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NEVADA OPERATIONS OFFICE
ANNUAL SITE ENVIRONMENTAL
REPORT - 1992**

Volume II - Appendices

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FOREWORD

These appendices contain 1992 NTS onsite and offsite environmental monitoring results. The onsite data presented are accompanied by summaries of statistical evaluations of the data. Other offsite data collected by the EPA are available from the U.S. Environmental Protection Agency, Environmental Monitoring Systems Laboratory, Las Vegas, Nevada.

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

Lawrence E. Barker

Sampling locations, sampling dates, measured concentrations, and analytic standard deviations for ^{238}Pu , $^{239+240}\text{Pu}$, gross beta, and gamma-emitting radionuclides in air appear in Attachments A.1, A.2, A.3, and A.4. Statistical analyses of these data appear below.

PLUTONIUM-238

The arithmetic mean and standard deviation for the network were, respectively, -8.0×10^{-18} and $2.4 \times 10^{-16} \mu\text{Ci/mL}$ (-3.0×10^{-7} and $8.9 \times 10^{-6} \text{ Bq/m}^3$). Since subtraction of background caused approximately 60 percent of the observed concentrations to be non-positive, geometric mean or standard deviation were not calculated.

At the end of March, the tracer used in the analytical procedure was changed; it is thought this change yields more accurate results. Accordingly, sample means and standard deviations are calculated for data collected before and after the change of procedure. The arithmetic mean and standard deviation for network results collected before the change in procedure were, respectively, -2.7×10^{-18} and $7.9 \times 10^{-18} \mu\text{Ci/mL}$ (-1.0×10^{-7} and $2.9 \times 10^{-7} \text{ Bq/L}$). Approximately 37 percent of these results were positive. The arithmetic mean and standard deviation for network results collected after the change of procedure were, respectively, -9.0×10^{-18} and $2.6 \times 10^{-16} \mu\text{Ci/mL}$ (-3.3×10^{-7} and $9.6 \times 10^{-6} \text{ Bq/L}$). Approximately 40 percent of these results were positive. As almost all results were well below the limits of detection, these results do not indicate the change of procedure was ineffective. Rather, they merely indicate that results below the limit of detection are so noisy conclusions are difficult to reach.

In Figure A.1, observed concentrations $\times 10^{18} (\mu\text{Ci/mL})$ at Area 9 9-300 Bunker, collected after the change in analytical procedures are plotted versus normal scores. The curvature of the plot indicates the normal distribution is a poor fit. As Area 9 9-300 Bunker was the sampling location for which the plot is straightest, it indicates normality is a poor distributional assumption. As so many of the observations are negative, the lognormal distribution is not considered.

Usually, when neither normal nor lognormal distributions fit the data, the rank-based Kruskal-Wallis test is used to compare results among groups. However, the large number of observed zeros, and therefore ties in ranks, would cause the Kruskal-Wallis test to have very little power. Accordingly, differences among sampling stations and among months are assessed by means of Analysis of Variance (ANOVA), recognizing that the results obtained are only approximate in the absence of normality.

In Table A.1, concentrations are compared, by means of a two-way ANOVA table, by both sampling stations and month of sampling. As sampling can extend over more than one month, samples are identified with the month corresponding to the mid-point of their sampling interval.

Figure A.1 Plot of Concentrations of ^{238}Pu at Area 9 9-300 Bunker, in units of $10^{-18} \mu\text{Ci/mL}$, versus Normal Scores

Table A.1 Two-Way Analysis of the Variance on ^{238}Pu Concentrations $\times 10^{17}$ among Sampling Stations and Months Sampling Began

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sequential Sum of the Squares</u>	<u>Adjusted Sum of the Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Month	11	7284.3	7284.3	662.2	1.17	0.304
Sampling Station	52	32899.2	32772.7	630.2	1.11	0.277
Error	<u>524</u>	<u>296326.8</u>	296326.8	565.5		
Total	587	336510.3				

The two-way ANOVA table ($\mu\text{Ci/mL}$), $\times 10^{17}$, indicates no differences, either among sampling stations or over time.

An exploratory data analysis suggested that results in December were lower than in other months. This is displayed in Table A.2, where an ANOVA compares concentrations ($\mu\text{Ci/mL}$), $\times 10^{17}$, among months of sample collection. A decline in concentrations during the last months of the year has been observed and commented on in previous Annual Site Environmental Reports. The usually observed springtime rise in observed ^{238}Pu concentrations, attributed to stratospheric-tropospheric mixing which injected some ^{238}Pu

Table A.2 One-Way Analysis of the Variance on ^{238}Pu Concentrations $\times 10^{17}$ among Months Sampling

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Month	11	7411	674	1.18	0.298
Error	576	329099	571		
Total	587	336510			

Month	Number	Mean	Standard Deviation	Individual 95 Percent Confidence Intervals (CIs) for the Means Based on a Pooled Standard Deviation
January	43	-0.23	0.63	(-----*-----)
February	43	-0.30	0.93	(-----*-----)
March	49	0.07	0.12	(-----*-----)
April	50	0.06	0.11	(-----*-----)
May	51	0.23	0.52	(-----*-----)
June	51	0.43	0.87	(-----*-----)
July	52	0.33	1.11	(-----*-----)
August	51	0.42	1.28	(-----*-----)
September	51	0.46	1.43	(-----*-----)
October	52	0.30	1.04	(-----*-----)
November	52	0.15	0.80	(-----*-----)
December	43	-13.42	88.46	(-----*-----)
Pooled Standard Deviation = 23.90				-16.0 -8.0 0.0 8.0

fallout into the stratosphere in the early days of nuclear testing, was not observed. The reason is unclear.

A sense of the accuracy of measured ^{238}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 non-zero concentrations, omitting ten outliers with coefficients of variation greater than 5.0, are illustrated in Figure A.2. The majority of the coefficients of variation are quite large, indicating that most observed concentrations of ^{238}Pu were well below the limit of detection.

PLUTONIUM-239+240

The arithmetic mean and standard deviation of observed $^{239+240}\text{Pu}$ concentrations were, respectively, 1.2×10^{-18} and $2.3 \times 10^{-15} \mu\text{Ci/mL}$ (4.4×10^{-6} and $8.5 \times 10^{-5} \text{ Bq/L}$). Subtraction of background caused approximately 13 percent of the observed concentrations to be non-positive. Accordingly, no geometric mean or standard deviation were calculated.

At the end of March, the tracer used in the analytical procedure was changed; it is thought this change yields more accurate results. Accordingly, sample means and standard deviations are calculated for data collected before and after the change of procedure. The arithmetic mean and standard deviation for network results collected before the change in procedure were, respectively, 1.8×10^{-17} and $6.7 \times 10^{-17} \mu\text{Ci/mL}$ (6.7×10^{-7} and $2.5 \times 10^{-6} \text{ Bq/L}$).

Figure A.2 Histogram of Empirical Coefficients of Variation for ^{238}Pu Concentrations Measured in Air Samples

Approximately 17 percent of the concentrations were non-positive. The standard deviations for network results collected after the change of procedure were, respectively, 1.5×10^{-16} and $6.9 \times 10^{-16} \mu\text{Ci/mL}$ (5.5×10^{-6} and $2.5 \times 10^{-5} \text{ Bq/L}$). As almost all results were well below the limits of detection, these results do not indicate the change of procedure was ineffective. Rather, they merely indicate that results below the limit of detection are so noisy conclusions are difficult to reach.

In Figure A.3, natural logarithms of observed concentrations at Area 9 9-300 Bunker are plotted versus normal scores. The curvature of the plot indicates the normal distribution is a poor fit. As Area 9 9-300 Bunker was the sampling location for which the plot is straightest, it indicates normality is a poor distributional assumption. As so many of the observations are negative, the lognormal distribution is not considered.

Usually, when neither normal nor lognormal distributions fit the data, the rank-based Kruskal-Wallis test is used to compare results among groups. However, the large number of observed zeros, and therefore of tied ranks, would the Kruskal-Wallis test to be of low power. Accordingly, differences among sampling stations and among months are assessed by means of classical ANOVA, recognizing that the results obtained are only approximate.

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.3. This two-way ANOVA table shows that concentrations differ both over sampling stations and between months.

Figure A.3 Plot of $^{239+240}\text{Pu}$ Concentrations at Area 9 9-300 Bunker, in units of $10^{-17} \mu\text{Ci/mL}$, versus Normal Scores

Table A.3 Two-Way Analysis of the Variance on $^{239+240}\text{Pu}$ Concentrations $\times 10^{17}$ 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
Month Sampling	11	57693	57693	5245	2.06	0.021
Station	52	982245	979949	18845	7.41	0.000
Error	548	1393683	1393683	2543		
Total	611	2433621				

Turkey's multiple comparison method revealed a complex interrelationship among sampling stations, not easily described in a few words. Accordingly, differences among sampling stations were simplified by combining sampling stations according to NTS operational areas. The results of this analysis are displayed in Table A.4. This table indicates greater concentrations of $^{239+240}\text{Pu}$ in Areas 3 and 9 and lower concentrations in other areas. This is not surprising, as Area 3, Bunker 3-300 and Area 9, Bunker 9-300 have, historically, displayed greater concentrations of $^{239+240}\text{Pu}$ than most other sampling stations. Concentrations are compared among months by means of a one-way analysis of variance. The results of this analysis are reported in Table A.5.

Table A.4 One-Way Analysis of the Variance on $^{239+240}\text{Pu}$ Concentrations $\times 10^{17}$ between NTS Areas

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational Area	16	419900	26244	7.75	0.000
Error	<u>595</u>	<u>2013721</u>	3384		
Total	611	2433621			

<u>Area</u>	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	Individual 95 Percent CIs for the Means Based on a Pooled Standard Deviation
19	22	0.25	0.30	(-----*-----)
23	47	0.32	0.44	(-----*-----)
20	11	0.38	0.53	(-----*-----)
16	11	0.55	0.54	(-----*-----)
12	12	0.59	1.03	(-----*-----)
5	242	1.03	6.09	(--*)
27	12	1.78	4.50	(-----*-----)
25	24	1.80	7.10	(-----*-----)
2	24	2.00	2.98	(-----*-----)
6	39	2.12	3.35	(-----*-----)
11	12	2.79	3.32	(-----*-----)
1	25	3.61	6.21	(-----*-----)
10	12	4.38	8.21	(-----*-----)
7	12	6.28	10.88	(-----*-----)
15	12	13.02	30.75	(-----*-----)
9	12	34.47	25.18	(-----*-----)
3	83	77.63	155.48	(---*---)
Pooled Standard Deviation = 58.18				-----+-----+-----+-----
				0 35 70

Table A.5 One-Way Analysis of the Variance on $^{239+240}\text{Pu}$ Concentrations $\times 10^{17}$ among Months

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
Month	11	59989	5454	1.38	0.179
Error	<u>600</u>	<u>2373632</u>	3956		
Total	611	2433621			

Table A.5 (One-Way Analysis of the Variance on $^{239+240}\text{Pu}$ Concentrations $\times 10^{17}$ among Months, cont.)

Month	Number	Mean	Standard Deviation	Individual 95 Percent CIs for the Means Based on a Pooled Standard Deviation
January	51	1.13	2.31	(-----*-----)
February	52	2.40	9.17	(-----*-----)
March	50	1.70	4.13	(-----*-----)
April	50	2.57	6.20	(-----*-----)
May	53	10.41	45.13	(-----*-----)
June	52	23.83	68.65	(-----*-----)
July	52	20.35	74.54	(-----*-----)
August	53	25.95	100.66	(-----*-----)
September	52	25.44	100.83	(-----*-----)
October	50	18.54	83.92	(-----*-----)
November	52	1.82	4.71	(-----*-----)
December	45	17.66	88.57	(-----*-----)
Pooled Standard Deviation = 62.90				-16 0 16 32

The data suggest concentrations might have been greater in August than during other months. In view of the relatively large p-value, it is plausible to attribute this to sampling variation.

A sense of the accuracy of measured $^{239+240}\text{Pu}$ 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 non-zero concentrations, omitting ten outliers with coefficients of variation greater than 7.0, are illustrated in Figure A.4. Note that coefficients of variation have two distinct modes. A comparison of coefficients of variation with sampling location and month sampling ended revealed no obvious relationship between the coefficient of variation and these factors. A possible explanation for this is that counting time might have varied with demands on laboratory facilities. Alternately, the phenomena might be attributable to a change in laboratory techniques, such as the change of tracer for Pu instituted in late March.

GROSS BETA

All observed concentrations of gross beta were positive. The arithmetic mean and standard deviation of the concentrations were, respectively, 2.0×10^{-14} and $8.8 \times 10^{-15} \mu\text{Ci/mL}$ (7.4×10^{-4} and $3.2 \times 10^{-4} \text{ Bq/m}^3$). The geometric mean and standard deviations were, respectively, $1.8 \times 10^{-14} \mu\text{Ci/mL}$ ($6.7 \times 10^{-4} \text{ Bq/m}^3$) and 1.6.

In Figure A.5, natural logarithms of gross beta concentrations recorded at Area 5 Pit 4 are plotted versus normal scores. This is typical of plots for locations at which data were collected. Were the distribution of gross beta concentrations actually lognormally distributed, scatter around a straight line would result. Ignoring one or two outliers per plot, usually among the smallest observed concentrations, a straight line fits the data reasonably well. It is thought that the lognormal distribution provides an adequate approximation to the concentrations' true distribution. Table A.6 presents the results of a two-way analysis of variance, in which concentrations are compared both across sampling locations and across the 12 months of sample collection.

Figure A.4 Histogram of Empirical Coefficients of Variation of $^{239+240}\text{Pu}$ in Air

Figure A.5 Plot of Natural Logarithms of Gross β Concentrations in Air at Area 5, Pit 4 versus Normal Scores

Table A.6 shows that concentrations of gross beta in air differ among both sampling locations and month of sample collection.

Table A.7 compares among months arithmetic means of logarithms of concentrations. Tukey's multiple comparison test allows the months to be divided into three categories, those of lesser, medium, and greater concentrations. The smallest concentrations occurred in February, March, and December. As the exclusion of January from this group is attributable to a few atypically large observations that occurred during the month of January, it suggests concentrations were smallest during the winter months. Intermediate values occurred in April, May, June, and July; the consecutiveness of these months suggests seasonal or meteorological factors. Greater concentrations, although still quite small, occurred in January, August, September, October, and November. As previously noted, the inclusion of January in this group is attributable to a small number of observations, possibly collected in error.

