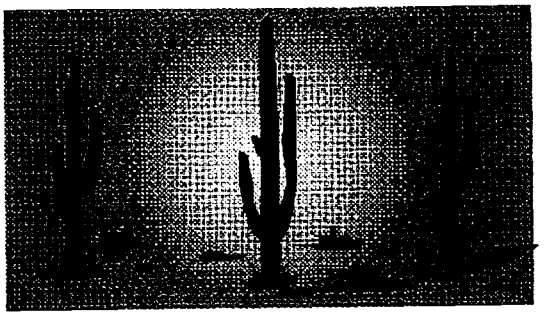
NEVADA TEST SITE

DOE/NV/11432-123
Volume II
UC-600

ANNUAL SITE ENVIRONMENTAL REPORT - 1993

VOLUME II

#22



Work Performed Under
Contract No. DE-AC08-94NV11432

DISCLAIMER

DOE/NV/11432-123
Volume II
UC-600

U.S. DEPARTMENT OF ENERGY NEVADA OPERATIONS OFFICE ANNUAL SITE ENVIRONMENTAL REPORT - 1993

Volume II - Appendices

Editors: Stuart C. Black, Wayne M. Glines and Yvonne E. Townsend
Graphics Artist: Angela McCurdy

September 1994

Work Performed Under
Contract No. DE-AC08-94NV11432

Prepared for the

U.S. Department of Energy
Nevada Operations Office

Prepared by:

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

FOREWORD

These appendices contain 1993 NTS onsite and offsite environmental monitoring results. Other offsite data collected by the EPA are available from the U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Las Vegas, Nevada. Some of the onsite data are accompanied by summaries of statistical evaluations of the data.

TABLE OF CONTENTS

Volume II

Table of Contents, cont. Page

LIST OF FIGURES

List of Figures, cont.

List of Figures, cont. Page

List of Figures, cont.

List of Figures, cont. Page

LIST OF TABLES

List of Tables, cont. Page

List of Tables, ~~c~~ont. Page

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

Lawrence E. Barker

Sampling locations, sampling dates, measured concentrations, and analytic standard deviations 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 respectively. The analytical laboratories calculate analytic standard deviations of 0.0 for concentrations of 0.0. These values have been so reported here. Statistical analyses of these data appear below. A display of the locations of all air sampling stations appears in Figure A.1. Concentrations observed at Area 12, P Tunnel Portal are not considered environmental data. Hence, although these concentrations were reported, they were not used in the statistical analyses.

PLUTONIUM-238

Fifty-two air samplers were placed around the NTS. These sampling stations are described in Volume 1, Chapter 5, where descriptive statistics for results from each station appears. Descriptive statistics, in units of μCi/mL, for the entire network, are:

Number of data values =	583
Arithmetic mean =	1.1×10^{-18}
Median =	0.0
Standard deviation =	3.1×10^{-18}
Minimum value =	-4.0×10^{-18}
Maximum value =	4.8×10^{-17}
Median MDC =	4.4×10^{-18}

Subtraction of background can result in non-positive concentrations. Of the measured concentrations, approximately 59 percent were 0.0 and approximately 3 percent were negative. As only 38 percent of the observed concentrations were positive, geometric means and standard deviations were not calculated.

Approximately 95 percent of the observed concentrations were below their individual limits of detection, indicating that very little ^{238}Pu was actually detected in air. In view of this, formal statistical analysis is thought to be of little value.

Some sense of variability among operating areas, can be obtained from simple descriptive statistical summaries of ^{238}Pu concentrations by NTS operational area (see Table A.1). In most operational areas, the median concentration was 0.0, indicating that more than half of the samples had zero or negative concentrations. In Area 23, which includes Mercury, both mean and median concentrations were very small.

In Figure A.2, concentrations x 10^{18} (μCi/mL) from all sampling stations are plotted versus month of collection. No temporal trend is suggested by the display. The single obvious outlier, sampled between August 30 and October 2, and therefore labeled as a September sample, was collected at the Area 9, 9-300 Bunker. Review of the sampling logs turned up no anomalies, so this result must be accepted at face value.

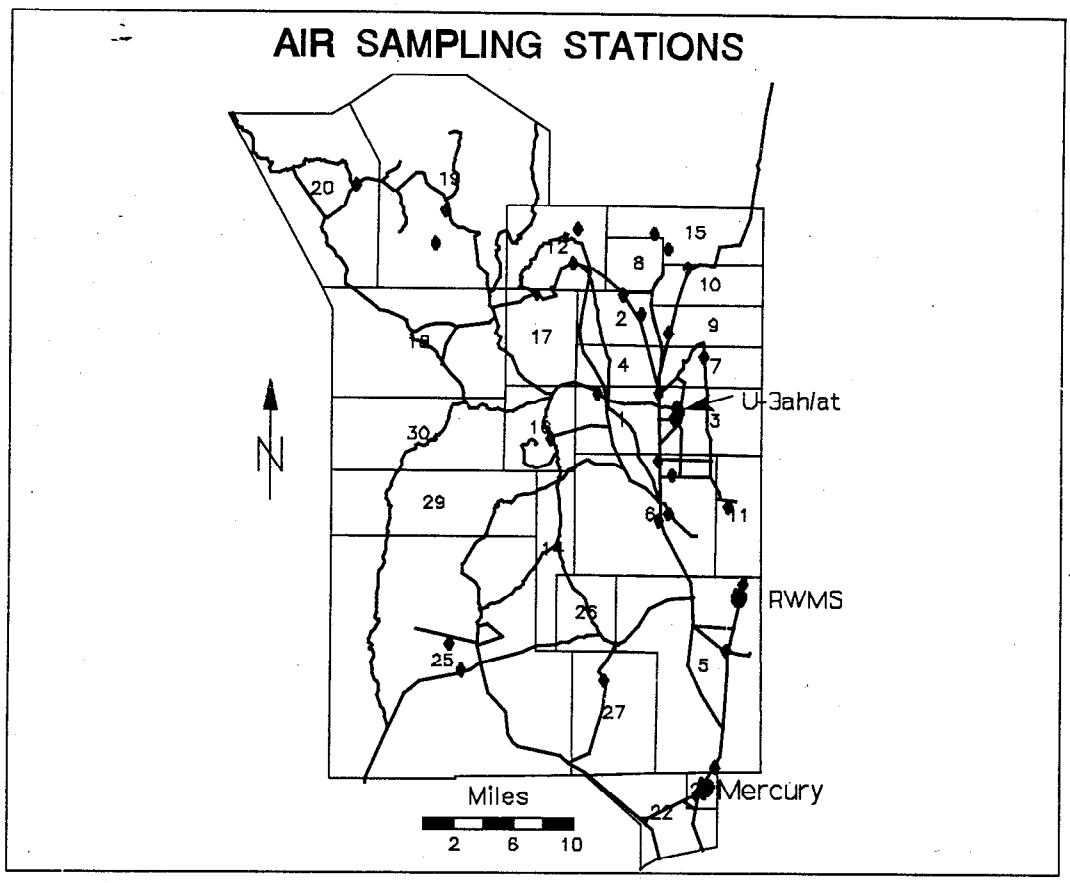


Figure A.1 Location of Air Sampling Stations on NTS

Table A.1 ^{238}Pu Concentrations, in Units of μCi/mL, Compared Among NTS Operational Areas

NTS Operational Area	Number of Samples	Mean	Median	Standard Deviation
1	24	1.5×10^{-18}	1.2×10^{-18}	2.0×10^{-18}
2	22	9.8×10^{-19}	3.2×10^{-19}	1.9×10^{-18}
3	80	2.6×10^{-18}	1.5×10^{-18}	3.5×10^{-18}
5	227	7.0×10^{-19}	0.0	1.7×10^{-18}
6	47	1.7×10^{-18}	0.0	4.1×10^{-18}
7	11	1.7×10^{-18}	0.0	4.1×10^{-18}
9	12	9.1×10^{-18}	3.7×10^{-18}	1.4×10^{-17}
10	12	1.0×10^{-18}	0.0	2.2×10^{-18}
11	11	2.1×10^{-18}	2.4×10^{-18}	2.8×10^{-18}
12	9	1.0×10^{-18}	0.0	3.4×10^{-18}
15	11	2.0×10^{-18}	8.7×10^{-19}	2.5×10^{-18}
16	12	-1.2×10^{-19}	0.0	7.1×10^{-19}
19	17	7.5×10^{-20}	0.0	1.4×10^{-18}
20	10	1.9×10^{-19}	0.0	4.1×10^{-19}
23	44	8.5×10^{-20}	0.0	6.2×10^{-19}
25	23	1.5×10^{-18}	0.0	1.2×10^{-18}
27	11	-5.7×10^{-20}	0.0	1.2×10^{-18}

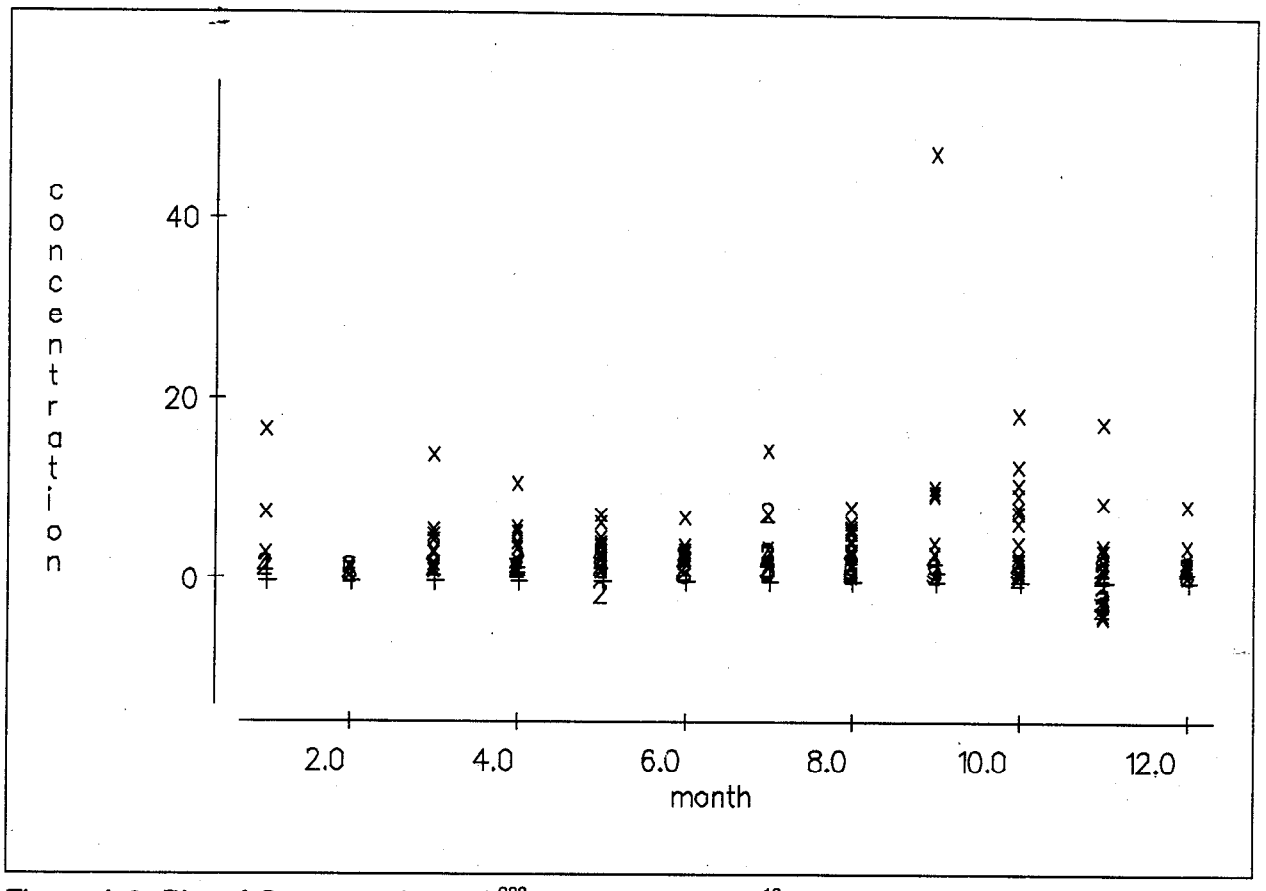


Figure A.2 Plot of Concentrations of ^{238}Pu, in Units of 10^{-18} μCi/mL, versus Month of Collection

In Figure A.3, individual concentrations, in units of 10^{-18} μCi/mL, from a typical sampling station (Area 1, BJY) are plotted versus month of collection. Individual limits of detection are denoted by a dashed line. Figure A.3 shows a lack of temporal pattern, which was typical of all sampling stations. Further, Figure A.3 shows only a handful of concentrations exceeding the individual limit of detection. This, too, is typical behavior for stations for which any concentrations exceeded the limits of detection. At many stations, all observed concentrations were below the individual limits of detection.

A sense of the accuracy of measured ^{238}Pu concentrations in air samples can be obtained from the empirical coefficients of variation, also called relative errors. These are defined as the analytic standard deviation divided by the measured concentration. Empirical coefficients of variation for all positive concentrations, omitting one outlier with a coefficient of variation greater than 1.5, are illustrated in Figure A.4. At least two distinct modes appear. No temporal or spatial explanation was found for these modes. However, larger coefficients of variation were associated with small positive concentrations and small coefficients of variation were associated with, in relative terms, large concentrations. In any case, it can be readily seen that, typically, analytic standard deviations are large with respect to observed concentrations, due to the extremely small concentrations.

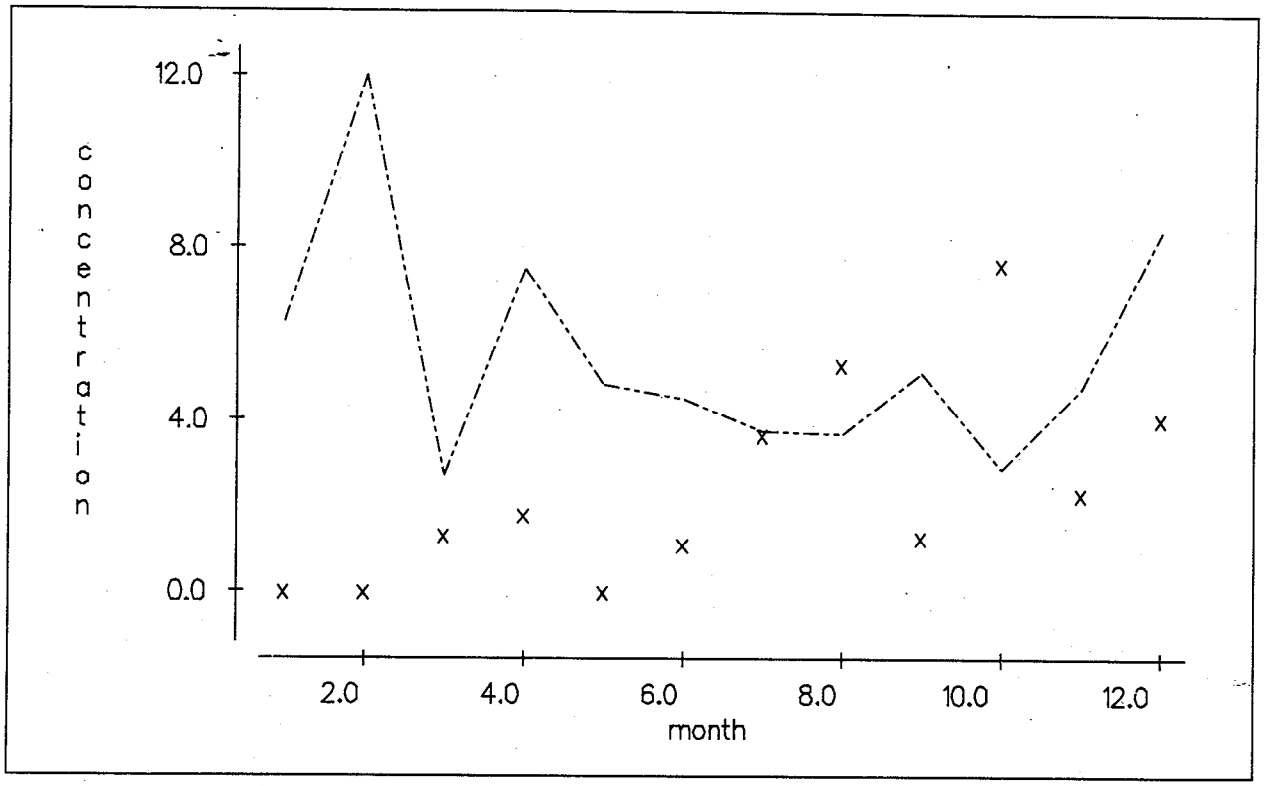


Figure A.3 Plot of ^{238}Pu Concentrations at Area 1 BJY, in Units of 10^{-18} μCi/mL, versus Month of Collection (The dashed line indicates sample limit of detection)

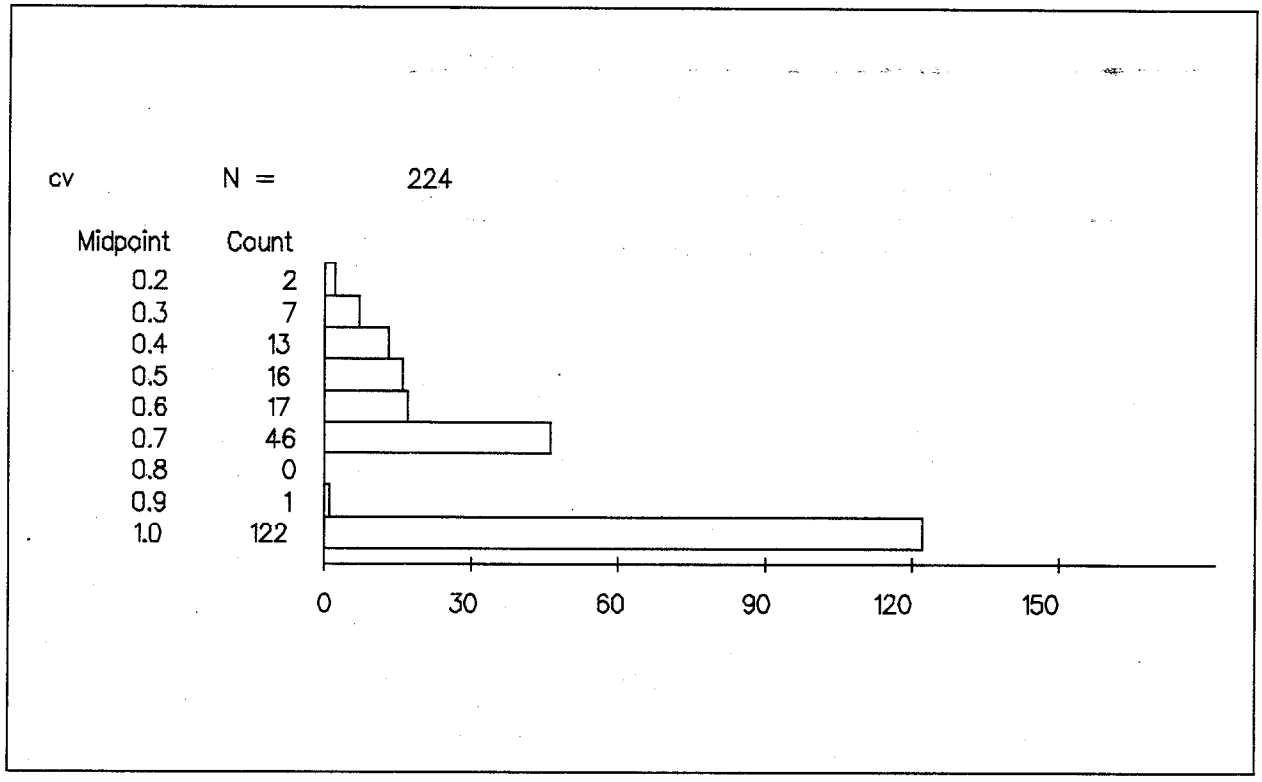


Figure A.4 Histogram of Empirical Coefficients of Variation (Unitless) for ^{238}Pu in Air

PLUTONIUM-239+240

Fifty-two air samplers were placed around the NTS. These sampling stations are described in Volume 1, Chapter 5, where descriptive statistics for results from each station appears. Descriptive statistics, in units of μCi/mL, for the entire network, are:

Number of data values =	583
Arithmetic mean =	4.1×10^{-17}
Median =	5.2×10^{-18}
Standard deviation =	1.5×10^{-16}
Minimum value =	-3.6×10^{-18}
Maximum value =	2.7×10^{-15}
Median MDC =	4.4×10^{-18}

Subtraction of background can result in concentrations that have a non-positive value. Of the measured concentrations, approximately 12 percent were 0.0, and approximately 2 percent were negative.

Eighty-six percent of the observed concentrations were positive. Of the positive concentrations, the geometric mean was 1.0×10^{-17} μCi/mL (3.7×10^{-7} Bq/m^3) and the geometric standard deviation was 5.3.

Approximately 50 percent of the observed concentrations were above their individual limits of detection. Accordingly, formal statistical methods are used to compare concentrations over space and time.

In Figure A.5, natural logarithms of observed concentrations at Area 15 EPA farm are plotted versus normal scores. Normal scores plots of positive concentrations from other sampling stations appear similar to this one. Although linearity is not a perfect fit, it is close enough to warrant use of the lognormal distribution.

To simultaneously compare differences in sampling stations and months in which sampling ended, a two-way analysis of variance (ANOVA) was conducted, and the results are shown in Table A.2. This two-way ANOVA table shows that concentrations differ both over sampling stations and between months.

Differences among sampling locations and among months of sampling are assessed by means of one-way ANOVAs. The ANOVA table comparing sampling locations appears in Table A.3. Individual confidence intervals are not reported, as means and standard deviations for results from each sampling station appear in Volume 1, Chapter 5. Differences among sampling stations are highly significant. This is attributable to the higher concentrations found at Area 9, 9-300 Bunker, which has historically had higher airborne Pu concentrations. Indeed, if this sample station were omitted from the analysis, the p-value would increase to approximately 0.01. Further, much of the difference between Area 9, 9-300 Bunker, and other sampling stations is attributable to a single large concentration, sampled from August 30 to October 2. This sample, which also yielded unusually high concentrations of ^{238}Pu, was rechecked. No errors were found, so the value must be taken at face value. A sense of the spatial variability of $^{239+240}$Pu can be had from Table A.4, where descriptive statistics are calculated for data from each NTS operational area. Individual confidence intervals are not reported, due to variance heterogeneity.

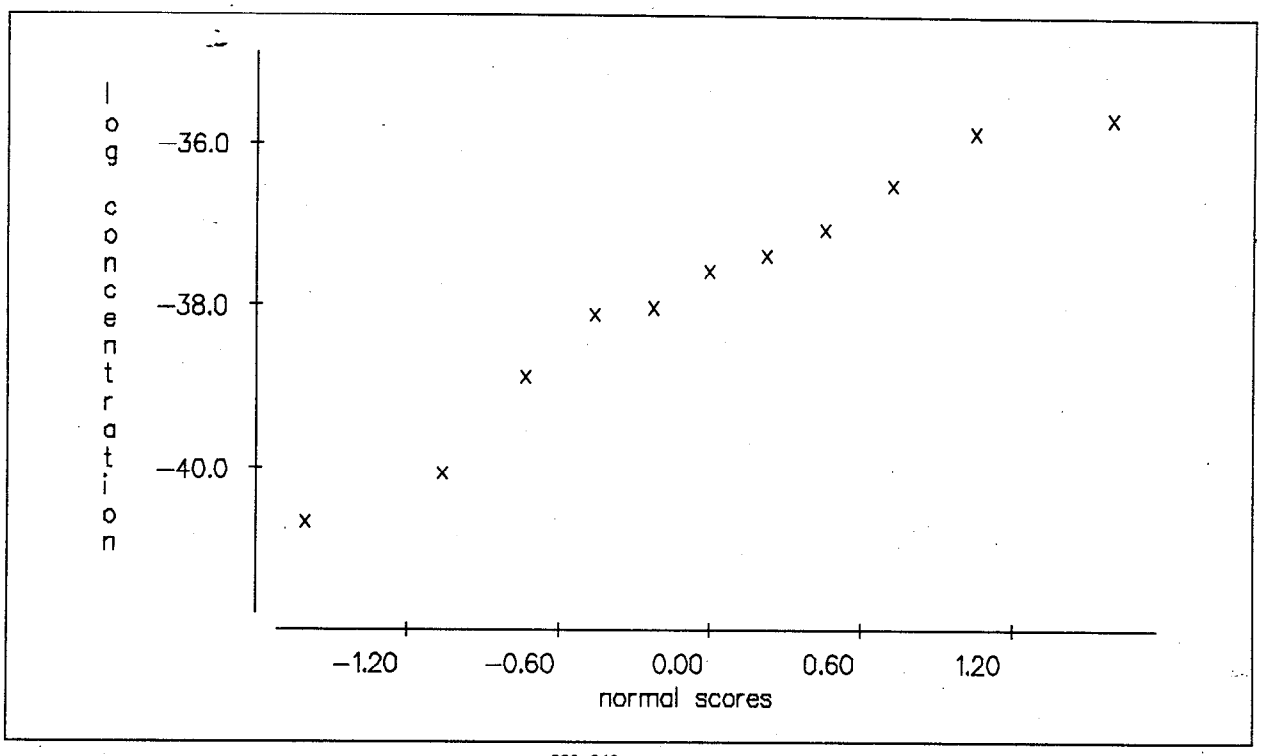


Figure A.5 Plot of Natural Logarithms of $^{239+240}$Pu Concentrations at Area 15, EPA Farm, in Units of μCi/mL, versus Normal Scores

Table A.2 Two-Way Analysis of Variance on Natural Logarithms of $^{239+240}$Pu Concentrations between Sampling Stations and Month Sampling

Source	Degrees of Freedom	Sequential Sum of the Squares	Adjusted Sum of Squares	Mean Square	F-Statistic	p Value
Sampling Station	51	648.615	720.277	14.123	13.56	0.000
Month	11	289.033	289.033	26.276	25.22	0.000
Error	442	464.418	460.418	1.042		
Total	504	1402.066				

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

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Sampling Station	51	651.62	12.78	7.72	0.000
Error	453	749.45	1.65		
Total	504	1401.07			

Table A.4 $^{239+240}$Pu Concentrations, in Units of μCi/mL, Compared Among NTS Operational Areas

NTS Operational Area	Number of Samples	Mean	Median	Standard Deviation
1	24	5.6×10^{-17}	1.0×10^{-17}	8.8×10^{-17}
2	22	4.0×10^{-17}	1.0×10^{-17}	9.9×10^{-17}
3	80	1.0×10^{-16}	6.4×10^{-17}	1.4×10^{-16}
5	227	1.3×10^{-17}	4.6×10^{-18}	4.9×10^{-17}
6	47	2.4×10^{-17}	1.4×10^{-17}	2.5×10^{-17}
7	11	2.4×10^{-17}	1.4×10^{-17}	2.5×10^{-17}
9	12	4.8×10^{-16}	2.4×10^{-16}	7.5×10^{-16}
10	12	2.2×10^{-17}	1.2×10^{-17}	4.6×10^{-17}
11	11	7.8×10^{-17}	2.3×10^{-17}	1.3×10^{-16}
12	9	9.7×10^{-17}	2.2×10^{-18}	2.7×10^{-16}
15	11	9.3×10^{-17}	5.0×10^{-17}	1.1×10^{-16}
16	12	3.7×10^{-18}	1.7×10^{-18}	4.8×10^{-18}
19	17	2.2×10^{-18}	1.9×10^{-18}	2.3×10^{-18}
20	10	1.4×10^{-18}	8.0×10^{-19}	1.6×10^{-18}
23	44	2.1×10^{-18}	1.3×10^{-18}	2.4×10^{-18}
25	23	1.0×10^{-18}	9.4×10^{-19}	1.5×10^{-18}
27	11	2.7×10^{-18}	1.1×10^{-18}	3.6×10^{-18}

The ANOVA table comparing months of sampling appears in Table A.5. Individual confidence intervals show lower concentrations were observed during the first three months of the year. As similar patterns have been observed in previous years, this is probably attributable to weather patterns.

Results from a single sampling station serve to illustrate temporal patterns. In Figure A.6, natural logarithms of individual observed concentrations, in units of μCi/mL, from a typical sampling station (Area 6, Well 3 Complex) are plotted versus month of collection. Individual limits of detection are denoted by a dashed line. Figure A.6 shows lower concentrations in the early parts of the year, which was typical of all sampling stations. Further, Figure A.6 shows that about half of the concentrations exceeded the individual limit of detection. This, too, is typical behavior.

A sense of the accuracy of measured $^{239+240}$Pu concentrations in air samples can be obtained from the empirical coefficients of variation, the analytic standard deviation divided by the absolute value of the measured concentration. Empirical coefficients of variation for all positive concentrations, omitting one outlier with a coefficient of variation greater than 1.5, are illustrated in Figure A.7. Note that coefficients of variation have two distinct modes. As with ^{238}Pu, no spatial or temporal pattern in the modes was discovered. However, larger coefficients of variation were associated with small positive concentrations and small coefficients of variation were associated with, in relative terms, large concentrations. In any case, analytic standard deviations are rarely larger than observed concentrations.

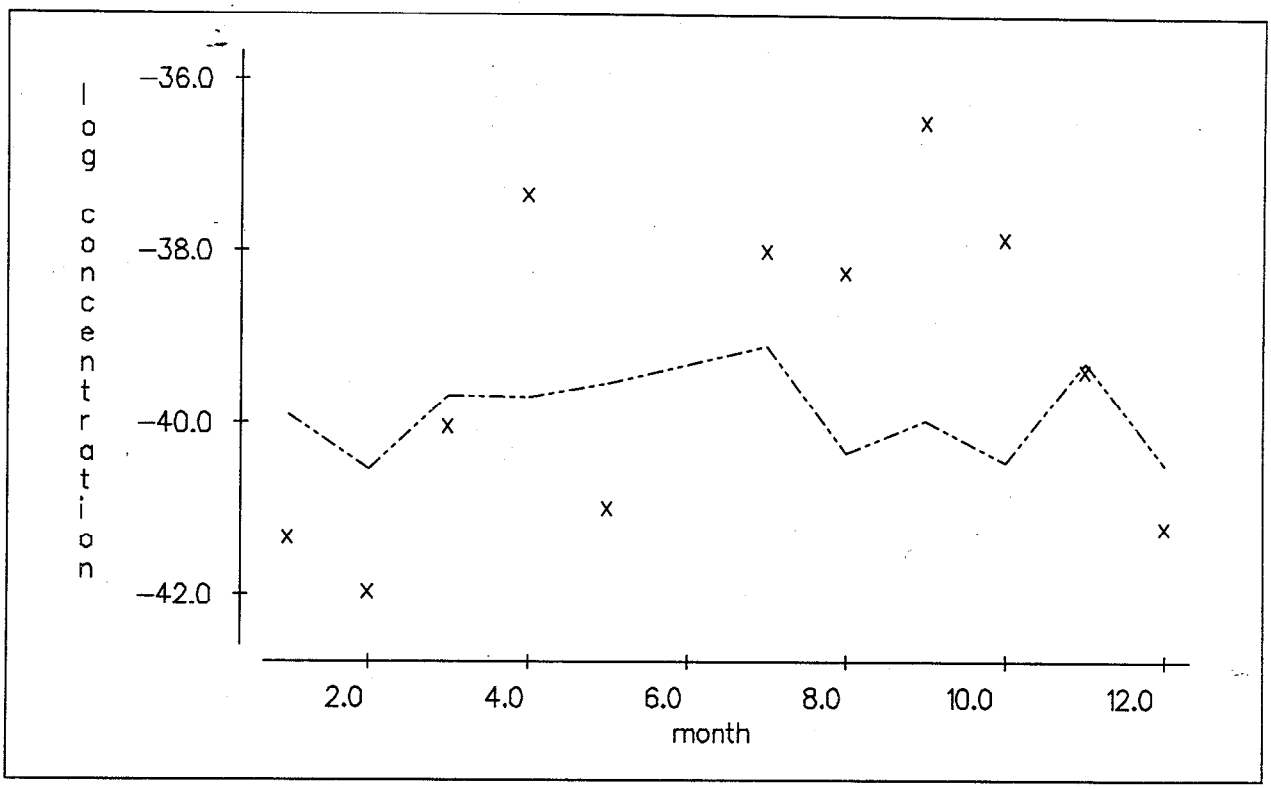


Figure A.6 Plot of Natural Logarithms of $^{239+240}$Pu Concentrations, in Air at Area 6, Well 3 Complex, in Units of µCi/mL, versus Month Collected: dashed line = MDC

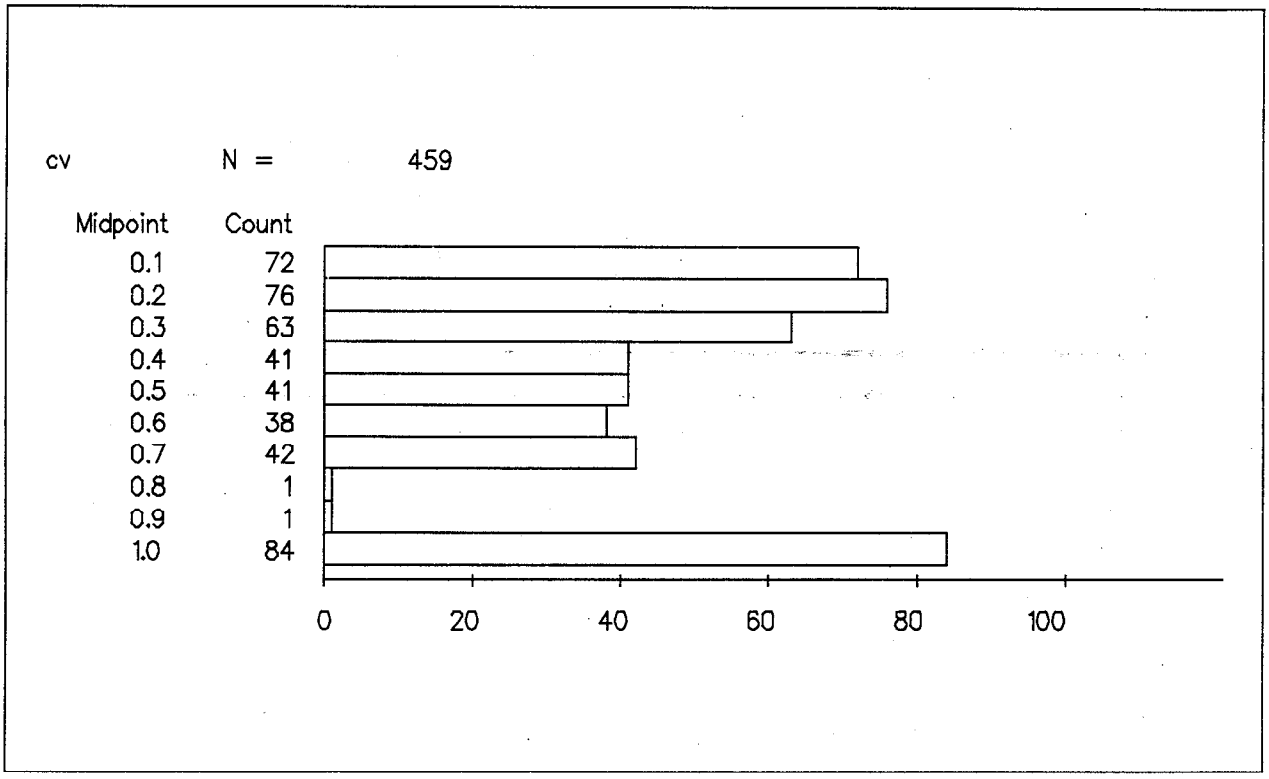


Figure A.7 Histogram of Empirical Coefficients of Variation (Unitless) for $^{239+240}$Pu in Air

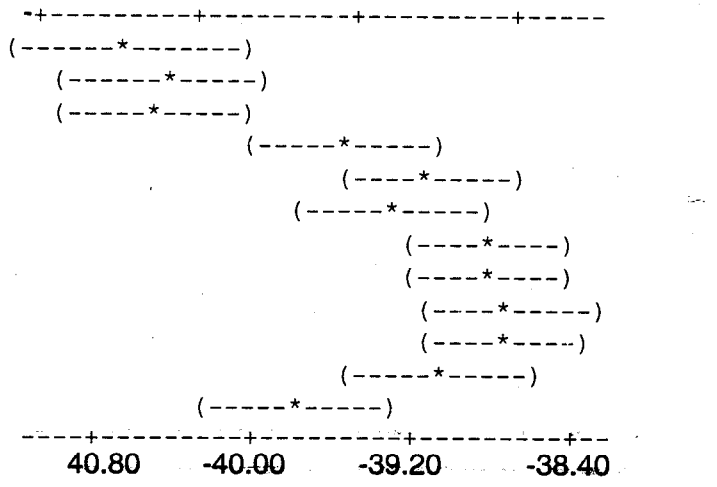
Table A.5 One-Way Analysis of Variance on the Natural Logarithms of $^{239+240}Pu$ Concentrations Among Months

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Month	11	220.37	20.03	8.37	0.000
Error	493	1108.69	2.39		
Total	504	1401.07			

Month	Number	Mean	Standard Deviation
January	27	-40.463	0.969
February	34	-40.272	1.240
March	39	-40.331	1.254
April	39	-39.358	1.235
May	43	-38.924	1.758
June	38	-39.128	1.334
July	50	-38.635	1.607
August	51	-38.643	1.659
September	49	-38.535	1.742
October	51	-38.569	1.950
November	38	-38.874	1.583
December	46	-39.571	1.486

Pooled Standard Deviation = 1.552

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



GROSS BETA

Fifty-two air samplers were placed around the NTS. These sampling stations are described in Volume 1, Section 5, where descriptive statistics for results from each station appears. Descriptive statistics, in units of μCi/mL, for the entire network, are:

Number of data values = 2576
Arithmetic mean = 2.0×10^{-14}
Median = 1.9×10^{-14}
Standard deviation = 7.6×10^{-15}
Minimum value = 4.3×10^{-15}
Maximum value = 9.3×10^{-14}
Median MDC = 1.5×10^{-15}

All concentrations were above the limit of detection, which implies that all were positive. The network-wide geometric mean was 1.9×10^{-14} μCi/mL (7.0×10^{-4} Bq/m^3) with geometric standard deviation of 1.4.

Air samples from all sampling stations, except Area 5, Gate 200 S, are held for some time prior to analysis, to allow radon daughters to decay. Accordingly, air samples from Gate 200 S exhibit greater concentrations of gross beta. Due to the large number of data values, omitting this station from the data set before calculating the preceding descriptive statistics results in very small changes, and hence is not reported here.

In Figure A.8, natural logarithms of gross beta concentrations recorded at Area 9, 9-300 Bunker are plotted versus normal scores. This is typical of plots for locations at which data were collected. The straightness of the plot indicates that lognormality is an adequate distributional assumption for concentrations of gross beta in air.

A two-way ANOVA table, comparing natural logarithms of concentrations among sampling stations and among weeks of sampling (first week of year equals 1, second week of year equals 2, etc.) appears in Table A.6. The ANOVA table shows that concentrations differ both by sampling location and by week of sampling.

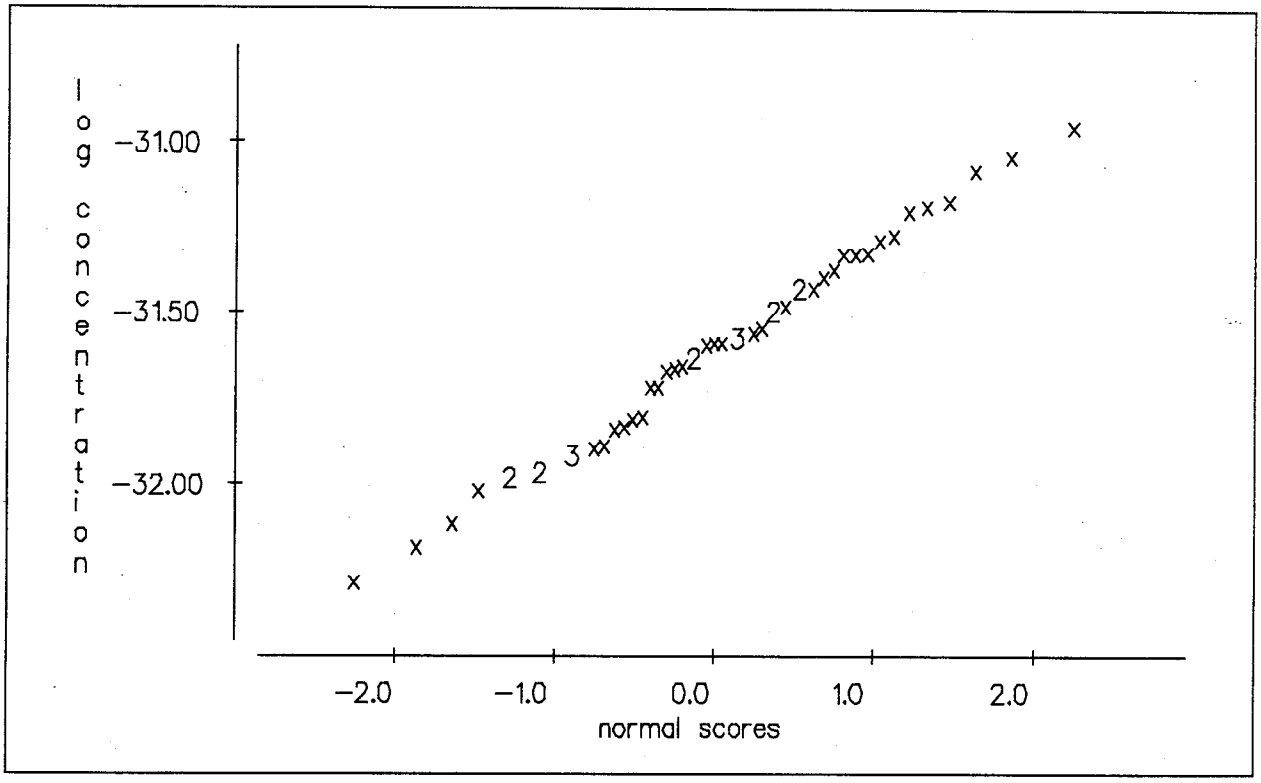


Figure A.8 Plot of Natural Logarithms of Gross Beta Concentrations in Air at Area 9, 9-300 Bunker, in Units of μCi/ml, versus Normal Scores

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

Source	Degrees of Freedom	Sequential Sum of the Squares	Adjusted Sum of Squares	Adjusted Mean Square	F-Statistic	p Value
Week	51	231.1461	231.1461	4.5323	121.91	0.000
Sampling Station	51	16.2364	16.095	0.3156	8.49	0.000
Error	2515	106.4579	106.4579	0.0423		
Total	2618	368.6092				

A one-way ANOVA table, comparing natural logarithms of concentrations among sampling stations, appears in Table A.7. As means and standard deviations for each sampling station appear in Volume 1, Chapter 5, individual confidence intervals are not reported. However, Tukey's multiple comparison test separated Area 5, Gate 200 S, from all other sampling stations, and failed to separate any other pair at the 0.05 level. As samples from Area 5, Gate 200 S are analyzed differently than those from other sampling stations, it is not surprising that these results differ. If samples from Area 5, Gate 200 S are removed from the data set and the ANOVA repeated, the p-value increases to approximately 0.01 and Tukey's multiple comparison test fails to locate any pairs significantly different at the 0.05 level.

A sense of the spatial distribution of gross beta concentrations can be had from Table A.8. There, an ANOVA of natural logarithms of gross beta concentrations, compared among NTS Operational Areas, appears. Data from Area 5, Gate 200, was not used in this table, as data from this sampling station are known not to be from the same population as those from the remainder of the sampling stations. No outstanding differences among NTS Operational Areas stands out. Indeed, the only pair of NTS Operational Areas Tukey's multiple comparison test identifies as different at the 0.05 level are Areas 5 and 6. This finding of significant difference may be attributed in part to the large number of analyses for Area 5. Additionally, dust generated by the operation of heavy equipment in Area 5 could result in elevated gross beta concentrations.

As samples to detect gross beta in air are collected weekly, concentrations were compared among weeks. An ANOVA table, comparing concentrations among weeks of sampling, appears in Table A.9. This table clearly shows a concentration difference among weeks. This difference can best be described graphically. A plot of the natural logarithms of concentrations from all sampling stations versus week of collection appears in Figure A.9, where an increasing trend can be seen. This trend can perhaps be seen more clearly by considering a single sampling station's results. Area 1, BJY was chosen as typical. A plot of natural logarithms of concentrations at Area 1, BJY versus week appears in Figure A.10. Natural logarithms of individual limits of detection, in units of μCi/mL, are represented by a dashed line. Figure A.10 clearly shows an increase in concentrations throughout the year. This increase occurred, subject to the normal scatter of the data, at every sampling station. It is not clear at this point to what the increase should be attributed. Possibilities include increases in concentration due to drier weather or to changes in experimental procedures which might have skewed the data. An examination of instrument calibration and control-chart record showed very good instrument stability over 1993, and suggested no obvious reason the measurement accuracy should be doubted. The investigation of this phenomenon continues.

A sense of the accuracy of measured gross beta in air concentration can be obtained from the empirical coefficients of variation, the analytic standard deviation divided by the measured concentration. A histogram of the empirical coefficients of variation appears in Figure A.11. In approximately 96 percent of the observations, the empirical coefficient of variation was less than 0.10, indicating that the analytic standard deviation tends to be at least an order of magnitude smaller than the measured concentration. In no case was the empirical coefficient of variation greater than 0.24, indicating that all concentrations were appreciably larger than their analytic standard deviations.

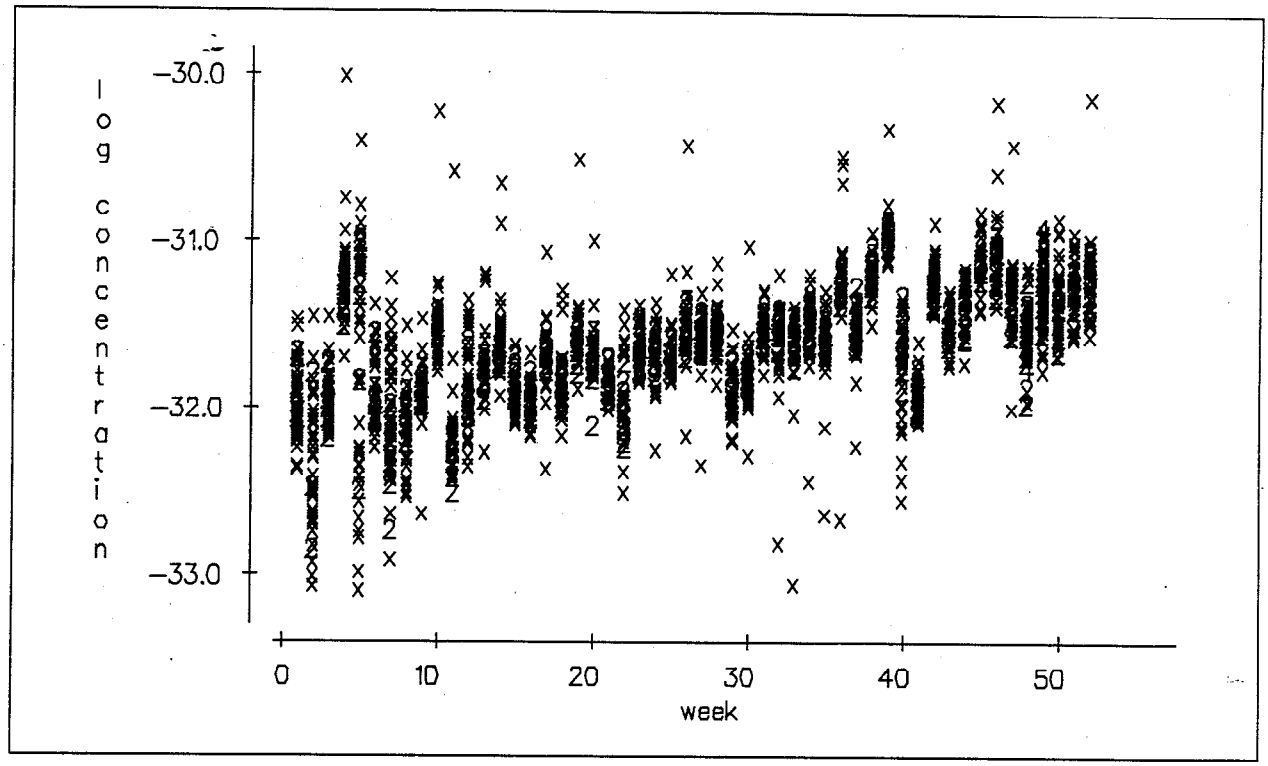


Figure A.9 Plot of Natural Logarithms of Gross Beta in Air Concentrations, in Units of µCi/mL, versus Week of Collection

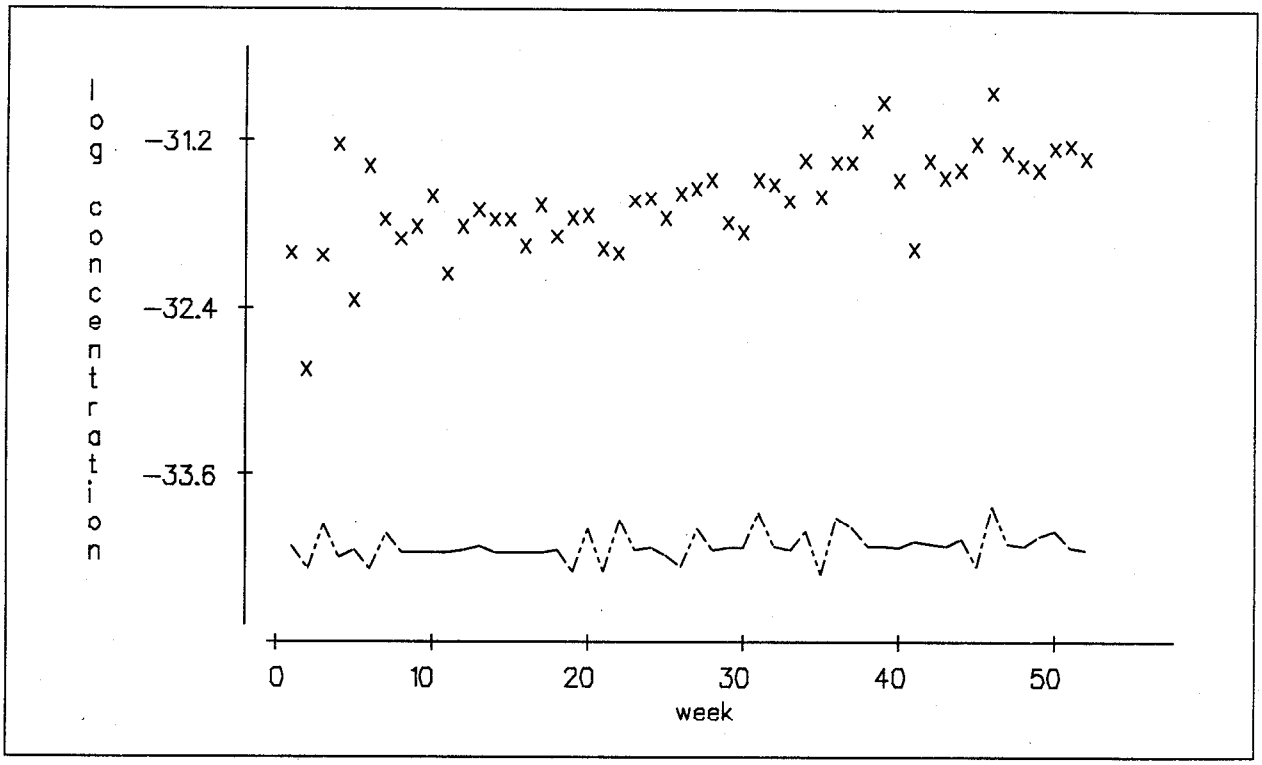


Figure A.10 Plot of Natural Logarithms of Gross Beta Concentrations in Air, in Units of µCi/mL, at Area 1, BJY versus Week of Collection (Dashed Line is Natural Logarithm of Sample Limit of Detection)

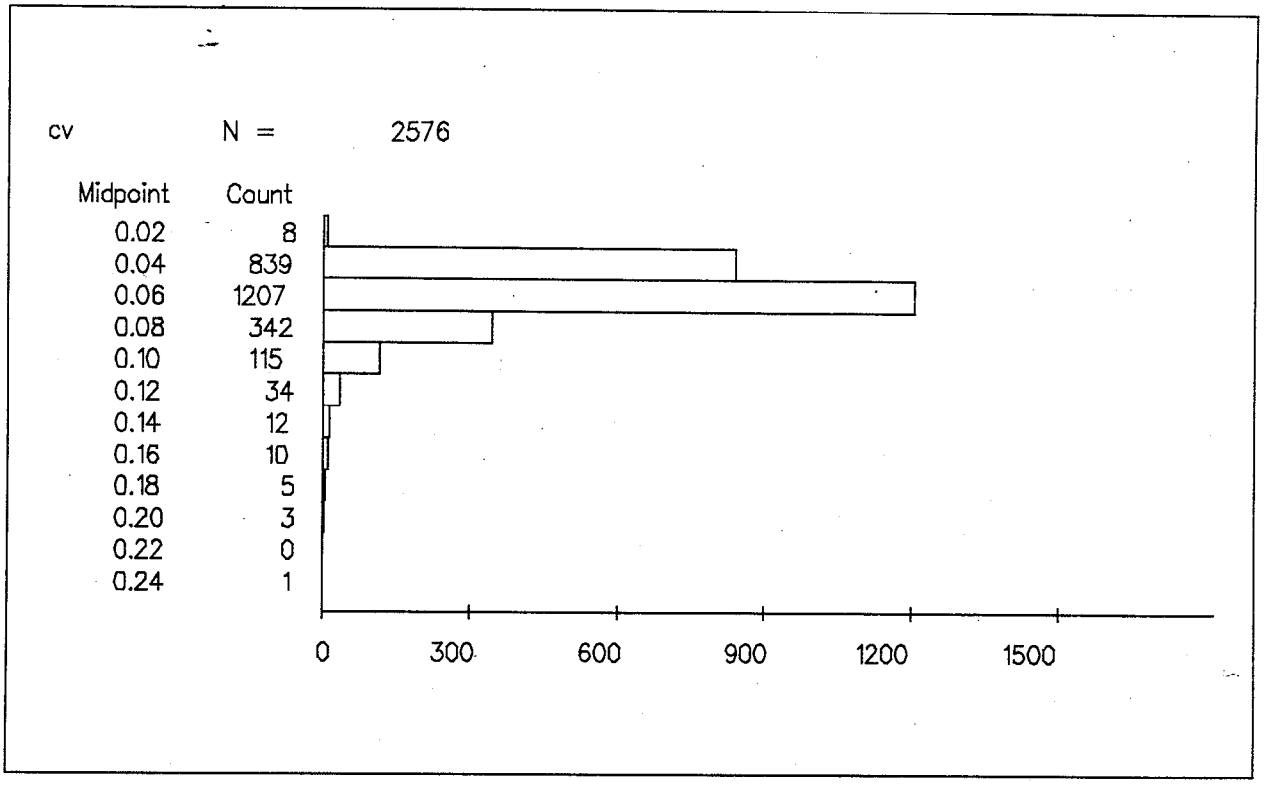


Figure A.11 Empirical Coefficients of Variation (Unitless) for Gross Beta in Air

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

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Sampling Station	51	16.236	0.318	2.49	0.000
Error	2524	323.084	0.128		
Total	2575	339.320			

Table A.8 One-Way Analysis of Variance on the Natural Log of Gross Beta Concentrations Among NTS Operational Areas

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
NTS Operational Area	16	5.795	0.362	2.905	0.000
Error	2510	312.961	0.125		
Total	2526	318.756			

Table A.8 (One-Way Analysis of Variance on the Natural Log of Gross Beta Concentrations Among NTS Operational Areas, cont.)

NTS Operational Area	Number	Mean	Standard Deviation	Individual 95 Percent Confidence Intervals for Ln Median Based on Pooled Standard Deviation
1	104	-31.591	0.380	(----*-----)
2	103	-31.662	0.327	(-----*-----)
3	357	-31.626	0.350	(---*--)
5	959	-31.569	0.355	(-*-)
6	198	-31.670	0.380	(---*---)
7	49	-31.729	0.336	(-------*-------)
9	51	-31.611	0.306	(-------*-------)
10	51	-31.596	0.309	(-------*-------)
11	49	-31.614	0.354	(-------*--------)
12	52	-31.707	0.296	(-------*-------)
15	52	-31.530	0.311	(-------*-------)
16	49	-31.697	0.374	(--------*-------)
19	66	-31.670	0.286	(------*------)
20	36	-31.631	0.255	(---------*---------)
23	204	-31.659	0.373	(---*---)
25	101	-31.658	0.411	(-----*-----)
27	46	-31.689	0.333	(-------*--------)

Pooled Standard Deviation = 0.353 -31.80 -31.68 -31.56 -31.44

Table A.9 One-Way Analysis of Variance on the Natural Log of Gross Beta Concentrations Among Weeks of Sampling

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Week	51	231.2866	4.5350	105.95	0.000
Error	2524	108.0335	0.0428		
Total	2575	339.3201			

Week	Number	Mean	Standard Deviation	Individual 95 Percent Confidence Intervals for Ln Median Based on Pooled Standard Deviation
1	48	-31.929	0.203	(*-)
2	37	-32.348	0.403	(*)
3	43	-31.924	0.155	(-*)
4	47	-31.249	0.248	(*)
5	49	-31.640	0.681	(*)
6	48	-31.913	0.185	(-*)
7	49	-32.077	0.373	(*-)

Pooled Standard Deviation = 0.207 -32.00 -31.50 -31.00

Table A.9 (One-Way Analysis of Variance on the Natural Log of Gross Beta Concentrations Among Weeks of Sampling, cont.)

Week	Number	Mean	Standard Deviation	Individual 95 Percent Confidence Intervals for Ln Median Based on Pooled Standard Deviation
8	48	-32.103	0.194	(*)
9	48	-31.897	0.153	(*)
10	48	-31.492	0.214	(*)
11	49	-32.211	0.257	(-*)
12	47	-31.876	0.235	(*-)
13	47	-31.755	0.184	(*)
14	51	-31.606	0.201	(*)
15	49	-31.888	0.104	(*)
16	51	-31.938	0.095	(*)
17	51	-31.663	0.161	(*)
18	49	-31.843	0.160	(*)
19	51	-31.569	0.180	(-*)
20	52	-31.680	0.152	(*-)
21	51	-31.841	0.079	(*)
22	52	-31.981	0.215	(*-)
23	50	-31.642	0.108	(*)
24	51	-31.668	0.138	(-*)
25	49	-31.676	0.107	(*-)
26	51	-31.492	0.205	(*)
27	51	-31.565	0.141	(-*)
28	52	-31.514	0.114	(*)
29	50	-31.857	0.130	(*)
30	51	-31.783	0.156	(*-)
31	49	-31.535	0.095	(*-)
32	51	-31.557	0.212	(*)
33	49	-31.611	0.237	(*)
34	49	-31.490	0.182	(*)
35	51	-31.588	0.191	(*)
36	49	-31.228	0.280	(*-)
37	52	-31.523	0.146	(-*)
38	50	-31.157	0.098	(*)
39	47	-30.941	0.122	(*-)
40	49	-31.676	0.275	(*-)
41	52	-31.892	0.099	(*)
42	52	-31.236	0.104	(*)
43	51	-31.499	0.091	(*)
44	52	-31.349	0.115	(*)
45	51	-31.118	0.117	(-*)
46	52	-31.058	0.191	(*)
47	52	-31.308	0.197	(*)
48	52	-31.552	0.196	(*)
49	52	-31.238	0.221	(*)
50	49	-31.339	0.184	(*)
51	48	-31.262	0.146	(*)
52	47	-31.190	0.209	(*)

Pooled Standard Deviation = 0.207

-32.00 -31.50 -31.00

GAMMA-EMITTING RADIONUCLIDES

Naturally occurring radionuclides not in equilibrium at the time of counting, such as ^{208}Tl, ^{212}Pb, ^{214}Pb, and ^{214}Bi were omitted from the data. This left no gamma emitting radionuclides other than naturally-occurring ^{7}Be and ^{40}K. Descriptive statistics, in units of μCi/mL, appear in Table A.10 for these radionuclides. The most important point to observe is that no man-made fission products were detected.

More than 99 percent of the samples with measured ^{7}Be had concentrations above the individual limit of detection. The median limit of detection for ^{7}Be was 6.5×10^{-14} μCi/mL (2.4×10^{-3} Bq/m^3). Approximately 87 percent of the samples containing measurable ^{40}K were above the individual limit of detection. The median limit of detection for ^{40}K was 1.4×10^{-13} μCi/mL (5.2×10^{-3} Bq/m^3). The geometric mean of the concentrations of ^{7}Be and ^{40}K were, respectively, 2.2×10^{-13} μCi/mL (8.1×10^{-3} Bq/m^3) and 1.8×10^{-13} μCi/mL (6.7×10^{-3} Bq/m^3). The geometric standard deviations of the concentrations were, respectively, 1.5, and 2.3.

The natural logarithms of the concentrations of ^{7}Be and ^{40}K appear, respectively, as boxplots, in Figure A.12 and Figure A.13. The logarithms of ^{7}Be concentrations are quite symmetric. The logarithms of ^{40}K concentrations are left-skewed. This can be explained by noting that ^{7}Be concentrations are approximately lognormally distributed, while ^{40}K concentrations are approximately normally distributed, and logarithms of normally distributed data tend to be skewed. These conclusions are supported by distributional tests, not reproduced here.

As ^{7}Be is a naturally occurring radionuclide, its concentrations were not studied as closely as those of man-made radionuclides were in the preceding sections. One-way ANOVAs, not reported here in detail, with natural logarithm of ^{7}Be concentration as dependent variable, were performed. These yielded a p-value of approximately 0.04 for comparing sampling stations, a p-value of 0.025 for comparing operational areas, and a p-value of 0.00 for comparing weeks of sampling. Tukey's multiple comparison test failed to identify any pairs of sampling stations as significantly different at the 0.05 level. Tukey's multiple comparison test separated results from NTS Operational Areas 5 and 6, but did not distinguish any other pairs of NTS Operational Areas at the 0.05 level. The difference between weeks is illustrated in Figure A.14, in which natural logarithms of ^{7}Be, from all sampling stations, are plotted versus week of sampling. A tendency for concentrations to be lower earlier in the year, supported by Tukey's

Table A.10 Descriptive Statistics for Gamma-Emitting Radionuclides Detected in Air

Nuclide	Number of Samples Containing	Mean	Median	Standard Deviation	Minimum	Maximum
^{7}Be	2556	2.4×10^{-13}	2.3×10^{-13}	1.2×10^{-13}	1.8×10^{-14}	2.2×10^{-12}
^{40}K	54	2.4×10^{-13}	2.9×10^{-13}	1.4×10^{-13}	1.4×10^{-14}	6.2×10^{-13}

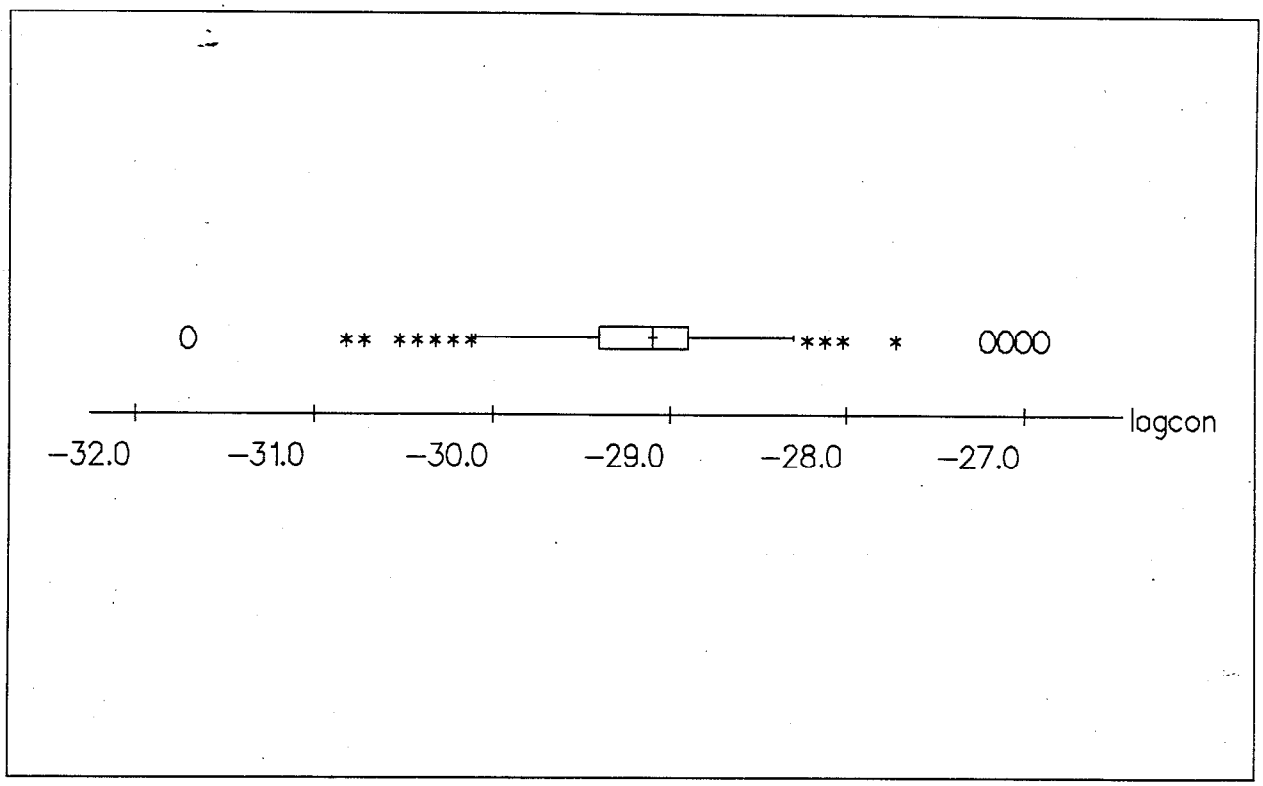


Figure A.12 Boxplot of Natural Logarithm of ^{7}Be Concentrations in Air, in Units of μCi/mL

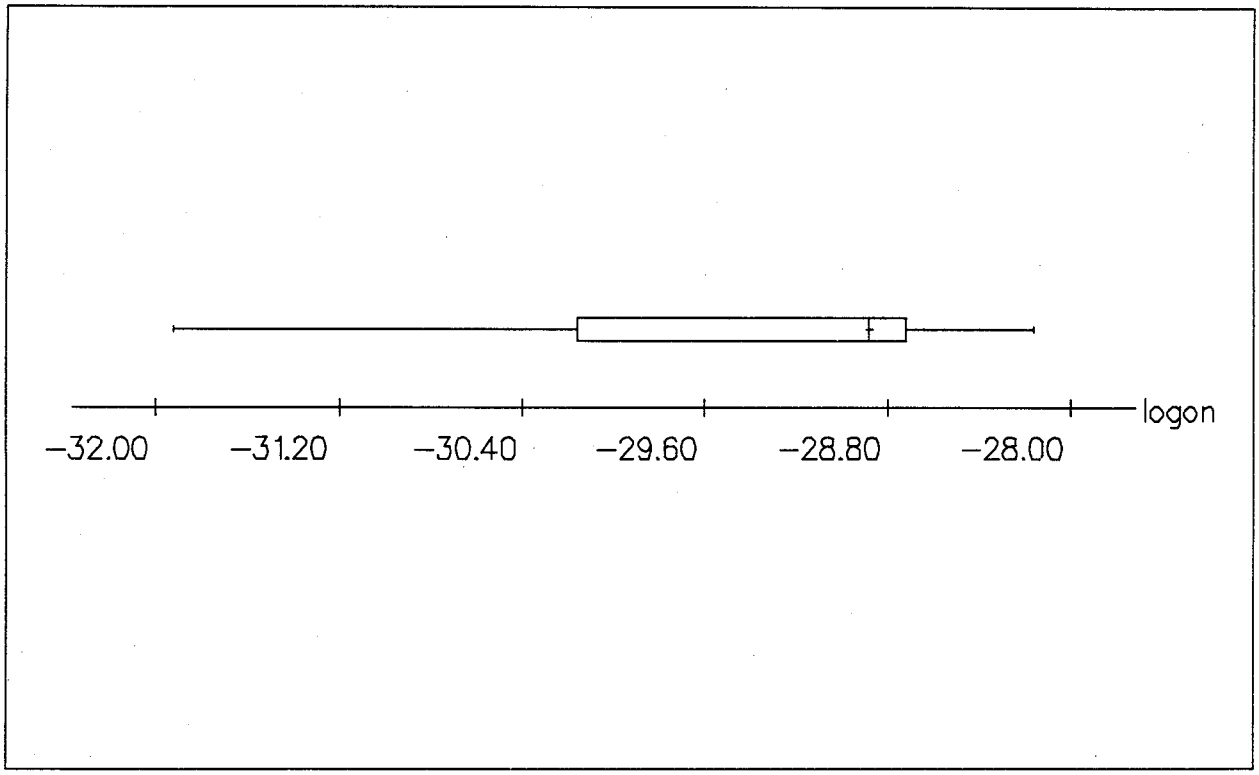


Figure A.13 Boxplot of Natural Logarithms of ^{40}K Concentrations in Air, in Units of μCi/mL

multiple comparison test, is suggested by Figure A.14. A review of sampling logs provided no explanations for the visually obvious outliers. Hence, they are taken at face value. A thematic map of ^{7}Be concentrations appears in Figure A.15. No obvious distribution pattern appears.

Similar studies of ^{40}K concentrations were not performed. At many sampling stations, in many NTS Operational Areas, and during many weeks, the numbers of observed ^{40}K concentration were very small. Therefore, detailed statistical comparisons would be of limited utility.

HISTORICAL TRENDS

Currently, there are fifty-two air sampling stations. Counting those stations at which samplers were in place at one time but are no longer, the number is even larger. Were a complete analysis of historical trends for all sampling stations included, in addition to the analysis of current results, the resulting document would be unwieldy. Accordingly, historical trends at ten representative sampling stations are studied. These stations, chosen for spatial dispersion, are:

NTS Operational Area	Sampling Station	Approximate Location
10	Gate 700 South	North-east corner of NTS
15	EPA Farm	North-east corner of NTS
19	Echo Peak	North-west corner of NTS
20	Area 20 Dispensary	North-west corner of NTS
25	E-MAD North	South-west corner of NTS
27	Cafeteria	South-central region of NTS
5	DOD Yard	South-east corner of NTS
23	H&S Building	South-east corner of NTS
6	CP-6	Central to NTS
16	3545 Substation	Central to NTS

Scatterplots of annual averages concentrations of gross beta (units of 10^{-14} μCi/mL), ^{238}Pu (units of 10^{-18} μCi/mL) and $^{239+240}Pu$ (units of 10^{-18} μCi/mL) appear in Figures A.16 through A.45.

Four noticeable peaks of annual average gross beta concentrations occur:

- A significant peak occurred in 1971. This is probably attributable to the 1970 BANEBERRY event, in which radioactive particles were accidently vented to the atmosphere.
- A peak occurred in 1977. This is probably attributable to foreign nuclear testing.
- A peak occurred in 1981. This is probably attributable to foreign nuclear testing.
- An increase in annual average gross beta concentrations occurred in 1986. This is probably attributable to the accident at Chernobyl.

Concentrations of gross beta in air, from 1982 onward, have been little influenced by nuclear testing. Concentrations measured during this period, with the exception of the peak occurring in 1986, have been uniformly low, although subject to normal statistical variation.

Concentrations of ^{238}Pu and $^{239+240}Pu$ show no consistent patterns over time. For example, $^{239+240}Pu$ concentrations at Area 15, EPA Farm, seemed to increase, those at Area 20, Dispensary, seemed to decrease, and those at Area 19, Echo Peak, appeared random over time. In view of the small number of years of data and the frequency with which ^{238}Pu and $^{239+240}Pu$ concentrations are below the limit of detection, it is difficult to reach any meaningful conclusions.

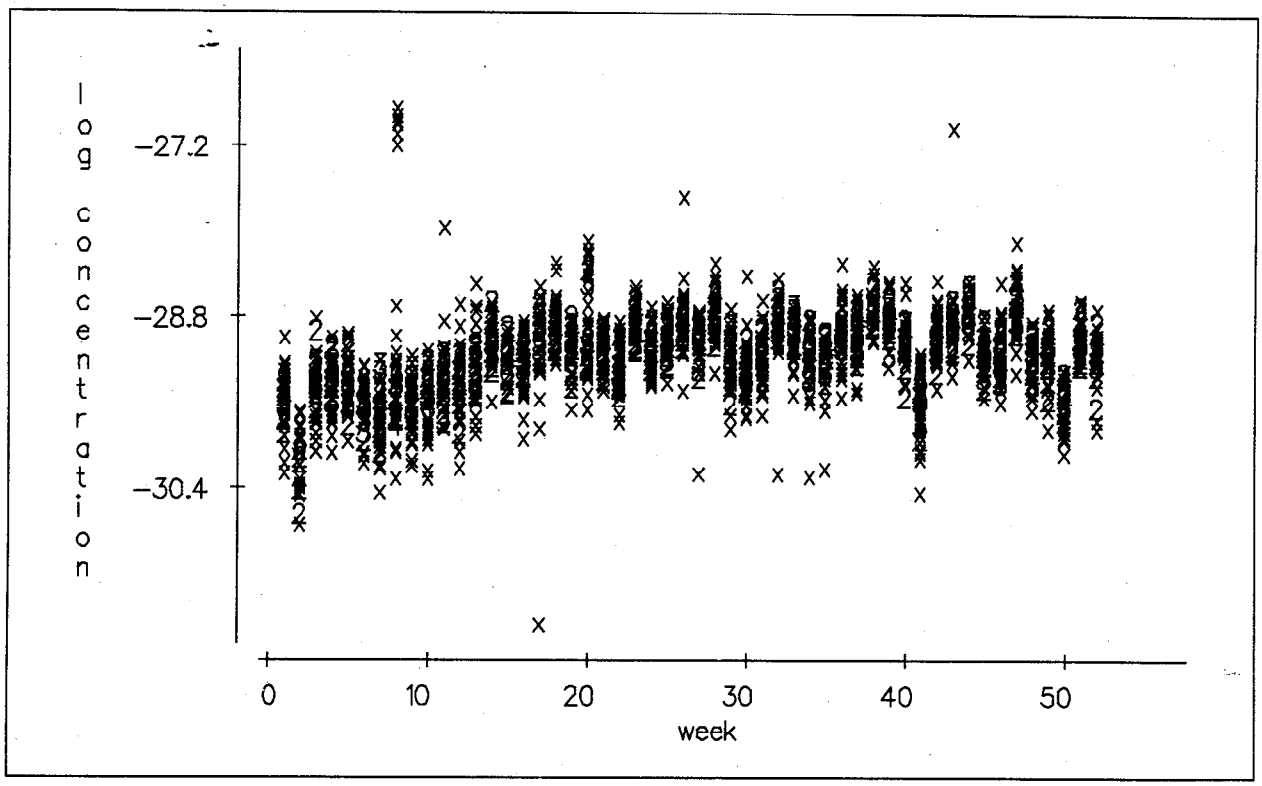


Figure A.14 Plot of Natural Logarithms of ^{7}Be Concentrations in Air, in Units of μCi/mL, versus Week of Collection

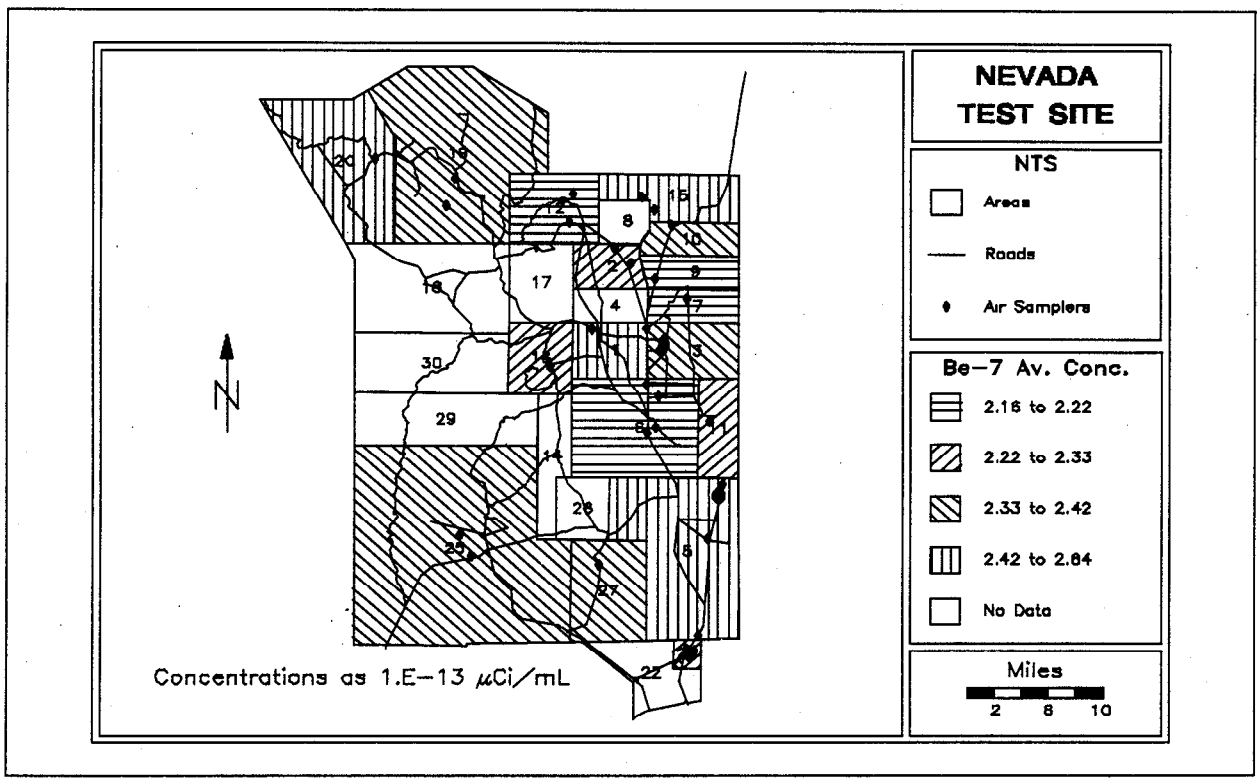


Figure A.15 Thematic Map of Average ^{7}Be Concentrations: units of 10^{-13} μCi/mL

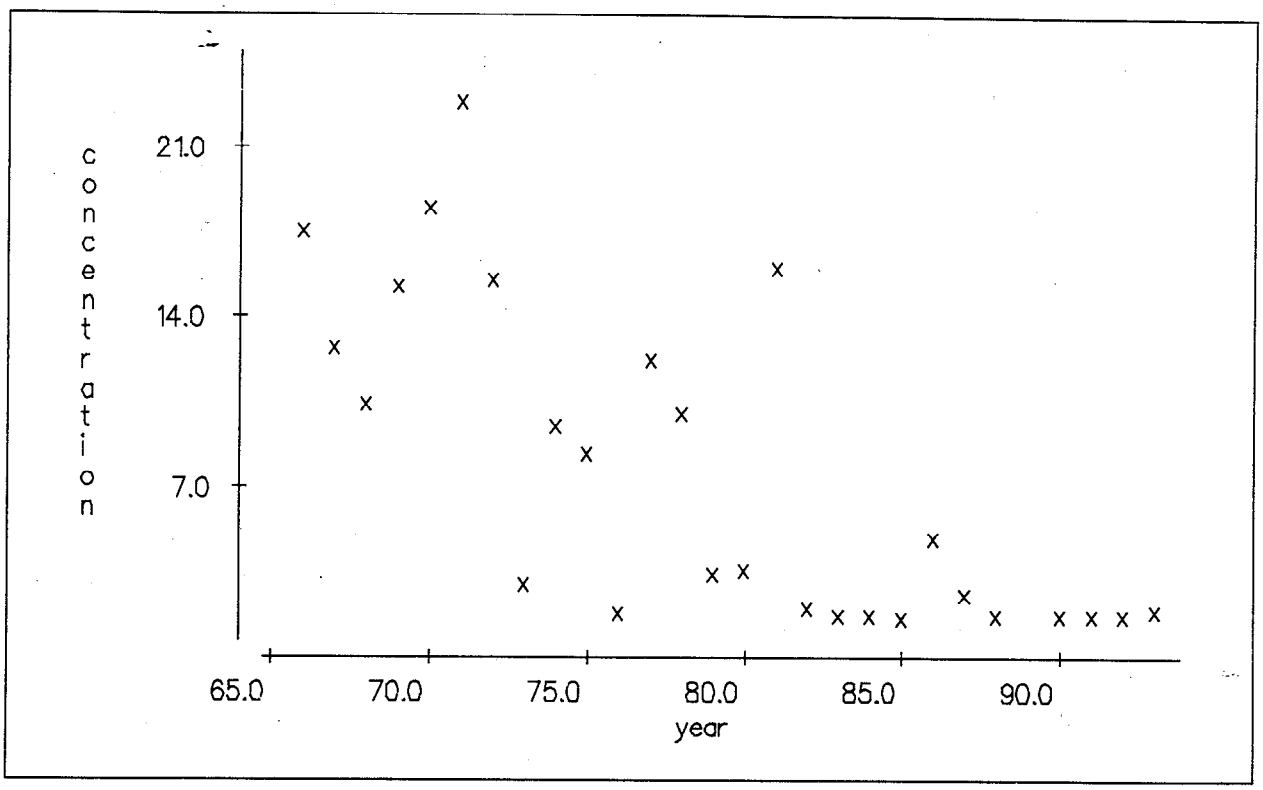


Figure A.16 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 10, Gate 700 South

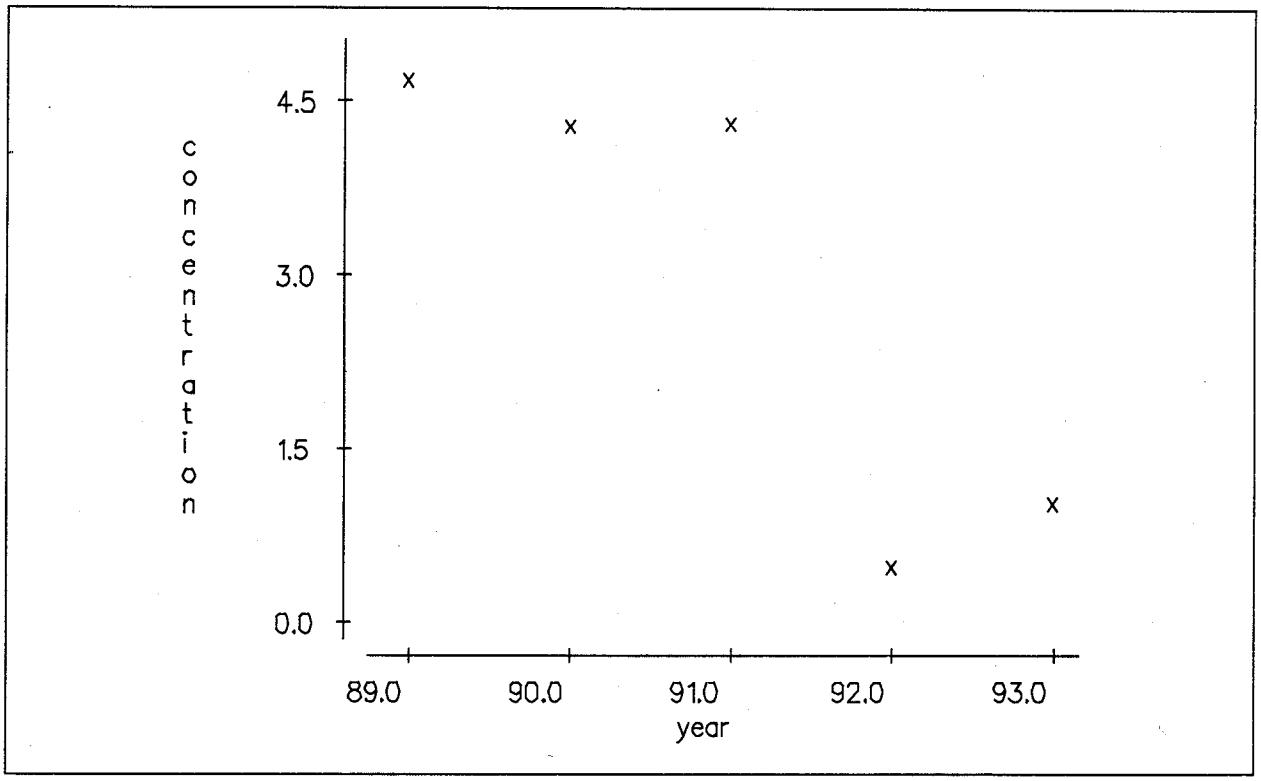


Figure A.17 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 10, Gate 700 South

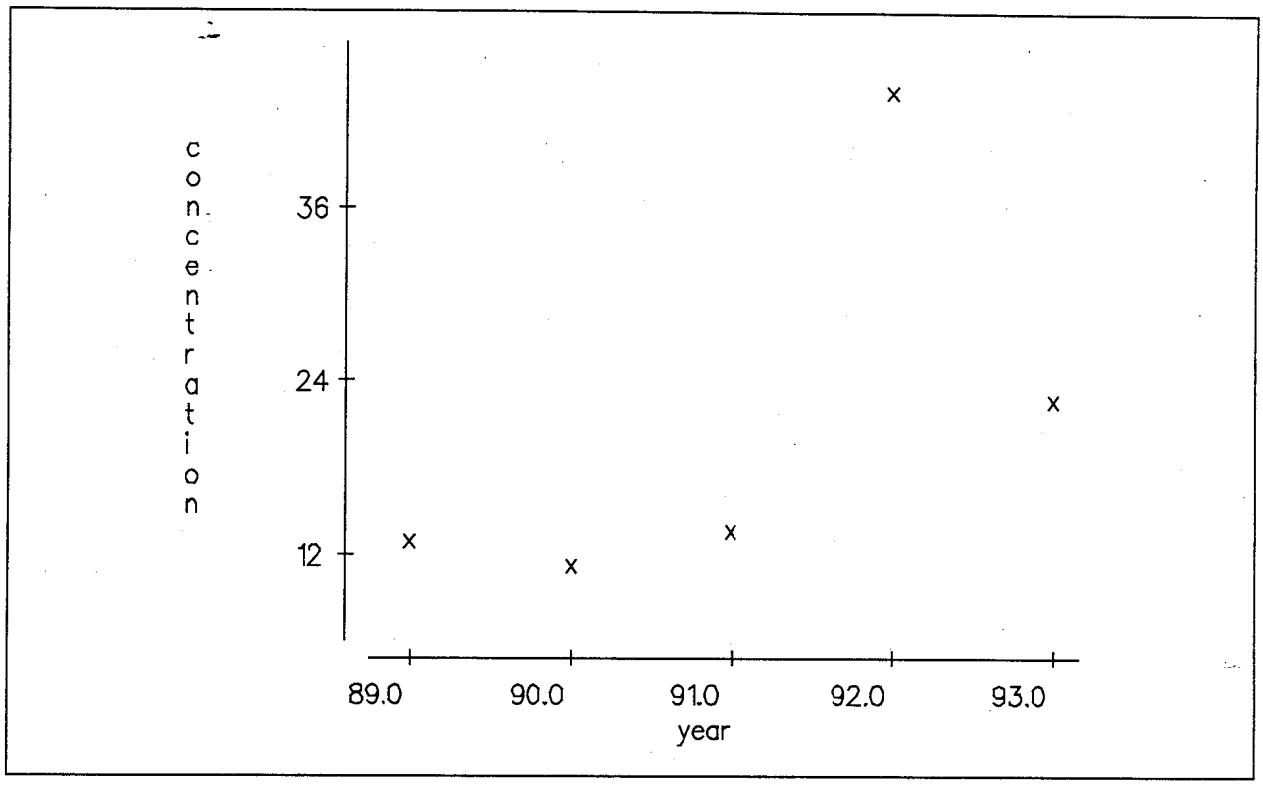


Figure A.18 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 10, Gate 700 South

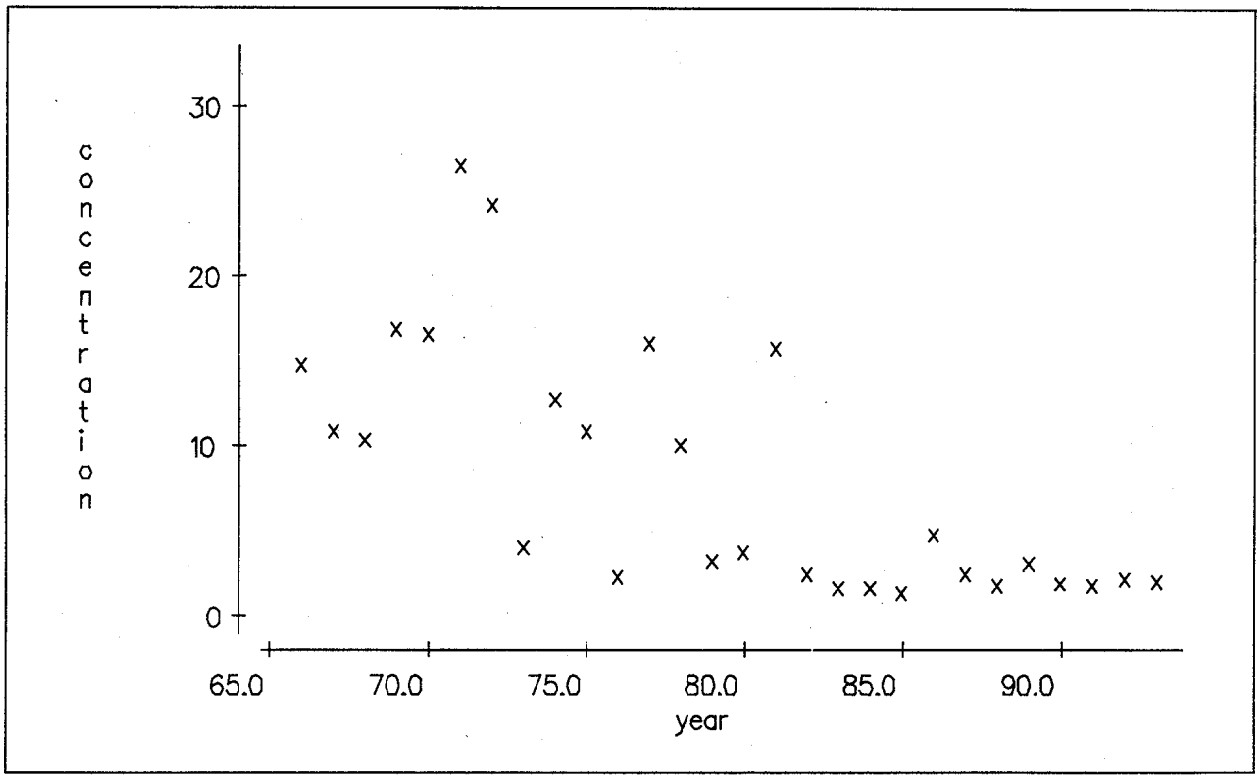


Figure A.19 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 15, EPA Farm

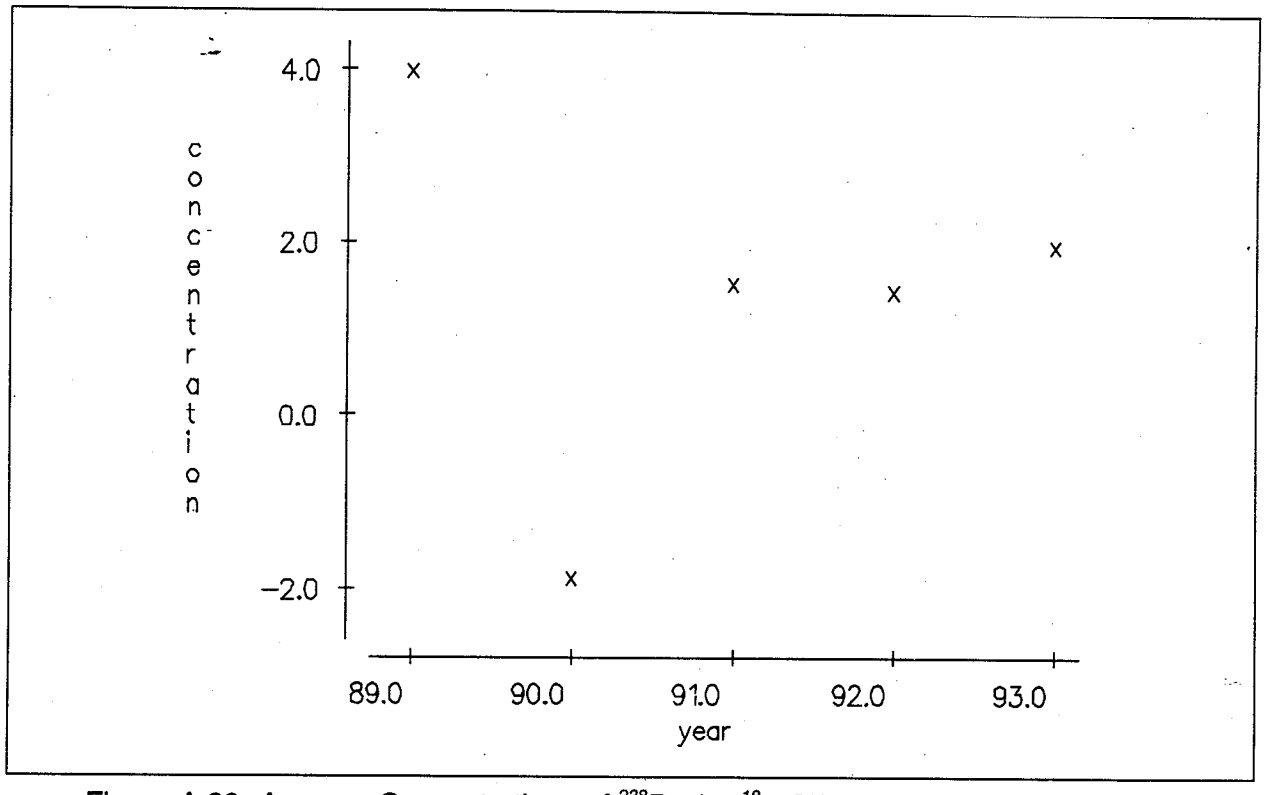


Figure A.20 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 15, EPA Farm

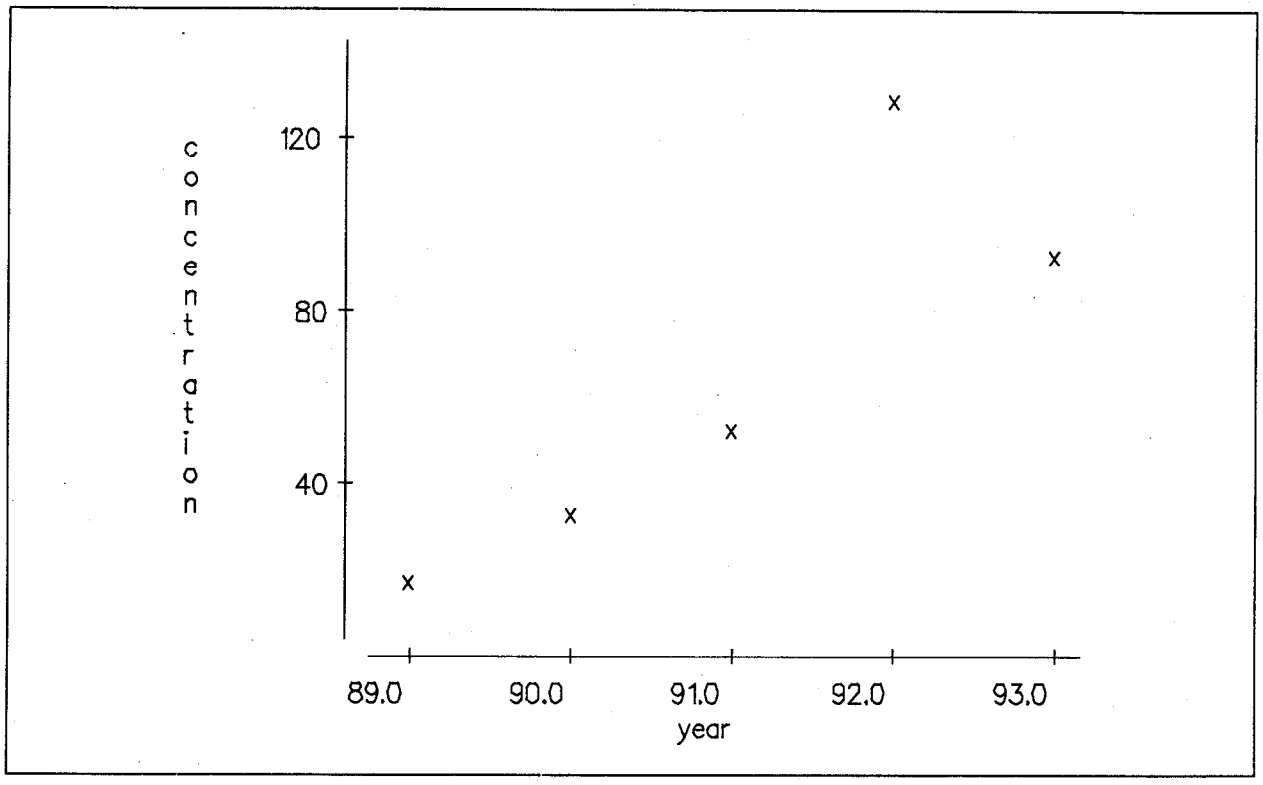


Figure A.21 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 15, EPA Farm

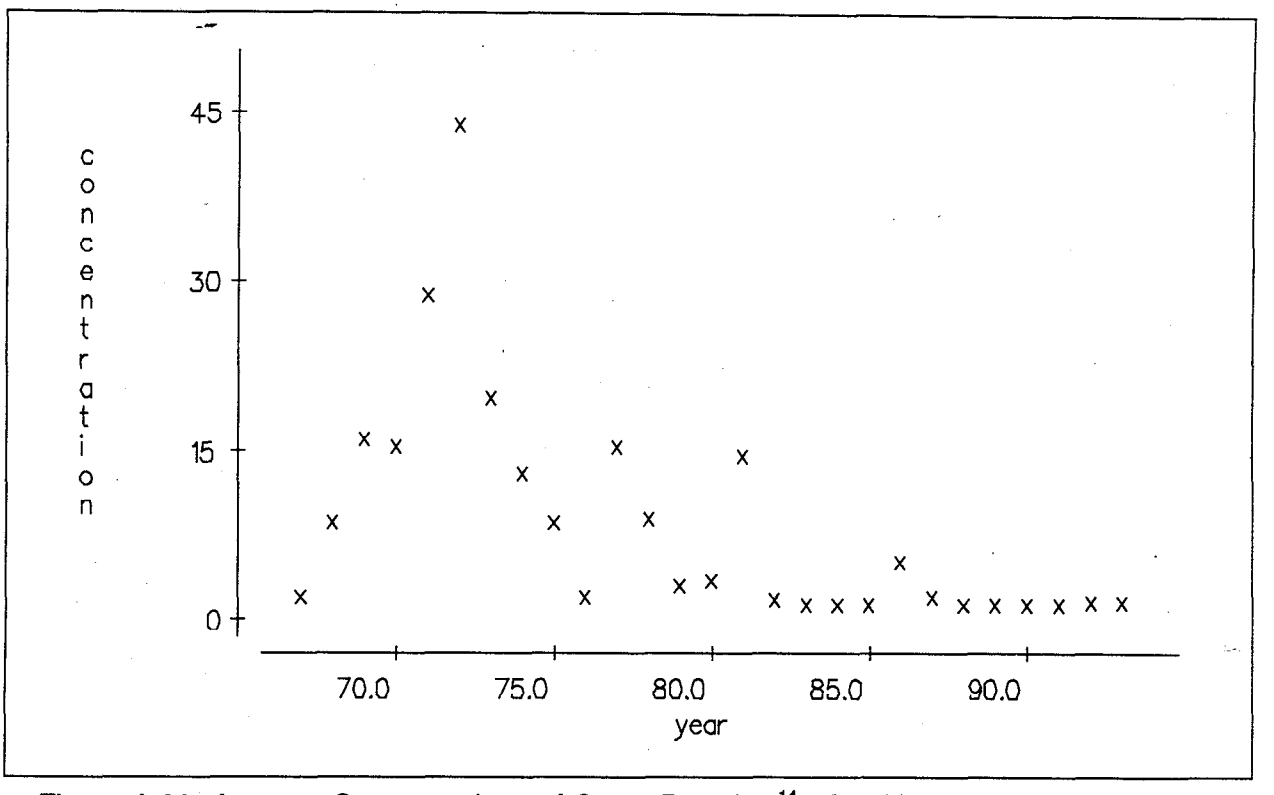


Figure A.22 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 19, Echo Peak

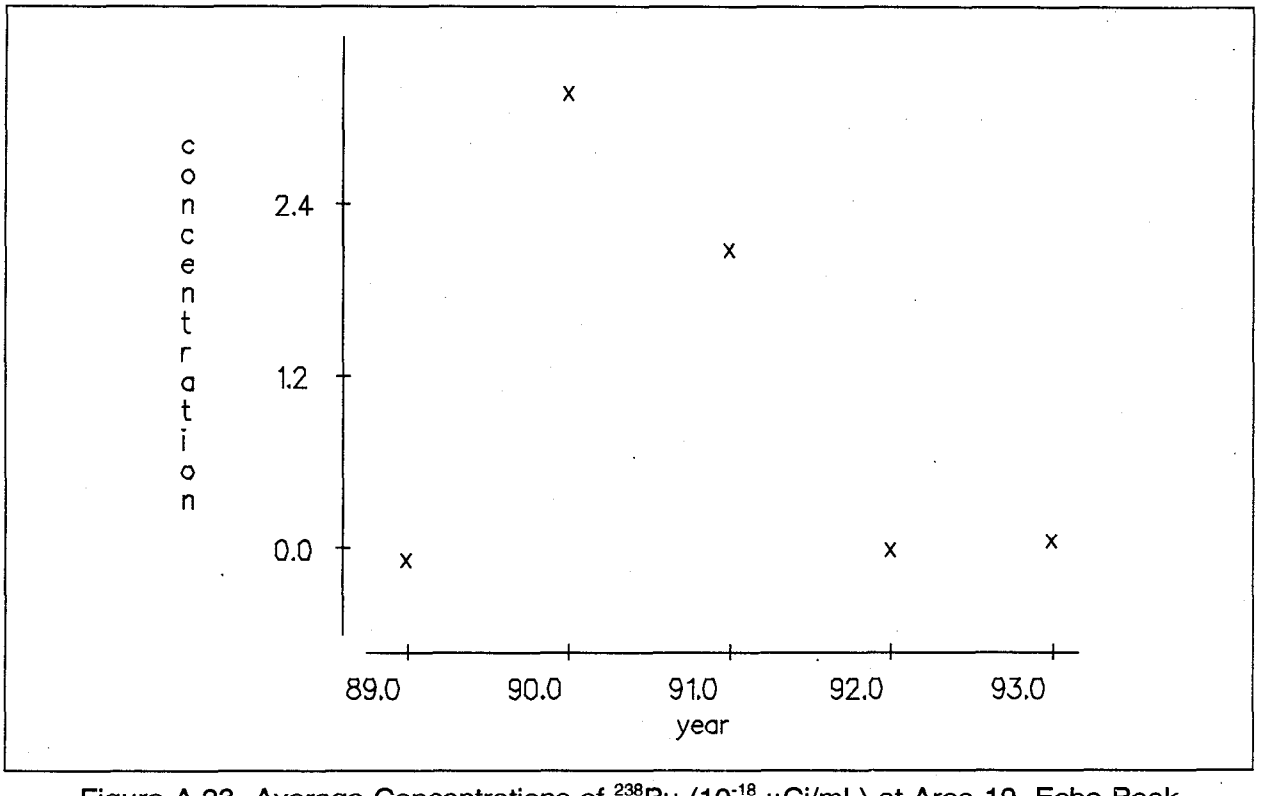


Figure A.23 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 19, Echo Peak

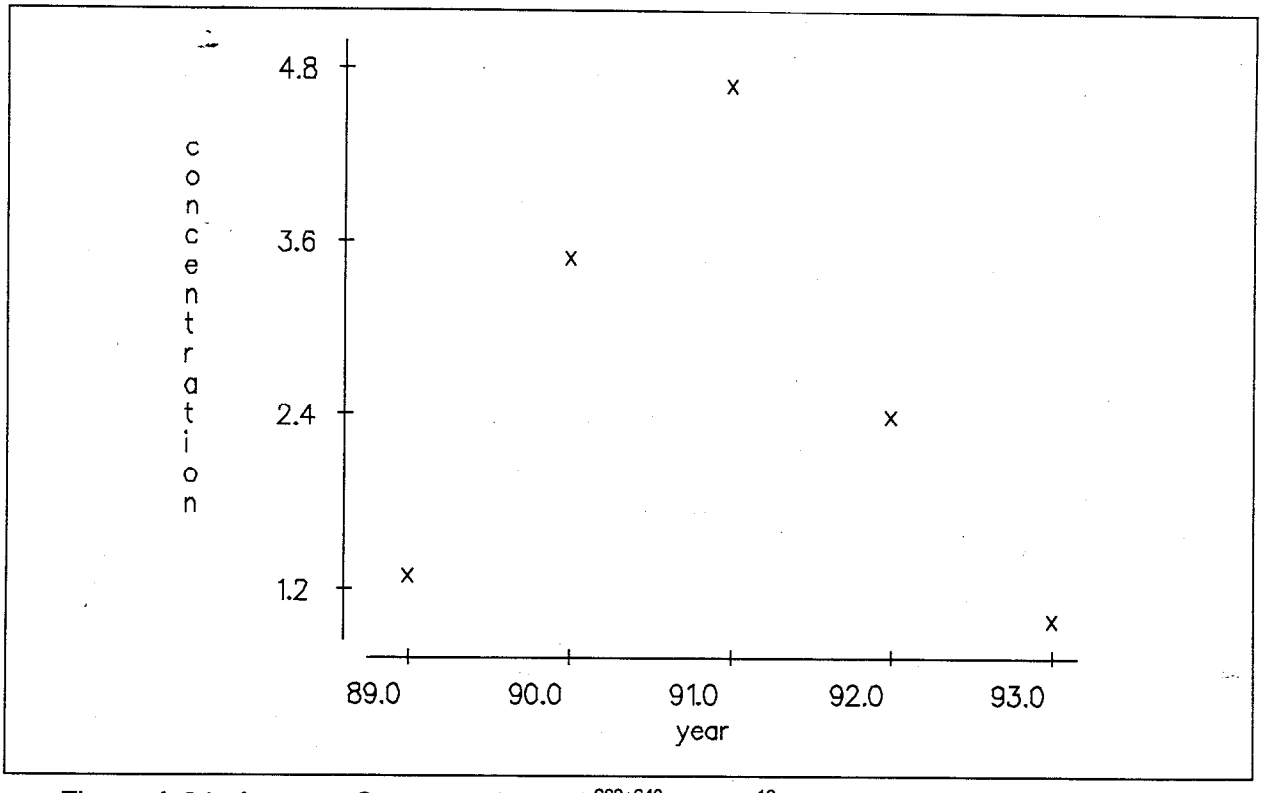


Figure A.24 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 19, Echo Peak

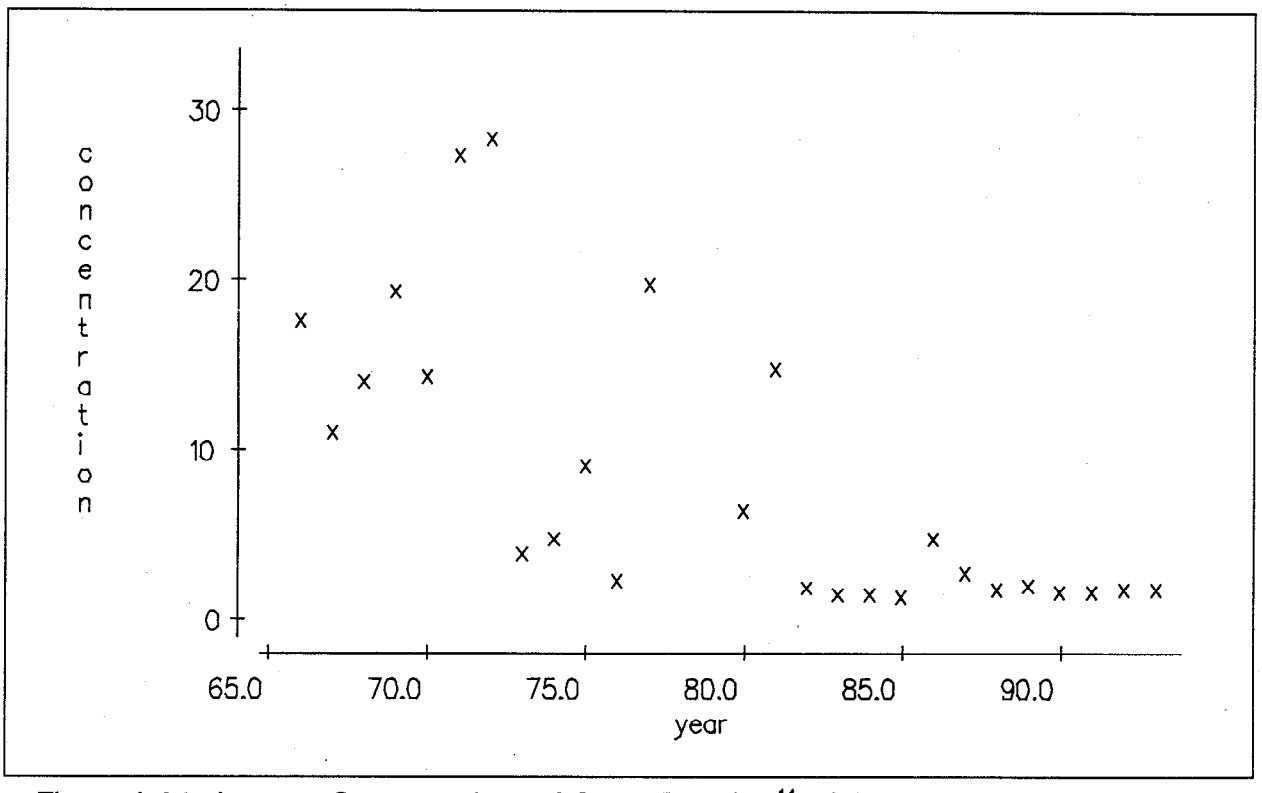


Figure A.25 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 20, Dispensary

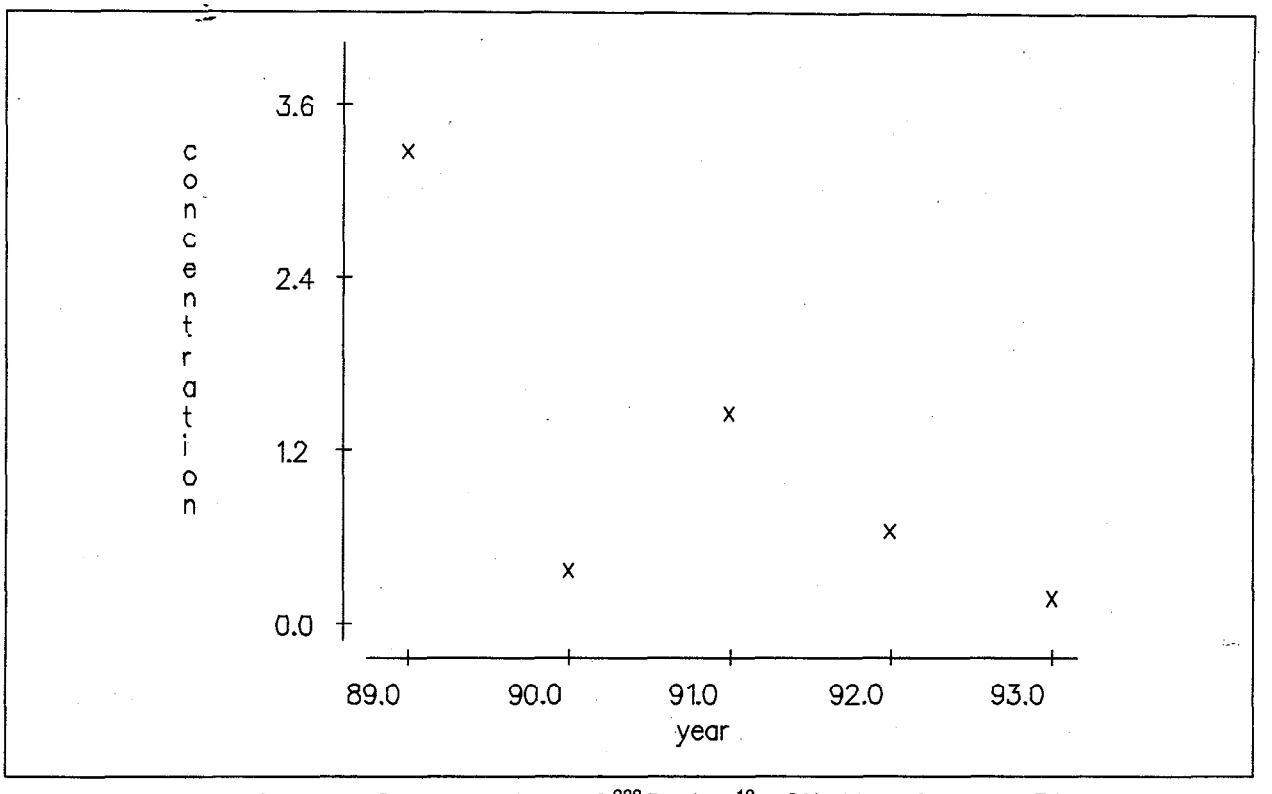


Figure A.26 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 20, Dispensary

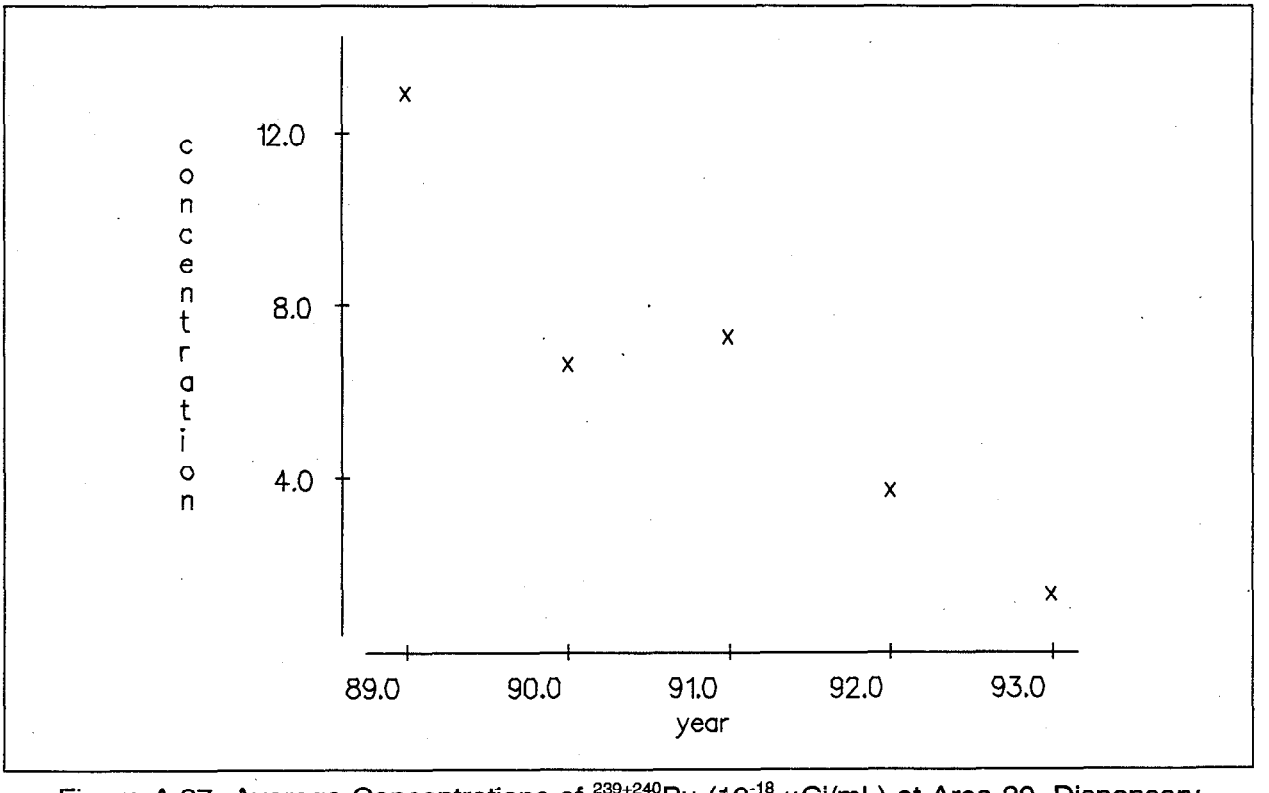


Figure A.27 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 20, Dispensary

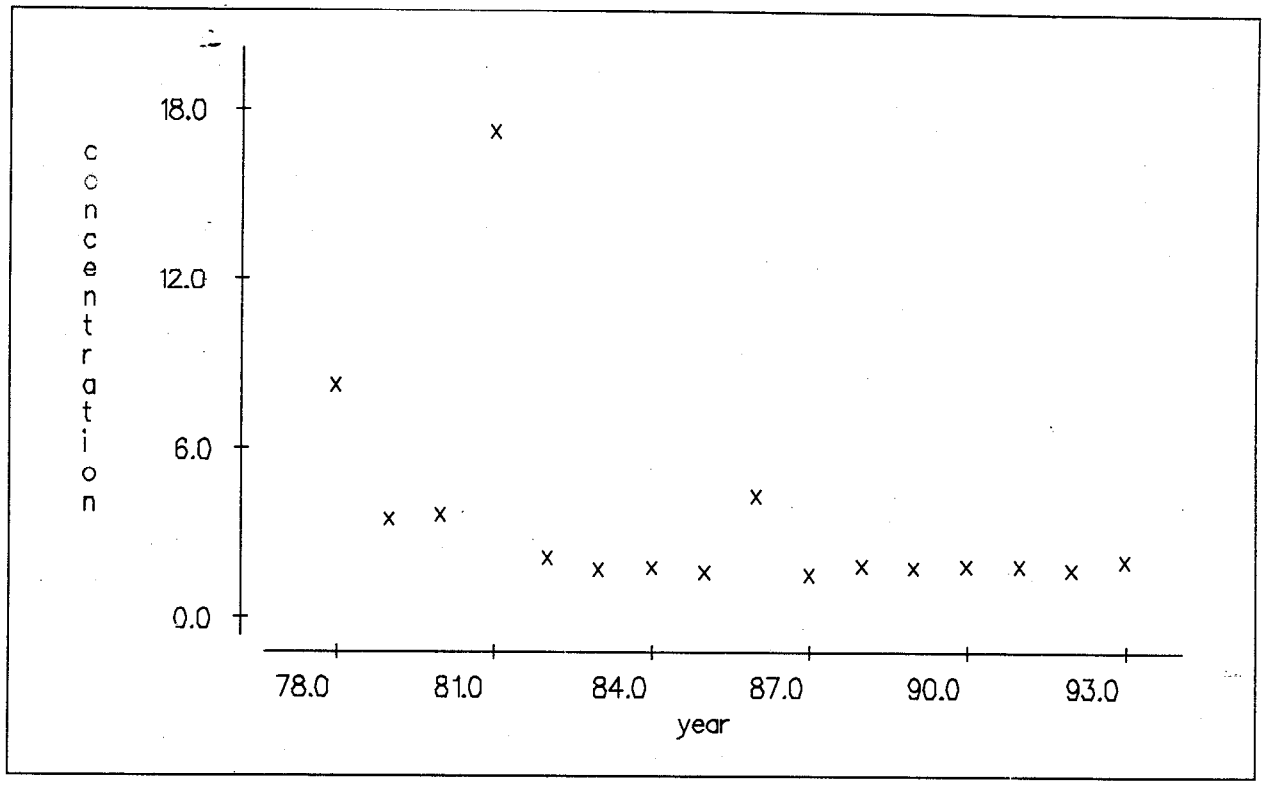


Figure A.28 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 25, E-MAD North

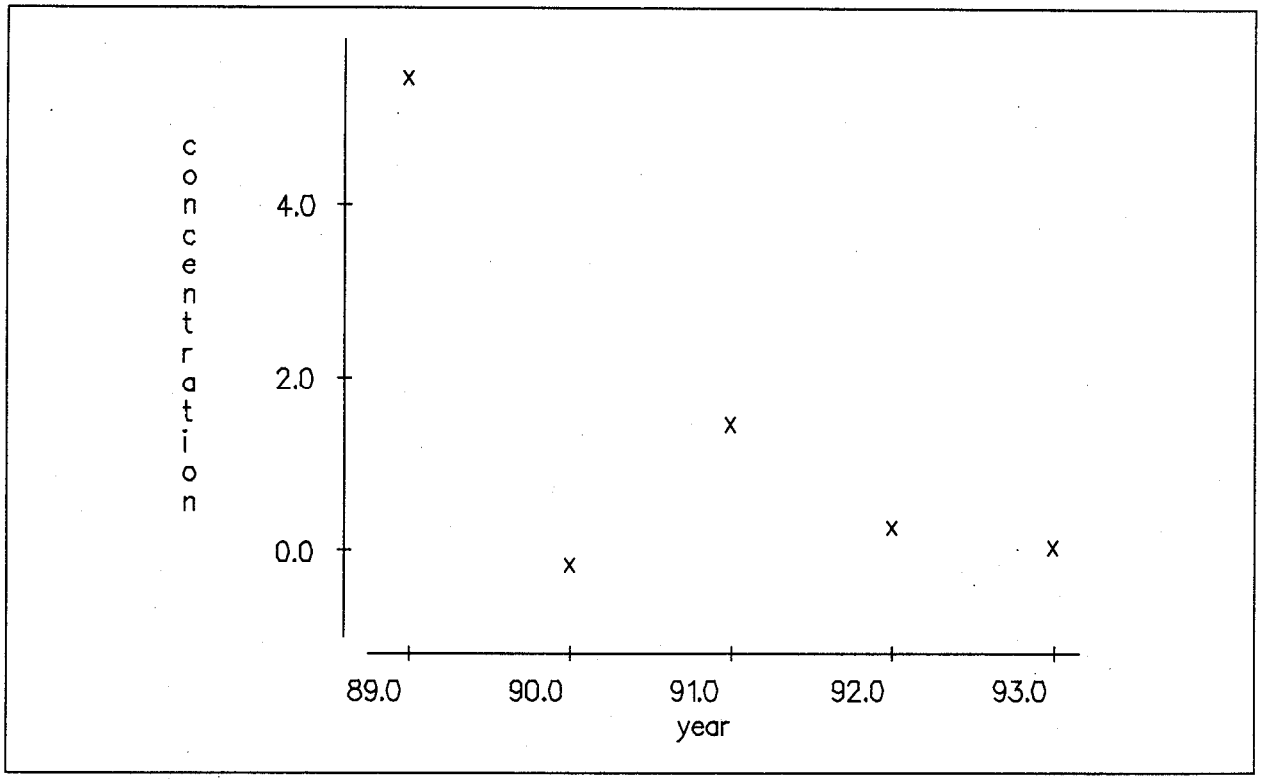


Figure A.29 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 25, E-MAD North

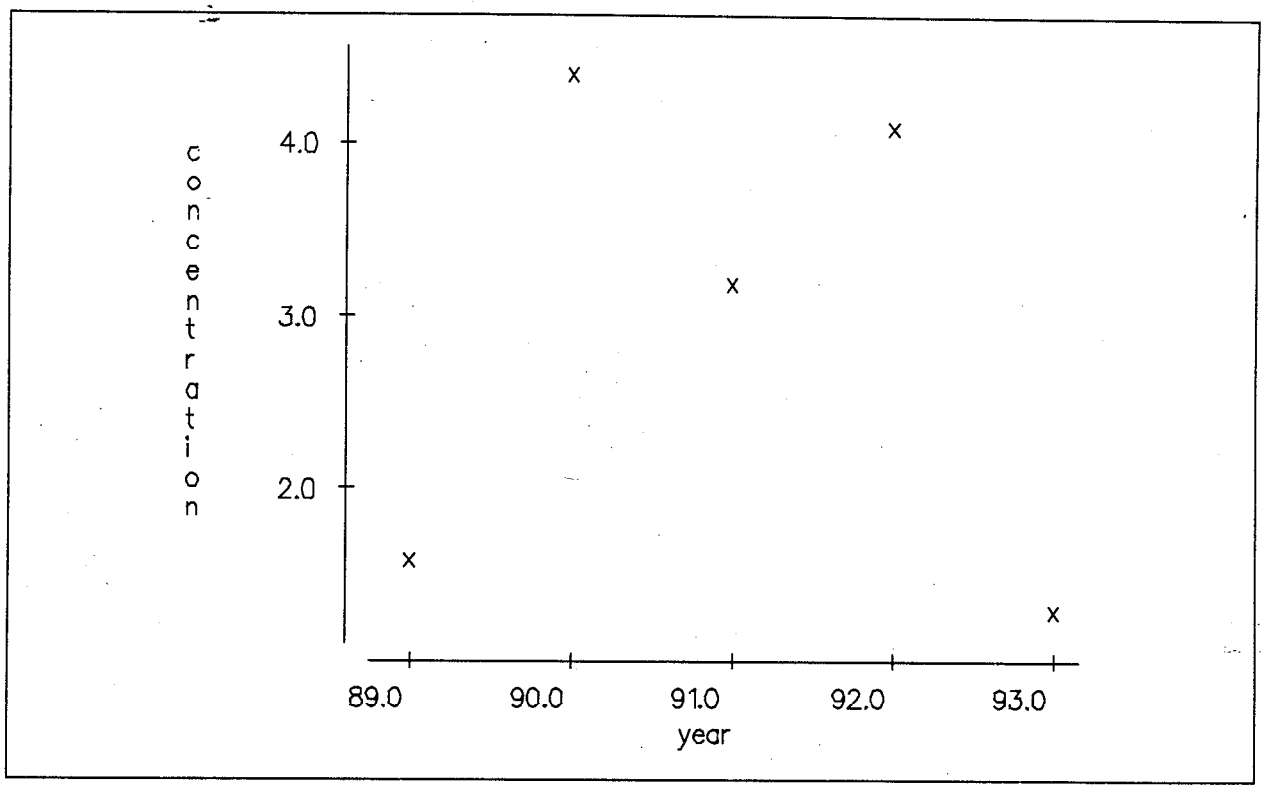


Figure A.30 Average Concentrations of $^{239+240}Pu$ (10^{-18} μCi/mL) at Area 25, E-MAD North

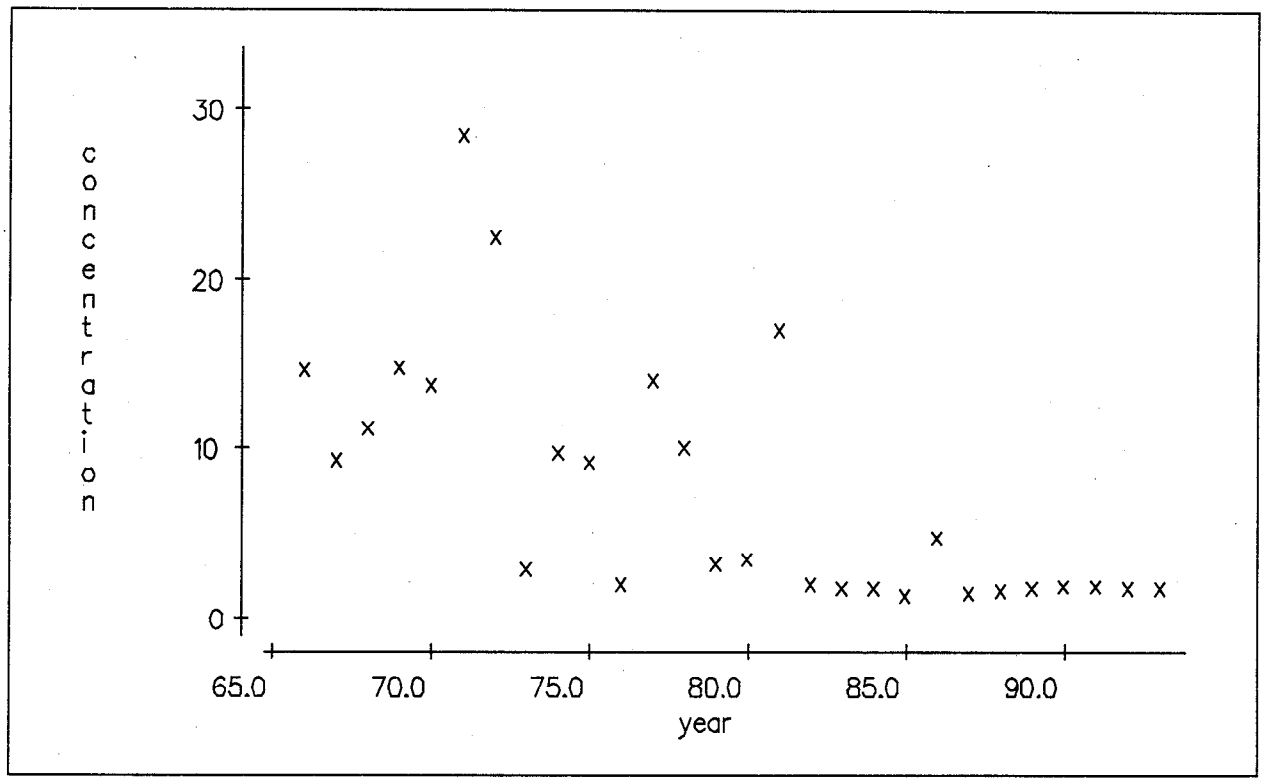


Figure A.31 Average Concentrations of Gross Beta (10^{-14} μCi/mL) at Area 27, Cafeteria

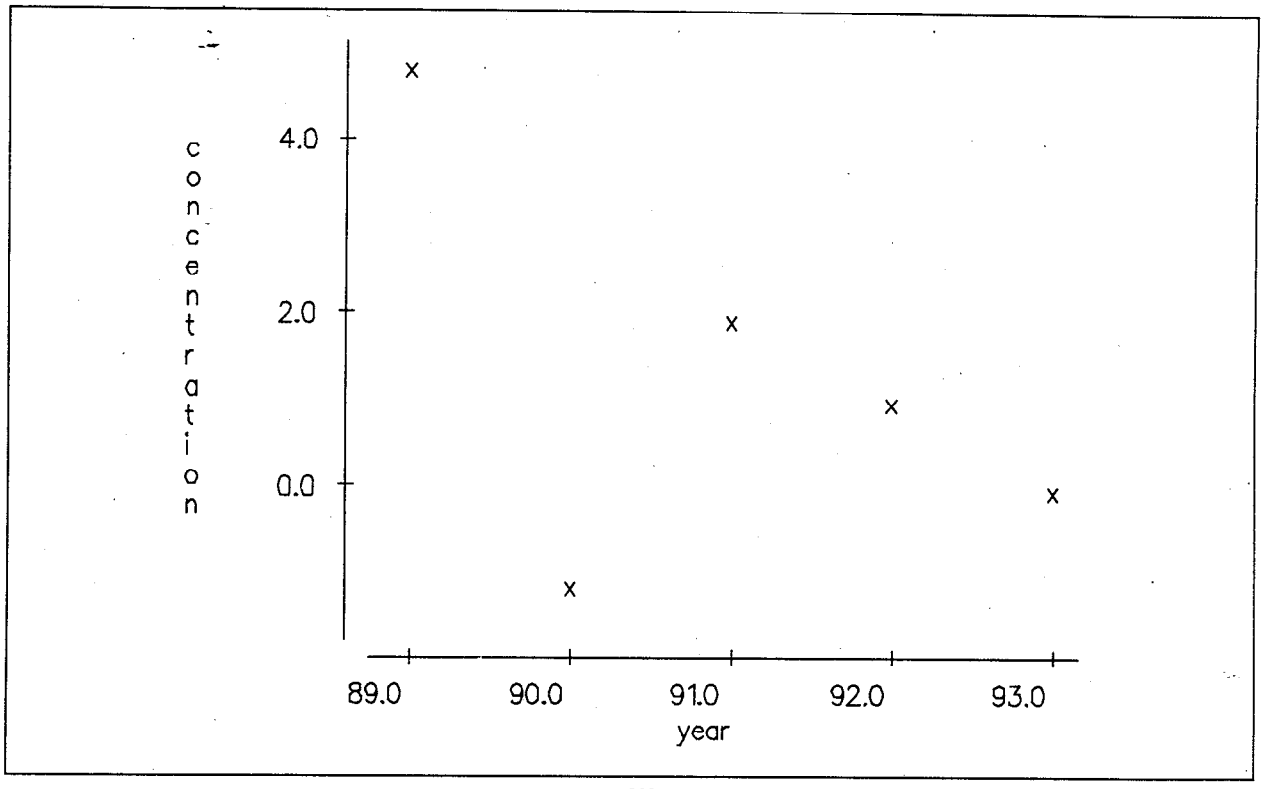


Figure A.32 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 27, Cafeteria

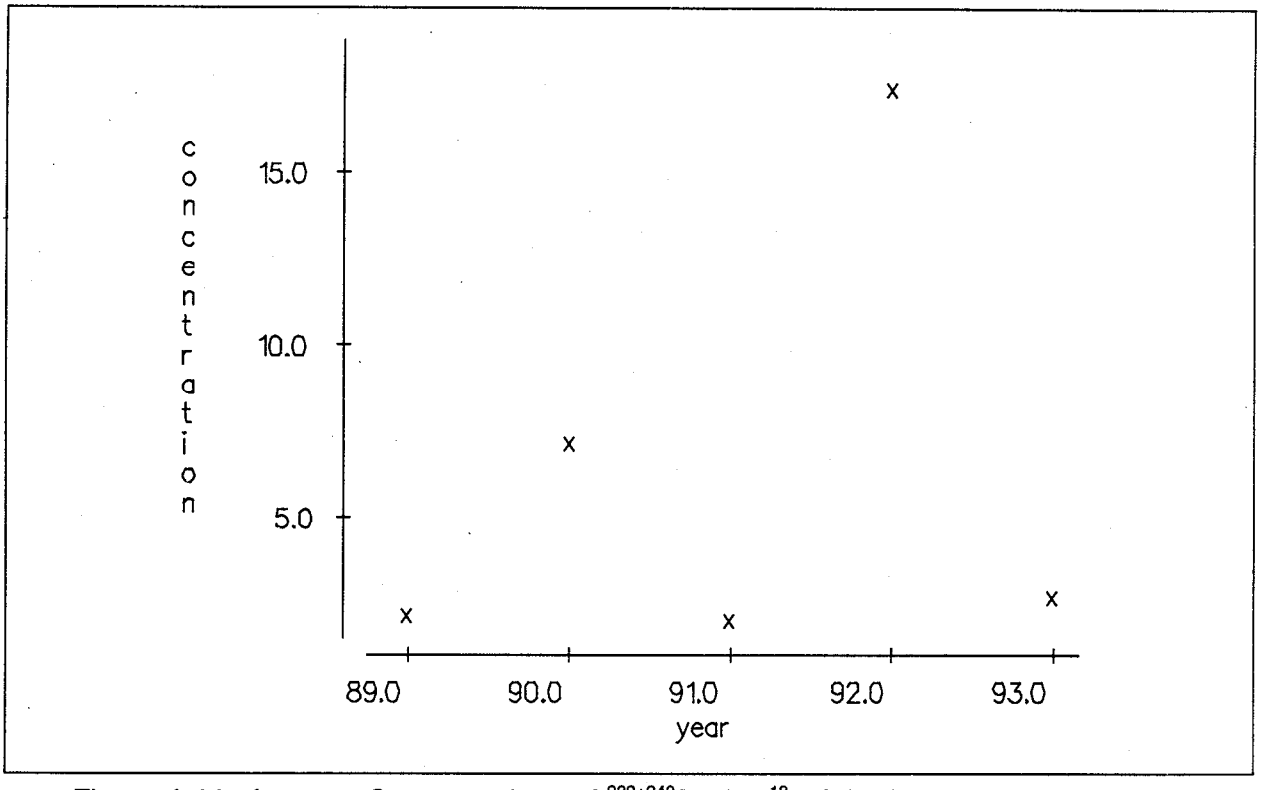


Figure A.33 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 27, Cafeteria

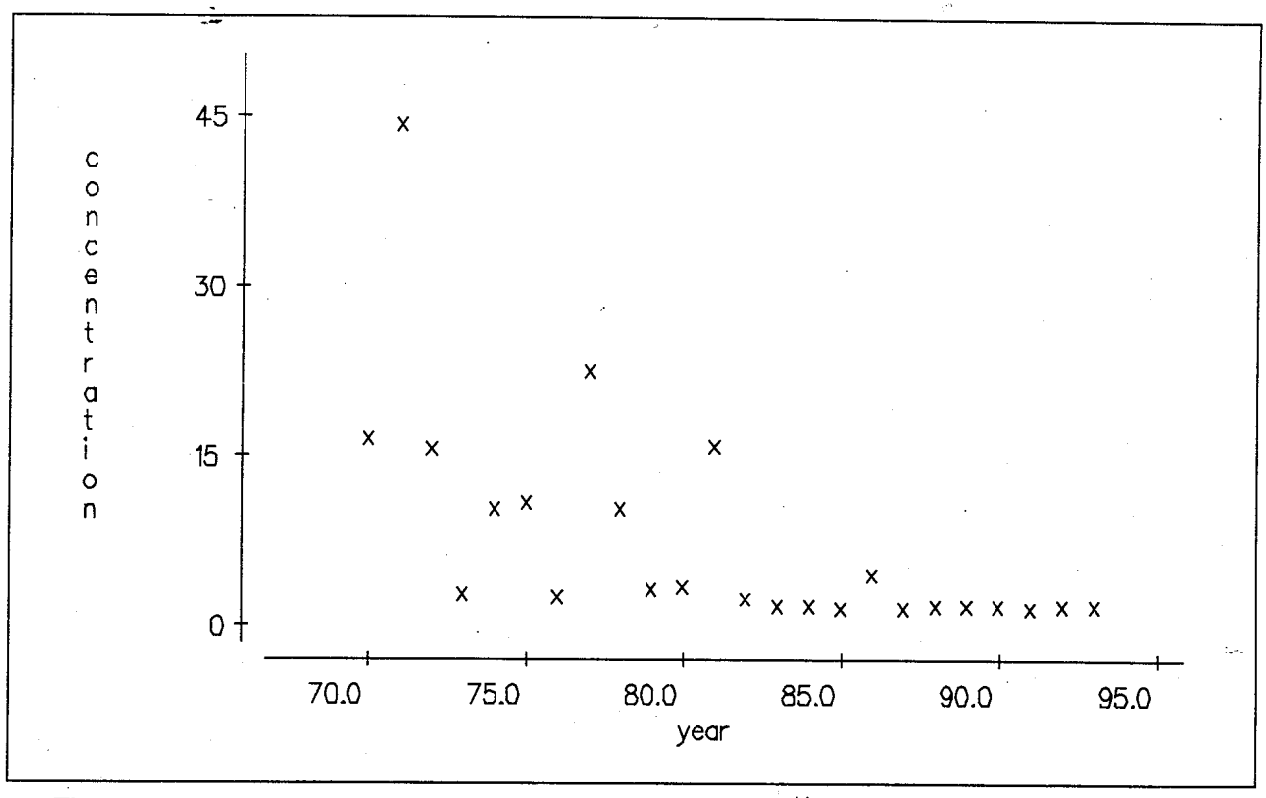


Figure A.34 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 5, DOD Yard

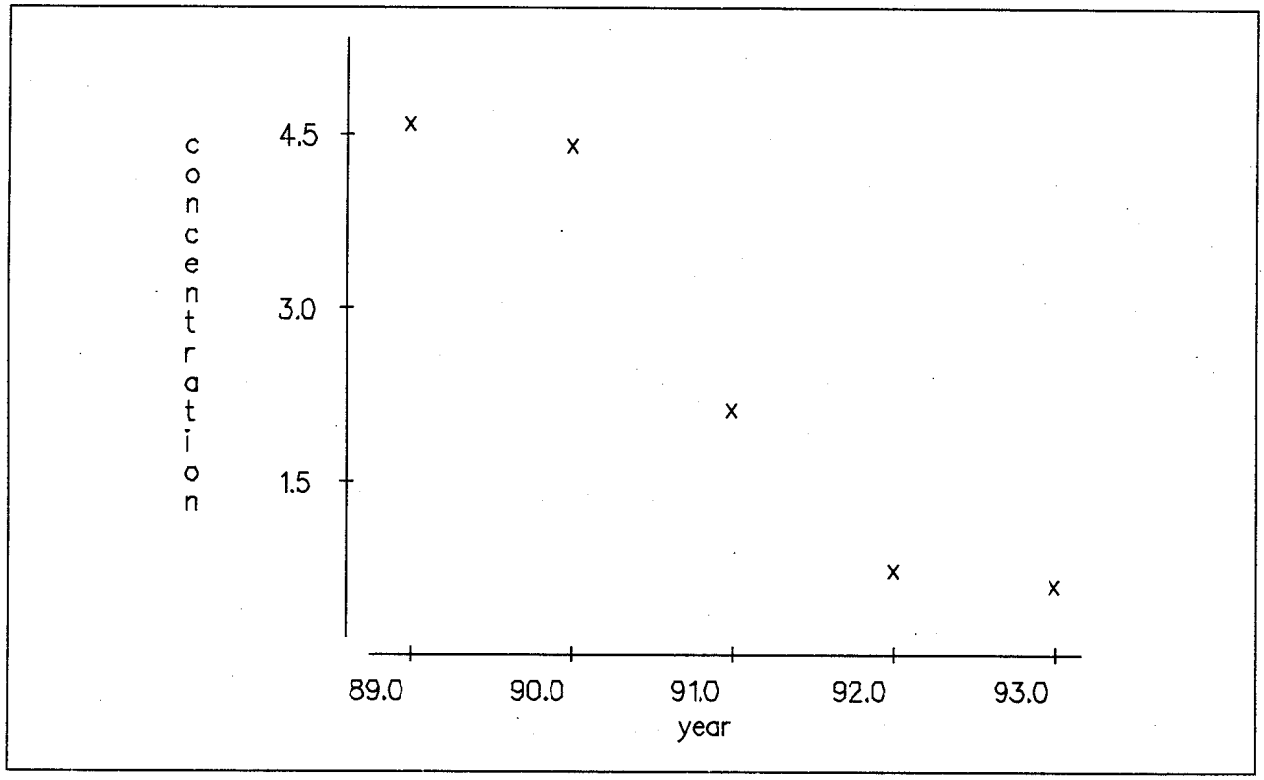


Figure A.35 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 5, DOD Yard

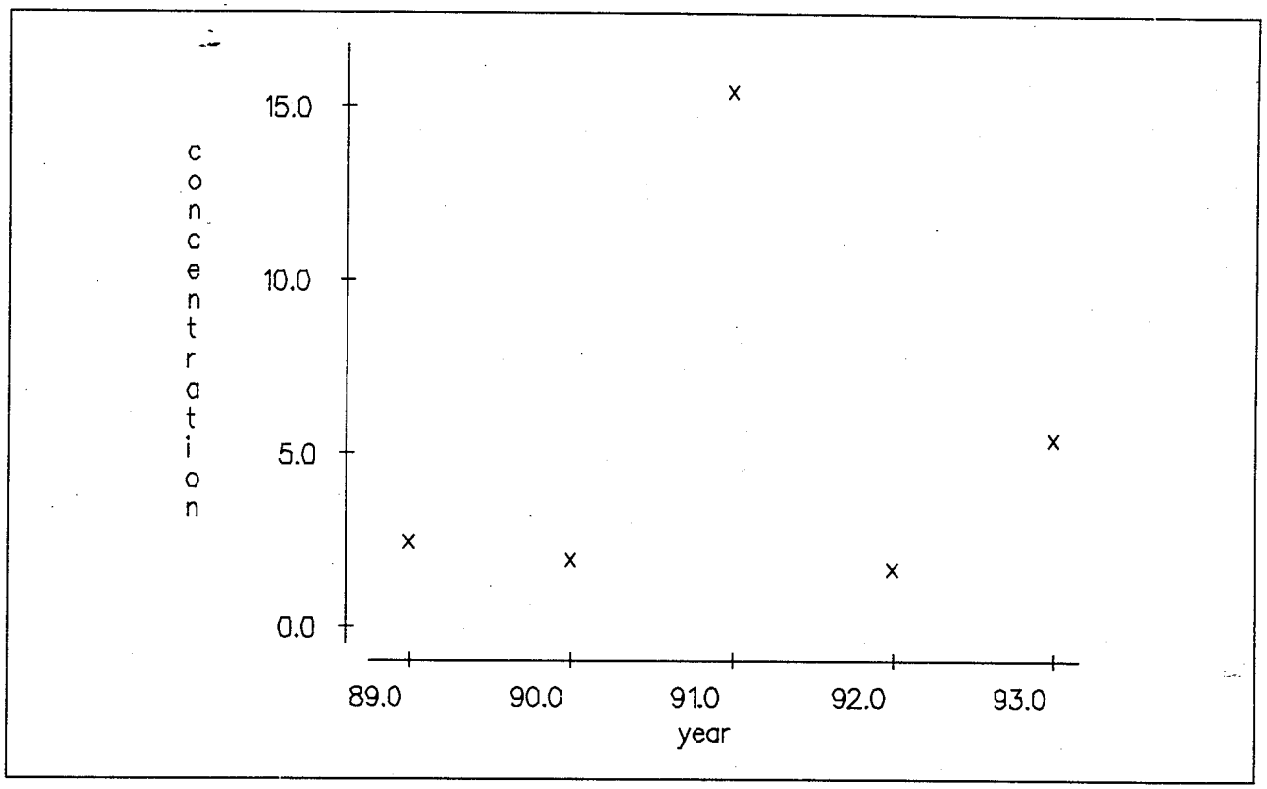


Figure A.36 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 5, DOD Yard

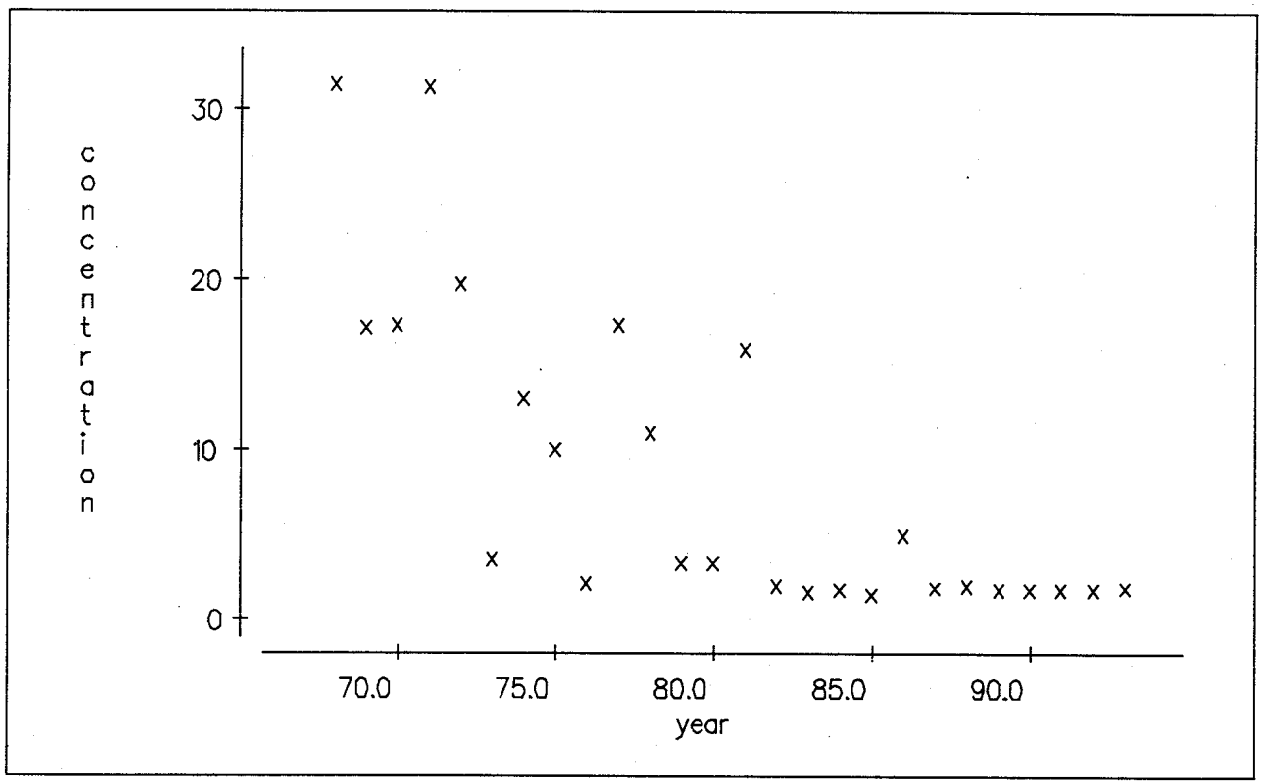


Figure A.37 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 23, H&S Building

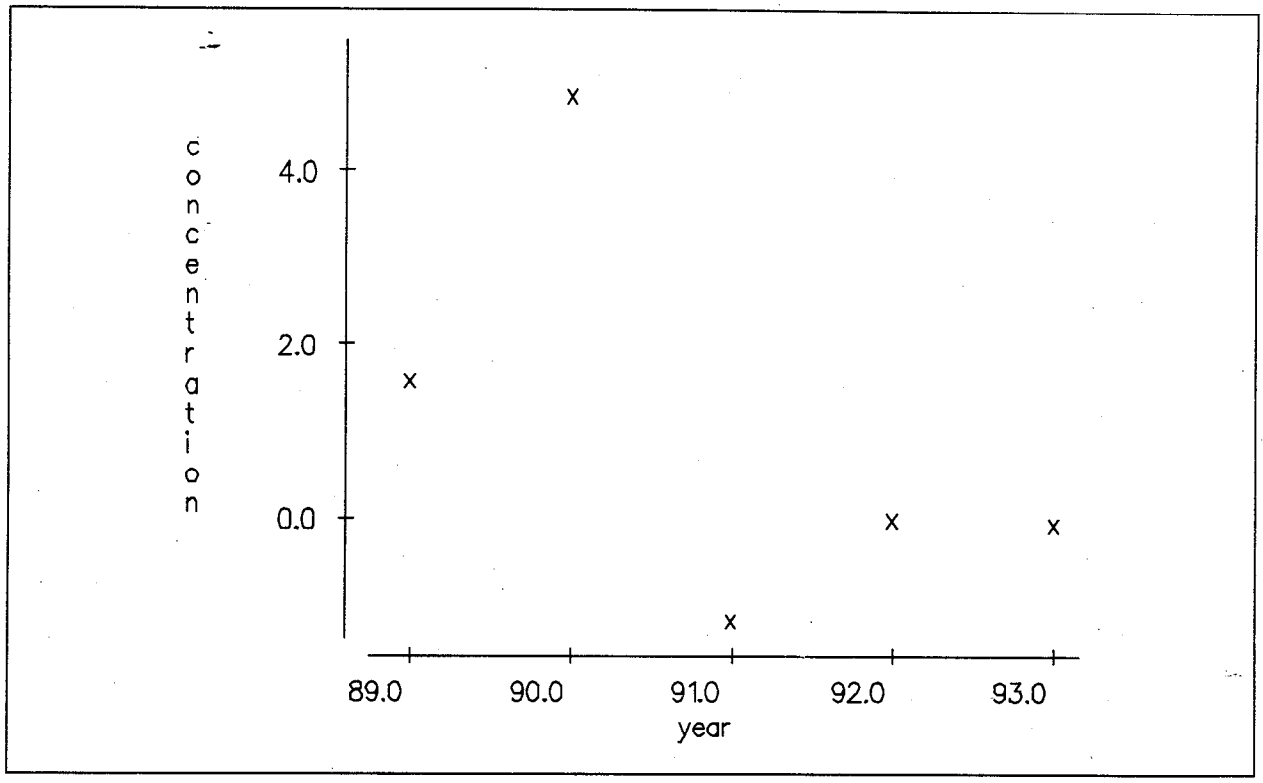


Figure A.38 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 23, H&S Building

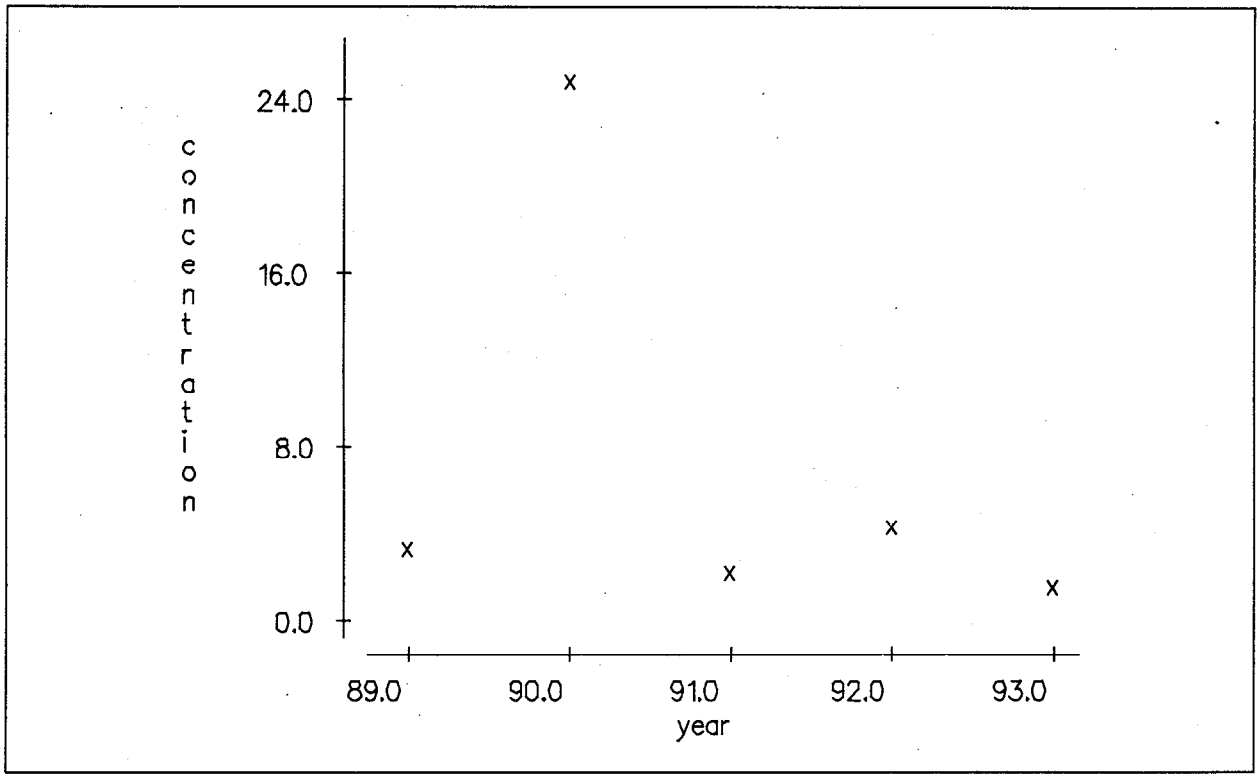


Figure A.39 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 23, H&S Building

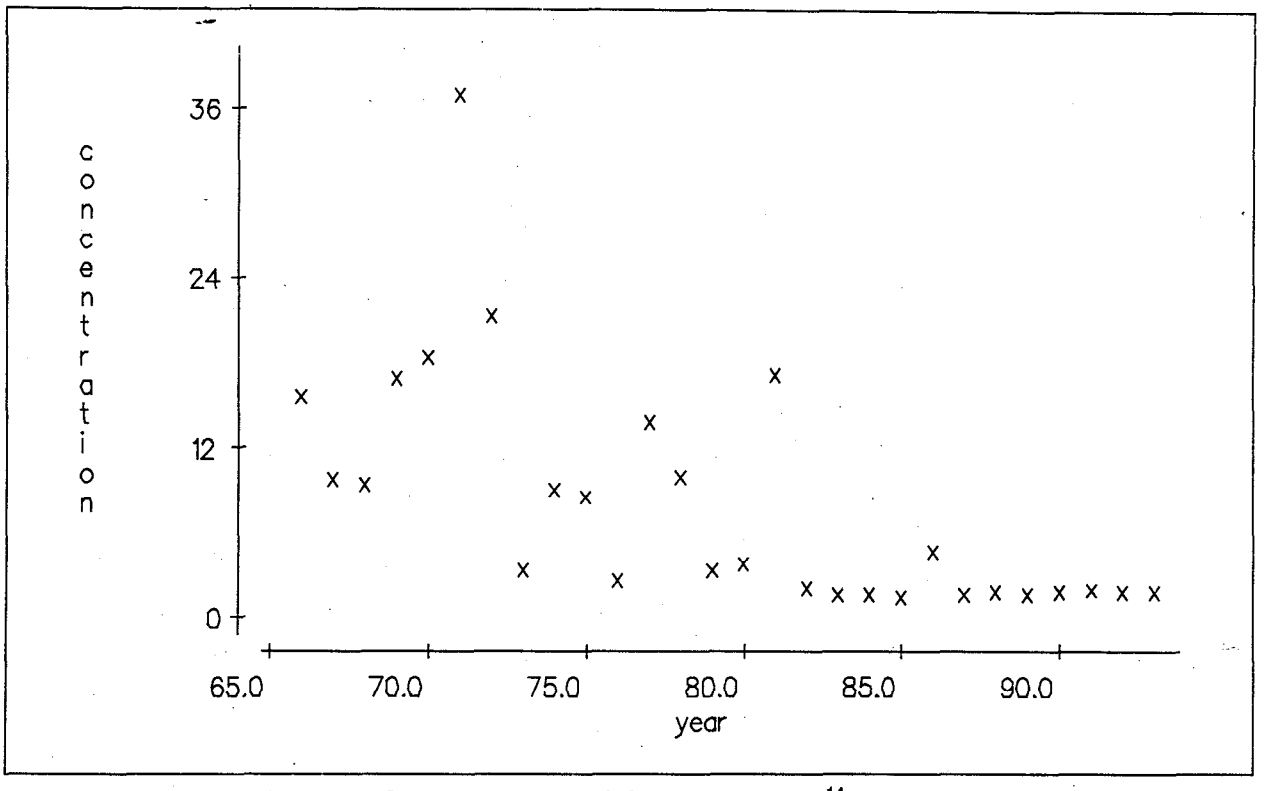


Figure A.40 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 6, CP-6

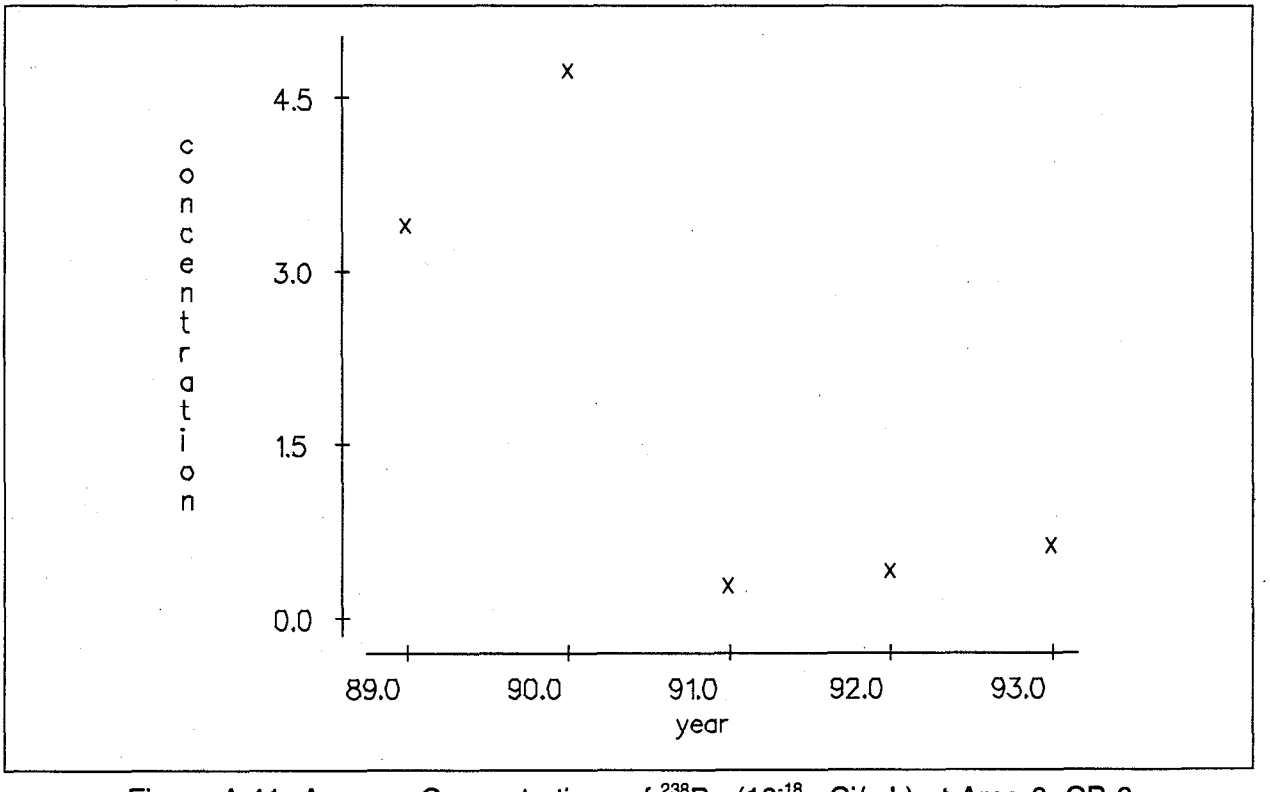


Figure A.41 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 6, CP-6

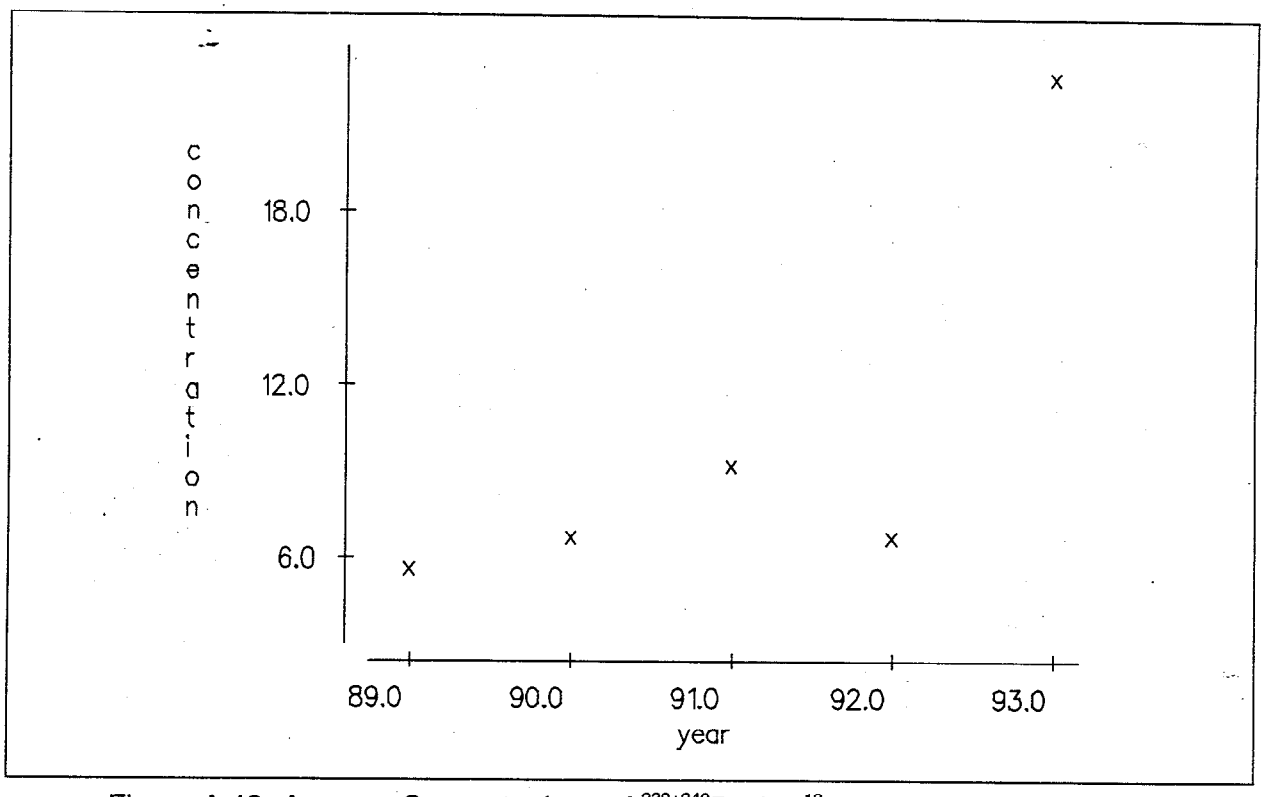


Figure A.42 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 6, CP-6

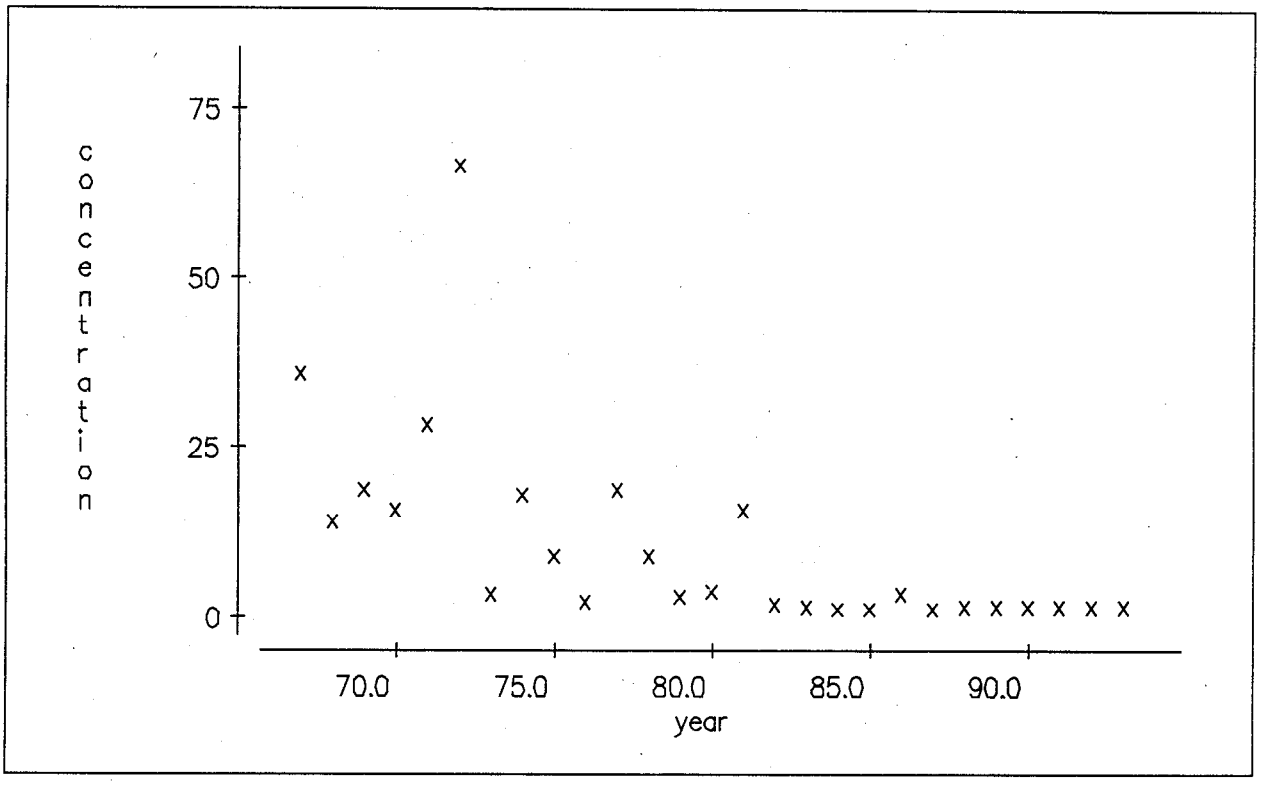


Figure A.43 Average Concentrations of Gross Beta (10^{-14} µCi/mL) at Area 16, 3545 Substation

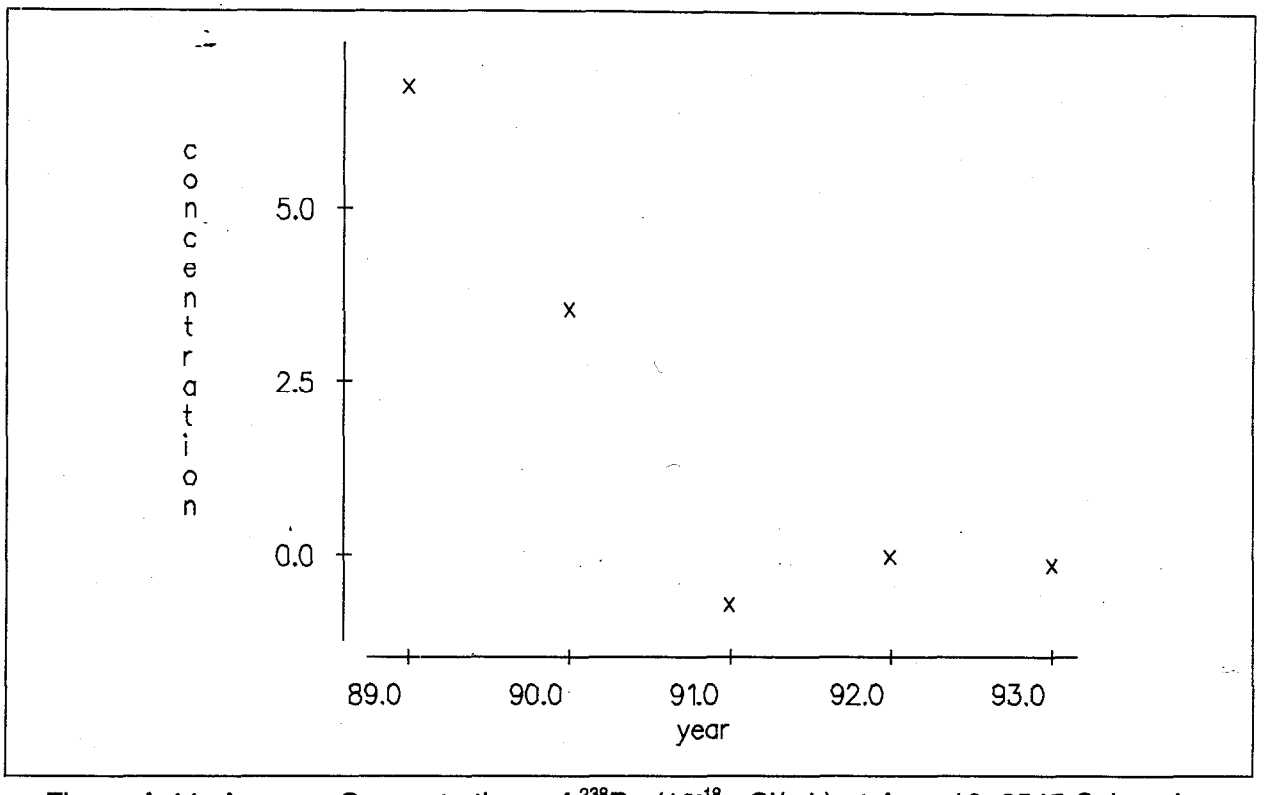


Figure A.44 Average Concentrations of ^{238}Pu (10^{-18} µCi/mL) at Area 16, 3545 Substation

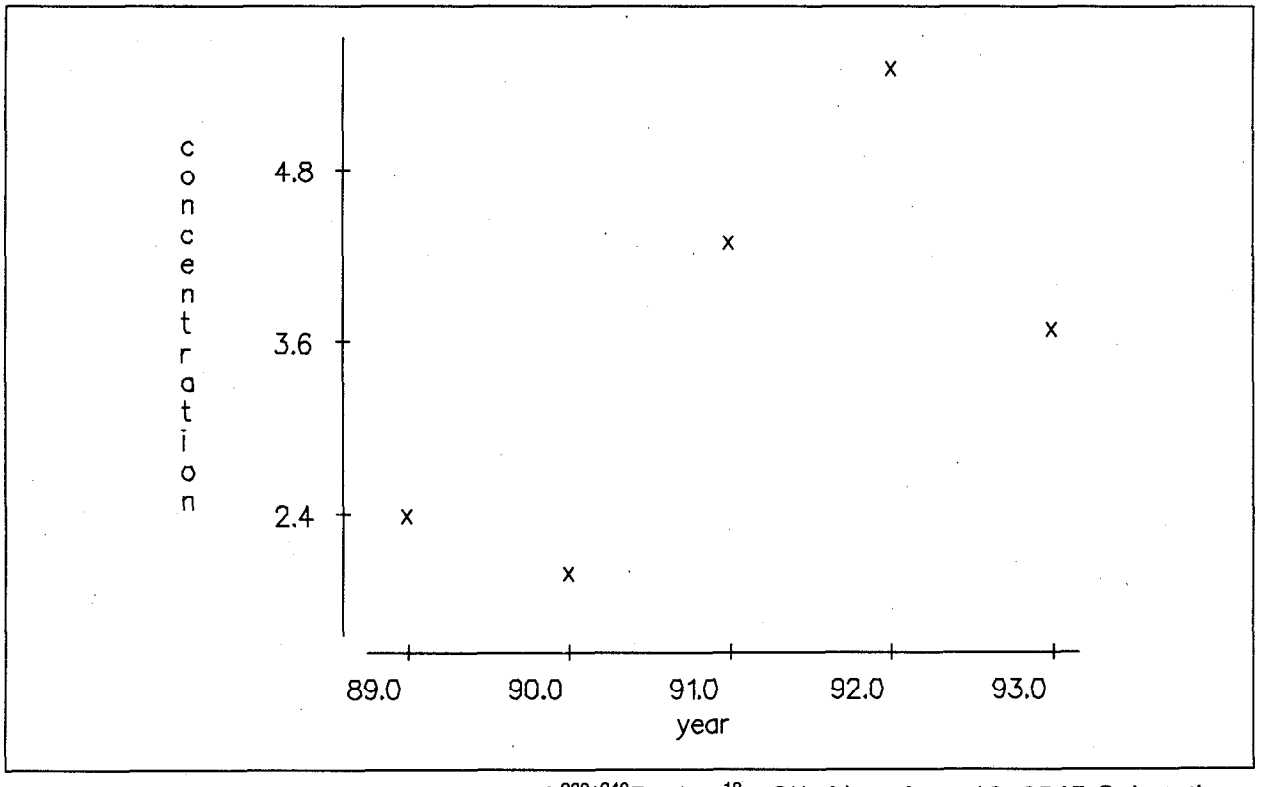


Figure A.45 Average Concentrations of $^{239+240}Pu$ (10^{-18} µCi/mL) at Area 16, 3545 Substation

