no attributable cause. Figure E.20 shows a January high value that can be attributed to atmospheric pumping after the BARNWELL event. This mechanism was discussed above in the xenon section of this appendix. The mid-April high value in Figure E.20 has no attributable cause. Figure E.21 is a repeat of Figure E.20 but with the two high values removed from the data. This figure shows a random pattern at levels higher than environmental, and the first value may show the end of the atmospheric pumping phenomenon. Figure E.22 shows high values and high variability in the left portion with a decrease in both variability and concentration as time passes. A regression test for linear trend gave a highly significant probability of a trend which accounted for 30 percent of the variability in the data (R^2). Figure E.23 is a composite of all the krypton data, including the U20bb data not found in other plots. In order to see any pattern in this plot, it was necessary to use the common logarithms of the data values for the ordinate. The distinct change in pattern between the two halves of the year is a result of the U20az data, which was collected for only the first half of the data and is distinctly higher than data from other stations.

An exploratory data analysis was performed on the krypton data for each of the nine sites with more than two months of data, using the same probability plot and goodness of fit test methods as used above on the xenon data. Some high values and a few low values

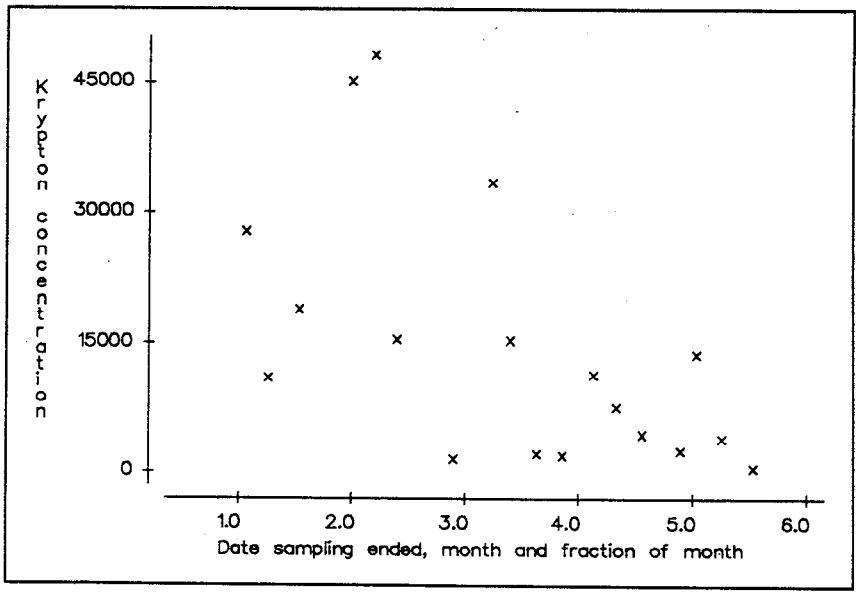


Figure E.22 Probability Plot of U20az #2 Kr Results (pCi/m^3)

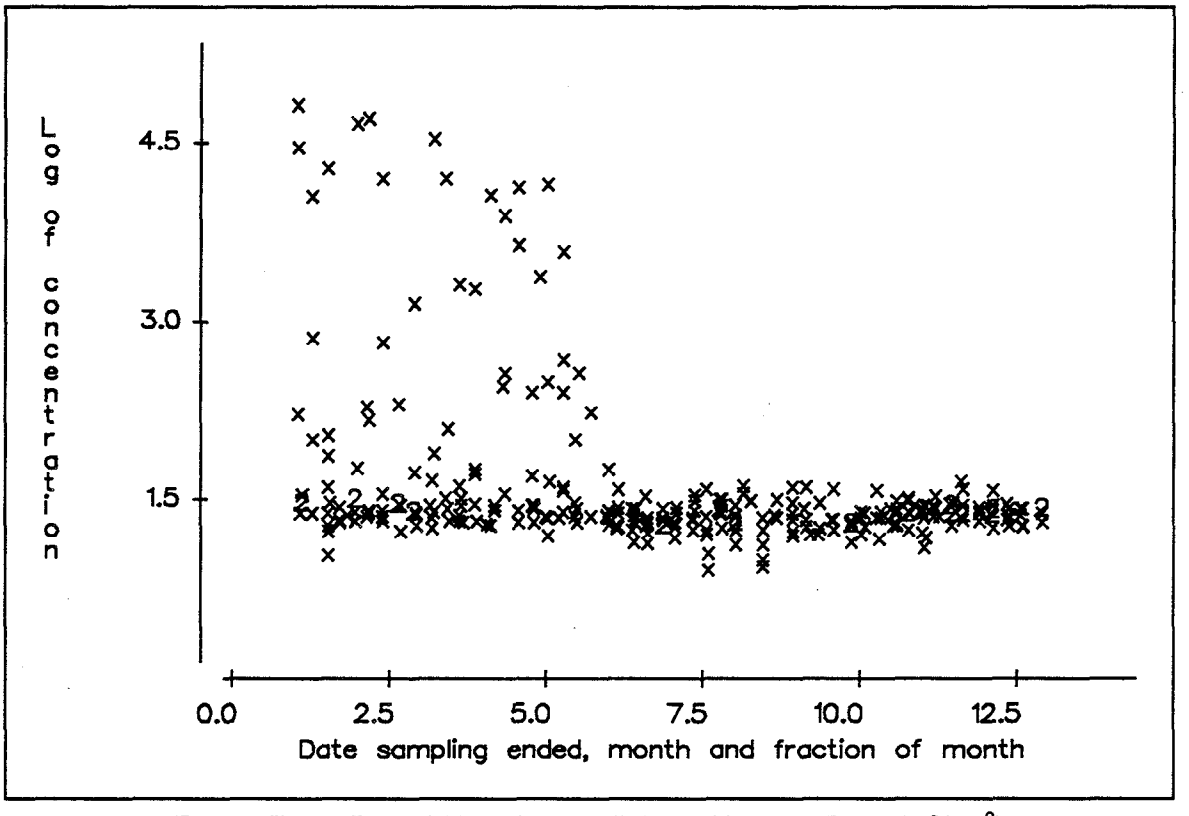


Figure E.23 Probability Plot of All 1990 Krypton Data (pCi/m^3)

were identified using these methods. The high values are obvious in Figures E.13 to E.22. When these values were removed from the data, all groups fit lognormal distributions and three of the nine also fit normal distributions. The PILEDRIVER station had one atypically high value.

The Gravel Pit station had one high and one low atypical values. The BJY data contained three atypically high data values. The Area 12 Camp data contained one high and three low values. The Area 20 Camp data contained three high and one low values. The U20az #7 data contained two atypically high values.

The lognormal distribution was chosen for further statistical analyses to satisfy the underlying assumptions of the ANOVA methods. This is a change from 1989 when it was found that a normal distribution was the best fit for the data. Table E.4 gives the basic descriptive statistics of the stations where annual krypton data were collected. The atypical values were removed from the data before this table was computed and logarithms were not used.

The overall mean given in this table is computed using only the data from the seven permanent environmental stations, and this mean is typical of environmental conditions at NTS.