As samples to detect gross beta in air are collected weekly, concentrations were compared across weeks. In Figure A.6, the mean of the logarithms (over all sampling stations) is plotted versus calendar week sampling began (first seven days of 1992 = week 1, second seven days = week 2, etc.). An ANOVA indicated several statistically significant differences, such as the gradual decline toward the end of the year. The marked decrease in variability following the twelfth week is attributable to the adoption by the laboratories of a new more efficient counter.

The complicated pattern of differences detected among sampling locations by Tukey's multiple comparison procedure is difficult to describe. Only Area 5's Gate 200, where samples are analyzed without waiting for radon daughter products to decay, and Area 12's P Tunnel Portal

Figure A.6 Average of Natural Logarithms of Gross β Concentrations, over all Sampling Locations, Plotted versus Week Sampling Began

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

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sequential Sum of the Squares</u>	<u>Adjusted Sum of Squares</u>	<u>Adjusted Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Month	11	68.94	68.94	6.27	32.94	0.000
Sampling Station	52	18.22	17.50	0.34	1.77	0.001
Error	<u>2507</u>	<u>477.16</u>	477.16	0.19		
Total	2550	564.32				

Table A.7 One-Way Analysis of the Variance on the Natural Log of Gross Beta Concentrations among Months

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
Month	11	71.667	6.515	43.30	0.000
Error	<u>2559</u>	<u>385.081</u>	0.150		
Total	2570	456.748			

<u>Month</u>	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Individual 95 Percent CIs for the Means Based on a Pooled Standard Deviation</u>	
January	182	-31.494	0.433	-----+-----+-----+----- (---*---)	
February	195	-31.892	0.676	(-***)	
March	253	-31.895	0.420	(-***)	
April	202	-31.562	0.265		(---*---)
May	200	-31.631	0.315		(-***)
June	253	-31.634	0.326		(-***)
July	199	-31.675	0.240		(-***)
August	251	-31.439	0.241		(---*---)
September	206	-31.537	0.335		(---*---)
October	205	-31.453	0.431		(-***)
November	243	-31.564	0.349		(---*---)
December	182	-31.942	0.477	(---*---)	
Pooled Standard Deviation = 0.388				-----+-----+-----+----- -31.80 -31.60 -31.40	

were unambiguously statistically significantly different from other sampling locations at the 0.05 level. A sense of the difference is given in Table A.8, where concentrations are compared among Areas. This shows that Areas 3, 5, and 15 tend to have the greatest concentrations of gross beta.

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

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational Area	16	11.428	0.714	4.10	0.000
Error	<u>2554</u>	<u>445.320</u>	0.714		
Total	2570	456.748			

<u>Area</u>	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	Individual 95 Percent CIs for the Means Based on a Pooled Standard Deviation
12	51	-31.784	0.670	(-----*-----)
10	52	-31.775	0.641	(-----*-----)
19	90	-31.758	0.305	(-----*-----)
16	45	-31.748	0.350	(-----*-----)
25	102	-31.729	0.403	(-----*-----)
1	101	-31.728	0.480	(-----*-----)
7	51	-31.714	0.354	(-----*-----)
23	199	-31.700	0.395	(-----*-----)
27	49	-31.692	0.369	(-----*-----)
2	103	-31.687	0.429	(-----*-----)
6	165	-31.685	0.434	(-----*-----)
20	47	-31.664	0.341	(-----*-----)
9	48	-31.621	0.407	(-----*-----)
11	52	-31.615	0.333	(-----*-----)
3	352	-31.590	0.362	(---*---)
5	1013	-31.589	0.422	(---*---)
15	51	-31.514	0.458	(-----*-----)

Pooled Standard Deviation = 0.418

-31.80 -31.65 -31.50

The greater concentrations in Areas 3 and 5 can be accounted for by the movement of dust and earth at the low-level radioactive waste disposal sites located there.

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. Omitting 15 values with coefficients of variation in excess of 0.4, these are illustrated in Figure A.7. In all but a relative handful of cases, the coefficient of variation is less than 0.13, indicating that the analytic standard deviation tends to be at least an order of magnitude smaller than the measured concentration. Exceptions are generally attributable to small samples or samples held for long periods of time prior to measurement of concentration. Analytic standard deviations, as presented in Attachment A.3, are determined solely by counting variability. Other sources of variability, such as differences in sample preparation, are not accounted for. To better assess non-counting variability, some samples were subject to duplicate measurements. Original measurements and duplicates appear in Attachment A.5. The part of the variance attributable to measurement error is estimated as one half the average squared difference between original measurements and duplicates. Standard

Figure A.7 Histogram of Coefficients of Variation for Gross β in Air

deviation attributable to measurement error is the square root of this variance. For gross beta in air, the standard deviation attributable to measurement error is $3.1 \times 10^{-15} \mu\text{Ci/mL}$ ($1.1 \times 10^{-4} \text{ Bq/m}^3$). Hence, measurement error accounts for a relatively small part of the total variation.

GAMMA-EMITTING RADIONUCLIDES

The only radionuclides observed on more than four occasions were the naturally occurring radionuclides ^7Be , ^{214}Bi , ^{40}K , ^{214}Pb , ^{212}Pb , and ^{208}Tl . For these, arithmetic mean, standard deviation, geometric mean, and geometric standard deviation of observed concentrations appear in Table A.9. As samples from Area 5 Gate 200 are analyzed immediately, rather than waiting for radon daughter products to decay, samples from Gate 200 displayed a markedly different profile than those from other sampling locations. Hence, samples from Gate 200 were omitted in the calculations of Table A.9. Complete data appears in Attachment A.4. An examination of the data in Attachment A.4 reveals no patterns that warrant additional statistical analysis.

Table A.9 Descriptive Statistics for Gamma-Emitting Radionuclides Detected in Air

Nu- clide	Number of Samples Containing	Arithmetic Mean $\mu\text{Ci/mL (Bq/m}^3\text{)}$	Standard Deviation $\mu\text{Ci/mL (Bq/m}^3\text{)}$	Geometric Mean $\mu\text{Ci/mL (Bq/m}^3\text{)}$	Geometric Standard Deviation
^7Be	2455	2.0×10^{-13} (7.4×10^{-3})	1.2×10^{-13} (4.4×10^{-3})	1.8×10^{-13} (6.7×10^{-3})	1.5
^{214}Bi	32	3.2×10^{-13} (1.4×10^{-2})	1.9×10^{-12} (7.0×10^{-2})	2.7×10^{-13} (1.0×10^{-2})	1.9
^{40}K	7	1.0×10^{-13} (3.7×10^{-3})	4.0×10^{-14} (1.5×10^{-3})	9.8×10^{-14} (3.6×10^{-3})	1.4
^{212}Pb	153	1.9×10^{-14} (7.0×10^{-4})	5.0×10^{-14} (1.8×10^{-3})	2.1×10^{-13} (7.8×10^{-3})	3.4
^{214}Pb	64	2.5×10^{-12} (9.2×10^{-2})	1.8×10^{-11} (6.7×10^{-1})	1.1×10^{-14} (4.1×10^{-4})	1.9
^{208}Tl	10	3.8×10^{-14} (1.4×10^{-3})	5.5×10^{-14} (2.0×10^{-3})	1.1×10^{-14} (4.0×10^{-4})	6.2

Attachment A.1 ^{238}Pu in Air - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, BJY	12/30/91	1.6×10^{-18}	4.2×10^{-18}
Area 1, BJY	02/03/92	-1.8×10^{-18}	6.3×10^{-18}
Area 1, BJY	03/02/92	3.5×10^{-18}	3.6×10^{-18}
Area 1, BJY	03/30/92	5.2×10^{-18}	2.6×10^{-18}
Area 1, BJY	04/28/92	3.0×10^{-18}	2.2×10^{-18}
Area 1, BJY	05/26/92	2.3×10^{-17}	2.4×10^{-17}
Area 1, BJY	06/29/92	0.0	0.0
Area 1, BJY	08/03/92	3.4×10^{-18}	2.0×10^{-18}
Area 1, BJY	08/31/92	5.0×10^{-18}	2.5×10^{-18}
Area 1, BJY	09/28/92	7.2×10^{-18}	3.7×10^{-18}
Area 1, BJY	10/26/92	7.6×10^{-19}	7.6×10^{-19}
Area 1, BJY	11/30/92	1.0×10^{-18}	1.0×10^{-18}
Area 1, Gravel Pit	12/30/91	-9.9×10^{-18}	4.4×10^{-18}
Area 1, Gravel Pit	02/03/92	-2.9×10^{-18}	4.8×10^{-18}
Area 1, Gravel Pit	03/02/92	0.0	0.0
Area 1, Gravel Pit	03/30/92	1.5×10^{-18}	1.5×10^{-18}
Area 1, Gravel Pit	04/28/92	0.0	0.0
Area 1, Gravel Pit	05/26/92	0.0	0.0
Area 1, Gravel Pit	06/29/92	0.0	0.0
Area 1, Gravel Pit	08/03/92	0.0	0.0
Area 1, Gravel Pit	08/31/92	0.0	0.0
Area 1, Gravel Pit	09/28/92	1.2×10^{-18}	1.2×10^{-18}
Area 1, Gravel Pit	10/26/92	0.0	0.0
Area 1, Gravel Pit	11/30/92	0.0	0.0
Area 2, 2-1 Substation	12/30/91	-4.2×10^{-18}	3.1×10^{-18}
Area 2, 2-1 Substation	03/02/92	1.0×10^{-18}	1.0×10^{-18}
Area 2, 2-1 Substation	03/30/92	0.0	0.0
Area 2, 2-1 Substation	04/28/92	0.0	0.0
Area 2, 2-1 Substation	05/26/92	1.6×10^{-18}	1.1×10^{-18}
Area 2, 2-1 Substation	06/29/92	0.0	0.0
Area 2, 2-1 Substation	08/03/92	1.6×10^{-18}	1.6×10^{-18}
Area 2, 2-1 Substation	08/31/92	1.0×10^{-18}	1.0×10^{-18}
Area 2, 2-1 Substation	09/28/92	0.0	0.0
Area 2, 2-1 Substation	10/26/92	0.0	0.0
Area 2, 2-1 Substation	11/30/92	0.0	0.0
Area 2, Complex	12/30/91	-3.3×10^{-18}	4.2×10^{-18}
Area 2, Complex	02/03/92	-4.4×10^{-18}	4.8×10^{-18}
Area 2, Complex	03/02/92	1.1×10^{-18}	1.1×10^{-18}
Area 2, Complex	03/30/92	1.2×10^{-18}	1.2×10^{-18}
Area 2, Complex	04/28/92	6.3×10^{-18}	3.2×10^{-18}

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 2, Complex	05/26/92	7.4×10^{-19}	7.4×10^{-19}
Area 2, Complex	06/29/92	9.8×10^{-19}	9.8×10^{-19}
Area 2, Complex	08/03/92	1.5×10^{-18}	1.6×10^{-18}
Area 2, Complex	08/31/92	3.0×10^{-18}	2.1×10^{-18}
Area 2, Complex	09/28/92	2.5×10^{-18}	1.4×10^{-18}
Area 2, Complex	10/26/92	0.0	0.0
Area 2, Complex	11/30/92	9.2×10^{-19}	9.2×10^{-19}
Area 3, 3-300 Bunker	12/30/91	3.7×10^{-18}	5.4×10^{-18}
Area 3, Complex	12/30/91	-1.9×10^{-18}	5.4×10^{-18}
Area 3, Complex	02/03/92	-4.2×10^{-18}	6.2×10^{-18}
Area 3, Complex	03/02/92	1.0×10^{-18}	1.0×10^{-18}
Area 3, Complex	03/30/92	0.0	0.0
Area 3, Complex	04/28/92	1.8×10^{-18}	1.2×10^{-18}
Area 3, Complex	05/26/92	5.3×10^{-18}	2.7×10^{-18}
Area 3, Complex	06/29/92	1.5×10^{-18}	1.1×10^{-18}
Area 3, Complex	08/03/92	2.8×10^{-18}	2.0×10^{-18}
Area 3, Complex	08/31/92	1.3×10^{-17}	5.8×10^{-18}
Area 3, Complex	09/28/92	8.6×10^{-19}	8.6×10^{-19}
Area 3, Complex	10/26/92	7.7×10^{-19}	7.8×10^{-19}
Area 3, Complex	11/30/92	0.0	0.0
Area 3, Complex	02/03/92	1.6×10^{-17}	1.3×10^{-17}
Area 3, Complex No. 2	12/30/91	6.4×10^{-18}	5.5×10^{-18}
Area 3, Complex No. 2	02/03/92	1.6×10^{-17}	1.3×10^{-17}
Area 3, Complex No. 2	03/02/92	0.0	0.0
Area 3, Complex No. 2	03/30/92	1.5×10^{-18}	1.5×10^{-18}
Area 3, Complex No. 2	04/28/92	3.1×10^{-18}	1.2×10^{-18}
Area 3, Complex No. 2	05/26/92	0.0	0.0
Area 3, Complex No. 2	06/29/92	2.3×10^{-18}	1.6×10^{-18}
Area 3, Complex No. 2	08/03/92	3.5×10^{-18}	2.5×10^{-18}
Area 3, Complex No. 2	08/31/92	1.4×10^{-17}	7.0×10^{-18}
Area 3, Complex No. 2	09/28/92	0.0	0.0
Area 3, Complex No. 2	10/26/92	0.0	0.0
Area 3, Complex No. 2	11/30/92	3.1×10^{-18}	1.6×10^{-18}
Area 3, Mud Plant	02/03/92	-3.3×10^{-17}	2.0×10^{-17}
Area 3, Mud Plant	03/02/92	0.0	0.0
Area 3, Mud Plant	03/30/92	9.4×10^{-19}	6.7×10^{-19}
Area 3, Mud Plant	04/28/92	3.2×10^{-17}	7.5×10^{-18}
Area 3, Mud Plant	05/26/92	4.2×10^{-17}	3.8×10^{-18}
Area 3, Mud Plant	06/29/92	4.2×10^{-17}	8.0×10^{-18}
Area 3, Mud Plant	08/03/92	7.8×10^{-17}	1.4×10^{-17}