Attachment A.1 ^{238}Pu in Air - 1993

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	12/29/92	01/25/93	0.0	0.0
Area 1, BJY	01/25/93	03/01/93	0.0	0.0
Area 1, BJY	03/01/93	04/05/93	1.3×10^{-18}	9.3×10^{-19}
Area 1, BJY	04/05/93	05/03/93	1.8×10^{-18}	1.8×10^{-18}
Area 1, BJY	05/03/93	06/01/93	0.0	0.0
Area 1, BJY	06/01/93	06/28/93	1.1×10^{-18}	1.1×10^{-18}
Area 1, BJY	06/28/93	07/26/93	3.6×10^{-18}	1.8×10^{-18}
Area 1, BJY	07/26/93	08/30/93	5.3×10^{-18}	2.2×10^{-18}
Area 1, BJY	08/30/93	09/27/93	1.2×10^{-18}	1.3×10^{-18}
Area 1, BJY	09/27/93	11/01/93	7.7×10^{-18}	2.4×10^{-18}
Area 1, BJY	11/01/93	11/29/93	2.3×10^{-18}	1.6×10^{-18}
Area 1, BJY	11/29/93	01/03/94	4.0×10^{-18}	2.9×10^{-18}
Area 1, Gravel Pit	12/28/92	01/25/93	0.0	0.0
Area 1, Gravel Pit	01/25/93	03/01/93	0.0	0.0
Area 1, Gravel Pit	03/01/93	04/05/93	0.0	0.0
Area 1, Gravel Pit	04/05/93	05/03/93	0.0	0.0
Area 1, Gravel Pit	05/03/93	06/01/93	2.8×10^{-18}	2.8×10^{-18}
Area 1, Gravel Pit	06/01/93	06/28/93	0.0	0.0
Area 1, Gravel Pit	06/28/93	07/26/93	0.0	0.0
Area 1, Gravel Pit	07/26/93	08/30/93	1.2×10^{-18}	1.2×10^{-18}
Area 1, Gravel Pit	08/30/93	09/27/93	0.0	0.0
Area 1, Gravel Pit	09/27/93	11/01/93	1.4×10^{-18}	1.0×10^{-18}
Area 1, Gravel Pit	11/01/93	11/29/93	1.4×10^{-18}	1.4×10^{-18}
Area 1, Gravel Pit	11/29/93	01/03/94	1.1×10^{-18}	1.1×10^{-18}
Area 2, 2-1 Substation	12/29/92	01/25/93	0.0	0.0
Area 2, 2-1 Substation	01/25/93	03/01/93	0.0	0.0
Area 2, 2-1 Substation	03/01/93	04/05/93	0.0	0.0
Area 2, 2-1 Substation	04/05/93	05/03/93	0.0	0.0
Area 2, 2-1 Substation	05/03/93	06/01/93	7.5×10^{-18}	3.1×10^{-18}
Area 2, 2-1 Substation	06/01/93	06/28/93	2.7×10^{-18}	1.9×10^{-18}
Area 2, 2-1 Substation	06/28/93	07/26/93	1.7×10^{-18}	1.2×10^{-18}
Area 2, 2-1 Substation	07/26/93	08/30/93	0.0	0.0
Area 2, 2-1 Substation	08/30/93	09/27/93	1.3×10^{-18}	2.0×10^{-18}
Area 2, 2-1 Substation	09/27/93	11/01/93	0.0	0.0
Area 2, 2-1 Substation	11/01/93	11/29/93	1.6×10^{-18}	1.2×10^{-18}
Area 2, 2-1 Substation	11/29/93	01/03/94	0.0	0.0
Area 2, Complex	12/29/92	01/25/93	0.0	0.0
Area 2, Complex	01/25/93	03/01/93	6.4×10^{-19}	6.4×10^{-19}
Area 2, Complex	03/01/93	04/05/93	0.0	0.0
Area 2, Complex	04/05/93	05/03/93	3.8×10^{-18}	3.8×10^{-18}
Area 2, Complex	05/03/93	06/01/93	-1.6×10^{-18}	9.1×10^{-19}
Area 2, Complex	06/28/93	07/26/93	5.3×10^{-18}	5.4×10^{-18}

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Complex	07/26/93	08/30/93	8.4×10^{-19}	8.5×10^{-19}
Area 2, Complex	08/30/93	09/27/93	1.1×10^{-18}	1.1×10^{-18}
Area 2, Complex	09/27/93	11/01/93	2.2×10^{-18}	1.6×10^{-18}
Area 2, Complex	11/01/93	11/29/93	-1.2×10^{-18}	2.0×10^{-18}
Area 2, Complex	11/29/93	01/03/94	8.3×10^{-19}	8.3×10^{-19}
Area 3, Complex	12/29/92	01/25/93	1.5×10^{-18}	1.5×10^{-18}
Area 3, Complex	01/25/93	03/01/93	0.0	0.0
Area 3, Complex	03/01/93	04/05/93	1.0×10^{-18}	1.0×10^{-18}
Area 3, Complex	04/05/93	05/03/93	0.0	0.0
Area 3, Complex	05/03/93	06/01/93	1.6×10^{-18}	1.6×10^{-18}
Area 3, Complex	06/28/93	07/26/93	7.7×10^{-18}	3.2×10^{-18}
Area 3, Complex	07/26/93	08/30/93	6.0×10^{-18}	2.1×10^{-18}
Area 3, Complex	08/30/93	09/27/93	9.7×10^{-18}	3.8×10^{-18}
Area 3, Complex	09/27/93	11/01/93	2.1×10^{-18}	1.5×10^{-18}
Area 3, Complex	11/01/93	11/29/93	-2.2×10^{-18}	1.6×10^{-18}
Area 3, Complex	11/29/93	01/03/94	0.0	0.0
Area 3, Complex No. 2	12/29/92	01/25/93	0.0	0.0
Area 3, Complex No. 2	01/25/93	03/01/93	1.7×10^{-18}	1.2×10^{-18}
Area 3, Complex No. 2	03/01/93	04/05/93	8.1×10^{-19}	8.2×10^{-19}
Area 3, Complex No. 2	04/05/93	05/03/93	1.0×10^{-18}	1.1×10^{-18}
Area 3, Complex No. 2	05/03/93	06/01/93	1.6×10^{-18}	1.6×10^{-18}
Area 3, Complex No. 2	06/01/93	06/28/93	1.4×10^{-18}	1.4×10^{-18}
Area 3, Complex No. 2	06/28/93	07/26/93	1.4×10^{-17}	3.9×10^{-18}
Area 3, Complex No. 2	07/26/93	08/30/93	2.1×10^{-18}	1.2×10^{-18}
Area 3, Complex No. 2	09/08/93	09/27/93	1.1×10^{-17}	4.8×10^{-18}
Area 3, Complex No. 2	09/27/93	11/01/93	1.1×10^{-17}	3.2×10^{-18}
Area 3, Complex No. 2	11/01/93	11/29/93	9.0×10^{-18}	3.1×10^{-18}
Area 3, Complex No. 2	11/29/93	01/03/94	0.0	0.0
Area 3, Mud Plant	12/29/92	01/25/93	1.7×10^{-17}	7.8×10^{-18}
Area 3, Mud Plant	01/25/93	03/01/93	0.0	0.0
Area 3, Mud Plant	03/01/93	04/05/93	5.6×10^{-18}	2.1×10^{-18}
Area 3, Mud Plant	04/05/93	05/03/93	8.6×10^{-19}	8.6×10^{-19}
Area 3, Mud Plant	05/03/93	06/01/93	1.6×10^{-18}	1.6×10^{-18}
Area 3, Mud Plant	06/28/93	07/26/93	1.4×10^{-17}	3.9×10^{-18}
Area 3, Mud Plant	07/26/93	08/30/93	8.3×10^{-18}	2.8×10^{-18}
Area 3, Mud Plant	08/30/93	09/27/93	2.2×10^{-18}	1.6×10^{-18}
Area 3, Mud Plant	09/27/93	11/01/93	2.8×10^{-18}	2.8×10^{-18}
Area 3, Mud Plant	11/01/93	11/29/93	4.0×10^{-18}	2.3×10^{-18}
Area 3, Mud Plant	11/29/93	01/03/94	1.7×10^{-18}	1.2×10^{-18}
Area 3, U-3ah/at E	01/04/93	01/11/93	3.0×10^{-18}	3.0×10^{-18}
Area 3, U-3ah/at E	02/01/93	03/01/93	0.0	0.0
Area 3, U-3ah/at E	03/01/93	04/05/93	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at E	04/05/93	05/03/93	1.0×10^{-18}	1.0×10^{-18}
Area 3, U-3ah/at E	05/03/93	06/02/93	2.1×10^{-18}	1.5×10^{-18}
Area 3, U-3ah/at E	06/02/93	06/28/93	3.1×10^{-18}	1.8×10^{-18}
Area 3, U-3ah/at E	06/28/93	07/26/93	1.3×10^{-18}	1.3×10^{-18}
Area 3, U-3ah/at E	07/26/93	08/30/93	2.9×10^{-18}	1.5×10^{-18}
Area 3, U-3ah/at E	08/30/93	09/27/93	4.3×10^{-18}	2.5×10^{-18}
Area 3, U-3ah/at E	09/27/93	11/01/93	2.0×10^{-18}	1.4×10^{-18}
Area 3, U-3ah/at E	11/01/93	11/29/93	0.0	0.0
Area 3, U-3ah/at E	11/29/93	01/03/94	8.1×10^{-19}	8.1×10^{-19}
Area 3, U-3ah/at N	01/04/93	01/25/93	0.0	0.0
Area 3, U-3ah/at N	01/25/93	03/01/93	9.7×10^{-19}	9.7×10^{-19}
Area 3, U-3ah/at N	03/01/93	04/05/93	0.0	0.0
Area 3, U-3ah/at N	04/05/93	05/03/93	0.0	0.0
Area 3, U-3ah/at N	05/03/93	06/02/93	1.5×10^{-18}	1.6×10^{-18}
Area 3, U-3ah/at N	06/02/93	06/28/93	2.2×10^{-18}	1.5×10^{-18}
Area 3, U-3ah/at N	06/28/93	07/26/93	1.8×10^{-18}	1.3×10^{-18}
Area 3, U-3ah/at N	07/26/93	08/30/93	4.6×10^{-18}	1.9×10^{-18}
Area 3, U-3ah/at N	08/30/93	09/27/93	8.2×10^{-19}	8.2×10^{-19}
Area 3, U-3ah/at N	09/27/93	11/01/93	4.3×10^{-18}	2.5×10^{-18}
Area 3, U-3ah/at N	11/01/93	11/29/93	3.4×10^{-18}	1.7×10^{-18}
Area 3, U-3ah/at N	11/29/93	01/03/94	0.0	0.0
Area 3, U-3ah/at S	01/04/93	01/25/93	0.0	0.0
Area 3, U-3ah/at S	01/25/93	03/01/93	0.0	0.0
Area 3, U-3ah/at S	03/01/93	04/05/93	0.0	0.0
Area 3, U-3ah/at S	04/05/93	05/03/93	1.3×10^{-18}	1.4×10^{-18}
Area 3, U-3ah/at S	05/03/93	06/02/93	0.0	0.0
Area 3, U-3ah/at S	06/28/93	07/26/93	3.0×10^{-18}	1.7×10^{-18}
Area 3, U-3ah/at S	07/26/93	08/30/93	1.4×10^{-18}	1.0×10^{-18}
Area 3, U-3ah/at S	08/30/93	09/27/93	1.2×10^{-18}	1.2×10^{-18}
Area 3, U-3ah/at S	09/27/93	11/01/93	2.1×10^{-18}	1.5×10^{-18}
Area 3, U-3ah/at S	11/01/93	11/29/93	1.1×10^{-18}	1.1×10^{-18}
Area 3, U-3ah/at S	11/29/93	01/03/94	1.8×10^{-18}	1.3×10^{-18}
Area 3, U-3ah/at W	01/04/93	01/25/93	0.0	0.0
Area 3, U-3ah/at W	01/25/93	03/01/93	0.0	0.0
Area 3, U-3ah/at W	03/01/93	04/05/93	0.0	0.0
Area 3, U-3ah/at W	05/03/93	06/02/93	3.0×10^{-18}	2.1×10^{-18}
Area 3, U-3ah/at W	06/02/93	06/28/93	1.7×10^{-18}	1.7×10^{-18}
Area 3, U-3ah/at W	06/28/93	07/26/93	3.2×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at W	07/26/93	08/30/93	6.7×10^{-18}	3.0×10^{-18}
Area 3, U-3ah/at W	08/30/93	09/27/93	1.0×10^{-17}	4.2×10^{-18}
Area 3, U-3ah/at W	10/11/93	11/01/93	6.6×10^{-18}	3.8×10^{-18}
Area 3, U-3ah/at W	11/01/93	11/29/93	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at W	11/29/93	01/03/94	0.0	0.0
Area 5, DOD Yard	12/28/92	01/26/93	0.0	0.0
Area 5, DOD Yard	01/26/93	03/01/93	0.0	0.0
Area 5, DOD Yard	03/01/93	04/05/93	5.1×10^{-18}	5.1×10^{-18}
Area 5, DOD Yard	04/05/93	05/03/93	0.0	0.0
Area 5, DOD Yard	05/03/93	06/01/93	1.8×10^{-18}	1.8×10^{-18}
Area 5, DOD Yard	06/01/93	06/28/93	0.0	0.0
Area 5, DOD Yard	06/28/93	07/26/93	0.0	0.0
Area 5, DOD Yard	07/26/93	08/30/93	0.0	0.0
Area 5, DOD Yard	08/30/93	09/27/93	0.0	0.0
Area 5, DOD Yard	09/27/93	11/01/93	0.0	0.0
Area 5, DOD Yard	11/29/93	01/03/94	0.0	0.0
Area 5, Gate 200	12/28/92	01/26/93	0.0	0.0
Area 5, Gate 200	01/26/93	03/01/93	8.8×10^{-19}	8.9×10^{-19}
Area 5, Gate 200	03/01/93	04/05/93	3.5×10^{-18}	1.8×10^{-18}
Area 5, Gate 200	04/05/93	05/03/93	3.2×10^{-18}	2.3×10^{-18}
Area 5, Gate 200	05/03/93	06/01/93	0.0	0.0
Area 5, Gate 200	06/01/93	06/28/93	0.0	0.0
Area 5, Gate 200	06/28/93	07/26/93	0.0	0.0
Area 5, Gate 200	07/26/93	08/30/93	0.0	0.0
Area 5, Gate 200	08/30/93	09/27/93	0.0	0.0
Area 5, Gate 200	09/27/93	11/01/93	0.0	0.0
Area 5, Gate 200	11/01/93	11/29/93	0.0	0.0
Area 5, Gate 200	11/29/93	01/03/94	7.3×10^{-19}	7.3×10^{-19}
Area 5, RWMS No. 1	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 1	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 1	03/01/93	04/05/93	3.2×10^{-18}	1.5×10^{-18}
Area 5, RWMS No. 1	04/05/93	05/03/93	4.4×10^{-18}	3.1×10^{-18}
Area 5, RWMS No. 1	05/03/93	06/01/93	4.8×10^{-18}	4.8×10^{-18}
Area 5, RWMS No. 1	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS No. 1	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS No. 1	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS No. 1	08/30/93	09/27/93	1.4×10^{-18}	1.5×10^{-18}
Area 5, RWMS No. 1	09/27/93	11/01/93	6.6×10^{-19}	6.6×10^{-19}
Area 5, RWMS No. 1	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 1	11/29/93	01/03/94	0.0	0.0
Area 5, RWMS No. 2	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 2	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 2	03/01/93	04/05/93	7.8×10^{-19}	7.8×10^{-19}
Area 5, RWMS No. 2	04/05/93	05/03/93	9.8×10^{-19}	9.8×10^{-19}
Area 5, RWMS No. 2	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS No. 2	06/01/93	06/28/93	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 2	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS No. 2	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS No. 2	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS No. 2	09/27/93	11/01/93	6.8×10^{-19}	6.8×10^{-19}
Area 5, RWMS No. 2	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 2	11/29/93	01/03/94	0.0	0.0
Area 5, RWMS No. 3	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 3	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 3	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 3	04/05/93	04/26/93	1.1×10^{-17}	5.0×10^{-18}
Area 5, RWMS No. 3	05/03/93	06/01/93	3.5×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 3	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS No. 3	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS No. 3	07/26/93	08/30/93	6.7×10^{-19}	6.7×10^{-19}
Area 5, RWMS No. 3	08/30/93	09/27/93	1.3×10^{-18}	1.4×10^{-18}
Area 5, RWMS No. 3	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS No. 3	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 3	11/29/93	01/03/94	1.9×10^{-18}	1.3×10^{-18}
Area 5, RWMS No. 4	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 4	01/26/93	03/01/93	9.2×10^{-19}	9.3×10^{-19}
Area 5, RWMS No. 4	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 4	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS No. 4	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS No. 4	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS No. 4	06/28/93	07/26/93	8.1×10^{-19}	8.1×10^{-19}
Area 5, RWMS No. 4	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS No. 4	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS No. 4	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS No. 4	11/29/93	01/03/94	1.0×10^{-18}	1.0×10^{-18}
Area 5, RWMS No. 5	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 5	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 5	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 5	04/05/93	05/03/93	1.6×10^{-18}	1.6×10^{-18}
Area 5, RWMS No. 5	05/03/93	06/01/93	4.2×10^{-18}	3.0×10^{-18}
Area 5, RWMS No. 5	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS No. 5	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS No. 5	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS No. 5	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS No. 5	09/27/93	11/01/93	8.3×10^{-18}	3.0×10^{-18}
Area 5, RWMS No. 5	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 5	11/29/93	01/03/94	8.3×10^{-19}	8.8×10^{-19}
Area 5, RWMS No. 6	12/28/92	01/26/93	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 6	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 6	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 6	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS No. 6	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS No. 6	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS No. 6	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS No. 6	07/26/93	08/30/93	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 6	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS No. 6	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS No. 6	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 6	11/29/93	01/03/94	8.5×10^{-18}	5.0×10^{-18}
Area 5, RWMS No. 7	12/28/92	01/26/93	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS No. 7	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 7	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 7	04/05/93	05/03/93	3.1×10^{-18}	2.2×10^{-18}
Area 5, RWMS No. 7	05/03/93	06/01/93	4.0×10^{-18}	2.3×10^{-18}
Area 5, RWMS No. 7	06/01/93	06/28/93	4.1×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 7	06/28/93	07/26/93	8.8×10^{-19}	8.8×10^{-19}
Area 5, RWMS No. 7	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS No. 7	08/30/93	09/27/93	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 7	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS No. 7	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 8	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 8	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 8	03/01/93	04/05/93	8.7×10^{-19}	8.7×10^{-19}
Area 5, RWMS No. 8	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS No. 8	06/01/93	06/28/93	1.8×10^{-18}	1.3×10^{-18}
Area 5, RWMS No. 8	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS No. 8	07/26/93	08/30/93	1.9×10^{-18}	1.4×10^{-18}
Area 5, RWMS No. 8	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS No. 8	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS No. 8	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 8	11/29/93	01/03/94	1.0×10^{-18}	1.0×10^{-18}
Area 5, RWMS No. 9	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 9	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 9	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 9	04/05/93	05/03/93	1.8×10^{-18}	1.8×10^{-18}
Area 5, RWMS No. 9	05/03/93	06/01/93	1.5×10^{-18}	1.5×10^{-18}
Area 5, RWMS No. 9	06/01/93	06/28/93	9.0×10^{-19}	9.0×10^{-19}
Area 5, RWMS No. 9	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS No. 9	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS No. 9	08/30/93	09/27/93	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 9	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS No. 9	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS Pit No. 3	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS Pit No. 3	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS Pit No. 3	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS Pit No. 3	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS Pit No. 3	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS Pit No. 3	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS Pit No. 3	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS Pit No. 3	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS Pit No. 3	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS Pit No. 3	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS Pit No. 3	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS Pit No. 3	11/29/93	01/03/94	1.4×10^{-18}	9.9×10^{-19}
Area 5, RWMS Pit No. 4	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS Pit No. 4	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS Pit No. 4	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS Pit No. 4	04/05/93	05/03/93	9.2×10^{-19}	9.2×10^{-19}
Area 5, RWMS Pit No. 4	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS Pit No. 4	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS Pit No. 4	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS Pit No. 4	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS Pit No. 4	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS Pit No. 4	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS Pit No. 4	11/01/93	11/29/93	8.2×10^{-19}	8.2×10^{-19}
Area 5, RWMS Pit No. 4	11/29/93	01/03/94	0.0	0.0
Area 5, RWMS TP N	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP N	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS TP N	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS TP N	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS TP N	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS TP N	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS TP N	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS TP N	08/30/93	09/27/93	1.0×10^{-18}	1.0×10^{-18}
Area 5, RWMS TP N	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS TP N	11/01/93	11/29/93	8.6×10^{-19}	8.6×10^{-19}
Area 5, RWMS TP N	11/29/93	12/27/93	0.0	0.0
Area 5, RWMS TP NE	12/28/92	01/26/93	1.7×10^{-18}	1.7×10^{-18}
Area 5, RWMS TP NE	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS TP NE	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS TP NE	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS TP NE	05/03/93	06/01/93	3.0×10^{-18}	2.1×10^{-18}

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP NE	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS TP NE	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS TP NE	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS TP NE	08/30/93	09/27/93	0.0	0.0
Area 5, RWMS TP NE	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS TP NE	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS TP NE	11/29/93	01/03/94	0.0	0.0
Area 5, RWMS TP NW	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP NW	01/26/93	03/01/93	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP NW	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS TP NW	04/05/93	05/03/93	1.7×10^{-18}	1.2×10^{-18}
Area 5, RWMS TP NW	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS TP NW	06/01/93	06/28/93	2.7×10^{-18}	2.7×10^{-18}
Area 5, RWMS TP NW	06/28/93	07/26/93	1.0×10^{-18}	1.0×10^{-18}
Area 5, RWMS TP NW	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS TP NW	08/30/93	09/27/93	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS TP NW	09/27/93	11/01/93	1.3×10^{-17}	3.7×10^{-18}
Area 5, RWMS TP NW	11/01/93	11/29/93	1.7×10^{-18}	1.2×10^{-18}
Area 5, RWMS TP NW	11/29/93	01/03/94	0.0	0.0
Area 5, RWMS TP S	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP S	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS TP S	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS TP S	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS TP S	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS TP S	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS TP S	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS TP S	08/30/93	09/27/93	2.4×10^{-18}	2.4×10^{-18}
Area 5, RWMS TP S	10/04/93	11/01/93	0.0	0.0
Area 5, RWMS TP S	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS TP S	11/29/93	01/03/94	0.0	0.0
Area 5, RWMS TP SE	01/26/93	03/01/93	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP SE	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS TP SE	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS TP SE	05/03/93	06/01/93	1.6×10^{-18}	1.6×10^{-18}
Area 5, RWMS TP SE	06/28/93	07/26/93	7.4×10^{-18}	3.8×10^{-18}
Area 5, RWMS TP SE	07/26/93	08/30/93	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS TP SE	08/30/93	09/27/93	6.9×10^{-19}	6.9×10^{-19}
Area 5, RWMS TP SE	09/27/93	11/01/93	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP SE	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS TP SE	11/29/93	01/03/94	0.0	0.0
Area 5, RWMS TP SW	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP SW	01/26/93	03/01/93	7.8×10^{-19}	7.9×10^{-19}

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP SW	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS TP SW	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS TP SW	06/28/93	07/26/93	0.0	0.0
Area 5, RWMS TP SW	07/26/93	08/30/93	0.0	0.0
Area 5, RWMS TP SW	08/30/93	09/27/93	8.2×10^{-19}	8.2×10^{-19}
Area 5, RWMS TP SW	09/27/93	11/01/93	0.0	0.0
Area 5, RWMS TP SW	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS TP SW	11/29/93	01/03/94	6.4×10^{-19}	6.4×10^{-19}
Area 5, Well 5B	02/01/93	03/01/93	0.0	0.0
Area 5, Well 5B	03/01/93	04/05/93	2.0×10^{-18}	1.4×10^{-18}
Area 5, Well 5B	05/03/93	06/01/93	2.6×10^{-18}	1.8×10^{-18}
Area 5, Well 5B	06/01/93	06/28/93	0.0	0.0
Area 5, Well 5B	06/28/93	07/26/93	7.5×10^{-19}	7.5×10^{-19}
Area 5, Well 5B	07/26/93	08/30/93	0.0	0.0
Area 5, Well 5B	08/30/93	09/27/93	0.0	0.0
Area 5, Well 5B	09/27/93	11/01/93	0.0	0.0
Area 5, Well 5B	11/01/93	11/29/93	0.0	0.0
Area 5, Well 5B	11/29/93	01/03/94	0.0	0.0
Area 6, Building 6-900	12/29/92	01/25/93	0.0	0.0
Area 6, Building 6-900	01/25/93	03/01/93	0.0	0.0
Area 6, Building 6-900	03/01/93	04/05/93	0.0	0.0
Area 6, Building 6-900	04/05/93	05/03/93	0.0	0.0
Area 6, Building 6-900	05/10/93	06/01/93	0.0	0.0
Area 6, Building 6-900	06/01/93	06/14/93	0.0	0.0
Area 6, Building 6-900	07/08/93	07/26/93	0.0	0.0
Area 6, Building 6-900	07/26/93	08/30/93	0.0	0.0
Area 6, Building 6-900	08/30/93	09/27/93	9.6×10^{-19}	9.6×10^{-19}
Area 6, Building 6-900	09/27/93	11/01/93	1.4×10^{-18}	1.4×10^{-18}
Area 6, Building 6-900	11/01/93	11/29/93	0.0	0.0
Area 6, Building 6-900	11/29/93	01/03/94	0.0	0.0
Area 6, CP-6	12/29/92	01/25/93	0.0	0.0
Area 6, CP-6	01/25/93	03/01/93	0.0	0.0
Area 6, CP-6	03/01/93	04/05/93	0.0	0.0
Area 6, CP-6	04/05/93	05/03/93	0.0	0.0
Area 6, CP-6	05/03/93	06/01/93	0.0	0.0
Area 6, CP-6	06/01/93	06/28/93	9.5×10^{-19}	9.5×10^{-19}
Area 6, CP-6	06/28/93	07/26/93	1.4×10^{-18}	9.9×10^{-19}
Area 6, CP-6	07/26/93	08/30/93	3.0×10^{-18}	1.8×10^{-18}
Area 6, CP-6	08/30/93	09/27/93	2.3×10^{-18}	1.6×10^{-18}
Area 6, CP-6	09/27/93	11/01/93	0.0	0.0
Area 6, CP-6	11/01/93	11/29/93	0.0	0.0
Area 6, CP-6	11/29/93	01/03/94	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well 3 Complex	12/29/92	01/25/93	0.0	0.0
Area 6, Well 3 Complex	01/25/93	03/01/93	0.0	0.0
Area 6, Well 3 Complex	03/01/93	04/05/93	0.0	0.0
Area 6, Well 3 Complex	04/05/93	05/03/93	5.5×10^{-18}	2.8×10^{-18}
Area 6, Well 3 Complex	05/03/93	06/01/93	0.0	0.0
Area 6, Well 3 Complex	06/28/93	07/26/93	0.0	0.0
Area 6, Well 3 Complex	07/26/93	08/30/93	1.5×10^{-18}	1.1×10^{-18}
Area 6, Well 3 Complex	08/30/93	09/27/93	3.2×10^{-18}	1.8×10^{-18}
Area 6, Well 3 Complex	09/27/93	11/01/93	0.0	0.0
Area 6, Well 3 Complex	11/01/93	11/29/93	-2.6×10^{-18}	1.9×10^{-18}
Area 6, Well 3 Complex	11/29/93	01/03/94	0.0	0.0
Area 6, Yucca Complex	12/29/92	01/25/93	0.0	0.0
Area 6, Yucca Complex	01/25/93	03/01/93	0.0	0.0
Area 6, Yucca Complex	03/01/93	04/05/93	1.6×10^{-18}	1.6×10^{-18}
Area 6, Yucca Complex	04/05/93	05/03/93	3.2×10^{-18}	2.3×10^{-18}
Area 6, Yucca Complex	05/03/93	06/01/93	0.0	0.0
Area 6, Yucca Complex	06/01/93	06/28/93	3.4×10^{-18}	2.0×10^{-18}
Area 6, Yucca Complex	06/28/93	07/26/93	1.1×10^{-18}	1.1×10^{-18}
Area 6, Yucca Complex	07/26/93	08/16/93	1.4×10^{-18}	1.4×10^{-18}
Area 6, Yucca Complex	08/30/93	09/27/93	1.1×10^{-18}	1.1×10^{-18}
Area 6, Yucca Complex	10/04/93	11/01/93	0.0	0.0
Area 6, Yucca Complex	11/01/93	11/29/93	1.1×10^{-18}	1.1×10^{-18}
Area 6, Yucca Complex	11/29/93	01/03/94	0.0	0.0
Area 7, UE-7ns	12/29/92	01/25/93	0.0	0.0
Area 7, UE-7ns	01/25/93	03/01/93	0.0	0.0
Area 7, UE-7ns	03/01/93	04/05/93	1.4×10^{-17}	1.5×10^{-17}
Area 7, UE-7ns	04/05/93	05/03/93	1.5×10^{-18}	1.5×10^{-18}
Area 7, UE-7ns	05/03/93	06/01/93	1.2×10^{-18}	1.2×10^{-18}
Area 7, UE-7ns	06/01/93	06/22/93	0.0	0.0
Area 7, UE-7ns	06/29/93	07/19/93	0.0	0.0
Area 7, UE-7ns	08/02/93	08/30/93	8.6×10^{-19}	8.6×10^{-19}
Area 7, UE-7ns	08/30/93	09/27/93	0.0	0.0
Area 7, UE-7ns	09/27/93	11/01/93	0.0	0.0
Area 7, UE-7ns	11/29/93	01/03/94	9.3×10^{-19}	9.4×10^{-19}
Area 9, 9-300 Bunker	12/29/92	01/25/93	1.3×10^{-18}	1.3×10^{-18}
Area 9, 9-300 Bunker	01/25/93	03/01/93	0.0	0.0
Area 9, 9-300 Bunker	03/01/93	04/05/93	1.7×10^{-18}	1.2×10^{-18}
Area 9, 9-300 Bunker	04/05/93	05/03/93	6.0×10^{-18}	3.0×10^{-18}
Area 9, 9-300 Bunker	05/03/93	06/01/93	6.6×10^{-18}	3.0×10^{-18}
Area 9, 9-300 Bunker	06/28/93	07/26/93	3.3×10^{-18}	2.3×10^{-18}
Area 9, 9-300 Bunker	07/26/93	08/30/93	4.2×10^{-18}	1.7×10^{-18}
Area 9, 9-300 Bunker	08/30/93	09/27/93	4.8×10^{-17}	8.0×10^{-18}

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 9, 9-300 Bunker	09/27/93	11/01/93	1.8×10^{-17}	4.3×10^{-18}
Area 9, 9-300 Bunker	11/01/93	11/29/93	1.8×10^{-17}	5.5×10^{-18}
Area 9, 9-300 Bunker	11/29/93	01/03/94	2.7×10^{-18}	1.6×10^{-18}
Area 10, Gate 700	12/29/92	01/25/93	0.0	0.0
Area 10, Gate 700	01/25/93	03/01/93	0.0	0.0
Area 10, Gate 700	03/01/93	04/05/93	0.0	0.0
Area 10, Gate 700	04/05/93	05/03/93	1.3×10^{-18}	1.3×10^{-18}
Area 10, Gate 700	05/03/93	06/01/93	0.0	0.0
Area 10, Gate 700	06/01/93	06/28/93	8.8×10^{-19}	8.8×10^{-19}
Area 10, Gate 700	06/28/93	07/26/93	7.6×10^{-18}	3.5×10^{-18}
Area 10, Gate 700	07/26/93	08/30/93	1.7×10^{-18}	1.2×10^{-18}
Area 10, Gate 700	08/30/93	09/27/93	1.3×10^{-18}	1.3×10^{-18}
Area 10, Gate 700	09/27/93	11/01/93	0.0	0.0
Area 10, Gate 700	11/01/93	11/29/93	0.0	0.0
Area 10, Gate 700	11/29/93	01/03/94	0.0	0.0
Area 11, Gate 293	12/29/92	01/25/93	7.8×10^{-18}	4.6×10^{-18}
Area 11, Gate 293	01/25/93	03/01/93	0.0	0.0
Area 11, Gate 293	03/01/93	04/05/93	4.5×10^{-18}	2.3×10^{-18}
Area 11, Gate 293	04/05/93	05/03/93	2.4×10^{-18}	1.4×10^{-18}
Area 11, Gate 293	05/03/93	06/01/93	3.4×10^{-18}	2.4×10^{-18}
Area 11, Gate 293	06/28/93	07/26/93	2.8×10^{-18}	2.8×10^{-18}
Area 11, Gate 293	07/26/93	08/16/93	3.4×10^{-18}	2.0×10^{-18}
Area 11, Gate 293	08/30/93	09/27/93	1.3×10^{-18}	1.3×10^{-18}
Area 11, Gate 293	09/27/93	11/01/93	0.0	0.0
Area 11, Gate 293	11/01/93	11/29/93	-2.7×10^{-18}	2.0×10^{-18}
Area 11, Gate 293	11/29/93	01/03/94	0.0	0.0
Area 12, Complex	01/25/93	03/01/93	7.4×10^{-19}	7.4×10^{-19}
Area 12, Complex	04/05/93	05/03/93	0.0	0.0
Area 12, Complex	05/03/93	06/01/93	0.0	0.0
Area 12, Complex	06/28/93	07/26/93	7.2×10^{-19}	7.2×10^{-19}
Area 12, Complex	07/26/93	08/30/93	0.0	0.0
Area 12, Complex	08/30/93	09/27/93	0.0	0.0
Area 12, Complex	10/04/93	11/01/93	9.7×10^{-18}	3.8×10^{-18}
Area 12, Complex	11/01/93	11/29/93	-2.0×10^{-18}	1.4×10^{-18}
Area 12, Complex	11/29/93	01/03/94	0.0	0.0
Area 12, P Tunnel Portal	01/25/93	03/01/93	1.0×10^{-17}	5.9×10^{-18}
Area 12, P Tunnel Portal	03/01/93	04/05/93	0.0	0.0
Area 12, P Tunnel Portal	06/28/93	07/26/93	1.1×10^{-16}	8.2×10^{-17}
Area 12, P Tunnel Portal	07/26/93	08/30/93	3.5×10^{-17}	2.5×10^{-17}
Area 15, EPA Farm	12/29/92	01/25/93	0.0	0.0
Area 15, EPA Farm	03/01/93	04/05/93	0.0	0.0
Area 15, EPA Farm	04/05/93	05/03/93	8.5×10^{-19}	8.5×10^{-19}

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, EPA Farm	05/03/93	06/01/93	3.4×10^{-18}	1.9×10^{-18}
Area 15, EPA Farm	06/01/93	06/28/93	7.2×10^{-18}	2.6×10^{-18}
Area 15, EPA Farm	06/28/93	07/26/93	1.9×10^{-18}	1.3×10^{-18}
Area 15, EPA Farm	07/26/93	08/30/93	5.7×10^{-18}	2.4×10^{-18}
Area 15, EPA Farm	08/30/93	09/27/93	2.3×10^{-18}	1.6×10^{-18}
Area 15, EPA Farm	09/27/93	11/01/93	8.7×10^{-19}	8.7×10^{-19}
Area 15, EPA Farm	11/01/93	11/29/93	0.0	0.0
Area 15, EPA Farm	11/29/93	01/03/94	0.0	0.0
Area 16, 3545 Substation	01/05/93	01/25/93	0.0	0.0
Area 16, 3545 Substation	01/25/93	03/01/93	0.0	0.0
Area 16, 3545 Substation	03/01/93	04/05/93	0.0	0.0
Area 16, 3545 Substation	04/05/93	05/03/93	0.0	0.0
Area 16, 3545 Substation	05/03/93	06/01/93	0.0	0.0
Area 16, 3545 Substation	06/01/93	06/28/93	7.7×10^{-19}	7.7×10^{-19}
Area 16, 3545 Substation	06/28/93	07/26/93	0.0	0.0
Area 16, 3545 Substation	07/26/93	08/30/93	0.0	0.0
Area 16, 3545 Substation	08/30/93	09/27/93	0.0	0.0
Area 16, 3545 Substation	10/11/93	11/01/93	0.0	0.0
Area 16, 3545 Substation	11/01/93	11/29/93	-2.3×10^{-18}	1.6×10^{-18}
Area 16, 3545 Substation	11/29/93	01/03/94	0.0	0.0
Area 19, Echo Peak	05/10/93	06/01/93	1.8×10^{-18}	1.8×10^{-18}
Area 19, Echo Peak	06/01/93	06/28/93	0.0	0.0
Area 19, Echo Peak	06/28/93	07/26/93	0.0	0.0
Area 19, Echo Peak	07/26/93	08/23/93	9.4×10^{-19}	9.4×10^{-19}
Area 19, Echo Peak	08/30/93	09/27/93	0.0	0.0
Area 19, Echo Peak	09/27/93	11/01/93	0.0	0.0
Area 19, Echo Peak	11/01/93	11/29/93	-2.2×10^{-18}	1.6×10^{-18}
Area 19, Echo Peak	11/29/93	12/13/93	0.0	0.0
Area 19, Pahute Substation	04/05/93	05/03/93	0.0	0.0
Area 19, Pahute Substation	05/10/93	06/01/93	2.0×10^{-18}	2.0×10^{-18}
Area 19, Pahute Substation	06/01/93	06/28/93	8.8×10^{-19}	8.8×10^{-19}
Area 19, Pahute Substation	06/28/93	07/26/93	0.0	0.0
Area 19, Pahute Substation	07/26/93	08/30/93	7.7×10^{-19}	7.7×10^{-19}
Area 19, Pahute Substation	08/30/93	09/27/93	0.0	0.0
Area 19, Pahute Substation	09/27/93	11/01/93	1.0×10^{-18}	1.0×10^{-18}
Area 19, Pahute Substation	11/01/93	11/29/93	-4.0×10^{-18}	2.8×10^{-18}
Area 19. Pahute Substation	11/29/93	12/13/93	0.0	0.0
Area 20, Dispensary	03/15/93	04/05/93	0.0	0.0
Area 20, Dispensary	04/05/93	05/03/93	1.1×10^{-18}	1.1×10^{-18}
Area 20, Dispensary	05/03/93	05/24/93	0.0	0.0
Area 20, Dispensary	06/01/93	06/28/93	8.0×10^{-19}	8.0×10^{-19}
Area 20, Dispensary	06/28/93	07/26/93	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Dispensary	07/26/93	08/30/93	0.0	0.0
Area 20, Dispensary	08/30/93	09/27/93	0.0	0.0
Area 20, Dispensary	09/27/93	11/01/93	0.0	0.0
Area 20, Dispensary	11/01/93	11/29/93	0.0	0.0
Area 20, Dispensary	11/29/93	12/13/93	0.0	0.0
Area 23, Building 790	12/28/92	01/26/93	1.3×10^{-18}	1.4×10^{-18}
Area 23, Building 790	01/26/93	03/01/93	0.0	0.0
Area 23, Building 790	03/01/93	04/05/93	0.0	0.0
Area 23, Building 790	04/05/93	05/03/93	0.0	0.0
Area 23, Building 790	05/03/93	06/01/93	0.0	0.0
Area 23, Building 790	06/01/93	06/28/93	0.0	0.0
Area 23, Building 790	06/28/93	07/26/93	0.0	0.0
Area 23, Building 790	07/26/93	08/30/93	0.0	0.0
Area 23, Building 790	08/30/93	09/27/93	1.3×10^{-18}	1.3×10^{-18}
Area 23, Building 790	10/04/93	11/01/93	0.0	0.0
Area 23, Building 790	11/01/93	11/29/93	-1.3×10^{-18}	2.2×10^{-18}
Area 23, Building 790	11/29/93	01/03/94	0.0	0.0
Area 23, Building 790 No. 2	12/28/92	01/26/93	0.0	0.0
Area 23, Building 790 No. 2	01/26/93	03/01/93	0.0	0.0
Area 23, Building 790 No. 2	03/01/93	04/05/93	9.4×10^{-19}	9.4×10^{-19}
Area 23, Building 790 No. 2	04/05/93	05/03/93	0.0	0.0
Area 23, Building 790 No. 2	05/03/93	06/01/93	0.0	0.0
Area 23, Building 790 No. 2	06/01/93	06/28/93	0.0	0.0
Area 23, Building 790 No. 2	06/28/93	07/26/93	0.0	0.0
Area 23, Building 790 No. 2	07/26/93	08/30/93	7.3×10^{-19}	7.3×10^{-19}
Area 23, Building 790 No. 2	08/30/93	09/27/93	0.0	0.0
Area 23, Building 790 No. 2	09/27/93	11/01/93	0.0	0.0
Area 23, Building 790 No. 2	11/01/93	11/29/93	-1.2×10^{-18}	2.0×10^{-18}
Area 23, Building 790 No. 2	11/29/93	01/03/94	0.0	0.0
Area 23, E Boundary	12/28/92	01/26/93	0.0	0.0
Area 23, E Boundary	01/26/93	03/01/93	0.0	0.0
Area 23, E Boundary	05/03/93	06/01/93	0.0	0.0
Area 23, E Boundary	06/01/93	06/28/93	1.2×10^{-18}	1.2×10^{-18}
Area 23, E Boundary	06/28/93	07/26/93	0.0	0.0
Area 23, E Boundary	07/26/93	08/30/93	0.0	0.0
Area 23, E Boundary	08/30/93	09/27/93	1.2×10^{-18}	1.2×10^{-18}
Area 23, E Boundary	09/27/93	11/01/93	0.0	0.0
Area 23, E Boundary	11/01/93	11/29/93	0.0	0.0
Area 23, E Boundary	11/29/93	01/03/94	0.0	0.0
Area 23, H&S Building	12/28/92	01/26/93	0.0	0.0
Area 23, H&S Building	01/26/93	03/01/93	0.0	0.0
Area 23, H&S Building	04/05/93	05/03/93	0.0	0.0
Area 23, H&S Building	05/03/93	06/01/93	0.0	0.0

Attachment A.1 (^{238}Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, H&S Building	06/28/93	07/26/93	0.0	0.0
Area 23, H&S Building	07/26/93	08/30/93	0.0	0.0
Area 23, H&S Building	08/30/93	09/27/93	1.4×10^{-18}	1.4×10^{-18}
Area 23, H&S Building	09/27/93	11/01/93	0.0	0.0
Area 23, H&S Building	11/01/93	11/29/93	-2.0×10^{-18}	1.4×10^{-18}
Area 23, H&S Building	11/29/93	01/03/94	0.0	0.0
Area 25, E-MAD N	12/28/92	01/26/93	0.0	0.0
Area 25, E-MAD N	01/26/93	03/01/93	0.0	0.0
Area 25, E-MAD N	04/05/93	05/03/93	0.0	0.0
Area 25, E-MAD N	05/03/93	06/01/93	0.0	0.0
Area 25, E-MAD N	06/01/93	06/28/93	2.9×10^{-18}	2.0×10^{-18}
Area 25, E-MAD N	06/28/93	07/19/93	0.0	0.0
Area 25, E-MAD N	07/26/93	08/30/93	0.0	0.0
Area 25, E-MAD N	08/30/93	09/27/93	0.0	0.0
Area 25, E-MAD N	09/27/93	11/01/93	0.0	0.0
Area 25, E-MAD N	11/01/93	11/29/93	0.0	0.0
Area 25, E-MAD N	11/29/93	01/03/94	0.0	0.0
Area 25, NRDS Warehouse	12/28/92	01/26/93	0.0	0.0
Area 25, NRDS Warehouse	01/26/93	03/01/93	0.0	0.0
Area 25, NRDS Warehouse	03/01/93	04/05/93	0.0	0.0
Area 25, NRDS Warehouse	04/05/93	05/03/93	0.0	0.0
Area 25, NRDS Warehouse	05/03/93	06/01/93	3.2×10^{-18}	2.9×10^{-18}
Area 25, NRDS Warehouse	06/01/93	06/28/93	0.0	0.0
Area 25, NRDS Warehouse	06/28/93	07/26/93	0.0	0.0
Area 25, NRDS Warehouse	07/26/93	08/30/93	0.0	0.0
Area 25, NRDS Warehouse	08/30/93	09/20/93	0.0	0.0
Area 25, NRDS Warehouse	09/27/93	11/01/93	0.0	0.0
Area 25, NRDS Warehouse	11/01/93	11/29/93	-3.6×10^{-18}	2.6×10^{-18}
Area 25, NRDS Warehouse	11/29/93	01/03/94	1.1×10^{-18}	1.1×10^{-18}
Area 27, Cafeteria	12/28/92	01/26/93	1.7×10^{-18}	1.7×10^{-18}
Area 27, Cafeteria	01/26/93	03/01/93	0.0	0.0
Area 27, Cafeteria	03/01/93	04/05/93	0.0	0.0
Area 27, Cafeteria	04/05/93	05/03/93	0.0	0.0
Area 27, Cafeteria	05/03/93	06/01/93	-1.4×10^{-18}	8.5×10^{-19}
Area 27, Cafeteria	06/01/93	06/28/93	8.8×10^{-19}	8.8×10^{-19}
Area 27, Cafeteria	06/28/93	07/26/93	1.1×10^{-18}	1.1×10^{-18}
Area 27, Cafeteria	07/26/93	08/30/93	0.0	0.0
Area 27, Cafeteria	09/27/93	11/01/93	0.0	0.0
Area 27, Cafeteria	11/01/93	11/29/93	-2.8×10^{-18}	2.0×10^{-18}
Area 27, Cafeteria	11/29/93	01/03/94	0.0	0.0

Attachment A.2 $^{239+240}$Pu in Air - 1993

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	12/29/92	01/25/93	1.5×10^{-18}	1.5×10^{-18}
Area 1, BJY	01/25/93	03/01/93	2.8×10^{-18}	2.8×10^{-18}
Area 1, BJY	03/01/93	04/05/93	4.2×10^{-17}	5.9×10^{-18}
Area 1, BJY	04/05/93	05/03/93	1.8×10^{-17}	6.0×10^{-18}
Area 1, BJY	05/03/93	06/01/93	1.4×10^{-17}	4.2×10^{-18}
Area 1, BJY	06/01/93	06/28/93	7.3×10^{-17}	1.0×10^{-17}
Area 1, BJY	06/28/93	07/26/93	2.1×10^{-16}	2.0×10^{-17}
Area 1, BJY	07/26/93	08/30/93	3.4×10^{-16}	2.9×10^{-17}
Area 1, BJY	08/30/93	09/27/93	1.8×10^{-16}	2.0×10^{-17}
Area 1, BJY	09/27/93	11/01/93	1.7×10^{-16}	1.5×10^{-17}
Area 1, BJY	11/01/93	11/29/93	5.2×10^{-17}	8.6×10^{-18}
Area 1, BJY	11/29/93	01/03/94	1.3×10^{-16}	2.0×10^{-17}
Area 1, Gravel Pit	12/28/92	01/25/93	0.0	0.0
Area 1, Gravel Pit	01/25/93	03/01/93	0.0	0.0
Area 1, Gravel Pit	03/01/93	04/05/93	3.2×10^{-18}	2.3×10^{-18}
Area 1, Gravel Pit	04/05/93	05/03/93	3.3×10^{-18}	2.4×10^{-18}
Area 1, Gravel Pit	05/03/93	06/01/93	2.8×10^{-18}	2.8×10^{-18}
Area 1, Gravel Pit	06/01/93	06/28/93	9.4×10^{-18}	6.8×10^{-18}
Area 1, Gravel Pit	06/28/93	07/26/93	1.1×10^{-17}	4.4×10^{-18}
Area 1, Gravel Pit	07/26/93	08/30/93	3.7×10^{-18}	2.1×10^{-18}
Area 1, Gravel Pit	08/30/93	09/27/93	2.8×10^{-18}	4.3×10^{-18}
Area 1, Gravel Pit	09/27/93	11/01/93	6.5×10^{-17}	7.7×10^{-18}
Area 1, Gravel Pit	11/01/93	11/29/93	8.2×10^{-18}	3.4×10^{-18}
Area 1, Gravel Pit	11/29/93	01/03/94	4.2×10^{-18}	2.2×10^{-18}
Area 2, 2-1 Substation	12/29/92	01/25/93	1.1×10^{-18}	1.1×10^{-18}
Area 2, 2-1 Substation	01/25/93	03/01/93	0.0	0.0
Area 2, 2-1 Substation	03/01/93	04/05/93	1.6×10^{-18}	9.3×10^{-19}
Area 2, 2-1 Substation	04/05/93	05/03/93	1.4×10^{-17}	3.9×10^{-18}
Area 2, 2-1 Substation	05/03/93	06/01/93	4.7×10^{-16}	4.6×10^{-17}
Area 2, 2-1 Substation	06/01/93	06/28/93	3.3×10^{-17}	7.2×10^{-18}
Area 2, 2-1 Substation	06/28/93	07/26/93	9.5×10^{-18}	3.0×10^{-18}
Area 2, 2-1 Substation	07/26/93	08/30/93	3.7×10^{-17}	6.4×10^{-18}
Area 2, 2-1 Substation	08/30/93	09/27/93	1.0×10^{-16}	1.4×10^{-17}
Area 2, 2-1 Substation	09/27/93	11/01/93	8.1×10^{-18}	2.2×10^{-18}
Area 2, 2-1 Substation	11/01/93	11/29/93	1.6×10^{-18}	1.2×10^{-18}
Area 2, 2-1 Substation	11/29/93	01/03/94	1.8×10^{-17}	4.6×10^{-18}
Area 2, Complex	12/29/92	01/25/93	4.2×10^{-18}	2.5×10^{-18}
Area 2, Complex	01/25/93	03/01/93	1.3×10^{-18}	9.2×10^{-19}
Area 2, Complex	03/01/93	04/05/93	1.3×10^{-18}	1.3×10^{-18}
Area 2, Complex	04/05/93	05/03/93	1.1×10^{-17}	6.7×10^{-18}
Area 2, Complex	05/03/93	06/01/93	3.1×10^{-18}	2.8×10^{-18}
Area 2, Complex	06/28/93	07/26/93	1.6×10^{-17}	9.6×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Complex	07/26/93	08/30/93	4.6×10^{-17}	7.0×10^{-18}
Area 2, Complex	08/30/93	09/27/93	4.9×10^{-17}	8.2×10^{-18}
Area 2, Complex	09/27/93	11/01/93	3.4×10^{-17}	6.7×10^{-18}
Area 2, Complex	11/01/93	11/29/93	2.1×10^{-17}	5.6×10^{-18}
Area 2, Complex	11/29/93	01/03/94	6.3×10^{-17}	8.5×10^{-18}
Area 3, Complex	12/29/92	01/25/93	1.5×10^{-18}	1.5×10^{-18}
Area 3, Complex	01/25/93	03/01/93	1.5×10^{-17}	3.9×10^{-18}
Area 3, Complex	03/01/93	04/05/93	1.0×10^{-18}	1.0×10^{-18}
Area 3, Complex	04/05/93	05/03/93	3.7×10^{-17}	1.0×10^{-17}
Area 3, Complex	05/03/93	06/01/93	1.2×10^{-16}	1.8×10^{-17}
Area 3, Complex	06/28/93	07/26/93	5.9×10^{-17}	1.0×10^{-17}
Area 3, Complex	07/26/93	08/30/93	7.9×10^{-17}	9.2×10^{-18}
Area 3, Complex	08/30/93	09/27/93	1.7×10^{-16}	2.0×10^{-17}
Area 3, Complex	09/27/93	11/01/93	7.1×10^{-17}	1.0×10^{-17}
Area 3, Complex	11/01/93	11/29/93	3.8×10^{-17}	7.4×10^{-18}
Area 3, Complex	11/29/93	01/03/94	6.3×10^{-17}	8.5×10^{-18}
Area 3, Complex No. 2	12/29/92	01/25/93	5.8×10^{-18}	2.6×10^{-18}
Area 3, Complex No. 2	01/25/93	03/01/93	3.5×10^{-17}	6.0×10^{-18}
Area 3, Complex No. 2	03/01/93	04/05/93	1.8×10^{-17}	4.0×10^{-18}
Area 3, Complex No. 2	04/05/93	05/03/93	2.0×10^{-17}	4.8×10^{-18}
Area 3, Complex No. 2	05/03/93	06/01/93	4.4×10^{-17}	9.8×10^{-18}
Area 3, Complex No. 2	06/01/93	06/28/93	3.3×10^{-17}	6.2×10^{-18}
Area 3, Complex No. 2	06/28/93	07/26/93	2.0×10^{-16}	2.2×10^{-17}
Area 3, Complex No. 2	07/26/93	08/30/93	4.3×10^{-17}	6.0×10^{-18}
Area 3, Complex No. 2	09/08/93	09/27/93	1.9×10^{-16}	2.5×10^{-17}
Area 3, Complex No. 2	09/27/93	11/01/93	1.0×10^{-15}	7.8×10^{-17}
Area 3, Complex No. 2	11/01/93	11/29/93	3.1×10^{-16}	2.8×10^{-17}
Area 3, Complex No. 2	11/29/93	01/03/94	3.8×10^{-17}	5.7×10^{-18}
Area 3, Mud Plant	12/29/92	01/25/93	3.4×10^{-18}	3.4×10^{-18}
Area 3, Mud Plant	01/25/93	03/01/93	5.2×10^{-18}	2.7×10^{-18}
Area 3, Mud Plant	03/01/93	04/05/93	2.1×10^{-16}	1.9×10^{-17}
Area 3, Mud Plant	04/05/93	05/03/93	4.9×10^{-17}	7.1×10^{-18}
Area 3, Mud Plant	05/03/93	06/01/93	1.2×10^{-16}	1.8×10^{-17}
Area 3, Mud Plant	06/28/93	07/26/93	3.4×10^{-16}	2.9×10^{-17}
Area 3, Mud Plant	07/26/93	08/30/93	2.0×10^{-16}	2.0×10^{-17}
Area 3, Mud Plant	08/30/93	09/27/93	1.9×10^{-16}	1.9×10^{-17}
Area 3, Mud Plant	09/27/93	11/01/93	1.7×10^{-16}	3.0×10^{-17}
Area 3, Mud Plant	11/01/93	11/29/93	7.3×10^{-17}	1.1×10^{-17}
Area 3, Mud Plant	11/29/93	01/03/94	9.0×10^{-17}	1.0×10^{-17}
Area 3, U-3ah/at E	01/04/93	01/11/93	2.1×10^{-17}	8.0×10^{-18}
Area 3, U-3ah/at E	02/01/93	03/01/93	4.3×10^{-17}	8.3×10^{-18}
Area 3, U-3ah/at E	03/01/93	04/05/93	3.3×10^{-18}	1.5×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at E	04/05/93	05/03/93	3.1×10^{-17}	6.1×10^{-18}
Area 3, U-3ah/at E	05/03/93	06/02/93	2.9×10^{-17}	5.9×10^{-18}
Area 3, U-3ah/at E	06/02/93	06/28/93	7.6×10^{-17}	1.0×10^{-17}
Area 3, U-3ah/at E	06/28/93	07/26/93	9.4×10^{-17}	1.3×10^{-17}
Area 3, U-3ah/at E	07/26/93	08/30/93	1.0×10^{-16}	1.1×10^{-17}
Area 3, U-3ah/at E	08/30/93	09/27/93	2.2×10^{-16}	2.4×10^{-17}
Area 3, U-3ah/at E	09/27/93	11/01/93	1.0×10^{-16}	1.3×10^{-17}
Area 3, U-3ah/at E	11/01/93	11/29/93	5.6×10^{-17}	8.5×10^{-18}
Area 3, U-3ah/at E	11/29/93	01/03/94	3.9×10^{-17}	6.1×10^{-18}
Area 3, U-3ah/at N	01/04/93	01/25/93	0.0	0.0
Area 3, U-3ah/at N	01/25/93	03/01/93	9.1×10^{-17}	1.2×10^{-17}
Area 3, U-3ah/at N	03/01/93	04/05/93	2.5×10^{-17}	4.7×10^{-18}
Area 3, U-3ah/at N	04/05/93	05/03/93	2.5×10^{-17}	7.6×10^{-18}
Area 3, U-3ah/at N	05/03/93	06/02/93	1.1×10^{-16}	1.7×10^{-17}
Area 3, U-3ah/at N	06/02/93	06/28/93	2.7×10^{-17}	5.7×10^{-18}
Area 3, U-3ah/at N	06/28/93	07/26/93	6.8×10^{-17}	9.1×10^{-18}
Area 3, U-3ah/at N	07/26/93	08/30/93	1.4×10^{-16}	1.4×10^{-17}
Area 3, U-3ah/at N	08/30/93	09/27/93	8.2×10^{-17}	9.7×10^{-18}
Area 3, U-3ah/at N	09/27/93	11/01/93	2.6×10^{-16}	2.8×10^{-17}
Area 3, U-3ah/at N	11/01/93	11/29/93	1.2×10^{-16}	1.2×10^{-17}
Area 3, U-3ah/at N	11/29/93	01/03/94	6.6×10^{-17}	1.0×10^{-17}
Area 3, U-3ah/at S	01/04/93	01/25/93	1.4×10^{-18}	1.4×10^{-18}
Area 3, U-3ah/at S	01/25/93	03/01/93	8.1×10^{-18}	4.2×10^{-18}
Area 3, U-3ah/at S	03/01/93	04/05/93	7.2×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at S	04/05/93	05/03/93	4.3×10^{-17}	8.4×10^{-18}
Area 3, U-3ah/at S	05/03/93	06/02/93	2.2×10^{-17}	5.3×10^{-18}
Area 3, U-3ah/at S	06/28/93	07/26/93	9.4×10^{-17}	1.2×10^{-17}
Area 3, U-3ah/at S	07/26/93	08/30/93	1.0×10^{-16}	1.1×10^{-17}
Area 3, U-3ah/at S	08/30/93	09/27/93	1.2×10^{-16}	1.5×10^{-17}
Area 3, U-3ah/at S	09/27/93	11/01/93	1.7×10^{-16}	1.8×10^{-17}
Area 3, U-3ah/at S	11/01/93	11/29/93	2.8×10^{-16}	2.6×10^{-17}
Area 3, U-3ah/at S	11/29/93	01/03/94	2.8×10^{-17}	5.3×10^{-18}
Area 3, U-3ah/at W	01/04/93	01/25/93	3.5×10^{-18}	2.0×10^{-18}
Area 3, U-3ah/at W	01/25/93	03/01/93	6.4×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at W	03/01/93	04/05/93	1.0×10^{-17}	3.1×10^{-18}
Area 3, U-3ah/at W	05/03/93	06/02/93	1.2×10^{-16}	1.7×10^{-17}
Area 3, U-3ah/at W	06/02/93	06/28/93	7.0×10^{-17}	1.2×10^{-17}
Area 3, U-3ah/at W	06/28/93	07/26/93	2.5×10^{-16}	2.6×10^{-17}
Area 3, U-3ah/at W	07/26/93	08/30/93	1.5×10^{-16}	1.7×10^{-17}
Area 3, U-3ah/at W	08/30/93	09/27/93	3.0×10^{-16}	3.0×10^{-17}
Area 3, U-3ah/at W	10/11/93	11/01/93	5.0×10^{-16}	5.2×10^{-17}
Area 3, U-3ah/at W	11/01/93	11/29/93	4.7×10^{-17}	7.7×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at W	11/29/93	01/03/94	3.8×10^{-17}	6.8×10^{-18}
Area 5, DOD Yard	12/28/92	01/26/93	1.1×10^{-18}	1.1×10^{-18}
Area 5, DOD Yard	01/26/93	03/01/93	0.0	0.0
Area 5, DOD Yard	03/01/93	04/05/93	5.1×10^{-18}	5.1×10^{-18}
Area 5, DOD Yard	04/05/93	05/03/93	1.4×10^{-18}	1.4×10^{-18}
Area 5, DOD Yard	05/03/93	06/01/93	0.0	0.0
Area 5, DOD Yard	06/01/93	06/28/93	2.3×10^{-18}	1.6×10^{-18}
Area 5, DOD Yard	06/28/93	07/26/93	1.4×10^{-17}	3.3×10^{-18}
Area 5, DOD Yard	07/26/93	08/30/93	1.1×10^{-17}	4.7×10^{-18}
Area 5, DOD Yard	08/30/93	09/27/93	1.3×10^{-17}	3.9×10^{-18}
Area 5, DOD Yard	09/27/93	11/01/93	6.9×10^{-18}	2.2×10^{-18}
Area 5, DOD Yard	11/29/93	01/03/94	5.0×10^{-18}	2.3×10^{-18}
Area 5, Gate 200	12/28/92	01/26/93	0.0	0.0
Area 5, Gate 200	01/26/93	03/01/93	0.0	0.0
Area 5, Gate 200	03/01/93	04/05/93	8.7×10^{-19}	8.7×10^{-19}
Area 5, Gate 200	04/05/93	05/03/93	0.0	0.0
Area 5, Gate 200	05/03/93	06/01/93	1.4×10^{-18}	1.4×10^{-18}
Area 5, Gate 200	06/01/93	06/28/93	4.3×10^{-17}	1.2×10^{-17}
Area 5, Gate 200	06/28/93	07/26/93	1.9×10^{-18}	1.4×10^{-18}
Area 5, Gate 200	07/26/93	08/30/93	8.7×10^{-18}	2.4×10^{-18}
Area 5, Gate 200	08/30/93	09/27/93	3.2×10^{-18}	2.2×10^{-18}
Area 5, Gate 200	09/27/93	11/01/93	9.7×10^{-19}	9.7×10^{-19}
Area 5, Gate 200	11/01/93	11/29/93	2.2×10^{-18}	1.3×10^{-18}
Area 5, Gate 200	11/29/93	01/03/94	1.4×10^{-18}	1.0×10^{-18}
Area 5, RWMS No. 1	12/28/92	01/26/93	1.0×10^{-18}	1.0×10^{-18}
Area 5, RWMS No. 1	01/26/93	03/01/93	1.7×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 1	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 1	04/05/93	05/03/93	6.5×10^{-18}	3.8×10^{-18}
Area 5, RWMS No. 1	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS No. 1	06/01/93	06/28/93	3.2×10^{-18}	1.8×10^{-18}
Area 5, RWMS No. 1	06/28/93	07/26/93	3.0×10^{-17}	5.5×10^{-18}
Area 5, RWMS No. 1	07/26/93	08/30/93	4.9×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 1	08/30/93	09/27/93	8.7×10^{-18}	3.6×10^{-18}
Area 5, RWMS No. 1	09/27/93	11/01/93	5.7×10^{-17}	7.1×10^{-18}
Area 5, RWMS No. 1	11/01/93	11/29/93	2.7×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 1	11/29/93	01/03/94	1.4×10^{-18}	9.7×10^{-19}
Area 5, RWMS No. 2	12/28/92	01/26/93	3.1×10^{-18}	1.8×10^{-18}
Area 5, RWMS No. 2	01/26/93	03/01/93	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 2	03/01/93	04/05/93	1.6×10^{-18}	1.1×10^{-18}
Area 5, RWMS No. 2	04/05/93	05/03/93	3.9×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 2	05/03/93	06/01/93	0.0	0.0
Area 5, RWMS No. 2	06/01/93	06/28/93	2.4×10^{-18}	2.4×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 2	06/28/93	07/26/93	1.2×10^{-17}	3.8×10^{-18}
Area 5, RWMS No. 2	07/26/93	08/30/93	7.4×10^{-18}	2.7×10^{-18}
Area 5, RWMS No. 2	08/30/93	09/27/93	5.5×10^{-17}	9.5×10^{-18}
Area 5, RWMS No. 2	09/27/93	11/01/93	8.9×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 2	11/01/93	11/29/93	3.3×10^{-18}	2.4×10^{-18}
Area 5, RWMS No. 2	11/29/93	01/03/94	3.4×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 3	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 3	01/26/93	03/01/93	3.9×10^{-18}	4.0×10^{-18}
Area 5, RWMS No. 3	03/01/93	04/05/93	1.8×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 3	04/05/93	04/26/93	0.0	0.0
Area 5, RWMS No. 3	05/03/93	06/01/93	3.5×10^{-17}	8.5×10^{-18}
Area 5, RWMS No. 3	06/01/93	06/28/93	1.5×10^{-17}	4.6×10^{-18}
Area 5, RWMS No. 3	06/28/93	07/26/93	3.7×10^{-17}	8.0×10^{-18}
Area 5, RWMS No. 3	07/26/93	08/30/93	6.0×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 3	08/30/93	09/27/93	1.3×10^{-17}	4.4×10^{-18}
Area 5, RWMS No. 3	09/27/93	11/01/93	5.2×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 3	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 3	11/29/93	01/03/94	1.9×10^{-18}	1.3×10^{-18}
Area 5, RWMS No. 4	12/28/92	01/26/93	8.7×10^{-19}	8.7×10^{-19}
Area 5, RWMS No. 4	01/26/93	03/01/93	9.2×10^{-19}	9.3×10^{-19}
Area 5, RWMS No. 4	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 4	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS No. 4	05/03/93	06/01/93	5.7×10^{-18}	4.1×10^{-18}
Area 5, RWMS No. 4	06/01/93	06/28/93	1.2×10^{-17}	3.2×10^{-18}
Area 5, RWMS No. 4	06/28/93	07/26/93	8.1×10^{-18}	2.6×10^{-18}
Area 5, RWMS No. 4	07/26/93	08/30/93	2.1×10^{-17}	4.4×10^{-18}
Area 5, RWMS No. 4	08/30/93	09/27/93	1.6×10^{-17}	4.3×10^{-18}
Area 5, RWMS No. 4	09/27/93	11/01/93	2.0×10^{-17}	3.8×10^{-18}
Area 5, RWMS No. 4	11/29/93	01/03/94	3.8×10^{-17}	6.9×10^{-18}
Area 5, RWMS No. 5	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 5	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 5	03/01/93	04/05/93	2.7×10^{-18}	1.6×10^{-18}
Area 5, RWMS No. 5	04/05/93	05/03/93	6.3×10^{-18}	3.2×10^{-18}
Area 5, RWMS No. 5	05/03/93	06/01/93	1.0×10^{-17}	4.8×10^{-18}
Area 5, RWMS No. 5	06/01/93	06/28/93	3.9×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 5	06/28/93	07/26/93	4.2×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 5	07/26/93	08/30/93	1.5×10^{-17}	4.5×10^{-18}
Area 5, RWMS No. 5	08/30/93	09/27/93	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 5	09/27/93	11/01/93	2.4×10^{-16}	2.5×10^{-17}
Area 5, RWMS No. 5	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS No. 5	11/29/93	01/03/94	8.3×10^{-19}	8.3×10^{-19}
Area 5, RWMS No. 6	12/28/92	01/26/93	0.0	0.0

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 6	01/26/93	03/01/93	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 6	03/01/93	04/05/93	1.8×10^{-18}	1.0×10^{-18}
Area 5, RWMS No. 6	04/05/93	05/03/93	9.7×10^{-18}	3.3×10^{-18}
Area 5, RWMS No. 6	05/03/93	06/01/93	4.4×10^{-18}	4.4×10^{-18}
Area 5, RWMS No. 6	06/01/93	06/28/93	6.8×10^{-18}	2.8×10^{-18}
Area 5, RWMS No. 6	06/28/93	07/26/93	1.7×10^{-17}	4.1×10^{-18}
Area 5, RWMS No. 6	07/26/93	08/30/93	1.2×10^{-17}	4.0×10^{-18}
Area 5, RWMS No. 6	08/30/93	09/27/93	1.2×10^{-17}	4.0×10^{-18}
Area 5, RWMS No. 6	09/27/93	11/01/93	6.0×10^{-18}	2.7×10^{-16}
Area 5, RWMS No. 6	11/01/93	11/29/93	3.4×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 6	11/29/93	01/03/94	1.4×10^{-17}	6.5×10^{-18}
Area 5, RWMS No. 7	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 7	01/26/93	03/01/93	1.3×10^{-18}	1.3×10^{-18}
Area 5, RWMS No. 7	03/01/93	04/05/93	8.9×10^{-19}	8.9×10^{-19}
Area 5, RWMS No. 7	04/05/93	05/03/93	4.7×10^{-18}	2.7×10^{-18}
Area 5, RWMS No. 7	05/03/93	06/01/93	2.7×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 7	06/01/93	06/28/93	1.3×10^{-16}	1.5×10^{-17}
Area 5, RWMS No. 7	06/28/93	07/26/93	2.4×10^{-17}	4.9×10^{-18}
Area 5, RWMS No. 7	07/26/93	08/30/93	1.1×10^{-17}	2.9×10^{-18}
Area 5, RWMS No. 7	08/30/93	09/27/93	4.0×10^{-17}	7.6×10^{-18}
Area 5, RWMS No. 7	09/27/93	11/01/93	4.9×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 7	11/01/93	11/29/93	2.7×10^{-17}	4.9×10^{-18}
Area 5, RWMS No. 8	12/28/92	01/26/93	2.1×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 8	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 8	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS No. 8	05/03/93	06/01/93	1.1×10^{-17}	3.5×10^{-18}
Area 5, RWMS No. 8	06/01/93	06/28/93	1.8×10^{-18}	1.3×10^{-18}
Area 5, RWMS No. 8	06/28/93	07/26/93	3.6×10^{-18}	1.8×10^{-18}
Area 5, RWMS No. 8	07/26/93	08/30/93	1.6×10^{-17}	4.1×10^{-18}
Area 5, RWMS No. 8	08/30/93	09/27/93	1.5×10^{-17}	5.7×10^{-18}
Area 5, RWMS No. 8	09/27/93	11/01/93	8.2×10^{-18}	3.2×10^{-18}
Area 5, RWMS No. 8	11/01/93	11/29/93	6.1×10^{-18}	3.6×10^{-18}
Area 5, RWMS No. 8	11/29/93	01/03/94	1.4×10^{-17}	3.4×10^{-18}
Area 5, RWMS No. 9	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS No. 9	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS No. 9	03/01/93	04/05/93	7.4×10^{-19}	7.4×10^{-19}
Area 5, RWMS No. 9	04/05/93	05/03/93	5.3×10^{-18}	3.1×10^{-18}
Area 5, RWMS No. 9	05/03/93	06/01/93	3.0×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 9	06/01/93	06/28/93	1.8×10^{-17}	4.2×10^{-18}
Area 5, RWMS No. 9	06/28/93	07/26/93	1.3×10^{-17}	3.2×10^{-18}
Area 5, RWMS No. 9	07/26/93	08/30/93	2.6×10^{-17}	4.4×10^{-18}
Area 5, RWMS No. 9	08/30/93	09/27/93	1.3×10^{-17}	5.0×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 9	09/27/93	11/01/93	1.4×10^{-17}	4.6×10^{-18}
Area 5, RWMS No. 9	11/01/93	11/29/93	4.5×10^{-18}	2.2×10^{-18}
Area 5, RWMS Pit No. 3	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS Pit No. 3	01/26/93	03/01/93	4.6×10^{-18}	4.6×10^{-18}
Area 5, RWMS Pit No. 3	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS Pit No. 3	04/05/93	05/03/93	0.0	0.0
Area 5, RWMS Pit No. 3	05/03/93	06/01/93	1.5×10^{-18}	1.5×10^{-18}
Area 5, RWMS Pit No. 3	06/01/93	06/28/93	0.0	0.0
Area 5, RWMS Pit No. 3	06/28/93	07/26/93	4.9×10^{-18}	2.2×10^{-18}
Area 5, RWMS Pit No. 3	07/26/93	08/30/93	7.6×10^{-18}	2.7×10^{-18}
Area 5, RWMS Pit No. 3	08/30/93	09/27/93	9.9×10^{-19}	9.9×10^{-19}
Area 5, RWMS Pit No. 3	09/27/93	11/01/93	2.5×10^{-18}	1.4×10^{-18}
Area 5, RWMS Pit No. 3	11/01/93	11/29/93	2.8×10^{-18}	1.6×10^{-18}
Area 5, RWMS Pit No. 3	11/29/93	01/03/94	2.8×10^{-18}	1.4×10^{-18}
Area 5, RWMS Pit No. 4	12/28/92	01/26/93	5.7×10^{-18}	4.0×10^{-18}
Area 5, RWMS Pit No. 4	01/26/93	03/01/93	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS Pit No. 4	03/01/93	04/05/93	0.0	0.0
Area 5, RWMS Pit No. 4	04/05/93	05/03/93	5.5×10^{-18}	2.3×10^{-18}
Area 5, RWMS Pit No. 4	05/03/93	06/01/93	3.7×10^{-17}	8.0×10^{-18}
Area 5, RWMS Pit No. 4	06/01/93	06/28/93	1.1×10^{-17}	3.8×10^{-18}
Area 5, RWMS Pit No. 4	06/28/93	07/26/93	2.0×10^{-17}	4.5×10^{-18}
Area 5, RWMS Pit No. 4	07/26/93	08/30/93	3.0×10^{-17}	6.2×10^{-18}
Area 5, RWMS Pit No. 4	08/30/93	09/27/93	1.9×10^{-17}	4.7×10^{-18}
Area 5, RWMS Pit No. 4	09/27/93	11/01/93	3.2×10^{-17}	7.0×10^{-18}
Area 5, RWMS Pit No. 4	11/01/93	11/29/93	1.6×10^{-18}	1.2×10^{-18}
Area 5, RWMS Pit No. 4	11/29/93	01/03/94	5.2×10^{-18}	2.4×10^{-18}
Area 5, RWMS TP N	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP N	03/01/93	04/05/93	8.4×10^{-19}	8.4×10^{-19}
Area 5, RWMS TP N	04/05/93	05/03/93	2.6×10^{-18}	1.5×10^{-18}
Area 5, RWMS TP N	05/03/93	06/01/93	1.3×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP N	06/01/93	06/28/93	2.7×10^{-17}	6.4×10^{-18}
Area 5, RWMS TP N	06/28/93	07/26/93	1.1×10^{-17}	5.0×10^{-18}
Area 5, RWMS TP N	07/26/93	08/30/93	1.3×10^{-17}	4.4×10^{-18}
Area 5, RWMS TP N	08/30/93	09/27/93	1.0×10^{-17}	3.3×10^{-18}
Area 5, RWMS TP N	09/27/93	11/01/93	2.0×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP N	11/01/93	11/29/93	5.1×10^{-18}	2.1×10^{-18}
Area 5, RWMS TP N	11/29/93	12/27/93	5.8×10^{-18}	2.6×10^{-18}
Area 5, RWMS TP NE	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP NE	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS TP NE	03/01/93	04/05/93	3.0×10^{-18}	1.8×10^{-18}
Area 5, RWMS TP NE	04/05/93	05/03/93	1.8×10^{-18}	1.2×10^{-18}
Area 5, RWMS TP NE	05/03/93	06/01/93	3.0×10^{-18}	2.1×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP NE	06/01/93	06/28/93	7.9×10^{-18}	2.5×10^{-18}
Area 5, RWMS TP NE	06/28/93	07/26/93	3.4×10^{-17}	8.2×10^{-18}
Area 5, RWMS TP NE	07/26/93	08/30/93	2.1×10^{-17}	6.5×10^{-18}
Area 5, RWMS TP NE	08/30/93	09/27/93	7.8×10^{-18}	2.8×10^{-18}
Area 5, RWMS TP NE	09/27/93	11/01/93	4.9×10^{-18}	2.2×10^{-18}
Area 5, RWMS TP NE	11/01/93	11/29/93	2.5×10^{-18}	1.8×10^{-18}
Area 5, RWMS TP NE	11/29/93	01/03/94	1.4×10^{-18}	9.9×10^{-19}
Area 5, RWMS TP NW	12/28/92	01/26/93	1.9×10^{-17}	5.2×10^{-18}
Area 5, RWMS TP NW	01/26/93	03/01/93	5.7×10^{-18}	2.9×10^{-18}
Area 5, RWMS TP NW	03/01/93	04/05/93	8.8×10^{-19}	8.8×10^{-19}
Area 5, RWMS TP NW	04/05/93	05/03/93	7.0×10^{-18}	2.5×10^{-18}
Area 5, RWMS TP NW	05/03/93	06/01/93	6.4×10^{-18}	3.3×10^{-18}
Area 5, RWMS TP NW	06/01/93	06/28/93	2.7×10^{-18}	2.7×10^{-18}
Area 5, RWMS TP NW	06/28/93	07/26/93	2.9×10^{-17}	5.8×10^{-18}
Area 5, RWMS TP NW	07/26/93	08/30/93	1.1×10^{-17}	3.1×10^{-18}
Area 5, RWMS TP NW	08/30/93	09/27/93	6.4×10^{-18}	2.7×10^{-18}
Area 5, RWMS TP NW	09/27/93	11/01/93	6.8×10^{-16}	5.8×10^{-17}
Area 5, RWMS TP NW	11/01/93	11/29/93	5.1×10^{-18}	2.1×10^{-18}
Area 5, RWMS TP NW	11/29/93	01/03/94	3.8×10^{-18}	2.2×10^{-18}
Area 5, RWMS TP S	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP S	01/26/93	03/01/93	3.3×10^{-18}	2.4×10^{-18}
Area 5, RWMS TP S	03/01/93	04/05/93	7.5×10^{-19}	7.6×10^{-19}
Area 5, RWMS TP S	04/05/93	05/03/93	4.0×10^{-18}	1.8×10^{-18}
Area 5, RWMS TP S	05/03/93	06/01/93	6.9×10^{-18}	2.9×10^{-18}
Area 5, RWMS TP S	06/28/93	07/26/93	1.1×10^{-17}	3.8×10^{-18}
Area 5, RWMS TP S	07/26/93	08/30/93	6.7×10^{-18}	2.6×10^{-18}
Area 5, RWMS TP S	08/30/93	09/27/93	1.9×10^{-17}	7.0×10^{-18}
Area 5, RWMS TP S	10/04/93	11/01/93	1.6×10^{-17}	5.6×10^{-18}
Area 5, RWMS TP S	11/01/93	11/29/93	5.1×10^{-18}	2.1×10^{-18}
Area 5, RWMS TP S	11/29/93	01/03/94	9.0×10^{-19}	9.1×10^{-19}
Area 5, RWMS TP SE	01/26/93	03/01/93	0.0	0.0
Area 5, RWMS TP SE	03/01/93	04/05/93	2.1×10^{-18}	1.2×10^{-18}
Area 5, RWMS TP SE	04/05/93	05/03/93	2.1×10^{-17}	5.0×10^{-18}
Area 5, RWMS TP SE	05/03/93	06/01/93	3.1×10^{-18}	2.2×10^{-18}
Area 5, RWMS TP SE	06/28/93	07/26/93	1.8×10^{-18}	1.8×10^{-18}
Area 5, RWMS TP SE	07/26/93	08/30/93	9.9×10^{-18}	3.4×10^{-18}
Area 5, RWMS TP SE	08/30/93	09/27/93	6.8×10^{-17}	7.9×10^{-18}
Area 5, RWMS TP SE	09/27/93	11/01/93	9.6×10^{-18}	3.7×10^{-18}
Area 5, RWMS TP SE	11/01/93	11/29/93	1.0×10^{-17}	3.4×10^{-18}
Area 5, RWMS TP SE	11/29/93	01/03/94	5.8×10^{-18}	2.6×10^{-18}
Area 5, RWMS TP SW	12/28/92	01/26/93	0.0	0.0
Area 5, RWMS TP SW	01/26/93	03/01/93	1.6×10^{-18}	1.1×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP SW	03/01/93	04/05/93	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS TP SW	04/05/93	05/03/93	5.8×10^{-18}	2.6×10^{-18}
Area 5, RWMS TP SW	06/28/93	07/26/93	8.4×10^{-18}	3.5×10^{-18}
Area 5, RWMS TP SW	07/26/93	08/30/93	2.0×10^{-17}	3.9×10^{-18}
Area 5, RWMS TP SW	08/30/93	09/27/93	4.1×10^{-18}	1.9×10^{-18}
Area 5, RWMS TP SW	09/27/93	11/01/93	2.0×10^{-18}	2.0×10^{-18}
Area 5, RWMS TP SW	11/01/93	11/29/93	0.0	0.0
Area 5, RWMS TP SW	11/29/93	01/03/94	3.9×10^{-18}	1.6×10^{-18}
Area 5, Well 5B	02/01/93	03/01/93	2.6×10^{-18}	2.6×10^{-18}
Area 5, Well 5B	03/01/93	04/05/93	2.0×10^{-18}	1.4×10^{-18}
Area 5, Well 5B	05/03/93	06/01/93	5.2×10^{-18}	2.6×10^{-18}
Area 5, Well 5B	06/01/93	06/28/93	2.5×10^{-17}	1.8×10^{-17}
Area 5, Well 5B	06/28/93	07/26/93	9.7×10^{-18}	2.8×10^{-18}
Area 5, Well 5B	07/26/93	08/30/93	3.4×10^{-17}	5.8×10^{-18}
Area 5, Well 5B	08/30/93	09/27/93	9.3×10^{-18}	3.6×10^{-18}
Area 5, Well 5B	09/27/93	11/01/93	6.8×10^{-18}	2.1×10^{-18}
Area 5, Well 5B	11/01/93	11/29/93	4.1×10^{-18}	2.0×10^{-18}
Area 5, Well 5B	11/29/93	01/03/94	5.7×10^{-18}	2.6×10^{-18}
Area 6, Building 6-900	12/29/92	01/25/93	1.5×10^{-18}	1.5×10^{-18}
Area 6, Building 6-900	01/25/93	03/01/93	1.5×10^{-18}	1.5×10^{-18}
Area 6, Building 6-900	03/01/93	04/05/93	1.1×10^{-18}	1.1×10^{-18}
Area 6, Building 6-900	04/05/93	05/03/93	2.8×10^{-17}	5.2×10^{-18}
Area 6, Building 6-900	05/10/93	06/01/93	2.1×10^{-17}	8.1×10^{-18}
Area 6, Building 6-900	06/01/93	06/14/93	1.3×10^{-17}	5.8×10^{-18}
Area 6, Building 6-900	07/08/93	07/26/93	3.4×10^{-17}	8.0×10^{-18}
Area 6, Building 6-900	07/26/93	08/30/93	4.2×10^{-17}	7.4×10^{-18}
Area 6, Building 6-900	08/30/93	09/27/93	2.3×10^{-17}	5.0×10^{-18}
Area 6, Building 6-900	09/27/93	11/01/93	2.9×10^{-17}	6.9×10^{-18}
Area 6, Building 6-900	11/01/93	11/29/93	1.0×10^{-17}	3.0×10^{-18}
Area 6, Building 6-900	11/29/93	01/03/94	5.4×10^{-18}	2.2×10^{-18}
Area 6, CP-6	12/29/92	01/25/93	0.0	0.0
Area 6, CP-6	01/25/93	03/01/93	4.6×10^{-18}	1.9×10^{-18}
Area 6, CP-6	03/01/93	04/05/93	4.3×10^{-18}	1.7×10^{-18}
Area 6, CP-6	04/05/93	05/03/93	7.9×10^{-18}	4.0×10^{-18}
Area 6, CP-6	05/03/93	06/01/93	1.0×10^{-17}	6.2×10^{-18}
Area 6, CP-6	06/01/93	06/28/93	7.6×10^{-18}	2.7×10^{-18}
Area 6, CP-6	06/28/93	07/26/93	3.7×10^{-17}	5.6×10^{-18}
Area 6, CP-6	07/26/93	08/30/93	2.2×10^{-17}	5.1×10^{-18}
Area 6, CP-6	08/30/93	09/27/93	8.3×10^{-17}	1.1×10^{-17}
Area 6, CP-6	09/27/93	11/01/93	2.5×10^{-17}	4.8×10^{-18}
Area 6, CP-6	11/01/93	11/29/93	5.8×10^{-17}	1.3×10^{-17}
Area 6, CP-6	11/29/93	01/03/94	1.3×10^{-17}	3.6×10^{-18}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well 3 Complex	12/29/92	01/25/93	1.1×10^{-18}	1.1×10^{-18}
Area 6, Well 3 Complex	01/25/93	03/01/93	6.1×10^{-19}	6.1×10^{-19}
Area 6, Well 3 Complex	03/01/93	04/05/93	4.2×10^{-18}	2.4×10^{-18}
Area 6, Well 3 Complex	04/05/93	05/03/93	6.3×10^{-17}	1.1×10^{-17}
Area 6, Well 3 Complex	05/03/93	06/01/93	1.6×10^{-18}	1.6×10^{-18}
Area 6, Well 3 Complex	06/28/93	07/26/93	3.2×10^{-17}	9.6×10^{-18}
Area 6, Well 3 Complex	07/26/93	08/30/93	2.5×10^{-17}	4.6×10^{-18}
Area 6, Well 3 Complex	08/30/93	09/27/93	1.5×10^{-16}	1.6×10^{-17}
Area 6, Well 3 Complex	09/27/93	11/01/93	3.7×10^{-17}	5.6×10^{-18}
Area 6, Well 3 Complex	11/01/93	11/29/93	8.0×10^{-18}	4.3×10^{-18}
Area 6, Well 3 Complex	11/29/93	01/03/94	1.3×10^{-18}	9.2×10^{-19}
Area 6, Yucca Complex	12/29/92	01/25/93	2.0×10^{-18}	1.4×10^{-18}
Area 6, Yucca Complex	01/25/93	03/01/93	6.7×10^{-18}	2.3×10^{-18}
Area 6, Yucca Complex	03/01/93	04/05/93	4.8×10^{-18}	2.8×10^{-18}
Area 6, Yucca Complex	04/05/93	05/03/93	1.9×10^{-17}	5.8×10^{-18}
Area 6, Yucca Complex	05/03/93	06/01/93	2.1×10^{-17}	5.8×10^{-18}
Area 6, Yucca Complex	06/01/93	06/28/93	1.1×10^{-17}	3.6×10^{-18}
Area 6, Yucca Complex	06/28/93	07/26/93	6.4×10^{-17}	9.6×10^{-18}
Area 6, Yucca Complex	07/26/93	08/16/93	8.3×10^{-17}	1.2×10^{-17}
Area 6, Yucca Complex	08/30/93	09/27/93	1.1×10^{-17}	3.6×10^{-18}
Area 6, Yucca Complex	10/04/93	11/01/93	3.8×10^{-18}	1.9×10^{-18}
Area 6, Yucca Complex	11/01/93	11/29/93	4.5×10^{-17}	7.6×10^{-18}
Area 6, Yucca Complex	11/29/93	01/03/94	3.6×10^{-18}	2.1×10^{-18}
Area 7, UE-7ns	12/29/92	01/25/93	0.0	0.0
Area 7, UE-7ns	01/25/93	03/01/93	5.1×10^{-18}	2.0×10^{-18}
Area 7, UE-7ns	03/01/93	04/05/93	0.0	0.0
Area 7, UE-7ns	04/05/93	05/03/93	1.4×10^{-17}	4.7×10^{-18}
Area 7, UE-7ns	05/03/93	06/01/93	3.7×10^{-17}	7.4×10^{-18}
Area 7, UE-7ns	06/01/93	06/22/93	3.5×10^{-17}	7.2×10^{-18}
Area 7, UE-7ns	06/29/93	07/19/93	5.4×10^{-17}	8.9×10^{-18}
Area 7, UE-7ns	08/02/93	08/30/93	7.8×10^{-17}	9.5×10^{-18}
Area 7, UE-7ns	08/30/93	09/27/93	3.2×10^{-17}	6.1×10^{-18}
Area 7, UE-7ns	09/27/93	11/01/93	6.6×10^{-18}	2.0×10^{-18}
Area 7, UE-7ns	11/29/93	01/03/94	6.5×10^{-18}	2.5×10^{-18}
Area 9, 9-300 Bunker	12/29/92	01/25/93	2.1×10^{-17}	5.6×10^{-18}
Area 9, 9-300 Bunker	01/25/93	03/01/93	2.7×10^{-17}	4.6×10^{-18}
Area 9, 9-300 Bunker	03/01/93	04/05/93	1.2×10^{-17}	3.3×10^{-18}
Area 9, 9-300 Bunker	04/05/93	05/03/93	6.7×10^{-17}	1.2×10^{-17}
Area 9, 9-300 Bunker	05/03/93	06/01/93	1.6×10^{-16}	2.0×10^{-17}
Area 9, 9-300 Bunker	06/28/93	07/26/93	3.0×10^{-16}	3.5×10^{-17}
Area 9, 9-300 Bunker	07/26/93	08/30/93	4.4×10^{-16}	3.3×10^{-17}
Area 9, 9-300 Bunker	08/30/93	09/27/93	2.7×10^{-15}	2.0×10^{-16}

Attachment A.2 ($^{239+240}$Pu in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 9, 9-300 Bunker	09/27/93	11/01/93	7.4×10^{-16}	6.0×10^{-17}
Area 9, 9-300 Bunker	11/01/93	11/29/93	8.5×10^{-16}	6.8×10^{-17}
Area 9, 9-300 Bunker	11/29/93	01/03/94	3.0×10^{-16}	2.7×10^{-17}
Area 10, Gate 700	12/29/92	01/25/93	0.0	0.0
Area 10, Gate 700	01/25/93	03/01/93	0.0	0.0
Area 10, Gate 700	03/01/93	04/05/93	4.5×10^{-18}	2.0×10^{-18}
Area 10, Gate 700	04/05/93	05/03/93	1.4×10^{-17}	4.3×10^{-18}
Area 10, Gate 700	05/03/93	06/01/93	1.6×10^{-17}	8.2×10^{-18}
Area 10, Gate 700	06/01/93	06/28/93	1.4×10^{-17}	3.6×10^{-18}
Area 10, Gate 700	06/28/93	07/26/93	1.7×10^{-16}	2.1×10^{-17}
Area 10, Gate 700	07/26/93	08/30/93	2.3×10^{-17}	4.7×10^{-18}
Area 10, Gate 700	08/30/93	09/27/93	2.1×10^{-17}	5.4×10^{-18}
Area 10, Gate 700	09/27/93	11/01/93	1.1×10^{-17}	3.7×10^{-18}
Area 10, Gate 700	11/01/93	11/29/93	3.5×10^{-18}	2.0×10^{-18}
Area 10, Gate 700	11/29/93	01/03/94	1.2×10^{-18}	1.2×10^{-18}
Area 11, Gate 293	12/29/92	01/25/93	2.6×10^{-18}	2.6×10^{-18}
Area 11, Gate 293	01/25/93	03/01/93	8.0×10^{-19}	8.1×10^{-19}
Area 11, Gate 293	03/01/93	04/05/93	4.5×10^{-18}	2.3×10^{-18}
Area 11, Gate 293	04/05/93	05/03/93	5.6×10^{-18}	2.1×10^{-18}
Area 11, Gate 293	05/03/93	06/01/93	4.2×10^{-16}	4.4×10^{-17}
Area 11, Gate 293	06/28/93	07/26/93	1.5×10^{-16}	2.7×10^{-17}
Area 11, Gate 293	07/26/93	08/16/93	1.6×10^{-16}	1.7×10^{-17}
Area 11, Gate 293	08/30/93	09/27/93	2.1×10^{-17}	5.6×10^{-18}
Area 11, Gate 293	09/27/93	11/01/93	3.4×10^{-17}	6.5×10^{-18}
Area 11, Gate 293	11/01/93	11/29/93	2.3×10^{-17}	6.6×10^{-18}
Area 11, Gate 293	11/29/93	01/03/94	2.4×10^{-17}	4.6×10^{-18}
Area 12, Complex	01/25/93	03/01/93	1.5×10^{-18}	1.1×10^{-18}
Area 12, Complex	04/05/93	05/03/93	3.8×10^{-18}	2.8×10^{-18}
Area 12, Complex	05/03/93	06/01/93	-1.3×10^{-18}	7.7×10^{-19}
Area 12, Complex	06/28/93	07/26/93	2.2×10^{-18}	1.2×10^{-18}
Area 12, Complex	07/26/93	08/30/93	1.7×10^{-18}	1.2×10^{-18}
Area 12, Complex	08/30/93	09/27/93	1.6×10^{-18}	1.6×10^{-18}
Area 12, Complex	10/04/93	11/01/93	8.4×10^{-16}	7.6×10^{-17}
Area 12, Complex	11/01/93	11/29/93	2.2×10^{-17}	5.2×10^{-18}
Area 12, Complex	11/29/93	01/03/94	4.8×10^{-18}	2.0×10^{-18}
Area 12, P Tunnel Portal	01/25/93	03/01/93	1.8×10^{-16}	2.8×10^{-17}
Area 12, P Tunnel Portal	03/01/93	04/05/93	3.4×10^{-17}	1.8×10^{-17}
Area 12, P Tunnel Portal	06/28/93	07/26/93	1.1×10^{-16}	8.2×10^{-17}
Area 12, P Tunnel Portal	07/26/93	08/30/93	8.7×10^{-17}	4.0×10^{-17}
Area 15, EPA Farm	12/29/92	01/25/93	2.2×10^{-18}	1.6×10^{-18}
Area 15, EPA Farm	03/01/93	04/05/93	4.2×10^{-18}	1.7×10^{-18}
Area 15, EPA Farm	04/05/93	05/03/93	3.1×10^{-17}	5.5×10^{-18}