As for xenon, an important consideration is whether or not the counting errors should be included in any formal statistics. This was investigated using the same methods described above in the discussion of the xenon analysis. The within-replicates mean square error, approximated from the analytical standard deviations and propagated in accordance to a logarithmic data transformation, was 0.0018 for 241 data values from the seven permanent environmental sampling stations. The between-replicates mean square error from the ANOVA

Table E.4 Descriptive Statistics of 1990 Krypton Data (pCi/m^3)

Environmental Stations	N	Mean	Median	Standard Deviation	1st Quartile	3rd Quartile	Maximum
PILEDRIVER	39	24.19	23.50	6.78	19.20	27.30	43.70
E-MAD	27	21.36	20.90	4.56	18.30	23.90	31.10
Gate 200	26	22.60	23.50	5.87	17.68	25.75	37.70
Gravel Pit	37	24.79	23.00	8.21	20.45	26.60	54.20
BJY	41	23.26	22.30	4.39	20.70	25.60	37.90
Area 12 Camp	34	23.91	23.95	3.53	21.15	26.35	30.60
Area 20 Camp	37	29.34	27.60	8.99	23.20	35.40	54.30
All	241	24.4	23.4	6.76	20.0	27.1	54.3
Event-Related Stations							
U20az #7	15	180	105	178	51.2	244	702
U20az #2	18	14600	11100	14800	2250	21000	48000
U20bb #5	3	23.0	24.0	10.44	*	*	32.9
U20bb #6	3	21.6	21.7	2.45	*	*	24.0
U20e	1	25.5	25.5	*	*	*	25.5
U19az	7	37.5	29.9	17.94	25.8	51.5	71.7
T Tunnel	1	85.9	85.9	*	*	*	85.9

was 0.0603. The within-replicates error would inflate the ANOVA mean squared error by about three percent if included in the statistics. Since a variance inflation of three percent is small, the counting errors were not used in the formal statistical analyses.

A one-way ANOVA was used to compare seven areas for equality of krypton data means using the natural logarithms of the data with atypical values removed. The ANOVA output is shown in Table E.5. The mean of the logarithms of data is the logarithm of the median of the original data. The standard deviation of the logarithms of data is the coefficient of variation of the original data. In an ANOVA table the degrees of freedom, sum of squares, mean squares, and the computed value of the F-statistic are shown; the "p Value" is the probability associated with the F-statistic. This is the probability that no significant differences between the stations were found. Since this probability is small, the conclusion is that there are significant differences. The analysis resulted in the highly significant finding that the means were not equal. A Tukey's multiple comparison procedure was then used to determine the pattern of equality among the means. This procedure resulted in the finding that the Area 20 Camp mean value was significantly higher than the other means at the five percent significance level.

ERROR ANALYSIS OF REPLICATES

The statistical sources of error have become a concern of the REECo Health Physics Department in recent years. Consideration of possible effects and mechanisms that could

Table E.5 One-Way Analysis of the Variance on Krypton Concentrations Between Stations [ln(pCi/m^3)]

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Between Stations	6	1.7246	0.2874	4.77	0.000
Error	234	14.1030	0.0603		
Total	240	15.8276			

Station	N	Log Median	Standard Deviation	Individual 95 Percent CI's for Mean Based on Pooled Standard Deviation
PILEDRIVER	39	3.1516	0.260	(----*----)
E-MAD	27	3.0397	0.2146	(------*-----)
Gate 200	26	3.0858	0.2608	(------*-----)
Gravel Pit	37	3.1633	0.3079	(----*----)
BJY	41	3.1301	0.1852	(----*----)
Area 12 Camp	34	3.1635	0.1508	(-----*----)
Area 20 Camp	37	3.3363	0.2932	(----*-----)
				3.00 3.15 3.30 3.45

Pooled Standard Deviation = 0.2455

contribute to the randomness in the data has led to the decision to investigate and quantify some of the potential error sources. To this end a few of the samples collected during the year were collected in replicate; these data are listed in Table E.6. The replicate sampling consisted of two interconnected air tanks filled by one compressed air pump; the tanks were then separately analyzed. Sufficient data for analysis were available only for krypton. Since previous sections of this appendix have shown that the data are lognormally distributed, the data are reported as natural logarithms and the associated transformed standard deviation, which is the coefficient of variation. In Table E.1 these replicated samples and their variances were averaged to avoid the analytical problems of a few replicated samples in a large data base.

The seven permanent sampling stations where replicate data were collected are indexed 1 through 7. Note that there are different numbers of samples for the seven sampling locations; this results in some problems for the statistical analysis. An ANOVA was used to test for differences between the sampling stations while accounting for the variability within samples and for differences between the samples collected at each station. Using ANOVA terminology, the samples are nested within the stations because any randomness in a given sample affects the total error of only one station. The samples mean square error is a random effect because there are an infinite number of possible samples. It was necessary to use an ANOVA procedure called the "Generalized Linear Model" because of the unequal number of samples for the stations and the nesting of error effects. The results of this analysis are reported in Table E.7.

Table E.6 Replicate Krypton Data for Error Analysis

Station Name	Station Index	Sample Index	Replicate Index	ln(Kr)	Coefficient of Variation
PILEDRIVER	1	1	1	3.34	0.057
PILEDRIVER	1	1	2	3.06	0.103
PILEDRIVER	1	2	1	2.94	0.069
PILEDRIVER	1	2	2	3.35	0.060
PILEDRIVER	1	3	1	3.07	0.074
PILEDRIVER	1	3	2	3.46	0.123
PILEDRIVER	1	4	1	2.83	0.071
PILEDRIVER	1	4	2	3.23	0.055
PILEDRIVER	1	5	1	2.65	0.113
PILEDRIVER	1	5	2	2.84	0.070
PILEDRIVER	1	6	1	3.47	0.115
PILEDRIVER	1	6	2	3.27	0.061
PILEDRIVER	1	7	2	3.42	0.059
PILEDRIVER	1	7	1	3.29	0.063
E-MAD	2	8	1	3.40	0.053
E-MAD	2	8	2	3.30	0.081
E-MAD	2	9	1	2.83	0.094
E-MAD	2	9	2	2.85	0.092
E-MAD	2	10	1	3.02	0.063
E-MAD	2	10	2	3.10	0.059
E-MAD	2	11	1	3.27	0.056
E-MAD	2	11	2	3.29	0.063
E-MAD	2	12	1	3.19	0.057
E-MAD	2	12	2	3.18	0.116
Gate 200	3	13	1	3.25	0.066
Gate 200	3	13	2	3.32	0.054
Gate 200	3	14	1	0.88	0.542
Gate 200	3	14	2	3.63	0.050
Gate 200	3	15	1	3.23	0.067
Gate 200	3	15	2	3.20	0.049
Gate 200	3	16	1	3.12	0.070
Gate 200	3	16	2	3.18	0.129
Gravel Pit	4	17	1	4.14	0.027
Gravel Pit	4	17	2	3.81	0.035
Gravel Pit	4	18	1	1.74	0.386
Gravel Pit	4	18	2	3.51	0.072
Gravel Pit	4	19	1	3.13	0.079
Gravel Pit	4	19	2	2.13	0.179
Gravel Pit	4	20	1	3.16	0.047
Gravel Pit	4	20	2	3.27	0.046
BJY	5	21	1	2.94	0.063

Table E.6 (Replicate Krypton Data for Error Analysis, cont.)

Station Name	Station Index	Sample Index	Replicate Index	ln(Kr)	Coefficient of Variation
BJY	5	21	2	3.11	0.058
BJY	5	22	1	2.73	0.111
BJY	5	22	2	3.68	0.043
BJY	5	24	1	2.97	0.087
BJY	5	24	2	3.22	0.084
BJY	5	25	1	3.03	0.072
BJY	5	25	2	3.13	0.070
BJY	5	26	1	2.64	0.107
BJY	5	26	2	3.39	0.091
BJY	5	27	1	2.31	0.218
BJY	5	27	2	3.19	0.070
BJY	5	28	1	2.88	0.107
BJY	5	28	2	3.25	0.082
BJY	5	29	1	3.03	0.058
BJY	5	29	2	3.19	0.050
BJY	5	30	1	3.24	0.082
BJY	5	30	2	3.22	0.068
Area 12 Camp	6	31	1	3.24	0.059
Area 12 Camp	6	31	2	3.23	0.103
Area 12 Camp	6	33	1	3.34	0.082
Area 12 Camp	6	33	2	3.43	0.097
Area 12 Camp	6	34	1	3.25	0.073
Area 12 Camp	6	34	2	3.13	0.087
Area 20 Camp	7	35	1	3.35	0.081
Area 20 Camp	7	35	2	3.15	0.073
Area 20 Camp	7	36	1	3.81	0.036
Area 20 Camp	7	36	2	3.74	0.045
Area 20 Camp	7	37	1	3.78	0.039
Area 20 Camp	7	37	2	3.76	0.042

The data in Table E.7 show no significant differences between stations or between the samples collected at each station. However, the finding of no significant differences between stations conflicts with the findings of Table E.5. The analysis of Table E.7 includes an additional source of error not accounted for in Table E.5, which is the variability between replicate samples collected at a station in interconnected pressure tanks. Either this additional source of error obscures the effects shown in Table E.5 or the much larger number of data values available for the analysis in Table E.5 are responsible for discriminating the differences. Only a much larger effort at collecting replicates will determine which of these alternatives is preferred. If the additional source of error is the cause of the disagreement between the conclusions of Tables E.5 and E.7, then the sample replicates are a very important factor to consider.