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 3, Mud Plant	08/31/92	5.9×10^{-17}	1.1×10^{-17}
Area 3, Mud Plant	09/28/92	0.0	0.0
Area 3, Mud Plant	10/26/92	7.9×10^{-19}	8.0×10^{-19}
Area 3, Mud Plant	11/30/92	0.0	0.0
Area 3, U-3ah/at E	12/30/91	-3.5×10^{-18}	3.9×10^{-18}
Area 3, U-3ah/at E	02/03/92	-4.3×10^{-18}	4.6×10^{-18}
Area 3, U-3ah/at E	03/02/92	0.0	0.0
Area 3, U-3ah/at E	03/30/92	0.0	0.0
Area 3, U-3ah/at E	04/28/92	8.9×10^{-19}	9.0×10^{-19}
Area 3, U-3ah/at E	05/26/92	5.0×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at E	06/29/92	7.6×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at E	08/03/92	3.1×10^{-18}	1.8×10^{-18}
Area 3, U-3ah/at E	08/31/92	5.7×10^{-18}	2.4×10^{-18}
Area 3, U-3ah/at E	09/28/92	7.9×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at E	10/26/92	1.8×10^{-18}	1.2×10^{-18}
Area 3, U-3ah/at E	11/30/92	-5.9×10^{-18}	6.8×10^{-17}
Area 3, U-3ah/at N	12/30/91	1.3×10^{-17}	7.1×10^{-18}
Area 3, U-3ah/at N	03/02/92	0.0	0.0
Area 3, U-3ah/at N	03/30/92	1.5×10^{-18}	1.5×10^{-18}
Area 3, U-3ah/at N	04/28/92	9.8×10^{-18}	2.2×10^{-18}
Area 3, U-3ah/at N	05/26/92	3.1×10^{-17}	1.5×10^{-17}
Area 3, U-3ah/at N	06/29/92	6.9×10^{-17}	9.0×10^{-18}
Area 3, U-3ah/at N	08/03/92	5.0×10^{-17}	1.3×10^{-17}
Area 3, U-3ah/at N	08/31/92	8.5×10^{-17}	1.3×10^{-17}
Area 3, U-3ah/at N	09/28/92	7.1×10^{-17}	1.4×10^{-17}
Area 3, U-3ah/at N	10/26/92	9.3×10^{-19}	9.3×10^{-19}
Area 3, U-3ah/at N	11/30/92	-1.4×10^{-15}	2.0×10^{-16}
Area 3, U-3ah/at S	12/30/91	1.2×10^{-18}	4.3×10^{-18}
Area 3, U-3ah/at S	02/03/92	-7.7×10^{-18}	5.6×10^{-18}
Area 3, U-3ah/at S	03/02/92	1.7×10^{-18}	1.7×10^{-18}
Area 3, U-3ah/at S	03/30/92	4.1×10^{-18}	2.1×10^{-18}
Area 3, U-3ah/at S	04/28/92	5.7×10^{-18}	2.0×10^{-18}
Area 3, U-3ah/at S	05/26/92	7.7×10^{-18}	7.8×10^{-18}
Area 3, U-3ah/at S	06/29/92	3.1×10^{-18}	1.6×10^{-18}
Area 3, U-3ah/at S	08/03/92	1.1×10^{-17}	4.7×10^{-18}
Area 3, U-3ah/at S	08/31/92	5.2×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at S	09/28/92	4.9×10^{-18}	2.9×10^{-18}
Area 3, U-3ah/at S	10/26/92	5.2×10^{-18}	2.3×10^{-18}
Area 3, U-3ah/at S	11/30/92	-5.8×10^{-15}	1.4×10^{-15}
Area 3, U-3ah/at W	12/30/91	-1.8×10^{-17}	8.6×10^{-18}

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, U-3ah/at W	02/03/92	2.3×10^{-19}	4.5×10^{-18}
Area 3, U-3ah/at W	03/02/92	1.1×10^{-18}	1.1×10^{-18}
Area 3, U-3ah/at W	03/30/92	0.0	0.0
Area 3, U-3ah/at W	04/28/92	1.5×10^{-17}	6.4×10^{-18}
Area 3, U-3ah/at W	05/26/92	5.8×10^{-18}	4.1×10^{-18}
Area 3, U-3ah/at W	06/29/92	1.3×10^{-17}	6.2×10^{-18}
Area 3, U-3ah/at W	08/03/92	2.0×10^{-18}	1.5×10^{-18}
Area 3, U-3ah/at W	08/31/92	3.1×10^{-18}	1.8×10^{-18}
Area 3, U-3ah/at W	09/28/92	0.0	0.0
Area 3, U-3ah/at W	10/26/92	9.2×10^{-19}	9.2×10^{-19}
Area 3, U-3ah/at W	02/03/92	2.3×10^{-19}	4.5×10^{-18}
Area 5, DOD Yard	12/30/91	7.6×10^{-18}	5.7×10^{-18}
Area 5, DOD Yard	02/03/92	5.1×10^{-18}	1.3×10^{-17}
Area 5, DOD Yard	03/02/92	0.0	0.0
Area 5, DOD Yard	03/30/92	1.6×10^{-18}	1.6×10^{-18}
Area 5, DOD Yard	04/28/92	0.0	0.0
Area 5, DOD Yard	05/26/92	0.0	0.0
Area 5, DOD Yard	06/29/92	0.0	0.0
Area 5, DOD Yard	08/03/92	0.0	0.0
Area 5, DOD Yard	08/31/92	0.0	0.0
Area 5, DOD Yard	09/28/92	3.9×10^{-18}	2.8×10^{-18}
Area 5, DOD Yard	10/26/92	0.0	0.0
Area 5, DOD Yard	11/30/92	0.0	0.0
Area 5, Gate 200	02/03/92	-5.5×10^{-18}	4.8×10^{-18}
Area 5, Gate 200	03/02/92	0.0	0.0
Area 5, Gate 200	03/30/92	0.0	0.0
Area 5, Gate 200	04/28/92	7.7×10^{-20}	7.7×10^{-20}
Area 5, Gate 200	05/26/92	0.0	0.0
Area 5, Gate 200	06/29/92	8.8×10^{-19}	8.9×10^{-19}
Area 5, Gate 200	08/03/92	0.0	0.0
Area 5, Gate 200	08/31/92	2.1×10^{-18}	2.1×10^{-18}
Area 5, Gate 200	09/28/92	4.0×10^{-18}	2.8×10^{-18}
Area 5, Gate 200	09/28/92	0.0	0.0
Area 5, Gate 200	10/26/92	0.0	0.0
Area 5, Gate 200	11/30/92	4.8×10^{-18}	2.8×10^{-18}
Area 5, RWMS No. 1	12/30/91	1.7×10^{-18}	4.6×10^{-18}
Area 5, RWMS No. 1	03/02/92	0.0	0.0
Area 5, RWMS No. 1	03/30/92	0.0	0.0
Area 5, RWMS No. 1	04/28/92	0.0	0.0
Area 5, RWMS No. 1	05/26/92	2.7×10^{-18}	2.7×10^{-18}

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 1	06/29/92	0.0	0.0
Area 5, RWMS No. 1	08/03/92	1.5×10^{-18}	1.5×10^{-18}
Area 5, RWMS No. 1	08/31/92	0.0	0.0
Area 5, RWMS No. 1	09/28/92	0.0	0.0
Area 5, RWMS No. 1	10/26/92	0.0	0.0
Area 5, RWMS No. 1	11/30/92	0.0	0.0
Area 5, RWMS No. 2	12/30/91	1.4×10^{-17}	7.6×10^{-18}
Area 5, RWMS No. 2	02/03/92	4.9×10^{-18}	7.5×10^{-18}
Area 5, RWMS No. 2	03/02/92	0.0	0.0
Area 5, RWMS No. 2	03/30/92	0.0	0.0
Area 5, RWMS No. 2	04/28/92	0.0	0.0
Area 5, RWMS No. 2	05/26/92	0.0	0.0
Area 5, RWMS No. 2	06/29/92	0.0	0.0
Area 5, RWMS No. 2	08/03/92	0.0	0.0
Area 5, RWMS No. 2	08/31/92	0.0	0.0
Area 5, RWMS No. 2	09/28/92	0.0	0.0
Area 5, RWMS No. 2	10/26/92	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS No. 2	11/30/92	0.0	0.0
Area 5, RWMS No. 3	12/30/91	5.1×10^{-19}	5.6×10^{-18}
Area 5, RWMS No. 3	02/03/92	-1.5×10^{-17}	1.0×10^{-17}
Area 5, RWMS No. 3	03/02/92	0.0	0.0
Area 5, RWMS No. 3	03/30/92	0.0	0.0
Area 5, RWMS No. 3	04/28/92	0.0	0.0
Area 5, RWMS No. 3	05/26/92	0.0	0.0
Area 5, RWMS No. 3	06/29/92	0.0	0.0
Area 5, RWMS No. 3	08/03/92	0.0	0.0
Area 5, RWMS No. 3	08/31/92	0.0	0.0
Area 5, RWMS No. 3	09/28/92	7.0×10^{-18}	4.1×10^{-18}
Area 5, RWMS No. 3	10/26/92	0.0	0.0
Area 5, RWMS No. 3	11/30/92	0.0	0.0
Area 5, RWMS No. 4	12/30/91	-9.3×10^{-18}	5.2×10^{-18}
Area 5, RWMS No. 4	03/02/92	0.0	0.0
Area 5, RWMS No. 4	03/30/92	0.0	0.0
Area 5, RWMS No. 4	04/28/92	0.0	0.0
Area 5, RWMS No. 4	05/26/92	0.0	0.0
Area 5, RWMS No. 4	06/29/92	8.6×10^{-19}	8.6×10^{-19}
Area 5, RWMS No. 4	08/03/92	0.0	0.0
Area 5, RWMS No. 4	08/31/92	2.7×10^{-18}	2.8×10^{-18}
Area 5, RWMS No. 4	09/28/92	0.0	0.0
Area 5, RWMS No. 4	10/26/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS No. 4	11/30/92	4.0×10^{-19}	4.0×10^{-19}
Area 5, RWMS No. 5	12/30/91	-7.3×10^{-18}	5.3×10^{-18}
Area 5, RWMS No. 5	02/03/92	-6.9×10^{-18}	9.3×10^{-18}
Area 5, RWMS No. 5	03/02/92	0.0	0.0
Area 5, RWMS No. 5	03/30/92	0.0	0.0
Area 5, RWMS No. 5	04/28/92	0.0	0.0
Area 5, RWMS No. 5	05/26/92	0.0	0.0
Area 5, RWMS No. 5	06/29/92	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 5	08/03/92	1.3×10^{-18}	1.3×10^{-18}
Area 5, RWMS No. 5	08/31/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS No. 5	09/28/92	2.3×10^{-18}	2.3×10^{-18}
Area 5, RWMS No. 5	10/26/92	0.0	0.0
Area 5, RWMS No. 5	11/30/92	0.0	0.0
Area 5, RWMS No. 6	12/30/91	-1.0×10^{-17}	4.2×10^{-18}
Area 5, RWMS No. 6	02/03/92	1.6×10^{-17}	1.1×10^{-17}
Area 5, RWMS No. 6	03/02/92	0.0	0.0
Area 5, RWMS No. 6	03/30/92	0.0	0.0
Area 5, RWMS No. 6	04/28/92	1.0×10^{-18}	1.0×10^{-18}
Area 5, RWMS No. 6	05/26/92	2.0×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 6	06/29/92	9.3×10^{-19}	9.3×10^{-19}
Area 5, RWMS No. 6	08/03/92	0.0	0.0
Area 5, RWMS No. 6	08/31/92	0.0	0.0
Area 5, RWMS No. 6	09/28/92	0.0	0.0
Area 5, RWMS No. 6	10/26/92	0.0	0.0
Area 5, RWMS No. 6	11/30/92	0.0	0.0
Area 5, RWMS No. 7	12/30/91	-5.1×10^{-18}	6.3×10^{-18}
Area 5, RWMS No. 7	02/03/92	6.6×10^{-18}	7.6×10^{-18}
Area 5, RWMS No. 7	03/02/92	0.0	0.0
Area 5, RWMS No. 7	03/30/92	0.0	0.0
Area 5, RWMS No. 7	04/28/92	0.0	0.0
Area 5, RWMS No. 7	05/26/92	2.2×10^{-17}	1.6×10^{-17}
Area 5, RWMS No. 7	06/29/92	4.3×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 7	08/03/92	0.0	0.0
Area 5, RWMS No. 7	08/31/92	2.0×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 7	09/28/92	0.0	0.0
Area 5, RWMS No. 7	10/26/92	0.0	0.0
Area 5, RWMS No. 7	11/30/92	0.0	0.0
Area 5, RWMS No. 8	12/30/91	-3.1×10^{-18}	6.3×10^{-18}
Area 5, RWMS No. 8	02/03/92	-1.1×10^{-17}	6.0×10^{-18}
Area 5, RWMS No. 8	03/02/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 8	03/30/92	0.0	0.0
Area 5, RWMS No. 8	04/28/92	6.1×10^{-19}	6.1×10^{-19}
Area 5, RWMS No. 8	05/26/92	1.5×10^{-17}	1.5×10^{-17}
Area 5, RWMS No. 8	06/29/92	0.0	0.0
Area 5, RWMS No. 8	08/03/92	1.6×10^{-18}	1.7×10^{-18}
Area 5, RWMS No. 8	08/31/92	0.0	0.0
Area 5, RWMS No. 8	09/28/92	0.0	0.0
Area 5, RWMS No. 8	10/26/92	0.0	0.0
Area 5, RWMS No. 8	11/30/92	0.0	0.0
Area 5, RWMS No. 9	12/30/91	4.1×10^{-18}	6.4×10^{-18}
Area 5, RWMS No. 9	02/03/92	-8.6×10^{-18}	7.0×10^{-18}
Area 5, RWMS No. 9	03/02/92	3.5×10^{-18}	3.5×10^{-18}
Area 5, RWMS No. 9	03/30/92	0.0	0.0
Area 5, RWMS No. 9	04/28/92	5.2×10^{-19}	5.2×10^{-19}
Area 5, RWMS No. 9	05/26/92	0.0	0.0
Area 5, RWMS No. 9	06/29/92	0.0	0.0
Area 5, RWMS No. 9	08/03/92	0.0	0.0
Area 5, RWMS No. 9	08/31/92	1.3×10^{-18}	1.3×10^{-18}
Area 5, RWMS No. 9	09/28/92	0.0	0.0
Area 5, RWMS No. 9	10/26/92	0.0	0.0
Area 5, RWMS No. 9	11/30/92	0.0	0.0
Area 5, RWMS Pit No. 3	02/03/92	-1.4×10^{-17}	8.7×10^{-18}
Area 5, RWMS Pit No. 3	03/02/92	0.0	0.0
Area 5, RWMS Pit No. 3	03/30/92	0.0	0.0
Area 5, RWMS Pit No. 3	04/28/92	2.3×10^{-18}	2.3×10^{-18}
Area 5, RWMS Pit No. 3	05/26/92	0.0	0.0
Area 5, RWMS Pit No. 3	06/29/92	8.6×10^{-19}	8.6×10^{-19}
Area 5, RWMS Pit No. 3	08/03/92	0.0	0.0
Area 5, RWMS Pit No. 3	08/31/92	0.0	0.0
Area 5, RWMS Pit No. 3	09/28/92	0.0	0.0
Area 5, RWMS Pit No. 3	10/26/92	1.7×10^{-18}	1.7×10^{-18}
Area 5, RWMS Pit No. 3	11/30/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS Pit No. 4	12/30/91	2.7×10^{-18}	3.8×10^{-18}
Area 5, RWMS Pit No. 4	02/03/92	-8.3×10^{-19}	6.7×10^{-18}
Area 5, RWMS Pit No. 4	03/02/92	0.0	0.0
Area 5, RWMS Pit No. 4	03/30/92	0.0	0.0
Area 5, RWMS Pit No. 4	04/28/92	0.0	0.0
Area 5, RWMS Pit No. 4	05/26/92	3.6×10^{-19}	3.6×10^{-19}
Area 5, RWMS Pit No. 4	06/29/92	0.0	0.0
Area 5, RWMS Pit No. 4	08/03/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS Pit No. 4	08/31/92	0.0	0.0
Area 5, RWMS Pit No. 4	09/28/92	0.0	0.0
Area 5, RWMS Pit No. 4	10/26/92	0.0	0.0
Area 5, RWMS Pit No. 4	11/30/92	0.0	0.0
Area 5, RWMS TP N	02/03/92	-1.3×10^{-17}	7.5×10^{-18}
Area 5, RWMS TP N	03/02/92	1.3×10^{-18}	1.3×10^{-18}
Area 5, RWMS TP N	03/30/92	0.0	0.0
Area 5, RWMS TP N	04/28/92	0.0	0.0
Area 5, RWMS TP N	05/26/92	0.0	0.0
Area 5, RWMS TP N	06/29/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP N	08/03/92	2.3×10^{-18}	2.3×10^{-18}
Area 5, RWMS TP N	08/31/92	0.0	0.0
Area 5, RWMS TP N	09/28/92	0.0	0.0
Area 5, RWMS TP N	10/26/92	0.0	0.0
Area 5, RWMS TP N	11/30/92	0.0	0.0
Area 5, RWMS TP NE	12/30/91	-5.7×10^{-18}	3.2×10^{-18}
Area 5, RWMS TP NE	02/03/92	8.9×10^{-18}	9.0×10^{-18}
Area 5, RWMS TP NE	03/02/92	0.0	0.0
Area 5, RWMS TP NE	03/30/92	0.0	0.0
Area 5, RWMS TP NE	04/28/92	0.0	0.0
Area 5, RWMS TP NE	05/26/92	0.0	0.0
Area 5, RWMS TP NE	06/29/92	0.0	0.0
Area 5, RWMS TP NE	08/03/92	1.2×10^{-17}	7.0×10^{-18}
Area 5, RWMS TP NE	08/31/92	0.0	0.0
Area 5, RWMS TP NE	09/28/92	0.0	0.0
Area 5, RWMS TP NE	10/26/92	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS TP NE	11/30/92	0.0	0.0
Area 5, RWMS TP NW	12/30/91	-3.3×10^{-18}	3.2×10^{-18}
Area 5, RWMS TP NW	02/03/92	4.7×10^{-18}	6.5×10^{-18}
Area 5, RWMS TP NW	03/02/92	0.0	0.0
Area 5, RWMS TP NW	03/30/92	0.0	0.0
Area 5, RWMS TP NW	04/28/92	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS TP NW	05/26/92	0.0	0.0
Area 5, RWMS TP NW	06/29/92	0.0	0.0
Area 5, RWMS TP NW	08/03/92	2.3×10^{-18}	2.4×10^{-18}
Area 5, RWMS TP NW	08/31/92	0.0	0.0
Area 5, RWMS TP NW	09/28/92	2.5×10^{-17}	7.7×10^{-18}
Area 5, RWMS TP NW	10/26/92	5.8×10^{-17}	9.2×10^{-18}
Area 5, RWMS TP NW	10/26/92	2.3×10^{-18}	1.6×10^{-18}
Area 5, RWMS TP NW	11/30/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS TP S	02/03/92	9.5×10^{-18}	8.3×10^{-18}
Area 5, RWMS TP S	03/02/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP S	03/30/92	0.0	0.0
Area 5, RWMS TP S	04/28/92	0.0	0.0
Area 5, RWMS TP S	05/26/92	0.0	0.0
Area 5, RWMS TP S	06/29/92	0.0	0.0
Area 5, RWMS TP S	08/03/92	2.6×10^{-18}	2.6×10^{-18}
Area 5, RWMS TP S	08/31/92	0.0	0.0
Area 5, RWMS TP S	09/28/92	0.0	0.0
Area 5, RWMS TP S	10/26/92	0.0	0.0
Area 5, RWMS TP S	11/30/92	0.0	0.0
Area 5, RWMS TP SE	12/30/91	1.0×10^{-18}	3.6×10^{-18}
Area 5, RWMS TP SE	02/03/92	5.8×10^{-18}	7.7×10^{-18}
Area 5, RWMS TP SE	03/02/92	0.0	0.0
Area 5, RWMS TP SE	03/30/92	0.0	0.0
Area 5, RWMS TP SE	04/28/92	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS TP SE	05/26/92	3.7×10^{-19}	3.6×10^{-19}
Area 5, RWMS TP SE	06/29/92	9.0×10^{-19}	9.1×10^{-19}
Area 5, RWMS TP SE	08/03/92	0.0	0.0
Area 5, RWMS TP SE	08/31/92	0.0	0.0
Area 5, RWMS TP SE	09/28/92	0.0	0.0
Area 5, RWMS TP SE	10/26/92	0.0	0.0
Area 5, RWMS TP SE	11/30/92	0.0	0.0
Area 5, RWMS TP SW	12/30/91	-6.6×10^{-18}	3.3×10^{-18}
Area 5, RWMS TP SW	03/02/92	0.0	0.0
Area 5, RWMS TP SW	03/30/92	0.0	0.0
Area 5, RWMS TP SW	04/28/92	0.0	0.0
Area 5, RWMS TP SW	05/26/92	0.0	0.0
Area 5, RWMS TP SW	06/29/92	0.0	0.0
Area 5, RWMS TP SW	08/03/92	0.0	0.0
Area 5, RWMS TP SW	08/31/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP SW	09/28/92	1.7×10^{-18}	1.7×10^{-18}
Area 5, RWMS TP SW	10/26/92	0.0	0.0
Area 5, RWMS TP SW	11/30/92	0.0	0.0
Area 5, Well 5B	12/30/91	-8.9×10^{-19}	3.9×10^{-18}
Area 5, Well 5B	02/03/92	-1.2×10^{-17}	5.9×10^{-18}
Area 5, Well 5B	03/02/92	0.0	0.0
Area 5, Well 5B	03/30/92	0.0	0.0
Area 5, Well 5B	04/28/92	3.2×10^{-18}	2.3×10^{-18}
Area 5, Well 5B	05/26/92	1.1×10^{-18}	1.1×10^{-18}