Attachment A.3 Gross Beta in Air - 1993

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	01/04/93	01/11/93	1.3×10^{-14}	9.5×10^{-16}
Area 1, BJY	01/11/93	01/19/93	5.5×10^{-15}	7.2×10^{-16}
Area 1, BJY	01/19/93	01/25/93	1.3×10^{-14}	1.1×10^{-15}
Area 1, BJY	01/25/93	02/01/93	2.8×10^{-14}	1.1×10^{-15}
Area 1, BJY	02/01/93	02/08/93	9.1×10^{-15}	8.8×10^{-16}
Area 1, BJY	02/08/93	02/16/93	2.4×10^{-14}	9.8×10^{-16}
Area 1, BJY	02/16/93	02/22/93	1.6×10^{-14}	1.1×10^{-15}
Area 1, BJY	02/22/93	03/01/93	1.4×10^{-14}	9.3×10^{-16}
Area 1, BJY	03/01/93	03/08/93	1.6×10^{-14}	9.6×10^{-16}
Area 1, BJY	03/08/93	03/15/93	1.9×10^{-14}	1.0×10^{-15}
Area 1, BJY	03/15/93	03/22/93	1.1×10^{-14}	8.9×10^{-16}
Area 1, BJY	03/22/93	03/29/93	1.6×10^{-14}	9.7×10^{-16}
Area 1, BJY	03/29/93	04/05/93	1.7×10^{-14}	1.0×10^{-15}
Area 1, BJY	04/05/93	04/12/93	1.6×10^{-14}	9.8×10^{-16}
Area 1, BJY	04/12/93	04/19/93	1.6×10^{-14}	9.7×10^{-16}
Area 1, BJY	04/19/93	04/26/93	1.4×10^{-14}	9.3×10^{-16}
Area 1, BJY	04/26/93	05/03/93	1.8×10^{-14}	9.9×10^{-16}
Area 1, BJY	05/03/93	05/10/93	1.4×10^{-14}	9.6×10^{-16}
Area 1, BJY	05/10/93	05/18/93	1.6×10^{-14}	8.8×10^{-16}
Area 1, BJY	05/18/93	05/24/93	1.7×10^{-14}	1.1×10^{-15}
Area 1, BJY	05/24/93	06/01/93	1.3×10^{-14}	8.3×10^{-16}
Area 1, BJY	06/01/93	06/07/93	1.3×10^{-14}	1.1×10^{-15}
Area 1, BJY	06/07/93	06/14/93	1.9×10^{-14}	1.0×10^{-15}
Area 1, BJY	06/14/93	06/21/93	1.9×10^{-14}	1.0×10^{-15}
Area 1, BJY	06/21/93	06/28/93	1.7×10^{-14}	9.7×10^{-16}
Area 1, BJY	06/28/93	07/06/93	2.0×10^{-14}	9.6×10^{-16}
Area 1, BJY	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 1, BJY	07/12/93	07/19/93	2.2×10^{-14}	1.1×10^{-15}
Area 1, BJY	07/19/93	07/26/93	1.6×10^{-14}	9.9×10^{-16}
Area 1, BJY	07/26/93	08/02/93	1.5×10^{-14}	9.8×10^{-16}
Area 1, BJY	08/02/93	08/09/93	2.2×10^{-14}	1.3×10^{-15}
Area 1, BJY	08/09/93	08/16/93	2.1×10^{-14}	1.1×10^{-15}
Area 1, BJY	08/16/93	08/23/93	1.9×10^{-14}	1.0×10^{-15}
Area 1, BJY	08/23/93	08/30/93	2.5×10^{-14}	1.2×10^{-15}
Area 1, BJY	08/30/93	09/08/93	1.9×10^{-14}	9.0×10^{-16}
Area 1, BJY	09/08/93	09/13/93	2.5×10^{-14}	1.3×10^{-15}
Area 1, BJY	09/13/93	09/20/93	2.4×10^{-14}	1.2×10^{-15}
Area 1, BJY	09/20/93	09/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 1, BJY	09/27/93	10/04/93	3.8×10^{-14}	1.3×10^{-15}
Area 1, BJY	10/04/93	10/11/93	2.2×10^{-14}	1.1×10^{-15}
Area 1, BJY	10/11/93	10/18/93	1.3×10^{-14}	1.0×10^{-15}
Area 1, BJY	10/18/93	10/25/93	2.5×10^{-14}	1.2×10^{-15}
Area 1, BJY	10/25/93	11/01/93	2.2×10^{-14}	1.1×10^{-15}
Area 1, BJY	11/01/93	11/08/93	2.4×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, BJY	11/08/93	11/15/93	2.8×10^{-14}	1.0×10^{-15}
Area 1, BJY	11/15/93	11/22/93	4.0×10^{-14}	1.6×10^{-15}
Area 1, BJY	11/22/93	11/29/93	2.6×10^{-14}	1.2×10^{-15}
Area 1, BJY	11/29/93	12/06/93	2.4×10^{-14}	1.1×10^{-15}
Area 1, BJY	12/06/93	12/13/93	2.3×10^{-14}	1.2×10^{-15}
Area 1, BJY	12/13/93	12/20/93	2.7×10^{-14}	1.2×10^{-15}
Area 1, BJY	12/20/93	12/27/93	2.8×10^{-14}	1.2×10^{-15}
Area 1, BJY	12/27/93	01/03/94	2.6×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	01/04/93	01/12/93	1.3×10^{-14}	8.4×10^{-16}
Area 1, Gravel Pit	01/12/93	01/19/93	4.4×10^{-15}	7.7×10^{-16}
Area 1, Gravel Pit	01/19/93	01/25/93	1.4×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	01/25/93	02/01/93	2.1×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	02/01/93	02/08/93	2.8×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	02/08/93	02/16/93	1.2×10^{-14}	8.3×10^{-16}
Area 1, Gravel Pit	02/16/93	02/22/93	1.1×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	02/22/93	03/01/93	1.0×10^{-14}	8.7×10^{-16}
Area 1, Gravel Pit	03/01/93	03/08/93	1.3×10^{-14}	9.2×10^{-16}
Area 1, Gravel Pit	03/08/93	03/15/93	2.0×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	03/15/93	03/22/93	9.5×10^{-15}	9.6×10^{-16}
Area 1, Gravel Pit	03/22/93	03/30/93	1.5×10^{-14}	9.4×10^{-16}
Area 1, Gravel Pit	03/30/93	04/05/93	1.8×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	04/05/93	04/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	04/12/93	04/19/93	1.4×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	04/19/93	04/26/93	1.4×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	04/26/93	05/03/93	1.8×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	05/03/93	05/10/93	1.6×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	05/10/93	05/18/93	2.1×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	05/18/93	05/24/93	1.7×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	05/24/93	06/01/93	1.6×10^{-14}	9.4×10^{-16}
Area 1, Gravel Pit	06/01/93	06/07/93	1.3×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	06/07/93	06/14/93	2.0×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	06/14/93	06/22/93	2.2×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	06/22/93	06/28/93	1.8×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	06/28/93	07/06/93	2.3×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	07/06/93	07/12/93	2.0×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	07/12/93	07/19/93	2.2×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	07/19/93	07/26/93	1.5×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	07/26/93	08/02/93	1.8×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	08/02/93	08/09/93	2.6×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	08/09/93	08/16/93	2.2×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	08/16/93	08/23/93	1.8×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	08/23/93	08/30/93	2.3×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	08/30/93	09/08/93	1.9×10^{-14}	9.3×10^{-16}
Area 1, Gravel Pit	09/08/93	09/13/93	2.7×10^{-14}	1.6×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Gravel Pit	09/13/93	09/20/93	2.7×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	09/20/93	09/27/93	2.1×10^{-14}	8.9×10^{-16}
Area 1, Gravel Pit	09/27/93	10/04/93	6.9×10^{-14}	2.4×10^{-15}
Area 1, Gravel Pit	10/04/93	10/11/93	2.0×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	10/11/93	10/18/93	1.7×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	10/18/93	10/25/93	2.8×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	10/25/93	11/01/93	2.3×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	11/01/93	11/08/93	2.6×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	11/08/93	11/15/93	3.5×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	11/15/93	11/22/93	3.2×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	11/22/93	11/29/93	3.0×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	11/29/93	12/06/93	1.9×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	12/06/93	12/13/93	2.8×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	12/13/93	12/20/93	2.6×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	12/20/93	12/27/93	2.8×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	12/27/93	01/03/94	2.8×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	01/04/93	01/11/93	1.3×10^{-14}	9.2×10^{-16}
Area 2, 2-1 Substation	01/11/93	01/19/93	1.0×10^{-14}	7.8×10^{-16}
Area 2, 2-1 Substation	01/19/93	01/25/93	1.4×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	01/25/93	02/01/93	2.9×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	02/01/93	02/08/93	3.1×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	02/08/93	02/16/93	1.3×10^{-14}	8.4×10^{-16}
Area 2, 2-1 Substation	02/16/93	02/22/93	1.0×10^{-14}	9.8×10^{-16}
Area 2, 2-1 Substation	02/22/93	03/01/93	1.1×10^{-14}	8.7×10^{-16}
Area 2, 2-1 Substation	03/01/93	03/08/93	1.4×10^{-14}	9.1×10^{-16}
Area 2, 2-1 Substation	03/08/93	03/15/93	2.0×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	03/15/93	03/22/93	1.0×10^{-14}	8.6×10^{-16}
Area 2, 2-1 Substation	03/22/93	03/29/93	1.7×10^{-14}	9.7×10^{-16}
Area 2, 2-1 Substation	03/29/93	04/05/93	1.6×10^{-14}	9.9×10^{-16}
Area 2, 2-1 Substation	04/05/93	04/12/93	1.7×10^{-14}	9.6×10^{-16}
Area 2, 2-1 Substation	04/12/93	04/19/93	1.4×10^{-14}	9.0×10^{-16}
Area 2, 2-1 Substation	04/19/93	04/26/93	1.5×10^{-14}	9.3×10^{-16}
Area 2, 2-1 Substation	04/26/93	05/03/93	1.7×10^{-14}	9.4×10^{-16}
Area 2, 2-1 Substation	05/03/93	05/10/93	1.3×10^{-14}	9.0×10^{-16}
Area 2, 2-1 Substation	05/10/93	05/18/93	1.8×10^{-14}	8.9×10^{-16}
Area 2, 2-1 Substation	05/18/93	05/24/93	1.8×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	05/24/93	06/01/93	1.5×10^{-14}	8.6×10^{-16}
Area 2, 2-1 Substation	06/01/93	06/07/93	1.1×10^{-14}	9.6×10^{-16}
Area 2, 2-1 Substation	06/07/93	06/14/93	2.0×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	06/14/93	06/21/93	1.7×10^{-14}	9.6×10^{-16}
Area 2, 2-1 Substation	06/21/93	06/28/93	1.6×10^{-14}	9.3×10^{-16}
Area 2, 2-1 Substation	06/28/93	07/06/93	1.9×10^{-14}	9.0×10^{-16}
Area 2, 2-1 Substation	07/06/93	07/12/93	1.8×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	07/12/93	07/19/93	2.0×10^{-14}	9.8×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, 2-1 Substation	07/19/93	07/26/93	1.4×10^{-14}	9.0×10^{-16}
Area 2, 2-1 Substation	07/26/93	08/02/93	1.4×10^{-14}	9.1×10^{-16}
Area 2, 2-1 Substation	08/02/93	08/09/93	2.0×10^{-14}	9.9×10^{-16}
Area 2, 2-1 Substation	08/09/93	08/16/93	2.1×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	08/16/93	08/23/93	1.8×10^{-14}	9.6×10^{-16}
Area 2, 2-1 Substation	08/23/93	08/30/93	2.3×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	08/30/93	09/08/93	2.0×10^{-14}	8.4×10^{-16}
Area 2, 2-1 Substation	09/08/93	09/13/93	2.5×10^{-14}	1.4×10^{-15}
Area 2, 2-1 Substation	09/13/93	09/20/93	1.9×10^{-14}	9.8×10^{-16}
Area 2, 2-1 Substation	09/20/93	09/27/93	3.0×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	09/27/93	10/04/93	3.4×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	10/04/93	10/11/93	1.8×10^{-14}	9.8×10^{-16}
Area 2, 2-1 Substation	10/11/93	10/18/93	1.4×10^{-14}	9.0×10^{-16}
Area 2, 2-1 Substation	10/18/93	10/25/93	2.6×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	10/25/93	11/01/93	2.0×10^{-14}	9.8×10^{-16}
Area 2, 2-1 Substation	11/01/93	11/08/93	2.1×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	11/08/93	11/15/93	2.9×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	11/15/93	11/22/93	2.9×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	11/22/93	11/29/93	2.5×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	11/29/93	12/06/93	2.0×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	12/06/93	12/13/93	2.1×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	12/13/93	12/20/93	2.5×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	12/20/93	12/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	12/27/93	01/03/94	2.7×10^{-14}	1.1×10^{-15}
Area 2, Complex	01/04/93	01/11/93	1.1×10^{-14}	8.9×10^{-16}
Area 2, Complex	01/11/93	01/19/93	6.4×10^{-15}	7.1×10^{-16}
Area 2, Complex	01/19/93	01/25/93	1.2×10^{-14}	9.8×10^{-16}
Area 2, Complex	01/25/93	02/01/93	2.3×10^{-14}	1.0×10^{-15}
Area 2, Complex	02/01/93	02/08/93	1.5×10^{-14}	9.6×10^{-16}
Area 2, Complex	02/08/93	02/16/93	1.2×10^{-14}	8.2×10^{-16}
Area 2, Complex	02/16/93	02/22/93	8.6×10^{-15}	9.4×10^{-16}
Area 2, Complex	02/22/93	03/01/93	1.0×10^{-14}	8.5×10^{-16}
Area 2, Complex	03/01/93	03/08/93	1.3×10^{-14}	9.0×10^{-16}
Area 2, Complex	03/08/93	03/15/93	1.8×10^{-14}	9.7×10^{-16}
Area 2, Complex	03/15/93	03/22/93	9.3×10^{-15}	8.4×10^{-16}
Area 2, Complex	03/22/93	03/29/93	1.4×10^{-14}	9.2×10^{-16}
Area 2, Complex	03/29/93	04/05/93	1.5×10^{-14}	9.7×10^{-16}
Area 2, Complex	04/05/93	04/12/93	1.7×10^{-14}	9.8×10^{-16}
Area 2, Complex	04/19/93	04/26/93	1.3×10^{-14}	9.0×10^{-16}
Area 2, Complex	04/26/93	05/03/93	1.6×10^{-14}	9.0×10^{-16}
Area 2, Complex	05/03/93	05/10/93	1.2×10^{-14}	8.6×10^{-16}
Area 2, Complex	05/10/93	05/18/93	1.6×10^{-14}	8.4×10^{-16}
Area 2, Complex	05/18/93	05/24/93	1.7×10^{-14}	1.0×10^{-15}
Area 2, Complex	05/24/93	06/01/93	1.5×10^{-14}	8.4×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Complex	06/01/93	06/07/93	1.1×10^{-14}	9.4×10^{-16}
Area 2, Complex	06/07/93	06/14/93	1.6×10^{-14}	9.2×10^{-16}
Area 2, Complex	06/14/93	06/21/93	1.8×10^{-14}	9.4×10^{-16}
Area 2, Complex	06/21/93	06/28/93	1.8×10^{-14}	9.3×10^{-16}
Area 2, Complex	06/28/93	07/06/93	2.3×10^{-14}	9.8×10^{-16}
Area 2, Complex	07/06/93	07/12/93	2.2×10^{-14}	1.1×10^{-15}
Area 2, Complex	07/12/93	07/19/93	2.1×10^{-14}	1.0×10^{-15}
Area 2, Complex	07/19/93	07/26/93	1.4×10^{-14}	9.0×10^{-16}
Area 2, Complex	07/26/93	08/02/93	1.5×10^{-14}	9.1×10^{-16}
Area 2, Complex	08/02/93	08/09/93	2.0×10^{-14}	9.9×10^{-16}
Area 2, Complex	08/09/93	08/16/93	2.0×10^{-14}	9.8×10^{-16}
Area 2, Complex	08/16/93	08/23/93	2.0×10^{-14}	9.8×10^{-16}
Area 2, Complex	08/23/93	08/30/93	2.3×10^{-14}	1.0×10^{-15}
Area 2, Complex	08/30/93	09/08/93	1.9×10^{-14}	8.2×10^{-16}
Area 2, Complex	09/08/93	09/13/93	2.5×10^{-14}	1.4×10^{-15}
Area 2, Complex	09/13/93	09/20/93	2.1×10^{-14}	9.9×10^{-16}
Area 2, Complex	09/20/93	09/27/93	3.0×10^{-14}	1.1×10^{-15}
Area 2, Complex	09/27/93	10/04/93	3.5×10^{-14}	1.2×10^{-15}
Area 2, Complex	10/04/93	10/11/93	1.2×10^{-14}	8.9×10^{-16}
Area 2, Complex	10/11/93	10/18/93	1.4×10^{-14}	8.9×10^{-16}
Area 2, Complex	10/18/93	10/25/93	2.5×10^{-14}	1.0×10^{-15}
Area 2, Complex	10/25/93	11/01/93	2.1×10^{-14}	1.0×10^{-15}
Area 2, Complex	11/01/93	11/08/93	2.0×10^{-14}	1.0×10^{-15}
Area 2, Complex	11/08/93	11/15/93	2.9×10^{-14}	1.1×10^{-15}
Area 2, Complex	11/15/93	11/22/93	2.8×10^{-14}	1.1×10^{-15}
Area 2, Complex	11/22/93	11/29/93	2.4×10^{-14}	1.0×10^{-15}
Area 2, Complex	11/29/93	12/06/93	2.4×10^{-14}	1.1×10^{-15}
Area 2, Complex	12/06/93	12/13/93	2.4×10^{-14}	1.0×10^{-15}
Area 2, Complex	12/13/93	12/20/93	2.1×10^{-14}	1.0×10^{-15}
Area 2, Complex	12/20/93	12/27/93	2.4×10^{-14}	1.1×10^{-15}
Area 2, Complex	12/27/93	01/03/94	2.3×10^{-14}	1.0×10^{-15}
Area 3, Complex	01/04/93	01/11/93	1.7×10^{-14}	1.0×10^{-15}
Area 3, Complex	01/11/93	01/19/93	6.4×10^{-15}	7.4×10^{-16}
Area 3, Complex	01/19/93	01/25/93	1.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	01/25/93	02/01/93	2.6×10^{-14}	1.1×10^{-15}
Area 3, Complex	02/01/93	02/08/93	3.0×10^{-14}	1.2×10^{-15}
Area 3, Complex	02/08/93	02/16/93	1.9×10^{-14}	9.5×10^{-16}
Area 3, Complex	02/16/93	02/22/93	1.1×10^{-14}	1.2×10^{-15}
Area 3, Complex	02/22/93	03/01/93	9.3×10^{-15}	8.9×10^{-16}
Area 3, Complex	03/01/93	03/08/93	1.3×10^{-14}	9.6×10^{-16}
Area 3, Complex	03/08/93	03/15/93	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	03/15/93	03/22/93	9.2×10^{-15}	8.7×10^{-16}
Area 3, Complex	03/22/93	03/29/93	1.2×10^{-14}	9.2×10^{-16}
Area 3, Complex	03/29/93	04/05/93	1.6×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Complex	04/05/93	04/12/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Complex	04/12/93	04/19/93	1.3×10^{-14}	9.3×10^{-16}
Area 3, Complex	04/19/93	04/26/93	1.4×10^{-14}	9.4×10^{-16}
Area 3, Complex	04/26/93	05/03/93	1.7×10^{-14}	9.9×10^{-16}
Area 3, Complex	05/03/93	05/10/93	1.3×10^{-14}	9.4×10^{-16}
Area 3, Complex	05/10/93	05/18/93	1.8×10^{-14}	9.1×10^{-16}
Area 3, Complex	05/17/93	05/24/93	1.7×10^{-14}	1.1×10^{-15}
Area 3, Complex	05/24/93	06/01/93	1.4×10^{-14}	8.4×10^{-16}
Area 3, Complex	06/01/93	06/07/93	1.1×10^{-14}	1.0×10^{-15}
Area 3, Complex	06/07/93	06/14/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Complex	06/14/93	06/22/93	1.6×10^{-14}	9.7×10^{-16}
Area 3, Complex	06/22/93	06/28/93	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex	06/28/93	07/06/93	1.7×10^{-14}	7.3×10^{-16}
Area 3, Complex	07/06/93	07/12/93	1.6×10^{-14}	8.6×10^{-16}
Area 3, Complex	07/12/93	07/19/93	2.0×10^{-14}	1.1×10^{-15}
Area 3, Complex	07/19/93	07/26/93	1.5×10^{-14}	9.8×10^{-16}
Area 3, Complex	07/26/93	08/02/93	1.6×10^{-14}	1.0×10^{-15}
Area 3, Complex	08/02/93	08/09/93	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/09/93	08/16/93	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/16/93	08/23/93	2.0×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/23/93	08/30/93	2.4×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/30/93	09/08/93	2.0×10^{-14}	8.8×10^{-16}
Area 3, Complex	09/08/93	09/13/93	2.8×10^{-14}	1.5×10^{-15}
Area 3, Complex	09/13/93	09/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	09/20/93	09/27/93	3.1×10^{-14}	1.2×10^{-15}
Area 3, Complex	09/27/93	10/04/93	4.1×10^{-14}	1.4×10^{-15}
Area 3, Complex	10/04/93	10/11/93	1.4×10^{-14}	9.8×10^{-16}
Area 3, Complex	10/11/93	10/18/93	1.4×10^{-14}	9.9×10^{-16}
Area 3, Complex	10/18/93	10/25/93	2.8×10^{-14}	1.2×10^{-15}
Area 3, Complex	10/25/93	11/01/93	1.9×10^{-14}	1.0×10^{-15}
Area 3, Complex	11/01/93	11/08/93	2.8×10^{-14}	1.2×10^{-15}
Area 3, Complex	11/08/93	11/15/93	3.6×10^{-14}	1.3×10^{-15}
Area 3, Complex	11/15/93	11/22/93	3.3×10^{-14}	1.2×10^{-15}
Area 3, Complex	11/22/93	11/29/93	2.6×10^{-14}	1.2×10^{-15}
Area 3, Complex	11/29/93	12/06/93	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex	12/06/93	12/13/93	2.6×10^{-14}	1.2×10^{-15}
Area 3, Complex	12/13/93	12/20/93	2.5×10^{-14}	1.2×10^{-15}
Area 3, Complex	12/20/93	12/27/93	2.8×10^{-14}	1.1×10^{-15}
Area 3, Complex	12/27/93	01/03/94	2.8×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	01/04/93	01/11/93	1.7×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	01/11/93	01/19/93	1.2×10^{-14}	8.7×10^{-16}
Area 3, Complex No. 2	01/19/93	01/25/93	1.4×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	01/25/93	02/01/93	2.9×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	02/01/93	02/08/93	3.1×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Complex No. 2	02/08/93	02/16/93	1.4×10^{-14}	8.8×10^{-16}
Area 3, Complex No. 2	02/16/93	02/22/93	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	02/22/93	03/01/93	1.0×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	03/01/93	03/08/93	1.3×10^{-14}	9.7×10^{-16}
Area 3, Complex No. 2	03/08/93	03/15/93	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	03/15/93	03/22/93	1.0×10^{-14}	9.0×10^{-16}
Area 3, Complex No. 2	03/22/93	03/29/93	1.4×10^{-14}	9.5×10^{-16}
Area 3, Complex No. 2	03/29/93	04/05/93	1.6×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	04/05/93	04/12/93	1.9×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	04/12/93	04/19/93	1.5×10^{-14}	9.6×10^{-16}
Area 3, Complex No. 2	04/19/93	04/26/93	1.4×10^{-14}	9.5×10^{-16}
Area 3, Complex No. 2	04/26/93	05/03/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	05/03/93	05/10/93	1.3×10^{-14}	9.5×10^{-16}
Area 3, Complex No. 2	05/10/93	05/18/93	2.0×10^{-14}	9.5×10^{-16}
Area 3, Complex No. 2	05/17/93	05/24/93	1.8×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	05/24/93	06/01/93	1.5×10^{-14}	8.8×10^{-16}
Area 3, Complex No. 2	06/01/93	06/07/93	1.5×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	06/07/93	06/14/93	2.0×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	06/14/93	06/22/93	1.7×10^{-14}	9.0×10^{-16}
Area 3, Complex No. 2	06/22/93	06/28/93	1.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	06/28/93	07/06/93	6.2×10^{-14}	2.7×10^{-15}
Area 3, Complex No. 2	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	07/12/93	07/19/93	2.0×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	07/19/93	07/26/93	1.2×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	07/26/93	08/02/93	1.5×10^{-14}	9.9×10^{-16}
Area 3, Complex No. 2	08/02/93	08/09/93	2.2×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	08/09/93	08/16/93	1.7×10^{-14}	9.9×10^{-16}
Area 3, Complex No. 2	08/16/93	08/23/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	08/23/93	08/30/93	2.4×10^{-14}	3.5×10^{-15}
Area 3, Complex No. 2	09/08/93	09/13/93	2.8×10^{-14}	1.7×10^{-15}
Area 3, Complex No. 2	09/13/93	09/20/93	1.8×10^{-14}	9.9×10^{-16}
Area 3, Complex No. 2	09/20/93	09/27/93	2.8×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	09/27/93	10/04/93	3.5×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	10/04/93	10/11/93	1.3×10^{-14}	9.1×10^{-16}
Area 3, Complex No. 2	10/11/93	10/18/93	1.4×10^{-14}	9.4×10^{-16}
Area 3, Complex No. 2	10/18/93	10/25/93	2.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	10/25/93	11/01/93	2.2×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	11/01/93	11/08/93	2.7×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	11/08/93	11/15/93	3.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	11/15/93	11/22/93	3.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	11/22/93	11/29/93	2.6×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	11/29/93	12/06/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	12/06/93	12/13/93	2.8×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	12/13/93	12/20/93	2.4×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Complex No. 2	12/20/93	12/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	12/27/93	01/03/94	3.0×10^{-14}	1.3×10^{-15}
Area 3, Mud Plant	01/04/93	01/11/93	1.3×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	01/11/93	01/19/93	6.6×10^{-15}	7.9×10^{-16}
Area 3, Mud Plant	01/19/93	01/25/93	1.1×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	01/25/93	02/01/93	2.3×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	02/01/93	02/08/93	1.5×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	02/08/93	02/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	02/16/93	02/22/93	1.2×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	02/22/93	03/01/93	1.2×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	03/01/93	03/08/93	1.5×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	03/08/93	03/15/93	2.1×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	03/15/93	03/22/93	9.7×10^{-15}	9.6×10^{-16}
Area 3, Mud Plant	03/22/93	03/29/93	1.4×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	03/29/93	04/05/93	1.6×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	04/05/93	04/12/93	1.8×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	04/12/93	04/19/93	1.6×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	04/19/93	04/26/93	1.2×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	04/26/93	05/03/93	1.7×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	05/03/93	05/10/93	1.5×10^{-14}	1.4×10^{-15}
Area 3, Mud Plant	05/10/93	05/18/93	1.7×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	05/18/93	05/24/93	1.8×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	05/24/93	06/01/93	1.3×10^{-14}	8.2×10^{-16}
Area 3, Mud Plant	06/01/93	06/07/93	1.3×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	06/07/93	06/14/93	1.7×10^{-14}	9.7×10^{-16}
Area 3, Mud Plant	06/14/93	06/21/93	1.9×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	06/21/93	06/28/93	1.6×10^{-14}	9.6×10^{-16}
Area 3, Mud Plant	06/28/93	07/06/93	2.0×10^{-14}	9.4×10^{-16}
Area 3, Mud Plant	07/06/93	07/12/93	1.8×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	07/12/93	07/19/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	07/19/93	07/26/93	1.5×10^{-14}	9.5×10^{-16}
Area 3, Mud Plant	07/26/93	08/02/93	1.7×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	08/02/93	08/09/93	1.9×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	08/09/93	08/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	08/16/93	08/23/93	2.1×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	08/23/93	08/30/93	2.1×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	08/30/93	09/08/93	2.0×10^{-14}	8.6×10^{-16}
Area 3, Mud Plant	09/08/93	09/13/93	2.7×10^{-14}	1.5×10^{-15}
Area 3, Mud Plant	09/13/93	09/20/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	09/20/93	09/27/93	2.9×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	09/27/93	10/04/93	3.4×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	10/04/93	10/11/93	1.1×10^{-14}	9.0×10^{-16}
Area 3, Mud Plant	10/11/93	10/18/93	1.4×10^{-14}	9.5×10^{-16}
Area 3, Mud Plant	10/18/93	10/25/93	2.7×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, Mud Plant	10/25/93	11/01/93	2.1×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	11/01/93	11/08/93	2.7×10^{-14}	2.9×10^{-15}
Area 3, Mud Plant	11/08/93	11/15/93	2.8×10^{-14}	1.3×10^{-15}
Area 3, Mud Plant	11/15/93	11/22/93	3.2×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	11/22/93	11/29/93	2.6×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	11/29/93	12/06/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	12/06/93	12/13/93	2.3×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	12/13/93	12/20/93	2.6×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	12/20/93	12/27/93	2.9×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	12/27/93	01/03/94	3.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	01/04/93	01/11/93	1.5×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at E	02/01/93	02/08/93	2.6×10^{-14}	2.1×10^{-15}
Area 3, U-3ah/at E	02/08/93	02/16/93	1.2×10^{-14}	8.1×10^{-16}
Area 3, U-3ah/at E	02/16/93	02/22/93	6.1×10^{-15}	8.8×10^{-16}
Area 3, U-3ah/at E	02/22/93	03/01/93	1.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	03/01/93	03/08/93	1.3×10^{-14}	7.7×10^{-16}
Area 3, U-3ah/at E	03/08/93	03/15/93	2.1×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	03/15/93	03/22/93	9.7×10^{-15}	8.4×10^{-16}
Area 3, U-3ah/at E	03/22/93	03/29/93	1.2×10^{-14}	8.9×10^{-16}
Area 3, U-3ah/at E	03/29/93	04/05/93	1.6×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at E	04/05/93	04/12/93	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	04/12/93	04/19/93	1.3×10^{-14}	9.0×10^{-16}
Area 3, U-3ah/at E	04/19/93	04/26/93	1.4×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at E	04/26/93	05/03/93	1.7×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at E	05/03/93	05/10/93	1.5×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at E	05/10/93	05/18/93	2.0×10^{-14}	9.5×10^{-16}
Area 3, U-3ah/at E	05/18/93	05/24/93	2.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	05/24/93	06/02/93	1.5×10^{-14}	8.0×10^{-16}
Area 3, U-3ah/at E	06/02/93	06/07/93	1.3×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at E	06/07/93	06/14/93	1.9×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	06/14/93	06/22/93	1.8×10^{-14}	9.3×10^{-16}
Area 3, U-3ah/at E	06/22/93	06/28/93	1.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	06/28/93	07/06/93	2.0×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at E	07/06/93	07/12/93	2.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	07/12/93	07/19/93	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	07/19/93	07/26/93	1.6×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	07/26/93	08/02/93	1.7×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	08/02/93	08/09/93	2.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/09/93	08/16/93	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/16/93	08/23/93	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/23/93	08/30/93	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/30/93	09/08/93	2.1×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at E	09/08/93	09/13/93	3.3×10^{-14}	1.6×10^{-15}
Area 3, U-3ah/at E	09/13/93	09/20/93	2.3×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at E	09/20/93	09/27/93	3.3×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at E	09/27/93	10/04/93	3.6×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at E	10/04/93	10/11/93	1.4×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at E	10/11/93	10/18/93	1.5×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	10/18/93	10/25/93	3.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	10/25/93	11/01/93	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	11/01/93	11/08/93	2.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	11/08/93	11/15/93	3.3×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at E	11/15/93	11/22/93	3.4×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at E	11/22/93	11/29/93	2.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	11/29/93	12/06/93	1.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	12/06/93	12/13/93	2.2×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at E	12/13/93	12/21/93	1.8×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	12/21/93	12/27/93	2.2×10^{-14}	1.4×10^{-15}
Area 3, U-3ah/at E	12/27/93	01/03/94	2.3×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	01/04/93	01/11/93	1.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	01/11/93	01/19/93	6.1×10^{-15}	8.6×10^{-16}
Area 3, U-3ah/at N	01/19/93	01/25/93	1.3×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	01/25/93	02/01/93	2.7×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	02/01/93	02/08/93	6.5×10^{-15}	9.8×10^{-16}
Area 3, U-3ah/at N	02/08/93	02/16/93	1.7×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	02/16/93	02/22/93	5.2×10^{-15}	1.1×10^{-15}
Area 3, U-3ah/at N	02/22/93	03/01/93	1.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	03/01/93	03/08/93	1.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	03/08/93	03/15/93	2.3×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	03/15/93	03/22/93	1.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	03/22/93	03/29/93	1.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	03/29/93	04/05/93	1.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	04/05/93	04/12/93	2.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	04/12/93	04/19/93	1.7×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	04/19/93	04/26/93	1.6×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	04/26/93	05/03/93	2.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	05/03/93	05/10/93	1.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	05/10/93	05/18/93	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	05/18/93	05/24/93	2.0×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	05/24/93	06/02/93	1.7×10^{-14}	9.0×10^{-16}
Area 3, U-3ah/at N	06/02/93	06/07/93	2.1×10^{-14}	1.8×10^{-15}
Area 3, U-3ah/at N	06/07/93	06/14/93	1.8×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at N	06/14/93	06/22/93	1.4×10^{-14}	7.2×10^{-16}
Area 3, U-3ah/at N	06/22/93	06/28/93	1.6×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	06/28/93	07/06/93	2.0×10^{-14}	9.1×10^{-16}
Area 3, U-3ah/at N	07/06/93	07/12/93	2.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	07/12/93	07/19/93	2.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	07/19/93	07/26/93	1.6×10^{-14}	9.4×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at N	07/26/93	08/02/93	1.5×10^{-14}	9.5×10^{-16}
Area 3, U-3ah/at N	08/02/93	08/09/93	2.1×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	08/09/93	08/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	08/16/93	08/23/93	1.9×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at N	08/23/93	08/30/93	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	08/30/93	09/08/93	2.0×10^{-14}	8.5×10^{-16}
Area 3, U-3ah/at N	09/08/93	09/13/93	2.8×10^{-14}	1.4×10^{-15}
Area 3, U-3ah/at N	09/13/93	09/20/93	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	09/20/93	09/27/93	3.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	09/27/93	10/04/93	3.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	10/04/93	10/11/93	2.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	10/11/93	10/18/93	1.3×10^{-14}	9.1×10^{-16}
Area 3, U-3ah/at N	10/18/93	10/25/93	2.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	10/25/93	11/01/93	2.2×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	11/01/93	11/08/93	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	11/08/93	11/15/93	3.1×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	11/15/93	11/22/93	3.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	11/22/93	11/29/93	2.7×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	11/29/93	12/06/93	1.8×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	12/06/93	12/13/93	2.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	12/13/93	12/21/93	1.9×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	12/21/93	12/27/93	2.0×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	12/27/93	01/03/94	2.4×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	01/04/93	01/11/93	1.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	01/11/93	01/19/93	1.5×10^{-14}	9.3×10^{-16}
Area 3, U-3ah/at S	01/19/93	01/25/93	1.1×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	01/25/93	02/01/93	2.1×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	02/01/93	02/08/93	2.9×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	02/08/93	02/16/93	1.8×10^{-14}	9.3×10^{-16}
Area 3, U-3ah/at S	02/16/93	02/22/93	1.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	02/22/93	03/01/93	8.3×10^{-15}	8.5×10^{-16}
Area 3, U-3ah/at S	03/01/93	03/08/93	1.2×10^{-14}	9.2×10^{-16}
Area 3, U-3ah/at S	03/08/93	03/15/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	03/15/93	03/22/93	8.6×10^{-15}	8.4×10^{-16}
Area 3, U-3ah/at S	03/22/93	03/29/93	9.4×10^{-15}	8.8×10^{-16}
Area 3, U-3ah/at S	03/29/93	04/05/93	1.3×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at S	04/05/93	04/12/93	1.7×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at S	04/12/93	04/19/93	1.3×10^{-14}	9.1×10^{-16}
Area 3, U-3ah/at S	04/19/93	04/26/93	1.1×10^{-14}	8.8×10^{-16}
Area 3, U-3ah/at S	04/26/93	05/03/93	1.9×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	05/03/93	05/10/93	1.4×10^{-14}	9.2×10^{-16}
Area 3, U-3ah/at S	05/10/93	05/18/93	1.8×10^{-14}	9.0×10^{-16}
Area 3, U-3ah/at S	05/18/93	05/24/93	1.7×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	05/24/93	06/02/93	1.4×10^{-14}	7.7×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at S	06/02/93	06/07/93	1.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	06/07/93	06/14/93	1.6×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at S	06/14/93	06/22/93	1.7×10^{-14}	8.9×10^{-16}
Area 3, U-3ah/at S	06/22/93	06/28/93	1.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	06/28/93	07/06/93	2.1×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at S	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	07/12/93	07/19/93	1.7×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	07/19/93	07/26/93	1.4×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at S	07/26/93	08/02/93	1.4×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at S	08/02/93	08/09/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	08/09/93	08/16/93	1.6×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at S	08/16/93	08/23/93	1.6×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at S	08/23/93	08/30/93	1.7×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at S	08/30/93	09/08/93	1.7×10^{-14}	8.7×10^{-16}
Area 3, U-3ah/at S	09/08/93	09/13/93	2.5×10^{-14}	1.5×10^{-15}
Area 3, U-3ah/at S	09/13/93	09/20/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	09/20/93	09/27/93	2.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	09/27/93	10/04/93	3.1×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	10/04/93	10/11/93	1.8×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	10/11/93	10/18/93	1.2×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at S	10/18/93	10/25/93	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	10/25/93	11/01/93	1.9×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	11/01/93	11/08/93	2.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	11/08/93	11/15/93	2.7×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	11/15/93	11/22/93	2.7×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	11/22/93	11/29/93	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	11/29/93	12/06/93	1.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	12/06/93	12/13/93	2.2×10^{-14}	1.6×10^{-15}
Area 3, U-3ah/at S	12/13/93	12/21/93	2.2×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at S	12/27/93	01/03/94	2.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	01/04/93	01/11/93	1.3×10^{-14}	9.0×10^{-16}
Area 3, U-3ah/at W	01/11/93	01/19/93	6.9×10^{-15}	6.9×10^{-16}
Area 3, U-3ah/at W	01/19/93	01/25/93	1.3×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	01/25/93	02/01/93	2.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	02/01/93	02/08/93	8.0×10^{-15}	9.0×10^{-16}
Area 3, U-3ah/at W	02/08/93	02/16/93	1.7×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at W	02/16/93	02/22/93	1.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	02/22/93	03/01/93	1.3×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at W	03/01/93	03/08/93	1.5×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	03/08/93	03/15/93	1.9×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	03/15/93	03/22/93	9.0×10^{-15}	8.8×10^{-16}
Area 3, U-3ah/at W	03/22/93	03/29/93	2.2×10^{-14}	1.7×10^{-15}
Area 3, U-3ah/at W	03/29/93	04/05/93	1.8×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	04/05/93	04/12/93	1.9×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 3, U-3ah/at W	04/12/93	04/19/93	1.6×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	04/19/93	04/26/93	1.4×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	04/26/93	05/03/93	1.9×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	05/03/93	05/10/93	1.7×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	05/10/93	05/18/93	1.9×10^{-14}	9.3×10^{-16}
Area 3, U-3ah/at W	05/18/93	05/24/93	2.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	05/24/93	06/02/93	1.7×10^{-14}	8.7×10^{-16}
Area 3, U-3ah/at W	06/02/93	06/07/93	1.4×10^{-14}	1.9×10^{-15}
Area 3, U-3ah/at W	06/07/93	06/14/93	2.4×10^{-14}	1.8×10^{-15}
Area 3, U-3ah/at W	06/14/93	06/22/93	1.9×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	06/22/93	06/28/93	2.9×10^{-14}	1.7×10^{-15}
Area 3, U-3ah/at W	06/28/93	07/06/93	2.4×10^{-14}	1.6×10^{-15}
Area 3, U-3ah/at W	07/06/93	07/12/93	2.5×10^{-14}	2.1×10^{-15}
Area 3, U-3ah/at W	07/12/93	07/19/93	2.7×10^{-14}	1.8×10^{-15}
Area 3, U-3ah/at W	07/19/93	07/26/93	1.8×10^{-14}	1.5×10^{-15}
Area 3, U-3ah/at W	07/26/93	08/02/93	1.9×10^{-14}	1.9×10^{-15}
Area 3, U-3ah/at W	08/02/93	08/09/93	2.3×10^{-14}	2.0×10^{-15}
Area 3, U-3ah/at W	08/09/93	08/16/93	2.9×10^{-14}	1.9×10^{-15}
Area 3, U-3ah/at W	08/16/93	08/23/93	2.1×10^{-14}	1.8×10^{-15}
Area 3, U-3ah/at W	08/23/93	08/30/93	2.1×10^{-14}	1.7×10^{-15}
Area 3, U-3ah/at W	08/30/93	09/08/93	2.4×10^{-14}	1.6×10^{-15}
Area 3, U-3ah/at W	09/08/93	09/13/93	3.0×10^{-14}	2.7×10^{-15}
Area 3, U-3ah/at W	09/13/93	09/20/93	2.4×10^{-14}	1.5×10^{-15}
Area 3, U-3ah/at W	09/20/93	09/27/93	3.3×10^{-14}	1.7×10^{-15}
Area 3, U-3ah/at W	10/11/93	10/18/93	1.5×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	10/18/93	10/25/93	2.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	10/25/93	11/01/93	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	11/01/93	11/08/93	2.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	11/08/93	11/15/93	3.4×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	11/15/93	11/22/93	3.3×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	11/22/93	11/29/93	2.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	11/29/93	12/06/93	1.8×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	12/06/93	12/13/93	1.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	12/13/93	12/21/93	2.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	12/21/93	12/27/93	2.1×10^{-14}	1.4×10^{-15}
Area 3, U-3ah/at W	12/27/93	01/03/94	2.2×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	01/04/93	01/12/93	1.8×10^{-14}	8.8×10^{-16}
Area 5, DOD Yard	01/12/93	01/20/93	5.6×10^{-15}	8.3×10^{-16}
Area 5, DOD Yard	01/20/93	01/26/93	1.7×10^{-14}	1.4×10^{-15}
Area 5, DOD Yard	01/26/93	02/01/93	2.7×10^{-14}	1.6×10^{-15}
Area 5, DOD Yard	02/01/93	02/08/93	6.2×10^{-15}	1.1×10^{-15}
Area 5, DOD Yard	02/08/93	02/16/93	1.2×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	02/16/93	02/22/93	9.2×10^{-15}	1.3×10^{-15}
Area 5, DOD Yard	02/22/93	03/01/93	1.1×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, DOD Yard	03/01/93	03/08/93	1.5×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	03/08/93	03/15/93	2.7×10^{-14}	1.4×10^{-15}
Area 5, DOD Yard	03/15/93	03/22/93	9.8×10^{-15}	1.2×10^{-15}
Area 5, DOD Yard	03/22/93	03/29/93	1.4×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	03/29/93	04/05/93	1.6×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	04/05/93	04/12/93	1.9×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	04/12/93	04/19/93	1.4×10^{-14}	9.6×10^{-16}
Area 5, DOD Yard	04/19/93	04/26/93	1.4×10^{-14}	8.8×10^{-16}
Area 5, DOD Yard	04/26/93	05/03/93	1.9×10^{-14}	9.8×10^{-16}
Area 5, DOD Yard	05/03/93	05/10/93	1.5×10^{-14}	8.9×10^{-16}
Area 5, DOD Yard	05/10/93	05/17/93	1.6×10^{-14}	9.4×10^{-16}
Area 5, DOD Yard	05/17/93	05/24/93	1.8×10^{-14}	9.4×10^{-16}
Area 5, DOD Yard	05/24/93	06/01/93	1.3×10^{-14}	7.9×10^{-16}
Area 5, DOD Yard	06/01/93	06/07/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	06/07/93	06/14/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, DOD Yard	06/14/93	06/21/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, DOD Yard	06/21/93	06/28/93	1.7×10^{-14}	9.3×10^{-16}
Area 5, DOD Yard	06/28/93	07/06/93	2.0×10^{-14}	9.0×10^{-16}
Area 5, DOD Yard	07/06/93	07/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	07/12/93	07/19/93	2.1×10^{-14}	9.8×10^{-16}
Area 5, DOD Yard	07/19/93	07/26/93	1.4×10^{-14}	9.0×10^{-16}
Area 5, DOD Yard	07/26/93	08/02/93	1.6×10^{-14}	9.2×10^{-16}
Area 5, DOD Yard	08/23/93	08/30/93	2.0×10^{-14}	8.7×10^{-16}
Area 5, DOD Yard	08/30/93	09/08/93	2.1×10^{-14}	9.0×10^{-16}
Area 5, DOD Yard	09/08/93	09/13/93	2.7×10^{-14}	1.4×10^{-15}
Area 5, DOD Yard	09/13/93	09/20/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	09/20/93	09/27/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	09/27/93	10/04/93	4.0×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	10/04/93	10/11/93	1.9×10^{-14}	9.7×10^{-16}
Area 5, DOD Yard	10/11/93	10/19/93	1.5×10^{-14}	8.2×10^{-16}
Area 5, DOD Yard	10/19/93	10/25/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	10/25/93	11/01/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	11/01/93	11/08/93	2.5×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	11/08/93	11/15/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	11/15/93	11/22/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	11/22/93	11/29/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	11/29/93	12/06/93	2.3×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	12/06/93	12/13/93	3.0×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	12/13/93	12/20/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	12/20/93	12/27/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	12/27/93	01/03/94	3.2×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	01/04/93	01/12/93	2.2×10^{-14}	9.8×10^{-16}
Area 5, Gate 200	01/26/93	02/01/93	9.3×10^{-14}	1.9×10^{-15}
Area 5, Gate 200	02/01/93	02/08/93	3.4×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Gate 200	02/08/93	02/16/93	1.2×10^{-14}	7.8×10^{-16}
Area 5, Gate 200	02/16/93	02/22/93	2.3×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	02/22/93	03/01/93	9.0×10^{-15}	8.5×10^{-16}
Area 5, Gate 200	03/01/93	03/08/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	03/08/93	03/15/93	7.5×10^{-14}	1.6×10^{-15}
Area 5, Gate 200	03/15/93	03/22/93	5.2×10^{-14}	1.4×10^{-15}
Area 5, Gate 200	03/22/93	03/29/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	03/29/93	04/05/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	04/05/93	04/12/93	4.9×10^{-14}	1.6×10^{-15}
Area 5, Gate 200	04/12/93	04/19/93	1.9×10^{-14}	8.8×10^{-16}
Area 5, Gate 200	04/19/93	04/26/93	1.2×10^{-14}	9.2×10^{-16}
Area 5, Gate 200	04/26/93	05/03/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	05/03/93	05/10/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	05/10/93	05/17/93	5.7×10^{-14}	1.4×10^{-15}
Area 5, Gate 200	05/17/93	05/24/93	1.8×10^{-14}	9.9×10^{-16}
Area 5, Gate 200	05/24/93	06/01/93	1.5×10^{-14}	8.5×10^{-16}
Area 5, Gate 200	06/01/93	06/07/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	06/14/93	06/21/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	06/21/93	06/28/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	06/28/93	07/06/93	2.9×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	07/06/93	07/12/93	1.8×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	07/12/93	07/19/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	07/19/93	07/26/93	1.1×10^{-14}	8.9×10^{-16}
Area 5, Gate 200	07/26/93	08/02/93	1.6×10^{-14}	9.7×10^{-16}
Area 5, Gate 200	08/02/93	08/09/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	08/09/93	08/16/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	08/16/93	08/23/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	08/23/93	08/30/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	08/30/93	09/08/93	1.9×10^{-14}	8.2×10^{-16}
Area 5, Gate 200	09/08/93	09/13/93	5.0×10^{-14}	1.7×10^{-15}
Area 5, Gate 200	09/13/93	09/20/93	2.3×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	09/20/93	09/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	09/27/93	10/04/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	10/04/93	10/11/93	1.6×10^{-14}	9.5×10^{-16}
Area 5, Gate 200	10/11/93	10/19/93	1.4×10^{-14}	8.4×10^{-16}
Area 5, Gate 200	10/19/93	10/24/93	3.1×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	10/29/93	11/01/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	11/01/93	11/08/93	3.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	11/08/93	11/15/93	3.9×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	11/15/93	11/22/93	8.1×10^{-14}	1.6×10^{-15}
Area 5, Gate 200	11/22/93	11/29/93	6.2×10^{-14}	1.5×10^{-15}
Area 5, Gate 200	11/29/93	12/06/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	12/06/93	12/13/93	3.3×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	12/13/93	12/20/93	4.0×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Gate 200	12/20/93	12/27/93	3.5×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	12/27/93	01/03/94	8.3×10^{-14}	1.8×10^{-15}
Area 5, RWMS No. 1	01/04/93	01/12/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	01/12/93	01/20/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	01/20/93	01/26/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	01/26/93	02/01/93	3.7×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 1	02/01/93	02/08/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	02/08/93	02/16/93	1.4×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 1	02/16/93	02/22/93	9.2×10^{-15}	1.0×10^{-15}
Area 5, RWMS No. 1	02/22/93	03/01/93	1.1×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 1	03/01/93	03/08/93	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 1	03/08/93	03/15/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	03/15/93	03/22/93	9.1×10^{-15}	8.8×10^{-16}
Area 5, RWMS No. 1	03/22/93	03/29/93	1.3×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 1	03/29/93	04/05/93	1.6×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 1	04/05/93	04/12/93	1.7×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 1	04/12/93	04/19/93	1.4×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 1	04/19/93	04/26/93	1.4×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 1	04/26/93	05/03/93	1.7×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 1	05/03/93	05/10/93	1.6×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 1	05/10/93	05/17/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	05/17/93	05/24/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	05/24/93	06/01/93	1.5×10^{-14}	8.6×10^{-16}
Area 5, RWMS No. 1	06/01/93	06/07/93	1.2×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 1	06/07/93	06/14/93	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 1	06/14/93	06/21/93	1.6×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 1	06/21/93	06/28/93	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 1	06/28/93	07/06/93	2.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 1	07/06/93	07/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	07/12/93	07/19/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	07/19/93	07/26/93	1.5×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 1	07/26/93	08/02/93	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 1	08/02/93	08/09/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	08/09/93	08/16/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	08/16/93	08/23/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	08/23/93	08/30/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	08/30/93	09/08/93	1.8×10^{-14}	8.3×10^{-16}
Area 5, RWMS No. 1	09/08/93	09/13/93	2.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 1	09/13/93	09/20/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	09/20/93	09/27/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	09/27/93	10/04/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	10/04/93	10/11/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	10/11/93	10/19/93	1.4×10^{-14}	8.7×10^{-16}
Area 5, RWMS No. 1	10/19/93	10/25/93	2.8×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 1	10/25/93	11/01/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	11/01/93	11/08/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	11/08/93	11/15/93	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	11/15/93	11/22/93	3.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	11/22/93	11/29/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	11/29/93	12/06/93	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	12/06/93	12/13/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	12/13/93	12/20/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	12/20/93	12/27/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	12/27/93	01/03/94	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	01/04/93	01/12/93	1.7×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 2	01/12/93	01/20/93	1.0×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 2	01/20/93	01/26/93	1.2×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 2	01/26/93	02/01/93	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	02/01/93	02/08/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	02/08/93	02/16/93	1.3×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 2	02/16/93	02/22/93	8.0×10^{-15}	1.0×10^{-15}
Area 5, RWMS No. 2	02/22/93	03/01/93	1.2×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 2	03/01/93	03/08/93	1.4×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 2	03/08/93	03/15/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	03/15/93	03/22/93	1.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 2	03/29/93	04/05/93	2.8×10^{-14}	1.8×10^{-15}
Area 5, RWMS No. 2	04/05/93	04/12/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	04/12/93	04/19/93	1.5×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 2	04/19/93	04/26/93	1.4×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 2	04/26/93	05/03/93	1.6×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 2	05/03/93	05/10/93	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 2	05/10/93	05/17/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	05/17/93	05/24/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	05/24/93	06/01/93	1.3×10^{-14}	8.2×10^{-16}
Area 5, RWMS No. 2	06/01/93	06/07/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	06/07/93	06/14/93	1.5×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 2	06/14/93	06/21/93	1.7×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 2	06/21/93	06/28/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	06/28/93	07/06/93	2.2×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 2	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	07/12/93	07/19/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	07/19/93	07/26/93	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	07/26/93	08/02/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	08/02/93	08/09/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	08/09/93	08/16/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	08/16/93	08/23/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	08/23/93	08/30/93	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	08/30/93	09/08/93	1.8×10^{-14}	8.8×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 2	09/08/93	09/13/93	2.6×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 2	09/13/93	09/20/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	09/20/93	09/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	09/27/93	10/04/93	3.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 2	10/04/93	10/11/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	10/11/93	10/19/93	1.4×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 2	10/19/93	10/25/93	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	10/25/93	11/01/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/01/93	11/08/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	11/08/93	11/15/93	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	11/15/93	11/22/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	11/22/93	11/29/93	2.2×10^{-14}	1.9×10^{-15}
Area 5, RWMS No. 2	11/29/93	12/06/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	12/06/93	12/13/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	12/13/93	12/20/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	12/20/93	12/27/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	12/27/93	01/03/94	3.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	01/04/93	01/12/93	9.0×10^{-15}	8.3×10^{-16}
Area 5, RWMS No. 3	01/12/93	01/20/93	8.4×10^{-15}	8.5×10^{-16}
Area 5, RWMS No. 3	01/20/93	01/26/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	01/26/93	02/01/93	4.5×10^{-14}	2.0×10^{-15}
Area 5, RWMS No. 3	02/01/93	02/08/93	9.0×10^{-15}	1.0×10^{-15}
Area 5, RWMS No. 3	02/08/93	02/16/93	1.4×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 3	02/16/93	02/22/93	1.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	02/22/93	03/01/93	1.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	03/01/93	03/08/93	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	03/08/93	03/15/93	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	03/15/93	03/22/93	1.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	03/29/93	04/05/93	1.7×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 3	04/05/93	04/12/93	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	04/12/93	04/19/93	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	04/19/93	04/26/93	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	05/03/93	05/10/93	2.6×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 3	05/10/93	05/17/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	05/17/93	05/24/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	05/24/93	06/01/93	1.6×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 3	06/01/93	06/07/93	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	06/07/93	06/14/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	06/14/93	06/21/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	06/21/93	06/28/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	06/28/93	07/06/93	2.2×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 3	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	07/12/93	07/19/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	07/19/93	07/26/93	1.3×10^{-14}	9.8×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 3	07/26/93	08/02/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	08/02/93	08/09/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	08/09/93	08/16/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	08/16/93	08/23/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	08/23/93	08/30/93	1.9×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 3	08/30/93	09/08/93	1.9×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 3	09/08/93	09/13/93	2.8×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 3	09/13/93	09/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	09/20/93	09/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	09/27/93	10/04/93	3.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	10/04/93	10/11/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	10/11/93	10/19/93	1.4×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 3	10/19/93	10/25/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	10/25/93	11/01/93	2.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 3	11/01/93	11/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	11/08/93	11/15/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	11/15/93	11/22/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	11/22/93	11/29/93	2.1×10^{-14}	1.8×10^{-15}
Area 5, RWMS No. 3	11/29/93	12/06/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	12/06/93	12/13/93	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	12/13/93	12/20/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	12/20/93	12/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	12/27/93	01/03/94	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	01/04/93	01/12/93	1.5×10^{-14}	8.1×10^{-16}
Area 5, RWMS No. 4	01/12/93	01/20/93	7.7×10^{-15}	7.4×10^{-16}
Area 5, RWMS No. 4	01/20/93	01/26/93	1.4×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 4	01/26/93	02/01/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	02/01/93	02/08/93	8.4×10^{-15}	8.2×10^{-16}
Area 5, RWMS No. 4	02/08/93	02/16/93	1.4×10^{-14}	8.0×10^{-16}
Area 5, RWMS No. 4	02/16/93	02/22/93	9.7×10^{-15}	9.7×10^{-16}
Area 5, RWMS No. 4	02/22/93	03/01/93	1.3×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 4	03/01/93	03/08/93	1.4×10^{-14}	8.3×10^{-16}
Area 5, RWMS No. 4	03/08/93	03/15/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	03/15/93	03/22/93	7.7×10^{-15}	8.1×10^{-16}
Area 5, RWMS No. 4	03/29/93	04/05/93	2.8×10^{-14}	2.0×10^{-15}
Area 5, RWMS No. 4	04/05/93	04/12/93	1.9×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 4	04/12/93	04/19/93	1.3×10^{-14}	8.8×10^{-16}
Area 5, RWMS No. 4	04/19/93	04/26/93	1.2×10^{-14}	8.8×10^{-16}
Area 5, RWMS No. 4	04/26/93	05/03/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 4	05/03/93	05/10/93	1.4×10^{-14}	8.6×10^{-16}
Area 5, RWMS No. 4	05/10/93	05/17/93	2.0×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 4	05/17/93	05/24/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 4	05/24/93	06/01/93	1.4×10^{-14}	8.2×10^{-16}
Area 5, RWMS No. 4	06/01/93	06/07/93	1.8×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 4	06/07/93	06/14/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 4	06/14/93	06/21/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	06/21/93	06/28/93	1.6×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 4	06/28/93	07/06/93	2.1×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 4	07/06/93	07/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	07/12/93	07/19/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	07/19/93	07/26/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	07/26/93	08/02/93	1.5×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 4	08/02/93	08/09/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	08/09/93	08/16/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	08/16/93	08/23/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	08/23/93	08/30/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	08/30/93	09/08/93	1.8×10^{-14}	8.3×10^{-16}
Area 5, RWMS No. 4	09/08/93	09/13/93	3.1×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 4	09/13/93	09/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	09/20/93	09/27/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	09/27/93	10/04/93	3.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	10/04/93	10/11/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	10/11/93	10/19/93	1.5×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 4	10/19/93	10/25/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	10/25/93	11/01/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	11/01/93	11/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	11/08/93	11/15/93	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	11/15/93	11/22/93	5.3×10^{-14}	1.8×10^{-15}
Area 5, RWMS No. 4	11/22/93	11/29/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	11/29/93	12/06/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	12/06/93	12/13/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	12/13/93	12/20/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	12/20/93	12/27/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	12/27/93	01/03/94	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	01/04/93	01/12/93	1.6×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 5	01/12/93	01/20/93	8.1×10^{-15}	8.7×10^{-16}
Area 5, RWMS No. 5	01/20/93	01/26/93	1.7×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 5	01/26/93	02/01/93	2.9×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 5	02/01/93	02/08/93	3.8×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 5	02/08/93	02/16/93	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	02/16/93	02/22/93	1.8×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 5	02/22/93	03/01/93	1.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	03/01/93	03/08/93	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	03/08/93	03/15/93	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	03/15/93	03/22/93	1.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	03/22/93	03/29/93	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	03/29/93	04/05/93	2.7×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 5	04/05/93	04/12/93	2.3×10^{-14}	1.4×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 5	04/12/93	04/19/93	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	04/19/93	04/26/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	04/26/93	05/03/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	05/03/93	05/10/93	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	05/10/93	05/17/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	05/17/93	05/24/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	05/24/93	06/01/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	06/01/93	06/07/93	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	06/07/93	06/14/93	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	06/14/93	06/21/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	06/21/93	06/28/93	1.6×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 5	06/28/93	07/06/93	2.1×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 5	07/06/93	07/12/93	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	07/12/93	07/19/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	07/19/93	07/26/93	1.3×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 5	07/26/93	08/02/93	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 5	08/02/93	08/09/93	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 5	08/09/93	08/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	08/16/93	08/23/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	08/23/93	08/30/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	08/30/93	09/08/93	1.8×10^{-14}	8.3×10^{-16}
Area 5, RWMS No. 5	09/08/93	09/13/93	2.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	09/13/93	09/20/93	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	09/20/93	09/27/93	2.5×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 5	09/27/93	10/04/93	3.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	10/04/93	10/11/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	10/11/93	10/19/93	1.6×10^{-14}	8.8×10^{-16}
Area 5, RWMS No. 5	10/19/93	10/25/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	10/25/93	11/01/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	11/01/93	11/08/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	11/08/93	11/15/93	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	11/15/93	11/22/93	3.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	11/22/93	11/29/93	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	11/29/93	12/06/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	12/06/93	12/13/93	3.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	12/13/93	12/20/93	3.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	12/20/93	12/27/93	3.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	12/27/93	01/03/94	2.5×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 6	01/04/93	01/12/93	2.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 6	01/12/93	01/20/93	9.7×10^{-15}	9.8×10^{-16}
Area 5, RWMS No. 6	01/20/93	01/26/93	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	01/26/93	02/01/93	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	02/01/93	02/08/93	3.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	02/08/93	02/16/93	1.4×10^{-14}	8.2×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 6	02/16/93	02/22/93	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	02/22/93	03/01/93	1.3×10^{-14}	9.0×10^{-16}
Area 5, RWMS No. 6	03/01/93	03/08/93	1.5×10^{-14}	9.0×10^{-16}
Area 5, RWMS No. 6	03/08/93	03/15/93	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 6	03/15/93	03/22/93	1.1×10^{-14}	8.7×10^{-16}
Area 5, RWMS No. 6	03/22/93	03/29/93	1.4×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 6	03/29/93	04/05/93	1.6×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 6	04/05/93	04/12/93	1.8×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 6	04/12/93	04/19/93	1.3×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 6	04/19/93	04/26/93	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	04/26/93	05/03/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	05/03/93	05/10/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	05/10/93	05/17/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	05/17/93	05/24/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	05/24/93	06/01/93	1.6×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 6	06/01/93	06/07/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	06/07/93	06/14/93	1.9×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 6	06/14/93	06/21/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	06/21/93	06/28/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	06/28/93	07/06/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	07/06/93	07/12/93	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	07/12/93	07/19/93	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	07/19/93	07/26/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	07/26/93	08/02/93	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	08/09/93	08/16/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	08/16/93	08/23/93	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	08/23/93	08/30/93	2.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	08/30/93	09/08/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	09/08/93	09/13/93	3.3×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 6	09/13/93	09/20/93	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	09/20/93	09/27/93	3.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	09/27/93	10/04/93	4.4×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 6	10/04/93	10/11/93	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	10/11/93	10/19/93	1.6×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 6	10/19/93	10/25/93	3.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	10/25/93	11/01/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	11/01/93	11/08/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	11/08/93	11/15/93	3.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	11/15/93	11/22/93	4.1×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	11/22/93	11/29/93	2.2×10^{-14}	2.1×10^{-15}
Area 5, RWMS No. 6	11/29/93	12/06/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	12/06/93	12/13/93	3.8×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	12/13/93	12/20/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	12/20/93	12/27/93	3.3×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 6	12/27/93	01/03/94	3.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	01/04/93	01/12/93	1.8×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	01/12/93	01/20/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	01/20/93	01/26/93	1.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	01/26/93	02/01/93	2.8×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 7	02/01/93	02/08/93	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	02/08/93	02/16/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	02/16/93	02/22/93	2.8×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 7	02/22/93	03/01/93	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	03/01/93	03/08/93	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	03/08/93	03/15/93	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	03/15/93	03/22/93	9.8×10^{-15}	1.2×10^{-15}
Area 5, RWMS No. 7	03/22/93	03/29/93	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	03/29/93	04/05/93	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	04/05/93	04/12/93	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	04/12/93	04/19/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	04/19/93	04/26/93	1.3×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 7	04/26/93	05/03/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	05/03/93	05/10/93	1.5×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 7	05/10/93	05/17/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	05/17/93	05/24/93	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	05/24/93	06/01/93	1.5×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 7	06/01/93	06/07/93	1.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	06/07/93	06/14/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	06/14/93	06/21/93	1.5×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 7	06/21/93	06/28/93	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	06/28/93	07/06/93	2.1×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 7	07/06/93	07/12/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	07/12/93	07/19/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	07/19/93	07/26/93	1.5×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 7	07/26/93	08/02/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	08/02/93	08/09/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	08/09/93	08/16/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	08/16/93	08/23/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	08/23/93	08/30/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	08/30/93	09/08/93	2.0×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 7	09/08/93	09/13/93	2.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	09/13/93	09/20/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	09/20/93	09/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	09/27/93	10/04/93	3.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	10/04/93	10/11/93	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 7	10/11/93	10/19/93	1.4×10^{-14}	8.2×10^{-16}
Area 5, RWMS No. 7	10/19/93	10/25/93	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	10/25/93	11/01/93	2.2×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 7	11/01/93	11/08/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	11/08/93	11/15/93	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	11/15/93	11/22/93	3.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	11/22/93	11/29/93	2.0×10^{-14}	1.8×10^{-15}
Area 5, RWMS No. 7	11/29/93	12/06/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	12/06/93	12/13/93	3.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	12/13/93	12/20/93	3.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	12/20/93	12/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	12/27/93	01/03/94	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	01/04/93	01/12/93	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	01/12/93	01/20/93	7.8×10^{-15}	8.1×10^{-16}
Area 5, RWMS No. 8	01/20/93	01/26/93	2.2×10^{-14}	2.2×10^{-15}
Area 5, RWMS No. 8	01/26/93	02/01/93	3.3×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 8	02/01/93	02/08/93	3.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 8	02/08/93	02/16/93	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	02/16/93	02/22/93	2.0×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 8	02/22/93	03/01/93	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	03/01/93	03/08/93	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	03/08/93	03/15/93	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	03/15/93	03/22/93	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	03/22/93	03/29/93	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	03/29/93	04/05/93	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	04/05/93	04/12/93	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	04/12/93	04/19/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	04/19/93	04/26/93	1.1×10^{-14}	8.3×10^{-16}
Area 5, RWMS No. 8	04/26/93	05/03/93	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 8	05/03/93	05/10/93	1.4×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 8	05/10/93	05/17/93	1.8×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 8	05/17/93	05/24/93	1.6×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 8	05/24/93	06/01/93	1.6×10^{-14}	8.5×10^{-16}
Area 5, RWMS No. 8	06/01/93	06/07/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	06/07/93	06/14/93	1.6×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 8	06/14/93	06/21/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	06/21/93	06/28/93	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 8	06/28/93	07/06/93	2.0×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 8	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	07/12/93	07/19/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	07/19/93	07/26/93	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	07/26/93	08/02/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/02/93	08/09/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/09/93	08/16/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/16/93	08/23/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	08/23/93	08/30/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	08/30/93	09/08/93	2.1×10^{-14}	9.2×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 8	09/08/93	09/13/93	2.7×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 8	09/13/93	09/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	09/20/93	09/27/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	09/27/93	10/04/93	4.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	10/04/93	10/11/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	10/11/93	10/19/93	1.6×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 8	10/19/93	10/25/93	3.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 8	10/25/93	11/01/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	11/01/93	11/08/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	11/08/93	11/15/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	11/15/93	11/22/93	3.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	11/22/93	11/29/93	2.0×10^{-14}	1.9×10^{-15}
Area 5, RWMS No. 8	11/29/93	12/06/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	12/06/93	12/13/93	3.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	12/13/93	12/20/93	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	12/20/93	12/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	12/27/93	01/03/94	3.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	01/04/93	01/12/93	1.2×10^{-14}	7.7×10^{-16}
Area 5, RWMS No. 9	01/12/93	01/20/93	1.1×10^{-14}	8.8×10^{-16}
Area 5, RWMS No. 9	01/20/93	01/26/93	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	01/26/93	02/01/93	2.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 9	02/01/93	02/08/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	02/08/93	02/16/93	1.3×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 9	02/16/93	02/22/93	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	02/22/93	03/01/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	03/01/93	03/08/93	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	03/08/93	03/15/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	03/15/93	03/22/93	9.6×10^{-15}	9.4×10^{-16}
Area 5, RWMS No. 9	03/22/93	03/29/93	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	03/29/93	04/05/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	04/05/93	04/12/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	04/12/93	04/19/93	1.3×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 9	04/19/93	04/26/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	04/26/93	05/03/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	05/03/93	05/10/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	05/10/93	05/17/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	05/17/93	05/24/93	1.1×10^{-14}	7.2×10^{-16}
Area 5, RWMS No. 9	05/24/93	06/01/93	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 9	06/01/93	06/07/93	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	06/07/93	06/14/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	06/14/93	06/21/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	06/21/93	06/28/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	06/28/93	07/06/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	07/06/93	07/12/93	2.2×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS No. 9	07/12/93	07/19/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	07/19/93	07/26/93	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	07/26/93	08/02/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	08/02/93	08/09/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	08/09/93	08/16/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	08/16/93	08/23/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	08/23/93	08/30/93	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	08/30/93	09/08/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	09/08/93	09/13/93	3.2×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 9	09/13/93	09/20/93	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	09/20/93	09/27/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	09/27/93	10/04/93	4.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	10/04/93	10/11/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	10/11/93	10/19/93	1.6×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 9	10/19/93	10/25/93	3.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 9	10/25/93	11/01/93	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	11/01/93	11/08/93	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	11/08/93	11/15/93	3.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	11/15/93	11/22/93	3.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	11/22/93	11/29/93	2.8×10^{-14}	2.6×10^{-15}
Area 5, RWMS No. 9	11/29/93	12/06/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	12/06/93	12/13/93	3.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	12/13/93	12/20/93	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	12/20/93	12/27/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	12/27/93	01/03/94	3.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	01/04/93	01/26/93	1.3×10^{-14}	5.2×10^{-16}
Area 5, RWMS Pit No. 3	01/26/93	02/01/93	2.5×10^{-14}	1.6×10^{-15}
Area 5, RWMS Pit No. 3	02/01/93	02/08/93	4.8×10^{-15}	7.5×10^{-16}
Area 5, RWMS Pit No. 3	02/08/93	02/16/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 3	02/16/93	02/22/93	1.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	02/22/93	03/01/93	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	03/01/93	03/08/93	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	03/08/93	03/15/93	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	03/15/93	03/22/93	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	03/22/93	03/29/93	9.0×10^{-15}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	03/29/93	04/05/93	1.3×10^{-14}	9.9×10^{-16}
Area 5, RWMS Pit No. 3	04/05/93	04/12/93	2.4×10^{-14}	1.6×10^{-15}
Area 5, RWMS Pit No. 3	04/12/93	04/19/93	1.4×10^{-14}	9.6×10^{-16}
Area 5, RWMS Pit No. 3	04/19/93	04/26/93	1.4×10^{-14}	9.5×10^{-16}
Area 5, RWMS Pit No. 3	04/26/93	05/03/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS Pit No. 3	05/03/93	05/10/93	1.4×10^{-14}	8.8×10^{-16}
Area 5, RWMS Pit No. 3	05/10/93	05/17/93	2.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS Pit No. 3	05/17/93	05/24/93	1.8×10^{-14}	9.3×10^{-16}
Area 5, RWMS Pit No. 3	05/24/93	06/01/93	1.5×10^{-14}	8.2×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS Pit No. 3	06/01/93	06/07/93	1.1×10^{-14}	9.7×10^{-16}
Area 5, RWMS Pit No. 3	06/07/93	06/14/93	1.7×10^{-14}	9.4×10^{-16}
Area 5, RWMS Pit No. 3	06/14/93	06/21/93	1.6×10^{-14}	9.4×10^{-16}
Area 5, RWMS Pit No. 3	06/21/93	06/28/93	1.6×10^{-14}	9.3×10^{-16}
Area 5, RWMS Pit No. 3	06/28/93	07/06/93	1.8×10^{-14}	8.8×10^{-16}
Area 5, RWMS Pit No. 3	07/06/93	07/12/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	07/12/93	07/19/93	1.9×10^{-14}	9.9×10^{-16}
Area 5, RWMS Pit No. 3	07/19/93	07/26/93	1.4×10^{-14}	9.3×10^{-16}
Area 5, RWMS Pit No. 3	07/26/93	08/02/93	1.5×10^{-14}	9.1×10^{-16}
Area 5, RWMS Pit No. 3	08/02/93	08/09/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 3	08/09/93	08/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 3	08/16/93	08/23/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 3	08/23/93	08/30/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	08/30/93	09/08/93	2.0×10^{-14}	8.2×10^{-16}
Area 5, RWMS Pit No. 3	09/08/93	09/13/93	2.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	09/13/93	09/20/93	1.9×10^{-14}	9.9×10^{-16}
Area 5, RWMS Pit No. 3	09/20/93	09/27/93	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	09/27/93	10/04/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	10/04/93	10/11/93	2.1×10^{-14}	9.8×10^{-16}
Area 5, RWMS Pit No. 3	10/11/93	10/19/93	1.4×10^{-14}	8.4×10^{-16}
Area 5, RWMS Pit No. 3	10/19/93	10/25/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	11/01/93	11/08/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	11/08/93	11/15/93	4.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	11/15/93	11/22/93	3.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	11/22/93	11/29/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	11/29/93	12/06/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 3	12/06/93	12/13/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	12/13/93	12/20/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	12/20/93	12/27/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	12/27/93	01/03/94	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	01/04/93	01/26/93	1.2×10^{-14}	4.8×10^{-16}
Area 5, RWMS Pit No. 4	01/26/93	02/01/93	2.9×10^{-14}	1.6×10^{-15}
Area 5, RWMS Pit No. 4	02/01/93	02/08/93	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	02/08/93	02/16/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	02/16/93	02/22/93	9.0×10^{-15}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	02/22/93	03/01/93	1.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	03/01/93	03/08/93	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	03/08/93	03/15/93	1.6×10^{-14}	9.7×10^{-16}
Area 5, RWMS Pit No. 4	03/15/93	03/22/93	1.7×10^{-14}	1.6×10^{-15}
Area 5, RWMS Pit No. 4	03/22/93	03/29/93	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	03/29/93	04/05/93	9.8×10^{-15}	8.2×10^{-16}
Area 5, RWMS Pit No. 4	04/05/93	04/12/93	3.8×10^{-14}	2.6×10^{-15}
Area 5, RWMS Pit No. 4	04/12/93	04/19/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	04/19/93	04/26/93	1.4×10^{-14}	9.4×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS Pit No. 4	04/26/93	05/03/93	8.8×10^{-15}	5.0×10^{-16}
Area 5, RWMS Pit No. 4	05/03/93	05/10/93	1.4×10^{-14}	8.8×10^{-16}
Area 5, RWMS Pit No. 4	05/10/93	05/17/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	05/17/93	05/24/93	1.9×10^{-14}	9.9×10^{-16}
Area 5, RWMS Pit No. 4	05/24/93	06/01/93	1.3×10^{-14}	8.4×10^{-16}
Area 5, RWMS Pit No. 4	06/01/93	06/07/93	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	06/07/93	06/14/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	06/14/93	06/21/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	06/21/93	06/28/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	06/28/93	07/06/93	2.0×10^{-14}	9.2×10^{-16}
Area 5, RWMS Pit No. 4	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	07/12/93	07/19/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	07/19/93	07/26/93	1.5×10^{-14}	9.5×10^{-16}
Area 5, RWMS Pit No. 4	07/26/93	08/02/93	1.4×10^{-14}	8.8×10^{-16}
Area 5, RWMS Pit No. 4	08/02/93	08/09/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/09/93	08/16/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/16/93	08/23/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	08/23/93	08/30/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/30/93	09/08/93	2.0×10^{-14}	8.6×10^{-16}
Area 5, RWMS Pit No. 4	09/08/93	09/13/93	2.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 4	09/13/93	09/20/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	09/20/93	09/27/93	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	09/27/93	10/04/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	10/04/93	10/11/93	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	10/11/93	10/19/93	1.5×10^{-14}	8.7×10^{-16}
Area 5, RWMS Pit No. 4	10/19/93	10/25/93	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	10/25/93	11/01/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	11/01/93	11/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	11/08/93	11/15/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	11/15/93	11/22/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	11/22/93	11/29/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	11/29/93	12/06/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	12/06/93	12/13/93	3.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	12/13/93	12/20/93	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	12/20/93	12/27/93	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	12/27/93	01/03/94	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	01/04/93	01/20/93	1.3×10^{-14}	4.9×10^{-16}
Area 5, RWMS TP N	01/20/93	01/26/93	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	01/26/93	02/01/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	02/01/93	02/08/93	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP N	02/08/93	02/16/93	1.0×10^{-14}	6.1×10^{-16}
Area 5, RWMS TP N	02/16/93	02/22/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	02/22/93	03/01/93	1.1×10^{-14}	8.7×10^{-16}
Area 5, RWMS TP N	03/01/93	03/08/93	1.4×10^{-14}	9.1×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP N	03/08/93	03/15/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	03/15/93	03/22/93	9.3×10^{-15}	8.4×10^{-16}
Area 5, RWMS TP N	03/22/93	03/29/93	1.1×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP N	03/29/93	04/05/93	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP N	04/05/93	04/12/93	1.7×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP N	04/12/93	04/19/93	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS TP N	04/19/93	04/26/93	1.3×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP N	04/26/93	05/03/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	05/03/93	05/10/93	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS TP N	05/10/93	05/17/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	05/17/93	05/24/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	05/24/93	06/01/93	1.6×10^{-14}	9.1×10^{-16}
Area 5, RWMS TP N	06/01/93	06/07/93	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	06/07/93	06/14/93	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP N	06/14/93	06/21/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	06/21/93	06/28/93	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	06/28/93	07/06/93	2.0×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP N	07/06/93	07/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	07/12/93	07/19/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	07/19/93	07/26/93	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	07/26/93	08/02/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	08/09/93	08/16/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	08/16/93	08/23/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	08/23/93	08/30/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	08/30/93	09/08/93	2.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP N	09/08/93	09/13/93	2.5×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP N	09/13/93	09/20/93	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	09/20/93	09/27/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	09/27/93	10/04/93	3.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP N	10/04/93	10/11/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	10/11/93	10/19/93	1.5×10^{-14}	8.7×10^{-16}
Area 5, RWMS TP N	10/19/93	10/25/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	10/25/93	11/01/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	11/01/93	11/08/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	11/08/93	11/15/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	11/15/93	11/22/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	11/22/93	11/29/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	11/29/93	12/06/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	12/06/93	12/13/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	12/13/93	12/20/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	12/20/93	12/27/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	01/04/93	01/20/93	1.2×10^{-14}	6.1×10^{-16}
Area 5, RWMS TP NE	01/20/93	01/26/93	1.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NE	01/26/93	02/01/93	2.6×10^{-14}	1.5×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP NE	02/01/93	02/08/93	7.7×10^{-15}	1.1×10^{-15}
Area 5, RWMS TP NE	02/08/93	02/16/93	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	02/16/93	02/22/93	2.2×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP NE	02/22/93	03/01/93	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	03/01/93	03/08/93	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	03/08/93	03/15/93	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	03/15/93	03/22/93	1.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	03/22/93	03/29/93	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	03/29/93	04/05/93	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	04/05/93	04/12/93	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	04/12/93	04/19/93	1.4×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NE	04/19/93	04/26/93	1.4×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP NE	04/26/93	05/03/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	05/03/93	05/10/93	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS TP NE	05/10/93	05/17/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	05/17/93	05/24/93	1.7×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP NE	05/24/93	06/01/93	1.4×10^{-14}	8.6×10^{-16}
Area 5, RWMS TP NE	06/01/93	06/07/93	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	06/07/93	06/14/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	06/14/93	06/21/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	06/21/93	06/28/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	06/28/93	07/06/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	07/12/93	07/19/93	3.1×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP NE	07/19/93	07/26/93	1.4×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP NE	07/26/93	08/02/93	1.5×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP NE	08/02/93	08/09/93	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	08/09/93	08/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	08/16/93	08/23/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	08/23/93	08/30/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	08/30/93	09/08/93	2.0×10^{-14}	8.5×10^{-16}
Area 5, RWMS TP NE	09/08/93	09/13/93	2.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NE	09/13/93	09/20/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	09/20/93	09/27/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	09/27/93	10/04/93	3.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	10/04/93	10/11/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	10/11/93	10/19/93	1.5×10^{-14}	8.4×10^{-16}
Area 5, RWMS TP NE	10/19/93	10/25/93	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	10/25/93	11/01/93	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	11/01/93	11/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	11/08/93	11/15/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	11/15/93	11/22/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	11/22/93	11/29/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	11/29/93	12/06/93	2.1×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP NE	12/06/93	12/13/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	12/13/93	12/20/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	12/20/93	12/27/93	3.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NE	12/27/93	01/03/94	3.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	01/04/93	01/20/93	1.4×10^{-14}	6.6×10^{-16}
Area 5, RWMS TP NW	01/20/93	01/26/93	1.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NW	01/26/93	02/01/93	3.0×10^{-14}	1.7×10^{-15}
Area 5, RWMS TP NW	02/01/93	02/08/93	1.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	02/08/93	02/16/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	02/16/93	02/22/93	1.9×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP NW	02/22/93	03/01/93	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	03/01/93	03/08/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	03/08/93	03/15/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	03/15/93	03/22/93	7.6×10^{-15}	8.6×10^{-16}
Area 5, RWMS TP NW	03/22/93	03/29/93	1.2×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP NW	03/29/93	04/05/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	04/05/93	04/12/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	04/12/93	04/19/93	1.5×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NW	04/19/93	04/26/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	04/26/93	05/03/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	05/03/93	05/10/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	05/10/93	05/17/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	05/17/93	05/24/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	05/24/93	06/01/93	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP NW	06/01/93	06/07/93	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	06/07/93	06/14/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	06/14/93	06/21/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	06/21/93	06/28/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	06/28/93	07/06/93	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	07/06/93	07/12/93	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	07/12/93	07/19/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	07/19/93	07/26/93	1.3×10^{-14}	9.0×10^{-16}
Area 5, RWMS TP NW	07/26/93	08/02/93	1.5×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP NW	08/02/93	08/09/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	08/09/93	08/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	08/16/93	08/23/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP NW	08/23/93	08/30/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	08/30/93	09/08/93	2.0×10^{-14}	8.3×10^{-16}
Area 5, RWMS TP NW	09/08/93	09/13/93	2.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NW	09/13/93	09/20/93	1.8×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP NW	09/20/93	09/27/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	09/27/93	10/04/93	3.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	10/04/93	10/11/93	2.0×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NW	10/11/93	10/19/93	1.3×10^{-14}	9.1×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP NW	10/19/93	10/25/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	10/25/93	11/01/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	11/01/93	11/08/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	11/08/93	11/15/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	11/15/93	11/22/93	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	11/22/93	11/29/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	11/29/93	12/06/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	12/06/93	12/13/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	12/13/93	12/20/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	12/20/93	12/27/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	12/27/93	01/03/94	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	01/04/93	01/20/93	1.2×10^{-14}	5.9×10^{-16}
Area 5, RWMS TP S	01/20/93	01/26/93	1.2×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP S	01/26/93	02/01/93	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	02/01/93	02/08/93	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	02/08/93	02/16/93	1.1×10^{-14}	7.6×10^{-16}
Area 5, RWMS TP S	02/16/93	02/22/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	02/22/93	03/01/93	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	03/01/93	03/08/93	6.7×10^{-15}	6.0×10^{-16}
Area 5, RWMS TP S	03/08/93	03/15/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	03/15/93	03/22/93	9.9×10^{-15}	8.3×10^{-16}
Area 5, RWMS TP S	03/22/93	03/29/93	1.4×10^{-14}	9.0×10^{-16}
Area 5, RWMS TP S	03/29/93	04/05/93	1.5×10^{-14}	9.1×10^{-16}
Area 5, RWMS TP S	04/05/93	04/12/93	1.8×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP S	04/12/93	04/19/93	1.3×10^{-14}	8.6×10^{-16}
Area 5, RWMS TP S	04/19/93	04/26/93	1.4×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP S	04/26/93	05/03/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	05/03/93	05/10/93	1.2×10^{-14}	8.4×10^{-16}
Area 5, RWMS TP S	05/10/93	05/17/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP S	05/17/93	05/24/93	1.8×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP S	05/24/93	06/01/93	1.4×10^{-14}	8.1×10^{-16}
Area 5, RWMS TP S	06/01/93	06/07/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	06/07/93	06/14/93	1.8×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP S	06/14/93	06/21/93	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP S	06/21/93	06/28/93	1.7×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP S	06/28/93	07/06/93	2.0×10^{-14}	9.0×10^{-16}
Area 5, RWMS TP S	07/06/93	07/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	07/12/93	07/19/93	1.9×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP S	07/19/93	07/26/93	1.0×10^{-14}	8.9×10^{-16}
Area 5, RWMS TP S	07/26/93	08/02/93	1.7×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP S	08/02/93	08/09/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	08/09/93	08/16/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	08/16/93	08/23/93	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP S	08/23/93	08/30/93	2.3×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP S	08/30/93	09/08/93	1.9×10^{-14}	8.4×10^{-16}
Area 5, RWMS TP S	09/08/93	09/13/93	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP S	09/13/93	09/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	09/20/93	09/27/93	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	10/04/93	10/11/93	2.5×10^{-14}	1.8×10^{-15}
Area 5, RWMS TP S	10/11/93	10/19/93	1.5×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP S	10/19/93	10/25/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	10/25/93	11/01/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	11/01/93	11/08/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	11/08/93	11/15/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	11/15/93	11/22/93	3.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	11/22/93	11/29/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	11/29/93	12/06/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	12/06/93	12/13/93	3.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	12/13/93	12/20/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	12/20/93	12/27/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	12/27/93	01/03/94	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	01/04/93	01/20/93	1.1×10^{-14}	6.2×10^{-16}
Area 5, RWMS TP SE	01/20/93	01/26/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	01/26/93	02/01/93	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SE	02/01/93	02/08/93	4.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP SE	02/08/93	02/16/93	1.3×10^{-14}	8.6×10^{-16}
Area 5, RWMS TP SE	02/16/93	02/22/93	8.8×10^{-15}	1.0×10^{-15}
Area 5, RWMS TP SE	02/22/93	03/01/93	1.4×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP SE	03/01/93	03/08/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	03/08/93	03/15/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	03/15/93	03/22/93	1.0×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP SE	03/22/93	03/29/93	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	03/29/93	04/05/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	04/05/93	04/12/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	04/12/93	04/19/93	1.4×10^{-14}	9.2×10^{-16}
Area 5, RWMS TP SE	04/19/93	04/26/93	1.4×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP SE	04/26/93	05/03/93	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	05/03/93	05/10/93	1.6×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP SE	05/10/93	05/17/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	05/17/93	05/24/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	05/24/93	06/01/93	1.6×10^{-14}	8.6×10^{-16}
Area 5, RWMS TP SE	06/01/93	06/07/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	06/07/93	06/14/93	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP SE	06/14/93	06/21/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	06/21/93	06/28/93	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP SE	06/28/93	07/06/93	2.2×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP SE	07/06/93	07/12/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	07/12/93	07/19/93	2.3×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP SE	07/19/93	07/26/93	1.5×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP SE	07/26/93	08/02/93	1.6×10^{-14}	9.0×10^{-16}
Area 5, RWMS TP SE	08/02/93	08/09/93	2.1×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP SE	08/09/93	08/16/93	1.9×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP SE	08/16/93	08/23/93	1.8×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP SE	08/23/93	08/30/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	08/30/93	09/08/93	2.0×10^{-14}	8.0×10^{-16}
Area 5, RWMS TP SE	09/08/93	09/13/93	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SE	09/13/93	09/20/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	09/20/93	09/27/93	3.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	09/27/93	10/04/93	3.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	10/04/93	10/11/93	2.0×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP SE	10/11/93	10/19/93	1.5×10^{-14}	8.4×10^{-16}
Area 5, RWMS TP SE	10/19/93	10/25/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	10/25/93	11/01/93	2.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP SE	11/01/93	11/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	11/08/93	11/15/93	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	11/15/93	11/22/93	3.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	11/22/93	11/29/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	11/29/93	12/06/93	2.0×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP SE	12/06/93	12/13/93	2.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	12/13/93	12/20/93	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	12/20/93	12/27/93	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	12/27/93	01/03/94	3.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	01/04/93	01/20/93	1.2×10^{-14}	5.1×10^{-16}
Area 5, RWMS TP SW	01/20/93	01/26/93	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	01/26/93	02/01/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	02/01/93	02/08/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	02/08/93	02/16/93	1.2×10^{-14}	8.0×10^{-16}
Area 5, RWMS TP SW	02/16/93	02/22/93	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	02/22/93	03/01/93	1.1×10^{-14}	8.7×10^{-16}
Area 5, RWMS TP SW	03/01/93	03/08/93	1.2×10^{-14}	8.9×10^{-16}
Area 5, RWMS TP SW	03/08/93	03/15/93	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	03/15/93	03/22/93	9.4×10^{-15}	8.6×10^{-16}
Area 5, RWMS TP SW	03/22/93	03/29/93	1.4×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP SW	03/29/93	04/05/93	1.4×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP SW	04/05/93	04/12/93	1.8×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP SW	04/12/93	04/19/93	1.3×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP SW	04/19/93	04/26/93	1.8×10^{-14}	2.0×10^{-15}
Area 5, RWMS TP SW	04/26/93	05/03/93	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SW	05/03/93	05/10/93	1.4×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP SW	05/10/93	05/17/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	05/17/93	05/24/93	1.6×10^{-14}	8.7×10^{-16}
Area 5, RWMS TP SW	05/24/93	06/01/93	1.5×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, RWMS TP SW	06/01/93	06/07/93	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	06/07/93	06/14/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	06/14/93	06/21/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	06/21/93	06/28/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	06/28/93	07/06/93	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP SW	07/06/93	07/12/93	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	07/12/93	07/19/93	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP SW	07/19/93	07/26/93	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP SW	07/26/93	08/02/93	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP SW	08/02/93	08/09/93	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	08/09/93	08/16/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	08/16/93	08/23/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	08/23/93	08/30/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	08/30/93	09/08/93	1.8×10^{-14}	8.2×10^{-16}
Area 5, RWMS TP SW	09/08/93	09/13/93	2.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SW	09/13/93	09/20/93	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	09/20/93	09/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	09/27/93	10/04/93	3.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	10/04/93	10/11/93	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	10/11/93	10/19/93	1.5×10^{-14}	8.6×10^{-16}
Area 5, RWMS TP SW	10/19/93	10/25/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	10/25/93	11/01/93	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	11/01/93	11/08/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	11/08/93	11/15/93	3.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	11/15/93	11/22/93	3.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	11/22/93	11/29/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	11/29/93	12/06/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	12/06/93	12/13/93	3.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	12/13/93	12/20/93	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	12/20/93	12/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	12/27/93	01/03/94	3.1×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	02/01/93	02/08/93	4.3×10^{-15}	8.3×10^{-16}
Area 5, Well 5B	02/08/93	02/16/93	1.2×10^{-14}	8.6×10^{-16}
Area 5, Well 5B	02/16/93	03/08/93	1.3×10^{-14}	4.5×10^{-16}
Area 5, Well 5B	03/08/93	03/15/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	03/15/93	03/22/93	1.1×10^{-14}	9.6×10^{-16}
Area 5, Well 5B	03/22/93	03/29/93	1.4×10^{-14}	9.9×10^{-16}
Area 5, Well 5B	03/29/93	04/05/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	04/05/93	04/12/93	1.8×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	04/12/93	04/19/93	1.5×10^{-14}	9.8×10^{-16}
Area 5, Well 5B	04/19/93	04/26/93	1.3×10^{-14}	9.9×10^{-16}
Area 5, Well 5B	04/26/93	05/03/93	1.3×10^{-14}	7.4×10^{-16}
Area 5, Well 5B	05/03/93	05/10/93	2.4×10^{-14}	1.7×10^{-15}
Area 5, Well 5B	05/10/93	05/17/93	2.4×10^{-14}	2.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5B	05/17/93	05/24/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	05/24/93	06/01/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	06/01/93	06/07/93	1.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	06/07/93	06/14/93	1.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	06/14/93	06/21/93	1.8×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	06/21/93	06/28/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	06/28/93	07/06/93	2.0×10^{-14}	9.9×10^{-16}
Area 5, Well 5B	07/06/93	07/12/93	1.9×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	07/12/93	07/19/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	07/19/93	07/26/93	1.6×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	07/26/93	08/02/93	1.7×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	08/02/93	08/09/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/09/93	08/16/93	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/16/93	08/23/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/23/93	08/30/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/30/93	09/08/93	2.0×10^{-14}	9.0×10^{-16}
Area 5, Well 5B	09/13/93	09/20/93	1.9×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	09/20/93	09/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	09/27/93	10/04/93	3.8×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	10/04/93	10/11/93	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/11/93	10/19/93	1.5×10^{-14}	9.0×10^{-16}
Area 5, Well 5B	10/19/93	10/25/93	2.6×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	10/25/93	11/01/93	2.0×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	11/01/93	11/08/93	2.7×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	11/08/93	11/15/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	11/15/93	11/22/93	3.6×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	11/22/93	11/29/93	2.8×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	11/29/93	12/06/93	2.1×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	12/06/93	12/13/93	3.8×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	12/13/93	12/20/93	3.3×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	12/20/93	12/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	12/27/93	01/03/94	3.3×10^{-14}	1.3×10^{-15}
Area 6, Building 6-900	01/04/93	01/11/93	1.4×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	01/11/93	01/19/93	1.2×10^{-14}	8.6×10^{-16}
Area 6, Building 6-900	01/19/93	01/25/93	1.2×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	01/25/93	02/01/93	3.1×10^{-14}	1.2×10^{-15}
Area 6, Building 6-900	02/01/93	02/08/93	7.2×10^{-15}	8.9×10^{-16}
Area 6, Building 6-900	02/08/93	02/16/93	2.0×10^{-14}	9.8×10^{-16}
Area 6, Building 6-900	02/16/93	02/22/93	1.1×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	02/22/93	03/01/93	1.6×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	03/01/93	03/08/93	1.4×10^{-14}	9.9×10^{-16}
Area 6, Building 6-900	03/08/93	03/15/93	2.1×10^{-14}	1.2×10^{-15}
Area 6, Building 6-900	03/15/93	03/22/93	1.1×10^{-14}	9.1×10^{-16}
Area 6, Building 6-900	03/22/93	03/29/93	1.9×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Building 6-900	03/29/93	04/05/93	1.7×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	04/05/93	04/12/93	1.7×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	04/12/93	04/19/93	1.4×10^{-14}	9.6×10^{-16}
Area 6, Building 6-900	04/19/93	04/26/93	1.3×10^{-14}	9.4×10^{-16}
Area 6, Building 6-900	04/26/93	05/03/93	1.6×10^{-14}	3.9×10^{-15}
Area 6, Building 6-900	05/10/93	05/17/93	2.1×10^{-14}	3.4×10^{-15}
Area 6, Building 6-900	05/17/93	05/24/93	2.4×10^{-14}	3.5×10^{-15}
Area 6, Building 6-900	05/24/93	06/01/93	1.6×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	06/01/93	06/07/93	1.0×10^{-14}	1.5×10^{-15}
Area 6, Building 6-900	06/07/93	06/14/93	1.7×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	07/08/93	07/19/93	2.1×10^{-14}	7.8×10^{-16}
Area 6, Building 6-900	07/19/93	07/26/93	1.4×10^{-14}	9.7×10^{-16}
Area 6, Building 6-900	07/26/93	08/02/93	1.7×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	08/02/93	08/09/93	2.0×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	08/09/93	08/16/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	08/16/93	08/23/93	4.4×10^{-15}	7.8×10^{-16}
Area 6, Building 6-900	08/23/93	08/30/93	8.2×10^{-15}	8.6×10^{-16}
Area 6, Building 6-900	08/30/93	09/08/93	1.9×10^{-14}	8.4×10^{-16}
Area 6, Building 6-900	09/08/93	09/13/93	5.6×10^{-14}	3.1×10^{-15}
Area 6, Building 6-900	09/13/93	09/20/93	1.5×10^{-14}	7.6×10^{-16}
Area 6, Building 6-900	09/20/93	09/27/93	3.0×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	09/27/93	10/04/93	3.5×10^{-14}	1.2×10^{-15}
Area 6, Building 6-900	10/04/93	10/11/93	2.3×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	10/11/93	10/18/93	1.4×10^{-14}	9.5×10^{-16}
Area 6, Building 6-900	10/18/93	10/25/93	2.6×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	10/25/93	11/01/93	2.1×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	11/01/93	11/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	11/08/93	11/15/93	2.9×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	11/15/93	11/22/93	3.1×10^{-14}	1.2×10^{-15}
Area 6, Building 6-900	11/22/93	11/29/93	2.4×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	11/29/93	12/06/93	1.9×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	12/06/93	12/13/93	2.7×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	12/13/93	12/20/93	2.3×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	12/20/93	12/27/93	2.9×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	12/27/93	01/03/94	2.8×10^{-14}	1.1×10^{-15}
Area 6, CP-6	01/04/93	01/11/93	1.1×10^{-14}	8.5×10^{-16}
Area 6, CP-6	01/11/93	01/19/93	7.9×10^{-15}	8.4×10^{-16}
Area 6, CP-6	01/19/93	01/25/93	1.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	01/25/93	02/01/93	2.3×10^{-14}	1.1×10^{-15}
Area 6, CP-6	02/01/93	02/08/93	2.4×10^{-14}	1.1×10^{-15}
Area 6, CP-6	02/08/93	02/16/93	2.0×10^{-14}	9.7×10^{-16}
Area 6, CP-6	02/16/93	02/22/93	1.1×10^{-14}	1.0×10^{-15}
Area 6, CP-6	02/22/93	03/01/93	7.7×10^{-15}	8.7×10^{-16}
Area 6, CP-6	03/01/93	03/08/93	1.2×10^{-14}	9.6×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, CP-6	03/08/93	03/15/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	03/15/93	03/22/93	8.3×10^{-15}	9.1×10^{-16}
Area 6, CP-6	03/22/93	03/29/93	1.2×10^{-14}	9.3×10^{-16}
Area 6, CP-6	03/29/93	04/05/93	1.6×10^{-14}	1.0×10^{-15}
Area 6, CP-6	04/05/93	04/12/93	1.9×10^{-14}	1.0×10^{-15}
Area 6, CP-6	04/12/93	04/19/93	1.4×10^{-14}	9.5×10^{-16}
Area 6, CP-6	04/19/93	04/26/93	1.2×10^{-14}	9.2×10^{-16}
Area 6, CP-6	04/26/93	05/03/93	1.9×10^{-14}	1.0×10^{-15}
Area 6, CP-6	05/03/93	05/10/93	1.6×10^{-14}	9.8×10^{-16}
Area 6, CP-6	05/10/93	05/17/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	05/17/93	05/24/93	1.7×10^{-14}	1.0×10^{-15}
Area 6, CP-6	05/24/93	06/01/93	1.6×10^{-14}	8.9×10^{-16}
Area 6, CP-6	06/01/93	06/07/93	1.2×10^{-14}	1.1×10^{-15}
Area 6, CP-6	06/07/93	06/14/93	1.8×10^{-14}	1.0×10^{-15}
Area 6, CP-6	06/14/93	06/21/93	1.9×10^{-14}	1.1×10^{-15}
Area 6, CP-6	06/21/93	06/28/93	1.7×10^{-14}	1.0×10^{-15}
Area 6, CP-6	06/28/93	07/06/93	2.0×10^{-14}	9.8×10^{-16}
Area 6, CP-6	07/06/93	07/12/93	2.1×10^{-14}	1.2×10^{-15}
Area 6, CP-6	07/12/93	07/19/93	2.0×10^{-14}	1.1×10^{-15}
Area 6, CP-6	07/19/93	07/26/93	1.5×10^{-14}	9.9×10^{-16}
Area 6, CP-6	07/26/93	08/02/93	1.5×10^{-14}	9.8×10^{-16}
Area 6, CP-6	08/02/93	08/09/93	2.0×10^{-14}	1.1×10^{-15}
Area 6, CP-6	08/09/93	08/16/93	1.6×10^{-14}	8.8×10^{-16}
Area 6, CP-6	08/16/93	08/23/93	2.0×10^{-14}	1.1×10^{-15}
Area 6, CP-6	08/23/93	08/30/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	08/30/93	09/08/93	1.9×10^{-14}	8.9×10^{-16}
Area 6, CP-6	09/08/93	09/13/93	2.6×10^{-14}	1.5×10^{-15}
Area 6, CP-6	09/13/93	09/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	09/20/93	09/27/93	2.8×10^{-14}	1.2×10^{-15}
Area 6, CP-6	09/27/93	10/04/93	3.6×10^{-14}	1.3×10^{-15}
Area 6, CP-6	10/04/93	10/11/93	1.9×10^{-14}	1.1×10^{-15}
Area 6, CP-6	10/11/93	10/18/93	1.3×10^{-14}	9.8×10^{-16}
Area 6, CP-6	10/18/93	10/25/93	2.5×10^{-14}	1.1×10^{-15}
Area 6, CP-6	10/25/93	11/01/93	2.0×10^{-14}	1.1×10^{-15}
Area 6, CP-6	11/01/93	11/08/93	2.4×10^{-14}	1.2×10^{-15}
Area 6, CP-6	11/08/93	11/15/93	3.2×10^{-14}	1.2×10^{-15}
Area 6, CP-6	11/15/93	11/22/93	3.2×10^{-14}	1.2×10^{-15}
Area 6, CP-6	11/22/93	11/29/93	2.4×10^{-14}	1.0×10^{-15}
Area 6, CP-6	11/29/93	12/06/93	2.2×10^{-14}	1.2×10^{-15}
Area 6, CP-6	12/06/93	12/13/93	3.1×10^{-14}	1.5×10^{-15}
Area 6, CP-6	12/13/93	12/20/93	2.5×10^{-14}	1.2×10^{-15}
Area 6, CP-6	12/20/93	12/27/93	2.6×10^{-14}	1.1×10^{-15}
Area 6, CP-6	12/27/93	01/03/94	2.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	01/04/93	01/11/93	1.6×10^{-14}	9.8×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well 3 Complex	01/11/93	01/19/93	9.5×10^{-15}	7.8×10^{-16}
Area 6, Well 3 Complex	01/19/93	01/25/93	1.3×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	01/25/93	02/01/93	2.3×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	02/01/93	02/08/93	7.8×10^{-15}	8.3×10^{-16}
Area 6, Well 3 Complex	02/08/93	02/16/93	1.3×10^{-14}	8.1×10^{-16}
Area 6, Well 3 Complex	02/16/93	02/22/93	8.6×10^{-15}	9.4×10^{-16}
Area 6, Well 3 Complex	02/22/93	03/01/93	8.0×10^{-15}	8.2×10^{-16}
Area 6, Well 3 Complex	03/01/93	03/08/93	1.4×10^{-14}	9.2×10^{-16}
Area 6, Well 3 Complex	03/08/93	03/15/93	2.0×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	03/15/93	03/22/93	8.4×10^{-15}	8.2×10^{-16}
Area 6, Well 3 Complex	03/22/93	03/29/93	1.1×10^{-14}	8.5×10^{-16}
Area 6, Well 3 Complex	03/29/93	04/05/93	1.5×10^{-14}	9.6×10^{-16}
Area 6, Well 3 Complex	04/05/93	04/12/93	1.6×10^{-14}	9.4×10^{-16}
Area 6, Well 3 Complex	04/12/93	04/19/93	1.2×10^{-14}	8.7×10^{-16}
Area 6, Well 3 Complex	04/19/93	04/26/93	1.3×10^{-14}	8.8×10^{-16}
Area 6, Well 3 Complex	04/26/93	05/03/93	1.7×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	05/03/93	05/10/93	1.1×10^{-14}	7.5×10^{-16}
Area 6, Well 3 Complex	05/10/93	05/18/93	1.9×10^{-14}	9.0×10^{-16}
Area 6, Well 3 Complex	05/18/93	05/24/93	1.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	05/24/93	06/01/93	1.5×10^{-14}	8.3×10^{-16}
Area 6, Well 3 Complex	06/01/93	06/07/93	1.3×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	06/07/93	06/14/93	1.8×10^{-14}	9.8×10^{-16}
Area 6, Well 3 Complex	06/14/93	06/22/93	1.6×10^{-14}	9.0×10^{-16}
Area 6, Well 3 Complex	06/28/93	07/06/93	2.1×10^{-14}	9.9×10^{-16}
Area 6, Well 3 Complex	07/06/93	07/12/93	2.0×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	07/12/93	07/19/93	2.1×10^{-14}	9.9×10^{-16}
Area 6, Well 3 Complex	07/19/93	07/26/93	1.3×10^{-14}	8.6×10^{-16}
Area 6, Well 3 Complex	07/26/93	08/02/93	1.5×10^{-14}	9.1×10^{-16}
Area 6, Well 3 Complex	08/02/93	08/09/93	1.9×10^{-14}	9.4×10^{-16}
Area 6, Well 3 Complex	08/09/93	08/16/93	2.1×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	08/16/93	08/23/93	1.8×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	08/23/93	08/30/93	2.1×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	08/30/93	09/08/93	1.8×10^{-14}	7.9×10^{-16}
Area 6, Well 3 Complex	09/08/93	09/13/93	2.5×10^{-14}	1.3×10^{-15}
Area 6, Well 3 Complex	09/13/93	09/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	09/20/93	09/27/93	2.5×10^{-14}	9.2×10^{-16}
Area 6, Well 3 Complex	09/27/93	10/04/93	3.3×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	10/11/93	10/18/93	1.3×10^{-14}	8.6×10^{-16}
Area 6, Well 3 Complex	10/18/93	10/25/93	2.4×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	10/25/93	11/01/93	2.0×10^{-14}	9.4×10^{-16}
Area 6, Well 3 Complex	11/01/93	11/08/93	2.2×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	11/08/93	11/15/93	2.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	11/15/93	11/22/93	2.8×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	11/22/93	11/29/93	2.4×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well 3 Complex	11/29/93	12/06/93	1.8×10^{-14}	9.6×10^{-16}
Area 6, Well 3 Complex	12/06/93	12/13/93	2.6×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	12/13/93	12/20/93	2.2×10^{-14}	9.8×10^{-16}
Area 6, Well 3 Complex	12/20/93	12/27/93	2.4×10^{-14}	9.9×10^{-16}
Area 6, Well 3 Complex	12/27/93	01/03/94	2.4×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	01/04/93	01/11/93	1.5×10^{-14}	9.6×10^{-16}
Area 6, Yucca Complex	01/11/93	01/19/93	7.5×10^{-15}	7.4×10^{-16}
Area 6, Yucca Complex	01/19/93	01/25/93	1.1×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	01/25/93	02/01/93	2.3×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	02/01/93	02/08/93	6.4×10^{-14}	1.5×10^{-15}
Area 6, Yucca Complex	02/08/93	02/16/93	1.2×10^{-14}	8.1×10^{-16}
Area 6, Yucca Complex	02/16/93	02/22/93	1.6×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	02/22/93	03/01/93	1.1×10^{-14}	8.9×10^{-16}
Area 6, Yucca Complex	03/01/93	03/08/93	1.2×10^{-14}	9.3×10^{-16}
Area 6, Yucca Complex	03/08/93	03/15/93	2.1×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	03/15/93	03/22/93	9.4×10^{-15}	8.6×10^{-16}
Area 6, Yucca Complex	03/22/93	03/29/93	1.8×10^{-14}	9.9×10^{-16}
Area 6, Yucca Complex	03/29/93	04/05/93	1.4×10^{-14}	9.6×10^{-16}
Area 6, Yucca Complex	04/05/93	04/12/93	1.7×10^{-14}	9.7×10^{-16}
Area 6, Yucca Complex	04/12/93	04/19/93	1.3×10^{-14}	9.1×10^{-16}
Area 6, Yucca Complex	04/19/93	04/26/93	1.1×10^{-14}	8.8×10^{-16}
Area 6, Yucca Complex	04/26/93	05/03/93	1.7×10^{-14}	9.6×10^{-16}
Area 6, Yucca Complex	05/03/93	05/10/93	1.6×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	05/10/93	05/17/93	1.4×10^{-14}	8.8×10^{-16}
Area 6, Yucca Complex	05/17/93	05/24/93	1.9×10^{-14}	9.9×10^{-16}
Area 6, Yucca Complex	05/24/93	06/01/93	1.3×10^{-14}	8.2×10^{-16}
Area 6, Yucca Complex	06/01/93	06/07/93	1.3×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	06/07/93	06/14/93	1.6×10^{-14}	9.5×10^{-16}
Area 6, Yucca Complex	06/14/93	06/21/93	1.8×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	06/21/93	06/28/93	1.7×10^{-14}	9.7×10^{-16}
Area 6, Yucca Complex	06/28/93	07/06/93	2.1×10^{-14}	9.5×10^{-16}
Area 6, Yucca Complex	07/06/93	07/12/93	2.0×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	07/12/93	07/19/93	2.1×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	07/19/93	07/26/93	1.5×10^{-14}	9.5×10^{-16}
Area 6, Yucca Complex	07/26/93	08/02/93	1.6×10^{-14}	9.7×10^{-16}
Area 6, Yucca Complex	08/02/93	08/09/93	2.0×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	08/09/93	08/16/93	5.7×10^{-15}	9.5×10^{-16}
Area 6, Yucca Complex	08/30/93	09/08/93	2.2×10^{-14}	9.2×10^{-16}
Area 6, Yucca Complex	09/08/93	09/13/93	2.5×10^{-14}	1.4×10^{-15}
Area 6, Yucca Complex	09/13/93	09/20/93	2.0×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	09/20/93	09/27/93	3.0×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	10/04/93	10/11/93	1.6×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	10/11/93	10/18/93	1.4×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	10/18/93	10/25/93	2.3×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Yucca Complex	10/25/93	11/01/93	1.9×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	11/01/93	11/08/93	2.0×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	11/08/93	11/15/93	2.4×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	11/15/93	11/22/93	2.7×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	11/22/93	11/29/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	11/29/93	12/06/93	2.2×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	12/06/93	12/13/93	2.1×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	12/13/93	12/20/93	1.8×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	12/20/93	12/27/93	2.1×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	12/27/93	01/03/94	2.0×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	01/04/93	01/11/93	1.2×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	01/11/93	01/19/93	8.0×10^{-15}	7.8×10^{-16}
Area 7, UE-7ns	01/19/93	01/25/93	1.3×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	01/25/93	02/01/93	2.2×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	02/01/93	02/08/93	9.7×10^{-15}	9.0×10^{-16}
Area 7, UE-7ns	02/08/93	02/16/93	1.2×10^{-14}	8.3×10^{-16}
Area 7, UE-7ns	02/16/93	02/22/93	8.3×10^{-15}	9.6×10^{-16}
Area 7, UE-7ns	02/22/93	03/01/93	1.4×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	03/01/93	03/08/93	1.2×10^{-14}	9.2×10^{-16}
Area 7, UE-7ns	03/08/93	03/15/93	1.7×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	03/15/93	03/22/93	9.9×10^{-15}	8.8×10^{-16}
Area 7, UE-7ns	03/22/93	03/29/93	1.0×10^{-14}	8.9×10^{-16}
Area 7, UE-7ns	03/29/93	04/05/93	1.5×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	04/05/93	04/12/93	1.6×10^{-14}	9.7×10^{-16}
Area 7, UE-7ns	04/12/93	04/19/93	1.5×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	04/19/93	04/26/93	1.3×10^{-14}	9.1×10^{-16}
Area 7, UE-7ns	04/26/93	05/03/93	1.6×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	05/03/93	05/10/93	1.3×10^{-14}	9.2×10^{-16}
Area 7, UE-7ns	05/10/93	05/18/93	1.8×10^{-14}	9.3×10^{-16}
Area 7, UE-7ns	05/18/93	05/24/93	1.2×10^{-14}	8.3×10^{-16}
Area 7, UE-7ns	05/24/93	06/01/93	1.5×10^{-14}	7.9×10^{-16}
Area 7, UE-7ns	06/01/93	06/07/93	1.1×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	06/07/93	06/14/93	1.6×10^{-14}	9.9×10^{-16}
Area 7, UE-7ns	06/14/93	06/22/93	1.7×10^{-14}	8.7×10^{-16}
Area 7, UE-7ns	06/29/93	07/07/93	1.9×10^{-14}	8.9×10^{-16}
Area 7, UE-7ns	07/07/93	07/12/93	2.0×10^{-14}	1.3×10^{-15}
Area 7, UE-7ns	07/12/93	07/19/93	2.0×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	08/02/93	08/09/93	2.3×10^{-14}	1.2×10^{-15}
Area 7, UE-7ns	08/09/93	08/16/93	1.9×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	08/16/93	08/23/93	1.7×10^{-14}	9.8×10^{-16}
Area 7, UE-7ns	08/23/93	08/30/93	1.9×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	08/30/93	09/08/93	1.8×10^{-14}	8.4×10^{-16}
Area 7, UE-7ns	09/08/93	09/13/93	2.6×10^{-14}	1.4×10^{-15}
Area 7, UE-7ns	09/13/93	09/20/93	1.9×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 7, UE-7ns	09/20/93	09/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	09/27/93	10/04/93	3.3×10^{-14}	1.2×10^{-15}
Area 7, UE-7ns	10/04/93	10/11/93	1.5×10^{-14}	9.7×10^{-16}
Area 7, UE-7ns	10/11/93	10/18/93	1.2×10^{-14}	9.1×10^{-16}
Area 7, UE-7ns	10/18/93	10/25/93	2.6×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	10/25/93	11/01/93	1.8×10^{-14}	9.8×10^{-16}
Area 7, UE-7ns	11/01/93	11/08/93	2.2×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	11/08/93	11/15/93	2.8×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	11/15/93	11/22/93	3.0×10^{-14}	1.2×10^{-15}
Area 7, UE-7ns	11/22/93	11/29/93	2.5×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	11/29/93	12/06/93	1.5×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	12/06/93	12/13/93	1.8×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	12/13/93	12/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	12/20/93	12/27/93	2.2×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	12/27/93	01/03/94	2.6×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	01/04/93	01/11/93	1.3×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	01/11/93	01/19/93	1.4×10^{-14}	9.2×10^{-16}
Area 9, 9-300 Bunker	01/25/93	02/01/93	2.5×10^{-14}	1.6×10^{-15}
Area 9, 9-300 Bunker	02/01/93	02/08/93	2.1×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	02/08/93	02/16/93	1.3×10^{-14}	8.4×10^{-16}
Area 9, 9-300 Bunker	02/16/93	02/22/93	1.1×10^{-14}	9.9×10^{-16}
Area 9, 9-300 Bunker	02/22/93	03/01/93	1.1×10^{-14}	8.9×10^{-16}
Area 9, 9-300 Bunker	03/01/93	03/08/93	1.3×10^{-14}	9.1×10^{-16}
Area 9, 9-300 Bunker	03/08/93	03/15/93	2.0×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	03/15/93	03/22/93	9.6×10^{-15}	8.6×10^{-16}
Area 9, 9-300 Bunker	03/22/93	03/29/93	1.8×10^{-14}	9.9×10^{-16}
Area 9, 9-300 Bunker	03/29/93	04/05/93	1.6×10^{-14}	9.9×10^{-16}
Area 9, 9-300 Bunker	04/05/93	04/12/93	1.8×10^{-14}	9.8×10^{-16}
Area 9, 9-300 Bunker	04/12/93	04/19/93	1.4×10^{-14}	9.2×10^{-16}
Area 9, 9-300 Bunker	04/19/93	04/26/93	1.2×10^{-14}	8.9×10^{-16}
Area 9, 9-300 Bunker	04/26/93	05/03/93	1.9×10^{-14}	9.7×10^{-16}
Area 9, 9-300 Bunker	05/03/93	05/10/93	1.4×10^{-14}	9.2×10^{-16}
Area 9, 9-300 Bunker	05/10/93	05/18/93	2.0×10^{-14}	9.2×10^{-16}
Area 9, 9-300 Bunker	05/18/93	05/24/93	1.5×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	05/24/93	06/01/93	1.4×10^{-14}	8.5×10^{-16}
Area 9, 9-300 Bunker	06/01/93	06/07/93	1.3×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	06/07/93	06/14/93	1.8×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	06/14/93	06/21/93	1.4×10^{-14}	8.4×10^{-16}
Area 9, 9-300 Bunker	06/21/93	06/28/93	1.8×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	06/28/93	07/06/93	2.1×10^{-14}	9.4×10^{-16}
Area 9, 9-300 Bunker	07/06/93	07/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	07/12/93	07/19/93	2.1×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	07/19/93	07/26/93	1.5×10^{-14}	9.4×10^{-16}
Area 9, 9-300 Bunker	07/26/93	08/02/93	1.7×10^{-14}	9.6×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 9, 9-300 Bunker	08/02/93	08/09/93	2.0×10^{-14}	9.8×10^{-16}
Area 9, 9-300 Bunker	08/09/93	08/16/93	2.2×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	08/16/93	08/23/93	2.2×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	08/23/93	08/30/93	2.3×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	08/30/93	09/08/93	1.9×10^{-14}	8.5×10^{-16}
Area 9, 9-300 Bunker	09/08/93	09/13/93	2.5×10^{-14}	1.4×10^{-15}
Area 9, 9-300 Bunker	09/13/93	09/20/93	2.0×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	09/20/93	09/27/93	3.2×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	09/27/93	10/04/93	3.6×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	10/04/93	10/11/93	1.8×10^{-14}	9.9×10^{-16}
Area 9, 9-300 Bunker	10/11/93	10/18/93	1.5×10^{-14}	9.4×10^{-16}
Area 9, 9-300 Bunker	10/18/93	10/25/93	2.6×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	10/25/93	11/01/93	2.2×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	11/01/93	11/08/93	1.7×10^{-14}	2.8×10^{-15}
Area 9, 9-300 Bunker	11/08/93	11/15/93	2.8×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	11/15/93	11/22/93	3.3×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	11/22/93	11/29/93	2.6×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	11/29/93	12/06/93	2.0×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	12/06/93	12/13/93	2.4×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	12/13/93	12/20/93	2.5×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	12/20/93	12/27/93	2.8×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	12/27/93	01/03/94	2.9×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	01/04/93	01/11/93	1.4×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	01/11/93	01/19/93	1.2×10^{-14}	8.5×10^{-16}
Area 10, Gate 700	01/19/93	01/25/93	1.4×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	01/25/93	02/01/93	2.8×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	02/01/93	02/08/93	3.4×10^{-14}	1.3×10^{-15}
Area 10, Gate 700	02/08/93	02/16/93	1.2×10^{-14}	8.9×10^{-16}
Area 10, Gate 700	02/16/93	02/22/93	9.3×10^{-15}	1.0×10^{-15}
Area 10, Gate 700	02/22/93	03/01/93	2.1×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	03/01/93	03/08/93	1.4×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	03/08/93	03/15/93	2.2×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	03/15/93	03/22/93	1.0×10^{-14}	9.7×10^{-16}
Area 10, Gate 700	03/22/93	03/29/93	1.3×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	03/29/93	04/05/93	1.6×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	04/05/93	04/12/93	2.1×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	04/12/93	04/19/93	1.6×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	04/19/93	04/26/93	1.5×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	04/26/93	05/03/93	2.2×10^{-14}	2.1×10^{-15}
Area 10, Gate 700	05/03/93	05/10/93	1.6×10^{-14}	1.3×10^{-15}
Area 10, Gate 700	05/10/93	05/18/93	1.9×10^{-14}	9.3×10^{-16}
Area 10, Gate 700	05/18/93	05/24/93	1.8×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	05/24/93	06/01/93	1.5×10^{-14}	9.0×10^{-16}
Area 10, Gate 700	06/01/93	06/07/93	1.2×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 10, Gate 700	06/07/93	06/14/93	1.9×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	06/14/93	06/21/93	1.6×10^{-14}	9.7×10^{-16}
Area 10, Gate 700	06/21/93	06/28/93	1.7×10^{-14}	9.9×10^{-16}
Area 10, Gate 700	06/28/93	07/06/93	2.1×10^{-14}	9.6×10^{-16}
Area 10, Gate 700	07/06/93	07/12/93	2.2×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	07/12/93	07/19/93	2.1×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	07/19/93	07/26/93	1.6×10^{-14}	9.9×10^{-16}
Area 10, Gate 700	07/26/93	08/02/93	1.7×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	08/02/93	08/09/93	1.9×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	08/09/93	08/16/93	2.1×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	08/16/93	08/23/93	2.0×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	08/23/93	08/30/93	2.2×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	08/30/93	09/08/93	2.0×10^{-14}	9.6×10^{-16}
Area 10, Gate 700	09/08/93	09/13/93	2.5×10^{-14}	1.5×10^{-15}
Area 10, Gate 700	09/13/93	09/20/93	2.2×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	09/20/93	09/27/93	2.9×10^{-14}	1.3×10^{-15}
Area 10, Gate 700	09/27/93	10/04/93	3.4×10^{-14}	1.3×10^{-15}
Area 10, Gate 700	10/04/93	10/11/93	1.9×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	10/11/93	10/18/93	1.2×10^{-14}	9.8×10^{-16}
Area 10, Gate 700	10/18/93	10/25/93	3.0×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	10/25/93	11/01/93	1.8×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	11/01/93	11/08/93	2.4×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	11/08/93	11/15/93	2.9×10^{-14}	1.3×10^{-15}
Area 10, Gate 700	11/15/93	11/22/93	2.8×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	11/22/93	11/29/93	2.5×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	11/29/93	12/06/93	1.6×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	12/06/93	12/13/93	2.6×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	12/13/93	12/20/93	2.4×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	12/20/93	12/27/93	2.9×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	01/04/93	01/11/93	1.1×10^{-14}	9.4×10^{-16}
Area 11, Gate 293	01/11/93	01/19/93	6.7×10^{-15}	7.4×10^{-16}
Area 11, Gate 293	01/19/93	01/25/93	1.4×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	01/25/93	02/01/93	2.1×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	02/01/93	02/08/93	3.5×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	02/08/93	02/16/93	1.6×10^{-14}	9.1×10^{-16}
Area 11, Gate 293	02/16/93	02/22/93	1.1×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	02/22/93	03/01/93	1.1×10^{-14}	9.3×10^{-16}
Area 11, Gate 293	03/01/93	03/08/93	1.3×10^{-14}	9.7×10^{-16}
Area 11, Gate 293	03/08/93	03/15/93	2.1×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	03/15/93	03/22/93	9.7×10^{-15}	8.8×10^{-16}
Area 11, Gate 293	03/22/93	03/29/93	2.4×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	03/29/93	04/05/93	1.5×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	04/05/93	04/12/93	1.7×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	04/12/93	04/19/93	1.5×10^{-14}	9.6×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 11, Gate 293	04/19/93	04/26/93	1.3×10^{-14}	9.2×10^{-16}
Area 11, Gate 293	04/26/93	05/03/93	1.7×10^{-14}	9.9×10^{-16}
Area 11, Gate 293	05/03/93	05/10/93	1.4×10^{-14}	9.5×10^{-16}
Area 11, Gate 293	05/17/93	05/24/93	1.6×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	05/24/93	06/01/93	1.4×10^{-14}	8.8×10^{-16}
Area 11, Gate 293	06/01/93	06/07/93	1.4×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	06/07/93	06/14/93	1.9×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	06/14/93	06/21/93	1.8×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	06/21/93	06/28/93	2.0×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	06/28/93	07/06/93	2.3×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/06/93	07/12/93	2.0×10^{-14}	1.4×10^{-15}
Area 11, Gate 293	07/12/93	07/19/93	2.3×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/19/93	07/26/93	1.3×10^{-14}	9.4×10^{-16}
Area 11, Gate 293	07/26/93	08/02/93	1.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	08/02/93	08/09/93	2.6×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	08/09/93	08/16/93	1.4×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	08/30/93	09/08/93	2.1×10^{-14}	9.2×10^{-16}
Area 11, Gate 293	09/08/93	09/13/93	2.4×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	09/13/93	09/20/93	1.9×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	09/20/93	09/27/93	2.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	09/27/93	10/04/93	3.5×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	10/04/93	10/11/93	1.7×10^{-14}	9.7×10^{-16}
Area 11, Gate 293	10/11/93	10/18/93	1.3×10^{-14}	8.8×10^{-16}
Area 11, Gate 293	10/18/93	10/25/93	2.4×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	10/25/93	11/01/93	2.2×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	11/01/93	11/08/93	2.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	11/08/93	11/15/93	2.8×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	11/15/93	11/22/93	3.2×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	11/22/93	11/29/93	2.8×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	11/29/93	12/06/93	1.9×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	12/06/93	12/13/93	2.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/13/93	12/20/93	2.8×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/20/93	12/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/27/93	01/03/94	2.9×10^{-14}	1.1×10^{-15}
Area 12, Complex	01/04/93	01/12/93	1.0×10^{-14}	8.0×10^{-16}
Area 12, Complex	01/12/93	01/19/93	1.4×10^{-14}	9.5×10^{-16}
Area 12, Complex	01/19/93	01/25/93	1.1×10^{-14}	9.9×10^{-16}
Area 12, Complex	01/25/93	02/01/93	1.7×10^{-14}	9.9×10^{-16}
Area 12, Complex	02/01/93	02/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 12, Complex	02/08/93	02/16/93	1.2×10^{-14}	8.2×10^{-16}
Area 12, Complex	02/16/93	02/22/93	8.6×10^{-15}	9.9×10^{-16}
Area 12, Complex	02/22/93	03/01/93	1.1×10^{-14}	8.7×10^{-16}
Area 12, Complex	03/01/93	03/08/93	1.4×10^{-14}	9.2×10^{-16}
Area 12, Complex	03/08/93	03/15/93	1.7×10^{-14}	9.6×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Complex	03/15/93	03/22/93	9.5×10^{-15}	8.6×10^{-16}
Area 12, Complex	03/22/93	03/30/93	1.8×10^{-14}	8.5×10^{-16}
Area 12, Complex	03/30/93	04/05/93	1.5×10^{-14}	1.3×10^{-15}
Area 12, Complex	04/05/93	04/12/93	1.7×10^{-14}	9.8×10^{-16}
Area 12, Complex	04/12/93	04/19/93	1.2×10^{-14}	9.0×10^{-16}
Area 12, Complex	04/19/93	04/26/93	1.3×10^{-14}	9.1×10^{-16}
Area 12, Complex	04/26/93	05/03/93	1.7×10^{-14}	9.7×10^{-16}
Area 12, Complex	05/03/93	05/10/93	1.3×10^{-14}	9.2×10^{-16}
Area 12, Complex	05/10/93	05/18/93	1.8×10^{-14}	8.9×10^{-16}
Area 12, Complex	05/18/93	05/24/93	1.5×10^{-14}	1.1×10^{-15}
Area 12, Complex	05/24/93	06/01/93	1.4×10^{-14}	8.4×10^{-16}
Area 12, Complex	06/01/93	06/07/93	1.0×10^{-14}	9.9×10^{-16}
Area 12, Complex	06/07/93	06/14/93	1.6×10^{-14}	9.5×10^{-16}
Area 12, Complex	06/14/93	06/22/93	1.8×10^{-14}	9.0×10^{-16}
Area 12, Complex	06/22/93	06/28/93	1.6×10^{-14}	1.1×10^{-15}
Area 12, Complex	06/28/93	07/06/93	2.0×10^{-14}	9.4×10^{-16}
Area 12, Complex	07/06/93	07/14/93	1.8×10^{-14}	8.9×10^{-16}
Area 12, Complex	07/14/93	07/19/93	2.0×10^{-14}	1.3×10^{-15}
Area 12, Complex	07/19/93	07/26/93	1.3×10^{-14}	9.2×10^{-16}
Area 12, Complex	07/26/93	08/02/93	1.5×10^{-14}	9.5×10^{-16}
Area 12, Complex	08/02/93	08/09/93	1.8×10^{-14}	1.0×10^{-15}
Area 12, Complex	08/09/93	08/16/93	1.8×10^{-14}	9.8×10^{-16}
Area 12, Complex	08/16/93	08/23/93	1.8×10^{-14}	9.9×10^{-16}
Area 12, Complex	08/23/93	08/30/93	1.9×10^{-14}	9.9×10^{-16}
Area 12, Complex	08/30/93	09/08/93	1.9×10^{-14}	8.5×10^{-16}
Area 12, Complex	09/08/93	09/13/93	2.7×10^{-14}	1.4×10^{-15}
Area 12, Complex	09/13/93	09/20/93	1.8×10^{-14}	9.9×10^{-16}
Area 12, Complex	09/20/93	09/27/93	2.9×10^{-14}	1.2×10^{-15}
Area 12, Complex	09/27/93	10/04/93	3.2×10^{-14}	1.2×10^{-15}
Area 12, Complex	10/04/93	10/11/93	1.7×10^{-14}	1.0×10^{-15}
Area 12, Complex	10/11/93	10/18/93	1.4×10^{-14}	9.5×10^{-16}
Area 12, Complex	10/18/93	10/25/93	2.4×10^{-14}	1.0×10^{-15}
Area 12, Complex	10/25/93	11/01/93	2.2×10^{-14}	1.1×10^{-15}
Area 12, Complex	11/01/93	11/08/93	2.3×10^{-14}	1.1×10^{-15}
Area 12, Complex	11/08/93	11/15/93	3.0×10^{-14}	1.2×10^{-15}
Area 12, Complex	11/15/93	11/22/93	2.5×10^{-14}	1.1×10^{-15}
Area 12, Complex	11/22/93	11/29/93	2.1×10^{-14}	1.0×10^{-15}
Area 12, Complex	11/29/93	12/06/93	1.6×10^{-14}	9.8×10^{-16}
Area 12, Complex	12/06/93	12/13/93	2.2×10^{-14}	1.1×10^{-15}
Area 12, Complex	12/13/93	12/20/93	1.8×10^{-14}	1.0×10^{-15}
Area 12, Complex	12/20/93	12/27/93	2.0×10^{-14}	1.0×10^{-15}
Area 12, Complex	12/27/93	01/03/94	2.1×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	01/04/93	01/11/93	1.1×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	01/11/93	01/19/93	1.6×10^{-14}	9.9×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, EPA Farm	01/19/93	01/25/93	1.6×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	01/25/93	02/01/93	2.5×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	02/01/93	02/08/93	2.7×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	02/08/93	02/16/93	1.7×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	02/16/93	02/22/93	1.2×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	02/22/93	03/01/93	1.2×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	03/01/93	03/08/93	1.5×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	03/08/93	03/15/93	2.2×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	03/15/93	03/22/93	9.6×10^{-15}	9.7×10^{-16}
Area 15, EPA Farm	03/22/93	03/29/93	1.9×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	03/29/93	04/05/93	1.6×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	04/05/93	04/12/93	1.9×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	04/12/93	04/19/93	1.6×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	04/19/93	04/26/93	1.5×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	04/26/93	05/03/93	2.0×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	05/03/93	05/10/93	1.7×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	05/10/93	05/18/93	2.2×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	05/18/93	05/24/93	2.1×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	05/24/93	06/01/93	1.6×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	06/01/93	06/07/93	1.2×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	06/07/93	06/14/93	2.2×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	06/14/93	06/21/93	9.9×10^{-15}	5.9×10^{-16}
Area 15, EPA Farm	06/21/93	06/28/93	2.0×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	06/28/93	07/06/93	2.4×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	07/06/93	07/12/93	2.3×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	07/12/93	07/19/93	2.3×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	07/19/93	07/26/93	1.8×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	07/26/93	08/02/93	1.7×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	08/02/93	08/09/93	2.2×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/09/93	08/16/93	2.2×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/16/93	08/23/93	2.3×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/23/93	08/30/93	2.4×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/30/93	09/08/93	2.2×10^{-14}	9.9×10^{-16}
Area 15, EPA Farm	09/08/93	09/13/93	3.0×10^{-14}	1.7×10^{-15}
Area 15, EPA Farm	09/13/93	09/20/93	2.3×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	09/20/93	09/27/93	3.3×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	09/27/93	10/04/93	3.7×10^{-14}	1.4×10^{-15}
Area 15, EPA Farm	10/04/93	10/11/93	1.9×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	10/11/93	10/18/93	1.9×10^{-14}	1.4×10^{-15}
Area 15, EPA Farm	10/18/93	10/25/93	2.4×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	10/25/93	11/01/93	2.3×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	11/01/93	11/08/93	2.4×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	11/08/93	11/15/93	3.3×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	11/15/93	11/22/93	3.2×10^{-14}	1.3×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 15, EPA Farm	11/22/93	11/29/93	2.9×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	11/29/93	12/06/93	2.0×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	12/06/93	12/13/93	3.1×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	12/13/93	12/20/93	2.6×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	12/20/93	12/27/93	2.6×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	12/27/93	01/03/94	2.8×10^{-14}	1.3×10^{-15}
Area 16, 3545 Substation	01/05/93	01/12/93	1.1×10^{-14}	9.0×10^{-16}
Area 16, 3545 Substation	01/12/93	01/19/93	5.1×10^{-15}	7.7×10^{-16}
Area 16, 3545 Substation	01/19/93	01/25/93	1.2×10^{-14}	9.8×10^{-16}
Area 16, 3545 Substation	01/25/93	02/01/93	2.6×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	02/01/93	02/08/93	2.5×10^{-14}	9.7×10^{-16}
Area 16, 3545 Substation	02/08/93	02/16/93	1.2×10^{-14}	8.0×10^{-16}
Area 16, 3545 Substation	02/16/93	02/22/93	1.0×10^{-14}	9.9×10^{-16}
Area 16, 3545 Substation	02/22/93	03/01/93	1.2×10^{-14}	8.8×10^{-16}
Area 16, 3545 Substation	03/01/93	03/08/93	1.4×10^{-14}	9.7×10^{-16}
Area 16, 3545 Substation	03/08/93	03/15/93	1.8×10^{-14}	9.2×10^{-16}
Area 16, 3545 Substation	03/15/93	03/22/93	8.5×10^{-15}	8.4×10^{-16}
Area 16, 3545 Substation	03/22/93	03/30/93	1.3×10^{-14}	8.2×10^{-16}
Area 16, 3545 Substation	04/05/93	04/12/93	1.8×10^{-14}	9.7×10^{-16}
Area 16, 3545 Substation	04/12/93	04/19/93	1.3×10^{-14}	8.8×10^{-16}
Area 16, 3545 Substation	04/19/93	04/26/93	1.2×10^{-14}	8.8×10^{-16}
Area 16, 3545 Substation	04/26/93	05/03/93	1.6×10^{-14}	9.4×10^{-16}
Area 16, 3545 Substation	05/03/93	05/10/93	1.4×10^{-14}	9.2×10^{-16}
Area 16, 3545 Substation	05/10/93	05/18/93	2.0×10^{-14}	9.0×10^{-16}
Area 16, 3545 Substation	05/18/93	05/24/93	1.6×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	05/24/93	06/01/93	1.4×10^{-14}	8.1×10^{-16}
Area 16, 3545 Substation	06/01/93	06/07/93	8.7×10^{-15}	9.4×10^{-16}
Area 16, 3545 Substation	06/07/93	06/14/93	1.8×10^{-14}	9.6×10^{-16}
Area 16, 3545 Substation	06/14/93	06/22/93	1.6×10^{-14}	8.4×10^{-16}
Area 16, 3545 Substation	06/22/93	06/28/93	1.8×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	06/28/93	07/06/93	2.1×10^{-14}	9.3×10^{-16}
Area 16, 3545 Substation	07/06/93	07/14/93	1.8×10^{-14}	8.8×10^{-16}
Area 16, 3545 Substation	07/14/93	07/19/93	1.9×10^{-14}	1.3×10^{-15}
Area 16, 3545 Substation	07/19/93	07/26/93	1.4×10^{-14}	9.2×10^{-16}
Area 16, 3545 Substation	07/26/93	08/02/93	1.4×10^{-14}	9.2×10^{-16}
Area 16, 3545 Substation	08/02/93	08/09/93	2.0×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	08/09/93	08/16/93	2.0×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	08/16/93	08/23/93	1.8×10^{-14}	9.6×10^{-16}
Area 16, 3545 Substation	08/23/93	08/30/93	1.9×10^{-14}	9.9×10^{-16}
Area 16, 3545 Substation	08/30/93	09/08/93	1.8×10^{-14}	8.3×10^{-16}
Area 16, 3545 Substation	09/08/93	09/13/93	2.8×10^{-14}	1.4×10^{-15}
Area 16, 3545 Substation	09/13/93	09/20/93	2.1×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	09/20/93	09/27/93	3.0×10^{-14}	1.4×10^{-15}
Area 16, 3545 Substation	10/11/93	10/18/93	1.2×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 16, 3545 Substation	10/18/93	10/25/93	2.7×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	10/25/93	11/01/93	2.0×10^{-14}	9.8×10^{-16}
Area 16, 3545 Substation	11/01/93	11/08/93	2.3×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	11/08/93	11/15/93	3.8×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	11/15/93	11/22/93	2.7×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	11/22/93	11/29/93	2.9×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	11/29/93	12/06/93	2.8×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	12/06/93	12/13/93	2.2×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	12/13/93	12/20/93	1.8×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	12/20/93	12/27/93	2.0×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	12/27/93	01/03/94	2.3×10^{-14}	1.0×10^{-15}
Area 19, Echo Peak	04/26/93	05/03/93	1.5×10^{-14}	2.6×10^{-15}
Area 19, Echo Peak	05/10/93	05/18/93	1.9×10^{-14}	1.2×10^{-15}
Area 19, Echo Peak	05/18/93	05/24/93	1.7×10^{-14}	1.3×10^{-15}
Area 19, Echo Peak	05/24/93	06/01/93	1.3×10^{-14}	9.2×10^{-16}
Area 19, Echo Peak	06/01/93	06/07/93	7.7×10^{-15}	1.0×10^{-15}
Area 19, Echo Peak	06/07/93	06/14/93	2.2×10^{-14}	1.2×10^{-15}
Area 19, Echo Peak	06/14/93	06/21/93	1.4×10^{-14}	8.2×10^{-16}
Area 19, Echo Peak	06/21/93	06/28/93	1.7×10^{-14}	1.0×10^{-15}
Area 19, Echo Peak	06/28/93	07/06/93	1.1×10^{-14}	5.0×10^{-16}
Area 19, Echo Peak	07/06/93	07/12/93	1.8×10^{-14}	1.0×10^{-15}
Area 19, Echo Peak	07/13/93	07/19/93	1.8×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	07/19/93	07/26/93	1.3×10^{-14}	9.1×10^{-16}
Area 19, Echo Peak	07/26/93	08/02/93	1.4×10^{-14}	9.4×10^{-16}
Area 19, Echo Peak	08/02/93	08/09/93	1.9×10^{-14}	1.0×10^{-15}
Area 19, Echo Peak	08/09/93	08/16/93	1.8×10^{-14}	9.8×10^{-16}
Area 19, Echo Peak	08/16/93	08/23/93	1.6×10^{-14}	9.8×10^{-16}
Area 19, Echo Peak	08/30/93	09/08/93	1.8×10^{-14}	8.4×10^{-16}
Area 19, Echo Peak	09/08/93	09/13/93	2.2×10^{-14}	1.4×10^{-15}
Area 19, Echo Peak	09/13/93	09/20/93	1.9×10^{-14}	1.0×10^{-15}
Area 19, Echo Peak	09/20/93	09/27/93	2.4×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	09/27/93	10/04/93	3.2×10^{-14}	1.2×10^{-15}
Area 19, Echo Peak	10/04/93	10/11/93	9.4×10^{-15}	8.4×10^{-16}
Area 19, Echo Peak	10/11/93	10/18/93	1.2×10^{-14}	9.1×10^{-16}
Area 19, Echo Peak	10/18/93	10/25/93	2.4×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	10/25/93	11/01/93	1.8×10^{-14}	9.8×10^{-16}
Area 19, Echo Peak	11/01/93	11/08/93	2.1×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	11/08/93	11/15/93	2.5×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	11/15/93	11/22/93	2.4×10^{-14}	1.1×10^{-15}
Area 19, Echo Peak	11/22/93	11/29/93	2.0×10^{-14}	1.0×10^{-15}
Area 19, Echo Peak	11/29/93	12/06/93	1.3×10^{-14}	9.3×10^{-16}
Area 19, Echo Peak	12/06/93	12/13/93	2.3×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	04/05/93	04/12/93	1.4×10^{-14}	9.4×10^{-16}
Area 19, Pahute Substation	04/12/93	04/19/93	1.2×10^{-14}	9.1×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 19, Pahute Substation	04/19/93	04/26/93	1.2×10^{-14}	8.9×10^{-16}
Area 19, Pahute Substation	04/26/93	05/03/93	1.6×10^{-14}	9.6×10^{-16}
Area 19, Pahute Substation	05/10/93	05/18/93	1.7×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	05/18/93	05/24/93	1.7×10^{-14}	1.3×10^{-15}
Area 19, Pahute Substation	05/24/93	06/01/93	1.4×10^{-14}	9.2×10^{-16}
Area 19, Pahute Substation	06/01/93	06/07/93	1.7×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	06/07/93	06/14/93	1.5×10^{-14}	9.5×10^{-16}
Area 19, Pahute Substation	06/14/93	06/21/93	1.6×10^{-14}	9.5×10^{-16}
Area 19, Pahute Substation	06/21/93	06/28/93	1.5×10^{-14}	9.7×10^{-16}
Area 19, Pahute Substation	06/28/93	07/06/93	2.0×10^{-14}	9.3×10^{-16}
Area 19, Pahute Substation	07/06/93	07/13/93	1.8×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	07/13/93	07/19/93	2.0×10^{-14}	1.3×10^{-15}
Area 19, Pahute Substation	07/19/93	07/26/93	1.2×10^{-14}	9.2×10^{-16}
Area 19, Pahute Substation	07/26/93	08/02/93	1.3×10^{-14}	9.3×10^{-16}
Area 19, Pahute Substation	08/02/93	08/09/93	1.6×10^{-14}	9.7×10^{-16}
Area 19, Pahute Substation	08/09/93	08/16/93	1.9×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	08/16/93	08/23/93	1.8×10^{-14}	9.9×10^{-16}
Area 19, Pahute Substation	08/23/93	08/30/93	2.0×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	08/30/93	09/08/93	1.9×10^{-14}	8.8×10^{-16}
Area 19, Pahute Substation	09/08/93	09/13/93	2.5×10^{-14}	1.4×10^{-15}
Area 19, Pahute Substation	09/13/93	09/20/93	2.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	09/20/93	09/27/93	2.7×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	09/27/93	10/04/93	3.4×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	10/04/93	10/11/93	1.3×10^{-14}	9.6×10^{-16}
Area 19, Pahute Substation	10/11/93	10/18/93	1.5×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	10/18/93	10/25/93	2.5×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	10/25/93	11/01/93	2.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	11/01/93	11/08/93	2.2×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	11/08/93	11/15/93	3.1×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	11/15/93	11/22/93	2.5×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	11/22/93	11/29/93	2.1×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	11/29/93	12/06/93	1.4×10^{-14}	9.9×10^{-16}
Area 19, Pahute Substation	12/06/93	12/13/93	2.0×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	03/22/93	04/05/93	1.4×10^{-14}	6.2×10^{-16}
Area 20, Dispensary	04/05/93	04/12/93	1.7×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	04/12/93	04/19/93	1.2×10^{-14}	9.6×10^{-16}
Area 20, Dispensary	04/19/93	04/26/93	1.3×10^{-14}	9.7×10^{-16}
Area 20, Dispensary	04/26/93	05/03/93	1.9×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	05/03/93	05/10/93	1.4×10^{-14}	9.9×10^{-16}
Area 20, Dispensary	05/10/93	05/18/93	1.8×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	05/18/93	05/24/93	1.7×10^{-14}	1.4×10^{-15}
Area 20, Dispensary	06/01/93	06/07/93	1.2×10^{-14}	8.1×10^{-16}
Area 20, Dispensary	06/07/93	06/14/93	1.7×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	06/14/93	06/21/93	1.7×10^{-14}	1.0×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Dispensary	06/21/93	06/28/93	1.8×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	06/28/93	07/06/93	2.0×10^{-14}	9.0×10^{-16}
Area 20, Dispensary	07/06/93	07/12/93	1.8×10^{-14}	9.6×10^{-16}
Area 20, Dispensary	07/13/93	07/19/93	1.8×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	07/19/93	07/26/93	1.5×10^{-14}	9.1×10^{-16}
Area 20, Dispensary	07/26/93	08/02/93	1.4×10^{-14}	9.0×10^{-16}
Area 20, Dispensary	08/02/93	08/09/93	1.9×10^{-14}	9.7×10^{-16}
Area 20, Dispensary	08/09/93	08/16/93	1.8×10^{-14}	9.6×10^{-16}
Area 20, Dispensary	08/16/93	08/23/93	1.7×10^{-14}	9.3×10^{-16}
Area 20, Dispensary	08/23/93	08/30/93	2.0×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	08/30/93	09/08/93	1.6×10^{-14}	7.9×10^{-16}
Area 20, Dispensary	09/08/93	09/13/93	2.4×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	09/13/93	09/20/93	2.0×10^{-14}	9.8×10^{-16}
Area 20, Dispensary	09/20/93	09/27/93	2.7×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	09/27/93	10/04/93	3.2×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	10/04/93	10/11/93	1.6×10^{-14}	9.2×10^{-16}
Area 20, Dispensary	10/11/93	10/18/93	1.2×10^{-14}	8.6×10^{-16}
Area 20, Dispensary	10/18/93	10/25/93	2.4×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	10/25/93	11/01/93	2.4×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	11/01/93	11/08/93	2.4×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	11/08/93	11/15/93	3.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	11/15/93	11/22/93	2.6×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	11/22/93	11/29/93	2.4×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	11/29/93	12/06/93	1.4×10^{-14}	8.9×10^{-16}
Area 20, Dispensary	12/06/93	12/13/93	2.0×10^{-14}	1.0×10^{-15}
Area 23, Building 790	01/04/93	01/12/93	8.8×10^{-15}	7.6×10^{-16}
Area 23, Building 790	01/12/93	01/20/93	1.4×10^{-14}	8.4×10^{-16}
Area 23, Building 790	01/20/93	01/26/93	1.4×10^{-14}	1.0×10^{-15}
Area 23, Building 790	01/26/93	02/01/93	2.3×10^{-14}	1.2×10^{-15}
Area 23, Building 790	02/01/93	02/08/93	3.0×10^{-14}	1.1×10^{-15}
Area 23, Building 790	02/08/93	02/16/93	1.4×10^{-14}	9.3×10^{-16}
Area 23, Building 790	02/16/93	02/22/93	6.8×10^{-15}	8.1×10^{-16}
Area 23, Building 790	02/22/93	03/01/93	7.5×10^{-15}	8.3×10^{-16}
Area 23, Building 790	03/01/93	03/08/93	1.3×10^{-14}	9.2×10^{-16}
Area 23, Building 790	03/08/93	03/15/93	1.8×10^{-14}	9.7×10^{-16}
Area 23, Building 790	03/15/93	03/22/93	9.2×10^{-15}	8.7×10^{-16}
Area 23, Building 790	03/22/93	03/29/93	1.0×10^{-14}	8.8×10^{-16}
Area 23, Building 790	03/29/93	04/05/93	1.4×10^{-14}	9.1×10^{-16}
Area 23, Building 790	04/05/93	04/12/93	1.7×10^{-14}	9.6×10^{-16}
Area 23, Building 790	04/12/93	04/19/93	1.3×10^{-14}	8.8×10^{-16}
Area 23, Building 790	04/19/93	04/26/93	1.3×10^{-14}	9.2×10^{-16}
Area 23, Building 790	04/26/93	05/03/93	1.8×10^{-14}	9.8×10^{-16}
Area 23, Building 790	05/03/93	05/10/93	1.4×10^{-14}	9.1×10^{-16}
Area 23, Building 790	05/10/93	05/17/93	1.8×10^{-14}	9.9×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Building 790	05/17/93	05/24/93	1.5×10^{-14}	9.5×10^{-16}
Area 23, Building 790	05/24/93	06/01/93	1.3×10^{-14}	8.2×10^{-16}
Area 23, Building 790	06/01/93	06/07/93	1.2×10^{-14}	9.9×10^{-16}
Area 23, Building 790	06/07/93	06/14/93	1.6×10^{-14}	1.1×10^{-15}
Area 23, Building 790	06/14/93	06/21/93	1.6×10^{-14}	1.1×10^{-15}
Area 23, Building 790	06/21/93	06/28/93	1.7×10^{-14}	1.1×10^{-15}
Area 23, Building 790	06/28/93	07/06/93	1.7×10^{-14}	9.9×10^{-16}
Area 23, Building 790	07/06/93	07/12/93	1.8×10^{-14}	1.3×10^{-15}
Area 23, Building 790	07/12/93	07/19/93	1.7×10^{-14}	1.1×10^{-15}
Area 23, Building 790	07/19/93	07/26/93	1.2×10^{-14}	1.0×10^{-15}
Area 23, Building 790	07/26/93	08/02/93	1.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790	08/02/93	08/09/93	2.2×10^{-14}	1.2×10^{-15}
Area 23, Building 790	08/09/93	08/16/93	2.0×10^{-14}	1.2×10^{-15}
Area 23, Building 790	08/16/93	08/23/93	1.6×10^{-14}	9.9×10^{-16}
Area 23, Building 790	08/23/93	08/30/93	1.8×10^{-14}	1.2×10^{-15}
Area 23, Building 790	08/30/93	09/08/93	1.1×10^{-14}	6.2×10^{-16}
Area 23, Building 790	09/08/93	09/13/93	5.8×10^{-14}	3.2×10^{-15}
Area 23, Building 790	09/13/93	09/20/93	1.8×10^{-14}	1.1×10^{-15}
Area 23, Building 790	09/20/93	09/27/93	2.6×10^{-14}	1.2×10^{-15}
Area 23, Building 790	10/04/93	10/11/93	1.2×10^{-14}	9.9×10^{-16}
Area 23, Building 790	10/11/93	10/19/93	1.2×10^{-14}	9.0×10^{-16}
Area 23, Building 790	10/19/93	10/25/93	2.4×10^{-14}	1.3×10^{-15}
Area 23, Building 790	10/25/93	11/01/93	1.6×10^{-14}	1.0×10^{-15}
Area 23, Building 790	11/01/93	11/08/93	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790	11/08/93	11/15/93	2.3×10^{-14}	1.1×10^{-15}
Area 23, Building 790	11/15/93	11/22/93	2.7×10^{-14}	1.2×10^{-15}
Area 23, Building 790	11/22/93	11/29/93	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790	11/29/93	12/06/93	1.3×10^{-14}	1.0×10^{-15}
Area 23, Building 790	12/06/93	12/13/93	2.4×10^{-14}	1.2×10^{-15}
Area 23, Building 790	12/13/93	12/20/93	2.0×10^{-14}	1.1×10^{-15}
Area 23, Building 790	12/20/93	12/27/93	2.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790	12/27/93	01/03/94	2.4×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	01/04/93	01/12/93	1.5×10^{-14}	8.5×10^{-16}
Area 23, Building 790 No. 2	01/12/93	01/20/93	5.4×10^{-15}	7.3×10^{-16}
Area 23, Building 790 No. 2	01/20/93	01/26/93	1.3×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	01/26/93	02/01/93	2.7×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	02/01/93	02/08/93	1.0×10^{-14}	8.7×10^{-16}
Area 23, Building 790 No. 2	02/08/93	02/16/93	1.4×10^{-14}	8.1×10^{-16}
Area 23, Building 790 No. 2	02/16/93	02/22/93	1.9×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	02/22/93	03/01/93	9.5×10^{-15}	8.6×10^{-16}
Area 23, Building 790 No. 2	03/01/93	03/08/93	1.5×10^{-14}	9.4×10^{-16}
Area 23, Building 790 No. 2	03/08/93	03/15/93	2.0×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	03/15/93	03/22/93	9.5×10^{-15}	8.7×10^{-16}
Area 23, Building 790 No. 2	03/22/93	03/29/93	1.2×10^{-14}	9.1×10^{-16}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Building 790 No. 2	03/29/93	04/05/93	1.4×10^{-14}	9.2×10^{-16}
Area 23, Building 790 No. 2	04/05/93	04/12/93	1.6×10^{-14}	9.5×10^{-16}
Area 23, Building 790 No. 2	04/12/93	04/19/93	1.3×10^{-14}	9.0×10^{-16}
Area 23, Building 790 No. 2	04/19/93	04/26/93	1.4×10^{-14}	9.4×10^{-16}
Area 23, Building 790 No. 2	04/26/93	05/03/93	1.5×10^{-14}	9.8×10^{-16}
Area 23, Building 790 No. 2	05/03/93	05/10/93	1.3×10^{-14}	9.3×10^{-16}
Area 23, Building 790 No. 2	05/10/93	05/17/93	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	05/17/93	05/24/93	1.7×10^{-14}	9.9×10^{-16}
Area 23, Building 790 No. 2	05/24/93	06/01/93	1.5×10^{-14}	8.7×10^{-16}
Area 23, Building 790 No. 2	06/01/93	06/07/93	1.1×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	06/07/93	06/14/93	1.8×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	06/14/93	06/21/93	1.6×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	06/21/93	06/28/93	1.6×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	06/28/93	07/06/93	1.9×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	07/06/93	07/12/93	2.2×10^{-14}	1.4×10^{-15}
Area 23, Building 790 No. 2	07/12/93	07/19/93	1.5×10^{-14}	9.0×10^{-16}
Area 23, Building 790 No. 2	07/19/93	07/26/93	2.1×10^{-14}	1.8×10^{-15}
Area 23, Building 790 No. 2	07/26/93	08/02/93	1.4×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	08/02/93	08/09/93	2.2×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	08/09/93	08/16/93	2.0×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	08/16/93	08/23/93	1.9×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	08/23/93	08/30/93	1.8×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	08/30/93	09/08/93	2.2×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	09/08/93	09/13/93	3.0×10^{-14}	1.5×10^{-15}
Area 23, Building 790 No. 2	09/13/93	09/20/93	1.8×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	09/20/93	09/27/93	3.1×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	09/27/93	10/04/93	3.7×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	10/04/93	10/11/93	1.9×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	10/11/93	10/19/93	1.3×10^{-14}	8.6×10^{-16}
Area 23, Building 790 No. 2	10/19/93	10/25/93	2.9×10^{-14}	1.3×10^{-15}
Area 23, Building 790 No. 2	10/25/93	11/01/93	2.0×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	11/01/93	11/08/93	2.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	11/08/93	11/15/93	3.1×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	11/15/93	11/22/93	3.6×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	11/22/93	11/29/93	2.8×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	11/29/93	12/06/93	1.8×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	12/06/93	12/13/93	2.8×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	12/13/93	12/20/93	2.3×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	12/20/93	12/27/93	2.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	12/27/93	01/03/94	3.0×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	01/04/93	01/12/93	1.7×10^{-14}	9.6×10^{-16}
Area 23, E Boundary	01/12/93	01/20/93	1.2×10^{-14}	8.8×10^{-16}
Area 23, E Boundary	01/20/93	01/26/93	1.5×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	01/26/93	02/01/93	3.2×10^{-14}	1.5×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, E Boundary	02/01/93	02/08/93	3.6×10^{-14}	1.3×10^{-15}
Area 23, E Boundary	02/08/93	02/16/93	1.2×10^{-14}	8.4×10^{-16}
Area 23, E Boundary	02/16/93	02/22/93	1.3×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	02/22/93	03/01/93	9.9×10^{-15}	9.5×10^{-16}
Area 23, E Boundary	03/01/93	03/08/93	1.4×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	03/15/93	03/22/93	1.4×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	03/22/93	03/29/93	1.9×10^{-14}	1.4×10^{-15}
Area 23, E Boundary	03/29/93	04/05/93	1.5×10^{-14}	9.1×10^{-16}
Area 23, E Boundary	04/05/93	04/12/93	1.7×10^{-14}	9.6×10^{-16}
Area 23, E Boundary	04/12/93	04/19/93	1.4×10^{-14}	9.0×10^{-16}
Area 23, E Boundary	04/19/93	04/26/93	1.4×10^{-14}	9.4×10^{-16}
Area 23, E Boundary	04/26/93	05/03/93	1.7×10^{-14}	9.7×10^{-16}
Area 23, E Boundary	05/03/93	05/10/93	1.4×10^{-14}	9.1×10^{-16}
Area 23, E Boundary	05/10/93	05/17/93	1.9×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	05/17/93	05/24/93	1.8×10^{-14}	9.9×10^{-16}
Area 23, E Boundary	05/24/93	06/01/93	1.4×10^{-14}	8.4×10^{-16}
Area 23, E Boundary	06/01/93	06/07/93	1.0×10^{-14}	9.7×10^{-16}
Area 23, E Boundary	06/07/93	06/14/93	1.6×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	06/14/93	06/21/93	1.9×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	06/21/93	06/28/93	1.8×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	06/28/93	07/06/93	2.0×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	07/06/93	07/12/93	1.8×10^{-14}	1.3×10^{-15}
Area 23, E Boundary	07/12/93	07/19/93	1.8×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	07/19/93	07/26/93	1.3×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	07/26/93	08/02/93	1.5×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	08/02/93	08/09/93	1.9×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	08/09/93	08/16/93	1.8×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	08/16/93	08/23/93	1.2×10^{-14}	7.4×10^{-16}
Area 23, E Boundary	08/23/93	08/30/93	2.0×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	08/30/93	09/08/93	1.7×10^{-14}	8.4×10^{-16}
Area 23, E Boundary	09/13/93	09/20/93	2.0×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	09/20/93	09/27/93	3.2×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	09/27/93	10/04/93	3.6×10^{-14}	1.3×10^{-15}
Area 23, E Boundary	10/04/93	10/11/93	7.4×10^{-15}	8.7×10^{-16}
Area 23, E Boundary	10/11/93	10/19/93	1.4×10^{-14}	8.6×10^{-16}
Area 23, E Boundary	10/19/93	10/25/93	2.9×10^{-14}	1.3×10^{-15}
Area 23, E Boundary	10/25/93	11/01/93	2.2×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	11/01/93	11/08/93	2.6×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	11/08/93	11/15/93	2.9×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	11/15/93	11/22/93	3.6×10^{-14}	1.3×10^{-15}
Area 23, E Boundary	11/22/93	11/29/93	2.6×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	11/29/93	12/06/93	2.1×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	12/06/93	12/13/93	3.0×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	12/13/93	12/20/93	2.7×10^{-14}	1.2×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, E Boundary	12/20/93	12/27/93	2.8×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	12/27/93	01/03/94	3.0×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	01/04/93	01/12/93	1.6×10^{-14}	8.7×10^{-16}
Area 23, H&S Building	01/12/93	01/20/93	1.6×10^{-14}	8.9×10^{-16}
Area 23, H&S Building	01/20/93	01/26/93	1.5×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	01/26/93	02/01/93	2.3×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	02/01/93	02/08/93	5.8×10^{-15}	1.0×10^{-15}
Area 23, H&S Building	02/08/93	02/16/93	1.2×10^{-14}	8.0×10^{-16}
Area 23, H&S Building	02/16/93	02/22/93	8.0×10^{-15}	1.0×10^{-15}
Area 23, H&S Building	02/22/93	03/01/93	1.0×10^{-14}	9.8×10^{-16}
Area 23, H&S Building	03/01/93	03/08/93	1.4×10^{-14}	8.9×10^{-16}
Area 23, H&S Building	03/08/93	03/15/93	2.2×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	03/15/93	03/22/93	9.6×10^{-15}	9.0×10^{-16}
Area 23, H&S Building	03/22/93	03/29/93	1.4×10^{-14}	9.6×10^{-16}
Area 23, H&S Building	04/05/93	04/12/93	2.0×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	04/12/93	04/19/93	1.5×10^{-14}	9.4×10^{-16}
Area 23, H&S Building	04/19/93	04/26/93	1.5×10^{-14}	9.9×10^{-16}
Area 23, H&S Building	04/26/93	05/03/93	2.0×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	05/03/93	05/10/93	1.4×10^{-14}	9.4×10^{-16}
Area 23, H&S Building	05/10/93	05/17/93	1.9×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	05/17/93	05/24/93	1.9×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	05/24/93	06/01/93	1.6×10^{-14}	9.0×10^{-16}
Area 23, H&S Building	06/01/93	06/07/93	1.9×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	06/07/93	06/14/93	1.7×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	06/14/93	06/21/93	1.9×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	06/21/93	06/28/93	1.9×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	06/28/93	07/06/93	2.2×10^{-14}	9.8×10^{-16}
Area 23, H&S Building	07/06/93	07/12/93	2.1×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	07/12/93	07/19/93	2.1×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	07/19/93	07/26/93	1.6×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	07/26/93	08/02/93	9.6×10^{-15}	8.8×10^{-16}
Area 23, H&S Building	08/02/93	08/09/93	2.3×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	08/09/93	08/16/93	2.0×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	08/16/93	08/23/93	2.1×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	08/23/93	08/30/93	2.2×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	08/30/93	09/08/93	2.0×10^{-14}	8.4×10^{-16}
Area 23, H&S Building	09/08/93	09/13/93	2.8×10^{-14}	1.5×10^{-15}
Area 23, H&S Building	09/13/93	09/20/93	2.4×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	09/20/93	09/27/93	2.8×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	09/27/93	10/04/93	4.0×10^{-14}	1.3×10^{-15}
Area 23, H&S Building	10/04/93	10/11/93	2.2×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	10/11/93	10/19/93	1.5×10^{-14}	8.8×10^{-16}
Area 23, H&S Building	10/19/93	10/25/93	2.9×10^{-14}	1.3×10^{-15}
Area 23, H&S Building	10/25/93	11/01/93	2.4×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, H&S Building	11/01/93	11/08/93	2.6×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	11/08/93	11/15/93	3.3×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	11/15/93	11/22/93	3.6×10^{-14}	1.3×10^{-15}
Area 23, H&S Building	11/22/93	11/29/93	2.8×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	11/29/93	12/06/93	1.7×10^{-14}	9.7×10^{-16}
Area 23, H&S Building	12/06/93	12/13/93	2.8×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	12/13/93	12/20/93	2.0×10^{-14}	9.7×10^{-16}
Area 23, H&S Building	12/20/93	12/27/93	2.4×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	12/27/93	01/03/94	2.8×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	01/04/93	01/12/93	1.0×10^{-14}	8.1×10^{-16}
Area 25, E-MAD N	01/12/93	01/20/93	4.6×10^{-15}	7.1×10^{-16}
Area 25, E-MAD N	01/20/93	01/26/93	1.3×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	01/26/93	02/01/93	2.5×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	02/01/93	02/08/93	2.9×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	02/08/93	02/16/93	1.3×10^{-14}	8.1×10^{-16}
Area 25, E-MAD N	02/16/93	02/22/93	1.6×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	02/22/93	03/01/93	1.1×10^{-14}	8.9×10^{-16}
Area 25, E-MAD N	03/01/93	03/08/93	1.4×10^{-14}	9.4×10^{-16}
Area 25, E-MAD N	03/08/93	03/15/93	2.0×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	03/15/93	03/22/93	8.3×10^{-15}	8.0×10^{-16}
Area 25, E-MAD N	03/22/93	03/29/93	1.3×10^{-14}	9.3×10^{-16}
Area 25, E-MAD N	03/29/93	04/05/93	1.6×10^{-14}	9.5×10^{-16}
Area 25, E-MAD N	04/05/93	04/12/93	1.8×10^{-14}	9.9×10^{-16}
Area 25, E-MAD N	04/12/93	04/19/93	1.4×10^{-14}	9.2×10^{-16}
Area 25, E-MAD N	04/19/93	04/26/93	1.4×10^{-14}	9.4×10^{-16}
Area 25, E-MAD N	04/26/93	05/03/93	1.9×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	05/03/93	05/10/93	1.4×10^{-14}	9.3×10^{-16}
Area 25, E-MAD N	05/10/93	05/17/93	1.9×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	05/17/93	05/24/93	1.8×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	05/24/93	06/01/93	1.5×10^{-14}	8.7×10^{-16}
Area 25, E-MAD N	06/01/93	06/07/93	1.2×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	06/07/93	06/14/93	2.2×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	06/14/93	06/21/93	2.1×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	06/21/93	06/28/93	2.1×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	06/28/93	07/06/93	2.4×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	07/06/93	07/12/93	2.3×10^{-14}	1.3×10^{-15}
Area 25, E-MAD N	07/12/93	07/19/93	2.2×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	07/26/93	08/02/93	3.4×10^{-14}	1.4×10^{-15}
Area 25, E-MAD N	08/02/93	08/09/93	2.2×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	08/09/93	08/16/93	2.3×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	08/16/93	08/23/93	2.1×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	08/23/93	08/30/93	2.3×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	08/30/93	09/08/93	2.2×10^{-14}	9.3×10^{-16}
Area 25, E-MAD N	09/08/93	09/13/93	3.0×10^{-14}	1.6×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, E-MAD N	09/13/93	09/20/93	2.2×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	09/20/93	09/27/93	3.4×10^{-14}	1.3×10^{-15}
Area 25, E-MAD N	09/27/93	10/04/93	3.9×10^{-14}	1.3×10^{-15}
Area 25, E-MAD N	10/04/93	10/11/93	2.2×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	10/11/93	10/19/93	1.4×10^{-14}	9.0×10^{-16}
Area 25, E-MAD N	10/19/93	10/25/93	2.9×10^{-14}	1.4×10^{-15}
Area 25, E-MAD N	10/25/93	11/01/93	1.7×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	11/01/93	11/08/93	2.8×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	11/08/93	11/15/93	3.3×10^{-14}	1.3×10^{-15}
Area 25, E-MAD N	11/15/93	11/22/93	3.4×10^{-14}	1.3×10^{-15}
Area 25, E-MAD N	11/22/93	11/29/93	2.8×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	11/29/93	12/06/93	2.7×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	12/06/93	12/13/93	2.5×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	12/13/93	12/20/93	3.1×10^{-14}	1.3×10^{-15}
Area 25, E-MAD N	12/20/93	12/27/93	2.6×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	12/27/93	01/03/94	2.8×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	01/04/93	01/12/93	1.1×10^{-14}	8.4×10^{-16}
Area 25, NRDS Warehouse	01/12/93	01/20/93	7.5×10^{-15}	7.7×10^{-16}
Area 25, NRDS Warehouse	01/20/93	01/26/93	1.4×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	01/26/93	02/01/93	2.3×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	02/01/93	02/08/93	3.5×10^{-14}	1.3×10^{-15}
Area 25, NRDS Warehouse	02/08/93	02/16/93	1.1×10^{-14}	7.3×10^{-16}
Area 25, NRDS Warehouse	02/16/93	02/22/93	8.3×10^{-15}	1.0×10^{-15}
Area 25, NRDS Warehouse	02/22/93	03/01/93	1.3×10^{-14}	9.4×10^{-16}
Area 25, NRDS Warehouse	03/01/93	03/08/93	1.6×10^{-14}	9.9×10^{-16}
Area 25, NRDS Warehouse	03/08/93	03/15/93	2.0×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	03/15/93	03/22/93	9.5×10^{-15}	8.9×10^{-16}
Area 25, NRDS Warehouse	03/22/93	03/29/93	1.2×10^{-14}	9.4×10^{-16}
Area 25, NRDS Warehouse	03/29/93	04/05/93	1.4×10^{-14}	9.0×10^{-16}
Area 25, NRDS Warehouse	04/05/93	04/12/93	1.8×10^{-14}	9.9×10^{-16}
Area 25, NRDS Warehouse	04/12/93	04/19/93	1.3×10^{-14}	9.0×10^{-16}
Area 25, NRDS Warehouse	04/19/93	04/26/93	1.2×10^{-14}	9.3×10^{-16}
Area 25, NRDS Warehouse	04/26/93	05/03/93	1.6×10^{-14}	9.8×10^{-16}
Area 25, NRDS Warehouse	05/03/93	05/10/93	1.4×10^{-14}	9.2×10^{-16}
Area 25, NRDS Warehouse	05/10/93	05/17/93	1.9×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	05/17/93	05/24/93	1.7×10^{-14}	9.9×10^{-16}
Area 25, NRDS Warehouse	05/24/93	06/01/93	1.5×10^{-14}	8.6×10^{-16}
Area 25, NRDS Warehouse	06/01/93	06/07/93	1.2×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	06/07/93	06/14/93	1.7×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	06/14/93	06/21/93	1.8×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	06/21/93	06/28/93	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	06/28/93	07/06/93	1.9×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	07/06/93	07/12/93	9.1×10^{-15}	5.7×10^{-16}
Area 25, NRDS Warehouse	07/12/93	07/19/93	2.0×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, NRDS Warehouse	07/19/93	07/26/93	1.5×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	07/26/93	08/02/93	1.4×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	08/02/93	08/09/93	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/09/93	08/16/93	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/16/93	08/23/93	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/23/93	08/30/93	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/30/93	09/08/93	6.7×10^{-15}	7.4×10^{-16}
Area 25, NRDS Warehouse	09/08/93	09/13/93	6.6×10^{-15}	1.1×10^{-15}
Area 25, NRDS Warehouse	09/13/93	09/20/93	1.0×10^{-14}	1.9×10^{-15}
Area 25, NRDS Warehouse	09/27/93	10/04/93	3.1×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	10/04/93	10/11/93	1.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	10/11/93	10/19/93	1.2×10^{-14}	8.8×10^{-16}
Area 25, NRDS Warehouse	10/19/93	10/25/93	2.4×10^{-14}	1.3×10^{-15}
Area 25, NRDS Warehouse	10/25/93	11/01/93	2.1×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	11/01/93	11/08/93	2.4×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	11/15/93	11/22/93	3.1×10^{-14}	1.3×10^{-15}
Area 25, NRDS Warehouse	11/22/93	11/29/93	2.6×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	11/29/93	12/06/93	1.8×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	12/06/93	12/13/93	2.5×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	12/13/93	12/20/93	2.1×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	12/20/93	12/27/93	2.6×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	12/27/93	01/03/94	2.7×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	01/04/93	01/12/93	1.3×10^{-14}	9.6×10^{-16}
Area 27, Cafeteria	01/20/93	01/26/93	1.4×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	01/26/93	02/01/93	2.3×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	02/01/93	02/08/93	1.9×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	02/16/93	02/22/93	6.1×10^{-15}	1.0×10^{-15}
Area 27, Cafeteria	02/22/93	03/01/93	1.1×10^{-14}	9.4×10^{-16}
Area 27, Cafeteria	03/01/93	03/08/93	1.4×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	03/08/93	03/15/93	2.0×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	03/15/93	03/22/93	9.7×10^{-15}	9.3×10^{-16}
Area 27, Cafeteria	03/22/93	03/29/93	1.3×10^{-14}	9.9×10^{-16}
Area 27, Cafeteria	03/29/93	04/05/93	1.5×10^{-14}	1.5×10^{-15}
Area 27, Cafeteria	04/05/93	04/19/93	1.6×10^{-14}	6.0×10^{-16}
Area 27, Cafeteria	04/19/93	04/26/93	1.4×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	04/26/93	05/03/93	1.9×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	05/03/93	05/10/93	1.6×10^{-14}	9.9×10^{-16}
Area 27, Cafeteria	05/10/93	05/17/93	2.0×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	05/17/93	05/24/93	1.7×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	05/24/93	06/01/93	1.5×10^{-14}	9.1×10^{-16}
Area 27, Cafeteria	06/01/93	06/07/93	1.2×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	06/14/93	06/21/93	1.7×10^{-14}	6.9×10^{-16}
Area 27, Cafeteria	06/21/93	06/28/93	1.8×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	06/28/93	07/06/93	1.8×10^{-14}	1.1×10^{-15}

Attachment A.3 (Gross Beta in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 27, Cafeteria	07/06/93	07/12/93	2.0×10^{-14}	1.4×10^{-15}
Area 27, Cafeteria	07/12/93	07/19/93	2.0×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	07/19/93	07/26/93	1.7×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	07/26/93	08/02/93	1.3×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	08/02/93	08/09/93	1.7×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	08/09/93	08/16/93	1.6×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	08/16/93	08/23/93	1.8×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	08/23/93	08/30/93	1.8×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	08/30/93	09/13/93	2.2×10^{-14}	7.4×10^{-16}
Area 27, Cafeteria	09/13/93	09/27/93	2.2×10^{-14}	7.4×10^{-16}
Area 27, Cafeteria	09/27/93	10/04/93	3.6×10^{-14}	1.4×10^{-15}
Area 27, Cafeteria	10/04/93	10/11/93	8.4×10^{-15}	9.7×10^{-16}
Area 27, Cafeteria	10/11/93	10/19/93	1.5×10^{-14}	8.6×10^{-16}
Area 27, Cafeteria	10/19/93	10/25/93	3.9×10^{-14}	1.8×10^{-15}
Area 27, Cafeteria	10/25/93	11/01/93	2.6×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	11/01/93	11/08/93	1.9×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	11/08/93	11/15/93	2.8×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	11/15/93	11/22/93	2.5×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	11/22/93	11/29/93	2.1×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	11/29/93	12/06/93	1.5×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	12/06/93	12/13/93	1.8×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	12/13/93	12/20/93	1.9×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	12/20/93	12/27/93	2.1×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	12/27/93	01/03/94	2.3×10^{-14}	1.2×10^{-15}

Attachment A.4 Gamma-Emitting Radionuclides in Air - 1993

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 1, BJY	01/04/93	01/11/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 1, BJY	01/11/93	01/19/93	9.7×10^{-14}	3.0×10^{-14}	^{7}Be
Area 1, BJY	01/19/93	01/25/93	1.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, BJY	01/25/93	03/03/93	2.7×10^{-14}	8.0×10^{-15}	^{40}K
Area 1, BJY	01/25/93	03/03/93	8.9×10^{-14}	1.2×10^{-14}	^{7}Be
Area 1, BJY	01/25/93	02/01/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, BJY	02/01/93	02/08/93	1.7×10^{-13}	3.4×10^{-14}	^{7}Be
Area 1, BJY	02/08/93	02/16/93	1.3×10^{-13}	3.7×10^{-14}	^{7}Be
Area 1, BJY	02/16/93	02/22/93	1.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 1, BJY	02/22/93	03/01/93	8.7×10^{-14}	3.7×10^{-14}	^{40}K
Area 1, BJY	02/22/93	03/01/93	1.4×10^{-13}	3.4×10^{-14}	^{7}Be
Area 1, BJY	03/01/93	03/08/93	1.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 1, BJY	03/08/93	03/15/93	2.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 1, BJY	03/15/93	03/22/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 1, BJY	03/22/93	03/29/93	1.2×10^{-13}	2.7×10^{-14}	^{7}Be
Area 1, BJY	03/29/93	04/05/93	1.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, BJY	04/05/93	04/12/93	3.6×10^{-13}	5.8×10^{-14}	^{7}Be
Area 1, BJY	04/12/93	04/19/93	2.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 1, BJY	04/19/93	04/26/93	2.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 1, BJY	04/26/93	05/03/93	2.7×10^{-13}	5.6×10^{-14}	^{7}Be
Area 1, BJY	05/03/93	05/10/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 1, BJY	05/10/93	05/18/93	2.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 1, BJY	05/18/93	05/24/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 1, BJY	05/24/93	06/01/93	2.3×10^{-13}	4.0×10^{-14}	^{7}Be
Area 1, BJY	06/01/93	06/07/93	2.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 1, BJY	06/07/93	06/14/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 1, BJY	06/14/93	06/21/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 1, BJY	06/22/93	06/28/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 1, BJY	06/28/93	07/06/93	3.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 1, BJY	07/06/93	07/12/93	2.8×10^{-13}	5.3×10^{-14}	^{7}Be
Area 1, BJY	07/12/93	07/19/93	4.5×10^{-13}	6.3×10^{-14}	^{7}Be
Area 1, BJY	07/19/93	07/26/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 1, BJY	07/26/93	08/02/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 1, BJY	08/02/93	08/09/93	3.0×10^{-13}	5.9×10^{-14}	^{7}Be
Area 1, BJY	08/09/93	08/16/93	3.1×10^{-13}	6.0×10^{-14}	^{7}Be
Area 1, BJY	08/16/93	08/23/93	2.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 1, BJY	08/23/93	08/30/93	2.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 1, BJY	08/30/93	09/08/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 1, BJY	09/08/93	09/13/93	2.5×10^{-13}	5.2×10^{-14}	^{7}Be
Area 1, BJY	09/13/93	09/20/93	2.6×10^{-13}	6.1×10^{-14}	^{7}Be
Area 1, BJY	09/20/93	09/27/93	3.5×10^{-13}	6.0×10^{-14}	^{7}Be
Area 1, BJY	09/27/93	10/04/93	3.1×10^{-13}	6.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 1, BJY	10/04/93	10/11/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 1, BJY	10/11/93	10/18/93	1.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 1, BJY	10/18/93	10/25/93	2.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 1, BJY	10/25/93	11/01/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 1, BJY	11/01/93	11/08/93	3.6×10^{-13}	6.6×10^{-14}	^{7}Be
Area 1, BJY	11/08/93	11/15/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 1, BJY	11/15/93	11/22/93	3.2×10^{-13}	6.2×10^{-14}	^{7}Be
Area 1, BJY	11/22/93	11/29/93	3.7×10^{-13}	5.8×10^{-14}	^{7}Be
Area 1, BJY	11/29/93	12/06/93	2.8×10^{-13}	5.8×10^{-14}	^{7}Be
Area 1, BJY	12/06/93	12/13/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, BJY	12/13/93	12/20/93	1.7×10^{-13}	4.1×10^{-14}	^{7}Be
Area 1, BJY	12/20/93	12/27/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, BJY	12/27/93	01/03/94	3.4×10^{-13}	6.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	01/04/93	01/12/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	01/19/93	01/25/93	1.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	01/25/93	02/01/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	02/01/93	02/08/93	1.5×10^{-13}	2.8×10^{-14}	^{7}Be
Area 1, Gravel Pit	02/08/93	02/16/93	1.3×10^{-13}	3.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	02/16/93	02/22/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 1, Gravel Pit	02/22/93	03/01/93	1.2×10^{-13}	3.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	03/01/93	03/08/93	1.3×10^{-13}	3.1×10^{-14}	^{7}Be
Area 1, Gravel Pit	03/08/93	03/15/93	7.9×10^{-14}	3.9×10^{-14}	^{40}K
Area 1, Gravel Pit	03/08/93	03/15/93	2.2×10^{-13}	3.8×10^{-14}	^{7}Be
Area 1, Gravel Pit	03/15/93	03/22/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 1, Gravel Pit	03/22/93	03/30/93	1.8×10^{-13}	3.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	03/30/93	04/05/93	2.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	04/05/93	04/12/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, Gravel Pit	04/12/93	04/19/93	2.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 1, Gravel Pit	04/19/93	04/26/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, Gravel Pit	04/26/93	05/03/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 1, Gravel Pit	05/03/93	05/10/93	2.6×10^{-13}	6.8×10^{-14}	^{7}Be
Area 1, Gravel Pit	05/10/93	05/18/93	2.7×10^{-13}	5.1×10^{-14}	^{7}Be
Area 1, Gravel Pit	05/18/93	05/24/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 1, Gravel Pit	05/24/93	06/01/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	06/01/93	06/07/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, Gravel Pit	06/07/93	06/14/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	06/14/93	06/22/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 1, Gravel Pit	06/22/93	06/28/93	3.3×10^{-13}	6.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	06/28/93	07/06/93	3.7×10^{-13}	5.6×10^{-14}	^{7}Be
Area 1, Gravel Pit	07/06/93	07/12/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	07/12/93	07/19/93	3.0×10^{-13}	6.8×10^{-14}	^{7}Be
Area 1, Gravel Pit	07/19/93	07/26/93	2.8×10^{-13}	5.2×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 1, Gravel Pit	07/26/93	08/02/93	2.6×10^{-13}	5.3×10^{-14}	^{7}Be
Area 1, Gravel Pit	08/02/93	08/09/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 1, Gravel Pit	08/09/93	08/16/93	4.1×10^{-13}	6.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	08/16/93	08/23/93	3.0×10^{-13}	6.0×10^{-14}	^{7}Be
Area 1, Gravel Pit	08/23/93	08/30/93	2.0×10^{-13}	5.8×10^{-14}	^{7}Be
Area 1, Gravel Pit	08/30/93	09/08/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 1, Gravel Pit	09/08/93	09/13/93	3.9×10^{-13}	7.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	09/13/93	09/20/93	3.2×10^{-13}	5.6×10^{-14}	^{7}Be
Area 1, Gravel Pit	09/20/93	09/27/93	2.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	09/27/93	10/04/93	4.4×10^{-13}	1.1×10^{-13}	^{7}Be
Area 1, Gravel Pit	10/04/93	10/11/93	2.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 1, Gravel Pit	10/11/93	10/18/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	10/18/93	10/25/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 1, Gravel Pit	10/25/93	11/01/93	3.5×10^{-13}	5.7×10^{-14}	^{7}Be
Area 1, Gravel Pit	11/01/93	11/08/93	4.3×10^{-13}	6.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	11/08/93	11/15/93	2.7×10^{-13}	5.9×10^{-14}	^{7}Be
Area 1, Gravel Pit	11/15/93	11/22/93	1.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 1, Gravel Pit	11/22/93	11/29/93	3.9×10^{-13}	7.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	11/29/93	12/06/93	2.8×10^{-13}	5.4×10^{-14}	^{7}Be
Area 1, Gravel Pit	12/06/93	12/13/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 1, Gravel Pit	12/13/93	12/20/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 1, Gravel Pit	12/20/93	12/27/93	3.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 1, Gravel Pit	12/27/93	01/03/94	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 2, 2-1 Substation	01/04/93	01/11/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 2, 2-1 Substation	01/11/93	01/19/93	5.0×10^{-14}	2.2×10^{-14}	^{7}Be
Area 2, 2-1 Substation	01/19/93	01/25/93	1.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, 2-1 Substation	01/25/93	02/01/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 2, 2-1 Substation	02/01/93	02/08/93	1.8×10^{-13}	3.4×10^{-14}	^{7}Be
Area 2, 2-1 Substation	02/08/93	02/16/93	1.2×10^{-13}	3.4×10^{-14}	^{7}Be
Area 2, 2-1 Substation	02/16/93	02/22/93	8.0×10^{-14}	4.6×10^{-14}	^{7}Be
Area 2, 2-1 Substation	02/22/93	03/01/93	7.1×10^{-14}	2.1×10^{-14}	^{7}Be
Area 2, 2-1 Substation	03/01/93	03/08/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 2, 2-1 Substation	03/08/93	03/15/93	1.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 2, 2-1 Substation	03/15/93	03/22/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 2, 2-1 Substation	03/22/93	03/29/93	1.4×10^{-13}	3.1×10^{-14}	^{7}Be
Area 2, 2-1 Substation	03/29/93	04/05/93	1.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, 2-1 Substation	04/05/93	04/12/93	2.4×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, 2-1 Substation	04/12/93	04/19/93	1.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 2, 2-1 Substation	04/19/93	04/26/93	3.0×10^{-13}	5.5×10^{-14}	^{7}Be
Area 2, 2-1 Substation	04/26/93	05/03/93	2.8×10^{-13}	5.5×10^{-14}	^{7}Be
Area 2, 2-1 Substation	05/03/93	05/10/93	2.4×10^{-13}	5.7×10^{-14}	^{7}Be
Area 2, 2-1 Substation	05/10/93	05/18/93	2.6×10^{-13}	5.9×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 2, 2-1 Substation	05/18/93	05/24/93	2.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, 2-1 Substation	05/24/93	06/01/93	2.7×10^{-13}	4.3×10^{-14}	^{7}Be
Area 2, 2-1 Substation	06/01/93	06/07/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 2, 2-1 Substation	06/07/93	06/14/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 2, 2-1 Substation	06/14/93	06/21/93	2.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 2, 2-1 Substation	06/22/93	06/28/93	2.8×10^{-13}	4.6×10^{-14}	^{7}Be
Area 2, 2-1 Substation	06/28/93	07/06/93	3.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 2, 2-1 Substation	07/06/93	07/12/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 2, 2-1 Substation	07/12/93	07/19/93	3.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 2, 2-1 Substation	07/19/93	07/26/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 2, 2-1 Substation	07/26/93	08/02/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 2, 2-1 Substation	08/02/93	08/09/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 2, 2-1 Substation	08/09/93	08/16/93	2.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 2, 2-1 Substation	08/16/93	08/23/93	2.5×10^{-13}	5.1×10^{-14}	^{7}Be
Area 2, 2-1 Substation	08/23/93	08/30/93	2.3×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, 2-1 Substation	08/30/93	09/08/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 2, 2-1 Substation	09/08/93	09/13/93	2.4×10^{-13}	6.1×10^{-14}	^{7}Be
Area 2, 2-1 Substation	09/13/93	09/20/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 2, 2-1 Substation	09/20/93	09/27/93	4.8×10^{-13}	6.3×10^{-14}	^{7}Be
Area 2, 2-1 Substation	09/27/93	10/04/93	3.3×10^{-13}	6.2×10^{-14}	^{7}Be
Area 2, 2-1 Substation	10/04/93	10/11/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 2, 2-1 Substation	10/11/93	10/18/93	1.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 2, 2-1 Substation	10/18/93	10/25/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 2, 2-1 Substation	10/25/93	11/01/93	3.2×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, 2-1 Substation	11/01/93	11/08/93	4.0×10^{-13}	6.5×10^{-14}	^{7}Be
Area 2, 2-1 Substation	11/08/93	11/15/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 2, 2-1 Substation	11/15/93	11/22/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 2, 2-1 Substation	11/22/93	11/29/93	3.5×10^{-13}	6.2×10^{-14}	^{7}Be
Area 2, 2-1 Substation	11/29/93	12/06/93	2.3×10^{-13}	5.3×10^{-14}	^{7}Be
Area 2, 2-1 Substation	12/06/93	12/13/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 2, 2-1 Substation	12/13/93	12/20/93	1.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 2, 2-1 Substation	12/20/93	12/27/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 2, 2-1 Substation	12/20/93	12/27/93	3.0×10^{-13}	1.5×10^{-13}	^{40}K
Area 2, 2-1 Substation	12/27/93	01/03/94	2.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, Complex	01/04/93	01/11/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 2, Complex	01/11/93	01/19/93	7.9×10^{-14}	2.6×10^{-14}	^{7}Be
Area 2, Complex	01/19/93	01/25/93	1.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, Complex	01/25/93	02/01/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 2, Complex	02/01/93	02/08/93	1.6×10^{-13}	3.3×10^{-14}	^{7}Be
Area 2, Complex	02/08/93	02/16/93	1.4×10^{-13}	3.2×10^{-14}	^{7}Be
Area 2, Complex	02/16/93	02/22/93	1.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 2, Complex	02/22/93	03/01/93	1.9×10^{-13}	3.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 2, Complex	03/01/93	03/08/93	1.4×10^{-13}	4.2×10^{-14}	^{7}Be
Area 2, Complex	03/08/93	03/15/93	1.3×10^{-13}	3.1×10^{-14}	^{7}Be
Area 2, Complex	03/15/93	03/22/93	2.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 2, Complex	03/22/93	03/29/93	9.9×10^{-14}	2.6×10^{-14}	^{7}Be
Area 2, Complex	03/29/93	04/05/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 2, Complex	04/05/93	04/12/93	1.9×10^{-13}	3.6×10^{-14}	^{7}Be
Area 2, Complex	04/05/93	04/12/93	5.9×10^{-14}	2.9×10^{-14}	^{40}K
Area 2, Complex	04/19/93	04/26/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 2, Complex	04/26/93	05/03/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, Complex	05/03/93	05/10/93	2.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 2, Complex	05/10/93	05/18/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, Complex	05/18/93	05/24/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 2, Complex	05/24/93	06/01/93	2.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 2, Complex	06/01/93	06/07/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 2, Complex	06/07/93	06/14/93	2.5×10^{-13}	5.1×10^{-14}	^{7}Be
Area 2, Complex	06/14/93	06/21/93	2.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, Complex	06/21/93	06/28/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 2, Complex	06/28/93	07/06/93	3.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, Complex	07/06/93	07/12/93	2.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, Complex	07/12/93	07/19/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, Complex	07/19/93	07/26/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 2, Complex	07/26/93	08/02/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 2, Complex	08/02/93	08/09/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 2, Complex	08/09/93	08/16/93	3.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, Complex	08/16/93	08/23/93	3.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 2, Complex	08/23/93	08/30/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 2, Complex	08/30/93	09/08/93	1.7×10^{-13}	3.8×10^{-14}	^{7}Be
Area 2, Complex	09/08/93	09/13/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 2, Complex	09/13/93	09/20/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 2, Complex	09/20/93	09/27/93	4.4×10^{-13}	6.3×10^{-14}	^{7}Be
Area 2, Complex	09/27/93	10/04/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 2, Complex	10/04/93	10/11/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 2, Complex	10/11/93	10/18/93	1.5×10^{-13}	4.3×10^{-14}	^{7}Be
Area 2, Complex	10/18/93	10/25/93	3.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 2, Complex	10/25/93	11/01/93	2.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 2, Complex	11/01/93	11/08/93	3.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 2, Complex	11/08/93	11/15/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 2, Complex	11/15/93	11/22/93	3.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 2, Complex	11/22/93	11/29/93	3.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 2, Complex	11/29/93	12/06/93	2.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 2, Complex	12/06/93	12/13/93	2.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 2, Complex	12/13/93	12/20/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		μCi/mL Concentration	μCi/mL Standard Deviation (s)	Radionuclide
Area 2, Complex	12/20/93	12/27/93	2.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 2, Complex	12/27/93	01/03/94	2.5×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, Complex	01/04/93	01/11/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Complex	01/11/93	01/19/93	7.0×10^{-14}	3.2×10^{-14}	^{7}Be
Area 3, Complex	01/19/93	01/25/93	1.0×10^{-13}	3.5×10^{-14}	^{7}Be
Area 3, Complex	01/25/93	02/01/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, Complex	02/01/93	02/08/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, Complex	02/08/93	02/16/93	1.2×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, Complex	02/16/93	02/22/93	1.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Complex	02/22/93	03/01/93	1.2×10^{-13}	3.0×10^{-14}	^{7}Be
Area 3, Complex	02/22/93	03/01/93	8.0×10^{-14}	3.8×10^{-14}	^{40}K
Area 3, Complex	03/01/93	03/08/93	1.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, Complex	03/08/93	03/15/93	1.3×10^{-13}	3.5×10^{-14}	^{7}Be
Area 3, Complex	03/15/93	03/22/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, Complex	03/22/93	03/29/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, Complex	03/29/93	04/05/93	1.7×10^{-13}	3.3×10^{-14}	^{7}Be
Area 3, Complex	04/05/93	04/12/93	2.8×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, Complex	04/12/93	04/19/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Complex	04/19/93	04/26/93	1.2×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, Complex	04/26/93	05/03/93	2.6×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, Complex	05/03/93	05/10/93	2.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 3, Complex	05/10/93	05/18/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Complex	05/17/93	05/24/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Complex	05/24/93	06/01/93	2.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Complex	06/01/93	06/07/93	1.5×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, Complex	06/07/93	06/14/93	3.2×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, Complex	06/14/93	06/22/93	2.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, Complex	06/22/93	06/28/93	2.6×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Complex	06/28/93	07/06/93	2.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 3, Complex	07/06/93	07/12/93	1.8×10^{-13}	3.6×10^{-14}	^{7}Be
Area 3, Complex	07/12/93	07/19/93	4.4×10^{-13}	7.2×10^{-14}	^{7}Be
Area 3, Complex	07/19/93	07/26/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, Complex	07/26/93	08/02/93	1.8×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, Complex	08/02/93	08/09/93	2.5×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, Complex	08/09/93	08/16/93	2.9×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, Complex	08/16/93	08/23/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, Complex	08/23/93	08/30/93	2.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, Complex	08/30/93	09/08/93	2.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Complex	09/08/93	09/13/93	3.0×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, Complex	09/13/93	09/20/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, Complex	09/20/93	09/27/93	4.2×10^{-13}	6.4×10^{-14}	^{7}Be
Area 3, Complex	09/27/93	10/04/93	3.3×10^{-13}	5.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, Complex	10/04/93	10/11/93	4.0×10^{-13}	6.7×10^{-14}	^{7}Be
Area 3, Complex	10/11/93	10/18/93	1.3×10^{-13}	3.6×10^{-14}	^{7}Be
Area 3, Complex	10/18/93	10/25/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Complex	10/25/93	11/01/93	2.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, Complex	11/01/93	11/08/93	3.2×10^{-13}	6.2×10^{-14}	^{7}Be
Area 3, Complex	11/08/93	11/15/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, Complex	11/15/93	11/22/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, Complex	11/22/93	11/29/93	4.3×10^{-13}	6.4×10^{-14}	^{7}Be
Area 3, Complex	11/22/93	11/29/93	3.5×10^{-13}	1.2×10^{-13}	^{40}K
Area 3, Complex	11/29/93	12/06/93	2.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, Complex	12/06/93	12/13/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, Complex	12/13/93	12/20/93	1.4×10^{-13}	3.7×10^{-14}	^{7}Be
Area 3, Complex	12/20/93	12/27/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, Complex	12/27/93	01/03/94	2.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, Complex No. 2	01/04/93	01/11/93	1.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Complex No. 2	01/11/93	01/19/93	1.0×10^{-13}	3.7×10^{-14}	^{7}Be
Area 3, Complex No. 2	01/19/93	01/25/93	1.0×10^{-13}	3.6×10^{-14}	^{7}Be
Area 3, Complex No. 2	01/25/93	02/01/93	1.7×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, Complex No. 2	02/01/93	02/08/93	2.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Complex No. 2	02/08/93	02/16/93	1.3×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, Complex No. 2	02/16/93	02/22/93	1.3×10^{-13}	3.7×10^{-14}	^{7}Be
Area 3, Complex No. 2	02/22/93	03/01/93	9.2×10^{-14}	3.9×10^{-14}	^{7}Be
Area 3, Complex No. 2	03/01/93	03/08/93	1.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, Complex No. 2	03/08/93	03/15/93	1.7×10^{-13}	3.3×10^{-14}	^{7}Be
Area 3, Complex No. 2	03/15/93	03/22/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, Complex No. 2	03/22/93	03/29/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, Complex No. 2	03/29/93	04/05/93	2.1×10^{-13}	3.4×10^{-14}	^{7}Be
Area 3, Complex No. 2	04/05/93	04/12/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, Complex No. 2	04/12/93	04/19/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, Complex No. 2	04/19/93	04/26/93	2.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, Complex No. 2	04/26/93	05/03/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, Complex No. 2	05/03/93	05/10/93	2.4×10^{-13}	5.7×10^{-14}	^{7}Be
Area 3, Complex No. 2	05/10/93	05/18/93	3.0×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, Complex No. 2	05/17/93	05/24/93	2.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Complex No. 2	05/24/93	06/01/93	2.4×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, Complex No. 2	06/01/93	06/07/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, Complex No. 2	06/07/93	06/14/93	3.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, Complex No. 2	06/14/93	06/22/93	2.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Complex No. 2	06/22/93	06/28/93	2.6×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Complex No. 2	06/28/93	07/06/93	9.8×10^{-13}	1.4×10^{-13}	^{7}Be
Area 3, Complex No. 2	07/06/93	07/12/93	2.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, Complex No. 2	07/12/93	07/19/93	1.9×10^{-13}	4.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, Complex No. 2	07/19/93	07/26/93	2.1×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, Complex No. 2	07/26/93	08/02/93	1.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, Complex No. 2	08/02/93	08/09/93	1.3×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, Complex No. 2	08/09/93	08/16/93	3.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 3, Complex No. 2	08/16/93	08/23/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, Complex No. 2	09/08/93	09/13/93	2.8×10^{-13}	6.4×10^{-14}	^{7}Be
Area 3, Complex No. 2	09/13/93	09/20/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Complex No. 2	09/20/93	09/27/93	4.2×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, Complex No. 2	09/27/93	10/04/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, Complex No. 2	10/04/93	10/11/93	2.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Complex No. 2	10/11/93	10/18/93	2.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Complex No. 2	10/18/93	10/25/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Complex No. 2	10/25/93	11/01/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Complex No. 2	11/01/93	11/08/93	3.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 3, Complex No. 2	11/08/93	11/15/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, Complex No. 2	11/15/93	11/22/93	1.7×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, Complex No. 2	11/22/93	11/29/93	3.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, Complex No. 2	11/29/93	12/06/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Complex No. 2	12/06/93	12/13/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, Complex No. 2	12/13/93	12/20/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, Complex No. 2	12/20/93	12/27/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, Complex No. 2	12/27/93	01/03/94	2.4×10^{-13}	5.7×10^{-14}	^{7}Be
Area 3, Mud Plant	01/04/93	01/11/93	1.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Mud Plant	01/11/93	01/19/93	1.0×10^{-13}	3.5×10^{-14}	^{7}Be
Area 3, Mud Plant	01/19/93	01/25/93	1.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, Mud Plant	01/25/93	02/01/93	1.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Mud Plant	02/01/93	02/08/93	1.9×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Mud Plant	02/08/93	02/16/93	1.3×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, Mud Plant	02/16/93	02/22/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Mud Plant	02/22/93	03/01/93	1.4×10^{-13}	3.0×10^{-14}	^{7}Be
Area 3, Mud Plant	03/01/93	03/08/93	1.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Mud Plant	03/08/93	03/15/93	2.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Mud Plant	03/15/93	03/22/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Mud Plant	03/22/93	03/29/93	7.7×10^{-14}	3.4×10^{-14}	^{7}Be
Area 3, Mud Plant	03/29/93	04/05/93	1.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Mud Plant	04/05/93	04/12/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, Mud Plant	04/12/93	04/19/93	2.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, Mud Plant	04/19/93	04/26/93	2.3×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, Mud Plant	04/26/93	05/03/93	2.4×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, Mud Plant	05/03/93	05/10/93	3.0×10^{-13}	6.5×10^{-14}	^{7}Be
Area 3, Mud Plant	05/10/93	05/18/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Mud Plant	05/18/93	05/24/93	2.3×10^{-13}	5.1×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, Mud Plant	05/24/93	06/01/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, Mud Plant	06/01/93	06/07/93	1.9×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, Mud Plant	06/07/93	06/14/93	3.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, Mud Plant	06/14/93	06/21/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, Mud Plant	06/22/93	06/28/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, Mud Plant	06/28/93	07/06/93	2.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, Mud Plant	07/06/93	07/12/93	2.6×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Mud Plant	07/12/93	07/19/93	3.0×10^{-13}	5.9×10^{-14}	^{7}Be
Area 3, Mud Plant	07/19/93	07/26/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, Mud Plant	07/26/93	08/02/93	2.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 3, Mud Plant	08/02/93	08/09/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, Mud Plant	08/09/93	08/16/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, Mud Plant	08/16/93	08/23/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, Mud Plant	08/23/93	08/30/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Mud Plant	08/30/93	09/08/93	2.3×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, Mud Plant	09/08/93	09/13/93	2.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, Mud Plant	09/13/93	09/20/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, Mud Plant	09/20/93	09/27/93	4.0×10^{-13}	6.3×10^{-14}	^{7}Be
Area 3, Mud Plant	09/27/93	10/04/93	3.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, Mud Plant	10/04/93	10/11/93	2.6×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, Mud Plant	10/11/93	10/18/93	1.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, Mud Plant	10/18/93	10/25/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, Mud Plant	10/25/93	11/01/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, Mud Plant	11/08/93	11/15/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, Mud Plant	11/15/93	11/22/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, Mud Plant	11/22/93	11/29/93	3.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, Mud Plant	11/29/93	12/06/93	2.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, Mud Plant	12/06/93	12/13/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, Mud Plant	12/13/93	12/20/93	1.5×10^{-13}	3.7×10^{-14}	^{7}Be
Area 3, Mud Plant	12/20/93	12/27/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, Mud Plant	12/27/93	01/03/94	2.6×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at E	02/01/93	02/08/93	2.5×10^{-13}	7.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	02/08/93	02/16/93	1.4×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, U-3ah/at E	02/16/93	02/22/93	9.4×10^{-14}	3.9×10^{-14}	^{7}Be
Area 3, U-3ah/at E	02/22/93	03/01/93	9.1×10^{-14}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at E	03/01/93	03/08/93	1.3×10^{-13}	3.6×10^{-14}	^{7}Be
Area 3, U-3ah/at E	03/08/93	03/15/93	1.8×10^{-13}	3.2×10^{-14}	^{7}Be
Area 3, U-3ah/at E	03/15/93	03/22/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, U-3ah/at E	03/22/93	03/29/93	1.6×10^{-13}	3.1×10^{-14}	^{7}Be
Area 3, U-3ah/at E	03/29/93	04/05/93	1.7×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, U-3ah/at E	04/05/93	04/12/93	3.7×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at E	04/12/93	04/19/93	2.3×10^{-13}	4.9×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, U-3ah/at E	04/19/93	04/26/93	1.6×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at E	04/26/93	05/03/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at E	05/03/93	05/10/93	3.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at E	05/10/93	05/18/93	2.4×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at E	05/18/93	05/24/93	2.8×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	05/24/93	06/02/93	2.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, U-3ah/at E	06/02/93	06/07/93	1.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at E	06/07/93	06/14/93	3.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, U-3ah/at E	06/14/93	06/22/93	2.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at E	06/22/93	06/28/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	06/28/93	07/06/93	3.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, U-3ah/at E	07/06/93	07/12/93	1.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at E	07/12/93	07/19/93	4.0×10^{-13}	6.0×10^{-14}	^{7}Be
Area 3, U-3ah/at E	07/19/93	07/26/93	2.7×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, U-3ah/at E	07/26/93	08/02/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	08/02/93	08/09/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at E	08/09/93	08/16/93	2.8×10^{-13}	6.2×10^{-14}	^{7}Be
Area 3, U-3ah/at E	08/16/93	08/23/93	2.9×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at E	08/23/93	08/30/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	08/30/93	09/08/93	2.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, U-3ah/at E	09/08/93	09/13/93	2.7×10^{-13}	5.9×10^{-14}	^{7}Be
Area 3, U-3ah/at E	09/13/93	09/20/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	09/20/93	09/27/93	4.3×10^{-13}	6.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	09/27/93	10/04/93	2.8×10^{-13}	5.9×10^{-14}	^{7}Be
Area 3, U-3ah/at E	10/04/93	10/11/93	3.2×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, U-3ah/at E	10/11/93	10/18/93	1.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, U-3ah/at E	10/18/93	10/25/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at E	10/25/93	11/01/93	3.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at E	11/01/93	11/08/93	3.2×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, U-3ah/at E	11/08/93	11/15/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at E	11/15/93	11/22/93	2.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, U-3ah/at E	11/15/93	11/22/93	3.5×10^{-13}	1.6×10^{-13}	^{40}K
Area 3, U-3ah/at E	11/22/93	11/29/93	4.3×10^{-13}	6.3×10^{-14}	^{7}Be
Area 3, U-3ah/at E	11/29/93	12/06/93	1.7×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, U-3ah/at E	12/06/93	12/13/93	1.5×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, U-3ah/at E	12/13/93	12/21/93	1.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at E	12/21/93	12/27/93	2.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, U-3ah/at E	12/27/93	01/03/94	2.2×10^{-13}	5.9×10^{-14}	^{7}Be
Area 3, U-3ah/at N	01/04/93	01/11/93	2.6×10^{-13}	6.6×10^{-14}	^{7}Be
Area 3, U-3ah/at N	01/19/93	01/25/93	1.8×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, U-3ah/at N	01/25/93	02/01/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, U-3ah/at N	02/01/93	02/08/93	1.4×10^{-13}	4.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, U-3ah/at N	02/08/93	02/16/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, U-3ah/at N	02/16/93	02/22/93	1.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at N	02/22/93	03/01/93	1.2×10^{-13}	3.6×10^{-14}	^{7}Be
Area 3, U-3ah/at N	03/01/93	03/08/93	2.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at N	03/08/93	03/15/93	1.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at N	03/15/93	03/22/93	2.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	03/22/93	03/29/93	1.4×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, U-3ah/at N	03/29/93	04/05/93	2.5×10^{-13}	6.2×10^{-14}	^{7}Be
Area 3, U-3ah/at N	04/05/93	04/12/93	3.2×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, U-3ah/at N	04/12/93	04/19/93	2.8×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at N	04/19/93	04/26/93	2.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	04/26/93	05/03/93	2.9×10^{-13}	6.2×10^{-14}	^{7}Be
Area 3, U-3ah/at N	05/03/93	05/10/93	3.6×10^{-13}	5.9×10^{-14}	^{7}Be
Area 3, U-3ah/at N	05/10/93	05/18/93	2.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at N	05/18/93	05/24/93	3.0×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	05/24/93	06/02/93	2.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at N	06/02/93	06/07/93	2.6×10^{-13}	7.1×10^{-14}	^{7}Be
Area 3, U-3ah/at N	06/07/93	06/14/93	4.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at N	06/14/93	06/22/93	1.7×10^{-13}	3.1×10^{-14}	^{7}Be
Area 3, U-3ah/at N	06/22/93	06/28/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at N	06/28/93	07/06/93	2.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at N	07/06/93	07/12/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, U-3ah/at N	07/12/93	07/19/93	2.5×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at N	07/19/93	07/26/93	3.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, U-3ah/at N	07/26/93	08/02/93	1.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, U-3ah/at N	08/02/93	08/09/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at N	08/09/93	08/16/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at N	08/16/93	08/23/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	08/23/93	08/30/93	3.1×10^{-13}	5.7×10^{-14}	^{7}Be
Area 3, U-3ah/at N	08/30/93	09/08/93	2.4×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, U-3ah/at N	09/08/93	09/13/93	2.6×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, U-3ah/at N	09/13/93	09/20/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	09/20/93	09/27/93	3.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at N	09/27/93	10/04/93	3.3×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, U-3ah/at N	10/04/93	10/11/93	3.0×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	10/11/93	10/18/93	1.2×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, U-3ah/at N	10/18/93	10/25/93	3.7×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	10/25/93	11/01/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	11/01/93	11/08/93	3.7×10^{-13}	6.4×10^{-14}	^{7}Be
Area 3, U-3ah/at N	11/08/93	11/15/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, U-3ah/at N	11/15/93	11/22/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, U-3ah/at N	11/22/93	11/29/93	3.6×10^{-13}	5.8×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, U-3ah/at N	11/29/93	12/06/93	2.3×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at N	12/06/93	12/13/93	2.1×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at N	12/13/93	12/21/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at N	12/21/93	12/27/93	2.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, U-3ah/at N	12/27/93	01/03/94	1.4×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at S	01/04/93	01/11/93	1.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, U-3ah/at S	01/11/93	01/19/93	1.3×10^{-13}	3.3×10^{-14}	^{7}Be
Area 3, U-3ah/at S	01/19/93	01/25/93	1.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at S	01/25/93	02/01/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	02/01/93	02/08/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	02/08/93	02/16/93	1.3×10^{-13}	3.6×10^{-14}	^{7}Be
Area 3, U-3ah/at S	02/16/93	02/22/93	1.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, U-3ah/at S	02/22/93	03/01/93	1.1×10^{-13}	2.8×10^{-14}	^{7}Be
Area 3, U-3ah/at S	03/01/93	03/08/93	1.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at S	03/08/93	03/15/93	1.6×10^{-13}	3.1×10^{-14}	^{7}Be
Area 3, U-3ah/at S	03/15/93	03/22/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at S	03/22/93	03/29/93	9.0×10^{-14}	2.8×10^{-14}	^{7}Be
Area 3, U-3ah/at S	03/29/93	04/05/93	1.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at S	04/05/93	04/12/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at S	04/12/93	04/19/93	2.6×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, U-3ah/at S	04/19/93	04/26/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 3, U-3ah/at S	04/26/93	05/03/93	2.3×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	05/03/93	05/10/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	05/10/93	05/18/93	2.2×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	05/18/93	05/24/93	1.9×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, U-3ah/at S	05/24/93	06/02/93	1.8×10^{-13}	3.3×10^{-14}	^{7}Be
Area 3, U-3ah/at S	06/02/93	06/07/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	06/07/93	06/14/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, U-3ah/at S	06/14/93	06/22/93	2.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, U-3ah/at S	06/22/93	06/28/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, U-3ah/at S	06/28/93	07/06/93	3.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, U-3ah/at S	07/06/93	07/12/93	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at S	07/12/93	07/19/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 3, U-3ah/at S	07/19/93	07/26/93	2.2×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, U-3ah/at S	07/26/93	08/02/93	1.8×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at S	08/02/93	08/09/93	2.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, U-3ah/at S	08/09/93	08/16/93	2.8×10^{-13}	6.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	08/16/93	08/23/93	2.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at S	08/23/93	08/30/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at S	08/30/93	09/08/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at S	09/08/93	09/13/93	2.9×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, U-3ah/at S	09/13/93	09/20/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, U-3ah/at S	09/20/93	09/27/93	3.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at S	09/27/93	10/04/93	2.2×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at S	10/04/93	10/11/93	2.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	10/11/93	10/18/93	1.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at S	10/18/93	10/25/93	2.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 3, U-3ah/at S	10/25/93	11/01/93	3.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, U-3ah/at S	11/01/93	11/08/93	3.4×10^{-13}	6.4×10^{-14}	^{7}Be
Area 3, U-3ah/at S	11/08/93	11/15/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, U-3ah/at S	11/15/93	11/22/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at S	11/22/93	11/29/93	3.4×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at S	11/29/93	12/06/93	1.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	12/06/93	12/13/93	1.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 3, U-3ah/at S	12/13/93	12/21/93	1.1×10^{-13}	4.0×10^{-14}	^{7}Be
Area 3, U-3ah/at S	12/27/93	01/03/94	2.2×10^{-13}	5.8×10^{-14}	^{7}Be
Area 3, U-3ah/at S	12/27/93	01/03/94	4.3×10^{-13}	1.8×10^{-13}	^{40}K
Area 3, U-3ah/at W	01/04/93	01/11/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	01/11/93	01/19/93	5.0×10^{-14}	2.3×10^{-14}	^{7}Be
Area 3, U-3ah/at W	01/19/93	01/25/93	1.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at W	01/25/93	02/01/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at W	02/01/93	02/08/93	1.6×10^{-13}	3.9×10^{-14}	^{7}Be
Area 3, U-3ah/at W	02/08/93	02/16/93	1.6×10^{-13}	4.2×10^{-14}	^{7}Be
Area 3, U-3ah/at W	02/16/93	02/22/93	1.5×10^{-13}	4.3×10^{-14}	^{7}Be
Area 3, U-3ah/at W	02/22/93	03/01/93	1.8×10^{-13}	3.7×10^{-14}	^{7}Be
Area 3, U-3ah/at W	03/01/93	03/08/93	1.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at W	03/08/93	03/15/93	1.0×10^{-13}	2.5×10^{-14}	^{7}Be
Area 3, U-3ah/at W	03/15/93	03/22/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	03/22/93	03/29/93	2.9×10^{-13}	5.7×10^{-14}	^{7}Be
Area 3, U-3ah/at W	03/29/93	04/05/93	2.3×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, U-3ah/at W	04/05/93	04/12/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 3, U-3ah/at W	04/12/93	04/19/93	2.5×10^{-13}	4.8×10^{-14}	^{7}Be
Area 3, U-3ah/at W	04/19/93	04/26/93	2.9×10^{-13}	5.9×10^{-14}	^{7}Be
Area 3, U-3ah/at W	04/26/93	05/03/93	3.2×10^{-13}	6.2×10^{-14}	^{7}Be
Area 3, U-3ah/at W	05/03/93	05/10/93	3.8×10^{-13}	6.2×10^{-14}	^{7}Be
Area 3, U-3ah/at W	05/10/93	05/18/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	05/18/93	05/24/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	05/24/93	06/02/93	2.9×10^{-13}	4.5×10^{-14}	^{7}Be
Area 3, U-3ah/at W	06/02/93	06/07/93	1.3×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, U-3ah/at W	06/07/93	06/14/93	4.2×10^{-13}	8.3×10^{-14}	^{7}Be
Area 3, U-3ah/at W	06/14/93	06/22/93	2.9×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	06/22/93	06/28/93	2.5×10^{-13}	6.1×10^{-14}	^{7}Be
Area 3, U-3ah/at W	06/28/93	07/06/93	3.2×10^{-13}	6.6×10^{-14}	^{7}Be
Area 3, U-3ah/at W	07/06/93	07/12/93	3.3×10^{-13}	8.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 3, U-3ah/at W	07/12/93	07/19/93	4.7×10^{-13}	8.6×10^{-14}	^{7}Be
Area 3, U-3ah/at W	07/19/93	07/26/93	3.1×10^{-13}	6.8×10^{-14}	^{7}Be
Area 3, U-3ah/at W	07/26/93	08/02/93	2.9×10^{-13}	7.8×10^{-14}	^{7}Be
Area 3, U-3ah/at W	08/02/93	08/09/93	3.8×10^{-13}	8.8×10^{-14}	^{7}Be
Area 3, U-3ah/at W	08/09/93	08/16/93	3.8×10^{-13}	9.8×10^{-14}	^{7}Be
Area 3, U-3ah/at W	08/16/93	08/23/93	3.5×10^{-13}	9.7×10^{-14}	^{7}Be
Area 3, U-3ah/at W	08/23/93	08/30/93	2.8×10^{-13}	8.5×10^{-14}	^{7}Be
Area 3, U-3ah/at W	08/30/93	09/08/93	2.7×10^{-13}	6.9×10^{-14}	^{7}Be
Area 3, U-3ah/at W	09/08/93	09/13/93	2.5×10^{-13}	8.1×10^{-14}	^{7}Be
Area 3, U-3ah/at W	09/13/93	09/20/93	3.1×10^{-13}	6.3×10^{-14}	^{7}Be
Area 3, U-3ah/at W	09/20/93	09/27/93	4.0×10^{-13}	7.6×10^{-14}	^{7}Be
Area 3, U-3ah/at W	10/11/93	10/18/93	2.2×10^{-13}	5.9×10^{-14}	^{7}Be
Area 3, U-3ah/at W	10/11/93	10/18/93	3.8×10^{-13}	1.8×10^{-13}	^{40}K
Area 3, U-3ah/at W	10/18/93	10/25/93	3.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	10/25/93	11/01/93	3.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 3, U-3ah/at W	11/01/93	11/08/93	3.3×10^{-13}	6.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	11/08/93	11/15/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 3, U-3ah/at W	11/15/93	11/22/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 3, U-3ah/at W	11/22/93	11/29/93	5.0×10^{-13}	7.1×10^{-14}	^{7}Be
Area 3, U-3ah/at W	11/29/93	12/06/93	1.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 3, U-3ah/at W	12/06/93	12/13/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 3, U-3ah/at W	12/13/93	12/21/93	1.3×10^{-13}	3.8×10^{-14}	^{7}Be
Area 3, U-3ah/at W	12/21/93	12/27/93	2.1×10^{-13}	5.5×10^{-14}	^{7}Be
Area 3, U-3ah/at W	12/27/93	01/03/94	2.2×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, DOD Yard	01/04/93	01/12/93	1.2×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, DOD Yard	01/20/93	01/26/93	2.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, DOD Yard	01/26/93	02/01/93	1.9×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, DOD Yard	02/01/93	02/08/93	1.5×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, DOD Yard	02/08/93	02/16/93	1.2×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, DOD Yard	02/16/93	02/22/93	1.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, DOD Yard	02/22/93	03/01/93	1.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, DOD Yard	03/01/93	03/08/93	1.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, DOD Yard	03/08/93	03/15/93	2.3×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, DOD Yard	03/15/93	03/22/93	1.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, DOD Yard	03/22/93	03/29/93	1.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, DOD Yard	03/29/93	04/05/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, DOD Yard	04/05/93	04/12/93	2.6×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, DOD Yard	04/12/93	04/19/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, DOD Yard	04/19/93	04/26/93	2.1×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, DOD Yard	04/26/93	05/03/93	2.6×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, DOD Yard	05/03/93	05/10/93	3.4×10^{-13}	6.6×10^{-14}	^{7}Be
Area 5, DOD Yard	05/10/93	05/17/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, DOD Yard	05/17/93	05/24/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, DOD Yard	05/24/93	06/01/93	2.0×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, DOD Yard	06/01/93	06/07/93	2.0×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, DOD Yard	06/07/93	06/14/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, DOD Yard	06/14/93	06/21/93	2.1×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, DOD Yard	06/21/93	06/28/93	2.8×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, DOD Yard	06/28/93	07/06/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, DOD Yard	07/06/93	07/12/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, DOD Yard	07/12/93	07/19/93	4.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, DOD Yard	07/19/93	07/26/93	2.1×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, DOD Yard	07/26/93	08/02/93	1.9×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, DOD Yard	08/23/93	08/30/93	2.0×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, DOD Yard	08/30/93	09/08/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, DOD Yard	09/08/93	09/13/93	1.8×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, DOD Yard	09/13/93	09/20/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, DOD Yard	09/20/93	09/27/93	4.0×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, DOD Yard	09/27/93	10/04/93	3.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, DOD Yard	10/04/93	10/11/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, DOD Yard	10/11/93	10/19/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, DOD Yard	10/19/93	10/24/93	3.7×10^{-13}	6.8×10^{-14}	^{7}Be
Area 5, DOD Yard	10/25/93	11/01/93	2.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, DOD Yard	11/01/93	11/08/93	3.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, DOD Yard	11/08/93	11/15/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, DOD Yard	11/15/93	11/22/93	1.7×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, DOD Yard	11/22/93	11/29/93	3.6×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, DOD Yard	11/29/93	12/06/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, DOD Yard	12/06/93	12/13/93	2.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, DOD Yard	12/13/93	12/20/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, DOD Yard	12/20/93	12/27/93	3.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, DOD Yard	12/27/93	01/03/94	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, Gate 200	01/04/93	01/12/93	1.7×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, Gate 200	01/26/93	02/01/93	1.4×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, Gate 200	02/01/93	02/08/93	2.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, Gate 200	02/08/93	02/16/93	8.6×10^{-14}	2.6×10^{-14}	^{7}Be
Area 5, Gate 200	02/16/93	02/22/93	1.4×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, Gate 200	02/22/93	03/01/93	1.7×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, Gate 200	03/01/93	03/08/93	1.3×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, Gate 200	03/08/93	03/15/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, Gate 200	03/15/93	03/22/93	1.2×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, Gate 200	03/22/93	03/29/93	1.1×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, Gate 200	03/29/93	04/05/93	1.7×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, Gate 200	04/05/93	04/12/93	3.4×10^{-13}	5.7×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, Gate 200	04/12/93	04/19/93	1.6×10^{-13}	2.9×10^{-14}	^{7}Be
Area 5, Gate 200	04/19/93	04/26/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, Gate 200	04/26/93	05/03/93	2.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, Gate 200	05/03/93	05/10/93	3.2×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, Gate 200	05/10/93	05/17/93	2.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, Gate 200	05/10/93	05/17/93	4.2×10^{-13}	1.4×10^{-13}	^{40}K
Area 5, Gate 200	05/17/93	05/24/93	2.4×10^{-13}	8.8×10^{-14}	^{7}Be
Area 5, Gate 200	05/24/93	06/01/93	2.0×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, Gate 200	06/01/93	06/07/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, Gate 200	06/14/93	06/21/93	2.4×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, Gate 200	06/21/93	06/28/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, Gate 200	06/28/93	07/06/93	2.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, Gate 200	07/06/93	07/12/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, Gate 200	07/12/93	07/19/93	3.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, Gate 200	07/19/93	07/26/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, Gate 200	07/26/93	08/02/93	1.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, Gate 200	08/02/93	08/09/93	2.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, Gate 200	08/09/93	08/16/93	2.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, Gate 200	08/16/93	08/23/93	3.2×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, Gate 200	08/23/93	08/30/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, Gate 200	08/30/93	09/08/93	2.1×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, Gate 200	09/08/93	09/13/93	2.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, Gate 200	09/13/93	09/20/93	3.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, Gate 200	09/20/93	09/27/93	3.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, Gate 200	09/27/93	10/04/93	3.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, Gate 200	10/04/93	10/11/93	1.7×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, Gate 200	10/11/93	10/19/93	1.1×10^{-13}	3.0×10^{-14}	^{7}Be
Area 5, Gate 200	10/19/93	10/24/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, Gate 200	10/29/93	11/01/93	2.5×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, Gate 200	11/01/93	11/08/93	3.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, Gate 200	11/08/93	11/15/93	2.1×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, Gate 200	11/15/93	11/22/93	2.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, Gate 200	11/22/93	11/29/93	3.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, Gate 200	11/29/93	12/06/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, Gate 200	12/06/93	12/13/93	2.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, Gate 200	12/13/93	12/20/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, Gate 200	12/20/93	12/27/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, Gate 200	12/27/93	01/03/94	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 1	01/04/93	01/12/93	1.6×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 1	01/12/93	01/20/93	7.0×10^{-14}	3.2×10^{-14}	^{7}Be
Area 5, RWMS No. 1	01/20/93	01/26/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 1	01/26/93	02/01/93	2.0×10^{-13}	5.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 1	01/26/93	02/01/93	3.3×10^{-13}	1.6×10^{-13}	^{40}K
Area 5, RWMS No. 1	02/01/93	02/08/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 1	02/08/93	02/16/93	1.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 1	02/16/93	02/22/93	1.5×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 1	02/22/93	03/01/93	1.6×10^{-12}	3.8×10^{-13}	^{7}Be
Area 5, RWMS No. 1	03/01/93	03/08/93	1.2×10^{-13}	2.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	03/08/93	03/15/93	1.4×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS No. 1	03/15/93	03/22/93	1.5×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 1	03/22/93	03/29/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 1	03/29/93	04/05/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 1	04/05/93	04/12/93	2.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	04/12/93	04/19/93	2.3×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS No. 1	04/19/93	04/26/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 1	04/26/93	05/03/93	3.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 1	05/03/93	05/10/93	2.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 1	05/10/93	05/17/93	2.9×10^{-13}	6.3×10^{-14}	^{7}Be
Area 5, RWMS No. 1	05/17/93	05/24/93	5.8×10^{-13}	1.3×10^{-13}	^{7}Be
Area 5, RWMS No. 1	05/24/93	06/01/93	2.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	06/01/93	06/07/93	1.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 1	06/07/93	06/14/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 1	06/14/93	06/21/93	2.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 1	06/21/93	06/28/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 1	06/28/93	07/06/93	3.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	07/06/93	07/12/93	1.9×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 1	07/12/93	07/19/93	3.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 1	07/19/93	07/26/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 1	07/26/93	08/02/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 1	08/02/93	08/09/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 1	08/09/93	08/16/93	3.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 1	08/16/93	08/23/93	3.0×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	08/23/93	08/30/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 1	08/30/93	09/08/93	2.1×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 1	09/08/93	09/13/93	2.8×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	09/13/93	09/20/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 1	09/20/93	09/27/93	4.3×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS No. 1	09/27/93	10/04/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 1	10/04/93	10/11/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 1	10/11/93	10/19/93	9.3×10^{-14}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 1	10/19/93	10/24/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 1	10/25/93	11/01/93	2.6×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 1	11/01/93	11/08/93	3.2×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 1	11/08/93	11/15/93	1.9×10^{-13}	4.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 1	11/15/93	11/22/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 1	11/22/93	11/29/93	4.4×10^{-13}	6.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	11/29/93	12/06/93	2.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 1	12/06/93	12/13/93	1.9×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 1	12/13/93	12/20/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 1	12/20/93	12/27/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 1	12/27/93	01/03/94	2.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 2	01/04/93	01/12/93	1.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	01/04/93	01/12/93	3.3×10^{-13}	1.6×10^{-13}	^{40}K
Area 5, RWMS No. 2	01/12/93	01/20/93	8.0×10^{-14}	2.7×10^{-14}	^{7}Be
Area 5, RWMS No. 2	01/20/93	01/26/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 2	01/26/93	02/01/93	1.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 2	02/01/93	02/08/93	1.3×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 2	02/08/93	02/16/93	1.6×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 2	02/16/93	02/22/93	1.1×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 2	02/22/93	03/01/93	2.0×10^{-12}	4.3×10^{-13}	^{7}Be
Area 5, RWMS No. 2	03/01/93	03/08/93	1.7×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 2	03/08/93	03/15/93	1.7×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS No. 2	03/15/93	03/22/93	1.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	03/29/93	04/05/93	4.2×10^{-13}	8.3×10^{-14}	^{7}Be
Area 5, RWMS No. 2	04/05/93	04/12/93	2.2×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 2	04/12/93	04/19/93	1.8×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 2	04/19/93	04/26/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 2	04/26/93	05/03/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	05/03/93	05/10/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	05/10/93	05/17/93	2.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 2	05/17/93	05/24/93	4.3×10^{-13}	1.1×10^{-13}	^{7}Be
Area 5, RWMS No. 2	05/24/93	06/01/93	2.2×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 2	06/01/93	06/07/93	2.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 2	06/07/93	06/14/93	2.8×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 2	06/14/93	06/21/93	2.5×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS No. 2	06/21/93	06/28/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	06/28/93	07/06/93	3.5×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 2	07/06/93	07/12/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 2	07/12/93	07/19/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 2	07/19/93	07/26/93	1.6×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS No. 2	07/26/93	08/02/93	2.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	08/02/93	08/09/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	08/09/93	08/16/93	3.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	08/16/93	08/23/93	2.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	08/23/93	08/30/93	2.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	08/30/93	09/08/93	2.4×10^{-13}	4.2×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 2	09/08/93	09/13/93	3.2×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, RWMS No. 2	09/13/93	09/20/93	2.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS No. 2	09/20/93	09/27/93	3.4×10^{-13}	6.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	09/27/93	10/04/93	4.3×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, RWMS No. 2	10/04/93	10/11/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 2	10/11/93	10/19/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	10/19/93	10/24/93	3.3×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS No. 2	10/25/93	11/01/93	3.8×10^{-13}	6.7×10^{-14}	^{7}Be
Area 5, RWMS No. 2	11/01/93	11/08/93	4.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 2	11/08/93	11/15/93	1.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 2	11/15/93	11/22/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 2	11/22/93	11/29/93	2.7×10^{-13}	1.0×10^{-13}	^{7}Be
Area 5, RWMS No. 2	11/29/93	12/06/93	2.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 2	12/06/93	12/13/93	2.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 2	12/13/93	12/20/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 2	12/20/93	12/27/93	2.6×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 2	12/27/93	01/03/94	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	01/04/93	01/12/93	7.4×10^{-14}	3.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	01/12/93	01/20/93	9.7×10^{-14}	3.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	01/12/93	01/20/93	3.4×10^{-13}	1.7×10^{-13}	^{40}K
Area 5, RWMS No. 3	01/20/93	01/26/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 3	01/26/93	02/01/93	2.3×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	02/01/93	02/08/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	02/08/93	02/16/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 3	02/16/93	02/22/93	1.2×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 3	02/22/93	03/01/93	2.1×10^{-12}	4.7×10^{-13}	^{7}Be
Area 5, RWMS No. 3	03/01/93	03/08/93	1.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 3	03/08/93	03/15/93	2.0×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 3	03/15/93	03/22/93	1.6×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	03/29/93	04/05/93	3.0×10^{-13}	7.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	04/05/93	04/12/93	2.5×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	04/12/93	04/19/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	04/19/93	04/26/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 3	05/03/93	05/10/93	4.9×10^{-13}	9.7×10^{-14}	^{7}Be
Area 5, RWMS No. 3	05/10/93	05/17/93	2.2×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS No. 3	05/17/93	05/24/93	5.1×10^{-13}	1.2×10^{-13}	^{7}Be
Area 5, RWMS No. 3	05/24/93	06/01/93	2.3×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	06/01/93	06/07/93	1.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 3	06/07/93	06/14/93	2.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 3	06/14/93	06/21/93	3.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	06/21/93	06/28/93	2.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	06/28/93	07/06/93	3.3×10^{-13}	4.9×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 3	07/06/93	07/12/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 3	07/12/93	07/19/93	3.2×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	07/19/93	07/26/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	07/26/93	08/02/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	08/02/93	08/09/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	08/09/93	08/16/93	3.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	08/16/93	08/23/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 3	08/23/93	08/30/93	2.2×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 3	08/30/93	09/08/93	2.0×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 3	09/08/93	09/13/93	2.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 3	09/13/93	09/20/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 3	09/13/93	09/20/93	2.9×10^{-13}	1.5×10^{-13}	^{40}K
Area 5, RWMS No. 3	09/20/93	09/27/93	3.1×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	09/27/93	10/04/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	10/04/93	10/11/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 3	10/11/93	10/19/93	1.5×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 3	10/19/93	10/24/93	2.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	10/25/93	11/01/93	2.8×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 3	11/01/93	11/08/93	3.7×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 3	11/08/93	11/15/93	2.3×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	11/15/93	11/22/93	3.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 3	11/22/93	11/29/93	3.4×10^{-13}	9.4×10^{-14}	^{7}Be
Area 5, RWMS No. 3	11/29/93	12/06/93	1.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 3	12/06/93	12/13/93	3.2×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	12/13/93	12/20/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 3	12/20/93	12/27/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 3	12/27/93	01/03/94	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 4	01/12/93	01/20/93	4.5×10^{-14}	2.1×10^{-14}	^{7}Be
Area 5, RWMS No. 4	01/20/93	01/26/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 4	01/25/93	03/03/93	1.2×10^{-13}	1.4×10^{-14}	^{7}Be
Area 5, RWMS No. 4	01/26/93	02/01/93	1.7×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 4	02/01/93	02/08/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 4	02/08/93	02/16/93	1.4×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS No. 4	02/16/93	02/22/93	9.9×10^{-14}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 4	02/22/93	03/01/93	2.2×10^{-12}	4.3×10^{-13}	^{7}Be
Area 5, RWMS No. 4	03/01/93	03/08/93	1.3×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 4	03/08/93	03/15/93	1.4×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS No. 4	03/15/93	03/22/93	1.2×10^{-13}	2.8×10^{-14}	^{7}Be
Area 5, RWMS No. 4	03/29/93	04/05/93	2.7×10^{-13}	7.2×10^{-14}	^{7}Be
Area 5, RWMS No. 4	04/05/93	04/12/93	2.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 4	04/12/93	04/19/93	1.9×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	04/19/93	04/26/93	2.1×10^{-13}	4.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 4	04/26/93	05/03/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 4	05/03/93	05/10/93	2.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 4	05/10/93	05/17/93	2.3×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	05/17/93	05/24/93	3.6×10^{-13}	1.0×10^{-13}	^{7}Be
Area 5, RWMS No. 4	05/24/93	06/01/93	2.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 4	06/01/93	06/07/93	1.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 4	06/07/93	06/14/93	3.4×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS No. 4	06/14/93	06/21/93	3.5×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 4	06/21/93	06/28/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 4	06/28/93	07/06/93	3.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	07/06/93	07/12/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	07/12/93	07/19/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 4	07/19/93	07/26/93	1.7×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 4	07/26/93	08/02/93	1.2×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS No. 4	08/02/93	08/09/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 4	08/09/93	08/16/93	3.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 4	08/16/93	08/23/93	3.1×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 4	08/23/93	08/30/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 4	08/30/93	09/08/93	2.4×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS No. 4	09/08/93	09/13/93	2.5×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS No. 4	09/13/93	09/20/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	09/20/93	09/27/93	3.1×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS No. 4	09/27/93	10/04/93	3.3×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 4	10/04/93	10/11/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	10/11/93	10/19/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 4	10/19/93	10/24/93	3.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	10/25/93	11/01/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 4	11/01/93	11/08/93	4.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	11/08/93	11/15/93	2.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 4	11/15/93	11/22/93	4.4×10^{-13}	7.6×10^{-14}	^{7}Be
Area 5, RWMS No. 4	11/22/93	11/29/93	1.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 4	11/29/93	12/06/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 4	12/06/93	12/13/93	2.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 4	12/13/93	12/20/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 4	12/20/93	12/27/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 4	12/27/93	01/03/94	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	01/04/93	01/12/93	1.2×10^{-13}	3.2×10^{-14}	^{7}Be
Area 5, RWMS No. 5	01/04/93	01/12/93	2.9×10^{-13}	1.4×10^{-13}	^{40}K
Area 5, RWMS No. 5	01/12/93	01/20/93	1.0×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS No. 5	01/12/93	01/20/93	5.0×10^{-13}	1.8×10^{-13}	^{40}K
Area 5, RWMS No. 5	01/20/93	01/26/93	3.1×10^{-13}	7.3×10^{-14}	^{7}Be
Area 5, RWMS No. 5	01/20/93	01/26/93	6.2×10^{-13}	2.2×10^{-13}	^{40}K

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 5	01/26/93	02/01/93	2.2×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS No. 5	02/01/93	02/08/93	2.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 5	02/08/93	02/16/93	1.7×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	02/22/93	03/01/93	1.9×10^{-12}	5.3×10^{-13}	^{7}Be
Area 5, RWMS No. 5	03/01/93	03/08/93	1.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS No. 5	03/08/93	03/15/93	1.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 5	03/15/93	03/22/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 5	03/22/93	03/29/93	1.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 5	03/29/93	04/05/93	3.3×10^{-13}	6.6×10^{-14}	^{7}Be
Area 5, RWMS No. 5	04/05/93	04/12/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 5	04/12/93	04/19/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	04/19/93	04/26/93	2.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 5	04/26/93	05/03/93	4.2×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	05/03/93	05/10/93	3.6×10^{-13}	7.2×10^{-14}	^{7}Be
Area 5, RWMS No. 5	05/10/93	05/17/93	2.9×10^{-13}	6.7×10^{-14}	^{7}Be
Area 5, RWMS No. 5	05/17/93	05/24/93	4.9×10^{-13}	1.3×10^{-13}	^{7}Be
Area 5, RWMS No. 5	05/24/93	06/01/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 5	06/01/93	06/07/93	2.6×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, RWMS No. 5	06/07/93	06/14/93	3.7×10^{-13}	7.0×10^{-14}	^{7}Be
Area 5, RWMS No. 5	06/14/93	06/21/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	06/21/93	06/28/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 5	06/28/93	07/06/93	2.9×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 5	07/06/93	07/12/93	3.2×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 5	07/12/93	07/19/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 5	07/19/93	07/26/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 5	07/26/93	08/02/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 5	08/02/93	08/09/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 5	08/09/93	08/16/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 5	08/16/93	08/23/93	2.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 5	08/23/93	08/30/93	2.5×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 5	08/30/93	09/08/93	2.1×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 5	09/08/93	09/13/93	2.3×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 5	09/13/93	09/20/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	09/20/93	09/27/93	3.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 5	09/27/93	10/04/93	3.5×10^{-13}	1.7×10^{-13}	^{40}K
Area 5, RWMS No. 5	09/27/93	10/04/93	3.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 5	10/04/93	10/11/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 5	10/11/93	10/19/93	1.7×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 5	10/19/93	10/24/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 5	10/25/93	11/01/93	1.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 5	11/01/93	11/08/93	4.3×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 5	11/08/93	11/15/93	2.2×10^{-13}	5.1×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 5	11/15/93	11/22/93	2.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 5	11/22/93	11/29/93	3.0×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS No. 5	11/29/93	12/06/93	1.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 5	12/06/93	12/13/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	12/13/93	12/20/93	1.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 5	12/20/93	12/27/93	3.6×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS No. 5	12/27/93	01/03/94	1.8×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 6	01/04/93	01/12/93	1.8×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 6	01/20/93	01/26/93	2.8×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS No. 6	01/26/93	02/01/93	1.7×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 6	02/01/93	02/08/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 6	02/08/93	02/16/93	1.3×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 6	02/16/93	02/22/93	1.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 6	02/22/93	03/01/93	1.8×10^{-12}	3.9×10^{-13}	^{7}Be
Area 5, RWMS No. 6	03/01/93	03/08/93	1.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 6	03/08/93	03/15/93	1.5×10^{-13}	3.2×10^{-14}	^{7}Be
Area 5, RWMS No. 6	03/15/93	03/22/93	8.7×10^{-14}	3.6×10^{-14}	^{40}K
Area 5, RWMS No. 6	03/15/93	03/22/93	1.3×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS No. 6	03/22/93	03/29/93	1.6×10^{-13}	2.9×10^{-14}	^{7}Be
Area 5, RWMS No. 6	03/29/93	04/05/93	1.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 6	04/05/93	04/12/93	2.7×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 6	04/12/93	04/19/93	2.1×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 6	04/19/93	04/26/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 6	04/26/93	05/03/93	2.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 6	05/03/93	05/10/93	2.7×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 6	05/10/93	05/17/93	2.3×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 6	05/17/93	05/24/93	6.4×10^{-13}	1.4×10^{-13}	^{7}Be
Area 5, RWMS No. 6	05/24/93	06/01/93	1.8×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 6	06/01/93	06/07/93	2.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 6	06/07/93	06/14/93	2.3×10^{-13}	9.8×10^{-14}	^{7}Be
Area 5, RWMS No. 6	06/14/93	06/21/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 6	06/21/93	06/28/93	3.3×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 6	06/28/93	07/06/93	4.6×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS No. 6	07/06/93	07/12/93	3.0×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS No. 6	07/12/93	07/19/93	3.5×10^{-13}	6.6×10^{-14}	^{7}Be
Area 5, RWMS No. 6	07/19/93	07/26/93	2.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 6	07/26/93	08/02/93	1.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 6	08/09/93	08/16/93	3.0×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 6	08/16/93	08/23/93	2.9×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS No. 6	08/23/93	08/30/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 6	08/30/93	09/08/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 6	09/08/93	09/13/93	3.5×10^{-13}	7.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 6	09/13/93	09/20/93	3.7×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS No. 6	09/20/93	09/27/93	3.5×10^{-13}	7.9×10^{-14}	^{7}Be
Area 5, RWMS No. 6	09/27/93	10/04/93	3.5×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS No. 6	10/04/93	10/11/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 6	10/11/93	10/19/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 6	10/19/93	10/24/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 6	10/25/93	11/01/93	3.1×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS No. 6	11/01/93	11/08/93	4.5×10^{-13}	6.7×10^{-14}	^{7}Be
Area 5, RWMS No. 6	11/08/93	11/15/93	2.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 6	11/15/93	11/22/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 6	11/22/93	11/29/93	3.4×10^{-13}	1.1×10^{-13}	^{7}Be
Area 5, RWMS No. 6	11/29/93	12/06/93	1.9×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 6	12/06/93	12/13/93	2.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 6	12/13/93	12/20/93	1.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 6	12/20/93	12/27/93	2.8×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 6	12/27/93	01/03/94	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 7	01/04/93	01/12/93	1.2×10^{-13}	3.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	01/12/93	01/20/93	6.3×10^{-14}	3.0×10^{-14}	^{7}Be
Area 5, RWMS No. 7	01/20/93	01/26/93	2.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 7	01/26/93	02/01/93	1.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 7	01/26/93	02/01/93	3.8×10^{-13}	1.6×10^{-13}	^{40}K
Area 5, RWMS No. 7	02/01/93	02/08/93	1.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 7	02/08/93	02/16/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS No. 7	02/16/93	02/22/93	1.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	02/22/93	03/01/93	2.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 7	03/01/93	03/08/93	1.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 7	03/08/93	03/15/93	1.5×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 7	03/15/93	03/22/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 7	03/22/93	03/29/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	03/29/93	04/05/93	2.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 7	04/05/93	04/12/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 7	04/12/93	04/19/93	1.9×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 7	04/19/93	04/26/93	1.5×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS No. 7	04/26/93	05/03/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 7	05/03/93	05/10/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 7	05/10/93	05/17/93	2.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 7	05/17/93	05/24/93	4.5×10^{-13}	1.2×10^{-13}	^{7}Be
Area 5, RWMS No. 7	05/24/93	06/01/93	1.9×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 7	06/01/93	06/07/93	1.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	06/07/93	06/14/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 7	06/14/93	06/21/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	06/21/93	06/28/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 7	06/28/93	07/06/93	3.1×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 7	07/06/93	07/12/93	2.6×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	07/12/93	07/19/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 7	07/19/93	07/26/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 7	07/26/93	08/02/93	2.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	08/02/93	08/09/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 7	08/09/93	08/16/93	3.7×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 7	08/16/93	08/23/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 7	08/23/93	08/30/93	2.5×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 7	08/30/93	09/08/93	2.6×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 7	09/08/93	09/13/93	2.9×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS No. 7	09/13/93	09/20/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 7	09/20/93	09/27/93	3.4×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	09/27/93	10/04/93	3.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS No. 7	09/27/93	10/04/93	2.9×10^{-13}	1.4×10^{-13}	^{40}K
Area 5, RWMS No. 7	10/04/93	10/11/93	2.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	10/11/93	10/19/93	1.4×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS No. 7	10/19/93	10/24/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 7	10/25/93	11/01/93	2.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 7	11/01/93	11/08/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 7	11/08/93	11/15/93	2.5×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 7	11/15/93	11/22/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 7	11/22/93	11/29/93	4.6×10^{-13}	9.1×10^{-14}	^{7}Be
Area 5, RWMS No. 7	11/29/93	12/06/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 7	12/06/93	12/13/93	2.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 7	12/20/93	12/27/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 7	12/27/93	01/03/94	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 8	01/04/93	01/12/93	1.3×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 8	01/20/93	01/26/93	2.8×10^{-13}	8.3×10^{-14}	^{7}Be
Area 5, RWMS No. 8	01/26/93	02/01/93	2.0×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 8	01/26/93	02/01/93	2.9×10^{-13}	1.6×10^{-13}	^{40}K
Area 5, RWMS No. 8	02/01/93	02/08/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 8	02/16/93	02/22/93	1.8×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS No. 8	02/22/93	03/01/93	2.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 8	03/01/93	03/08/93	1.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 8	03/08/93	03/15/93	1.6×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS No. 8	03/15/93	03/22/93	1.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 8	03/22/93	03/29/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 8	03/29/93	04/05/93	2.3×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 8	04/05/93	04/12/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 8	04/12/93	04/19/93	2.8×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 8	04/19/93	04/26/93	1.5×10^{-13}	3.2×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 8	04/19/93	04/26/93	7.4×10^{-14}	3.0×10^{-14}	^{40}K
Area 5, RWMS No. 8	04/26/93	05/03/93	3.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 8	05/03/93	05/10/93	2.6×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 8	05/10/93	05/17/93	1.9×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 8	05/17/93	05/24/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS No. 8	05/24/93	06/01/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 8	06/01/93	06/07/93	1.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 8	06/07/93	06/14/93	2.7×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 8	06/14/93	06/21/93	1.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 8	06/21/93	06/28/93	2.5×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 8	06/28/93	07/06/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 8	07/06/93	07/12/93	3.1×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS No. 8	07/12/93	07/19/93	3.2×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS No. 8	07/19/93	07/26/93	1.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 8	07/26/93	08/02/93	1.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 8	08/02/93	08/09/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 8	08/09/93	08/16/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 8	08/16/93	08/23/93	3.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 8	08/23/93	08/30/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 8	08/30/93	09/08/93	1.9×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 8	09/08/93	09/13/93	2.7×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 8	09/13/93	09/20/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 8	09/13/93	09/20/93	3.9×10^{-13}	2.0×10^{-13}	^{40}K
Area 5, RWMS No. 8	09/20/93	09/27/93	4.0×10^{-13}	7.4×10^{-14}	^{7}Be
Area 5, RWMS No. 8	09/27/93	10/04/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 8	10/04/93	10/11/93	2.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 8	10/11/93	10/19/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS No. 8	10/19/93	10/24/93	2.4×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 8	10/25/93	11/01/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 8	11/01/93	11/08/93	4.2×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS No. 8	11/08/93	11/15/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 8	11/15/93	11/22/93	2.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 8	11/22/93	11/29/93	5.0×10^{-13}	1.0×10^{-13}	^{7}Be
Area 5, RWMS No. 8	11/29/93	12/06/93	2.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 8	12/06/93	12/13/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 8	12/13/93	12/20/93	1.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS No. 8	12/20/93	12/27/93	2.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 8	12/27/93	01/03/94	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 9	01/04/93	01/12/93	1.4×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS No. 9	01/20/93	01/26/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	01/26/93	02/01/93	2.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	02/01/93	02/08/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 9	02/08/93	02/16/93	1.4×10^{-13}	3.0×10^{-14}	^{7}Be
Area 5, RWMS No. 9	02/16/93	02/22/93	1.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS No. 9	02/22/93	03/01/93	1.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 9	03/01/93	03/08/93	1.4×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS No. 9	03/08/93	03/15/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS No. 9	03/15/93	03/22/93	1.5×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS No. 9	03/22/93	03/29/93	1.3×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	03/29/93	04/05/93	1.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	04/05/93	04/12/93	2.7×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 9	04/12/93	04/19/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS No. 9	04/19/93	04/26/93	2.0×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	04/26/93	05/03/93	3.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	05/03/93	05/10/93	3.0×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 9	05/10/93	05/17/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	05/17/93	05/24/93	1.5×10^{-13}	3.2×10^{-14}	^{7}Be
Area 5, RWMS No. 9	05/24/93	06/01/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 9	06/01/93	06/07/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 9	06/07/93	06/14/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 9	06/14/93	06/21/93	2.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 9	06/21/93	06/28/93	3.0×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS No. 9	06/28/93	07/06/93	2.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	07/06/93	07/12/93	2.8×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	07/12/93	07/19/93	2.8×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	07/19/93	07/26/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS No. 9	07/26/93	08/02/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	08/02/93	08/09/93	2.7×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS No. 9	08/09/93	08/16/93	3.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 9	08/16/93	08/23/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 9	08/23/93	08/30/93	2.2×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS No. 9	08/30/93	09/08/93	2.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 9	09/08/93	09/13/93	2.8×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	09/13/93	09/20/93	3.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	09/20/93	09/27/93	3.6×10^{-13}	6.6×10^{-14}	^{7}Be
Area 5, RWMS No. 9	09/27/93	10/04/93	3.8×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	10/04/93	10/11/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS No. 9	10/11/93	10/19/93	1.0×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	10/19/93	10/24/93	2.6×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS No. 9	10/25/93	11/01/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 9	11/01/93	11/08/93	3.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS No. 9	11/08/93	11/15/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS No. 9	11/15/93	11/22/93	2.6×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, RWMS No. 9	11/22/93	11/29/93	6.5×10^{-13}	1.3×10^{-13}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS No. 9	11/29/93	12/06/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS No. 9	12/06/93	12/13/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS No. 9	12/13/93	12/20/93	1.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 9	12/20/93	12/27/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS No. 9	12/27/93	01/03/94	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	01/04/93	01/26/93	1.0×10^{-13}	2.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	01/26/93	02/01/93	1.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	02/08/93	02/16/93	8.8×10^{-14}	3.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	02/16/93	02/22/93	2.0×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	02/22/93	03/01/93	1.6×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	03/01/93	03/08/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	03/08/93	03/15/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	03/15/93	03/22/93	1.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	03/22/93	03/29/93	1.8×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	03/29/93	04/05/93	1.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	04/05/93	04/12/93	3.2×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	04/12/93	04/19/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	04/19/93	04/26/93	1.9×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	04/26/93	05/03/93	2.1×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	05/03/93	05/10/93	2.7×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	05/10/93	05/17/93	2.1×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	05/17/93	05/24/93	2.1×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	05/24/93	06/01/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	06/01/93	06/07/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	06/07/93	06/14/93	2.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	06/14/93	06/21/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	06/21/93	06/28/93	2.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	06/28/93	07/06/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	07/06/93	07/12/93	1.9×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	07/12/93	07/19/93	2.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	07/19/93	07/26/93	1.9×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	07/26/93	08/02/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	08/02/93	08/09/93	2.4×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	08/09/93	08/16/93	3.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	08/16/93	08/23/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	08/23/93	08/30/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	08/30/93	09/08/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	09/08/93	09/13/93	2.7×10^{-13}	7.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	09/13/93	09/20/93	2.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	09/20/93	09/27/93	3.0×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	09/27/93	10/04/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	09/27/93	10/04/93	2.9×10^{-13}	1.2×10^{-13}	^{40}K