Table E.7 Two-Way Analysis of the Variance for Replicate Data Between Sampling Stations and Individual Samples

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value	Error Terms
Between Stations	6	1.670	0.278	1.42	0.242	Between Samples
Between Samples	28	5.484	0.196	0.91	0.598	Error
Error	35	7.535	0.215			

Another approximate comparison of errors is possible. The counting error in the replicate results is reported in the coefficient of variation column of Table E.6. These may be summarized by the mean value of their squares, which is 0.0128. This value is one-twentieth of the error mean square in Table E.7, which gives the conclusion that the counting error is insignificant compared to other sources of error.

It is theoretically possible to use the information in Table E.7 to estimate the individual components of the errors. This is done by computing a table of "expected mean square" terms which shows the composition of the mean square column in an ANOVA table. The values in such a table, such as Table E.7, can then be split into additive components. This was not done because in Table E.7 the within-samples mean square is less than the error mean square, and this situation would result in negative estimates of variance components. The only meaningful component that can be estimated is the between-replicates, within-sample coefficient of variation, which is estimated by the square root of the error mean squared and has a value of 0.464.

APPENDIX F
ONSITE THERMOLUMINESCENT DOSIMETER DATA

Robert R. Kinnison

Thermoluminescent dosimeters (TLDs) were placed at 184 locations at the NTS. The dosimeters were exchanged quarterly and read at the Reynolds Electrical & Engineering Co., Inc., Radiological Laboratory in Mercury. Tables F.1 and F.2 show the individual and control data, respectively. "Area" refers to the NTS area within which the sampling point is located, and "Location" identifies the location within each area. An asterisk in this table denotes a missing data value.

The 1990 data include 33 more sample locations than were present in 1989. The new locations include 28 at the Radiological Waste Management Site (RWMS) in Area 5 plus five in the RWMS in Area 3. In addition, the nine control locations are summarized in Table F.2 as well as being listed by area in Table F.1. The control dosimeters are located in places thought to be at background exposure levels. The area given in Table F.1 for the boundary locations gives the general location of the sampling station, and the location field gives the Nevada State Plane (central) coordinates. The locations listed in Table F.1 contain two corrections to the 1989 Annual Report. In the 1989 report, Stake TH-58 was listed in Area 4 (it is in Area 2), and Building 190 was listed in Area 22 (it is in Area 23).

Table F.1 TLD Network Gamma Exposure Rates - 1990

Area/Location	1st Quarter mR/day	2nd Quarter mR/day	3rd Quarter mR/day	4th Quarter mR/day	Average mR/day	1990 mR/y	1989 mR/y	1988 mR/y
Area 1, BJY	0.40	0.35	0.39	0.39	0.38	139	141	172
Area 1, Sandbag Storage Hut	0.39	0.37	0.38	0.32	0.36	132	130	135
Area 1, Stake TH-28	0.39	0.34	0.34	0.30	0.34	125	158	*
Area 1, Stake TH-38	0.40	0.39	0.38	0.35	0.38	139	129	157
Area 2, Cable Yard	0.47	0.41	0.46	0.48	0.46	167	314	164
Area 2, Stake M-140	0.44	0.36	0.42	0.43	0.41	150	154	168
Area 2, Stake M-150	0.45	0.36	0.42	0.43	0.42	152	163	181
Area 2, Stake 2L-9	0.68	0.56	0.66	0.69	0.65	236	251	339
Area 2, Stake TH-58	0.33	0.32	0.31	0.28	0.31	112	108	151
Area 2, Stake 2N-8	4.47	3.55	4.14	3.66	3.96	1445	1581	1905
Area 3, LANL Trailers	0.40	0.34	0.38	0.42	0.39	141	147	139
Area 3, Stake OB-11.5	0.42	0.35	0.41	0.40	0.40	145	225	230
Area 3, Stake 3A-6.5	0.53	0.46	*	0.53	0.51	186	149	*
Area 3, Stake OB-20	0.29	0.25	0.29	0.31	0.28	104	108	102
Area 3, U3ah/at North	*	0.35	0.44	0.45	0.41	151	*	*
Area 3, U3ah/at West	*	0.35	0.42	0.47	0.41	150	*	*
Area 3, U3ah/at South Gate	*	0.35	0.44	0.45	0.42	152	*	*
Area 3, U3ah/at South	*	0.57	0.63	0.67	0.62	227	*	*
Area 3, U3ah/at East	*	0.33	0.43	0.45	0.41	148	*	*
Area 3, U3ax/bl Northeast	0.94	0.78	0.90	0.88	0.87	319	340	374

Table F.1 (TLD Network Gamma Exposure Rates - 1990, cont.)

Area/Location	1st Quarter mR/day	2nd Quarter mR/day	3rd Quarter mR/day	4th Quarter mR/day	Average mR/day	1990 mR/yr	1989 mR/yr	1988 mR/yr
Area 3, U3ax/bl Northwest	0.60	0.51	0.57	0.60	0.57	208	213	*
Area 3, U3ax/bl Southeast	0.56	0.48	0.55	0.56	0.54	196	202	217
Area 3, U3ax/bl South	0.48	0.42	0.49	0.51	0.47	173	179	193
Area 3, U3by North	0.90	0.74	0.89	0.87	0.85	310	326	388
Area 3, U3by South	0.53	0.42	0.52	0.51	0.50	181	187	206
Area 3, U3bz North	0.65	0.56	0.67	0.64	0.63	230	239	281
Area 3, U3bz South	0.48	0.39	0.47	0.47	0.45	164	170	183
Area 3, U3cj North	0.46	*	0.72	0.44	0.54	196	160	164
Area 3, U3co North	3.31	2.83	3.25	3.18	3.14	1147	1218	1110
Area 3, U3co South	1.99	1.69	2.05	2.05	1.94	710	752	770
Area 3, U3du North	0.55	0.43	0.51	0.54	0.51	186	192	186
Area 3, U3du South	0.56	0.48	0.61	0.58	0.56	203	223	241
Area 3, U3ey South	0.45	0.37	0.44	0.48	0.44	159	167	347
Area 4, Stake M-130	0.39	0.33	0.37	0.38	0.37	135	139	161
Area 4, Stake 4A-9	4.27	3.53	3.89	3.75	3.86	1408	1497	1484
Area 4, Stake TH-48	0.44	0.41	0.41	0.36	0.41	148	148	166
Area 5, RWMS East 1000	0.44	0.36	0.40	0.38	0.39	144	148	184
Area 5, RWMS East 1500	0.43	0.35	0.37	0.36	0.38	139	139	175
Area 5, RWMS East 500	0.41	0.35	0.38	0.38	0.38	139	140	177
Area 5, RWMS East Gate	0.41	0.34	0.38	0.36	0.37	136	139	162
Area 5, RWMS North 1000	0.42	0.36	0.39	0.37	0.38	141	148	175
Area 5, RWMS North 1500	0.42	0.36	0.39	0.35	0.38	139	149	172
Area 5, RWMS North 500	0.46	0.39	0.44	0.38	0.42	152	154	228
Area 5, RWMS Northeast Corner	0.41	0.34	0.39	0.38	0.38	139	144	183
Area 5, RWMS Northwest Corner	0.43	0.38	0.42	0.36	0.40	145	153	186
Area 5, RWMS Office	0.34	0.29	0.31	0.26	0.30	110	121	128
Area 5, RWMS South 500	0.43	0.36	0.41	0.35	0.39	142	146	183
Area 5, RWMS South Gate	0.36	0.31	0.35	0.29	0.33	119	142	558
Area 5, RWMS Southwest Corner	0.41	0.34	0.40	0.34	0.37	136	142	168
Area 5, RWMS West 1000	0.47	0.39	0.43	0.39	0.42	153	156	190
Area 5, RWMS West 1500	0.45	0.38	0.44	0.37	0.41	149	152	204
Area 5, RWMS West 500	0.44	0.36	0.41	0.35	0.39	142	148	179
Area 5, RWMS Pit 3 North Side	*	0.35	0.44	0.36	0.38	140	*	*
Area 5, RWMS Pit 3 South Side	*	0.34	0.42	0.33	0.36	132	*	*
Area 5, RWMS Pit 4 North Side	*	0.41	0.45	0.37	0.41	148	*	*
Area 5, RWMS Pit 4 South Side	*	0.60	0.46	0.39	0.48	176	*	*
Area 5, RWMS TRU Northeast	*	0.43	0.53	0.50	0.48	177	*	*
Area 5, RWMS TRU North	*	3.02	1.99	1.80	2.27	829	*	*
Area 5, RWMS TRU Northwest	*	0.33	0.41	0.42	0.38	140	*	*
Area 5, RWMS TRU Southwest	*	0.31	0.38	0.32	0.34	124	*	*
Area 5, RWMS TRU South	*	0.43	0.57	0.48	0.49	180	*	*
Area 5, RWMS TRU Southeast	*	0.31	0.36	0.35	0.34	125	*	*
Area 5, RWMS MSM-1 Southeast	*	1.29	1.37	1.34	1.33	487	*	*
Area 5, RWMS MSM-1 East	*	2.61	3.06	2.61	2.76	1007	*	*
Area 5, RWMS MSM-1 Northeast	*	1.46	1.64	1.55	1.55	566	*	*