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well 5B	06/29/92	7.5×10^{-19}	7.5×10^{-19}
Area 5, Well 5B	08/03/92	0.0	0.0
Area 5, Well 5B	08/31/92	0.0	0.0
Area 5, Well 5B	09/28/92	1.8×10^{-18}	1.8×10^{-18}
Area 5, Well 5B	10/26/92	0.0	0.0
Area 6, Building 6-900	10/26/92	9.6×10^{-19}	9.7×10^{-19}
Area 6, Building 6-900	11/30/92	0.0	0.0
Area 6, CP-6	12/30/91	-3.5×10^{-19}	2.4×10^{-18}
Area 6, CP-6	02/03/92	4.3×10^{-19}	8.6×10^{-18}
Area 6, CP-6	03/02/92	1.1×10^{-18}	1.1×10^{-18}
Area 6, CP-6	03/30/92	0.0	0.0
Area 6, CP-6	04/28/92	0.0	0.0
Area 6, CP-6	05/26/92	0.0	0.0
Area 6, CP-6	06/29/92	0.0	0.0
Area 6, CP-6	08/03/92	2.8×10^{-18}	2.0×10^{-18}
Area 6, CP-6	08/31/92	4.3×10^{-18}	4.3×10^{-18}
Area 6, CP-6	09/28/92	0.0	0.0
Area 6, CP-6	10/26/92	0.0	0.0
Area 6, CP-6	11/30/92	0.0	0.0
Area 6, Well 3 Complex	12/30/91	-5.2×10^{-18}	4.2×10^{-18}
Area 6, Well 3 Complex	02/03/92	-1.2×10^{-17}	6.1×10^{-18}
Area 6, Well 3 Complex	03/02/92	0.0	0.0
Area 6, Well 3 Complex	03/30/92	0.0	0.0
Area 6, Well 3 Complex	04/28/92	0.0	0.0
Area 6, Well 3 Complex	05/26/92	1.4×10^{-17}	1.5×10^{-17}
Area 6, Well 3 Complex	06/29/92	0.0	0.0
Area 6, Well 3 Complex	08/03/92	2.7×10^{-18}	2.0×10^{-18}
Area 6, Well 3 Complex	08/31/92	0.0	0.0
Area 6, Well 3 Complex	09/28/92	1.6×10^{-18}	1.6×10^{-18}
Area 6, Well 3 Complex	10/26/92	0.0	0.0
Area 6, Well 3 Complex	11/30/92	0.0	0.0
Area 6, Yucca Complex	12/30/91	4.1×10^{-19}	4.9×10^{-18}
Area 6, Yucca Complex	03/02/92	0.0	0.0
Area 6, Yucca Complex	03/30/92	0.0	0.0
Area 6, Yucca Complex	04/28/92	0.0	0.0
Area 6, Yucca Complex	05/26/92	0.0	0.0
Area 6, Yucca Complex	06/29/92	6.8×10^{-19}	6.8×10^{-19}
Area 6, Yucca Complex	08/03/92	0.0	0.0
Area 6, Yucca Complex	08/31/92	4.8×10^{-18}	2.4×10^{-18}
Area 6, Yucca Complex	09/28/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 6, Yucca Complex	10/26/92	5.8×10^{-19}	5.8×10^{-19}
Area 6, Yucca Complex	11/30/92	0.0	0.0
Area 7, UE-7ns	12/30/91	1.1×10^{-19}	4.0×10^{-18}
Area 7, UE-7ns	02/03/92	-1.3×10^{-17}	5.8×10^{-18}
Area 7, UE-7ns	03/02/92	0.0	0.0
Area 7, UE-7ns	03/30/92	2.9×10^{-18}	1.7×10^{-18}
Area 7, UE-7ns	04/28/92	2.9×10^{-19}	2.9×10^{-19}
Area 7, UE-7ns	05/26/92	0.0	0.0
Area 7, UE-7ns	06/29/92	1.1×10^{-18}	1.1×10^{-18}
Area 7, UE-7ns	08/03/92	1.5×10^{-18}	1.5×10^{-18}
Area 7, UE-7ns	08/31/92	3.5×10^{-18}	2.0×10^{-18}
Area 7, UE-7ns	09/28/92	0.0	0.0
Area 7, UE-7ns	10/26/92	0.0	0.0
Area 7, UE-7ns	11/30/92	0.0	0.0
Area 9, 9-300 Bunker	12/30/91	4.9×10^{-18}	3.7×10^{-18}
Area 9, 9-300 Bunker	02/03/92	-1.5×10^{-17}	6.4×10^{-18}
Area 9, 9-300 Bunker	03/02/92	5.4×10^{-18}	2.4×10^{-18}
Area 9, 9-300 Bunker	03/30/92	1.3×10^{-18}	1.3×10^{-18}
Area 9, 9-300 Bunker	04/28/92	6.4×10^{-18}	3.8×10^{-18}
Area 9, 9-300 Bunker	05/26/92	1.3×10^{-17}	4.2×10^{-18}
Area 9, 9-300 Bunker	06/29/92	8.6×10^{-18}	3.9×10^{-18}
Area 9, 9-300 Bunker	08/03/92	4.8×10^{-18}	2.2×10^{-18}
Area 9, 9-300 Bunker	08/31/92	2.7×10^{-18}	2.7×10^{-18}
Area 9, 9-300 Bunker	09/28/92	3.0×10^{-18}	1.7×10^{-18}
Area 9, 9-300 Bunker	10/26/92	3.7×10^{-18}	1.9×10^{-18}
Area 9, 9-300 Bunker	11/30/92	1.8×10^{-18}	1.3×10^{-18}
Area 10, Gate 700 S	12/30/91	-2.5×10^{-19}	3.2×10^{-18}
Area 10, Gate 700 S	02/03/92	1.8×10^{-18}	6.1×10^{-18}
Area 10, Gate 700 S	03/02/92	0.0	0.0
Area 10, Gate 700 S	03/30/92	1.2×10^{-18}	1.2×10^{-18}
Area 10, Gate 700 S	04/28/92	0.0	0.0
Area 10, Gate 700 S	05/26/92	3.7×10^{-18}	9.1×10^{-19}
Area 10, Gate 700 S	06/29/92	9.0×10^{-19}	9.0×10^{-19}
Area 10, Gate 700 S	08/03/92	4.4×10^{-18}	4.5×10^{-18}
Area 10, Gate 700 S	08/31/92	5.0×10^{-18}	2.5×10^{-18}
Area 10, Gate 700 S	09/28/92	2.3×10^{-18}	2.3×10^{-18}
Area 10, Gate 700 S	10/26/92	8.6×10^{-19}	8.6×10^{-19}
Area 10, Gate 700 S	11/30/92	0.0	0.0
Area 11, Gate 293	12/30/91	-5.3×10^{-18}	4.3×10^{-18}
Area 11, Gate 293	02/03/92	9.3×10^{-19}	5.8×10^{-18}