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS Pit No. 3	10/04/93	10/11/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	10/11/93	10/19/93	1.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	10/19/93	10/24/93	1.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	10/25/93	11/01/93	1.9×10^{-12}	3.4×10^{-13}	^{7}Be
Area 5, RWMS Pit No. 3	11/01/93	11/08/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	11/08/93	11/15/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	11/15/93	11/22/93	1.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	11/22/93	11/29/93	3.6×10^{-13}	6.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	11/29/93	12/06/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	12/06/93	12/13/93	2.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	12/13/93	12/20/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	12/20/93	12/27/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 3	12/27/93	01/03/94	3.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	01/04/93	01/26/93	1.1×10^{-13}	2.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	01/26/93	02/01/93	1.2×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	02/01/93	02/08/93	2.7×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	02/08/93	02/16/93	1.4×10^{-13}	3.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	02/22/93	03/01/93	1.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	03/01/93	03/08/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	03/08/93	03/15/93	1.1×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	03/15/93	03/22/93	3.0×10^{-13}	8.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	03/22/93	03/29/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	03/29/93	04/05/93	1.1×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	04/05/93	04/12/93	3.7×10^{-13}	9.1×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	04/12/93	04/19/93	2.0×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	04/19/93	04/26/93	2.1×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	04/26/93	05/03/93	1.1×10^{-13}	2.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	04/26/93	05/03/93	1.5×10^{-13}	6.6×10^{-14}	^{40}K
Area 5, RWMS Pit No. 4	05/03/93	05/10/93	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	05/10/93	05/17/93	2.2×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	05/17/93	05/24/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	05/24/93	06/01/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	06/01/93	06/07/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	06/07/93	06/14/93	2.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	06/14/93	06/21/93	2.6×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	06/21/93	06/28/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	06/28/93	07/06/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	07/06/93	07/12/93	2.9×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	07/12/93	07/19/93	2.6×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	07/19/93	07/26/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	07/26/93	08/02/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	08/02/93	08/09/93	2.3×10^{-13}	5.7×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS Pit No. 4	08/09/93	08/16/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	08/16/93	08/23/93	3.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	08/23/93	08/30/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	08/30/93	09/08/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	09/08/93	09/13/93	2.8×10^{-13}	7.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	09/13/93	09/20/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	09/20/93	09/27/93	3.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	09/27/93	10/04/93	3.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	10/04/93	10/11/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	10/11/93	10/19/93	1.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	10/19/93	10/24/93	2.5×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	10/25/93	11/01/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	11/01/93	11/08/93	3.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	11/01/93	11/08/93	3.1×10^{-13}	1.5×10^{-13}	^{40}K
Area 5, RWMS Pit No. 4	11/08/93	11/15/93	1.8×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	11/15/93	11/22/93	2.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	11/22/93	11/29/93	3.1×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	11/29/93	12/06/93	2.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	12/06/93	12/13/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	12/13/93	12/20/93	8.9×10^{-14}	4.0×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	12/20/93	12/27/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS Pit No. 4	12/27/93	01/03/94	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP N	01/04/93	01/20/93	1.4×10^{-13}	2.2×10^{-14}	^{7}Be
Area 5, RWMS TP N	01/20/93	01/26/93	1.7×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS TP N	01/26/93	02/01/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS TP N	02/01/93	02/08/93	1.8×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP N	02/08/93	02/16/93	1.0×10^{-13}	2.0×10^{-14}	^{7}Be
Area 5, RWMS TP N	02/16/93	02/22/93	6.2×10^{-14}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP N	02/22/93	03/01/93	1.7×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	03/01/93	03/08/93	1.8×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS TP N	03/08/93	03/15/93	7.6×10^{-14}	2.9×10^{-14}	^{7}Be
Area 5, RWMS TP N	03/15/93	03/22/93	1.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP N	03/22/93	03/29/93	1.2×10^{-13}	2.7×10^{-14}	^{7}Be
Area 5, RWMS TP N	03/29/93	04/05/93	2.5×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS TP N	04/05/93	04/12/93	2.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP N	04/12/93	04/19/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP N	04/19/93	04/26/93	1.9×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	04/26/93	05/03/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP N	05/03/93	05/10/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	05/10/93	05/17/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	05/17/93	05/24/93	2.6×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP N	05/24/93	06/01/93	2.2×10^{-13}	5.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS TP N	06/01/93	06/07/93	2.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP N	06/07/93	06/14/93	3.7×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	06/14/93	06/21/93	1.8×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS TP N	06/21/93	06/28/93	2.0×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS TP N	06/28/93	07/06/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	07/06/93	07/12/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP N	07/12/93	07/19/93	3.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS TP N	07/19/93	07/26/93	2.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	07/26/93	08/02/93	2.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP N	08/09/93	08/16/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP N	08/16/93	08/23/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	08/23/93	08/30/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP N	08/30/93	09/08/93	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP N	09/08/93	09/13/93	2.5×10^{-13}	6.8×10^{-14}	^{7}Be
Area 5, RWMS TP N	09/13/93	09/20/93	3.9×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP N	09/20/93	09/27/93	2.9×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP N	09/27/93	10/04/93	2.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP N	10/04/93	10/11/93	2.8×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP N	10/11/93	10/19/93	8.4×10^{-14}	3.4×10^{-14}	^{7}Be
Area 5, RWMS TP N	10/19/93	10/24/93	2.4×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS TP N	10/25/93	11/01/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP N	11/01/93	11/08/93	3.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP N	11/08/93	11/15/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP N	11/15/93	11/22/93	3.3×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP N	11/22/93	11/29/93	2.9×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS TP N	11/29/93	12/06/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP N	12/06/93	12/13/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP N	12/13/93	12/20/93	1.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP N	12/20/93	12/27/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	01/04/93	01/20/93	1.1×10^{-13}	2.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	01/20/93	01/26/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	01/26/93	02/01/93	1.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	02/01/93	02/08/93	1.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP NE	02/01/93	02/08/93	9.8×10^{-14}	3.6×10^{-14}	^{7}Be
Area 5, RWMS TP NE	02/08/93	02/16/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS TP NE	02/16/93	02/22/93	1.1×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS TP NE	02/22/93	03/01/93	1.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP NE	03/01/93	03/08/93	1.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP NE	03/08/93	03/15/93	1.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS TP NE	03/15/93	03/22/93	1.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP NE	03/22/93	03/29/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	03/29/93	04/05/93	1.8×10^{-13}	5.3×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS TP NE	04/05/93	04/12/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP NE	04/12/93	04/19/93	2.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP NE	04/19/93	04/26/93	1.8×10^{-13}	3.7×10^{-14}	^{7}Be
Area 5, RWMS TP NE	04/26/93	05/03/93	3.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	05/03/93	05/10/93	3.4×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS TP NE	05/10/93	05/17/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	05/17/93	05/24/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP NE	05/24/93	06/01/93	2.2×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP NE	06/01/93	06/07/93	1.9×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	06/07/93	06/14/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	06/14/93	06/21/93	3.1×10^{-13}	5.9×10^{-14}	^{7}Be
Area 5, RWMS TP NE	06/21/93	06/28/93	2.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	06/28/93	07/06/93	2.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP NE	07/06/93	07/12/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP NE	07/12/93	07/19/93	5.2×10^{-13}	8.0×10^{-14}	^{7}Be
Area 5, RWMS TP NE	07/19/93	07/26/93	1.9×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP NE	07/26/93	08/02/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP NE	08/02/93	08/09/93	3.0×10^{-13}	6.8×10^{-14}	^{7}Be
Area 5, RWMS TP NE	08/09/93	08/16/93	3.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	08/16/93	08/23/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS TP NE	08/23/93	08/30/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP NE	08/30/93	09/08/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP NE	09/08/93	09/13/93	2.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP NE	09/13/93	09/20/93	3.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS TP NE	09/20/93	09/27/93	3.6×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	09/27/93	10/04/93	3.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	09/27/93	10/04/93	4.0×10^{-13}	1.8×10^{-13}	^{40}K
Area 5, RWMS TP NE	10/04/93	10/11/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	10/11/93	10/19/93	1.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP NE	10/19/93	10/24/93	2.7×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP NE	10/25/93	11/01/93	3.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP NE	11/01/93	11/08/93	3.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	11/08/93	11/15/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP NE	11/15/93	11/22/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP NE	11/22/93	11/29/93	4.5×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	11/29/93	12/06/93	1.7×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS TP NE	12/06/93	12/13/93	2.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP NE	12/13/93	12/20/93	1.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	12/20/93	12/27/93	3.7×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS TP NE	12/27/93	01/03/94	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP NW	01/04/93	01/20/93	1.2×10^{-13}	2.5×10^{-14}	^{7}Be
Area 5, RWMS TP NW	01/20/93	01/26/93	1.8×10^{-13}	4.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS TP NW	01/26/93	02/01/93	2.1×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS TP NW	01/26/93	02/01/93	3.4×10^{-13}	1.7×10^{-13}	^{40}K
Area 5, RWMS TP NW	02/01/93	02/08/93	1.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP NW	02/08/93	02/16/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS TP NW	02/16/93	02/22/93	1.2×10^{-13}	6.7×10^{-14}	^{7}Be
Area 5, RWMS TP NW	02/22/93	03/01/93	2.6×10^{-13}	6.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	03/01/93	03/08/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS TP NW	03/08/93	03/15/93	1.4×10^{-13}	3.0×10^{-14}	^{7}Be
Area 5, RWMS TP NW	03/15/93	03/22/93	1.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP NW	03/22/93	03/29/93	1.6×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS TP NW	03/29/93	04/05/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP NW	04/05/93	04/12/93	8.5×10^{-14}	3.5×10^{-14}	^{40}K
Area 5, RWMS TP NW	04/05/93	04/12/93	2.4×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP NW	04/12/93	04/19/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP NW	04/19/93	04/26/93	2.4×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP NW	04/26/93	05/03/93	3.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	05/03/93	05/10/93	3.2×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS TP NW	05/10/93	05/17/93	2.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	05/17/93	05/24/93	2.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP NW	05/24/93	06/01/93	2.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	06/01/93	06/07/93	1.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP NW	06/07/93	06/14/93	3.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP NW	06/14/93	06/21/93	2.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP NW	06/21/93	06/28/93	2.1×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS TP NW	06/28/93	07/06/93	3.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS TP NW	07/06/93	07/12/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	07/12/93	07/19/93	3.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP NW	07/19/93	07/26/93	1.3×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP NW	07/26/93	08/02/93	1.7×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP NW	08/02/93	08/09/93	1.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP NW	08/09/93	08/16/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP NW	08/16/93	08/23/93	2.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP NW	08/23/93	08/30/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP NW	08/30/93	09/08/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP NW	09/08/93	09/13/93	2.4×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS TP NW	09/13/93	09/20/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP NW	09/20/93	09/27/93	3.5×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS TP NW	09/27/93	10/04/93	3.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP NW	10/04/93	10/11/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP NW	10/11/93	10/19/93	1.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP NW	10/19/93	10/24/93	2.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	10/25/93	11/01/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS TP NW	11/01/93	11/08/93	3.6×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS TP NW	11/08/93	11/15/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP NW	11/15/93	11/22/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP NW	11/22/93	11/29/93	2.8×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS TP NW	11/29/93	12/06/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	12/06/93	12/13/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP NW	12/13/93	12/20/93	1.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP NW	12/20/93	12/27/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP NW	12/27/93	01/03/94	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP S	01/04/93	01/20/93	8.2×10^{-14}	2.5×10^{-14}	^{7}Be
Area 5, RWMS TP S	01/20/93	01/26/93	1.3×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, RWMS TP S	01/26/93	02/01/93	1.2×10^{-13}	3.2×10^{-14}	^{7}Be
Area 5, RWMS TP S	02/01/93	02/08/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS TP S	02/08/93	02/16/93	1.6×10^{-13}	2.6×10^{-14}	^{7}Be
Area 5, RWMS TP S	02/16/93	02/22/93	8.8×10^{-14}	3.8×10^{-14}	^{7}Be
Area 5, RWMS TP S	02/22/93	03/01/93	3.5×10^{-13}	7.2×10^{-14}	^{7}Be
Area 5, RWMS TP S	03/01/93	03/08/93	7.9×10^{-14}	2.8×10^{-14}	^{7}Be
Area 5, RWMS TP S	03/08/93	03/15/93	9.7×10^{-14}	2.8×10^{-14}	^{7}Be
Area 5, RWMS TP S	03/15/93	03/22/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP S	03/22/93	03/29/93	1.2×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS TP S	03/29/93	04/05/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP S	04/05/93	04/12/93	2.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP S	04/12/93	04/19/93	2.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP S	04/19/93	04/26/93	2.6×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS TP S	04/26/93	05/03/93	2.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP S	05/03/93	05/10/93	2.7×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS TP S	05/10/93	05/17/93	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP S	05/17/93	05/24/93	2.0×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP S	05/24/93	06/01/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP S	06/01/93	06/07/93	2.6×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP S	06/07/93	06/14/93	3.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP S	06/14/93	06/21/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP S	06/21/93	06/28/93	2.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP S	06/28/93	07/06/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP S	07/06/93	07/12/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP S	07/12/93	07/19/93	3.9×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, RWMS TP S	07/19/93	07/26/93	1.1×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP S	07/26/93	08/02/93	1.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP S	08/02/93	08/09/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP S	08/09/93	08/16/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP S	08/16/93	08/23/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP S	08/23/93	08/30/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS TP S	08/30/93	09/08/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP S	09/08/93	09/13/93	2.8×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, RWMS TP S	09/13/93	09/20/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP S	09/20/93	09/27/93	3.5×10^{-13}	6.7×10^{-14}	^{7}Be
Area 5, RWMS TP S	10/04/93	10/11/93	4.4×10^{-13}	8.5×10^{-14}	^{7}Be
Area 5, RWMS TP S	10/11/93	10/19/93	1.4×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP S	10/19/93	10/24/93	2.6×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP S	10/25/93	11/01/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP S	11/01/93	11/08/93	3.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP S	11/08/93	11/15/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP S	11/15/93	11/22/93	2.5×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP S	11/22/93	11/29/93	3.1×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS TP S	11/29/93	12/06/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP S	12/06/93	12/13/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP S	12/13/93	12/20/93	1.7×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP S	12/20/93	12/27/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP S	12/27/93	01/03/94	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	01/04/93	01/20/93	1.1×10^{-13}	2.9×10^{-14}	^{7}Be
Area 5, RWMS TP SE	01/20/93	01/26/93	1.5×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, RWMS TP SE	01/26/93	02/01/93	1.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP SE	01/26/93	02/01/93	2.2×10^{-13}	1.2×10^{-13}	^{40}K
Area 5, RWMS TP SE	02/01/93	02/08/93	2.5×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP SE	02/08/93	02/16/93	1.3×10^{-13}	2.7×10^{-14}	^{7}Be
Area 5, RWMS TP SE	02/16/93	02/22/93	1.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP SE	02/22/93	03/01/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP SE	03/01/93	03/08/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP SE	03/08/93	03/15/93	1.1×10^{-13}	2.9×10^{-14}	^{7}Be
Area 5, RWMS TP SE	03/15/93	03/22/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP SE	03/22/93	03/29/93	1.5×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, RWMS TP SE	03/29/93	04/05/93	1.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP SE	03/29/93	04/05/93	3.0×10^{-13}	1.5×10^{-13}	^{40}K
Area 5, RWMS TP SE	04/05/93	04/12/93	2.6×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SE	04/12/93	04/19/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP SE	04/19/93	04/26/93	2.4×10^{-13}	6.3×10^{-14}	^{7}Be
Area 5, RWMS TP SE	04/26/93	05/03/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SE	05/03/93	05/10/93	3.4×10^{-13}	7.0×10^{-14}	^{7}Be
Area 5, RWMS TP SE	05/10/93	05/17/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	05/17/93	05/24/93	4.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP SE	05/24/93	06/01/93	2.5×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP SE	06/01/93	06/07/93	2.5×10^{-13}	4.8×10^{-14}	^{7}Be
Area 5, RWMS TP SE	06/07/93	06/14/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP SE	06/14/93	06/21/93	2.0×10^{-13}	4.7×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS TP SE	06/21/93	06/28/93	2.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS TP SE	06/28/93	07/06/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	07/06/93	07/12/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP SE	07/12/93	07/19/93	3.7×10^{-13}	6.4×10^{-14}	^{7}Be
Area 5, RWMS TP SE	07/19/93	07/26/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP SE	07/26/93	08/02/93	2.2×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SE	08/02/93	08/09/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP SE	08/09/93	08/16/93	2.8×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	08/16/93	08/23/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	08/23/93	08/30/93	2.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP SE	08/30/93	09/08/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP SE	09/08/93	09/13/93	2.9×10^{-13}	6.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	09/13/93	09/20/93	2.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	09/20/93	09/27/93	3.1×10^{-13}	6.2×10^{-14}	^{7}Be
Area 5, RWMS TP SE	09/27/93	10/04/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	10/04/93	10/11/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP SE	10/11/93	10/19/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	10/19/93	10/24/93	2.9×10^{-13}	6.1×10^{-14}	^{7}Be
Area 5, RWMS TP SE	10/25/93	11/01/93	3.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS TP SE	11/01/93	11/08/93	3.9×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS TP SE	11/08/93	11/15/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 5, RWMS TP SE	11/15/93	11/22/93	1.8×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP SE	11/22/93	11/29/93	3.4×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP SE	11/29/93	12/06/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP SE	12/06/93	12/13/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP SE	12/13/93	12/20/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SE	12/20/93	12/27/93	2.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP SE	12/27/93	01/03/94	2.0×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP SW	01/04/93	01/20/93	9.3×10^{-14}	2.4×10^{-14}	^{7}Be
Area 5, RWMS TP SW	01/20/93	01/26/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be
Area 5, RWMS TP SW	01/26/93	02/01/93	1.4×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP SW	01/26/93	02/01/93	2.6×10^{-13}	1.2×10^{-13}	^{40}K
Area 5, RWMS TP SW	02/01/93	02/08/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP SW	02/08/93	02/16/93	6.2×10^{-14}	3.0×10^{-14}	^{40}K
Area 5, RWMS TP SW	02/08/93	02/16/93	1.0×10^{-13}	2.6×10^{-14}	^{7}Be
Area 5, RWMS TP SW	02/16/93	02/22/93	1.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP SW	02/22/93	03/01/93	1.3×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, RWMS TP SW	02/22/93	03/01/93	4.2×10^{-13}	1.4×10^{-13}	^{40}K
Area 5, RWMS TP SW	03/01/93	03/08/93	1.4×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, RWMS TP SW	03/08/93	03/15/93	1.1×10^{-13}	3.0×10^{-14}	^{7}Be
Area 5, RWMS TP SW	03/15/93	03/22/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP SW	03/22/93	03/29/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, RWMS TP SW	03/29/93	04/05/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SW	04/05/93	04/12/93	2.0×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, RWMS TP SW	04/12/93	04/19/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP SW	04/19/93	04/26/93	2.8×10^{-13}	8.1×10^{-14}	^{7}Be
Area 5, RWMS TP SW	04/26/93	05/03/93	1.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP SW	05/03/93	05/10/93	3.5×10^{-13}	7.2×10^{-14}	^{7}Be
Area 5, RWMS TP SW	05/10/93	05/17/93	1.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, RWMS TP SW	05/17/93	05/24/93	2.0×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, RWMS TP SW	05/24/93	06/01/93	2.5×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP SW	06/01/93	06/07/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP SW	06/07/93	06/14/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, RWMS TP SW	06/14/93	06/21/93	2.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS TP SW	06/21/93	06/28/93	2.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, RWMS TP SW	06/28/93	07/06/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP SW	07/06/93	07/12/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP SW	07/12/93	07/19/93	3.2×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS TP SW	07/19/93	07/26/93	1.7×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP SW	07/26/93	08/02/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, RWMS TP SW	08/02/93	08/09/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, RWMS TP SW	08/09/93	08/16/93	3.5×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP SW	08/16/93	08/23/93	3.2×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, RWMS TP SW	08/23/93	08/30/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SW	08/30/93	09/08/93	2.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SW	09/08/93	09/13/93	2.8×10^{-13}	6.8×10^{-14}	^{7}Be
Area 5, RWMS TP SW	09/13/93	09/20/93	3.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, RWMS TP SW	09/20/93	09/27/93	3.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 5, RWMS TP SW	09/27/93	10/04/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP SW	10/04/93	10/11/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, RWMS TP SW	10/11/93	10/19/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SW	10/19/93	10/24/93	1.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP SW	10/25/93	11/01/93	3.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP SW	11/01/93	11/08/93	4.0×10^{-13}	5.8×10^{-14}	^{7}Be
Area 5, RWMS TP SW	11/08/93	11/15/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, RWMS TP SW	11/15/93	11/22/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, RWMS TP SW	11/22/93	11/29/93	2.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, RWMS TP SW	11/29/93	12/06/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, RWMS TP SW	12/06/93	12/13/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, RWMS TP SW	12/13/93	12/20/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, RWMS TP SW	12/20/93	12/27/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 5, RWMS TP SW	12/27/93	01/03/94	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, Well 5B	02/01/93	02/08/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 5, Well 5B	02/08/93	02/16/93	2.0×10^{-13}	3.9×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, Well 5B	02/16/93	03/08/93	1.3×10^{-13}	1.7×10^{-14}	^{7}Be
Area 5, Well 5B	03/08/93	03/15/93	1.3×10^{-13}	3.1×10^{-14}	^{7}Be
Area 5, Well 5B	03/15/93	03/22/93	1.6×10^{-13}	3.3×10^{-14}	^{7}Be
Area 5, Well 5B	03/22/93	03/29/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 5, Well 5B	03/29/93	04/05/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, Well 5B	04/05/93	04/12/93	2.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 5, Well 5B	04/12/93	04/19/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 5, Well 5B	04/19/93	04/26/93	2.5×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, Well 5B	04/26/93	05/03/93	1.8×10^{-14}	3.3×10^{-15}	^{7}Be
Area 5, Well 5B	05/03/93	05/10/93	5.2×10^{-13}	1.0×10^{-13}	^{7}Be
Area 5, Well 5B	05/10/93	05/17/93	2.9×10^{-13}	1.1×10^{-13}	^{7}Be
Area 5, Well 5B	05/17/93	05/24/93	5.6×10^{-13}	1.3×10^{-13}	^{7}Be
Area 5, Well 5B	05/24/93	06/01/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 5, Well 5B	06/01/93	06/07/93	1.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, Well 5B	06/07/93	06/14/93	2.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, Well 5B	06/14/93	06/21/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, Well 5B	06/21/93	06/28/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, Well 5B	06/28/93	07/06/93	3.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, Well 5B	07/06/93	07/12/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, Well 5B	07/12/93	07/19/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, Well 5B	07/19/93	07/26/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 5, Well 5B	07/26/93	08/02/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 5, Well 5B	08/02/93	08/09/93	1.7×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, Well 5B	08/09/93	08/16/93	3.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 5, Well 5B	08/16/93	08/23/93	2.4×10^{-13}	5.7×10^{-14}	^{7}Be
Area 5, Well 5B	08/23/93	08/30/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, Well 5B	08/30/93	09/08/93	2.2×10^{-13}	4.0×10^{-14}	^{7}Be
Area 5, Well 5B	08/30/93	09/08/93	3.1×10^{-13}	1.4×10^{-13}	^{40}K
Area 5, Well 5B	09/13/93	09/20/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, Well 5B	09/20/93	09/27/93	3.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 5, Well 5B	09/27/93	10/04/93	2.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 5, Well 5B	10/04/93	10/11/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, Well 5B	10/11/93	10/19/93	1.1×10^{-13}	3.6×10^{-14}	^{7}Be
Area 5, Well 5B	10/19/93	10/24/93	2.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 5, Well 5B	10/25/93	11/01/93	3.1×10^{-13}	6.5×10^{-14}	^{7}Be
Area 5, Well 5B	11/01/93	11/08/93	3.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, Well 5B	11/08/93	11/15/93	2.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 5, Well 5B	11/15/93	11/22/93	2.9×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, Well 5B	11/22/93	11/29/93	3.8×10^{-13}	6.8×10^{-14}	^{7}Be
Area 5, Well 5B	11/29/93	12/06/93	2.1×10^{-13}	5.3×10^{-14}	^{7}Be
Area 5, Well 5B	12/06/93	12/13/93	2.5×10^{-13}	4.7×10^{-14}	^{7}Be
Area 5, Well 5B	12/13/93	12/20/93	1.3×10^{-13}	3.8×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 5, Well 5B	12/20/93	12/27/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 5, Well 5B	12/27/93	01/03/94	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 5, Well 5B	12/27/93	01/03/94	4.0×10^{-13}	1.6×10^{-13}	^{40}K
Area 6, Building 6-900	01/04/93	01/11/93	1.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Building 6-900	01/19/93	01/25/93	1.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Building 6-900	01/25/93	02/01/93	1.9×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Building 6-900	02/01/93	02/08/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Building 6-900	02/08/93	02/16/93	1.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Building 6-900	02/16/93	02/22/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Building 6-900	02/22/93	03/01/93	2.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 6, Building 6-900	03/01/93	03/08/93	1.4×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Building 6-900	03/08/93	03/15/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Building 6-900	03/15/93	03/22/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Building 6-900	03/22/93	03/29/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, Building 6-900	03/29/93	04/05/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, Building 6-900	04/05/93	04/12/93	2.7×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, Building 6-900	04/12/93	04/19/93	2.6×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, Building 6-900	04/19/93	04/26/93	2.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, Building 6-900	05/24/93	06/01/93	2.4×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, Building 6-900	06/01/93	06/07/93	2.8×10^{-13}	6.9×10^{-14}	^{7}Be
Area 6, Building 6-900	06/07/93	06/14/93	2.8×10^{-13}	6.1×10^{-14}	^{7}Be
Area 6, Building 6-900	07/08/93	07/19/93	3.2×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, Building 6-900	07/19/93	07/26/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, Building 6-900	07/26/93	08/02/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, Building 6-900	08/02/93	08/09/93	2.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, Building 6-900	08/09/93	08/16/93	2.7×10^{-13}	5.9×10^{-14}	^{7}Be
Area 6, Building 6-900	08/23/93	08/30/93	7.2×10^{-14}	3.1×10^{-14}	^{7}Be
Area 6, Building 6-900	08/30/93	09/08/93	2.2×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, Building 6-900	09/08/93	09/13/93	5.2×10^{-13}	1.2×10^{-13}	^{7}Be
Area 6, Building 6-900	09/13/93	09/20/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Building 6-900	09/20/93	09/27/93	3.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 6, Building 6-900	09/27/93	10/04/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, Building 6-900	10/04/93	10/11/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, Building 6-900	10/11/93	10/18/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Building 6-900	10/18/93	10/25/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Building 6-900	10/25/93	11/01/93	3.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 6, Building 6-900	11/01/93	11/08/93	2.5×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, Building 6-900	11/08/93	11/15/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Building 6-900	11/15/93	11/22/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Building 6-900	11/22/93	11/29/93	4.3×10^{-13}	6.3×10^{-14}	^{7}Be
Area 6, Building 6-900	11/29/93	12/06/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Building 6-900	12/06/93	12/13/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 6, Building 6-900	12/13/93	12/20/93	1.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Building 6-900	12/20/93	12/27/93	3.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, Building 6-900	12/27/93	01/03/94	1.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 6, CP-6	01/04/93	01/11/93	1.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, CP-6	01/11/93	01/19/93	1.1×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, CP-6	01/19/93	01/25/93	1.9×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, CP-6	01/25/93	02/01/93	1.7×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, CP-6	02/01/93	02/08/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, CP-6	02/08/93	02/16/93	8.1×10^{-14}	3.0×10^{-14}	^{7}Be
Area 6, CP-6	02/16/93	02/22/93	2.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, CP-6	02/22/93	03/01/93	1.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, CP-6	03/01/93	03/08/93	1.3×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, CP-6	03/08/93	03/15/93	1.3×10^{-13}	3.3×10^{-14}	^{7}Be
Area 6, CP-6	03/15/93	03/22/93	1.7×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, CP-6	03/22/93	03/29/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, CP-6	03/29/93	04/05/93	1.7×10^{-13}	3.3×10^{-14}	^{7}Be
Area 6, CP-6	04/05/93	04/12/93	2.4×10^{-13}	4.8×10^{-14}	^{7}Be
Area 6, CP-6	04/12/93	04/19/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, CP-6	04/19/93	04/26/93	1.6×10^{-13}	3.0×10^{-14}	^{7}Be
Area 6, CP-6	04/26/93	05/03/93	2.3×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, CP-6	05/03/93	05/10/93	2.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, CP-6	05/10/93	05/17/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, CP-6	05/17/93	05/24/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, CP-6	05/24/93	06/01/93	1.9×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, CP-6	06/01/93	06/07/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 6, CP-6	06/07/93	06/14/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 6, CP-6	06/14/93	06/21/93	2.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, CP-6	06/21/93	06/28/93	2.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, CP-6	06/28/93	07/06/93	3.4×10^{-13}	5.8×10^{-14}	^{7}Be
Area 6, CP-6	07/06/93	07/12/93	2.9×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, CP-6	07/12/93	07/19/93	3.9×10^{-13}	5.9×10^{-14}	^{7}Be
Area 6, CP-6	07/19/93	07/26/93	1.8×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, CP-6	07/26/93	08/02/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, CP-6	08/02/93	08/09/93	1.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, CP-6	08/09/93	08/16/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, CP-6	08/16/93	08/23/93	2.7×10^{-13}	5.9×10^{-14}	^{7}Be
Area 6, CP-6	08/23/93	08/30/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, CP-6	08/30/93	09/08/93	2.1×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, CP-6	09/08/93	09/13/93	2.8×10^{-13}	7.2×10^{-14}	^{7}Be
Area 6, CP-6	09/13/93	09/20/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 6, CP-6	09/20/93	09/27/93	3.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 6, CP-6	09/27/93	10/04/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 6, CP-6	10/04/93	10/11/93	2.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, CP-6	10/11/93	10/18/93	1.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, CP-6	10/18/93	10/25/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, CP-6	10/25/93	11/01/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, CP-6	11/01/93	11/08/93	3.7×10^{-13}	7.0×10^{-14}	^{7}Be
Area 6, CP-6	11/08/93	11/15/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, CP-6	11/15/93	11/22/93	2.6×10^{-13}	6.0×10^{-14}	^{7}Be
Area 6, CP-6	11/22/93	11/29/93	3.5×10^{-13}	6.0×10^{-14}	^{7}Be
Area 6, CP-6	11/29/93	12/06/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, CP-6	12/06/93	12/13/93	2.2×10^{-13}	5.5×10^{-14}	^{7}Be
Area 6, CP-6	12/13/93	12/20/93	1.1×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, CP-6	12/20/93	12/27/93	3.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, CP-6	12/27/93	01/03/94	1.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Well 3 Complex	01/04/93	01/11/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Well 3 Complex	01/11/93	01/19/93	9.0×10^{-14}	3.2×10^{-14}	^{7}Be
Area 6, Well 3 Complex	01/19/93	01/25/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Well 3 Complex	01/25/93	02/01/93	1.8×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, Well 3 Complex	02/01/93	02/08/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 6, Well 3 Complex	02/08/93	02/16/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Well 3 Complex	02/16/93	02/22/93	1.4×10^{-13}	3.7×10^{-14}	^{7}Be
Area 6, Well 3 Complex	02/22/93	03/01/93	1.1×10^{-13}	2.9×10^{-14}	^{7}Be
Area 6, Well 3 Complex	03/01/93	03/08/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 6, Well 3 Complex	03/08/93	03/15/93	1.8×10^{-13}	3.4×10^{-14}	^{7}Be
Area 6, Well 3 Complex	03/15/93	03/22/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	03/22/93	03/29/93	1.4×10^{-13}	3.4×10^{-14}	^{7}Be
Area 6, Well 3 Complex	03/29/93	04/05/93	2.0×10^{-13}	3.4×10^{-14}	^{7}Be
Area 6, Well 3 Complex	04/05/93	04/12/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 6, Well 3 Complex	04/12/93	04/19/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 6, Well 3 Complex	04/19/93	04/26/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 6, Well 3 Complex	04/26/93	05/03/93	2.0×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	05/03/93	05/10/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Well 3 Complex	05/10/93	05/18/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Well 3 Complex	05/17/93	05/24/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Well 3 Complex	05/24/93	06/01/93	2.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 6, Well 3 Complex	06/01/93	06/07/93	1.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Well 3 Complex	06/07/93	06/14/93	2.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Well 3 Complex	06/14/93	06/22/93	1.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Well 3 Complex	06/28/93	07/06/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, Well 3 Complex	07/06/93	07/12/93	2.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	07/12/93	07/19/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	07/19/93	07/26/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, Well 3 Complex	07/26/93	08/02/93	1.9×10^{-13}	4.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 6, Well 3 Complex	08/02/93	08/09/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, Well 3 Complex	08/09/93	08/16/93	2.9×10^{-13}	5.5×10^{-14}	^{7}Be
Area 6, Well 3 Complex	08/16/93	08/23/93	2.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	08/23/93	08/30/93	1.7×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Well 3 Complex	08/30/93	09/08/93	2.1×10^{-13}	3.5×10^{-14}	^{7}Be
Area 6, Well 3 Complex	09/08/93	09/13/93	2.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, Well 3 Complex	09/13/93	09/20/93	2.6×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, Well 3 Complex	09/20/93	09/27/93	3.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, Well 3 Complex	09/27/93	10/04/93	2.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 6, Well 3 Complex	10/04/93	10/11/93	2.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, Well 3 Complex	10/11/93	10/18/93	1.4×10^{-13}	4.1×10^{-14}	^{7}Be
Area 6, Well 3 Complex	10/18/93	10/25/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	10/25/93	11/01/93	2.5×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Well 3 Complex	11/01/93	11/08/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	11/08/93	11/15/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Well 3 Complex	11/15/93	11/22/93	1.8×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Well 3 Complex	11/22/93	11/29/93	3.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 6, Well 3 Complex	11/29/93	12/06/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 6, Well 3 Complex	12/06/93	12/13/93	2.7×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Well 3 Complex	12/13/93	12/20/93	1.2×10^{-13}	3.2×10^{-14}	^{7}Be
Area 6, Well 3 Complex	12/20/93	12/27/93	2.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Well 3 Complex	12/27/93	01/03/94	2.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	01/04/93	01/11/93	1.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, Yucca Complex	01/11/93	01/19/93	1.3×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	01/19/93	01/25/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	01/25/93	02/01/93	2.0×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Yucca Complex	02/01/93	02/08/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 6, Yucca Complex	02/08/93	02/16/93	9.9×10^{-14}	2.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	02/16/93	02/22/93	1.4×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	02/22/93	03/01/93	1.3×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, Yucca Complex	03/01/93	03/08/93	1.2×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, Yucca Complex	03/08/93	03/15/93	1.7×10^{-13}	3.2×10^{-14}	^{7}Be
Area 6, Yucca Complex	03/15/93	03/22/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	03/22/93	03/29/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 6, Yucca Complex	03/29/93	04/05/93	1.8×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	04/05/93	04/12/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Yucca Complex	04/12/93	04/19/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 6, Yucca Complex	04/19/93	04/26/93	1.0×10^{-13}	3.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	04/26/93	05/03/93	2.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	05/03/93	05/10/93	3.0×10^{-13}	5.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	05/10/93	05/17/93	1.3×10^{-13}	3.7×10^{-14}	^{7}Be
Area 6, Yucca Complex	05/17/93	05/24/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 6, Yucca Complex	05/24/93	06/01/93	2.1×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Yucca Complex	06/01/93	06/07/93	1.7×10^{-13}	4.1×10^{-14}	^{7}Be
Area 6, Yucca Complex	06/07/93	06/14/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	06/14/93	06/21/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	06/21/93	06/28/93	2.3×10^{-13}	5.0×10^{-14}	^{7}Be
Area 6, Yucca Complex	06/28/93	07/06/93	3.8×10^{-13}	6.0×10^{-14}	^{7}Be
Area 6, Yucca Complex	07/06/93	07/12/93	2.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 6, Yucca Complex	07/12/93	07/19/93	3.9×10^{-13}	5.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	07/19/93	07/26/93	2.6×10^{-13}	5.2×10^{-14}	^{7}Be
Area 6, Yucca Complex	07/26/93	08/02/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	08/02/93	08/09/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	08/09/93	08/16/93	7.3×10^{-14}	2.9×10^{-14}	^{7}Be
Area 6, Yucca Complex	08/30/93	09/08/93	2.3×10^{-13}	4.0×10^{-14}	^{7}Be
Area 6, Yucca Complex	09/08/93	09/13/93	2.6×10^{-13}	6.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	09/13/93	09/20/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 6, Yucca Complex	09/20/93	09/27/93	3.8×10^{-13}	5.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	10/04/93	10/11/93	2.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 6, Yucca Complex	10/11/93	10/18/93	9.1×10^{-14}	4.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	10/18/93	10/25/93	2.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, Yucca Complex	10/25/93	11/01/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	11/01/93	11/08/93	2.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	11/08/93	11/15/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	11/15/93	11/22/93	1.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	11/22/93	11/29/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 6, Yucca Complex	11/29/93	12/06/93	1.7×10^{-13}	4.3×10^{-14}	^{7}Be
Area 6, Yucca Complex	12/06/93	12/13/93	1.1×10^{-13}	3.6×10^{-14}	^{7}Be
Area 6, Yucca Complex	12/13/93	12/20/93	1.5×10^{-13}	3.9×10^{-14}	^{7}Be
Area 6, Yucca Complex	12/20/93	12/27/93	2.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 6, Yucca Complex	12/27/93	01/03/94	1.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 7, UE-7ns	01/04/93	01/11/93	1.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 7, UE-7ns	01/11/93	01/19/93	8.5×10^{-14}	2.8×10^{-14}	^{7}Be
Area 7, UE-7ns	01/19/93	01/25/93	1.2×10^{-13}	3.9×10^{-14}	^{7}Be
Area 7, UE-7ns	01/25/93	02/01/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 7, UE-7ns	02/01/93	02/08/93	1.8×10^{-13}	3.3×10^{-14}	^{7}Be
Area 7, UE-7ns	02/08/93	02/16/93	1.6×10^{-13}	3.9×10^{-14}	^{7}Be
Area 7, UE-7ns	02/16/93	02/22/93	1.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 7, UE-7ns	02/22/93	03/01/93	1.6×10^{-13}	3.3×10^{-14}	^{7}Be
Area 7, UE-7ns	02/22/93	03/01/93	7.5×10^{-14}	3.7×10^{-14}	^{40}K
Area 7, UE-7ns	03/08/93	03/15/93	1.3×10^{-13}	3.1×10^{-14}	^{7}Be
Area 7, UE-7ns	03/15/93	03/22/93	1.6×10^{-13}	3.9×10^{-14}	^{7}Be
Area 7, UE-7ns	03/22/93	03/29/93	1.4×10^{-13}	3.0×10^{-14}	^{7}Be
Area 7, UE-7ns	03/29/93	04/05/93	1.4×10^{-13}	4.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 7, UE-7ns	04/05/93	04/12/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 7, UE-7ns	04/12/93	04/19/93	2.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 7, UE-7ns	04/19/93	04/26/93	2.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 7, UE-7ns	04/26/93	05/03/93	2.5×10^{-13}	5.3×10^{-14}	^{7}Be
Area 7, UE-7ns	05/03/93	05/10/93	2.4×10^{-13}	4.9×10^{-14}	^{7}Be
Area 7, UE-7ns	05/10/93	05/18/93	2.8×10^{-13}	4.6×10^{-14}	^{7}Be
Area 7, UE-7ns	05/18/93	05/24/93	1.3×10^{-13}	3.2×10^{-14}	^{7}Be
Area 7, UE-7ns	05/24/93	06/01/93	1.7×10^{-13}	3.3×10^{-14}	^{7}Be
Area 7, UE-7ns	06/01/93	06/07/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 7, UE-7ns	06/07/93	06/14/93	3.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 7, UE-7ns	06/14/93	06/22/93	2.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 7, UE-7ns	06/29/93	07/07/93	3.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 7, UE-7ns	07/06/93	07/12/93	2.7×10^{-13}	5.7×10^{-14}	^{7}Be
Area 7, UE-7ns	07/12/93	07/19/93	3.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 7, UE-7ns	08/02/93	08/09/93	2.1×10^{-13}	4.8×10^{-14}	^{7}Be
Area 7, UE-7ns	08/09/93	08/16/93	3.2×10^{-13}	5.8×10^{-14}	^{7}Be
Area 7, UE-7ns	08/16/93	08/23/93	2.3×10^{-13}	5.0×10^{-14}	^{7}Be
Area 7, UE-7ns	08/23/93	08/30/93	1.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 7, UE-7ns	08/30/93	09/08/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 7, UE-7ns	09/08/93	09/13/93	3.0×10^{-13}	5.9×10^{-14}	^{7}Be
Area 7, UE-7ns	09/13/93	09/20/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 7, UE-7ns	09/20/93	09/27/93	3.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 7, UE-7ns	09/27/93	10/04/93	2.0×10^{-13}	6.3×10^{-14}	^{7}Be
Area 7, UE-7ns	10/04/93	10/11/93	1.5×10^{-13}	3.9×10^{-14}	^{7}Be
Area 7, UE-7ns	10/11/93	10/18/93	1.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 7, UE-7ns	10/18/93	10/25/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 7, UE-7ns	10/25/93	11/01/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 7, UE-7ns	11/01/93	11/08/93	3.2×10^{-13}	6.8×10^{-14}	^{7}Be
Area 7, UE-7ns	11/08/93	11/15/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 7, UE-7ns	11/15/93	11/22/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 7, UE-7ns	11/22/93	11/29/93	4.0×10^{-13}	6.1×10^{-14}	^{7}Be
Area 7, UE-7ns	11/29/93	12/06/93	1.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 7, UE-7ns	12/06/93	12/13/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 7, UE-7ns	12/13/93	12/20/93	1.2×10^{-13}	3.4×10^{-14}	^{7}Be
Area 7, UE-7ns	12/20/93	12/27/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 7, UE-7ns	12/27/93	01/03/94	2.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	01/04/93	01/11/93	1.4×10^{-13}	3.7×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	01/11/93	01/19/93	8.8×10^{-14}	2.9×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	01/25/93	02/01/93	2.4×10^{-13}	6.2×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	02/01/93	02/08/93	1.7×10^{-13}	3.1×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	02/08/93	02/16/93	1.4×10^{-13}	3.9×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	02/16/93	02/22/93	1.9×10^{-13}	5.3×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 9, 9-300 Bunker	02/22/93	03/01/93	1.2×10^{-13}	3.0×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	03/01/93	03/08/93	9.8×10^{-14}	3.3×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	03/08/93	03/15/93	1.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	03/15/93	03/22/93	1.3×10^{-13}	3.4×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	03/22/93	03/29/93	1.5×10^{-13}	3.1×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	03/22/93	03/29/93	8.9×10^{-14}	3.6×10^{-14}	^{40}K
Area 9, 9-300 Bunker	03/29/93	04/05/93	2.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	04/05/93	04/12/93	2.1×10^{-13}	3.6×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	04/12/93	04/19/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	04/19/93	04/26/93	1.8×10^{-13}	3.8×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	04/26/93	05/03/93	2.6×10^{-13}	5.3×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	05/03/93	05/10/93	3.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	05/10/93	05/18/93	1.7×10^{-13}	4.5×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	05/18/93	05/24/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	05/24/93	06/01/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	06/01/93	06/07/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	06/07/93	06/14/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	06/14/93	06/22/93	2.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	06/21/93	06/28/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	06/28/93	07/06/93	3.6×10^{-13}	5.1×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	07/06/93	07/12/93	2.4×10^{-13}	4.9×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	07/12/93	07/19/93	2.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	07/19/93	07/26/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	07/26/93	08/02/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	08/02/93	08/09/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	08/09/93	08/16/93	3.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	08/16/93	08/23/93	3.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	08/23/93	08/30/93	1.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	08/30/93	09/08/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	09/08/93	09/13/93	2.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	09/13/93	09/20/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	09/20/93	09/27/93	4.3×10^{-13}	6.0×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	09/27/93	10/04/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	10/04/93	10/11/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	10/11/93	10/18/93	1.2×10^{-13}	3.8×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	10/18/93	10/25/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	10/25/93	11/01/93	3.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	11/01/93	11/08/93	4.3×10^{-13}	1.2×10^{-13}	^{7}Be
Area 9, 9-300 Bunker	11/08/93	11/15/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	11/15/93	11/22/93	2.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	11/22/93	11/29/93	2.6×10^{-13}	6.5×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	11/29/93	12/06/93	1.8×10^{-13}	5.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 9, 9-300 Bunker	12/06/93	12/13/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	12/13/93	12/20/93	1.0×10^{-13}	3.1×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	12/20/93	12/27/93	2.7×10^{-13}	4.7×10^{-14}	^{7}Be
Area 9, 9-300 Bunker	12/27/93	01/03/94	2.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 10, Gate 700	01/04/93	01/11/93	1.7×10^{-13}	4.2×10^{-14}	^{7}Be
Area 10, Gate 700	01/11/93	01/19/93	9.0×10^{-14}	3.0×10^{-14}	^{7}Be
Area 10, Gate 700	01/19/93	01/25/93	9.0×10^{-14}	4.9×10^{-14}	^{7}Be
Area 10, Gate 700	01/25/93	02/01/93	2.0×10^{-13}	4.3×10^{-14}	^{7}Be
Area 10, Gate 700	02/01/93	02/08/93	1.6×10^{-13}	3.3×10^{-14}	^{7}Be
Area 10, Gate 700	02/08/93	02/16/93	1.0×10^{-13}	3.7×10^{-14}	^{7}Be
Area 10, Gate 700	02/16/93	02/22/93	1.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 10, Gate 700	02/22/93	03/01/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 10, Gate 700	03/01/93	03/08/93	8.3×10^{-14}	4.0×10^{-14}	^{7}Be
Area 10, Gate 700	03/15/93	03/22/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 10, Gate 700	03/22/93	03/29/93	1.3×10^{-13}	3.3×10^{-14}	^{7}Be
Area 10, Gate 700	03/29/93	04/05/93	1.5×10^{-13}	4.0×10^{-14}	^{7}Be
Area 10, Gate 700	04/05/93	04/12/93	2.7×10^{-13}	4.5×10^{-14}	^{7}Be
Area 10, Gate 700	04/12/93	04/19/93	2.4×10^{-13}	5.8×10^{-14}	^{7}Be
Area 10, Gate 700	04/19/93	04/26/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 10, Gate 700	04/26/93	05/03/93	3.8×10^{-13}	1.2×10^{-13}	^{7}Be
Area 10, Gate 700	05/03/93	05/10/93	3.6×10^{-13}	6.5×10^{-14}	^{7}Be
Area 10, Gate 700	05/10/93	05/18/93	1.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 10, Gate 700	05/18/93	05/24/93	2.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 10, Gate 700	05/24/93	06/01/93	2.1×10^{-13}	4.0×10^{-14}	^{7}Be
Area 10, Gate 700	06/01/93	06/07/93	2.4×10^{-13}	4.8×10^{-14}	^{7}Be
Area 10, Gate 700	06/07/93	06/14/93	3.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 10, Gate 700	06/14/93	06/21/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 10, Gate 700	06/21/93	06/28/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 10, Gate 700	06/28/93	07/06/93	2.7×10^{-13}	4.4×10^{-14}	^{7}Be
Area 10, Gate 700	07/06/93	07/12/93	2.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 10, Gate 700	07/12/93	07/19/93	2.9×10^{-13}	5.9×10^{-14}	^{7}Be
Area 10, Gate 700	07/19/93	07/26/93	2.6×10^{-13}	4.9×10^{-14}	^{7}Be
Area 10, Gate 700	07/26/93	08/02/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 10, Gate 700	08/02/93	08/09/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 10, Gate 700	08/09/93	08/16/93	3.9×10^{-13}	6.2×10^{-14}	^{7}Be
Area 10, Gate 700	08/16/93	08/23/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 10, Gate 700	08/23/93	08/30/93	2.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 10, Gate 700	08/30/93	09/08/93	1.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 10, Gate 700	09/08/93	09/13/93	1.9×10^{-13}	5.3×10^{-14}	^{7}Be
Area 10, Gate 700	09/13/93	09/20/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 10, Gate 700	09/20/93	09/27/93	3.6×10^{-13}	5.9×10^{-14}	^{7}Be
Area 10, Gate 700	09/27/93	10/04/93	3.6×10^{-13}	7.1×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 10, Gate 700	10/04/93	10/11/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 10, Gate 700	10/11/93	10/18/93	1.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 10, Gate 700	10/18/93	10/25/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 10, Gate 700	10/25/93	11/01/93	3.7×10^{-13}	6.2×10^{-14}	^{7}Be
Area 10, Gate 700	11/01/93	11/08/93	3.7×10^{-13}	5.9×10^{-14}	^{7}Be
Area 10, Gate 700	11/08/93	11/15/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 10, Gate 700	11/15/93	11/22/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 10, Gate 700	11/22/93	11/29/93	3.5×10^{-13}	6.8×10^{-14}	^{7}Be
Area 10, Gate 700	11/29/93	12/06/93	2.8×10^{-13}	6.1×10^{-14}	^{7}Be
Area 10, Gate 700	12/06/93	12/13/93	2.4×10^{-13}	4.9×10^{-14}	^{7}Be
Area 10, Gate 700	12/13/93	12/20/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 10, Gate 700	12/20/93	12/27/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 11, Gate 293	01/04/93	01/11/93	1.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 11, Gate 293	01/19/93	01/25/93	1.6×10^{-13}	4.1×10^{-14}	^{7}Be
Area 11, Gate 293	01/25/93	02/01/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 11, Gate 293	02/01/93	02/08/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 11, Gate 293	02/08/93	02/16/93	1.2×10^{-13}	2.7×10^{-14}	^{7}Be
Area 11, Gate 293	02/08/93	02/16/93	7.4×10^{-14}	3.3×10^{-14}	^{40}K
Area 11, Gate 293	02/16/93	02/22/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 11, Gate 293	02/22/93	03/01/93	1.1×10^{-13}	3.9×10^{-14}	^{7}Be
Area 11, Gate 293	03/01/93	03/08/93	1.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 11, Gate 293	03/08/93	03/15/93	1.6×10^{-13}	3.5×10^{-14}	^{7}Be
Area 11, Gate 293	03/15/93	03/22/93	1.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 11, Gate 293	03/22/93	03/29/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 11, Gate 293	03/29/93	04/05/93	1.5×10^{-13}	3.3×10^{-14}	^{7}Be
Area 11, Gate 293	04/05/93	04/12/93	2.8×10^{-13}	5.4×10^{-14}	^{7}Be
Area 11, Gate 293	04/12/93	04/19/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 11, Gate 293	04/19/93	04/26/93	2.2×10^{-13}	5.0×10^{-14}	^{7}Be
Area 11, Gate 293	04/26/93	05/03/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 11, Gate 293	05/03/93	05/10/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 11, Gate 293	05/17/93	05/24/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 11, Gate 293	05/24/93	06/01/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 11, Gate 293	06/01/93	06/07/93	2.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 11, Gate 293	06/07/93	06/14/93	3.2×10^{-13}	6.2×10^{-14}	^{7}Be
Area 11, Gate 293	06/14/93	06/21/93	2.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 11, Gate 293	06/21/93	06/28/93	1.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 11, Gate 293	06/28/93	07/06/93	2.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 11, Gate 293	07/06/93	07/12/93	2.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 11, Gate 293	07/12/93	07/19/93	2.8×10^{-13}	5.3×10^{-14}	^{7}Be
Area 11, Gate 293	07/19/93	07/26/93	1.4×10^{-13}	4.1×10^{-14}	^{7}Be
Area 11, Gate 293	07/26/93	08/02/93	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 11, Gate 293	08/02/93	08/09/93	2.0×10^{-13}	5.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 11, Gate 293	08/09/93	08/16/93	2.3×10^{-13}	5.3×10^{-14}	^{7}Be
Area 11, Gate 293	08/30/93	09/08/93	2.4×10^{-13}	4.0×10^{-14}	^{7}Be
Area 11, Gate 293	09/08/93	09/13/93	2.6×10^{-13}	6.6×10^{-14}	^{7}Be
Area 11, Gate 293	09/13/93	09/20/93	2.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 11, Gate 293	09/20/93	09/27/93	3.3×10^{-13}	5.2×10^{-14}	^{7}Be
Area 11, Gate 293	09/27/93	10/04/93	3.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 11, Gate 293	10/04/93	10/11/93	2.2×10^{-13}	5.0×10^{-14}	^{7}Be
Area 11, Gate 293	10/11/93	10/18/93	6.2×10^{-14}	3.4×10^{-14}	^{7}Be
Area 11, Gate 293	10/18/93	10/25/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 11, Gate 293	10/25/93	11/01/93	3.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 11, Gate 293	11/01/93	11/08/93	3.0×10^{-13}	6.1×10^{-14}	^{7}Be
Area 11, Gate 293	11/08/93	11/15/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 11, Gate 293	11/15/93	11/22/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 11, Gate 293	11/22/93	11/29/93	3.6×10^{-13}	5.5×10^{-14}	^{7}Be
Area 11, Gate 293	11/29/93	12/06/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 11, Gate 293	12/06/93	12/13/93	2.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 11, Gate 293	12/13/93	12/20/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 11, Gate 293	12/20/93	12/27/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 11, Gate 293	12/27/93	01/03/94	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 12, Complex	01/04/93	01/12/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 12, Complex	01/12/93	01/19/93	6.3×10^{-14}	2.9×10^{-14}	^{7}Be
Area 12, Complex	01/19/93	01/25/93	1.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 12, Complex	01/25/93	02/01/93	1.6×10^{-13}	4.2×10^{-14}	^{7}Be
Area 12, Complex	02/01/93	02/08/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be
Area 12, Complex	02/08/93	02/16/93	1.2×10^{-13}	3.0×10^{-14}	^{7}Be
Area 12, Complex	02/16/93	02/22/93	1.7×10^{-13}	4.3×10^{-14}	^{7}Be
Area 12, Complex	02/22/93	03/01/93	1.8×10^{-13}	3.8×10^{-14}	^{7}Be
Area 12, Complex	03/01/93	03/08/93	9.8×10^{-14}	3.4×10^{-14}	^{7}Be
Area 12, Complex	03/08/93	03/15/93	1.3×10^{-13}	3.3×10^{-14}	^{7}Be
Area 12, Complex	03/15/93	03/22/93	1.7×10^{-13}	4.6×10^{-14}	^{7}Be
Area 12, Complex	03/22/93	03/30/93	1.6×10^{-13}	2.8×10^{-14}	^{7}Be
Area 12, Complex	03/22/93	03/30/93	5.3×10^{-14}	2.5×10^{-14}	^{40}K
Area 12, Complex	03/30/93	04/05/93	2.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 12, Complex	04/05/93	04/12/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 12, Complex	04/12/93	04/19/93	2.1×10^{-13}	4.7×10^{-14}	^{7}Be
Area 12, Complex	04/19/93	04/26/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 12, Complex	04/26/93	05/03/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 12, Complex	05/03/93	05/10/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 12, Complex	05/10/93	05/18/93	3.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 12, Complex	05/18/93	05/24/93	2.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 12, Complex	05/18/93	05/24/93	2.7×10^{-13}	1.3×10^{-13}	^{40}K
Area 12, Complex	05/24/93	06/01/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 12, Complex	06/01/93	06/07/93	2.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 12, Complex	06/07/93	06/14/93	3.3×10^{-13}	5.5×10^{-14}	^{7}Be
Area 12, Complex	06/14/93	06/22/93	3.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 12, Complex	06/22/93	06/28/93	2.5×10^{-13}	4.8×10^{-14}	^{7}Be
Area 12, Complex	06/28/93	07/06/93	3.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 12, Complex	07/06/93	07/14/93	2.4×10^{-13}	4.1×10^{-14}	^{7}Be
Area 12, Complex	07/14/93	07/19/93	3.4×10^{-13}	7.3×10^{-14}	^{7}Be
Area 12, Complex	07/19/93	07/26/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 12, Complex	07/26/93	08/02/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 12, Complex	08/02/93	08/09/93	3.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 12, Complex	08/09/93	08/16/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 12, Complex	08/16/93	08/23/93	1.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 12, Complex	08/23/93	08/30/93	1.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 12, Complex	08/30/93	09/08/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 12, Complex	09/08/93	09/13/93	2.5×10^{-13}	5.7×10^{-14}	^{7}Be
Area 12, Complex	09/13/93	09/20/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 12, Complex	09/20/93	09/27/93	4.3×10^{-13}	6.1×10^{-14}	^{7}Be
Area 12, Complex	10/04/93	10/11/93	2.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 12, Complex	10/11/93	10/18/93	1.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 12, Complex	10/18/93	10/25/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 12, Complex	10/25/93	11/01/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 12, Complex	11/01/93	11/08/93	3.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 12, Complex	11/08/93	11/15/93	2.1×10^{-13}	4.8×10^{-14}	^{7}Be
Area 12, Complex	11/15/93	11/22/93	1.7×10^{-13}	4.4×10^{-14}	^{7}Be
Area 12, Complex	11/22/93	11/29/93	3.8×10^{-13}	6.7×10^{-14}	^{7}Be
Area 12, Complex	11/29/93	12/06/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 12, Complex	12/06/93	12/13/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 12, Complex	12/13/93	12/20/93	1.7×10^{-13}	4.1×10^{-14}	^{7}Be
Area 12, Complex	12/20/93	12/27/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 12, Complex	12/27/93	01/03/94	2.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 12, P Tunnel Portal	02/09/93	02/17/93	3.1×10^{-13}	1.5×10^{-13}	^{40}K
Area 12, P Tunnel Portal	02/17/93	02/24/93	8.7×10^{-14}	4.5×10^{-14}	^{7}Be
Area 12, P Tunnel Portal	02/22/93	03/03/93	2.0×10^{-13}	7.7×10^{-14}	^{7}Be
Area 12, P Tunnel Portal	03/09/93	03/17/93	5.1×10^{-13}	1.6×10^{-13}	^{40}K
Area 12, P Tunnel Portal	03/30/93	04/06/94	7.0×10^{-13}	2.8×10^{-13}	^{40}K
Area 12, P Tunnel Portal	04/06/93	04/13/93	3.1×10^{-13}	1.1×10^{-13}	^{7}Be
Area 12, P Tunnel Portal	04/06/93	04/13/93	4.2×10^{-13}	1.5×10^{-13}	^{40}K
Area 12, P Tunnel Portal	04/28/93	05/04/93	3.4×10^{-13}	1.5×10^{-13}	^{7}Be
Area 12, P Tunnel Portal	05/18/93	05/25/93	1.7×10^{-12}	4.0×10^{-13}	^{7}Be
Area 12, P Tunnel Portal	05/25/93	06/01/93	1.3×10^{-13}	7.0×10^{-14}	^{7}Be
Area 12, P Tunnel Portal	06/08/93	06/15/93	5.2×10^{-12}	1.2×10^{-12}	^{7}Be
Area 12, P Tunnel Portal	06/22/93	06/29/93	1.5×10^{-12}	5.6×10^{-13}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radio-nuclide
Area 12, P Tunnel Portal	07/06/93	07/12/93	2.1×10^{-12}	1.1×10^{-12}	^{7}Be
Area 12, P Tunnel Portal	07/13/93	07/20/93	2.3×10^{-12}	8.2×10^{-13}	^{7}Be
Area 12, P Tunnel Portal	07/20/93	07/27/93	2.3×10^{-13}	7.4×10^{-14}	^{7}Be
Area 12, P Tunnel Portal	07/27/93	08/03/93	2.8×10^{-13}	8.2×10^{-14}	^{7}Be
Area 15, EPA Farm	01/04/93	01/11/93	2.1×10^{-13}	4.6×10^{-14}	^{7}Be
Area 15, EPA Farm	01/11/93	01/19/93	9.7×10^{-14}	3.4×10^{-14}	^{7}Be
Area 15, EPA Farm	01/19/93	01/25/93	1.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 15, EPA Farm	01/25/93	02/01/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 15, EPA Farm	02/01/93	02/08/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 15, EPA Farm	02/08/93	02/16/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 15, EPA Farm	02/16/93	02/22/93	1.1×10^{-13}	4.7×10^{-14}	^{7}Be
Area 15, EPA Farm	02/22/93	03/01/93	1.5×10^{-13}	3.2×10^{-14}	^{7}Be
Area 15, EPA Farm	03/01/93	03/08/93	1.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 15, EPA Farm	03/08/93	03/15/93	1.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 15, EPA Farm	03/15/93	03/22/93	2.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 15, EPA Farm	03/22/93	03/29/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 15, EPA Farm	03/29/93	04/05/93	2.4×10^{-13}	4.8×10^{-14}	^{7}Be
Area 15, EPA Farm	04/05/93	04/12/93	2.9×10^{-13}	4.5×10^{-14}	^{7}Be
Area 15, EPA Farm	04/12/93	04/19/93	2.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 15, EPA Farm	04/19/93	04/26/93	2.9×10^{-13}	5.2×10^{-14}	^{7}Be
Area 15, EPA Farm	04/26/93	05/03/93	3.2×10^{-13}	6.4×10^{-14}	^{7}Be
Area 15, EPA Farm	05/03/93	05/10/93	3.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 15, EPA Farm	05/10/93	05/18/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 15, EPA Farm	05/18/93	05/24/93	3.1×10^{-13}	5.8×10^{-14}	^{7}Be
Area 15, EPA Farm	05/24/93	06/01/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 15, EPA Farm	06/01/93	06/07/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 15, EPA Farm	06/07/93	06/14/93	3.3×10^{-13}	5.9×10^{-14}	^{7}Be
Area 15, EPA Farm	06/14/93	06/21/93	1.8×10^{-13}	3.0×10^{-14}	^{7}Be
Area 15, EPA Farm	06/21/93	06/28/93	3.7×10^{-13}	5.9×10^{-14}	^{7}Be
Area 15, EPA Farm	06/28/93	07/06/93	3.9×10^{-13}	5.8×10^{-14}	^{7}Be
Area 15, EPA Farm	07/06/93	07/12/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 15, EPA Farm	07/12/93	07/19/93	3.7×10^{-13}	7.0×10^{-14}	^{7}Be
Area 15, EPA Farm	07/19/93	07/26/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 15, EPA Farm	07/26/93	08/02/93	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 15, EPA Farm	08/02/93	08/09/93	2.9×10^{-13}	5.3×10^{-14}	^{7}Be
Area 15, EPA Farm	08/09/93	08/16/93	4.6×10^{-13}	6.7×10^{-14}	^{7}Be
Area 15, EPA Farm	08/16/93	08/23/93	3.4×10^{-13}	5.8×10^{-14}	^{7}Be
Area 15, EPA Farm	08/23/93	08/30/93	2.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 15, EPA Farm	08/30/93	09/08/93	2.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 15, EPA Farm	09/08/93	09/13/93	4.1×10^{-13}	7.5×10^{-14}	^{7}Be
Area 15, EPA Farm	09/13/93	09/20/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 15, EPA Farm	09/20/93	09/27/93	3.4×10^{-13}	6.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 15, EPA Farm	09/27/93	10/04/93	3.7×10^{-13}	7.2×10^{-14}	^{7}Be
Area 15, EPA Farm	10/04/93	10/11/93	2.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 15, EPA Farm	10/11/93	10/18/93	2.1×10^{-13}	7.2×10^{-14}	^{7}Be
Area 15, EPA Farm	10/18/93	10/25/93	2.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 15, EPA Farm	10/25/93	11/01/93	3.5×10^{-13}	5.8×10^{-14}	^{7}Be
Area 15, EPA Farm	11/01/93	11/08/93	3.2×10^{-13}	5.6×10^{-14}	^{7}Be
Area 15, EPA Farm	11/08/93	11/15/93	2.8×10^{-13}	6.1×10^{-14}	^{7}Be
Area 15, EPA Farm	11/15/93	11/22/93	2.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 15, EPA Farm	11/22/93	11/29/93	3.3×10^{-13}	6.7×10^{-14}	^{7}Be
Area 15, EPA Farm	11/29/93	12/06/93	2.5×10^{-13}	6.0×10^{-14}	^{7}Be
Area 15, EPA Farm	12/06/93	12/13/93	3.4×10^{-13}	5.8×10^{-14}	^{7}Be
Area 15, EPA Farm	12/13/93	12/20/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 15, EPA Farm	12/20/93	12/27/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 15, EPA Farm	12/27/93	01/03/94	2.6×10^{-13}	5.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	01/05/93	01/12/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 16, 3545 Substation	01/12/93	01/19/93	6.4×10^{-14}	2.4×10^{-14}	^{7}Be
Area 16, 3545 Substation	01/19/93	01/25/93	1.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 16, 3545 Substation	01/25/93	02/01/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	02/01/93	02/08/93	1.1×10^{-13}	2.6×10^{-14}	^{7}Be
Area 16, 3545 Substation	02/08/93	02/16/93	1.5×10^{-13}	3.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	02/16/93	02/22/93	8.8×10^{-14}	3.3×10^{-14}	^{7}Be
Area 16, 3545 Substation	02/22/93	03/01/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	03/01/93	03/08/93	1.7×10^{-13}	4.5×10^{-14}	^{7}Be
Area 16, 3545 Substation	03/08/93	03/15/93	1.6×10^{-13}	3.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	03/15/93	03/22/93	2.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 16, 3545 Substation	03/22/93	03/30/93	1.0×10^{-13}	2.5×10^{-14}	^{7}Be
Area 16, 3545 Substation	04/05/93	04/12/93	1.9×10^{-13}	3.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	04/12/93	04/19/93	2.9×10^{-13}	5.4×10^{-14}	^{7}Be
Area 16, 3545 Substation	04/19/93	04/26/93	2.6×10^{-13}	4.7×10^{-14}	^{7}Be
Area 16, 3545 Substation	04/26/93	05/03/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 16, 3545 Substation	05/03/93	05/10/93	3.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	05/10/93	05/18/93	3.2×10^{-13}	5.3×10^{-14}	^{7}Be
Area 16, 3545 Substation	05/18/93	05/24/93	2.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	05/24/93	06/01/93	2.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	06/01/93	06/07/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	06/07/93	06/14/93	2.7×10^{-13}	4.7×10^{-14}	^{7}Be
Area 16, 3545 Substation	06/14/93	06/22/93	2.1×10^{-13}	3.7×10^{-14}	^{7}Be
Area 16, 3545 Substation	06/22/93	06/28/93	2.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 16, 3545 Substation	06/28/93	07/06/93	2.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 16, 3545 Substation	07/06/93	07/14/93	2.9×10^{-13}	4.6×10^{-14}	^{7}Be
Area 16, 3545 Substation	07/14/93	07/19/93	2.6×10^{-13}	6.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	07/19/93	07/26/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 16, 3545 Substation	07/26/93	08/02/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 16, 3545 Substation	08/02/93	08/09/93	2.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 16, 3545 Substation	08/09/93	08/16/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	08/16/93	08/23/93	2.9×10^{-13}	5.5×10^{-14}	^{7}Be
Area 16, 3545 Substation	08/23/93	08/30/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 16, 3545 Substation	08/30/93	09/08/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 16, 3545 Substation	09/08/93	09/13/93	2.7×10^{-13}	5.6×10^{-14}	^{7}Be
Area 16, 3545 Substation	09/13/93	09/20/93	3.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 16, 3545 Substation	09/20/93	09/27/93	3.0×10^{-13}	5.9×10^{-14}	^{7}Be
Area 16, 3545 Substation	10/11/93	10/18/93	1.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	10/18/93	10/25/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 16, 3545 Substation	10/25/93	11/01/93	2.8×10^{-13}	4.7×10^{-14}	^{7}Be
Area 16, 3545 Substation	11/01/93	11/08/93	3.8×10^{-13}	5.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	11/01/93	11/08/93	2.9×10^{-13}	1.4×10^{-13}	^{40}K
Area 16, 3545 Substation	11/08/93	11/15/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 16, 3545 Substation	11/15/93	11/22/93	1.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 16, 3545 Substation	11/22/93	11/29/93	3.3×10^{-13}	6.1×10^{-14}	^{7}Be
Area 16, 3545 Substation	11/29/93	12/06/93	2.3×10^{-13}	4.6×10^{-14}	^{7}Be
Area 16, 3545 Substation	12/06/93	12/13/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 16, 3545 Substation	12/13/93	12/20/93	1.6×10^{-13}	3.8×10^{-14}	^{7}Be
Area 16, 3545 Substation	12/20/93	12/27/93	2.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 16, 3545 Substation	12/27/93	01/03/94	2.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 19, Echo Peak	04/26/93	05/03/93	2.1×10^{-13}	1.1×10^{-13}	^{7}Be
Area 19, Echo Peak	05/10/93	05/18/93	2.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 19, Echo Peak	05/18/93	05/24/93	2.2×10^{-13}	5.6×10^{-14}	^{7}Be
Area 19, Echo Peak	05/24/93	06/01/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 19, Echo Peak	06/01/93	06/07/93	1.6×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Echo Peak	06/07/93	06/14/93	3.3×10^{-13}	5.8×10^{-14}	^{7}Be
Area 19, Echo Peak	06/14/93	06/21/93	1.7×10^{-13}	3.4×10^{-14}	^{7}Be
Area 19, Echo Peak	06/21/93	06/28/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 19, Echo Peak	06/28/93	07/06/93	1.6×10^{-13}	2.5×10^{-14}	^{7}Be
Area 19, Echo Peak	07/06/93	07/12/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 19, Echo Peak	07/13/93	07/19/93	2.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 19, Echo Peak	07/19/93	07/26/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 19, Echo Peak	07/26/93	08/02/93	1.5×10^{-13}	3.7×10^{-14}	^{7}Be
Area 19, Echo Peak	08/02/93	08/09/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 19, Echo Peak	08/09/93	08/16/93	2.7×10^{-13}	4.7×10^{-14}	^{7}Be
Area 19, Echo Peak	08/16/93	08/23/93	2.2×10^{-13}	4.9×10^{-14}	^{7}Be
Area 19, Echo Peak	08/30/93	09/08/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 19, Echo Peak	09/08/93	09/13/93	1.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 19, Echo Peak	09/13/93	09/20/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 19, Echo Peak	09/20/93	09/27/93	3.2×10^{-13}	5.3×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 19, Echo Peak	09/27/93	10/04/93	2.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 19, Echo Peak	10/04/93	10/11/93	2.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 19, Echo Peak	10/11/93	10/18/93	1.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Echo Peak	10/18/93	10/25/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 19, Echo Peak	10/25/93	11/01/93	3.1×10^{-13}	5.0×10^{-14}	^{7}Be
Area 19, Echo Peak	11/01/93	11/08/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 19, Echo Peak	11/08/93	11/15/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 19, Echo Peak	11/15/93	11/22/93	2.0×10^{-13}	4.6×10^{-14}	^{7}Be
Area 19, Echo Peak	11/22/93	11/29/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 19, Echo Peak	11/29/93	12/06/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 19, Echo Peak	12/06/93	12/13/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 19, Pahute Substation	04/05/93	04/12/93	1.4×10^{-13}	3.8×10^{-14}	^{7}Be
Area 19, Pahute Substation	04/12/93	04/19/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	04/19/93	04/26/93	2.3×10^{-13}	4.3×10^{-14}	^{7}Be
Area 19, Pahute Substation	04/26/93	05/03/93	2.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 19, Pahute Substation	05/10/93	05/18/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 19, Pahute Substation	05/18/93	05/24/93	2.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 19, Pahute Substation	05/24/93	06/01/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	06/01/93	06/07/93	1.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 19, Pahute Substation	06/07/93	06/14/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 19, Pahute Substation	06/14/93	06/21/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	06/21/93	06/28/93	3.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 19, Pahute Substation	06/28/93	07/06/93	3.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 19, Pahute Substation	07/06/93	07/12/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	07/13/93	07/19/93	3.4×10^{-13}	7.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	07/19/93	07/26/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 19, Pahute Substation	07/26/93	08/02/93	1.6×10^{-13}	4.3×10^{-14}	^{7}Be
Area 19, Pahute Substation	08/02/93	08/09/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 19, Pahute Substation	08/09/93	08/16/93	2.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 19, Pahute Substation	08/16/93	08/23/93	2.5×10^{-13}	5.4×10^{-14}	^{7}Be
Area 19, Pahute Substation	08/23/93	08/30/93	1.8×10^{-13}	4.6×10^{-14}	^{7}Be
Area 19, Pahute Substation	08/30/93	09/08/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	09/08/93	09/13/93	3.1×10^{-13}	6.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	09/13/93	09/20/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 19, Pahute Substation	09/20/93	09/27/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 19, Pahute Substation	09/27/93	10/04/93	3.5×10^{-13}	6.7×10^{-14}	^{7}Be
Area 19, Pahute Substation	10/04/93	10/11/93	2.4×10^{-13}	5.5×10^{-14}	^{7}Be
Area 19, Pahute Substation	10/11/93	10/18/93	1.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 19, Pahute Substation	10/18/93	10/25/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 19, Pahute Substation	10/25/93	11/01/93	2.3×10^{-13}	4.5×10^{-14}	^{7}Be
Area 19, Pahute Substation	11/01/93	11/08/93	3.9×10^{-13}	5.9×10^{-14}	^{7}Be
Area 19, Pahute Substation	11/08/93	11/15/93	2.3×10^{-13}	5.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 19, Pahute Substation	11/15/93	11/22/93	1.9×10^{-13}	4.7×10^{-14}	^{7}Be
Area 19, Pahute Substation	11/22/93	11/29/93	3.6×10^{-13}	6.6×10^{-14}	^{7}Be
Area 19, Pahute Substation	11/29/93	12/06/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 19, Pahute Substation	12/06/93	12/13/93	2.0×10^{-13}	4.4×10^{-14}	^{7}Be
Area 20, Dispensary	03/15/93	03/22/93	7.2×10^{-13}	1.1×10^{-13}	^{7}Be
Area 20, Dispensary	03/22/93	04/05/93	1.4×10^{-13}	2.7×10^{-14}	^{7}Be
Area 20, Dispensary	04/05/93	04/12/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 20, Dispensary	04/12/93	04/19/93	1.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 20, Dispensary	04/19/93	04/26/93	2.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 20, Dispensary	04/26/93	05/03/93	3.2×10^{-13}	5.5×10^{-14}	^{7}Be
Area 20, Dispensary	05/03/93	05/10/93	3.5×10^{-13}	5.8×10^{-14}	^{7}Be
Area 20, Dispensary	05/10/93	05/18/93	3.0×10^{-13}	6.0×10^{-14}	^{7}Be
Area 20, Dispensary	05/18/93	05/24/93	2.3×10^{-13}	5.7×10^{-14}	^{7}Be
Area 20, Dispensary	06/01/93	06/07/93	1.8×10^{-13}	3.7×10^{-14}	^{7}Be
Area 20, Dispensary	06/07/93	06/14/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 20, Dispensary	06/14/93	06/21/93	2.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 20, Dispensary	06/21/93	06/28/93	2.5×10^{-13}	4.8×10^{-14}	^{7}Be
Area 20, Dispensary	06/28/93	07/06/93	3.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 20, Dispensary	07/06/93	07/12/93	2.4×10^{-13}	4.3×10^{-14}	^{7}Be
Area 20, Dispensary	07/13/93	07/19/93	3.6×10^{-13}	7.6×10^{-14}	^{7}Be
Area 20, Dispensary	07/19/93	07/26/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 20, Dispensary	07/26/93	08/02/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 20, Dispensary	08/02/93	08/09/93	2.1×10^{-13}	4.1×10^{-14}	^{7}Be
Area 20, Dispensary	08/09/93	08/16/93	3.6×10^{-13}	5.3×10^{-14}	^{7}Be
Area 20, Dispensary	08/16/93	08/23/93	2.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 20, Dispensary	08/23/93	08/30/93	2.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 20, Dispensary	08/30/93	09/08/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 20, Dispensary	09/08/93	09/13/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 20, Dispensary	09/13/93	09/20/93	3.1×10^{-13}	4.8×10^{-14}	^{7}Be
Area 20, Dispensary	09/20/93	09/27/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 20, Dispensary	09/27/93	10/04/93	2.2×10^{-13}	5.0×10^{-14}	^{7}Be
Area 20, Dispensary	10/04/93	10/11/93	1.7×10^{-13}	4.5×10^{-14}	^{7}Be
Area 20, Dispensary	10/11/93	10/18/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 20, Dispensary	10/18/93	10/25/93	2.4×10^{-13}	4.4×10^{-14}	^{7}Be
Area 20, Dispensary	10/25/93	11/01/93	3.5×10^{-13}	5.2×10^{-14}	^{7}Be
Area 20, Dispensary	11/01/93	11/08/93	3.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 20, Dispensary	11/08/93	11/15/93	2.4×10^{-13}	5.1×10^{-14}	^{7}Be
Area 20, Dispensary	11/15/93	11/22/93	1.6×10^{-13}	4.4×10^{-14}	^{7}Be
Area 20, Dispensary	11/22/93	11/29/93	3.0×10^{-13}	5.8×10^{-14}	^{7}Be
Area 20, Dispensary	11/29/93	12/06/93	1.8×10^{-13}	3.8×10^{-14}	^{7}Be
Area 20, Dispensary	12/06/93	12/13/93	2.0×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, Building 790	01/04/93	01/12/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 23, Building 790	01/12/93	01/20/93	6.6×10^{-14}	2.4×10^{-14}	^{7}Be
Area 23, Building 790	01/20/93	01/26/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 23, Building 790	01/26/93	02/01/93	1.8×10^{-13}	4.1×10^{-14}	^{7}Be
Area 23, Building 790	02/01/93	02/08/93	1.4×10^{-13}	3.2×10^{-14}	^{7}Be
Area 23, Building 790	02/08/93	02/16/93	1.4×10^{-13}	3.7×10^{-14}	^{7}Be
Area 23, Building 790	02/16/93	02/22/93	9.0×10^{-14}	3.4×10^{-14}	^{7}Be
Area 23, Building 790	02/22/93	03/01/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 23, Building 790	03/01/93	03/08/93	1.5×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, Building 790	03/08/93	03/15/93	7.0×10^{-14}	3.2×10^{-14}	^{7}Be
Area 23, Building 790	03/15/93	03/22/93	7.1×10^{-14}	3.2×10^{-14}	^{40}K
Area 23, Building 790	03/15/93	03/22/93	1.8×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, Building 790	03/22/93	03/29/93	1.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 23, Building 790	03/29/93	04/05/93	2.2×10^{-13}	4.6×10^{-14}	^{7}Be
Area 23, Building 790	04/05/93	04/12/93	2.0×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, Building 790	04/12/93	04/19/93	1.8×10^{-13}	3.0×10^{-14}	^{7}Be
Area 23, Building 790	04/19/93	04/26/93	1.8×10^{-13}	3.8×10^{-14}	^{7}Be
Area 23, Building 790	04/26/93	05/03/93	2.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 23, Building 790	05/03/93	05/10/93	2.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, Building 790	05/10/93	05/17/93	2.5×10^{-13}	5.5×10^{-14}	^{7}Be
Area 23, Building 790	05/17/93	05/24/93	5.1×10^{-13}	1.2×10^{-13}	^{7}Be
Area 23, Building 790	05/24/93	06/01/93	2.6×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790	06/01/93	06/07/93	1.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 23, Building 790	06/07/93	06/14/93	2.3×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, Building 790	06/14/93	06/21/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, Building 790	06/21/93	06/28/93	2.5×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, Building 790	06/28/93	07/06/93	3.0×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, Building 790	07/06/93	07/12/93	2.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, Building 790	07/12/93	07/19/93	2.9×10^{-13}	5.3×10^{-14}	^{7}Be
Area 23, Building 790	07/19/93	07/26/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790	07/26/93	08/02/93	1.5×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790	08/02/93	08/09/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 23, Building 790	08/09/93	08/16/93	3.3×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, Building 790	08/16/93	08/23/93	2.3×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, Building 790	08/23/93	08/30/93	1.9×10^{-13}	4.5×10^{-14}	^{7}Be
Area 23, Building 790	08/30/93	09/08/93	1.3×10^{-13}	2.6×10^{-14}	^{7}Be
Area 23, Building 790	08/30/93	09/08/93	2.4×10^{-13}	1.1×10^{-13}	^{40}K
Area 23, Building 790	09/08/93	09/13/93	3.9×10^{-13}	1.1×10^{-13}	^{7}Be
Area 23, Building 790	09/13/93	09/20/93	2.5×10^{-13}	5.7×10^{-14}	^{7}Be
Area 23, Building 790	09/20/93	09/27/93	3.5×10^{-13}	5.8×10^{-14}	^{7}Be
Area 23, Building 790	10/04/93	10/11/93	2.1×10^{-13}	4.5×10^{-14}	^{7}Be
Area 23, Building 790	10/11/93	10/19/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 23, Building 790	10/19/93	10/24/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 23, Building 790	10/25/93	11/01/93	3.0×10^{-13}	5.9×10^{-14}	^{7}Be
Area 23, Building 790	11/01/93	11/08/93	3.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, Building 790	11/08/93	11/15/93	1.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 23, Building 790	11/15/93	11/22/93	1.9×10^{-13}	4.4×10^{-14}	^{7}Be
Area 23, Building 790	11/22/93	11/29/93	3.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, Building 790	11/29/93	12/06/93	1.8×10^{-13}	6.1×10^{-14}	^{7}Be
Area 23, Building 790	12/06/93	12/13/93	1.7×10^{-13}	4.0×10^{-14}	^{7}Be
Area 23, Building 790	12/13/93	12/20/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790	12/20/93	12/27/93	2.0×10^{-13}	4.7×10^{-14}	^{7}Be
Area 23, Building 790	12/27/93	01/03/94	1.7×10^{-13}	4.8×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	01/04/93	01/12/93	1.6×10^{-13}	3.4×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	01/12/93	01/20/93	7.1×10^{-14}	2.8×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	01/20/93	01/26/93	1.5×10^{-13}	3.5×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	01/26/93	02/01/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	02/01/93	02/08/93	1.1×10^{-13}	2.8×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	02/08/93	02/16/93	1.0×10^{-13}	3.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	02/16/93	02/22/93	1.0×10^{-13}	3.8×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	02/22/93	03/01/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	03/01/93	03/08/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	03/08/93	03/15/93	1.4×10^{-13}	3.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	03/15/93	03/22/93	1.8×10^{-13}	3.1×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	03/15/93	03/22/93	6.6×10^{-14}	3.1×10^{-14}	^{40}K
Area 23, Building 790 No. 2	03/22/93	03/29/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	03/29/93	04/05/93	2.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	04/05/93	04/12/93	2.0×10^{-13}	4.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	04/05/93	04/12/93	8.1×10^{-14}	3.6×10^{-14}	^{40}K
Area 23, Building 790 No. 2	04/12/93	04/19/93	1.6×10^{-13}	3.5×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	04/12/93	04/19/93	1.2×10^{-13}	3.7×10^{-14}	^{40}K
Area 23, Building 790 No. 2	04/19/93	04/26/93	2.7×10^{-13}	4.7×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	04/26/93	05/03/93	3.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	05/03/93	05/10/93	3.0×10^{-13}	6.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	05/10/93	05/17/93	1.8×10^{-13}	4.4×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	05/17/93	05/24/93	4.9×10^{-13}	1.2×10^{-13}	^{7}Be
Area 23, Building 790 No. 2	05/24/93	06/01/93	2.0×10^{-13}	3.7×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	06/01/93	06/07/93	1.8×10^{-13}	4.8×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	06/07/93	06/14/93	3.5×10^{-13}	7.1×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	06/14/93	06/21/93	2.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	06/21/93	06/28/93	2.8×10^{-13}	5.7×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	06/28/93	07/06/93	2.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	07/06/93	07/12/93	2.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	07/12/93	07/19/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	07/19/93	07/26/93	3.4×10^{-13}	7.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 23, Building 790 No. 2	07/26/93	08/02/93	2.1×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	08/02/93	08/09/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	08/09/93	08/16/93	3.1×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	08/16/93	08/23/93	1.9×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	08/23/93	08/30/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	08/30/93	09/08/93	2.3×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	08/30/93	09/08/93	3.2×10^{-13}	1.6×10^{-13}	^{40}K
Area 23, Building 790 No. 2	09/08/93	09/13/93	2.6×10^{-13}	5.7×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	09/13/93	09/20/93	2.2×10^{-13}	5.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	09/20/93	09/27/93	3.2×10^{-13}	5.3×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	09/27/93	10/04/93	3.6×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	10/04/93	10/11/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	10/11/93	10/19/93	1.2×10^{-13}	3.1×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	10/19/93	10/24/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	10/25/93	11/01/93	3.2×10^{-13}	6.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	11/01/93	11/08/93	3.1×10^{-13}	5.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	11/08/93	11/15/93	3.0×10^{-13}	6.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	11/15/93	11/22/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	11/22/93	11/29/93	3.9×10^{-13}	6.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	11/29/93	12/06/93	2.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	12/06/93	12/13/93	2.0×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	12/13/93	12/20/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	12/20/93	12/27/93	2.5×10^{-13}	4.6×10^{-14}	^{7}Be
Area 23, Building 790 No. 2	12/27/93	01/03/94	2.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, E Boundary	01/04/93	01/12/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be
Area 23, E Boundary	01/12/93	01/20/93	1.1×10^{-13}	3.1×10^{-14}	^{7}Be
Area 23, E Boundary	01/20/93	01/26/93	1.8×10^{-13}	4.1×10^{-14}	^{7}Be
Area 23, E Boundary	01/26/93	02/01/93	2.4×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, E Boundary	02/01/93	02/08/93	1.7×10^{-13}	3.4×10^{-14}	^{7}Be
Area 23, E Boundary	02/08/93	02/16/93	1.7×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, E Boundary	02/16/93	02/22/93	1.9×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, E Boundary	02/22/93	03/01/93	1.8×10^{-13}	4.1×10^{-14}	^{7}Be
Area 23, E Boundary	03/01/93	03/08/93	1.6×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, E Boundary	03/15/93	03/22/93	1.9×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, E Boundary	03/22/93	03/29/93	3.6×10^{-13}	6.8×10^{-14}	^{7}Be
Area 23, E Boundary	03/29/93	04/05/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 23, E Boundary	04/05/93	04/12/93	2.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, E Boundary	04/12/93	04/19/93	2.2×10^{-13}	3.5×10^{-14}	^{7}Be
Area 23, E Boundary	04/19/93	04/26/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 23, E Boundary	04/26/93	05/03/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 23, E Boundary	05/03/93	05/10/93	3.0×10^{-13}	5.7×10^{-14}	^{7}Be
Area 23, E Boundary	05/10/93	05/17/93	2.5×10^{-13}	5.9×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 23, E Boundary	05/17/93	05/24/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 23, E Boundary	05/24/93	06/01/93	2.6×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, E Boundary	06/01/93	06/07/93	2.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, E Boundary	06/07/93	06/14/93	2.5×10^{-13}	5.8×10^{-14}	^{7}Be
Area 23, E Boundary	06/14/93	06/21/93	2.7×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, E Boundary	06/21/93	06/28/93	2.4×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, E Boundary	06/28/93	07/06/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, E Boundary	07/06/93	07/12/93	2.7×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, E Boundary	07/12/93	07/19/93	3.3×10^{-13}	5.7×10^{-14}	^{7}Be
Area 23, E Boundary	07/19/93	07/26/93	2.0×10^{-13}	4.5×10^{-14}	^{7}Be
Area 23, E Boundary	07/26/93	08/02/93	1.8×10^{-13}	4.3×10^{-14}	^{7}Be
Area 23, E Boundary	08/02/93	08/09/93	1.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 23, E Boundary	08/09/93	08/16/93	2.6×10^{-13}	5.4×10^{-14}	^{7}Be
Area 23, E Boundary	08/16/93	08/23/93	1.9×10^{-13}	4.1×10^{-14}	^{7}Be
Area 23, E Boundary	08/23/93	08/30/93	2.0×10^{-13}	4.3×10^{-14}	^{7}Be
Area 23, E Boundary	08/30/93	09/08/93	3.6×10^{-13}	1.4×10^{-13}	^{40}K
Area 23, E Boundary	08/30/93	09/08/93	2.4×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, E Boundary	09/13/93	09/20/93	3.1×10^{-13}	5.8×10^{-14}	^{7}Be
Area 23, E Boundary	09/20/93	09/27/93	3.5×10^{-13}	5.8×10^{-14}	^{7}Be
Area 23, E Boundary	09/27/93	10/04/93	2.6×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, E Boundary	10/04/93	10/11/93	2.1×10^{-13}	4.4×10^{-14}	^{7}Be
Area 23, E Boundary	10/11/93	10/19/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, E Boundary	10/19/93	10/24/93	2.3×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, E Boundary	10/25/93	11/01/93	2.7×10^{-13}	5.7×10^{-14}	^{7}Be
Area 23, E Boundary	11/01/93	11/08/93	4.3×10^{-13}	6.2×10^{-14}	^{7}Be
Area 23, E Boundary	11/08/93	11/15/93	2.3×10^{-13}	5.3×10^{-14}	^{7}Be
Area 23, E Boundary	11/15/93	11/22/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 23, E Boundary	11/22/93	11/29/93	3.5×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, E Boundary	11/29/93	12/06/93	2.6×10^{-13}	6.4×10^{-14}	^{7}Be
Area 23, E Boundary	12/06/93	12/13/93	2.6×10^{-13}	4.8×10^{-14}	^{7}Be
Area 23, E Boundary	12/13/93	12/20/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 23, E Boundary	12/20/93	12/27/93	3.0×10^{-13}	5.2×10^{-14}	^{7}Be
Area 23, E Boundary	12/27/93	01/03/94	2.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, H&S Building	01/04/93	01/12/93	2.0×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, H&S Building	01/12/93	01/20/93	8.4×10^{-14}	2.6×10^{-14}	^{7}Be
Area 23, H&S Building	01/20/93	01/26/93	2.1×10^{-13}	3.8×10^{-14}	^{7}Be
Area 23, H&S Building	01/26/93	02/01/93	1.4×10^{-13}	3.6×10^{-14}	^{7}Be
Area 23, H&S Building	02/01/93	02/08/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 23, H&S Building	02/08/93	02/16/93	1.3×10^{-13}	3.1×10^{-14}	^{7}Be
Area 23, H&S Building	02/16/93	02/22/93	2.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, H&S Building	02/22/93	03/01/93	1.4×10^{-13}	3.8×10^{-14}	^{7}Be
Area 23, H&S Building	03/01/93	03/08/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 23, H&S Building	03/08/93	03/15/93	1.6×10^{-13}	3.4×10^{-14}	^{7}Be
Area 23, H&S Building	03/15/93	03/22/93	1.1×10^{-13}	2.6×10^{-14}	^{7}Be
Area 23, H&S Building	03/22/93	03/29/93	2.4×10^{-13}	4.5×10^{-14}	^{7}Be
Area 23, H&S Building	04/05/93	04/12/93	2.6×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, H&S Building	04/12/93	04/19/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, H&S Building	04/19/93	04/26/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 23, H&S Building	04/26/93	05/03/93	3.6×10^{-13}	5.5×10^{-14}	^{7}Be
Area 23, H&S Building	05/03/93	05/10/93	2.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 23, H&S Building	05/10/93	05/17/93	2.4×10^{-13}	6.0×10^{-14}	^{7}Be
Area 23, H&S Building	05/17/93	05/24/93	4.0×10^{-13}	1.1×10^{-13}	^{7}Be
Area 23, H&S Building	05/24/93	06/01/93	2.9×10^{-13}	4.6×10^{-14}	^{7}Be
Area 23, H&S Building	06/01/93	06/07/93	1.8×10^{-13}	5.2×10^{-14}	^{7}Be
Area 23, H&S Building	06/07/93	06/14/93	2.3×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, H&S Building	06/14/93	06/21/93	2.6×10^{-13}	4.6×10^{-14}	^{7}Be
Area 23, H&S Building	06/21/93	06/28/93	3.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, H&S Building	06/28/93	07/06/93	3.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, H&S Building	07/06/93	07/12/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, H&S Building	07/12/93	07/19/93	3.9×10^{-13}	5.8×10^{-14}	^{7}Be
Area 23, H&S Building	07/19/93	07/26/93	2.3×10^{-13}	4.4×10^{-14}	^{7}Be
Area 23, H&S Building	07/26/93	08/02/93	1.4×10^{-13}	3.5×10^{-14}	^{7}Be
Area 23, H&S Building	08/02/93	08/09/93	2.7×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, H&S Building	08/09/93	08/16/93	3.0×10^{-13}	5.0×10^{-14}	^{7}Be
Area 23, H&S Building	08/16/93	08/23/93	3.3×10^{-13}	5.9×10^{-14}	^{7}Be
Area 23, H&S Building	08/23/93	08/30/93	3.1×10^{-13}	5.5×10^{-14}	^{7}Be
Area 23, H&S Building	08/30/93	09/08/93	2.5×10^{-13}	4.0×10^{-14}	^{7}Be
Area 23, H&S Building	08/30/93	09/08/93	2.6×10^{-13}	1.3×10^{-13}	^{40}K
Area 23, H&S Building	09/08/93	09/13/93	3.5×10^{-13}	6.5×10^{-14}	^{7}Be
Area 23, H&S Building	09/13/93	09/20/93	3.3×10^{-13}	6.4×10^{-14}	^{7}Be
Area 23, H&S Building	09/20/93	09/27/93	3.2×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, H&S Building	09/27/93	10/04/93	3.1×10^{-13}	5.1×10^{-14}	^{7}Be
Area 23, H&S Building	10/04/93	10/11/93	2.5×10^{-13}	4.7×10^{-14}	^{7}Be
Area 23, H&S Building	10/11/93	10/19/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be
Area 23, H&S Building	10/19/93	10/24/93	3.2×10^{-13}	5.7×10^{-14}	^{7}Be
Area 23, H&S Building	10/25/93	11/01/93	3.0×10^{-13}	5.9×10^{-14}	^{7}Be
Area 23, H&S Building	11/01/93	11/08/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 23, H&S Building	11/08/93	11/15/93	3.1×10^{-13}	6.0×10^{-14}	^{7}Be
Area 23, H&S Building	11/15/93	11/22/93	2.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 23, H&S Building	11/22/93	11/29/93	4.0×10^{-13}	6.3×10^{-14}	^{7}Be
Area 23, H&S Building	11/29/93	12/06/93	2.3×10^{-13}	4.8×10^{-14}	^{7}Be
Area 23, H&S Building	12/06/93	12/13/93	2.5×10^{-13}	4.4×10^{-14}	^{7}Be
Area 23, H&S Building	12/13/93	12/20/93	1.3×10^{-13}	3.4×10^{-14}	^{7}Be
Area 23, H&S Building	12/20/93	12/27/93	2.7×10^{-13}	4.6×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 23, H&S Building	12/27/93	01/03/94	2.2×10^{-13}	4.8×10^{-14}	^{7}Be
Area 25, E-MAD N	01/04/93	01/12/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 25, E-MAD N	01/12/93	01/20/93	6.0×10^{-14}	2.4×10^{-14}	^{7}Be
Area 25, E-MAD N	01/20/93	01/26/93	1.7×10^{-13}	3.4×10^{-14}	^{7}Be
Area 25, E-MAD N	01/25/93	03/03/93	1.4×10^{-14}	6.0×10^{-15}	^{40}K
Area 25, E-MAD N	01/25/93	03/03/93	1.0×10^{-13}	1.4×10^{-14}	^{7}Be
Area 25, E-MAD N	01/26/93	02/01/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 25, E-MAD N	02/01/93	02/08/93	2.0×10^{-13}	3.5×10^{-14}	^{7}Be
Area 25, E-MAD N	02/08/93	02/16/93	1.6×10^{-13}	3.4×10^{-14}	^{7}Be
Area 25, E-MAD N	02/16/93	02/22/93	1.5×10^{-13}	5.0×10^{-14}	^{7}Be
Area 25, E-MAD N	02/22/93	03/01/93	1.3×10^{-13}	3.3×10^{-14}	^{7}Be
Area 25, E-MAD N	03/01/93	03/08/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 25, E-MAD N	03/08/93	03/15/93	1.7×10^{-13}	3.1×10^{-14}	^{7}Be
Area 25, E-MAD N	03/15/93	03/22/93	1.2×10^{-13}	3.0×10^{-14}	^{7}Be
Area 25, E-MAD N	03/22/93	03/29/93	2.1×10^{-13}	4.2×10^{-14}	^{7}Be
Area 25, E-MAD N	03/29/93	04/05/93	1.6×10^{-13}	3.6×10^{-14}	^{7}Be
Area 25, E-MAD N	04/05/93	04/12/93	2.2×10^{-13}	4.1×10^{-14}	^{7}Be
Area 25, E-MAD N	04/12/93	04/19/93	1.8×10^{-13}	3.4×10^{-14}	^{7}Be
Area 25, E-MAD N	04/19/93	04/26/93	1.9×10^{-13}	4.0×10^{-14}	^{7}Be
Area 25, E-MAD N	04/26/93	05/03/93	3.4×10^{-13}	5.3×10^{-14}	^{7}Be
Area 25, E-MAD N	05/03/93	05/10/93	3.1×10^{-13}	6.4×10^{-14}	^{7}Be
Area 25, E-MAD N	05/10/93	05/17/93	2.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 25, E-MAD N	05/17/93	05/24/93	4.3×10^{-13}	1.1×10^{-13}	^{7}Be
Area 25, E-MAD N	05/24/93	06/01/93	2.3×10^{-13}	4.0×10^{-14}	^{7}Be
Area 25, E-MAD N	06/01/93	06/07/93	1.8×10^{-13}	4.9×10^{-14}	^{7}Be
Area 25, E-MAD N	06/07/93	06/14/93	3.3×10^{-13}	6.7×10^{-14}	^{7}Be
Area 25, E-MAD N	06/14/93	06/21/93	2.8×10^{-13}	5.0×10^{-14}	^{7}Be
Area 25, E-MAD N	06/21/93	06/28/93	3.0×10^{-13}	5.3×10^{-14}	^{7}Be
Area 25, E-MAD N	06/28/93	07/06/93	3.6×10^{-13}	5.3×10^{-14}	^{7}Be
Area 25, E-MAD N	07/06/93	07/12/93	3.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 25, E-MAD N	07/12/93	07/19/93	3.8×10^{-13}	6.0×10^{-14}	^{7}Be
Area 25, E-MAD N	07/26/93	08/02/93	4.7×10^{-13}	6.8×10^{-14}	^{7}Be
Area 25, E-MAD N	08/02/93	08/09/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 25, E-MAD N	08/09/93	08/16/93	4.1×10^{-13}	6.1×10^{-14}	^{7}Be
Area 25, E-MAD N	08/16/93	08/23/93	2.4×10^{-13}	5.6×10^{-14}	^{7}Be
Area 25, E-MAD N	08/23/93	08/30/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 25, E-MAD N	08/30/93	09/08/93	2.3×10^{-13}	4.0×10^{-14}	^{7}Be
Area 25, E-MAD N	09/08/93	09/13/93	3.1×10^{-13}	6.4×10^{-14}	^{7}Be
Area 25, E-MAD N	09/13/93	09/20/93	2.3×10^{-13}	6.3×10^{-14}	^{7}Be
Area 25, E-MAD N	09/20/93	09/27/93	5.1×10^{-13}	7.0×10^{-14}	^{7}Be
Area 25, E-MAD N	09/27/93	10/04/93	4.2×10^{-13}	6.3×10^{-14}	^{7}Be
Area 25, E-MAD N	10/04/93	10/11/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 25, E-MAD N	10/11/93	10/19/93	9.9×10^{-14}	3.3×10^{-14}	^{7}Be
Area 25, E-MAD N	10/19/93	10/24/93	2.4×10^{-13}	5.2×10^{-14}	^{7}Be
Area 25, E-MAD N	10/25/93	11/01/93	2.6×10^{-13}	6.1×10^{-14}	^{7}Be
Area 25, E-MAD N	11/01/93	11/08/93	4.3×10^{-13}	6.3×10^{-14}	^{7}Be
Area 25, E-MAD N	11/08/93	11/15/93	2.5×10^{-13}	6.1×10^{-14}	^{7}Be
Area 25, E-MAD N	11/15/93	11/22/93	2.5×10^{-13}	4.7×10^{-14}	^{7}Be
Area 25, E-MAD N	11/22/93	11/29/93	4.3×10^{-13}	6.4×10^{-14}	^{7}Be
Area 25, E-MAD N	11/29/93	12/06/93	3.1×10^{-13}	6.2×10^{-14}	^{7}Be
Area 25, E-MAD N	12/06/93	12/13/93	2.4×10^{-13}	4.7×10^{-14}	^{7}Be
Area 25, E-MAD N	12/13/93	12/20/93	1.6×10^{-13}	4.0×10^{-14}	^{7}Be
Area 25, E-MAD N	12/20/93	12/27/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 25, E-MAD N	12/27/93	01/03/94	2.0×10^{-13}	5.6×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	01/04/93	01/12/93	1.8×10^{-13}	3.9×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	01/12/93	01/20/93	8.1×10^{-14}	2.6×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	01/20/93	01/26/93	2.1×10^{-13}	3.7×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	01/26/93	02/01/93	1.9×10^{-13}	4.3×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	02/01/93	02/08/93	2.0×10^{-13}	3.8×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	02/08/93	02/16/93	1.3×10^{-13}	3.0×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	02/16/93	02/22/93	7.7×10^{-14}	3.9×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	02/22/93	03/01/93	1.6×10^{-13}	3.7×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	03/01/93	03/08/93	2.2×10^{-13}	4.3×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	03/08/93	03/15/93	1.5×10^{-13}	3.4×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	03/15/93	03/22/93	1.9×10^{-13}	3.2×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	03/22/93	03/29/93	2.0×10^{-13}	4.1×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	03/29/93	04/05/93	1.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	04/05/93	04/12/93	2.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	04/05/93	04/12/93	6.3×10^{-14}	2.9×10^{-14}	^{40}K
Area 25, NRDS Warehouse	04/12/93	04/19/93	1.5×10^{-13}	3.3×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	04/19/93	04/26/93	2.4×10^{-13}	4.6×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	04/26/93	05/03/93	2.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	05/03/93	05/10/93	3.1×10^{-13}	5.8×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	05/10/93	05/17/93	3.2×10^{-13}	5.8×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	05/17/93	05/24/93	4.6×10^{-13}	1.2×10^{-13}	^{7}Be
Area 25, NRDS Warehouse	05/24/93	06/01/93	2.2×10^{-13}	3.9×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	06/01/93	06/07/93	2.7×10^{-13}	5.7×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	06/07/93	06/14/93	3.0×10^{-13}	6.2×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	06/14/93	06/21/93	2.8×10^{-13}	5.1×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	06/21/93	06/28/93	2.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	06/28/93	07/06/93	2.9×10^{-13}	4.8×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	07/06/93	07/12/93	7.4×10^{-14}	2.0×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	07/12/93	07/19/93	3.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	07/19/93	07/26/93	1.9×10^{-13}	4.4×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 25, NRDS Warehouse	07/26/93	08/02/93	1.9×10^{-13}	4.4×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	08/02/93	08/09/93	2.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	08/09/93	08/16/93	3.2×10^{-13}	5.4×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	08/16/93	08/23/93	3.6×10^{-13}	7.1×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	08/23/93	08/30/93	2.3×10^{-13}	4.7×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	08/30/93	09/08/93	7.6×10^{-14}	2.8×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	09/13/93	09/20/93	1.6×10^{-13}	8.4×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	09/27/93	10/04/93	3.3×10^{-13}	5.6×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	10/04/93	10/11/93	3.1×10^{-13}	5.5×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	10/11/93	10/19/93	1.5×10^{-13}	3.5×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	10/19/93	10/24/93	2.8×10^{-13}	5.6×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	10/25/93	11/01/93	3.5×10^{-13}	6.5×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	11/01/93	11/08/93	3.6×10^{-13}	5.8×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	11/15/93	11/22/93	2.2×10^{-13}	4.5×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	11/22/93	11/29/93	3.9×10^{-13}	6.2×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	11/29/93	12/06/93	1.5×10^{-13}	4.5×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	12/06/93	12/13/93	2.0×10^{-13}	4.3×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	12/13/93	12/20/93	1.5×10^{-13}	4.0×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	12/20/93	12/27/93	3.0×10^{-13}	5.4×10^{-14}	^{7}Be
Area 25, NRDS Warehouse	12/27/93	01/03/94	2.1×10^{-13}	5.4×10^{-14}	^{7}Be
Area 27, Cafeteria	01/04/93	01/12/93	1.8×10^{-13}	4.2×10^{-14}	^{7}Be
Area 27, Cafeteria	01/20/93	01/26/93	1.8×10^{-13}	3.3×10^{-14}	^{7}Be
Area 27, Cafeteria	01/26/93	02/01/93	2.4×10^{-13}	4.9×10^{-14}	^{7}Be
Area 27, Cafeteria	02/01/93	02/08/93	1.2×10^{-13}	3.3×10^{-14}	^{7}Be
Area 27, Cafeteria	02/16/93	02/22/93	1.9×10^{-13}	5.6×10^{-14}	^{7}Be
Area 27, Cafeteria	02/22/93	03/01/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 27, Cafeteria	03/01/93	03/08/93	1.7×10^{-13}	3.9×10^{-14}	^{7}Be
Area 27, Cafeteria	03/08/93	03/15/93	1.2×10^{-13}	2.9×10^{-14}	^{7}Be
Area 27, Cafeteria	03/15/93	03/22/93	1.5×10^{-13}	3.2×10^{-14}	^{7}Be
Area 27, Cafeteria	03/22/93	03/29/93	1.5×10^{-13}	3.7×10^{-14}	^{7}Be
Area 27, Cafeteria	03/29/93	04/05/93	3.5×10^{-13}	7.4×10^{-14}	^{7}Be
Area 27, Cafeteria	04/05/93	04/19/93	2.2×10^{-13}	3.6×10^{-14}	^{7}Be
Area 27, Cafeteria	04/19/93	04/26/93	2.6×10^{-13}	5.0×10^{-14}	^{7}Be
Area 27, Cafeteria	04/26/93	05/03/93	3.0×10^{-13}	5.1×10^{-14}	^{7}Be
Area 27, Cafeteria	05/03/93	05/10/93	3.4×10^{-13}	6.3×10^{-14}	^{7}Be
Area 27, Cafeteria	05/10/93	05/17/93	2.8×10^{-13}	5.5×10^{-14}	^{7}Be
Area 27, Cafeteria	05/17/93	05/24/93	1.9×10^{-13}	4.2×10^{-14}	^{7}Be
Area 27, Cafeteria	05/24/93	06/01/93	3.0×10^{-13}	4.8×10^{-14}	^{7}Be
Area 27, Cafeteria	06/01/93	06/07/93	1.9×10^{-13}	5.1×10^{-14}	^{7}Be
Area 27, Cafeteria	06/14/93	06/21/93	2.7×10^{-13}	3.7×10^{-14}	^{7}Be
Area 27, Cafeteria	06/21/93	06/28/93	2.4×10^{-13}	5.0×10^{-14}	^{7}Be
Area 27, Cafeteria	06/28/93	07/06/93	2.9×10^{-13}	5.0×10^{-14}	^{7}Be

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1993, cont.)

Sampling Location	Sampling Period		µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 27, Cafeteria	07/06/93	07/12/93	1.9×10^{-13}	4.9×10^{-14}	^{7}Be
Area 27, Cafeteria	07/12/93	07/19/93	3.2×10^{-13}	5.7×10^{-14}	^{7}Be
Area 27, Cafeteria	07/19/93	07/26/93	2.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 27, Cafeteria	07/26/93	08/02/93	1.6×10^{-13}	4.5×10^{-14}	^{7}Be
Area 27, Cafeteria	08/02/93	08/09/93	2.2×10^{-13}	4.7×10^{-14}	^{7}Be
Area 27, Cafeteria	08/09/93	08/16/93	2.9×10^{-13}	5.3×10^{-14}	^{7}Be
Area 27, Cafeteria	08/16/93	08/23/93	2.4×10^{-13}	6.2×10^{-14}	^{7}Be
Area 27, Cafeteria	08/23/93	08/30/93	2.6×10^{-13}	5.2×10^{-14}	^{7}Be
Area 27, Cafeteria	08/30/93	09/13/93	2.8×10^{-13}	4.0×10^{-14}	^{7}Be
Area 27, Cafeteria	09/13/93	09/27/93	3.2×10^{-13}	4.2×10^{-14}	^{7}Be
Area 27, Cafeteria	09/27/93	10/04/93	3.0×10^{-13}	5.5×10^{-14}	^{7}Be
Area 27, Cafeteria	10/04/93	10/11/93	1.5×10^{-13}	3.8×10^{-14}	^{7}Be
Area 27, Cafeteria	10/11/93	10/19/93	2.1×10^{-13}	3.9×10^{-14}	^{7}Be
Area 27, Cafeteria	10/19/93	10/24/93	4.5×10^{-13}	8.1×10^{-14}	^{7}Be
Area 27, Cafeteria	10/25/93	11/01/93	3.2×10^{-13}	7.0×10^{-14}	^{7}Be
Area 27, Cafeteria	11/01/93	11/08/93	2.7×10^{-13}	5.1×10^{-14}	^{7}Be
Area 27, Cafeteria	11/08/93	11/15/93	1.7×10^{-13}	5.2×10^{-14}	^{7}Be
Area 27, Cafeteria	11/15/93	11/22/93	2.2×10^{-13}	4.4×10^{-14}	^{7}Be
Area 27, Cafeteria	11/22/93	11/29/93	3.1×10^{-13}	5.5×10^{-14}	^{7}Be
Area 27, Cafeteria	11/29/93	12/06/93	2.4×10^{-13}	5.8×10^{-14}	^{7}Be
Area 27, Cafeteria	12/06/93	12/13/93	1.5×10^{-13}	4.1×10^{-14}	^{7}Be
Area 27, Cafeteria	12/13/93	12/20/93	1.9×10^{-13}	4.3×10^{-14}	^{7}Be
Area 27, Cafeteria	12/20/93	12/27/93	2.7×10^{-13}	5.0×10^{-14}	^{7}Be
Area 27, Cafeteria	12/27/93	01/03/94	1.4×10^{-13}	4.4×10^{-14}	^{7}Be

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, Chapter 5. Table B.1 displays the sampling locations, dates that sampling began, observed concentration in picocuries per milliliter (10^{-6} pCi/mL = pCi/m^3), and analytic standard deviation for the 406 analyses performed in 1993. The sampling locations are given in Figure B.1 below. Samples were collected over 2-week periods. Data are presented in Table B.1 for sampling stations at the DAF (Device Assembly Facility) and the P-Tunnel Portal, but this data is not included in any of the discussion or analyses. The DAF is a recently added location with only one month of data for 1993, these stations will be included in future annual reports with a full year of data. The P-Tunnel portal is not an environmental monitoring location since that tunnel is used for testing and tritium concentrations at this location reflect operational activity. The analytic standard deviation and detection limits are in the same units of measurement as the concentration. The simple descriptive statistics for all the data combined are:

Number of data values = 406
Arithmetic mean = 4.58×10^{-6} pCi/mL
Median = 2.05×10^{-6}
Standard deviation = 7.62×10^{-6}
Minimum value = -3.33×10^{-6}
Maximum value = 68.20×10^{-6}
MDC Mean ± s = $1.6 \pm 0.7 \times 10^{-6}$

The first quartile of the data is 0.48×10^{-6} pCi/mL and the third quartile is 5.64×10^{-6} pCi/mL. Half the data values are between these statistics.

Table B.1 Tritiated Water Vapor in Air Sampling Results - 1993

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 1, BJY	01/06/93	4.5×10^{-07}	8.3×10^{-07}
Area 1, BJY	01/21/93	1.2×10^{-06}	1.1×10^{-06}
Area 1, BJY	02/03/93	1.9×10^{-07}	4.2×10^{-07}
Area 1, BJY	02/18/93	-6.6×10^{-07}	9.0×10^{-07}
Area 1, BJY	03/03/93	7.8×10^{-07}	7.6×10^{-07}
Area 1, BJY	03/17/93	-2.7×10^{-07}	1.0×10^{-06}
Area 1, BJY	03/31/93	7.1×10^{-07}	3.3×10^{-07}
Area 1, BJY	04/14/93	-1.5×10^{-08}	6.0×10^{-07}
Area 1, BJY	04/28/93	3.6×10^{-07}	6.5×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 1, BJY	05/13/93	2.1×10^{-06}	1.1×10^{-06}
Area 1, BJY	05/26/93	2.6×10^{-06}	8.1×10^{-07}
Area 1, BJY	06/09/93	2.5×10^{-06}	7.9×10^{-07}
Area 1, BJY	06/24/93	4.5×10^{-06}	8.9×10^{-07}
Area 1, BJY	07/08/93	5.4×10^{-06}	1.6×10^{-06}
Area 1, BJY	07/22/93	8.7×10^{-06}	1.2×10^{-06}
Area 1, BJY	08/06/93	2.9×10^{-06}	7.8×10^{-07}
Area 1, BJY	08/19/93	1.2×10^{-06}	1.0×10^{-06}
Area 1, BJY	09/01/93	7.1×10^{-06}	7.5×10^{-07}
Area 1, BJY	09/29/93	4.5×10^{-07}	3.0×10^{-07}
Area 1, BJY	10/14/93	3.7×10^{-07}	2.9×10^{-07}
Area 1, BJY	10/27/93	2.5×10^{-08}	2.7×10^{-07}
Area 1, BJY	11/10/93	1.8×10^{-07}	2.0×10^{-07}
Area 1, BJY	11/24/93	1.2×10^{-07}	2.2×10^{-07}
Area 1, BJY	12/08/93	5.3×10^{-07}	2.7×10^{-07}
Area 1, BJY	12/22/93	7.4×10^{-07}	2.6×10^{-07}
Area 5, RWMS No. 1	01/21/93	2.8×10^{-06}	6.1×10^{-07}
Area 5, RWMS No. 1	02/03/93	1.5×10^{-06}	7.8×10^{-07}
Area 5, RWMS No. 1	02/18/93	1.2×10^{-06}	8.0×10^{-07}
Area 5, RWMS No. 1	03/08/93	8.4×10^{-07}	7.6×10^{-07}
Area 5, RWMS No. 1	03/29/93	2.0×10^{-06}	3.3×10^{-07}
Area 5, RWMS No. 1	04/15/93	1.1×10^{-06}	5.9×10^{-07}
Area 5, RWMS No. 1	04/29/93	-3.3×10^{-06}	5.5×10^{-07}
Area 5, RWMS No. 1	05/13/93	2.5×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 1	05/26/93	1.9×10^{-06}	6.5×10^{-07}
Area 5, RWMS No. 1	06/09/93	2.4×10^{-06}	6.8×10^{-07}
Area 5, RWMS No. 1	06/24/93	4.6×10^{-06}	5.2×10^{-07}
Area 5, RWMS No. 1	07/08/93	5.6×10^{-06}	8.1×10^{-07}
Area 5, RWMS No. 1	07/22/93	1.3×10^{-05}	1.3×10^{-06}
Area 5, RWMS No. 1	08/06/93	4.0×10^{-06}	8.5×10^{-07}
Area 5, RWMS No. 1	08/18/93	8.3×10^{-06}	1.3×10^{-06}
Area 5, RWMS No. 1	09/02/93	1.9×10^{-05}	9.4×10^{-07}
Area 5, RWMS No. 1	09/15/93	1.1×10^{-05}	7.9×10^{-07}
Area 5, RWMS No. 1	09/29/93	6.8×10^{-06}	1.0×10^{-06}
Area 5, RWMS No. 1	10/13/93	6.0×10^{-06}	9.3×10^{-07}
Area 5, RWMS No. 1	10/27/93	2.4×10^{-06}	4.4×10^{-07}
Area 5, RWMS No. 1	11/10/93	2.1×10^{-06}	7.6×10^{-07}
Area 5, RWMS No. 1	11/24/93	3.1×10^{-06}	5.1×10^{-07}
Area 5, RWMS No. 1	12/08/93	2.2×10^{-06}	6.7×10^{-07}
Area 5, RWMS No. 1	12/22/93	4.4×10^{-06}	6.3×10^{-07}
Area 5, RWMS No. 2	01/06/93	4.0×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 2	01/21/93	3.3×10^{-06}	7.9×10^{-07}
Area 5, RWMS No. 2	02/03/93	4.0×10^{-06}	1.7×10^{-06}
Area 5, RWMS No. 2	02/18/93	1.0×10^{-06}	9.3×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 5, RWMS No. 2	03/03/93	-4.8×10^{-07}	8.6×10^{-07}
Area 5, RWMS No. 2	04/15/93	1.7×10^{-06}	4.9×10^{-07}
Area 5, RWMS No. 2	04/29/93	2.1×10^{-06}	7.0×10^{-07}
Area 5, RWMS No. 2	05/13/93	6.2×10^{-06}	1.6×10^{-06}
Area 5, RWMS No. 2	05/26/93	2.8×10^{-06}	8.5×10^{-07}
Area 5, RWMS No. 2	06/09/93	1.6×10^{-06}	8.6×10^{-07}
Area 5, RWMS No. 2	06/24/93	1.0×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 2	07/22/93	8.0×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 2	08/06/93	6.1×10^{-06}	2.3×10^{-06}
Area 5, RWMS No. 2	08/18/93	9.0×10^{-06}	1.7×10^{-06}
Area 5, RWMS No. 2	09/02/93	7.6×10^{-06}	8.1×10^{-07}
Area 5, RWMS No. 2	09/15/93	7.3×10^{-06}	7.6×10^{-07}
Area 5, RWMS No. 2	09/29/93	4.9×10^{-06}	9.5×10^{-07}
Area 5, RWMS No. 2	10/13/93	3.6×10^{-06}	8.8×10^{-07}
Area 5, RWMS No. 2	10/27/93	2.1×10^{-06}	4.4×10^{-07}
Area 5, RWMS No. 2	11/10/93	3.6×10^{-06}	8.1×10^{-07}
Area 5, RWMS No. 2	11/24/93	3.4×10^{-06}	6.8×10^{-07}
Area 5, RWMS No. 2	12/08/93	2.5×10^{-06}	6.9×10^{-07}
Area 5, RWMS No. 2	12/22/93	5.7×10^{-06}	6.6×10^{-07}
Area 5, RWMS No. 3	01/06/93	3.9×10^{-06}	8.4×10^{-07}
Area 5, RWMS No. 3	01/21/93	2.4×10^{-06}	7.3×10^{-07}
Area 5, RWMS No. 3	02/03/93	-2.3×10^{-07}	1.0×10^{-06}
Area 5, RWMS No. 3	02/18/93	1.2×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 3	03/03/93	6.4×10^{-07}	9.3×10^{-07}
Area 5, RWMS No. 3	03/29/93	1.8×10^{-06}	4.2×10^{-07}
Area 5, RWMS No. 3	04/15/93	2.5×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 3	04/29/93	5.6×10^{-07}	7.5×10^{-07}
Area 5, RWMS No. 3	05/13/93	1.1×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 3	05/26/93	2.0×10^{-06}	8.6×10^{-07}
Area 5, RWMS No. 3	06/09/93	3.6×10^{-06}	9.0×10^{-07}
Area 5, RWMS No. 3	06/24/93	7.5×10^{-06}	9.6×10^{-07}
Area 5, RWMS No. 3	07/08/93	7.6×10^{-06}	9.5×10^{-07}
Area 5, RWMS No. 3	07/22/93	1.4×10^{-05}	1.3×10^{-06}
Area 5, RWMS No. 3	08/06/93	1.0×10^{-05}	1.0×10^{-06}
Area 5, RWMS No. 3	08/18/93	7.4×10^{-06}	1.4×10^{-06}
Area 5, RWMS No. 3	09/02/93	2.7×10^{-06}	3.0×10^{-07}
Area 5, RWMS No. 3	09/15/93	7.2×10^{-06}	6.3×10^{-07}
Area 5, RWMS No. 3	09/29/93	5.0×10^{-06}	7.6×10^{-07}
Area 5, RWMS No. 3	10/13/93	2.4×10^{-06}	6.8×10^{-07}
Area 5, RWMS No. 3	10/27/93	2.2×10^{-06}	3.4×10^{-07}
Area 5, RWMS No. 3	11/10/93	2.5×10^{-06}	6.0×10^{-07}
Area 5, RWMS No. 3	11/24/93	2.5×10^{-06}	5.7×10^{-07}
Area 5, RWMS No. 3	12/08/93	1.4×10^{-06}	5.0×10^{-07}
Area 5, RWMS No. 3	12/22/93	3.3×10^{-06}	4.7×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 5, RWMS No. 4	01/06/93	1.7×10^{-06}	3.6×10^{-07}
Area 5, RWMS No. 4	01/21/93	2.0×10^{-06}	5.3×10^{-07}
Area 5, RWMS No. 4	02/03/93	4.2×10^{-07}	2.7×10^{-07}
Area 5, RWMS No. 4	02/18/93	5.6×10^{-07}	3.5×10^{-07}
Area 5, RWMS No. 4	03/03/93	-3.9×10^{-07}	4.8×10^{-07}
Area 5, RWMS No. 4	03/29/93	1.3×10^{-06}	2.6×10^{-07}
Area 5, RWMS No. 4	04/15/93	2.1×10^{-06}	5.2×10^{-07}
Area 5, RWMS No. 4	04/29/93	2.5×10^{-06}	7.5×10^{-07}
Area 5, RWMS No. 4	05/13/93	7.8×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 4	05/26/93	9.7×10^{-06}	8.9×10^{-07}
Area 5, RWMS No. 4	06/09/93	9.9×10^{-06}	7.9×10^{-07}
Area 5, RWMS No. 4	06/24/93	8.6×10^{-06}	6.3×10^{-07}
Area 5, RWMS No. 4	07/08/93	6.8×10^{-05}	1.9×10^{-06}
Area 5, RWMS No. 4	08/06/93	3.1×10^{-05}	1.0×10^{-06}
Area 5, RWMS No. 4	08/18/93	8.2×10^{-06}	9.8×10^{-07}
Area 5, RWMS No. 4	10/13/93	3.3×10^{-05}	1.2×10^{-06}
Area 5, RWMS No. 4	10/27/93	3.2×10^{-06}	4.6×10^{-07}
Area 5, RWMS No. 4	11/24/93	2.8×10^{-06}	6.4×10^{-07}
Area 5, RWMS No. 4	12/08/93	2.9×10^{-06}	7.2×10^{-07}
Area 5, RWMS No. 4	12/22/93	4.6×10^{-06}	6.5×10^{-07}
Area 5, RWMS No. 5	01/06/93	3.3×10^{-06}	9.0×10^{-07}
Area 5, RWMS No. 5	01/21/93	4.0×10^{-06}	7.7×10^{-07}
Area 5, RWMS No. 5	02/03/93	3.0×10^{-06}	9.2×10^{-07}
Area 5, RWMS No. 5	02/18/93	5.2×10^{-06}	9.4×10^{-07}
Area 5, RWMS No. 5	03/03/93	9.9×10^{-07}	8.8×10^{-07}
Area 5, RWMS No. 5	03/17/93	2.4×10^{-06}	6.3×10^{-07}
Area 5, RWMS No. 5	03/29/93	1.0×10^{-06}	2.9×10^{-07}
Area 5, RWMS No. 5	04/29/93	8.5×10^{-06}	2.3×10^{-06}
Area 5, RWMS No. 5	05/13/93	4.6×10^{-07}	8.4×10^{-07}
Area 5, RWMS No. 5	05/26/93	2.0×10^{-06}	6.9×10^{-07}
Area 5, RWMS No. 5	06/09/93	2.4×10^{-06}	7.3×10^{-07}
Area 5, RWMS No. 5	06/24/93	1.1×10^{-05}	7.0×10^{-07}
Area 5, RWMS No. 5	07/08/93	1.7×10^{-05}	1.6×10^{-06}
Area 5, RWMS No. 5	07/22/93	1.9×10^{-05}	1.0×10^{-06}
Area 5, RWMS No. 5	08/06/93	1.9×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 5	08/18/93	1.2×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 5	09/02/93	1.6×10^{-05}	8.3×10^{-07}
Area 5, RWMS No. 5	09/15/93	1.5×10^{-05}	7.8×10^{-07}
Area 5, RWMS No. 5	09/29/93	8.4×10^{-06}	8.6×10^{-07}
Area 5, RWMS No. 5	10/13/93	4.2×10^{-06}	6.9×10^{-07}
Area 5, RWMS No. 5	10/27/93	2.8×10^{-06}	3.9×10^{-07}
Area 5, RWMS No. 5	11/10/93	1.4×10^{-06}	6.1×10^{-07}
Area 5, RWMS No. 5	11/24/93	2.2×10^{-06}	4.3×10^{-07}
Area 5, RWMS No. 5	12/08/93	2.0×10^{-06}	5.7×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 5, RWMS No. 5	12/22/93	2.3×10^{-06}	4.9×10^{-07}
Area 5, RWMS No. 6	01/06/93	6.3×10^{-06}	1.0×10^{-06}
Area 5, RWMS No. 6	01/21/93	4.9×10^{-07}	4.1×10^{-07}
Area 5, RWMS No. 6	02/03/93	4.8×10^{-06}	9.9×10^{-07}
Area 5, RWMS No. 6	02/18/93	3.3×10^{-06}	9.2×10^{-07}
Area 5, RWMS No. 6	03/03/93	2.4×10^{-06}	8.1×10^{-07}
Area 5, RWMS No. 6	03/17/93	1.4×10^{-06}	9.7×10^{-07}
Area 5, RWMS No. 6	03/29/93	1.7×10^{-06}	3.5×10^{-07}
Area 5, RWMS No. 6	04/15/93	1.4×10^{-06}	6.8×10^{-07}
Area 5, RWMS No. 6	04/29/93	8.5×10^{-06}	9.2×10^{-07}
Area 5, RWMS No. 6	05/13/93	2.8×10^{-06}	1.4×10^{-06}
Area 5, RWMS No. 6	05/26/93	2.5×10^{-06}	8.1×10^{-07}
Area 5, RWMS No. 6	06/09/93	3.2×10^{-06}	8.0×10^{-07}
Area 5, RWMS No. 6	06/24/93	3.3×10^{-05}	1.4×10^{-06}
Area 5, RWMS No. 6	07/08/93	3.1×10^{-05}	1.5×10^{-06}
Area 5, RWMS No. 6	07/22/93	2.5×10^{-05}	1.2×10^{-06}
Area 5, RWMS No. 6	08/06/93	1.3×10^{-05}	9.8×10^{-07}
Area 5, RWMS No. 6	08/18/93	1.4×10^{-05}	1.5×10^{-06}
Area 5, RWMS No. 6	09/02/93	2.1×10^{-05}	9.6×10^{-07}
Area 5, RWMS No. 6	09/15/93	9.2×10^{-06}	4.4×10^{-07}
Area 5, RWMS No. 6	09/29/93	5.2×10^{-06}	1.0×10^{-06}
Area 5, RWMS No. 6	10/13/93	2.7×10^{-06}	9.1×10^{-07}
Area 5, RWMS No. 6	10/27/93	3.6×10^{-06}	4.8×10^{-07}
Area 5, RWMS No. 6	11/10/93	7.1×10^{-07}	7.8×10^{-07}
Area 5, RWMS No. 6	11/24/93	1.8×10^{-06}	6.8×10^{-07}
Area 5, RWMS No. 6	12/08/93	1.6×10^{-06}	7.2×10^{-07}
Area 5, RWMS No. 6	12/22/93	1.7×10^{-06}	6.1×10^{-07}
Area 5, RWMS No. 7	01/06/93	2.7×10^{-05}	1.5×10^{-06}
Area 5, RWMS No. 7	01/21/93	1.7×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 7	02/03/93	3.1×10^{-05}	2.2×10^{-06}
Area 5, RWMS No. 7	04/29/93	1.6×10^{-06}	8.9×10^{-07}
Area 5, RWMS No. 7	05/13/93	1.3×10^{-05}	2.5×10^{-06}
Area 5, RWMS No. 7	05/26/93	3.2×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 7	06/09/93	5.4×10^{-06}	9.6×10^{-07}
Area 5, RWMS No. 7	07/08/93	3.1×10^{-05}	9.5×10^{-07}
Area 5, RWMS No. 7	07/22/93	4.5×10^{-05}	1.4×10^{-06}
Area 5, RWMS No. 7	08/06/93	2.4×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 7	08/18/93	3.9×10^{-05}	1.8×10^{-06}
Area 5, RWMS No. 7	09/02/93	3.4×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 7	09/15/93	3.3×10^{-05}	1.0×10^{-06}
Area 5, RWMS No. 7	09/29/93	3.3×10^{-05}	1.3×10^{-06}
Area 5, RWMS No. 7	10/13/93	1.4×10^{-05}	8.7×10^{-07}
Area 5, RWMS No. 7	10/27/93	1.1×10^{-05}	4.9×10^{-07}
Area 5, RWMS No. 7	11/10/93	3.5×10^{-06}	7.4×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 5, RWMS No. 7	11/24/93	1.9×10^{-06}	4.1×10^{-07}
Area 5, RWMS No. 7	12/08/93	1.5×10^{-06}	3.8×10^{-07}
Area 5, RWMS No. 7	12/22/93	2.3×10^{-06}	5.2×10^{-07}
Area 5, RWMS No. 8	01/06/93	5.6×10^{-06}	1.0×10^{-06}
Area 5, RWMS No. 8	01/21/93	1.2×10^{-05}	8.2×10^{-07}
Area 5, RWMS No. 8	02/03/93	4.3×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 8	02/18/93	7.1×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 8	03/08/93	1.2×10^{-06}	7.8×10^{-07}
Area 5, RWMS No. 8	03/17/93	1.4×10^{-05}	1.3×10^{-06}
Area 5, RWMS No. 8	03/29/93	1.2×10^{-06}	3.8×10^{-07}
Area 5, RWMS No. 8	04/15/93	2.2×10^{-05}	8.7×10^{-07}
Area 5, RWMS No. 8	04/29/93	3.7×10^{-07}	1.7×10^{-06}
Area 5, RWMS No. 8	05/13/93	1.5×10^{-05}	1.3×10^{-06}
Area 5, RWMS No. 8	06/09/93	4.9×10^{-06}	1.3×10^{-06}
Area 5, RWMS No. 8	06/24/93	8.3×10^{-06}	8.9×10^{-07}
Area 5, RWMS No. 8	07/08/93	5.3×10^{-06}	7.7×10^{-07}
Area 5, RWMS No. 8	07/22/93	9.3×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 8	08/06/93	3.7×10^{-06}	7.6×10^{-07}
Area 5, RWMS No. 8	08/18/93	6.2×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 8	09/02/93	5.7×10^{-06}	6.8×10^{-07}
Area 5, RWMS No. 8	09/29/93	3.8×10^{-06}	8.5×10^{-07}
Area 5, RWMS No. 8	10/27/93	3.2×10^{-06}	9.2×10^{-07}
Area 5, RWMS No. 8	11/10/93	1.5×10^{-06}	7.4×10^{-07}
Area 5, RWMS No. 8	11/24/93	3.0×10^{-06}	6.7×10^{-07}
Area 5, RWMS No. 8	12/08/93	6.9×10^{-07}	7.0×10^{-07}
Area 5, RWMS No. 8	12/22/93	2.3×10^{-06}	6.1×10^{-07}
Area 5, RWMS No. 9	01/06/93	5.1×10^{-06}	1.0×10^{-06}
Area 5, RWMS No. 9	01/21/93	2.9×10^{-06}	4.1×10^{-07}
Area 5, RWMS No. 9	02/03/93	7.5×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 9	02/18/93	3.5×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 9	03/08/93	2.7×10^{-06}	1.1×10^{-06}
Area 5, RWMS No. 9	03/17/93	3.4×10^{-06}	1.3×10^{-06}
Area 5, RWMS No. 9	03/29/93	2.6×10^{-06}	4.6×10^{-07}
Area 5, RWMS No. 9	04/15/93	1.7×10^{-06}	7.6×10^{-07}
Area 5, RWMS No. 9	04/29/93	2.0×10^{-06}	8.5×10^{-07}
Area 5, RWMS No. 9	05/13/93	2.5×10^{-06}	1.5×10^{-06}
Area 5, RWMS No. 9	05/26/93	1.7×10^{-06}	1.4×10^{-06}
Area 5, RWMS No. 9	06/09/93	7.4×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 9	06/24/93	7.4×10^{-06}	9.4×10^{-07}
Area 5, RWMS No. 9	07/08/93	1.4×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 9	07/22/93	2.2×10^{-05}	1.6×10^{-06}
Area 5, RWMS No. 9	08/06/93	6.2×10^{-06}	1.0×10^{-06}
Area 5, RWMS No. 9	08/18/93	1.8×10^{-05}	2.1×10^{-06}
Area 5, RWMS No. 9	09/02/93	1.0×10^{-05}	9.3×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 5, RWMS No. 9	09/29/93	1.2×10^{-05}	1.1×10^{-06}
Area 5, RWMS No. 9	10/13/93	6.6×10^{-06}	9.2×10^{-07}
Area 5, RWMS No. 9	10/27/93	4.7×10^{-06}	1.2×10^{-06}
Area 5, RWMS No. 9	11/10/93	4.1×10^{-06}	8.9×10^{-07}
Area 5, RWMS No. 9	12/08/93	2.9×10^{-06}	7.3×10^{-07}
Area 6, DAF NE	11/04/93	7.5×10^{-07}	3.5×10^{-07}
Area 6, DAF NE	11/24/93	3.3×10^{-07}	4.4×10^{-07}
Area 6, DAF SSE	11/04/93	-5.5×10^{-07}	4.7×10^{-07}
Area 6, DAF SSE	11/24/93	-6.5×10^{-07}	3.9×10^{-07}
Area 10, Gate 700 S	01/06/93	-8.4×10^{-07}	1.0×10^{-06}
Area 10, Gate 700 S	01/21/93	7.0×10^{-07}	3.6×10^{-07}
Area 10, Gate 700 S	02/03/93	-1.2×10^{-06}	1.8×10^{-06}
Area 10, Gate 700 S	02/18/93	5.1×10^{-07}	9.0×10^{-07}
Area 10, Gate 700 S	03/03/93	-4.7×10^{-07}	7.2×10^{-07}
Area 10, Gate 700 S	03/17/93	1.8×10^{-07}	7.8×10^{-07}
Area 10, Gate 700 S	03/31/93	5.9×10^{-07}	3.3×10^{-07}
Area 10, Gate 700 S	04/14/93	6.6×10^{-07}	5.3×10^{-07}
Area 10, Gate 700 S	04/28/93	-7.3×10^{-07}	5.7×10^{-07}
Area 10, Gate 700 S	05/13/93	1.7×10^{-06}	1.0×10^{-06}
Area 10, Gate 700 S	05/26/93	-2.5×10^{-07}	8.1×10^{-07}
Area 10, Gate 700 S	06/09/93	5.6×10^{-07}	7.5×10^{-07}
Area 10, Gate 700 S	06/24/93	1.7×10^{-06}	8.2×10^{-07}
Area 10, Gate 700 S	07/08/93	1.7×10^{-06}	6.9×10^{-07}
Area 10, Gate 700 S	07/22/93	2.7×10^{-06}	1.0×10^{-06}
Area 10, Gate 700 S	08/06/93	3.0×10^{-07}	7.1×10^{-07}
Area 10, Gate 700 S	08/19/93	-3.0×10^{-07}	9.9×10^{-07}
Area 10, Gate 700 S	09/01/93	7.9×10^{-06}	7.7×10^{-07}
Area 10, Gate 700 S	09/29/93	1.6×10^{-06}	1.7×10^{-06}
Area 10, Gate 700 S	10/14/93	-1.2×10^{-06}	8.1×10^{-07}
Area 10, Gate 700 S	10/27/93	-3.3×10^{-07}	9.7×10^{-07}
Area 10, Gate 700 S	11/10/93	5.5×10^{-07}	6.1×10^{-07}
Area 10, Gate 700 S	12/08/93	6.0×10^{-07}	1.5×10^{-06}
Area 10, Gate 700 S	12/22/93	6.1×10^{-07}	5.0×10^{-07}
Area 12, Camp	01/06/93	-1.7×10^{-07}	8.4×10^{-07}
Area 12, Camp	01/21/93	7.8×10^{-07}	6.0×10^{-07}
Area 12, Camp	02/03/93	-6.1×10^{-07}	8.5×10^{-07}
Area 12, Camp	02/18/93	-3.2×10^{-07}	8.5×10^{-07}
Area 12, Camp	03/03/93	-7.0×10^{-07}	7.8×10^{-07}
Area 12, Camp	03/17/93	-1.5×10^{-07}	9.6×10^{-07}
Area 12, Camp	03/31/93	2.2×10^{-06}	8.5×10^{-07}
Area 12, Camp	04/14/93	2.4×10^{-07}	6.0×10^{-07}
Area 12, Camp	04/28/93	-8.1×10^{-07}	6.4×10^{-07}
Area 12, Camp	05/13/93	-2.1×10^{-08}	4.2×10^{-07}
Area 12, Camp	05/26/93	5.5×10^{-07}	6.4×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 12, Camp	06/09/93	-3.9×10^{-07}	5.9×10^{-07}
Area 12, Camp	06/24/93	1.4×10^{-06}	8.9×10^{-07}
Area 12, Camp	07/08/93	1.1×10^{-06}	7.5×10^{-07}
Area 12, Camp	07/22/93	1.6×10^{-06}	9.2×10^{-07}
Area 12, Camp	08/06/93	8.0×10^{-07}	8.0×10^{-07}
Area 12, Camp	09/01/93	3.7×10^{-06}	7.8×10^{-07}
Area 12, Camp	09/15/93	1.4×10^{-06}	6.8×10^{-07}
Area 12, Camp	09/29/93	-3.6×10^{-07}	8.2×10^{-07}
Area 12, Camp	10/14/93	-3.5×10^{-07}	7.4×10^{-07}
Area 12, Camp	10/27/93	4.9×10^{-07}	2.9×10^{-07}
Area 12, Camp	11/10/93	-9.3×10^{-07}	8.0×10^{-07}
Area 12, Camp	12/08/93	-6.4×10^{-08}	3.4×10^{-07}
Area 12, Camp	12/22/93	7.3×10^{-07}	3.1×10^{-07}
Area 12, P Tunnel	01/12/93	1.8×10^{-03}	1.4×10^{-05}
Area 12, P Tunnel	01/19/93	3.8×10^{-04}	3.8×10^{-06}
Area 12, P Tunnel	02/09/93	2.2×10^{-04}	7.8×10^{-06}
Area 12, P Tunnel	02/17/93	2.8×10^{-04}	4.4×10^{-06}
Area 12, P Tunnel	02/24/93	1.0×10^{-04}	5.1×10^{-06}
Area 12, P Tunnel	03/03/93	7.6×10^{-04}	1.4×10^{-05}
Area 12, P Tunnel	03/09/93	6.3×10^{-04}	9.3×10^{-06}
Area 12, P Tunnel	03/30/93	7.2×10^{-04}	1.7×10^{-05}
Area 12, P Tunnel	04/06/93	9.3×10^{-03}	7.6×10^{-05}
Area 12, P Tunnel	06/01/93	1.0×10^{-04}	5.7×10^{-06}
Area 12, P Tunnel	06/08/93	6.4×10^{-07}	4.4×10^{-07}
Area 12, P Tunnel	06/15/93	2.3×10^{-05}	7.0×10^{-06}
Area 12, P Tunnel	06/22/93	1.2×10^{-04}	3.6×10^{-06}
Area 12, P Tunnel	06/30/93	1.2×10^{-05}	2.2×10^{-06}
Area 12, P Tunnel	07/12/93	9.5×10^{-04}	9.2×10^{-06}
Area 12, P Tunnel	07/12/93	9.7×10^{-04}	9.6×10^{-06}
Area 12, P Tunnel	07/20/93	6.4×10^{-06}	2.5×10^{-06}
Area 12, P Tunnel	07/27/93	4.2×10^{-05}	9.7×10^{-06}
Area 15, EPA Farm	01/06/93	7.9×10^{-06}	1.4×10^{-06}
Area 15, EPA Farm	01/21/93	7.7×10^{-06}	8.2×10^{-07}
Area 15, EPA Farm	02/03/93	2.0×10^{-05}	1.2×10^{-06}
Area 15, EPA Farm	02/18/93	2.9×10^{-06}	1.2×10^{-06}
Area 15, EPA Farm	03/03/93	8.2×10^{-06}	9.2×10^{-07}
Area 15, EPA Farm	03/17/93	7.3×10^{-06}	1.1×10^{-06}
Area 15, EPA Farm	03/31/93	3.6×10^{-06}	3.7×10^{-07}
Area 15, EPA Farm	04/14/93	6.7×10^{-06}	7.5×10^{-07}
Area 15, EPA Farm	04/28/93	4.7×10^{-06}	7.2×10^{-07}
Area 15, EPA Farm	05/13/93	1.1×10^{-05}	1.3×10^{-06}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 15, EPA Farm	05/26/93	5.7×10^{-06}	1.0×10^{-06}
Area 15, EPA Farm	06/09/93	5.6×10^{-06}	9.7×10^{-07}
Area 15, EPA Farm	06/24/93	6.3×10^{-06}	1.0×10^{-06}
Area 15, EPA Farm	07/08/93	9.0×10^{-06}	8.2×10^{-07}
Area 15, EPA Farm	07/22/93	1.6×10^{-05}	1.8×10^{-06}
Area 15, EPA Farm	08/06/93	8.6×10^{-06}	9.5×10^{-07}
Area 15, EPA Farm	08/19/93	1.4×10^{-05}	1.5×10^{-06}
Area 15, EPA Farm	09/01/93	9.8×10^{-06}	1.0×10^{-06}
Area 15, EPA Farm	09/15/93	1.2×10^{-05}	5.3×10^{-07}
Area 15, EPA Farm	09/29/93	1.3×10^{-05}	8.6×10^{-07}
Area 15, EPA Farm	10/14/93	6.2×10^{-06}	6.9×10^{-07}
Area 15, EPA Farm	10/27/93	5.6×10^{-06}	4.2×10^{-07}
Area 15, EPA Farm	11/10/93	4.8×10^{-06}	5.8×10^{-07}
Area 15, EPA Farm	11/24/93	1.0×10^{-05}	4.9×10^{-07}
Area 15, EPA Farm	12/08/93	5.0×10^{-06}	5.2×10^{-07}
Area 15, EPA Farm	12/22/93	1.2×10^{-05}	5.6×10^{-07}
Area 23, H&S Building	01/06/93	-7.9×10^{-07}	8.0×10^{-07}
Area 23, H&S Building	01/21/93	6.3×10^{-06}	6.9×10^{-07}
Area 23, H&S Building	02/03/93	-1.0×10^{-06}	7.8×10^{-07}
Area 23, H&S Building	02/18/93	7.9×10^{-08}	8.0×10^{-07}
Area 23, H&S Building	03/03/93	-9.3×10^{-07}	8.0×10^{-07}
Area 23, H&S Building	03/17/93	-1.4×10^{-07}	8.6×10^{-07}
Area 23, H&S Building	03/31/93	9.5×10^{-07}	3.2×10^{-07}
Area 23, H&S Building	04/14/93	9.2×10^{-08}	4.6×10^{-07}
Area 23, H&S Building	04/28/93	-1.0×10^{-06}	6.2×10^{-07}
Area 23, H&S Building	05/13/93	1.8×10^{-08}	7.4×10^{-07}
Area 23, H&S Building	05/26/93	1.6×10^{-06}	8.1×10^{-07}
Area 23, H&S Building	06/09/93	-6.7×10^{-07}	7.7×10^{-07}
Area 23, H&S Building	06/24/93	6.8×10^{-08}	8.6×10^{-07}
Area 23, H&S Building	07/08/93	-3.9×10^{-07}	7.4×10^{-07}
Area 23, H&S Building	07/22/93	3.3×10^{-06}	1.2×10^{-06}
Area 23, H&S Building	08/06/93	-1.0×10^{-06}	7.6×10^{-07}
Area 23, H&S Building	08/19/93	5.5×10^{-07}	1.2×10^{-06}
Area 23, H&S Building	09/01/93	1.5×10^{-06}	7.4×10^{-07}
Area 23, H&S Building	09/29/93	-8.2×10^{-08}	4.5×10^{-07}
Area 23, H&S Building	10/14/93	-8.0×10^{-07}	3.6×10^{-07}
Area 23, H&S Building	10/27/93	-1.0×10^{-07}	1.9×10^{-07}
Area 23, H&S Building	11/10/93	8.8×10^{-09}	3.3×10^{-07}
Area 23, H&S Building	12/08/93	6.9×10^{-07}	2.8×10^{-07}
Area 23, H&S Building	12/22/93	5.4×10^{-07}	2.3×10^{-07}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 23, E Boundary	01/06/93	-1.3×10^{-07}	5.5×10^{-07}
Area 23, E Boundary	01/21/93	2.4×10^{-07}	4.1×10^{-07}
Area 23, E Boundary	02/03/93	7.4×10^{-08}	5.8×10^{-07}
Area 23, E Boundary	02/18/93	2.0×10^{-07}	8.1×10^{-07}
Area 23, E Boundary	03/03/93	-1.1×10^{-06}	7.3×10^{-07}
Area 23, E Boundary	03/17/93	-4.6×10^{-07}	8.5×10^{-07}
Area 23, E Boundary	03/31/93	7.2×10^{-07}	2.9×10^{-07}
Area 23, E Boundary	04/14/93	-7.3×10^{-08}	4.9×10^{-07}
Area 23, E Boundary	04/28/93	-1.4×10^{-06}	5.3×10^{-07}
Area 23, E Boundary	05/13/93	5.6×10^{-07}	9.9×10^{-07}
Area 23, E Boundary	05/26/93	1.5×10^{-06}	7.2×10^{-07}
Area 23, E Boundary	06/09/93	-1.2×10^{-06}	1.4×10^{-06}
Area 23, E Boundary	06/24/93	1.1×10^{-06}	6.0×10^{-07}
Area 23, E Boundary	07/08/93	-3.2×10^{-07}	6.6×10^{-07}
Area 23, E Boundary	07/22/93	1.3×10^{-06}	6.4×10^{-07}
Area 23, E Boundary	08/06/93	2.0×10^{-07}	7.5×10^{-07}
Area 23, E Boundary	08/19/93	-5.8×10^{-07}	9.5×10^{-07}
Area 23, E Boundary	09/01/93	2.6×10^{-07}	6.8×10^{-07}
Area 23, E Boundary	09/15/93	6.8×10^{-07}	3.8×10^{-07}
Area 23, E Boundary	09/29/93	-3.8×10^{-07}	5.4×10^{-07}
Area 23, E Boundary	10/14/93	-1.0×10^{-07}	5.0×10^{-07}
Area 23, E Boundary	10/27/93	2.1×10^{-07}	2.9×10^{-07}
Area 23, E Boundary	11/10/93	-2.5×10^{-08}	4.7×10^{-07}
Area 23, E Boundary	11/24/93	8.3×10^{-07}	4.3×10^{-07}
Area 23, E Boundary	12/08/93	6.9×10^{-07}	5.8×10^{-07}
Area 23, E Boundary	12/22/93	6.5×10^{-07}	4.1×10^{-07}
Area 23, Building 790 No. 2	01/06/93	1.5×10^{-06}	1.3×10^{-06}
Area 23, Building 790 No. 2	01/21/93	1.8×10^{-06}	1.2×10^{-06}
Area 23, Building 790 No. 2	02/03/93	-1.8×10^{-06}	1.5×10^{-06}
Area 23, Building 790 No. 2	02/18/93	7.0×10^{-07}	1.7×10^{-06}
Area 23, Building 790 No. 2	03/03/93	2.2×10^{-07}	1.3×10^{-06}
Area 23, Building 790 No. 2	03/17/93	1.8×10^{-06}	1.5×10^{-06}
Area 23, Building 790 No. 2	03/31/93	7.1×10^{-07}	5.6×10^{-07}
Area 23, Building 790 No. 2	04/14/93	2.2×10^{-06}	1.4×10^{-06}
Area 23, Building 790 No. 2	04/28/93	-8.0×10^{-07}	4.5×10^{-07}
Area 23, Building 790 No. 2	05/13/93	1.2×10^{-06}	1.1×10^{-06}
Area 23, Building 790 No. 2	05/26/93	2.1×10^{-07}	3.6×10^{-07}
Area 23, Building 790 No. 2	06/09/93	9.4×10^{-08}	2.8×10^{-07}
Area 23, Building 790 No. 2	07/08/93	-4.1×10^{-07}	5.0×10^{-07}
Area 23, Building 790 No. 2	07/22/93	3.0×10^{-06}	1.1×10^{-06}

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1993, cont.)

Sampling Location	Start of Sampling Period	pCi/mL Concentration	pCi/mL Standard Deviation (s)
Area 23, Building 790 No. 2	08/06/93	-7.1×10^{-08}	2.9×10^{-07}
Area 23, Building 790 No. 2	08/19/93	3.9×10^{-06}	1.2×10^{-06}
Area 23, Building 790 No. 2	09/01/93	1.0×10^{-06}	7.0×10^{-07}
Area 23, Building 790 No. 2	09/15/93	7.9×10^{-08}	4.8×10^{-07}
Area 23, Building 790 No. 2	09/29/93	-4.6×10^{-07}	6.4×10^{-07}
Area 23, Building 790 No. 2	10/14/93	-1.6×10^{-06}	8.4×10^{-07}
Area 23, Building 790 No. 2	10/27/93	-1.9×10^{-07}	4.4×10^{-07}
Area 23, Building 790 No. 2	11/24/93	9.0×10^{-07}	5.0×10^{-07}
Area 23, Building 790 No. 2	12/22/93	3.9×10^{-06}	6.0×10^{-07}
Area 25, E-MAD N	01/06/93	1.9×10^{-06}	5.7×10^{-07}
Area 25, E-MAD N	01/21/93	9.0×10^{-07}	5.9×10^{-07}
Area 25, E-MAD N	02/03/93	-1.9×10^{-07}	9.1×10^{-07}
Area 25, E-MAD N	02/18/93	1.1×10^{-06}	8.2×10^{-07}
Area 25, E-MAD N	03/03/93	-1.3×10^{-06}	7.9×10^{-07}
Area 25, E-MAD N	03/17/93	-8.0×10^{-07}	1.2×10^{-06}
Area 25, E-MAD N	03/29/93	8.8×10^{-07}	3.2×10^{-07}
Area 25, E-MAD N	04/15/93	-1.6×10^{-07}	6.6×10^{-07}
Area 25, E-MAD N	04/29/93	-6.3×10^{-07}	7.1×10^{-07}
Area 25, E-MAD N	05/13/93	-2.2×10^{-06}	1.0×10^{-06}
Area 25, E-MAD N	05/26/93	3.1×10^{-07}	7.4×10^{-07}
Area 25, E-MAD N	06/09/93	3.6×10^{-07}	8.7×10^{-07}
Area 25, E-MAD N	06/24/93	-5.6×10^{-07}	1.0×10^{-06}
Area 25, E-MAD N	07/08/93	-9.1×10^{-08}	8.7×10^{-07}
Area 25, E-MAD N	07/22/93	1.8×10^{-06}	1.1×10^{-06}
Area 25, E-MAD N	08/06/93	-6.8×10^{-07}	8.8×10^{-07}
Area 25, E-MAD N	08/18/93	5.9×10^{-07}	8.8×10^{-07}
Area 25, E-MAD N	09/15/93	1.2×10^{-06}	7.0×10^{-07}
Area 25, E-MAD N	09/29/93	-1.6×10^{-07}	8.9×10^{-07}
Area 25, E-MAD N	10/13/93	-6.3×10^{-08}	8.2×10^{-07}
Area 25, E-MAD N	10/27/93	2.8×10^{-07}	4.2×10^{-07}
Area 25, E-MAD N	11/10/93	-7.3×10^{-07}	6.6×10^{-07}
Area 25, E-MAD N	11/24/93	-1.6×10^{-07}	4.9×10^{-07}
Area 25, E-MAD N	12/08/93	8.6×10^{-07}	5.7×10^{-07}
Area 25, E-MAD N	12/22/93	1.8×10^{-06}	4.8×10^{-07}

Figure B.1 shows the locations of the tritium in air sampling stations on a map of the Nevada Test Site. In this figure the major roads are indicated by the wavy lines. The nine RWMS stations are indicated by the larger square in Area 5, These stations are numbered counter-clockwise from the lower right corner with three stations to a side. The three stations in Area 23 are Building 790 on the upper left, East Boundary on the right, and the Health and Safety Building on the lower left. The Health and Safety Building is also called Building 650. Note that there is no tritium in air sampling in most of the test site areas. Sampling locations are chosen where tritium may be detected. The RWMS is storage for tritiated waste. Area 23

has laboratories that analyze samples for tritium. The EPA Farm and Gate 700 are close to the Sedan crater, which is a known source of low levels of tritium. Area 12 Camp is close to several tunnel portals which discharge some tritiated water. BJY is a location within Yucca Valley, where many underground tests were conducted. Not shown are two stations added at the Device Assembly Facility (DAF) in Area 6. The data from these stations will be used to establish pre-operational levels of HTO in air.

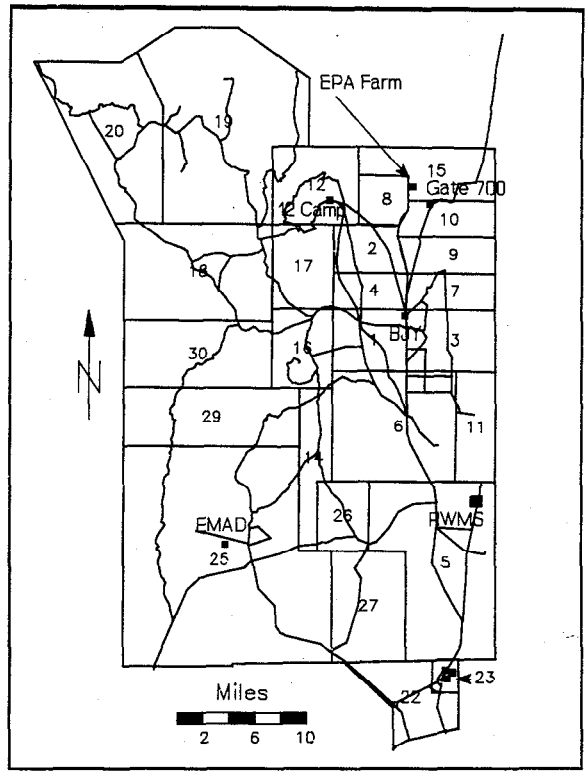


Figure B.1 Tritium in Air Sampling Locations

Figures B.2 through B.18 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 abscissa gives the time that sampling started in terms of month of the year and fraction of the month. The fraction of the month was approximated as the day of the month divided by 32. Note that the values for the ordinate range from zero to one hundred for one of the radiological waste management (RWMS) sampling stations while most of the plots have a range of zero to twenty and a couple range from zero to forty. Figure B.19 shows all the data combined in one plot; this plot does not contain any confidence intervals or detection limits. 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 lognormally distributed and a logarithmic transformation will cause those occasional high values to appear less remarkable. Some of the RWMS stations show consistently higher values during the third quarter, these are most likely due to a shipment of improperly packaged tritiated waste that was unloaded on July 21 and 22.

DATA ANALYSIS

Examination of the figures shows two items of note. First, most data values are in the range of zero to twenty x 10^{-6} pCi/mL. Second, Figure B.19 shows a pattern of most of the data values near zero with the number of data values decreasing as concentration values increase. This pattern is suggestive of a lognormal data distribution. Since statistical tests are dependent on the data distribution, the distribution will be discussed first.

The data distribution for each sampling location and all locations combined 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.

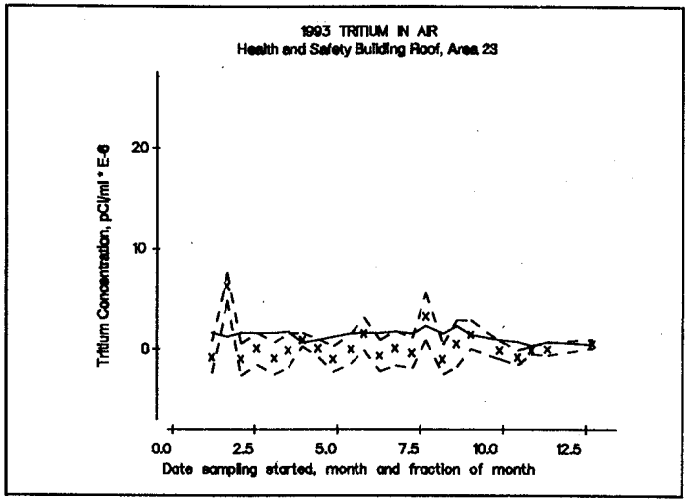


Figure B.2 Time Series Plot of H&S Building Tritium Results

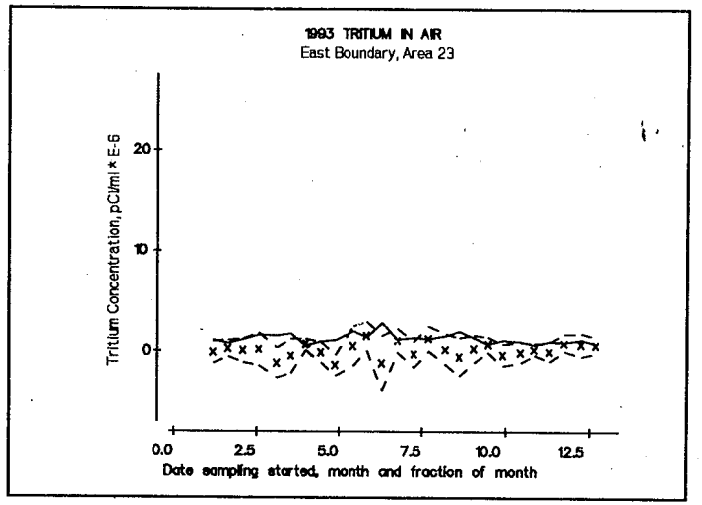


Figure B.3 Time Series Plot of East Boundary Tritium

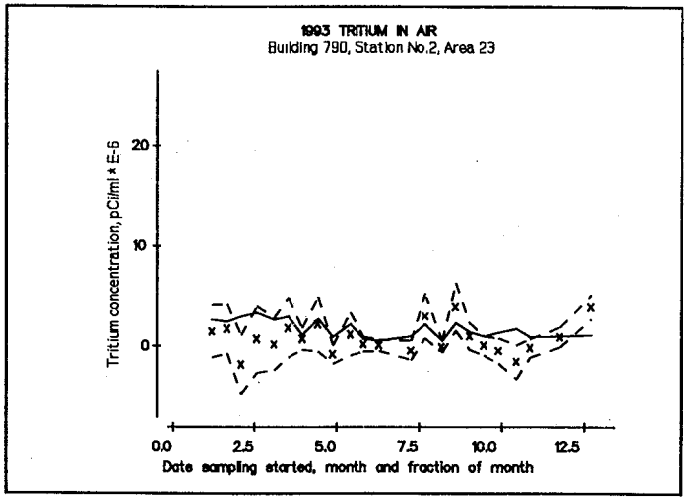


Figure B.4 Time Series Plot of Building 790 No. 2 Tritium

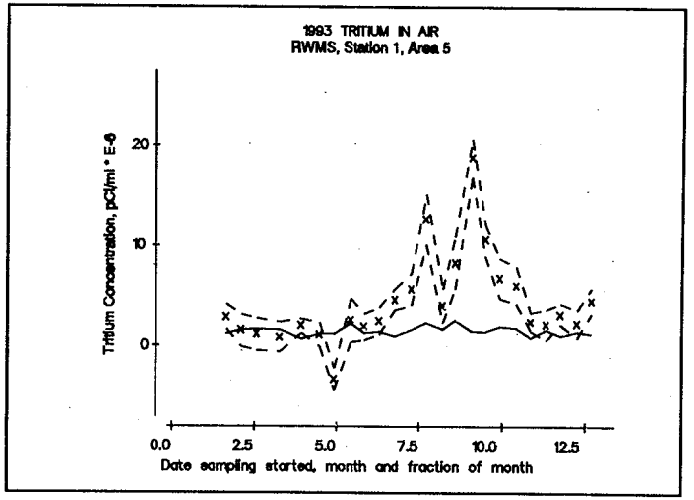


Figure B.5 Time Series Plot of RWMS No. 1 Tritium

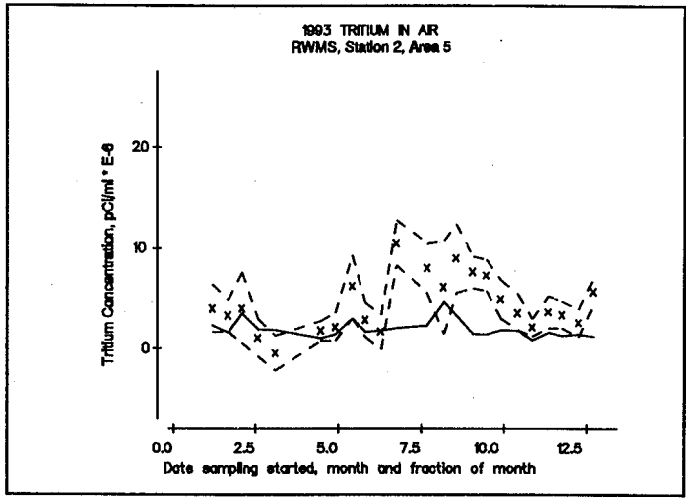


Figure B.6 Time Series Plot of RWMS No. 2 Tritium

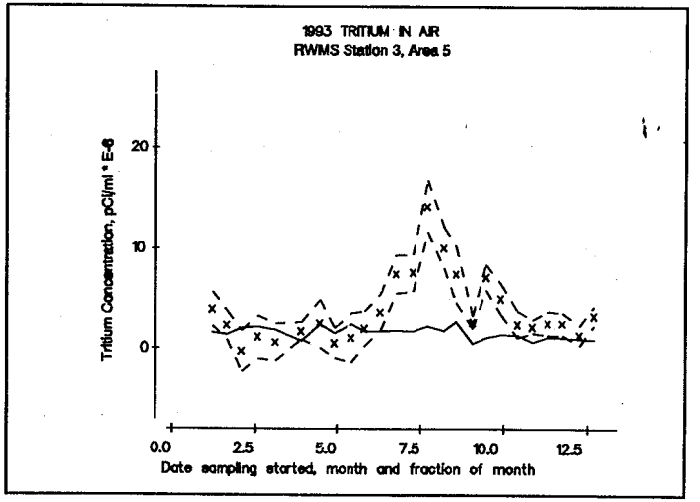


Figure B.7 Time Series Plot of RWMS No. 3 Tritium

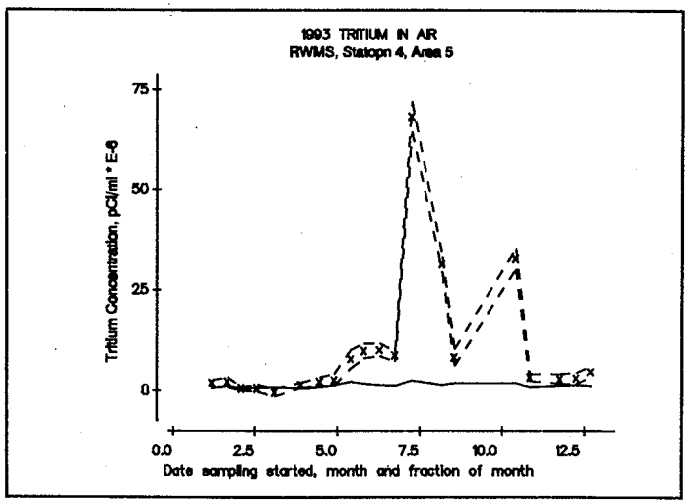


Figure B.8 Time Series Plot of RWMS No. 4 Tritium

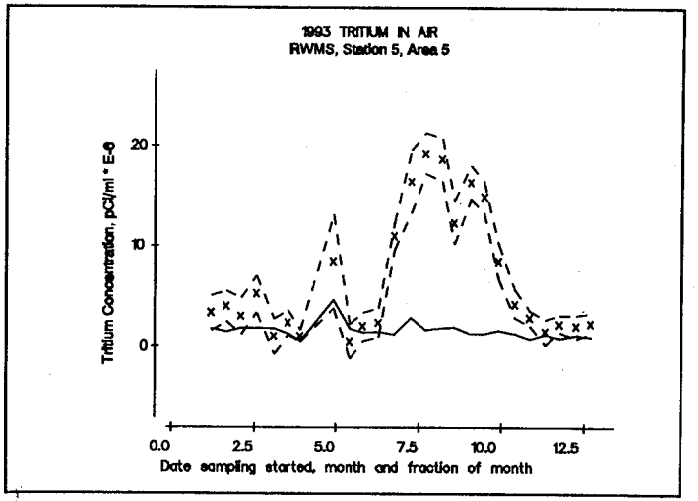


Figure B.9 Time Series Plot of RWMS No. 5 Tritium

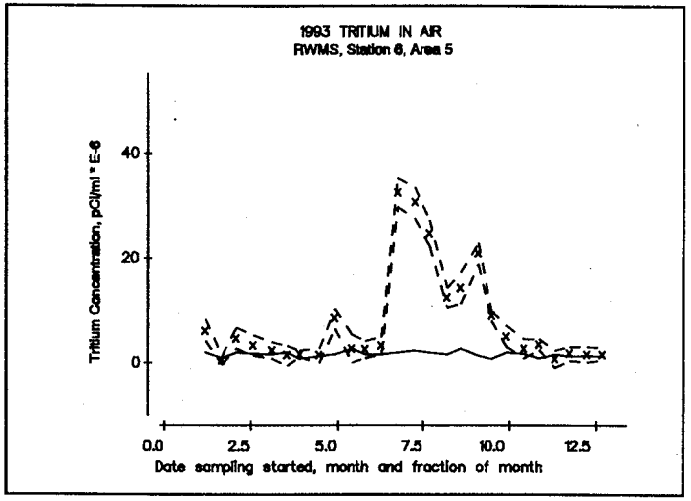


Figure B.10 Time Series Plot of RWMS No. 6 Tritium

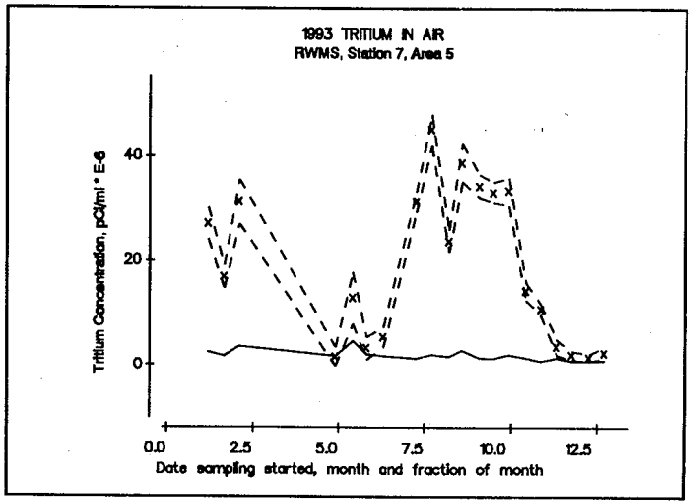


Figure B.11 Time Series Plot of RWMS No. 7 Tritium

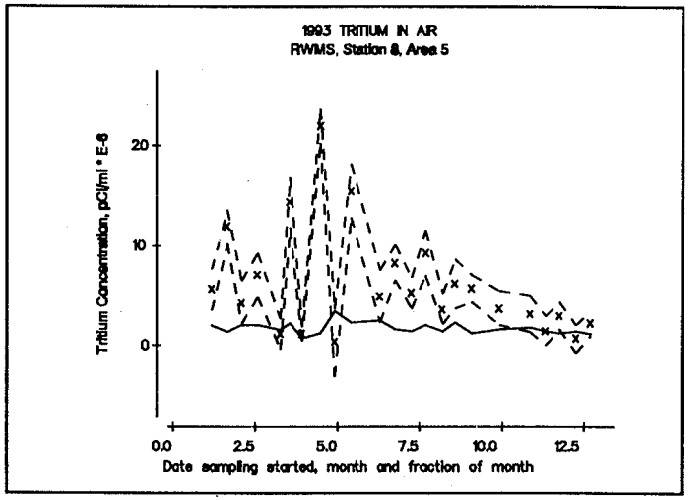


Figure B.12 Time Series Plot of RWMS No. 8 Tritium

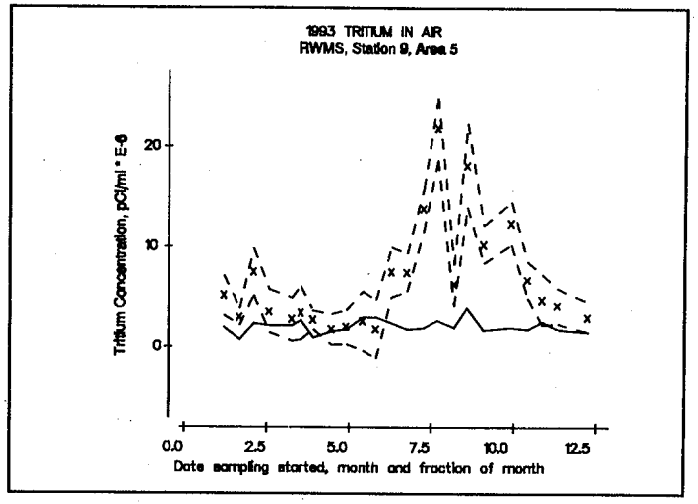


Figure B.13 Time Series Plot of RWMS No.9 Tritium

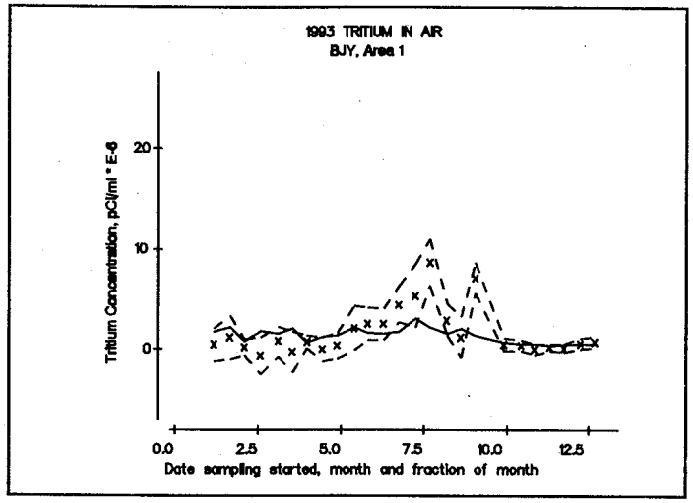


Figure B.14 Time Series Plot of BJY Tritium

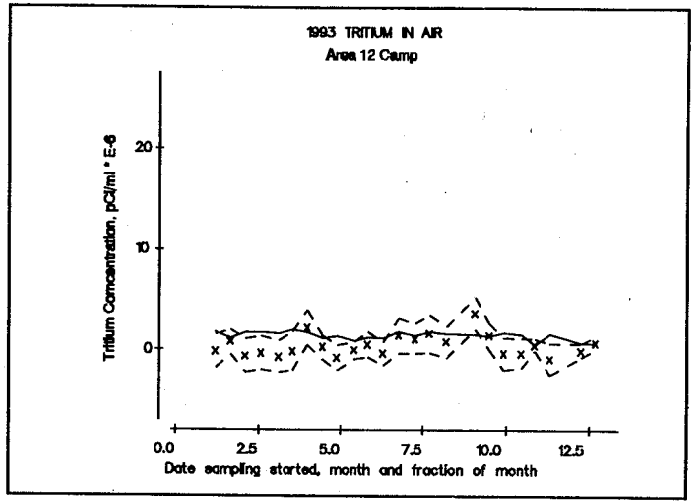


Figure B.15 Time Series Plot of Area 12 Camp Tritium

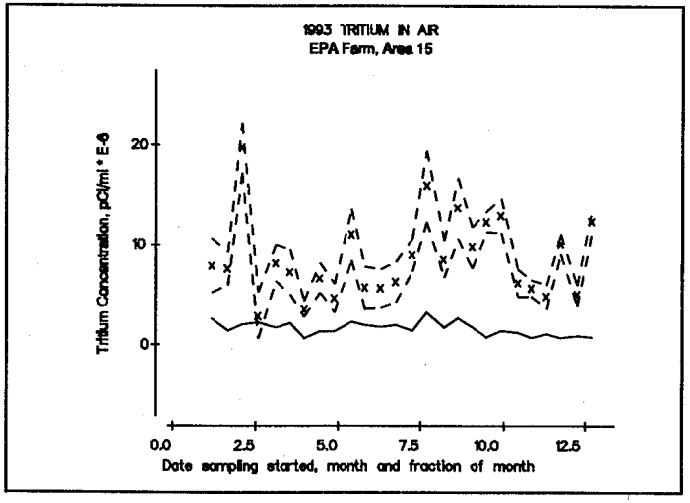


Figure B.16 Time Series Plot of EPA Farm Tritium

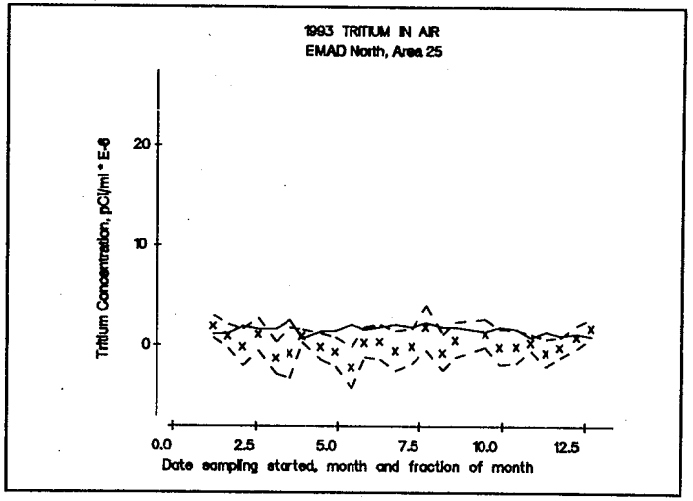


Figure B.17 Time Series Plot of E-MAD North Tritium

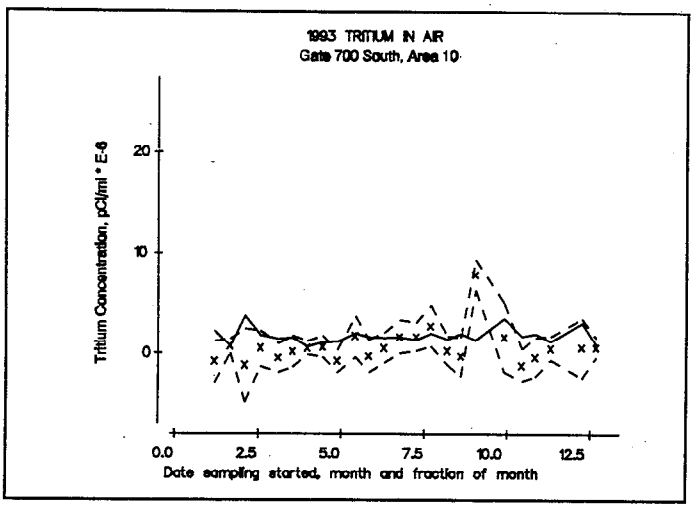


Figure B.18 Time Series Plot of Gate 700 S Tritium

Figure B.20 is a typical probability plot of the tritium in air data. A time series plot of the same data is shown in Figure B.19. Figure B.20 shows a curvature increasing towards the right, which suggests that the logarithm of the data should be used. 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 the Figure. The same procedure was repeated using the natural logarithms of the data and the resulting plot is shown in Figure B.21. This figure now shows the data approximately falling on a straight line.

The correlation coefficient test for goodness of fit indicates a fit to a normal distribution for the logarithms of the data. Thus, the conclusion of these tests is that this data set has a lognormal data distribution. The lognormal distribution was also found to be appropriate in last years annual report. In the logarithmic scale a low outlier is produced by a data value numerically close to zero, thus removing these data has insignificant effect on the group statistics. All negative values are necessarily removed when logarithms of the data are used. The distinctly high values indicated for some of the radiological waste management stations (RWMS) are not remarkable when working with logarithms of the data, and thus do not seem to be high outliers. Simple descriptive statistics can be used to summarize the data for each sampling station. Outliers were not removed for these statistics since they were defined only for the logarithms of the data as data values close to zero. 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. A comparison of Table B.2 with the corresponding table in last years annual environmental report shows that concentrations are about the same this year. An examination of Figures B.1 to B.18 indicates no reason to suspect any time trends within the tritium data except for the

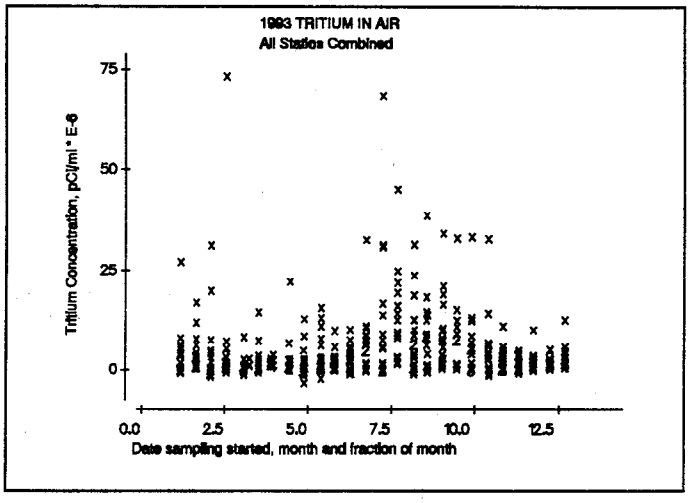


Figure B.19 Time Series Plot of All Tritium Data

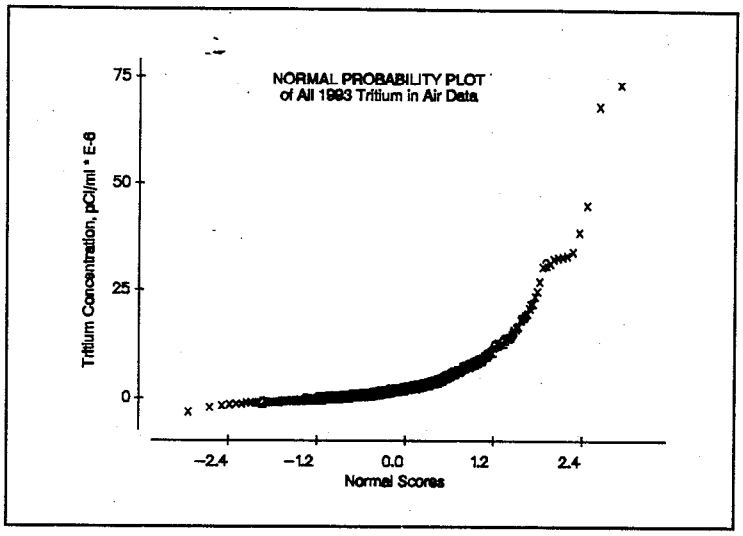


Figure B.20 Normal Probability Plot of All Tritium Results

probable effect of the waste shipment in July, thus no time series analyses were performed. The final statistical test on these data was a one-way analysis of variance to test for differences between group medians. The data were logarithmically transformed before this test because the data are lognormally distributed. Also, the negative values were removed. The output of this procedure is given in Tables B.3 and B.4. Note that the mean values and confidence intervals are of the natural logarithms of the data, thus the exponential transformation gives the data median and the confidence interval of the median. The medians in the analysis of variance table do not equal the corresponding medians in Table B.2 for two reasons. First, the medians in Table B.2 were derived from all the data while the medians reported in the analysis of variance are computed from only the data values above zero. This truncation of the data is necessary because logarithms of negative numbers are imaginary numbers and cannot be used in the analysis of variance. Second, the medians are estimated in Table B.4 from the mean of the logarithms of the data. Statistically, if the data is lognormally distributed, the anti-logarithm of the mean of the logarithms of the data is an estimator of the median of the data. 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 median data values that are statistically similar; any geographical meaning to these groupings is secondary and interpretive. Tukey's multiple comparison procedure was used to simultaneously compare all medians for equality. This process identified the groupings indicated by the vertical lines in Table B.4 located between the median and standard deviation columns. Within these groupings, two major groupings of stations can be identified by the distinct increase in median values between the Area 12 Camp and RWMS 3; the RWMS stations and the EPA Farm as one group, and the remaining stations as a second group. This corresponds to those stations listed in Table B.2 with medians greater than 2.0 in the first group, and the remaining stations in the second group. The list of "stations" has been rearranged by increasing magnitude of the means to facilitate the comparison of the grouped medians in Table B.4.

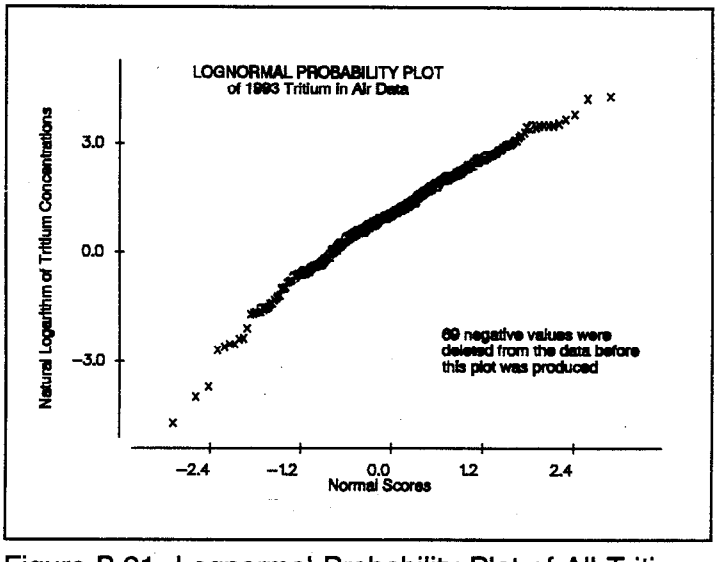


Figure B.21 Lognormal Probability Plot of All Tritium Results

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 among the station means. Since the p value is essentially 0 (1.0×10^{-34}), the statistical conclusion is that there are differences between the station means, as was discussed in the previous paragraph.

Table B.2 1993 Descriptive Statistics by Sampling Station

		10^{-6} pCi/mL				
Station	Number	Mean	Standard Deviation	Median	1st Quartile	3rd Quartile
Building 650	24	0.36	1.6	0.01	-0.76	0.65
East Boundary	26	0.13	0.73	0.20	-0.33	0.68
Building 790, No. 2	23	0.78	1.5	0.70	-0.19	1.8
RWMS No. 1	24	4.3	4.6	2.7	1.9	5.9
RWMS No. 2	23	4.4	2.8	3.6	2.1	6.2
RWMS No. 3	25	3.8	3.4	2.5	1.6	6.1
RWMS No. 4	20	10.	16.	3.0	1.8	9.4
RWMS No. 5	25	6.6	6.2	3.3	2.1	12.
RWMS No. 6	26	7.7	9.3	3.3	1.7	10.
RWMS No. 7	20	19.	15.	16.	3.3	33.
RWMS No. 8	23	6.2	5.4	4.9	2.3	8.3
RWMS No. 9	23	6.6	5.4	4.7	2.7	7.5
BJY	25	1.7	2.4	0.71	0.18	2.5
Area 12 Camp	24	0.42	1.1	0.11	-0.36	1.0
EPA Farm	26	8.6	4.0	7.8	5.6	11.
E-MAD North	25	0.17	1.0	-0.06	-0.60	0.89
Gate 700 South	24	0.72	1.8	0.55	-0.32	1.4
All	406	4.6	7.6	2.0	0.48	5.6

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

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Area	16	300.89	18.81	17.36	0.000
Error	320	346.63	1.08		
Total	336	647.53			

Table B.4 Comparison of Station Means for Significant Differences

Station	N	Ln of Median	Standard Deviation	Individual 95 Percent Confidence Intervals for Ln Median Based on Pooled Standard Deviation
Building 650	13	-14.902	2.006	(---*---)
E Boundary	15	-14.592	0.860	(---*--)
E-MAD North	12	-14.012	0.677	(---*---)
Building 790	16	-13.967	1.239	(---*--)
BJY	22	-13.951	1.458	(--*--)
Gate 700 South	16	-13.938	0.921	(--*---)
Area 12 Camp	12	-13.832	0.732	(---*---)
RWMS No. 3	24	-12.751	0.832	(--*--)
RWMS No. 1	23	-12.603	0.813	(--*--)
RWMS No. 2	22	-12.460	0.617	(--*--)
RWMS No. 8	23	-12.408	1.020	(--*--)
RWMS No. 6	26	-12.396	1.139	(-*--)
RWMS No. 5	25	-12.396	1.056	(-*--)
RWMS No. 4	19	-12.311	1.329	(--*--)
RWMS No. 9	23	-12.207	0.740	(--*-)
EPA Farm	26	-11.765	0.461	(--*-)
RWMS No. 7	20	-11.405	1.246	(--*--)

Pooled Standard Deviation = 1.046

-15.0 -13.5 -12.0 -10.5

HISTORICAL TRENDS

During 1993 annual averages for tritium in air were compiled for all years that these data have been reported in the annual reports. Annual averages are available for the seventeen tritium in air stations starting with 1982. Table B.5 gives the data, and Figures B.22 through B.24 are plots of some of the data in this table. The laboratories, which were left out of the combined annual averages, are Building 650 and Building 790. The high data values for these buildings from 1982 through 1987 are not indicative of environmental conditions, but rather reflect analytical activities of the laboratories. In Building 650, during those earlier years, many distillations of tritium and plutonium in water were performed. The 790 Building was used as a soils laboratory. After 1987 the number of waste shipments into the Radiological Waste Management Site (RWMS) significantly decreased, and this is evident in the magnitude of the tritium concentrations measured at these locations. The somewhat high average for the RWMS in 1987 is due to the obviously high annual average for RWMS No.4 in that year. No reason is known for this reading and it is possibly in error. The two negative values reported in 1988 are probably in error and these two values were not used to compute the two annual averages reported in Table B.5.