Table F.1 (TLD Network Gamma Exposure Rates - 1990, cont.)

Area/Location	1st Quarter mR/day	2nd Quarter mR/day	3rd Quarter mR/day	4th Quarter mR/day	Average mR/day	1990 mR/yr	1989 mR/yr	1988 mR/yr
Area 5, RWMS MSM-1 NNE	*	6.96	7.56	7.33	7.28	2659	*	*
Area 5, RWMS MSM-1 NNW	*	2.28	2.59	2.32	2.39	874	*	*
Area 5, RWMS MSM-1 Northwest	*	2.35	2.60	2.31	2.42	885	*	*
Area 5, RWMS MSM-1 West	*	5.77	6.56	6.08	6.14	2240	*	*
Area 5, RWMS MSM-1 Southwest	*	2.42	2.69	2.58	2.56	935	*	*
Area 5, RWMS MSM-1 SSW	*	2.45	2.73	2.53	2.57	938	*	*
Area 5, RWMS MSM-1 SSE	*	3.72	4.12	3.94	3.93	1434	*	*
Area 5, RWMS MSM-2 Northeast	*	4.12	3.81	3.69	3.87	1414	*	*
Area 5, RWMS MSM-2 North	*	5.88	6.58	6.27	6.24	2279	*	*
Area 5, RWMS MSM-2 Northwest	*	3.60	4.00	3.80	3.80	1388	*	*
Area 5, RWMS MSM-2 West	*	6.09	9.55	8.51	8.05	2939	*	*
Area 5, RWMS MSM-2 Southwest	*	3.39	3.09	2.89	3.12	1140	*	*
Area 5, RWMS MSM-2 South	*	21.27	4.83	5.05	10.39	3791	*	*
Area 5, RWMS MSM-2 Southeast	*	8.67	3.09	2.94	4.90	1789	*	*
Area 5, RWMS MSM-2 East	*	25.63	10.51	9.73	15.29	5581	*	*
Area 5, Well 5B	0.38	0.32	0.36	0.31	0.34	125	129	157
Area 6, CP-2 Logistic Desk	0.27	0.22	0.26	0.23	0.24	88	83	80
Area 6, CP-50 Calib. Bench	0.44	0.23	0.26	0.29	0.30	111	91	120
Area 6, CP-50 Inst. Calib. Door	0.30	0.43	0.54	0.50	0.44	162	148	126
Area 6, CP-6	0.26	*	*	0.23	0.25	90	100	131
Area 6, Decon Pad Back Room	0.33	0.26	0.30	0.33	0.30	111	108	117
Area 6, Decon Pad Office	0.23	0.32	*	0.44	0.33	120	82	117
Area 6, Stake TH-1	0.29	0.25	0.24	0.22	0.25	91	90	100
Area 6, Stake TH-9	0.36	0.35	0.34	0.33	0.34	126	121	146
Area 6, Stake TH-18	0.32	0.30	0.30	0.28	0.30	110	105	128
Area 6, Well 3	0.32	0.30	0.35	0.37	0.34	123	130	135
Area 6, Yucca Oil Storage Area	0.35	0.25	0.31	0.35	0.32	116	115	106
Area 7, 7-300 Bunker	1.09	0.92	1.09	1.00	1.03	375	385	485
Area 8, Stake 8K-25	0.36	0.29	0.33	0.36	0.33	122	126	150
Area 9, 9-300 Bunker	0.42	0.36	0.42	0.43	0.40	148	151	179
Area 10, Stake 10A-24	0.59	0.51	0.59	0.61	0.57	210	225	263
Area 10, Circle & L Road	0.42	0.35	0.39	0.40	0.39	142	146	175
Area 10, SEDAN East Visitor Box	0.52	0.42	0.49	0.48	0.48	174	174	210
Area 10, SEDAN West	1.39	1.17	1.36	1.37	1.32	482	520	626
Area 10, Stake CA-14	0.45	0.36	0.43	0.45	0.42	153	172	204
Area 11, Gate 293	0.41	0.36	0.39	0.29	0.36	132	153	158
Area 12, Bldg. 12-10	0.42	0.42	0.41	0.36	0.40	146	116	139
Area 12, Stake M-168	0.39	0.39	0.41	0.38	0.39	143	112	124
Area 12, Stake M-170	0.41	0.39	0.38	0.34	0.38	138	108	319
Area 12, Stake M-175	0.44	0.41	0.40	0.36	0.40	147	119	131
Area 12, Stake TH-68.5	0.35	0.33	0.32	0.30	0.33	119	92	131
Area 12, T Tunnel #2 Pond	1.12	1.03	1.08	*	1.08	394	340	358
Area 12, Upper Haines Lake	0.38	0.36	*	0.33	0.36	131	102	157

Table F.1 (TLD Network Gamma Exposure Rates - 1990, cont.)