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 11, Gate 293	03/02/92	1.4×10^{-18}	9.6×10^{-19}
Area 11, Gate 293	03/30/92	2.2×10^{-18}	1.6×10^{-18}
Area 11, Gate 293	04/28/92	3.2×10^{-18}	3.2×10^{-18}
Area 11, Gate 293	05/26/92	1.1×10^{-18}	1.2×10^{-18}
Area 11, Gate 293	06/29/92	1.5×10^{-18}	1.5×10^{-18}
Area 11, Gate 293	08/03/92	1.7×10^{-18}	1.7×10^{-18}
Area 11, Gate 293	08/31/92	0.0	0.0
Area 11, Gate 293	09/28/92	5.6×10^{-18}	4.0×10^{-18}
Area 11, Gate 293	10/26/92	0.0	0.0
Area 11, Gate 293	11/30/92	0.0	0.0
Area 12, Complex	02/03/92	-5.7×10^{-18}	6.9×10^{-18}
Area 12, Complex	03/02/92	1.7×10^{-18}	1.7×10^{-18}
Area 12, Complex	03/30/92	0.0	0.0
Area 12, Complex	04/28/92	0.0	0.0
Area 12, Complex	05/26/92	0.0	0.0
Area 12, Complex	06/29/92	0.0	0.0
Area 12, Complex	08/03/92	8.9×10^{-19}	8.9×10^{-19}
Area 12, Complex	08/31/92	0.0	0.0
Area 12, Complex	09/28/92	0.0	0.0
Area 12, Complex	10/26/92	0.0	0.0
Area 12, Complex	11/30/92	1.4×10^{-17}	1.4×10^{-17}
Area 15, EPA Farm	12/30/91	-4.5×10^{-18}	4.0×10^{-18}
Area 15, EPA Farm	02/03/92	-1.1×10^{-17}	6.9×10^{-18}
Area 15, EPA Farm	03/02/92	1.9×10^{-18}	1.9×10^{-18}
Area 15, EPA Farm	03/30/92	2.1×10^{-18}	2.1×10^{-18}
Area 15, EPA Farm	04/28/92	2.3×10^{-18}	1.2×10^{-18}
Area 15, EPA Farm	05/26/92	1.5×10^{-17}	4.3×10^{-18}
Area 15, EPA Farm	06/29/92	2.9×10^{-18}	2.1×10^{-18}
Area 15, EPA Farm	08/03/92	9.9×10^{-18}	5.1×10^{-18}
Area 15, EPA Farm	08/31/92	3.1×10^{-18}	1.8×10^{-18}
Area 15, EPA Farm	09/28/92	0.0	0.0
Area 15, EPA Farm	10/26/92	0.0	0.0
Area 15, EPA Farm	11/30/92	1.2×10^{-18}	1.2×10^{-18}
Area 16, 3545 Substation	12/30/91	-3.0×10^{-18}	3.2×10^{-18}
Area 16, 3545 Substation	02/03/92	-2.0×10^{-18}	4.7×10^{-18}
Area 16, 3545 Substation	04/28/92	0.0	0.0
Area 16, 3545 Substation	05/26/92	0.0	0.0
Area 16, 3545 Substation	06/29/92	0.0	0.0
Area 16, 3545 Substation	08/03/92	0.0	0.0
Area 16, 3545 Substation	08/31/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 16, 3545 Substation	09/28/92	0.0	0.0
Area 16, 3545 Substation	10/26/92	0.0	0.0
Area 19, Echo Peak	12/30/91	-1.4×10^{-17}	5.7×10^{-18}
Area 19, Echo Peak	02/03/92	-2.5×10^{-18}	4.9×10^{-18}
Area 19, Echo Peak	03/02/92	0.0	0.0
Area 19, Echo Peak	03/30/92	0.0	0.0
Area 19, Echo Peak	04/28/92	0.0	0.0
Area 19, Echo Peak	05/26/92	0.0	0.0
Area 19, Echo Peak	06/29/92	0.0	0.0
Area 19, Echo Peak	08/03/92	0.0	0.0
Area 19, Echo Peak	08/31/92	0.0	0.0
Area 19, Echo Peak	09/28/92	0.0	0.0
Area 19, Echo Peak	10/26/92	0.0	0.0
Area 19, Pahute Substation	02/03/92	2.5×10^{-18}	5.4×10^{-18}
Area 19, Pahute Substation	03/02/92	0.0	0.0
Area 19, Pahute Substation	03/30/92	1.9×10^{-18}	1.3×10^{-18}
Area 19, Pahute Substation	04/28/92	2.4×10^{-18}	2.4×10^{-18}
Area 19, Pahute Substation	05/26/92	0.0	0.0
Area 19, Pahute Substation	06/29/92	0.0	0.0
Area 19, Pahute Substation	08/03/92	3.8×10^{-18}	2.8×10^{-18}
Area 19, Pahute Substation	08/31/92	1.4×10^{-18}	1.4×10^{-18}
Area 19, Pahute Substation	09/28/92	1.3×10^{-18}	1.3×10^{-18}
Area 19, Pahute Substation	10/26/92	0.0	0.0
Area 20, Dispensary	12/30/91	-1.0×10^{-17}	5.7×10^{-18}
Area 20, Dispensary	02/03/92	6.8×10^{-18}	7.6×10^{-18}
Area 20, Dispensary	03/02/92	0.0	0.0
Area 20, Dispensary	03/30/92	0.0	0.0
Area 20, Dispensary	04/28/92	0.0	0.0
Area 20, Dispensary	05/26/92	3.1×10^{-18}	2.2×10^{-18}
Area 20, Dispensary	06/29/92	4.6×10^{-18}	2.7×10^{-18}
Area 20, Dispensary	08/03/92	0.0	0.0
Area 20, Dispensary	08/31/92	2.8×10^{-18}	2.0×10^{-18}
Area 20, Dispensary	09/28/92	0.0	0.0
Area 20, Dispensary	10/26/92	0.0	0.0
Area 20, Dispensary	02/03/92	-1.4×10^{-17}	7.4×10^{-18}
Area 23, Building 790	03/02/92	0.0	0.0
Area 23, Building 790	03/30/92	0.0	0.0
Area 23, Building 790	04/28/92	0.0	0.0
Area 23, Building 790	05/26/92	0.0	0.0
Area 23, Building 790	06/29/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Building 790	08/03/92	0.0	0.0
Area 23, Building 790	08/31/92	0.0	0.0
Area 23, Building 790	09/28/92	0.0	0.0
Area 23, Building 790	10/26/92	0.0	0.0
Area 23, Building 790	11/30/92	8.9×10^{-19}	8.9×10^{-19}
Area 23, Building 790 No. 2	12/30/91	-4.5×10^{-18}	3.5×10^{-18}
Area 23, Building 790 No. 2	02/03/92	-5.6×10^{-18}	4.8×10^{-18}
Area 23, Building 790 No. 2	03/02/92	0.0	0.0
Area 23, Building 790 No. 2	03/30/92	0.0	0.0
Area 23, Building 790 No. 2	04/28/92	2.0×10^{-18}	2.0×10^{-18}
Area 23, Building 790 No. 2	05/26/92	0.0	0.0
Area 23, Building 790 No. 2	06/29/92	0.0	0.0
Area 23, Building 790 No. 2	08/03/92	0.0	0.0
Area 23, Building 790 No. 2	08/31/92	0.0	0.0
Area 23, Building 790 No. 2	09/28/92	0.0	0.0
Area 23, Building 790 No. 2	10/26/92	0.0	0.0
Area 23, Building 790 No. 2	11/30/92	0.0	0.0
Area 23, E. Boundary	12/30/91	-4.8×10^{-18}	3.7×10^{-18}
Area 23, E. Boundary	03/02/92	0.0	0.0
Area 23, E. Boundary	03/30/92	0.0	0.0
Area 23, E. Boundary	04/28/92	1.0×10^{-18}	7.4×10^{-19}
Area 23, E. Boundary	05/26/92	0.0	0.0
Area 23, E. Boundary	06/29/92	0.0	0.0
Area 23, E. Boundary	08/03/92	0.0	0.0
Area 23, E. Boundary	08/31/92	1.1×10^{-18}	1.1×10^{-18}
Area 23, E. Boundary	09/28/92	0.0	0.0
Area 23, E. Boundary	10/26/92	1.5×10^{-18}	1.6×10^{-18}
Area 23, H&S Building	12/30/91	-7.4×10^{-18}	5.8×10^{-18}
Area 23, H&S Building	03/02/92	0.0	0.0
Area 23, H&S Building	03/30/92	0.0	0.0
Area 23, H&S Building	04/28/92	0.0	0.0
Area 23, H&S Building	05/26/92	0.0	0.0
Area 23, H&S Building	06/29/92	0.0	0.0
Area 23, H&S Building	08/03/92	0.0	0.0
Area 23, H&S Building	08/31/92	0.0	0.0
Area 23, H&S Building	09/28/92	0.0	0.0
Area 23, H&S Building	10/26/92	0.0	0.0
Area 23, H&S Building	11/30/92	0.0	0.0
Area 25, E-MAD N	12/30/91	-8.3×10^{-18}	5.0×10^{-18}
Area 25, E-MAD N	02/03/92	2.9×10^{-18}	6.0×10^{-18}

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.1 (^{238}Pu in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, E-MAD N	03/02/92	2.1×10^{-18}	1.5×10^{-18}
Area 25, E-MAD N	03/30/92	0.0	0.0
Area 25, E-MAD N	04/28/92	0.0	0.0
Area 25, E-MAD N	05/26/92	0.0	0.0
Area 25, E-MAD N	06/29/92	0.0	0.0
Area 25, E-MAD N	08/03/92	0.0	0.0
Area 25, E-MAD N	08/31/92	0.0	0.0
Area 25, E-MAD N	09/28/92	0.0	0.0
Area 25, E-MAD N	10/26/92	0.0	0.0
Area 25, E-MAD N	11/30/92	0.0	0.0
Area 25, NRDS Warehouse	12/30/91	-1.9×10^{-18}	4.2×10^{-18}
Area 25, NRDS Warehouse	02/03/92	-9.8×10^{-19}	4.9×10^{-18}
Area 25, NRDS Warehouse	03/02/92	0.0	0.0
Area 25, NRDS Warehouse	03/30/92	0.0	0.0
Area 25, NRDS Warehouse	04/28/92	0.0	0.0
Area 25, NRDS Warehouse	05/26/92	3.0×10^{-18}	3.0×10^{-18}
Area 25, NRDS Warehouse	06/29/92	0.0	0.0
Area 25, NRDS Warehouse	08/03/92	0.0	0.0
Area 25, NRDS Warehouse	08/31/92	1.4×10^{-18}	1.4×10^{-18}
Area 25, NRDS Warehouse	09/28/92	1.2×10^{-18}	1.2×10^{-18}
Area 25, NRDS Warehouse	10/26/92	0.0	0.0
Area 25, NRDS Warehouse	11/30/92	0.0	0.0
Area 27, Cafeteria	02/03/92	1.0×10^{-18}	4.6×10^{-18}
Area 27, Cafeteria	03/02/92	3.2×10^{-18}	3.2×10^{-18}
Area 27, Cafeteria	03/30/92	0.0	0.0
Area 27, Cafeteria	04/28/92	9.6×10^{-18}	7.0×10^{-18}
Area 27, Cafeteria	05/26/92	1.3×10^{-18}	1.3×10^{-18}
Area 27, Cafeteria	06/29/92	0.0	0.0
Area 27, Cafeteria	08/03/92	0.0	0.0
Area 27, Cafeteria	08/31/92	1.5×10^{-18}	1.5×10^{-18}
Area 27, Cafeteria	09/28/92	1.6×10^{-18}	1.6×10^{-18}
Area 27, Cafeteria	10/26/92	0.0	0.0
Area 27, Cafeteria	11/30/92	0.0	0.0

Mean MDC: $1.5 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 $^{239+240}\text{Pu}$ in Air - 1992