Table B.5 Historical Annual Averages Tritium in Air/Station Annual Averages (10^{-6} pCi/mL)

Station	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
RWMS No. 1	400.	74.	37.	78.	46.	25.	12.	9.4	4.8	6.1	4.2	4.3
RWMS No. 2	58.	46.	12.	10.	19.	24.	12.	7.3	5.7	4.8	6.7	4.4
RWMS No. 3	21.	23.	7.7	3.6	8.6	25.	16.	11.	5.8	4.0	4.2	3.8
RWMS No. 4	85.	36.	17.	4.5	11.	220.	38.	9.5	8.5	5.1	6.5	10.
RWMS No. 5	130.	170.	26.	15.	30.	25.	6.7	8.8	7.9	5.0	4.0	6.8
RWMS No. 6	160.	35.	7.9	3.9	7.2	13.	-180.	5.5	7.5	5.4	4.0	7.7
RWMS No. 7	30.	67.	6.5	4.7	11.	13.	8.7	5.1	12.	14.	12.	21.
RWMS No. 8	24.	73.	4.1	4.9	5.3	11.	9.4	10.	9.1	8.9	5.0	6.2
RWMS No. 9	24.	54.	29.	8.9	12.	27.	22.	12.	11.	14.	12.	6.6
Average of RWMS	104.	64.	16.	15.	17.	43.	16.	8.7	8.1	7.5	6.5	7.9
BJY	150.	21.	25.	34.	37.	17.	-120.	15.	2.4	1.8	1.4	1.7
Gate 700 South	-	420.	5.8	7.1	9.8	45.	42.	3.2	1.8	1.5	0.63	0.72
Area 12 Camp	420.	28.	19.	260.	21.	21.	11.	5.9	2.0	1.3	0.54	0.42
EPA Farm	140.	96.	220.	29.	32.	30.	35.	26.	10.	6.3	10.	8.6
H&S Building	6000.	2700.	560.	8000.	390.	66.	7.5	5.7	15.	0.90	0.53	0.34
East Boundary	-	17.	5.3	3.0	2.9	4.6	2.6	2.3	7.2	0.78	0.36	0.13
Building 790 No. 2	6300.	100.	120.	27.	3.9	6.6	0.8	2.4	2.5	0.54	0.76	0.78
E-MAD North	150.	29.	18.	2.9	3.8	6.7	3.8	3.0	5.5	4.5	7.6	0.17
All Stations, Except Laboratories, Combined (Includes RWMS)	140.	79.	29.	31.	17.	34.	17.	8.9	6.8	5.6	5.3	5.5

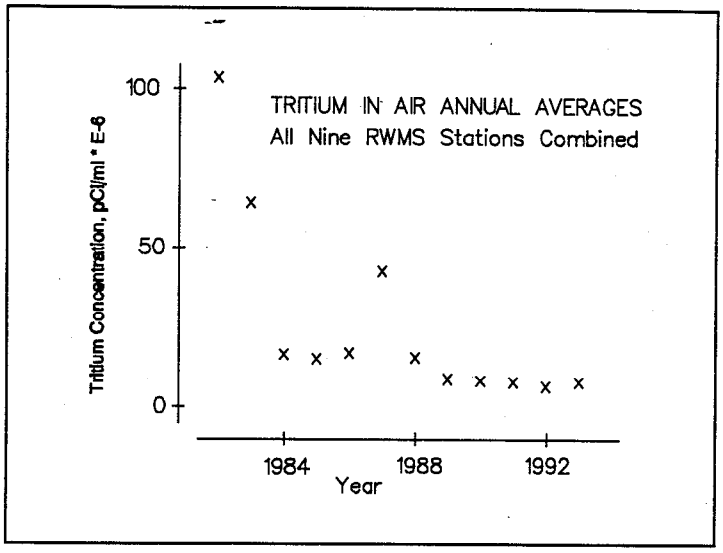


Figure B.22 RWMS Annual Averages

Figure B.22 is a plot of the RWMS annual averages. It shows an obvious decrease in concentrations over the years with a rapid decline in the earlier years of the plot and a gradual decline in more recent rears. The shape of this curve is typical of the exponential decay curve. The break in the pattern of exponential decreases is obvious for 1987, however it is no longer possible to find a good cause for this break in the pattern. The rapid decrease in concentrations in the early 1980's is probably due to a similar decrease over the entire Nevada Test Site due to a decrease in testing and better confinement of the underground tests that were performed.

Figure B.23 shows the annual tritium in air concentrations averaged over the entire Nevada Test Site for the past twelve years, excluding the data from the laboratory buildings for the reasons discussed above, and including the RWMS stations. The discussion of the pattern above for Figure B.22 also describes the pattern in Figure B.23. Thus, the pattern seen at the RWMS is not distinct from the pattern seen for the entire NTS. However, the levels at the RWMS have generally been higher than the average of the other stations since 1989.

Figure B.24 shows the historical trends of annual averages for a typical background station, the East Boundary station in Area 23. This station is located at the northeast corner of the Mercury Base Camp. It is somewhat removed from the analytical laboratories and is separated from the area of active underground testing, Yucca Flat, by two low mountain ranges and Frenchmans Flat. The mountain ranges are the Massachusetts Mountains between Yucca Flat and Frenchman Flat, and the Red Mountain - Mercury Ridge complex between Mercury Valley and Frenchman Flat. Figure B.24 shows the same general pattern as Figures B.22 and B.23, but the range of values on the ordinate is only about thirteen percent of the range of Figures B.22 and B.23. This similarity of patterns also suggests that the decrease in tritium concentrations in the early 1980's is due to a general decline in values for the entire region. The slightly but obviously high value for 1990 in Figure B.24 is probably due to statistical fluctuations in the data, which should be expected when the actual concentrations are below 10 x 10^{-6} pCi/mL. On page B-1 it was noted that the average detection limit for these data is 2 x 10^{-6} with a standard deviation of about 3 x 10^{-6}, thus most of the data in Figure B.24

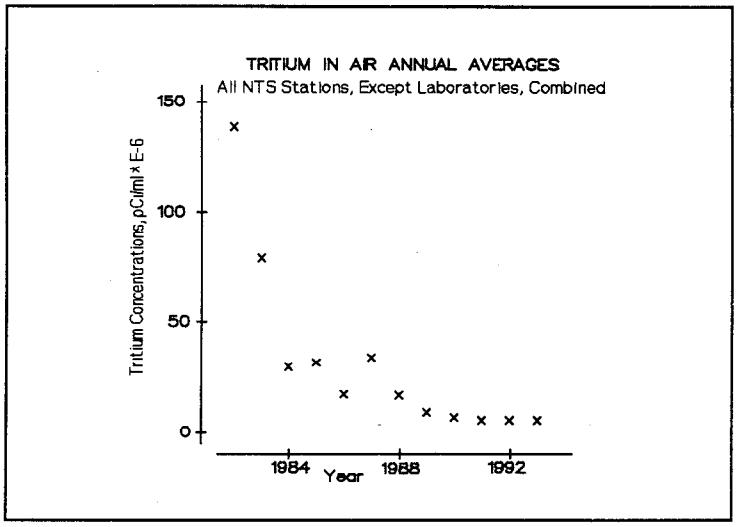


Figure B.23 NTS Annual Averages, Labs Excluded

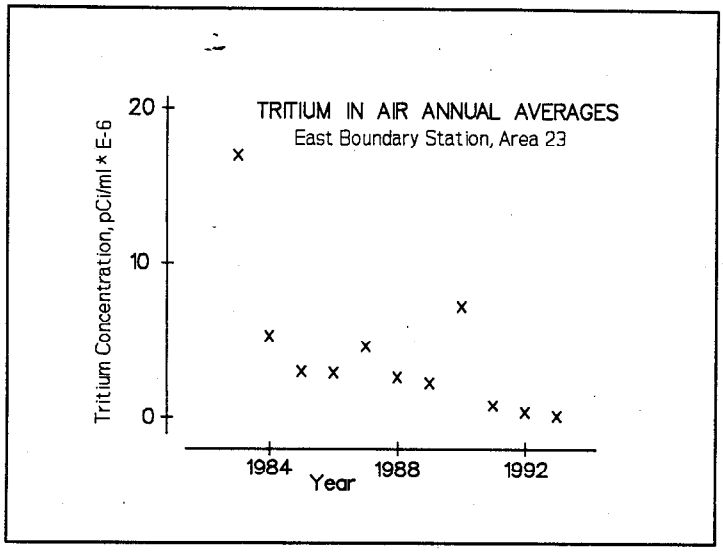


Figure B.24 East Boundary Annual Averages

are within the 95 percent confidence interval (two standard deviations) of the detection limit and in this range of values statistical variability should be the major contributor to any apparent patterns.

Several general conclusions can be drawn from the historical annual average tritium in air data for the seventeen stations of the Nevada Test Site. All stations show the same general trend, thus that trend should be representative of the entire site. In the early 1980's concentrations decreased rapidly, this decrease corresponds to a time of decreasing test activity. Current concentrations are typically very low, and are within the statistical confidence interval of the detection limit.

APPENDIX C
ONSITE ^{238}Pu, $^{239+240}Pu$, ^{90}Sr, GROSS ALPHA AND BETA, GAMMA-EMITTING RADIONUCLIDES, ^{226}Ra, ^{228}Ra, AND TRITIUM IN WATER

Lawrence E. Barker

For purposes of statistical analysis, sampling stations are divided into the following classes, by source of water:

Class	Sampling Stations
Potable Water	Area 1 Building 101; Area 2 Rest Room; Cafeterias in Areas 6, 12, and 23; Area 6 Bottled Water & Building 6-900; Area 25 Building 4221
Natural Springs	Area 5 Cane Spring; Area 7 Reitman Seep; Area 12 Captain Jack, Gold Meadows, & White Rock Springs; Area 16 Tippipah Spring; Area 27 Topopah Spring
Sewage Lagoons	Area 6 Sewage; Area 12 Sewage; Area 23 Sewage
Supply Wells	Area 5 Well 5B, Well 5C, & Well UE-5c; Area 6 Well No. 4, Well C, & Well C1; Area 16 Well UE-16d; Area 18 Well 8; Area 20 Well U-20; Area 23 Army Well No. 1; Area 25 Well J-12 & Well J-13
Open Reservoirs	Area 2 Mud Plant & Well 2 Reservoir; Area 3 Mud Plant & Well A Reservoir; Area 5 Well UE-5C Reservoir & Well 5B Reservoir; Area 6 Well 3 Reservoir & Well C1 Reservoir; Area 18 Camp 17 Reservoir and Well 8 Reservoir; Area 19 Well UE-19c Reservoir; Area 20 Well 20 Reservoir; Area 23 Swimming Pool; Area 25 Well J-11 and Well J-12 Reservoirs
Containment Ponds	Yucca Pond, E, N, and T Tunnels effluents and ponds

Additionally, concentrations of some contaminants were measured in samples from Area 6, CP-72 Sewage Pond, DAF Sewage, LANL Sewage Pond, and Yucca Sewage Pond, and Area

25, Central Sewage Pond. These locations were sampled only once each late in 1993. Hence, these concentrations were reported in the attachments, but not used in the statistical analyses.

Sampling locations, sampling dates, measured concentrations, and analytic standard deviations for ^{90}Sr, gross alpha, ^{238}Pu, $^{239+240}Pu$, gross beta, gamma emitting radionuclides, tritium, ^{226}Ra, and ^{228}Ra in water appear in Attachments C.1 through C.9 following this text. Statistical analyses of these data are presented below.

STRONTIUM-90

^{90}Sr concentrations in water were measured at 45 sampling stations placed on the NTS, as described in Volume 1, Chapter 5. Descriptive statistics, in units of μCi/mL, for the entire network are:

Number of data values =	72
Arithmetic mean =	2.6×10^{-10}
Median =	7.5×10^{-11}
Standard deviation =	9.0×10^{-10}
Minimum value =	-2.0×10^{-10}
Maximum value =	6.0×10^{-09}
Median MDC =	1.4×10^{-10}

Of the entire network, approximately 74 percent of the observed concentrations are positive, approximately 1 percent are zero, and the remaining 25 percent are negative. This stands in contrast to 1992 results, in which 5 percent of the network results were negative. This change is attributable to a change in sampling. In 1992, all stations were sampled annually. In 1993, supply wells, which have very low concentration of ^{90}Sr and therefore are much more likely to yield non-positive results, were sampled quarterly. Of the positive concentrations, the geometric mean was 1.1×10^{-10} μCi/mL (4.1×10^{-3} Bq/L), with a geometric standard deviation of 4.8. Approximately 36 percent of the observed concentrations were above the individual limits of detection.

An exploratory data analysis, not reported in detail here, suggests that certain samples are outliers, with greater concentrations than the remainder of the data. These samples are from Area 12, E Tunnel Effluent, and Area 12, E Tunnel Pond 1, both collected on July 20, and the sample collected at Area 12, Gold Meadows, on July 21. The outliers associated with containment ponds can be attributed to activity associated with testing performed in previous years. The sample from Gold Meadows Spring was collected from the mud at the bottom of an almost dry spring, conditions under which elevated concentrations are not surprising. If these three samples are removed, descriptive statistics in units of μCi/mL, become:

Number of data values =	69
Arithmetic mean =	9.9×10^{-11}
Median =	7.3×10^{-11}
Standard deviation =	1.7×10^{-10}
Minimum value =	-2.0×10^{-10}
Maximum value =	7.7×10^{-10}
Median MDC =	1.4×10^{-10}

With these three observations removed, a normal distribution fits the data reasonably well. This is tested by plotting concentrations versus normal scores, with an approximately straight line indicating normality. A plot of ^{90}Sr concentrations from supply wells, in units of 10^{-10} μCi/mL, versus normal scores appears in Figure C.1. As supply wells were sampled quarterly and all other stations were sampled annually, comparisons over time will be limited to supply wells. Therefore, no two-way ANOVA was performed. Rather, two one-way ANOVAs are employed, one comparing the types of sampling stations and the other comparing months of sampling among supply wells.

Concentrations are compared among sources of water in Table C.1. Although the differences were not statistically significant, the smallest average concentrations were observed in supply wells and potable water. Similarly, the largest concentrations, after concentrations from containment ponds were removed from the data set, occurred in samples from natural springs. This is not surprising. During the summer months, when the samples were collected, many natural springs on the NTS either dry up or become very shallow and muddy. Water samples so collected often contain sediment, which is known to have a greater concentration of ^{90}Sr.

Restricting attention to supply wells, which were sampled quarterly, concentrations were compared among quarters, or, equivalently, by month of sampling. The results of the ANOVA appears in Table C.2. Differences among results by months are statistically significantly different at a level of just over 0.05, but not at 0.05 itself. The difference is primarily attributable to lower concentrations in samples collected in November. In previous years, samples were only analyzed annually for ^{90}Sr so it isn't possible to decide if a difference among months is unusual.

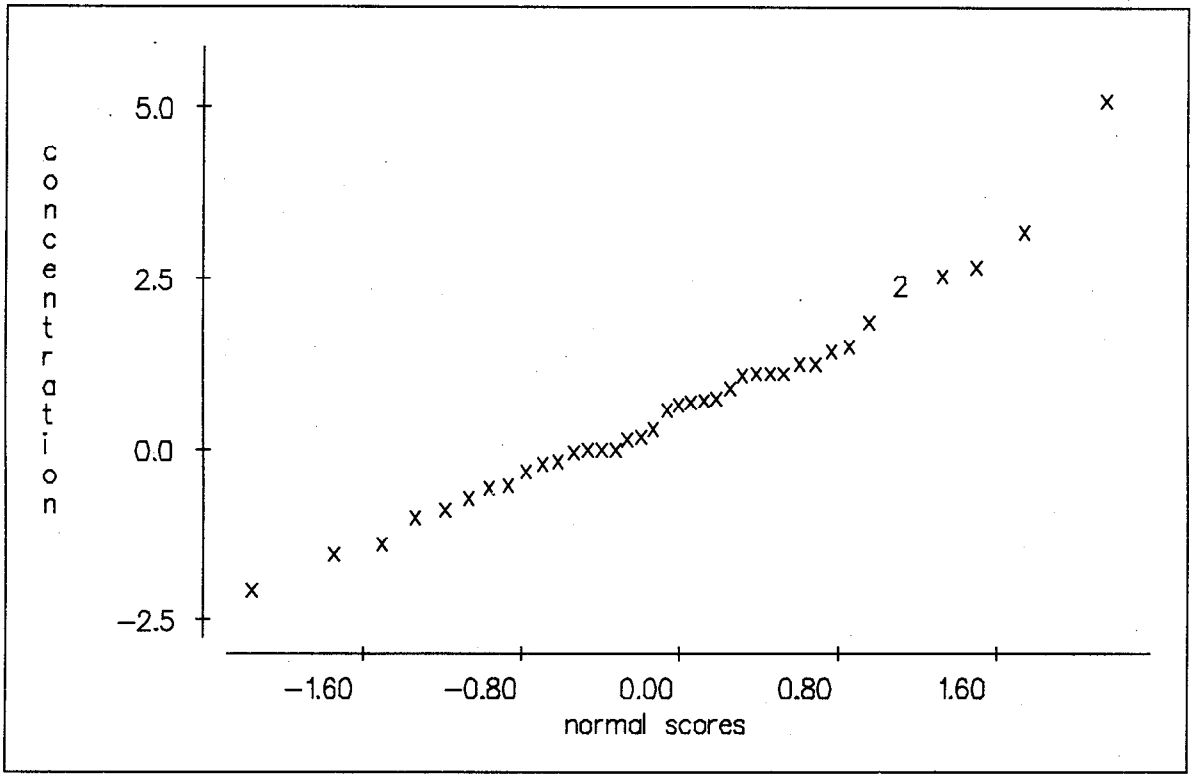


Figure C.1 Plot of ^{90}Sr Concentrations from Supply Wells in Units of 10^{-10} μCi/mL versus Normal Scores

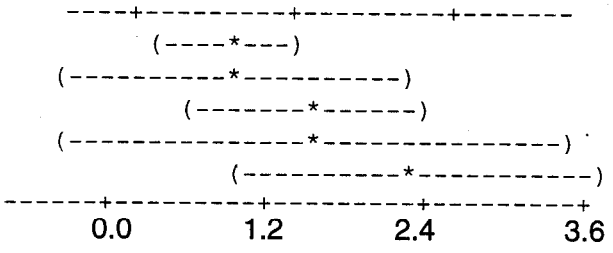
Table C.1 One-Way Analysis of Variance on ^{90}Sr Concentrations, in Units of 10^{-10} µCi/mL, Comparing Concentrations Among Sources of Water

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Source of Water	4	17.87	4.47	1.58	0.191
Error	64	181.23	2.83		
Total	68	199.11			

Source	Number	Mean	Standard Deviation
1	39	0.686	1.408
2	7	0.717	1.552
3	14	1.291	1.875
4	3	1.335	0.648
5	6	2.411	2.998

Pooled Standard Deviation = 1.683

Individual 95 Percent Confidence Intervals (CI) for Mean Based on Pooled Standard Deviation



Key:
1 Supply Wells
2 Potable Water
3 Open Reservoirs
4 Sewage Lagoons
5 Natural Springs

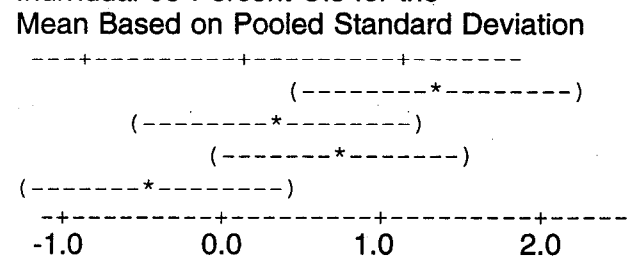
Table C.2 One-Way Analysis of Variance on ^{90}Sr Concentrations in Supply Wells, in Units of 10^{-10} µCi/mL, Comparing Concentrations Among Months of Collection

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Month of Collection	3	14.75	4.86	2.80	0.054
Error	35	60.73	1.74		
Total	38	75.31			

Month	Number	Mean	Standard Deviation
February	9	1.477	0.901
April	9	0.477	1.194
July	11	0.996	1.620
November	10	-0.180	1.357

Pooled Standard Deviation = 1.317

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



Measurement error for ^{90}Sr concentrations is not negligible. To quantify this, the coefficient of variation (analytic standard deviation divided by observed concentration) was calculated for each positive observation. This appears as a histogram in Figure C.2. The median of the empirical coefficients of variation was 0.56. This indicates that, for slightly more than half the observations, the observed concentration was more than two analytic standard deviations from zero. Longer count times would result in smaller coefficients of variation, and hence in fewer observations being below the limit of detection.

Analytic standard deviation only accounts for counting variability. To account for other sources of variability, some samples were split and each sample was counted. Original data and duplicates appear in Attachment C.10. The number of duplicate samples analyzed for ^{90}Sr is not large enough to allow any particularly meaningful statements to be made.

GROSS ALPHA

Gross alpha concentrations in water were measured at 18 sampling stations on the NTS, all of which are either potable water supply wells or consumption end points. Descriptive statistics, in units of μCi/mL, for the entire network are:

Number of data values =	65
Arithmetic mean =	5.4×10^{-09}
Median =	5.2×10^{-09}
Standard deviation =	4.5×10^{-09}
Minimum value =	-1.2×10^{-10}
Maximum value =	2.0×10^{-08}
Median MDC =	8.6×10^{-10}

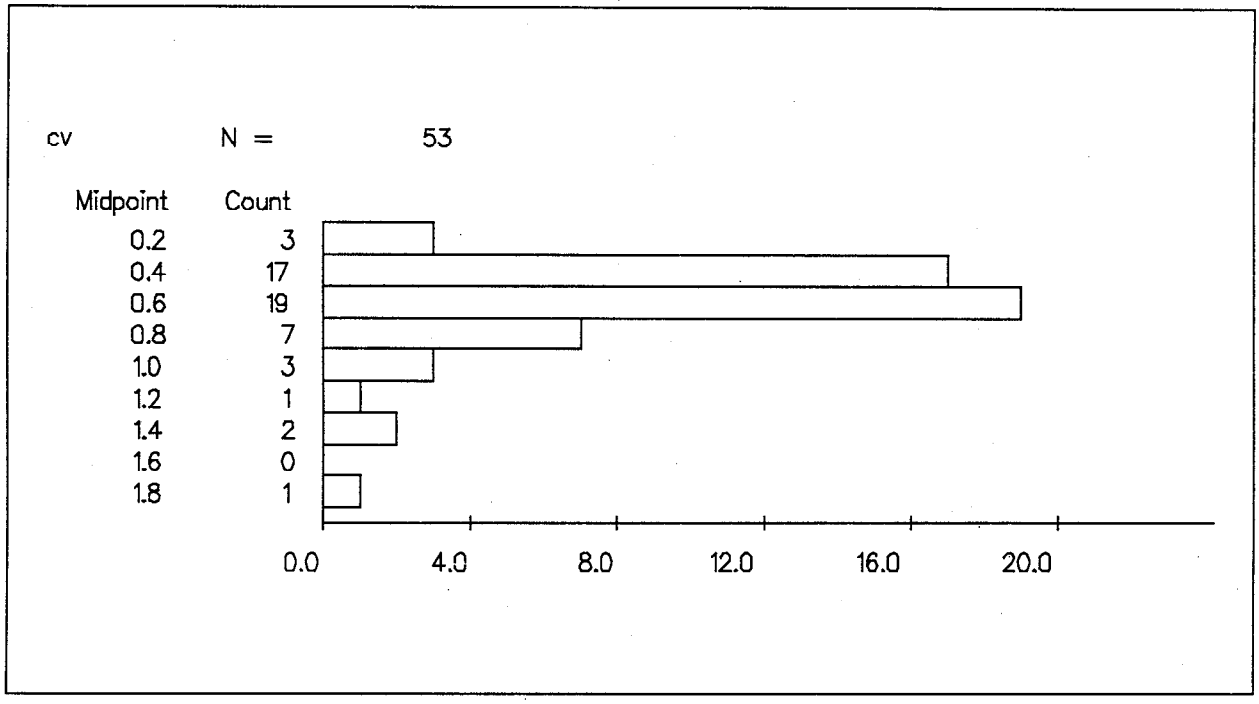


Figure C.2 Histogram of Empirical Coefficient of Variation (Unitless) of Positive Concentrations of ^{90}Sr

Of the entire network, approximately 97 percent of the observed concentrations are positive, and the rest are negative. Of the positive concentrations, the geometric mean was 3.4×10^{-09} µCi/mL (1.2×10^{-01} Bq/L), with a geometric standard deviation of 3.4. Approximately 86 percent of the observations exceed their individual limit of detection.

Neither the normal nor lognormal distribution fit the data, either combined or broken down into smaller subsets. This is illustrated in Figures C.3 and C.4, where concentrations are plotted versus normal scores. In Figure C.3, natural logarithms of gross alpha concentrations, in units of µCi/mL, in water from supply wells, are plotted against normal scores. In Figure C.4, gross alpha concentrations, in units of 10^{-09} µCi/mL, in water from supply wells, are plotted against normal scores. As a straight line indicates normality, we conclude neither distribution fits the data well. Hence, rather than a classical ANOVA, the Kruskal-Wallis test, which is valid under a wide variety of distributional assumptions at the price of lower power (less ability to detect differences when they exist) than classical ANOVA, is employed. In the Kruskal-Wallis test, a statistic is calculated for each level of the independent variable which, if concentrations had the same median, would have a standard normal distribution. This appears in the tables under the heading Z-value. These Z-values for each row of a table indicate, on the scale of a standardized normal variable, how much the ranks for that row deviate from the overall mean rank. If all categories have the same median, the Kruskal-Wallis statistic has approximately, a chi-square distribution with degrees of freedom one less than the number of categories.

In Table C.3, concentrations from supply wells are compared with those from potable water. No difference between the water sources, significant at the 0.10 level, and therefore none at the 0.05 level, is found. As expected, potable water, which should contain very little gross alpha, has a smaller median concentration.

In Table C.4, concentrations are compared by month of sampling. No statistically significant differences are found. This is supported by Figure C.5, in which all gross alpha concentrations, in units of 10^{-09} µCi/mL, are plotted against month of sampling.

To quantify measurement error for gross alpha in water, the empirical coefficient of variation was calculated for each positive concentration. The empirical coefficients of variation are displayed as a histogram in Figure C.6. To enhance readability of the histogram, seven empirical coefficients of variation greater than 0.50 were omitted. The remaining empirical coefficients of variation show a distinct bimodality. Although there are exceptions, generally the smaller mode is associated with samples from potable water and the greater mode is associated with samples from supply wells.

Analytic standard deviation only accounts for counting variability. To account for other sources of variability, some samples were split and each sample was counted. Original data and duplicates appear in Attachment C.11. Variability between duplicate and original is described via a five-point summary (minimum, twenty-fifth percentile, median, seventy-fifth percentile, and maximum) of the absolute value of the differences between duplicate and original. Descriptive statistics, in units of µCi/mL, follow:

Number of data values =	26
Minimum value =	9.0×10^{-11}
Twenty-fifth percentile =	1.9×10^{-10}
Median =	7.4×10^{-10}
Seventy-fifth percentile =	2.2×10^{-09}
Maximum value =	1.1×10^{-08}

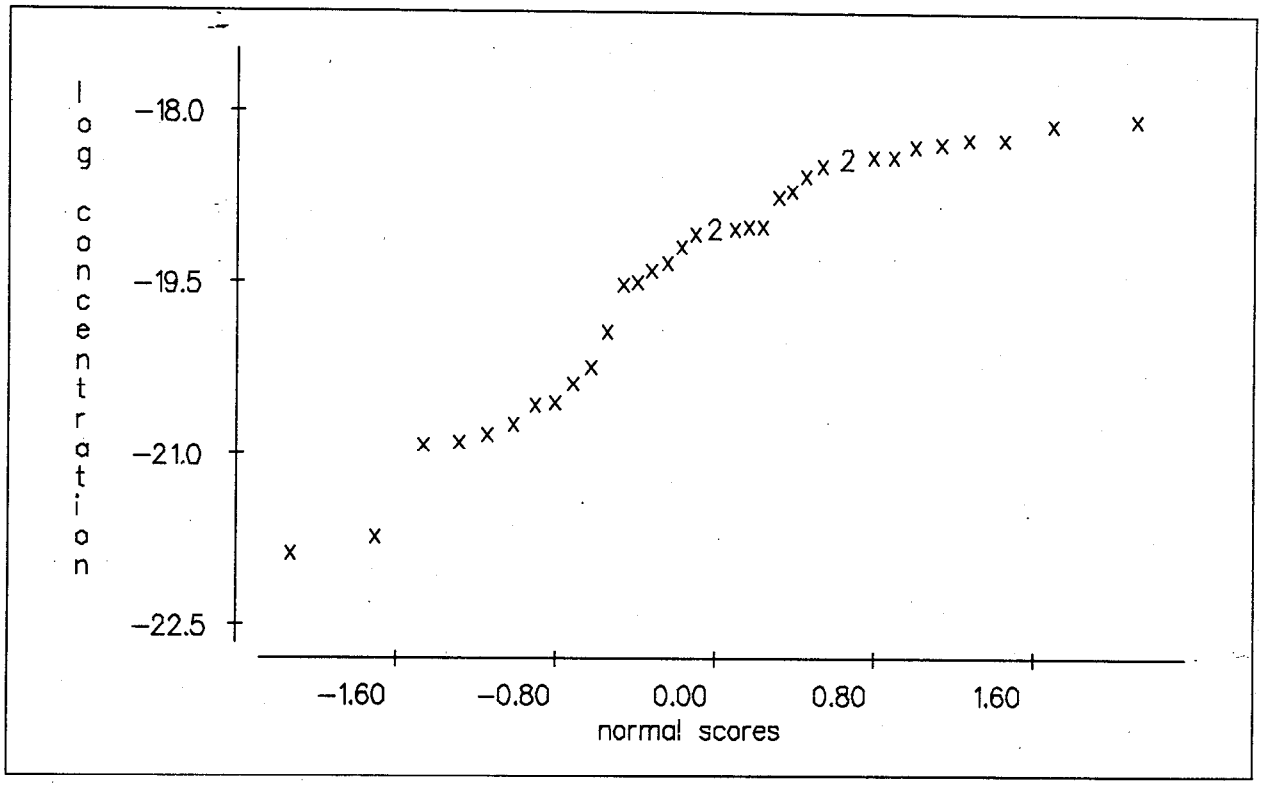


Figure C.3 Plot of Natural Logarithms of Concentrations of Gross Alpha in Supply Wells, in Units of μCi/mL, versus Normal Scores (# = Number of Identical Data Points)

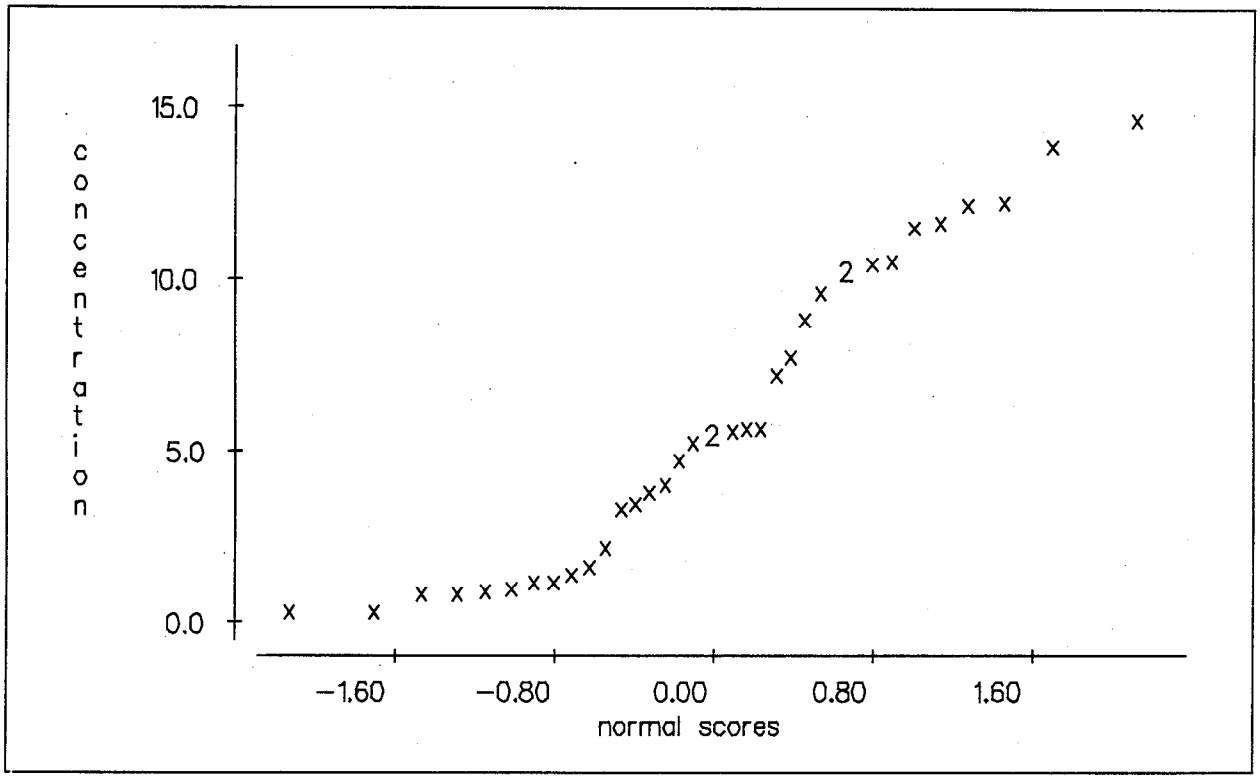


Figure C.4 Plot of Gross Alpha Concentrations in Supply Wells, in Units of 10^{-09} μCi/mL, versus Normal Scores (# = Number of Identical Data Points)

Table C.3 Results of Kruskal-Wallis Test for Equality of Median Gross Alpha Concentrations, Units of μCi/mL

Source	Number	Median	Average Rank	Z-Value
Potable water	29	4.6×10^{-09}	28.9	-1.56
Supply wells	36	5.5×10^{-09}	36.3	1.56
Overall	65		33.0	

Kruskal-Wallis statistic = 2.43 Degrees of Freedom = 1 p-Value = 0.120

Table C.4 Results of Kruskal-Wallis Test for Equality of Median Gross Alpha Concentrations, Units of μCi/mL, by Month of Sampling

Month	Number	Median	Average Rank	Z-Value
January	11	5.6×10^{-09}	38.0	0.97
March	7	4.6×10^{-09}	28.9	-0.61
April	9	5.5×10^{-09}	36.9	0.67
July	15	3.5×10^{-09}	29.5	-0.81
October	7	4.0×10^{-09}	25.0	-1.19
November	10	6.5×10^{-09}	37.9	0.89
December	6	3.4×10^{-09}	32.5	-0.07
Overall	65		33.0	

Kruskal-Wallis Statistic = 3.94 Degrees of Freedom = 6 p-Value = 0.684

To compare this to the data from locations chosen for duplicate sampling, the mean and median of the original results from duplicate locations were calculated. Of these, in units of μCi/mL, the mean and median were, respectively, 4.4×10^{-09} and 3.5×10^{-09}. Hence, it can be seen that the median absolute difference between duplicate and original is much smaller than the median concentration of the original samples.

PLUTONIUM-238

^{238}Pu concentrations in water were measured at 54 sampling stations on the NTS, as described in Volume 1, Chapter 5. Descriptive statistics, in units of μCi/mL, for the entire network are:

Number of data values = 175
Arithmetic mean = 2.5×10^{-11}
Median = 0.0
Standard deviation = 1.3×10^{-10}
Minimum value = -4.6×10^{-11}
Maximum value = 9.6×10^{-10}
Median MDC = 1.1×10^{-11}

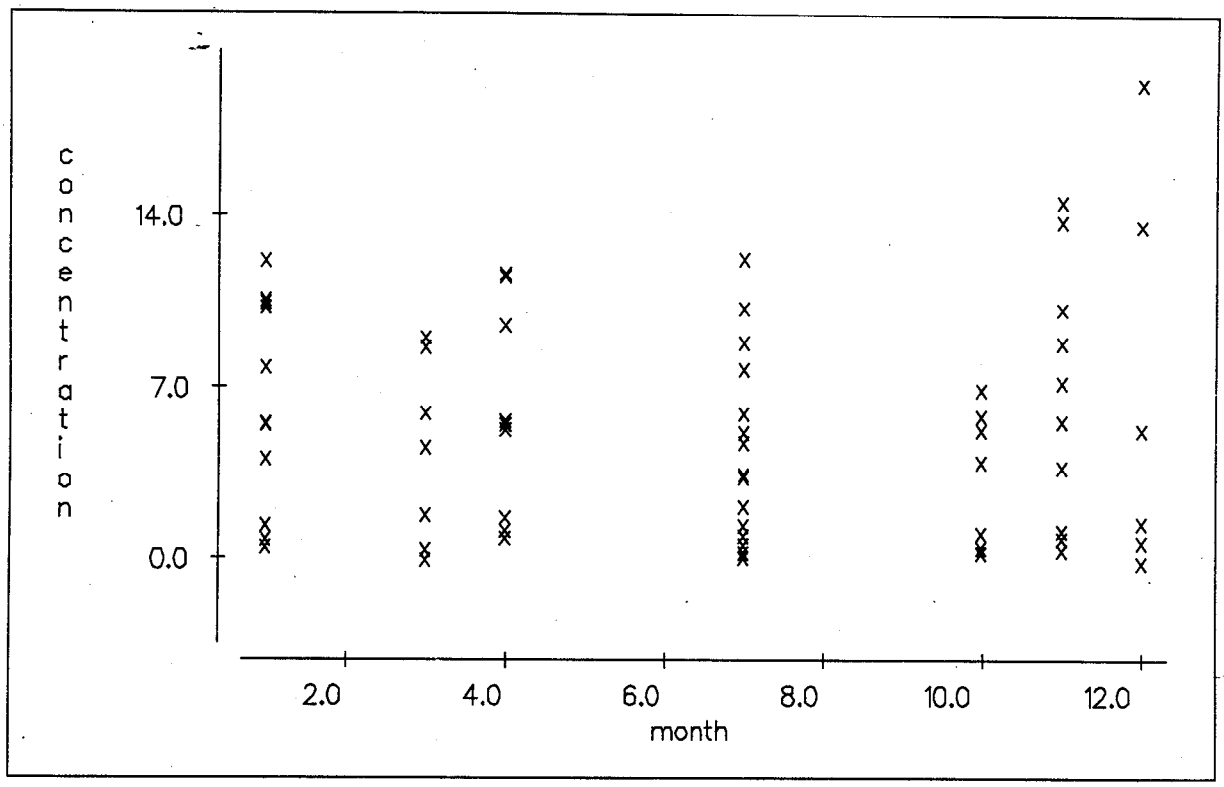


Figure C.5 Plot of Gross Alpha Concentration, in Units of 10^{-09} µCi/mL, versus Month of Sampling

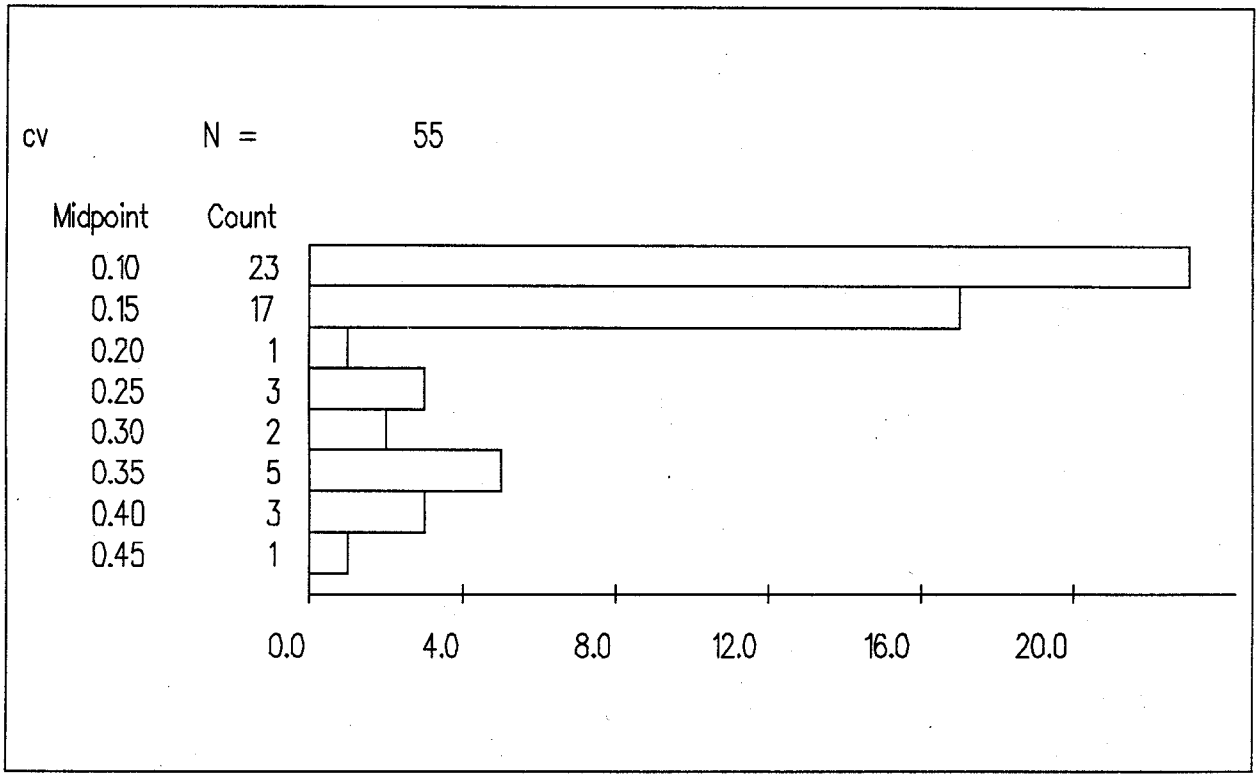


Figure C.6 Histogram of Empirical Coefficients of Variation (Unitless) for Positive Gross Alpha Concentrations

Of the entire network, approximately 36 percent of the observed concentrations are positive, approximately 53 percent are zero, and the remaining 11 percent are negative. Approximately 9 percent of the concentrations exceed the individual limit of detection.

An examination of the data revealed that concentrations in E Tunnel Effluent and E Tunnel Pond 1 were much greater than concentrations from other sampling stations. The following descriptive statistics, in units of μCi/mL, result from separating E Tunnel from the other stations:

	E Tunnel Effluent and E Tunnel Pond 1	Other Sampling Stations
Number of data values	= 7	168
Arithmetic mean	= 6.2×10^{-10}	6.6×10^{-13}
Median	= 5.8×10^{-10}	0.0 x
Standard deviation	= 2.0×10^{-10}	1.2×10^{-11}
Minimum value	= 4.9×10^{-11}	-4.6×10^{-11}
Maximum value	= 9.6×10^{-10}	3.6×10^{-10}

All of the samples from E Tunnel Effluent and E Tunnel Pond 1 were above their individual limits of detection. Approximately five percent of the remaining samples exceeded their individual limits of detection.

In view of the small number of samples exceeding individual limits of detection, the difficulties in fitting a probability distribution to a data set that contains so many zeroes, and the number of observations having tied ranks making the Kruskal-Wallis test inappropriate, no formal statistical analysis is performed. Rather, ^{238}Pu concentrations are compared across sources of water by simple descriptive statistics, in units of μCi/mL:

Source	Number	Arithmetic Mean	Median	Standard Deviation
Supply Wells	40	-6.3×10^{-12}	0.0	1.9×10^{-11}
Potable Water	29	8.6×10^{-13}	0.0	1.5×10^{-12}
Sewage Lagoons	11	1.1×10^{-12}	0.0	1.7×10^{-12}
Open Reservoirs	52	1.1×10^{-12}	0.0	2.5×10^{-12}
Containment Ponds, other than E Tunnel	15	1.4×10^{-11}	3.6×10^{-12}	2.0×10^{-11}
Natural Springs	21	3.0×10^{-11}	0.0	4.2×10^{-12}
E Tunnel	7	6.2×10^{-10}	5.8×10^{-10}	2.0×10^{-10}

In water from sources other than containment ponds, the median concentrations were zero. Thus, in water from sources other than containment ponds, no ^{238}Pu at all was found in most samples.

At each sampling station, concentrations were measured quarterly. Concentrations are compared over time by means of plots. Results from E Tunnel are separated from those from other sampling stations.

In Figure C.7, a plot of all observed ^{238}Pu concentrations, other than those from Area 12, E Tunnel Effluent, and Area 12, E Tunnel Pond 1, in units of 10^{-11} μCi/mL, versus month of collection appears. Three features catch the eye: a cluster of negative outliers in January, a few large outliers in January and February, and a single large outlier in November.

The large outliers early in the year are from T Tunnel. It is not surprising that greater concentrations of ^{238}Pu were observed in samples from T Tunnel, in view of past experimental activity. As T Tunnel was sealed in March, it is not surprising that greater concentrations were only observed during the first months of the year.

The large outlier in November is from the sample collected at Area 6, Well C-1. As laboratory logs indicate nothing that could have caused this outlier, its nature remains a mystery.

The cluster of negative outliers in January is puzzling. Laboratory logs show no anomalies in these samples. However, all were collected, on the same day, from supply wells. It is possible that some unknown factor, possibly analytical, possibly an artifact of handling, affected all these samples.

In Figure C.8, a plot of observed ^{238}Pu concentrations from Area 12, E Tunnel Effluent and Area 12, E Tunnel Pond 1, in units of 10^{-11} μCi/mL, versus month of collections appears. No unambiguous time trend exists. However, with only seven data points, only a very strong time trend could be detected, if one existed.

To assess measurement error in measured ^{238}Pu concentrations, we consider empirical coefficients of variation (relative error). A histogram of the empirical coefficient of variation for positive measured concentrations appears in Figure C.9.

Two distinct populations occur, one with values near 1.0, the other spread out between 0 and 0.7. The smaller coefficients of variation tend to be associated with samples from containment ponds, the larger ones from samples from other sources. As samples from containment ponds are much more likely to exceed the limit of detection than samples from other sources this is not surprising. Figure C.9 shows that, for samples from sources other than containment ponds, analytic standard deviations tend to be close to observed concentrations. Although longer counting times would lower the limit of detection, the observed concentrations are already so small this is not thought worthwhile.

Analytic standard deviation only accounts for counting variability. To account for other sources of variability, some samples were split and each sample was counted. Original data and duplicates appear in Attachment C.12. Variability between duplicate and original is described via a five-point summary of the absolute value of the differences between duplicate and original. Descriptive statistics, in units of μCi/mL, follow:

Number of data values	=	20
Minimum value	=	0.0
Twenty-fifth percentile	=	3.0×10^{-12}
Median	=	1.3×10^{-11}
Seventy-fifth percentile	=	4.9×10^{-11}
Maximum value	=	4.6×10^{-10}

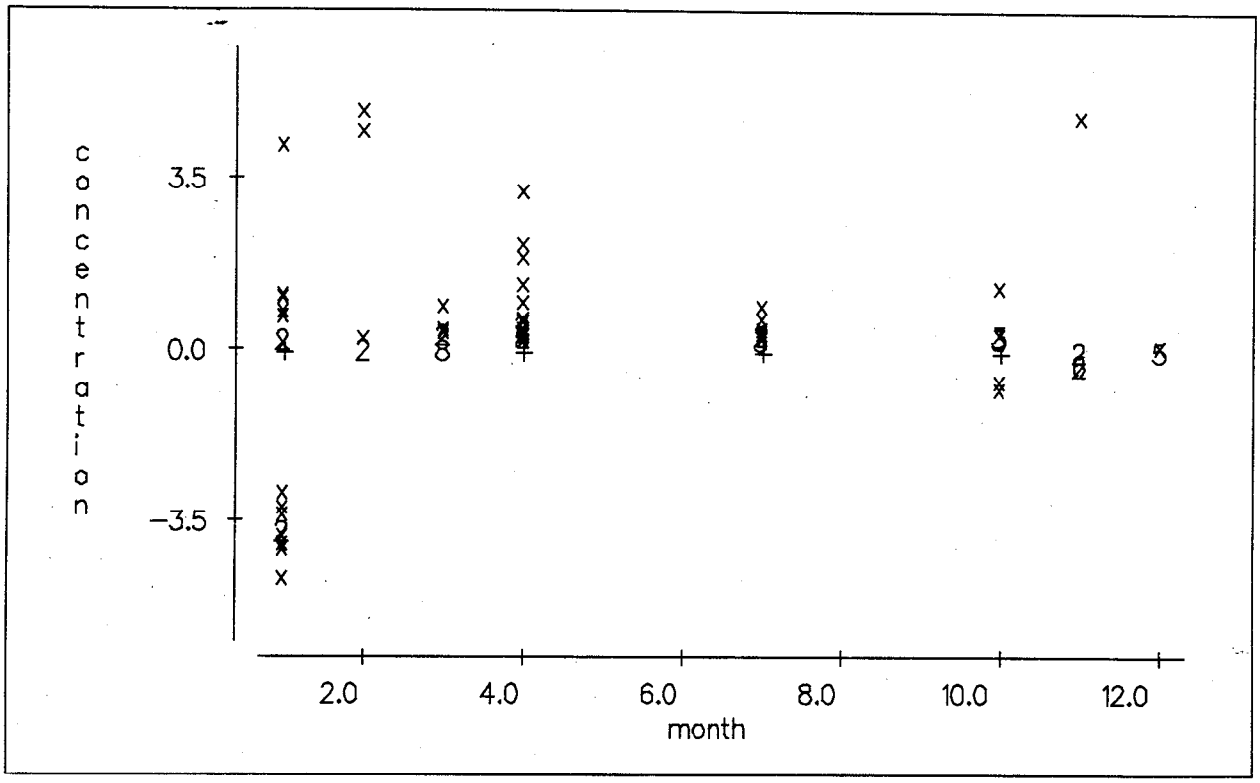


Figure C.7 Plot of Concentrations of ^{238}Pu, in Units of 10^{-11} µCi/mL, from Sampling Stations other than those at E Tunnel versus Month of Collection

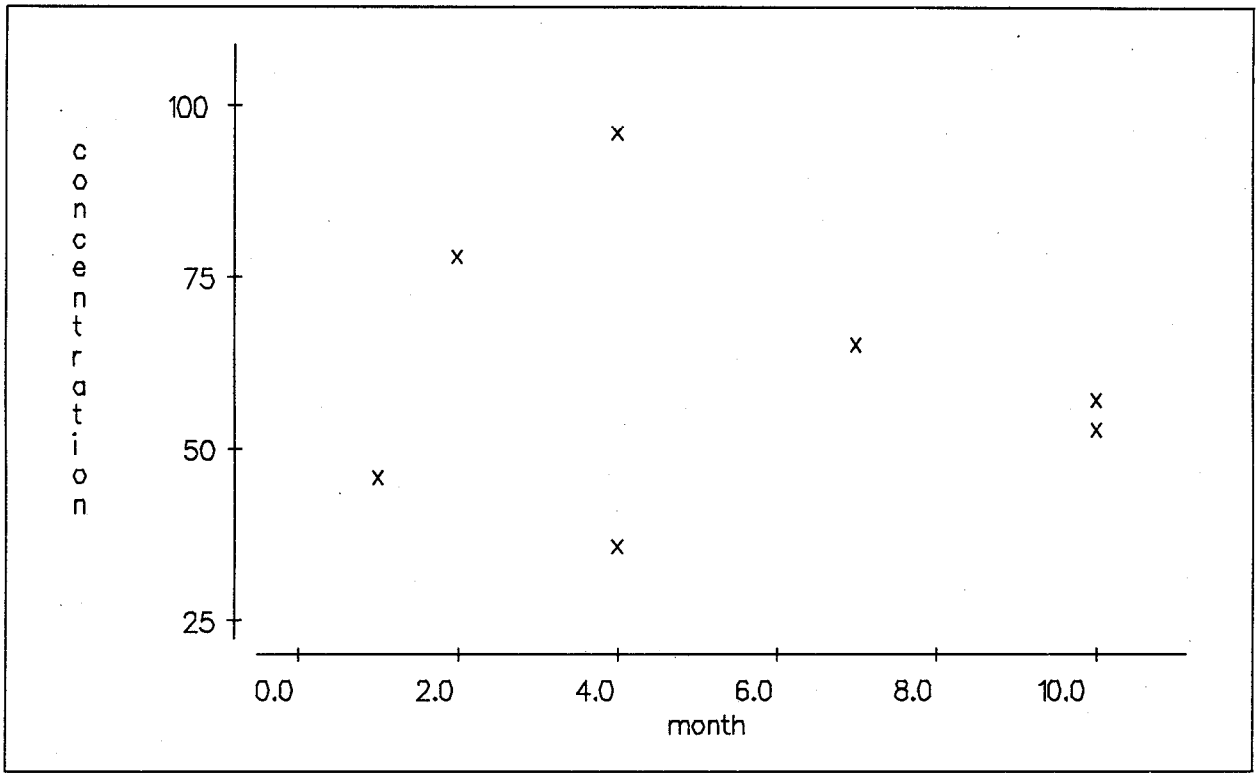


Figure C.8 Plot of ^{238}Pu Concentrations, in Units of 10^{-11} µCi/mL, in Samples from E Tunnel versus Month of Collection

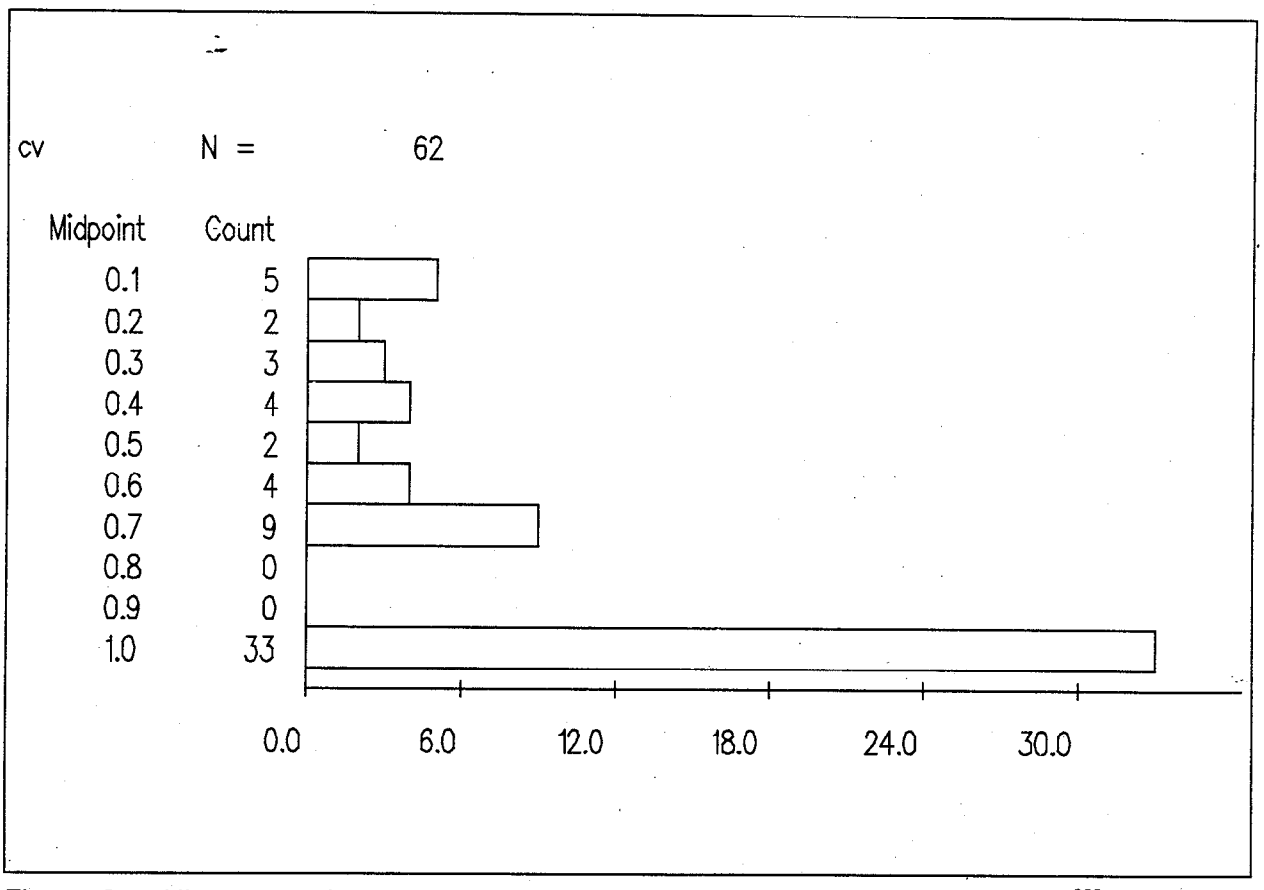


Figure C.9 Histogram of Empirical Coefficients of Variation (Unitless) of Positive ^{238}Pu Concentrations

To compare this to the data from locations chosen for duplicate sampling, all of which were containment ponds, the mean and median of the original results from duplicate locations were calculated. Of these, in units of µCi/mL, the mean and median were, respectively, 2.2×10^{-10} and 3.8×10^{-11}. Hence, it can be seen that the median absolute difference between duplicate and original is smaller than the median concentration of the original samples, by approximately a factor of three.

PLUTONIUM-239+240

$^{239+240}Pu$ concentrations in water were measured at 54 sampling stations on the NTS, as described in Volume 1, Chapter 5. Descriptive statistics, in units of µCi/mL, for the entire network are:

Number of data values	=	175
Arithmetic mean	=	2.6×10^{-10}
Median	=	3.5×10^{-12}
Standard deviation	=	1.1×10^{-09}
Minimum value	=	-4.6×10^{-11}
Maximum value	=	7.6×10^{-09}

Of the entire network, approximately 65 percent of the observed concentrations are positive, approximately 29 percent are zero, and the remaining 6 percent are negative. Approximately 20 percent of the concentrations exceed the individual limit of detection. The median limit of detection was 1.1×10^{-11} µCi/mL (4.1×10^{-04} Bq/L).

An examination of the data revealed that concentrations in E Tunnel Effluent and E Tunnel Pond 1 were much greater than concentrations from other sampling stations. The following descriptive statistics, in units of µCi/mL, result from separating E Tunnel from the other stations:

	E Tunnel Effluent and E Tunnel Pond 1	Other Sampling Stations
Number of data values	= 7	168
Arithmetic mean	= 5.3×10^{-08}	4.9×10^{-10}
Median	= 5.0×10^{-08}	2.8×10^{-11}
Standard deviation	= 1.2×10^{-08}	1.9×10^{-09}
Minimum value	= 3.8×10^{-08}	-4.6×10^{-10}
Maximum value	= 7.6×10^{-08}	1.1×10^{-08}

All of the samples from E Tunnel Effluent and E Tunnel Pond 1 were above their individual limits of detection. Approximately 17 percent of the remaining samples exceeded their individual limits of detection.

In view of the difficulties in fitting a probability distribution to a data set that contains so many zeroes and the number of tied ranked observations making the Kruskal-Wallis test inappropriate, no formal statistical analysis is performed. Rather, $^{239+240}$Pu concentrations are compared across sources of water by simple descriptive statistics. In units of µCi/mL, these are:

Source	Number	Arithmetic Mean	Median	Standard Deviation
Supply Wells	40	-2.0×10^{-11}	0.0	3.4×10^{-10}
Potable Water	29	1.3×10^{-11}	0.0	2.0×10^{-11}
Sewage Lagoons	11	8.2×10^{-11}	5.9×10^{-11}	8.7×10^{-11}
Open Reservoirs	52	2.0×10^{-10}	5.6×10^{-11}	1.0×10^{-10}
Natural Springs	21	4.6×10^{-10}	1.2×10^{-10}	1.0×10^{-09}
Containment Ponds, other than E Tunnel	15	4.1×10^{-09}	1.4×10^{-09}	4.6×10^{-09}
E Tunnel	7	5.3×10^{-08}	5.0×10^{-08}	1.2×10^{-08}

At each sampling station, concentrations were measured quarterly, at most. Concentrations are compared over time by means of plots. Results from E Tunnel are separated from those of the other sampling stations.

In Figure C.10, a plot of all observed $^{239+240}Pu$ concentrations, other than those from E Tunnel Effluent and E Tunnel Pond 1, in units of 10^{-10} µCi/mL, versus month of collection, appears. Three features are worthy of notice: many negative concentrations occur in January, a few large outliers occur in January through April, and a single large outlier occurs in October. These unusual observations generally match corresponding unusual concentrations of ^{238}Pu in water (see previous heading).

The large outliers early in the year are from T Tunnel and Well J-12 Reservoir. It is not surprising that greater concentrations of $^{239+240}Pu$ we observed in samples from T Tunnel, in view of past experimental activity. As T Tunnel was sealed in March, it is not surprising that greater concentrations were only observed during the first months of the year.

The large outlier in October is from the sample collected at Area 7, Reitman Seep. As laboratory logs indicate nothing that could have caused this outlier, its nature remains a mystery.

The negative concentrations observed in January, as with the corresponding ^{238}Pu, were collected on the same day, except for the sample from Building 6-900 collected on December 29, 1992. Further, all these samples were from supply wells. As with ^{238}Pu, no explanation for these negative concentrations was found.

In Figure C.11, a plot of observed $^{239+240}Pu$ concentrations, in units of 10^{-11} µCi/mL, versus month of collection for E Tunnel effluent appears. No unambiguous time trend exists. However, with only seven data points, only a very strong time trend could be detected, if one existed.

To assess measurement error in measured $^{239+240}Pu$ concentrations, we consider empirical coefficients of variation. A histogram of the empirical coefficients of variation for all measured concentrations appears in Figure C.12.

Two distinct populations occur, one with values near 1.0, the other spread out between 0 and 0.7. The smaller coefficients of variation tend to be associated with samples from containment ponds, the larger ones from samples from other sources. As samples from containment ponds are much more likely to exceed the limit of detection than samples from other sources this is not surprising. Figure C.12 shows that, for samples from sources other than containment ponds, analytic standard deviations tend to be close to observed concentrations. Although longer counting times would lower the limit of detection, the observed concentrations are already so small this is not thought worthwhile.

Analytic standard deviation only accounts for counting variability. To account for other sources of variability, some samples were split and each sample was counted. Variability between duplicate and original is described via a five-point summary of the absolute value of the differences between duplicate and original. Descriptive statistics, in units of µCi/mL, follow:

Number of data values	=	21
Minimum value	=	0.0
Twenty-fifth percentile	=	9.3×10^{-12}
Median	=	3.0×10^{-11}
Seventy-fifth percentile	=	2.5×10^{-10}
Maximum value	=	3.8×10^{-09}

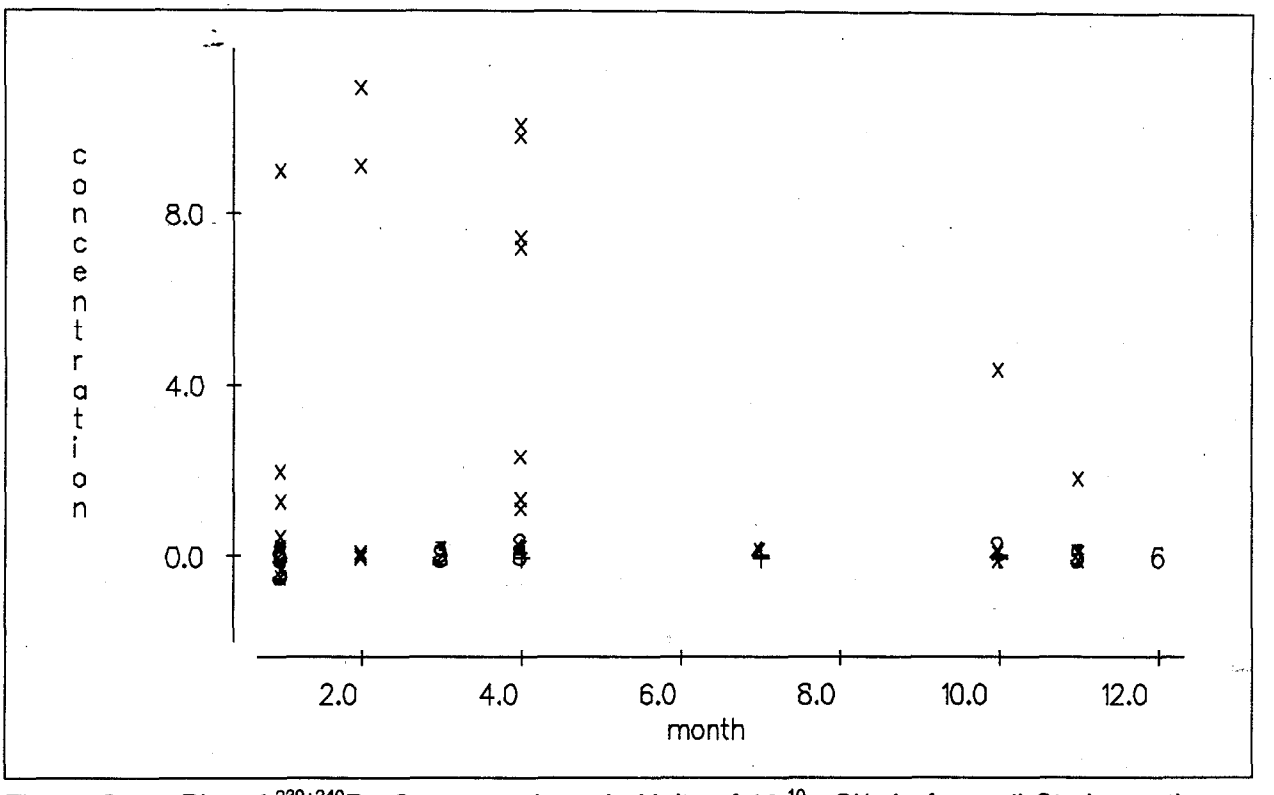


Figure C.10 Plot of $^{239+240}Pu$ Concentrations, in Units of 10^{-10} µCi/mL, from all Stations other than E Tunnel versus Month of Collection

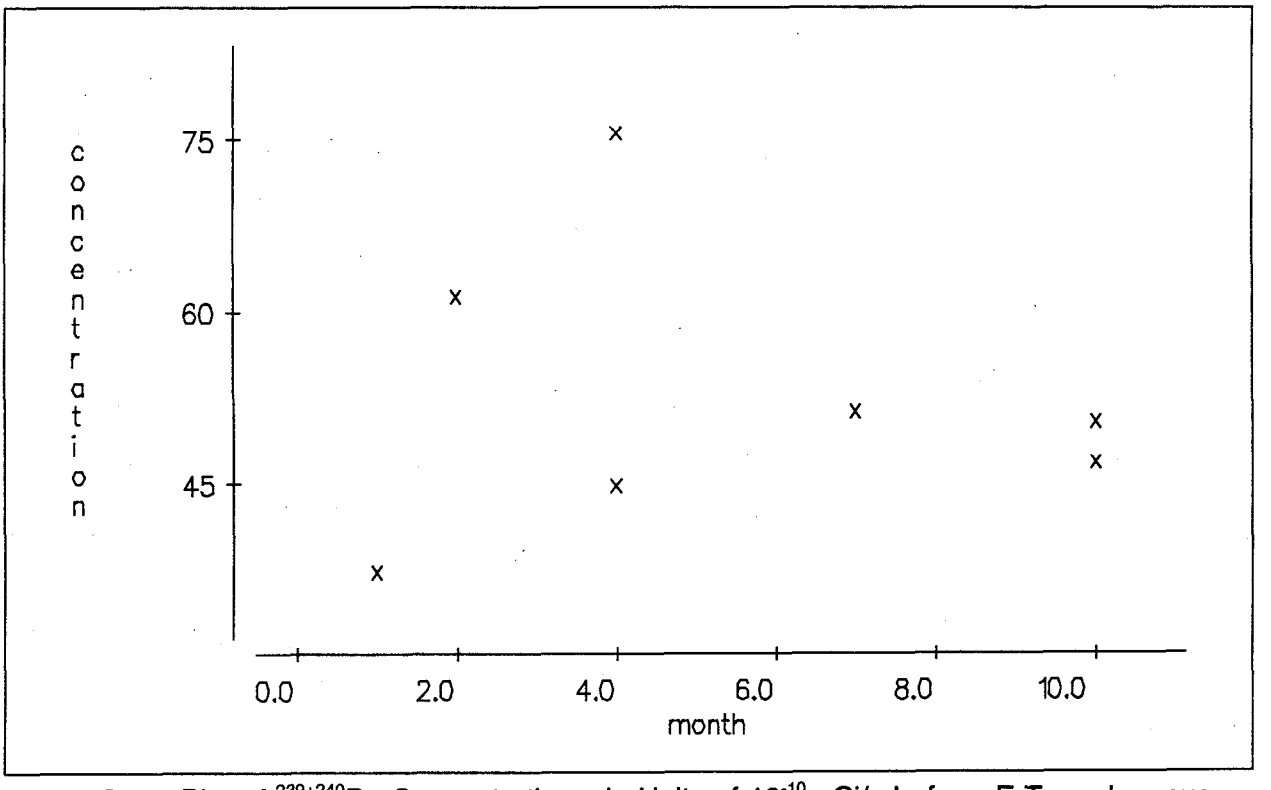


Figure C.11 Plot of $^{239+240}Pu$ Concentrations, in Units of 10^{-10} µCi/mL, from E Tunnel versus Month of Collection

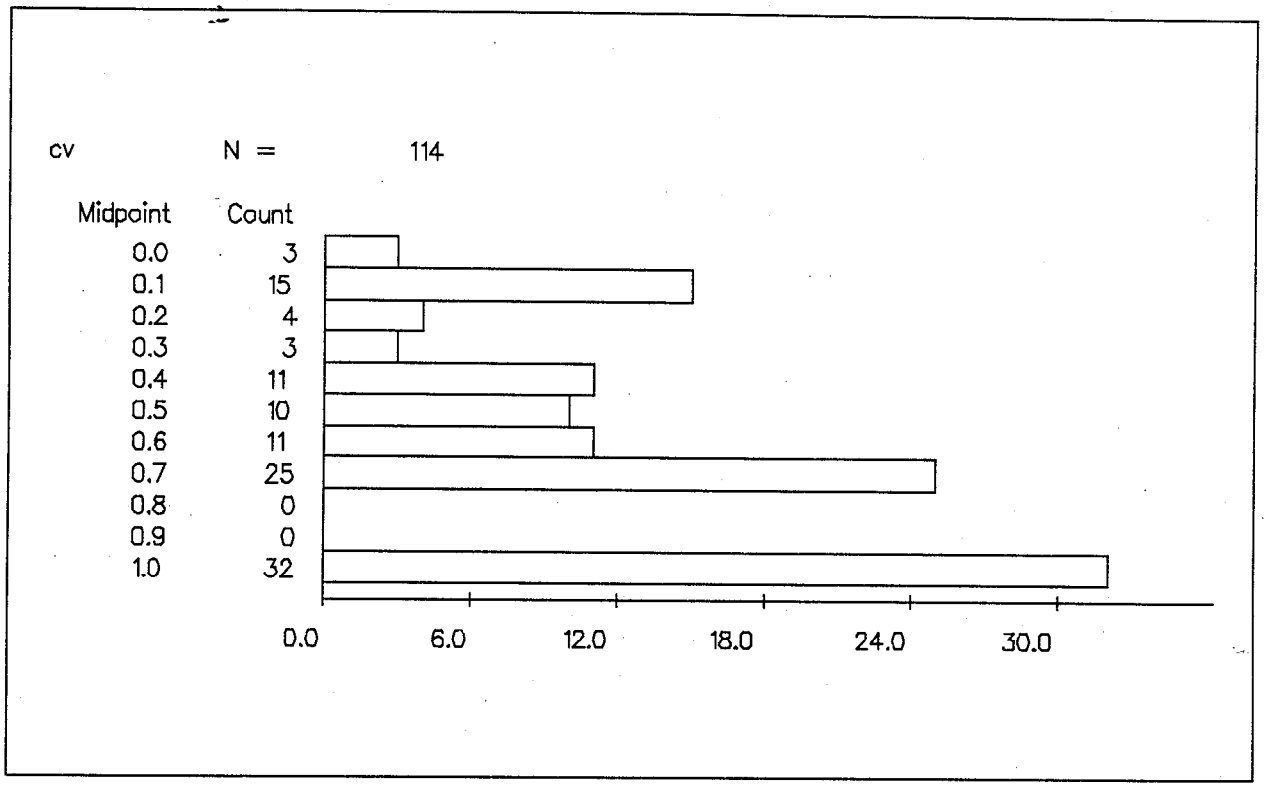


Figure C.12 Histogram of Empirical Coefficients of Variation (Unitless) of Positive $^{239+240}Pu$ Concentrations

To compare this to the data from locations chosen for duplicate sampling, all of which were containment ponds, the mean and median of the original results from duplicate locations were calculated. Of these, in units of µCi/mL, the mean and median were, respectively, 2.2×10^{-09} and 8.8×10^{-10}. Hence, it can be seen that the median absolute difference between duplicate and original is much smaller than the median concentration of the original samples.

GROSS BETA

Gross beta concentrations in water were measured at 54 sampling stations on the NTS, as described in Volume 1, Chapter 5. Descriptive statistics, in units of µCi/mL, for the entire network are:

Number of data values	=	721
Arithmetic mean	=	1.4×10^{-08}
Median	=	6.1×10^{-09}
Standard deviation	=	4.2×10^{-08}
Minimum value	=	-4.3×10^{-09}
Maximum value	=	4.5×10^{-07}
Median MDC	=	7.6×10^{-10}

Of the entire network, approximately 96 percent of the observed concentrations are positive. Of the positive concentrations, the geometric mean was 6.9×10^{-09} µCi/mL (2.6×10^{-01} Bq/L), with a geometric standard deviation of 3.0. Approximately 92 percent of the concentrations exceed the individual limit of detection.

In Figure C.13, natural logarithms of gross beta in water concentrations collected from Area 23 Cafeteria are plotted against normal scores. The straightness of the plot indicates the lognormal distribution is a reasonable approximation to the probability distribution of the concentration there. Plots generated with the positive observations from other sampling stations, not reproduced here, were generally similar. That is, plots of natural logarithms of positive concentrations versus normal scores, for almost every sampling station, produced a graph that was roughly linear, with a few scattered points off the curve (see Figure C.14). Hence, the few non-positive measurements will be ignored and the positive ones will be treated as lognormally distributed.

Table C.5, shows results of the ANOVA performed on logarithms of positive observed concentrations indicating concentrations differ by source of water, but not by week of collection.

Results of a one-way ANOVA, comparing natural logarithms of gross beta concentrations among sources of water appears in Table C.6. Tukey's multiple comparison procedure allows all pairs of sources of water, except for open reservoirs and supply wells, to be separated from one another at the 0.05 level. It is not surprising that the smallest concentrations of gross beta should occur in potable water, open reservoirs, and supply wells, as there are few ways for these water sources to become contaminated. It is not surprising that water from containment ponds has the greatest concentrations, as water from the tunnels, where experimental activity has occurred, drains into them. Concentrations of gross beta in natural springs have, in previous years, been slightly greater than in open reservoirs and in supply wells. Concentrations in sewage lagoons have been greater than those in natural springs, although much smaller than those in containment ponds. These patterns continue in the 1993 data.

The two-way ANVOA reported in Table C.5 showed no evidence of temporal trends in gross beta concentrations. This is supported by two illustrations. In Figure C.14, the natural logarithm of all positive concentrations, in μCi/mL, is plotted versus week of sampling (week equals 1 during first week of year, 2 during second week of year, etc.). Although scattered outliers occur, no patterns are obvious. In Figure C.15, results from a typical sampling station (Area 25, Building 4221) appear. Natural logarithms of observed concentrations are plotted versus week of collection, natural logarithms of individual limits of detection are indicated by a dashed line. As is typical, no temporal pattern appears in the concentrations, and concentrations tend to be well above the limit of detection.

Measurement error for gross beta concentrations is generally small. This is quantified by means of empirical standard deviations. Empirical standard deviations for positive concentrations appear in Figure C.16. It can be seen that analytic standard deviations tend to be approximately an order of magnitude less than observed concentration. Twenty data points, with empirical coefficients of variation greater than 1.0, were omitted to enhance readability.

Analytic standard deviation only accounts for counting variability. To account for other sources of variability, some samples were split and each sample was counted. Original data and duplicates appear in Attachment C.14. As concentrations were found lognormally distributed, the appropriate measure of variability is the absolute value of the natural logarithm of the original concentration, divided by that of the duplicate. (This is, of course, the same as

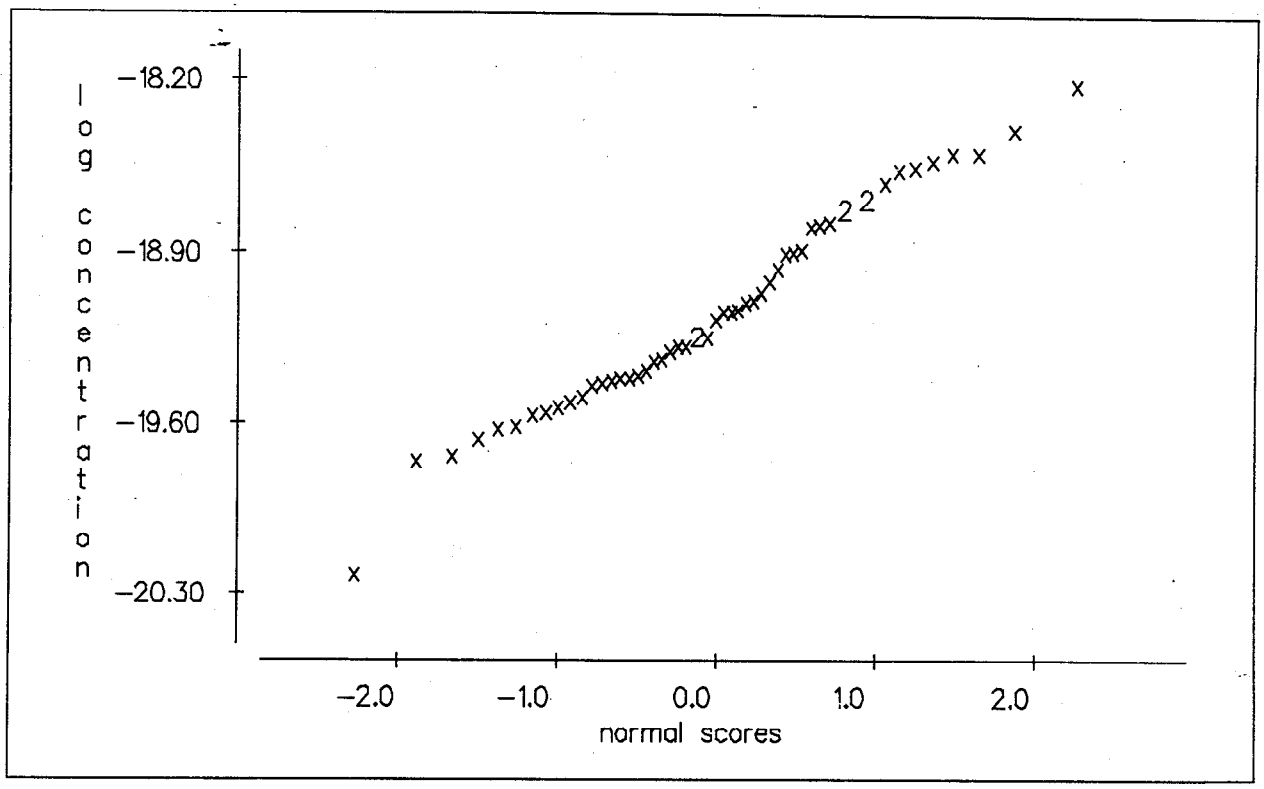


Figure C.13 Plot of Natural Logarithm of Gross Beta Concentrations, in Units of µCi/mL, at Area 23 Cafeteria versus Normal Scores

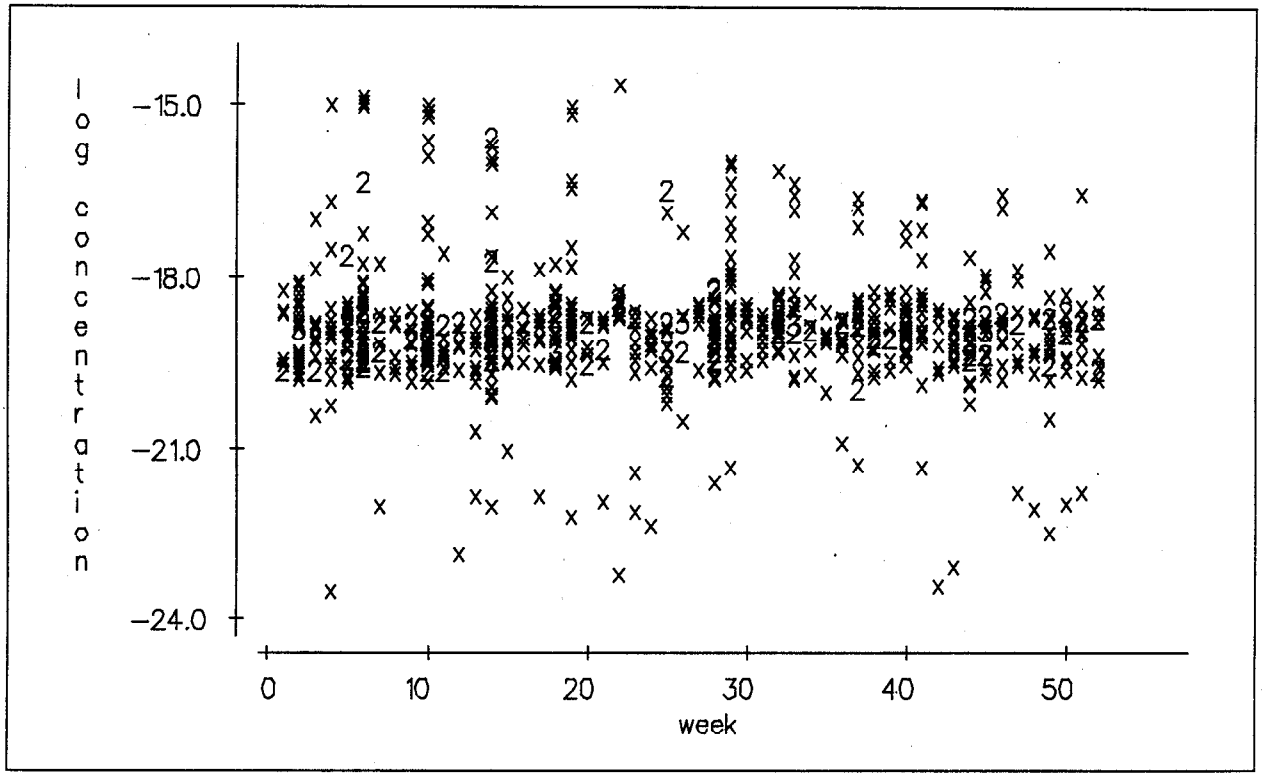


Figure C.14 Plot of Natural Logarithm of Gross Beta Concentrations, in Units of µCi/mL, from all Sampling Stations, versus Week of Collection

Table C.5 Analysis of Variance on Natural Logarithms of Gross Beta in Water

Source	Degrees of Freedom	Sequential Sum of Squares	Adjusted Sum of Squares	Mean Square	F-Statistic	p-Value
Source of Water	5	351.981	295.484	59.097	87.28	0.000
Week	51	34.187	34.187	0.670	0.99	0.496
Error	638	431.975	431.975	0.677		
Total	694	818.143				

Table C.6 One-Way Analysis of Variance on Natural Logarithms of Gross Beta (µCi/mL) Comparing Concentrations Among NTS Sources of Water

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Source of Water	5	351.981	70.396	104.05	0.000
Error	689	466.161	0.677		
Total	694	818.142			

Source of Water	Number	Mean	Standard Deviation	Individual 95 Percent CIs for ln Median Based on Pooled Standard Deviation
1	348	-19.238	0.851	(*
2	148	-18.990	0.766	(*)
3	67	-18.910	0.484	(-*-)
4	71	-18.489	0.747	(-*-)
5	11	-17.528	0.344	(----*---)
6	50	-16.535	1.218	(--*-)

Pooled Standard Deviation = 0.823

-19.0 -18.0 -17.0 -16.0

Key:
1 Potable Water
2 Open Reservoirs
3 Supply Wells
4 Natural Springs
5 Sewage Lagoons
6 Containment Ponds

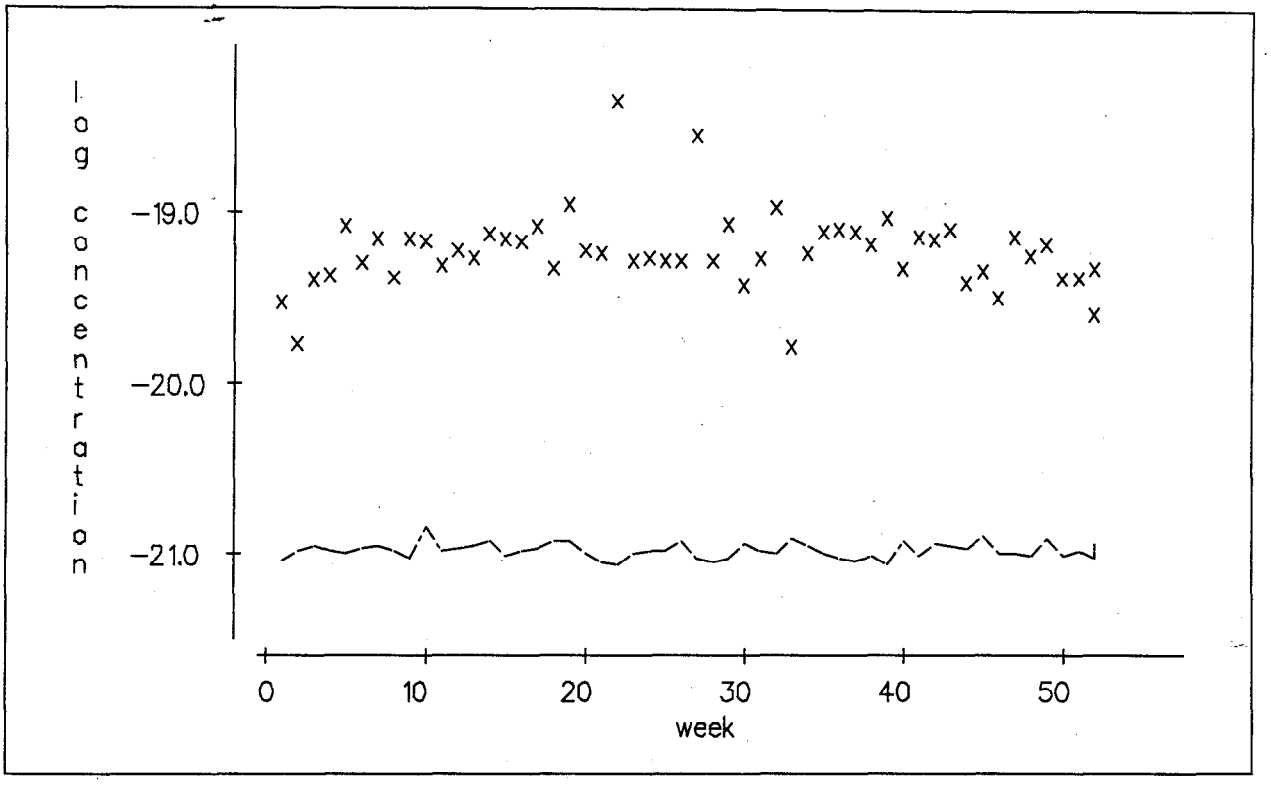


Figure C.15 Plot of Natural Logarithms of Gross Beta Concentrations, in Units of µCi/mL, at Area 25, Building 4221, versus Week of Collection (Dashed line is natural log of MDC)

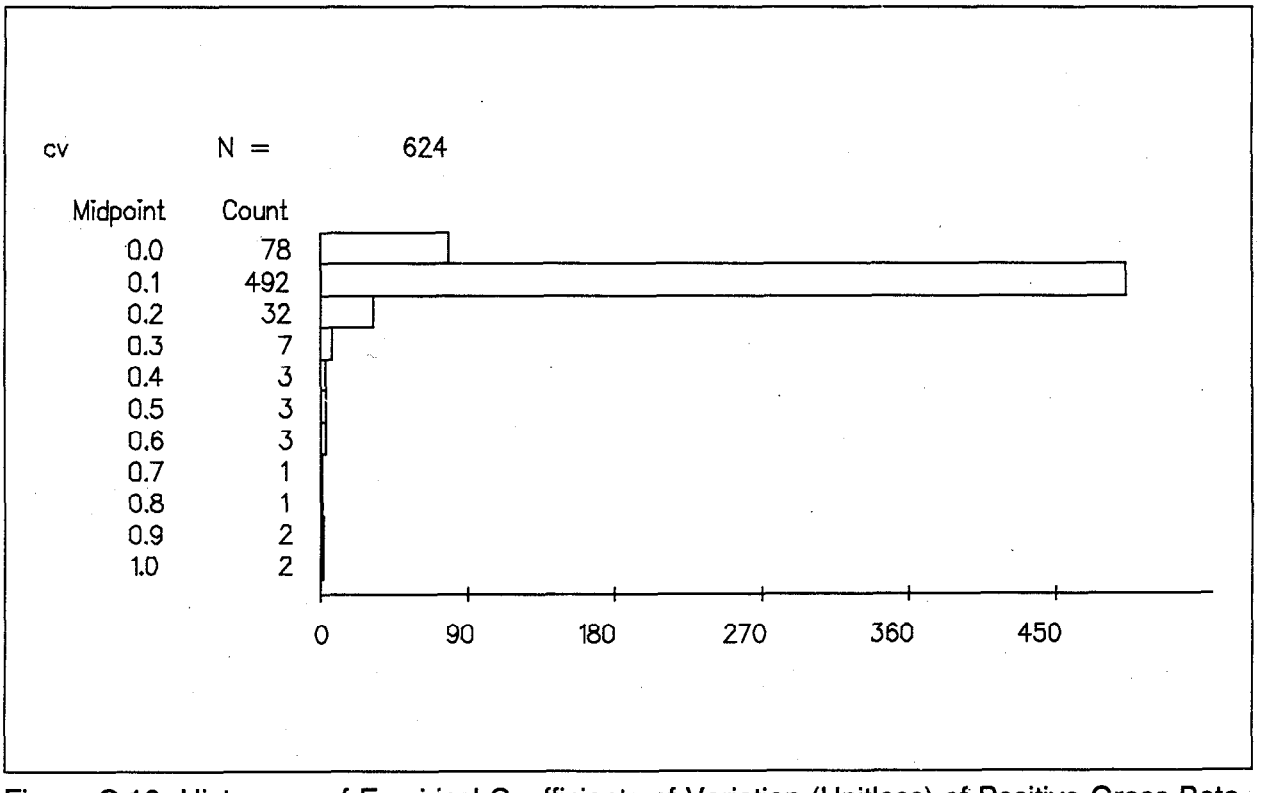


Figure C.16 Histogram of Empirical Coefficients of Variation (Unitless) of Positive Gross Beta Concentrations

the absolute value of the natural logarithm of the duplicate concentration divided by the original.) These unitless values are described, via a five-point summary, below:

Number of data values =	45
Minimum value =	0.000
Twenty-fifth percentile =	0.074
Median =	0.137
Seventy-fifth percentile =	0.306
Maximum value =	2.140

All locations chosen for duplicate sampling of gross beta were containment ponds. As Table C.6 shows, concentrations of gross beta in containment ponds tend to be much larger than in other sources of water. It is unknown if these results generalize to other water sources.

GAMMA-EMITTING RADIONUCLIDES

The only non-naturally occurring gamma emitter found in water samples was ^{137}Cs. This was found in seven samples, one of which was a sample from a natural spring and the other six of which were samples from containment ponds. Descriptive statistics, in units of µCi/mL, for ^{137}Cs concentrations follow:

Number of data values =	7
Arithmetic mean =	1.7×10^{-07}
Median =	1.8×10^{-07}
Standard deviation =	6.8×10^{-08}
Minimum value =	8.6×10^{-08}
Maximum value =	3.0×10^{-08}

All concentrations were above their individual limit of detection. The median limit of detection was 1.1×10^{-07} µCi/mL (4.1 Bq/L).

TRITIUM

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

WATER FROM SOURCES OTHER THAN CONTAINMENT PONDS

Tritium concentrations in water were measured at 46 sampling stations, other than containment ponds, as described in Volume 1, Chapter 5. Descriptive statistics, in units of µCi/mL, for the entire network are:

Number of data values =	676
Arithmetic mean =	1.0×10^{-08}
Median =	1.6×10^{-09}
Standard deviation =	2.9×10^{-07}
Minimum value =	-1.1×10^{-06}
Maximum value =	2.4×10^{-06}
Median MDC =	4.5×10^{-07}

Of the entire network, approximately 51 percent of the observed concentrations are positive. Approximately 94 percent of the concentrations were less than their individual limits of detection. Hence, formal statistical analysis is judged to be of limited value.

A boxplot of the entire data set, in units of 10^{-09} µCi/mL, appears in Figure C.17. Four unusually large concentrations stand out from the remainder of the data. These were measured in Area 6, Bottled Water, on October 11 and November 1 and in Area 6, Cafeteria, on November 24 and on December 13. A review of the sampling logs showed no reason why these data should be rejected. Accordingly, these data are retained for this analysis.

Concentrations are compared among sources of water by means of simple descriptive statistics, as almost all concentrations were below the individual limits of detection. Results, in units of µCi/mL, follow:

Source of Water	Number of Data Values	Mean	Median	Standard Deviation
Supply Wells	63	-4.4×10^{-08}	3.3×10^{-09}	2.1×10^{-07}
Open Reservoirs	159	-3.3×10^{-08}	-5.7×10^{-08}	2.3×10^{-07}
Natural Springs	71	5.4×10^{-09}	-4.0×10^{-08}	2.5×10^{-07}
Potable Water	372	3.7×10^{-08}	2.0×10^{-08}	3.3×10^{-07}
Sewage Lagoons	11	6.7×10^{-08}	1.1×10^{-07}	1.9×10^{-07}

Sewage lagoons and natural springs have, historically, had higher levels of ^{3}H concentration than did other water sources. This continued in the 1993 data. Potable water's relatively large average concentration of ^{3}H is surprising. It is largely, although not solely, attributable to the unusual observations discussed previously. Even with these, only five percent of the measured concentrations in potable water exceeded individual limits of detection. A better understanding of the concentrations of ^{3}H in potable water can be obtained by a boxplot of the observed concentrations of ^{3}H in potable water. This appears, in units of 10^{-09} µCi/mL, in Figure C.18. There it can be seen that, aside from a few highly unusual observations, the concentrations are not terrible surprising.

Concentrations are compared across time by graphical methods. In Figure C.19, a scatterplot of all observed ^{3}H concentrations, in units of 10^{-09} µCi/mL, versus week of collection appears. Two features stand out: the unusual concentrations, already discussed, and the cluster of negative concentrations in the year's final week. No physical explanation was found for the cluster of negative concentrations. It is possible, but far from certain, that some error in sample handling or preparation occurred. Other than these, no obvious trends exist.

Concentrations from a single representative station, Area 1 Building 101, appear, in units of 10^{-09} µCi/mL, in Figure C.20. Individual limits of detection, in units of 10^{-09} µCi/mL, are marked

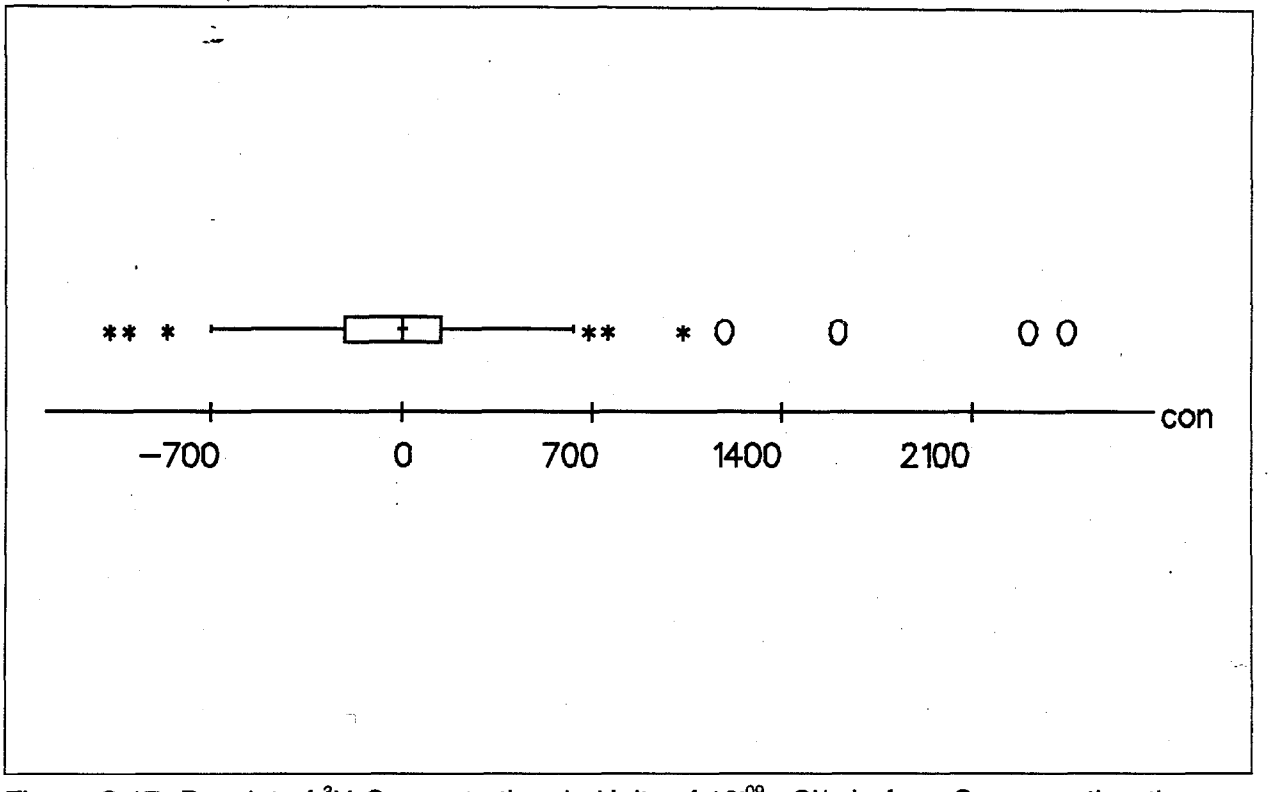


Figure C.17 Boxplot of ^{3}H Concentration, in Units of 10^{-09} μCi/mL, from Sources other than Containment Ponds

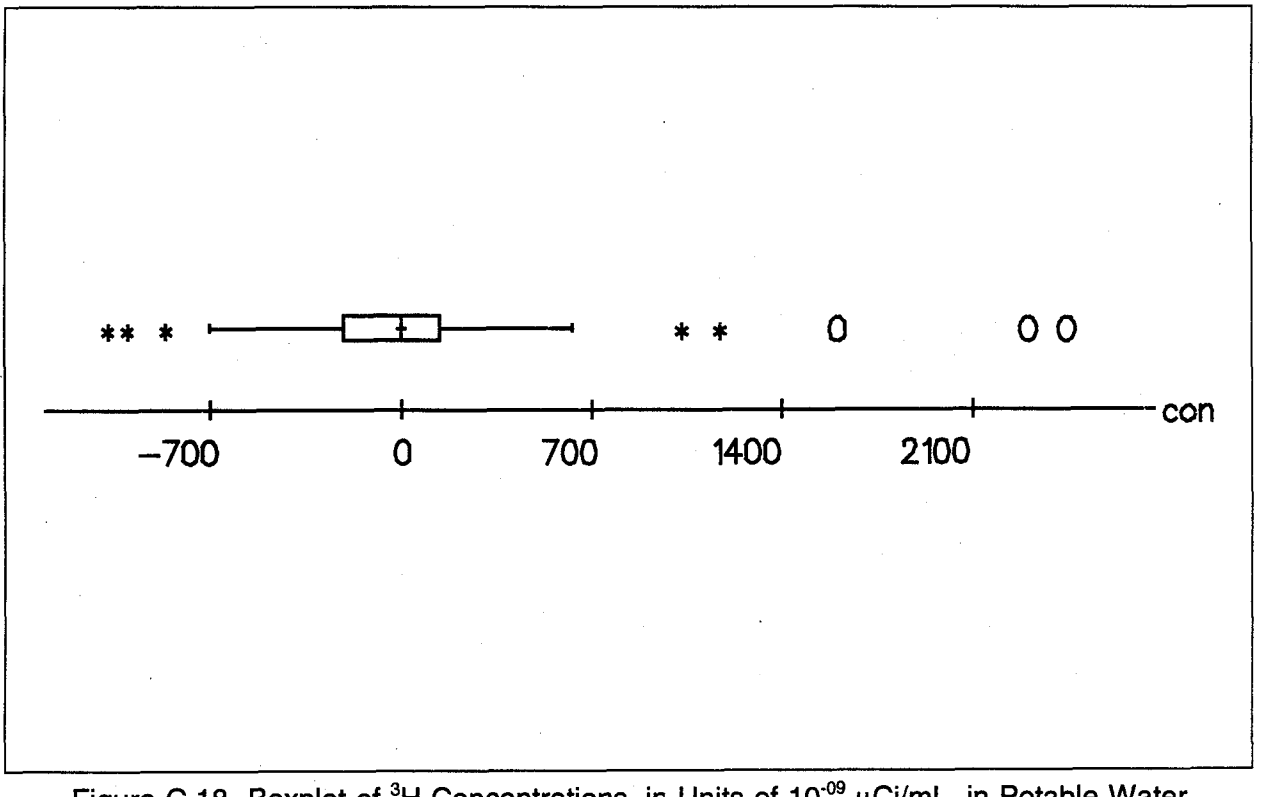


Figure C.18 Boxplot of ^{3}H Concentrations, in Units of 10^{-09} μCi/mL, in Potable Water

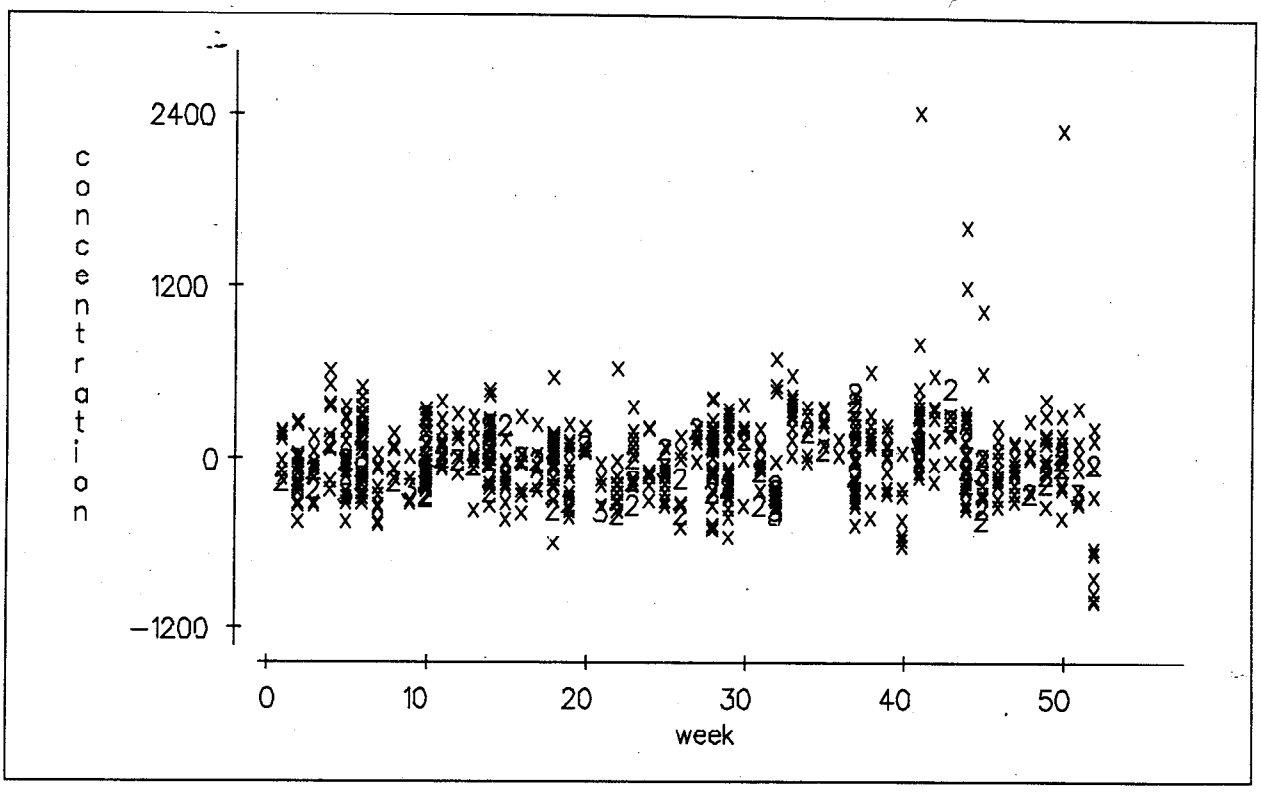


Figure C.19 Plot of ^{3}H Concentrations, in Units of 10^{-09} µCi/mL, versus Week of Collection

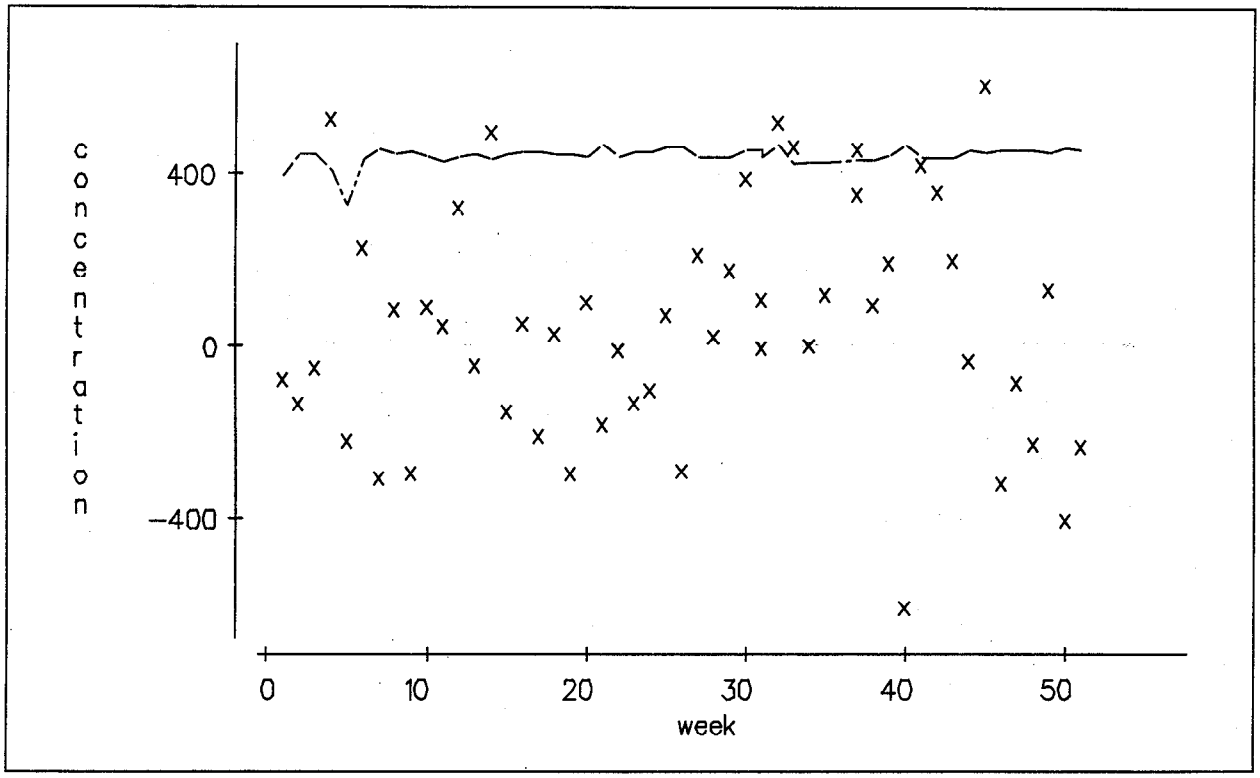


Figure C.20 Plot of ^{3}H Concentrations at Area 1 Building 101, in Units of 10^{-09} µCi/mL, versus Week of Collection (--- Indicates Sample Limits of Detection)

by a dashed line. As at most stations, there is evidence of serial dependency, but none of consistent trends. Also, as at most stations, very few of the concentrations exceed the individual limit of detection.

Analytic error for ^{3}H in water other than containment ponds tends to be large, relative to concentrations. This is illustrated in Figure C.21 by a histogram of empirical coefficients of variation for positive concentrations. To enhance readability, 25 empirical coefficients of variation that exceed 14 were omitted. It can be readily seen that analytic standard deviation tends to be larger than measured concentration.

WATER FROM CONTAINMENT PONDS

Tritium concentrations in containment ponds were measured at 9 sampling stations, as described in Volume 1, Chapter 5. Descriptive statistics, in units of µCi/mL, for the entire network are:

Number of data values =	52
Arithmetic mean =	8.7×10^{-03}
Median =	1.7×10^{-03}
Standard deviation =	1.6×10^{-02}
Minimum value =	6.9×10^{-07}
Maximum value =	5.2×10^{-02}
Median MDC =	4.5×10^{-07}

All concentrations were above individual limits of detection, and therefore positive. The geometric mean was 5.2×10^{-04} µCi/mL ($1.9 \times 10^{+04}$ Bq/L), with a geometric standard deviation of 29. The natural logarithms of all concentrations from containment ponds, in units of µCi/mL, appear in a boxplot in Figure C.22.

Neither the normal nor lognormal distribution fit the data particularly well. In Figure C.23, concentrations, in units of µCi/mL, from Area 12, E Tunnel Effluent are plotted versus normal scores. In Figure C.24, the natural logarithms of the same concentrations are plotted versus normal scores. Neither scatterplot falls near a straight line. This result is typical for the sampling stations.

Concentrations are compared among sampling stations by means of the Kruskal-Wallis test. The results of this test appear in Table C.7. The results of the Kruskal-Wallis test should be viewed as an approximation, since the p-value is calculated under the assumption that the number of samples from each sampling station is moderately large; this is usually taken to mean at least five observations per class. It is not surprising that small concentrations were observed in Yucca Waste Pond, which was not active during the year. Among sampling stations associated with tunnels, those associated with N Tunnel had the smallest concentrations, those associated with E Tunnel were next, and those associated with T Tunnel were greatest.

Concentrations are compared among months of collection by both the Kruskal-Wallis test and by graphical methods. As in the preceding paragraph, the results of the Kruskal-Wallis test should be viewed as an approximation. The numbers of observations in several months is too small for the calculated p-value to be accurate.

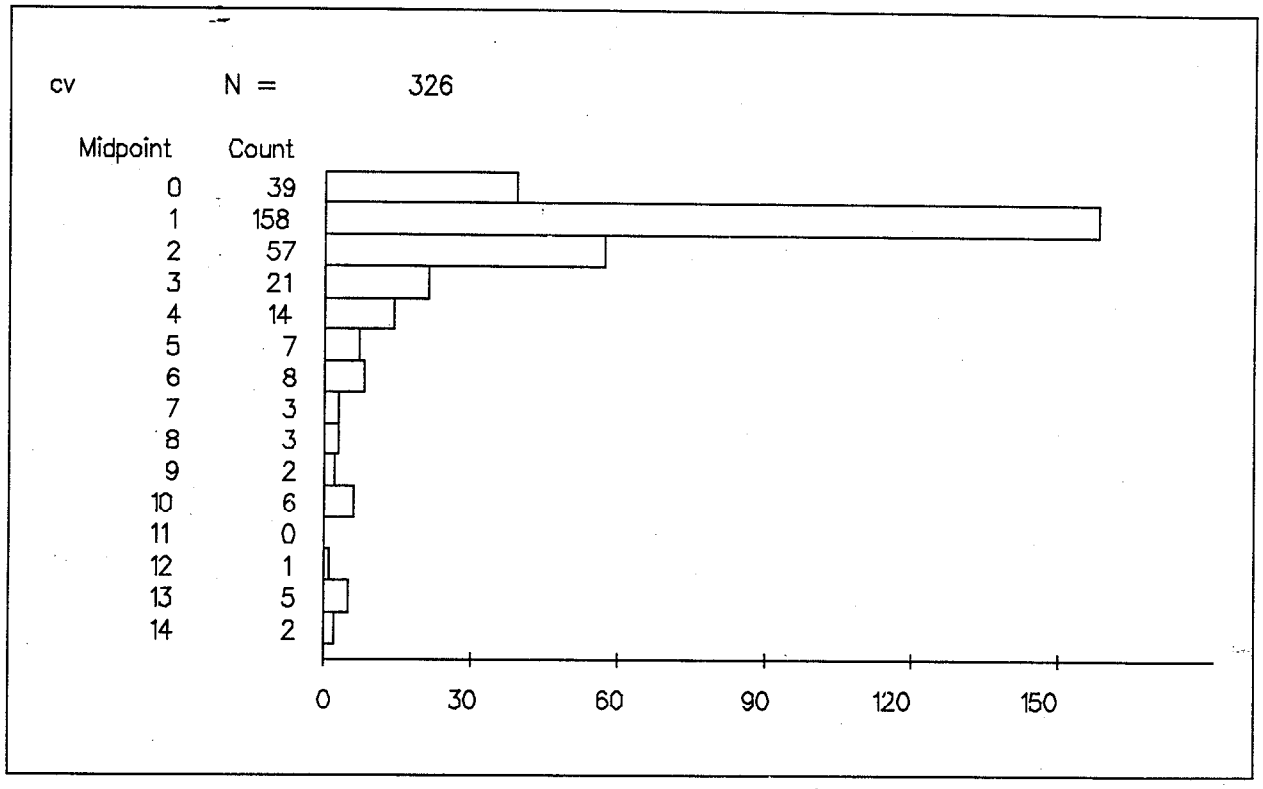


Figure C.21 Empirical Coefficients of Variation (Unitless) for ^{3}H Concentrations, other than those from Containment Ponds

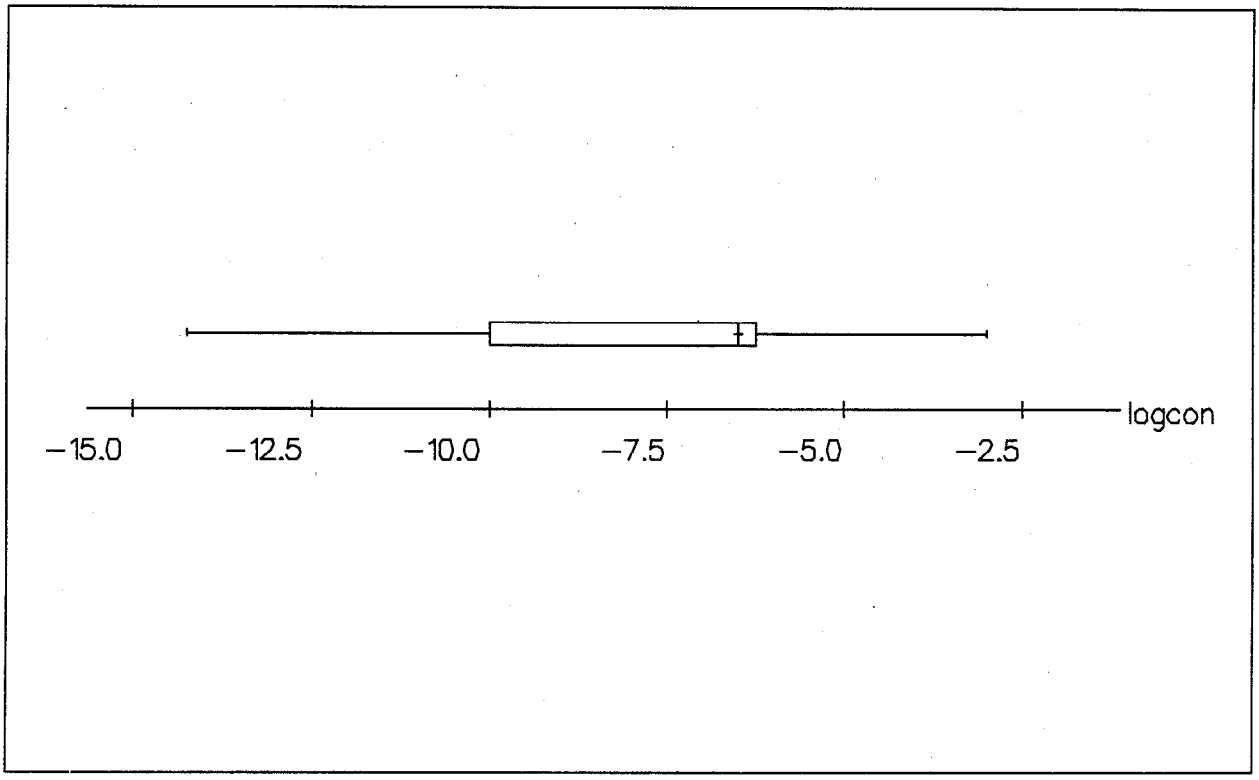


Figure C.22 Boxplot of Natural Logarithms of ^{3}H Concentrations, in Units of μCi/mL, in Water from Containment Ponds

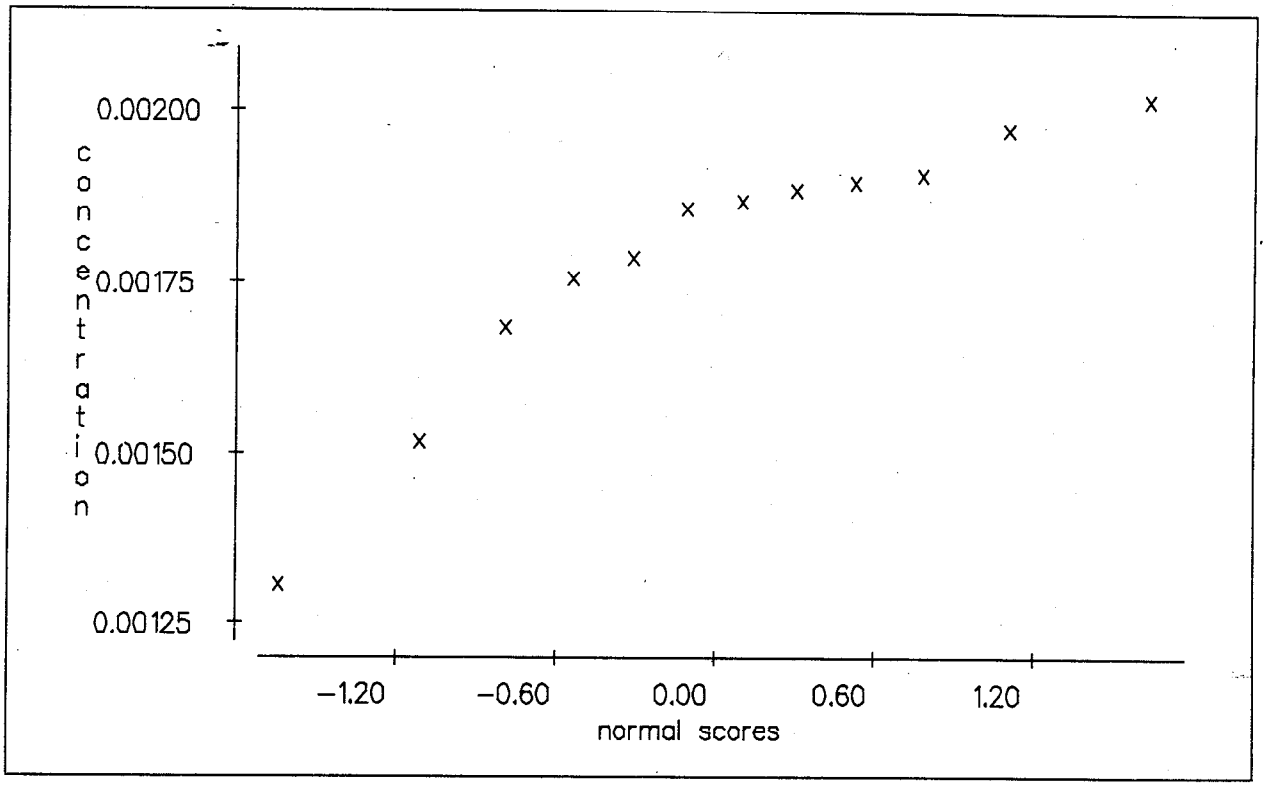


Figure C.23 Plot of ^{3}H Concentrations, in Units of µCi/mL, from E Tunnel Effluent, versus Normal Scores

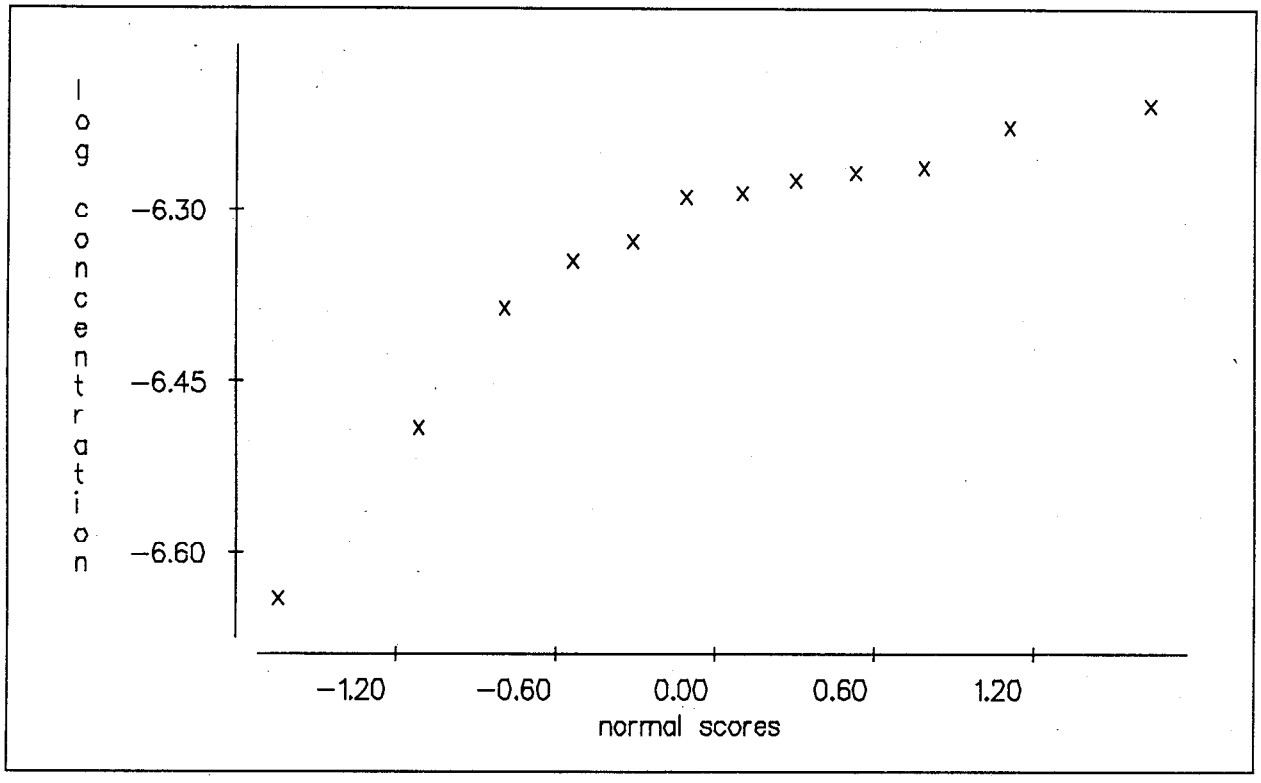


Figure C.24 Plot of Natural Logarithms of ^{3}H Concentrations, in Units of µCi/mL, from E Tunnel Effluent versus Normal Scores

Table C.7 Results of Kruskal-Wallis Test for Equality of Median ^3H Concentrations in Containment Ponds Among Sampling Locations, in Units of μCi/mL

Sampling Location	Number	Median	Average Rank	Z-Value
Yucca Pond	7	9.3×10^{-07}	4.0	-4.22
N Tunnel Effluent	5	1.2×10^{-05}	11.8	-2.28
N Tunnel Pond No. 2	2	3.4×10^{-05}	12.0	-1.38
N Tunnel Pond No. 3	3	6.6×10^{-04}	18.3	-0.96
E Tunnel Pond No. 1	10	1.8×10^{-03}	29.5	0.70
E Tunnel Effluent	12	1.9×10^{-03}	33.2	1.74
T Tunnel Pond No. 2	3	3.6×10^{-02}	46.5	2.35
T Tunnel Pond No. 3	4	3.6×10^{-02}	37.9	1.56
T Tunnel Pond No. 1	6	3.9×10^{-02}	38.0	1.98
Overall	52		26.5	

Kruskal-Wallis Statistic = 36.48 Degrees of Freedom = 8 p-Value = 0.000

The Kruskal-Wallis test, whose results are detailed in Table C.8, failed to detect any differences among months. However, the plot of natural logarithms (logarithms were used to reduce the number of overlaid data points) of ^3H concentrations in containment ponds, in units of μCi/mL, appearing in Figure C.25, do indicate greater concentrations during the first three months of the year. These greater concentrations all come from T Tunnel, which was sealed early in the year and therefore was not reflected in the sampling for the remainder of the year. The Kruskal-Wallis test's failure to detect this can be attributed to the null hypothesis tested for. The Kruskal-Wallis tests the hypothesis that the median concentration is not changing over months. Table C.8 shows that the median concentration changed very little among months. Unlike the median, the mean concentration, not reported here in detail, did change among months, taking greater values during the first three months of the year.

To assess measurement error in ^3H concentrations, we consider empirical coefficients of variation. A histogram of the empirical coefficients of variation appears in Figure C.26. Coefficients of variation for ^3H concentrations are quite small. This is attributable to the relatively greater concentrations of ^3H in water from containment ponds.

Analytic standard deviation only accounts for counting variability. To account for other sources of variability, some samples were split and each sample was counted.

Examination of the data and Table C.7 suggest that concentrations in Yucca Pond, sampling stations associated with E Tunnel, sampling stations associated with N Tunnel, and sampling stations associated with T Tunnel tend to have concentrations of differing orders of magnitude. Additionally, the few samples collected at T Tunnel in May 1993 or later were of still another order of magnitude. The three late samples from T Tunnel were discarded. For each source of water (Yucca Pond, stations associated with E Tunnel, etc.), absolute values of the differences between original and duplicate concentrations were calculated. These appear, as

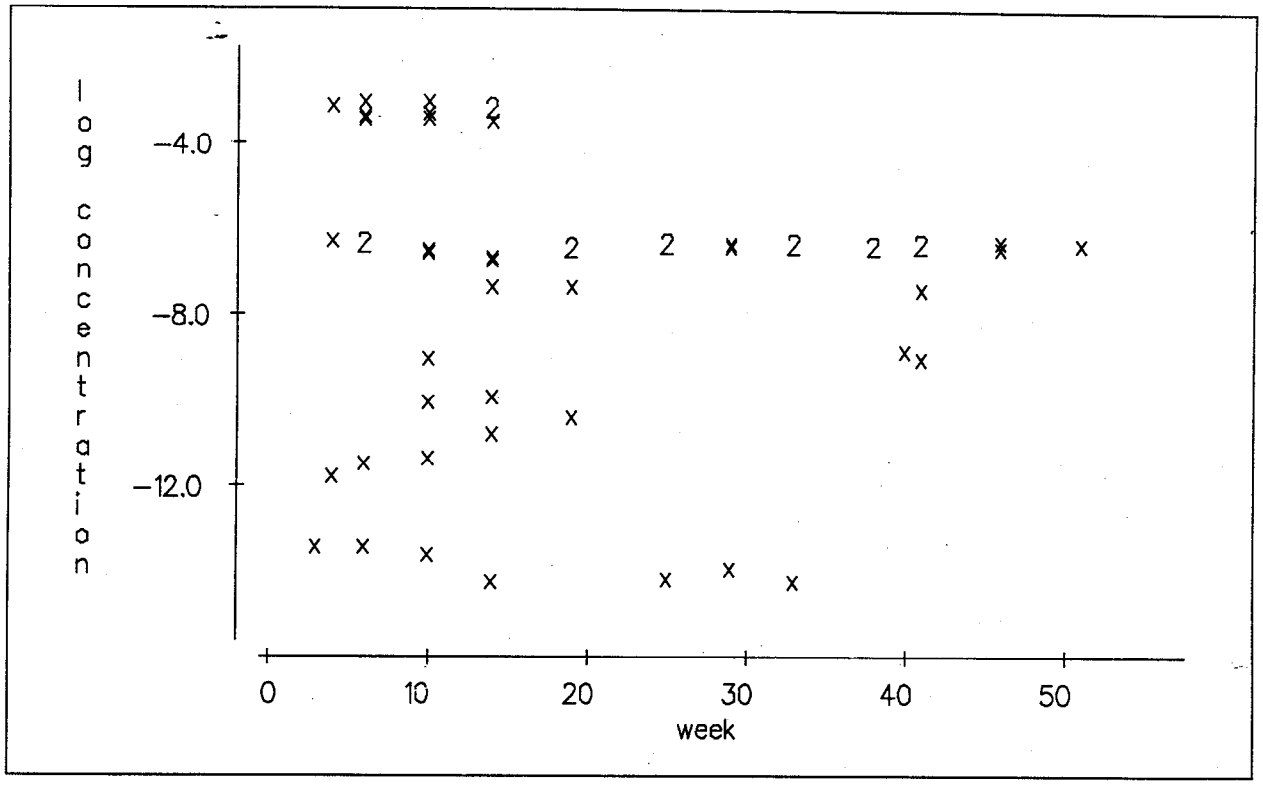


Figure C.25 Plot of Natural Logarithm of ^{3}H Concentrations, in Units of µCi/mL, from Containment Ponds versus Month of Collection

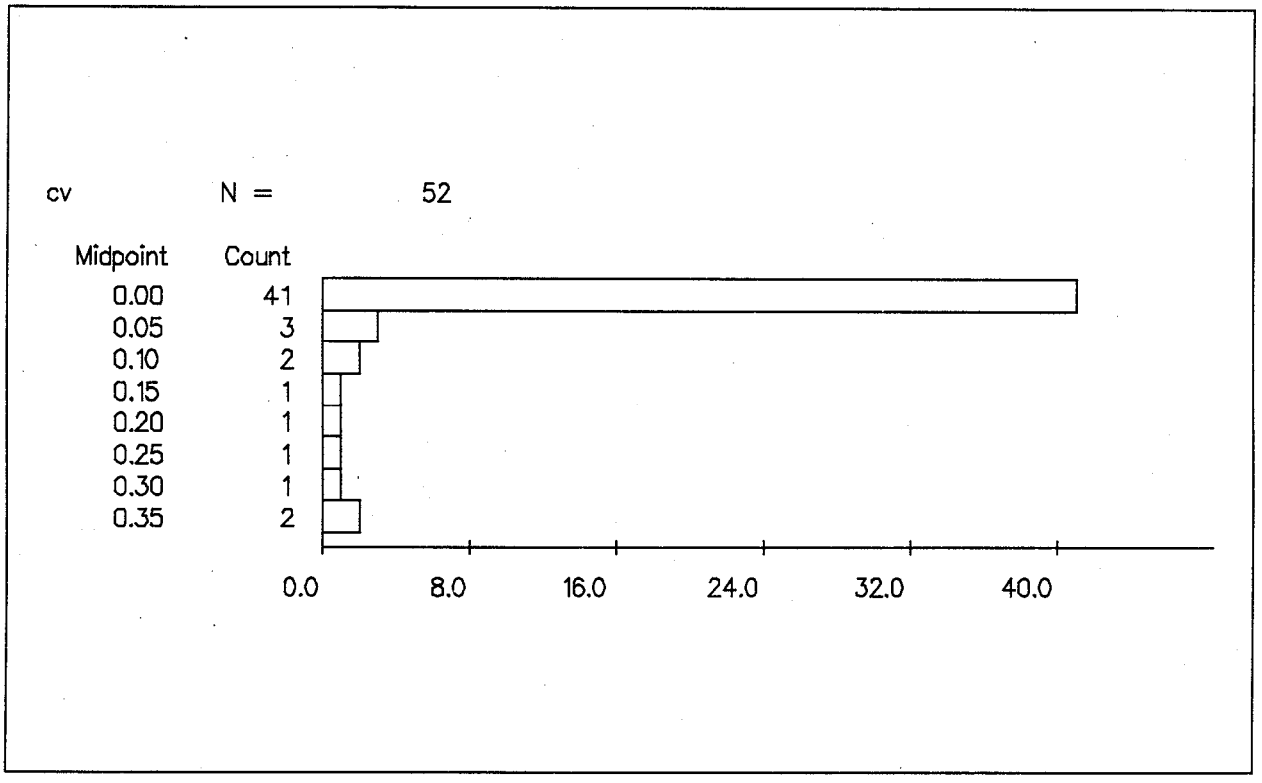


Figure C.26 Histogram of Empirical Coefficients of Variation (Unitless) for ^{3}H in Water from Containment Ponds

Table C.8 Results of Kruskal-Wallis Test for Equality of Median ^{3}H Concentrations Among Months of Collection, in Units of µCi/mL

Month of Collection	Number	Median	Average Rank	Z-Value
January	4	9.9×10^{-04}	26.2	-0.03
February	7	1.9×10^{-03}	33.7	1.35
March	9	1.5×10^{-03}	26.1	-0.08
April	9	1.2×10^{-03}	25.3	-0.25
May	4	1.2×10^{-03}	21.2	-0.72
June	3	1.8×10^{-03}	23.0	-0.41
July	3	1.8×10^{-03}	21.8	-0.55
August	3	1.8×10^{-03}	24.3	-0.26
September	3	1.8×10^{-03}	24.7	-0.22
October	4	1.2×10^{-03}	26.1	-0.05
November	2	1.8×10^{-03}	33.5	0.67
December	1	1.9×10^{-03}	36.0	0.63
Overall	52		26.5	

Kruskal-Wallis Statistic = 3.50 Degrees of Freedom = 11 p-Value = 0.982

five-point summaries, in Table C.9. To compare these to data from samples chosen for duplication, the mean and median of the original results from duplicate locations were calculated. For the water sources, in units of µCi/mL, these were:

Water Source	Arithmetic Mean	Median
Yucca Pond	1.1×10^{-06}	1.0×10^{-06}
E Tunnel	1.8×10^{-03}	1.8×10^{-03}
N Tunnel	2.2×10^{-04}	4.9×10^{-05}
T Tunnel	3.7×10^{-02}	3.6×10^{-02}

In every case, it can be seen that the median absolute difference between duplicate and original is much smaller than the median concentration of the original samples.

SAMPLES FROM SUPPLY WELLS, ANALYZED USING ENRICHED TRITIUM

Tritium concentrations in water from ten supply wells were measured, using enrichment, an analytic technique with a smaller limit of detection than conventional methods. Individual concentrations appear in Attachment C.16. Descriptive statistics, in units of µCi/mL, for the samples analyzed with enriched tritium are:

Number of data values = 36
Arithmetic mean = 4.4×10^{-09}
Median = 3.0×10^{-09}
Standard deviation = 4.9×10^{-09}
Minimum value = -1.3×10^{-09}
Maximum value = 1.9×10^{-08}

Table C.9 Five-Point Summaries of Absolute Values of Differences between Original and Duplicate Measurement of ^{3}H Concentrations, in Units of µCi/mL, in Water from Containment Ponds

Water Source	Number of Values	Minimum Value	25th Percentile	Median	75th Percentile	Max. Value
Yucca Pond	6	1.0×10^{-07}	1.2×10^{-07}	2.1×10^{-07}	4.0×10^{-07}	4.0×10^{-07}
E Tunnel	20	0.0	0.0	0.0	0.0	4.0×10^{-04}
N Tunnel	10	0.0	0.0	1.0×10^{-06}	1.0×10^{-06}	3.0×10^{-05}
T Tunnel	11	0.0	0.0	1.0×10^{-03}	2.0×10^{-03}	2.0×10^{-03}

Of these concentrations, all but one was positive. The geometric mean of the positive concentrations was 2.5×10^{-09} µCi/mL (9.2×10^{-02} Bq/L), and the geometric standard deviation was 4.1. The median limit of detection was 9.0×10^{-09} µCi/mL (3.3×10^{-01} Bq/L), approximately one fiftieth of the median limit of detection in the samples analyzed by conventional methods. Approximately eleven percent of the samples analyzed using the enriched tritium method yielded concentrations greater than the individual limits of detection. Results from individual sampling stations are discussed in Volume I, Chapter 5.

RADIUM-226 AND RADIUM-228

Radium concentrations were measured at 10 supply wells around the NTS, as described in Volume 1, Chapter 5. For ^{226}Ra, descriptive statistics, in units of µCi/mL, for the entire network are:

Number of data values = 25
Arithmetic mean = 5.2×10^{-10}
Median = 4.9×10^{-10}
Standard deviation = 7.9×10^{-10}
Minimum value = -6.7×10^{-10}
Maximum value = 2.2×10^{-09}

For ^{228}Ra, descriptive statistics, in units of µCi/mL, for the entire network are:

Number of data values = 25
Arithmetic mean = 2.1×10^{-10}
Median = 2.0×10^{-10}
Standard deviation = 3.3×10^{-10}
Minimum value = -5.3×10^{-10}
Maximum value = 9.3×10^{-10}

All but one of the observed concentrations of ^{226}Ra, the exception being the sample collected at Area 6, Well C, on November 4, were less than the individual limits of detection. The median limit of detection was 2.8×10^{-09} µCi/mL (1.0×10^{-01} Bq/L). Sixty-eight percent of the observed concentrations were positive. Of the positive concentrations, the geometric mean was 6.6×10^{-10} µCi/mL (2.4×10^{-02} Bq/L), with a geometric standard deviation of 2.3. The concentrations, in units of 10^{-10} µCi/mL, appear in a boxplot in Figure C.27.

All of the observed concentrations of ^{228}Ra were less than the individual limits of detection. The median limit of detection was 1.6×10^{-09} µCi/mL (5.9×10^{-02} Bq/L). Seventy-six percent of

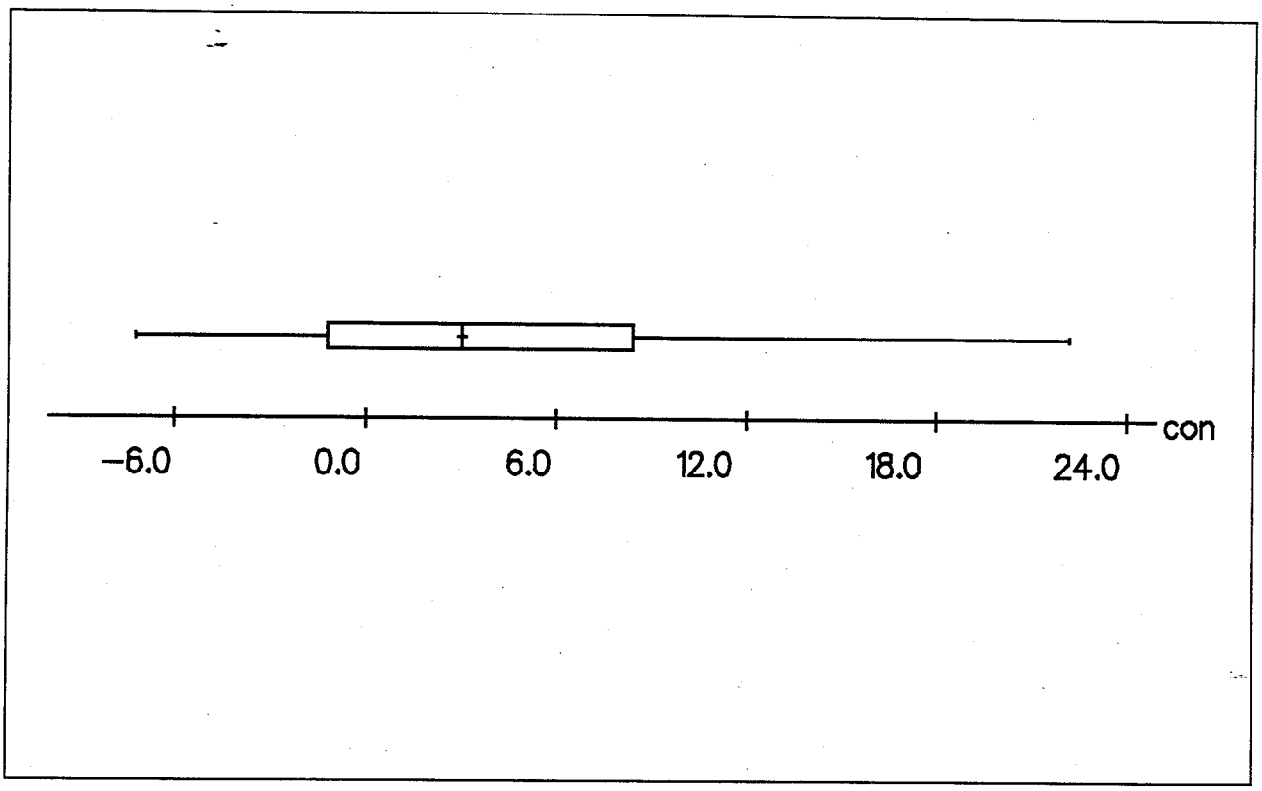


Figure C.27 Boxplot of ^{226}Ra Concentrations, in Units of 10^{-10} µCi/mL

the observed concentrations were positive. Of the positive concentrations, the geometric mean was 2.8×10^{-09} µCi/mL (1.0×10^{-01} Bq/L), with a geometric standard deviation of 2.0. The concentrations, in units of 10^{-10} µCi/mL, appear in a boxplot in Figure C.28.

Water sources cannot be compared, as only samples gathered from supply wells are analyzed for radium. Comparing sampling stations is of dubious merit, as few samples were gathered at any one sampling station. Samples are collected at three times, in April, July, and November. It is possible to compare results among these times of collection. As the observed concentrations are almost all below individual limits of detection, detailed statistical analysis is not thought worthwhile. Therefore, comparison is done through simple descriptive statistics. This comparison appears in Table C.10 for ^{226}Ra and in Table C.11 for ^{228}Ra.

It can be seen that the differences among sampling periods are small, compared to the standard deviations, and that no obvious patterns in means or medians exists. The standard deviation of concentration of ^{228}Ra can be seen to be much smaller in November than in the preceding months. An examination of the data shows that the larger variances early in the year are not attributable to a few unusual observations, but represent data which is intrinsically noisy. This change in variability is perhaps attributable to a change in technicians responsible for sample handling. No other factor that might account for this phenomenon has been found.

Analytic standard deviations for radium concentrations are rarely appreciably smaller than the measured concentrations. This is illustrated in Figures C.29 and C.30 where, respectively, empirical coefficients of variation for ^{226}Ra and ^{228}Ra appear as histograms.

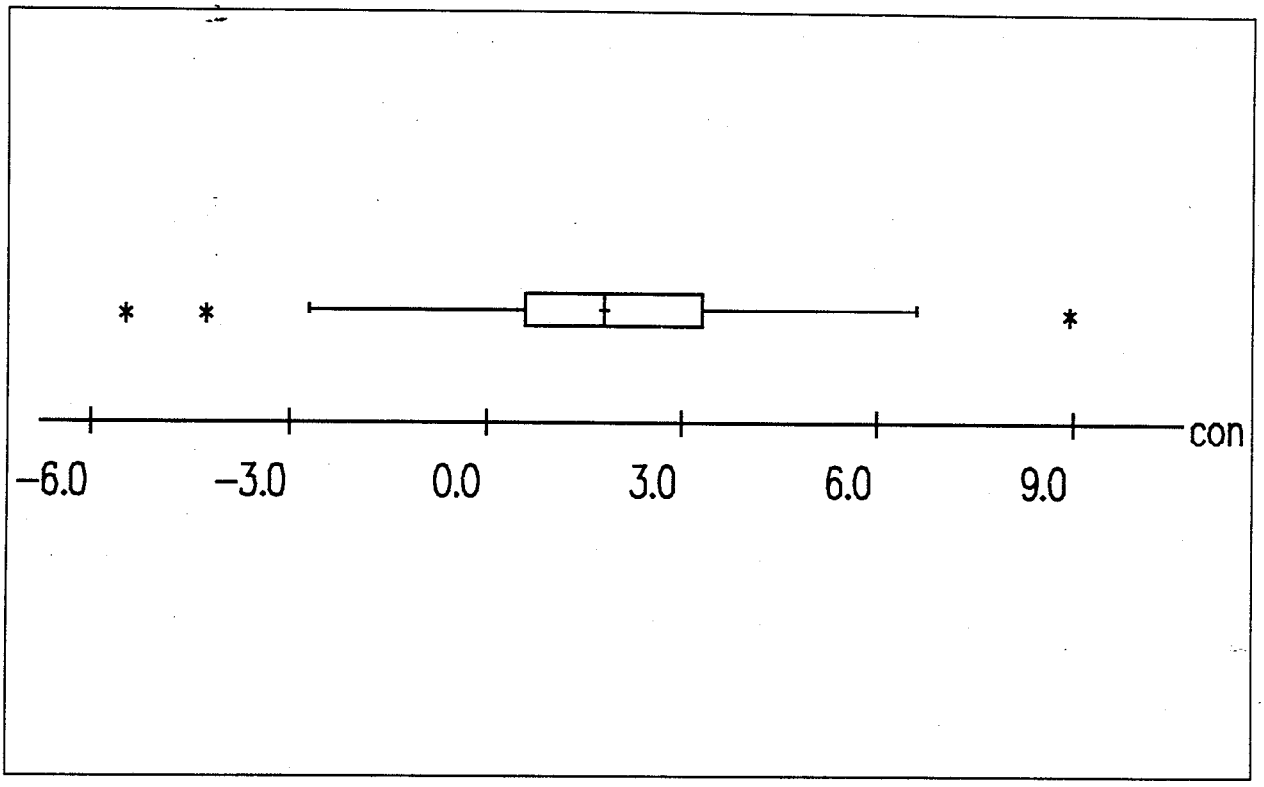


Figure C.28 Boxplot of ^{228}Ra Concentrations, in Units of 10^{-10} µCi/mL

Table C.10 Comparison of Concentrations of ^{226}Ra Samples, in Units of µCi/mL, Among Months of Sample Collection

Month	Number of Data Values	Mean	Median	Standard Deviation
April	8	6.4×10^{-10}	5.9×10^{-10}	9.5×10^{-10}
July	8	1.4×10^{-10}	-6.5×10^{-11}	6.8×10^{-10}
November	9	7.4×10^{-10}	5.2×10^{-10}	6.9×10^{-10}

Table C.11 Comparison of Concentrations of ^{228}Ra Samples, in Units of µCi/mL, Among Months of Sample Collection

Month	Number of Data Values	Mean	Median	Standard Deviation
April	8	1.4×10^{-10}	1.6×10^{-10}	4.8×10^{-10}
July	8	2.4×10^{-10}	2.2×10^{-10}	3.2×10^{-10}
November	9	2.3×10^{-10}	2.2×10^{-10}	1.6×10^{-10}

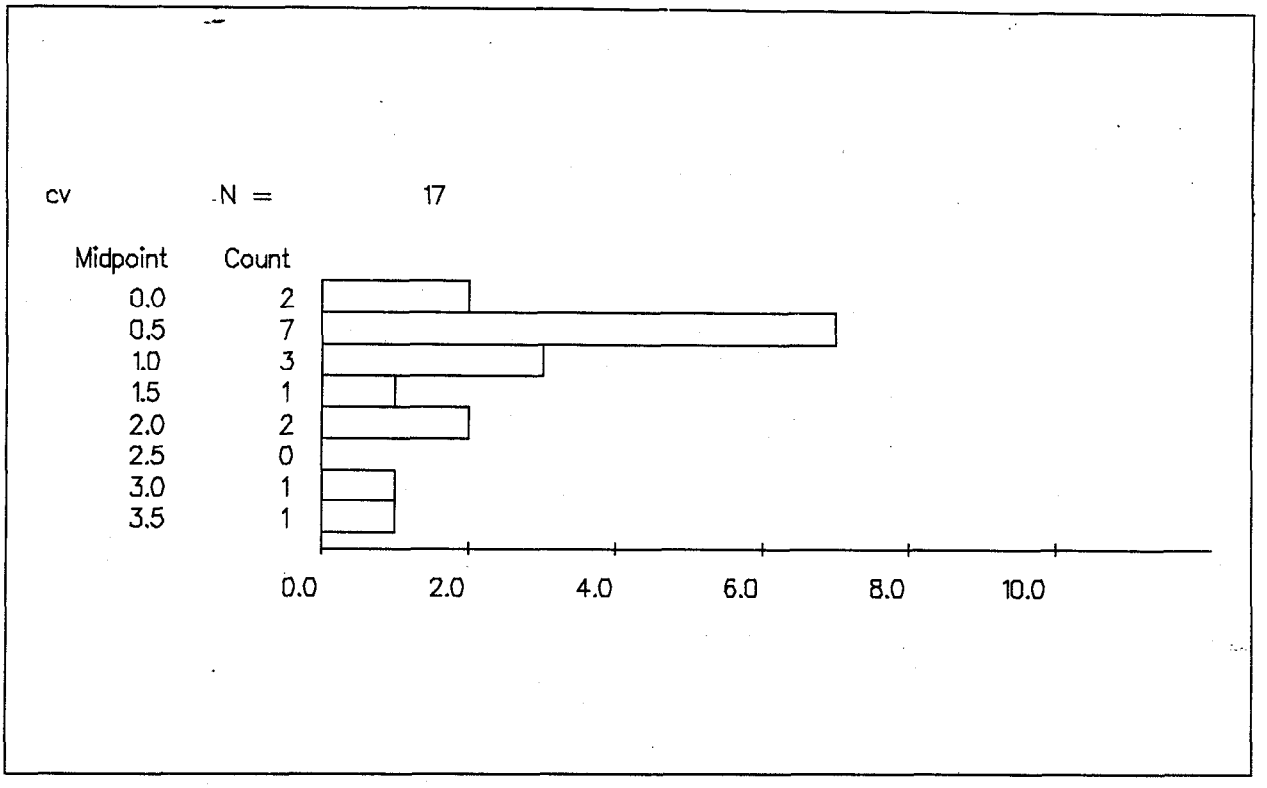


Figure C.29 Histogram of Empirical Coefficients of Variation (Unitless) for ^{226}Ra Concentrations

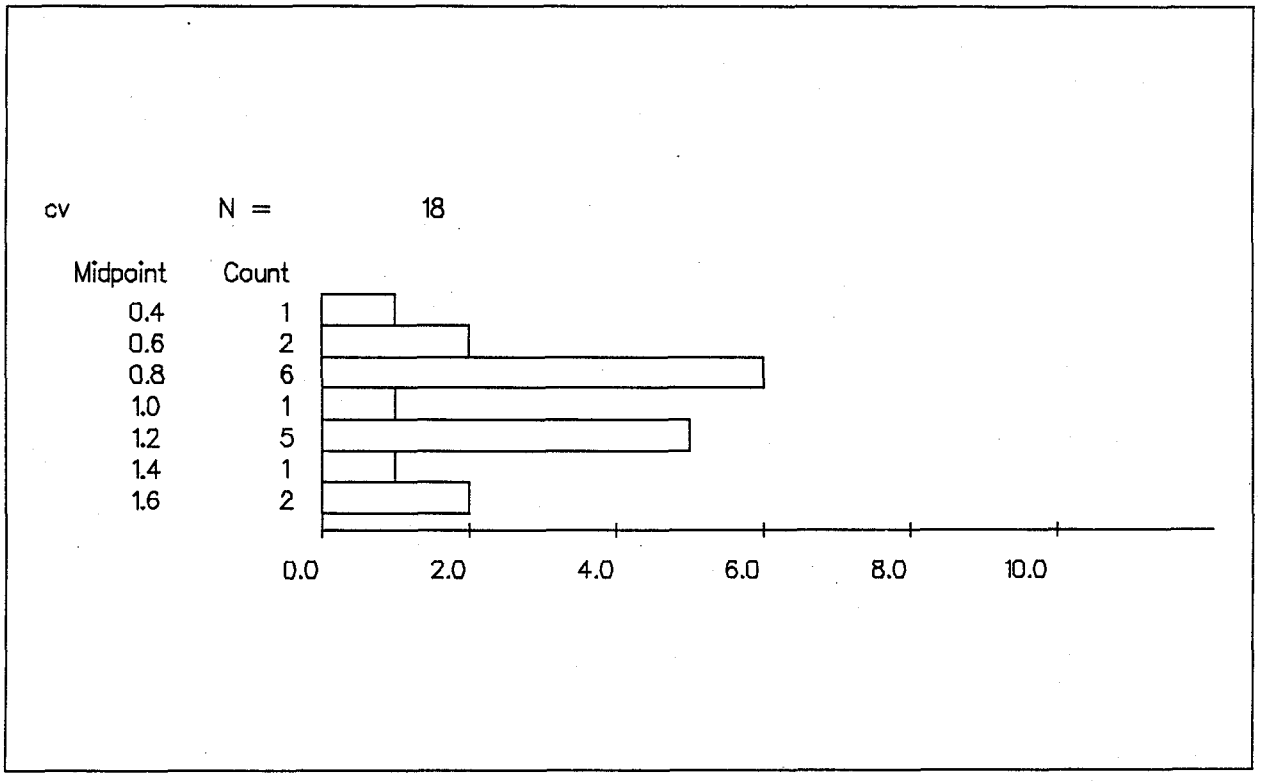


Figure C.30 Histogram of Empirical Coefficients of Variation (Unitless) for ^{228}Ra Concentrations

HISTORICAL TRENDS

Detailed reporting of historical trends for all contaminants at all sampling stations would result in an unwieldy document. Instead, two representative stations were chosen from each of the water sources, open reservoirs, natural springs, supply wells, and potable water.

Representative sampling stations are:

Water Source	NTS Operational Area	Sampling Station
Open Reservoir	2	Well 2 Reservoir
Open Reservoir	18	Camp 17 Reservoir
Natural Springs	12	White Rock Spring
Natural Springs	12	Gold Meadow Spring
Supply Wells	23	Army Well Number 1
Supply Wells	6	Well C-1
Potable Water	2	Rest Room
Potable Water	6	Cafeteria

Plots of annual average gross beta concentrations, in units of 10^{-09} µCi/mL, at the representative stations, versus year of collection appear in Figures C.31 through C.38. For the two potable water sampling stations, plots of annual average concentrations of certain other contaminants versus year of sample collection appear. Annual average ^{3}H concentrations, in units of 10^{-08} µCi/mL, appear in Figures C.39 and C.40. Annual average gross alpha concentrations, in units of 10^{-09} µCi/mL, appear in Figures C.41 and C.42. Annual average ^{238}Pu concentrations, in units of 10^{-12} µCi/mL, appear in Figures C.43 and C.44. Annual average $^{239+240}Pu$ concentrations, in units of 10^{-12} µCi/mL, appear in Figures C.45 and C.46. No historical trends were analyzed for water from sewage lagoons or containment ponds. There is relatively little variability in concentrations of samples taken from sewage ponds. Concentrations from containment ponds vary so greatly among years, depending on the type of experimental activity conducted during those years, that few meaningful conclusions could be drawn.

In general, historical trends for concentrations of gross beta in water are not as clear as those of gross beta in air. Among non-potable water sources, a peak generally appeared in 1971, following the BANEBERRY event's accidental venting. This feature is not universal, nor should we expect it to be. Underground water, such as samples from wells, would not have been affected. We see this in samples from Area 23, Army Well Number 1, where no peak was evident. Some sampling stations, such as Area 12, White Rock Spring, showed a peak in the late 1970's, perhaps attributable to foreign nuclear testing, others did not. Among potable water sources, no trends were evident. This is not terribly surprising, as potable water is typically better shielded from environmental factors than water from other sources.

In Figures C.39 through C.46, concentrations of ^{3}H, gross alpha, ^{238}Pu, and $^{239+240}Pu$ concentrations from samples collected at Area 2, Restroom, and Area 6, Cafeteria, are plotted versus year of collection. The only obvious features are peaks in gross alpha concentrations occurring in 1987 and in Pu concentrations occurring in 1990. These peaks were observed at almost all stations, including those not reported here in detail. No physical explanation for these peaks were found. It is possible that it is an artifact, arising from the manner in which the samples were analyzed that year.