Area/Location	1st Quarter mR/day	2nd Quarter mR/day	3rd Quarter mR/day	4th Quarter mR/day	Average mR/day	1990 mR/yr	1989 mR/yr	1988 mR/yr
Area 12, Upper N Pond	0.47	0.43	0.42	0.38	0.43	155	124	195
Area 15, EPA Farm	0.36	0.31	0.35	0.34	0.34	124	134	155
Area 15, Lamp Shack	0.42	0.34	0.40	0.40	0.39	143	145	170
Area 15, Office	0.33	0.26	0.30	0.31	0.30	109	112	*
Area 15, Storage Shed U15e	0.42	*	*	*	0.42	153	147	173
Area 15, Sub Station U15e	0.32	0.26	0.32	0.30	0.30	109	254	137
Area 17, Stake M-185	0.44	0.43	0.42	0.40	0.42	154	153	142
Area 17, Stake M-190	0.49	0.48	0.49	0.45	0.48	174	166	201
Area 18, Stake M-196	0.49	0.48	0.47	0.43	0.47	171	165	219
Area 18, Stake P-35	0.52	0.50	0.49	0.44	0.49	179	172	204
Area 18, Stake P-39	0.49	0.46	0.46	*	0.47	172	167	131
Area 19, Stake C-16	0.44	0.48	0.47	0.44	0.46	168	164	203
Area 19, Stake C-25	0.50	0.47	0.47	0.45	0.47	172	166	199
Area 19, Stake C-27	0.47	0.50	0.50	0.48	0.49	178	174	192
Area 19, Stake C-31	0.46	0.48	0.49	0.47	0.48	174	164	262
Area 19, Stake P-41	0.53	0.51	0.49	0.48	0.50	183	186	214
Area 19, Stake P-46	0.44	0.45	0.46	0.42	0.44	162	156	179
Area 19, Stake P-54	0.44	0.44	0.41	0.39	0.42	154	156	181
Area 19, Stake P-59	0.59	0.51	0.51	0.48	0.52	190	185	214
Area 19, Stake P-66	0.52	0.52	0.52	0.49	0.51	187	193	270
Area 19, Stake P-71	0.50	0.50	0.48	0.43	0.48	174	172	199
Area 19, Stake P-77	0.55	0.54	0.53	0.48	0.52	192	190	199
Area 19, Stake P-87	0.55	0.57	0.57	0.50	0.55	200	203	495
Area 19, Stake P-91	0.55	*	0.50	0.49	0.52	188	189	188
Area 19, Stake P-88	0.48	*	0.52	0.46	0.48	177	182	307
Area 19, Stake R-3	0.54	0.55	0.57	0.48	0.54	195	191	208
Area 19, Stake R-7	0.57	0.54	0.54	0.52	0.54	197	191	210
Area 19, Stake R-31	0.52	0.48	0.47	0.40	0.47	170	172	179
Area 19, Stake R-20	0.50	0.51	0.52	0.43	0.49	178	170	184
Area 19, Stake R-26	0.48	0.48	0.51	0.42	0.47	172	177	186
Area 19, Upper Well U19C Reservoir	0.49	0.46	0.49	0.44	0.47	172	163	192
Area 20, Stake A-106	0.52	*	*	0.45	0.48	177	120	292
Area 20, P & K Road Junction	0.48	0.47	0.47	0.44	0.46	169	164	184
Area 20, Stake P-116.5	0.48	0.47	0.48	0.42	0.47	170	202	186
Area 20, Stake P-120.5	0.48	0.48	0.46	0.40	0.46	166	165	175
Area 20, Stake P-124	0.49	0.48	0.48	0.45	0.48	174	171	197
Area 20, Stake P-129.5	0.53	0.51	0.52	0.44	0.50	183	179	186
Area 20, Stake P-134.5	0.52	0.48	0.47	0.43	0.48	174	118	186
Area 20, Stake J-6	0.51	0.52	0.58	0.45	0.51	188	181	175
Area 20, Stake J-16	0.48	0.48	0.48	*	0.48	175	167	188
Area 20, Stake J-24	0.49	0.48	0.48	0.39	0.46	168	222	190
Area 20, Stake J-31	1.11	1.05	1.04	0.96	1.04	380	386	443
Area 22, Desert Rock Control Tower	0.27	0.21	0.23	0.21	0.23	83	78	84
Area 23, Bldg. 190, in Bench Drawer	0.44	0.72	0.29	0.25	0.43	156	181	270
Area 23, Bldg. 610 Gate	0.21	0.21	0.19	0.20	0.21	75	68	88
Area 23, Bldg. 610 Bay	1.41	1.27	2.23	2.47	1.85	674	382	801
Area 23, Bldg. 650 Dosimetry	0.23	0.18	*	0.18	0.20	73	69	95

Table F.1 (TLD Network Gamma Exposure Rates - 1990, cont.)

Area/Location	1st Quarter mR/day	2nd Quarter mR/day	3rd Quarter mR/day	4th Quarter mR/day	Average mR/day	1990 mR/yr	1989 mR/yr	1988 mR/yr
Area 23, Bldg. 650 Roof	0.22	0.17	0.19	0.18	0.19	69	64	86
Area 23, Bldg. 650 Storage Room	0.27	0.22	0.23	0.23	0.24	87	76	126
Area 23, Gate 100	0.22	0.17	0.20	0.19	0.19	71	69	91
Area 23, Post Office	0.26	0.21	0.23	0.21	0.23	83	83	106
Area 23, Bldg. 180 Scaler Room	0.36	0.29	0.31	0.27	0.31	113	110	139
Area 25, 25-4P Gate	0.44	0.37	0.41	0.37	0.40	145	146	173
Area 25, 25-7P Gate	0.63	0.37	0.39	0.35	0.44	159	137	179
Area 25, E-MAD East	0.40	0.35	0.38	0.35	0.37	135	135	173
Area 25, E-MAD North	0.37	0.32	0.35	0.33	0.34	125	121	148
Area 25, E-MAD South	0.41	0.34	0.38	0.35	0.37	134	134	161
Area 25, E-MAD West	0.38	0.33	0.36	0.32	0.35	128	219	153
Area 25, HENRE	0.42	0.36	0.42	0.36	0.39	143	138	170
Area 25, NRDS Warehouse	0.42	0.37	0.39	0.37	0.39	142	139	166
Area 27, Cafeteria	0.44	0.38	0.41	0.38	0.40	146	118	179
Boundary TLDs								
N843,555 E704,945 (13)	0.24	0.26	0.22	0.24	0.24	88	88	84
N712,618 E713,111 (15)	0.23	0.23	0.21	0.22	0.22	81	80	82
N875,015 E690,664 (12)	0.26	0.28	0.23	0.27	0.26	95	91	93
N789,449 E709,501 (14)	0.50	0.47	0.45	0.50	0.48	175	172	175
N904,470 E635,530 (10)	0.36	*	0.21	0.37	0.31	114	135	135
N907,578 E684,659 (11)	0.49	0.50	0.47	0.50	0.49	180	179	178
N833,950 E557,892 (4)	0.47	*	0.43	0.52	0.48	174	179	184
N933,423 E637,495 (9)	0.38	0.48	0.48	0.47	0.45	165	204	252
N954,202 E611,581 (8)	0.37	*	0.44	0.48	0.43	157	212	181
N886,398 E556,098 (5)	0.56	0.56	0.56	0.58	0.57	207	208	201
N944,597 E558,448 (7)	0.31	0.32	0.28	0.33	0.31	113	106	193
N948,800 E527,800 (6)	0.38	0.50	0.50	0.51	0.47	173	208	60
N674,614 E671,355 (1)	0.23	0.25	0.19	0.24	0.23	83	77	84
N732,411 E638,710 (2)	0.33	0.33	0.30	0.34	0.32	119	99	117
N759,934 E556,412 (3)	0.45	0.44	0.44	0.47	0.45	165	164	164

DATA ANALYSIS

The data analysis was performed in two phases. The first phase used exploratory data analysis methods to determine the distribution of the data and to identify atypical values. The second phase used analysis of variance to test for significant differences between groups of data values.