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 1, BJJ	12/30/91	1.5×10^{-17}	3.6×10^{-18}
Area 1, BJJ	02/03/92	9.6×10^{-18}	4.1×10^{-18}
Area 1, BJJ	03/02/92	1.1×10^{-17}	6.5×10^{-18}
Area 1, BJJ	03/30/92	6.8×10^{-17}	1.1×10^{-17}
Area 1, BJJ	04/28/92	6.6×10^{-17}	1.2×10^{-17}
Area 1, BJJ	05/26/92	2.7×10^{-16}	1.2×10^{-16}
Area 1, BJJ	06/29/92	4.0×10^{-17}	2.0×10^{-17}
Area 1, BJJ	08/03/92	1.6×10^{-16}	1.8×10^{-17}
Area 1, BJJ	08/31/92	8.1×10^{-17}	1.2×10^{-17}
Area 1, BJJ	09/28/92	8.5×10^{-17}	1.5×10^{-17}
Area 1, BJJ	10/26/92	1.8×10^{-17}	3.9×10^{-18}
Area 1, BJJ	11/30/92	2.5×10^{-17}	5.3×10^{-18}
Area 1, Gravel Pit	12/30/91	7.9×10^{-18}	3.0×10^{-18}
Area 1, Gravel Pit	02/03/92	1.1×10^{-18}	1.4×10^{-18}
Area 1, Gravel Pit	03/02/92	0.0	0.0
Area 1, Gravel Pit	03/30/92	4.6×10^{-18}	2.7×10^{-18}
Area 1, Gravel Pit	04/28/92	3.6×10^{-18}	2.6×10^{-18}
Area 1, Gravel Pit	05/26/92	0.0	0.0
Area 1, Gravel Pit	05/26/92	0.0	0.0
Area 1, Gravel Pit	06/29/92	2.4×10^{-18}	1.7×10^{-18}
Area 1, Gravel Pit	08/03/92	2.1×10^{-18}	1.5×10^{-18}
Area 1, Gravel Pit	08/31/92	2.9×10^{-17}	6.7×10^{-18}
Area 1, Gravel Pit	09/28/92	9.6×10^{-18}	3.5×10^{-18}
Area 1, Gravel Pit	10/26/92	1.3×10^{-18}	1.3×10^{-18}
Area 1, Gravel Pit	11/30/92	1.7×10^{-18}	1.2×10^{-18}
Area 2, 2-1 Substation	12/30/91	6.3×10^{-18}	2.1×10^{-18}
Area 2, 2-1 Substation	02/03/92	0.0	0.0
Area 2, 2-1 Substation	03/02/92	1.0×10^{-18}	1.0×10^{-18}
Area 2, 2-1 Substation	03/30/92	9.4×10^{-18}	3.2×10^{-18}
Area 2, 2-1 Substation	04/28/92	1.1×10^{-17}	5.7×10^{-18}
Area 2, 2-1 Substation	05/26/92	1.5×10^{-17}	3.6×10^{-18}
Area 2, 2-1 Substation	06/29/92	1.2×10^{-17}	3.6×10^{-18}
Area 2, 2-1 Substation	08/03/92	2.4×10^{-17}	6.6×10^{-18}
Area 2, 2-1 Substation	08/31/92	4.0×10^{-17}	7.2×10^{-18}
Area 2, 2-1 Substation	09/28/92	3.7×10^{-17}	7.2×10^{-18}
Area 2, 2-1 Substation	10/26/92	7.2×10^{-18}	3.6×10^{-18}
Area 2, 2-1 Substation	11/30/92	1.1×10^{-18}	1.1×10^{-18}
Area 2, Complex	12/30/91	5.0×10^{-18}	2.0×10^{-18}
Area 2, Complex	02/03/92	5.1×10^{-18}	2.3×10^{-18}
Area 2, Complex	03/02/92	7.7×10^{-18}	3.0×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 2, Complex	03/30/92	4.7×10^{-18}	2.4×10^{-18}
Area 2, Complex	04/28/92	1.1×10^{-16}	1.7×10^{-17}
Area 2, Complex	05/26/92	1.2×10^{-17}	3.1×10^{-18}
Area 2, Complex	06/29/92	1.1×10^{-16}	1.4×10^{-17}
Area 2, Complex	08/03/92	3.1×10^{-17}	7.4×10^{-18}
Area 2, Complex	08/31/92	1.3×10^{-17}	4.5×10^{-18}
Area 2, Complex	09/28/92	1.3×10^{-17}	3.4×10^{-18}
Area 2, Complex	10/26/92	2.8×10^{-18}	1.6×10^{-18}
Area 2, Complex	11/30/92	1.8×10^{-18}	1.3×10^{-18}
Area 3, 3-300 Bunker	12/30/91	6.8×10^{-17}	1.1×10^{-17}
Area 3, Complex	12/30/91	4.4×10^{-17}	7.2×10^{-18}
Area 3, Complex	02/03/92	7.0×10^{-18}	3.1×10^{-18}
Area 3, Complex	03/02/92	1.1×10^{-17}	3.4×10^{-18}
Area 3, Complex	03/30/92	1.7×10^{-17}	4.2×10^{-18}
Area 3, Complex	04/28/92	2.6×10^{-17}	5.1×10^{-18}
Area 3, Complex	05/26/92	6.5×10^{-17}	1.1×10^{-17}
Area 3, Complex	06/29/92	3.5×10^{-17}	5.8×10^{-18}
Area 3, Complex	08/03/92	6.7×10^{-17}	1.1×10^{-17}
Area 3, Complex	08/31/92	5.8×10^{-16}	7.9×10^{-17}
Area 3, Complex	09/28/92	1.1×10^{-16}	1.2×10^{-17}
Area 3, Complex	10/26/92	2.6×10^{-17}	4.9×10^{-18}
Area 3, Complex	11/30/92	1.6×10^{-18}	1.1×10^{-18}
Area 3, Complex No. 2	12/30/91	3.9×10^{-17}	7.6×10^{-18}
Area 3, Complex No. 2	02/03/92	1.5×10^{-16}	3.6×10^{-17}
Area 3, Complex No. 2	03/02/92	7.3×10^{-17}	2.1×10^{-17}
Area 3, Complex No. 2	03/30/92	5.9×10^{-17}	1.1×10^{-17}
Area 3, Complex No. 2	04/28/92	6.0×10^{-17}	5.9×10^{-18}
Area 3, Complex No. 2	05/26/92	1.6×10^{-16}	1.9×10^{-17}
Area 3, Complex No. 2	06/29/92	9.4×10^{-17}	1.3×10^{-17}
Area 3, Complex No. 2	08/03/92	1.7×10^{-16}	2.2×10^{-17}
Area 3, Complex No. 2	08/31/92	8.6×10^{-16}	1.3×10^{-16}
Area 3, Complex No. 2	09/28/92	1.5×10^{-16}	2.3×10^{-17}
Area 3, Complex No. 2	10/26/92	4.3×10^{-17}	6.7×10^{-18}
Area 3, Complex No. 2	11/30/92	1.4×10^{-17}	3.4×10^{-18}
Area 3, Mud Plant	02/03/92	1.0×10^{-16}	2.1×10^{-17}
Area 3, Mud Plant	03/02/92	9.0×10^{-17}	1.3×10^{-17}
Area 3, Mud Plant	03/30/92	6.8×10^{-17}	6.5×10^{-18}
Area 3, Mud Plant	04/28/92	3.2×10^{-15}	2.9×10^{-16}
Area 3, Mud Plant	05/26/92	3.0×10^{-15}	1.3×10^{-16}
Area 3, Mud Plant	06/29/92	3.6×10^{-15}	3.2×10^{-16}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, Mud Plant	08/03/92	4.9×10^{-15}	4.7×10^{-16}
Area 3, Mud Plant	08/31/92	3.2×10^{-15}	3.0×10^{-16}
Area 3, Mud Plant	09/28/92	0.0	0.0
Area 3, Mud Plant	10/26/92	2.3×10^{-17}	4.6×10^{-18}
Area 3, Mud Plant	11/30/92	8.1×10^{-18}	2.9×10^{-18}
Area 3, U-3ah/at E	12/30/91	1.5×10^{-17}	3.7×10^{-18}
Area 3, U-3ah/at E	02/03/92	1.7×10^{-17}	4.0×10^{-18}
Area 3, U-3ah/at E	03/02/92	3.2×10^{-17}	1.0×10^{-17}
Area 3, U-3ah/at E	03/30/92	3.1×10^{-17}	9.3×10^{-18}
Area 3, U-3ah/at E	04/28/92	6.3×10^{-17}	8.7×10^{-18}
Area 3, U-3ah/at E	05/26/92	4.1×10^{-16}	3.9×10^{-17}
Area 3, U-3ah/at E	06/29/92	3.4×10^{-16}	2.8×10^{-17}
Area 3, U-3ah/at E	08/03/92	1.9×10^{-16}	2.1×10^{-17}
Area 3, U-3ah/at E	08/31/92	2.2×10^{-16}	2.2×10^{-17}
Area 3, U-3ah/at E	09/28/92	4.0×10^{-16}	4.1×10^{-17}
Area 3, U-3ah/at E	10/26/92	5.8×10^{-17}	8.5×10^{-18}
Area 3, U-3ah/at E	11/30/92	-5.6×10^{-16}	6.6×10^{-17}
Area 3, U-3ah/at N	12/30/91	9.1×10^{-17}	1.5×10^{-17}
Area 3, U-3ah/at N	02/03/92	9.6×10^{-17}	1.3×10^{-17}
Area 3, U-3ah/at N	03/02/92	7.6×10^{-17}	1.7×10^{-17}
Area 3, U-3ah/at N	03/30/92	6.1×10^{-17}	1.1×10^{-17}
Area 3, U-3ah/at N	04/28/92	7.8×10^{-16}	4.4×10^{-17}
Area 3, U-3ah/at N	05/26/92	3.7×10^{-15}	7.3×10^{-16}
Area 3, U-3ah/at N	06/29/92	4.0×10^{-15}	2.9×10^{-16}
Area 3, U-3ah/at N	08/03/92	5.5×10^{-15}	6.1×10^{-16}
Area 3, U-3ah/at N	08/31/92	6.6×10^{-15}	5.6×10^{-16}
Area 3, U-3ah/at N	09/28/92	5.9×10^{-15}	6.1×10^{-16}
Area 3, U-3ah/at N	10/26/92	8.0×10^{-17}	1.0×10^{-17}
Area 3, U-3ah/at N	11/30/92	-1.4×10^{-15}	2.0×10^{-16}
Area 3, U-3ah/at S	12/30/91	2.4×10^{-17}	4.9×10^{-18}
Area 3, U-3ah/at S	02/03/92	5.0×10^{-17}	8.4×10^{-18}
Area 3, U-3ah/at S	03/02/92	1.4×10^{-16}	2.1×10^{-17}
Area 3, U-3ah/at S	03/30/92	9.7×10^{-17}	1.2×10^{-17}
Area 3, U-3ah/at S	04/28/92	2.8×10^{-16}	2.2×10^{-17}
Area 3, U-3ah/at S	05/26/92	1.3×10^{-15}	3.0×10^{-16}
Area 3, U-3ah/at S	06/29/92	1.4×10^{-16}	1.4×10^{-17}
Area 3, U-3ah/at S	08/03/92	1.1×10^{-15}	1.2×10^{-16}
Area 3, U-3ah/at S	08/31/92	1.6×10^{-16}	1.8×10^{-17}
Area 3, U-3ah/at S	09/28/92	4.3×10^{-16}	4.9×10^{-17}
Area 3, U-3ah/at S	10/26/92	8.7×10^{-17}	1.2×10^{-17}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 3, U-3ah/at S	11/30/92	-5.8×10^{-15}	1.4×10^{-17}
Area 3, U-3ah/at W	12/30/91	6.8×10^{-17}	1.1×10^{-17}
Area 3, U-3ah/at W	02/03/92	1.3×10^{-16}	1.4×10^{-17}
Area 3, U-3ah/at W	03/02/92	5.6×10^{-17}	9.0×10^{-18}
Area 3, U-3ah/at W	03/30/92	4.8×10^{-17}	9.0×10^{-18}
Area 3, U-3ah/at W	04/28/92	9.6×10^{-17}	1.9×10^{-17}
Area 3, U-3ah/at W	05/26/92	4.4×10^{-16}	5.8×10^{-17}
Area 3, U-3ah/at W	06/29/92	9.7×10^{-16}	1.3×10^{-16}
Area 3, U-3ah/at W	08/03/92	7.8×10^{-16}	6.7×10^{-17}
Area 3, U-3ah/at W	08/31/92	2.9×10^{-16}	2.9×10^{-17}
Area 3, U-3ah/at W	09/28/92	1.6×10^{-16}	2.4×10^{-17}
Area 3, U-3ah/at W	10/26/92	4.8×10^{-17}	7.8×10^{-18}
Area 5, DOD Yard	12/30/91	1.3×10^{-18}	1.5×10^{-18}
Area 5, DOD Yard	02/03/92	-1.6×10^{-18}	1.1×10^{-18}
Area 5, DOD Yard	03/02/92	0.0	0.0
Area 5, DOD Yard	03/30/92	0.0	0.0
Area 5, DOD Yard	04/28/92	0.0	0.0
Area 5, DOD Yard	05/26/92	2.6×10^{-18}	1.9×10^{-18}
Area 5, DCD Yard	06/29/92	0.0	0.0