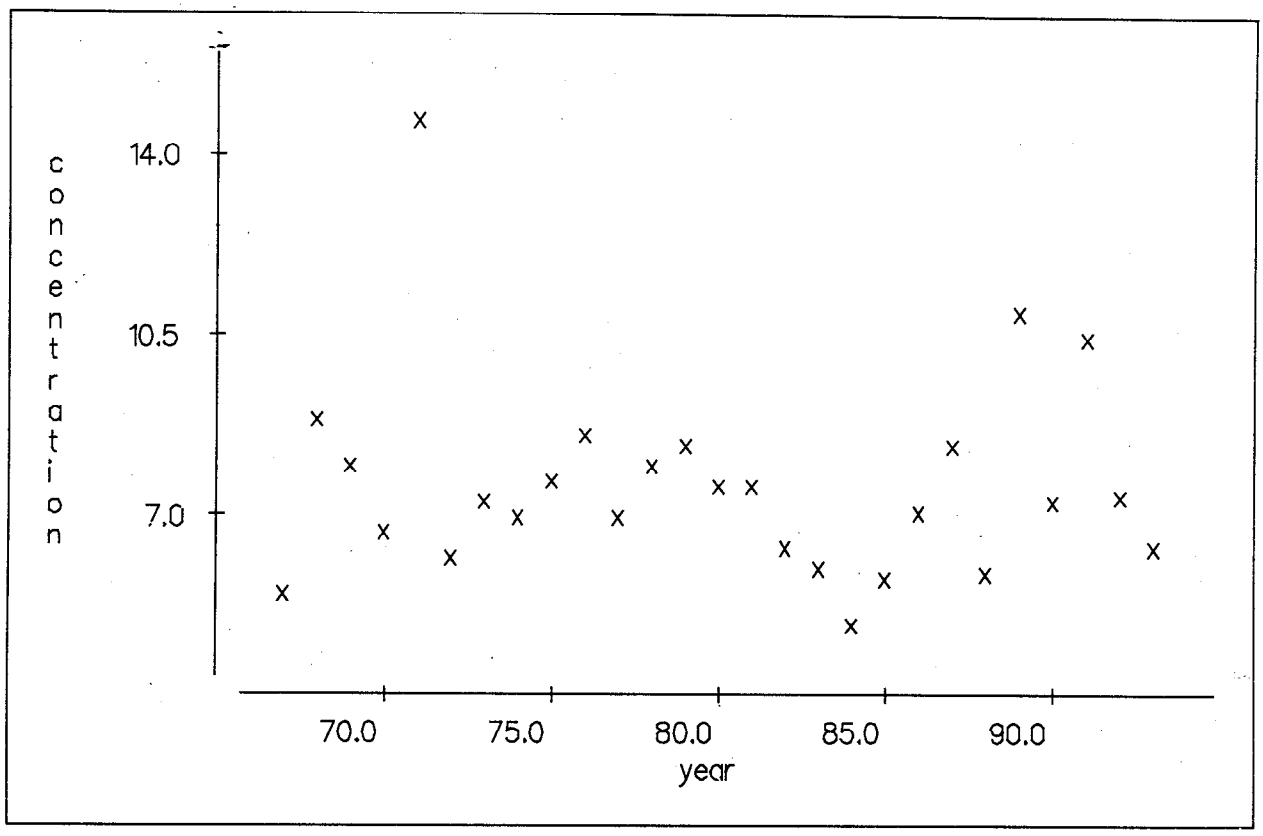


Figure C.31 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 2, Well 2 Reservoir

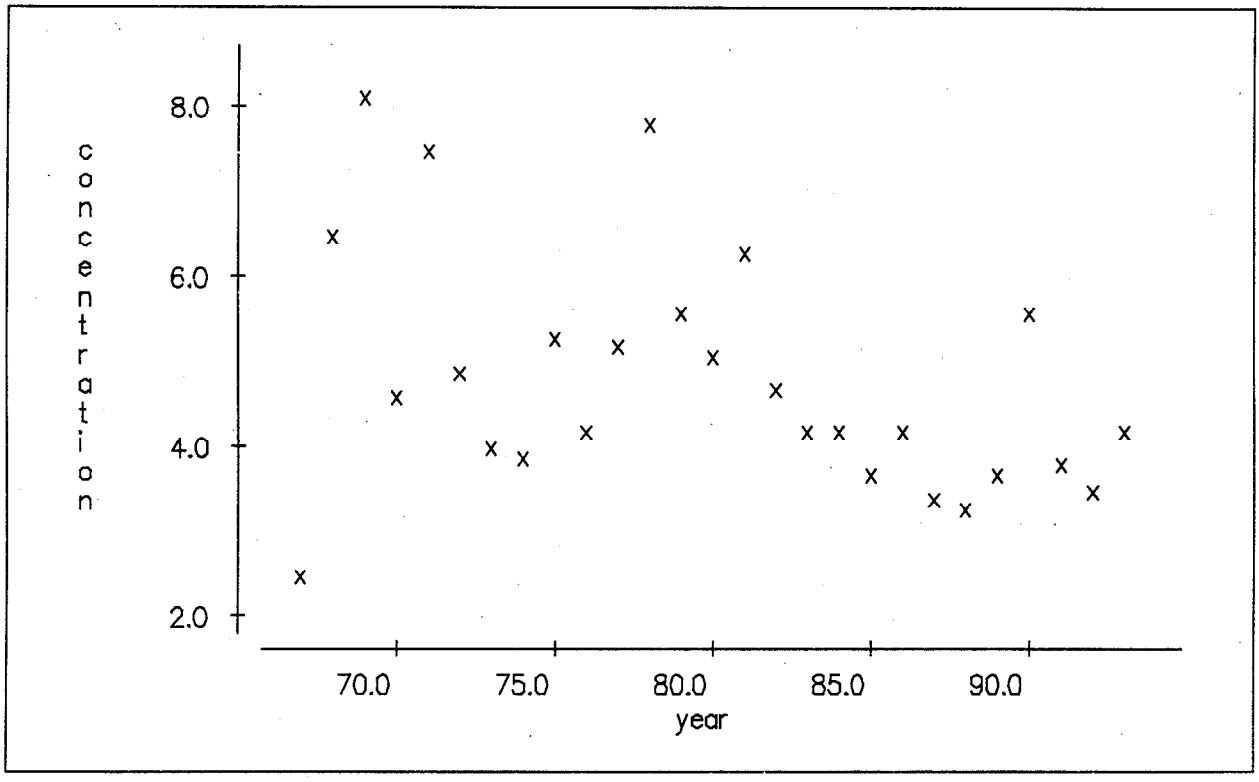


Figure C.32 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 18, Camp 17 Reservoir

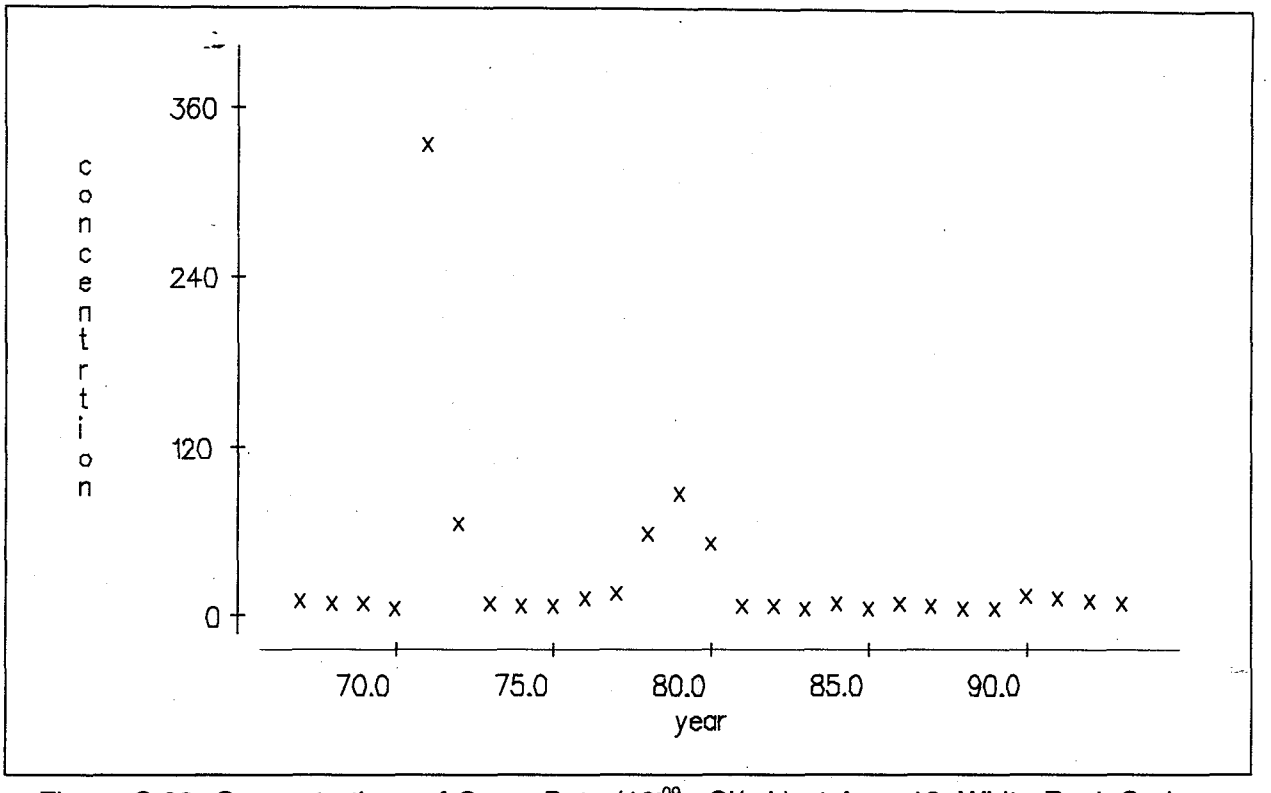


Figure C.33 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 12, White Rock Springs

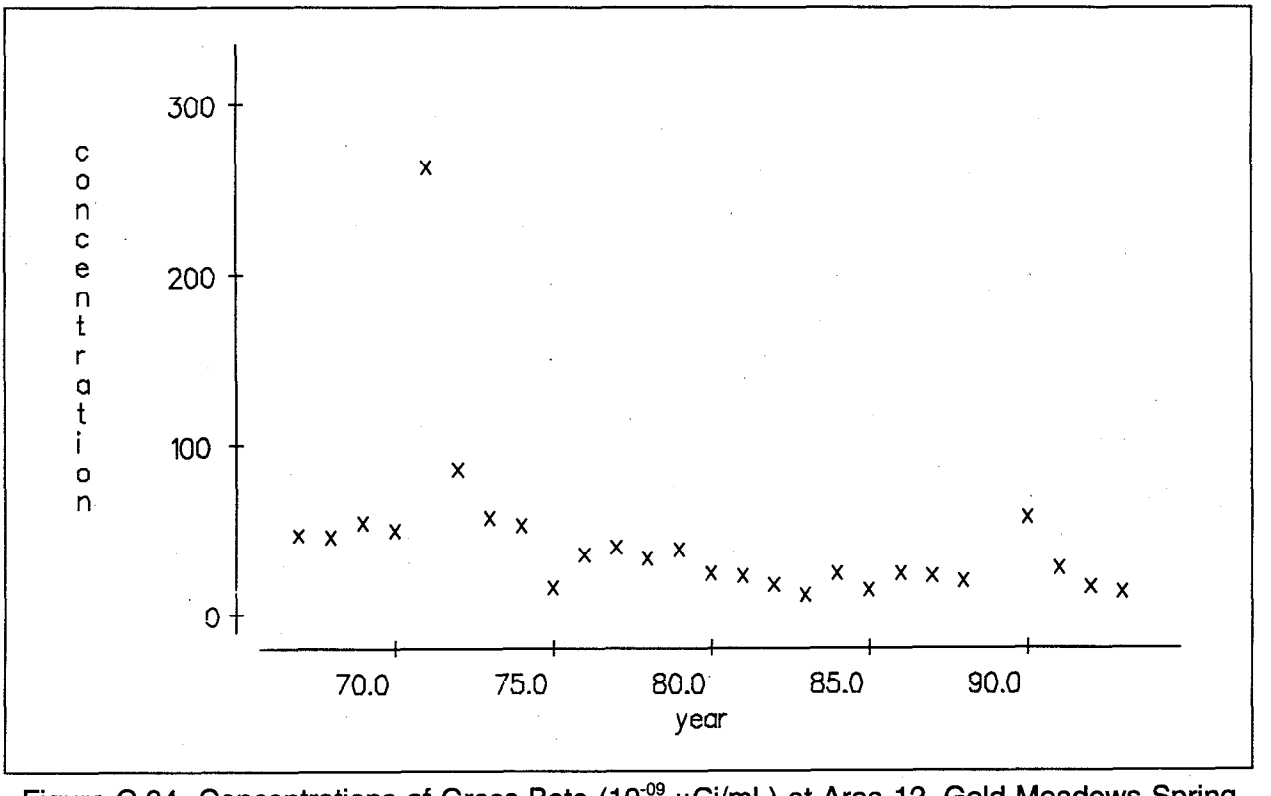


Figure C.34 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 12, Gold Meadows Spring

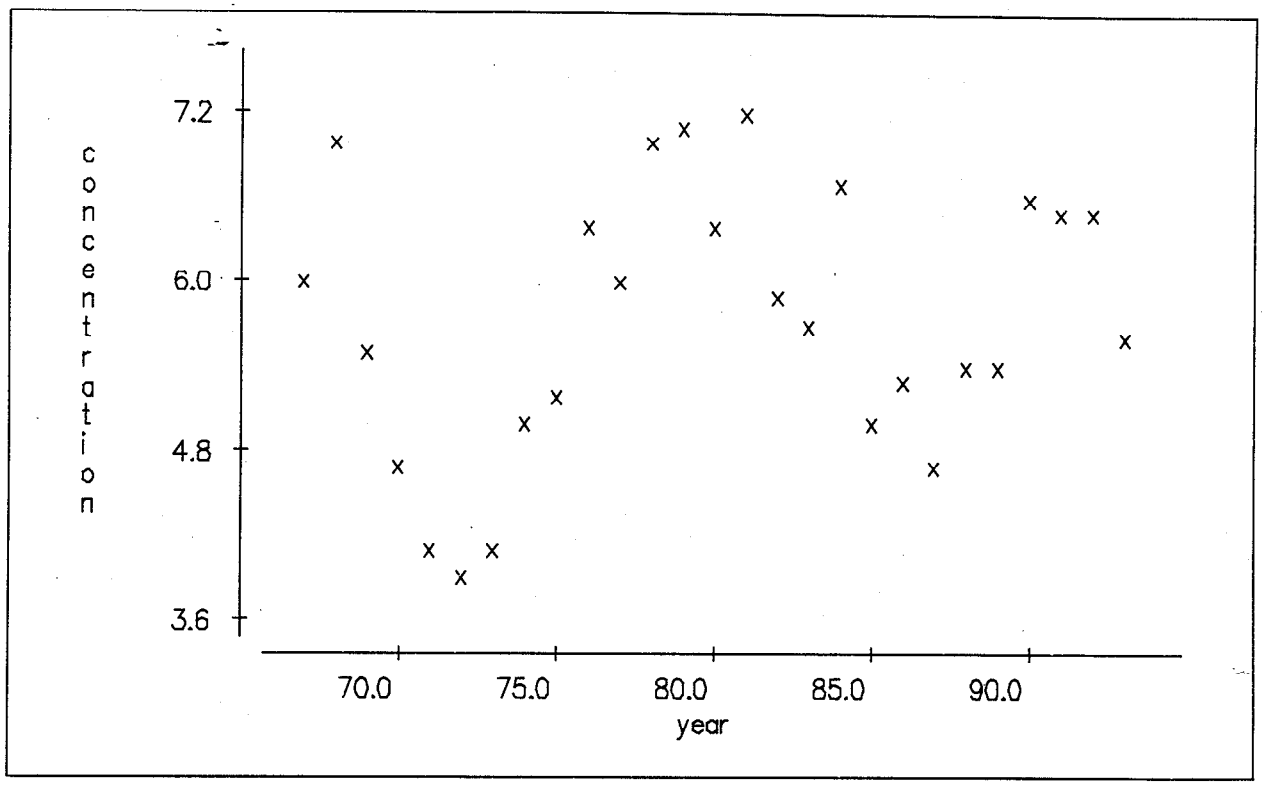


Figure C.35 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 23, Army Well No. 1

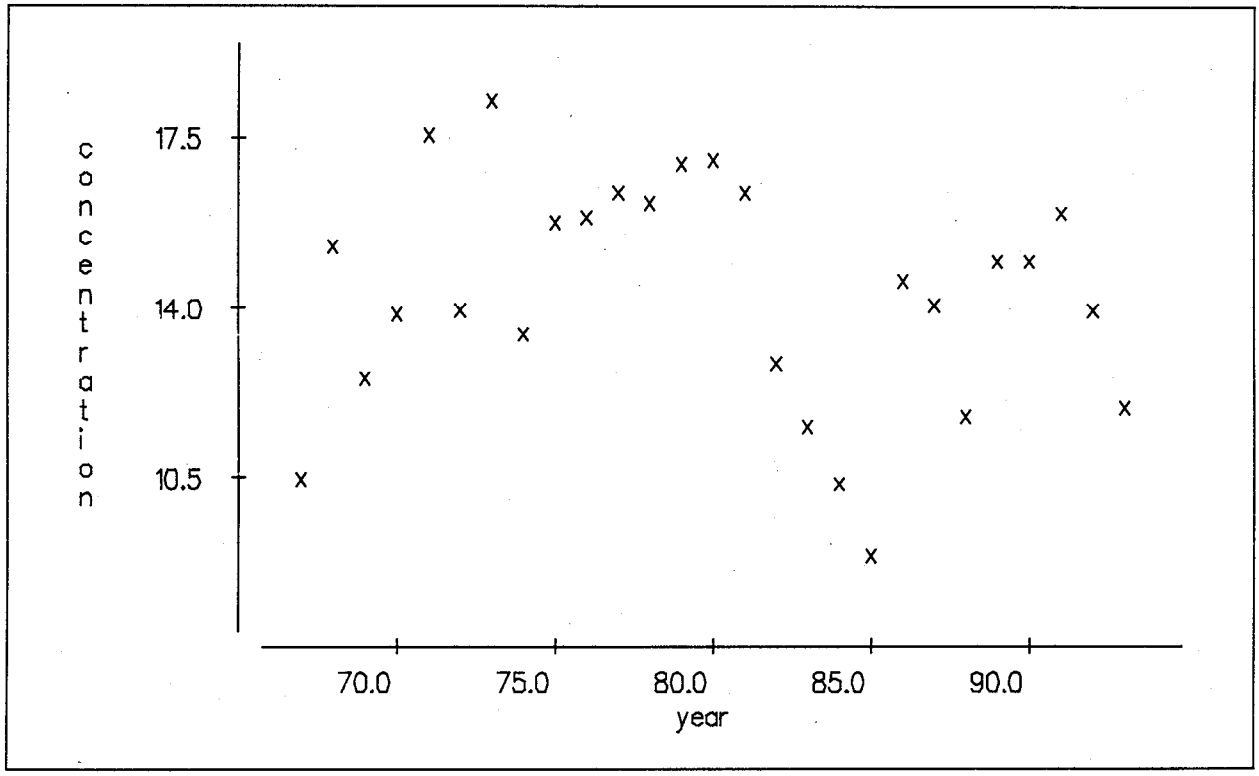


Figure C.36 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 6, Well C-1

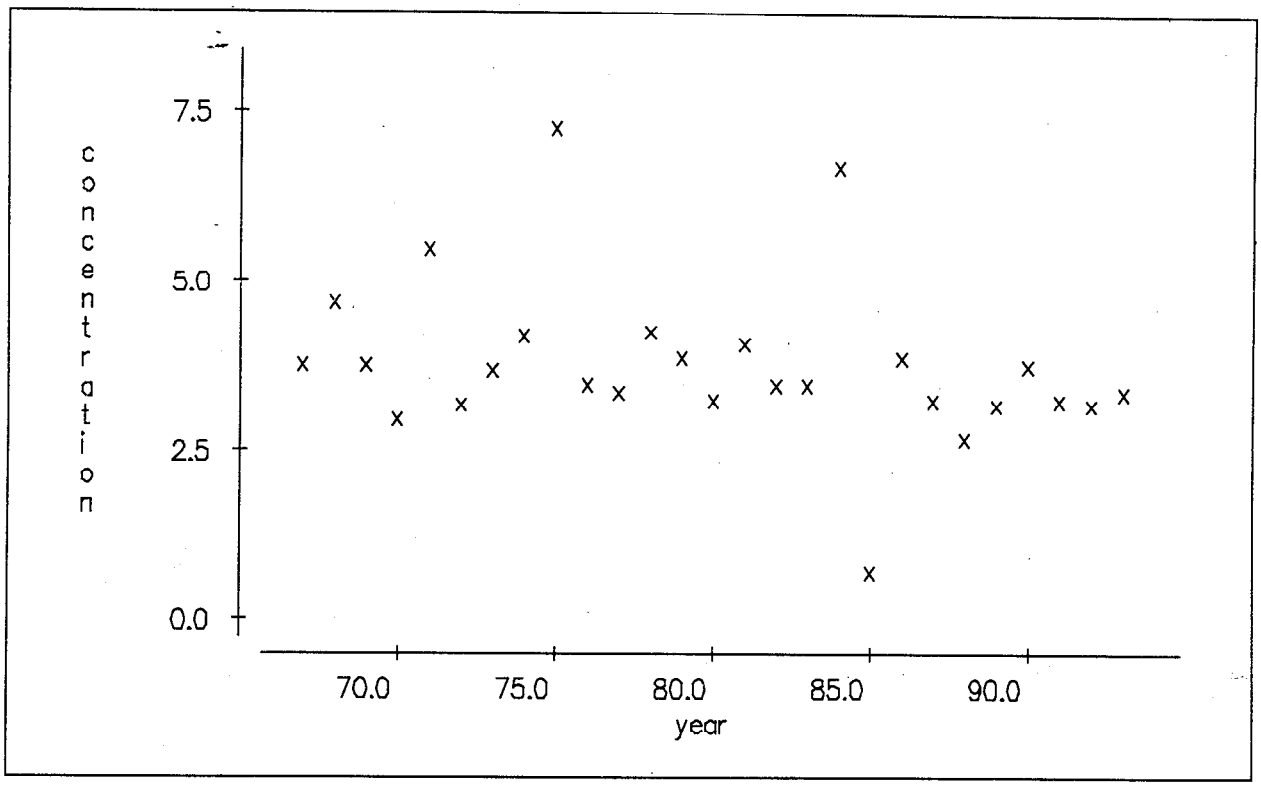


Figure C.37 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 2, Rest Room

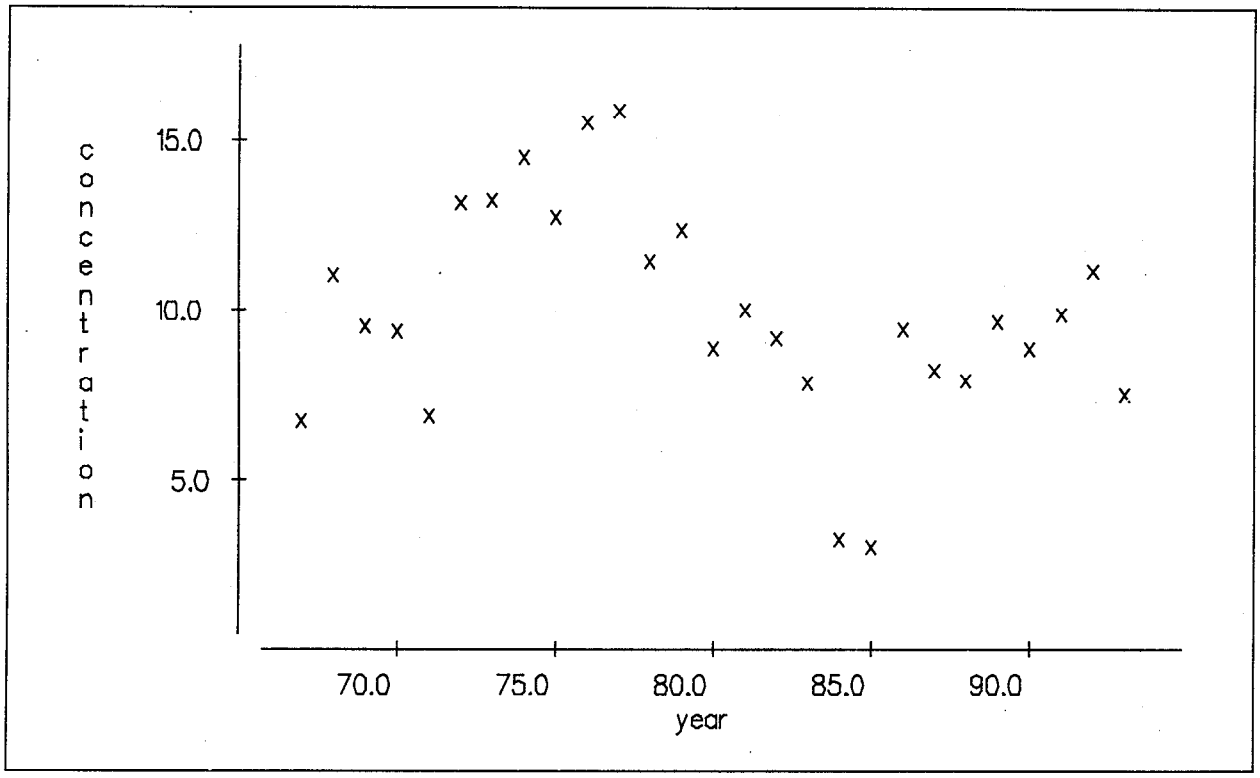


Figure C.38 Concentrations of Gross Beta (10^{-09} µCi/mL) at Area 6, Cafeteria

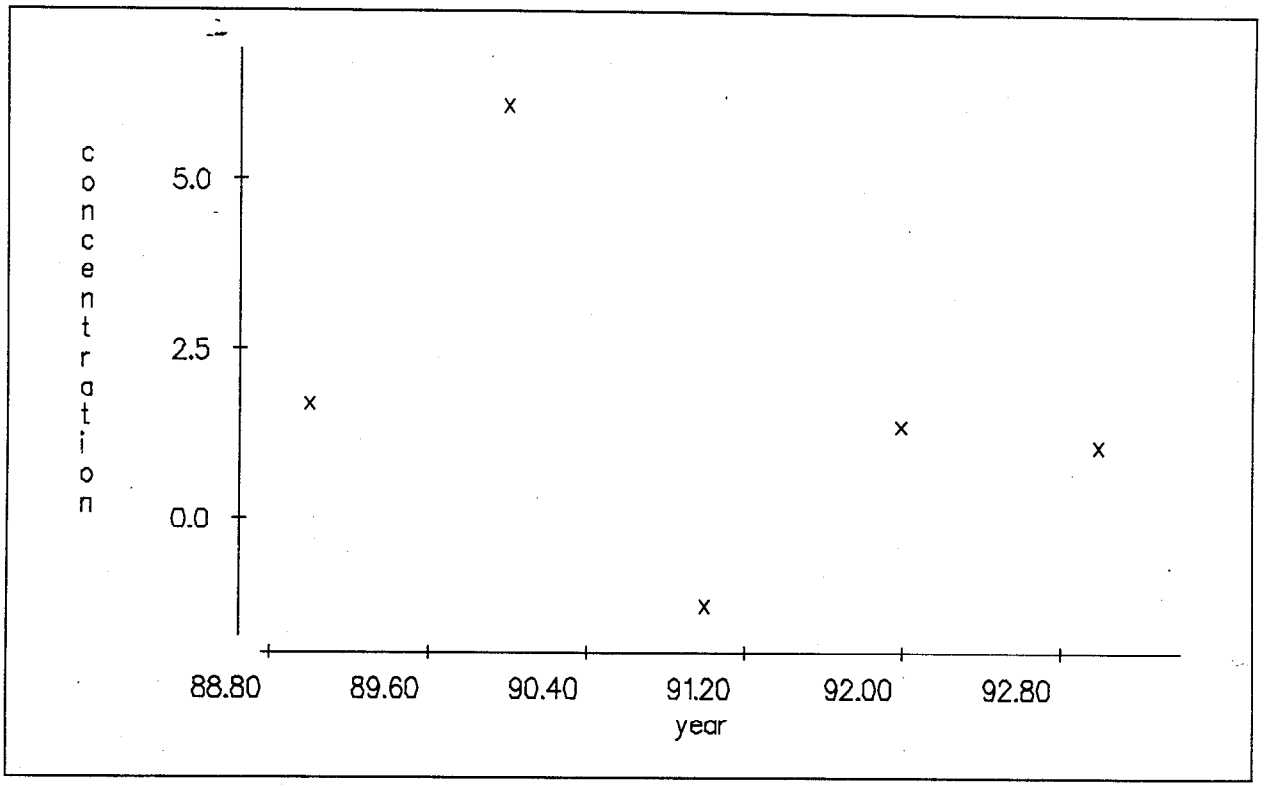


Figure C.39 Concentrations of ^{3}H (10^{-08} µCi/mL) at Area 2, Rest Room

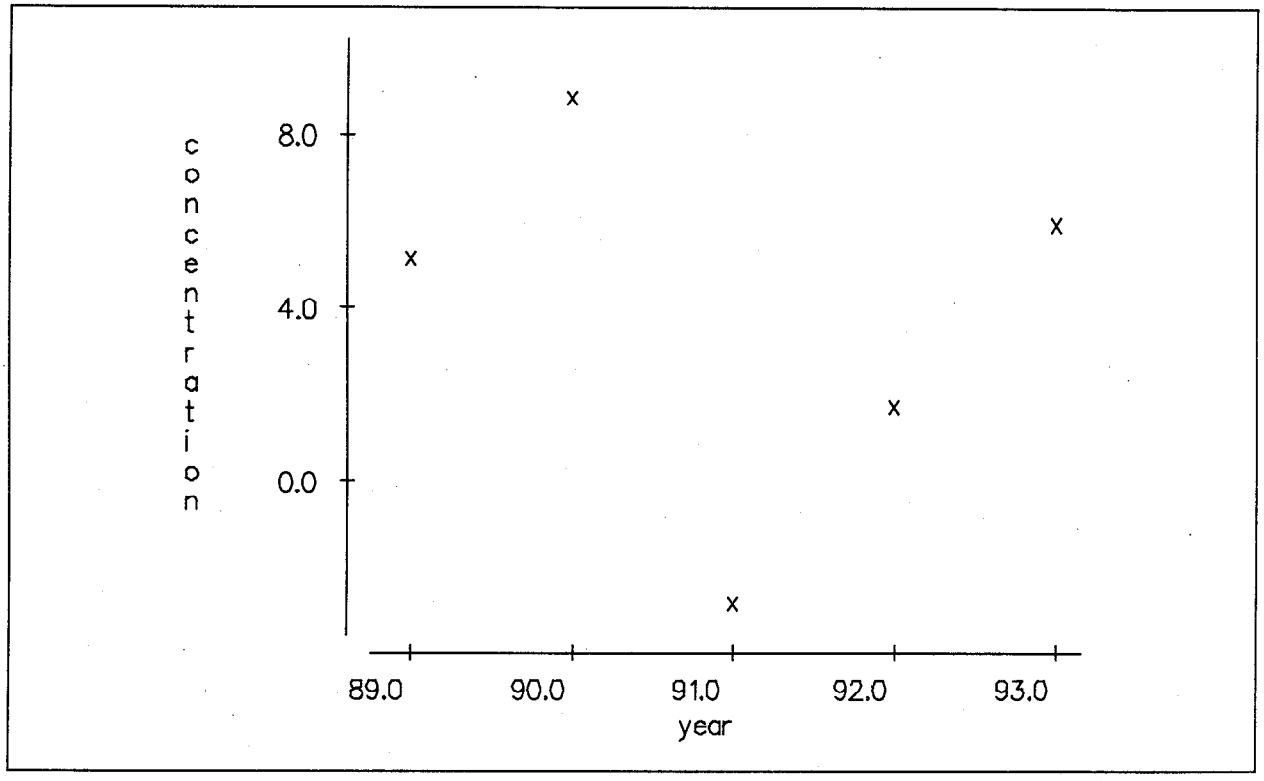


Figure C.40 Concentrations of ^{3}H (10^{-08} µCi/mL) at Area 6, Cafeteria

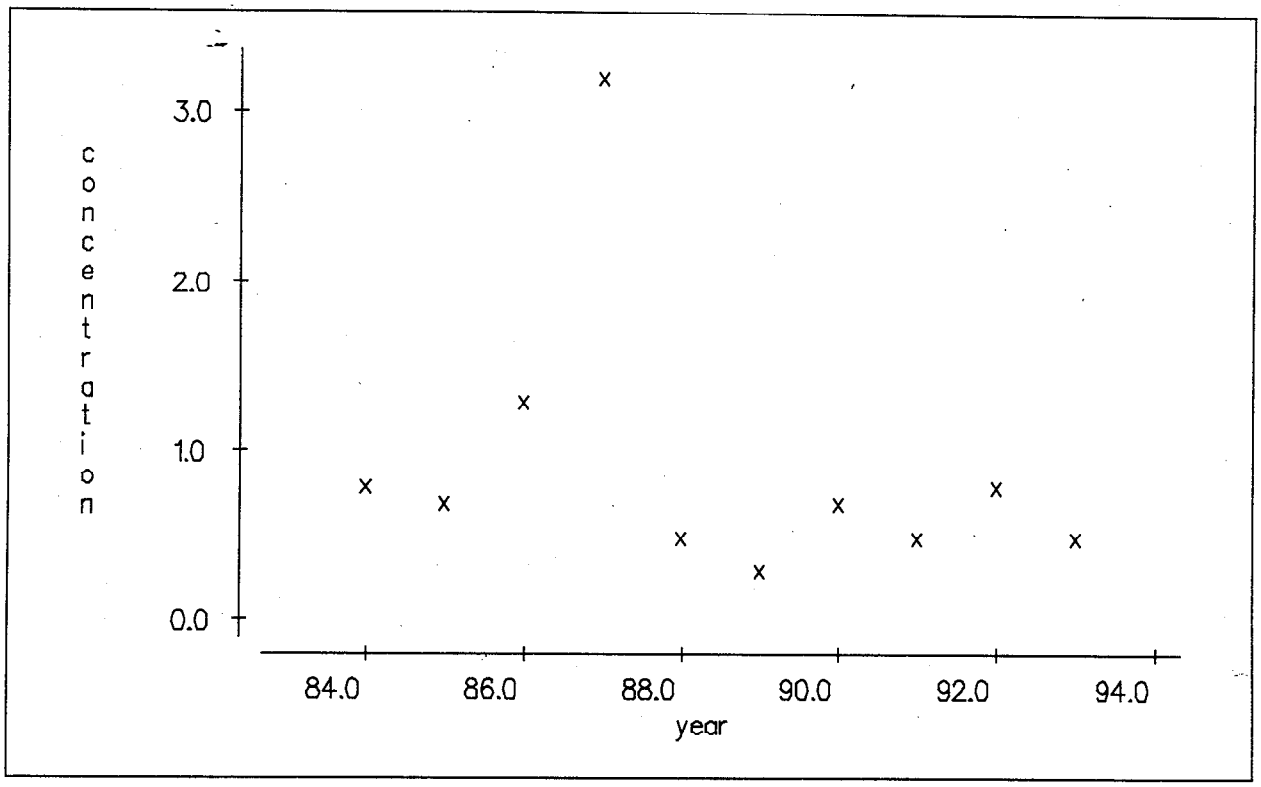


Figure C.41 Concentrations of Gross Alpha (10^{-09} µCi/mL) at Area 2, Rest Room

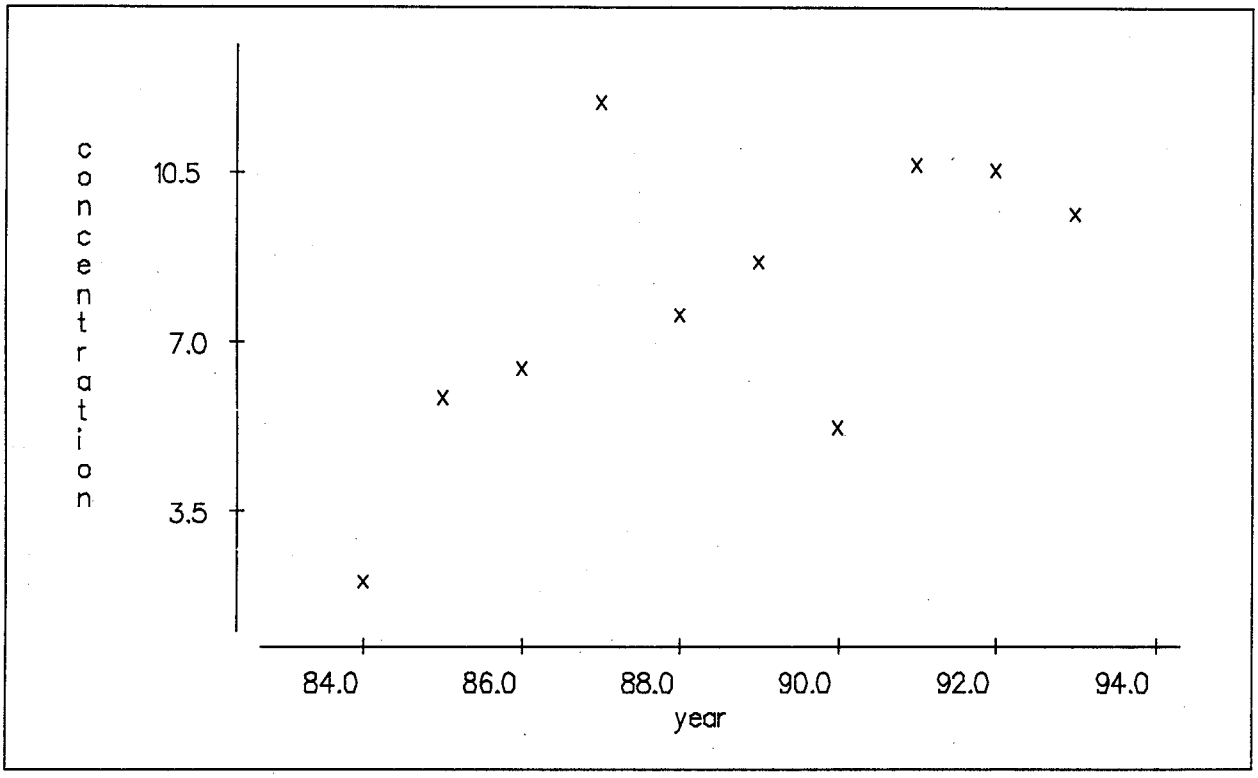


Figure C.42 Concentrations of Gross Alpha (10^{-09} µCi/mL) at Area 6, Cafeteria

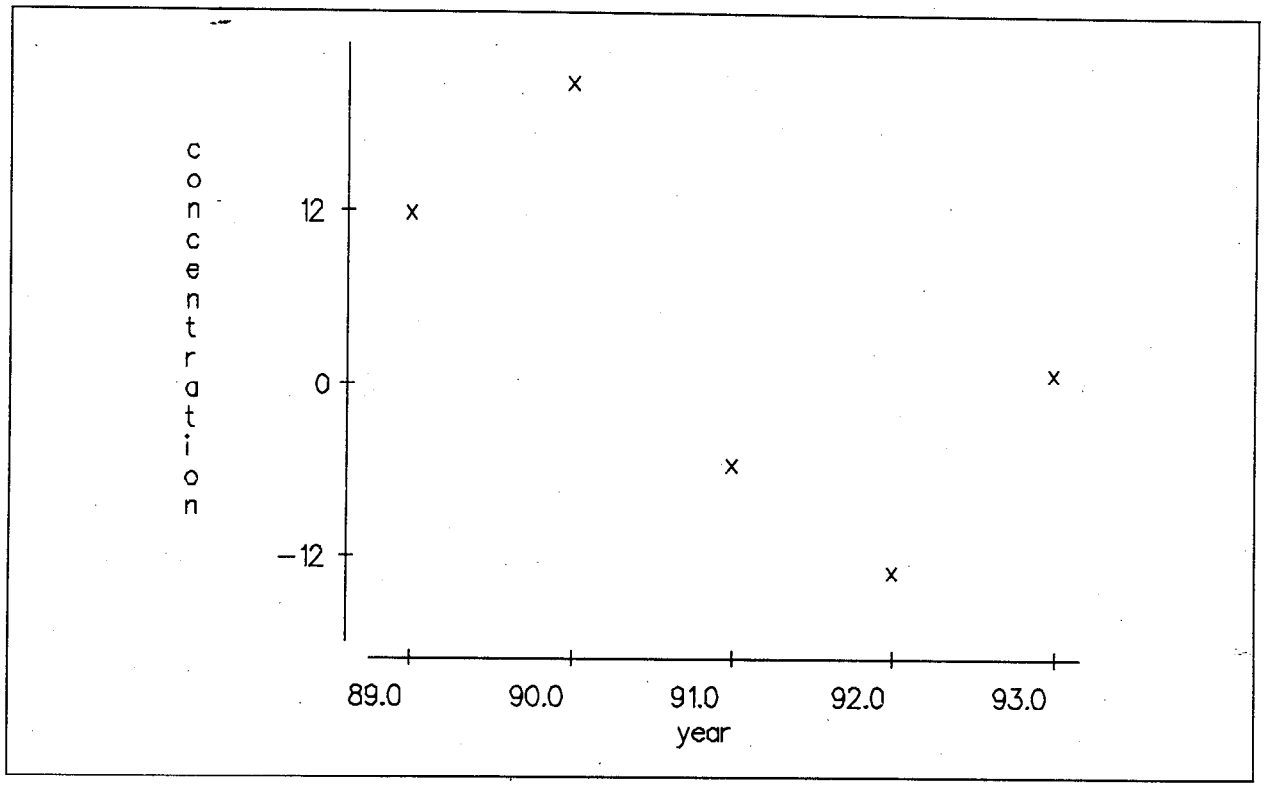


Figure C.43 Concentrations of ^{238}Pu (10^{-12} µCi/mL) at Area 2, Rest Room

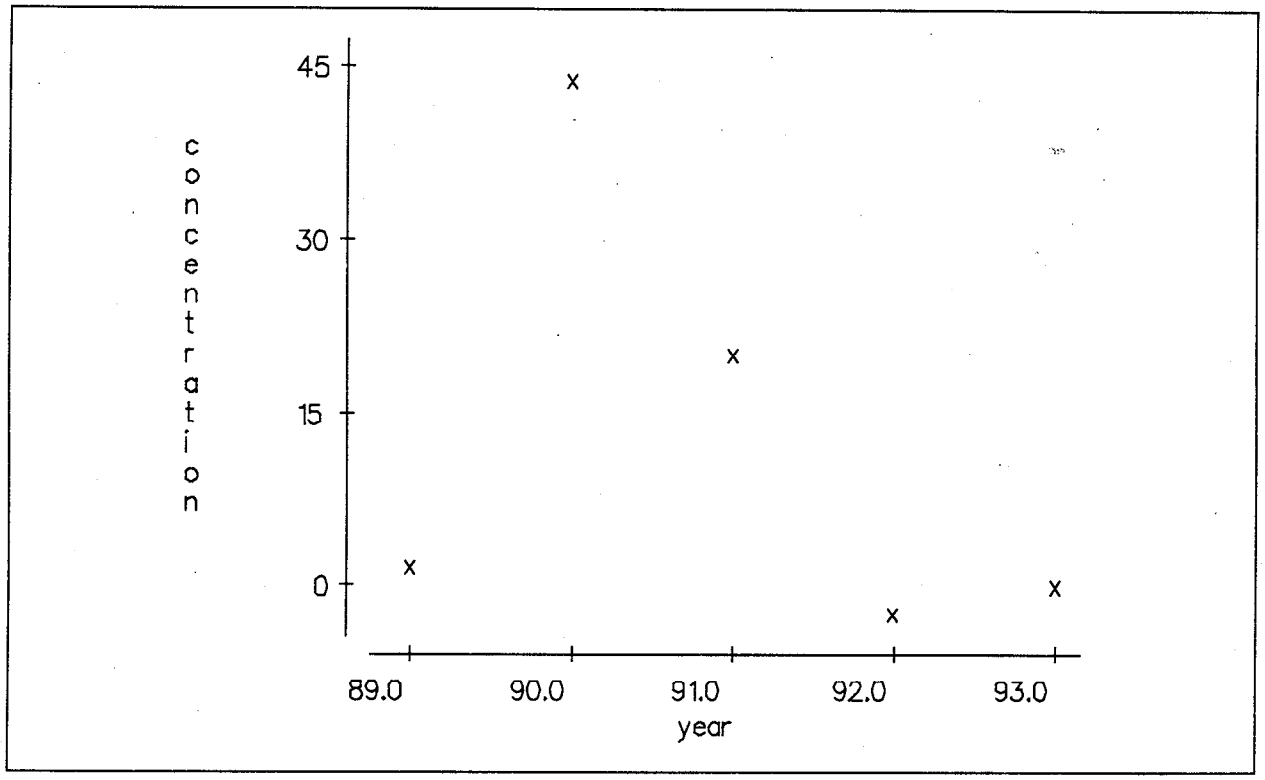


Figure C.44 Concentrations of ^{238}Pu (10^{-12} µCi/mL) at Area 6, Cafeteria

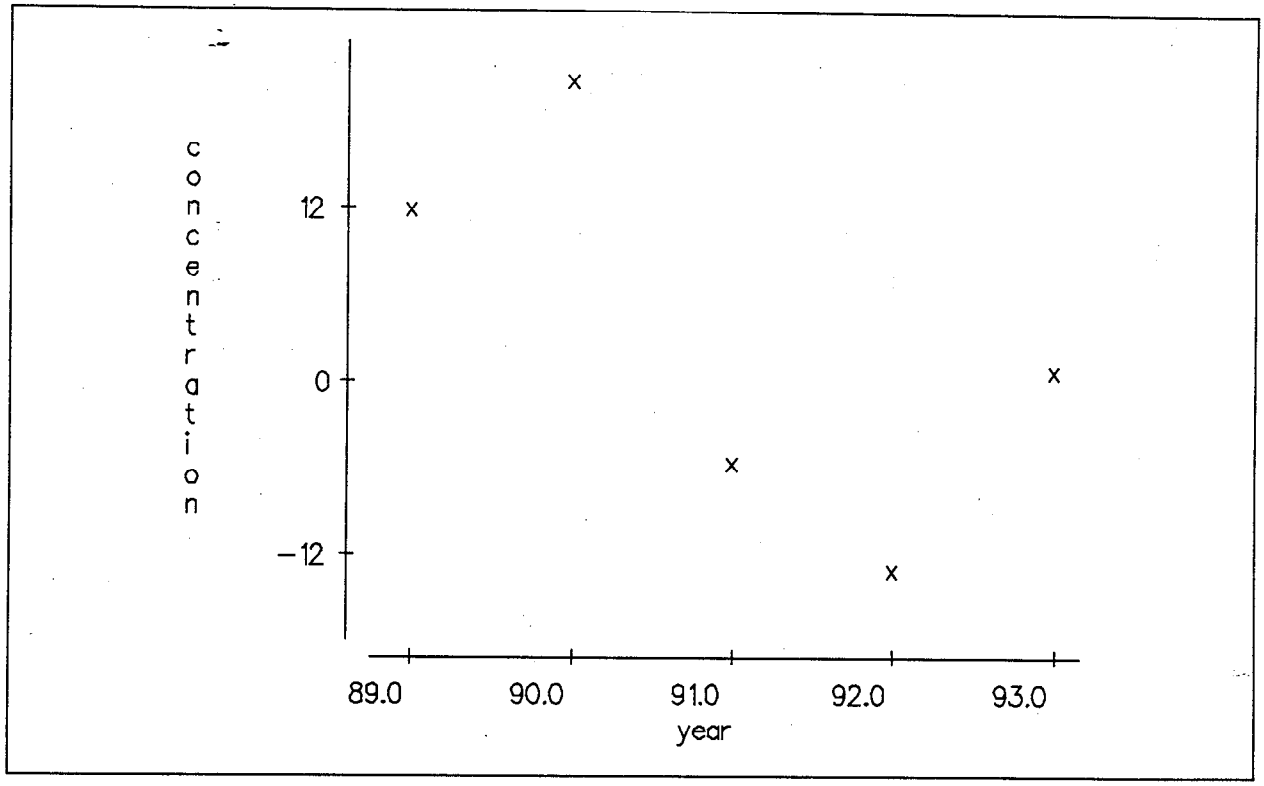


Figure C.45 Concentrations of $^{239+240}Pu$ (10^{-12} μCi/mL) at Area 2, Rest Room

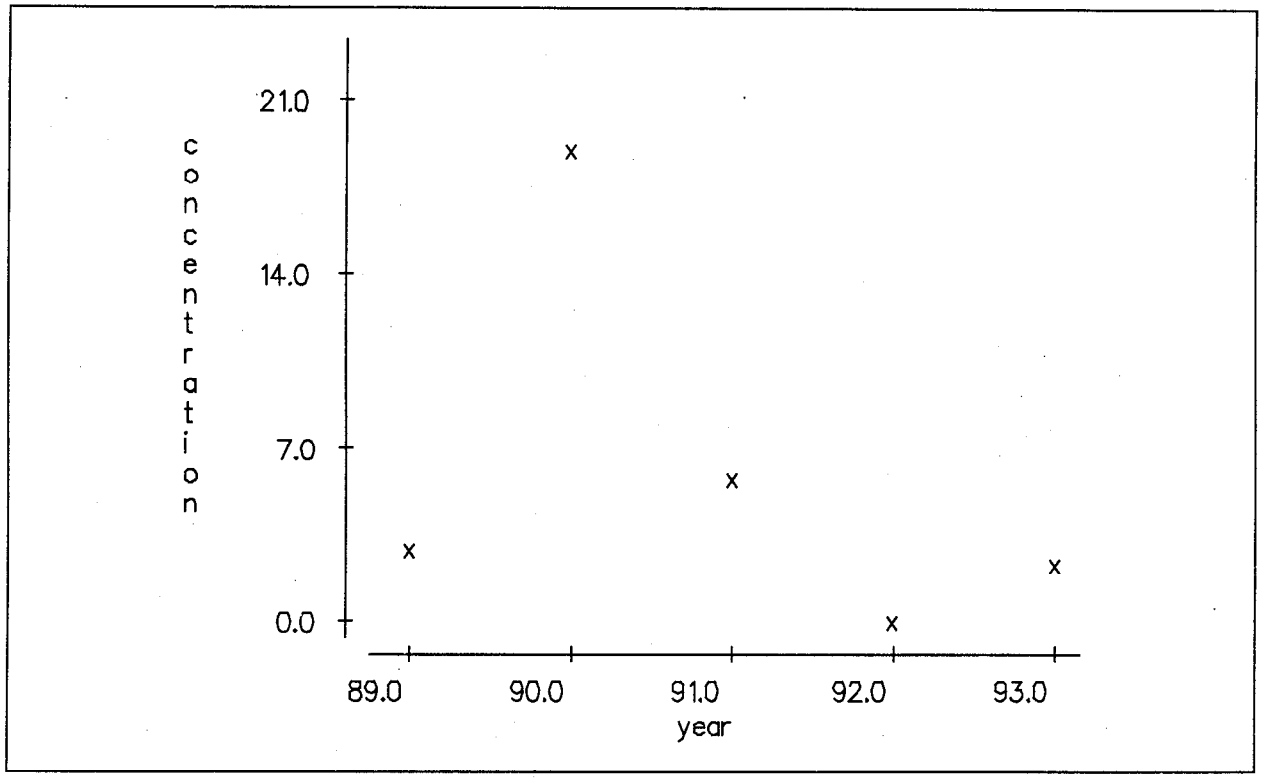


Figure C.46 Concentrations of $^{239+240}Pu$ (10^{-12} μCi/mL) at Area 6, Cafeteria

Attachment C.1 ^{90}Sr in Water - 1993

Sampling Location	Collection Dates	Concentration (µCi/mL)	Standard Deviation (s) (µCi/mL)
Area 1, Building 101	07/06/93	6.8×10^{-11}	4.4×10^{-11}
Area 2, Mud Plant	07/14/93	2.2×10^{-12}	4.1×10^{-12}
Area 2, Rest Room	07/06/93	-2.8×10^{-11}	7.7×10^{-11}
Area 2, Well 2 Reservoir	07/14/93	5.5×10^{-10}	2.1×10^{-10}
Area 3, Mud Plant	07/21/93	4.2×10^{-11}	2.9×10^{-11}
Area 3, Well A Reservoir	07/20/93	1.6×10^{-10}	8.0×10^{-11}
Area 5, Cane Springs	07/27/93	-6.9×10^{-11}	4.9×10^{-10}
Area 5, Well UE-5c	07/12/93	3.2×10^{-11}	4.3×10^{-11}
Area 5, Well UE-5c Reservoir	07/20/93	-2.8×10^{-11}	8.0×10^{-11}
Area 5, Well 5B	07/12/93	0.0	0.0
Area 5, Well 5B	11/04/93	-8.6×10^{-11}	1.3×10^{-10}
Area 5, Well 5B Reservoir	07/20/93	2.4×10^{-11}	2.0×10^{-11}
Area 5, Well 5C	02/04/93	3.2×10^{-10}	1.2×10^{-10}
Area 5, Well 5C	04/04/93	7.2×10^{-11}	4.0×10^{-11}
Area 5, Well 5C	11/04/93	-2.0×10^{-10}	7.0×10^{-11}
Area 6, Bottled Water	07/06/93	6.2×10^{-12}	6.3×10^{-12}
Area 6, Building 6-900	07/08/93	-1.7×10^{-10}	1.0×10^{-10}
Area 6, Cafeteria	07/06/93	3.0×10^{-10}	1.4×10^{-10}
Area 6, DAF Sewage	12/29/93	2.1×10^{-10}	6.9×10^{-11}
Area 6, Sewage	07/21/93	1.2×10^{-10}	5.9×10^{-11}
Area 6, Well C	02/04/93	1.3×10^{-10}	7.2×10^{-11}
Area 6, Well C	04/04/93	1.9×10^{-10}	6.9×10^{-11}
Area 6, Well C	07/12/93	1.1×10^{-10}	5.2×10^{-11}
Area 6, Well C	11/04/93	1.2×10^{-10}	9.8×10^{-11}
Area 6, Well C-1	02/04/93	1.5×10^{-10}	6.8×10^{-11}
Area 6, Well C-1	04/04/93	2.6×10^{-10}	8.5×10^{-11}
Area 6, Well C-1	07/12/93	6.0×10^{-11}	3.9×10^{-11}
Area 6, Well C-1	11/24/93	-6.7×10^{-11}	5.2×10^{-11}
Area 6, Well C-1 Reservoir	07/20/93	-3.3×10^{-11}	1.4×10^{-11}
Area 6, Well 3 Reservoir	07/21/93	5.4×10^{-11}	4.2×10^{-11}
Area 6, Well 4	02/04/93	1.5×10^{-10}	7.7×10^{-11}
Area 6, Well 4	04/04/93	-3.0×10^{-11}	8.7×10^{-11}
Area 6, Well 4	07/12/93	8.0×10^{-11}	6.0×10^{-11}
Area 6, Well 4	11/04/93	-1.6×10^{-11}	8.8×10^{-11}
Area 7, Reitman Seep	07/21/93	7.7×10^{-10}	2.9×10^{-10}
Area 12, Captain Jack Spring	07/29/93	1.4×10^{-10}	6.6×10^{-11}
Area 12, E Tunnel Effluent	07/20/93	6.0×10^{-09}	1.6×10^{-09}
Area 12, E Tunnel Pond 1	07/20/93	4.6×10^{-09}	1.2×10^{-09}
Area 12, Gold Meadows Spring	07/21/93	1.2×10^{-09}	3.4×10^{-10}
Area 12, Sewage	07/20/93	2.0×10^{-10}	8.8×10^{-11}
Area 12, White Rock Spring	07/20/93	7.4×10^{-11}	6.3×10^{-11}

Attachment C.1 (^{90}Sr in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 16, Tippipah Spring	07/14/93	4.1×10^{-10}	2.8×10^{-10}
Area 16, Well UE-16d	02/04/93	2.4×10^{-10}	1.1×10^{-10}
Area 16, Well UE-16d	04/04/93	-1.5×10^{-10}	8.4×10^{-11}
Area 16, Well UE-16d	07/12/93	2.7×10^{-10}	9.4×10^{-11}
Area 16, Well UE-16d	11/04/93	-1.4×10^{-10}	6.7×10^{-11}
Area 18, Well 8	02/04/93	1.1×10^{-10}	5.9×10^{-11}
Area 18, Well 8	04/04/93	6.6×10^{-11}	4.3×10^{-11}
Area 18, Well 8	07/12/93	2.2×10^{-11}	2.2×10^{-11}
Area 18, Well 8	11/04/93	1.2×10^{-10}	9.3×10^{-11}
Area 19, Well UE-19c Reservoir	07/15/93	1.6×10^{-10}	1.1×10^{-10}
Area 20, Well U-20	07/12/93	5.2×10^{-10}	2.8×10^{-10}
Area 20, Well 20 Reservoir	07/15/93	4.9×10^{-10}	2.2×10^{-10}
Area 23, Army Well No. 1	02/04/93	9.4×10^{-11}	5.3×10^{-11}
Area 23, Army Well No. 1	04/04/93	2.0×10^{-11}	1.6×10^{-11}
Area 23, Army Well No. 1	07/12/93	-5.5×10^{-11}	5.4×10^{-11}
Area 23, Army Well No. 1	11/04/93	-5.1×10^{-11}	5.1×10^{-11}
Area 23, Cafeteria	07/06/93	2.1×10^{-10}	9.0×10^{-11}
Area 23, Sewage	07/21/93	7.6×10^{-11}	9.0×10^{-11}
Area 23, Swimming Pool	07/20/93	-9.7×10^{-12}	1.6×10^{-11}
Area 25, Building 4221	07/06/93	1.2×10^{-10}	5.4×10^{-11}
Area 25, Well J-11 Reservoir	07/13/93	1.5×10^{-10}	9.1×10^{-11}
Area 25, Well J-12	02/04/93	1.3×10^{-10}	8.4×10^{-11}
Area 25, Well J-12	04/04/93	2.4×10^{-12}	3.2×10^{-12}
Area 25, Well J-12	07/12/93	7.3×10^{-11}	4.1×10^{-11}
Area 25, Well J-12	11/04/93	2.4×10^{-10}	1.6×10^{-10}
Area 25, Well J-12 Reservoir	07/13/93	2.4×10^{-10}	1.2×10^{-10}
Area 25, Well J-13	02/04/93	3.4×10^{-12}	2.1×10^{-12}
Area 25, Well J-13	04/04/93	4.4×10^{-12}	4.8×10^{-12}
Area 25, Well J-13	07/12/93	-1.6×10^{-11}	2.6×10^{-11}
Area 25, Well J-13	11/04/93	-9.5×10^{-11}	2.4×10^{-10}
Area 27, Topopah Springs	07/29/93	1.3×10^{-10}	6.3×10^{-11}

Attachment C.2 Gross Alpha in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	01/04/93	7.9×10^{-09}	1.1×10^{-09}
Area 1, Building 101	03/30/93	6.0×10^{-09}	7.5×10^{-10}
Area 1, Building 101	07/06/93	6.0×10^{-09}	7.7×10^{-10}
Area 1, Building 101	10/04/93	5.2×10^{-09}	7.2×10^{-10}
Area 2, Rest Room	12/29/92	7.3×10^{-10}	2.8×10^{-10}
Area 2, Rest Room	03/29/93	3.6×10^{-10}	2.5×10^{-10}
Area 2, Rest Room	07/06/93	6.4×10^{-10}	2.7×10^{-10}
Area 2, Rest Room	10/04/93	4.5×10^{-10}	2.6×10^{-10}
Area 5, Well 5B	11/04/93	5.7×10^{-09}	7.1×10^{-10}
Area 5, Well 5C	01/13/93	1.1×10^{-08}	1.0×10^{-09}
Area 5, Well 5C	04/04/93	1.2×10^{-08}	1.0×10^{-09}
Area 5, Well 5C	11/04/93	1.0×10^{-08}	9.4×10^{-10}
Area 6, Well C	01/13/93	1.2×10^{-08}	1.1×10^{-09}
Area 6, Well C	04/04/93	5.5×10^{-09}	7.4×10^{-10}
Area 6, Well C	07/12/93	4.8×10^{-09}	5.0×10^{-10}
Area 6, Well C	11/04/93	1.5×10^{-08}	1.6×10^{-09}
Area 6, Well C-1	01/13/93	1.0×10^{-08}	1.0×10^{-09}
Area 6, Well C-1	04/04/93	5.7×10^{-09}	7.5×10^{-10}
Area 6, Well C-1	07/12/93	3.4×10^{-09}	4.3×10^{-10}
Area 6, Well C-1	11/24/93	1.4×10^{-08}	1.5×10^{-09}
Area 6, Well 4	01/13/93	1.0×10^{-08}	9.7×10^{-10}
Area 6, Well 4	04/04/93	1.2×10^{-08}	9.4×10^{-10}
Area 6, Well 4	07/12/93	7.8×10^{-09}	8.0×10^{-10}
Area 6, Well 4	11/04/93	8.9×10^{-09}	8.4×10^{-10}
Area 6, A-6 Cafeteria	12/29/92	1.4×10^{-08}	1.1×10^{-09}
Area 6, A-6 Cafeteria	03/29/93	8.8×10^{-09}	1.1×10^{-09}
Area 6, A-6 Cafeteria	07/06/93	1.0×10^{-08}	9.3×10^{-10}
Area 6, A-6 Cafeteria	10/04/93	5.9×10^{-09}	7.8×10^{-10}
Area 6, Building 6-900	12/29/92	2.0×10^{-08}	1.8×10^{-09}
Area 6, Building 6-900	03/29/93	9.1×10^{-09}	8.4×10^{-10}
Area 6, Building 6-900	07/08/93	8.9×10^{-09}	1.0×10^{-09}
Area 6, Building 6-900	10/04/93	4.0×10^{-09}	6.1×10^{-10}
Area 6, Bottle Water	12/29/92	-1.2×10^{-10}	1.0×10^{-10}
Area 6, Bottle Water	03/29/93	-2.0×10^{-11}	1.1×10^{-10}
Area 6, Bottle Water	07/06/93	1.0×10^{-10}	1.2×10^{-10}
Area 6, Bottle Water	10/04/93	3.4×10^{-10}	1.7×10^{-10}
Area 12, Cafeteria	01/04/93	5.3×10^{-10}	2.8×10^{-10}
Area 16, Well UE-16d	01/13/93	5.6×10^{-09}	7.8×10^{-10}
Area 16, Well UE-16d	04/04/93	9.6×10^{-09}	9.3×10^{-10}
Area 16, Well UE-16d	07/12/93	1.2×10^{-08}	1.4×10^{-09}
Area 16, Well UE-16d	11/04/93	7.3×10^{-09}	8.2×10^{-10}
Area 18, Well 8	01/13/93	8.5×10^{-10}	3.0×10^{-10}

Attachment C.2 (Gross Alpha in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 18, Well 8	04/04/93	9.2×10^{-10}	3.0×10^{-10}
Area 18, Well 8	07/12/93	3.2×10^{-10}	2.8×10^{-10}
Area 18, Well 8	11/04/93	3.7×10^{-10}	2.8×10^{-10}
Area 22, Army Well No. 1	01/13/93	5.5×10^{-09}	7.6×10^{-10}
Area 22, Army Well No. 1	04/04/93	5.3×10^{-09}	7.2×10^{-10}
Area 22, Army Well No. 1	07/12/93	3.5×10^{-09}	5.9×10^{-10}
Area 22, Army Well No. 1	11/04/93	3.8×10^{-09}	6.3×10^{-10}
Area 23, Cafeteria	12/28/92	5.4×10^{-09}	7.2×10^{-10}
Area 23, Cafeteria	03/29/93	4.6×10^{-09}	6.5×10^{-10}
Area 23, Cafeteria	07/06/93	5.2×10^{-09}	7.0×10^{-10}
Area 23, Cafeteria	10/04/93	7.0×10^{-09}	8.3×10^{-10}
Area 25, Well J-12	01/13/93	1.4×10^{-09}	4.1×10^{-10}
Area 25, Well J-12	04/04/93	1.7×10^{-09}	4.1×10^{-10}
Area 25, Well J-12	07/12/93	1.0×10^{-09}	4.2×10^{-10}
Area 25, Well J-12	11/04/93	8.5×10^{-10}	4.0×10^{-10}
Area 25, Well J-13	01/13/93	4.1×10^{-09}	6.0×10^{-10}
Area 25, Well J-13	04/04/93	1.2×10^{-09}	4.4×10^{-10}
Area 25, Well J-13	07/12/93	2.2×10^{-09}	4.7×10^{-10}
Area 25, Well J-13	11/04/93	1.2×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	12/28/92	1.5×10^{-09}	4.5×10^{-10}
Area 25, Building 4221	03/29/93	1.8×10^{-09}	4.7×10^{-10}
Area 25, Building 4221	07/06/93	1.4×10^{-09}	3.9×10^{-10}
Area 25, Building 4221	10/04/93	1.1×10^{-09}	3.9×10^{-10}

Attachment C.3 ^{238}Pu in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	01/04/93	1.9×10^{-12}	1.9×10^{-12}
Area 1, Building 101	03/30/93	2.8×10^{-12}	2.8×10^{-12}
Area 1, Building 101	07/06/93	0.0	0.0
Area 1, Building 101	10/04/93	0.0	0.0
Area 2, Mud Plant	01/20/93	7.1×10^{-12}	7.2×10^{-12}
Area 2, Mud Plant	04/07/93	0.0	0.0
Area 2, Mud Plant	07/14/93	0.0	0.0
Area 2, Mud Plant	10/06/93	0.0	0.0
Area 2, Rest Room	12/29/92	0.0	0.0
Area 2, Rest Room	03/29/93	0.0	0.0
Area 2, Rest Room	07/06/93	3.2×10^{-12}	3.2×10^{-12}
Area 2, Rest Room	10/04/93	0.0	0.0
Area 2, Well 2 Reservoir	01/20/93	0.0	0.0
Area 2, Well 2 Reservoir	04/07/93	0.0	0.0
Area 2, Well 2 Reservoir	10/06/93	2.8×10^{-12}	2.8×10^{-12}
Area 3, Mud Plant	01/12/93	1.1×10^{-11}	4.6×10^{-12}
Area 3, Mud Plant	04/07/93	2.5×10^{-12}	2.5×10^{-12}
Area 3, Mud Plant	10/07/93	0.0	0.0
Area 3, Well A Reservoir	01/12/93	0.0	0.0
Area 3, Well A Reservoir	04/06/93	0.0	0.0
Area 3, Well A Reservoir	10/07/93	0.0	0.0
Area 5, Cane Springs	01/27/93	0.0	0.0
Area 5, Cane Springs	04/14/93	4.2×10^{-12}	4.2×10^{-12}
Area 5, Cane Springs	10/26/93	2.6×10^{-12}	2.6×10^{-12}
Area 5, Well UE-5c	01/13/93	1.7×10^{-12}	1.7×10^{-12}
Area 5, Well UE-5c	04/04/93	0.0	0.0
Area 5, Well UE-5c	11/04/93	0.0	0.0
Area 5, Well UE-5c Reservoir	01/28/93	0.0	0.0
Area 5, Well UE-5c Reservoir	04/06/93	0.0	0.0
Area 5, Well UE-5c Reservoir	07/20/93	6.6×10^{-12}	6.6×10^{-12}
Area 5, Well UE-5c Reservoir	10/07/93	2.8×10^{-12}	2.8×10^{-12}
Area 5, Well 5B	07/12/93	2.8×10^{-12}	2.0×10^{-12}
Area 5, Well 5B	11/04/93	0.0	0.0
Area 5, Well 5B Reservoir	01/28/93	0.0	0.0
Area 5, Well 5B Reservoir	04/06/93	0.0	0.0
Area 5, Well 5B Reservoir	07/20/93	8.8×10^{-12}	8.9×10^{-12}
Area 5, Well 5B Reservoir	10/07/93	0.0	0.0
Area 5, Well 5C	01/13/93	-4.6×10^{-11}	3.8×10^{-11}
Area 5, Well 5C	04/04/93	0.0	0.0
Area 5, Well 5C	11/04/93	-2.4×10^{-12}	2.4×10^{-12}
Area 6, Bottled Water	12/29/92	0.0	0.0

Attachment C.3 (^{238}Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	03/29/93	4.1×10^{-12}	2.9×10^{-12}
Area 6, Bottled Water	07/06/93	0.0	0.0
Area 6, Bottled Water	10/04/93	0.0	0.0
Area 6, Building 6-900	12/29/92	2.1×10^{-12}	2.1×10^{-12}
Area 6, Building 6-900	03/29/93	0.0	0.0
Area 6, Building 6-900	07/08/93	3.6×10^{-12}	3.6×10^{-12}
Area 6, Building 6-900	10/04/93	3.5×10^{-12}	3.5×10^{-12}
Area 6, Cafeteria	12/29/92	0.0	0.0
Area 6, Cafeteria	03/29/93	0.0	0.0
Area 6, Cafeteria	07/06/93	0.0	0.0
Area 6, Cafeteria	10/04/93	0.0	0.0
Area 6, DAF Sewage	11/24/93	0.0	0.0
Area 6, DAF Sewage	12/29/93	0.0	0.0
Area 6, Sewage	01/20/93	0.0	0.0
Area 6, Sewage	04/13/93	5.2×10^{-12}	3.7×10^{-12}
Area 6, Sewage	07/21/93	0.0	0.0
Area 6, Sewage	10/07/93	0.0	0.0
Area 6, Well C	01/13/93	-3.3×10^{-11}	2.7×10^{-11}
Area 6, Well C	04/04/93	1.0×10^{-11}	5.9×10^{-12}
Area 6, Well C	11/04/93	-2.5×10^{-12}	2.5×10^{-12}
Area 6, Well C-1	01/13/93	-3.8×10^{-11}	3.1×10^{-11}
Area 6, Well C-1	04/04/93	2.3×10^{-12}	2.3×10^{-12}
Area 6, Well C-1	11/24/93	4.8×10^{-11}	2.1×10^{-11}
Area 6, Well C-1	07/12/93	0.0	0.0
Area 6, Well C-1 Reservoir	01/28/93	0.0	0.0
Area 6, Well C-1 Reservoir	04/06/93	0.0	0.0
Area 6, Well C-1 Reservoir	10/07/93	0.0	0.0
Area 6, Well 3 Reservoir	01/12/93	0.0	0.0
Area 6, Well 3 Reservoir	04/06/93	0.0	0.0
Area 6, Well 3 Reservoir	10/07/93	0.0	0.0
Area 6, Well 4	01/13/93	-4.0×10^{-11}	3.3×10^{-11}
Area 6, Well 4	04/04/93	2.0×10^{-12}	2.0×10^{-12}
Area 6, Well 4	07/12/93	0.0	0.0
Area 6, Well 4	11/04/93	-2.3×10^{-12}	2.3×10^{-12}
Area 6, Yucca Pond	04/07/93	0.0	0.0
Area 6, Yucca Sewage Pond	11/24/93	0.0	0.0
Area 7, Reitman Seep	01/27/93	8.2×10^{-12}	4.8×10^{-12}
Area 7, Reitman Seep	04/01/93	3.2×10^{-12}	3.2×10^{-12}
Area 7, Reitman Seep	10/06/93	1.3×10^{-11}	5.0×10^{-12}
Area 12, Cafeteria	01/04/93	0.0	0.0
Area 12, Captain Jack Spring	03/25/93	8.9×10^{-12}	5.2×10^{-12}

Attachment C.3 (^{238}Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Captain Jack Spring	04/21/93	5.9×10^{-12}	4.2×10^{-12}
Area 12, Captain Jack Spring	07/29/93	0.0	0.0
Area 12, Captain Jack Spring	10/21/93	3.1×10^{-12}	3.1×10^{-12}
Area 12, E Tunnel Effluent	01/27/93	4.6×10^{-10}	4.3×10^{-11}
Area 12, E Tunnel Effluent	04/06/93	3.6×10^{-10}	7.7×10^{-11}
Area 12, E Tunnel Effluent	10/07/93	5.3×10^{-10}	5.2×10^{-11}
Area 12, E Tunnel Pond No. 1	02/09/93	7.8×10^{-10}	7.3×10^{-11}
Area 12, E Tunnel Pond No. 1	04/06/93	9.6×10^{-10}	8.4×10^{-11}
Area 12, E Tunnel Pond No. 1	07/20/93	6.5×10^{-10}	1.1×10^{-10}
Area 12, E Tunnel Pond No. 1	10/07/93	5.8×10^{-10}	5.3×10^{-11}
Area 12, Gold Meadows Spring	04/30/93	0.0	0.0
Area 12, N Tunnel Effluent	01/27/93	0.0	0.0
Area 12, N Tunnel Effluent	04/06/93	3.6×10^{-12}	3.6×10^{-12}
Area 12, N Tunnel Effluent	10/07/93	-6.2×10^{-12}	7.6×10^{-12}
Area 12, N Tunnel Pond No. 2	03/09/93	0.0	0.0
Area 12, N Tunnel Pond No. 2	04/06/93	0.0	0.0
Area 12, N Tunnel Pond No. 3	03/09/93	3.0×10^{-12}	3.0×10^{-12}
Area 12, N Tunnel Pond No. 3	04/06/93	6.4×10^{-12}	4.5×10^{-12}
Area 12, Sewage	02/03/93	0.0	0.0
Area 12, Sewage	04/06/93	2.6×10^{-12}	2.6×10^{-12}
Area 12, Sewage	07/20/93	1.9×10^{-12}	1.9×10^{-12}
Area 12, Sewage	10/06/93	2.5×10^{-12}	2.5×10^{-12}
Area 12, T Tunnel Effluent	01/27/93	4.2×10^{-11}	1.1×10^{-11}
Area 12, T Tunnel Effluent	04/07/93	1.3×10^{-11}	7.7×10^{-12}
Area 12, T Tunnel Effluent	10/07/93	-7.4×10^{-12}	9.1×10^{-12}
Area 12, T Tunnel Pond No. 2	02/09/93	4.5×10^{-11}	1.5×10^{-11}
Area 12, T Tunnel Pond No. 2	04/07/93	3.2×10^{-11}	1.5×10^{-11}
Area 12, T Tunnel Pond No. 3	02/09/93	4.9×10^{-11}	1.6×10^{-11}
Area 12, T Tunnel Pond No. 3	04/07/93	2.2×10^{-11}	1.1×10^{-11}
Area 12, White Rock Spring	01/13/93	1.1×10^{-11}	4.6×10^{-12}
Area 12, White Rock Spring	04/07/93	0.0	0.0
Area 12, White Rock Spring	10/06/93	0.0	0.0
Area 16, Tippipah Spring	01/13/93	0.0	0.0
Area 16, Tippipah Spring	04/06/93	2.3×10^{-12}	2.3×10^{-12}
Area 16, Tippipah Spring	07/14/93	0.0	0.0
Area 16, Tippipah Spring	10/06/93	0.0	0.0
Area 16, Well UE-16d	01/13/93	-2.9×10^{-11}	2.4×10^{-11}
Area 16, Well UE-16d	04/04/93	0.0	0.0
Area 16, Well UE-16d	07/12/93	0.0	0.0
Area 16, Well UE-16d	11/04/93	-2.8×10^{-12}	2.8×10^{-12}
Area 18, Camp 17 Reservoir	02/10/93	2.7×10^{-12}	2.7×10^{-12}

Attachment C.3 (^{238}Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 18, Camp 17 Reservoir	04/13/93	0.0	0.0
Area 18, Camp 17 Reservoir	07/15/93	0.0	0.0
Area 18, Camp 17 Reservoir	10/06/93	0.0	0.0
Area 18, Well 8	01/13/93	-3.7×10^{-11}	3.0×10^{-11}
Area 18, Well 8	04/04/93	1.9×10^{-11}	1.9×10^{-11}
Area 18, Well 8	07/12/93	1.8×10^{-12}	1.8×10^{-12}
Area 18, Well 8	11/04/93	-2.5×10^{-12}	2.5×10^{-12}
Area 18, Well 8 Reservoir	03/15/93	0.0	0.0
Area 18, Well 8 Reservoir	04/13/93	0.0	0.0
Area 19, Well UE-19c Reservoir	03/25/93	0.0	0.0
Area 19, Well UE-19c Reservoir	04/06/93	0.0	0.0
Area 19, Well UE-19c Reservoir	07/15/93	0.0	0.0
Area 19, Well UE-19c Reservoir	10/06/93	0.0	0.0
Area 20, Well U-20	07/12/93	4.7×10^{-12}	3.3×10^{-12}
Area 20, Well 20 Reservoir	03/25/93	0.0	0.0
Area 20, Well 20 Reservoir	04/06/93	3.6×10^{-12}	2.6×10^{-12}
Area 20, Well 20 Reservoir	07/15/93	0.0	0.0
Area 20, Well 20 Reservoir	10/06/93	2.3×10^{-12}	2.3×10^{-12}
Area 23, Army Well No. 1	01/13/93	-3.7×10^{-11}	3.0×10^{-11}
Area 23, Army Well No. 1	04/04/93	2.6×10^{-12}	2.6×10^{-12}
Area 23, Army Well No. 1	07/12/93	0.0	0.0
Area 23, Army Well No. 1	11/04/93	-3.2×10^{-12}	3.2×10^{-12}
Area 23, Cafeteria	12/28/92	0.0	0.0
Area 23, Cafeteria	03/29/93	0.0	0.0
Area 23, Cafeteria	07/06/93	0.0	0.0
Area 23, Cafeteria	10/04/93	0.0	0.0
Area 23, Sewage	01/28/93	0.0	0.0
Area 23, Sewage	04/27/93	0.0	0.0
Area 23, Sewage	07/21/93	0.0	0.0
Area 23, Swimming Pool	01/28/93	2.0×10^{-12}	2.0×10^{-12}
Area 23, Swimming Pool	04/06/93	0.0	0.0
Area 23, Swimming Pool	10/26/93	0.0	0.0
Area 25, Building 4221	12/28/92	0.0	0.0
Area 25, Building 4221	03/29/93	4.7×10^{-12}	3.3×10^{-12}
Area 25, Building 4221	07/06/93	0.0	0.0
Area 25, Building 4221	10/04/93	0.0	0.0
Area 25, Well J-11 Reservoir	01/28/93	0.0	0.0
Area 25, Well J-11 Reservoir	04/06/93	4.8×10^{-12}	3.4×10^{-12}
Area 25, Well J-11 Reservoir	07/13/93	1.8×10^{-12}	1.8×10^{-12}
Area 25, Well J-11 Reservoir	10/06/93	0.0	0.0
Area 25, Well J-12	01/13/93	-4.0×10^{-11}	3.2×10^{-11}

Attachment C.3 (^{238}Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Well J-12	04/04/93	0.0	0.0
Area 25, Well J-12	07/12/93	0.0	0.0
Area 25, Well J-12	11/04/93	-2.4×10^{-12}	2.4×10^{-12}
Area 25, Well J-13	01/13/93	-3.2×10^{-11}	2.6×10^{-11}
Area 25, Well J-13	04/04/93	4.8×10^{-12}	4.8×10^{-12}
Area 25, Well J-13	07/12/93	2.4×10^{-12}	2.4×10^{-12}
Area 25, Well J-13	11/04/93	-2.7×10^{-12}	2.7×10^{-12}
Area 25, Well J-12 Reservoir	01/28/93	0.0	0.0
Area 25, Well J-12 Reservoir	04/06/93	0.0	0.0
Area 25, Well J-12 Reservoir	07/13/93	0.0	0.0
Area 25, Well J-12 Reservoir	10/06/93	0.0	0.0
Area 27, Topopah Springs	02/11/93	0.0	0.0
Area 27, Topopah Springs	04/30/93	0.0	0.0
Area 27, Topopah Springs	10/21/93	0.0	0.0

Attachment C.4 $^{239+240}$Pu in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	01/04/93	0.0	0.0
Area 1, Building 101	03/30/93	0.0	0.0
Area 1, Building 101	07/06/93	0.0	0.0
Area 1, Building 101	10/04/93	0.0	0.0
Area 2, Mud Plant	01/20/93	0.0	0.0
Area 2, Mud Plant	04/07/93	2.1×10^{-12}	2.1×10^{-12}
Area 2, Mud Plant	07/14/93	9.7×10^{-12}	4.9×10^{-12}
Area 2, Mud Plant	10/06/93	5.4×10^{-12}	5.4×10^{-12}
Area 2, Rest Room	12/29/92	0.0	0.0
Area 2, Rest Room	03/29/93	0.0	0.0
Area 2, Rest Room	07/06/93	6.4×10^{-12}	4.6×10^{-12}
Area 2, Rest Room	10/04/93	2.6×10^{-12}	2.6×10^{-12}
Area 2, Well 2 Reservoir	01/20/93	2.2×10^{-12}	2.2×10^{-12}
Area 2, Well 2 Reservoir	04/07/93	7.2×10^{-12}	4.2×10^{-12}
Area 2, Well 2 Reservoir	10/06/93	8.5×10^{-12}	4.9×10^{-12}
Area 3, Mud Plant	01/12/93	1.3×10^{-10}	1.6×10^{-11}
Area 3, Mud Plant	04/07/93	1.5×10^{-11}	6.2×10^{-12}
Area 3, Mud Plant	10/07/93	5.9×10^{-12}	4.2×10^{-12}
Area 3, Well A Reservoir	01/12/93	3.5×10^{-12}	2.5×10^{-12}
Area 3, Well A Reservoir	04/06/93	4.7×10^{-12}	3.3×10^{-12}
Area 3, Well A Reservoir	10/07/93	0.0	0.0
Area 5, Cane Springs	01/27/93	2.0×10^{-11}	6.9×10^{-12}
Area 5, Cane Springs	04/14/93	4.2×10^{-12}	4.2×10^{-12}
Area 5, Cane Springs	10/26/93	2.6×10^{-12}	2.6×10^{-12}
Area 5, Well UE-5c	01/13/93	5.0×10^{-12}	2.9×10^{-12}
Area 5, Well UE-5c	04/04/93	0.0	0.0
Area 5, Well UE-5c	11/04/93	5.3×10^{-12}	3.1×10^{-12}
Area 5, Well UE-5c Reservoir	01/28/93	0.0	0.0
Area 5, Well UE-5c Reservoir	04/06/93	1.8×10^{-12}	1.8×10^{-12}
Area 5, Well UE-5c Reservoir	07/20/93	0.0	0.0
Area 5, Well UE-5c Reservoir	10/07/93	2.8×10^{-12}	2.8×10^{-12}
Area 5, Well 5B	07/12/93	5.6×10^{-12}	2.8×10^{-12}
Area 5, Well 5B	11/04/93	-2.2×10^{-12}	2.2×10^{-12}
Area 5, Well 5B Reservoir	01/28/93	3.8×10^{-12}	2.7×10^{-12}
Area 5, Well 5B Reservoir	04/06/93	0.0	0.0
Area 5, Well 5B Reservoir	07/20/93	1.8×10^{-11}	1.3×10^{-11}
Area 5, Well 5B Reservoir	10/07/93	7.7×10^{-12}	5.5×10^{-12}
Area 5, Well 5C	01/13/93	-4.6×10^{-11}	3.8×10^{-11}
Area 5, Well 5C	04/04/93	6.0×10^{-12}	4.2×10^{-12}
Area 5, Well 5C	11/04/93	7.1×10^{-12}	5.3×10^{-12}
Area 6, Bottled Water	12/29/92	0.0	0.0

Attachment C.4 ($^{239+240}$Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	03/29/93	2.0×10^{-12}	2.0×10^{-12}
Area 6, Bottled Water	07/06/93	3.1×10^{-12}	3.1×10^{-12}
Area 6, Bottled Water	10/04/93	0.0	0.0
Area 6, Building 6-900	12/29/92	-7.0×10^{-13}	1.4×10^{-12}
Area 6, Building 6-900	03/29/93	0.0	0.0
Area 6, Building 6-900	07/08/93	3.6×10^{-12}	3.6×10^{-12}
Area 6, Building 6-900	10/04/93	0.0	0.0
Area 6, Cafeteria	12/29/92	1.8×10^{-12}	1.8×10^{-12}
Area 6, Cafeteria	03/29/93	4.1×10^{-12}	2.9×10^{-12}
Area 6, Cafeteria	07/06/93	0.0	0.0
Area 6, Cafeteria	10/04/93	3.4×10^{-12}	3.4×10^{-12}
Area 6, DAF Sewage	11/24/93	8.9×10^{-12}	4.4×10^{-12}
Area 6, DAF Sewage	12/29/93	1.7×10^{-11}	9.1×10^{-12}
Area 6, Sewage	01/20/93	1.2×10^{-11}	5.2×10^{-12}
Area 6, Sewage	04/13/93	3.1×10^{-11}	9.0×10^{-12}
Area 6, Sewage	07/21/93	5.9×10^{-12}	3.4×10^{-12}
Area 6, Sewage	10/07/93	2.8×10^{-12}	2.8×10^{-12}
Area 6, Well C	01/13/93	-3.3×10^{-11}	2.7×10^{-11}
Area 6, Well C	04/04/93	0.0	0.0
Area 6, Well C	11/04/93	0.0	0.0
Area 6, Well C-1	01/13/93	-3.8×10^{-11}	3.1×10^{-11}
Area 6, Well C-1	04/04/93	2.3×10^{-12}	2.3×10^{-12}
Area 6, Well C-1	07/12/93	0.0	0.0
Area 6, Well C-1	11/24/93	1.8×10^{-10}	3.9×10^{-11}
Area 6, Well C-1 Reservoir	01/28/93	2.0×10^{-12}	2.0×10^{-12}
Area 6, Well C-1 Reservoir	04/06/93	0.0	0.0
Area 6, Well C-1 Reservoir	10/07/93	0.0	0.0
Area 6, Well 3 Reservoir	01/12/93	5.1×10^{-12}	2.9×10^{-12}
Area 6, Well 3 Reservoir	04/06/93	0.0	0.0
Area 6, Well 3 Reservoir	10/07/93	6.5×10^{-12}	4.6×10^{-12}
Area 6, Well 4	01/13/93	-4.0×10^{-11}	3.3×10^{-11}
Area 6, Well 4	04/04/93	2.0×10^{-12}	2.0×10^{-12}
Area 6, Well 4	07/12/93	0.0	0.0
Area 6, Well 4	11/04/93	4.7×10^{-12}	4.7×10^{-12}
Area 6, Yucca Pond	04/07/93	1.4×10^{-10}	2.4×10^{-11}
Area 6, Yucca Sewage Pond	11/24/93	2.3×10^{-12}	2.3×10^{-12}
Area 7, Reitman Seep	01/27/93	2.0×10^{-10}	2.5×10^{-11}
Area 7, Reitman Seep	04/01/93	1.1×10^{-10}	2.0×10^{-11}
Area 7, Reitman Seep	10/06/93	4.4×10^{-10}	3.3×10^{-11}
Area 12, Cafeteria	01/04/93	2.0×10^{-12}	2.0×10^{-12}
Area 12, Captain Jack Spring	03/25/93	1.2×10^{-11}	6.0×10^{-12}

Attachment C.4 ($^{239+240}$Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Captain Jack Spring	04/21/93	2.1×10^{-11}	7.9×10^{-12}
Area 12, Captain Jack Spring	07/29/93	0.0	0.0
Area 12, Captain Jack Spring	10/21/93	9.4×10^{-12}	5.4×10^{-12}
Area 12, E Tunnel Effluent	01/27/93	3.8×10^{-09}	1.8×10^{-10}
Area 12, E Tunnel Effluent	04/06/93	4.5×10^{-09}	4.3×10^{-10}
Area 12, E Tunnel Effluent	10/07/93	4.7×10^{-09}	2.3×10^{-10}
Area 12, E Tunnel Pond No. 1	02/09/93	6.2×10^{-09}	3.4×10^{-10}
Area 12, E Tunnel Pond No. 1	04/06/93	7.6×10^{-09}	4.1×10^{-10}
Area 12, E Tunnel Pond No. 1	07/20/93	5.1×10^{-09}	4.6×10^{-10}
Area 12, E Tunnel Pond No. 1	10/07/93	5.0×10^{-09}	2.4×10^{-10}
Area 12, Gold Meadows Spring	04/30/93	4.5×10^{-12}	3.2×10^{-12}
Area 12, N Tunnel Effluent	01/27/93	3.5×10^{-12}	3.5×10^{-12}
Area 12, N Tunnel Effluent	04/06/93	2.3×10^{-10}	3.1×10^{-11}
Area 12, N Tunnel Effluent	10/07/93	2.5×10^{-11}	1.2×10^{-11}
Area 12, N Tunnel Pond No. 2	03/09/93	1.4×10^{-11}	7.0×10^{-12}
Area 12, N Tunnel Pond No. 2	04/06/93	3.0×10^{-11}	1.1×10^{-11}
Area 12, N Tunnel Pond No. 3	03/09/93	8.8×10^{-12}	5.1×10^{-12}
Area 12, N Tunnel Pond No. 3	04/06/93	1.6×10^{-11}	7.2×10^{-12}
Area 12, Sewage	02/03/93	4.8×10^{-12}	3.4×10^{-12}
Area 12, Sewage	04/06/93	0.0	0.0
Area 12, Sewage	07/20/93	7.7×10^{-12}	3.8×10^{-12}
Area 12, Sewage	10/06/93	4.9×10^{-12}	3.5×10^{-12}
Area 12, T Tunnel Effluent	01/27/93	9.0×10^{-10}	6.2×10^{-11}
Area 12, T Tunnel Effluent	04/07/93	7.5×10^{-10}	6.6×10^{-11}
Area 12, T Tunnel Effluent	10/07/93	-3.7×10^{-12}	9.8×10^{-12}
Area 12, T Tunnel Pond No. 2	02/09/93	9.1×10^{-10}	8.0×10^{-11}
Area 12, T Tunnel Pond No. 2	04/07/93	9.8×10^{-10}	9.5×10^{-11}
Area 12, T Tunnel Pond No. 3	02/09/93	1.1×10^{-09}	9.5×10^{-11}
Area 12, T Tunnel Pond No. 3	04/07/93	1.0×10^{-09}	8.9×10^{-11}
Area 12, White Rock Spring	01/13/93	4.3×10^{-11}	9.2×10^{-12}
Area 12, White Rock Spring	04/07/93	1.4×10^{-11}	6.5×10^{-12}
Area 12, White Rock Spring	10/06/93	2.4×10^{-11}	8.2×10^{-12}
Area 16, Tippipah Spring	01/13/93	3.6×10^{-12}	2.5×10^{-12}
Area 16, Tippipah Spring	04/06/93	2.3×10^{-12}	2.3×10^{-12}
Area 16, Tippipah Spring	07/14/93	1.2×10^{-11}	5.2×10^{-12}
Area 16, Tippipah Spring	10/06/93	1.9×10^{-11}	7.8×10^{-12}
Area 16, Well UE-16d	01/13/93	-2.7×10^{-11}	2.4×10^{-11}
Area 16, Well UE-16d	04/04/93	0.0	0.0
Area 16, Well UE-16d	07/12/93	5.4×10^{-12}	3.8×10^{-12}
Area 16, Well UE-16d	11/04/93	0.0	0.0
Area 18, Camp 17 Reservoir	02/10/93	2.7×10^{-12}	2.7×10^{-12}

Attachment C.4 ($^{239+240}$Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 18, Camp 17 Reservoir	04/13/93	2.3×10^{-12}	2.3×10^{-12}
Area 18, Camp 17 Reservoir	07/15/93	9.6×10^{-12}	4.3×10^{-12}
Area 18, Camp 17 Reservoir	10/06/93	8.3×10^{-12}	4.2×10^{-12}
Area 18, Well 8	01/13/93	-3.2×10^{-11}	3.1×10^{-11}
Area 18, Well 8	04/04/93	0.0	0.0
Area 18, Well 8	07/12/93	1.8×10^{-12}	1.8×10^{-12}
Area 18, Well 8	11/04/93	-2.5×10^{-12}	2.5×10^{-12}
Area 18, Well 8 Reservoir	03/15/93	0.0	0.0
Area 18, Well 8 Reservoir	04/13/93	4.6×10^{-12}	3.2×10^{-12}
Area 19, Well UE-19c Reservoir	03/25/93	0.0	0.0
Area 19, Well UE-19c Reservoir	04/06/93	2.6×10^{-12}	2.6×10^{-12}
Area 19, Well UE-19c Reservoir	07/15/93	6.8×10^{-12}	3.4×10^{-12}
Area 19, Well UE-19c Reservoir	10/06/93	4.7×10^{-12}	3.4×10^{-12}
Area 20, Well U-20	07/12/93	4.7×10^{-12}	3.3×10^{-12}
Area 20, Well 20 Reservoir	03/25/93	5.2×10^{-12}	3.7×10^{-12}
Area 20, Well 20 Reservoir	04/06/93	0.0	0.0
Area 20, Well 20 Reservoir	07/15/93	3.8×10^{-12}	2.7×10^{-12}
Area 20, Well 20 Reservoir	10/06/93	6.8×10^{-12}	3.9×10^{-12}
Area 23, Army Well No. 1	01/13/93	-3.7×10^{-11}	3.0×10^{-11}
Area 23, Army Well No. 1	04/04/93	2.6×10^{-12}	2.6×10^{-12}
Area 23, Army Well No. 1	07/12/93	0.0	0.0
Area 23, Army Well No. 1	11/04/93	-3.2×10^{-12}	3.2×10^{-12}
Area 23, Cafeteria	12/28/92	0.0	0.0
Area 23, Cafeteria	03/29/93	2.3×10^{-12}	2.3×10^{-12}
Area 23, Cafeteria	07/06/93	6.0×10^{-12}	4.2×10^{-12}
Area 23, Cafeteria	10/04/93	0.0	0.0
Area 23, Sewage	01/28/93	0.0	0.0
Area 23, Sewage	04/27/93	1.4×10^{-11}	7.3×10^{-12}
Area 23, Sewage	07/21/93	7.3×10^{-12}	3.7×10^{-12}
Area 23, Swimming Pool	01/28/93	0.0	0.0
Area 23, Swimming Pool	04/06/93	4.0×10^{-12}	2.8×10^{-12}
Area 23, Swimming Pool	10/26/93	0.0	0.0
Area 25, Building 4221	12/28/92	0.0	0.0
Area 25, Building 4221	03/29/93	0.0	0.0
Area 25, Building 4221	07/06/93	3.9×10^{-12}	3.9×10^{-12}
Area 25, Building 4221	10/04/93	0.0	0.0
Area 25, Well J-11 Reservoir	01/28/93	0.0	0.0
Area 25, Well J-11 Reservoir	04/06/93	2.4×10^{-12}	2.4×10^{-12}
Area 25, Well J-11 Reservoir	07/13/93	9.0×10^{-12}	4.0×10^{-12}
Area 25, Well J-11 Reservoir	10/06/93	5.6×10^{-12}	4.0×10^{-12}
Area 25, Well J-12	01/13/93	-4.0×10^{-11}	3.2×10^{-11}

Attachment C.4 ($^{239+240}$Pu in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Well J-12	04/04/93	0.0	0.0
Area 25, Well J-12	07/12/93	1.9×10^{-12}	1.9×10^{-12}
Area 25, Well J-12	11/04/93	9.6×10^{-12}	5.9×10^{-12}
Area 25, Well J-12 Reservoir	01/28/93	1.2×10^{-11}	5.4×10^{-12}
Area 25, Well J-12 Reservoir	04/06/93	7.3×10^{-10}	5.1×10^{-11}
Area 25, Well J-12 Reservoir	07/13/93	1.7×10^{-12}	1.7×10^{-12}
Area 25, Well J-12 Reservoir	10/06/93	0.0	0.0
Area 25, Well J-13	01/13/93	-3.0×10^{-11}	2.6×10^{-11}
Area 25, Well J-13	04/04/93	0.0	0.0
Area 25, Well J-13	07/12/93	2.4×10^{-12}	2.4×10^{-12}
Area 25, Well J-13	11/04/93	0.0	0.0
Area 27, Topopah Springs	02/11/93	1.1×10^{-11}	6.2×10^{-12}
Area 27, Topopah Springs	04/30/93	5.0×10^{-12}	3.5×10^{-12}
Area 27, Topopah Springs	10/21/93	0.0	0.0

Attachment C.5 Gross Beta in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	01/04/93	8.6×10^{-09}	6.3×10^{-10}
Area 1, Building 101	01/12/93	6.6×10^{-09}	4.6×10^{-10}
Area 1, Building 101	01/19/93	6.8×10^{-09}	4.8×10^{-10}
Area 1, Building 101	01/25/93	6.5×10^{-09}	4.8×10^{-10}
Area 1, Building 101	02/01/93	6.8×10^{-09}	4.4×10^{-10}
Area 1, Building 101	02/08/93	6.9×10^{-09}	4.7×10^{-10}
Area 1, Building 101	02/16/93	7.2×10^{-09}	4.6×10^{-10}
Area 1, Building 101	02/22/93	6.8×10^{-09}	4.8×10^{-10}
Area 1, Building 101	03/01/93	5.3×10^{-09}	4.5×10^{-10}
Area 1, Building 101	03/08/93	5.2×10^{-09}	4.2×10^{-10}
Area 1, Building 101	03/15/93	5.4×10^{-09}	4.8×10^{-10}
Area 1, Building 101	03/22/93	7.0×10^{-09}	4.7×10^{-10}
Area 1, Building 101	03/30/93	5.3×10^{-09}	4.4×10^{-10}
Area 1, Building 101	04/05/93	5.4×10^{-09}	4.6×10^{-10}
Area 1, Building 101	04/12/93	7.4×10^{-09}	4.5×10^{-10}
Area 1, Building 101	04/19/93	5.5×10^{-09}	4.6×10^{-10}
Area 1, Building 101	04/26/93	7.3×10^{-09}	4.8×10^{-10}
Area 1, Building 101	05/03/93	4.1×10^{-09}	4.2×10^{-10}
Area 1, Building 101	05/10/93	7.5×10^{-09}	4.8×10^{-10}
Area 1, Building 101	05/18/93	7.0×10^{-09}	4.7×10^{-10}
Area 1, Building 101	05/24/93	6.7×10^{-09}	4.4×10^{-10}
Area 1, Building 101	06/01/93	1.0×10^{-08}	4.9×10^{-10}
Area 1, Building 101	06/07/93	6.5×10^{-09}	4.5×10^{-10}
Area 1, Building 101	06/14/93	5.6×10^{-09}	4.6×10^{-10}
Area 1, Building 101	06/22/93	4.6×10^{-09}	4.3×10^{-10}
Area 1, Building 101	06/28/93	7.0×10^{-09}	4.6×10^{-10}
Area 1, Building 101	07/06/93	1.0×10^{-08}	4.7×10^{-10}
Area 1, Building 101	07/14/93	7.9×10^{-09}	4.5×10^{-10}
Area 1, Building 101	07/19/93	8.5×10^{-09}	4.6×10^{-10}
Area 1, Building 101	07/26/93	6.3×10^{-09}	4.6×10^{-10}
Area 1, Building 101	08/02/93	6.1×10^{-09}	4.6×10^{-10}
Area 1, Building 101	08/09/93	7.6×10^{-09}	4.7×10^{-10}
Area 1, Building 101	08/16/93	6.0×10^{-09}	4.5×10^{-10}
Area 1, Building 101	08/23/93	6.1×10^{-09}	4.7×10^{-10}
Area 1, Building 101	08/30/93	5.7×10^{-09}	4.6×10^{-10}
Area 1, Building 101	09/08/93	7.4×10^{-09}	4.4×10^{-10}
Area 1, Building 101	09/13/93	7.8×10^{-09}	4.5×10^{-10}
Area 1, Building 101	09/20/93	3.1×10^{-09}	4.2×10^{-10}
Area 1, Building 101	09/27/93	6.3×10^{-09}	4.3×10^{-10}
Area 1, Building 101	10/04/93	6.2×10^{-09}	4.5×10^{-10}
Area 1, Building 101	10/11/93	5.7×10^{-09}	4.4×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	10/18/93	6.8×10^{-09}	4.6×10^{-10}
Area 1, Building 101	10/25/93	6.4×10^{-09}	4.6×10^{-10}
Area 1, Building 101	11/01/93	6.0×10^{-09}	4.3×10^{-10}
Area 1, Building 101	11/08/93	5.9×10^{-09}	4.5×10^{-10}
Area 1, Building 101	11/15/93	6.7×10^{-09}	4.6×10^{-10}
Area 1, Building 101	11/22/93	7.1×10^{-09}	4.5×10^{-10}
Area 1, Building 101	11/29/93	8.0×10^{-09}	4.6×10^{-10}
Area 1, Building 101	12/06/93	5.4×10^{-09}	4.5×10^{-10}
Area 1, Building 101	12/13/93	6.5×10^{-09}	4.4×10^{-10}
Area 1, Building 101	12/20/93	7.5×10^{-09}	5.1×10^{-10}
Area 2, Mud Plant	01/20/93	1.4×10^{-09}	4.0×10^{-10}
Area 2, Mud Plant	02/04/93	3.2×10^{-09}	3.9×10^{-10}
Area 2, Mud Plant	03/04/93	2.5×10^{-09}	4.0×10^{-10}
Area 2, Mud Plant	04/07/93	3.2×10^{-09}	3.9×10^{-10}
Area 2, Mud Plant	05/04/93	3.6×10^{-09}	4.2×10^{-10}
Area 2, Mud Plant	06/23/93	3.5×10^{-09}	4.2×10^{-10}
Area 2, Mud Plant	07/14/93	4.3×10^{-09}	4.2×10^{-10}
Area 2, Mud Plant	08/10/93	9.7×10^{-09}	4.8×10^{-10}
Area 2, Mud Plant	09/14/93	2.8×10^{-09}	4.1×10^{-10}
Area 2, Mud Plant	10/06/93	5.7×10^{-09}	4.3×10^{-10}
Area 2, Mud Plant	11/02/93	2.5×10^{-09}	3.8×10^{-10}
Area 2, Mud Plant	12/02/93	3.3×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	12/29/92	3.4×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	01/04/93	3.6×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	01/11/93	2.9×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	01/19/93	3.0×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	01/25/93	3.4×10^{-09}	4.5×10^{-10}
Area 2, Rest Room	02/01/93	2.5×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	02/08/93	3.9×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	02/16/93	2.9×10^{-09}	4.3×10^{-10}
Area 2, Rest Room	02/22/93	2.8×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	03/01/93	3.2×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	03/08/93	3.0×10^{-09}	3.8×10^{-10}
Area 2, Rest Room	03/15/93	3.0×10^{-09}	4.3×10^{-10}
Area 2, Rest Room	03/22/93	3.2×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	03/29/93	3.0×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	04/05/93	2.3×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	04/12/93	3.6×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	04/19/93	3.5×10^{-09}	4.3×10^{-10}
Area 2, Rest Room	04/26/93	3.4×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	05/03/93	3.4×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	05/10/93	3.5×10^{-09}	4.2×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Rest Room	05/17/93	4.0×10^{-09}	4.3×10^{-10}
Area 2, Rest Room	05/24/93	3.5×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	06/01/93	9.4×10^{-09}	4.7×10^{-10}
Area 2, Rest Room	06/07/93	3.0×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	06/14/93	3.3×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	06/22/93	2.4×10^{-09}	3.8×10^{-10}
Area 2, Rest Room	06/28/93	1.3×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	07/06/93	8.0×10^{-09}	4.6×10^{-10}
Area 2, Rest Room	07/12/93	3.7×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	07/19/93	3.6×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	07/26/93	3.2×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	08/02/93	3.6×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	08/09/93	4.4×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	08/16/93	2.8×10^{-09}	4.3×10^{-10}
Area 2, Rest Room	08/23/93	2.9×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	08/30/93	2.2×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	09/08/93	4.0×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	09/13/93	3.0×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	09/20/93	5.9×10^{-09}	4.6×10^{-10}
Area 2, Rest Room	09/27/93	3.6×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	10/04/93	3.4×10^{-09}	4.3×10^{-10}
Area 2, Rest Room	10/11/93	2.4×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	10/18/93	3.3×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	10/25/93	3.4×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	11/01/93	2.4×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	11/08/93	2.9×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	11/15/93	2.6×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	11/22/93	3.4×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	11/29/93	3.0×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	12/06/93	2.6×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	12/13/93	3.1×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	12/20/93	2.8×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	12/27/93	3.2×10^{-09}	4.3×10^{-10}
Area 2, Well 2 Reservoir	01/20/93	5.3×10^{-09}	4.4×10^{-10}
Area 2, Well 2 Reservoir	02/04/93	5.4×10^{-09}	4.3×10^{-10}
Area 2, Well 2 Reservoir	03/04/93	5.2×10^{-09}	4.3×10^{-10}
Area 2, Well 2 Reservoir	04/07/93	5.7×10^{-09}	4.2×10^{-10}
Area 2, Well 2 Reservoir	05/04/93	7.4×10^{-09}	4.9×10^{-10}
Area 2, Well 2 Reservoir	06/23/93	6.3×10^{-09}	4.5×10^{-10}
Area 2, Well 2 Reservoir	07/14/93	7.1×10^{-09}	4.5×10^{-10}
Area 2, Well 2 Reservoir	08/10/93	1.2×10^{-08}	5.0×10^{-10}
Area 2, Well 2 Reservoir	09/14/93	5.4×10^{-09}	4.4×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Well 2 Reservoir	10/06/93	9.0×10^{-09}	4.9×10^{-10}
Area 2, Well 2 Reservoir	11/02/93	4.0×10^{-09}	4.0×10^{-10}
Area 2, Well 2 Reservoir	12/02/93	4.5×10^{-09}	4.4×10^{-10}
Area 3, Mud Plant	01/12/93	1.2×10^{-08}	5.2×10^{-10}
Area 3, Mud Plant	02/04/93	8.3×10^{-09}	4.6×10^{-10}
Area 3, Mud Plant	03/04/93	8.9×10^{-09}	4.4×10^{-10}
Area 3, Mud Plant	04/07/93	8.5×10^{-09}	4.6×10^{-10}
Area 3, Mud Plant	05/04/93	1.2×10^{-08}	5.3×10^{-10}
Area 3, Mud Plant	06/03/93	2.8×10^{-09}	4.3×10^{-10}
Area 3, Mud Plant	07/21/93	1.3×10^{-08}	5.2×10^{-10}
Area 3, Mud Plant	08/04/93	1.8×10^{-08}	5.6×10^{-10}
Area 3, Mud Plant	09/14/93	1.2×10^{-08}	5.6×10^{-10}
Area 3, Mud Plant	10/07/93	9.8×10^{-09}	5.1×10^{-10}
Area 3, Mud Plant	11/03/93	1.0×10^{-08}	5.0×10^{-10}
Area 3, Mud Plant	12/15/93	1.1×10^{-08}	5.0×10^{-10}
Area 3, Well A Reservoir	01/12/93	1.0×10^{-08}	4.9×10^{-10}
Area 3, Well A Reservoir	02/04/93	9.2×10^{-09}	4.6×10^{-10}
Area 3, Well A Reservoir	03/04/93	6.9×10^{-09}	4.3×10^{-10}
Area 3, Well A Reservoir	04/06/93	1.2×10^{-08}	5.1×10^{-10}
Area 3, Well A Reservoir	05/04/93	9.5×10^{-09}	5.0×10^{-10}
Area 3, Well A Reservoir	06/03/93	8.5×10^{-11}	3.6×10^{-10}
Area 3, Well A Reservoir	07/20/93	1.1×10^{-08}	4.9×10^{-10}
Area 3, Well A Reservoir	08/05/93	6.8×10^{-09}	4.6×10^{-10}
Area 3, Well A Reservoir	09/14/93	1.0×10^{-08}	5.2×10^{-10}
Area 3, Well A Reservoir	10/07/93	1.0×10^{-08}	4.9×10^{-10}
Area 3, Well A Reservoir	11/03/93	5.2×10^{-09}	4.3×10^{-10}
Area 3, Well A Reservoir	12/15/93	7.7×10^{-09}	4.9×10^{-10}
Area 5, Cane Springs	01/27/93	7.4×10^{-09}	4.4×10^{-10}
Area 5, Cane Springs	02/11/93	2.0×10^{-08}	6.2×10^{-10}
Area 5, Cane Springs	03/11/93	2.4×10^{-08}	6.4×10^{-10}
Area 5, Cane Springs	04/14/93	1.1×10^{-08}	5.2×10^{-10}
Area 5, Cane Springs	05/27/93	7.7×10^{-09}	5.0×10^{-10}
Area 5, Cane Springs	06/28/93	-3.7×10^{-07}	2.2×10^{-07}
Area 5, Cane Springs	07/27/93	9.7×10^{-09}	4.9×10^{-10}
Area 5, Cane Springs	08/17/93	6.0×10^{-09}	4.6×10^{-10}
Area 5, Cane Springs	09/16/93	5.4×10^{-09}	4.4×10^{-10}
Area 5, Cane Springs	10/26/93	6.2×10^{-09}	4.4×10^{-10}
Area 5, Cane Springs	11/16/93	7.8×10^{-09}	4.8×10^{-10}
Area 5, Cane Springs	12/21/93	5.0×10^{-09}	4.4×10^{-10}
Area 5, Well UE-5c	01/13/93	7.0×10^{-09}	4.8×10^{-10}
Area 5, Well UE-5c	02/03/93	6.6×10^{-09}	4.6×10^{-10}
Area 5, Well UE-5c	02/04/93	6.3×10^{-09}	5.1×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well UE-5c	03/09/93	6.3×10^{-09}	4.3×10^{-10}
Area 5, Well UE-5c	04/04/93	6.4×10^{-09}	4.5×10^{-10}
Area 5, Well UE-5c	07/12/93	6.9×10^{-09}	4.4×10^{-10}
Area 5, Well UE-5c	11/04/93	1.5×10^{-08}	4.8×10^{-10}
Area 5, Well UE-5c Reservoir	01/28/93	7.1×10^{-09}	4.8×10^{-10}
Area 5, Well UE-5c Reservoir	03/10/93	5.9×10^{-09}	4.4×10^{-10}
Area 5, Well UE-5c Reservoir	04/06/93	5.2×10^{-09}	4.3×10^{-10}
Area 5, Well UE-5c Reservoir	05/05/93	8.4×10^{-09}	4.8×10^{-10}
Area 5, Well UE-5c Reservoir	06/09/93	7.7×10^{-09}	4.7×10^{-10}
Area 5, Well UE-5c Reservoir	07/20/93	8.9×10^{-09}	4.6×10^{-10}
Area 5, Well UE-5c Reservoir	08/05/93	7.8×10^{-09}	4.8×10^{-10}
Area 5, Well UE-5c Reservoir	09/14/93	7.4×10^{-09}	4.9×10^{-10}
Area 5, Well UE-5c Reservoir	10/07/93	6.3×10^{-09}	4.6×10^{-10}
Area 5, Well UE-5c Reservoir	11/03/93	6.1×10^{-09}	4.6×10^{-10}
Area 5, Well UE-5c Reservoir	12/15/93	5.9×10^{-09}	4.5×10^{-10}
Area 5, Well 5B	02/03/93	7.5×10^{-09}	4.9×10^{-10}
Area 5, Well 5B	07/12/93	1.0×10^{-08}	4.8×10^{-10}
Area 5, Well 5B	11/04/93	1.2×10^{-08}	5.2×10^{-10}
Area 5, Well 5B Reservoir	01/28/93	9.0×10^{-09}	5.0×10^{-10}
Area 5, Well 5B Reservoir	03/10/93	5.0×10^{-09}	4.3×10^{-10}
Area 5, Well 5B Reservoir	04/06/93	6.4×10^{-09}	4.4×10^{-10}
Area 5, Well 5B Reservoir	05/05/93	8.5×10^{-09}	4.8×10^{-10}
Area 5, Well 5B Reservoir	06/09/93	8.9×10^{-09}	5.0×10^{-10}
Area 5, Well 5B Reservoir	07/20/93	1.5×10^{-08}	5.4×10^{-10}
Area 5, Well 5B Reservoir	08/05/93	1.1×10^{-08}	5.0×10^{-10}
Area 5, Well 5B Reservoir	09/14/93	1.0×10^{-08}	5.0×10^{-10}
Area 5, Well 5B Reservoir	10/07/93	1.2×10^{-08}	5.2×10^{-10}
Area 5, Well 5B Reservoir	11/03/93	4.8×10^{-09}	4.1×10^{-10}
Area 5, Well 5B Reservoir	12/15/93	1.2×10^{-08}	5.1×10^{-10}
Area 5, Well 5C	01/13/93	6.7×10^{-09}	4.8×10^{-10}
Area 5, Well 5C	02/04/93	7.0×10^{-09}	4.9×10^{-10}
Area 5, Well 5C	03/09/93	6.0×10^{-09}	4.4×10^{-10}
Area 5, Well 5C	04/04/93	6.4×10^{-09}	4.3×10^{-10}
Area 5, Well 5C	11/04/93	7.9×10^{-09}	4.8×10^{-10}
Area 6, Bottled Water	12/29/92	-3.8×10^{-10}	3.2×10^{-10}
Area 6, Bottled Water	01/04/93	-4.8×10^{-10}	3.1×10^{-10}
Area 6, Bottled Water	01/11/93	-2.8×10^{-11}	3.1×10^{-10}
Area 6, Bottled Water	01/19/93	-2.4×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	01/25/93	6.2×10^{-11}	3.6×10^{-10}
Area 6, Bottled Water	02/01/93	-5.2×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	02/08/93	-1.7×10^{-10}	3.1×10^{-10}
Area 6, Bottled Water	02/16/93	2.8×10^{-10}	3.3×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	02/22/93	-2.8×10^{-10}	3.7×10^{-10}
Area 6, Bottled Water	03/08/93	-9.3×10^{-11}	3.1×10^{-10}
Area 6, Bottled Water	03/15/93	-3.4×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	03/22/93	1.2×10^{-10}	3.5×10^{-10}
Area 6, Bottled Water	03/29/93	3.4×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	04/05/93	2.8×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	04/12/93	7.6×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	04/19/93	-1.7×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	04/26/93	3.4×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	05/03/93	-1.4×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	05/10/93	2.4×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	05/17/93	3.4×10^{-09}	4.1×10^{-10}
Area 6, Bottled Water	05/24/93	3.0×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	06/01/93	7.9×10^{-09}	4.7×10^{-10}
Area 6, Bottled Water	06/07/93	2.6×10^{-10}	3.6×10^{-10}
Area 6, Bottled Water	06/14/93	2.0×10^{-10}	3.2×10^{-10}
Area 6, Bottled Water	06/21/93	-3.9×10^{-10}	3.2×10^{-10}
Area 6, Bottled Water	06/28/93	-5.1×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	07/06/93	3.2×10^{-09}	3.7×10^{-10}
Area 6, Bottled Water	07/12/93	4.3×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	07/19/93	5.6×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	07/26/93	-3.0×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	08/02/93	-2.0×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	08/09/93	5.8×10^{-09}	4.2×10^{-10}
Area 6, Bottled Water	08/23/93	-8.6×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	08/30/93	-4.0×10^{-10}	3.6×10^{-10}
Area 6, Bottled Water	09/08/93	8.7×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	09/13/93	5.8×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	09/20/93	-4.3×10^{-10}	3.6×10^{-10}
Area 6, Bottled Water	09/27/93	3.2×10^{-09}	4.0×10^{-10}
Area 6, Bottled Water	10/04/93	-2.9×10^{-10}	3.6×10^{-10}
Area 6, Bottled Water	10/11/93	5.7×10^{-10}	3.6×10^{-10}
Area 6, Bottled Water	10/19/93	6.8×10^{-11}	3.4×10^{-10}
Area 6, Bottled Water	10/24/93	9.6×10^{-11}	3.7×10^{-10}
Area 6, Bottled Water	11/01/93	-5.6×10^{-10}	3.2×10^{-10}
Area 6, Bottled Water	11/08/93	-1.1×10^{-10}	3.7×10^{-10}
Area 6, Bottled Water	11/15/93	-4.0×10^{-10}	3.2×10^{-10}
Area 6, Bottled Water	11/22/93	3.7×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	11/29/93	2.7×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	12/06/93	1.8×10^{-10}	3.7×10^{-10}
Area 6, Bottled Water	12/13/93	2.9×10^{-10}	3.2×10^{-10}
Area 6, Bottled Water	12/20/93	3.7×10^{-10}	3.5×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	12/27/93	-8.1×10^{-10}	3.9×10^{-10}
Area 6, Building 6-900	12/29/92	1.2×10^{-08}	7.8×10^{-10}
Area 6, Building 6-900	01/04/93	1.2×10^{-08}	8.6×10^{-10}
Area 6, Building 6-900	01/11/93	8.3×10^{-09}	6.0×10^{-10}
Area 6, Building 6-900	01/19/93	7.1×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	01/25/93	6.0×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	02/01/93	8.2×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	02/08/93	8.4×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	02/16/93	8.0×10^{-09}	4.7×10^{-10}
Area 6, Building 6-900	02/22/93	8.3×10^{-09}	5.0×10^{-10}
Area 6, Building 6-900	03/01/93	7.2×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	03/08/93	7.3×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	03/15/93	6.7×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	03/22/93	7.1×10^{-09}	4.7×10^{-10}
Area 6, Building 6-900	03/29/93	6.2×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	04/05/93	5.6×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	04/12/93	8.4×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	04/19/93	7.1×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	04/26/93	6.7×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	05/03/93	7.6×10^{-09}	4.7×10^{-10}
Area 6, Building 6-900	05/10/93	6.1×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	05/17/93	6.9×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	05/24/93	7.1×10^{-09}	4.4×10^{-10}
Area 6, Building 6-900	06/01/93	1.0×10^{-08}	4.9×10^{-10}
Area 6, Building 6-900	06/07/93	7.4×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	06/14/93	7.7×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	06/21/93	7.2×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	06/28/93	7.1×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	07/08/93	1.3×10^{-08}	5.9×10^{-10}
Area 6, Building 6-900	07/12/93	7.2×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	07/19/93	5.8×10^{-09}	4.2×10^{-10}
Area 6, Building 6-900	07/26/93	7.3×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	08/02/93	8.2×10^{-09}	4.7×10^{-10}
Area 6, Building 6-900	08/09/93	7.9×10^{-09}	4.4×10^{-10}
Area 6, Building 6-900	08/16/93	6.6×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	08/23/93	6.6×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	08/30/93	5.5×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	09/08/93	7.0×10^{-09}	4.4×10^{-10}
Area 6, Building 6-900	09/13/93	6.8×10^{-09}	4.4×10^{-10}
Area 6, Building 6-900	09/20/93	6.4×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	09/27/93	5.4×10^{-09}	4.1×10^{-10}
Area 6, Building 6-900	10/04/93	7.4×10^{-09}	4.6×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Cafeteria	07/26/93	8.2×10^{-09}	5.0×10^{-10}
Area 6, Cafeteria	08/02/93	6.0×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	08/09/93	8.2×10^{-09}	4.5×10^{-10}
Area 6, Cafeteria	08/23/93	6.3×10^{-09}	4.5×10^{-10}
Area 6, Cafeteria	08/30/93	6.0×10^{-09}	4.7×10^{-10}
Area 6, Cafeteria	09/08/93	6.9×10^{-09}	4.5×10^{-10}
Area 6, Cafeteria	09/13/93	6.8×10^{-09}	4.3×10^{-10}
Area 6, Cafeteria	09/20/93	7.5×10^{-09}	4.7×10^{-10}
Area 6, Cafeteria	09/27/93	1.2×10^{-08}	4.9×10^{-10}
Area 6, Cafeteria	10/04/93	6.6×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	10/11/93	9.9×10^{-09}	4.9×10^{-10}
Area 6, Cafeteria	10/19/93	9.0×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	10/24/93	8.5×10^{-09}	4.7×10^{-10}
Area 6, Cafeteria	11/01/93	7.8×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	11/08/93	8.2×10^{-09}	5.2×10^{-10}
Area 6, Cafeteria	11/15/93	8.2×10^{-09}	4.9×10^{-10}
Area 6, Cafeteria	11/22/93	7.2×10^{-09}	4.5×10^{-10}
Area 6, Cafeteria	11/29/93	8.3×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	12/06/93	7.9×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	12/13/93	8.8×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	12/20/93	7.3×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	12/27/93	7.2×10^{-09}	4.9×10^{-10}
Area 6, CP-72 Sewage	11/24/93	2.2×10^{-08}	6.2×10^{-10}
Area 6, DAF Sewage	11/24/93	1.5×10^{-08}	5.6×10^{-10}
Area 6, DAF Sewage	12/29/93	8.2×10^{-09}	4.8×10^{-10}
Area 6, Sewage	01/20/93	1.8×10^{-08}	6.2×10^{-10}
Area 6, Sewage	04/13/93	1.6×10^{-08}	5.5×10^{-10}
Area 6, Sewage	07/21/93	3.2×10^{-08}	7.0×10^{-10}
Area 6, Sewage	10/07/93	3.6×10^{-08}	7.3×10^{-10}
Area 6, LANL Sewage	11/24/93	1.9×10^{-08}	6.0×10^{-10}
Area 6, Well C	01/13/93	1.5×10^{-08}	5.7×10^{-10}
Area 6, Well C	02/04/93	1.5×10^{-08}	5.6×10^{-10}
Area 6, Well C	03/10/93	1.4×10^{-08}	5.1×10^{-10}
Area 6, Well C	04/04/93	5.9×10^{-09}	4.2×10^{-10}
Area 6, Well C	07/12/93	1.2×10^{-08}	5.2×10^{-10}
Area 6, Well C	11/04/93	1.6×10^{-08}	9.1×10^{-10}
Area 6, Well C-1	01/13/93	1.3×10^{-08}	5.7×10^{-10}
Area 6, Well C-1	02/04/93	1.4×10^{-08}	5.4×10^{-10}
Area 6, Well C-1	03/10/93	1.5×10^{-08}	5.4×10^{-10}
Area 6, Well C-1	04/04/93	5.0×10^{-09}	4.1×10^{-10}
Area 6, Well C-1	07/12/93	1.2×10^{-08}	5.2×10^{-10}
Area 6, Well C-1	11/24/93	1.5×10^{-08}	8.8×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well C-1 Reservoir	01/28/93	1.0×10^{-08}	4.9×10^{-10}
Area 6, Well C-1 Reservoir	02/10/93	9.8×10^{-09}	5.3×10^{-10}
Area 6, Well C-1 Reservoir	03/10/93	7.3×10^{-09}	4.5×10^{-10}
Area 6, Well C-1 Reservoir	04/06/93	5.0×10^{-09}	4.2×10^{-10}
Area 6, Well C-1 Reservoir	05/05/93	1.9×10^{-08}	6.5×10^{-10}
Area 6, Well C-1 Reservoir	06/03/93	5.2×10^{-10}	3.5×10^{-10}
Area 6, Well C-1 Reservoir	07/20/93	1.7×10^{-08}	6.0×10^{-10}
Area 6, Well C-1 Reservoir	08/05/93	8.4×10^{-09}	4.8×10^{-10}
Area 6, Well C-1 Reservoir	09/14/93	1.1×10^{-08}	5.5×10^{-10}
Area 6, Well C-1 Reservoir	10/07/93	7.0×10^{-09}	4.6×10^{-10}
Area 6, Well C-1 Reservoir	11/03/93	6.8×10^{-09}	4.7×10^{-10}
Area 6, Well C-1 Reservoir	12/15/93	8.6×10^{-09}	4.8×10^{-10}
Area 6, Well 3 Reservoir	02/04/93	1.2×10^{-08}	5.2×10^{-10}
Area 6, Well 3 Reservoir	03/04/93	9.1×10^{-09}	4.6×10^{-10}
Area 6, Well 4	01/13/93	6.2×10^{-09}	4.9×10^{-10}
Area 6, Well 4	02/04/93	6.0×10^{-09}	4.8×10^{-10}
Area 6, Well 4	03/10/93	6.0×10^{-09}	4.3×10^{-10}
Area 6, Well 4	04/04/93	6.8×10^{-09}	4.4×10^{-10}
Area 6, Well 4	07/12/93	5.1×10^{-09}	4.4×10^{-10}
Area 6, Well 4	11/04/93	6.1×10^{-09}	4.5×10^{-10}
Area 6, Yucca Pond	01/20/93	4.3×10^{-08}	1.2×10^{-08}
Area 6, Yucca Pond	02/09/93	3.3×10^{-08}	1.1×10^{-08}
Area 6, Yucca Pond	03/09/93	4.0×10^{-08}	1.4×10^{-08}
Area 6, Yucca Pond	04/07/93	4.9×10^{-08}	1.3×10^{-08}
Area 6, Yucca Pond	06/23/93	4.8×10^{-08}	4.1×10^{-09}
Area 6, Yucca Pond	07/20/93	8.1×10^{-08}	1.3×10^{-08}
Area 6, Yucca Pond	08/12/93	8.3×10^{-08}	1.2×10^{-08}
Area 6, Yucca Sewage	11/24/93	2.4×10^{-08}	6.5×10^{-10}
Area 7, Reitman Seep	01/27/93	2.5×10^{-08}	7.3×10^{-10}
Area 7, Reitman Seep	02/04/93	1.9×10^{-08}	6.4×10^{-10}
Area 7, Reitman Seep	03/04/93	3.4×10^{-08}	7.4×10^{-10}
Area 7, Reitman Seep	04/01/93	2.0×10^{-08}	8.4×10^{-10}
Area 7, Reitman Seep	05/10/93	2.7×10^{-08}	7.6×10^{-10}
Area 7, Reitman Seep	06/28/93	3.4×10^{-08}	7.4×10^{-10}
Area 7, Reitman Seep	07/21/93	5.9×10^{-08}	1.2×10^{-09}
Area 7, Reitman Seep	08/05/93	1.0×10^{-07}	1.8×10^{-09}
Area 7, Reitman Seep	09/14/93	3.8×10^{-08}	7.4×10^{-10}
Area 7, Reitman Seep	10/06/93	3.1×10^{-08}	6.6×10^{-10}
Area 7, Reitman Seep	11/03/93	2.3×10^{-08}	6.2×10^{-10}
Area 7, Reitman Seep	12/02/93	2.6×10^{-08}	6.6×10^{-10}
Area 12, Cafeteria	01/04/93	3.0×10^{-09}	4.4×10^{-10}
Area 12, Cafeteria	01/12/93	3.6×10^{-09}	4.2×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, Cafeteria	01/19/93	3.0×10^{-09}	4.3×10^{-10}
Area 12, Cafeteria	01/25/93	2.6×10^{-09}	4.4×10^{-10}
Area 12, Cafeteria	02/01/93	3.3×10^{-09}	4.0×10^{-10}
Area 12, Captain Jack Spring	03/25/93	5.0×10^{-09}	4.4×10^{-10}
Area 12, Captain Jack Spring	04/21/93	9.0×10^{-09}	5.1×10^{-10}
Area 12, Captain Jack Spring	05/12/93	9.2×10^{-09}	4.9×10^{-10}
Area 12, Captain Jack Spring	07/29/93	7.0×10^{-09}	4.7×10^{-10}
Area 12, Captain Jack Spring	08/05/93	6.8×10^{-09}	4.6×10^{-10}
Area 12, Captain Jack Spring	09/23/93	1.1×10^{-08}	5.2×10^{-10}
Area 12, Captain Jack Spring	10/21/93	6.7×10^{-09}	4.7×10^{-10}
Area 12, Captain Jack Spring	11/23/93	1.8×10^{-08}	5.7×10^{-10}
Area 12, E Tunnel Effluent	01/27/93	5.7×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Effluent	02/09/93	8.3×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Effluent	03/09/93	1.7×10^{-07}	1.3×10^{-08}
Area 12, E Tunnel Effluent	04/06/93	1.2×10^{-07}	1.3×10^{-08}
Area 12, E Tunnel Effluent	05/12/93	8.4×10^{-08}	1.0×10^{-08}
Area 12, E Tunnel Effluent	06/23/93	7.0×10^{-08}	1.3×10^{-09}
Area 12, E Tunnel Effluent	07/20/93	1.2×10^{-07}	1.1×10^{-08}
Area 12, E Tunnel Effluent	08/12/93	5.1×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Effluent	09/15/93	6.3×10^{-08}	1.0×10^{-08}
Area 12, E Tunnel Effluent	10/07/93	6.1×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Effluent	11/16/93	7.0×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Effluent	12/21/93	6.8×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Pond No. 1	02/09/93	8.2×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Pond No. 1	03/09/93	1.3×10^{-07}	1.2×10^{-08}
Area 12, E Tunnel Pond No. 1	04/06/93	1.3×10^{-07}	1.2×10^{-08}
Area 12, E Tunnel Pond No. 1	05/12/93	7.4×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Pond No. 1	06/23/93	7.3×10^{-08}	1.3×10^{-09}
Area 12, E Tunnel Pond No. 1	07/20/93	1.1×10^{-07}	1.2×10^{-08}
Area 12, E Tunnel Pond No. 1	08/12/93	6.6×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Pond No. 1	09/15/93	5.3×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Pond No. 1	10/07/93	5.8×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Pond No. 1	11/16/93	5.3×10^{-08}	1.2×10^{-08}
Area 12, Gold Meadows Spring	04/30/93	1.0×10^{-08}	4.8×10^{-10}
Area 12, Gold Meadows Spring	05/10/93	8.1×10^{-09}	4.9×10^{-10}
Area 12, Gold Meadows Spring	06/28/93	8.1×10^{-09}	5.1×10^{-10}
Area 12, Gold Meadows Spring	07/21/93	2.3×10^{-08}	6.0×10^{-10}
Area 12, Gold Meadows Spring	08/12/93	2.2×10^{-08}	6.4×10^{-10}
Area 12, N Tunnel Effluent	01/27/93	9.2×10^{-09}	1.2×10^{-08}
Area 12, N Tunnel Effluent	02/09/93	1.1×10^{-08}	2.1×10^{-08}
Area 12, N Tunnel Effluent	03/09/93	2.5×10^{-09}	1.1×10^{-08}
Area 12, N Tunnel Effluent	04/06/93	2.0×10^{-09}	1.1×10^{-08}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, N Tunnel Effluent	10/07/93	2.2×10^{-08}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	03/09/93	-4.3×10^{-09}	9.3×10^{-09}
Area 12, N Tunnel Pond No. 2	04/06/93	7.7×10^{-09}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 3	03/09/93	6.1×10^{-09}	9.0×10^{-09}
Area 12, N Tunnel Pond No. 3	04/06/93	2.0×10^{-08}	1.0×10^{-08}
Area 12, N Tunnel Pond No. 3	05/12/93	1.9×10^{-08}	9.2×10^{-09}
Area 12, Sewage	02/03/93	2.2×10^{-08}	6.2×10^{-10}
Area 12, Sewage	04/06/93	2.2×10^{-08}	6.0×10^{-10}
Area 12, Sewage	07/20/93	4.0×10^{-08}	7.7×10^{-10}
Area 12, Sewage	10/06/93	3.8×10^{-08}	7.7×10^{-10}
Area 12, T Tunnel Effluent	01/27/93	3.2×10^{-07}	1.6×10^{-08}
Area 12, T Tunnel Effluent	02/09/93	3.6×10^{-07}	1.6×10^{-08}
Area 12, T Tunnel Effluent	03/09/93	3.2×10^{-07}	1.3×10^{-08}
Area 12, T Tunnel Effluent	04/07/93	1.5×10^{-07}	1.2×10^{-08}
Area 12, T Tunnel Effluent	09/29/93	-3.9×10^{-09}	1.1×10^{-08}
Area 12, T Tunnel Effluent	10/07/93	1.1×10^{-08}	9.6×10^{-09}
Area 12, T Tunnel Pond No. 2	02/09/93	3.1×10^{-07}	1.3×10^{-08}
Area 12, T Tunnel Pond No. 2	03/09/93	2.8×10^{-07}	1.2×10^{-08}
Area 12, T Tunnel Pond No. 2	04/07/93	1.7×10^{-07}	1.4×10^{-08}
Area 12, T Tunnel Pond No. 2	05/12/93	2.6×10^{-07}	1.4×10^{-08}
Area 12, T Tunnel Pond No. 3	02/09/93	3.3×10^{-07}	1.3×10^{-08}
Area 12, T Tunnel Pond No. 3	03/09/93	2.6×10^{-07}	1.5×10^{-08}
Area 12, T Tunnel Pond No. 3	04/07/93	1.8×10^{-07}	1.2×10^{-08}
Area 12, T Tunnel Pond No. 3	05/12/93	3.1×10^{-07}	1.4×10^{-08}
Area 12, White Rock Spring	01/13/93	7.3×10^{-09}	4.8×10^{-10}
Area 12, White Rock Spring	02/04/93	1.1×10^{-08}	5.2×10^{-10}
Area 12, White Rock Spring	03/04/93	9.5×10^{-09}	4.8×10^{-10}
Area 12, White Rock Spring	04/07/93	1.0×10^{-08}	4.7×10^{-10}
Area 12, White Rock Spring	05/04/93	1.2×10^{-08}	5.2×10^{-10}
Area 12, White Rock Spring	06/23/93	7.0×10^{-09}	4.7×10^{-10}
Area 12, White Rock Spring	07/20/93	1.3×10^{-08}	5.1×10^{-10}
Area 12, White Rock Spring	08/12/93	9.5×10^{-09}	4.8×10^{-10}
Area 12, White Rock Spring	09/14/93	9.7×10^{-09}	4.8×10^{-10}
Area 12, White Rock Spring	10/06/93	1.2×10^{-08}	5.1×10^{-10}
Area 12, White Rock Spring	11/16/93	8.3×10^{-09}	4.8×10^{-10}
Area 12, White Rock Spring	12/21/93	9.6×10^{-09}	5.2×10^{-10}
Area 16, Tippipah Spring	01/13/93	4.3×10^{-09}	4.3×10^{-10}
Area 16, Tippipah Spring	02/04/93	4.0×10^{-09}	4.0×10^{-10}
Area 16, Tippipah Spring	03/04/93	5.1×10^{-09}	4.3×10^{-10}
Area 16, Tippipah Spring	04/06/93	3.2×10^{-09}	3.9×10^{-10}
Area 16, Tippipah Spring	05/05/93	5.8×10^{-09}	4.4×10^{-10}
Area 16, Tippipah Spring	06/23/93	4.2×10^{-09}	4.3×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 16, Tippipah Spring	07/14/93	5.0×10^{-09}	4.1×10^{-10}
Area 16, Tippipah Spring	08/12/93	4.0×10^{-09}	4.2×10^{-10}
Area 16, Tippipah Spring	09/16/93	4.8×10^{-09}	4.5×10^{-10}
Area 16, Tippipah Spring	10/06/93	7.3×10^{-09}	4.6×10^{-10}
Area 16, Tippipah Spring	11/03/93	4.0×10^{-09}	4.4×10^{-10}
Area 16, Tippipah Spring	12/02/93	4.0×10^{-09}	4.4×10^{-10}
Area 16, Well UE-16d	01/13/93	6.1×10^{-09}	4.6×10^{-10}
Area 16, Well UE-16d	02/04/93	6.1×10^{-09}	4.6×10^{-10}
Area 16, Well UE-16d	03/10/93	7.0×10^{-09}	4.5×10^{-10}
Area 16, Well UE-16d	04/04/93	7.6×10^{-09}	4.5×10^{-10}
Area 16, Well UE-16d	07/12/93	5.4×10^{-09}	4.5×10^{-10}
Area 16, Well UE-16d	11/04/93	6.8×10^{-09}	4.7×10^{-10}
Area 18, Camp 17 Reservoir	02/10/93	3.7×10^{-09}	4.3×10^{-10}
Area 18, Camp 17 Reservoir	03/15/93	3.0×10^{-09}	4.2×10^{-10}
Area 18, Camp 17 Reservoir	04/13/93	3.8×10^{-09}	4.1×10^{-10}
Area 18, Camp 17 Reservoir	05/05/93	3.3×10^{-09}	4.2×10^{-10}
Area 18, Camp 17 Reservoir	06/23/93	2.8×10^{-09}	4.7×10^{-10}
Area 18, Camp 17 Reservoir	07/15/93	4.1×10^{-09}	4.0×10^{-10}
Area 18, Camp 17 Reservoir	08/09/93	8.7×10^{-09}	4.7×10^{-10}
Area 18, Camp 17 Reservoir	09/13/93	3.8×10^{-09}	4.3×10^{-10}
Area 18, Camp 17 Reservoir	10/06/93	4.2×10^{-09}	4.0×10^{-10}
Area 18, Camp 17 Reservoir	11/03/93	5.0×10^{-09}	4.5×10^{-10}
Area 18, Camp 17 Reservoir	12/02/93	3.4×10^{-09}	4.2×10^{-10}
Area 18, Well 8	01/13/93	3.3×10^{-09}	4.3×10^{-10}
Area 18, Well 8	02/04/93	3.3×10^{-09}	4.4×10^{-10}
Area 18, Well 8	03/10/93	2.9×10^{-09}	3.9×10^{-10}
Area 18, Well 8	04/04/93	3.6×10^{-09}	4.0×10^{-10}
Area 18, Well 8	07/12/93	2.6×10^{-09}	4.0×10^{-10}
Area 18, Well 8	11/04/93	3.2×10^{-09}	4.3×10^{-10}
Area 18, Well 8 Reservoir	03/15/93	3.8×10^{-09}	4.0×10^{-10}
Area 18, Well 8 Reservoir	04/13/93	5.6×10^{-09}	4.4×10^{-10}
Area 18, Well 8 Reservoir	05/05/93	6.1×10^{-09}	4.6×10^{-10}
Area 19, Well UE-19c Reservoir	03/25/93	2.5×10^{-09}	4.0×10^{-10}
Area 19, Well UE-19c Reservoir	04/06/93	3.2×10^{-09}	4.0×10^{-10}
Area 19, Well UE-19c Reservoir	05/11/93	2.7×10^{-09}	4.3×10^{-10}
Area 19, Well UE-19c Reservoir	06/23/93	1.7×10^{-09}	4.1×10^{-10}
Area 19, Well UE-19c Reservoir	07/15/93	2.9×10^{-09}	4.0×10^{-10}
Area 19, Well UE-19c Reservoir	08/09/93	1.2×10^{-08}	5.1×10^{-10}
Area 19, Well UE-19c Reservoir	09/13/93	2.2×10^{-09}	4.2×10^{-10}
Area 19, Well UE-19c Reservoir	10/06/93	4.3×10^{-09}	4.2×10^{-10}
Area 19, Well UE-19c Reservoir	11/03/93	1.7×10^{-09}	4.0×10^{-10}
Area 19, Well UE-19c Reservoir	12/02/93	1.4×10^{-09}	4.1×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 20, Well U-20	07/12/93	2.7×10^{-09}	3.8×10^{-10}
Area 20, Well 20 Reservoir	03/25/93	1.1×10^{-09}	3.6×10^{-10}
Area 20, Well 20 Reservoir	04/06/93	2.0×10^{-09}	3.8×10^{-10}
Area 20, Well 20 Reservoir	06/23/93	2.8×10^{-09}	4.1×10^{-10}
Area 20, Well 20 Reservoir	07/15/93	4.5×10^{-09}	4.1×10^{-10}
Area 20, Well 20 Reservoir	08/09/93	1.2×10^{-08}	4.9×10^{-10}
Area 20, Well 20 Reservoir	09/13/93	2.2×10^{-09}	4.0×10^{-10}
Area 20, Well 20 Reservoir	10/06/93	5.9×10^{-09}	4.2×10^{-10}
Area 23, Army Well No. 1	01/13/93	6.1×10^{-09}	4.6×10^{-10}
Area 23, Army Well No. 1	02/04/93	4.9×10^{-09}	4.5×10^{-10}
Area 23, Army Well No. 1	03/09/93	5.3×10^{-09}	4.3×10^{-10}
Area 23, Army Well No. 1	04/04/93	6.8×10^{-09}	4.4×10^{-10}
Area 23, Army Well No. 1	07/12/93	4.2×10^{-09}	4.3×10^{-10}
Area 23, Army Well No. 1	11/04/93	6.3×10^{-09}	4.4×10^{-10}
Area 23, Cafeteria	12/28/92	2.6×10^{-09}	3.9×10^{-10}
Area 23, Cafeteria	01/04/93	3.0×10^{-09}	3.9×10^{-10}
Area 23, Cafeteria	01/12/93	3.8×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	01/20/93	5.1×10^{-09}	4.4×10^{-10}
Area 23, Cafeteria	01/26/93	1.7×10^{-09}	4.3×10^{-10}
Area 23, Cafeteria	02/01/93	2.7×10^{-09}	3.8×10^{-10}
Area 23, Cafeteria	02/08/93	4.9×10^{-09}	4.4×10^{-10}
Area 23, Cafeteria	02/16/93	4.2×10^{-09}	4.4×10^{-10}
Area 23, Cafeteria	02/22/93	3.2×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	03/01/93	3.6×10^{-09}	4.0×10^{-10}
Area 23, Cafeteria	03/08/93	3.4×10^{-09}	4.0×10^{-10}
Area 23, Cafeteria	03/15/93	3.3×10^{-09}	4.3×10^{-10}
Area 23, Cafeteria	03/22/93	4.8×10^{-09}	4.5×10^{-10}
Area 23, Cafeteria	03/29/93	3.2×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	04/05/93	2.9×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	04/12/93	5.1×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	04/19/93	7.0×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	04/26/93	5.6×10^{-09}	4.5×10^{-10}
Area 23, Cafeteria	05/03/93	4.0×10^{-09}	4.3×10^{-10}
Area 23, Cafeteria	05/10/93	4.4×10^{-09}	4.3×10^{-10}
Area 23, Cafeteria	05/17/93	3.4×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	05/24/93	4.4×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	06/01/93	1.2×10^{-08}	5.0×10^{-10}
Area 23, Cafeteria	06/07/93	4.9×10^{-09}	7.1×10^{-10}
Area 23, Cafeteria	06/14/93	4.9×10^{-09}	4.4×10^{-10}
Area 23, Cafeteria	06/21/93	4.2×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	06/28/93	4.2×10^{-09}	4.5×10^{-10}
Area 23, Cafeteria	07/06/93	6.9×10^{-09}	4.2×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Cafeteria	07/12/93	3.6×10^{-09}	4.0×10^{-10}
Area 23, Cafeteria	07/19/93	9.4×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	07/26/93	9.0×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	08/02/93	7.4×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	08/09/93	7.4×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	08/16/93	8.7×10^{-09}	5.0×10^{-10}
Area 23, Cafeteria	08/23/93	1.0×10^{-08}	5.2×10^{-10}
Area 23, Cafeteria	08/30/93	8.8×10^{-09}	4.9×10^{-10}
Area 23, Cafeteria	09/08/93	7.8×10^{-09}	4.6×10^{-10}
Area 23, Cafeteria	09/13/93	8.3×10^{-09}	4.5×10^{-10}
Area 23, Cafeteria	09/20/93	4.4×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	09/27/93	9.3×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	10/04/93	7.1×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	10/11/93	5.9×10^{-09}	4.5×10^{-10}
Area 23, Cafeteria	10/19/93	3.0×10^{-09}	4.1×10^{-10}
Area 23, Cafeteria	10/24/93	3.7×10^{-09}	4.3×10^{-10}
Area 23, Cafeteria	11/01/93	3.7×10^{-09}	4.1×10^{-10}
Area 23, Cafeteria	11/08/93	6.3×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	11/15/93	5.3×10^{-09}	4.4×10^{-10}
Area 23, Cafeteria	11/22/93	3.7×10^{-09}	4.2×10^{-10}
Area 23, Cafeteria	11/29/93	4.0×10^{-09}	4.1×10^{-10}
Area 23, Cafeteria	12/06/93	6.2×10^{-09}	4.8×10^{-10}
Area 23, Cafeteria	12/13/93	3.8×10^{-09}	4.1×10^{-10}
Area 23, Cafeteria	12/20/93	6.2×10^{-09}	4.5×10^{-10}
Area 23, Cafeteria	12/27/93	7.8×10^{-09}	4.9×10^{-10}
Area 23, Sewage	01/28/93	2.3×10^{-08}	6.2×10^{-10}
Area 23, Sewage	04/27/93	1.8×10^{-08}	5.6×10^{-10}
Area 23, Sewage	07/21/93	1.8×10^{-08}	5.7×10^{-10}
Area 23, Swimming Pool	01/28/93	3.8×10^{-09}	4.3×10^{-10}
Area 23, Swimming Pool	02/10/93	3.5×10^{-09}	4.3×10^{-10}
Area 23, Swimming Pool	03/10/93	3.5×10^{-09}	4.2×10^{-10}
Area 23, Swimming Pool	04/06/93	3.2×10^{-09}	3.9×10^{-10}
Area 23, Swimming Pool	05/05/93	3.7×10^{-09}	4.1×10^{-10}
Area 23, Swimming Pool	06/09/93	3.7×10^{-09}	4.1×10^{-10}
Area 23, Swimming Pool	07/20/93	5.8×10^{-09}	4.3×10^{-10}
Area 23, Swimming Pool	08/05/93	4.2×10^{-09}	4.3×10^{-10}
Area 23, Swimming Pool	09/14/93	6.3×10^{-09}	4.5×10^{-10}
Area 23, Swimming Pool	10/26/93	4.7×10^{-09}	4.2×10^{-10}
Area 23, Swimming Pool	11/03/93	4.2×10^{-09}	4.9×10^{-10}
Area 23, Swimming Pool	12/21/93	5.9×10^{-09}	4.6×10^{-10}
Area 25, Building 4221	12/28/92	3.1×10^{-09}	4.0×10^{-10}
Area 25, Building 4221	01/04/93	3.4×10^{-09}	4.0×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Building 4221	01/12/93	2.6×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	01/20/93	3.8×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	01/26/93	3.9×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	02/01/93	5.2×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	02/08/93	4.2×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	02/16/93	4.9×10^{-09}	4.5×10^{-10}
Area 25, Building 4221	02/22/93	3.8×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	03/01/93	4.8×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	03/08/93	4.8×10^{-09}	4.9×10^{-10}
Area 25, Building 4221	03/15/93	4.2×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	03/22/93	4.5×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	03/29/93	4.4×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	04/05/93	5.0×10^{-09}	4.6×10^{-10}
Area 25, Building 4221	04/12/93	4.9×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	04/19/93	4.8×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	04/26/93	5.2×10^{-09}	4.5×10^{-10}
Area 25, Building 4221	05/03/93	4.1×10^{-09}	4.5×10^{-10}
Area 25, Building 4221	05/10/93	5.9×10^{-09}	4.7×10^{-10}
Area 25, Building 4221	05/17/93	4.5×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	05/24/93	4.4×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	06/01/93	1.1×10^{-08}	4.8×10^{-10}
Area 25, Building 4221	06/07/93	4.2×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	06/14/93	4.3×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	06/21/93	4.2×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	06/28/93	4.3×10^{-09}	4.5×10^{-10}
Area 25, Building 4221	07/06/93	8.8×10^{-09}	4.7×10^{-10}
Area 25, Building 4221	07/12/93	4.3×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	07/19/93	5.3×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	07/26/93	3.7×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	08/02/93	4.3×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	08/09/93	5.8×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	08/16/93	2.6×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	08/23/93	4.4×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	08/30/93	5.1×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	09/08/93	5.2×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	09/13/93	5.1×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	09/20/93	4.7×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	09/27/93	5.5×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	10/04/93	4.1×10^{-09}	4.5×10^{-10}
Area 25, Building 4221	10/11/93	4.9×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	10/19/93	4.9×10^{-09}	4.6×10^{-10}
Area 25, Building 4221	10/24/93	5.1×10^{-09}	4.5×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Building 4221	11/01/93	3.8×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	11/08/93	4.0×10^{-09}	4.6×10^{-10}
Area 25, Building 4221	11/15/93	3.4×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	11/22/93	4.9×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	11/29/93	4.4×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	12/06/93	4.7×10^{-09}	4.7×10^{-10}
Area 25, Building 4221	12/13/93	3.9×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	12/20/93	3.8×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	12/27/93	4.1×10^{-09}	4.5×10^{-10}
Area 25, Central Sewage	11/24/93	2.4×10^{-08}	6.5×10^{-10}
Area 25, Well J-11 Reservoir	01/28/93	3.7×10^{-09}	4.1×10^{-10}
Area 25, Well J-11 Reservoir	02/03/93	4.4×10^{-09}	4.2×10^{-10}
Area 25, Well J-11 Reservoir	03/10/93	4.5×10^{-09}	4.1×10^{-10}
Area 25, Well J-11 Reservoir	04/06/93	4.4×10^{-09}	4.1×10^{-10}
Area 25, Well J-11 Reservoir	05/10/93	6.5×10^{-09}	5.2×10^{-10}
Area 25, Well J-11 Reservoir	06/01/93	4.5×10^{-07}	2.2×10^{-09}
Area 25, Well J-11 Reservoir	07/13/93	6.4×10^{-09}	4.4×10^{-10}
Area 25, Well J-11 Reservoir	08/05/93	5.8×10^{-09}	4.6×10^{-10}
Area 25, Well J-11 Reservoir	09/02/93	5.5×10^{-09}	4.5×10^{-10}
Area 25, Well J-11 Reservoir	10/06/93	5.5×10^{-09}	4.4×10^{-10}
Area 25, Well J-11 Reservoir	11/03/93	4.9×10^{-09}	4.3×10^{-10}
Area 25, Well J-11 Reservoir	12/13/93	5.7×10^{-09}	4.4×10^{-10}
Area 25, Well J-12	01/13/93	3.7×10^{-09}	4.4×10^{-10}
Area 25, Well J-12	02/04/93	3.7×10^{-09}	4.2×10^{-10}
Area 25, Well J-12	03/09/93	3.7×10^{-09}	4.1×10^{-10}
Area 25, Well J-12	04/04/93	3.9×10^{-09}	4.0×10^{-10}
Area 25, Well J-12	07/12/93	3.5×10^{-09}	4.2×10^{-10}
Area 25, Well J-12	11/04/93	4.2×10^{-09}	4.4×10^{-10}
Area 25, Well J-12 Reservoir	01/28/93	5.8×10^{-09}	4.5×10^{-10}
Area 25, Well J-12 Reservoir	02/03/93	5.5×10^{-09}	4.6×10^{-10}
Area 25, Well J-12 Reservoir	03/10/93	5.4×10^{-09}	4.4×10^{-10}
Area 25, Well J-12 Reservoir	04/06/93	9.1×10^{-09}	4.8×10^{-10}
Area 25, Well J-12 Reservoir	05/10/93	6.7×10^{-09}	4.7×10^{-10}
Area 25, Well J-12 Reservoir	06/01/93	9.5×10^{-09}	4.7×10^{-10}
Area 25, Well J-12 Reservoir	07/13/93	5.9×10^{-09}	4.4×10^{-10}
Area 25, Well J-12 Reservoir	08/05/93	6.1×10^{-09}	4.6×10^{-10}
Area 25, Well J-12 Reservoir	09/02/93	4.9×10^{-09}	4.4×10^{-10}
Area 25, Well J-12 Reservoir	10/06/93	8.4×10^{-09}	4.7×10^{-10}
Area 25, Well J-12 Reservoir	11/03/93	4.8×10^{-09}	4.4×10^{-10}
Area 25, Well J-12 Reservoir	12/13/93	6.0×10^{-09}	4.5×10^{-10}
Area 25, Well J-13	01/13/93	4.0×10^{-09}	4.4×10^{-10}
Area 25, Well J-13	02/04/93	3.6×10^{-09}	4.3×10^{-10}

Attachment C.5 (Gross Beta in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Well J-13	03/09/93	4.0×10^{-09}	4.1×10^{-10}
Area 25, Well J-13	04/04/93	4.5×10^{-09}	4.1×10^{-10}
Area 25, Well J-13	07/12/93	3.6×10^{-09}	4.2×10^{-10}
Area 25, Well J-13	11/04/93	4.1×10^{-09}	4.4×10^{-10}
Area 27, Topopah Springs	02/11/93	4.2×10^{-09}	4.4×10^{-10}
Area 27, Topopah Springs	03/11/93	4.3×10^{-09}	4.2×10^{-10}
Area 27, Topopah Springs	04/30/93	5.3×10^{-09}	4.4×10^{-10}
Area 27, Topopah Springs	05/12/93	5.5×10^{-09}	4.7×10^{-10}
Area 27, Topopah Springs	06/02/93	8.4×10^{-09}	4.5×10^{-10}
Area 27, Topopah Springs	07/29/93	5.1×10^{-09}	4.3×10^{-10}
Area 27, Topopah Springs	08/12/93	6.6×10^{-09}	4.7×10^{-10}
Area 27, Topopah Springs	09/22/93	8.2×10^{-09}	4.5×10^{-10}
Area 27, Topopah Springs	10/21/93	4.5×10^{-09}	4.0×10^{-10}
Area 27, Topopah Springs	11/17/93	5.1×10^{-09}	4.2×10^{-10}

Attachment C.6 Gamma-Emitting Radionuclides in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)	Radionuclide
Area 7, Retiman Seep	08/05/93	8.6×10^{-08}	5.4×10^{-08}	^{137}Cs
Area 12, E Tunnel Effluent	03/09/93	1.6×10^{-07}	5.8×10^{-08}	^{137}Cs
Area 12, E Tunnel Effluent	05/12/93	1.2×10^{-07}	5.4×10^{-08}	^{137}Cs
Area 12, E Tunnel Pond No. 1	03/09/93	3.0×10^{-07}	7.2×10^{-08}	^{137}Cs
Area 12, E Tunnel Pond No. 1	05/12/93	2.0×10^{-07}	6.2×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	05/12/93	1.8×10^{-07}	6.0×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 3	05/12/93	1.8×10^{-07}	6.0×10^{-08}	^{137}Cs

Attachment C.7 Tritium in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	01/04/93	-7.6×10^{-08}	1.9×10^{-07}
Area 1, Building 101	01/12/93	-1.3×10^{-07}	2.2×10^{-07}
Area 1, Building 101	01/19/93	-4.6×10^{-08}	2.2×10^{-07}
Area 1, Building 101	01/25/93	5.3×10^{-07}	2.0×10^{-07}
Area 1, Building 101	02/01/93	-2.2×10^{-07}	1.6×10^{-07}
Area 1, Building 101	02/08/93	2.4×10^{-07}	2.1×10^{-07}
Area 1, Building 101	02/16/93	-3.0×10^{-07}	2.2×10^{-07}
Area 1, Building 101	02/22/93	9.2×10^{-08}	2.2×10^{-07}
Area 1, Building 101	03/01/93	-2.9×10^{-07}	2.2×10^{-07}
Area 1, Building 101	03/08/93	9.5×10^{-08}	2.2×10^{-07}
Area 1, Building 101	03/15/93	5.2×10^{-08}	2.1×10^{-07}
Area 1, Building 101	03/22/93	3.3×10^{-07}	2.2×10^{-07}
Area 1, Building 101	03/30/93	-3.9×10^{-08}	2.2×10^{-07}
Area 1, Building 101	04/05/93	5.0×10^{-07}	2.2×10^{-07}
Area 1, Building 101	04/12/93	-1.5×10^{-07}	2.2×10^{-07}
Area 1, Building 101	04/19/93	5.9×10^{-08}	2.2×10^{-07}
Area 1, Building 101	04/26/93	-2.0×10^{-07}	2.2×10^{-07}
Area 1, Building 101	05/03/93	3.4×10^{-08}	2.2×10^{-07}
Area 1, Building 101	05/10/93	-2.9×10^{-07}	2.1×10^{-07}
Area 1, Building 101	05/18/93	1.1×10^{-07}	2.2×10^{-07}
Area 1, Building 101	05/24/93	-1.8×10^{-07}	2.3×10^{-07}
Area 1, Building 101	06/01/93	-5.4×10^{-09}	2.2×10^{-07}
Area 1, Building 101	06/07/93	-1.3×10^{-07}	2.2×10^{-07}
Area 1, Building 101	06/14/93	-9.7×10^{-08}	2.2×10^{-07}
Area 1, Building 101	06/22/93	8.0×10^{-08}	2.3×10^{-07}
Area 1, Building 101	06/28/93	-2.9×10^{-07}	2.2×10^{-07}
Area 1, Building 101	07/06/93	2.2×10^{-07}	2.2×10^{-07}
Area 1, Building 101	07/14/93	2.7×10^{-08}	2.2×10^{-07}
Area 1, Building 101	07/19/93	1.8×10^{-07}	2.2×10^{-07}
Area 1, Building 101	07/26/93	3.9×10^{-07}	2.3×10^{-07}
Area 1, Building 101	08/02/93	3.8×10^{-07}	2.2×10^{-07}
Area 1, Building 101	08/02/93	1.1×10^{-07}	2.2×10^{-07}
Area 1, Building 101	08/09/93	5.3×10^{-07}	2.4×10^{-07}
Area 1, Building 101	08/16/93	4.7×10^{-07}	2.1×10^{-07}
Area 1, Building 101	08/23/93	5.6×10^{-09}	2.1×10^{-07}
Area 1, Building 101	08/30/93	1.3×10^{-07}	2.1×10^{-07}
Area 1, Building 101	09/08/93	3.6×10^{-07}	2.2×10^{-07}
Area 1, Building 101	09/13/93	4.6×10^{-07}	2.2×10^{-07}
Area 1, Building 101	09/20/93	1.0×10^{-07}	2.2×10^{-07}
Area 1, Building 101	09/27/93	2.0×10^{-07}	2.2×10^{-07}
Area 1, Building 101	10/04/93	-6.0×10^{-07}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 1, Building 101	10/11/93	4.3×10^{-07}	2.2×10^{-07}
Area 1, Building 101	10/18/93	3.7×10^{-07}	2.2×10^{-07}
Area 1, Building 101	10/25/93	2.1×10^{-07}	2.2×10^{-07}
Area 1, Building 101	11/01/93	-2.9×10^{-08}	2.2×10^{-07}
Area 1, Building 101	11/08/93	6.1×10^{-07}	2.3×10^{-07}
Area 1, Building 101	11/15/93	-3.1×10^{-07}	2.2×10^{-07}
Area 1, Building 101	11/22/93	-8.2×10^{-08}	2.2×10^{-07}
Area 1, Building 101	11/29/93	-2.2×10^{-07}	2.2×10^{-07}
Area 1, Building 101	12/06/93	1.4×10^{-07}	2.2×10^{-07}
Area 1, Building 101	12/13/93	-4.0×10^{-07}	2.2×10^{-07}
Area 1, Building 101	12/20/93	-2.3×10^{-07}	2.2×10^{-07}
Area 2, Mud Plant	01/20/93	-2.8×10^{-07}	1.8×10^{-07}
Area 2, Mud Plant	02/04/93	1.8×10^{-07}	2.2×10^{-07}
Area 2, Mud Plant	03/04/93	-2.2×10^{-08}	2.2×10^{-07}
Area 2, Mud Plant	04/07/93	8.1×10^{-08}	2.1×10^{-07}
Area 2, Mud Plant	05/04/93	-1.3×10^{-07}	2.2×10^{-07}
Area 2, Mud Plant	06/23/93	-8.6×10^{-08}	2.2×10^{-07}
Area 2, Mud Plant	07/14/93	1.1×10^{-07}	2.2×10^{-07}
Area 2, Mud Plant	08/10/93	7.3×10^{-07}	2.4×10^{-07}
Area 2, Mud Plant	09/14/93	-1.2×10^{-07}	2.2×10^{-07}
Area 2, Mud Plant	10/06/93	5.7×10^{-09}	4.0×10^{-07}
Area 2, Mud Plant	11/02/93	-1.9×10^{-07}	2.2×10^{-07}
Area 2, Mud Plant	12/02/93	-1.2×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	12/29/92	-2.0×10^{-08}	1.9×10^{-07}
Area 2, Rest Room	01/04/93	1.6×10^{-07}	1.9×10^{-07}
Area 2, Rest Room	01/11/93	5.5×10^{-08}	1.9×10^{-07}
Area 2, Rest Room	01/19/93	-3.2×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	01/25/93	3.8×10^{-07}	2.0×10^{-07}
Area 2, Rest Room	02/01/93	1.4×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	02/08/93	-1.2×10^{-07}	1.6×10^{-07}
Area 2, Rest Room	02/16/93	-4.4×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	02/22/93	-1.6×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	03/01/93	-2.1×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	03/08/93	9.5×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	03/15/93	-4.6×10^{-08}	2.1×10^{-07}
Area 2, Rest Room	03/22/93	5.5×10^{-09}	2.1×10^{-07}
Area 2, Rest Room	03/29/93	3.9×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	04/05/93	4.6×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	04/12/93	-7.8×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	04/19/93	-2.4×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	04/26/93	5.4×10^{-09}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Rest Room	05/03/93	1.6×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	05/10/93	-2.5×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	05/17/93	9.8×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	05/24/93	-3.1×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	06/01/93	-9.8×10^{-08}	2.1×10^{-07}
Area 2, Rest Room	06/07/93	3.8×10^{-07}	2.3×10^{-07}
Area 2, Rest Room	06/14/93	-7.4×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	06/22/93	-2.9×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	06/28/93	-3.8×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	07/06/93	4.1×10^{-10}	2.1×10^{-07}
Area 2, Rest Room	07/12/93	2.5×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	07/19/93	3.2×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	07/26/93	1.2×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	08/02/93	2.2×10^{-07}	2.3×10^{-07}
Area 2, Rest Room	08/09/93	5.7×10^{-09}	2.3×10^{-07}
Area 2, Rest Room	08/16/93	4.3×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	08/23/93	3.2×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	08/30/93	2.8×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	09/08/93	1.1×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	09/13/93	4.8×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	09/20/93	1.7×10^{-07}	2.1×10^{-07}
Area 2, Rest Room	09/27/93	3.8×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	10/04/93	-1.8×10^{-07}	2.3×10^{-07}
Area 2, Rest Room	10/11/93	2.1×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	10/18/93	-1.1×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	10/25/93	1.8×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	11/01/93	-1.5×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	11/08/93	-3.2×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	11/15/93	-1.3×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	11/22/93	-1.1×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	11/29/93	3.5×10^{-08}	2.2×10^{-07}
Area 2, Rest Room	12/06/93	1.6×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	12/13/93	1.9×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	12/20/93	-2.0×10^{-07}	2.2×10^{-07}
Area 2, Rest Room	12/27/93	-1.0×10^{-06}	2.0×10^{-07}
Area 2, Well 2 Reservoir	01/20/93	-2.1×10^{-07}	1.8×10^{-07}
Area 2, Well 2 Reservoir	02/04/93	-1.4×10^{-07}	2.1×10^{-07}
Area 2, Well 2 Reservoir	03/04/93	-3.4×10^{-08}	2.2×10^{-07}
Area 2, Well 2 Reservoir	04/07/93	2.3×10^{-07}	2.1×10^{-07}
Area 2, Well 2 Reservoir	05/04/93	5.6×10^{-08}	2.2×10^{-07}
Area 2, Well 2 Reservoir	06/23/93	-6.9×10^{-08}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 2, Well 2 Reservoir	07/14/93	2.2×10^{-07}	2.2×10^{-07}
Area 2, Well 2 Reservoir	08/10/93	-1.8×10^{-07}	2.3×10^{-07}
Area 2, Well 2 Reservoir	09/14/93	-4.4×10^{-07}	2.2×10^{-07}
Area 2, Well 2 Reservoir	10/06/93	-5.7×10^{-09}	2.2×10^{-07}
Area 2, Well 2 Reservoir	11/02/93	2.2×10^{-07}	2.3×10^{-07}
Area 2, Well 2 Reservoir	12/02/93	-1.6×10^{-07}	2.2×10^{-07}
Area 3, Mud Plant	01/12/93	-4.3×10^{-07}	1.7×10^{-07}
Area 3, Mud Plant	02/04/93	-5.9×10^{-08}	2.1×10^{-07}
Area 3, Mud Plant	03/04/93	5.0×10^{-08}	2.2×10^{-07}
Area 3, Mud Plant	04/07/93	-3.0×10^{-07}	2.1×10^{-07}
Area 3, Mud Plant	05/04/93	8.4×10^{-08}	2.2×10^{-07}
Area 3, Mud Plant	06/03/93	-1.6×10^{-07}	2.1×10^{-07}
Area 3, Mud Plant	07/21/93	-1.4×10^{-07}	2.2×10^{-07}
Area 3, Mud Plant	08/04/93	-3.0×10^{-07}	2.2×10^{-07}
Area 3, Mud Plant	09/14/93	1.3×10^{-07}	2.2×10^{-07}
Area 3, Mud Plant	10/07/93	3.5×10^{-07}	2.2×10^{-07}
Area 3, Mud Plant	11/03/93	1.8×10^{-07}	2.2×10^{-07}
Area 3, Mud Plant	12/15/93	-2.9×10^{-08}	2.2×10^{-07}
Area 3, Well A Reservoir	01/12/93	-3.1×10^{-07}	1.8×10^{-07}
Area 3, Well A Reservoir	02/04/93	-5.4×10^{-08}	2.1×10^{-07}
Area 3, Well A Reservoir	03/04/93	-1.1×10^{-08}	2.2×10^{-07}
Area 3, Well A Reservoir	04/06/93	-2.2×10^{-07}	2.1×10^{-07}
Area 3, Well A Reservoir	05/04/93	6.1×10^{-08}	2.2×10^{-07}
Area 3, Well A Reservoir	06/03/93	-1.3×10^{-07}	2.1×10^{-07}
Area 3, Well A Reservoir	07/20/93	-1.7×10^{-07}	2.2×10^{-07}
Area 3, Well A Reservoir	08/05/93	-1.9×10^{-07}	2.3×10^{-07}
Area 3, Well A Reservoir	09/14/93	-2.1×10^{-07}	2.2×10^{-07}
Area 3, Well A Reservoir	10/07/93	1.7×10^{-07}	2.2×10^{-07}
Area 3, Well A Reservoir	11/03/93	-4.7×10^{-08}	2.2×10^{-07}
Area 3, Well A Reservoir	12/15/93	3.3×10^{-07}	2.3×10^{-07}
Area 5, Cane Springs	01/27/93	-1.4×10^{-07}	1.6×10^{-07}
Area 5, Cane Springs	02/11/93	-4.3×10^{-07}	2.2×10^{-07}
Area 5, Cane Springs	03/11/93	9.8×10^{-08}	2.1×10^{-07}
Area 5, Cane Springs	04/14/93	1.5×10^{-07}	2.1×10^{-07}
Area 5, Cane Springs	05/27/93	-3.5×10^{-07}	2.2×10^{-07}
Area 5, Cane Springs	06/28/93	-3.7×10^{-07}	2.2×10^{-07}
Area 5, Cane Springs	07/27/93	1.6×10^{-07}	2.3×10^{-07}
Area 5, Cane Springs	08/17/93	4.0×10^{-07}	2.1×10^{-07}
Area 5, Cane Springs	09/16/93	-2.1×10^{-07}	2.2×10^{-07}
Area 5, Cane Springs	10/26/93	2.7×10^{-07}	2.2×10^{-07}
Area 5, Cane Springs	11/16/93	2.5×10^{-07}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Cane Springs	12/21/93	3.7×10^{-07}	2.3×10^{-07}
Area 5, Well UE-5c	01/13/93	-1.8×10^{-07}	1.8×10^{-07}
Area 5, Well UE-5c	02/03/93	2.0×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c	02/04/93	2.1×10^{-08}	2.1×10^{-07}
Area 5, Well UE-5c	03/09/93	2.0×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c	04/04/93	1.7×10^{-07}	2.1×10^{-07}
Area 5, Well UE-5c	07/12/93	1.4×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c	11/04/93	-8.0×10^{-08}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	01/28/93	-2.5×10^{-07}	1.8×10^{-07}
Area 5, Well UE-5c Reservoir	03/10/93	3.1×10^{-07}	2.1×10^{-07}
Area 5, Well UE-5c Reservoir	04/06/93	-1.5×10^{-07}	2.1×10^{-07}
Area 5, Well UE-5c Reservoir	05/05/93	1.4×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	06/09/93	-3.1×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	07/20/93	-2.4×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	08/05/93	-3.0×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	09/14/93	-8.1×10^{-08}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	10/07/93	1.4×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	11/03/93	-1.3×10^{-07}	2.2×10^{-07}
Area 5, Well UE-5c Reservoir	12/15/93	2.3×10^{-08}	2.3×10^{-07}
Area 5, Well 5B	02/03/93	2.7×10^{-08}	2.1×10^{-07}
Area 5, Well 5B	07/12/93	1.2×10^{-07}	2.2×10^{-07}
Area 5, Well 5B	11/04/93	-8.9×10^{-08}	2.4×10^{-07}
Area 5, Well 5B Reservoir	01/28/93	-2.4×10^{-07}	1.8×10^{-07}
Area 5, Well 5B Reservoir	03/10/93	3.7×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	04/06/93	3.0×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	05/05/93	-1.7×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	06/09/93	1.0×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	07/20/93	-2.5×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	08/05/93	-2.0×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	09/14/93	-1.0×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	10/07/93	-1.1×10^{-07}	2.2×10^{-07}
Area 5, Well 5B Reservoir	11/03/93	7.7×10^{-08}	2.2×10^{-07}
Area 5, Well 5B Reservoir	12/15/93	2.3×10^{-08}	2.3×10^{-07}
Area 5, Well 5C	01/13/93	-2.6×10^{-07}	4.0×10^{-07}
Area 5, Well 5C	02/04/93	-8.0×10^{-08}	2.1×10^{-07}
Area 5, Well 5C	03/09/93	-1.8×10^{-07}	2.2×10^{-07}
Area 5, Well 5C	04/04/93	-2.8×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	12/29/92	-2.5×10^{-07}	1.9×10^{-07}
Area 6, Bottled Water	01/04/93	-1.6×10^{-07}	1.9×10^{-07}
Area 6, Bottled Water	01/11/93	2.7×10^{-07}	1.9×10^{-07}
Area 6, Bottled Water	01/19/93	1.7×10^{-07}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	01/25/93	1.7×10^{-07}	2.0×10^{-07}
Area 6, Bottled Water	02/01/93	-7.0×10^{-08}	2.1×10^{-07}
Area 6, Bottled Water	02/08/93	-9.5×10^{-08}	1.6×10^{-07}
Area 6, Bottled Water	02/16/93	5.9×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	02/22/93	1.8×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	03/01/93	-2.1×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	03/08/93	-5.6×10^{-09}	2.2×10^{-07}
Area 6, Bottled Water	03/15/93	2.9×10^{-07}	2.1×10^{-07}
Area 6, Bottled Water	03/22/93	-9.4×10^{-08}	2.1×10^{-07}
Area 6, Bottled Water	03/29/93	2.3×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	04/05/93	6.7×10^{-08}	2.1×10^{-07}
Area 6, Bottled Water	04/12/93	-2.9×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	04/19/93	-2.0×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	04/26/93	4.3×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	05/03/93	-1.1×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	05/10/93	-1.1×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	05/17/93	9.3×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	05/24/93	-1.1×10^{-08}	2.3×10^{-07}
Area 6, Bottled Water	06/01/93	-3.7×10^{-07}	2.1×10^{-07}
Area 6, Bottled Water	06/07/93	2.0×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	06/14/93	2.2×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	06/21/93	-5.2×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	06/28/93	1.7×10^{-07}	2.3×10^{-07}
Area 6, Bottled Water	07/06/93	2.2×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	07/12/93	2.9×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	07/19/93	3.6×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	07/26/93	1.4×10^{-07}	2.3×10^{-07}
Area 6, Bottled Water	08/02/93	-5.0×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	08/09/93	4.9×10^{-07}	2.3×10^{-07}
Area 6, Bottled Water	08/23/93	5.0×10^{-08}	2.1×10^{-07}
Area 6, Bottled Water	08/30/93	2.5×10^{-07}	2.1×10^{-07}
Area 6, Bottled Water	09/08/93	1.7×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	09/13/93	3.5×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	09/20/93	1.4×10^{-07}	2.1×10^{-07}
Area 6, Bottled Water	09/27/93	4.4×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	10/04/93	-2.4×10^{-07}	2.3×10^{-07}
Area 6, Bottled Water	10/11/93	2.4×10^{-06}	2.4×10^{-07}
Area 6, Bottled Water	10/19/93	1.5×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	10/24/93	-5.5×10^{-09}	2.2×10^{-07}
Area 6, Bottled Water	11/01/93	1.6×10^{-06}	2.4×10^{-07}
Area 6, Bottled Water	11/08/93	-2.2×10^{-07}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Bottled Water	11/15/93	3.3×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	11/22/93	2.8×10^{-08}	2.3×10^{-07}
Area 6, Bottled Water	11/29/93	4.7×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	12/06/93	-9.4×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	12/13/93	7.1×10^{-08}	2.2×10^{-07}
Area 6, Bottled Water	12/20/93	-2.2×10^{-07}	2.2×10^{-07}
Area 6, Bottled Water	12/27/93	-6.6×10^{-07}	2.1×10^{-07}
Area 6, Building 6-900	12/29/92	-2.0×10^{-08}	1.9×10^{-07}
Area 6, Building 6-900	01/04/93	3.5×10^{-10}	1.9×10^{-07}
Area 6, Building 6-900	01/11/93	-1.9×10^{-07}	1.9×10^{-07}
Area 6, Building 6-900	01/19/93	-2.1×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	01/25/93	1.2×10^{-07}	2.0×10^{-07}
Area 6, Building 6-900	02/01/93	3.2×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	02/08/93	-2.6×10^{-07}	1.6×10^{-07}
Area 6, Building 6-900	02/16/93	-2.5×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	02/22/93	-5.2×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	03/01/93	-2.7×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	03/08/93	-2.4×10^{-07}	2.1×10^{-07}
Area 6, Building 6-900	03/15/93	4.1×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	03/22/93	1.6×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	03/29/93	-3.5×10^{-07}	2.1×10^{-07}
Area 6, Building 6-900	04/05/93	1.7×10^{-07}	2.1×10^{-07}
Area 6, Building 6-900	04/12/93	-5.6×10^{-09}	2.2×10^{-07}
Area 6, Building 6-900	04/19/93	1.6×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	04/26/93	-3.2×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	05/03/93	-5.6×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	05/10/93	1.2×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	05/17/93	2.4×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	05/24/93	-3.6×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	06/01/93	-2.3×10^{-07}	2.1×10^{-07}
Area 6, Building 6-900	06/07/93	-1.5×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	06/14/93	-8.6×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	06/21/93	-1.1×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	06/28/93	7.2×10^{-08}	2.3×10^{-07}
Area 6, Building 6-900	07/08/93	8.1×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	07/12/93	-1.1×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	07/19/93	2.9×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	07/26/93	2.4×10^{-07}	2.3×10^{-07}
Area 6, Building 6-900	08/02/93	-7.2×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	08/09/93	-2.2×10^{-07}	2.3×10^{-07}
Area 6, Building 6-900	08/16/93	5.9×10^{-08}	2.1×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Building 6-900	08/23/93	2.0×10^{-07}	2.1×10^{-07}
Area 6, Building 6-900	08/30/93	9.1×10^{-08}	2.1×10^{-07}
Area 6, Building 6-900	09/08/93	2.0×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	09/13/93	1.3×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	09/20/93	3.2×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	09/27/93	-6.5×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	10/04/93	-5.2×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	10/11/93	8.8×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	10/18/93	6.0×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	10/25/93	2.8×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	11/01/93	-3.3×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	11/08/93	4.4×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	11/15/93	-1.5×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	11/22/93	-4.4×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	11/29/93	2.9×10^{-07}	2.3×10^{-07}
Area 6, Building 6-900	12/06/93	-1.5×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	12/13/93	3.5×10^{-08}	2.2×10^{-07}
Area 6, Building 6-900	12/20/93	-2.3×10^{-07}	2.2×10^{-07}
Area 6, Building 6-900	12/27/93	-9.3×10^{-07}	2.0×10^{-07}
Area 6, Cafeteria	12/29/92	-4.0×10^{-08}	1.9×10^{-07}
Area 6, Cafeteria	01/04/93	2.0×10^{-07}	1.9×10^{-07}
Area 6, Cafeteria	01/11/93	5.0×10^{-09}	1.9×10^{-07}
Area 6, Cafeteria	01/19/93	-1.2×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	01/25/93	1.2×10^{-07}	2.0×10^{-07}
Area 6, Cafeteria	02/01/93	-2.3×10^{-07}	1.6×10^{-07}
Area 6, Cafeteria	02/08/93	5.1×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	02/16/93	-1.8×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	02/22/93	1.1×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	03/01/93	3.4×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	03/08/93	-1.1×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	03/15/93	1.4×10^{-07}	2.1×10^{-07}
Area 6, Cafeteria	03/22/93	3.9×10^{-10}	2.1×10^{-07}
Area 6, Cafeteria	03/29/93	-3.9×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	04/05/93	1.3×10^{-07}	2.1×10^{-07}
Area 6, Cafeteria	04/12/93	-1.7×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	04/19/93	2.2×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	04/26/93	-5.4×10^{-09}	2.2×10^{-07}
Area 6, Cafeteria	05/03/93	2.0×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	05/10/93	-3.9×10^{-07}	2.1×10^{-07}
Area 6, Cafeteria	05/17/93	1.3×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	05/24/93	-3.6×10^{-07}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Cafeteria	06/01/93	-2.9×10^{-07}	2.1×10^{-07}
Area 6, Cafeteria	06/07/93	-1.4×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	06/14/93	-1.8×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	06/21/93	-3.2×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	06/28/93	-4.6×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	07/06/93	1.4×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	07/12/93	4.3×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	07/19/93	-7.1×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	07/26/93	-3.0×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	08/02/93	-2.1×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	08/09/93	-2.8×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	08/23/93	2.1×10^{-07}	2.1×10^{-07}
Area 6, Cafeteria	08/30/93	3.8×10^{-07}	2.1×10^{-07}
Area 6, Cafeteria	09/08/93	3.0×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	09/13/93	2.6×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	09/20/93	6.3×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	09/27/93	9.8×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	10/04/93	7.4×10^{-08}	2.3×10^{-07}
Area 6, Cafeteria	10/11/93	3.2×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	10/19/93	3.1×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	10/24/93	1.2×10^{-06}	2.3×10^{-07}
Area 6, Cafeteria	11/01/93	1.4×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	11/08/93	-1.5×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	11/15/93	-4.4×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	11/22/93	-1.6×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	11/29/93	-2.1×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	12/06/93	1.8×10^{-08}	2.2×10^{-07}
Area 6, Cafeteria	12/13/93	2.3×10^{-06}	2.5×10^{-07}
Area 6, Cafeteria	12/20/93	-2.8×10^{-07}	2.2×10^{-07}
Area 6, Cafeteria	12/27/93	-9.8×10^{-07}	2.0×10^{-07}
Area 6, CP-72 Sewage	11/24/93	-2.4×10^{-08}	2.2×10^{-07}
Area 6, DAF Sewage	11/24/93	2.7×10^{-07}	2.3×10^{-06}
Area 6, DAF Sewage	12/29/93	-8.9×10^{-08}	2.2×10^{-07}
Area 6, LANL Sewage	11/24/93	3.7×10^{-07}	2.3×10^{-07}
Area 6, Sewage	01/20/93	-7.4×10^{-08}	1.8×10^{-07}
Area 6, Sewage	04/13/93	2.4×10^{-07}	2.2×10^{-07}
Area 6, Sewage	07/21/93	1.1×10^{-07}	2.2×10^{-07}
Area 6, Sewage	10/07/93	2.1×10^{-07}	2.2×10^{-07}
Area 6, Well C	02/04/93	3.8×10^{-07}	2.2×10^{-07}
Area 6, Well C	03/10/93	-2.5×10^{-07}	2.2×10^{-07}
Area 6, Well C	04/04/93	4.0×10^{-08}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Well C	07/12/93	-2.2×10^{-07}	2.2×10^{-07}
Area 6, Well C	11/04/93	-2.3×10^{-07}	2.4×10^{-07}
Area 6, Well C-1	02/04/93	1.7×10^{-07}	2.2×10^{-07}
Area 6, Well C-1	03/10/93	-2.4×10^{-07}	2.2×10^{-07}
Area 6, Well C-1	04/04/93	-1.2×10^{-07}	2.2×10^{-07}
Area 6, Well C-1	07/12/93	2.1×10^{-07}	2.3×10^{-07}
Area 6, Well C-1	11/24/93	1.3×10^{-07}	2.4×10^{-07}
Area 6, Well C-1 Reservoir	01/28/93	-4.2×10^{-07}	1.7×10^{-07}
Area 6, Well C-1 Reservoir	02/10/93	-2.9×10^{-07}	2.1×10^{-07}
Area 6, Well C-1 Reservoir	03/10/93	3.1×10^{-07}	2.1×10^{-07}
Area 6, Well C-1 Reservoir	04/06/93	1.4×10^{-07}	2.1×10^{-07}
Area 6, Well C-1 Reservoir	05/05/93	-3.5×10^{-07}	2.1×10^{-07}
Area 6, Well C-1 Reservoir	06/03/93	1.6×10^{-08}	2.2×10^{-07}
Area 6, Well C-1 Reservoir	07/20/93	-5.3×10^{-07}	2.2×10^{-07}
Area 6, Well C-1 Reservoir	08/05/93	-1.6×10^{-07}	2.3×10^{-07}
Area 6, Well C-1 Reservoir	09/14/93	3.5×10^{-08}	2.2×10^{-07}
Area 6, Well C-1 Reservoir	10/07/93	2.6×10^{-07}	2.2×10^{-07}
Area 6, Well C-1 Reservoir	11/03/93	-1.1×10^{-07}	2.2×10^{-07}
Area 6, Well C-1 Reservoir	12/15/93	6.3×10^{-08}	2.3×10^{-07}
Area 6, Well 3 Reservoir	01/12/93	-4.4×10^{-08}	1.8×10^{-07}
Area 6, Well 3 Reservoir	02/04/93	1.6×10^{-08}	2.1×10^{-07}
Area 6, Well 3 Reservoir	04/06/93	2.3×10^{-08}	2.1×10^{-07}
Area 6, Well 3 Reservoir	05/04/93	1.7×10^{-07}	2.2×10^{-07}
Area 6, Well 3 Reservoir	06/03/93	-3.1×10^{-07}	2.1×10^{-07}
Area 6, Well 3 Reservoir	07/21/93	-2.0×10^{-07}	2.2×10^{-07}
Area 6, Well 3 Reservoir	08/05/93	-3.4×10^{-07}	2.2×10^{-07}
Area 6, Well 3 Reservoir	09/14/93	-1.4×10^{-07}	2.2×10^{-07}
Area 6, Well 3 Reservoir	10/07/93	1.3×10^{-07}	2.2×10^{-07}
Area 6, Well 3 Reservoir	11/03/93	1.7×10^{-07}	2.3×10^{-07}
Area 6, Well 3 Reservoir	12/15/93	-1.9×10^{-07}	2.2×10^{-07}
Area 6, Well 4	02/04/93	2.0×10^{-07}	2.2×10^{-07}
Area 6, Well 4	03/10/93	-2.0×10^{-07}	2.2×10^{-07}
Area 6, Well 4	04/04/93	1.5×10^{-07}	2.2×10^{-07}
Area 6, Well 4	07/12/93	-4.6×10^{-07}	2.2×10^{-07}
Area 6, Well 4	11/04/93	-4.2×10^{-07}	2.3×10^{-07}
Area 6, Yucca Pond	01/20/93	1.6×10^{-06}	1.7×10^{-07}
Area 6, Yucca Pond	02/09/93	1.6×10^{-06}	2.3×10^{-07}
Area 6, Yucca Pond	03/09/93	1.3×10^{-06}	2.3×10^{-07}
Area 6, Yucca Pond	04/07/93	6.9×10^{-07}	2.3×10^{-07}
Area 6, Yucca Pond	06/23/93	7.3×10^{-07}	2.4×10^{-07}
Area 6, Yucca Pond	07/20/93	9.3×10^{-07}	2.4×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 6, Yucca Pond	08/12/93	7.0×10^{-07}	2.3×10^{-07}
Area 6, Yucca Sewage	11/24/93	-1.2×10^{-08}	2.2×10^{-07}
Area 7, Reitman Seep	01/27/93	-2.0×10^{-07}	1.6×10^{-07}
Area 7, Reitman Seep	02/04/93	-1.3×10^{-07}	2.1×10^{-07}
Area 7, Reitman Seep	03/04/93	-1.4×10^{-07}	2.2×10^{-07}
Area 7, Reitman Seep	04/01/93	2.2×10^{-07}	2.2×10^{-07}
Area 7, Reitman Seep	05/10/93	-3.5×10^{-07}	2.1×10^{-07}
Area 7, Reitman Seep	06/28/93	-1.3×10^{-07}	2.2×10^{-07}
Area 7, Reitman Seep	07/21/93	-1.5×10^{-07}	2.2×10^{-07}
Area 7, Reitman Seep	08/05/93	-2.5×10^{-07}	2.2×10^{-07}
Area 7, Reitman Seep	09/14/93	-2.4×10^{-07}	2.2×10^{-07}
Area 7, Reitman Seep	10/06/93	1.4×10^{-07}	2.2×10^{-07}
Area 7, Reitman Seep	11/03/93	-7.1×10^{-08}	2.2×10^{-07}
Area 7, Reitman Seep	12/02/93	3.3×10^{-07}	2.2×10^{-07}
Area 12, Cafeteria	01/04/93	2.0×10^{-07}	2.0×10^{-07}
Area 12, Cafeteria	01/12/93	-2.9×10^{-07}	2.1×10^{-07}
Area 12, Cafeteria	01/19/93	6.3×10^{-08}	2.2×10^{-07}
Area 12, Cafeteria	01/25/93	6.3×10^{-07}	2.0×10^{-07}
Area 12, Cafeteria	02/01/93	-2.6×10^{-07}	1.6×10^{-07}
Area 12, Captain Jack Spring	03/25/93	1.5×10^{-07}	2.1×10^{-07}
Area 12, Captain Jack Spring	04/21/93	3.2×10^{-07}	2.1×10^{-07}
Area 12, Captain Jack Spring	05/12/93	2.5×10^{-07}	2.2×10^{-07}
Area 12, Captain Jack Spring	07/29/93	-6.9×10^{-08}	2.2×10^{-07}
Area 12, Captain Jack Spring	08/05/93	-3.3×10^{-07}	2.2×10^{-07}
Area 12, Captain Jack Spring	09/23/93	-2.2×10^{-07}	2.2×10^{-07}
Area 12, Captain Jack Spring	10/21/93	5.1×10^{-07}	2.2×10^{-07}
Area 12, Captain Jack Spring	11/23/93	-2.2×10^{-07}	2.2×10^{-07}
Area 12, E Tunnel Effluent	01/27/93	2.0×10^{-03}	2.8×10^{-06}
Area 12, E Tunnel Effluent	02/09/93	1.9×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Effluent	03/09/93	1.5×10^{-03}	3.0×10^{-06}
Area 12, E Tunnel Effluent	04/06/93	1.3×10^{-03}	2.8×10^{-06}
Area 12, E Tunnel Effluent	05/12/93	1.7×10^{-03}	3.0×10^{-06}
Area 12, E Tunnel Effluent	06/23/93	1.9×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Effluent	07/20/93	1.8×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Effluent	08/12/93	1.9×10^{-03}	3.3×10^{-06}
Area 12, E Tunnel Effluent	09/15/93	1.8×10^{-03}	3.1×10^{-06}
Area 12, E Tunnel Effluent	10/07/93	1.9×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Effluent	11/16/93	2.0×10^{-03}	3.4×10^{-06}
Area 12, E Tunnel Effluent	12/21/93	1.9×10^{-03}	3.3×10^{-06}
Area 12, E Tunnel Pond No. 1	02/09/93	1.9×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Pond No. 1	03/09/93	1.5×10^{-03}	3.0×10^{-06}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, E Tunnel Pond No. 1	04/06/93	1.2×10^{-03}	2.7×10^{-06}
Area 12, E Tunnel Pond No. 1	05/12/93	1.7×10^{-03}	3.0×10^{-06}
Area 12, E Tunnel Pond No. 1	06/23/93	1.8×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Pond No. 1	07/20/93	1.8×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Pond No. 1	08/12/93	1.8×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Pond No. 1	09/15/93	1.8×10^{-03}	3.1×10^{-06}
Area 12, E Tunnel Pond No. 1	10/07/93	1.9×10^{-03}	3.2×10^{-06}
Area 12, E Tunnel Pond No. 1	11/16/93	1.7×10^{-03}	3.2×10^{-06}
Area 12, Gold Meadows Spring	04/30/93	-3.8×10^{-08}	2.1×10^{-07}
Area 12, Gold Meadows Spring	05/10/93	-6.7×10^{-08}	2.2×10^{-07}
Area 12, Gold Meadows Spring	06/28/93	1.7×10^{-08}	2.2×10^{-07}
Area 12, Gold Meadows Spring	07/21/93	-3.3×10^{-07}	2.2×10^{-07}
Area 12, Gold Meadows Spring	08/12/93	6.0×10^{-07}	2.1×10^{-07}
Area 12, N Tunnel Effluent	01/27/93	8.0×10^{-06}	2.3×10^{-07}
Area 12, N Tunnel Effluent	02/09/93	1.1×10^{-05}	3.2×10^{-07}
Area 12, N Tunnel Effluent	03/09/93	1.2×10^{-05}	3.4×10^{-07}
Area 12, N Tunnel Effluent	04/06/93	5.2×10^{-05}	5.9×10^{-07}
Area 12, N Tunnel Effluent	10/07/93	6.4×10^{-04}	1.9×10^{-06}
Area 12, N Tunnel Pond No. 2	03/09/93	4.7×10^{-05}	5.6×10^{-07}
Area 12, N Tunnel Pond No. 2	04/06/93	2.2×10^{-05}	4.2×10^{-07}
Area 12, N Tunnel Pond No. 3	03/09/93	1.3×10^{-04}	8.8×10^{-07}
Area 12, N Tunnel Pond No. 3	04/06/93	6.6×10^{-04}	2.0×10^{-06}
Area 12, N Tunnel Pond No. 3	05/12/93	6.6×10^{-04}	1.9×10^{-06}
Area 12, Sewage	02/03/93	2.3×10^{-08}	2.2×10^{-07}
Area 12, Sewage	04/06/93	4.0×10^{-08}	2.2×10^{-07}
Area 12, Sewage	07/20/93	1.1×10^{-07}	2.2×10^{-07}
Area 12, Sewage	10/06/93	3.1×10^{-07}	2.2×10^{-07}
Area 12, T Tunnel Effluent	01/27/93	4.5×10^{-02}	7.1×10^{-05}
Area 12, T Tunnel Effluent	02/09/93	5.2×10^{-02}	8.2×10^{-05}
Area 12, T Tunnel Effluent	03/09/93	5.2×10^{-02}	8.2×10^{-05}
Area 12, T Tunnel Effluent	04/07/93	3.2×10^{-02}	5.1×10^{-05}
Area 12, T Tunnel Effluent	09/29/93	1.5×10^{-04}	9.3×10^{-07}
Area 12, T Tunnel Effluent	10/07/93	1.2×10^{-04}	8.6×10^{-07}
Area 12, T Tunnel Pond No. 2	02/09/93	3.6×10^{-02}	5.7×10^{-05}
Area 12, T Tunnel Pond No. 2	03/09/93	3.5×10^{-02}	5.6×10^{-05}
Area 12, T Tunnel Pond No. 2	04/07/93	4.2×10^{-02}	6.7×10^{-05}
Area 12, T Tunnel Pond No. 3	02/09/93	3.5×10^{-02}	5.6×10^{-05}
Area 12, T Tunnel Pond No. 3	03/09/93	3.8×10^{-02}	6.0×10^{-05}
Area 12, T Tunnel Pond No. 3	04/07/93	4.2×10^{-02}	6.7×10^{-05}
Area 12, T Tunnel Pond No. 3	05/12/93	3.2×10^{-05}	3.2×10^{-06}
Area 12, White Rock Spring	01/13/93	-8.7×10^{-08}	1.8×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 12, White Rock Spring	02/04/93	3.1×10^{-07}	2.2×10^{-07}
Area 12, White Rock Spring	03/04/93	-1.3×10^{-07}	2.2×10^{-07}
Area 12, White Rock Spring	04/07/93	-2.2×10^{-07}	2.1×10^{-07}
Area 12, White Rock Spring	05/04/93	6.7×10^{-08}	2.2×10^{-07}
Area 12, White Rock Spring	06/23/93	-4.6×10^{-08}	2.2×10^{-07}
Area 12, White Rock Spring	07/20/93	-1.8×10^{-07}	2.2×10^{-07}
Area 12, White Rock Spring	08/12/93	3.5×10^{-07}	2.1×10^{-07}
Area 12, White Rock Spring	09/14/93	-2.0×10^{-07}	2.2×10^{-07}
Area 12, White Rock Spring	10/06/93	1.2×10^{-07}	2.2×10^{-07}
Area 12, White Rock Spring	11/16/93	1.6×10^{-07}	2.2×10^{-07}
Area 12, White Rock Spring	12/21/93	1.4×10^{-07}	2.3×10^{-07}
Area 16, Tippipah Spring	01/13/93	-2.3×10^{-07}	1.8×10^{-07}
Area 16, Tippipah Spring	02/04/93	8.6×10^{-08}	2.1×10^{-07}
Area 16, Tippipah Spring	03/04/93	1.2×10^{-07}	2.2×10^{-07}
Area 16, Tippipah Spring	04/06/93	8.0×10^{-08}	2.1×10^{-07}
Area 16, Tippipah Spring	05/05/93	-5.8×10^{-07}	2.1×10^{-07}
Area 16, Tippipah Spring	06/23/93	8.6×10^{-08}	2.3×10^{-07}
Area 16, Tippipah Spring	07/14/93	-5.2×10^{-08}	2.2×10^{-07}
Area 16, Tippipah Spring	08/12/93	2.4×10^{-07}	2.1×10^{-07}
Area 16, Tippipah Spring	09/16/93	-3.9×10^{-07}	2.2×10^{-07}
Area 16, Tippipah Spring	10/06/93	1.5×10^{-07}	2.2×10^{-07}
Area 16, Tippipah Spring	11/03/93	-2.0×10^{-07}	2.2×10^{-07}
Area 16, Tippipah Spring	12/02/93	1.9×10^{-07}	2.2×10^{-07}
Area 16, Well UE-16d	01/13/93	7.0×10^{-08}	4.0×10^{-07}
Area 16, Well UE-16d	02/04/93	3.3×10^{-07}	2.2×10^{-07}
Area 16, Well UE-16d	03/10/93	-5.0×10^{-08}	2.2×10^{-07}
Area 16, Well UE-16d	04/04/93	5.7×10^{-09}	2.2×10^{-07}
Area 16, Well UE-16d	07/12/93	-2.3×10^{-07}	2.2×10^{-07}
Area 16, Well UE-16d	11/04/93	1.7×10^{-08}	2.4×10^{-07}
Area 18, Camp 17 Reservoir	02/10/93	-1.7×10^{-07}	2.1×10^{-07}
Area 18, Camp 17 Reservoir	03/15/93	2.2×10^{-08}	2.1×10^{-07}
Area 18, Camp 17 Reservoir	04/13/93	2.3×10^{-07}	2.1×10^{-07}
Area 18, Camp 17 Reservoir	05/05/93	-1.8×10^{-07}	2.2×10^{-07}
Area 18, Camp 17 Reservoir	06/23/93	-2.8×10^{-07}	2.2×10^{-07}
Area 18, Camp 17 Reservoir	07/15/93	-5.8×10^{-08}	2.2×10^{-07}
Area 18, Camp 17 Reservoir	08/09/93	-2.1×10^{-07}	2.2×10^{-07}
Area 18, Camp 17 Reservoir	09/13/93	-2.8×10^{-07}	2.2×10^{-07}
Area 18, Camp 17 Reservoir	10/06/93	1.0×10^{-07}	2.2×10^{-07}
Area 18, Camp 17 Reservoir	11/03/93	3.1×10^{-07}	2.3×10^{-07}
Area 18, Camp 17 Reservoir	12/02/93	-3.0×10^{-07}	2.2×10^{-07}
Area 18, Well 8	01/13/93	5.0×10^{-08}	4.0×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 18, Well 8	02/04/93	-2.2×10^{-07}	2.1×10^{-07}
Area 18, Well 8	03/10/93	-2.6×10^{-07}	2.2×10^{-07}
Area 18, Well 8	04/04/93	-1.2×10^{-07}	2.2×10^{-07}
Area 18, Well 8	07/12/93	-3.1×10^{-07}	2.2×10^{-07}
Area 18, Well 8	11/04/93	-3.2×10^{-07}	2.4×10^{-07}
Area 18, Well 8 Reservoir	03/15/93	4.0×10^{-08}	2.1×10^{-07}
Area 18, Well 8 Reservoir	04/13/93	-1.9×10^{-07}	2.1×10^{-07}
Area 18, Well 8 Reservoir	05/05/93	-3.4×10^{-07}	2.1×10^{-07}
Area 19, Well UE-19c Reserv.	03/25/93	4.9×10^{-08}	2.1×10^{-07}
Area 19, Well UE-19c Reserv.	04/06/93	2.7×10^{-07}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	05/11/93	1.4×10^{-07}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	06/23/93	-5.7×10^{-08}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	07/15/93	-8.1×10^{-08}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	08/09/93	-3.4×10^{-07}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	09/13/93	-3.0×10^{-07}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	10/06/93	-6.8×10^{-08}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	11/03/93	3.0×10^{-07}	2.2×10^{-07}
Area 19, Well UE-19c Reserv.	12/02/93	-7.0×10^{-08}	2.2×10^{-07}
Area 20, Well U-20	07/12/93	1.2×10^{-07}	2.2×10^{-07}
Area 20, Well 20 Reservoir	03/25/93	-6.0×10^{-08}	2.1×10^{-07}
Area 20, Well 20 Reservoir	04/06/93	1.4×10^{-07}	2.1×10^{-07}
Area 20, Well 20 Reservoir	06/23/93	-1.6×10^{-07}	2.2×10^{-07}
Area 20, Well 20 Reservoir	07/15/93	-1.9×10^{-07}	2.2×10^{-07}
Area 20, Well 20 Reservoir	08/09/93	-2.6×10^{-07}	2.2×10^{-07}
Area 20, Well 20 Reservoir	09/13/93	-9.3×10^{-08}	2.2×10^{-07}
Area 20, Well 20 Reservoir	10/06/93	-1.7×10^{-08}	2.2×10^{-07}
Area 23, Army Well No. 1	01/13/93	-2.1×10^{-07}	4.0×10^{-07}
Area 23, Army Well No. 1	02/04/93	1.2×10^{-07}	2.2×10^{-07}
Area 23, Army Well No. 1	03/09/93	-1.0×10^{-07}	2.2×10^{-07}
Area 23, Army Well No. 1	04/04/93	6.2×10^{-08}	2.2×10^{-07}
Area 23, Army Well No. 1	07/12/93	-4.9×10^{-07}	2.2×10^{-07}
Area 23, Army Well No. 1	11/04/93	-4.2×10^{-07}	2.3×10^{-07}
Area 23, Cafeteria	12/28/92	2.4×10^{-07}	2.0×10^{-07}
Area 23, Cafeteria	01/04/93	-1.6×10^{-07}	1.9×10^{-07}
Area 23, Cafeteria	01/12/93	-4.0×10^{-08}	2.2×10^{-07}
Area 23, Cafeteria	01/20/93	-7.5×10^{-08}	2.2×10^{-07}
Area 23, Cafeteria	01/26/93	7.8×10^{-08}	2.0×10^{-07}
Area 23, Cafeteria	02/01/93	8.3×10^{-09}	1.6×10^{-07}
Area 23, Cafeteria	02/08/93	2.1×10^{-07}	2.1×10^{-07}
Area 23, Cafeteria	02/16/93	-3.2×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	02/22/93	-1.2×10^{-07}	2.1×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Cafeteria	03/01/93	-2.1×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	03/08/93	-5.6×10^{-08}	2.2×10^{-07}
Area 23, Cafeteria	03/15/93	2.1×10^{-07}	2.1×10^{-07}
Area 23, Cafeteria	03/22/93	1.8×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	03/29/93	5.6×10^{-09}	2.2×10^{-07}
Area 23, Cafeteria	04/05/93	1.7×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	04/12/93	-1.2×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	04/19/93	-3.7×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	04/26/93	-1.6×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	05/03/93	1.3×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	05/10/93	-3.2×10^{-07}	2.1×10^{-07}
Area 23, Cafeteria	05/17/93	1.4×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	05/24/93	-1.1×10^{-07}	2.3×10^{-07}
Area 23, Cafeteria	06/01/93	-2.7×10^{-07}	2.1×10^{-07}
Area 23, Cafeteria	06/07/93	2.4×10^{-08}	2.2×10^{-07}
Area 23, Cafeteria	06/14/93	-2.7×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	06/21/93	1.1×10^{-07}	2.3×10^{-07}
Area 23, Cafeteria	06/28/93	-3.0×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	07/06/93	1.7×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	07/12/93	4.4×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	07/19/93	2.0×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	07/26/93	1.6×10^{-07}	2.3×10^{-07}
Area 23, Cafeteria	08/02/93	-3.1×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	08/09/93	-3.8×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	08/16/93	3.0×10^{-07}	2.1×10^{-07}
Area 23, Cafeteria	08/23/93	3.8×10^{-07}	2.1×10^{-07}
Area 23, Cafeteria	08/30/93	3.6×10^{-07}	2.1×10^{-07}
Area 23, Cafeteria	09/08/93	4.2×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	09/13/93	4.9×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	09/20/93	2.5×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	09/27/93	2.5×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	10/04/93	-4.0×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	10/11/93	2.1×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	10/19/93	3.7×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	10/24/93	3.2×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	11/01/93	-2.9×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	11/08/93	1.1×10^{-06}	2.3×10^{-07}
Area 23, Cafeteria	11/15/93	8.2×10^{-08}	2.2×10^{-07}
Area 23, Cafeteria	11/22/93	1.2×10^{-07}	2.3×10^{-07}
Area 23, Cafeteria	11/29/93	-2.2×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	12/06/93	-8.8×10^{-08}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 23, Cafeteria	12/13/93	1.4×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	12/20/93	-3.0×10^{-07}	2.2×10^{-07}
Area 23, Cafeteria	12/27/93	-8.3×10^{-07}	2.1×10^{-07}
Area 23, Sewage	01/28/93	-3.0×10^{-07}	1.8×10^{-07}
Area 23, Sewage	04/27/93	2.5×10^{-07}	2.2×10^{-07}
Area 23, Sewage	07/21/93	-1.9×10^{-07}	2.2×10^{-07}
Area 23, Swimming Pool	01/28/93	-2.6×10^{-08}	1.8×10^{-07}
Area 23, Swimming Pool	02/10/93	1.7×10^{-08}	2.2×10^{-07}
Area 23, Swimming Pool	03/10/93	3.0×10^{-07}	2.1×10^{-07}
Area 23, Swimming Pool	04/06/93	2.8×10^{-08}	2.1×10^{-07}
Area 23, Swimming Pool	05/05/93	-2.7×10^{-07}	2.3×10^{-07}
Area 23, Swimming Pool	06/09/93	1.6×10^{-07}	2.2×10^{-07}
Area 23, Swimming Pool	07/20/93	-3.9×10^{-07}	2.2×10^{-07}
Area 23, Swimming Pool	08/05/93	-3.8×10^{-07}	2.2×10^{-07}
Area 23, Swimming Pool	09/14/93	-1.1×10^{-07}	2.2×10^{-07}
Area 23, Swimming Pool	10/26/93	5.2×10^{-07}	2.2×10^{-07}
Area 23, Swimming Pool	11/03/93	-5.5×10^{-08}	2.2×10^{-07}
Area 23, Swimming Pool	12/21/93	4.6×10^{-08}	2.3×10^{-07}
Area 25, Building 4221	12/28/92	1.6×10^{-07}	2.0×10^{-07}
Area 25, Building 4221	01/04/93	-1.2×10^{-07}	1.9×10^{-07}
Area 25, Building 4221	01/12/93	2.6×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	01/20/93	-1.3×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	01/26/93	3.9×10^{-07}	2.0×10^{-07}
Area 25, Building 4221	02/01/93	-2.5×10^{-08}	1.6×10^{-07}
Area 25, Building 4221	02/08/93	2.6×10^{-07}	2.1×10^{-07}
Area 25, Building 4221	02/16/93	-5.4×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	02/22/93	-1.5×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	03/01/93	-1.2×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	03/08/93	-1.8×10^{-07}	2.1×10^{-07}
Area 25, Building 4221	03/15/93	1.7×10^{-08}	2.1×10^{-07}
Area 25, Building 4221	03/22/93	3.3×10^{-08}	2.1×10^{-07}
Area 25, Building 4221	03/29/93	3.0×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	04/05/93	2.2×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	04/12/93	-4.2×10^{-07}	2.1×10^{-07}
Area 25, Building 4221	04/19/93	-1.6×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	04/26/93	-1.5×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	05/03/93	6.7×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	05/10/93	-2.9×10^{-07}	2.1×10^{-07}
Area 25, Building 4221	05/17/93	6.5×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	05/24/93	-3.6×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	06/01/93	6.5×10^{-07}	2.2×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Building 4221	06/07/93	5.1×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	06/14/93	2.4×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	06/21/93	-2.3×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	06/28/93	-1.2×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	07/06/93	2.4×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	07/12/93	1.6×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	07/19/93	2.5×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	07/26/93	2.1×10^{-07}	2.3×10^{-07}
Area 25, Building 4221	08/02/93	-3.3×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	08/09/93	-3.4×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	08/16/93	3.3×10^{-07}	2.1×10^{-07}
Area 25, Building 4221	08/23/93	2.2×10^{-07}	2.1×10^{-07}
Area 25, Building 4221	08/30/93	8.0×10^{-08}	2.1×10^{-07}
Area 25, Building 4221	09/08/93	4.2×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	09/13/93	4.1×10^{-10}	2.1×10^{-07}
Area 25, Building 4221	09/20/93	2.0×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	09/27/93	-1.8×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	10/04/93	-5.4×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	10/11/93	3.8×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	10/19/93	-1.4×10^{-07}	2.1×10^{-07}
Area 25, Building 4221	11/01/93	-1.5×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	11/08/93	-6.0×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	11/15/93	-2.6×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	11/22/93	-2.8×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	11/29/93	1.2×10^{-07}	2.3×10^{-07}
Area 25, Building 4221	12/06/93	4.3×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	12/13/93	-1.5×10^{-07}	2.2×10^{-07}
Area 25, Building 4221	12/20/93	-4.6×10^{-08}	2.2×10^{-07}
Area 25, Building 4221	12/27/93	-6.1×10^{-07}	2.1×10^{-07}
Area 25, Central Sewage Pond	11/24/93	-3.2×10^{-07}	2.2×10^{-07}
Area 25, Well J-11 Reservoir	01/28/93	-9.9×10^{-08}	1.6×10^{-07}
Area 25, Well J-11 Reservoir	02/03/93	3.7×10^{-07}	2.2×10^{-07}
Area 25, Well J-11 Reservoir	03/10/93	-2.3×10^{-08}	2.1×10^{-07}
Area 25, Well J-11 Reservoir	04/06/93	2.3×10^{-07}	2.1×10^{-07}
Area 25, Well J-11 Reservoir	05/10/93	9.0×10^{-08}	2.2×10^{-07}
Area 25, Well J-11 Reservoir	06/01/93	-3.8×10^{-07}	2.1×10^{-07}
Area 25, Well J-11 Reservoir	07/13/93	-8.1×10^{-08}	2.2×10^{-07}
Area 25, Well J-11 Reservoir	08/05/93	-3.8×10^{-07}	2.2×10^{-07}
Area 25, Well J-11 Reservoir	09/02/93	1.6×10^{-07}	2.1×10^{-07}
Area 25, Well J-11 Reservoir	10/06/93	5.1×10^{-07}	2.2×10^{-07}
Area 25, Well J-11 Reservoir	11/03/93	3.5×10^{-07}	2.3×10^{-07}