Exploratory data analysis primarily consisted of probability plots of the data and logarithms of the data grouped by quarter and area. Figure F.1 is a typical probability plot. In some statistics text this type of plot is called a Q-Q (or quantile-quantile) plot because the data quantile is plotted on the ordinate and the corresponding expected value of the quantile, assuming a Gaussian distribution, is plotted on the abscissa. "Goodness of fit" was tested

Table F.2 Summary of Control TLD Data for 1990

Location	1st Quarter mR/day	2nd Quarter mR/day	3rd Quarter mR/day	4th Quarter mR/day	Average mR/day	1990 mR/y	1989 mR/y	1988 mR/y
Bldg. 650 Dosimetry	0.23	0.18	*	0.18	0.20	73	69	95
Bldg. 650 Roof	0.22	0.17	0.19	0.18	0.19	69	66	88
Area 27 Cafeteria	0.44	0.38	0.41	0.38	0.40	146	117	179
CP-6	0.26	*	*	0.23	0.25	91	99	131
HENRE Site	0.42	0.36	0.42	0.36	0.39	143	139	172
NRDS Warehouse	0.42	0.37	0.39	0.37	0.39	142	139	168
Post Office	0.26	0.21	0.23	0.21	0.23	83	84	106
Well 5B	0.38	0.32	0.36	0.31	0.34	125	131	157
Yucca Oil Storage	0.35	0.25	0.31	0.35	0.32	116	117	106

using the correlation coefficient goodness of fit test, which is asymptotically equivalent to the Shapiro-Wilk test. This test is performed by calculating the product moment correlation coefficient between the data values and the corresponding expected quantiles, which is a measure of the linearity of the line plotted in Figure F.1. Tables published in the statistics literature are then used to find the probability of a good fit from the calculated correlation

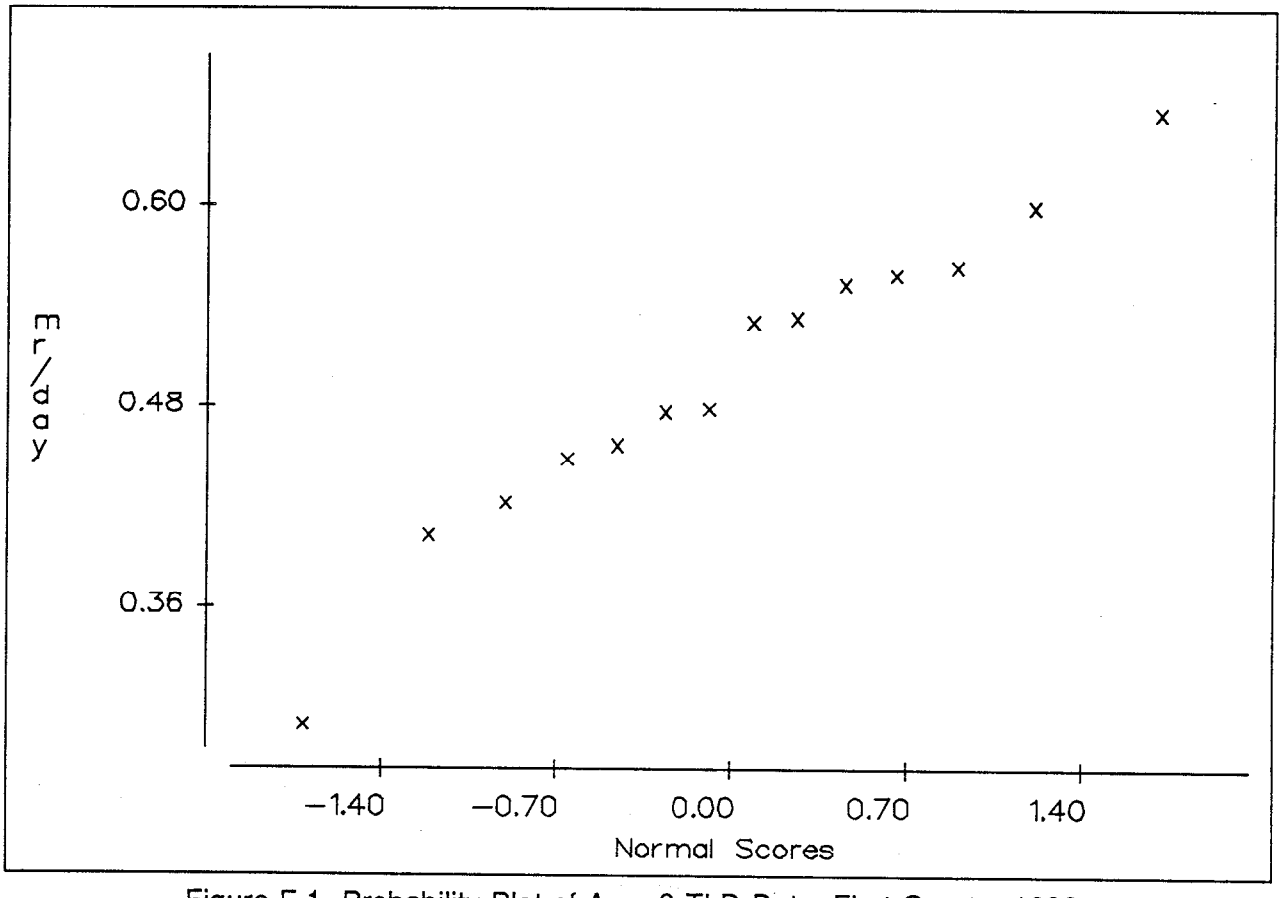


Figure F.1 Probability Plot of Area 3 TLD Data, First Quarter 1990

coefficient. Figure F.1 shows a good fit to a Gaussian distribution, the correlation is 0.981 with a sample size of 14. From the tables the probability of a Gaussian distribution is between 0.50 and 0.75. Data points which were grossly higher or lower than most were removed and the goodness of fit test repeated. With very few exceptions, the original data either fit both a normal and a lognormal distribution or fit neither, and removal of the atypical values resulted in an acceptable fit to both (at the 95 percent or higher confidence level). Since it is easier to statistically interpret normal data than it is to interpret lognormal data, the normal distribution was chosen for the analyses of variance (ANOVA) described below.

Table F.3 lists those data values that were found to be atypical and gives the mean of the data for each location with the atypical values removed. For comparison, the pooled standard deviation from the ANOVA with the atypical and RWMS MSM sample values removed was 0.167. The examination for atypical values could not be done on several of the groups because of small sample size; data from Areas 4, 7, 8, 9, 11, 16, 17, 18, 22, and 27 had sample sizes of three or smaller for each quarter. Table F.3 does not include the high data values associated with the MSM-1 and MSM-2 areas within Area 5 for two reasons. These areas are posted high radiation areas used for temporary storage of radioactive waste from other DOE facilities. Also, data from these areas are normally distributed as determined by the correlation coefficient test and thus are consistent within the subgroup. The mean of these data is about 20 times higher than the mean of other NTS areas.

Table F.3 is almost identical to the corresponding table in the 1989 annual report (Wruble and McDowell 1990). It is identical if one considers only those locations with atypical values for more than one quarter. Of the 184 TLD stations distributed throughout the NTS, several were placed near sources of radiation. Therefore, it was expected that the TLDs placed at these locations would display "atypical values." The results from these TLDs are atypical only with respect to TLDs distributed elsewhere on the NTS. The atypical values from Area 5 are known to be caused by the dosimeters' location, which were placed adjacent to a cargo container holding transuranic waste. The Area 10 atypical values are caused by the dosimeter being located close to the SEDAN crater. In Area 12 the tunnel ponds are known to contain fission products. The bay in Building 610 is used to store radiological calibration sources. The bench drawer in Building 190 was used to store soil samples during the second quarter of the year.

All but one of the remaining atypical values are from sampling stations located in Yucca Flat or in areas known to be contaminated from early atmospheric testing. The one remaining atypical value is from the sampling station at Stake J-31, in the far northwest corner of the NTS, about one mile north of the PALANQUIN and CABRIOLET test sites. These two cratering tests occurred in the mid 1960s, and the plumes from them travelled northward. There is no group mean given for Area 7 because the atypical value is from the only station within that area, and this value was judged to be atypical using data from surrounding areas.