Area 5, DOD Yard	08/03/92	2.8×10^{-18}	2.0×10^{-18}
Area 5, DOD Yard	08/31/92	4.5×10^{-18}	2.3×10^{-18}
Area 5, DOD Yard	09/28/92	7.8×10^{-18}	4.0×10^{-18}
Area 5, DOD Yard	10/26/92	0.0	0.0
Area 5, DOD Yard	11/30/92	3.6×10^{-18}	2.1×10^{-18}
Area 5, Gate 200	12/30/91	0.0	0.0
Area 5, Gate 200	02/03/92	1.4×10^{-18}	1.6×10^{-18}
Area 5, Gate 200	03/02/92	0.0	0.0
Area 5, Gate 200	03/30/92	0.0	0.0
Area 5, Gate 200	04/28/92	1.3×10^{-18}	3.2×10^{-19}
Area 5, Gate 200	05/26/92	6.1×10^{-18}	2.8×10^{-18}
Area 5, Gate 200	06/29/92	2.2×10^{-17}	4.7×10^{-18}
Area 5, Gate 200	08/03/92	2.8×10^{-18}	2.0×10^{-18}
Area 5, Gate 200	08/31/92	4.1×10^{-18}	2.9×10^{-18}
Area 5, Gate 200	09/28/92	4.0×10^{-18}	2.9×10^{-18}
Area 5, Gate 200	10/26/92	7.1×10^{-19}	7.1×10^{-19}
Area 5, Gate 200	11/30/92	1.6×10^{-18}	1.6×10^{-18}
Area 5, RWMS No. 1	12/30/91	1.8×10^{-18}	1.5×10^{-18}
Area 5, RWMS No. 1	02/03/92	0.0	0.0
Area 5, RWMS No. 1	03/02/92	0.0	0.0
Area 5, RWMS No. 1	03/30/92	1.9×10^{-18}	1.9×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS No. 1	04/28/92	0.0	0.0
Area 5, RWMS No. 1	05/26/92	1.1×10^{-17}	5.7×10^{-18}
Area 5, RWMS No. 1	06/29/92	3.4×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 1	08/03/92	4.5×10^{-18}	2.6×10^{-18}
Area 5, RWMS No. 1	08/31/92	4.9×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 1	09/28/92	9.5×10^{-18}	3.2×10^{-18}
Area 5, RWMS No. 1	10/26/92	7.4×10^{-18}	3.4×10^{-18}
Area 5, RWMS No. 1	11/30/92	4.4×10^{-18}	3.1×10^{-18}
Area 5, RWMS No. 2	12/30/91	-7.0×10^{-19}	5.4×10^{-19}
Area 5, RWMS No. 2	02/03/92	2.7×10^{-18}	2.2×10^{-18}
Area 5, RWMS No. 2	03/02/92	0.0	0.0
Area 5, RWMS No. 2	03/30/92	7.6×10^{-18}	3.5×10^{-18}
Area 5, RWMS No. 2	04/28/92	1.9×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 2	05/26/92	2.2×10^{-17}	2.3×10^{-17}
Area 5, RWMS No. 2	06/29/92	3.3×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 2	08/03/92	2.1×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 2	08/31/92	1.3×10^{-17}	4.7×10^{-18}
Area 5, RWMS No. 2	09/28/92	6.4×10^{-18}	3.2×10^{-18}
Area 5, RWMS No. 2	10/26/92	1.3×10^{-17}	3.9×10^{-18}
Area 5, RWMS No. 2	11/30/92	3.0×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 3	12/30/91	2.9×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 3	02/03/92	1.1×10^{-17}	5.6×10^{-18}
Area 5, RWMS No. 3	03/02/92	0.0	0.0
Area 5, RWMS No. 3	03/30/92	1.2×10^{-17}	3.9×10^{-18}
Area 5, RWMS No. 3	04/28/92	0.0	0.0
Area 5, RWMS No. 3	05/26/92	1.8×10^{-17}	4.9×10^{-18}
Area 5, RWMS No. 3	06/29/92	4.1×10^{-18}	2.4×10^{-18}
Area 5, RWMS No. 3	08/03/92	2.4×10^{-17}	8.9×10^{-18}
Area 5, RWMS No. 3	08/31/92	8.6×10^{-18}	4.4×10^{-18}
Area 5, RWMS No. 3	09/28/92	5.9×10^{-17}	1.3×10^{-17}
Area 5, RWMS No. 3	10/26/92	2.1×10^{-18}	1.5×10^{-18}
Area 5, RWMS No. 3	11/30/92	0.0	0.0
Area 5, RWMS No. 4	12/30/91	3.1×10^{-19}	1.1×10^{-18}
Area 5, RWMS No. 4	02/03/92	0.0	0.0
Area 5, RWMS No. 4	03/02/92	1.2×10^{-18}	1.2×10^{-18}
Area 5, RWMS No. 4	03/30/92	2.2×10^{-18}	1.6×10^{-18}
Area 5, RWMS No. 4	04/28/92	0.0	0.0
Area 5, RWMS No. 4	04/28/92	0.0	0.0
Area 5, RWMS No. 4	05/26/92	1.5×10^{-17}	2.8×10^{-18}
Area 5, RWMS No. 4	06/29/92	1.7×10^{-18}	1.2×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 4	08/03/92	7.0×10^{-18}	3.5×10^{-18}
Area 5, RWMS No. 4	08/31/92	1.6×10^{-17}	6.7×10^{-18}
Area 5, RWMS No. 4	09/28/92	7.7×10^{-18}	3.2×10^{-18}
Area 5, RWMS No. 4	10/26/92	4.7×10^{-18}	2.4×10^{-18}
Area 5, RWMS No. 4	11/30/92	1.6×10^{-18}	8.1×10^{-19}
Area 5, RWMS No. 5	12/30/91	3.7×10^{-19}	1.2×10^{-18}
Area 5, RWMS No. 5	02/03/92	2.0×10^{-18}	2.3×10^{-18}
Area 5, RWMS No. 5	03/02/92	6.0×10^{-18}	4.3×10^{-18}
Area 5, RWMS No. 5	03/30/92	2.8×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 5	04/28/92	1.0×10^{-17}	2.3×10^{-18}
Area 5, RWMS No. 5	05/26/92	1.3×10^{-17}	3.7×10^{-18}
Area 5, RWMS No. 5	06/29/92	4.3×10^{-17}	8.1×10^{-18}
Area 5, RWMS No. 5	08/03/92	3.0×10^{-17}	6.8×10^{-18}
Area 5, RWMS No. 5	08/31/92	5.8×10^{-18}	2.9×10^{-18}
Area 5, RWMS No. 5	09/28/92	1.6×10^{-17}	6.3×10^{-18}
Area 5, RWMS No. 5	10/26/92	3.1×10^{-18}	1.6×10^{-18}
Area 5, RWMS No. 5	11/30/92	0.0	0.0
Area 5, RWMS No. 6	12/30/91	1.8×10^{-18}	1.5×10^{-18}
Area 5, RWMS No. 6	02/03/92	-1.3×10^{-18}	9.3×10^{-19}
Area 5, RWMS No. 6	03/02/92	0.0	0.0
Area 5, RWMS No. 6	03/30/92	0.0	0.0
Area 5, RWMS No. 6	04/28/92	3.2×10^{-17}	6.1×10^{-18}
Area 5, RWMS No. 6	05/26/92	2.9×10^{-17}	8.0×10^{-18}
Area 5, RWMS No. 6	06/29/92	1.2×10^{-17}	3.4×10^{-18}
Area 5, RWMS No. 6	08/03/92	1.9×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 6	08/31/92	2.1×10^{-17}	1.3×10^{-17}
Area 5, RWMS No. 6	09/28/92	5.7×10^{-18}	2.4×10^{-18}
Area 5, RWMS No. 6	10/26/92	7.8×10^{-18}	2.7×10^{-18}
Area 5, RWMS No. 6	11/30/92	0.0	0.0
Area 5, RWMS No. 7	12/30/91	1.7×10^{-18}	1.8×10^{-18}
Area 5, RWMS No. 7	02/03/92	-9.6×10^{-19}	6.6×10^{-19}
Area 5, RWMS No. 7	03/02/92	5.0×10^{-18}	3.6×10^{-18}
Area 5, RWMS No. 7	03/30/92	3.2×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 7	04/28/92	0.0	0.0
Area 5, RWMS No. 7	05/26/92	0.0	0.0
Area 5, RWMS No. 7	06/29/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS No. 7	08/03/92	8.7×10^{-18}	3.3×10^{-18}
Area 5, RWMS No. 7	08/31/92	8.2×10^{-18}	4.2×10^{-18}
Area 5, RWMS No. 7	09/28/92	2.1×10^{-17}	7.3×10^{-18}
Area 5, RWMS No. 7	10/26/92	2.2×10^{-18}	1.6×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 7	11/30/92	0.0	0.0
Area 5, RWMS No. 8	12/30/91	-6.5×10^{-19}	5.1×10^{-19}
Area 5, RWMS No. 8	02/03/92	2.2×10^{-18}	1.9×10^{-18}
Area 5, RWMS No. 8	03/02/92	0.0	0.0
Area 5, RWMS No. 8	03/30/92	2.0×10^{-18}	1.4×10^{-18}
Area 5, RWMS No. 8	04/28/92	7.3×10^{-18}	2.1×10^{-18}
Area 5, RWMS No. 8	05/26/92	0.0	0.0
Area 5, RWMS No. 8	06/29/92	2.0×10^{-18}	1.4×10^{-18}
Area 5, RWMS No. 8	08/03/92	3.3×10^{-18}	2.3×10^{-18}
Area 5, RWMS No. 8	08/31/92	6.5×10^{-18}	3.3×10^{-18}
Area 5, RWMS No. 8	09/28/92	2.5×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 8	10/26/92	5.0×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 8	11/30/92	4.3×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 9	12/30/91	2.1×10^{-18}	2.0×10^{-18}
Area 5, RWMS No. 9	02/03/92	2.6×10^{-18}	2.6×10^{-18}
Area 5, RWMS No. 9	03/02/92	3.5×10^{-18}	3.5×10^{-18}
Area 5, RWMS No. 9	03/30/92	4.9×10^{-18}	2.5×10^{-18}
Area 5, RWMS No. 9	04/28/92	1.0×10^{-17}	2.3×10^{-18}
Area 5, RWMS No. 9	05/26/92	6.2×10^{-18}	6.3×10^{-18}
Area 5, RWMS No. 9	06/29/92	7.0×10^{-18}	2.9×10^{-18}
Area 5, RWMS No. 9	08/03/92	0.0	0.0
Area 5, RWMS No. 9	08/31/92	9.1×10^{-18}	3.5×10^{-18}
Area 5, RWMS No. 9	09/28/92	4.2×10^{-18}	3.0×10^{-18}
Area 5, RWMS No. 9	10/26/92	1.5×10^{-18}	1.1×10^{-18}
Area 5, RWMS No. 9	11/30/92	1.7×10^{-18}	1.7×10^{-18}
Area 5, RWMS Pit No. 3	12/30/91	0.0	0.0
Area 5, RWMS Pit No. 3	02/03/92	-1.3×10^{-18}	8.7×10^{-19}
Area 5, RWMS Pit No. 3	03/02/92	1.0×10^{-17}	4.5×10^{-18}
Area 5, RWMS Pit No. 3	03/30/92	5.0×10^{-18}	2.9×10^{-18}
Area 5, RWMS Pit No. 3	04/28/92	0.0	0.0
Area 5, RWMS Pit No. 3	05/26/92	1.3×10^{-17}	9.5×10^{-18}
Area 5, RWMS Pit No. 3	06/29/92	7.8×10^{-18}	2.7×10^{-18}
Area 5, RWMS Pit No. 3	08/03/92	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS Pit No. 3	08/31/92	1.6×10^{-18}	1.6×10^{-18}
Area 5, RWMS Pit No. 3	09/28/92	1.1×10^{-17}	4.6×10^{-18}
Area 5, RWMS Pit No. 3	10/26/92	3.5×10^{-18}	2.5×10^{-18}
Area 5, RWMS Pit No. 3	11/30/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS Pit No. 4	12/30/91	9.5×10^{-19}	9.7×10^{-19}
Area 5, RWMS Pit No. 4	02/03/92	3.4×10^{-19}	1.4×10^{-18}
Area 5, RWMS Pit No. 4	03/02/92	0.0	0.0