Attachment C.7 (Tritium in Water - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 25, Well J-11 Reservoir	12/13/93	-4.1×10^{-08}	2.2×10^{-07}
Area 25, Well J-12	01/13/93	8.5×10^{-08}	4.0×10^{-07}
Area 25, Well J-12	02/04/93	2.0×10^{-07}	2.2×10^{-07}
Area 25, Well J-12	03/09/93	2.4×10^{-07}	2.2×10^{-07}
Area 25, Well J-12	04/04/93	5.7×10^{-09}	2.2×10^{-07}
Area 25, Well J-12	07/12/93	-4.4×10^{-07}	2.2×10^{-07}
Area 25, Well J-12	11/04/93	-2.6×10^{-07}	2.3×10^{-07}
Area 25, Well J-12 Reservoir	01/28/93	4.1×10^{-09}	1.6×10^{-07}
Area 25, Well J-12 Reservoir	02/03/93	2.9×10^{-07}	2.2×10^{-07}
Area 25, Well J-12 Reservoir	03/10/93	3.3×10^{-07}	2.1×10^{-07}
Area 25, Well J-12 Reservoir	04/06/93	6.2×10^{-08}	2.1×10^{-07}
Area 25, Well J-12 Reservoir	05/10/93	-2.2×10^{-07}	2.2×10^{-07}
Area 25, Well J-12 Reservoir	06/01/93	-1.5×10^{-07}	2.1×10^{-07}
Area 25, Well J-12 Reservoir	07/13/93	-2.0×10^{-07}	2.2×10^{-07}
Area 25, Well J-12 Reservoir	08/05/93	-2.5×10^{-07}	2.2×10^{-07}
Area 25, Well J-12 Reservoir	09/02/93	4.9×10^{-08}	2.1×10^{-07}
Area 25, Well J-12 Reservoir	10/06/93	8.2×10^{-07}	2.2×10^{-07}
Area 25, Well J-12 Reservoir	11/03/93	5.5×10^{-08}	2.2×10^{-07}
Area 25, Well J-12 Reservoir	12/13/93	-5.9×10^{-08}	2.2×10^{-07}
Area 25, Well J-13	01/13/93	2.9×10^{-07}	4.0×10^{-07}
Area 25, Well J-13	02/04/93	4.5×10^{-07}	2.2×10^{-07}
Area 25, Well J-13	03/09/93	-8.9×10^{-08}	2.2×10^{-07}
Area 25, Well J-13	04/04/93	-1.9×10^{-07}	2.2×10^{-07}
Area 25, Well J-13	07/12/93	-7.3×10^{-08}	2.3×10^{-07}
Area 25, Well J-13	11/04/93	1.1×10^{-08}	2.4×10^{-07}
Area 27, Topopah Springs	02/11/93	-4.0×10^{-08}	2.2×10^{-07}
Area 27, Topopah Springs	03/11/93	-4.0×10^{-08}	2.1×10^{-07}
Area 27, Topopah Springs	04/30/93	5.8×10^{-07}	2.2×10^{-07}
Area 27, Topopah Springs	05/12/93	-1.0×10^{-07}	2.2×10^{-07}
Area 27, Topopah Springs	06/02/93	-1.7×10^{-07}	2.1×10^{-07}
Area 27, Topopah Springs	07/29/93	9.8×10^{-08}	2.2×10^{-07}
Area 27, Topopah Springs	08/12/93	1.6×10^{-07}	2.1×10^{-07}
Area 27, Topopah Springs	09/22/93	1.2×10^{-07}	2.2×10^{-07}
Area 27, Topopah Springs	10/21/93	2.8×10^{-07}	2.2×10^{-07}
Area 27, Topopah Springs	11/17/93	-1.1×10^{-07}	2.2×10^{-07}

Attachment C.8 ^{226}Ra in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5B	11/04/93	3.2×10^{-10}	4.9×10^{-10}
Area 5, Well 5C	04/04/93	-4.4×10^{-10}	3.3×10^{-09}
Area 5, Well 5C	11/04/93	7.6×10^{-10}	4.2×10^{-10}
Area 6, Well C	04/04/93	1.6×10^{-09}	1.1×10^{-09}
Area 6, Well C	07/12/93	2.9×10^{-10}	5.8×10^{-10}
Area 6, Well C	11/04/93	1.6×10^{-09}	3.9×10^{-10}
Area 6, Well C-1	04/04/93	2.3×10^{-09}	8.2×10^{-10}
Area 6, Well C-1	07/12/93	-6.4×10^{-11}	3.6×10^{-10}
Area 6, Well 4	04/04/93	-4.4×10^{-10}	9.4×10^{-10}
Area 6, Well 4	07/12/93	4.0×10^{-10}	7.9×10^{-10}
Area 6, Well 4	11/04/93	4.0×10^{-10}	2.6×10^{-10}
Area 16, Well UE-16d	07/12/93	1.6×10^{-09}	8.9×10^{-10}
Area 16, Well UE-16d	11/04/93	2.1×10^{-09}	4.3×10^{-10}
Area 18, Well 8	04/04/93	2.9×10^{-10}	8.4×10^{-10}
Area 18, Well 8	07/12/93	-1.3×10^{-10}	2.0×10^{-09}
Area 18, Well 8	11/04/93	3.6×10^{-10}	3.2×10^{-10}
Area 23, Army Well No. 1	04/04/93	8.9×10^{-10}	3.3×10^{-09}
Area 23, Army Well No. 1	07/12/93	-6.5×10^{-11}	3.6×10^{-10}
Area 23, Army Well No. 1	11/04/93	8.3×10^{-10}	4.0×10^{-10}
Area 25, Well J-12	04/04/93	8.9×10^{-10}	1.1×10^{-09}
Area 25, Well J-12	07/12/93	-2.7×10^{-10}	7.3×10^{-10}
Area 25, Well J-12	11/04/93	5.2×10^{-10}	4.6×10^{-10}
Area 25, Well J-13	04/04/93	1.3×10^{-10}	7.6×10^{-11}
Area 25, Well J-13	07/12/93	-6.7×10^{-10}	6.7×10^{-10}
Area 25, Well J-13	11/04/93	-1.5×10^{-10}	4.0×10^{-10}

Attachment C.9 ^{228}Ra in Water - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5B	11/04/93	0.0	0.0
Area 5, Well 5C	04/04/93	-8.8×10^{-11}	4.6×10^{-10}
Area 5, Well 5C	11/04/93	2.5×10^{-10}	2.2×10^{-10}
Area 6, Well C	04/04/93	1.3×10^{-10}	1.9×10^{-10}
Area 6, Well C	07/12/93	1.9×10^{-10}	3.0×10^{-10}
Area 6, Well C	11/04/93	2.0×10^{-10}	1.7×10^{-10}
Area 6, Well C-1	04/04/93	9.3×10^{-10}	5.1×10^{-10}
Area 6, Well C-1	07/12/93	6.4×10^{-11}	1.9×10^{-10}
Area 6, Well 4	04/04/93	3.5×10^{-10}	5.6×10^{-10}
Area 6, Well 4	07/12/93	4.0×10^{-10}	4.4×10^{-10}
Area 6, Well 4	11/04/93	2.4×10^{-10}	1.5×10^{-10}
Area 16, Well UE-16d	07/12/93	6.6×10^{-10}	4.8×10^{-10}
Area 16, Well UE-16d	11/04/93	6.2×10^{-10}	2.3×10^{-10}
Area 18, Well 8	04/04/93	1.8×10^{-10}	2.0×10^{-10}
Area 18, Well 8	07/12/93	6.6×10^{-10}	4.7×10^{-10}
Area 18, Well 8	11/04/93	1.5×10^{-10}	1.7×10^{-10}
Area 23, Army Well No. 1	04/04/93	5.7×10^{-10}	6.0×10^{-10}
Area 23, Army Well No. 1	07/12/93	0.0	0.0
Area 23, Army Well No. 1	11/04/93	1.8×10^{-10}	2.0×10^{-10}
Area 25, Well J-12	04/04/93	-5.3×10^{-10}	3.4×10^{-10}
Area 25, Well J-12	07/12/93	-2.7×10^{-10}	3.3×10^{-10}
Area 25, Well J-12	11/04/93	2.2×10^{-10}	1.8×10^{-10}
Area 25, Well J-13	04/04/93	-4.0×10^{-10}	3.0×10^{-10}
Area 25, Well J-13	07/12/93	2.4×10^{-10}	2.1×10^{-10}
Area 25, Well J-13	11/04/93	2.2×10^{-10}	2.4×10^{-10}

Attachment C.10 Duplicates: ^{90}Sr in Water [containment ponds] - 1993

Sampling Location	Collection Dates	µCi/mL	
		Original	Duplicate
Area 12, E Tunnel Effluent	07/20/92	6.0×10^{-09}	5.7×10^{-09}
Area 12, E Tunnel Pond No. 1	07/20/92	4.6×10^{-09}	5.3×10^{-09}

Attachment C.11 Duplicates: Gross Alpha in Water [potable water and end points] - 1993

Sampling Location	Collection Dates	µCi/mL Original	µCi/mL Duplicate
Area 1, Building 101	03/30/93	6.0×10^{-09}	7.7×10^{-09}
Area 1, Building 101	07/06/93	6.0×10^{-09}	8.8×10^{-09}
Area 1, Building 101	10/04/93	5.2×10^{-09}	7.3×10^{-09}
Area 2, Rest Room	12/29/92	7.3×10^{-10}	6.4×10^{-10}
Area 2, Rest Room	03/29/93	3.6×10^{-10}	8.7×10^{-10}
Area 2, Rest Room	07/06/93	6.4×10^{-10}	8.0×10^{-10}
Area 2, Rest Room	10/04/93	4.5×10^{-10}	8.6×10^{-10}
Area 6, Bottled Water	12/29/92	-1.2×10^{-10}	9.6×10^{-11}
Area 6, Bottled Water	03/29/93	-2.0×10^{-11}	7.7×10^{-11}
Area 6, Bottled Water	07/06/93	1.0×10^{-10}	2.6×10^{-10}
Area 6, Bottled Water	10/04/93	3.4×10^{-10}	2.2×10^{-12}
Area 6, Cafeteria	12/29/92	1.4×10^{-08}	1.2×10^{-08}
Area 6, Cafeteria	03/29/93	8.8×10^{-09}	1.3×10^{-08}
Area 6, Cafeteria	10/04/93	5.9×10^{-09}	9.7×10^{-09}
Area 6, Building 6-900	03/29/93	9.1×10^{-09}	6.8×10^{-09}
Area 6, Building 6-900	07/08/93	8.9×10^{-09}	2.0×10^{-08}
Area 6, Building 6-900	10/04/93	4.0×10^{-09}	7.5×10^{-09}
Area 12 Cafeteria	01/04/93	5.3×10^{-10}	6.8×10^{-10}
Area 23, Cafeteria	12/28/92	5.4×10^{-09}	5.6×10^{-09}
Area 23, Cafeteria	03/29/93	4.6×10^{-09}	6.6×10^{-09}
Area 23, Cafeteria	07/06/93	5.2×10^{-09}	8.0×10^{-09}
Area 23, Cafeteria	10/04/93	7.0×10^{-09}	9.3×10^{-09}
Area 25, Building 4221	12/28/92	1.5×10^{-09}	1.4×10^{-09}
Area 25, Building 4221	03/29/93	1.8×10^{-09}	8.2×10^{-10}
Area 25, Building 4221	07/06/93	1.4×10^{-09}	1.5×10^{-09}
Area 25, Building 4221	10/04/93	1.1×10^{-09}	1.4×10^{-09}

Attachment C.12 Duplicates: ^{238}Pu in Water [containment ponds] - 1993

Sampling Location	Collection Dates	µCi/mL Original	µCi/mL Duplicate
Area 12, E Tunnel Effluent	01/27/93	4.6×10^{-10}	0.0
Area 12, E Tunnel Effluent	04/06/93	3.6×10^{-10}	7.0×10^{-10}
Area 12, E Tunnel Effluent	10/07/93	5.3×10^{-10}	5.7×10^{-10}
Area 12, E Tunnel Pond No. 1	02/09/93	7.8×10^{-10}	7.3×10^{-10}
Area 12, E Tunnel Pond No. 1	04/06/93	9.6×10^{-10}	8.7×10^{-10}
Area 12, E Tunnel Pond No. 1	07/20/93	6.5×10^{-10}	6.7×10^{-10}
Area 12, E Tunnel Pond No. 1	10/07/93	5.8×10^{-10}	6.3×10^{-10}
Area 12, N Tunnel Effluent	01/27/93	0.0	0.0
Area 12, N Tunnel Effluent	04/06/93	3.6×10^{-12}	0.0
Area 12, N Tunnel Effluent	10/07/93	-6.2×10^{-12}	-3.7×10^{-12}
Area 12, N Tunnel Pond No. 2	03/09/93	0.0	4.7×10^{-12}
Area 12, N Tunnel Pond No. 2	04/06/93	0.0	0.0
Area 12, N Tunnel Pond No. 3	03/09/93	3.0×10^{-12}	0.0
Area 12, N Tunnel Pond No. 3	04/06/93	6.4×10^{-12}	3.4×10^{-12}
Area 12, T Tunnel Effluent	04/07/93	1.3×10^{-11}	5.8×10^{-11}
Area 12, T Tunnel Effluent	10/07/93	-7.4×10^{-12}	0.0
Area 12, T Tunnel Pond No. 2	02/09/93	4.5×10^{-11}	5.0×10^{-11}
Area 12, T Tunnel Pond No. 2	04/07/93	3.2×10^{-11}	5.1×10^{-11}
Area 12, T Tunnel Pond No. 3	02/09/93	4.9×10^{-11}	5.4×10^{-11}
Area 12, T Tunnel Pond No. 3	04/07/93	2.2×10^{-11}	4.8×10^{-11}

Attachment C.13 Duplicates: $^{239+240}Pu$ in Water [containment ponds] - 1993

Sampling Location	Collection Dates	µCi/mL Original	µCi/mL Duplicate
Area 6, Yucca Pond	04/07/93	1.4×10^{-10}	1.3×10^{-10}
Area 12, E Tunnel Effluent	01/27/93	3.8×10^{-09}	0.0
Area 12, E Tunnel Effluent	04/06/93	4.5×10^{-09}	4.7×10^{-09}
Area 12, E Tunnel Effluent	10/07/93	4.7×10^{-09}	5.0×10^{-09}
Area 12, E Tunnel Pond No. 1	02/09/93	6.2×10^{-09}	6.7×10^{-09}
Area 12, E Tunnel Pond No. 1	04/06/93	7.6×10^{-09}	7.6×10^{-09}
Area 12, E Tunnel Pond No. 1	07/20/93	5.1×10^{-09}	6.0×10^{-09}
Area 12, E Tunnel Pond No. 1	10/07/93	5.0×10^{-09}	4.9×10^{-09}
Area 12, N Tunnel Effluent	01/27/93	3.5×10^{-12}	0.0
Area 12, N Tunnel Effluent	04/06/93	2.3×10^{-10}	2.6×10^{-10}
Area 12, N Tunnel Effluent	10/07/93	2.5×10^{-11}	1.8×10^{-11}
Area 12, N Tunnel Pond No. 2	03/09/93	1.4×10^{-11}	4.7×10^{-12}
Area 12, N Tunnel Pond No. 2	04/06/93	3.0×10^{-11}	7.9×10^{-12}
Area 12, N Tunnel Pond No. 3	03/09/93	8.8×10^{-12}	0.0
Area 12, N Tunnel Pond No. 3	04/06/93	1.6×10^{-11}	1.0×10^{-11}
Area 12, T Tunnel Effluent	04/07/93	7.5×10^{-10}	1.0×10^{-09}
Area 12, T Tunnel Effluent	10/07/93	-3.7×10^{-12}	1.4×10^{-11}
Area 12, T Tunnel Pond No. 2	02/09/93	9.1×10^{-10}	9.9×10^{-10}
Area 12, T Tunnel Pond No. 2	04/07/93	9.8×10^{-10}	1.0×10^{-09}
Area 12, T Tunnel Pond No. 3	02/09/93	1.1×10^{-09}	8.5×10^{-10}
Area 12, T Tunnel Pond No. 3	04/07/93	1.0×10^{-09}	1.0×10^{-09}

Attachment C.14 Duplicates: Gross Beta in Water [containment ponds] - 1993

Sampling Location	Collection Dates	µCi/mL Original	µCi/mL Duplicate
Area 6, Yucca Pond	02/09/93	3.3×10^{-08}	3.6×10^{-08}
Area 6, Yucca Pond	03/09/93	4.0×10^{-08}	2.7×10^{-08}
Area 6, Yucca Pond	04/07/93	4.9×10^{-08}	2.6×10^{-08}
Area 6, Yucca Pond	07/20/93	8.1×10^{-08}	8.9×10^{-08}
Area 6, Yucca Pond	08/12/93	8.3×10^{-08}	6.2×10^{-08}
Area 12, E Tunnel Effluent	01/27/93	5.7×10^{-08}	7.0×10^{-08}
Area 12, E Tunnel Effluent	02/09/93	8.3×10^{-08}	1.0×10^{-07}
Area 12, E Tunnel Effluent	03/09/93	1.7×10^{-07}	1.3×10^{-07}
Area 12, E Tunnel Effluent	04/06/93	1.2×10^{-07}	1.4×10^{-07}
Area 12, E Tunnel Effluent	05/12/93	8.4×10^{-08}	9.2×10^{-08}
Area 12, E Tunnel Effluent	07/20/93	1.2×10^{-07}	9.6×10^{-08}
Area 12, E Tunnel Effluent	08/12/93	5.1×10^{-08}	4.8×10^{-08}
Area 12, E Tunnel Effluent	09/15/93	6.3×10^{-08}	3.0×10^{-08}
Area 12, E Tunnel Effluent	10/07/93	6.1×10^{-08}	5.5×10^{-08}
Area 12, E Tunnel Effluent	11/16/93	7.0×10^{-08}	6.6×10^{-08}
Area 12, E Tunnel Effluent	12/21/93	6.8×10^{-08}	4.3×10^{-08}
Area 12, E Tunnel Pond No. 1	02/09/93	8.2×10^{-08}	1.3×10^{-07}
Area 12, E Tunnel Pond No. 1	03/09/93	1.3×10^{-07}	1.2×10^{-07}
Area 12, E Tunnel Pond No. 1	04/06/93	1.3×10^{-07}	1.4×10^{-07}
Area 12, E Tunnel Pond No. 1	05/12/93	7.4×10^{-08}	8.5×10^{-08}
Area 12, E Tunnel Pond No. 1	07/20/93	1.1×10^{-07}	9.6×10^{-08}
Area 12, E Tunnel Pond No. 1	08/12/93	6.6×10^{-08}	7.0×10^{-08}
Area 12, E Tunnel Pond No. 1	09/15/93	5.3×10^{-08}	7.3×10^{-08}
Area 12, E Tunnel Pond No. 1	10/07/93	5.8×10^{-08}	5.0×10^{-08}
Area 12, E Tunnel Pond No. 1	11/16/93	5.3×10^{-08}	3.5×10^{-08}
Area 12, N Tunnel Effluent	01/27/93	9.2×10^{-09}	1.4×10^{-09}
Area 12, N Tunnel Effluent	03/09/93	2.5×10^{-09}	1.3×10^{-08}
Area 12, N Tunnel Effluent	04/06/93	2.0×10^{-09}	1.7×10^{-08}
Area 12, N Tunnel Effluent	10/07/93	2.2×10^{-08}	2.4×10^{-08}
Area 12, N Tunnel Pond No. 2	03/09/93	-4.3×10^{-09}	-2.5×10^{-09}
Area 12, N Tunnel Pond No. 2	04/06/93	7.7×10^{-09}	7.5×10^{-09}
Area 12, N Tunnel Pond No. 3	03/09/93	6.1×10^{-09}	1.0×10^{-08}
Area 12, N Tunnel Pond No. 3	04/06/93	2.0×10^{-08}	-4.0×10^{-09}
Area 12, N Tunnel Pond No. 3	05/12/93	1.9×10^{-08}	2.2×10^{-08}
Area 12, T Tunnel Effluent	01/27/93	3.2×10^{-07}	2.5×10^{-07}
Area 12, T Tunnel Effluent	02/09/93	3.6×10^{-07}	3.6×10^{-07}
Area 12, T Tunnel Effluent	03/09/93	3.2×10^{-07}	3.1×10^{-07}
Area 12, T Tunnel Effluent	04/07/93	1.5×10^{-07}	1.4×10^{-07}
Area 12, T Tunnel Effluent	09/29/93	-3.9×10^{-09}	5.7×10^{-09}
Area 12, T Tunnel Effluent	10/07/93	1.1×10^{-08}	1.4×10^{-08}

Attachment C.14 (Duplicates: Gross Beta in Water [containment ponds] - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Original	µCi/mL Duplicate
Area 12, T Tunnel Pond No. 2	02/09/93	3.1×10^{-07}	3.3×10^{-07}
Area 12, T Tunnel Pond No. 2	03/09/93	2.8×10^{-07}	2.6×10^{-07}
Area 12, T Tunnel Pond No. 2	04/07/93	1.7×10^{-07}	2.0×10^{-07}
Area 12, T Tunnel Pond No. 2	05/12/93	2.6×10^{-07}	2.7×10^{-07}
Area 12, T Tunnel Pond No. 3	02/09/93	3.3×10^{-07}	3.4×10^{-07}
Area 12, T Tunnel Pond No. 3	03/09/93	2.6×10^{-07}	2.3×10^{-07}
Area 12, T Tunnel Pond No. 3	04/07/93	1.8×10^{-07}	2.0×10^{-07}
Area 12, T Tunnel Pond No. 3	05/12/93	3.1×10^{-07}	2.8×10^{-07}

Attachment C.15 Duplicates: Tritium in Water [containment ponds] - 1993

Sampling Location	Collection Dates	µCi/mL Original	µCi/mL Duplicate
Area 6, Yucca Pond	01/20/93	1.6×10^{-06}	1.2×10^{-06}
Area 6, Yucca Pond	02/09/93	1.6×10^{-06}	1.2×10^{-06}
Area 6, Yucca Pond	03/09/93	1.3×10^{-06}	1.1×10^{-06}
Area 6, Yucca Pond	04/07/93	6.9×10^{-07}	7.9×10^{-07}
Area 6, Yucca Pond	07/20/93	9.3×10^{-07}	8.6×10^{-07}
Area 6, Yucca Pond	08/12/93	7.0×10^{-07}	9.1×10^{-07}
Area 12, E Tunnel Effluent	01/27/93	2.0×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Effluent	02/09/93	1.9×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Effluent	03/09/93	1.5×10^{-03}	1.5×10^{-03}
Area 12, E Tunnel Effluent	04/06/93	1.3×10^{-03}	1.3×10^{-03}
Area 12, E Tunnel Effluent	05/12/93	1.7×10^{-03}	1.7×10^{-03}
Area 12, E Tunnel Effluent	07/20/93	1.8×10^{-03}	1.8×10^{-03}
Area 12, E Tunnel Effluent	08/12/93	1.9×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Effluent	09/15/93	1.8×10^{-03}	1.8×10^{-03}
Area 12, E Tunnel Effluent	10/07/93	1.9×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Effluent	11/16/93	2.0×10^{-03}	2.0×10^{-03}
Area 12, E Tunnel Effluent	12/21/93	1.9×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Pond No. 1	02/09/93	1.9×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Pond No. 1	03/09/93	1.5×10^{-03}	1.5×10^{-03}
Area 12, E Tunnel Pond No. 1	04/06/93	1.2×10^{-03}	1.2×10^{-03}
Area 12, E Tunnel Pond No. 1	05/12/93	1.7×10^{-03}	1.7×10^{-03}
Area 12, E Tunnel Pond No. 1	07/20/93	1.8×10^{-03}	1.8×10^{-03}
Area 12, E Tunnel Pond No. 1	08/12/93	1.8×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Pond No. 1	09/15/93	1.8×10^{-03}	1.8×10^{-03}
Area 12, E Tunnel Pond No. 1	10/07/93	1.9×10^{-03}	1.9×10^{-03}
Area 12, E Tunnel Pond No. 1	11/16/93	1.7×10^{-03}	2.1×10^{-03}
Area 12, N Tunnel Effluent	01/27/93	8.0×10^{-06}	7.7×10^{-06}
Area 12, N Tunnel Effluent	02/09/93	1.1×10^{-05}	1.1×10^{-05}
Area 12, N Tunnel Effluent	03/09/93	1.2×10^{-05}	1.2×10^{-05}
Area 12, N Tunnel Effluent	04/06/93	5.2×10^{-05}	5.3×10^{-05}
Area 12, N Tunnel Effluent	10/07/93	6.4×10^{-04}	6.5×10^{-04}
Area 12, N Tunnel Pond No. 2	03/09/93	4.7×10^{-05}	4.5×10^{-05}
Area 12, N Tunnel Pond No. 2	04/06/93	2.2×10^{-05}	2.3×10^{-05}
Area 12, N Tunnel Pond No. 3	03/09/93	1.3×10^{-04}	1.2×10^{-04}
Area 12, N Tunnel Pond No. 3	04/06/93	6.6×10^{-04}	6.9×10^{-04}
Area 12, N Tunnel Pond No. 3	05/12/93	6.6×10^{-04}	6.6×10^{-04}
Area 12, T Tunnel Effluent	01/27/93	4.5×10^{-02}	4.7×10^{-02}
Area 12, T Tunnel Effluent	02/09/93	5.2×10^{-02}	5.0×10^{-02}
Area 12, T Tunnel Effluent	03/09/93	5.2×10^{-02}	5.2×10^{-02}

Attachment C.15 (Duplicates: Tritium in Water [containment ponds] - 1993, cont.)

Sampling Location	Collection Dates	µCi/mL Original	µCi/mL Duplicate
Area 12, T Tunnel Effluent	04/07/93	3.2×10^{-02}	3.3×10^{-02}
Area 12, T Tunnel Effluent	09/29/93	1.5×10^{-04}	1.5×10^{-04}
Area 12, T Tunnel Effluent	10/07/93	1.2×10^{-04}	1.3×10^{-04}
Area 12, T Tunnel Pond No. 2	02/09/93	3.6×10^{-02}	3.6×10^{-02}
Area 12, T Tunnel Pond No. 2	03/09/93	3.5×10^{-02}	3.7×10^{-02}
Area 12, T Tunnel Pond No. 2	04/07/93	4.2×10^{-02}	4.2×10^{-02}
Area 12, T Tunnel Pond No. 3	02/09/93	3.5×10^{-02}	3.5×10^{-02}
Area 12, T Tunnel Pond No. 3	03/09/93	3.8×10^{-02}	3.7×10^{-02}
Area 12, T Tunnel Pond No. 3	04/07/93	4.2×10^{-02}	4.3×10^{-02}
Area 12, T Tunnel Pond No. 3	05/12/93	3.2×10^{-02}	9.8×10^{-06}

Attachment C.16 Tritium in Supply Wells, Analyzed by means of Enrichment - 1993

Sampling Location	Collection Dates	µCi/mL Concentration	µCi/mL Standard Deviation (s)
Area 5, Well 5-B	11/04/93	9.3×10^{-10}	3.8×10^{-09}
Area 5, Well 5-C	01/13/93	1.7×10^{-09}	4.4×10^{-09}
Area 5, Well 5-C	04/04/93	3.4×10^{-09}	4.6×10^{-09}
Area 5, Well 5-C	11/04/93	2.4×10^{-09}	4.1×10^{-09}
Area 6, Well C	01/13/93	1.9×10^{-08}	4.8×10^{-09}
Area 6, Well C	04/04/93	1.8×10^{-08}	4.6×10^{-09}
Area 6, Well C	07/12/93	1.8×10^{-08}	5.4×10^{-09}
Area 6, Well C	11/04/93	1.2×10^{-08}	4.0×10^{-09}
Area 6, Well C-1	01/13/93	5.8×10^{-09}	4.3×10^{-09}
Area 6, Well C-1	04/04/93	7.8×10^{-09}	4.6×10^{-09}
Area 6, Well C-1	07/12/93	3.8×10^{-09}	5.3×10^{-09}
Area 6, Well C-1	11/24/93	4.4×10^{-09}	3.8×10^{-09}
Area 6, Well 4	01/13/93	4.0×10^{-09}	4.6×10^{-09}
Area 6, Well 4	04/04/93	2.7×10^{-09}	4.3×10^{-09}
Area 6, Well 4	07/12/93	2.4×10^{-09}	4.9×10^{-09}
Area 6, Well 4	11/04/93	1.3×10^{-10}	3.8×10^{-09}
Area 16, Well UE-16d	01/13/93	4.4×10^{-09}	4.5×10^{-09}
Area 16, Well UE-16d	04/04/93	2.4×10^{-09}	4.4×10^{-09}
Area 16, Well UE-16d	07/12/93	-1.3×10^{-09}	4.8×10^{-09}
Area 16, Well UE-16d	11/04/93	1.9×10^{-09}	4.0×10^{-09}
Area 18, Well 8	07/12/93	1.6×10^{-11}	4.8×10^{-09}
Area 18, Well 8	11/04/93	2.8×10^{-09}	3.9×10^{-09}
Area 18, Well 8	01/13/93	4.9×10^{-09}	4.4×10^{-09}
Area 18, Well 8	04/04/93	3.0×10^{-09}	4.4×10^{-09}
Area 23, Army Well 1	01/13/93	5.2×10^{-09}	4.5×10^{-09}
Area 23, Army Well 1	04/04/93	6.1×10^{-09}	4.7×10^{-09}
Area 23, Army Well 1	07/12/93	7.0×10^{-10}	5.2×10^{-09}
Area 23, Army Well 1	11/04/93	1.6×10^{-09}	3.8×10^{-09}
Area 25, Well J-12	01/13/93	2.6×10^{-09}	4.2×10^{-09}
Area 25, Well J-12	04/04/93	4.8×10^{-09}	4.5×10^{-09}
Area 25, Well J-12	07/12/93	2.9×10^{-09}	4.9×10^{-09}
Area 25, Well J-12	11/04/93	3.9×10^{-10}	3.8×10^{-09}
Area 25, Well J-13	01/13/93	1.5×10^{-10}	4.3×10^{-09}
Area 25, Well J-13	04/04/93	4.6×10^{-09}	4.7×10^{-09}
Area 25, Well J-13	07/12/93	2.9×10^{-09}	4.8×10^{-09}
Area 25, Well J-13	11/04/93	3.1×10^{-09}	3.8×10^{-09}

APPENDIX D
SUMMARY OF 1993 RESULTS OF OFFSITE RADIOLOGICAL MONITORING

Statistical treatment of these data will appear in EPA's 1993 Offsite Environmental Monitoring Report.

Table D.1 Gross Beta Results for the Offsite Standby Air Surveillance Network - 1993

		Gross Beta Concentration (10^{-14} µCi/mL)			
Sampling Location	Number	Maximum	Minimum	Arithmetic Mean	Standard Deviation
Little Rock, AR	3	2.4	1.5	1.8	0.5
Globe, AZ	3	1.7	1.6	1.7	0.1
Kingman, AZ	3	1.8	0.3	1.1	0.8
Tucson, AZ	1	1.7	1.7	1.7	--
Winslow, AZ	3	2.0	1.1	1.6	0.5
Yuma, AZ	3	1.5	0.1	1.0	0.7
Alturas, CA	2	1.4	0.5	1.0	0.6
Baker, CA	3	1.6	1.0	1.2	0.3
Bishop, CA	3	1.8	1.4	1.6	0.2
Chico, CA	3	2.3	1.0	1.5	0.7
Indio, CA	3	3.0	1.6	2.3	0.7
Lone Pine, CA	1	1.6	1.6	1.6	--
Ridgecrest, CA	3	2.1	1.4	1.7	0.4
Santa Rosa, CA	3	1.2	1.0	1.1	0.1
Cortez, CO	2	1.8	1.2	1.5	0.5
Denver, CO	3	1.8	1.0	1.4	0.4
Grand Junction, CO	2	3.7	2.1	2.9	1.1
Mountain Home, ID	2	0.6	0.3	0.4	0.3
Nampa, ID	4	2.2	0.8	1.4	0.7
Pocatello, ID	3	2.4	0.8	1.6	0.8
Fort Dodge, IA	3	3.4	1.5	2.2	1.0
Iowa City, IA	3	1.9	1.2	1.5	0.3
Dodge City, KS	3	1.8	1.4	1.6	0.3
Monroe, LA	3	1.7	1.3	1.5	0.2
Minneapolis, MN	3	1.2	0.8	1.0	0.2
Clayton, MO	3	1.8	0.9	1.4	0.5

Mean MDC: 0.23×10^{-14} µCi/mL Standard Deviation of Mean MDC: 0.03×10^{-16} µCi/mL

MDC Minimum Detectable Concentration
-- Result is less than the MDC of analysis

Table D.1 (Gross Beta Results for the Offsite Standby Air Surveillance Network - 1993, cont.)

Sampling Location	Number	Gross Beta Concentration (10^{-14} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Joplin, MO	3	3.3	1.2	2.2	1.1
St. Joseph, MO	3	1.2	0.0	0.6	0.6
Great Falls, MT	2	0.9	0.6	0.8	0.2
Kalispell, MT	3	1.4	0.7	1.1	0.3
Miles City, MT	3	3.7	0.9	1.9	1.6
North Platte, NE	3	1.7	1.2	1.4	0.3
Adaven-Uhalde Ranch, NV	3	1.9	1.0	1.5	0.5
Battle Mountain, NV	4	2.9	0.9	1.6	0.9
Blue Jay, NV	3	1.6	0.9	1.4	0.4
Clark Station, NV	3	1.4	0.5	1.1	0.6
Currant-Angle Worm Ranch, NV	3	1.8	1.2	1.5	0.3
Currie Maint. Station, NV	3	1.8	1.2	1.4	0.3
Duckwater, NV	3	1.5	0.6	1.2	0.5
Elko, NV	4	2.5	0.4	1.5	0.9
Eureka, NV	3	1.5	0.5	1.1	0.6
Fallon, NV	4	2.7	1.3	1.8	0.6
Geyser Ranch, NV	2	2.5	1.2	1.8	0.9
Lida, NV	3	1.8	1.0	1.3	0.4
Lovelock, NV	3	2.6	0.4	1.4	1.1
Lund, NV	3	1.9	1.2	1.6	0.3
Mesquite, NV	1	1.6	1.6	1.6	--
Reno, NV	4	2.4	1.2	1.6	0.5
Round Mountain, NV	3	1.9	1.0	1.5	0.5
Wells, NV	4	1.8	0.1	1.2	0.7
Winnemucca, NV	4	2.2	0.9	1.4	0.6
Albuquerque, NM	4	2.1	0.2	1.2	0.8
Carlsbad, NM	3	2.2	1.3	1.7	0.5
Shiprock, NM	3	1.6	1.3	1.5	0.2
Bismarck, ND	3	2.0	0.9	1.3	0.6
Fargo, ND	3	2.5	0.5	1.3	1.1
Williston, ND	3	4.1	1.4	2.3	1.6
Muskogee, OK	4	1.5	0.5	1.1	0.5
Burns, OR	3	1.0	0.6	0.8	0.2
Medford, OR	1	0.9	0.9	0.9	--
Rapid City, SD	3	1.6	0.7	1.1	0.5
Amarillo, TX	1	1.1	1.1	1.1	--
Austin, TX	2	3.6	2.2	2.9	0.9

Mean MDC: 0.23 x 10^{-14} µCi/mL Standard Deviation of Mean MDC: 0.03 x 10^{-14} µCi/mL

MDC Minimum Detectable Concentration
-- Result is less than the MDC of analysis

Table D.1 (Gross Beta Results for the Offsite Standby Air Surveillance Network - 1993, cont.)

Sampling Location	Number	Gross Beta Concentration (10^{-14} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Midland, TX	3	3.3	0.8	1.7	1.4
Tyler, TX	1	1.2	1.2	1.2	--
Bryce Canyon, UT	3	1.4	0.1	0.6	0.7
Enterprise, UT	3	1.7	1.2	1.5	0.3
Garrison, UT	3	2.4	1.2	1.7	0.6
Logan, UT	3	1.3	1.1	1.2	0.1
Parowan, UT	1	2.1	2.1	2.1	--
Vernal, UT	3	4.8	0.9	2.2	2.2
Wendover, UT	4	1.8	1.1	1.4	0.3
Seattle, WA	3	1.5	0.3	0.8	0.7
Spokane, WA	3	2.1	0.6	1.1	0.8
Rock Springs, WY	3	3.5	1.3	2.1	1.2
Worland, WY	3	2.7	0.2	1.1	1.4

Mean MDC: 0.23×10^{-14} µCi/mL Standard Deviation of Mean MDC: 0.03×10^{-16} µCi/mL
MDC Minimum Detectable Concentration

Table D.2 Gross Beta Results for the TOMSK - 1993

Sampling Location	Number	Gross Beta Concentration (10^{-14} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Yuma, AZ	1	0.9	0.9	0.9	--
Alturas, CA	1	0.4	0.4	0.4	--
Baker, CA	1	1.3	1.3	1.3	--
Bishop, CA	1	0.9	0.9	0.9	--
Lone Pine, CA	1	1.2	1.2	1.2	--
Ridgecrest, CA	1	1.4	1.4	1.4	--
Santa Rosa, CA	3	0.6	0.3	0.4	0.2
Mountain Home, ID	3	0.2	-0.4	-0.1	0.3
Pocatello, ID	1	0.6	0.6	0.6	--
Kalispell, MT Equity Supply Co.	3	1.1	0.2	0.6	0.4
Miles City, MT	1	0.6	0.6	0.6	--

Mean MDC: 0.52×10^{-14} µCi/mL Standard Deviation of Mean MDC: 0.03×10^{-14} µCi/mL
MDC Minimum Detectable Concentration

Table D.2 (Gross Beta Results for the TOMSK - 1993, cont.)

Sampling Location	Number	Gross Beta Concentration (10^{-14} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Adaven, NV					
Uhalde Ranch	1	0.7	0.7	0.7	--
Battle Mountain, NV	1	1.1	1.1	1.1	--
Blue Jay, NV	3	1.4	1.0	1.3	0.3
Elko, NV					
Phillips 66 Truck Stop	1	1.3	1.3	1.3	--
Geyser Ranch, NV	1	0.9	0.9	0.9	--
Lovelock, NV	3	1.1	-0.1	0.6	0.6
Lund, NV	1	0.9	0.9	0.9	--
Reno, NV	1	0.9	0.9	0.9	--
Round Mountain, NV	1	0.8	0.8	0.8	--
Winnemucca, NV	4	1.2	0.2	0.6	0.4
Medford, OR	3	0.7	0.5	0.6	0.1
Seattle, WA	3	0.3	0.1	0.2	0.1
Spokane, WA	1	1.0	1.0	1.0	--

Mean MDC: 0.52 x 10^{-14} µCi/mL Standard Deviation of Mean MDC: 0.03 x 10^{-14} µCi/mL
MDC Minimum Detectable Concentration

Table D.3 Gross Alpha Results for the Offsite Standby Air Surveillance Network - 1993

Sampling Location	Number	Gross Alpha Concentration (10^{-15} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Little Rock, AR	3	1.6	0.3	0.8	0.7
Globe, AZ	3	2.3	1.2	1.7	0.6
Kingman, AZ	3	0.8	0.3	0.5	0.3
Tucson, AZ	1	1.2	1.2	1.2	--
Winslow, AZ	3	1.0	0.7	0.8	0.2
Yuma, AZ	3	1.4	0.8	1.1	0.3
Alturas, CA	2	0.4	0.1	0.3	0.2
Baker, CA	3	0.8	0.3	0.5	0.3
Bishop, CA	3	1.5	1.2	1.3	0.2
Chico, CA	3	0.9	0.0	0.4	0.5

Mean MDC: 0.84 x 10^{-15} µCi/mL Standard Deviation of Mean MDC: 0.23 x 10^{-15} µCi/mL
MDC Minimum Detectable Concentration

Table D.3 (Gross Alpha Results for the Offsite Standby Air Surveillance Network - 1993, cont.)

Sampling Location	Number	Gross Alpha Concentration (10^{-15} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Indio, CA	3	1.7	0.7	1.3	0.5
Lone Pine, CA	1	1.5	1.5	1.5	--
Ridgecrest, CA	3	2.8	1.1	1.8	0.9
Santa Rosa, CA	3	1.4	0.6	0.9	0.5
Cortez, CO	2	0.6	0.2	0.4	0.3
Denver, CO	3	0.7	0.3	0.5	0.2
Grand Junction, CO	2	1.1	1.0	1.1	0.1
Mountain Home, ID	2	0.3	0.3	0.3	0.0
Nampa, ID	4	1.4	-0.4	0.4	0.7
Pocatello, ID	3	3.6	0.4	1.8	1.6
Fort Dodge, IA	3	2.2	0.8	1.4	0.7
Iowa City, IA	3	1.6	0.8	1.2	0.4
Dodge City, KS	3	0.9	0.3	0.7	0.3
Monroe, LA	3	0.6	0.5	0.5	0.1
Minneapolis, MN	3	0.5	-0.1	0.3	0.3
Clayton, MO	3	0.8	-0.2	0.3	0.5
Joplin, MO	3	1.5	-0.2	0.7	0.9
St. Joseph, MO	3	0.9	0.1	0.5	0.4
Great Falls, MT	2	1.2	0.6	0.9	0.4
Kalispell, MT	3	1.0	-0.5	0.2	0.8
Miles City, MT	3	0.9	0.5	0.7	0.2
North Platte, NE	3	1.0	0.4	0.7	0.3
Adaven-Uhalde Ranch, NV	3	1.0	0.4	0.7	0.3
Battle Mountain, NV	4	1.4	0.1	0.7	0.5
Blue Jay, NV	3	1.1	0.0	0.5	0.6
Clark Station, NV	3	0.6	0.1	0.4	0.3
Currant-Angle Worm Ranch, NV	3	2.4	0.6	1.4	0.9
Currie Maint. Station, NV	3	2.4	0.8	1.5	0.8
Duckwater, NV	3	1.0	0.0	0.6	0.6
Elko, NV	4	1.7	0.5	0.9	0.6
Eureka, NV	3	2.0	-0.1	1.0	1.1
Fallon, NV	4	2.0	-0.2	0.7	0.9
Geyser Ranch, NV	2	0.6	0.2	0.4	0.3
Lida, NV	3	2.3	0.1	1.0	1.2
Lovelock, NV	3	0.9	0.2	0.6	0.4
Lund, NV	3	1.5	-0.2	0.6	0.9

Mean MDC: 0.84×10^{-15} µCi/mL Standard Deviation of Mean MDC: 0.23×10^{-15} µCi/mL

MDC Minimum Detectable Concentration

Table D.3 (Gross Alpha Results for the Offsite Standby Air Surveillance Network - 1993, cont.)

Sampling Location	Number	Gross Alpha Concentration (10^{-15} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Mesquite, NV	1	1.4	1.4	1.4	--
Reno, NV	4	1.4	0.2	0.9	0.6
Round Mountain, NV	3	0.7	-0.4	0.2	0.6
Wells, NV	4	1.7	-0.2	0.8	0.8
Winnemucca, NV	4	1.3	0.2	0.7	0.5
Albuquerque, NM	4	1.4	0.2	0.6	0.6
Carlsbad, NM	3	1.3	-0.2	0.6	0.8
Shiprock, NM	3	1.7	0.4	0.9	0.7
Bismarck, ND	3	0.6	0.3	0.5	0.2
Fargo, ND	3	0.8	0.1	0.5	0.4
Williston, ND	3	4.4	0.8	2.2	2.0
Muskogee, OK	4	0.9	0.4	0.6	0.3
Burns, OR	3	0.8	0.5	0.6	0.2
Medford, OR	1	0.0	0.0	0.0	--
Rapid City, SD	3	0.3	-0.5	0.0	0.4
Amarillo, TX	1	1.6	1.6	1.6	--
Austin, TX	2	2.7	2.4	2.6	0.2
Midland, TX	3	3.8	1.1	2.1	1.5
Tyler, TX	1	0.5	0.5	0.5	--
Bryce Canyon, UT	3	0.3	-0.2	0.1	0.3
Enterprise, UT	3	1.2	0.3	0.6	0.5
Garrison, UT	3	1.4	0.8	1.1	0.3
Logan, UT	3	0.7	0.1	0.5	0.3
Parowan, UT	1	2.6	2.6	2.6	--
Vernal, UT	3	1.3	0.6	1.0	0.4
Wendover, UT	4	1.8	0.4	1.0	0.6
Seattle, WA	3	1.1	0.3	0.6	0.5
Spokane, WA	3	0.3	-0.2	0.1	0.3
Rock Springs, WY	3	1.9	0.6	1.1	0.7
Worland, WY	3	0.6	0.1	0.4	0.3

Mean MDC: 0.84×10^{-14} µCi/mL Standard Deviation of Mean MDC: 0.23×10^{-15} µCi/mL

MDC Minimum Detectable Concentration

Table D.4 Gross Alpha Results for the TOMSK - 1993

Sampling Location	Number	Gross Alpha Concentration (10^{-15} µCi/mL) Maximum	Minimum	Arithmetic Mean	Standard Deviation
Yuma, AZ	1	1.2	1.2	1.2	--
Alturas, CA	1	0.4	0.4	0.4	--
Baker, CA	1	2.1	2.1	2.1	--
Bishop, CA	1	0.5	0.5	0.5	--
Lone Pine, CA	1	0.4	0.4	0.4	--
Ridgecrest, CA	1	0.9	0.9	0.9	--
Santa Rosa, CA	3	-0.2	-0.9	-0.5	0.4
Mountain Home, ID	3	0.6	-0.9	0.1	0.9
Pocatello, ID	1	0.2	0.2	0.2	--
Kalispell, MT					
Equity Supply Co.	3	0.2	-1.9	-0.8	1.1
Miles City, MT	1	0.1	0.1	0.1	--
Adaven, NV					
Uhalde Ranch	1	0.4	0.4	0.4	--
Battle Mountain, NV	1	0.4	0.4	0.4	--
Blue Jay, NV	3	1.6	0.1	0.8	0.8
Elko, NV					
Phillips 66 Truck Stop	1	0.7	0.7	0.7	--
Geyser Ranch, NV	1	0.9	0.9	0.9	--
Lovelock, NV	3	0.7	-0.9	-0.3	0.9
Lund, NV	1	0.7	0.7	0.7	--
Reno, NV	1	0.5	0.5	0.5	--
Round Mountain, NV	1	0.4	0.4	0.4	--
Winnemucca, NV	4	2.2	0.0	0.7	1.0
Medford, OR	3	0.3	-0.6	-0.2	0.5
Seattle, WA	3	-0.3	-1.6	-0.9	0.7
Spokane, WA	1	0.3	0.3	0.3	--

Mean MDC: 2.2×10^{-15} µCi/mL Standard Deviation of Mean MDC: 1.2×10^{-15} µCi/mL

MDC Minimum Detectable Concentration

Table D.5 Offsite Atmospheric Plutonium Results for Standby Samplers - 1993

Sampling Location	Number	Maximum	Minimum	Arithmetic Mean	Standard Deviation	Mean as %DCG
^{238}Pu Concentration (10^{-18} µCi/mL)						
AZ (Winslow & Tucson)	3	26	−9.9	5.3	18	NA
CA (Bishop & Ridgecrest)	3	3.9	−1.0	1.3	2.5	NA
CO (Denver & Cortez)	3	19	−8.3	3.5	14	NA
ID (Nampa & Mountain Home)	3	16	1.9	7.3	7.9	NA
MO (Clayton & Joplin)	3	0.0	−9.6	−4.6	4.8	NA
MT (Great Falls & Miles City)	3	36	−13.0	7.4	25	NA
NM (Albuquerque & Carlsbad)	3	11.0	−1.5	4.4	6.1	NA
ND (Bismarck & Fargo)	3	5.9	−18.0	−5.1	12	NA
OR (Burns & Medford)	2	7.6	−12.0	−2.3	14	NA
TX (Austin & Amarillo)	2	7.9	5.4	6.6	1.8	NA
UT (Logan & Vernal)	3	16	−44.0	−13.0	30	NA
WA (Seattle & Spokane)	3	12	−65.0	−19.0	40	NA
WY (Worland & Rock Springs)	3	33	5.2	21	14	NA

Mean MDC: 42 x 10^{-18} µCi/mL Standard Deviation of Mean MDC: 43 x 10^{-18} µCi/mL

DCG Derived Concentration Guide; Established by DOE Order as 3 x 10^{-15} µCi/mL

$^{239+240}$Pu Concentration (10^{-18} µCi/mL)						
AZ (Winslow & Tucson)	3	8.6	2.5	5.3	3.1	NA
CA (Bishop & Ridgecrest)	3	−2.3	−3.9	−3.1	.8	NA
CO (Denver & Cortez)	3	0.0	−4.1	−1.4	2.4	NA
ID (Nampa & Mountain Home)	3	16	0.0	6	8.9	NA
MO (Clayton & Joplin)	3	2.1	−1.7	.1	1.9	NA
MT (Great Falls & Miles City)	3	1.9	0.0	.6	1.1	NA
NM (Albuquerque & Carlsbad)	3	11.0	−2.0	2.9	6.8	NA
ND (Bismarck & Fargo)	3	8.9	1.6	5	3.7	NA
OR (Burns & Medford)	2	4.1	−7.6	−5.8	2.5	NA
TX (Austin & Amarillo)	2	7.2	−7.9	−0.4	11	NA
UT (Logan & Vernal)	3	2.9	−11.0	−3.8	6.9	NA
WA (Seattle & Spokane)	3	12	0.0	4.4	6.3	NA
WY (Worland & Rock Springs)	3	34.0	0.0	18	17	NA

Mean MDC: 29 x 10^{-18} µCi/mL Standard Deviation of Mean MDC: 30 x 10^{-18} µCi/mL

DCG Derived Concentration Guide; Established by DOE Order as 2 x 10^{-15} µCi/mL.
MDC Minimum Detectable Concentration
NA Not Applicable, Result Less than <MDC

Note: These data are from 1st, 2nd and 3rd quarters only

Table D.6 Offsite Atmospheric Tritium Results for Standby Samplers - 1993

Sampling Location	HTO Concentration (10^{-7} pCi/mL) Number	Maximum	Minimum	Arithmetic Mean	Standard Deviation	Mean as %DCG
Shoshone, CA	3	3	−13	−7	9	NA
Austin, NV	3	11	−17	−5	14	NA
Caliente, NV	3	20	−3	7	12	NA
Ely, NV	4	16	−2	5	8	NA
Cedar City, UT	5	21	−13	1	13	NA
Delta, UT	4	8	−2	2	4	NA
Milford, UT	4	13	−1	5	7	NA

Mean MDC: 43 x 10^{-7} pCi/mL Standard Deviation of Mean MDC: 50 x 10^{-7} pCi/mL

DCG Derived Concentration Guide; Established by DOE Order as 1 x 10^{-2} pCi/mL
MDC Minimum Detectable Concentration
NA Not applicable, result is less than MDC

Table D.7 Standby Milk Surveillance Network Radiochemical Analyses Results - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s (MDC)[a] ^{3}H x 10^{-9} µCi/mL[b]	^{89}Sr x 10^{-9} µCi/mL[b]	^{90}Sr x 10^{-9} µCi/mL[b]
Little Rock, AR Borden's	07/06	380 ± 43 (460)	N/A	2.1 ± 0.41 (1.4)*
Russellville, AR Arkansas Tech. Univ.	08/25	-33 ± 120 (390)	N/A	0.73 ± 0.45 (1.5)
Taylor, AZ Sunrise Dairy	09/19	N/A	N/A	0.18 ± 0.28 (1.2)
Tucson, AZ University of Arizona	08/26	75 ± 120 (380)	N/A	0.28 ±0.31 (1.4)
Delta, CO Meadow Gold Dairy	06/09	270 ± 140 (470)	1.0 ± 1.1(1.7)	0.29 ±0.35 (1.5)

(a) Minimum Detectable Concentration (MDC)
(b) Multiply the results by 3.7 x 10^{-7} to obtain Bq/L
* Result is greater than the MDC of analysis
N/A Not Analyzed

Table D.7 (Standby Milk Surveillance Network Radiochemical Analyses Results - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s (MDC)[a] ^{3}H x 10^{-9} µCi/mL[b]	^{89}Sr x 10^{-9} µCi/mL[b]	^{90}Sr x 10^{-9} µCi/mL[b]
Denver, CO Safeway Dairy Plant	06/15	130 ± 140 (470)	-0.49 ± 0.99 (1.5)	0.80 ± 0.34 (1.5)
Quincy, IL Prairie Farms Dairy	06/23	120 ± 140 (460)	0.08 ± 1.1 (1.4)	1.4 ± 0.40 (1.5)
Boise, ID Meadow Gold Dairies	10/29	N/A	0.49 ± 0.68 (1.1)	0.30 ± 0.27 (1.3)
Idaho Falls, ID Reed's Dairy	10/26	N/A	-0.050 ± 0.71 (1.2)	0.59 ± 0.27 (1.3)
Dubuque, IA Swiss Valley Farms, Inc.	08/31	-24 ± 120 (380)	N/A	1.8 ± 0.34 (1.3)*
Ellis, KS Mid-America Dairymen	08/18	360 ± 120 (380)	-1.3 ± 1 (1.4)	1.5 ± 0.37 (1.4)*
Sabetha, KS Mid-America Dairymen	07/14	150 ± 140 (450)	-1.5 ± 1.3 (1.8)	1.6 ± 0.39 (1.5)*
Baton Rouge, LA Borden's	05/17	120 ± 140 (460)	-0.39 ± 1 (1.3)	1.9 ± 0.41 (1.5)*
Monroe, LA Borden's Dairy	05/17	320 ± 140 (450)	N/A	1.3 ± 0.38 (1.5)
New Orleans, LA Brown's Velvet Dairy	04/22	340 ± 140 (460)	-1.1 ± 1.5 (1.9)	2.4 ± 0.44 (1.5)*
Rochester, MN Assoc Milk Prod Inc.	05/10	280 ± 140 (450)	-0.73 ± 0.99 (1.4)	1.6 ± 0.37 (1.4)*
Thief River Falls, MN Bridgeman Dairy	09/09	58 ± 110 (370)	N/A	1 ± 0.35 (1.3)
Monett, MO Mid-America Dairy Inc.	11/01	N/A	0.14 ± 0.88 (1.2)	1.7 ± 0.35 (1.3)*

(a) Minimum Detectable Concentration (MDC)
(b) Multiply the results by 3.7×10^{-7} to obtain Bq/L
* Result is greater than the MDC of analysis
N/A Not Analyzed

Table D.7 (Standby Milk Surveillance Network Radiochemical Analyses Results - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s (MDC)[a] ^{3}H x 10^{-9} µCi/mL[b]	^{89}Sr x 10^{-9} µCi/mL[b]	^{90}Sr x 10^{-9} µCi/mL[b]
Chillicothe, MO Mid-America Dairymen	07/15	310 ± 120 (390)	N/A	1.7 ± 0.41 (1.3)*
Billings, MT Meadow Gold Dairy	11/03	N/A	0.24 ± 0.77 (1.1)	1.2 ± 0.32 (1.3)
Norfolk, NE Gillette Dairy	07/30	32 ± 110 (370)	0.5 ± 1.6 (1.9)	1.8 ± 0.44 (1.4)*
North Platte, NE Mid-America Dairymen	07/30	260 ± 120 (390)	0.7 ± 1.5 (1.9)	1.4 ± 0.42 (1.4)
Albuquerque, NM Borden's Valley Gold	08/23	100 ± 120 (390)	N/A	0.65 ± 0.35 (1.4)
La Plata, NM River Edge Dairy	08/27	220 ± 120 (390)	-0.2 ± 1 (1.2)	1.4 ± 0.41 (1.4)
Bismarck, ND Bridgeman Creamery, Inc.	06/21	420 ± 140 (460)	1 ± 1.3 (1.5)	1.9 ± 0.45 (1.5)*
Grand Forks, ND Minnesota Dairy	06/01	300 ± 140 (470)	N/A	0.64 ± 0.31 (1.3)
Medford, OR Dairygold Farms	10/18	N/A	N/A	0.62 ± 0.35 (1.3)
Redmond, OR Eberhard's Creamery Inc.	12/09	N/A	N/A	N/A
Salem, OR Curly's Dairy	11/01	N/A	0.38 ± 0.76 (1.1)	0.73 ± 0.30 (1.3)
Tillamook, OR Tillamook Creamery	10/27	N/A	-0.75 ± 0.80 (1.2)	1.5 ± 0.31 (1.3)*
Rapid City, SD Gillette Dairy - Black Hills	07/23	-8 ± 120 (380)	N/A	1.4 ± 0.35 (1.3)*

(a) Minimum Detectable Concentration (MDC)
(b) Multiply the results by 3.7×10^{-7} to obtain Bq/L
* Result is greater than the MDC of analysis
N/A Not Analyzed

Table D.7 (Standby Milk Surveillance Network Radiochemical Analyses Results - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s (MDC)[a] ^{3}H x 10^{-9} µCi/mL[b]	^{89}Sr x 10^{-9} µCi/mL[b]	^{90}Sr x 10^{-9} µCi/mL[b]
Sulphur Springs, TX				
Tommy Rue Potts Dairy	11/30	N/A	1.1 ± 8.8 (1)*	1.5 ± 0.42 (1.4)*
Windthorst, TX				
Lloyd Wolf Dairy	09/28	N/A	N/A	0.97 ± 0.31 (1.2)
Seattle, WA				
Darigold Inc.	09/28	N/A	N/A	1.1 ± 0.34 (1.3)
Spokane, WA				
Darigold Inc.	10/28	N/A	0.06 ± 0.90 (1.3)	1.5 ± 0.35 (1.3)*
Cheyenne, WY				
Dairy Gold Foods	09/01	-23 ± 120 (380)	N/A	0.95 ± 0.31 (1.3)
Sheridan, WY				
Mydland Dairy	06/04	150 ± 140 (450)	N/A	1.6 ± 0.41 (1.5)*

(a) Minimum Detectable Concentration (MDC)
(b) Multiply the results by 3.7 x 10^{-7} to obtain Bq/L
* Result is greater than the MDC of analysis
N/A Not Analyzed

Table D.8 Standby Milk Surveillance Network Gamma Spectrometry Results - 1993

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

Sampling Location	Collection Date	Sampling Location	Collection Date
Duncan, AZ		Fayetteville, AR	
Lunt Dairy	09/29	University Of Arkansas	08/17
Taylor, AZ		Little Rock, AR	
Sunrise Dairy	09/19	Bordens	07/06
Tempe, AZ		Russellville, AR	
United Dairymen of Arizona	09/29	Arkansas Tech University	08/25
Tucson, AZ		Chino, CA	
University of Arizona	08/26	CA Institute for Men	09/27
Batesville, AR		Cresent City, CA	
Hills Valley Foods	08/16	Rumiano Cheese Company	09/07

Table D.8 (Standby Milk Surveillance Network Gamma Spectrometry Results - 1993, cont.)

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

Fernbridge, CA	
Humboldt Creamery Assn	09/08
Fresno, CA	
CA State University Creamery	09/27
Helendale, CA	
Osterkamp Dairy No. 2	09/27
Holtville, CA	
Schaffner & Son Dairy	09/21
Lancaster, CA	
High Desert Dairy	09/21
Lompoc, CA	
Federal Penitentiary Camp	12/07
Manchester, CA	
Point Arena Dairies	09/14
Manteca, CA	
Supremo Foods	09/26
Modesto, CA	
Foster Farms - Jersey Dairy	12/07
Petaluma, CA	
Point Reyes Seashore Dairy	09/14
Redding, CA	
McColl's Dairy Produce	12/09
San Jose, CA	
Marquez Bros Mexican Cheese	10/04
San Luis Obispo, CA	
Cal Poly University Dairy	10/14
Soledad, CA	
Correction Training Industry	09/27
Tracy, CA	
Deuel Vocational Institute	12/07
Tulare, CA	
Dairymen's Co-Op. Cream	10/25
Willows, CA	
Mid-America Dairies	12/15
Colorado Springs, CO	
Sinton Dairy	06/06
Delta, CO	
Meadow Gold Dairy	06/09
Denver, CO	
Safeway Dairy Plant	06/15
Ft Collins, CO	
Poudre Valley Creamery	06/07
Boise, ID	
Meadow Gold Dairies	10/29
Buhl, ID	
Smiths Dairy Products	09/20
Caldwell, ID	
Darigold Inc.	10/30
Pocatello, ID	
Rowland's Meadowgold Dairy	10/27
Dubuque, IA	
Swiss Valley Farms, Inc.	08/31
Lake Mills, IA	
Lake Mills Coop Creamery	07/16
Lemars, IA	
Wells Dairy	07/19
Marion, IA	
Mid-America Dairymen	12/03
Ellis, KS	
Mid-America Dairy	08/18
Sabetha, KS	
Mid-America Dairymen	07/14
Manhattan, KS	
Kansas State University	07/27
Baton Rouge, LA	
Borden's	05/17
Lafayette, LA	
Borden's	09/15
Monroe, LA	
Borden's Dairy	05/17
New Orleans, LA	
Brown's Velvet Dry Produce	04/22
New Orleans, LA	
Walker Roemer Dairy	04/22
Shreveport, LA	
Foremost Dairy	06/01
Fergus Falls, MN	
Mid-America Dairymen	05/12
Browerville, MN	
Land O' Lakes, Inc.	06/17
Nicollet, MN	
Doug Schultz Farm	05/27
Rochester, MN	
Association Milk Produce Inc.	05/10
Thief River Falls, MN	
Bridgeman Dairy	09/09
Monett, MO	
Mid-America Dairy Inc.	11/01

Table D.8 (Standby Milk Surveillance Network Gamma Spectrometry Results - 1993, cont.)

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

Sampling Location	Collection Date
Chillicothe, MO	
Mid-America Dairymen Inc.	07/15
Jackson, MO	
Mid-America Dairymen Inc.	12/30
Jefferson City, MO	
Central Dairy Company	12/10
Billings, MT	
Meadow Gold Dairy	11/03
Bozeman, MT	
Country Classic-DBA-Darigold	11/03
Great Falls, MT	
Meadow Gold Dairy	12/08
Kalispell, MT	
Equity Supply Co	12/06
Bismarck, ND	
Bridgeman Creamery, Inc.	06/21
Fargo, ND	
Cass Clay Creamery	06/21
Grand Forks, ND	
Minnesota Dairy	06/01
Minot, ND	
Bridgemen Creamery	06/15
Chappell, NE	
Leprino Foods	07/28
Norfolk, NE	
Gillette Dairy	07/30
North Platte, NE	
Mid-America Dairymen	07/30
Omaha, NE	
Roberts Dairy, Marshall Green	11/03
Superior, NE	
Mid-America Dairymen	07/29
Albuquerque, NM	
Borden's Valley Gold	08/23
La Plata, NM	
River Edge Dairy	08/27
Las Vegas, NV	
Anderson Dairy	10/01
Reno, NV	
Model Dairy	09/24
Yerington, NV	
Valley Dairy	11/29
Coalgate, OK	
Larry Krebs Dairy	11/29
Claremore, OK	
Swan Brothers Dairy	11/19
Mcalester, OK	
Jackie Brannon Corr. Center	12/10
Stillwater, OK	
OK State University Dairy	11/22
Grants Pass, OR	
Valley Of Rouge Dairy	09/13
Junction City, OR	
Lockmead Farms Inc.	10/25
Klamath Falls, OR	
Klamath Dairy Products	09/20
Medford, OR	
Dairygold Farms	10/18
Myrtle Point, OR	
Safeway Stores Inc.	09/14
Ontario, OR	
Eastway Dairy	12/13
Portland, OR	
Darigold Farms	12/31
Redmond, OR	
Eberhard's Creamery Inc.	12/09
Salem, OR	
Curly's Dairy	11/01
Tillamook, OR	
Tillamook Company Creamery	10/27
Ethan, SD	
Ethan Dairy Products	06/29
Rapid City, SD	
Gillette Dry-Black Hills	07/23
Sioux Falls, SD	
Lakeside Dairy	12/13
Volga, SD	
Land O'Lakes Inc.	06/14
Canyon, TX	
West Texas State Dairy	10/11

Table D.8 (Standby Milk Surveillance Network Gamma Spectrometry Results - 1993, cont.)

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

Sampling Location	Collection Date	Sampling Location	Collection Date
Corpus Christi, TX		Smithfield, UT	
Hygeia Milk Plant	11/30	Cache Valley Dairy	12/13
Fabens, TX		Moses Lake, WA	
Island Dairy - El Paso County	12/08	Safeway Stores, Inc.	10/28
Glen Rose, TX		Seattle, WA	
Dewayne Hankins Dairy	10/21	Darigold, Inc.	09/28
Sulphur Springs, TX		Spokane, WA	
Tommy Rue Potts Dairy	11/30	Darigold, Inc.	10/28
Windthorst, TX		Riverton, WY	
Lloyd Wolf Dairy	09/28	Western Dairymen's Co-Op.	06/03
Beaver, UT		Sheridan, WY	
Cache Valley Dairy	12/30	Mydland Dairy	06/04
Provo, UT		Thayne, WY	
Byu Dairy Products Laboratory	12/30	Western Dairymen's Co-Op.	06/17
Richfield, UT		Cheyenne, WY	
Ideal Dairy	12/17	Dairy Gold Foods	09/01

Table D.9 Personnel Thermoluminescent Dosimetry Results - 1993

Station Name		Number of Days	Daily Deep Dose Exposure (mrem) Min.	Max.	Mean	Total Annual[a] Exposure (mrem)	Percent Completeness
002	Caliente, NV	361	0.22	0.50	0.33	121	99
006	Indian Springs, NV	354	0.21	0.37	0.28	102	97
007	Goldfield, NV	259	0.23	0.45	0.34	124	71
009	Blue Eagle Ranch, NV	347	0.22	0.41	0.30	110	95
010	Complex I, NV	361	0.17	0.39	0.31	113	99
011	Complex I, NV	361	0.30	0.39	0.33	120	99
014	Coyote Summit, NV	361	0.22	0.35	0.28	102	99
015	Coyote Summit, NV	361	0.26	0.46	0.33	121	99
018	Nyala, NV	339	0.21	0.85	0.51	186	93
019	Goldfield, NV	350	0.26	0.62	0.41	150	96
021	Beatty, NV	361	0.14	0.44	0.31	113	99
022	Alamo, NV	358	0.12	0.36	0.24	88	98
025	American Borate, NV	365	0.09	0.20	0.14	51	100
029	Stone Cabin Ranch, NV	288	0.29	0.42	0.32	117	79

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.9 (Personnel Thermoluminescent Dosimetry Results - 1993, cont.)

Station Name	Number of Days	Daily Deep Dose Exposure (mrem) Min.	Max.	Mean	Total Annual[a] Exposure (mrem)	Percent Completeness
037 Indian Springs, NV	361	0.15	0.27	0.21	77	99
038 Beatty, NV	296	0.20	0.64	0.36	131	81
040 Goldfield, NV	350	0.22	0.49	0.38	139	96
042 Tonopah, NV	325	0.32	0.55	0.39	142	89
044 Cedar City, UT	361	0.07	0.40	0.26	95	99
045 St. George, UT	361	0.04	0.25	0.18	66	99
052 Salt Lake City, UT	358	0.05	0.33	0.22	80	98
056 American Borate, NV	365	0.10	0.35	0.18	66	100
060 Shoshone, CA	354	0.20	0.54	0.34	124	97
232 Hiko, NV	361	0.19	0.40	0.28	95	99
248 Penoyer Farms, NV	358	0.21	0.35	0.27	99	98
264 Rachel, NV	336	0.18	0.35	0.27	99	92
293 Pioche, NV	361	0.11	0.30	0.23	84	99
300 Koyne Ranch, NV	358	0.19	0.31	0.26	95	98
302 Gabbs, NV	354	0.20	0.33	0.28	102	97
304 Death Valley Jct., CA	354	0.26	0.45	0.36	131	97
307 Mina, NV	255	0.12	0.47	0.28	102	70
329 Austin, NV	325	0.11	0.37	0.31	113	89
334 Rachel, NV	358	0.22	0.36	0.29	106	98
336 Caliente, NV	361	0.18	0.30	0.24	88	99
339 Tonopah, NV	354	0.28	0.36	0.32	117	97
341 Silver Peak, NV	266	0.18	0.37	0.28	102	73
344 Delta, UT	310	0.11	0.31	0.18	66	85
345 Delta, UT	358	0.10	0.32	0.22	80	98
346 Milford, UT	358	0.10	0.36	0.26	95	98
347 Milford, UT	358	0.13	0.36	0.28	102	98
348 Overton, NV	361	0.03	0.23	0.17	62	99
359 Death Valley, CA	354	0.26	0.39	0.32	117	97
370 Twin Springs Ranch, NV	91	0.23	0.52	0.37	135	25
372 Pahrump, NV	208	0.25	0.42	0.32	117	57
379 Manhattan, NV	350	0.28	0.57	0.36	131	96
380 Amargosa Valley, NV	358	0.20	0.50	0.30	110	98
404 Shoshone, CA	354	0.23	0.43	0.30	110	97
405 Indian Springs, NV	354	0.18	0.30	0.23	84	97
411 Pahrump, NV	354	0.08	0.29	0.22	80	97
426 Amargosa Center, NV	358	0.20	0.32	0.27	99	98
427 Alamo, NV	361	0.16	0.31	0.24	88	99
429 Beatty, NV	109	0.19	0.33	0.26	95	30
443 Rachel, NV	350	0.24	0.31	0.28	102	96
444 Ely, NV	361	0.25	0.39	0.29	106	99
445 Terrell's Ranch, NV	358	0.28	0.38	0.34	124	98

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.9 (Personnel Thermoluminescent Dosimetry Results - 1993, cont.)

Station Name		Number of Days	Daily Deep Dose Exposure (mrem) Min	Max	Mean	Total Annual[(a)] Exposure (mrem)	Percent Completeness
448	Ione, NV	266	0.21	0.54	0.37	135	73
449	Round Mountain, NV	350	0.31	0.84	0.48	175	96
450	Pahrump, NV	263	0.03	0.31	0.20	73	72
453	USDI	365	0.11	0.27	0.17	62	100
454	Cedar City, UT	361	0.04	0.32	0.21	77	99
455	Ely, NV	361	0.22	0.29	0.25	91	99
467	USDI	365	0.13	0.23	0.17	62	100
468	USDI	281	0.03	0.18	0.13	47	77
470	USDI	365	0.12	0.21	0.15	55	100
555	Beatty, NV	321	0.24	0.35	0.30	110	88
556	Beatty, NV	266	0.29	0.34	0.31	113	73
557	USDI	189	0.13	2.73	1.00	365	52
580	Ione, NV	91	0.34	0.34	0.34	124	25
582	USDI	91	0.23	0.23	0.23	84	25

Total data completeness: 88.8%

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.10 Personnel Thermoluminescent Dosimetry Results - 1992

Station Name		Number of Days	Daily Deep Dose Exposure (mrem) Min	Max	Mean	Total Annual[(a)] Exposure (mrem)	Percent Completeness
002	Caliente, NV	341	0.49	0.82	0.59	216	93
003	Hot Creek Ranch, NV	237	0.24	1.78	0.85	310	65
006	Indian Springs, NV	336	0.28	0.54	0.39	142	92
007	Goldfield, NV	376	0.29	0.71	0.49	179	103
009	Blue Eagle Ranch, NV	305	0.21	2.23	0.63	230	84
010	Complex I, NV	341	0.36	0.78	0.57	208	93
011	Complex I, NV	335	0.40	0.68	0.54	197	92
014	Coyote Summit, NV	343	0.33	0.64	0.46	168	94
015	Coyote Summit, NV	342	0.32	0.60	0.46	168	94
018	Nyala, NV	320	0.25	1.14	0.73	267	88
019	Goldfield, NV	307	0.33	0.97	0.55	201	84
021	Beatty, NV	275	0.38	0.78	0.54	197	75
022	Alamo, NV	338	0.33	0.53	0.41	150	93
025	American Borate, NV	262	0.25	0.40	0.33	121	72

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.10 (Personnel Thermoluminescent Dosimetry Results - 1992, cont.)

Station Name		Number of Days	Daily Deep Dose Exposure (mrem) Min	Max	Mean	Total Annual[a] Exposure (mrem)	Percent Completeness
029	Stone Cabin Ranch, NV	349	0.33	1.46	0.74	270	96
037	Indian Springs, NV	302	0.23	0.57	0.39	142	83
038	Beatty, NV	360	0.13	0.69	0.51	186	99
040	Goldfield, NV	337	0.32	0.78	0.53	194	92
042	Tonopah, NV	336	0.35	0.77	0.53	194	92
044	Cedar City, UT	309	0.31	0.71	0.50	183	85
045	St. George, UT	341	0.18	0.56	0.37	135	93
052	Salt Lake City, UT	339	0.31	0.81	0.48	176	93
056	American Borate, NV	280	0.22	1.39	0.40	146	77
060	Shoshone, CA	297	0.24	0.60	0.45	164	81
232	Hiko, NV	336	0.29	0.61	0.45	164	92
248	Penoyer Farms, NV	239	0.33	0.68	0.50	183	65
264	Rachel, NV	344	0.34	0.62	0.48	175	94
293	Pioche, NV	342	0.19	0.75	0.48	175	94
300	Koyne Ranch, NV	336	0.32	0.52	0.42	153	92
302	Gabbs, NV	337	0.27	0.69	0.49	179	92
304	Death Valley Jct, CA	311	0.13	0.80	0.54	197	85
307	Mina, NV	354	0.35	1.19	0.59	215	97
329	Austin, NV	316	0.42	0.82	0.63	230	87
334	Rachel, NV	335	0.32	0.64	0.50	183	92
336	Caliente, NV	331	0.30	0.75	0.46	168	91
339	Tonopah, NV	337	0.38	0.76	0.60	219	92
341	Silver Peak, NV	310	0.38	0.71	0.56	205	85
344	Delta, UT	340	0.29	0.82	0.47	172	93
345	Delta, UT	340	0.32	0.75	0.46	168	93
346	Milford, UT	339	0.30	0.76	0.48	175	93
347	Milford, UT	339	0.31	0.84	0.47	172	93
348	Overton, NV	303	0.26	0.68	0.43	157	83
358	Beatty, NV	245	0.33	0.71	0.48	175	67
359	Death Valley, CA	285	0.35	0.75	0.56	205	78
370	Twin Springs Ranch, NV	342	0.33	0.99	0.61	223	94
372	Pahrump, NV	327	0.12	0.63	0.40	146	90
377	Las Vegas USDI, NV	196	0.23	1.06	0.44	161	54
379	Manhattan, NV	337	0.40	0.83	0.61	223	92
380	Amargosa Valley, NV	325	0.40	1.60	1.03	376	89
404	Shoshone, CA	327	0.32	0.68	0.46	168	90
405	Indian Springs, NV	296	0.31	0.58	0.43	157	81
411	Pahrump, NV	354	0.18	0.57	0.37	135	97
426	Amargosa Center, NV	352	0.25	0.64	0.50	183	96
427	Alamo, NV	279	0.25	0.71	0.44	161	76
429	Beatty, NV	365	0.15	0.63	0.46	168	100
443	Rachel, NV	345	0.34	0.70	0.48	175	95
444	Ely, NV	343	0.32	0.62	0.46	179	94
445	Terrell's Ranch, NV	364	0.16	0.71	0.52	190	100
448	Ione, NV	309	0.37	0.84	0.54	197	85
449	Round Mountain, NV	314	0.45	0.86	0.64	234	86
450	Pahrump, NV	333	0.19	0.59	0.42	153	91
453	Las Vegas USDI, NV	258	0.24	1.15	0.39	142	71

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.10 (Personnel Thermoluminescent Dosimetry Results 1992, cont.)

Station Name	Number of Days	Daily Deep Dose Exposure (mrem) Min	Max	Mean	Total Annual[a] Exposure (mrem)	Percent Completeness
454 Cedar City, UT	305	0.33	0.70	0.45	164	84
455 Ely, NV	336	0.41	0.82	0.53	194	92
467 Las Vegas USDI, NV	251	0.19	1.29	0.43	157	69
468 Las Vegas USDI, NV	251	0.25	1.39	0.47	172	69
470 Las Vegas USDI, NV	175	0.17	0.40	0.31	113	48

Total data completeness: 86.8%

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.11 Environmental Thermoluminescent Dosimetry Results - 1993

Station Name	Number of Days	Daily Exposure (mR) Min	Max	Mean	Total Exposure[a] (mR)	Percent Completeness
Alamo, NV	365	0.22	0.25	0.24	88	100
Amargosa Valley, NV	365	0.20	0.32	0.25	91	100
American Borate, NV	365	0.25	0.33	0.29	106	100
Angleworm Ranch, NV	365	0.29	0.33	0.31	113	100
Atlanta Mine, NV	365	0.20	0.31	0.26	95	100
Austin, NV	365	0.33	0.39	0.35	128	100
Baker, CA	134	0.23	0.23	0.23	84	37
Barstow, CA	181	0.28	0.34	0.30	110	50
Battle Mountain, NV	296	0.20	0.22	0.21	77	81
Beatty, NV	365	0.28	0.34	0.31	113	100
Bishop, CA	180	0.29	0.34	0.32	117	49
Blue Eagle Ranch, NV	365	0.18	0.23	0.20	73	100
Blue Jay, NV	365	0.33	0.39	0.36	131	100
Boulder, UT	312	0.20	0.25	0.23	84	85
Bryce Canyon, UT	365	0.18	0.23	0.21	77	100
Cactus Springs, NV	290	0.16	0.20	0.18	66	79
Caliente, NV	365	0.21	0.27	0.25	91	100
Carp, NV	355	0.23	0.26	0.24	88	97
Cedar City, UT	365	0.17	0.21	0.19	69	100
Cherry Creek, NV	365	0.24	0.27	0.26	95	100
Clark Station, NV	365	0.30	0.33	0.31	113	100
Coaldale, NV	365	0.29	0.32	0.30	110	100
Complex I, NV	365	0.27	0.33	0.30	110	100
Corn Creek, NV	359	0.13	0.16	0.15	55	98
Cortez Hwy. 278, NV	225	0.26	0.30	0.29	106	62
Coyote Summit, NV	365	0.31	0.38	0.34	124	100
Crescent Valley, NV	365	0.23	0.25	0.24	88	100
Currie, NV	365	0.29	0.31	0.30	110	100
Death Valley Jct, CA	365	0.21	0.29	0.25	91	100
Delta, UT	365	0.15	0.22	0.20	73	100
Diablo Wells, NV	365	0.35	0.38	0.36	131	100

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.11 (Environmental Thermoluminescent Dosimetry Results - 1993, cont.)

Station Name	Number of Days	Daily Exposure (mR) Min	Max	Mean	Total Exposure[a] (mR)	Percent Completeness
Duchesne, UT	365	0.13	0.20	0.18	66	100
Duckwater, NV	365	0.27	0.33	0.30	110	100
Elgin, NV	355	0.31	0.37	0.35	128	97
Elko, NV	365	0.20	0.24	0.22	80	100
Ely, NV	365	0.20	0.24	0.22	80	100
Enterprise, UT	304	0.34	0.57	0.45	164	83
Eureka, NV	365	0.28	0.40	0.34	124	100
Fallon, NV	365	0.21	0.23	0.22	80	100
Ferron, UT	202	0.14	0.69	0.29	106	55
Flying Diamond, NV	365	0.19	0.23	0.21	77	100
Furnace Creek, CA	365	0.17	0.22	0.19	69	100
Gabbs, NV	365	0.20	0.23	0.22	80	100
Garrison, UT	365	0.18	0.21	0.20	73	100
Geyser Ranch, NV	365	0.19	0.24	0.21	77	100
Goldfield, NV	365	0.25	0.27	0.26	95	100
Grantsville, UT	296	0.13	0.29	0.20	73	81
Green River, UT	295	0.18	0.21	0.19	69	81
Groom Lake, NV	365	0.21	0.29	0.24	88	100
Gunnison, UT	310	0.16	0.19	0.18	66	85
Hancock Summit, NV	365	0.39	0.45	0.42	153	100
Hiko, NV	365	0.19	0.24	0.21	77	100
Hot Creek Ranch, NV	359	0.30	0.44	0.35	128	98
Ibapah, UT	365	0.27	0.28	0.28	102	100
Independence, CA	88	0.19	0.32	0.25	91	24
Indian Springs, NV	346	0.17	0.27	0.22	80	95
Ione, NV	315	0.29	0.33	0.31	113	86
Jacob Lake, AZ	295	0.23	0.29	0.27	99	81
Kanab, UT	295	0.14	0.18	0.17	62	81
Kirkeby Ranch, NV	365	0.18	0.22	0.21	77	100
Koyens, NV	365	0.24	0.30	0.27	99	100
Las Vegas Airport, NV	355	0.14	0.17	0.16	58	97
Las Vegas UNLV, NV	355	0.16	0.21	0.19	69	97
Las Vegas USDI, NV	355	0.17	0.20	0.19	69	97
Lida, NV	365	0.27	0.30	0.28	102	100
Loa, UT	289	0.28	0.33	0.31	113	79
Lone Pine, CA	358	0.10	0.30	0.23	84	98
Lovelock, NV	365	0.21	0.22	0.22	80	100
Lund, NV	365	0.20	0.24	0.23	84	100
Lund, UT	365	0.26	0.31	0.29	106	100
Mammoth Geothermal, CA	180	0.30	0.34	0.32	117	49
Mammoth Lake, CA	272	0.23	0.36	0.30	110	75
Manhattan, NV	365	0.28	0.46	0.36	131	100
Medlins Ranch, NV	365	0.29	0.35	0.31	113	100
Mesquite, NV	365	0.15	0.18	0.16	58	100
Milford, UT	365	0.29	0.34	0.31	113	100
Mina, NV	365	0.28	0.30	0.28	102	100
Moapa, NV	127	0.20	0.22	0.21	77	35
Monticello, UT	296	0.21	0.26	0.24	88	81
Mtn Meadows Ranch, NV	270	0.21	0.21	0.21	77	74

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.11 (Environmental Thermoluminescent Dosimetry Results - 1993, cont.)

Station Name	Number of Days	Daily Exposure (mR) Min	Max	Mean	Total Exposure[a] (mR)	Percent Completeness
Nash Ranch, NV	365	0.20	0.27	0.23	84	100
Nephi, UT	312	0.17	0.66	0.31	113	85
Nyala, NV	365	0.22	0.26	0.24	88	100
Olancha, CA	345	0.24	0.28	0.25	91	95
Overton, NV	365	0.15	0.17	0.16	58	100
Page, AZ	295	0.16	0.19	0.18	66	81
Pahrump, NV	291	0.13	0.17	0.15	55	80
Parowan, UT	289	0.14	0.22	0.19	69	79
Penoyer Farms, NV	365	0.29	0.37	0.33	121	100
Pine Creek, NV	203	0.32	0.86	0.52	190	56
Pioche, NV	365	0.21	0.24	0.22	80	100
Price, UT	365	0.15	0.23	0.19	69	100
Provo, UT	365	0.23	0.26	0.24	88	100
Queen City Summ., NV	365	0.36	0.37	0.37	135	100
Rachel, NV	365	0.28	0.32	0.30	110	100
Reed Ranch, NV	365	0.28	0.34	0.32	117	100
Reno, NV	365	0.20	0.24	0.22	80	100
Ridgecrest, CA	134	0.26	0.27	0.27	97	37
Round Mountain, NV	365	0.32	0.36	0.34	124	100
Ruby Valley, NV	365	0.24	0.32	0.29	106	100
Desert Cor. Center, NV	365	0.13	0.17	0.16	58	97
Salt Lake City, UT	364	0.14	0.22	0.19	69	100
Shoshone, CA	324	0.20	0.29	0.24	88	89
Shurz, NV	365	0.27	0.30	0.29	106	100
Silver Peak, NV	364	0.22	0.33	0.25	91	100
Springdale, NV	365	0.27	0.37	0.31	113	100
St. George, UT	365	0.14	0.17	0.16	58	100
Steward Ranch, NV	365	0.25	0.33	0.29	106	100
Stone Cabin, NV	365	0.32	0.37	0.33	121	100
Sunnyside, NV	365	0.15	0.18	0.16	58	100
Tempuite, NV	278	0.27	0.30	0.29	106	76
Tonopah Test Range, NV	364	0.33	0.37	0.35	128	100
Tonopah, NV	364	0.31	0.34	0.32	117	100
Trout Creek, UT	365	0.20	0.24	0.22	80	100
Twin Springs, NV	365	0.29	0.34	0.32	117	100
U.S. Ecology, NV	365	0.30	0.36	0.32	117	100
Uhaldes Ranch, NV	364	0.27	0.34	0.30	110	100
Valley Crest, CA	365	0.13	0.20	0.16	58	100
Vernal, UT	365	0.14	0.22	0.20	73	100
Vernon, UT	296	0.15	0.33	0.23	80	81
Warm Springs No. 1, NV	365	0.36	1.17	0.53	194	100
Warm Springs No. 2, NV	270	0.81	0.85	0.84	307	74
Wells, NV	365	0.21	0.25	0.23	84	100
Wendover, UT	365	0.20	0.22	0.21	77	100
Willow Springs, UT	296	0.11	0.28	0.18	66	81
Winnemucca, NV	365	0.25	0.28	0.26	95	100
Youngs Ranch, NV	365	0.12	0.25	0.19	66	100

Total Data Completeness: 91.4%

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate by 365.25

Table D.12 Environmental Thermoluminescent Dosimetry Results - 1992

Station Name	Number of Days	Daily Exposure (mR) Min	Max	Mean	Total Exposure[a] (mR)	Percent Completeness
Alamo, NV	366	0.28	0.31	0.30	110	100
Amargosa Center, NV	268	0.34	0.40	0.37	135	73
Amargosa Valley, NV	269	0.31	0.40	0.35	128	74
American Borate, NV	268	0.31	0.40	0.36	131	73
Atlanta Mine, NV	275	0.20	0.29	0.24	88	75
Austin, NV	275	0.38	0.46	0.40	146	75
Baker, CA	366	0.25	0.30	0.28	102	100
Barstow, CA	366	0.30	0.36	0.33	121	100
Battle Mountain, NV	274	0.19	0.36	0.28	102	75
Beatty, NV	267	0.34	0.40	0.37	135	73
Bishop, CA	364	0.31	0.36	0.34	124	100
Blue Eagle Ranch, NV	359	0.21	0.26	0.24	88	98
Blue Jay, NV	360	0.37	0.46	0.41	150	99
Boulder, UT	296	0.21	0.30	0.25	91	81
Bryce Canyon, UT	296	0.20	0.29	0.24	88	81
Cactus Springs, NV	366	0.19	0.23	0.21	77	100
Caliente, NV	366	0.29	0.35	0.32	117	100
Carp, NV	366	0.28	0.34	0.30	110	100
Cedar City, UT	303	0.17	0.26	0.22	80	83
Cherry Creek, NV	272	0.25	0.35	0.30	110	75
Clark Station, NV	358	0.32	0.39	0.37	135	98
Coaldale, NV	276	0.31	0.38	0.34	124	76
Colorado City, AZ	232	0.20	0.32	0.26	95	64
Complex I, NV	365	0.09	0.38	0.30	110	100
Corn Creek, NV	366	0.15	0.18	0.17	62	100
Cortez Hwy 278, NV	206	0.26	0.47	0.33	121	56
Coyote Summit, NV	364	0.36	0.48	0.42	153	100
Crescent Valley, NV	303	0.21	0.37	0.28	102	83
Currant , NV	358	0.33	0.36	0.35	128	98
Currie, NV	179	0.28	0.47	0.38	139	49
Death Valley Jct, CA	181	0.32	0.33	0.33	121	50
Delta, UT	357	0.23	0.28	0.25	91	98
Desert Co. Fty., NV	366	0.17	0.20	0.19	69	100
Diablo Well, NV	360	0.37	0.43	0.41	150	99
Duchesne, UT	359	0.20	0.26	0.23	84	98
Duckwater, NV	359	0.31	0.37	0.33	121	98
Elgin, NV	365	0.40	0.50	0.43	157	100
Elko, NV	303	0.19	0.37	0.26	95	83
Ely, NV	275	0.19	0.29	0.24	88	75
Enterprise, UT	296	0.31	0.47	0.38	139	81
Eureka, NV	359	0.07	0.41	0.29	106	98
Fallon, NV	302	0.21	0.48	0.30	110	83

(a) Total exposure is calculated by multiplying the mean daily exposure rate 365.25

Table D.12 (Environmental Thermoluminescent Dosimetry Results - 1992, cont.)

Station Name	Number of Days	Daily Exposure (mR) Min	Max	Mean	Total Exposure[a] (mR)	Percent Completeness
Ferron, UT	359	0.20	0.26	0.23	84	98
Flying Diamond, NV	366	0.06	0.29	0.23	84	100
Furnace Creek, CA	268	0.23	0.30	0.26	95	73
Gabbs, NV	274	0.25	0.30	0.27	99	75
Garrison, UT	272	0.19	0.24	0.22	80	75
Geyser Ranch, NV	275	0.18	0.28	0.23	84	75
Goldfield, NV	276	0.30	0.35	0.32	117	76
Grantsville, UT	358	0.22	0.27	0.24	88	98
Green River, UT	366	0.23	0.38	0.28	102	100
Groom Lake, NV	236	0.29	0.37	0.32	117	65
Gunnison, UT	302	0.16	0.26	0.20	73	83
Hancock Summit, NV	366	0.46	0.57	0.50	183	100
Hiko, NV	366	0.25	0.31	0.27	99	100
Hot Creek Ranch, NV	353	0.28	0.44	0.36	131	97
Ibapah, UT	272	0.25	0.36	0.30	110	75
Independence, CA	211	0.10	0.33	0.24	88	58
Indian Springs, NV	364	0.19	0.22	0.21	77	100
Ione, NV	231	0.31	0.43	0.36	131	63
Jacob's Lake, AZ	364	0.27	0.42	0.33	121	100
Kanab, UT	366	0.19	0.31	0.24	88	100
Kirkeby Ranch, NV	280	0.17	0.26	0.22	80	77
Koyen's Ranch, NV	366	0.31	0.38	0.33	121	100
Las Vegas, Apt., NV	267	0.13	0.25	0.18	66	73
Las Vegas, UNLV, NV	267	0.11	0.25	0.17	62	73
Las Vegas, USDI, NV	267	0.15	0.33	0.22	80	73
Lida, NV	275	0.30	0.38	0.33	121	75
Loa, UT	296	0.32	0.42	0.35	128	81
Lone Pine, CA	315	0.30	0.35	0.32	117	86
Lovelock, NV	302	0.20	0.37	0.27	99	83
Lund, NV	274	0.20	0.32	0.26	95	75
Lund, UT	296	0.27	0.43	0.33	121	81
Mammoth Geother, CA	365	0.33	0.41	0.36	131	100
Mammoth Lakes, CA	134	0.30	0.34	0.32	117	37
Manhattan, NV	231	0.38	0.45	0.41	150	63
Medlin's Ranch, NV	366	0.36	0.44	0.39	142	100
Mesquite, NV	365	0.19	0.36	0.25	91	100
Milford, UT	210	0.34	0.41	0.36	131	58
Mina, NV	275	0.31	0.36	0.33	121	75
Moapa, NV	365	0.07	0.29	0.23	84	100
Monticello, UT	365	0.26	0.44	0.33	121	100
Mtn Meadows Ranch, NV	272	0.22	0.26	0.24	88	75
Nash Ranch, NV	366	0.06	0.29	0.23	84	100
Nyala, NV	359	0.27	0.31	0.29	106	98

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate 365.25

Table D.12 (Environmental Thermoluminescent Dosimetry Results - 1992, cont.)

Station Name	Number of Days	Daily Exposure (mR) Min	Max	Mean	Total Exposure[a] (mR)	Percent Completeness
Nephi, UT	302	0.17	0.25	0.20	73	83
Olancha, CA	365	0.28	0.31	0.30	110	100
Overton, NV	366	0.19	0.43	0.26	95	100
Page, AZ	366	0.07	0.27	0.21	77	100
Parowan, UT	294	0.19	0.28	0.24	88	81
Penoyer Farms, NV	365	0.38	0.47	0.41	150	100
Pine Creek Ranch, NV	265	0.40	0.42	0.41	150	73
Pioche, NV	366	0.26	0.30	0.28	102	100
Price, UT	359	0.22	0.28	0.25	91	98
Provo, UT	358	0.21	0.26	0.23	84	98
Pahrump, NV	366	0.17	0.22	0.19	69	100
Queen City Summit, NV	360	0.40	0.46	0.43	157	99
Rachel, NV	366	0.35	0.45	0.39	142	100
Reed Ranch, NV	360	0.35	0.43	0.39	142	99
Reno, NV	290	0.30	0.32	0.31	113	79
Ridgecrest, CA	366	0.29	0.36	0.32	117	100
Round Mountain, NV	276	0.36	0.40	0.38	139	76
Ruby Valley, NV	302	0.23	0.49	0.35	128	83
Salt Lake City, UT	358	0.23	0.28	0.25	91	98
Shoshone, CA	366	0.24	0.28	0.26	95	100
Shurz, NV	301	0.26	0.40	0.33	121	82
Silver Peak, NV	274	0.25	0.30	0.28	102	75
Springdale, NV	267	0.35	0.47	0.41	150	73
St. George, UT	356	0.15	0.22	0.18	66	98
Steward Ranch, NV	275	0.27	0.42	0.34	124	75
Stone Cabin Ranch, NV	356	0.36	0.43	0.39	142	98
Sunnyside, NV	273	0.14	0.22	0.18	66	75
Tempiute, NV	366	0.35	0.45	0.38	139	100
Terrel's Ranch, NV	267	0.36	0.41	0.39	142	73
Tonopah Test Range, NV	358	0.38	0.47	0.41	150	98
Tonopah, NV	275	0.36	0.42	0.38	139	75
Trout Creek, UT	271	0.21	0.28	0.24	88	74
Twin Springs Ranch, NV	360	0.33	0.41	0.37	135	99
U.S. Ecology, NV	267	0.37	0.47	0.41	150	73
US Ecology, NV	268	0.36	0.43	0.40	146	73
Uhaldes Ranch, NV	366	0.33	0.43	0.38	139	100
Valley Crest, CA	268	0.19	0.23	0.21	77	73
Vernal, UT	359	0.21	0.26	0.24	88	98
Vernon, UT	358	0.22	0.27	0.24	88	98
Warm Springs No. 2, NV	176	0.93	1.08	1.00	365	48
Wells, NV	301	0.21	0.41	0.29	106	82
Wendover, UT	238	0.18	0.28	0.22	80	65
Willow Springs Lodge, UT	358	0.18	0.28	0.22	80	98
Winnemucca, NV	302	0.22	0.40	0.30	110	83
Young's Ranch, NV	274	0.31	0.36	0.32	117	75

Total Data Completeness: 85.7%

(a) Total annual exposure is calculated by multiplying the mean daily exposure rate 365.25

Table D.13 Long-Term Hydrological Monitoring Program Analytical Results for Locations in the Vicinity of the Nevada Test Site - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Shoshone, CA			
Shoshone Spring	02/08	−0.2 ± 1.6	NA
	08/16	1.4 ± 1.5	NA
Amargosa Valley, NV			
Well Mary Nickell's	02/02	1.5 ± 1.5	NA
	08/10	0.4 ± 1.6	NA
Adaven, NV			
Adaven Spring	01/06	31 ± 2.0	0.03
	07/07	36 ± 2.0	0.04
Alamo, NV			
Well 4 City	01/06	−0.6 ± 1.6	NA
	07/08	−0.1 ± 1.3	NA
Ash Meadows, NV			
Crystal Pool	05/12	−1.6 ± 1.4	NA
	11/09	1.1 ± 1.5	NA
Fairbanks Springs	05/12	2.0 ± 1.7	NA
	11/09	−0.9 ± 2.1	NA
Spring-17S-50E-14cac	06/17	−0.8 ± 1.4	NA
	10/06	1.4 ± 1.5	NA
	12/14	−3.1 ± 1.7	NA
Well 18S-51E-7db	05/12	2.3 ± 1.5	NA
	11/09	1.4 ± 1.5	NA
Beatty, NV			
U.S. Ecology	03/03	−0.2 ± 1.7	NA
	09/16	1.5 ± 1.7	NA
Specie Springs	02/04	−85 ± 140[b]	NA
	07/21	18 ± 1.6*	0.02
	12/15	20 ± 1.9*	0.02
Tolicha Peak	02/10	62 ± 140[b]	NA
	04/08	0.7 ± 1.6	NA
Well 11S-48-1dd Coffers	02/03	−120 ± 140	NA
	07/15	0.6 ± 1.4	NA
Well 12S-47E-7dbd City	01/13	37 ± 140[b]	NA
	07/21	0.1 ± 1.6	NA
Well Road D Spicers	02/10	210 ± 140[b]	NA
	06/08	0.8 ± 1.4	NA
Younghans Ranch	06/24	3.8 ± 1.6	NA
(House Well)	12/15	2.0 ± 2.8	NA
Boulder City, NV			
Lake Mead Intake	03/08	37 ± 140[b]	NA
	09/07	54 ± 2.0*	<0.01

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(b) Analysis by conventional method (Mean MDC: 454 pCi/L Standard Deviation of Mean MDC: 3 pCi/L)

Table D.13 (Long-Term Hydrological Monitoring Program Analytical Results for Locations in the Vicinity of the Nevada Test Site - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Clark Station, NV			
Well 6 TTR	02/02	0.4 ± 1.8	NA
	08/12	−0.9 ± 1.5	NA
Hiko, NV			
Crystal Springs	01/06	1.6 ± 1.6	NA
	07/13	2.5 ± 1.9	NA
Indian Springs, NV			
Well 1 Sewer Company	03/15	11 ± 140[b]	NA
	09/13	−1.4 ± 1.6	NA
Well 2 US Air Force	03/15	140 ± 140[b]	NA
	09/13	3.7 ± 1.8	NA
Johnnie, NV			
Well Johnnie Mine	03/15	−160 ± 140[b]	NA
	09/15	2.1 ± 1.8	<0.01
Las Vegas, NV			
(Alt. Well 23A)	04/05	−1.7 ± 1.6	NA
Well 28 Water District	10/01	−0.2 ± 1.9	NA
Lathrop Wells, NV			
City 15S-50E-18cdc	04/09	4.1 ± 1.6	NA
	10/06	−1.3 ± 1.9	NA
Nyala, NV			
Sharp's Ranch	02/02	−11 ± 140[b]	NA
	08/12	1.7 ± 1.6	NA
Oasis Valley, NV			
Goss Springs	02/09	74 ± 140[b]	NA
	08/20	0.3 ± 1.6	NA
Pahrump, NV			
Calvada Well	02/08	0.4 ± 1.4	NA
	08/16	0.6 ± 1.4	NA
Rachel, NV			
Wells 7 & 8 Penoyer	05/10	3.8 ± 1.4	NA
	10/05	−1.4 ± 1.5	NA
Well 13 Penoyer	04/28	−0.3 ± 1.7	NA
	10/05	−1.4 ± 1.7	NA

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(b) Analysis by conventional method (Mean MDC: 454 pCi/L Standard Deviation of Mean MDC: 3 pCi/L)

Table D.13 (Long-Term Hydrological Monitoring Program Analytical Results for Locations in the Vicinity of the Nevada Test Site - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Well Penoyer Culinary	07/13	−1.7 ± 1.4	NA
	12/07	−2.2 ± 1.6	NA
Tempiute, NV			
Union Carbide Well	05/05	3.1 ± 1.4	NA
Tonopah, NV			
City Well	03/01	−48 ± 140[b]	NA
	09/15	1.1 ± 1.3	NA
Warm Springs, NV			
Twin Springs Ranch	04/07	−4.1 ± 1.7	NA
	10/05	1.1 ± 1.9	NA

Mean MDC: 5.3 pCi/L Standard Deviation of Mean MDC: 0.8 pCi/L

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(b) Analysis by conventional method (Mean MDC: 454 pCi/L Standard Deviation of Mean MDC: 3 pCi/L)

Table D.14 Long-Term Hydrological Monitoring Program Analytical Results for Project Faultless - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Blue Jay, NV			
Maintenance Station	03/16	7.3 ± 1.8	<0.01
Hot Creek Ranch Spring	03/17	−2.0 ± 1.4	NA
Well Bias	03/17	−0.8 ± 1.6	NA
Well HTH-1	03/23	3.8 ± 1.8	NA
Well HTH-2	03/23	−4.5 ± 1.7	NA
Well Six Mile	Not Sampled, Pump motor removed		

Mean MDC: 5.4 pCi/L Standard Deviation of Mean MDC: 0.5 pCi/L

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

Table D.15 Long-Term Hydrological Monitoring Program Analytical Results for Project Shoal - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Frenchmen Station, NV			
Hunt's Station	02/24	−2.6 ± 1.6	NA
Smith/James Springs	02/25	62 ± 2.1	0.07
Spring Windmill	Not Sampled - Well removed		
Well Flowing	02/25	−2.5 ± 1.8	NA
Well H-3	02/24	0.9 ± 1.6	NA
Well HS-1	02/25	2.7 ± 1.8	NA

Mean MDC: 5.6 pCi/L Standard Deviation of Mean MDC: 0.5 pCi/L

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

Table D.16 Long-Term Hydrological Monitoring Program Analytical Results for Project Rulison - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Rulison, CO			
Lee Hayward Ranch	06/16	116 ± 3.0	0.13
Potter Ranch	06/16	Sample Invalid	NA
Robert Searcy Ranch	06/16	57 ± 2.1	0.06
Felix Sefcovic Ranch	06/16	100 ± 2.4	0.11
Grand Valley, CO			
Battlement Creek	06/16	49 ± 1.9	0.05
City Springs	06/16	−1.6 ± 1.5	NA
Albert Gardner Ranch	06/16	80 ± 2.2	0.09
Spring 300 Yd. N of GZ	06/16	57 ± 2.1	0.06
Well CER Test	06/16	51 ± 2.1	0.06

Mean MDC: 5.1 pCi/L Standard Deviation of Mean MDC: 0.3 pCi/L

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

Table D-17 Long-Term Hydrological Monitoring Program Analytical Results for Rio Blanco - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Rio Blanco, CO			
B-1 Equity Camp (Spring)	06/18	58 ± 2.5	0.06
CER No.1 Black Sulfur (Spring)	06/18	49 ± 1.9	0.05
CER No.4 Black Sulfur (Spring)	06/18	55 ± 2.2	0.06
Fawn Creek 1	06/17	180 ± 110[b]	NA
Fawn Creek 3	06/17	28 ± 1.7	0.03
Fawn Creek 500 Ft. Upstream	06/17	75 ± 110[b]	NA
Fawn Creek 500 Ft. Downstream	06/17	39 ± 2.2	0.04
Fawn Creek 6800 Ft. Upstream	06/17	34 ± 2.1	0.04
Fawn Creek 8400 Ft. Downstream	06/17	39 ± 1.9	0.04
Johnson Artesian Well	06/17	1.8 ± 1.8	NA
Brennan Windmill (Well)	06/17	7.0 ± 2.0	<0.01
Well RB-D-01	06/17	−0.5 ± 1.6	NA
Well RB-D-03	06/17	2.5 ± 1.8	NA
Well RB-S-03	06/17	−0.8 ± 1.6	NA

Mean MDC: 5.7 pCi/L Standard Deviation of Mean MDC: 0.6 pCi/L

NA Not applicable. Percent concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(b) Analysis by conventional method (Mean MDC = 373 Standard Deviation of Mean MDC: 0 pCi/L)

Table D-18 Long-Term Hydrological Monitoring Program Analytical Results for Project Gnome - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)			Percent of Concentration Guide[a]
Malaga, NM					
Well DD-1	06/27	7.4E+07	±	3.2E+05	NA[b,c]
Well LRL-7	06/27	7300	±	150	NA[b,d]
Well PHS 6	06/26	30	±	1.8	0.03
Well PHS 8	06/26	9.0	±	1.7	0.01
Well PHS 9	06/26	1.8	±	1.8	NA
Well PHS 10	06/26	0.0	±	1.8	NA
Well USGS 1	06/27	0.9	±	1.7	NA
Well USGS 4	06/27	140,000	±	400	NA[b,e]
Well USGS 8	06/27	88,000	±	350	NA[b,f]
Carlsbad, NM					
Well 7 City	06/28	1.9	±	1.7	NA
Loving, NM					
Well 2 City	06/26	9.1	±	1.7	0.01
J. Mobley Ranch	06/27	4.9	±	1.5	0.01[g]

Mean MDC: 5.5 pCi/L Standard Deviation of Mean MDC: 0.4 pCi/L

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(b) Analysis by conventional method (Mean MDC = 373 ± 0 pCi/L)

(c,d,e,f,g) Additional analyses greater than MDC:

	Analysis	Result	1 sigma	MDC	Units
(c)	Cs-137	821,000	39,800	NA	pCi/L
	Sr-90	17,000	1400	4700	pCi/L
(d)	Cs-137	112	7	NA	pCi/L
(e)	Sr-90	4,000	12	1.4	pCi/L
(f)	Cs-137	59	5	NA	pCi/L
	Sr-90	2,400	10	1.5	pCi/L
(g)	U-234	11	0.4	0.03	pCi/L
	U-235	0.21	0.02	0.02	pCi/L
	U-238	4.4	0.18	0.02	pCi/L

Table D-19 Long-Term Hydrological Monitoring Program Analytical Results for Project Gasbuggy - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Gobernador, NM			
Arnold Ranch	06/20	14 ± 1.9	0.02
Bixler Ranch	06/22	11 ± 1.7	0.01
Bubbling Springs	06/21	34 ± 1.7	0.04
Cave Springs	06/22	20 ± 1.9	0.02
Cedar Springs	06/21	49 ± 1.9	0.05
La Jara Creek	06/20	41 ± 1.8	0.05
Lower Burro Canyon	06/20	0.0 ± 1.9	NA
Pond N. of Well 30.3.32.343	06/21	36 ± 1.8	0.04
Well EPNG 10-36	06/25	327 ± 3.5	0.36[b]
Well Jicarilla 1	06/20	14 ± 1.5	0.02
Well 28.3.33.233 (South)	06/20	40 ± 1.9	0.04
Windmill 2	06/20	0.3 ± 1.4	NA

Mean MDC: 5.1 pCi/L Standard Deviation of Mean MDC: 0.5 pCi/L

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(b) Additional analyses greater than MDC:

Analysis	Result	1 sigma	MDC	Units
Cs-137	16	3.9	NA	pCi/L

Table D.20 Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble (Salmon Test Site) - 1993

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Onsite Sampling Locations			
Baxterville, MS			
Half Moon Creek	04/18	20 ± 1.6	0.02
	04/19	486 ± 4.2	0.54
Half Moon Creek Overflow	04/18	492 ± 4.7	0.54
	04/19	26 ± 2.4	0.03
Pond West Of GZ	04/18	17 ± 1.6	0.02
	04/19	19 ± 2.1	0.02
REECo Pit Drainage-A	04/22	15 ± 1.5	0.02
REECo Pit Drainage-B	04/22	22 ± 1.9	0.02
REECo Pit Drainage-C	04/22	159 ± 2.6	0.18
Well E-7	04/19	2.2 ± 1.6	NA
Well HM-1	04/19	−0.83 ± 1.5	NA
	04/19	−0.67 ± 1.4	NA
Well HM-2A	04/19	−0.09 ± 1.5	NA
	04/19	−0.61 ± 1.4	NA
Well HM-2B	04/19	−0.94 ± 1.5	NA
	04/19	−0.17 ± 1.4	NA
Well HM-3	04/19	0.82 ± 1.5	NA
	04/19	0.70 ± 1.4	NA
Well HM-L	04/19	896 ± 113	1.0[b]
	04/19	660 ± 4.9	0.73
Well HM-L2	04/19	1.9 ± 1.6	NA
	04/19	1.4 ± 2.2	NA
Well HM-S	04/18	6240 ± 150	6.9[b]
	04/19	5750 ± 140	6.4[b]
Well HMH-1	04/18	2760 ± 130	3.1[b]
	04/19	3340 ± 130	3.7[b]
Well HMH-2	04/18	3640 ± 130	4.0[b]
	04/19	7790 ± 150	8.7[b]
Well HMH-3	04/18	36 ± 2.2	0.04
	04/19	37 ± 2.0	0.04
Well HMH-4	04/18	13 ± 1.6	0.01
	04/19	13 ± 1.7	0.01

* Activity is greater than the minimum detectable concentration (MDC)

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(b) Analysis by conventional method (Mean MDC: 380 pCi/L, Standard Deviation of Mean MDC: 8 pCi/L

Table D.20 (Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble (Salmon Test Site) - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)	Percent of Concentration Guide[a]
Onsite Sampling Locations (cont.)			
Well HMH-5	04/18	1770 ± 130	2.0[b]
	04/19	2970 ± 130	3.3[b]
Well HMH-6	04/18	100 ± 2.5	0.11
	04/19	57 ± 2.0	0.06
Well HMH-7	Not Sampled - Well under water		
Well HMH-8	04/18	17 ± 1.9	0.02
	04/19	14 ± 1.4	0.02
Well HMH-9	04/18	39 ± 1.9	0.04
	04/19	40 ± 1.9	0.04
Well HMH-10	04/18	74 ± 2.6	0.08
	04/19	66 ± 1.9	0.07
Well HMH-11	04/18	21 ± 1.8	0.02
	04/19	23 ± 1.7	0.03
Well HMH-12	04/18	17 ± 2.0	0.02
	04/19	25 ± 1.8	0.03
Well HMH-13	04/18	14 ± 1.9	0.02
	04/19	13 ± 1.8	0.01
Well HMH-14	04/18	18 ± 2.0	0.02
	04/19	17 ± 1.6	0.02
Well HMH-15	04/18	15 ± 1.6	0.02
	04/19	17 ± 2.1	0.02
Well HMH-16	04/18	57 ± 1.9	0.06
	04/19	113 ± 2.8	0.13
Well HT-2C	04/21	15 ± 1.6	0.02
Well HT-4	04/20	6.7 ± 1.7	0.01
Well HT-5	04/19	−0.40 ± 1.7	NA
Offsite Sampling Locations			
Baxterville, MS			
Little Creek No. 1	04/20	20 ± 1.7	0.02
Lower Little Creek No. 2	04/20	21 ± 2.0	0.02
Salt Dome Hunting Club	04/19	21 ± 1.9	0.02
Salt Dome Timber Co.	04/19	23 ± 1.9	0.03

* Activity is greater than the minimum detectable concentration (MDC)

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(c) Rain sample

Table D.20 (Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble (Salmon Test Site) - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)			Percent of Concentration Guide[a]
		Offsite Sampling Locations (cont.)			
Baxterville,MS (cont.)					
Anderson Pond	04/19	17	±	2.0	0.02
Anderson, Billy Ray	04/19	16	±	1.8	0.02
Anderson, Robert Harvey	04/19	16	±	1.9	0.02
	04/20	15	±	2.0	0.02[c]
Anderson, Robert Lowell, Sr.	04/19	19	±	1.8	0.02
Anderson, Robert Lowell, Jr.	04/19	18	±	1.8	0.02
Bilbo, Timothy	04/20	23	±	2.0	0.03[d]
Burge, Joe	04/19	13	±	2.0	0.01
Daniels, Ray	04/21	19	±	1.7	0.02
Daniels, Webster Jr.	04/21	22	±	1.9	0.02
Daniels Fish Pond Well No. 2	04/21	19	±	1.8	0.02
Hibley, Billy	04/20	−2.7	±	1.7	NA[e]
Kelly Gertrude	04/20	−0.5	±	1.6	NA
Napier, Denise	04/19	16	±	1.9	0.02
Lee, P. T.	04/19	37	±	1.8	0.04
Mills, A. C.	04/19	−2.3	±	1.7	NA
Mills, Roy	04/19	14	±	1.7	0.02
Nobles Pond	04/19	18	±	2.0	0.02
Noble, W. H., Jr.	04/19	32	±	2.1	0.04
Saucier, Dennis	04/20	29	±	1.9	0.03
Saucier, Wilma/Yancy	04/20	1.6	±	1.7	NA
Well Ascot 2	Not Sampled - Inaccessible				
City Well	04/21	23	±	1.8	0.03
Columbia, MS					
Dennis, Buddy	04/21	17	±	1.6	0.02
Dennis, Marvin	04/21	19	±	1.6	0.02
City Well 64B	04/19	9.7	±	1.7	0.01
Lumberton, MS					
Anderson, G. W.	04/19	21	±	1.6	0.02
Anderson, Lee L.	04/21	21	±	2.1	0.02

* Activity is greater than the minimum detectable concentration (MDC)
NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable
(a) Established by DOE Order as 90,000 pCi/L tritium
(d) Formerly the residence of Talmadge S. Saucier
(e) Formerly the residence of B. Cambliss

Table D.20 (Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble (Salmon Test Site) - 1993, cont.)

Sampling Location	Collection Date in 1993	Concentration ± 1s of Tritium (pCi/L)			Percent of Concentration Guide[a]
Offsite Sampling Locations (cont.)					
Bond, Bradley K.	04/21	21	±	2.1*	0.02
Cox, Eddie	04/19	23	±	1.7*	0.03
Gil Ray's Crawfish Pond	04/20	20	±	1.5*	0.02
Gipson, Herman	04/20	−0.8	±	1.8	NA
Gipson, Hewie	04/20	21	±	1.6*	0.02
Gipson, Michael	04/20	15	±	1.7*	0.02[f,g]
Gipson, Phillip	04/20	13	±	1.8*	0.01
Graham, Sylvester	04/20	5.2	±	1.5*	0.01
Hartfield, Ray	04/20	0.8	±	1.5	NA
Powers, Shannon	04/21	21	±	1.6*	0.02
Rushing, Debra	04/20	20	±	1.4*	0.02
Saul, Ola	04/20	24	±	1.8*	0.03[f,h]
Saul, Lee L.	04/20	−1.9	±	1.5	NA
Smith, E. J.	04/20	14	±	2.1*	0.02
Smith, Howard	04/20	6.3	±	1.4*	0.01
Smith, Howard-Pond	04/20	24	±	1.8*	0.03
Thompson, Roswell	04/20	20	±	2.2*	0.02
Well 2 City	04/21	−1.8	±	1.7	NA
Purvis, MS					
Burge Willie Ray and Grace	04/19	18	±	1.7*	0.02
City Supply	04/21	−1.4	±	1.6	NA
Gil, Ray-House Well	04/20	4.3	±	1.4	NA

* Activity is greater than the minimum detectable concentration (MDC)

NA Not applicable. Percent of concentration guide is not applicable either because the tritium result is less than the MDC or because the water is known to be nonpotable

(a) Established by DOE Order as 90,000 pCi/L tritium

(f) New sampling location

(g,h) Additional analyses greater than MDC:

	Analysis	Result	1 std. dev.	MDC	Units
(g)	U-235	0.049	0.008	0.01	pCi/L
	U-238	0.048	0.015	0.027	pCi/L
(h)	U-234	0.013	0.017	0.016	pCi/L
	U-235	0.019	0.006	0.0058	pCi/L
	U-238	0.032	0.017	0.0058	pCi/L

Table D.21 Long-Term Hydrological Monitoring Program 1993 Analytical Results for Amchitka Island, Alaska

Sampling Location	Collection Date	Concentration ± 1s Tritium (pCi/L)	Percent of Concentration Guide[a]
		Background Sites	
Clevenger Lake	07/30	20 ± 1.6	0.02
Constantine Spring	07/30	26 ± 1.3	0.03
Constantine Spring-Pump House	07/30	30 ± 1.7	0.03
RX-Site Pump House	07/30	14 ± 1.4	0.02
TX-Site Springs	07/30	19 ± 1.7	0.02
TX-Site Water Tank House	Not Sampled - Tank Dry, Pump Removed		
Dove Cove Creek	07/31	16 ± 1.4	0.02
Jones Lake	07/30	13 ± 1.2	0.01
Rain Base Camp	07/31	6.5 ± 1.7	0.01
Rain Base Camp	08/01	4.5 ± 1.7	NA
Well No. 1 Army	08/01	16 ± 1.6	0.02
Well No. 2 Army	07/30	6.6 ± 1.5	0.01
Well No. 4 Army	07/30	24 ± 1.8	0.03
		Project Cannikin	
Cannikin Lake (North End)	07/29	19 ± 1.7	0.02
Cannikin Lake (South End)	07/29	21 ± 1.8	0.02
DK-45 Lake	07/30	17 ± 1.7	0.02
Ice Box Lake	07/29	20 ± 1.8	0.02
Pit South of Cannikin GZ	07/29	16 ± 1.6	0.02
Well HTH-3	07/29	23 ± 1.8	0.03
White Alice Creek	07/29	19 ± 1.6	0.02
		Project Long Shot	
Long Shot Pond No. 1	08/01	13 ± 1.5	0.01
Long Shot Pond No. 2	08/01	12 ± 1.6	0.01
Long Shot Pond No. 3	08/01	21 ± 1.7	0.02
Mud Pit No. 1	08/01	102 ± 1.9	0.11
Mud Pit No. 2	08/01	140 ± 2.3	0.16
Mud Pit No. 3	08/01	152 ± 2.0	0.17
Reed Pond	08/01	10 ± 1.1	0.01

Mean MDC: 4.7 pCi/L Standard Deviation of Mean MDC: 0.7 pCi/L

(a) Derived from the ^{3}H ALI in ICRP-30 as 90,000 pCi/L tritium All results were > MDC except the result marked NA

Table D.21 (Long-Term Hydrological Monitoring Program 1993 Analytical Results for Amchitka Island, Alaska, cont.)

Sampling Location	Collection Date	Concentration ± 1s Tritium (pCi/L)	Percent of Concentration Guide[a]
		Project Long Shot, (cont.)	
Stream East-Longshot	08/01	184 ± 2.8	0.20
Well EPA-1	08/01	11 ± 1.7	0.01
Well GZ No.1	08/01	1350 ± 130[b]	1.5
Well GZ No.2	08/01	51 ± 1.5	0.06
Well WL-1	08/01	12 ± 1.3	0.01
Well WL-2	08/01	67 ± 1.6	0.07
		Project Milrow	
Clevenger Creek	07/31	22 ± 1.6	0.02
Heart Lake	07/31	16 ± 1.5	0.02
Well W-2	07/31	19 ± 1.8	0.02
Well W-3	07/31	15 ± 1.7	0.02
Well W-4	Not Sampled - Well Dry		
Well W-5	07/31	18 ± 1.6	0.02
Well W-6	07/31	18 ± 1.7	0.02
Well W-7	07/31	16 ± 1.7	0.02
Well W-8	07/31	24 ± 2.1	0.03
Well W-9	Not Sampled - Well Under Water		
Well W-10	07/31	18 ± 1.5	0.02
Well W-11	07/31	36 ± 2.0	0.04
Well W-12	Not Sampled - Well Under Water		
Well W-13	07/31	18 ± 2.0	0.02
Well W-14	07/31	13 ± 1.6	0.10
Well W-15	07/31	19 ± 1.8	0.02
Well W-16	Not Sampled - Well Under Water		
Well W-17	Not Sampled - Well Under Water		
Well W-18	07/31	24 ± 1.8	0.03
Well W-19	Not Sampled - Well Under Water		

Mean MDC: 4.7 pCi/L Standard Deviation of Mean MDC: 0.7 pCi/L

(a) Derived from the ^{3}H ALI in ICRP-30 as 90,000 pCi/L tritium All results were > MDC except the result marked NA

APPENDIX E
RADIOACTIVE NOBLE GASES IN AIR ONSITE

Robert R. Kinnison

The 1993 data consist of krypton and xenon concentrations from eleven stations. The locations of these noble gas sampling stations are shown in Figure E.1. Data from the first quarter of the year are missing for stations located on Pahute and Rainier Mesas, Areas 19 and 20, because these areas were closed during the winter. The P-Tunnel Portal station is an effluent monitoring station. Its data are included in the table but are not used in the analyses of this chapter. The information available is comprised of (1) an alphabetic station description including the area within which the sampling station is located, (2) the dates of sample collection given as the date sample collection began (samples were collected for a one week period), and (3) the krypton and xenon concentrations in μCi/mL x 10^{-12} with one analytic standard deviation (1s). The analytic Minimum Detectable Concentrations (MDC) are shown in the time series plots of the data but are not given in the data table. The units of 10^{-12} μCi/mL are equivalent to pCi/m^3. 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 result minus the background. While negative concentrations have no physical meaning, they are essential for calculating unbiased summary statistics. Note that all of the krypton concentrations are above the average MDC of 4.7 x 10^{-12} μCi/mL and 71 percent of the xenon data are below it's average detection limit of 16.7 x 10^{-12} μCi/mL. The standard deviations of the krypton and xenon MDC's are 2.6 and 17.9 x 10^{-12} μCi/mL respectively.

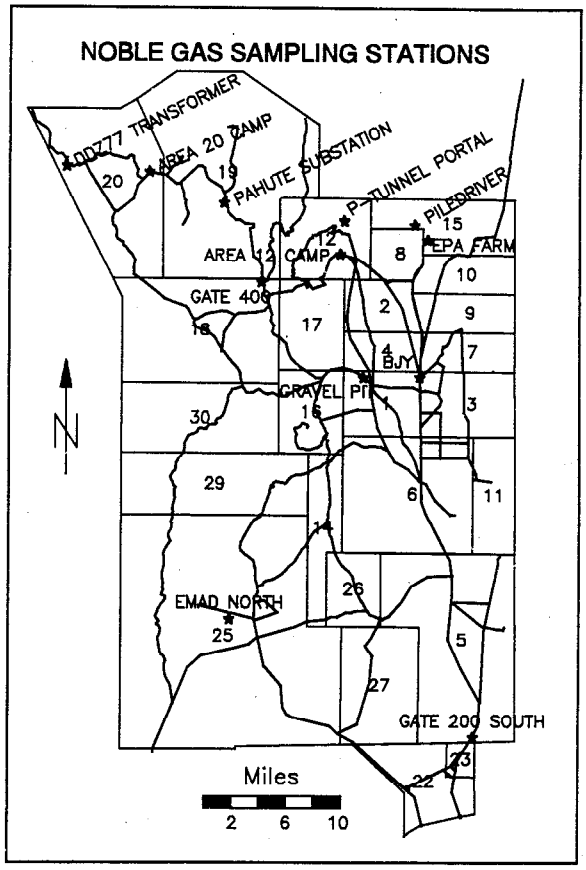


Figure E.1 Nevada Test Site Map

Table E.1 Sample Results for ^{133}Xe and ^{85}Kr - 1993

Sampling Location	Collection Dates	Krypton 10^{-12}μCi/mL ± 1(s)	Xenon 10^{-12}μCi/mL ± 1(s)
Area 1, BJY	93/01/06	* ± *	90.1 ± 10.8
Area 1, BJY	93/01/20	22.3 ± 0.7	-2.9 ± 3.0
Area 1, BJY	93/01/25	32.4 ± 0.8	-8.2 ± 5.5
Area 1, BJY	93/02/01	21.0 ± 0.9	-8.4 ± 4.6

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL$ ± 1(s)	Xenon $10^{-12}\mu Ci/mL$ ± 1(s)
Area 1, BJY	93/02/09	23.7 ± 1.1	-24.3 ± 6.1
Area 1, BJY	93/02/16	20.0 ± 0.6	-0.5 ± 2.2
Area 1, BJY	93/02/22	25.2 ± 0.6	10.3 ± 3.5
Area 1, BJY	93/03/01	24.5 ± 0.7	-11.3 ± 2.5
Area 1, BJY	93/03/08	21.6 ± 0.8	-8.2 ± 3.0
Area 1, BJY	93/03/15	20.4 ± 0.6	2.7 ± 2.2
Area 1, BJY	93/03/22	24.9 ± 0.6	8.8 ± 2.8
Area 1, BJY	93/04/05	29.9 ± 0.7	4.3 ± 2.1
Area 1, BJY	93/04/12	28.1 ± 0.8	1.3 ± 2.5
Area 1, BJY	93/04/19	27.5 ± 0.7	5.0 ± 3.2
Area 1, BJY	93/04/26	31.5 ± 0.8	6.4 ± 4.7
Area 1, BJY	93/05/03	19.5 ± 1.1	-9.3 ± 3.1
Area 1, BJY	93/05/18	20.4 ± 0.8	1.7 ± 2.2
Area 1, BJY	93/05/24	28.3 ± 0.8	-7.9 ± 4.8
Area 1, BJY	93/06/01	35.5 ± 0.6	6.8 ± 3.4
Area 1, BJY	93/06/07	31.3 ± 0.7	2.2 ± 3.8
Area 1, BJY	93/06/21	* ± *	14.9 ± 9.6
Area 1, BJY	93/06/28	29.4 ± 0.7	* ± *
Area 1, BJY	93/07/06	29.3 ± 0.9	* ± *
Area 1, BJY	93/07/12	25.8 ± 0.8	* ± *
Area 1, BJY	93/07/19	25.6 ± 0.7	-3.5 ± 8.3
Area 1, BJY	93/07/26	23.8 ± 0.9	* ± *
Area 1, BJY	93/08/09	28.0 ± 0.8	13.1 ± 32.6
Area 1, BJY	93/08/16	25.9 ± 0.7	* ± *
Area 1, BJY	93/08/30	24.7 ± 1.0	* ± *
Area 1, BJY	93/09/14	26.2 ± 0.7	-4.9 ± 5.9
Area 1, BJY	93/09/21	26.3 ± 0.6	2.1 ± 1.8
Area 1, BJY	93/09/27	26.8 ± 0.9	-5.8 ± 3.5
Area 1, BJY	93/10/13	36.7 ± 0.8	* ± *
Area 1, BJY	93/10/18	34.4 ± 0.8	* ± *
Area 1, BJY	93/10/25	33.4 ± 0.9	19.7 ± 10.2
Area 1, BJY	93/11/01	29.2 ± 0.9	* ± *
Area 1, BJY	93/11/15	28.2 ± 0.8	14.1 ± 6.7
Area 1, BJY	93/11/22	22.3 ± 0.8	* ± *
Area 1, BJY	93/12/07	26.3 ± 0.6	60.6 ± 47.3
Area 1, BJY	93/12/13	32.3 ± 0.7	30.9 ± 16.3
Area 1, BJY	93/12/20	28.0 ± 0.7	16.7 ± 11.9
Area 1, Gravel Pit	93/01/04	17.9 ± 0.9	-9.2 ± 1.9
Area 1, Gravel Pit	93/01/12	22.9 ± 0.6	-1.1 ± 2.3
Area 1, Gravel Pit	93/01/19	* ± *	14.9 ± 5.1
Area 1, Gravel Pit	93/01/26	19.6 ± 0.6	-7.2 ± 3.0
Area 1, Gravel Pit	93/02/02	27.4 ± 0.6	-7.4 ± 2.7
Area 1, Gravel Pit	93/02/09	24.6 ± 1.0	-1.7 ± 2.0
Area 1, Gravel Pit	93/02/17	23.6 ± 1.0	-4.4 ± 2.2
Area 1, Gravel Pit	93/02/24	46.6 ± 0.6	2.3 ± 1.8

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL \pm 1(s)$	Xenon $10^{-12}\mu Ci/mL \pm 1(s)$
Area 1, Gravel Pit	93/03/01	20.4 ± 0.8	* ± *
Area 1, Gravel Pit	93/03/15	25.0 ± 0.6	-2.4 ± 1.8
Area 1, Gravel Pit	93/03/30	35.4 ± 1.5	-8.0 ± 3.5
Area 1, Gravel Pit	93/04/05	28.9 ± 0.8	-6.5 ± 2.0
Area 1, Gravel Pit	93/04/12	23.9 ± 0.7	-2.1 ± 2.0
Area 1, Gravel Pit	93/04/20	38.7 ± 0.8	2.6 ± 2.5
Area 1, Gravel Pit	93/04/26	24.2 ± 0.8	5.5 ± 6.9
Area 1, Gravel Pit	93/05/03	26.5 ± 0.8	-10.2 ± 2.3
Area 1, Gravel Pit	93/05/10	* ± *	-10.1 ± 3.6
Area 1, Gravel Pit	93/05/18	* ± *	-3.9 ± 2.0
Area 1, Gravel Pit	93/06/01	30.8 ± 0.6	13.2 ± 3.7
Area 1, Gravel Pit	93/07/26	19.4 ± 0.9	31.1 ± 17.3
Area 1, Gravel Pit	93/08/02	20.3 ± 0.7	* ± *
Area 1, Gravel Pit	93/08/09	19.1 ± 0.7	13.1 ± 32.6
Area 1, Gravel Pit	93/08/16	22.2 ± 0.7	* ± *
Area 1, Gravel Pit	93/08/23	38.6 ± 0.9	* ± *
Area 1, Gravel Pit	93/08/31	31.2 ± 1.0	25.7 ± 25.5
Area 1, Gravel Pit	93/09/08	26.5 ± 0.9	-0.2 ± 7.1
Area 1, Gravel Pit	93/09/13	26.1 ± 0.8	11.9 ± 7.3
Area 1, Gravel Pit	93/09/20	* ± *	10.7 ± 3.8
Area 1, Gravel Pit	93/09/27	28.5 ± 0.8	12.3 ± 3.6
Area 1, Gravel Pit	93/10/04	29.8 ± 0.7	* ± *
Area 1, Gravel Pit	93/10/11	30.0 ± 0.8	* ± *
Area 1, Gravel Pit	93/10/18	29.2 ± 1.5	* ± *
Area 1, Gravel Pit	93/10/25	29.6 ± 0.8	-0.2 ± 4.3
Area 1, Gravel Pit	93/11/01	21.9 ± 1.1	* ± *
Area 1, Gravel Pit	93/11/08	25.5 ± 1.2	* ± *
Area 1, Gravel Pit	93/11/15	27.5 ± 0.8	* ± *
Area 1, Gravel Pit	93/11/22	26.7 ± 0.7	14.3 ± 8.1
Area 1, Gravel Pit	93/11/29	22.8 ± 0.7	-11.5 ± 6.4
Area 1, Gravel Pit	93/12/06	* ± *	-0.6 ± 8.8
Area 1, Gravel Pit	93/12/13	30.4 ± 0.8	* ± *
Area 1, Gravel Pit	93/12/20	25.8 ± 0.8	* ± *
Area 1, Gravel Pit	93/12/28	24.5 ± 0.7	* ± *
Area 5, Gate 200 S	93/01/04	20.0 ± 0.7	-9.2 ± 1.9
Area 5, Gate 200 S	93/01/11	24.3 ± 0.7	2.7 ± 6.2
Area 5, Gate 200 S	93/01/20	24.7 ± 0.8	-13.0 ± 3.8
Area 5, Gate 200 S	93/01/26	24.9 ± 0.6	-4.4 ± 2.0
Area 5, Gate 200 S	93/02/01	22.9 ± 0.8	-17.8 ± 5.4
Area 5, Gate 200 S	93/02/08	20.8 ± 0.6	1.4 ± 6.3
Area 5, Gate 200 S	93/02/17	21.6 ± 0.8	-14.1 ± 2.7
Area 5, Gate 200 S	93/02/22	26.1 ± 0.7	11.4 ± 5.2
Area 5, Gate 200 S	93/03/01	23.7 ± 1.1	-11.9 ± 4.6
Area 5, Gate 200 S	93/03/16	22.4 ± 0.8	-6.8 ± 2.0
Area 5, Gate 200 S	93/03/22	25.7 ± 0.8	-7.1 ± 3.5

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL$ ± 1(s)	Xenon $10^{-12}\mu Ci/mL$ ± 1(s)
Area 12, Camp	93/04/06	27.5 ± 0.7	0.4 ± 2.1
Area 12, Camp	93/04/13	22.6 ± 0.7	-1.9 ± 1.9
Area 12, Camp	93/04/20	41.9 ± 0.6	7.3 ± 2.8
Area 12, Camp	93/05/11	* ± *	1.8 ± 2.0
Area 12, Camp	93/05/18	* ± *	-8.5 ± 6.7
Area 12, Camp	93/06/07	26.3 ± 0.6	2.2 ± 3.8
Area 12, Camp	93/06/15	19.9 ± 0.6	26.4 ± 8.4
Area 12, Camp	93/06/22	22.6 ± 0.6	5.5 ± 3.5
Area 12, Camp	93/07/06	20.7 ± 0.7	* ± *
Area 12, Camp	93/07/20	23.7 ± 0.7	* ± *
Area 12, Camp	93/07/26	26.5 ± 0.7	* ± *
Area 12, Camp	93/09/09	34.4 ± 1.0	* ± *
Area 12, Camp	93/09/28	21.6 ± 1.0	-10.6 ± 4.9
Area 12, Camp	93/10/11	* ± *	6.1 ± 3.5
Area 12, Camp	93/11/02	28.3 ± 0.7	12.1 ± 7.4
Area 12, Camp	93/11/08	32.1 ± 1.5	-29.3 ± 15.2
Area 12, Camp	93/11/15	28.4 ± 1.1	-8.3 ± 8.8
Area 12, Camp	93/11/30	32.4 ± 0.8	20.0 ± 22.1
Area 12, Camp	93/12/06	29.9 ± 1.2	7.1 ± 6.8
Area 12, Camp	93/12/13	29.1 ± 0.8	-2.8 ± 15.1
Area 12, Camp	93/12/20	24.9 ± 1.1	11.5 ± 10.4
Area 12, Camp	93/12/28	29.6 ± 0.8	1.0 ± 3.3
Area 12, P-Tunnel Portal	93/01/05	103.0 ± 0.5	3.7 ± 2.3
Area 12, P-Tunnel Portal	93/01/12	73.4 ± 1.1	21.7 ± 2.6
Area 12, P-Tunnel Portal	93/01/19	105.0 ± 1.0	-10.6 ± 2.7
Area 12, P-Tunnel Portal	93/01/26	41.2 ± 0.7	7.1 ± 1.9
Area 12, P-Tunnel Portal	93/02/09	106.0 ± 1.0	-15.7 ± 3.5
Area 12, P-Tunnel Portal	93/02/17	46.9 ± 0.8	11.7 ± 2.4
Area 12, P-Tunnel Portal	93/02/24	97.7 ± 0.8	2.5 ± 2.1
Area 12, P-Tunnel Portal	93/03/03	25.7 ± 1.0	-5.2 ± 2.9
Area 12, P-Tunnel Portal	93/03/09	41.2 ± 0.6	-20.7 ± 3.4
Area 12, P-Tunnel Portal	93/03/25	31.0 ± 1.0	10.0 ± 3.4
Area 12, P-Tunnel Portal	93/04/06	40.4 ± 1.1	-11.1 ± 3.0
Area 12, P-Tunnel Portal	93/04/20	28.5 ± 0.6	96.3 ± 13.5
Area 12, P-Tunnel Portal	93/04/28	59.6 ± 0.8	9.5 ± 7.4
Area 12, P-Tunnel Portal	93/05/04	53.7 ± 1.0	-76.4 ± 13.5
Area 12, P-Tunnel Portal	93/05/18	238.0 ± 1.9	242.0 ± 2.3
Area 12, P-Tunnel Portal	93/05/25	53.8 ± 0.9	103.0 ± 20.9
Area 12, P-Tunnel Portal	93/06/08	38.7 ± 1.0	11.7 ± 5.0
Area 12, P-Tunnel Portal	93/07/06	608.0 ± 3.8	* ± *
Area 12, P-Tunnel Portal	93/07/12	409.0 ± 2.6	1.5 ± 8.3
Area 12, P-Tunnel Portal	93/07/20	228.0 ± 1.4	35.0 ± 7.6
Area 15, EPA Farm	93/01/04	24.3 ± 0.6	-7.7 ± 1.9
Area 15, EPA Farm	93/01/11	* ± *	-6.7 ± 1.5
Area 15, EPA Farm	93/01/20	20.6 ± 0.6	8.5 ± 2.7

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL$ ± 1(s)	Xenon $10^{-12}\mu Ci/mL$ ± 1(s)
Area 5, Gate 200 S	93/03/29	29.2 ± 0.8	-5.1 ± 2.8
Area 5, Gate 200 S	93/04/07	21.4 ± 1.1	-5.6 ± 3.4
Area 5, Gate 200 S	93/04/20	23.9 ± 0.9	* ± *
Area 5, Gate 200 S	93/04/26	25.0 ± 0.8	7.8 ± 6.8
Area 5, Gate 200 S	93/05/03	30.1 ± 0.8	0.3 ± 3.0
Area 5, Gate 200 S	93/05/10	* ± *	-20.6 ± 6.2
Area 5, Gate 200 S	93/05/17	25.6 ± 0.7	* ± *
Area 5, Gate 200 S	93/05/24	20.8 ± 0.6	3.2 ± 5.9
Area 5, Gate 200 S	93/06/01	25.7 ± 1.1	37.8 ± 6.8
Area 5, Gate 200 S	93/06/07	34.6 ± 0.7	4.7 ± 3.8
Area 5, Gate 200 S	93/06/14	33.0 ± 0.9	-5.8 ± 15.2
Area 5, Gate 200 S	93/06/21	33.2 ± 0.7	4.2 ± 3.9
Area 5, Gate 200 S	93/06/28	23.3 ± 0.6	2.0 ± 4.2
Area 5, Gate 200 S	93/07/06	31.8 ± 0.7	-19.4 ± 28.1
Area 5, Gate 200 S	93/07/12	24.9 ± 0.6	-14.2 ± 9.7
Area 5, Gate 200 S	93/07/19	21.6 ± 1.2	-16.6 ± 6.7
Area 5, Gate 200 S	93/07/26	25.1 ± 0.8	4.6 ± 3.7
Area 5, Gate 200 S	93/08/02	45.1 ± 1.1	* ± *
Area 5, Gate 200 S	93/08/16	27.8 ± 0.6	18.5 ± 7.3
Area 5, Gate 200 S	93/08/30	30.1 ± 0.8	28.2 ± 24.5
Area 5, Gate 200 S	93/09/08	25.9 ± 0.9	-0.9 ± 12.1
Area 5, Gate 200 S	93/09/27	29.4 ± 1.0	-7.2 ± 5.6
Area 5, Gate 200 S	93/10/04	29.6 ± 0.7	30.2 ± 14.3
Area 5, Gate 200 S	93/10/11	25.3 ± 0.7	* ± *
Area 5, Gate 200 S	93/10/19	33.2 ± 0.7	4.4 ± 3.4
Area 5, Gate 200 S	93/10/25	23.8 ± 0.9	-23.4 ± 26.2
Area 5, Gate 200 S	93/11/01	28.2 ± 0.7	15.0 ± 8.9
Area 5, Gate 200 S	93/11/08	27.9 ± 1.0	51.3 ± 16.5
Area 5, Gate 200 S	93/11/15	28.6 ± 0.8	14.8 ± 7.2
Area 5, Gate 200 S	93/11/22	25.4 ± 0.8	-20.6 ± 7.8
Area 5, Gate 200 S	93/11/29	31.1 ± 1.4	-12.4 ± 6.7
Area 5, Gate 200 S	93/12/06	24.1 ± 0.7	18.3 ± 7.9
Area 5, Gate 200 S	93/12/28	30.9 ± 0.7	* ± *
Area 12, Camp	93/01/04	24.3 ± 0.6	10.9 ± 1.6
Area 12, Camp	93/01/12	21.4 ± 0.9	-3.7 ± 5.5
Area 12, Camp	93/01/21	18.9 ± 0.8	-4.8 ± 1.4
Area 12, Camp	93/01/26	25.3 ± 0.6	-4.0 ± 1.6
Area 12, Camp	93/02/02	27.1 ± 0.6	-5.3 ± 3.5
Area 12, Camp	93/02/09	26.3 ± 0.6	-5.0 ± 2.0
Area 12, Camp	93/02/17	21.0 ± 0.7	-3.2 ± 1.7
Area 12, Camp	93/02/22	22.0 ± 0.6	8.6 ± 3.5
Area 12, Camp	93/03/01	25.9 ± 0.6	3.6 ± 2.6
Area 12, Camp	93/03/08	15.3 ± 0.5	-26.2 ± 6.3
Area 12, Camp	93/03/22	19.4 ± 0.6	16.5 ± 2.2
Area 12, Camp	93/03/30	28.4 ± 0.6	-1.0 ± 1.7

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL$ ± 1(s)	Xenon $10^{-12}\mu Ci/mL$ ± 1(s)
Area 18, Gate 400	93/03/01	26.2 ± 1.4	-12.4 ± 5.0
Area 18, Gate 400	93/03/08	23.5 ± 0.9	-43.2 ± 7.2
Area 18, Gate 400	93/03/15	20.6 ± 0.7	-3.5 ± 3.0
Area 18, Gate 400	93/04/01	27.7 ± 0.7	-2.6 ± 2.0
Area 18, Gate 400	93/04/05	26.1 ± 0.8	13.9 ± 2.6
Area 18, Gate 400	93/04/13	30.7 ± 2.0	11.3 ± 2.2
Area 18, Gate 400	93/04/21	26.3 ± 0.9	5.9 ± 0.9
Area 18, Gate 400	93/04/26	28.2 ± 0.6	-1.1 ± 1.9
Area 18, Gate 400	93/05/03	26.1 ± 0.6	-4.0 ± 2.4
Area 18, Gate 400	93/05/10	26.8 ± 0.9	-1.3 ± 2.0
Area 18, Gate 400	93/05/18	24.6 ± 1.0	-16.4 ± 6.4
Area 18, Gate 400	93/06/02	36.8 ± 1.1	46.3 ± 14.6
Area 18, Gate 400	93/06/07	28.8 ± 0.9	* ± *
Area 18, Gate 400	93/06/15	39.9 ± 0.8	9.0 ± 10.3
Area 18, Gate 400	93/06/30	29.7 ± 0.6	6.2 ± 4.2
Area 18, Gate 400	93/07/06	21.3 ± 0.7	5.3 ± 14.6
Area 18, Gate 400	93/07/26	* ± *	34.8 ± 25.1
Area 18, Gate 400	93/08/02	32.0 ± 0.7	* ± *
Area 18, Gate 400	93/08/09	27.4 ± 0.9	-9.4 ± 31.2
Area 18, Gate 400	93/08/23	32.3 ± 2.0	* ± *
Area 18, Gate 400	93/08/30	21.6 ± 1.1	9.1 ± 25.0
Area 18, Gate 400	93/09/08	26.6 ± 0.7	-6.6 ± 6.6
Area 18, Gate 400	93/09/13	27.7 ± 0.9	13.0 ± 5.6
Area 18, Gate 400	93/09/21	30.7 ± 0.8	6.5 ± 3.6
Area 18, Gate 400	93/09/27	28.1 ± 1.1	7.0 ± 5.9
Area 18, Gate 400	93/10/11	23.8 ± 0.9	-23.4 ± 26.2
Area 18, Gate 400	93/10/28	32.5 ± 0.9	56.1 ± 11.9
Area 18, Gate 400	93/11/01	27.6 ± 0.8	7.5 ± 7.6
Area 18, Gate 400	93/11/08	18.2 ± 0.7	38.3 ± 16.0
Area 18, Gate 400	93/11/15	23.0 ± 2.9	-14.7 ± 9.1
Area 18, Gate 400	93/11/22	29.0 ± 1.0	-44.8 ± 25.5
Area 18, Gate 400	93/11/30	27.9 ± 1.0	-63.4 ± 29.9
Area 18, Gate 400	93/12/14	21.3 ± 0.6	29.6 ± 18.3
Area 18, Gate 400	93/12/28	22.3 ± 0.7	6.1 ± 3.3
Area 19, Pahute Substation	93/04/05	22.0 ± 0.7	2.2 ± 2.2
Area 19, Pahute Substation	93/04/12	36.9 ± 0.8	13.9 ± 2.3
Area 19, Pahute Substation	93/04/21	36.0 ± 0.9	8.5 ± 2.3
Area 19, Pahute Substation	93/04/26	22.3 ± 0.7	-1.7 ± 2.2
Area 19, Pahute Substation	93/05/03	20.3 ± 0.7	2.7 ± 2.6
Area 19, Pahute Substation	93/05/10	23.3 ± 0.7	0.6 ± 2.3
Area 19, Pahute Substation	93/05/25	23.1 ± 0.9	-8.1 ± 3.2
Area 19, Pahute Substation	93/06/01	19.9 ± 0.6	6.5 ± 10.2
Area 19, Pahute Substation	93/06/07	21.5 ± 1.0	4.0 ± 3.1
Area 19, Pahute Substation	93/06/15	32.7 ± 1.1	0.6 ± 15.9

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL \pm 1(s)$	Xenon $10^{-12}\mu Ci/mL \pm 1(s)$
Area 19, Pahute Substation	93/07/26	18.3 ± 0.7	* ± *
Area 19, Pahute Substation	93/08/02	41.5 ± 1.1	* ± *
Area 19, Pahute Substation	93/08/25	35.8 ± 2.1	* ± *
Area 19, Pahute Substation	93/09/08	31.2 ± 0.8	26.0 ± 21.6
Area 19, Pahute Substation	93/09/13	24.0 ± 0.7	-20.6 ± 6.8
Area 19, Pahute Substation	93/09/20	43.9 ± 2.4	12.1 ± 7.3
Area 19, Pahute Substation	93/09/27	23.2 ± 0.9	6.3 ± 3.8
Area 19, Pahute Substation	93/10/04	31.2 ± 1.1	* ± *
Area 19, Pahute Substation	93/10/11	28.9 ± 0.8	-28.2 ± 20.3
Area 19, Pahute Substation	93/10/25	16.7 ± 0.7	5.4 ± 3.7
Area 19, Pahute Substation	93/11/01	30.2 ± 0.7	14.4 ± 7.9
Area 19, Pahute Substation	93/11/08	13.9 ± 1.0	-71.4 ± 49.8
Area 19, Pahute Substation	93/11/15	21.8 ± 0.9	-26.2 ± 27.1
Area 19, Pahute Substation	93/11/22	32.4 ± 0.7	-9.8 ± 8.8
Area 19, Pahute Substation	93/11/29	* ± *	89.9 ± 38.4
Area 19, Pahute Substation	93/12/06	30.4 ± 0.8	20.0 ± 22.1
Area 20, DDZ77 Transformer	93/03/17	20.5 ± 0.6	1.0 ± 1.7
Area 20, DDZ77 Transformer	93/03/22	23.0 ± 0.8	3.9 ± 4.9
Area 20, DDZ77 Transformer	93/04/01	25.4 ± 0.4	-13.1 ± 9.1
Area 20, DDZ77 Transformer	93/04/05	25.1 ± 0.6	2.9 ± 1.9
Area 20, DDZ77 Transformer	93/04/12	27.1 ± 0.7	-1.4 ± 3.7
Area 20, DDZ77 Transformer	93/04/22	46.4 ± 0.8	* ± *
Area 20, DDZ77 Transformer	93/04/26	25.5 ± 0.6	2.5 ± 1.9
Area 20, DDZ77 Transformer	93/05/03	26.7 ± 0.8	-0.8 ± 3.3
Area 20, DDZ77 Transformer	93/05/10	27.5 ± 0.6	-0.4 ± 2.1
Area 20, DDZ77 Transformer	93/06/08	35.7 ± 0.9	-1.2 ± 3.3
Area 20, DDZ77 Transformer	93/06/15	37.7 ± 0.7	* ± *
Area 20, DDZ77 Transformer	93/06/23	27.8 ± 0.7	-1.3 ± 6.7
Area 20, DDZ77 Transformer	93/07/01	27.8 ± 0.6	-5.0 ± 3.8
Area 20, DDZ77 Transformer	93/07/06	28.0 ± 0.9	* ± *
Area 20, DDZ77 Transformer	93/07/13	20.8 ± 0.7	11.1 ± 8.3
Area 20, DDZ77 Transformer	93/07/19	* ± *	-26.1 ± 20.9
Area 20, DDZ77 Transformer	93/08/11	25.2 ± 0.6	33.8 ± 17.4
Area 20, DDZ77 Transformer	93/08/25	36.8 ± 0.7	* ± *
Area 20, DDZ77 Transformer	93/08/30	26.6 ± 0.7	7.2 ± 22.7
Area 20, DDZ77 Transformer	93/09/08	30.2 ± 0.7	22.8 ± 14.7
Area 20, DDZ77 Transformer	93/09/13	19.4 ± 1.0	-15.0 ± 6.2
Area 20, DDZ77 Transformer	93/09/20	27.6 ± 0.8	* ± *
Area 20, DDZ77 Transformer	93/10/13	22.9 ± 1.4	11.1 ± 4.1
Area 20, DDZ77 Transformer	93/10/25	33.9 ± 0.8	69.9 ± 35.0
Area 20, DDZ77 Transformer	93/11/01	21.3 ± 0.7	-54.0 ± 19.8

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL \pm 1(s)$	Xenon $10^{-12}\mu Ci/mL \pm 1(s)$
Area 20, DDZ77 Transformer	93/11/09	24.2 ± 0.9	31.1 ± 6.5
Area 20, DDZ77 Transformer	93/11/15	26.1 ± 0.9	-2.3 ± 9.4
Area 20, DDZ77 Transformer	93/11/22	27.0 ± 0.8	-18.4 ± 55.0
Area 20, DDZ77 Transformer	93/11/29	22.6 ± 0.8	* ± *
Area 20, DDZ77 Transformer	93/12/06	27.0 ± 0.7	5.7 ± 9.1
Area 20, Dispensary	93/03/15	23.8 ± 1.1	-3.5 ± 3.0
Area 20, Dispensary	93/03/22	27.5 ± 1.0	28.8 ± 9.4
Area 20, Dispensary	93/04/01	25.4 ± 0.9	25.8 ± 3.9
Area 20, Dispensary	93/04/05	21.8 ± 1.0	11.9 ± 3.8
Area 20, Dispensary	93/04/12	33.0 ± 0.9	30.2 ± 6.7
Area 20, Dispensary	93/04/26	22.9 ± 0.6	-2.1 ± 1.5
Area 20, Dispensary	93/05/03	28.8 ± 0.8	14.4 ± 3.6
Area 20, Dispensary	93/05/10	26.3 ± 0.6	4.0 ± 2.2
Area 20, Dispensary	93/05/18	34.3 ± 0.8	* ± *
Area 20, Dispensary	93/06/08	25.8 ± 0.9	1.3 ± 5.9
Area 20, Dispensary	93/06/15	17.2 ± 1.3	21.8 ± 13.4
Area 20, Dispensary	93/06/21	28.7 ± 0.6	2.2 ± 8.8
Area 20, Dispensary	93/07/06	34.5 ± 0.9	* ± *
Area 20, Dispensary	93/07/13	29.9 ± 0.7	7.6 ± 6.9
Area 20, Dispensary	93/07/19	22.3 ± 0.8	-9.3 ± 7.6
Area 20, Dispensary	93/07/26	17.9 ± 0.6	-65.8 ± 38.3
Area 20, Dispensary	93/08/11	31.7 ± 0.8	* ± *
Area 20, Dispensary	93/08/16	* ± *	* ± *
Area 20, Dispensary	93/08/23	28.0 ± 0.8	-37.9 ± 25.3
Area 20, Dispensary	93/08/30	* ± *	1.2 ± 32.7
Area 20, Dispensary	93/09/08	26.8 ± 0.7	-4.7 ± 6.2
Area 20, Dispensary	93/09/13	26.6 ± 1.1	-14.8 ± 10.4
Area 20, Dispensary	93/09/27	36.5 ± 1.0	7.9 ± 3.5
Area 20, Dispensary	93/10/11	40.1 ± 0.7	* ± *
Area 20, Dispensary	93/10/20	26.8 ± 0.8	3.0 ± 2.8
Area 20, Dispensary	93/11/01	26.6 ± 0.6	-1.6 ± 7.1
Area 20, Dispensary	93/11/15	29.3 ± 0.7	8.3 ± 7.2
Area 20, Dispensary	93/11/22	35.7 ± 0.7	* ± *
Area 20, Dispensary	93/11/29	37.7 ± 0.7	* ± *
Area 25, E-MAD N	93/01/04	21.3 ± 0.6	-17.3 ± 4.2
Area 25, E-MAD N	93/01/11	31.0 ± 0.7	-2.1 ± 8.4
Area 25, E-MAD N	93/01/20	24.6 ± 0.8	* ± *
Area 25, E-MAD N	93/01/26	23.7 ± 0.7	1.7 ± 2.5
Area 25, E-MAD N	93/02/01	21.7 ± 0.7	-11.4 ± 5.4
Area 25, E-MAD N	93/02/08	20.9 ± 0.9	-36.8 ± 6.4

* Missing Data Value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1993, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu Ci/mL$ ± 1(s)	Xenon $10^{-12}\mu Ci/mL$ ± 1(s)
Area 25, E-MAD N	93/02/17	21.0 ± 0.9	-0.5 ± 2.2
Area 25, E-MAD N	93/02/22	29.5 ± 0.7	-1.4 ± 2.5
Area 25, E-MAD N	93/03/01	21.5 ± 0.8	* ± *
Area 25, E-MAD N	93/03/16	28.9 ± 0.7	-0.5 ± 1.9
Area 25, E-MAD N	93/03/22	* ± *	-1.1 ± 2.6
Area 25, E-MAD N	93/04/12	22.0 ± 0.7	-0.4 ± 2.3
Area 25, E-MAD N	93/04/19	25.2 ± 0.9	0.8 ± 4.1
Area 25, E-MAD N	93/04/26	24.7 ± 0.6	17.7 ± 4.6
Area 25, E-MAD N	93/05/03	23.5 ± 0.8	6.9 ± 2.5
Area 25, E-MAD N	93/05/10	23.7 ± 0.8	-10.1 ± 3.6
Area 25, E-MAD N	93/05/17	19.3 ± 0.6	26.0 ± 3.7
Area 25, E-MAD N	93/05/24	28.7 ± 0.7	3.4 ± 1.9
Area 25, E-MAD N	93/06/01	33.4 ± 0.7	28.2 ± 5.3
Area 25, E-MAD N	93/06/14	30.4 ± 0.7	* ± *
Area 25, E-MAD N	93/06/21	29.8 ± 0.7	-10.8 ± 7.6
Area 25, E-MAD N	93/07/06	23.8 ± 0.6	66.5 ± 21.6
Area 25, E-MAD N	93/07/12	27.4 ± 0.7	5.1 ± 7.9
Area 25, E-MAD N	93/07/27	26.0 ± 0.8	0.9 ± 2.4
Area 25, E-MAD N	93/08/09	22.4 ± 0.6	30.2 ± 19.0
Area 25, E-MAD N	93/08/09	24.9 ± 0.7	* ± *
Area 25, E-MAD N	93/09/08	27.4 ± 0.8	-8.4 ± 9.8
Area 25, E-MAD N	93/09/13	27.1 ± 0.9	-12.3 ± 7.0
Area 25, E-MAD N	93/09/20	27.0 ± 0.9	* ± *
Area 25, E-MAD N	93/09/27	19.6 ± 0.8	-2.9 ± 4.4
Area 25, E-MAD N	93/10/04	31.3 ± 0.8	12.2 ± 12.6
Area 25, E-MAD N	93/10/11	37.7 ± 0.9	* ± *
Area 25, E-MAD N	93/10/18	28.9 ± 0.8	1.5 ± 3.5
Area 25, E-MAD N	93/11/01	16.0 ± 1.9	-9.0 ± 8.9
Area 25, E-MAD N	93/11/08	23.9 ± 1.0	-0.9 ± 23.5
Area 25, E-MAD N	93/11/15	21.7 ± 0.7	-16.9 ± 21.1
Area 25, E-MAD N	93/11/22	23.2 ± 0.7	-6.9 ± 7.4
Area 25, E-MAD N	93/11/29	34.3 ± 1.2	* ± *
Area 25, E-MAD N	93/12/06	27.4 ± 0.7	-5.9 ± 6.5
Area 25, E-MAD N	93/12/13	25.3 ± 0.8	-9.6 ± 21.6

* Misising Data Value

XENON DATA

Figure E.2 shows the data from all the environmental stations combined. Note that there seems to be somewhat more variability in the data shown in Figure E.2 during the second half of the year. This is due to an increased laboratory sample load during the last half of the year

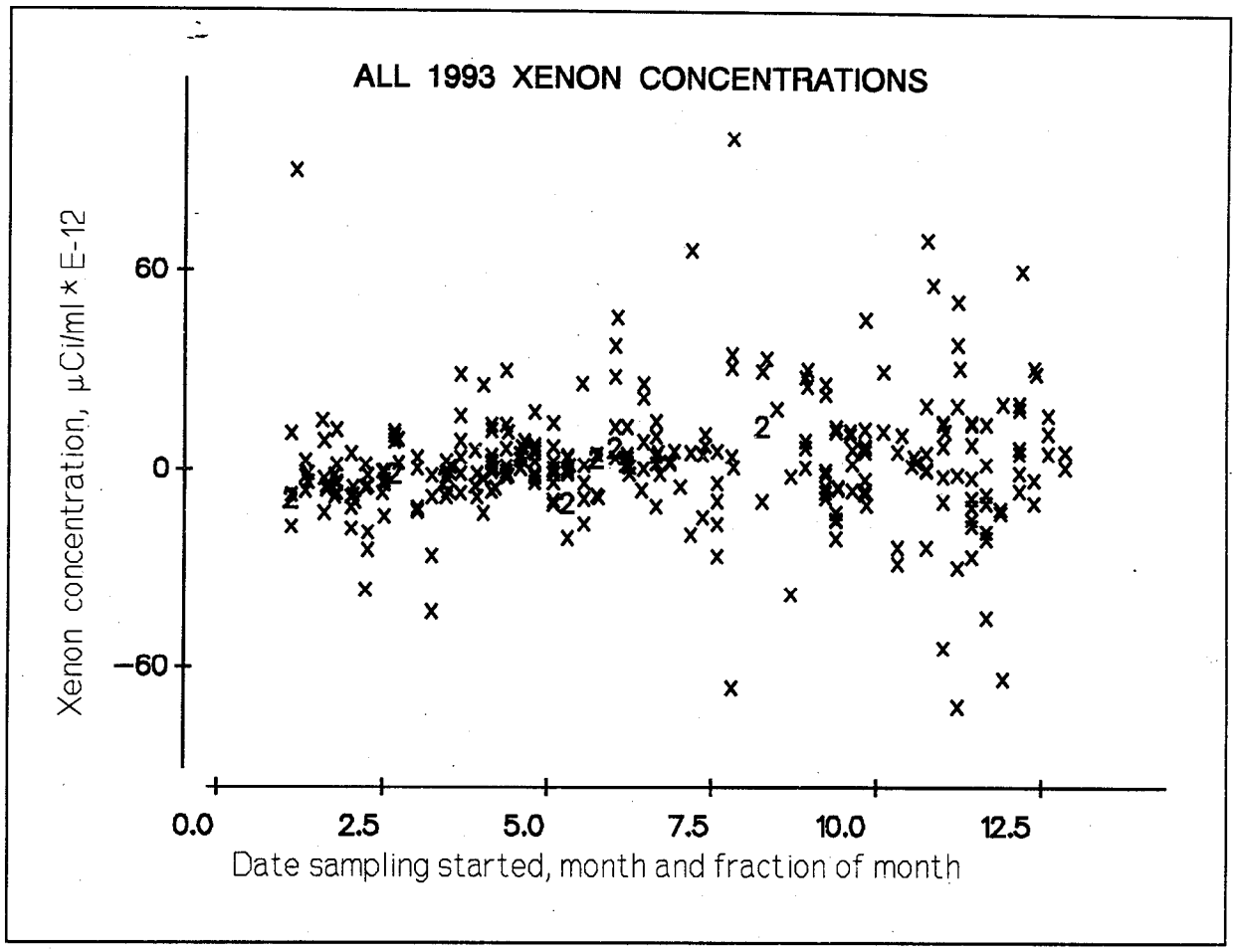


Figure E.2 Time Series Plot of All 1993 Xe Results

which resulted in longer sample holding times. Subsequent decay reduced the sample radioactivity and increased counting variability. Figures E.3 through E.12 are time series plots of the xenon data in Table E.1 with one plot for each of the environmental stations. The solid line in these plots gives the minimum detectable concentration and the dotted lines are confidence intervals calculated as ± two standard deviations. Note that the ordinate scale varies from plot to plot. The time used for the abscissa is the month and day that sampling started converted into month and fraction of the month by dividing the day of the month by 32 and adding this fraction to the month index.

These eleven figures give a graphical overview of the xenon data. The general pattern is one of a few high values with most of the data values being within the confidence interval for the detection limit or below the detection limit.

Figure E.13 is a normal probability plot of the data in Table E.1 and Figure E.14 is a lognormal probability plot of these data. These plots show the data values or natural logarithm of the data values on the ordinate and the expected quartiles or normal scores associated with each data value on the abscissa. In a probability plot an approximately straight line indicates that the data have a distribution determined by the type of plot. These data form approximately a straight line in the logarithmic plot suggesting that the data are lognormally distributed. This suggestion is statistically tested using the correlation coefficient "goodness of fit" test.