The probability plot of all the annual average data, Figure F.2, shows an interesting pattern. This spline-like pattern of joined straight lines in a probability plot is diagnostic of a mixture of distributions. Each "2" in this figure indicates a point where two data points are located at the same plotting position. Most of the data values are located in the lower line segment which ends at a normal score of 1.0 and an average mR/day of about 1.0 also. The shallow slope of this line indicates a relatively small standard deviation for this subset of the data. The descriptive statistics for this subset of 165 data values in (mR/day) are:

Table F.3 Atypical Data Values - 1990 TLD Data

Area Location	Quarter	Atypical Data	Group Mean
Area 2, Stake 2N-8	1	4.47	0.48
Area 2, Stake 2N-8	2	3.55	0.40
Area 2, Stake 2N-8	3	4.14	0.45
Area 2, Stake 2N-8	4	3.66	0.46
Area 3, U3co North	1	3.31	0.50
Area 3, U3co North	2	2.83	0.41
Area 3, U3co North	3	3.25	0.50
Area 3, U3co North	4	3.18	0.50
Area 3, U3co South	1	1.99	0.50
Area 3, U3co South	2	1.69	0.41
Area 3, U3co South	3	2.05	0.50
Area 3, U3co South	4	2.05	0.50
Area 4, Stake 4A-9	1	4.27	0.42
Area 4, Stake 4A-9	2	3.53	0.37
Area 4, Stake 4A-9	3	3.89	0.39
Area 4, Stake 4A-9	4	3.75	0.37
Area 5, RWMS TRU North	2	3.02	0.36
Area 5, RWMS TRU North	3	1.99	0.40
Area 5, RWMS TRU North	4	1.80	0.36
Area 7, 7-300 Bunker	1	1.09	-
Area 7, 7-300 Bunker	2	0.92	-
Area 7, 7-300 Bunker	3	1.09	-
Area 7, 7-300 Bunker	4	1.00	-
Area 10, Sedan West	1	1.39	0.49
Area 10, Sedan West	2	1.17	0.41
Area 10, Sedan West	3	1.36	0.48
Area 10, Sedan West	4	1.37	0.48
Area 12, T Tunnel #2 Pond	1	1.12	0.41
Area 12, T Tunnel #2 Pond	2	1.03	0.39
Area 12, T Tunnel #2 Pond	3	1.08	0.39
Area 20, Stake J-31	1	1.11	0.50
Area 20, Stake J-31	2	1.05	0.48
Area 20, Stake J-31	3	1.04	0.49
Area 20, Stake J-31	4	0.96	0.48
Area 23 Bldg. 610 Bay	1	1.41	0.28
Area 23 Bldg. 610 Bay	2	1.27	0.21
Area 23 Bldg. 610 Bay	3	2.23	0.24
Area 23 Bldg. 610 Bay	4	1.85	0.21
Area 23 Bldg. 190 in Drawer	2	0.72	0.21

Mean = 0.407
Median = 0.404
Standard deviation = 0.107

First quartile = 0.342
Third quartile = 0.476

A normal probability plot of this subset indicated a very good fit to a single Gaussian distribution.

The second segment of data can easily be identified in Table F.1 as mostly those data values from the MSM-1 and MSM-2 areas within the RWMS. The other data in this subgroup are the atypical values identified in Table F.3. The relatively steep slope of this segment indicates a large standard deviation. The descriptive statistics of this subset of 28 data values are: mean = 3.93, median = 2.94, standard deviation = 3.20, first quartile = 1.87, third quartile = 4.67. The skewed distribution indicated by these statistics is mostly caused by the single large data value from MSM-2 East.

Table F.4 summarizes the data with the atypical values removed and gives the number of remaining data values and the mean with the data grouped by area and quarter. The column marked "All" gives the total number of samples for each row and the row mean, which averages over the quarters for each area. The bottom row, marked "Total," gives the total number of samples for each column and the column mean, which averages over the areas for each quarter. In this table note that the row totals have sample sizes that range from 4 to 78, while the column totals have sample sizes from 153 to 182. This is statistically a very important characteristic because it strongly influences the way patterns of significant differences can be elucidated.

The first step in the formal statistical analysis of these data was to perform a two-way ANOVA to simultaneously test for differences between areas and differences between quarters. Most

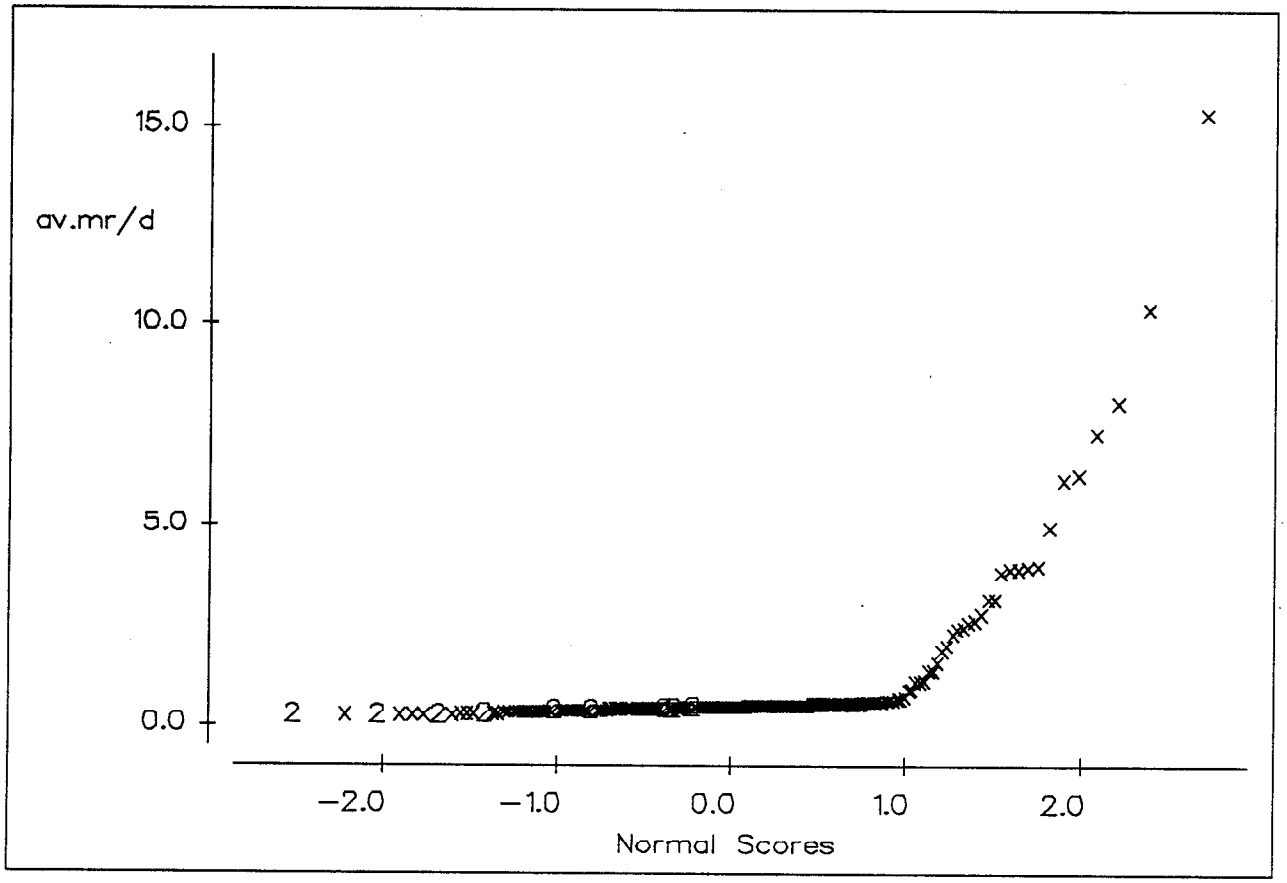


Figure F.2 Probability Plot of All NTS TLD Annual Average Data

Table F.4 Average mR/day Data with Atypical Values Removed

Area	Quarter 1	2	3	4	All	Area	Quarter 1	2	3	4	All
1	9 0.33	8 0.28	7 0.33	9 0.29	33 0.31	17	2 0.47	2 0.45	2 0.46	2 0.42	8 0.45
2	5 0.47	5 0.40	5 0.45	5 0.46	20 0.45	18	3 0.50	3 0.48	3 0.47	2 0.44	11 0.48
3	16 0.55	20 0.45	20 0.54	21 0.54	77 0.52	19	20 0.51	18 0.50	20 0.50	20 0.46	78 0.49
4	2 0.42	2 0.37	2 0.39	2 0.37	8 0.39	20	11 0.55	10 0.54	10 0.55	10 0.48	41 0.53
5.1[a]	17 0.42	26 0.36	26 0.41	26 0.37	95 0.39	22	1 0.27	1 0.21	1 0.23	1 0.21	4 0.23
5.2[b]	0 --	18 6.11	18 4.47	18 4.19	54 4.92	23	9 0.40	9 0.38	8 0.49	9 0.46	35 0.43
6	11 0.32	10 0.29	9 0.32	11 0.32	41 0.31	25	8 0.43	8 0.35	8 0.39	8 0.35	32 0.38
8	1 0.36	1 0.29	1 0.33	1 0.36	4 0.33	27	1 0.44	1 0.38	1 0.41	1 0.38	4 0.40
9	1 0.42	1 0.36	1 0.42	1 0.43	4 0.40	Boundary	15 0.37	12 0.39	15 0.36	15 0.40	57 0.38
10	4 0.49	4 0.41	4 0.47	4 0.48	16 0.47	Column Means Including MSM -1, and -2: Total	153 0.44	175 0.99	176 0.85	182 0.79	686 0.78
11	1 0.41	1 0.36	1 0.39	1 0.29	4 0.36	Column Means Excluding MSM -1, and -2: Total	153 0.44	157 0.40	158 0.44	164 0.41	632 0.42
12	7 0.41	7 0.39	6 0.39	7 0.35	27 0.38						

(a) The area coded as 5.1 refers to Area 5 locations other than the MSM-1 and MSM-2 locations.
(b) The area coded as 5.2 refers to only the MSM-1 and MSM-2 locations.

applicable ANOVA programs require equal sample sizes within the cells of data and thus cannot be used with this data set. It was necessary to use a Generalized Linear Model program in order to calculate this ANOVA with variable sample sizes within the cells. The generalized linear model assumes that the ANOVA effects are fixed and fully crossed; these are reasonable assumptions for the TLD data. An analysis was performed using all the data; that is, without removing the atypical values. This showed a difference between areas, no differences between quarters, and no interactions. The analysis with the atypical values, MSM-1 data, and MSM-2 data removed showed differences between areas, no differences

between quarters, and no interactions. The ANOVA table for the data without atypical values and the MSM data is shown in Table F.5.

Tukey's multiple comparison procedure was used to elucidate the significance of differences between areas. Because of the vastly differing number of data values for the areas (the "All" columns in Table F.4), no consistent or interpretable patterns could be found. For example, there is a significant difference between Area 15 (Area mean = 0.34) and the boundary dosimeters (mean value = 0.38), but there is no significant difference between Area 15 and Area 20 (Area mean = 0.53). The reason for the vastly different number of data values for the areas is that the number of sampling stations is a reflection of the amount of activity in the area. Areas that are now being used for testing, such as Yucca Valley which contains Areas 1, 2, 3, 4, 7, and 9, contain numerous sampling stations while Area 29 contains none because it is a rugged mountainous area that has never been used for testing.

Statistically it would be desirable to aggregate the sampling locations into groups of more equal size, however the grouping must be upon *a priori* considerations of sampling station characteristics. The current grouping, with the very unequal number of data per group, is based on *a priori* considerations. The NTS areas were originally established as areas for a particular testing program, current usage is usually different from the original usage. The areas also have defined geological characteristics, many of the areas are totally contained in valley floors while others are mountainous or contain only high plateaus. This is a good way to separate groups since the localized meteorology and geomorphology are consistent within areas. Since the areas associated with a small number of sampling stations have obviously different localized meteorology and geomorphology, their data should not be combined into larger groupings. The alternate approach would be to break up the groups containing many sampling stations into subgroups more equal in number of sampling stations to the currently defined groups containing few sampling stations, even though such would reduce the statistical power of the ANOVA test.

With the NTS data such an alternative is statistically a poor choice. The sampling stations are close together in areas of high testing activity by choice for the purpose of localized detection of small releases. In areas where there is no potential sources of effluents, there is no reason to have sampling stations. There is little *a priori* information available to establish subsets of the areas with many sampling stations. The localized meteorology and geomorphology is similar for all sampling stations within these areas. In fact, it seems reasonable to combine the areas of Yucca Valley into one group, even though these areas already have the highest density of sampling stations, because of the almost identical meteorology and geomorphology.

Table F.5 Analysis of Variance without Atypical Data

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Area	21	3.21745	0.15321	5.49	0.000
Quarter	3	0.07642	0.02547	0.91	0.434
Area x Quarter	63	0.31185	0.00495	0.18	1.000
Error	544	15.18012	0.02790		

However, each NTS area in Yucca Valley is used by a different testing organization and thus there may be a different potential for environmental contamination between the areas.

The final analysis performed compared the 1990 annual doses with the 1989 and 1988 annual doses for each area. This was done using an ANOVA on the millirem per year data shown in Table F.1 with the atypical values and the RWMS data removed. A one-way ANOVA with all the data grouped by years, showed no significant difference between 1989 and 1990, but 1988 was different from the other two years. Table F.6 shows the output of the one-way ANOVA program.

A two-way ANOVA on years and areas for the three years showed significant differences between both years and areas, and when 1988 data was deleted from the analysis, there was significant differences between areas but no significant differences between 1990 and 1989. Table F.7 gives the count of data values and means of millirems per year for each area and each year and area and year averages. The atypically high data values, including the RWMS in Area 5, were deleted from this table. The control station average for 1990 compares favorably with the average annual per capita dose to the whole U.S. population of 103 mrem per year.

A time trend analysis over the years using data from years prior to 1988 is inappropriate because there was a major change in methodologies in 1987, and 1988 is the first year for which an entire year's data is available using the new system. The new dosimetry monitoring system consists of a Panasonic UD-710A TLD reader and UD-814AS environmental dosimeters. The dosimeters are analyzed in the REECo Health Physics Laboratory. For a further discussion of this change in methods, refer to the 1987 NTS Annual Report (Gonzalez 1988).

Table F.6 Analysis of Variance Between Years

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Years	2	40732	20366	7.74	0.001
Error	365	960155	2631		
Total	367	1000886			

Year	Number	Log Median	Standard Deviation	Individual 95 Percent Confidence Intervals for the Log of the Median Based on a Pooled Standard Deviation
90 mR/y	130	152.63	41.16	(------*-------)
89 mR/y	121	153.34	50.99	(-------*------)
88 mR/y	117	175.56	60.86	(------*-------)

Pooled Standard Deviation = 51.29

144 156 168 180

Table F.7 Count and Annual Average mR/year by Area and Year

	Years					Years			
Area	1990	1989	1988	All	Area	1990	1989	1988	All
Control	9 110	0 131	0 157	9 133	15	5 112.53	5 158.40	4 158.75	14 142.12
1	4 133.89	4 139.50	3 154.67	11 141.60	17	2 164.23	2 159.50	2 171.50	6 165.08
2	5 163.48	5 198.00	5 200.60	15 187.36	18	3 159.49	3 168.00	3 184.67	9 170.72
3	21 187.07	16 201.69	14 232.21	51 204.05	19	20 179.23	16 175.50	16 212.06	52 188.18
4	2 141.35	2 143.50	2 163.50	6 149.45	20	11 188.96	11 188.64	11 218.36	33 198.65
5	26 142.01	17 144.12	17 200.53	60 159.19	22	1 83.44	1 78.00	1 84.00	3 81.81
6	11 113.37	11 106.64	11 118.73	33 112.91	23	9 155.58	9 122.44	9 200.22	27 159.42
8	1 121.95	1 126.00	1 150.00	3 132.65	25	8 138.81	8 146.12	8 165.37	24 150.10
9	1 147.65	1 151.00	1 179.00	3 159.22	27	1 146.09	1 118.00	1 179.00	3 147.70
10	4 169.72	4 179.25	4 213.00	12 187.32	Boundary	15 139.15	0 --	0 --	15 139.15
11	1 132.13	1 153.00	1 158.00	3 147.71	All	167 151.89	125 156.56	121 190.17	413 164.52
12	7 140.05	7 110.43	7 170.86	21 140.44					