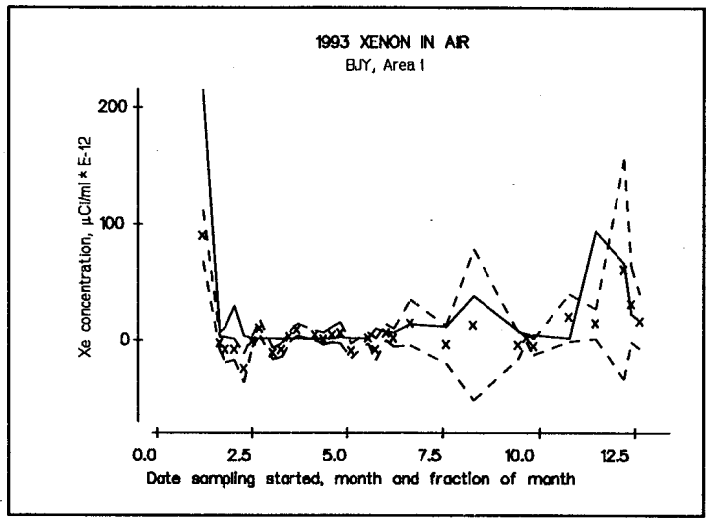


Figure E.3 Time Series Plot of 1993 BJY Xe Results

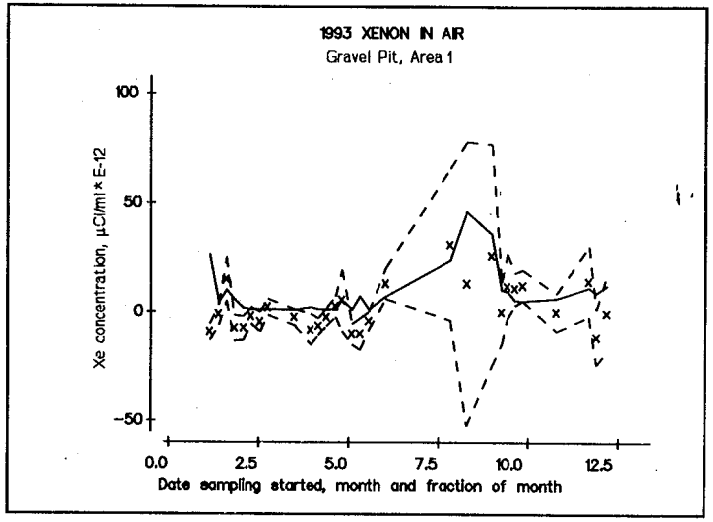


Figure E.4 Time Series Plot of 1993 Gravel Pit Xe Results

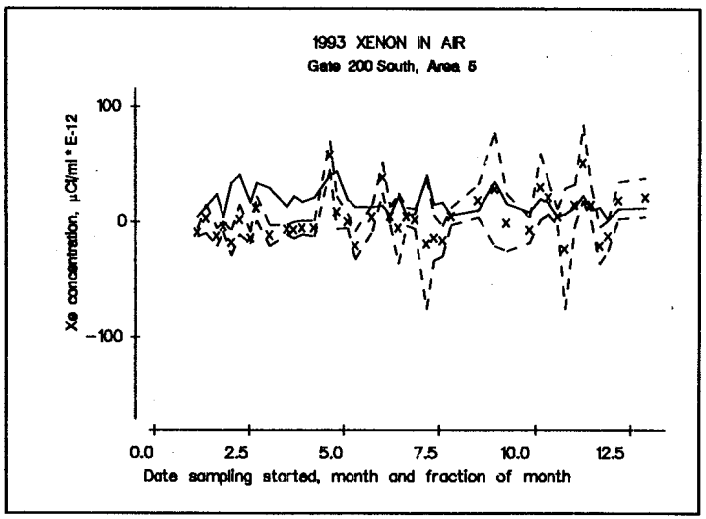


Figure E.5 Time Series Plot of 1993 Gate 200 South Xe Results

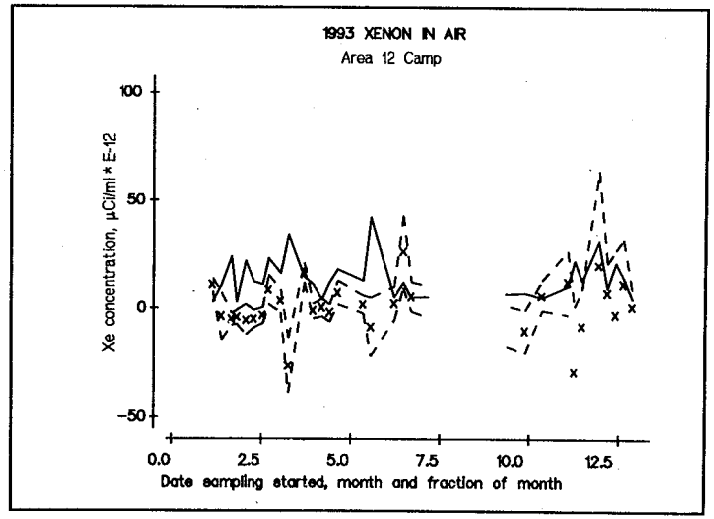


Figure E.6 Time Series Plot of 1993 Area 12 Camp Xe Results

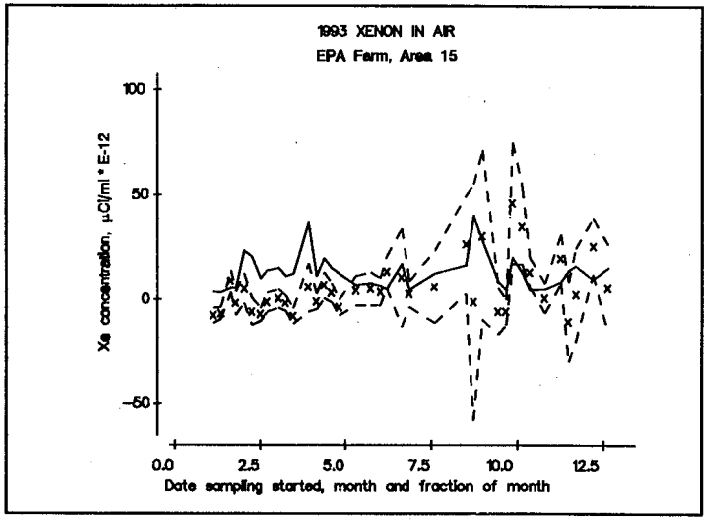


Figure E.7 Time Series Plot of 1993 EPA Farm Xe Results

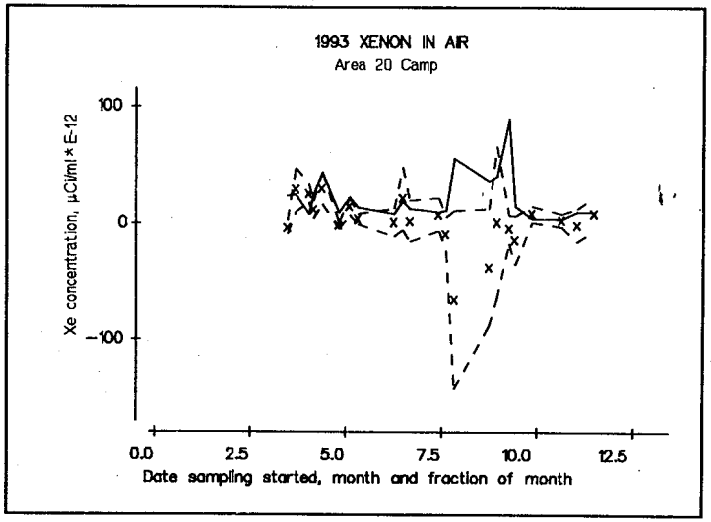


Figure E.8 Time Series Plot of 1993 Area 20 Camp Xe Results

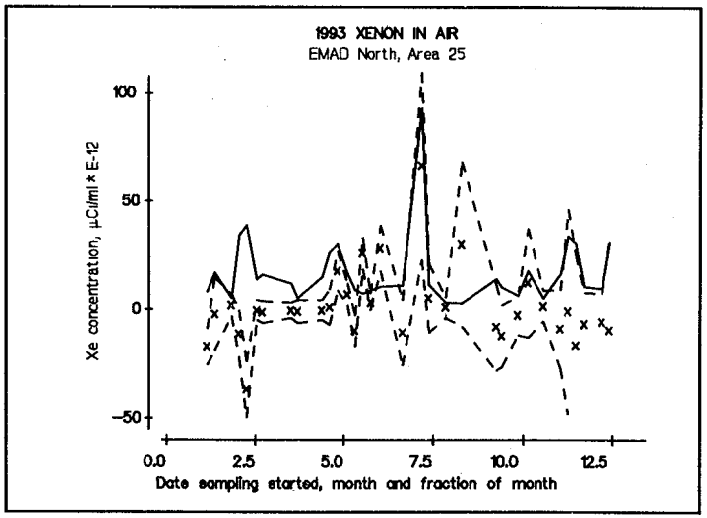


Figure E.9 Time Series Plot of 1993 E-MAD Xe Results

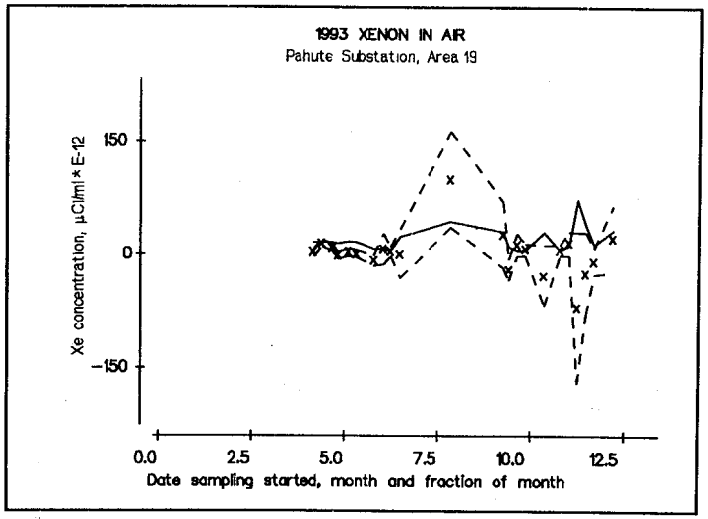


Figure E.10 Time Series Plot of 1993 Pahute Substation Xe Results

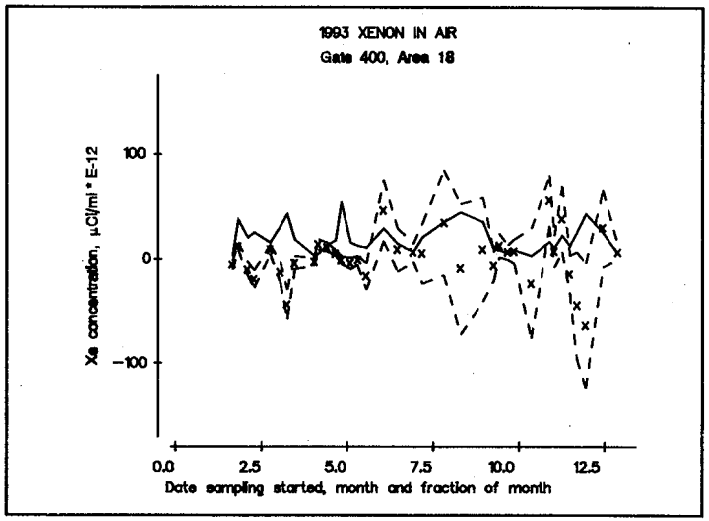


Figure E.11 Time Series Plot of 1993 Gate 400 Xe Results

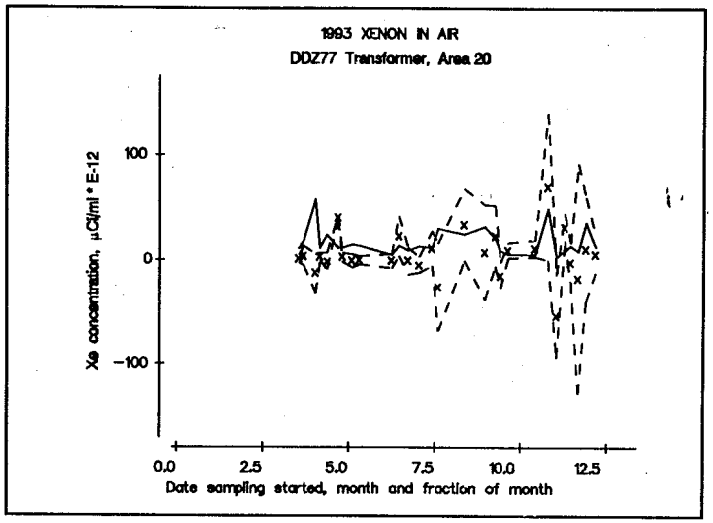


Figure E.12 Time Series Plot of 1993 DDZ77 Trans. Xe Results

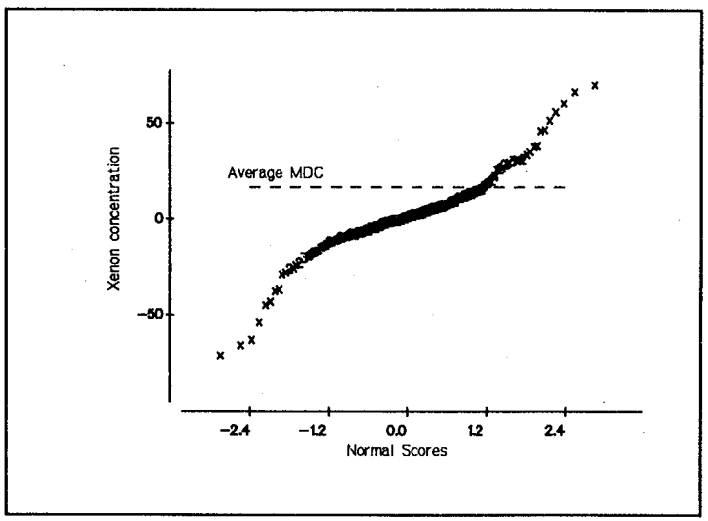


Figure E.13 Normal Probability Plot of Xe Data

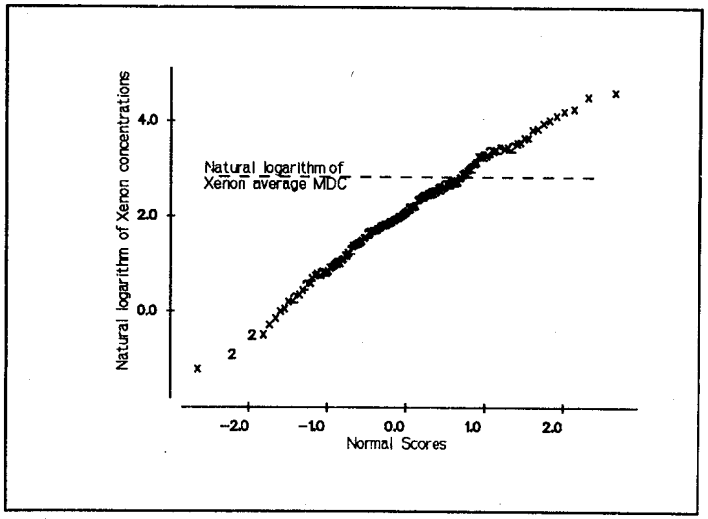


Figure E.14 Lognormal Probability Plot of Xe Data

The results of this test suggest that there is around a 50 percent chance that these data are lognormally distributed. This is a strong acceptance criterion. For the lognormal probability plot, all concentration values at zero and less were deleted because logarithms of negative values are imaginary numbers.

Analyses similar to that discussed with Figures E.13 and E.14 were performed on the data from each of the environmental sampling stations. These analyses established that only a few of the data groups had a normal distribution, but almost 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, zero and negative data values become missing values and thus are excluded from the analysis.

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 provide information about the relative proportion of the variance that is contributed by analytical variance. 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 means shows that the means are closer to the first quartile than to the third quartile, which indicates the data are skewed, a property of lognormal distributions. The values in this table are noticeably lower than the corresponding values in the 1992 report.

The final statistical analysis tested for differences between sampling stations. The logarithms of the data were used in order to approximate a normal distribution for 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 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 ten permanent stations with all negative values removed. Note that this ANOVA ignores the within-replicates error

Table E.2 Descriptive Statistics of Xe Data for 1993 (in 10^{-12} µCi/mL)

Environmental Stations	N	Mean	Median	Standard Deviation	1st Quartile	3rd Quartile	Maximum
BJY	31	7.0	2.2	21.6	-5.8	13.1	90.1
Gravel Pit	29	2.5	-0.6	11.0	-6.9	12.1	31.1
Gate 200 S	39	0.6	-0.9	16.8	-12.4	7.8	51.3
Area 12 Camp	30	0.9	0.7	11.7	-4.9	7.6	26.4

Table E.2 (Descriptive Statistics of Xe Data for 1993, cont.)

Environmental Stations	N	Mean	Median	Standard Deviation	1st Quartile	3rd Quartile	Maximum
EPA Farm	33	3.3	2.2	11.3	-4.8	5.9	45.8
Area 20 Camp	22	1.3	2.6	21.3	-3.8	12.5	30.2
E-MAD	33	1.1	-0.9	17.8	-9.3	4.2	66.5
Pahute Sbst.	22	2.6	3.4	29.9	-8.5	12.6	99.7
Gate 400	36	1.3	5.6	23.7	-9.6	10.8	56.1
DDZ77 Trans.	24	2.7	0.3	22.9	-4.3	10.1	69.9
All	299	2.3	1.0	23.9	-6.7	8.8	99.7

Environmental Stations	Number Missing Values	Number Less Than MDC	Number Less Than Zero
BJY	10	27	12
Gravel Pit	13	27	17
Gate 200 S	5	33	20
Area 12 Camp	4	28	14
EPA Farm	9	30	14
Area 20 Camp	7	18	8
E-MAD	7	28	20
Pahute Sbst.	3	19	7
Gate 400	3	31	17
DDZ77 Trans.	6	20	12
All	67	261	141

discussed in the previous paragraph. The changes in sample sizes between Tables E.2 and E.3 are due to the deleted negative 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 data 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 0.598 indicates that there is essentially 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 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

Table E.3 One-Way Analysis of the Variance on Xe Concentrations between Stations (ln [10^{-12} µCi/mL])

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-Value	p-Value
Area	9	10.61	1.18	0.86	0.559
Error	148	202.12	1.37		
Total	157	212.73			

Location	N	Log of Median	Standard Deviation	Individual 95 Percent Confidence Intervals for Ln Median Based on Pooled Standard Deviation
BJY	19	2.128	1.181	(-------*--------)
Gravel Pit	12	2.337	0.799	(----------*----------)
Gate 200	19	2.000	1.302	(---------*--------)
Area 12 Camp	16	1.736	1.132	(---------*---------)
EPA Farm	19	1.673	1.157	(--------*--------)
Area 20 Camp	14	2.015	1.113	(----------*---------)
E-MAD N	13	1.913	1.481	(----------*----------)
Pahute Sub.	15	1.890	1.359	(---------*--------)
Gate 400	19	2.530	0.770	(--------*--------)
DDZ77 Tran.	12	2.181	1.250	(----------*----------)

Pooled Standard Deviation = 1.169

1.2 1.8 2.4 3.0

variance because they have no degrees of freedom or equivalent, but their effect can be approximated. The sum of the analytical variances (after transformation) provides an approximation based on counting statistics errors, 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 299 remaining transformed analytical variances have a sum of 21270. This sum was highly influenced by seven data cases with mean values very close to zero. These account for 62 percent of the variance sum. Deleting these values gives 292 cases with a sum of 8025 and a mean of 27.5. Comparing this 27.5 to the error mean square of 1.37 in Table E.3 shows that the fuzziness in the data would account for most 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 are 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; the krypton MDC's average 4.7 x 10^{-12} µCi/mL. Figures E.15 through E.25 are the krypton counterparts of Figures E.2 through E.12. In general these plots show most of the values around environmental background levels. As for the xenon data, no values are available from the stations on the mesas for the winter months.

An exploratory data analysis was performed on the krypton data for each of the sites using the same probability plot and goodness of fit test methods as used above on the xenon data.

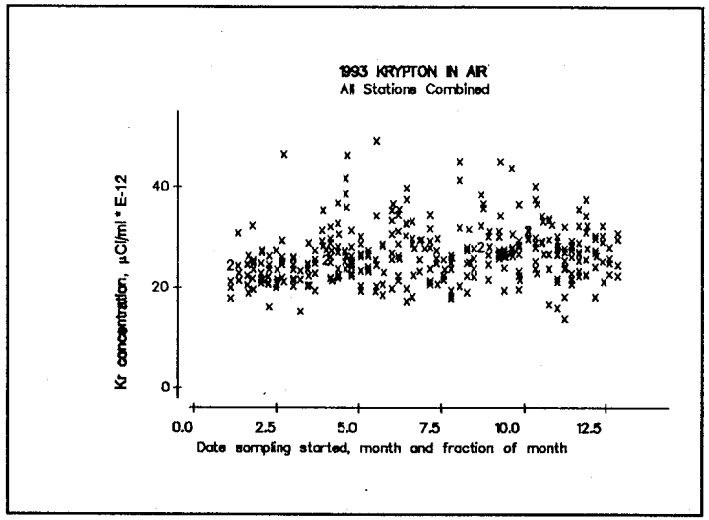


Figure E.15 Time Series Plot of All 1993 Kr Results

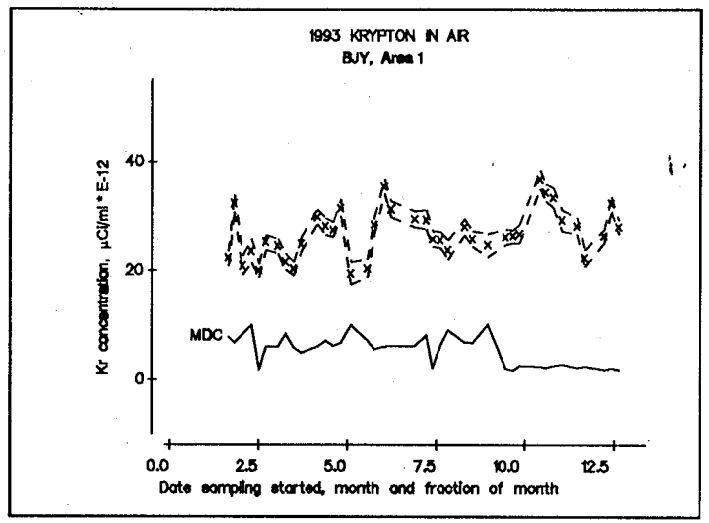


Figure E.16 Time Series Plot of 1993 BJY Kr Results

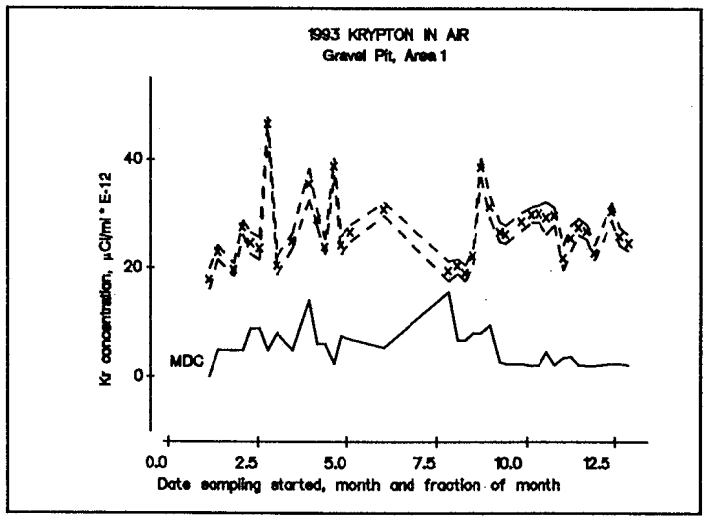


Figure E.17 Time Series Plot of 1993 Gravel Pit Kr Results

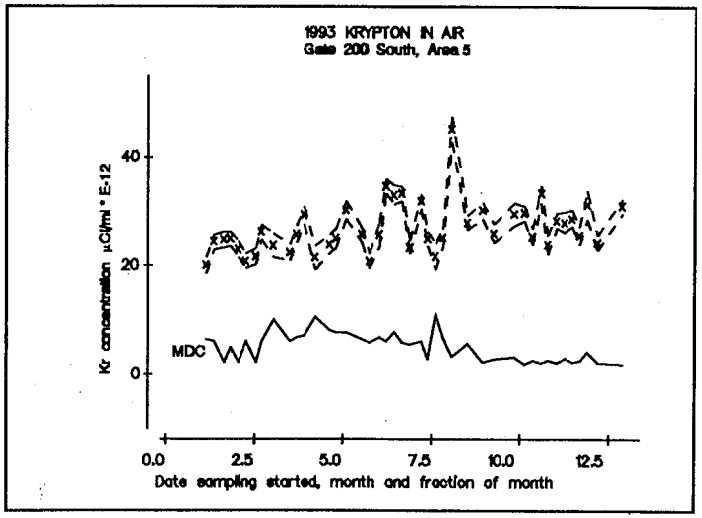


Figure E.18 Time Series Plot of 1993 Gate 200 South Kr Results

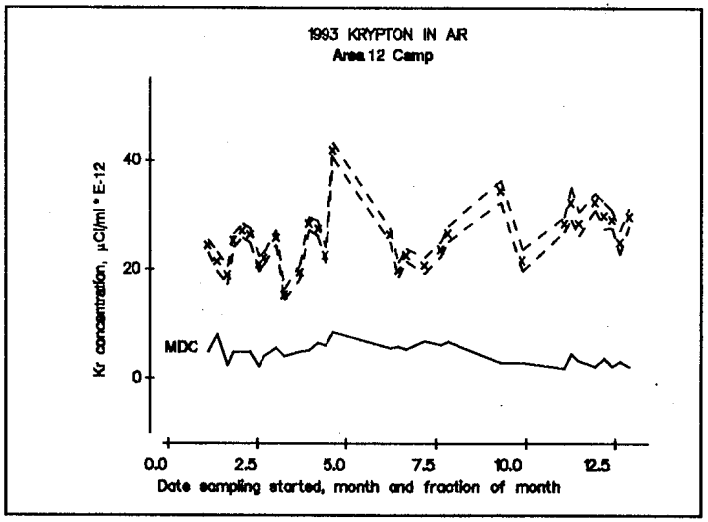


Figure E.19 Time Series Plot of 1993 Area 12 Camp Kr Results

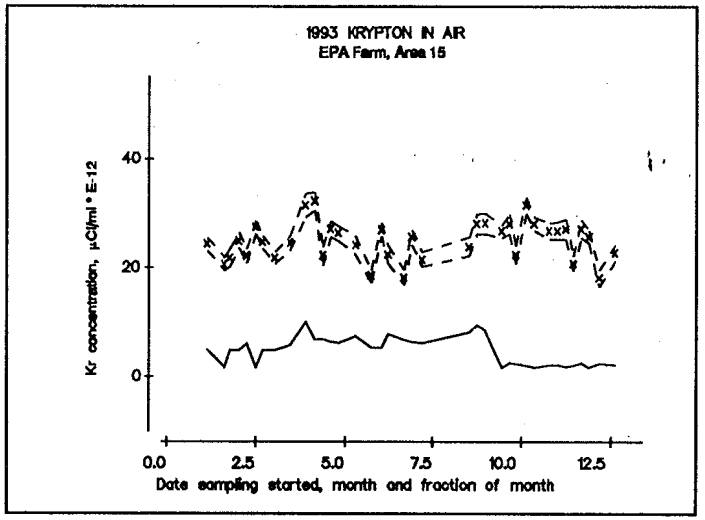


Figure E.20 Time Series Plot of 1993 EPA Farm Kr Results

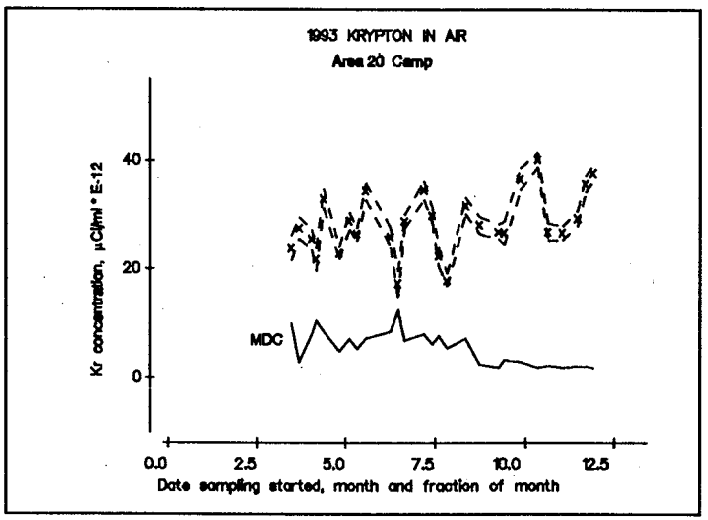


Figure E.21 Time Series Plot of 1993 Area 20 Camp Kr Results

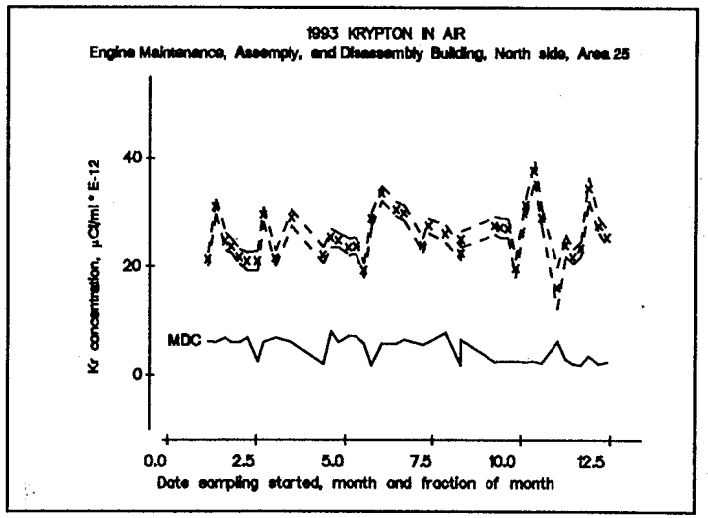


Figure E.22 Time Series Plot of 1993 E-MAD Kr Results

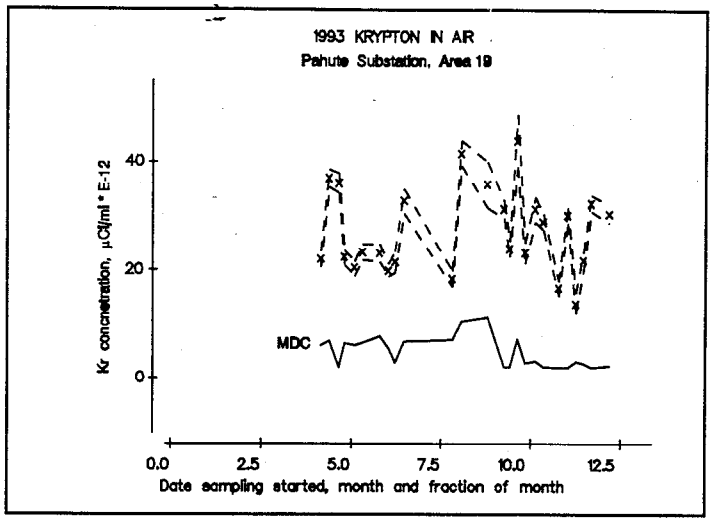


Figure E.23 Time Series Plot of 1993 Pahute Substation Kr Results

All of the Station Data Sets fit lognormal distributions and some also fit normal distributions. The lognormal distribution was chosen for further statistical analyses to satisfy the underlying assumptions of the ANOVA methods. Table E.4 gives the basic descriptive statistics of the stations where annual krypton data were collected. The overall mean given in this table 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 0.00113 for 345 data values from the ten environmental sampling stations. The between-replicates mean square error from the ANOVA was 0.0370. 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 ten locations for equality of krypton location means of the natural logarithms of the data. The ANOVA output is shown in Table E.5. The mean of the logarithms of data estimates 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 significant differences between the stations would be found if in fact the null hypothesis were true. Since this probability is larger than the usual five percent critical value the conclusion is that there are no significant differences. Examination of the plots of the confidence intervals in Table E.5 suggest that the station at the Area 20 Camp might be higher than the remaining stations. The assumed cause of the apparent but not significant higher levels in Area 20 is atmospheric pumping from past underground events in Areas 19 and 20.

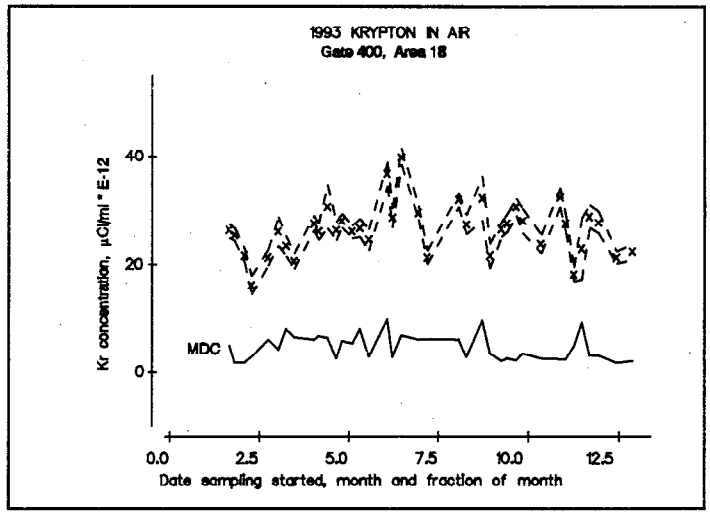


Figure E.24 Time Series Plot of 1993 Gate 400 Kr Results

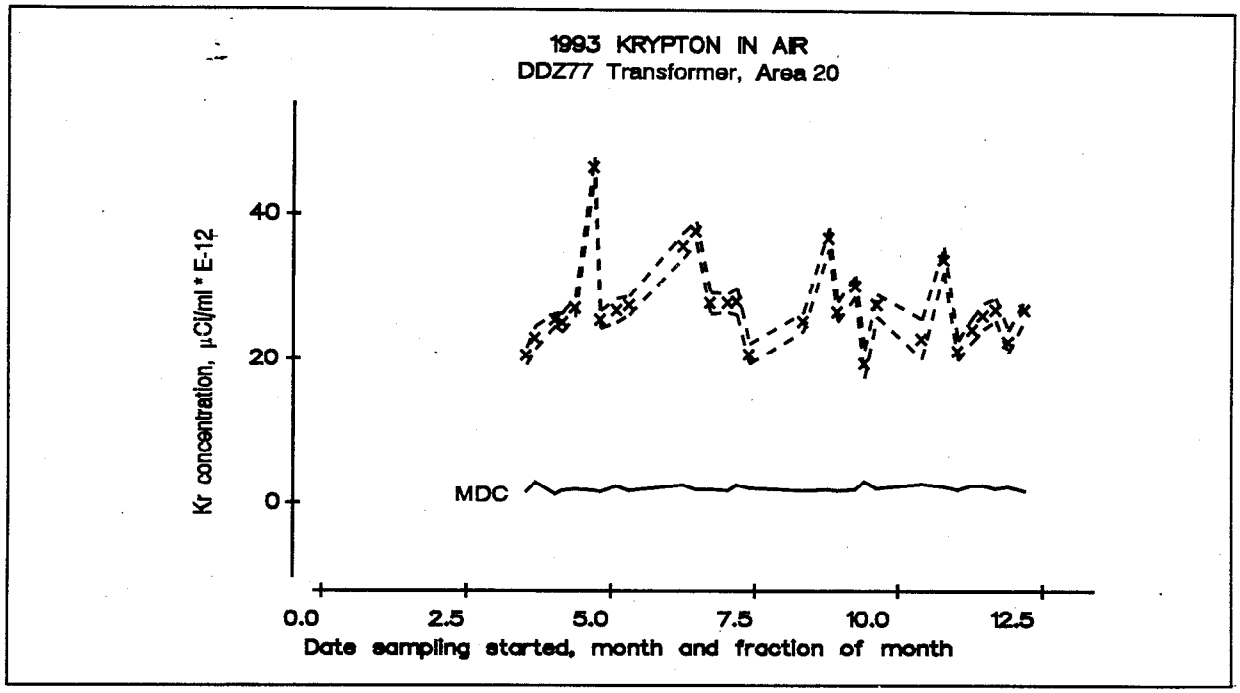


Figure E.25 Time Series Plot of 1993 DDZ77 Transformer Kr Results

Table E.4 Descriptive Statistics of 1993 Kr Data (pCi/m^3)

Environmental Stations	N	Mean	Median	Standard Deviation	1st Quartile	3rd Quartile	Maximum
BJY	39	27	26	4.4	24	29	38
Gravel Pit	37	27	26	6.0	23	30	47
Gate 200	43	27	26	4.7	24	30	45
Area 12 Camp	31	26	26	5.3	22	28	42
EPA Farm	37	25	25	3.5	22	27	32
Area 20 Camp	27	28	28	5.7	25	33	40
E-MAD	39	26	25	4.5	22	29	38
Pahute Sbst.	25	27	24	7.8	22	33	44
Gate 400	38	26	26	4.8	23	29	40
DDZ77 Trans.	29	27	27	5.9	24	28	46
All	345	27	26	5.2	23	29	47

DUPLICATE NOBLE GAS ANALYSIS

In previous annual reports it was noted that the analytical errors, reported in the data tables as one standard deviation, might not be representative of the total randomness associated with each result. The reported errors are the counting errors and these do not reflect randomness that may be derived from such things as sample collection and sample preparation. In 1993 some of the samples were analyzed in duplicate to provide data that can be used to analyze the significance of some of the sources of error.

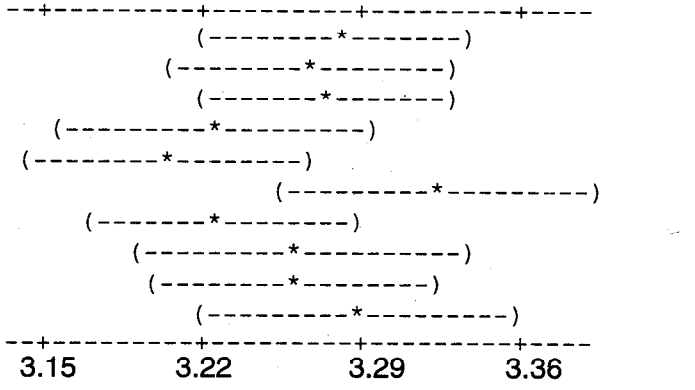
Table E.5 One-Way Analysis of Variance on Natural Logarithm of Kr Concentrations for Differences between Stations (ln[pCi/m^3])

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-Value	p-Value
Location	9	0.3587	0.0399	1.08	0.378
Error	335	12.3803	0.0370		
Total	344	12.7389			

Location	N	Log of Median	Standard Deviation
BJY	39	3.2805	0.1641
Gravel Pit	37	3.2669	0.2087
Gate 200 S	43	3.2749	0.1644
Area 12 Camp	31	3.2277	0.2034
EPA Farm	37	3.2037	0.1451
Area 20 Camp	27	3.3249	0.2084
E-MAD N	39	3.2294	0.1752
Pahute Sub.	25	3.2649	0.2927
Gate 400	38	3.2603	0.1825
DDZ77 Tran.	29	3.2926	0.1956

Pooled Standard Deviation = 0.1922

Individual 95 Percent Confidence Intervals for Ln Median Based on Pooled Standard Deviation



Because of analytical problems associated with very low activity samples, 96 percent of the xenon duplicate data were reported as missing values. The remaining data were insufficient for a statistical analysis. Most of the krypton duplicate data were available for analysis thus the duplicate analyses of this section will be for krypton only. The data are presented in Table E.6. The duplicates are listed as two successive lines in the table with the same location and same sample starting dates. All samples were collected for a two week period.

These data were screened for statistical distribution properties using the same procedures as were used for the regular xenon and krypton data. The duplicate data were found to follow a lognormal statistical distribution, which was expected since the regular data follows this distribution. Since the data are lognormally distributed, the statistical analyses were performed on the logarithms of the data values.

Analysis of variance procedures are the appropriate statistical tool for investigating sources of error in the krypton data. The structure of the data indicates that a "nested" analysis of variance model should be used. For each of the ten locations from which duplicate samples were collected, the duplicates have no association with the duplicates of other sampling locations, i.e., duplicates are nested within sampling locations. Statistical analysis programs that use the methodology called the "General Linear Model" are used to analyze nested data. The krypton data have another characteristic that is important to the analysis of variance; they are statistically "unbalanced." A "balanced" data set is one in which the number of samples collected at each of the ten locations is the same. Since the actual number of duplicate samples ranges from one at the Area 12 Camp and Pahute substation to seven at the BJY location, the data are unbalanced. Using unbalanced data in an analysis of variance results in probabilities for the several hypotheses tested that are only close approximations of the true probabilities.

Table E.6 Duplicate Results for ^{85}Kr - 1993

Location Name	Sampling Start Date	Krypton $10^{-12}\mu Ci/mL \pm 1s$	Detection Limit
BJY	93/02/16	20.0 ± 0.6	1.9
BJY	93/02/16	22.3 ± 0.6	5.0
BJY	93/03/22	24.9 ± 0.6	5.0
BJY	93/03/22	19.6 ± 0.6	5.8
BJY	93/04/19	27.5 ± 0.7	6.2
BJY	93/04/19	25.8 ± 0.8	6.9
BJY	93/05/24	28.3 ± 0.8	5.7
BJY	93/05/24	28.3 ± 0.8	7.2
BJY	93/06/01	35.5 ± 0.6	6.1
BJY	93/06/01	29.3 ± 0.7	1.9
BJY	93/06/07	31.3 ± 0.7	6.1
BJY	93/06/07	26.0 ± 1.3	12.4
BJY	93/07/19	25.6 ± 0.7	6.4
BJY	93/07/19	26.6 ± 1.6	16.1
Gravel Pit	93/02/09	24.6 ± 1.0	9.0
Gravel Pit	93/02/09	22.0 ± 1.5	14.0
Gravel Pit	93/02/17	23.6 ± 1.0	9.0
Gravel Pit	93/02/17	26.5 ± 0.6	5.0
Gravel Pit	93/03/30	35.4 ± 1.5	14.0
Gravel Pit	93/03/30	23.9 ± 0.9	9.0
Gravel Pit	93/06/01	30.8 ± 0.6	5.3
Gravel Pit	93/06/01	28.7 ± 0.9	8.1
Gravel Pit	93/08/23	38.6 ± 0.9	8.0
Gravel Pit	93/08/23	27.1 ± 0.9	8.7
Gravel Pit	93/11/15	27.5 ± 0.8	2.2
Gravel Pit	93/11/15	25.0 ± 0.8	2.4
Gate 200 S	93/03/22	25.7 ± 0.8	6.6
Gate 200 S	93/03/22	20.3 ± 0.8	2.2
Gate 200 S	93/04/07	21.4 ± 1.1	10.6
Gate 200 S	93/04/07	27.7 ± 1.1	10.4
Gate 200 S	93/06/28	29.7 ± 0.6	1.8
Gate 200 S	93/06/28	23.3 ± 0.6	5.4
Gate 200 S	93/09/08	25.9 ± 0.9	2.7
Gate 200 S	93/09/08	29.7 ± 0.9	2.6
Area 12 Camp	93/02/22	22.0 ± 0.6	4.0
Area 12 Camp	93/02/22	20.9 ± 0.7	6.0
EPA Farm	93/01/04	24.3 ± 0.6	5.0
EPA Farm	93/01/04	24.3 ± 0.6	5.0
EPA Farm	93/04/05	32.2 ± 0.8	7.0
EPA Farm	93/04/05	22.8 ± 0.7	6.4
EPA Farm	93/06/07	22.4 ± 0.8	7.7
EPA Farm	93/06/07	21.9 ± 0.7	6.5
EPA Farm	93/06/21	18.2 ± 0.7	6.7
EPA Farm	93/06/21	33.8 ± 0.8	2.0

Table E.6 (Duplicate Results for ^{85}Kr - 1993, cont.)

Location Name	Sampling Start Date	Krypton $10^{-12}\mu Ci/ml \pm 1s$	Detection Limit
EPA Farm	93/09/27	22.4 ± 0.8	2.4
EPA Farm	93/09/27	32.4 ± 0.8	2.3
Area 20 Camp	93/04/01	25.4 ± 0.9	8.0
Area 20 Camp	93/04/01	22.5 ± 1.0	1.0
Area 20 Camp	93/06/08	25.8 ± 0.9	8.5
Area 20 Camp	93/06/08	25.2 ± 0.7	6.1
E-MAD North	93/01/20	23.2 ± 0.7	6.3
E-MAD North	93/01/20	24.6 ± 0.8	7.0
E-MAD North	93/01/26	23.7 ± 0.7	6.0
E-MAD North	93/01/26	25.4 ± 0.9	8.0
E-MAD North	93/03/01	21.5 ± 0.8	7.0
E-MAD North	93/03/01	25.0 ± 0.8	7.0
E-MAD North	93/05/17	19.3 ± 0.6	5.8
E-MAD North	93/05/17	22.5 ± 0.6	5.7
E-MAD North	93/08/09	22.4 ± 0.6	1.9
E-MAD North	93/08/09	24.9 ± 0.7	6.6
Pahute Substation	93/06/07	21.5 ± 1.0	3.0
Pahute Substation	93/06/07	23.9 ± 0.6	5.8
Gate 400	93/02/03	21.6 ± 0.6	1.9
Gate 400	93/02/03	23.0 ± 0.6	5.0
Gate 400	93/02/24	21.3 ± 0.7	6.0
Gate 400	93/02/24	27.8 ± 0.7	6.0
Gate 400	93/06/30	29.7 ± 0.6	6.0
Gate 400	93/06/30	33.2 ± 0.9	1.8
Gate 400	93/09/21	30.7 ± 0.8	2.2
Gate 400	93/09/21	30.7 ± 0.8	2.3
DDZ77 Transformer	93/04/22	46.4 ± 0.8	1.9
DDZ77 Transformer	93/04/22	28.7 ± 0.8	2.3
DDZ77 Transformer	93/07/13	20.8 ± 0.7	2.1
DDZ77 Transformer	93/07/13	19.9 ± 0.8	2.5
DDZ77 Transformer	93/09/08	30.2 ± 0.7	2.0
DDZ77 Transformer	93/09/08	29.2 ± 0.8	2.2
DDZ77 Transformer	93/10/13	22.9 ± 1.4	2.7
DDZ77 Transformer	93/10/13	21.5 ± 0.8	2.5

The results of the nested analysis of variance are given in Table E.7. This table shows that there was no significant differences (probability less than 0.05) between sampling locations and a significant difference between the samples taken within the locations. The significant difference between samples within locations can be interpreted as a difference over time since the samples were taken at different times of the year. Note, however, that the significance shown in the table, 0.043 is not very different from the significance criterion of 0.05, thus the differences between samples within locations is not remarkable.

The significant difference between samples within locations indicates that there is some variability over time of year that the samples were taken. This significance does not imply that the same pattern over time is shown by all locations or that all locations show a pattern. The variability over time is best explored by examining the plots of the data provided in Figures E.26 through E.35. In these plots the abscissa gives the time that sampling started in 1992 as month and fraction of the month. The ordinate gives the krypton concentration as the logarithm of the concentration on a linear scale, which was the data used for the statistical analysis, and as $\mu Ci/mL \times 10^{-12}$ on a logarithmic scale to indicate the concentrations as usually used for reporting. Examination of Figures E.26 to E.35 shows that most of the data is within the range of natural logarithms of 2 to 4. The plots indicate that all of the locations show a consistently narrow range of data values in a variety of time patterns. Since the purpose of this statistical analysis is to examine sources of error rather than time series patterns, the causes of the samples within locations significance was not further pursued.

The final comparison to consider is the relation of the errors between duplicates to the analytical or counting errors. The statistical techniques for this comparison were detailed in previous sections of this appendix. The general procedure is to square the analytical standard deviations to get the corresponding variances then average the variances over all samples and duplicates to get a number that can be compared to the mean-square-error in the Analysis of Variance in Table E.7. The average analytical variance, transformed to correspond to the logarithms of the data, is 0.00105. This is noticeably smaller than the corresponding analysis of variance number measuring the variability between duplicates, 0.02210 from the last line of the mean-square column in Table E.7. The statistical method for

Table E.7 Analysis of Variance on Logarithms of Duplicate Krypton Data

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Locations	9	0.295552	0.03283	0.82	0.5994
Samples within locations	29	1.155806	0.03985	1.80	0.0430
Duplicates within samples	39	0.862138	0.02210		
Total	77	2.313495			

Location	Log Median	Median (pCi/m^3)
All Locations	3.2127	25
Area 20 Camp	3.0654	21
Pahute Substation	3.1210	23
E-MAD North	3.1432	23
Area 20 Camp	3.2064	25
EPA Farm	3.2184	25
Gate 200 S	3.2284	25
BJY	3.2652	26
DDZ77 Trans.	3.2751	26
Gate 400	3.2918	27
Gravel Pit	3.3119	27

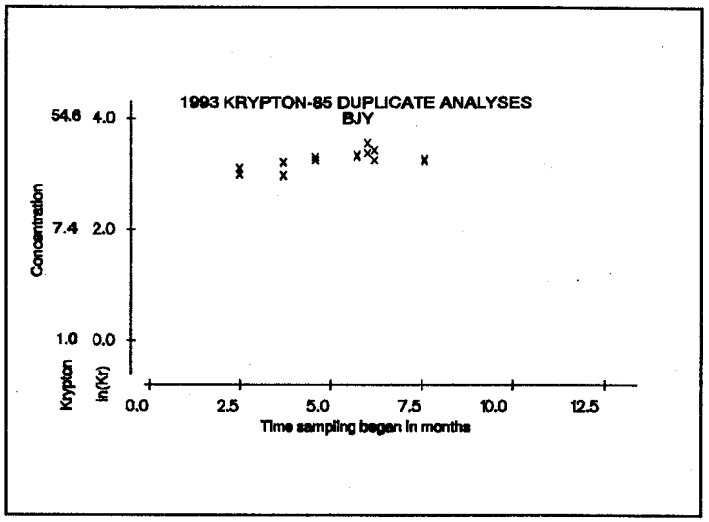


Figure E.26 Time Series Plot of BJY Duplicate Data

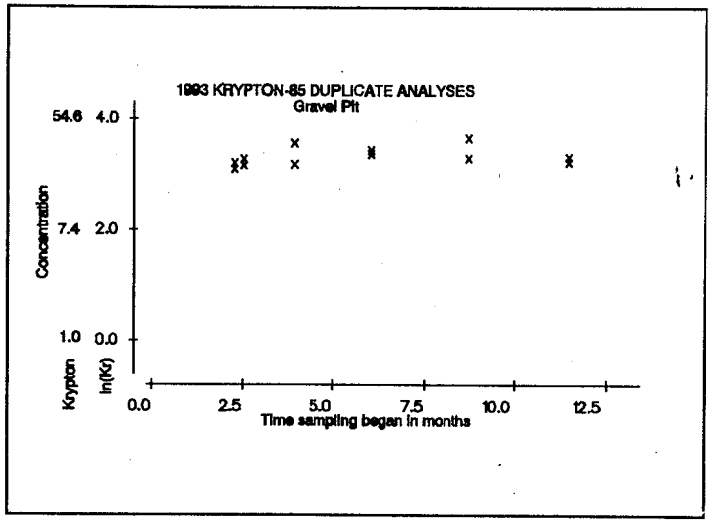


Figure E.27 Time Series Plot of Gravel Pit Data

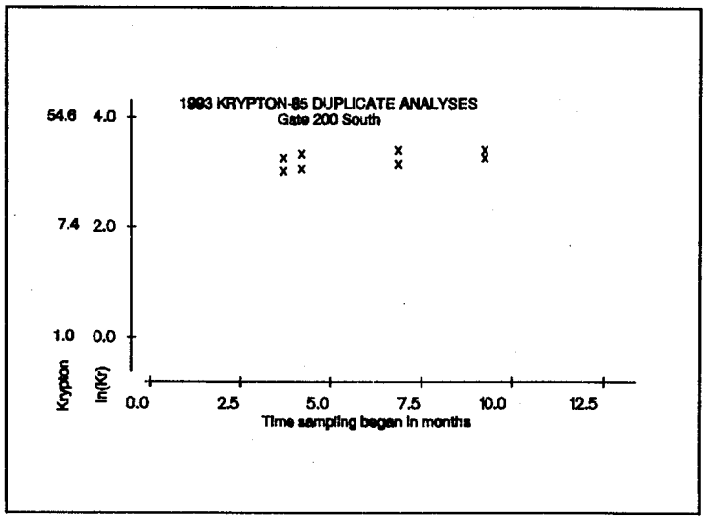


Figure E.28 Time Series Plot of Gate 200 Data

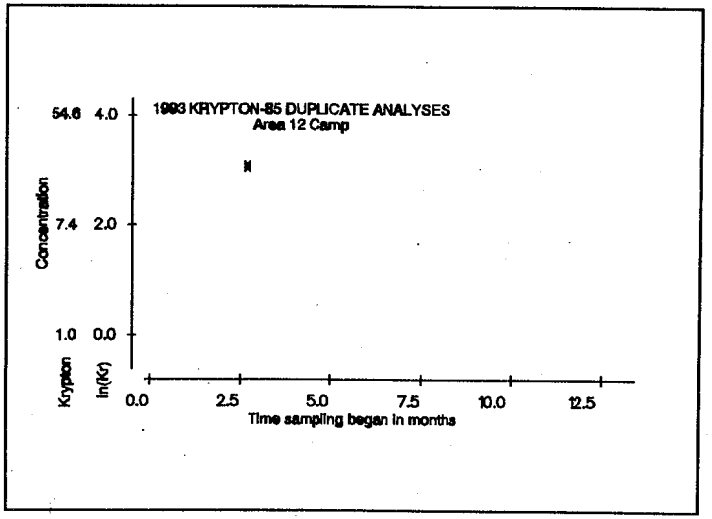


Figure E.29 Time Series Plot of Area 12 Camp Data

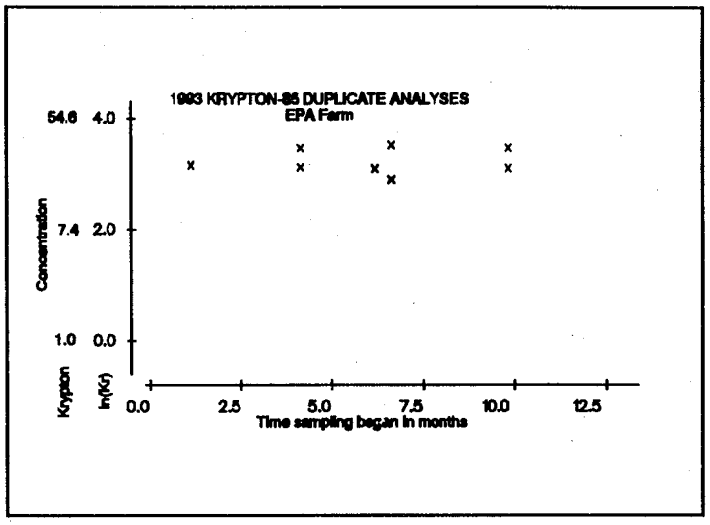


Figure E.30 Time Series Plot of EPA Farm Data

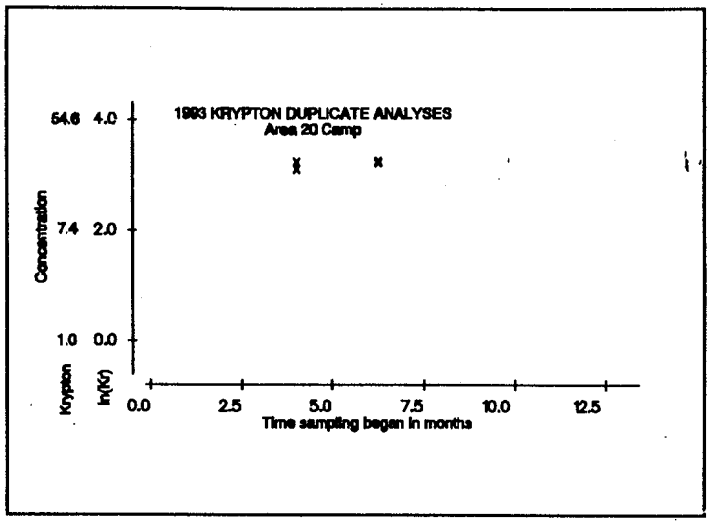


Figure E.31 Time Series Plot of Area 20 Camp Data

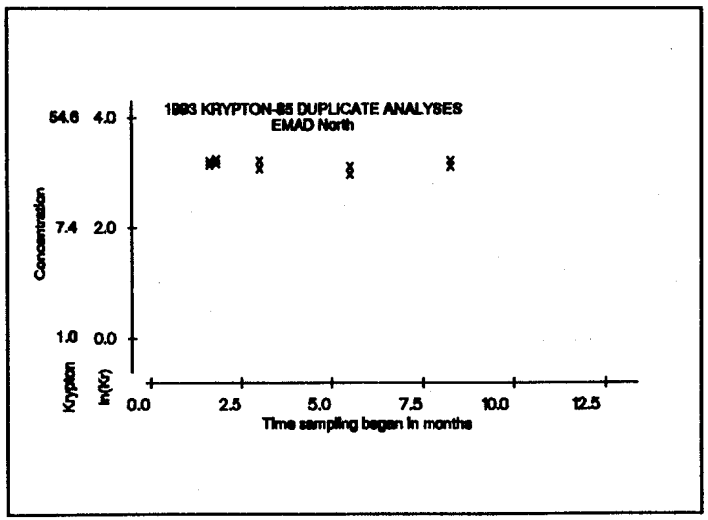


Figure E.32 Time Series Plot of E-MAD Duplicate Data

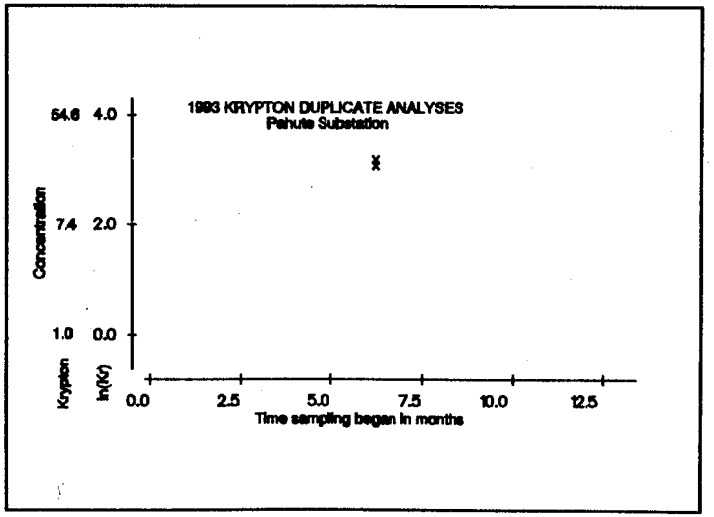


Figure E.33 Time Series Plot of Pahute Data

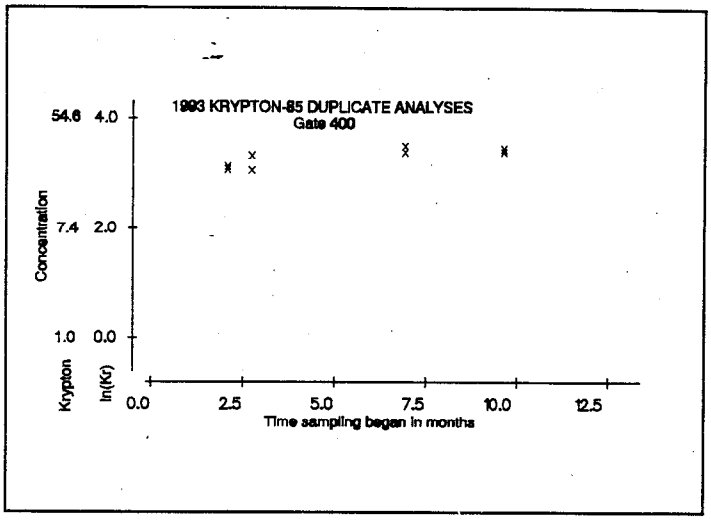


Figure E.34 Time Series Plot of Gate 400 Data

comparing two variances or mean-square-errors is to ratio them and derive the significance of the differences from a table of the F-distribution. Using such a table requires that the degrees of freedom associated with each variance be known. The degrees of freedom associated with analytical error are not defined because a statistical variance cannot be computed from one data point per analysis, however for purposes of this comparison a conservative "working degrees of freedom" can be assumed to be the total degrees of freedom in the analysis of variance of Table E.7. Using this value for analytical degrees of freedom yields a significance of much smaller than the customary critical value of 0.05, thus it is concluded that the between duplicates errors and the analytical errors are significantly different for krypton in air in 1993. In 1993 the analytical errors are obviously smaller than the variability between replicate samples.

The analysis of only the krypton duplicate data yielded three statistical conclusions. There are no significant differences between the sampling locations. This conclusion was also obtained from the analysis of the non-duplicate krypton data. The second conclusion is that there are differences over time within one or more of the sampling locations. An examination of time series plots of the duplicate data showed no consistent patterns and a test for trends within the several locations was not done. Statistical testing for differences over time within each location cannot be done with the non-duplicate data. The comparison of the differences between duplicates to the analytical error was the basic reason for collecting and analyzing the duplicate data. This analysis showed significant differences between the analytical error and the between duplicate error. This statistical test is an approximation since the analytical errors formally have no degrees of freedom. This conclusion differs from the 1992 report when no significant difference was found between replicate and analytical errors.

HISTORICAL TRENDS

Krypton concentrations have been reported in NTS annual environmental reports for twelve years, since 1982, at six locations and for a portion of this time period for an additional five stations. Before 1982, EPA operated the Noble Gas network. Before 1990 almost all xenon data were reported as detection limits and thus reflect analytical capability rather than environmental concentrations. Measured xenon concentrations,

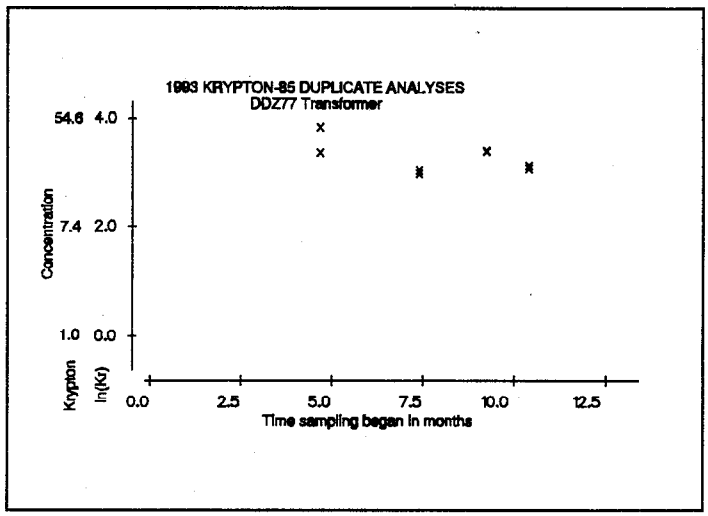


Figure E.35 Time Series Plot of DDZ77 Duplicate Data

regardless of the detection limit, have been reported only since 1990 and will not be discussed in this noble gas historical trends section.

The krypton data are shown in Table E.8. Note that data for the Pile Driver location exist only for the years 1987 through 1990, and these are the years in which no data were collected at the EPA Farm. For these years a noble gas sampler was moved 1.5 miles northwest from the EPA Farm to the vicinity of the Pile Driver event. Pile Driver was a weapons effect test detonated on 6/2/1966. The move from the EPA Farm was made when the farm was closed and the move back was made when electrical power was disconnected from the Pile Driver location. An assumption can be made that these stations were close enough together that the moves would not significantly affect the concentrations, thus these stations probably can be considered as one.

The Pahute Substation, Gate 400, and DDZ77 Transformer locations are all newer locations in the northwest portion of the Nevada Test Site, on Pahute and Rainier Mesas (see Figure E.1). The DDZ77 Transformer station is at the extreme Northwest corner of the NTS. These stations were added at the request of DOE Nevada Operations for the purpose of obtaining better coverage of Pahute and Rainier Mesas.

Figure E.36 is a histogram of the data in Table E.8. This histogram shows that most of the data are clustered between 20 and 30 $\mu Ci/mL \times 10^{-12}$, with a few values in the 40 to 50 range. These three high values occurred at the Area 20 camp in 1985, 1986, and 1987. During this time period there were several accidental ventings within three miles of this camp. The remaining data in Table E.8 show a very consistent pattern of values clustered about 25 $\mu Ci/mL \times 10^{-12}$. Including the high values from the Area 20 Camp, the data in Table E.8 have an average of 26.8 and a standard deviation of 4.9, thus most of the data are within one standard deviation of the mean. This is unusual consistency for environmental data, and indicates that for the years 1982 through 1993 there has been no historical trend in krypton concentrations on the Nevada Test Site.

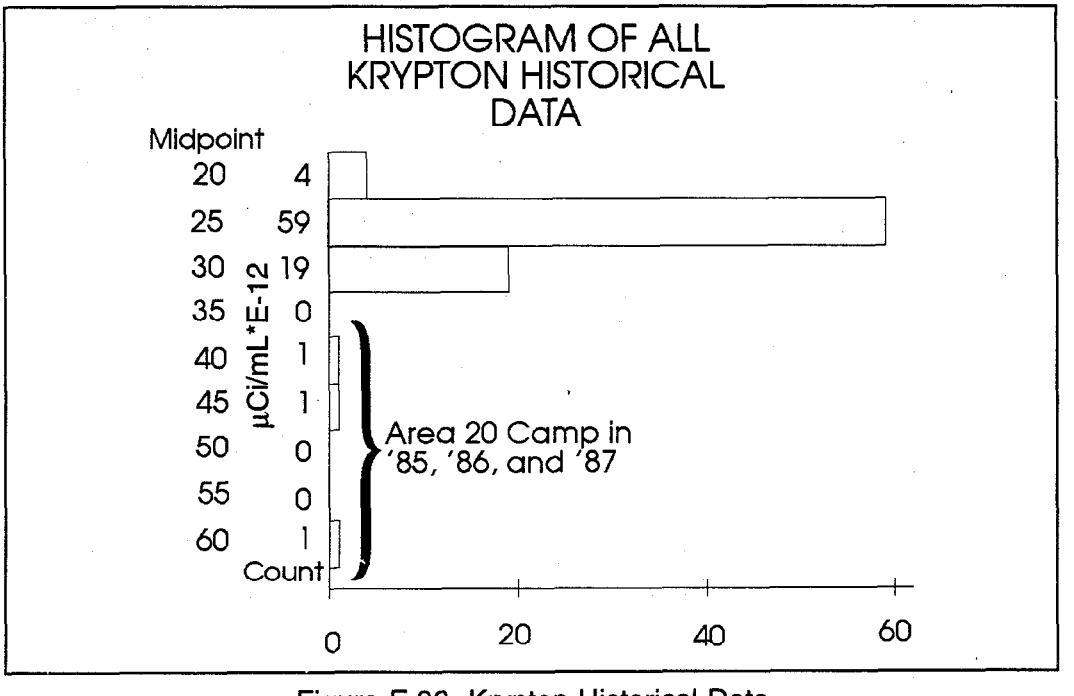


Figure E.36 Krypton Historical Data

Table E.8 NTS Krypton History

HISTORICAL KRYPTON ANNUAL AVERAGES, μCi/mL * 10^{-12}

	Locations												
Year	BJY	Gravel Pit	Gate 200 S.	Area 12 Camp	EPA Farm	Area 20 Camp	E-MAD North	Pile Driver	Pahute Substa.	Gate 400	DDZ77 Trans.	Years Average	N
1982	25.4	-	-	24.5	25.4	-	24.4	-	-	-	-	24.9	4
1983	26.5	-	25.3	24.8	24.9	22.5	25.3	-	-	-	-	24.9	6
1984	28.0	-	26.0	27.0	28.0	31.0	27.0	-	-	-	-	27.8	6
1985	29.0	30.0	27.0	28.0	30.0	46.0	29.0	-	-	-	-	31.3	7
1986	30.0	29.0	27.0	30.0	31.0	58.0	32.0	-	-	-	-	33.9	7
1987	25.3	26.2	27.3	25.7	-	39.3	26.4	26.2	-	-	-	28.1	7
1988	23.7	22.8	23.4	26.0	-	28.8	22.5	24.4	-	-	-	24.5	7
1989	24.1	22.4	22.7	22.9	-	26.8	22.1	22.3	-	-	-	23.3	7
1990	23.3	24.8	22.6	23.9	-	29.3	21.4	24.2	-	-	-	24.2	7
1991	24.0	24.0	22.5	23.6	23.4	31.7	23.8	-	-	-	-	24.7	7
1992	25.8	26.6	26.6	25.9	26.3	29.5	27.7	-	24.4	24.5	24.3	26.2	10
1993	26.9	26.8	26.8	25.7	26.0	28.4	25.6	-	27.3	26.5	27.4	26.7	10
Location Average	26.0	25.8	25.2	25.7	26.9	33.8	25.6	24.3	25.9	25.5	25.9	26.8	85
N	12	9	11	12	8	11	12	4	2	2	2	85	

APPENDIX F
ONSITE THERMOLUMINESCENT DOSIMETER DATA

Robert R. Kinnison

Thermoluminescent dosimeters (TLD) were placed at 193 environmental monitoring stations at the NTS. The dosimeters were exchanged quarterly and processed 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 sampling station within each area. An asterisk in this table denotes a missing data value. For the last quarter of 1993, six new stations were added: Stake J-41, Stake LC-4, Stake A-118, Gate 19-3P, Papoose Lake Road, and Stake A-83. Data were available from only 191 stations because the TLDs at Gate 19-3P and Papoose Lake could not be collected at the end of the fourth quarter.

The 24 control dosimeters are located in places thought to be at background exposure levels. The Area given in Tables F.1 and F.2 for the boundary stations, i.e., stations that are close to or just outside the NTS boundary, is the Area that is adjacent to the sampling station. In previous annual reports the boundary stations were not included in the table of control data. Boundary stations were established in late 1989 and data was first reported in the 1990 annual report. Data from previous years confirm that these locations do represent background exposure levels. Thus, for 1993 the boundary data has been included with the control data. (Note that the second quarter data from all the boundary stations are missing in Table F.2. This is due to a laboratory procedural error.)

In 1992 DOE implemented a policy change restricting snow removal from roads. This policy effectively closed the high mesa areas during the winter months, effectively closing the access to many of the TLD sampling stations in Areas 19 and 20 for the fourth quarter of 1993. These stations should be accessible by the end of the first quarter of 1994, and at that time a fourth quarter 1993 and first quarter 1994 combination exposure measurement will be obtained. As a result of the closure of the mesas during the winter of 1992-1993 the first quarter values in this report from the affected stations are actually half the total exposure for the combined last quarter of 1992 and the first quarter of 1993.

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. The numbers in Figure F.1 indicate where several identical data values occur, e.g., in the data subset used for the figure

Table F.1 TLD Network Gamma Exposure Rates - 1993

Area/Location		1st Quarter (mR/day)	2nd Quarter (mR/day)	3rd Quarter (mR/day)	4th Quarter (mR/day)	Annual Average (mR/day)	Annual Total (mR/yr)
1	BJY	0.39	0.33	0.35	0.38	0.36	132
1	Sandbag Storage Hut	0.42	0.45	0.45	*	0.44	161
1	Stake TH-27	0.38	0.34	0.35	0.42	0.37	136
2	Cable Yard	0.53	0.49	0.50	0.53	0.51	187
2	Stake L-9	0.68	0.62	0.64	0.66	0.65	237
2	Stake M-140	0.49	0.45	0.47	0.48	0.47	173
2	Stake M-150	*	0.47	0.51	0.50	0.49	180
2	Stake N-8	2.98	2.90	2.87	2.71	2.87	1046
2	Stake TH-58	0.37	0.33	0.34	0.38	0.36	130
3	U-3ah/at E	0.53	0.56	0.49	0.53	0.53	193
3	U-3ah/at N	0.52	0.47	0.45	0.48	0.48	175
3	U-3ah/at S	0.61	0.60	0.57	*	0.59	217
3	U-3ah/at S Gate	0.53	0.48	0.43	*	0.48	175
3	U-3ah/at W	0.49	0.44	0.58	0.48	0.50	182
3	Boundary TLD Station 358	0.28	*	0.33	0.23	0.28	102
3	LANL Trailers	0.45	0.42	0.41	0.46	0.44	159
3	Stake A-6.5	0.59	0.54	0.58	0.58	0.57	209
3	Stake OB-20	0.36	0.31	0.31	0.34	0.33	121
3	U-3ax/bl NE	0.85	0.76	0.77	0.75	0.78	286
3	U-3ax/bl NW	0.47	0.55	0.54	0.65	0.55	202
3	U-3ax/bl S	0.53	0.51	0.56	0.53	0.53	194
3	U-3ax/bl SE	0.60	0.55	0.53	0.60	0.57	208
3	U-3by N	*	0.84	0.88	0.87	0.86	315
3	U-3by S	0.57	*	0.54	0.55	0.55	202
3	U-3bz N	0.70	0.65	0.71	0.70	0.69	252
3	U-3bz S	0.52	0.48	0.48	0.53	0.50	184
3	U-3cj N	0.54	*	0.52	0.51	0.52	191
3	U-3co N	2.87	2.88	2.95	2.81	2.88	1051
3	U-3co S	1.88	1.83	1.95	1.79	1.86	680
3	U-3du N	0.57	0.52	0.59	0.56	0.56	205
3	U-3du S	0.60	0.57	0.54	0.59	0.57	210
3	U-3ey S	0.51	0.48	*	0.62	0.54	196
4	Stake A-9	3.60	3.46	3.57	3.47	3.53	1288
4	Stake M-130	0.45	0.41	0.42	0.44	0.43	157
4	Stake TH-38	0.42	0.40	0.41	0.46	0.42	154
4	Stake TH-48	0.44	0.41	0.42	0.51	0.44	163
5	Boundary TLD Station 360	0.25	*	0.32	0.22	0.26	96
5	RWMS E 1000'	0.47	0.45	0.43	0.50	0.46	169
5	RWMS E 1500'	0.44	0.43	0.43	0.48	0.44	163
5	RWMS E 500'	0.42	0.44	0.41	0.46	0.43	158
5	RWMS E Gate	0.71	0.70	0.78	0.80	0.75	273
5	RWMS MSM-1 E	3.78	3.51	3.63	3.76	3.67	1340
5	RWMS MSM-1 NNE	9.97	8.40	1.71	9.14	7.31	2668
5	RWMS MSM-1 NNW	3.23	3.23	3.49	3.35	3.33	1214
5	RWMS MSM-1 NE	2.31	2.03	4.96	2.25	2.89	1055
5	RWMS MSM-1 NW	3.35	3.18	1.98	3.29	2.95	1077
5	RWMS MSM-1 SSE	5.42	4.89	7.74	5.35	5.85	2137

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1993, cont.)

Area/Location		1st Quarter (mR/day)	2nd Quarter (mR/day)	3rd Quarter (mR/day)	4th Quarter (mR/day)	Annual Average (mR/day)	Annual Total (mR/yr)
5	RWMS MSM-1 SSW	3.50	3.20	3.13	3.30	3.28	1199
5	RWMS MSM-1 SE	1.97	1.58	3.29	1.79	2.16	788
5	RWMS MSM-1 SW	3.58	3.14	3.09	3.64	3.36	1228
5	RWMS MSM-1 W	8.14	6.79	8.09	7.11	7.53	2751
5	RWMS MSM-2 E	12.63	10.70	12.19	11.40	11.73	4284
5	RWMS MSM-2 N	8.70	7.27	7.98	8.15	8.02	2931
5	RWMS MSM-2 NE	5.07	4.81	4.51	5.27	4.91	1795
5	RWMS MSM-2 NW	5.31	4.95	4.82	5.31	5.10	1862
5	RWMS MSM-2 S	*	5.07	6.49	6.30	5.95	2174
5	RWMS MSM-2 SE	4.17	3.83	3.64	4.17	3.95	1444
5	RWMS MSM-2 SW	4.05	3.73	3.73	4.09	3.90	1424
5	RWMS MSM-2 W	13.78	10.84	11.30	11.31	11.81	4313
5	RWMS N 1000'	0.49	0.46	0.51	0.54	0.50	183
5	RWMS N 1500'	0.49	0.44	0.44	0.49	0.47	170
5	RWMS N 500'	0.47	0.48	0.49	0.50	0.49	177
5	RWMS NE Corner	0.41	0.44	0.41	0.48	0.44	159
5	RWMS NW Corner	0.47	0.45	0.44	0.50	0.47	170
5	RWMS Office	0.42	0.51	0.51	0.57	0.50	184
5	RWMS Pit 3 N Side	1.14	0.49	*	0.52	0.72	262
5	RWMS Pit 3 S Side	1.20	0.47	*	0.49	0.72	263
5	RWMS Pit 4 W Side	*	*	0.52	0.53	0.52	192
5	RWMS Pit 4 E Side	*	*	0.53	0.54	0.53	195
5	RWMS S 500'	0.46	0.45	0.45	0.48	0.46	168
5	RWMS S Gate	0.44	0.41	0.42	0.44	0.43	156
5	RWMS SW Corner	0.44	0.44	0.43	0.46	0.44	162
5	RWMS TRU Pad N	1.51	0.68	0.69	0.68	0.89	325
5	RWMS TRU Pad NE	1.26	*	0.42	3.50	1.73	631
5	RWMS TRU Pad NW	0.70	0.44	0.75	0.49	0.60	217
5	RWMS TRU Pad S	2.17	0.99	0.69	0.62	1.12	408
5	RWMS TRU Pad SE	1.10	1.21	1.05	1.09	1.11	406
5	RWMS TRU Pad SW	0.56	0.48	0.60	0.82	0.62	225
5	RWMS W 1000'	0.52	0.48	0.49	0.54	0.51	185
5	RWMS W 1500'	0.47	0.47	0.47	0.49	0.47	173
5	RWMS W 500'	0.47	0.46	0.44	0.52	0.47	173
5	Well 5B	0.33	0.40	0.42	0.43	0.40	144
6	CP-2 Logistic Desk	*	0.30	0.27	0.34	0.30	111
6	CP-50 Calibration Bench	0.29	0.29	0.26	0.45	0.32	118
6	CP-50 Calibration Door	0.49	0.44	0.45	0.30	0.42	153
6	CP-6	0.32	0.27	0.27	0.33	0.30	109
6	Decon Pad Back Room	0.33	0.29	0.27	0.33	0.31	111
6	Decon Pad Office	0.44	0.41	0.33	0.38	0.39	142
6	Stake OB-11.5	0.49	0.44	0.43	0.48	0.46	168
6	Stake TH-1	0.30	0.27	0.27	0.32	0.29	106
6	Stake TH-18	0.35	0.32	0.35	0.38	0.35	128
6	Stake TH-9	0.40	0.36	0.39	0.42	0.39	143
6	Well 3	*	0.38	0.40	0.42	0.40	146

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1993, cont.)

Area/Location	1st Quarter (mR/day)	2nd Quarter (mR/day)	3rd Quarter (mR/day)	4th Quarter (mR/day)	Annual Average (mR/day)	Annual Total (mR/yr)
6 Yucca Oil Storage Area	0.38	0.35	0.36	0.40	0.37	136
7 7-300 Bunker	1.11	1.02	1.14	1.02	1.07	392
7 Reitmann Seep	0.49	0.45	0.46	0.48	0.47	172
7 UE-7ns	0.47	0.39	0.42	0.44	0.43	157
8 Stake CA-14	0.43	0.43	0.47	0.44	0.44	162
8 Stake K-25	0.41	0.37	0.39	0.40	0.39	143
9 9-300 Bunker	0.48	0.44	0.44	0.58	0.48	177
9 U-9cw S	0.40	0.39	0.37	0.43	0.40	145
9 V&G Road Junction	0.43	0.37	0.41	0.39	0.40	146
10 Boundary TLD Station 357	0.43	*	0.35	0.26	0.35	127
10 Circle & L Road	0.47	0.42	0.42	0.46	0.44	162
10 Sedan E Visitor Box	0.56	*	0.50	0.53	0.53	194
10 Sedan W	1.25	1.16	1.21	1.16	1.19	436
10 Stake A-24	*	0.58	0.59	0.59	0.59	214
10 Stake CA-14	0.43	0.43	0.47	0.44	0.44	162
11 Boundary TLD Station 359	0.53	*	0.67	0.44	0.55	200
11 Gate 293	0.48	0.44	0.43	0.48	0.46	167
12 Boundary TLD Station 355	0.31	*	0.47	0.33	0.37	135
12 Building 12-10	0.47	0.43	0.44	0.48	0.45	166
12 Stake M-168	0.40	0.42	0.45	0.49	0.44	161
12 Stake M-170	0.40	0.40	0.41	0.43	0.41	150
12 Stake M-175	0.45	0.44	0.46	0.48	0.46	167
12 Stake TH-68.5	0.39	0.35	0.37	0.40	0.38	138
12 T Tunnel No. 2 Pond	1.43	1.55	1.53	1.74	1.56	571
12 Upper Haines Lake	0.42	0.39	0.42	0.43	0.41	152
12 Upper N Pond	0.47	0.45	0.48	0.48	0.47	172
15 Boundary TLD Station 356	0.52	*	0.24	0.45	0.40	147
15 EPA Complex	0.43	0.40	0.41	0.44	0.42	153
15 Lamp Shack	0.51	0.46	0.46	0.47	0.47	173
15 Office	0.42	0.37	0.39	0.41	0.40	145
15 Substation U-15e	0.42	0.34	0.35	0.37	0.37	135
17 Stake M-185	0.35	0.45	0.54	0.48	0.45	166
17 Stake M-190	0.50	0.49	0.53	0.54	0.51	188
18 Stake A-106	0.54	0.61	0.51	*	0.55	202
18 Stake M-196	0.49	0.50	0.53	0.56	0.52	190
18 Stake P-35	0.51	0.50	0.49	*	0.50	183
18 Stake P-39	0.50	0.48	0.53	*	0.50	184
18 Stake A-83	*	*	*	0.60	0.60	218
19 Boundary TLD Station 353	0.48	*	0.49	0.43	0.47	170
19 Boundary TLD Station 354	0.40	*	0.50	0.44	0.45	163
19 Stake C-16	*	0.47	0.52	*	0.50	181
19 Stake C-25	*	0.47	0.51	*	0.49	179
19 Stake C-27	*	0.46	0.50	*	0.48	175
19 Stake C-31	*	0.47	0.53	*	0.50	183
19 Stake P-41	0.56	0.57	0.52	0.61	0.56	206
19 Stake P-46	0.47	0.46	0.46	0.54	0.48	176

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1993, cont.)

Area/Location	1st Quarter (mR/day)	2nd Quarter (mR/day)	3rd Quarter (mR/day)	4th Quarter (mR/day)	Annual Average (mR/day)	Annual Total (mR/yr)
19 Stake P-54	0.38	0.46	0.46	0.54	0.46	168
19 Stake P-59	*	0.54	0.55	0.63	0.57	209
19 Stake P-66	*	*	0.54	0.62	0.58	212
19 Stake P-71	*	*	0.50	0.55	0.52	192
19 Stake P-77	*	0.55	0.56	0.75	0.62	226
19 Stake P-88	0.53	0.60	0.60	0.80	0.63	231
19 Stake P-91	0.49	0.53	0.59	0.78	0.60	218
19 Stake P-98	0.52	0.55	0.54	0.71	0.58	212
19 Stake R-18	*	0.51	0.51	*	0.51	186
19 Stake R-26	0.52	0.55	0.57	*	0.55	200
19 Stake R-29	0.55	0.54	0.53	*	0.54	197
19 Stake R-3	0.48	0.45	0.59	*	0.51	185
19 Stake R-8	0.53	0.58	0.57	*	0.56	205
19 Upper Well UE-19c Reservoir	*	0.46	0.48	*	0.47	172
20 Boundary TLD Station 350	0.62	*	0.83	0.52	0.66	240
20 Boundary TLD Station 351	0.51	*	0.49	0.47	0.49	179
20 Boundary TLD Station 352	0.35	*	0.44	0.29	0.36	131
20 P&K Road Junction	0.46	0.49	0.49	0.65	0.52	191
20 Stake J-16	0.50	0.59	0.53	*	0.54	197
20 Stake J-24	0.47	0.57	0.51	0.68	0.56	204
20 Stake J-31	0.87	*	0.91	*	0.89	325
20 Stake J-6	0.48	0.62	1.15	*	0.75	274
20 Stake P-116.5	0.47	0.49	0.54	0.69	0.55	200
20 Stake P-120.5	0.49	0.48	0.50	0.68	0.54	196
20 Stake P-124	0.53	0.51	0.53	0.69	0.56	206
20 Stake P-129.5	0.54	0.53	0.55	0.76	0.60	217
20 Stake P-134.5	0.46	0.57	0.56	0.67	0.56	206
20 Stake J-41	*	*	*	0.51	0.51	186
20 Stake LC-4	*	*	*	0.65	0.65	237
22 Boundary TLD Station 346	0.25	*	0.32	0.21	0.26	95
22 Desert Rock Control Tower	0.29	0.27	0.23	0.32	0.28	101
23 Building 180 Scaler Room	0.36	0.34	0.34	0.40	0.36	131
23 Building 190 Bench Drawer	0.33	0.33	0.37	0.39	0.36	130
23 Building 610 Bay	2.86	5.81	1.98	1.67	3.08	1125
23 Building 610 Gate	0.26	0.27	0.22	0.28	0.26	94
23 Building 650 Dosimetry	0.25	0.29	0.21	0.29	0.26	95
23 Building 650 Roof	0.25	0.24	0.21	0.29	0.25	90
23 Building 650 Storage Room	0.30	0.25	0.26	0.33	0.28	104
23 Gate 100	0.24	0.25	0.22	0.29	0.25	91
23 Post Office	0.30	0.29	0.27	0.33	0.30	109
25 Boundary TLD Station 347	0.35	*	*	*	0.35	128
25 Boundary TLD Station 348	0.49	*	*	0.41	0.45	164
25 25-4P Gate	0.45	0.48	0.44	0.49	0.47	170
25 25-7P Gate	0.44	0.45	0.41	0.48	0.44	163

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1993, cont.)

Area/Location	1st Quarter (mR/day)	2nd Quarter (mR/day)	3rd Quarter (mR/day)	4th Quarter (mR/day)	Annual Average (mR/day)	Annual Total (mR/yr)
25 E-MAD E	0.42	0.43	0.42	0.48	0.44	160
25 E-MAD N	0.40	0.40	0.39	0.44	0.41	149
25 E-MAD S	0.45	*	0.40	0.47	0.44	161
25 E-MAD W	0.42	*	0.39	0.47	0.43	156
25 HENRE	0.43	0.44	0.45	0.47	0.45	163
25 NRDS Warehouse	0.43	0.46	0.44	0.50	0.46	167
27 Area 27 Cafeteria	0.42	0.43	0.43	0.57	0.46	169
30 Boundary TLD Station 349	0.42	*	0.74	0.44	0.53	195

* Missing data value

Table F.2 Summary of Control TLD Data for 1993

Area/Location	1st Quarter (mR/day)	2nd Quarter (mR/day)	3rd Quarter (mR/day)	4th Quarter (mR/day)	Annual Average (mR/day)	Annual Total (mR/yr)
5 Well 5B	0.33	0.40	0.42	0.43	0.40	144
6 CP-6	0.32	0.27	0.27	0.33	0.30	109
6 Yucca Oil Storage	0.38	0.35	0.36	0.40	0.37	136
23 Building 650 Dosimetry	0.25	0.29	0.21	0.29	0.26	95
23 Building 650 Roof	0.25	0.24	0.21	0.29	0.25	90
23 Post Office	0.30	0.29	0.27	0.33	0.30	109
25 HENRE	0.43	0.44	0.45	0.47	0.45	163
25 NRDS Warehouse	0.43	0.46	0.44	0.50	0.46	167
27 Area 27 Cafeteria	0.42	0.43	0.43	0.57	0.46	169
22 Boundary Station 346	0.25	*	0.32	0.21	0.26	95
25 Boundary Station 347	0.35	*	*	*	0.35	128
25 Boundary Station 348	0.49	*	*	0.41	0.45	164
30 Boundary Station 349	0.42	*	0.74	0.44	0.53	195
20 Boundary Station 350	0.62	*	0.83	0.52	0.66	240
20 Boundary Station 351	0.51	*	0.49	0.47	0.49	179
20 Boundary Station 352	0.35	*	0.44	0.29	0.36	131
19 Boundary Station 353	0.48	*	0.49	0.43	0.47	170
19 Boundary Station 354	0.40	*	0.50	0.44	0.45	163
12 Boundary Station 355	0.31	*	0.47	0.33	0.37	135
15 Boundary Station 356	0.52	*	0.24	0.45	0.40	147
10 Boundary Station 357	0.43	*	0.35	0.26	0.35	127
3 Boundary Station 358	0.28	*	0.33	0.23	0.28	102
11 Boundary Station 359	0.53	*	0.67	0.44	0.55	200
5 Boundary Station 360	0.25	*	0.32	0.22	0.26	96

* Missing data value

there were four values of 0.25 mrem per day which has a natural logarithm of -1.39. "Goodness of fit" was tested 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 data 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 coefficient. Figure F.1 shows a good fit to a Gaussian distribution, the correlation is 0.992 with a sample size of 24. From the tables, the probability of a Gaussian distribution is approximately 0.90. Since Figure F.1 uses the logarithms of the data values, this figure shows a reasonable fit to a lognormal statistical distribution.

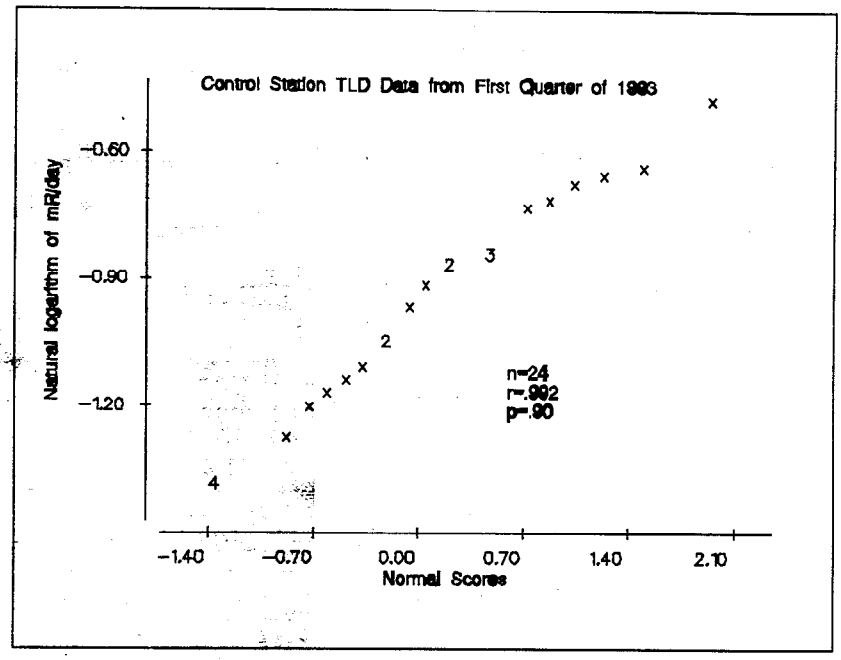


Figure F.1 Typical Lognormal Probability Plot

When a probability plot showed data points that were grossly higher or lower than most, they were removed and the goodness of fit test repeated. If the remaining data fit a normal or lognormal distribution the high data points were assigned to Table F.3 which lists all atypical values. With very few exceptions, after atypical values were removed, the data fit a lognormal distribution and many data subsets fit both a normal and a lognormal distribution. Because of these findings, it was decided to do the statistical comparisons, using the Analyses of Variance, on the natural logarithms of the data. Typically, when lognormal data have a narrow range of values they will also statistically fit a normal distribution. It is generally accepted that most environmental data are lognormally distributed.

In previous annual reports it was found that the data collected in Area 5 adjacent to the Mound Strategic Material (MSM) storage site, e.g., monitoring station names designated by a MSM-1 or MSM-2, were substantially higher than the environmental monitoring stations. This was to be expected because this storage site contains a substantial inventory of radioisotopes and thus the data from these TLDs cannot be considered as environmental data. The data from the MSM monitoring stations were not used for the evaluation of environmental exposures in 1993.

One way that the special case of the MSM data was recognized was by the segmented shape of the Area 5 data probability plot. Figure F.2 is the probability plot for the fourth quarter data from Area 5. A line has been drawn in at an exposure level of 1.0 mrem per day. This line divides the data into two approximately straight line segments. This shape should be compared to Figure F.1 which shows no segmentation. The corresponding plots for the other quarters also showed two segments. An examination of the Area 5 data, excluding the MSM

data, shows that the second segment data, those values above 1.0 mrem per day, are from the monitoring stations surrounding the transuranic storage pad TRU Pad. When the TRU pad data were removed from the probability plot, the remaining data plotted as approximately a straight line and fit both a normal and lognormal distribution. The TRU Pad is also a storage area with high levels of radioisotopes. During the first quarter of 1993 the TRU Pad was reconfigured, leading to the higher levels indicated in Table F.3. Because these increased exposures are from a known radiation source they are not considered environmental exposures and were deleted from the data used for environmental assessment.

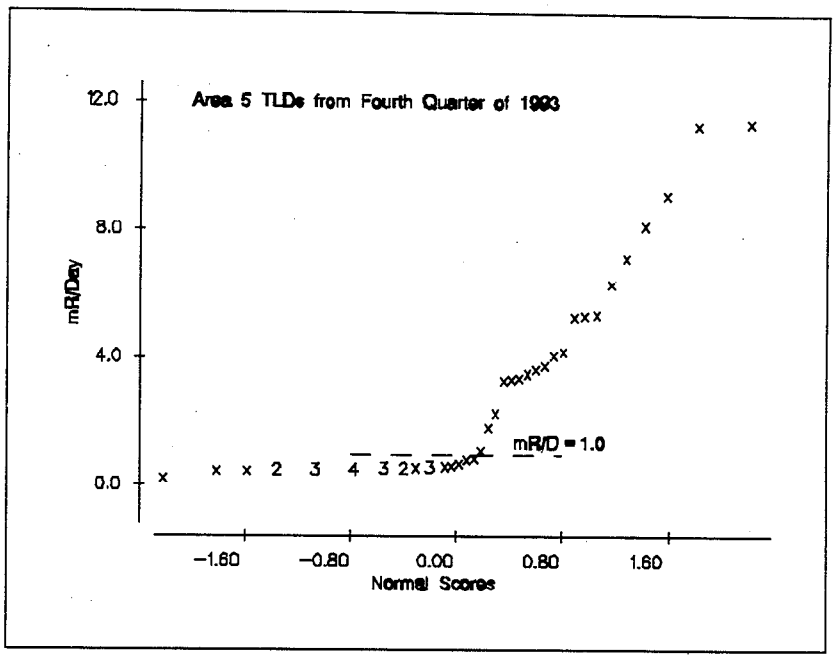


Figure F.2 Typical Mixed Distribution Probability Plot

Table F.3 lists those data values that were found to be atypical and gives the arithmetic mean of the data for the operational area with the atypical values removed. For comparison, the arithmetic mean of all sampling stations with all data from atypical and RWMS MSM sampling stations removed was 0.47 mR/day compared to 0.40 mR/day in 1992. The examination for atypical values could not be done on several of the data subsets because of small sample size; data from Areas 4, 7, 8, 9, 11, 17, 18, 22, 27 and 30 had sample sizes of four 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: (1) these areas are posted as high radiation areas used for temporary storage of radioactive waste from other DOE facilities; (2) the mean of these data is about 10 times higher than the mean of other NTS areas.

Table F.3 is almost identical to the corresponding tables in the 1991 and 1992 annual reports except that the high values in the first quarter of 1992 for all R-stakes were not repeated in 1993. 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 datum for Area 20 stake J-31 is missing for the second and fourth quarters, however these missing values were included in the table. The pattern for Stake J-31 from previous years and the remaining quarters suggests that the second and fourth quarter values would also be atypically high. The high values for the TRU stations in Area 5 are probably due to a reconfiguration of the pad in early 1993 to prepare for construction.

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

Table F-3 Atypical Data Values [mR/day] - 1993 TLD Data

Area, Location	Quarter	Atypical Data	Group Mean
Area 2, Stake N-8	1	2.98	0.52
Area 2, Stake N-8	2	2.90	0.47
Area 2, Stake N-8	3	2.87	0.49
Area 2, Stake N-8	4	2.71	0.51
Area 3, U-3co N	1	2.87	0.54
Area 3, U-3co N	2	2.88	0.54
Area 3, U-3co N	3	2.95	0.54
Area 3, U-3co N	4	2.81	0.56
Area 3, U-3co S	1	1.88	0.54
Area 3, U-3co S	2	1.83	0.54
Area 3, U-3co S	3	1.95	0.54
Area 3, U-3co S	4	1.79	0.56
Area 4, Stake 4A-9	1	3.60	0.44
Area 4, Stake 4A-9	2	3.46	0.41
Area 4, Stake 4A-9	3	3.57	0.42
Area 4, Stake 4A-9	4	3.47	0.47
Area 5, Pit 3 North	1	1.14	0.47
Area 5, Pit 3 South	1	1.20	0.47
Area 5, TRU North	1	1.57	0.47
Area 5, TRU Northeast	1	1.26	0.47
Area 5, TRU South	1	2.17	0.47
Area 5, TRU Southeast	1	1.10	0.47
Area 5, TRU Southeast	2	1.21	0.50
Area 5, TRU Southeast	3	1.05	0.50
Area 5, TRU Southeast	4	1.09	0.63
Area 7, 7-300 Bunker	1	1.11	0.43
Area 7, 7-300 Bunker	2	1.02	0.41
Area 7, 7-300 Bunker	3	1.14	0.42
Area 7, 7-300 Bunker	4	1.02	0.45
Area 10, Sedan W	1	1.25	0.48
Area 10, Sedan W	2	1.16	0.50
Area 10, Sedan W	3	1.21	0.47
Area 10, Sedan W	4	1.16	0.46
Area 12, T Tunnel No. 2 Pond	1	1.43	0.41
Area 12, T Tunnel No. 2 Pond	2	1.55	0.41
Area 12, T Tunnel No. 2 Pond	3	1.53	0.44
Area 12, T Tunnel No. 2 Pond	4	1.74	0.44
Area 20, Stake J-31	1	0.87	0.49
Area 20, Stake J-31	2	*	0.55
Area 20, Stake J-31	3	0.91	0.52
Area 20, Stake J-31	4	*	0.68
Area 20, Stake J-6	4	1.15	0.68
Area 23 Building 610 Bay	1	2.86	0.29
Area 23 Building 610 Bay	2	5.81	0.28
Area 23 Building 610 Bay	3	1.98	0.26
Area 23 Building 610 Bay	4	1.67	0.33

* Missing data value

cratering tests occurred in the mid 1960s, and the plumes from them travelled northward. The annual arithmetic average mR/day at Stake N-8 for 1992 was 3.05, and may be decreasing. This average for the years 1989, 1990 and 1991 were 4.33, 3.96 and 3.10 respectively.

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 penultimate row, marked "Column Means, All Data," 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 77, while the column totals have sample sizes from 129 to 150. This is statistically a very important characteristic because it strongly influences the way patterns of significant differences can be elucidated. Figure F.3 is a thematic map visually summarizing the data in Table F.4.

The first step in the formal statistical analysis of these data was to perform a two-way Analysis of Variance (ANOVA) to simultaneously test for differences between areas and differences between quarters. (For this analysis the four new stations with only fourth quarter data were not considered.) Most 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. Since the data have a lognormal statistical distribution, the analyses of variance were calculated using the natural logarithms of the data values. An analysis was performed after removing the atypical values and the data from known areas of high radiation. This showed differences between areas and also differences between quarters with no interactions. Examination of Table F.4 column means, all data, suggest that the fourth quarter mean might be higher than the means of the other quarters. Removing the fourth quarter data resulted in no ($p=0.865$) significant differences among the first three quarters and no interactions. Thus, it appears that, with just the environmental data, the overall averages for the first three quarters are significantly lower than for the fourth quarter. The ANOVA table for the data without atypical values and radiation areas, for all areas and all quarters, is shown in Table F.5.

The analysis of variance presented in Table F.5 can only be considered as an approximate statistical test because the data is "rank deficient." This is a statistical problem caused by the many missing data values.

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. 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 have been 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

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

	Quarter						Quarter				
Area	1	2	3	4	All	Area	1	2	3	4	All
1	3 0.40	3 0.37	3 0.38	2 0.40	11 0.39	12	8 0.41	7 0.41	8 0.44	8 0.44	31 0.43
2	4 0.52	5 0.47	5 0.49	5 0.51	19 0.50	15	5 0.46	4 0.39	5 0.37	5 0.43	19 0.41
3	20 0.54	18 0.54	20 0.54	19 0.56	77 0.54	17	2 0.42	2 0.47	2 0.53	2 0.51	8 0.49
4	3 0.44	3 0.40	3 0.42	3 0.47	12 0.43	18	3 0.50	3 0.49	3 0.52	1 0.56	10 0.51
5	1 0.33	1 0.40	1 0.42	1 0.43	4 0.40	19	12 0.49	18 0.51	22 0.53	12 0.62	64 0.53
5.1[a]	17 0.46	16 0.47	19 0.47	19 0.50	71 0.48	20	12 0.50	9 0.54	12 0.54	10 0.61	43 0.54
5.2[b]	2 0.63	2 0.46	2 0.68	2 0.66	8 0.61	22	2 0.27	1 0.27	2 0.28	2 0.27	7 0.27
6	10 0.38	12 0.34	12 0.34	12 0.38	46 0.36	23	8 0.29	8 0.28	8 0.26	8 0.33	32 0.29
7	3 0.45	3 0.41	3 0.42	3 0.45	12 0.43	25	10 0.42	6 0.44	8 0.44	9 0.47	33 0.44
8	2 0.42	2 0.40	2 0.43	2 0.42	8 0.42	27	1 0.42	1 0.43	1 0.43	1 0.57	4 0.46
9	2 0.46	2 0.41	2 0.43	2 0.49	8 0.44	30	1 0.42	0 --	1 0.74	1 0.44	3 0.53
10	3 0.49	2 0.50	4 0.47	4 0.46	13 0.47	Column Means All Data	136 0.46	129 0.45	150 0.46	135 0.49	550 0.47
11	2 0.51	1 0.44	2 0.55	2 0.46	7 0.50	Column Means Excluding (a),(b)	118 0.45	111 0.45	130 0.46	115 0.48	474 0.46

(a) The area coded as 5.1 refers to only the non-TRU pad RWMS locations.
(b) The area coded as 5.2 refers to only the transuranic pad locations.
The area coded as 5 refers to those stations in Area 5 away from the RWMS.

Table F.5 Analysis of Variance on Edited Data

Source	Degrees of Freedom	Sum of the Squares	Mean Square	F-Statistic	p Value
Area	21	17.61957	0.83903	25.84	0.000
Quarter	3	0.55486	0.18486	5.70	0.001
Area X Quarter	63	1.18810	0.01886	0.58	0.996
Error	462	15.00345	0.03248		

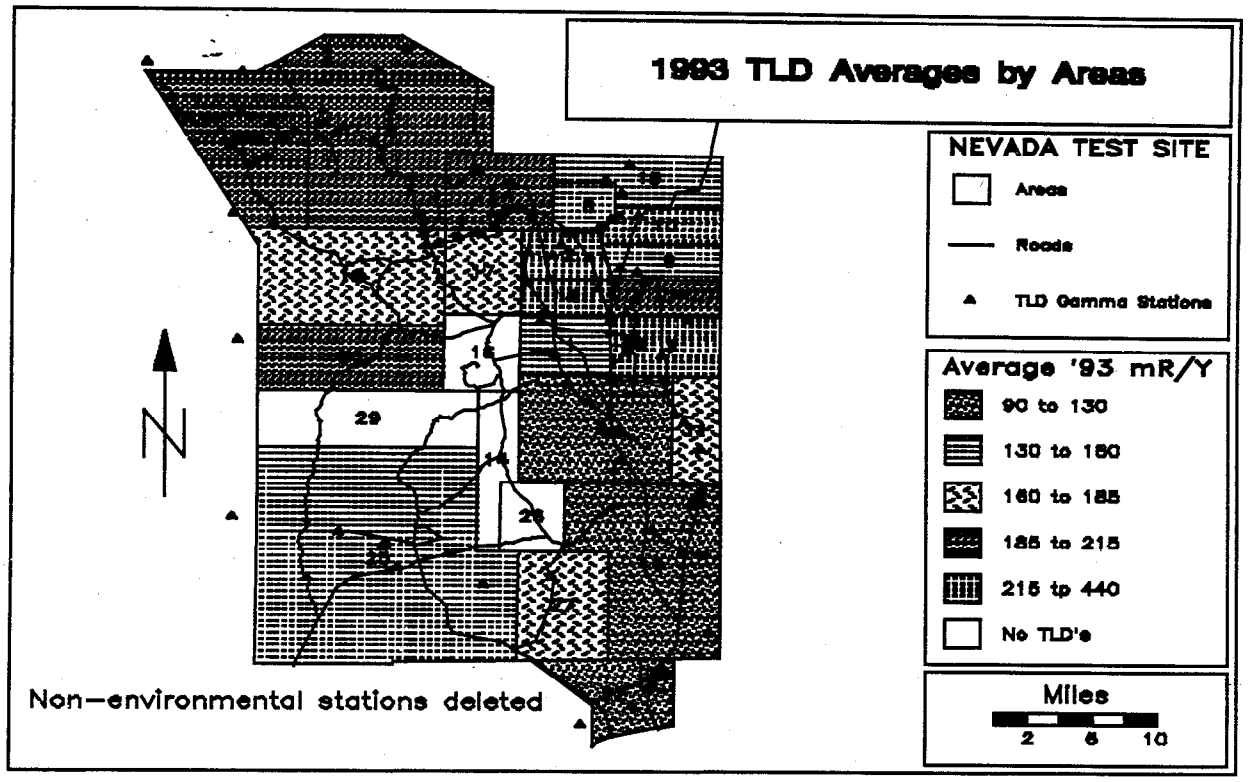


Figure F.3 TLD Averages by Area - 1993

based on *a priori* considerations. The NTS areas were originally established as areas for a particular testing program, but 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 are no potential sources of effluent, 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. 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 general conclusion from the analyses of variance for 1993 is that there are differences between NTS areas in levels of environmental exposure but a pattern of differences cannot be elucidated because of vastly different numbers of samples from the many areas. In addition, the exposure levels during the fourth quarter are higher than during the first three quarters.

APPENDIX G
HISTORICAL TRENDS IN ONSITE THERMOLUMINESCENT DOSIMETER DATA

Robert R. Kinnison

Film badges were used during early activities on the NTS for ambient gamma exposure monitoring. Thermoluminescent dosimeters (TLDs) replaced the film badges in 1977 with 10 stations chosen to be near worksites. By 1981 this network had expanded to 163 stations covering most areas of the NTS. Since 1981 only a few stations have been added or removed. From 1977 to 1987 TLDs used were manufactured by the Harshaw Chemical Co. In 1987 a changeover was made to TLDs manufactured by Panasonic. Because of this changeover, a comparison of the early years to current years is not totally appropriate. The designated background stations are most comparable between the two types of TLDs because of the calibration procedures. In late 1988 a calibration problem was discovered that may have caused inaccurate results in the 1988 data.

In the last quarter of 1993 six TLD stations were added to the network. These additions are not included herein because only a few months of data are available. They will be included in next year's report.

BACKGROUND DATA

Table G.1 displays the annual average millirem per day data from the 9 designated background stations and for the 15 boundary stations for the current and previous 10 years. The boundary stations have been added to the list of stations this year because there have been no statistically significant differences between the background and boundary stations and the increase in sample size yields an increase in statistical power.

The review of the statistical properties of all the TLD data (Appendix F herein and previous annual reports) concludes that TLD data are lognormally distributed. Thus the natural logarithms of the data in Table G.1 were used for statistical analysis of trends. A one-way analysis of variance was chosen for the initial analysis to determine if there is any significant differences between years. This statistical test will determine if there are any significant differences between years caused by any type of trend. If significance is found, then an evaluation of the type of trend can be done. Table G.2 gives an analysis of all the control and boundary station data from 1978 through 1993. The column labeled "log median" is actually the average of the logarithms of the data values. Statistically, for log-normally distributed data, the anti-logarithm of the average of the logarithms is an estimator of the median of the data. The column labeled "median" is the anti-logarithm of the column labeled "log median." The column labeled "standard deviation" is the standard deviation of the natural logarithms of the data.

This table has been edited to include the median in millirem per day for each year so that there are values for comparison that are in the same units as the data in Table G.1. For comparison, the U.S. average exposure is generally assumed to be 100 millirem per year.

Table G.1 Average Annual Millirem per Day for Background TLD Stations

	Year										
Location	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Building 650 Dosimetry	75	53	49	112	51	95	69	73	69	66	95
Building 650 Roof	65	50	45	47	62	86	64	69	69	66	90
Post Office	65	50	47	57	89	106	83	83	86	84	109
NRDS Warehouse	130	116	101	100	144	166	139	142	144	135	167
Henre	130	110	101	99	123	170	138	143	147	132	163
Area 27 Cafeteria	140	118	106	89	139	179	118	146	154	143	169
Well 5B	120	98	93	79	119	157	129	125	133	113	144
CP-6	90	64	60	49	76	131	100	90	86	84	109
Yucca Oil Storage	105	85	82	79	112	106	115	116	120	113	136
Boundary Station 346	60	60	47	53	158	84	77	83	74	81	95
Boundary Station 347	105	97	78	98	145	117	99	119	110	117	128
Boundary Station 348	150	128	*	118	*	146	164	165	137	172	164
Boundary Station 349	155	139	121	131	201	184	179	174	155	179	195
Boundary Station 350	185	157	147	155	172	201	208	207	193	205	240
Boundary Station 351	185	144	129	139	202	193	106	113	169	187	179
Boundary Station 352	100	85	76	84	134	60	208	173	101	117	131
Boundary Station 353	155	136	126	180	214	181	212	157	171	150	170
Boundary Station 354	155	135	123	113	146	252	204	165	163	154	163
Boundary Station 355	115	100	89	99	115	135	135	114	119	117	135
Boundary Station 356	155	141	128	376	144	178	179	180	170	172	147
Boundary Station 357	80	71	59	69	82	93	91	95	94	102	127
Boundary Station 358	75	64	54	64	60	84	88	88	79	88	102
Boundary Station 359	140	131	111	127	116	175	172	175	165	172	200
Boundary Station 360	65	54	47	62	30	82	80	81	74	77	96

Table G.2 indicates that there are significant differences among the years since the probability or p-value of less than 0.05 indicates that the hypothesis of no differences can be rejected with 95 percent confidence. The next step is to determine what the significant differences are. An examination of the means and confidence intervals plot part of Table G.2 suggest that perhaps the means for 1984, 1985 and 1986 are significantly smaller than the means for 1988 and 1993. An examination of the data in Table G.1 and histograms of that data (the histograms of the data are not included in this report) indicate that the data for all years do not contain outliers. The statistical significance of the possible differences between years was tested using "Tukey contrast." Contrast is a way of simultaneously testing all possible differences between years while maintaining an overall nominal error rate. When a nominal error rate of 0.05 was specified the Tukey contrast (using MINITAB) showed that the lowest year, 1985, is significantly different than the six highest years (1981, 1988, 1989, 1990, 1992, and 1993). Also, the highest year, 1993, is significantly different from the three lowest years (1984, 1985, and 1986). The higher values in 1988 are likely due to the calibration problem discussed at the end of the first paragraph of this chapter. The higher values for 1993 are discussed in Chapter 5, Volume I, and later in this appendix since all environmental stations showed somewhat higher values in 1993 than in 1992.

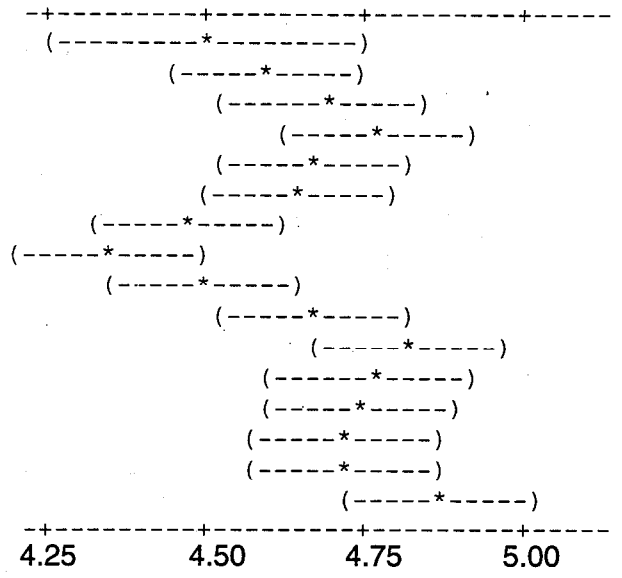
Table G.2 One-Way Analysis of Variance for Differences Among Years on ln (mR/y)

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Year	15	6.823	0.455	3.21	0.000
Error	351	49.791	0.142		
Total	366	56.614			

Year	N	Ln Median	Standard Deviation	Median
1978	9	4.5046	0.3918	90
1979	24	4.6282	0.3851	102
1980	24	4.7127	0.3811	111
1981	24	4.8035	0.3598	122
1982	24	4.7210	0.3662	112
1983	24	4.7010	0.3572	112
1984	24	4.5328	0.3838	93
1985	23	4.4033	0.3963	82
1986	24	4.5563	0.4684	95
1987	23	4.7178	0.4844	112
1988	24	4.8793	0.3701	132
1989	24	4.8127	0.3766	123
1990	24	4.8036	0.3273	122
1991	24	4.7709	0.3351	118
1992	24	4.7836	0.3394	120
1993	24	4.9350	0.2681	139

Pooled Standard Deviation = 0.3766

Individual 95 Percent Confidence Intervals for the Ln of the Median Based on the Pooled Standard Deviation



The analysis of variance is not sensitive to gradual trends that could be well within the confidence interval of the data. Table G.2 shows that such a trend could have occurred from 1981 to 1985. However after 1985 this trend is broken and the pattern over all years shows a relatively constant background gamma level with possibly an insignificant lowering from 1984 to 1986. Because of the lack of a pattern of mean values over all years and the lack of significant differences found by the analysis of variance, no further investigation of historical trends in background data was attempted.

ENVIRONMENTAL SAMPLING STATIONS

The data for the present year and the previous five years is listed in Table G.3. The background station data analyzed in the previous section are included in this data set and are listed in the operational area of the NTS in which they are located. An asterisk in this table denotes a missing value and the pattern of missing values shows how monitoring stations have been added and removed over the years. Data from TLD's monitoring the Mound Strategic Material storage site were deleted from this analysis because these locations are known to be in a posted and controlled high radiation area. The "boundary" stations are monitoring stations that are somewhat evenly spaced around the perimeter of the NTS and typically are just outside the boundary.

Table G. 3 Average Annual Millirem per Year for NTS Environmental Monitoring TLDs

NTS ID#	Station Name	Year 1988	1989	1990	1991	1992	1993
01293	BJY	172	141	139	112	113	132
01318	Stake TH-27/28	*	158	125	125	113	136
01381	Sandbag Storage	135	130	132	135	135	161
02296	Stake M-140	168	154	150	150	154	173
02297	Stake N-8	1905	1581	1445	1130	1116	1046
02298	Stake L-9	339	251	236	230	220	237
02299	Stake M-150	181	163	152	153	161	180
02321	Stake TH-58	151	108	112	114	110	130
03275	Stake OB-20	102	108	104	106	102	121
03276	U3ax/bl South	193	179	173	181	179	195
03277	U3ax/bl Southeast	217	202	196	198	190	208
03278	U3ax/bl Northeast	374	340	319	321	282	286
03279	U3ax/bl Northwest	*	213	208	210	190	202
03280	LANL Trailers	139	147	141	147	139	159
03281	Stake A-6.5	*	149	186	195	179	209
03282	U3du South	241	223	203	202	187	210
03283	U3by South	206	187	181	190	176	202
03284	U3bz South	183	170	164	165	161	184
03285	U3ey South	347	167	159	164	154	196
03286	U3cj North	164	160	196	165	157	191
03287	U3bz North	281	239	230	217	220	252
03288	U3by North	388	326	310	311	289	315
03289	U3co North	1110	1218	1147	827	981	1051
03290	U3co South	770	752	710	708	641	680
03291	U3du North	186	192	186	190	172	205
03294	Stake A-9	1484	1497	1408	1115	1274	1288
03340	Stake P-71	199	172	174	182	172	192
03358	Boundary Station	84	88	88	79	88	102
03628	ah/at North	*	*	151	158	150	175
03629	ah/at South	*	*	227	231	198	217
03630	ah/at East	*	*	148	145	154	193
03631	ah/at West	*	*	150	158	143	182
03632	ah/at Southgate	*	*	152	172	150	175
04295	Stake M-130	161	139	135	145	146	157
04319	Stake TH-38	157	129	139	139	132	154
04320	Stake TH-48	166	148	148	146	135	163
04600	RWMS Pit 3 North	*	*	140	168	146	262
05249	Well 5B	157	129	125	133	113	144
05250	RWMS East 1500'	175	139	139	145	139	163
05251	RWMS East 1000'	184	148	144	137	139	169
05252	RWMS East 500'	177	140	139	148	135	158
05253	RWMS Northeast	183	144	139	132	128	159

* Missing data value

Table G. 3 (Average Annual Millirem per Year for NTS Environmental Monitoring TLDs, cont.)

		Year					
NTS ID#	Station Name	1988	1989	1990	1991	1992	1993
05254	RWMS North 1500	172	149	139	146	132	170
05255	RWMS North 1000	175	148	141	152	146	183
05256	RWMS North 500'	228	154	152	158	139	177
05257	RWMS Northwest Corner	186	153	145	151	143	170
05258	RWMS West 500'	179	148	142	151	135	173
05259	RWMS West 1000'	190	156	153	160	146	185
05260	RWMS West 1500'	204	152	149	154	146	173
05261	RWMS Southwest Corner	168	142	136	143	157	162
05262	RWMS South 500'	183	146	142	150	146	168
05263	RWMS Southgate	558	142	119	146	132	156
05264	RWMS Eastgate	162	139	136	273	253	273
05265	RWMS Office	128	121	110	140	128	184
05360	Boundary Station 360	82	80	81	74	77	96
05601	RWMS Pit 3 Southside	*	*	132	149	139	263
05602	RWMS Pit 4 Westside	*	*	148	161	154	192
05603	RWMS Pit 4 Eastside	*	*	176	161	146	195
05604	RWMS TRU Pad Northeast	*	*	177	286	286	631
05605	RWMS TRU Pad North	*	*	829	466	466	325
05606	RWMS TRU Pad Northwest	*	*	140	225	231	217
05607	RWMS TRU Pad Southwest	*	*	124	325	190	225
05608	RWMS TRU Pad South	*	*	180	562	655	408
05609	RWMS TRU Pad Southeast	*	*	125	325	238	406
06266	CP-6	131	100	90	86	84	109
06267	CP-2 Logistic Desk	80	83	88	88	84	111
06268	CP-50 Calibration Door	126	148	162	186	161	153
06269	CP-50 Calibration Bench	120	91	111	88	91	118
06270	YUCCA Oil Storage Area	106	115	116	120	113	136
06271	Decon Pad Office	80	82	120	123	95	142
06272	Decon Pad Backroom	117	108	111	106	91	111
06274	Stake OB-11.5	230	225	145	148	135	168
06292	Well 3	135	130	123	128	132	146
06315	Stake TH-1	100	90	91	91	91	106
06316	Stake TH-9	146	121	126	127	121	143
06317	Stake TH-18	128	105	110	112	110	128
07314	7-300 Bunker	485	385	375	376	373	392
07633	Ue7-ns	*	*	*	130	146	157
07634	Reitman Seep	*	*	*	134	143	172
07636	Crater U9cw South	*	*	*	121	132	145
08300	Cable Yard	164	314	167	167	183	187
08301	Stake CA-14	204	172	153	148	154	162
08302	Sedan West	626	520	482	459	436	436
08306	Stake K-25	150	126	122	124	128	143

* Missing data value

Table G. 3 (Average Annual Millirem per Year for NTS Environmental Monitoring TLDs, cont.)

		Year					
NTS ID#	Station Name	1988	1989	1990	1991	1992	1993
09313	9-300 Bunker	179	151	148	147	154	177
09635	V&G Roads Junction	*	*	*	128	121	146
10303	Sedan East Visitor Box	210	174	174	175	168	194
10304	Stake A-24	263	225	210	186	198	214
10312	Circle & L Roads	175	146	142	147	154	162
10357	Boundary Station 357	93	91	95	94	102	127
11273	Gate 293	158	153	132	151	143	167
11359	Boundary Station 359	175	172	175	165	172	200
12322	Stake TH-68.5	131	92	119	122	117	138
12323	T-Tunnel No. 2 Pond	358	340	394	527	483	571
12324	Building 12-10	139	116	146	147	146	166
12325	Upper N Pond	195	124	155	156	146	172
12326	Stake M-168	124	112	143	153	143	161
12327	Upper Haines Lake	157	102	131	130	117	152
12328	Stake M-170	319	108	138	139	128	150
12329	Stake M-175	131	119	147	149	135	167
12355	Boundary Station 355	135	135	114	119	117	135
15305	EPA Complex	155	134	124	129	128	153
15307	Office	*	112	109	125	124	145
15309	Lamp Shack	170	145	143	147	157	173
15310	Sub Station U15e	137	254	109	111	113	135
15356	Boundary Station 356	178	179	180	170	172	147
17330	Stake M-185	142	153	154	153	139	166
17331	Stake M-190	201	166	174	177	165	188
18332	Stake M-196	219	165	171	177	157	190
18333	Stake P-35	204	172	179	176	168	183
18334	Stake P-39	131	167	172	171	154	184
19335	Stake P-41	214	186	183	169	176	206
19336	Stake P-46	179	156	162	166	157	176
19337	Stake P-54	181	156	154	160	157	168
19338	Stake P-59	214	185	190	194	183	209
19339	Stake P-66	270	193	187	191	176	212
19341	Upper Well U-19c Reservoir	192	163	172	179	154	172
19342	Stake C-31	262	164	174	178	176	183
19343	Stake C-27	192	174	178	185	172	175
19344	Stake C-25	199	166	172	175	168	179
19345	Stake C-16	203	164	168	170	168	181
19353	Boundary Station 353	181	212	157	171	150	170
19354	Boundary Station 354	252	204	165	163	154	163
19361	Stake P-77	199	190	192	185	187	226
19362	Stake P-88	307	182	177	196	209	231
19363	Stake P-91	188	189	188	193	198	218

* Missing data value

Table G. 3 (Average Annual Millirem per Year for NTS Environmental Monitoring TLDs, cont.)

		Year					
NTS ID#	Station Name	1988	1989	1990	1991	1992	1993
19364	Stake P-98	*	*	*	173	176	212
19365	Stake R-29/31	179	172	170	167	242	197
19366	Stake R-26/27	186	177	172	172	245	200
19367	Stake R-18	*	*	170	165	227	186
19368	Stake R-8	*	*	197	184	256	205
19369	Stake R-3	208	191	195	190	256	185
20350	Boundary Station 350	201	208	207	193	205	240
20351	Boundary Station 351	193	106	113	169	187	179
20352	Boundary Station 352	60	208	173	101	117	131
20370	P&K Roads Junction	184	164	169	170	168	191
20371	Stake P-116.5	186	202	170	170	172	200
20372	Stake P-120.5	175	165	166	162	165	196
20373	Stake P-124	197	171	174	157	176	206
20374	Stake P-129.5	186	179	183	180	179	217
20375	Stake P-134.5	186	118	174	166	172	206
20376	Stake J-24	190	222	168	168	176	204
20377	Stake J-31	443	386	380	360	360	325
20378	Stake J-16	188	167	131	165	168	197
20379	Stake J-6	175	181	188	184	161	274
20380	Stake A-106	292	120	177	186	179	202
22237	Desert Rock Control Tower	84	78	83	87	77	101
22346	Boundary Station 346	84	77	83	74	81	95
23230	Building 650 Storage Room	126	76	87	110	95	104
23231	Building 650 Dosimetry	95	69	73	69	66	95
23232	Building 650 Roof	86	64	69	69	66	90
23233	Postoffice	106	83	83	86	84	109
23234	Building 610 Gate	88	68	75	71	73	94
23235	Building 610 Bay	801	382	674	928	1153	1125
23236	Gate 100	91	69	71	71	66	91
23238	Building 190 Bench Drawer	270	181	156	97	99	130
23239	Building 180 Scaler Room	139	110	113	127	132	131
25240	NRDS Warehouse	166	139	142	144	135	167
25241	25-4P Gate	173	146	145	151	139	170
25242	25-7P Gate	179	137	159	161	132	163
25243	E-MAD North	148	121	125	128	117	149
25244	E-MAD East	173	135	135	141	128	160
25245	E-MAD South	161	134	134	140	124	161
25246	E-MAD West	153	219	128	134	121	156
25247	HENRE	170	138	143	147	132	163
25347	Boundary Station 347	117	99	119	110	117	128
25348	Boundary Station 348	146	164	165	137	172	164
27248	Area 27 Cafeteria	179	118	146	154	143	245
30349	Boundary Station 349	184	179	174	155	179	195

* Missing data value

The statistical procedures used to analyze all the data in Table G.3 are essentially the same as the procedures used to analyze the background station data. Because substantially more data were available than just the background station data, some additional analyses were performed.

In the 1991 report, histograms of the data for each year were examined for data distribution characteristics, and were found to be skewed with a long tail of data in the direction of higher values. This shape is characteristic of lognormally distributed data and it is generally accepted that TLD data has a lognormal statistical distribution. The 1992 and 1993 data have similar histograms. Thus all the statistical analyses of these data was performed on the natural logarithms of the data.

The Analysis of Variance was again used to test for trend by testing the statistical hypothesis that the data show no significant differences between years. This hypothesis was used because it tests for any type of trend. If the analysis of variance rejects this hypothesis then one can conclude that there are differences between the years and these differences may be caused by some type of trend. If the hypothesis is accepted, there can be no significant differences between years and thus no trend of any kind is present in the data. Table G.4 presents the analysis of variance results. Table G.4 is structured in the same way as Table G.2. The hypothesis of no differences between years must be rejected at the 95% confidence level since the tabled probability of 0.002 is smaller than the critical value of 0.05. The plot of the means and confidence intervals suggests that the mean values for 1988 and 1993 are higher than for the other years. This is the same pattern shown in Table G.2 which analyzed the background data. As was discussed at the beginning of this chapter, the calibration problems identified in 1988 make those data less reliable than the data from the other years.

The high values in 1993 are currently under investigation. Possible causes are discussed in Chapter 5, Section 2. The pattern of confidence intervals in Table G.1 does not suggest that the 1993 data are remarkably higher than in previous years. However a further statistical analysis of the data indicate a non-random change from 1992 to 1993. The average mR/Year increased 14.7 percent between 1992 and 1993. Comparing the mR/Year between 1992 and 1993 shows that 90.4 percent of the stations have higher values in 1993 than in 1992. If changes between years were random, about half the values would increase and half decrease between years. The 90.4 percent is very significant statistically, thus some type of change is indicated. Statistical power analysis shows that for this sample size, 169 stations, and if no actual change occurred between 1992 and 1993, the proportion of values higher in 1993 than in 1992 should be between 42.5 and 57.5 percent.

A two-way analysis of variance was also performed to analyze for differences between years and operational areas. Both the years factor and the area factor were specified as analysis of variance fixed effects for this analysis. This analysis showed a significant difference between areas, a much less significant difference between years ($p=0.56$) than in the one-way analysis, and no interaction between areas and years. The lack of interactions leads to the conclusion that any pattern of responses over the years does not differ among the areas. Thus, annual averages over all areas are a reasonable way of summarizing the data. The significant differences between areas means that the average gamma exposure over all years differs from operational area to operational area. The much less significance of differences between years in the two-way analysis than in the one-way analysis is to be expected since the two-way analysis compensates for the differences between areas, in statistical terminology the areas become "blocking" factors.

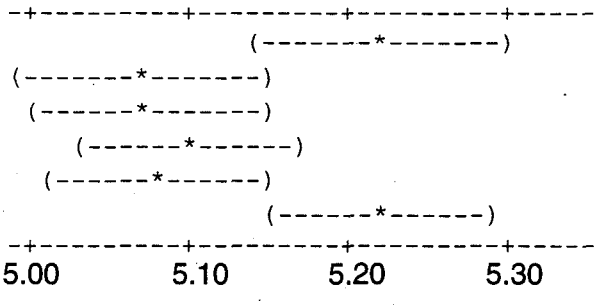
Table G.4 One-Way Analysis of Variance for Differences between Years

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Year	5	4.250	0.850	3.77	0.002
Error	955	215.159	0.225		
Total	960	219.410			

Year	N	Ln Median	Standard Deviation	Median
1988	143	5.2194	0.5172	184.8
1989	147	5.0700	0.4971	159.2
1990	164	5.0743	0.4687	159.9
1991	169	5.0994	0.4622	163.9
1992	169	5.0780	0.4781	160.5
1993	169	5.2232	0.4295	185.5

Pooled Standard Deviation = 0.4747

Individual 95 Percent Confidence Intervals for the Ln of the Median Based on the Pooled Standard Deviation



CONCLUSIONS

Two types of TLD data were analyzed to see if any significant historical trends might be detected. The analysis of the data from the 24 designated background (control and boundary) stations for the years 1978 through 1993 showed that the means for the 3 lowest years 1984, 1985, and 1986 were significantly lower than the six highest means, and there were no other significant differences between the annual means. The pattern of means over the years shows that a decrease occurred from 1981 to 1985 and that 1988 and 1993 were uniquely high. Since there was a calibration problem discovered in 1988, the data for this year are less reliable than for other years. There were no other significant differences between years, thus no long term historical pattern was detected during the period studied. The second type of data consisted of all the data from the NTS for the current year and previous 5 years. These data showed the mean values could be divided into two groupings, a high valued group consisting of 1988 and 1993, and a lower valued group consisting of the remaining years. There is a statistically significant increase from 1992 to 1993.

APPENDIX H
SUMMARY OF 1993 COMPLIANCE DATA AT THE DOE/NV NTS AND NON-NTS FACILITIES

Table H.1 NEPA Documentation - 1989-1993

File Number	Description	Category	Review Status
NV-89-07	Mixed Waste Management Unit, Area 5	Environmental Assessment	Pending
NV-89-21	Device Assembly Facility, Area 6	Environmental Assessment	Pending
NV-89-30	SCYLLA Facility in Area 26	Environmental Assessment	Closed
NV-90-51	Liquified Gaseous Fuels Spill Test Facility, Area 5	Environmental Assessment	Pending
NV-90-63	New Decontamination Pond, Area 6	Environmental Assessment	Cancelled
NV-90-107	NTS Power Distribution	Environmental Assessment	Cancelled
NV-91-001	Demonstrated Decontaminating Technology for Pu-contaminated Soils	Environmental Assessment	Pending
NV-92-008	Space Nuclear Thermal Propulsion, Area 14	Environmental Impact Statement	Final 4/93
NV-92-009	EG&G Kirtland Area Office	Environmental Assessment	Pending
NV-92-014	Test Logistics Support Facilities, Area 23	Categorical Exclusion	Cancelled
NV-92-017	Ground Wave Emergency Network Relay Node Network Expansion, Area 25	Categorical Exclusion	Approved 6/93
NV-92-019	Dormitories, NTS (94), Areas 12 and 23	Categorical Exclusion	Closed
NV-92-020	Environmental Restoration and Waste Management, NTS	Environmental Impact Statement	Pending
NV-92-026	Transmission System Upgrades, Area 25	Environmental Assessment	Pending
NV-92-042	Building C-1 QAL Area and Nurse's Station Modification, NLV	Categorical Exclusion	Closed
NV-92-052	Lawrence Livermore National Laboratory Mine Detection Demonstration at NTS	Categorical Exclusion	Approved 02/04/93
NV-92-067	Removal and Disposal of Hydrocarbon Contaminated Soil, NTS	Categorical Exclusion	Approved 01/11/93
NV-92-068	Sanitary Sewer Connection, Area 6	Categorical Exclusion	Approved 01/11/93
NV-92-069	Four Steam Cleaning Systems, Areas 6 and 12	Categorical Exclusion	Approved 01/11/93

Table H.1 (NEPA Documentation - 1989-1993, cont.)

File Number	Description	Category	Review Status
NV-92-070	Replacement of Circuit Switcher, Yucca Substation, Area 3	Categorical Exclusion	Approved 01/11/93
NV-93-001	Demonstration Testing of Underground Contained Burn of Solid Rocket Motor Propellants and Explosives in an NTS Tunnel	Environmental Assessment	Closed
NV-93-002	Plumbing modifications, Quonset 800, Area 23	Categorical Exclusion	Approved 2/04/93
NV-93-003	Underground Storage Tank Modifications	Categorical Exclusion	Approved 2/04/93
NV-93-004	Transuranic (TRU) Waste Certification Building, Area 5	Environmental Assessment	Pending
NV-93-005	Renovate Existing Roadways, NTS	Categorical Exclusion	Cancelled
NV-93-006	138 Kv. Substation Modernization, NTS	Categorical Exclusion	Closed
NV-93-007	Waste Examination Building, Area 5	Environmental Assessment	Pending
NV-93-008	Sewage Lagoon at RWMS, Area 5	Environmental Assessment	Pending
NV-93-011	Tower Module Storage Area, Revitalization Subproject, Construction Facilities, Area 6	Categorical Exclusion	Approved 4/93
NV-93-012	Installation of Buried Cable, Area 6	Categorical Exclusion	Approved 03/26/93
NV-93-013	Information Repository Location for Office Administrative CERCLA Records, NTS	Categorical Exclusion	Closed
NV-93-020	Replacement of Transformer, F F Substation, Area 5	Categorical Exclusion	Approved 03/26/93
NV-93-021	Installation of Buried Conduit, Area 27	Categorical Exclusion	Approved 03/26/93
NV-93-024	Transportation Placement, Area 23	Categorical Exclusion	Approved 4/6/93
NV-93-025	Fire Training Facility, Area 23	Environmental Assessment	Pending
NV-93-026	Physical Wellness Center, Area 23	Categorical Exclusion	Approved 4/19/93
NV-93-027	Power Hookups to Two Boxcars, Building 652 Area 23	Categorical Exclusion	Approved 4/19/93
NV-93-028	Soil Trench Excavations, Area 5	Categorical Exclusion	Approved 5/4/93
NV-93-029	Temporary Placement of Optical Test Support Equipment, Areas 19, 20	Categorical Exclusion	Approved 5/4/93
NV-93-030	Conduct Outdoor Laser Experiments, Areas 1,6,20	Categorical Exclusion	Approved 5/4/93
NV-93-031	Lysimeter & Micrometeorology Monitoring System Installation, Maintenance & Operation	Categorical Exclusion	Approved 5/13/93

Table H.1 (NEPA Documentation - 1989-1993, cont.)

File Number	Description	Category	Review Status
NV-93-033	Construction of Tap Lines, Areas 1,2,4, 8,9,10	Categorical Exclusion	Approved 5/25/93
NV-93-034	Safe-Secure Transport Recovery, NTS	Categorical Exclusion	Approved 6/7/93
NV-93-035	Repair/Replacement of Buried Cable, Area 6	Categorical Exclusion	Approved 6/7/93
NV-93-036	Aerial Radiological Surveys, DOE	Categorical Exclusion	Approved 6/7/93
NV-93-037	Construction of Electrical Power Substation, Area 6	Categorical Exclusion	Approved 6/7/93
NV-93-038	Modification of Electrical Power Substation, Area 18	Categorical Exclusion	Approved 6/7/93
NV-93-040	Power Hookup to Two Boxcars, Building 133 South, Area 23	Categorical Exclusion	Approved 5/24/93
NV-93-041	Project CHARIOT, Alaska	Environmental Assessment	Approved 7/18/93
NV-93-043	Characterization of N-Tunnel Muck Pile, Area 12	Categorical Exclusion	Approved 6/21/93
NV-93-044	Phase II Science Boreholes, Area 5	Categorical Exclusion	Approved 6/21/93
NV-93-045	Relocation of Portec Hopper, Area 3	Categorical Exclusion	Approved 7/15/93
NV-93-046	Soil Trench Excavation, Area 5	Categorical Exclusion	Approved 7/15/93
NV-93-048	Transportainer Placement, Area 23	Categorical Exclusion	Approved 7/15/93
NV-93-049	Power Upgrades to NTS Area 5 RWMS	Categorical Exclusion	Approved 8/3/93
NV-93-050	Underground Pipe Placement, Truck Fill Stand, Mercury Bypass, Area 23	Categorical Exclusion	Approved 8/3/93
NV-93-051	Bus Connections,Substations 25-11, Area 25	Categorical Exclusion	Approved 8/3/93
NV-93-052	Cylinder Enclosure Building T-2592, Area 23	Categorical Exclusion	Approved 8/3/93
NV-93-055	North Mercury Bypass Road Intersection, Area 23	Categorical Exclusion	Approved 8/17/93
NV-93-056	Conduct Scientific Research, NTS	Categorical Exclusion	Approved 8/31/93
NV-93-057	Dust Control for Fines at Cement Services, Well 3 Yard, Area 6	Categorical Exclusion	Approved 8/31/93
NV-93-058	Water Distribution System, NTS	Categorical Exclusion	Approved 8/17/93
NV-93-059	Rotary Dryer, Shaker Plant, Area 1	Categorical Exclusion	Approved 8/31/93
NV-93-060	Provide Power to Trailer, Guard Station 510, Area 25	Categorical Exclusion	Approved 8/17/93

Table H.1 (NEPA Documentation - 1989-1993, cont.)

File Number	Description	Category	Review Status
NV-93-061	pH Reducing and Control Equipment, Forebay Tank, Well 5B, Area 5	Categorical Exclusion	Approved 8/17/93
NV-93-062	Upper Wastewater System, Decontamination Facility, Area 6	Categorical Exclusion	Approved 9/21/93
NV-93-064	Dust Control, Batch Plant, Area 1	Categorical Exclusion	Approved 8/31/93
NV-93-065	Mercury Cafeteria Renovations, Area 23	Categorical Exclusion	Approved 8/25/93
NV-93-066	Mercury Garbage Facility, Area 23	Categorical Exclusion	Approved 8/25/93
NV-93-067	Underground Storage Tank Upgrades, Areas 6,22	Categorical Exclusion	Approved 8/25/93
NV-93-068	Dust Control, Two-Part Epoxy Mixing Batch Plant, Area 3	Categorical Exclusion	Approved 8/31/93
NV-93-069	Dust Control, LANL Downhole Stemming Fines, NTS	Categorical Exclusion	Approved 9/21/93
NV-93-070	Dust Control, LLNL Downhole Stemming Fines, NTS	Categorical Exclusion	Approved 9/21/93
NV-93-071	Dust Control, Ground Zero Downhole Collection, NTS	Categorical Exclusion	Approved 9/21/93
NV-93-072	Replace Showers, Dormitories 501 through 508, 513 through 515, 106 and 107, Area 23	Categorical Exclusion	Approved 8/31/93
NV-93-073	Replace Showers, BOQ Dormitories 400 and 600 Series, Area 23	Categorical Exclusion	Approved 8/31/93
NV-93-075	Aerial Rad. & Multispectral Surveys, TTR	Categorical Exclusion	Approved 8/16/93
NV-93-076	Waste Disposal Cell Soil Properties Testing, Area 5	Categorical Exclusion	Approved 9/21/93
NV-93-077	Upgrade Tweezer Road	Categorical Exclusion	Approved 9/21/93
NV-93-078	Building 6-900 Parking Area, Area 6	Categorical Exclusion	Approved 9/21/93
NV-93-079	Consolidate HS-12 to Building 600, Area 23	Categorical Exclusion	Approved 9/21/93
NV-93-080	CP-1 Cafeteria Renovations, Area 1	Categorical Exclusion	Approved 10/20/93
NV-93-081	Quality Assurance Building 642 Addition, Area 6	Categorical Exclusion	Approved 10/20/93
NV-93-082	Site Maint. Office Addition, Bldg. 610, Area 23	Categorical Exclusion	Approved 10/20/93
NV-93-083	Remodel NTS Badge Office, Building 1000, Area 23	Categorical Exclusion	Approved 10/20/93

Table H.1 (NEPA Documentation - 1989-1993, cont.)

File Number	Description	Category	Review Status
NV-93-084	Expansion/Upgrade of Building 1001, Area 23	Categorical Exclusion	Approved 10/20/93
NV-93-085	Cementing Services Facility, Building 351, Area 6	Categorical Exclusion	Approved 10/20/93
NV-93-087	Effluent Tracking Experiments, LGFSTF, Area 5	Categorical Exclusion	Pending
NV-93-088	Conduct Scientific Research, NTS	Categorical Exclusion	Pending
NV-93-089	Solar Voltaic Sampling System, Area 23	Categorical Exclusion	Approved 12/8/93
NV-93-090	WSI Parking Lot Expansion, Area 23	Categorical Exclusion	Approved 12/8/93
NV-93-092	Drilling in Support of Area 3 RWMS Closure	Categorical Exclusion	Pending
NV-93-094	Installation of Transformer, Area 6	Categorical Exclusion	Pending
NV-93-095	Enlargement of Main Entrance Gate, Area 23	Categorical Exclusion	Pending
NV-93-096	Monuments on Landfill Boundaries	Categorical Exclusion	Pending
NV-93-097	Decon Facility Sanitary Sewage Sys. Area 6	Categorical Exclusion	Approved 11/24/93
	Off NTS NEPA Documentation		
NV-92-011	North Las Vegas Facility	Environmental Assessment	DOE/HQ DP
NV-92-015	Second story addition, RSL	Categorical Exclusion	Pending
NV-92-016	WAMD Detachment Operations Facility	Categorical Exclusion	Pending
NV-93-009	Advanced Technology Laboratory (ATL) Modification for the Standards and Calibration Laboratory	Categorical Exclusion	Pending
NV-93-010	EG&G/EM Special Technology Laboratory	Environmental Assessment	Approved 03/26/93
NV-93-014	Periodic Calib. of Aerial Rad. Survey Sys.	Categorical Exclusion	Approved 03/26/93
NV-93-015	Training & Test Flts., Aerial Rad. Surveys	Categorical Exclusion	Approved 03/26/93
NV-93-016	Training & Test Flts., NTS Cloud Tracking	Categorical Exclusion	Approved 03/26/93
NV-93-017	Temp. Plcmnt. of Microwave Ranging Sys.	Categorical Exclusion	Approved 03/26/93
NV-93-018	Temp. Plcmnt. of Global Pos. Sat. Receiver	Categorical Exclusion	Approved 03/26/93
NV-93-019	Temp. Plcmnt. of UHF Ranging Transponder	Categorical Exclusion	Approved 03/26/93
NV-93-022	Small Laser Experiment Shed	Categorical Exclusion	Approved 03/26/93
NV-93-023	Construction of a Wellness Confidence Course	Categorical Exclusion	Approved 4/06/93
NV-93-032[a]	Conduct Outdoor Laser Experiments at the Nevada Test Site	Categorical Exclusion	Approved 5/13/93

Table H.1 (NEPA Documentation - 1989-1993, cont.)

File Number	Description	Category	Review Status
	Off NTS NEPA Documentation, cont.		
NV-93-034[a]	Safe Secure Transport Recovery	Categorical Exclusion	Approved 6/07/93
NV-93-039[a]	Conduct Field Research to Examine Turnover of Lizard Species	Categorical Exclusion	Approved 6/07/93
NV-93-053	Terminate Leases and Dispose of Existing Emergency Fuel Sites (EFS)	Categorical Exclusion	Approved 8/03/93
NV-93-054[a]	Conduct Laser Flight Experiments at the NTS	Categorical Exclusion	Approved 8/17/93
NV-93-063	Provide Soil Stabilization at the North Las Vegas Facility	Categorical Exclusion	Approved 8/17/93
NV-93-086	Miscellaneous Construction Activities	Categorical Exclusion	Approved 10/20/93
NV-93-091	Construction of Canopy	Categorical Exclusion	Approved 12/14/93
NV-93-093	Reinstall Underground Fuel Storage Tanks	Categorical Exclusion	Approved 12/14/93
NV-93-097	Improvements to the Photo Lab Wastewater Treatment System	Categorical Exclusion	Approved 12/14/93

(a) These are EG&G/EM prepared NEPA documents for on-NTS activities

Table H.2 NESHAP Notifications to the state of Nevada for NTS Asbestos Activities - 1993

Area	Building	Friable Asbestos	Date
25[a]	4015	24 linear feet of pipe insulation 155 square feet of insulation	April 1993
6	Trailer 9111	28 square feet of insulation	April 1993
23	726	9 square feet of insulation	May 1993
25	4015	8 linear feet of pipe insulation	July 1993
3	Rad Safe Office	420 square feet of insulation	August 1993
25	3127	20 square feet of insulation 40 linear feet of pipe insulation	August 1993
23	650	119 square feet of insulation	November 1993

(a) Indicates the project where EPA was also notified

Table H.3 Well, Population, and Community/Noncommunity Status Information for Public Drinking Water Systems at the NTS

Permit No.	Area(s)	Population	Status	Wells
360-12C	22, 23	1500	Community	5B, 5C, Army
5000-12NC	06, 27	1000[a]	Non-Community	C, C1, 4, 4a
4098-12NC	25	200	Non-Community	J12, J13
4099-12C	02, 12	1000[a]	Community	8
5024-12NC	01	200	Non-Community	UE16d

(a) The population for permits 4099-12C and 5000-12NC have been rounded up to assure proper sampling frequency

Note: Numbers are from 1991 figures

Table H.4 Underground Storage Tank Activities - 1993

Area/Facility	Tank Number	Action Taken
12/Boiler House	12-13-1	Removal
23/Engineering	23-110-1	Removal
23/Building 112	23-112-1	Removal
25/Test Cell C	25-3205-1	Removal
27/Boiler House	27-5170-1	Removal
6/Helicopter Pad	6-CPHP-1	Upgrade

Table H.5 NTS Recycling Activities - 1993

Material	Quantity
Office Paper	113 tons
Aluminum	21 tons
Used Motor Oil	49,000 tons
Cable	128 tons
Light Iron	300 tons
Heavy Iron	900 tons
Brass & Copper	200 tons
Precious Metals	1 ton
Batteries	500 tons
Tires	20 tons
Solvents	350 gallons

Note: There was also over 2 million gallons of water estimated

Table H.6 Off-Normal Occurrences at NTS Facilities

Date	Report Number	Description	Status
02/04/93	NVOO-REEC-OMDO 1993-0015	20 gal antifreeze spill at near Well J-13, Area 25	Soil excavated and disposed
02/09/93	NVOO-REEC-YMPD 1993-0002	Historic oil spill at C-hole complex, Area 25	Under evaluation
02/11/93	NVOO-REEC-OMDO 1992-0053	Spill of waste oil at Operations Equipment yard, Area 6	Complete
02/16/93	NVOO-REEC-OMDO 1993-0019	Diesel oil spill at Borrow Pit #1, Area 25	Soil excavated and disposed
02/26/93	NVOO-REEC-EHDO 1993-0003	Issuance of FOAV and Order by the state of Nevada for RCRA violations	Settlement completed
03/04/93	NVOO-REC-OMDO 1993-0062	Excessive airborne asbestos found in routine survey, Area 23 shop	Complete
03/05/93	HQ-RELV-LVOGD 1993-0006	Punctured backhoe diesel fuel tank, Area 25	Soil excavated, awaiting disposal
03/10/93	NVOO-REEC-EHDO 1993-0004	Fuel spill at the RWMS, Area 5	Sampled and excavated, awaiting disposal
03/12/93	NVOO-REEC-YMPD 1993-0007	Antifreeze spill at Exploratory Studies Facility north portal, Area 25	Under evaluation
03/15/93	NVOO-REEC-SSDO 1993-0003	Historical oil spill, above ground tank farm, Area 6	Notification made
03/15/93	NVOO-REEC-YMPD 1993-0005	Oil spill north of subdock, Area 25	Under evaluation
03/17/93	NVOO-REEC-OMDO 1993-0028	Diesel fuel spill from overfilling underground tank at Device Assembly Facility, Area 6	Sampled and excavated, awaiting disposal
03/17/93	NVOO-REEC-OMDO 1992-0045	Historical release from a UST at Building 12-16, Area 12	Complete
03/17/93	NVOO-REEC-OMDO 1992-0054	15 gal spill from a generator sight glass	Complete
03/17/93	NVOO-REEC-OMDO 1992-0056	Backup from sewer grey water onto soil from plugged line at Area 12	Complete

Table H.6 (Off-Normal Occurrences at NTS Facilities, cont.)

Date	Report Number	Description	Status
03/19/93	NVOO-REEC-OMDO 1992-0058	20 gallon spill of hydraulic fluid at U3ml post shot, Area 3	Complete
03/24/93	NVOO-REEC-OMDO 1992-0018	Historic oil spill covering 280 ft^2, Crane Yard, Area 2	Soil excavated, awaiting approved disposal
04/05/93	NVOO-REEC-OMDO 1993-0029	Hydraulic fluid spill from broken line on bulldozer, Area 6	Complete
04/07/93	NVOO-REEC-OMDO 1991-1040	10 gal fuel leaked from pressurized fuel line to boiler, Area 6	One section of line has been replaced, more line will have to be replaced; further characterization is necessary
04/07/93	NVOO-REEC-SSDO 1992-0005	Historic release from UST at Building 26-2104, Area 26	Complete
05/05/93	NVOO-REEC-OMDO 1993-0035	Hydraulic oil leak from drill jumbo, Area 12	Soil containerized and sampled, awaiting disposal
05/13/93	NVOO-REEC-OMDO 1993-0007	Historic hydrocarbon release from non-hazardous injection wells, Area 1	Complete
05/13/93	NVOO-REEC-OMDO 1993-0013	10 gal hydraulic fluid spill near U10j, Area 10	Complete
05/18/93	NVOO-REEC-OMDO 1992-0075	Release of one gallon of radioactive water from drum following incident with muck car	Complete
05/18/93	NVOO-SDNL-NTSO 1993-0001	Cd contaminated sludge in injection well	Cancelled following additional sampling
05/18/93	NVOO-REEC-SSDO 1993-0005	Historic hydrocarbon spill, Bldg 300, Area 23	Soil excavated, covered, sampled, awaiting disposal
05/30/93	NVOO-REEC-OMDO 1992-0078	Hydraulic oil spill at N-Tunnel Upper Yard, Area 12	Complete
06/03/93	NVOO-RSNO-NTSO 1993-0001	Improper shipment of radiation sources (DOT regulations)	Investigating
06/14/93	NVOO-REEC-OMDO 1993-0038	Propane tank leak, Area 23 service station	New tank installed
06/15/93	NVOO-REEC-SSDO 1993-0007	Overflow of Hydraulic Bulk Storage Fuel Tank, Area 6	Soil excavated, covered and awaiting disposal

Table H.6 (Off-Normal Occurrences at NTS Facilities, cont.)

Date	Report Number	Description	Status
08/01/93	NVOO-REEC-ADMN 1992-0003	Waste oil release at LANL construction site, Area 6	Complete
08/01/93	NVOO-REEC-OMDO 1992-0014	80 gal hydraulic oil spilled, Operating Equipment Yard, Area 6	Complete
08/01/93	NVOO-REEC-OMDO 1992-0021	20 gal of hydraulic fluid spilled on concrete apron, Area 12	Complete
08/01/93	NVOO-REEC-OMDO 1992-0036	Backup of skim line from steam cleaning clarifier; Approximately 30 gal Area 6	Complete
08/01/93	NVOO-REEC-OMDO 1992-0063	Spill of grease/oil at Fleet Operations, Area 23	Complete
08/01/93	NVOO-REEC-OMDO 1992-0064	25 gal diesel spill at Area 6 gas station	Complete
08/01/93	NVOO-REEC-OMDO 1992-0074	30 gal diesel fuel spill at Fuel and Lube Yard, Area 6	Complete
09/17/93	NVOO-REEC-EHDO 1993-0015	Soil contamination from generator leak, Pilot Well 2, Area 5	Complete
09/20/93	NVOO-REEC-OMDO 1993-0017	Gross alpha and beta above effluent discharge levels at GCP well ER-6-2	Updated
10/05/93	NVOO-REEC-OMDO 1993-0036	Hydraulic oil spill from failed hose, Area 4	Complete
12/09/93	NVOO-REEC-OMD2 1993-0004	Stained soil under removed fuel UST, Boiler House, Area 27	Soil excavated, covered, awaiting disposal
12/09/93	NVOO-REEC-OMD2 1993-0005	Stained soil under removed fuel UST, Boiler House, Area 12	Soil excavated, covered, awaiting disposal

Table H.7 Off-Normal Environmental Occurrences at Off-NTS Support Facilities

Date	Report Number	Description	Status
03/11/93	NVOO-EGGO-RSLO 1991-0016	Spill 400 gals gasoline, 100 gals diesel from misconnected hoses, Nellis AF Base	Complete
04/02/93	NVOO-EGGO-RSLO 1992-0003	Hydraulic fluid spill during maintenance, Remote Sensing Lab	Complete
04/07/93	NVOO-EGGO-NLVO 1992-0015	Heavy metals released thru floor crack to soil, EG&G/EM, NLV	Complete
04/12/93	NVOO-EGGO-NLVO 1993-0004	Due to the failure of electronic temperature sequencing control unit that is located internal to the air conditioner, the Halon fire system was activated and Halon discharged.	Complete
04/30/93	NVOO-EGGO-NTSO 1992-0004	Gasoline vapor in excess of limits, CORRTEX trailer, Area 3	Complete
05/10/93	NVOO-EGGO-NLVO 1992-0013	Unauthorized shipment irradiated indium foil, EG&G/EM, NLV	Complete
07/12/93	NVOO-EGGO-NLVO 1993-0005	Two gallons waste oil leaked from barrel, EG&G/EM facility, NLV	Complete
07/19/93	NVOO-EGGO-NLVO 1993-0009	Due to the failure of electronic temperature sequencing control unit that is located internal to the air conditioner, the Halon fire extinguishing system was activated and Halon discharged	Complete
11/04/93	NVOO-EGGO-LAOO 1993-0001	One 500 ml bottle of 1,2 Dichloroethane fell out of the bottom of a cardboard box onto the floor and broke	Pending DOE approval
11/18/93	NVOO-EGGO-NLVO 1993-0010	Laser dye (ethylene glycol, methanol, and rhodamine) into city sewer from pipe leak	Complete
12/16/93	NVOO-EGGO-AVOO 1993-0001	Notice of permit violation	Final Report Pending
12/28/93	NVOO-EGGO-NLVO 1993-0011	Finding of alleged violation and Order: Violation of CWA by failure to pretreat chromium discharges	Final Report Pending

Table H.8 Environmental Permit Summary - 1993

	Air Pollution	Wastewater	Drinking Water	Number of EPA Generator User IDs	County Hazardous Waste Generator	Endangered Species Act	Storage of Flammables (City)
NTS	43	14	5	2[a]		3	
Las Vegas Area Operations Office	28[b]	2		1[a]			
Amador Valley Operations	1			1			
Kirtland Operations				2			
Los Alamos Operations				1			
Santa Barbara Operations		2[b]		2			
Special Technologies Laboratory (Santa Barbara)	1	1[b]		1			
Woburn Cathode Ray Tube Operations	1	2[c]		1			1[b]
Washington Aerial Measurements Dept.							
TOTAL	74	21	5	11		3	1

(a) Biennial report required.
(b) Routine monitoring of emissions is not required.
(c) One permit is for the discharge of uncontaminated noncontact cooling water into a dry well.

APPENDIX I
SUMMARY OF 1993 RESULTS OF NONRADIOLOGICAL MONITORING

Table I.1 Monthly Monitoring Results for NTS Potable Water Systems - 1993[a]

Area/ Building	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
						PERMIT NY-360-12C						
Area 22												
RC	0.5	1.0	1.5	0.6	0.3	0.5	0.7	1.5	0.8	2.5	0.8	0.8
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	--	--	--	--	--	--	--	0.8	--	--	--	--
Coliform	--	--	--	--	--	--	--	0	--	--	--	--
Area 23												
RC	.08	.05	1.0	0.7	0.8	0.7	.07	0.8	0.8	2.5	0.8	0.8
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	.06	1.0	1.8	0.7	0.8	0.7	0.7	0.8	0.8	2.5	0.8	0.8
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	0.5	1.0	1.0	0.7	0.8	0.7	0.7	0.8	1.0	2.5	0.8	0.8
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	0.8	--	0.8	--	0.0	1.5	--	1.0	--	--	--	--
Coliform	0	--	0	--	0	0	--	Yes[b]	--	--	--	--
RC	.08	--	--	--	--	1.5	--	10.	--	--	--	--
Coliform	0	--	--	--	--	0	--	Yes[b]	--	--	--	--
RC	0.0	--	--	--	--	--	--	0.0	--	--	--	--
Coliform	0	--	--	--	--	--	--	Yes[b]	--	--	--	--
RC	1.0	--	--	--	--	--	--	0.0	--	--	--	--
Coliform	0	--	--	--	--	--	--	Yes[b]	--	--	--	--
RC	--	--	--	--	--	--	--	0.9	--	--	--	--
Coliform	--	--	--	--	--	--	--	0	--	--	--	--
RC	--	--	--	--	--	--	--	0.1	--	--	--	--
Coliform	--	--	--	--	--	--	--	0	--	--	--	--
RC	--	--	--	--	--	--	--	1.2	--	--	--	--
Coliform	--	--	--	--	--	--	--	0	--	--	--	--
Area 23 Fill Stand												
RC	--	--	--	--	--	--	--	--	--	--	--	--
Coliform	--	--	--	--	--	--	--	--	--	--	--	--
						PERMIT NY-4098-12NC						
Area 25												
RC	.08	1.0	1.0	0.5	.02	0.5	0.5	--	0.9	0.8	1.0	0.8
Coliform	0	0	0	0	0	0	0	--	0	0	0	0
						PERMIT NY-4099 12NC						
Area 2												
RC	.04	0.3	1.0	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.6	0.8
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
Area 12												
RC	1.0	0.5	1.0	0.5	0.5	0.5	0.5	0.5	0.4	0.6	0.6	0.8
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	1.0	0.5	1.5	--	0.5	0.5	0.5	0.5	0.4	0.6	0.6	0.8
Coliform	0	0	0	0	0	0	0	0	0	0	0	0

(a) RC - residual chlorine in parts per million (ppm); coliform colony count is in number/100 mL
(b) Total coliforms present in August when Army Well pump replaced

Table I.1 (Monthly Monitoring Results for NTS Potable Water Systems - 1992[a], cont.)

Area/ Building	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
					PERMIT NY-5000-12NC							
Area 6												
RC	0.6	0.9	.08	.05	1.1	0.6	0.8	0.5	0.8	0.1	0.8	0.6
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	0.8	0.9	1.0	2.0	1.1	0.6	.08	0.5	0.8	0.1	0.8	0.6
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	0.8	0.9	1.0	2.0	1.1	0.6	0.8	0.5	0.8	0.1	0.8	0.6
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	0.8	0.8	.05	2.0	--	--	--	0.5	--	0.4	0.0	0.0
Coliform	0	0	0	0	--	--	--	0	--	0	0	0
RC	--	0.8	--	--	--	--	--	--	--	--	0.0	--
Coliform	--	0	--	--	--	--	--	--	--	--	0	--
RC	--	0.8	--	--	--	--	--	--	--	--	--	--
Coliform	--	0	--	--	--	--	--	--	--	--	--	--
Area 6	Fill Stand											
RC	--	--	--	--	--	--	--	--	--	--	--	--
Coliform	--	--	--	--	--	--	--	--	--	--	--	--
Area 6	Sample of Water at Area 27											
RC	1.0	1.5	1.6	1.0	1.5	.05	.08	1.5	.05	0.8	.05	0.6
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
RC	--	--	--	.05	--	--	--	--	--	--	--	--
Coliform	--	--	--	0	--	--	--	--	--	--	--	--
RC	--	--	--	.05	--	--	--	--	--	--	--	--
Coliform	--	--	--	0	--	--	--	--	--	--	--	--
					PERMIT NY-5024-12NC							
Area 1												
RC	2.0	0.8	1.5	0.9	0.8	0.5	0.8	5.0	0.9	0.8	0.5	0.9
Coliform	0	0	0	0	0	0	0	0	0	0	0	0
					PERMIT NY-4097-12NC							
Area 3												
RC	0.5	0.4	1.0	0.5	.05	0.5	--	0.3	0.3	0.3	0.5	0.3
Coliform	0	0	0	0	0	0	--	0	0	0	0	0
RC	1.5	1.0	0.5	0.3	0.3	0.5	--	1.5	0.3	0.4	0.5	0.3
Coliform	0	0	0	0	0	0	--	0	0	0	0	0
RC	1.0	1.0	0.1	0.4	0.3	--	--	--	0.5	0.4	0.3	--
Coliform	0	0	0	0	0	--	--	--	0	0	0	--
RC	--	1.5	--	0.1	--	--	--	--	0.6	--	0.5	--
Coliform	--	0	--	0	--	--	--	--	0	--	0	--
RC	--	1.2	--	--	--	--	--	--	0.5	--	0.5	--
Coliform	--	0	--	--	--	--	--	--	0	--	0	--

(a) RC - residual chlorine in parts per million (ppm); coliform colony count is in number/100 mL
(b) Total coliforms present in August when Army Well pump replaced

Table I.2 Water Chemistry Analysis for the NTS Potable Water Distribution Systems - 1993

Constituents	WATER SYSTEMS						STANDARDS	
	A-23	A-25	A-12	A-6	A-6 DAF	A-1	SWDA	State Limits[b]
T.D.S.[a]	356	232	151	295	288	417	500	
Hardness	26	58	29	83	87	296	--	--
Calcium	7	20	10	25	24	79	--	--
Magnesium	2	2	1	5	8	24	--	--
Sodium	103	44	31	54	48	30	--	--
Potassium	7	5	3	5	5	6	--	--
Sulfate	52	21	15	42	42	57	--	250
Chloride	24	8	7	13	12	23	--	250
Nitrate	3.2	2.5	1.8	4.5	6.8	1.2	10	--
Alkalinity	174	114	64	136	134	270	--	--
Bicarbonate	188	110	78	166	149	329	--	--
Carbonate	12	14	0	0	7	0	--	--
Fluoride	0.94	2.12	0.82	0.89	0.80	0.55	4.0	2.0
Arsenic	0.012	0.009	<0.003	<0.007	0.006	<0.003	0.05	--
Iron	0.03	0.08	0.05	<0.03	0.002	0.01	--	0.6
Manganese	0.00	0.00	0.00	<0.00	0.00	0.00	--	0.05
Copper	0.02	0.04	0.02	0.10	0.00	0.02	--	1
Zinc	0.00	0.04	0.00	0.00	0.00	0.04	--	5
Barium	0.01	0.00	0.00	0.01	0.00	0.15	--	1
Boron	0.3	0.2	0.1	0.2	0.2	0.2	--	--
Silica	48	62	48	55	61	31	--	--
Color	3	3	3	3	3	3	--	15
Turbidity	0.5	0.5	0.6	0.7	0.5	0.4	N/A	N/A
pH	8.37	8.66	8.14	8.01	8.26	7.70	6.5/8.5	6.5/8.5
Elect. Conduct.	527	307	202	419	401	661	--	--
Cadmium	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.01	--
Chromium	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.05	--
Lead	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.05	--
Mercury	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.002	--
Selenium	0.001	0.001	<0.001	0.002	0.001	0.002	0.01	--
Silver	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.05	--
MBASs	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	--	0.5

(a) Analysis for T.D.S. through Silica, and Cadmium through MBASs are measured in parts per million. Color through Electrical Conductivity are measured in standard units for each individual constituent.

(b) State primary standards are adopted directly from the SDWA standards. All standards listed are state established secondary standards.

Table I.3 pH, BOD, Flow Rate and TSS in NTS Sewage Lagoon Influents - 1993

	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter			State
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Limits
pH													
Yucca Lake	---	---	7.0	---	---	7.8	---	---	7.9	---	8.8	---	6.0 to 9.0
Area 6, CP-6	---	---	8.0	---	---	7.8	---	---	7.7	---	8.0	---	6.0 to 9.0
Area 6, CP-72	---	---	9.0	---	---	7.8	---	---	7.8	---	7.7	---	6.0 to 9.0
Area 6 LANL	---	---	7.0	---	---	8.0	---	---	8.0	---	8.8	---	6.0 to 9.0
Area 6 DAF	---	---	9.0	---	---	8.4	---	---	8.5	---	7.9	---	6.0 to 9.0
Area 2	---	---	7.0	---	---	7.9	---	---	Dry	---	Dry	---	6.0 to 9.0
Area 12	---	---	7.7	---	---	7.9	---	---	8.1	---	---	8.2	6.0 to 9.0
Area 22, Gate	8.0	8.0	8.0	8.1	7.9	7.9	8.0	8.0	8.3	8.5	7.8	8.3	6.0 to 9.0
Area 23	8.0	8.0	8.0	8.0	8.1	7.0	7.8	8.1	7.7	7.6	8.0	7.5	6.0 to 9.0
Area 25, Reactor Control	---	---	8.0	---	---	Dry	---	---	Dry	---	8.2	---	6.0 to 9.0
Area 25, Central Support	---	---	9.0	---	---	7.5	---	---	7.9	---	8.4	---	6.0 to 9.0
Area 25, Engine Test Stand	---	---	Dry	---	---	Dry	---	---	Dry	---	---	Dry	6.0 to 9.0
Area 25, Test Cell "C"	---	---	Dry	---	---	Dry	---	---	Dry	---	---	Dry	6.0 to 9.0
FLOW RATE (in millions of gallons per day)													
Area 6, Yucca Lake	0.0026	0.0059	0.0043	0.0056	0.0032	0.0057	0.0049	0.0039	0.0045	0.0042	0.0016	0.0091	0.01
Area 6, CP-6	0.0015	0.0015	0.0015	0.0012	0.0012	0.0011	0.0010	0.0010	0.0010	0.0008	0.0008	0.0008	0.0078
Area 6, CP-72	0.0004	0.0004	0.0004	0.0004	0.0004	0.0003	0.0001	0.0001	0.0003	0.0003	0.0003	0.0003	0.0006
Area 6 DAF	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002	0.0001	0.0004	0.0004	0.0004	0.0055
Area 6 LANL	0.0020	0.0020	0.0020	0.0015	0.0015	0.0018	0.0018	0.0018	0.0018	0.0011	0.0012	0.0011	0.0066
Area 2	0.0004	0.0004	0.0004	0.0003	0.0002	0.0001	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001	0.0009
Area 12	0.021	0.024	0.025	0.028	0.013	0.0020	0.001	0.005	0.0033	0.0012	0.0019	0.0001	0.072
Area 22, Gate	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0015
Area 23	0.127	0.172	0.090	0.092	0.082	0.081	0.078	0.072	0.082	0.133	0.124	0.126	0.227
Area 25, Reactor Control	0.0004	Dry	Dry	Dry	Dry	Dry	0.0001	0.0001	Dry	Dry	0.006	Dry	0.0015
Area 25, Central Support	0.0010	0.0010	0.0012	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0036
Area 25, Engine Test Stand	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.0012
Area 25, Test Cell "C"	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	Dry	0.0008
BOD (mg/L)													
Area 6, Yucca Lake	---	---	---	830	---	---	---	---	---	380	---	---	No Standard
Area 12	---	---	189	---	---	200	---	---	305	---	---	77.5	No Standard
Area 23	321	430	388	640	770	185	430	452	245	340	270	390	No Standard
Area 25, Reactor Control	---	---	---	Dry	---	---	---	---	---	Dry	---	---	No Standard
TSS (mg/L)													
Area 6, Yucca Lake	---	---	---	590	---	---	---	---	---	152	---	---	No Standard
Area 12	---	---	167	---	---	18	---	---	116	---	---	28	No Standard
Area 23	272	305	175	504	552	130	222	241	736	231	72	252	No Standard
Area 25, Reactor Control	---	---	---	Dry	---	---	---	---	---	Dry	---	---	No Standard

--- = No sampling required

Dry = No flow

Table I.4 N-Tunnel Drainage Monitoring Station Continuous Sampling Results

January 1993

Parameter	Units	Mean	Range of Average Daily Values
Hydrogen Ion Activity (pH)	Standard Units	9.17	8.7 - 9.3
Temperature	Degrees Celsius	6.20	3.4 - 12.1
Specific Conductance	Microsiemens	496.33	412 - 994
Turbidity	N.T.U.'s	33.06	16 - 122
Flow Rate	Liters/Minute	41.29	12 - 68
Total Flow	Liters	1.43×10^6	---

February 1993

Parameter	Units	Mean	Range of Average Daily Values
Hydrogen Ion Activity (pH)	Standard Units	9.09	6 - 9.6
Temperature	Degrees Celsius	7.21	4.3 - 9.2
Specific Conductance	Microsiemens	513.89	411 - 1197
Turbidity	N.T.U.'s	50.99	5 - 333
Flow Rate	Liters/Minute	13.31	0 - 39
Total Flow	Liters	4.60×10^5	---

March 1993

Parameter	Units	Mean	Range of Average Daily Values
Hydrogen Ion Activity (pH)	Standard Units	8.81	8.6 - 9.2
Temperature	Degrees Celsius	10.27	7.1 - 13.9
Specific Conductance	Microsiemens	367.75	238 - 989
Turbidity	N.T.U.'s	6.02	5.4 - 6.7
Flow Rate	Liters/Minute	12.0	4.4 - 40.2
Total Flow	Liters	5.53×10^5	---

April 1 to June 30, 1993

Parameter	Units	Mean	Range of Average Daily Values
Hydrogen Ion Activity (pH) [(a)]	Standard Units	---	---
Temperature [(a)]	Degrees Celsius	---	---

(a) Insufficient flow for continuous flow measuring equipment

Table I.4 (N-Tunnel Drainage Monitoring Station Continuous Sampling Results, cont.)

Parameter	Units	Mean	Range of Average Daily Values
	(April 1 to June 30, 1993, cont.)		
Specific Conductance [a]	Microsiemens	---	---
Turbidity [a]	N.T.U.'s	---	---
Flow Rate April	Liters/Minute	4.75	0 - 10.2
Total Flow April	Liters	2.93×10^4	---
Flow Rate May	Liters/Minute	0.34	0 - 1.2
Total Flow May	Liters	7.84×10^3	
Flow Rate June	Liters/Minute	0.80	0 - 2.1
Total Flow June	Liters	1.72×10^4	
	July 1 to September 30, 1993		
Parameter	Units	Mean	Range of Average Daily Values
Hydrogen Ion Activity (pH) [a]	Standard Units	---	---
Temperature [a]	Degrees Celsius	---	---
Specific Conductance [a]	Microsiemens	---	---
Turbidity [a]	N.T.U.'s	---	---
Flow Rate July	Liters/Minute	0.86	0 - 33.2
Total Flow July	Liters	3.83×10^4	---
Flow Rate August	Liters/Minute	2.27	0 - 31.8
Total Flow August	Liters	1.02×10^5	
Flow Rate September	Liters/Minute	0.70	0 - 2.5
Total Flow September	Liters	3.02×10^4	
	October 1 to December 31, 1993		
Parameter	Units	Mean	Range of Average Daily Values
Hydrogen Ion Activity (pH) [a]	Standard Units	---	---
Temperature [a]	Degrees Celsius	---	---
Specific Conductance [a]	Microsiemens	---	---
Turbidity [a]	N.T.U.'s	---	---
Flow Rate October	Liters/Minute	7.95	0 - 62.2
Total Flow October	Liters	3.55×10^5	---
Flow Rate November	Liters/Minute	1.23	0 - 21.4
Total Flow November	Liters	5.30×10^4	---
Flow Rate December	Liters/Minute	1.95	0 - 5.7
Total Flow December	Liters	8.70×10^4	---

(a) Insufficient flow for continuous flow measuring equipment

Table I.5 Inorganic Chemical Analysis of N-Tunnel Effluents - 1993

Chemical	Permit Limit mg/L	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Arsenic	0.05	0.010	<0.11[(a)]	0.044	NT
Cadmium	0.01	<0.0001	U	0.00077	NT
Chromium	0.05	U	U	O.012	NT
Lead	0.05	0.05	U	0.03	NT
Selenium	0.01	<0.004	U	<0.0014	NT
Silver	0.05	<0.016	U	0.019	NT
Copper	1.00	U	<0.011	<0.011	NT
Zinc	5.00	0.0066	0.017	0.10	NT

(a) Due to method of analysis, limit of quantitation was above permit limit
NT No samples taken because of insufficient liquid in ponds
U Not detected

Table I.6 Radionuclide Analysis of N-Tunnel Effluents - 1993

Constituent	Units	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Gross Alpha	pCi/L	7.51	2.26	1.40	NT
Gross Beta	pCi/L	4.35	3.26	1.45	NT
Tritium	pCi/L	10,500	52,000	NT	695,000

NT No samples taken because of insufficient liquids in ponds

Table I.7 Organic Analysis of N-Tunnel Effluents - 1993

Chemical	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Chloroethane	7.0	-	-	NT
Acetone	3.0	-	-	NT
Tetrachloroethene	2.0	-	-	NT
Di-n-octylphthalate	-	22	-	NT

NT No samples taken because of insufficient liquids in ponds

Table I.8 Quantity of Waste Disposed of in Landfills - 1993

Month	Quantity (in pounds) Area 9	Area 23	Area 6
January	779,800	573,100	-
February	259,700	372,700	-
March	588,300	546,500	-
April	889,800	259,900	-
May	360,400	302,700	1,211,100
June	911,900	530,300	38,400
July	1,006,400	569,800	892,600
August	2,236,700	-	779,700
September	2,105,400	-	5,135,000
October	1,743,000	-	166,700
November	961,100	35,200	286,700
December	706,900	169,100	684,600
Total	12,549,400	3,359,300	9,194,800

Table I.9 Number of RCRA Samples Analyzed - 1993

Sample Type Analysis	Soil	Water	Sediment	Oil	Other	Total
Volatile Organic	205	385	130	43	184	947
Semi-volatile Organic	180	170	63	34	55	502
ICP Metals[a]	286	322	382	66	233	1289
TCLP Metals[b]	298	196	154	85	304	1037
pH	65	211	25	32	49	382
Flashpoint	53	36	9	160	28	286
TPH[c]	904	210	37	90	53	1294
Other	26	13	13	302	24	378
Total	2,017	1543	813	812	930	6115

(a) "ICP Metals" refers to samples analyzed on an inductively coupled plasma spectrometer for the presence of certain metals

(b) "TCLP Metals" refers to samples that have been subjected to the EPA approved "toxicity characteristic leaching procedure

(c) "TPH" (Total Petroleum Hydrocarbons) refers to samples usually associated with underground storage tanks and fuel spills

Table I.10 Precipitation at BJY in Central Yucca Flat, 1984 - 1993

Year	Precipitation Total (mm)
1984	276
1985	106
1986	154
1987	194
1988	114
1989	63
1990	54
1991	105
1992	220
1993	245

Table I.11 Counts of Live Perennial Plants Species, and Dead Shrubs and Grasses on a 100 m^2 Baseline Plot in Southwestern Yucca Flat, 1989 - 1993

Species	1989	1990	1991	1992	1993
Acamptopappus shockleyi	26	13	11	9	10
Artemisia spinescens	38	21	6	2	16
Atriplex canescens	38	41	31	32	34
Ceratoides lanata	53	54	42	35	36
Ephedra nevadensis	21	21	21	18	18
Erioneuron pulchellum[(a)]	0	2	0	27	3
Grayia spinosa	34	44	33	35	38
Hymenoclea salsola	8	10	8	5	4
Lycium andersonii	18	20	14	13	19
Menodora spinescens	1	1	1	1	1
Mirabilis pudica	0	0	1	11	11
Oryzopsis hymenoides[(a)]	5	0	0	4	8
Sitanian jubatum[(a)]	0	0	0	4	4
Sphaeralcea ambigua	2	0	1	60	41
Stipa speciosa[(a)]	5	8	3	3	2
Tetradymia axillaris	2	2	2	1	1
Totals	251	237	174	260	246
Dead grasses	8	32	44	33	18
Dead shrubs	55	167	230	230	189

(a) These species are grasses; the remainder are shrubs

Table I.12 Estimated Live Volumes (Liters per 100 m^2) of Perennial Plants on a Baseline Plot in Southwestern Yucca Flat, 1989 - 1993

Species	1989	1990	1991	1992	1993
Acamptopappus shockleyi	381	16	41	93	304
Artemisia spinescens	575	47	32	5	10
Atriplex canescens	1264	921	893	3802	6232
Ceratoides lanata	611	378	265	780	1119
Ephedra nevadensis	5015	4482	4130	3599	5513
Erioneuron pulchellum[a]	0	0	0	0	0
Grayia spinosa	3015	1598	1392	2612	3648
Hymenoclea salsola	188	44	41	238	292
Lycium andersonii	2681	2521	2630	677	1672
Menodora spinescens	1	0	1	0	3
Mirabilis pudica	0	0	1	89	182
Oryzopsis hymenoides[a]	2	0	0	3	3
Sitanian jubatum[a]	0	0	0	0	1
Sphaeralcea ambigua	0	0	0	11	65
Stipa speciosa[a]	3	2	1	1	4
Tetradymia axillaris	1869	1636	1514	0	128
Totals	15,605	11,645	10,941	11,910	19,176
Dead grasses	4	21	57	13	32
Dead shrubs	2429	3487	5184	5057	2947

(a) These species are grasses; the remainder are shrubs

Table I.13 Mean Sighting Rates ± 2 se for Raptors (Number per 100 km) Along Roadsides with Pole Lines During 1993 (N = 48). Kruskal-Wallis H Values are shown with Levels of P, 1 d.f. for Each Comparison. ( ) = Number of Surveys

	Number per 100 km ± 2se (n)		
Locations	Spring	Summer	Fall
Frenchman	7.4 ± 3.6 (14)	5.3 ± 4.8 (6)	12.6 ± 11.0 (6)
Yucca	6.6 ± 3.0 (10)	15.7 ± 4.9 (6)	35.5 ± 10.7 (6)
Test Result	0.12, P = 0.72	5.12, P = 0.024	5.04, P = 0.025

Table I.14 Properties of Roadside Weeds Along Mercury Highway in Frenchman and Yucca Flats. Abbreviations are the First Three Letters of Genus and Species Names

Species	Amstes	Brorub	Brotec	Dessop	Eridef	Erocic	Halglo	Sisalt
Introduced or Native?	N	I	I	I	N	I	I	I
More/less frequent on roadside? (t-test, $P < 0.05$)	less	less	less	same	same	more	same	same
More/less dense nearer road (t-test, $P < 0.05$)	same	less	same	more	same	same	same	same
Percent of study sites occupied	60	98	84	78	73	71	22	38
Point of highest density	35 m	35 m	5 m	berm	75 m	15 m	berm	berm
Point of lowest density	scraped	scraped	scraped	scraped	scraped	berm	trough	75 m
Varies along road? (ANOVA, $P < 0.05$)	yes	yes	yes	yes	yes	yes	no	yes

GPO JACKET 586-673