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS Pit No. 4	03/30/92	3.5×10^{-18}	2.5×10^{-18}
Area 5, RWMS Pit No. 4	04/28/92	4.3×10^{-18}	3.1×10^{-18}
Area 5, RWMS Pit No. 4	05/26/92	1.4×10^{-17}	2.3×10^{-18}
Area 5, RWMS Pit No. 4	06/29/92	8.1×10^{-18}	3.4×10^{-18}
Area 5, RWMS Pit No. 4	08/03/92	7.0×10^{-18}	5.0×10^{-18}
Area 5, RWMS Pit No. 4	08/31/92	5.5×10^{-18}	2.8×10^{-18}
Area 5, RWMS Pit No. 4	09/28/92	2.4×10^{-18}	1.7×10^{-18}
Area 5, RWMS Pit No. 4	10/26/92	3.6×10^{-18}	2.1×10^{-18}
Area 5, RWMS Pit No. 4	11/30/92	4.3×10^{-18}	2.5×10^{-18}
Area 5, RWMS TP N	12/30/91	0.0	0.0
Area 5, RWMS TP N	02/03/92	-9.4×10^{-19}	6.6×10^{-19}
Area 5, RWMS TP N	03/02/92	0.0	0.0
Area 5, RWMS TP N	03/30/92	1.3×10^{-18}	1.3×10^{-18}
Area 5, RWMS TP N	04/28/92	1.7×10^{-17}	4.3×10^{-18}
Area 5, RWMS TP N	05/26/92	6.8×10^{-18}	1.6×10^{-18}
Area 5, RWMS TP N	06/29/92	1.4×10^{-17}	4.6×10^{-18}
Area 5, RWMS TP N	08/03/92	2.3×10^{-18}	2.3×10^{-18}
Area 5, RWMS TP N	08/31/92	5.1×10^{-18}	3.0×10^{-18}
Area 5, RWMS TP N	09/28/92	9.9×10^{-18}	4.2×10^{-18}
Area 5, RWMS TP N	10/26/92	2.3×10^{-18}	1.3×10^{-18}
Area 5, RWMS TP N	11/30/92	1.7×10^{-18}	1.2×10^{-18}
Area 5, RWMS TP NE	12/30/91	7.8×10^{-19}	8.7×10^{-19}
Area 5, RWMS TP NE	02/03/92	-9.8×10^{-19}	6.8×10^{-19}
Area 5, RWMS TP NE	02/02/92	0.0	0.0
Area 5, RWMS TP NE	03/30/92	1.9×10^{-18}	1.9×10^{-18}
Area 5, RWMS TP NE	04/28/92	3.9×10^{-18}	2.8×10^{-18}
Area 5, RWMS TP NE	05/26/92	1.5×10^{-17}	2.7×10^{-18}
Area 5, RWMS TP NE	06/29/92	3.8×10^{-18}	2.7×10^{-18}
Area 5, RWMS TP NE	08/03/92	1.9×10^{-17}	9.0×10^{-18}
Area 5, RWMS TP NE	08/31/92	8.6×10^{-18}	6.2×10^{-18}
Area 5, RWMS TP NE	09/28/92	0.0	0.0
Area 5, RWMS TP NE	10/26/92	4.7×10^{-18}	2.4×10^{-18}
Area 5, RWMS TP NE	11/30/92	1.7×10^{-18}	1.7×10^{-18}
Area 5, RWMS TP NW	12/30/91	3.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS TP NW	02/03/92	2.6×10^{-19}	1.3×10^{-18}
Area 5, RWMS TP NW	03/02/92	0.0	0.0
Area 5, RWMS TP NW	03/30/92	0.0	0.0
Area 5, RWMS TP NW	04/28/92	2.3×10^{-18}	1.6×10^{-18}
Area 5, RWMS TP NW	05/26/92	6.7×10^{-18}	1.9×10^{-18}
Area 5, RWMS TP NW	06/29/92	1.1×10^{-17}	3.8×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS TP NW	08/03/92	1.4×10^{-17}	6.0×10^{-18}
Area 5, RWMS TP NW	08/31/92	6.6×10^{-18}	3.0×10^{-18}
Area 5, RWMS TP NW	09/28/92	9.3×10^{-16}	1.1×10^{-16}
Area 5, RWMS TP NW	10/26/92	5.8×10^{-17}	9.3×10^{-18}
Area 5, RWMS TP NW	11/30/92	1.6×10^{-17}	1.7×10^{-17}
Area 5, RWMS TP S	12/30/91	0.0	0.0
Area 5, RWMS TP S	02/03/92	3.2×10^{-18}	2.5×10^{-18}
Area 5, RWMS TP S	03/02/92	4.3×10^{-18}	2.5×10^{-18}
Area 5, RWMS TP S	03/30/92	6.2×10^{-18}	3.1×10^{-18}
Area 5, RWMS TP S	04/28/92	8.5×10^{-18}	5.0×10^{-18}
Area 5, RWMS TP S	05/26/92	7.0×10^{-18}	2.1×10^{-18}
Area 5, RWMS TP S	06/29/92	3.3×10^{-18}	3.3×10^{-18}
Area 5, RWMS TP S	08/03/92	3.7×10^{-17}	1.1×10^{-17}
Area 5, RWMS TP S	08/31/92	7.4×10^{-18}	3.4×10^{-18}
Area 5, RWMS TP S	09/28/92	5.3×10^{-18}	3.1×10^{-18}
Area 5, RWMS TP S	10/26/92	1.3×10^{-17}	3.7×10^{-18}
Area 5, RWMS TP S	11/30/92	0.0	0.0
Area 5, RWMS TP SE	12/30/91	1.3×10^{-18}	1.0×10^{-18}
Area 5, RWMS TP SE	02/03/92	-9.2×10^{-19}	6.3×10^{-19}
Area 5, RWMS TP SE	03/02/92	1.3×10^{-18}	1.3×10^{-18}
Area 5, RWMS TP SE	03/30/92	4.1×10^{-18}	2.4×10^{-18}
Area 5, RWMS TP SE	04/28/92	6.5×10^{-18}	2.7×10^{-18}
Area 5, RWMS TP SE	05/26/92	3.4×10^{-17}	3.8×10^{-18}
Area 5, RWMS TP SE	06/29/92	6.1×10^{-17}	8.7×10^{-18}
Area 5, RWMS TP SE	08/03/92	1.6×10^{-16}	3.2×10^{-17}
Area 5, RWMS TP SE	08/31/92	9.8×10^{-18}	3.2×10^{-18}
Area 5, RWMS TP SE	09/28/92	2.4×10^{-17}	6.6×10^{-18}
Area 5, RWMS TP SE	10/26/92	1.1×10^{-18}	1.1×10^{-18}
Area 5, RWMS TP SE	11/30/92	3.8×10^{-18}	2.7×10^{-18}
Area 5, RWMS TP SW	12/30/91	6.7×10^{-19}	9.4×10^{-19}
Area 5, RWMS TP SW	03/02/92	2.6×10^{-18}	1.8×10^{-18}
Area 5, RWMS TP SW	03/30/92	3.2×10^{-18}	2.3×10^{-18}
Area 5, RWMS TP SW	04/28/92	6.5×10^{-18}	3.3×10^{-18}
Area 5, RWMS TP SW	04/28/92	0.0	0.0
Area 5, RWMS TP SW	05/26/92	4.4×10^{-17}	4.1×10^{-18}
Area 5, RWMS TP SW	06/29/92	1.1×10^{-17}	4.3×10^{-18}
Area 5, RWMS TP SW	08/03/92	7.2×10^{-18}	3.7×10^{-18}
Area 5, RWMS TP SW	08/31/92	1.4×10^{-18}	1.4×10^{-18}
Area 5, RWMS TP SW	08/31/92	5.8×10^{-18}	2.9×10^{-18}
Area 5, RWMS TP SW	09/28/92	2.1×10^{-17}	6.3×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS TP SW	10/26/92	5.2×10^{-18}	2.2×10^{-18}
Area 5, RWMS TP SW	11/30/92	0.0	0.0
Area 5, RWMS TP SW	02/03/92	1.3×10^{-18}	1.7×10^{-18}
Area 5, Well 5B	12/30/91	2.4×10^{-18}	1.5×10^{-18}
Area 5, Well 5B	02/03/92	2.5×10^{-18}	1.9×10^{-18}
Area 5, Well 5B	03/02/92	3.9×10^{-18}	2.0×10^{-18}
Area 5, Well 5B	03/30/92	1.7×10^{-18}	1.2×10^{-18}
Area 5, Well 5B	04/28/92	0.0	0.0
Area 5, Well 5B	05/26/92	1.8×10^{-17}	4.7×10^{-18}
Area 5, Well 5B	06/29/92	9.7×10^{-18}	2.8×10^{-18}
Area 5, Well 5B	08/03/92	8.9×10^{-18}	3.7×10^{-18}
Area 5, Well 5B	08/31/92	5.2×10^{-18}	2.6×10^{-18}
Area 5, Well 5B	09/28/92	5.4×10^{-18}	3.2×10^{-18}
Area 5, Well 5B	10/26/92	3.0×10^{-18}	2.1×10^{-18}
Area 6, Building 6-900	10/26/92	9.6×10^{-18}	3.1×10^{-18}
Area 6, Building 6-900	11/30/92	3.9×10^{-18}	2.0×10^{-18}
Area 6, CP-6	12/30/91	2.1×10^{-18}	1.0×10^{-18}
Area 6, CP-6	02/03/92	1.7×10^{-18}	2.1×10^{-18}
Area 6, CP-6	03/02/92	5.4×10^{-18}	2.5×10^{-18}
Area 6, CP-6	03/30/92	4.9×10^{-18}	2.9×10^{-18}
Area 6, CP-6	04/28/92	6.6×10^{-18}	3.0×10^{-18}
Area 6, CP-6	05/26/92	1.3×10^{-17}	3.9×10^{-18}
Area 6, CP-6	06/29/92	1.1×10^{-17}	2.9×10^{-18}
Area 6, CP-6	08/03/92	2.6×10^{-17}	6.4×10^{-18}
Area 6, CP-6	08/31/92	1.7×10^{-17}	8.7×10^{-18}
Area 6, CP-6	09/28/92	1.4×10^{-17}	4.4×10^{-18}
Area 6, CP-6	10/26/92	6.8×10^{-18}	2.6×10^{-18}
Area 6, CP-6	11/30/92	1.0×10^{-18}	1.0×10^{-18}
Area 6, Well 3 Complex	12/30/91	3.2×10^{-18}	1.6×10^{-18}
Area 6, Well 3 Complex	02/03/92	1.7×10^{-18}	1.8×10^{-18}
Area 6, Well 3 Complex	03/02/92	2.1×10^{-18}	1.5×10^{-18}
Area 6, Well 3 Complex	03/30/92	3.5×10^{-18}	2.0×10^{-18}
Area 6, Well 3 Complex	04/28/92	2.4×10^{-17}	6.6×10^{-18}
Area 6, Well 3 Complex	05/26/92	4.2×10^{-17}	2.8×10^{-17}
Area 6, Well 3 Complex	06/29/92	2.6×10^{-17}	4.6×10^{-18}
Area 6, Well 3 Complex	08/03/92	1.2×10^{-17}	4.1×10^{-18}
Area 6, Well 3 Complex	08/31/92	2.8×10^{-17}	6.6×10^{-18}
Area 6, Well 3 Complex	09/28/92	2.8×10^{-17}	7.3×10^{-18}
Area 6, Well 3 Complex	10/26/92	9.8×10^{-18}	3.2×10^{-18}
Area 6, Well 3 Complex	11/30/92	3.4×10^{-18}	1.7×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Yucca Complex	12/30/91	2.5×10^{-17}	5.6×10^{-18}
Area 6, Yucca Complex	02/03/92	0.0	0.0
Area 6, Yucca Complex	03/02/92	5.4×10^{-18}	2.2×10^{-18}
Area 6, Yucca Complex	03/30/92	2.9×10^{-17}	6.3×10^{-18}
Area 6, Yucca Complex	04/28/92	9.2×10^{-17}	2.1×10^{-17}
Area 6, Yucca Complex	05/26/92	2.7×10^{-17}	6.1×10^{-18}
Area 6, Yucca Complex	06/29/92	6.8×10^{-19}	6.8×10^{-19}
Area 6, Yucca Complex	06/29/92	1.6×10^{-17}	3.5×10^{-18}
Area 6, Yucca Complex	08/03/92	1.9×10^{-17}	5.3×10^{-18}
Area 6, Yucca Complex	08/31/92	1.4×10^{-16}	1.7×10^{-17}
Area 6, Yucca Complex	09/28/92	1.5×10^{-16}	2.7×10^{-17}
Area 6, Yucca Complex	10/26/92	1.1×10^{-17}	2.7×10^{-18}
Area 6, Yucca Complex	11/30/92	5.1×10^{-18}	2.3×10^{-18}
Area 7, UE-7ns	12/30/91	2.5×10^{-18}	1.4×10^{-18}
Area 7, UE-7ns	02/03/92	-4.0×10^{-20}	1.0×10^{-18}
Area 7, UE-7ns	03/02/92	0.0	0.0
Area 7, UE-7ns	03/30/92	3.9×10^{-16}	3.5×10^{-17}
Area 7, UE-7ns	04/28/92	2.2×10^{-17}	2.7×10^{-18}
Area 7, UE-7ns	05/26/92	4.8×10^{-17}	6.5×10^{-18}
Area 7, UE-7ns	06/29/92	5.8×10^{-17}	9.7×10^{-18}
Area 7, UE-7ns	08/03/92	9.5×10^{-17}	1.5×10^{-17}
Area 7, UE-7ns	08/31/92	9.5×10^{-17}	1.3×10^{-17}
Area 7, UE-7ns	09/28/92	3.5×10^{-17}	1.2×10^{-17}
Area 7, UE-7ns	10/26/92	5.2×10^{-16}	2.4×10^{-18}
Area 7, UE-7ns	11/30/92	2.5×10^{-18}	1.4×10^{-18}
Area 9, 9-300 Bunker	12/30/91	1.0×10^{-16}	1.1×10^{-17}
Area 9, 9-300 Bunker	02/03/92	6.3×10^{-16}	5.5×10^{-17}
Area 9, 9-300 Bunker	03/02/92	2.3×10^{-16}	2.3×10^{-17}
Area 9, 9-300 Bunker	03/30/92	1.7×10^{-16}	1.9×10^{-17}
Area 9, 9-300 Bunker	04/28/92	4.3×10^{-16}	5.6×10^{-17}
Area 9, 9-300 Bunker	05/26/92	8.8×10^{-16}	7.6×10^{-17}
Area 9, 9-300 Bunker	06/29/92	6.3×10^{-16}	6.2×10^{-17}
Area 9, 9-300 Bunker	08/03/92	2.0×10^{-16}	2.1×10^{-17}
Area 9, 9-300 Bunker	08/31/92	2.5×10^{-16}	3.7×10^{-17}
Area 9, 9-300 Bunker	09/28/92	2.7×10^{-16}	2.6×10^{-17}
Area 9, 9-300 Bunker	10/26/92	3.2×10^{-16}	3.1×10^{-17}
Area 9, 9-300 Bunker	11/30/92	2.7×10^{-17}	5.3×10^{-18}
Area 10, Gate 700	12/30/91	2.1×10^{-17}	2.5×10^{-18}
Area 10, Gate 700	02/03/92	3.4×10^{-18}	2.2×10^{-18}
Area 10, Gate 700	03/02/92	4.7×10^{-18}	1.9×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 10, Gate 700	03/30/92	4.7×10^{-18}	2.4×10^{-18}
Area 10, Gate 700	04/28/92	1.1×10^{-17}	4.0×10^{-18}
Area 10, Gate 700	05/26/92	1.5×10^{-16}	8.3×10^{-18}
Area 10, Gate 700	06/29/92	2.2×10^{-17}	4.8×10^{-18}
Area 10, Gate 700	08/03/92	1.8×10^{-17}	9.4×10^{-18}
Area 10, Gate 700	08/31/92	2.7×10^{-18}	3.0×10^{-17}
Area 10, Gate 700	09/28/92	1.8×10^{-17}	6.7×10^{-18}
Area 10, Gate 700	10/26/92	2.6×10^{-18}	1.5×10^{-18}
Area 10, Gate 700	11/30/92	0.0	0.0
Area 11, Gate 293	12/30/91	5.9×10^{-18}	2.1×10^{-18}
Area 11, Gate 293	02/03/92	2.4×10^{-19}	1.1×10^{-18}
Area 11, Gate 293	03/02/92	6.8×10^{-19}	6.8×10^{-19}
Area 11, Gate 293	03/30/92	8.4×10^{-17}	1.2×10^{-17}
Area 11, Gate 293	04/28/92	6.4×10^{-18}	4.6×10^{-18}
Area 11, Gate 293	05/26/92	2.9×10^{-17}	6.4×10^{-18}
Area 11, Gate 293	06/29/92	8.8×10^{-17}	1.5×10^{-17}
Area 11, Gate 293	08/03/92	1.7×10^{-17}	5.6×10^{-18}
Area 11, Gate 293	08/31/92	3.0×10^{-17}	7.4×10^{-18}
Area 11, Gate 293	09/28/92	6.7×10^{-17}	1.6×10^{-17}
Area 11, Gate 293	10/26/92	0.0	0.0
Area 11, Gate 293	11/30/92	6.3×10^{-18}	2.4×10^{-18}
Area 12, Complex	12/30/91	0.0	0.0
Area 12, Complex	02/03/92	-9.1×10^{-19}	6.3×10^{-19}
Area 12, Complex	03/02/92	3.8×10^{-17}	8.5×10^{-18}
Area 12, Complex	03/30/92	3.1×10^{-18}	2.2×10^{-18}
Area 12, Complex	04/28/92	4.2×10^{-18}	2.1×10^{-18}
Area 12, Complex	05/26/92	6.8×10^{-18}	2.5×10^{-18}
Area 12, Complex	06/29/92	5.6×10^{-18}	2.8×10^{-18}
Area 12, Complex	08/03/92	1.8×10^{-18}	1.3×10^{-18}
Area 12, Complex	08/31/92	4.4×10^{-18}	4.5×10^{-18}
Area 12, Complex	09/28/92	1.5×10^{-18}	1.5×10^{-18}
Area 12, Complex	10/26/92	4.1×10^{-18}	2.4×10^{-18}
Area 12, Complex	11/30/92	0.0	0.0
Area 15, EPA Farm	12/30/91	7.7×10^{-19}	1.1×10^{-18}
Area 15, EPA Farm	02/03/92	3.2×10^{-19}	1.4×10^{-18}
Area 15, EPA Farm	03/02/92	1.7×10^{-17}	5.9×10^{-18}
Area 15, EPA Farm	03/30/92	5.1×10^{-17}	1.2×10^{-17}
Area 15, EPA Farm	04/28/92	8.6×10^{-17}	8.7×10^{-18}
Area 15, EPA Farm	05/26/92	1.1×10^{-15}	1.0×10^{-16}
Area 15, EPA Farm	06/29/92	1.1×10^{-16}	1.7×10^{-17}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 15, EPA Farm	08/03/92	4.0×10^{-17}	1.1×10^{-17}
Area 15, EPA Farm	08/31/92	8.8×10^{-17}	1.1×10^{-17}
Area 15, EPA Farm	09/28/92	3.6×10^{-17}	7.7×10^{-17}
Area 15, EPA Farm	10/26/92	1.2×10^{-17}	3.6×10^{-17}
Area 15, EPA Farm	11/30/92	2.1×10^{-17}	5.4×10^{-17}
Area 16, 3545 Substation	12/30/91	3.3×10^{-18}	1.5×10^{-18}
Area 16, 3545 Substation	02/03/92	2.3×10^{-19}	1.0×10^{-18}
Area 16, 3545 Substation	03/02/92	2.2×10^{-18}	1.6×10^{-18}
Area 16, 3545 Substation	03/30/92	3.1×10^{-18}	1.8×10^{-18}
Area 16, 3545 Substation	04/28/92	5.8×10^{-18}	3.4×10^{-18}
Area 16, 3545 Substation	05/26/92	2.5×10^{-18}	2.5×10^{-18}
Area 16, 3545 Substation	06/29/92	1.1×10^{-17}	3.1×10^{-18}
Area 16, 3545 Substation	08/03/92	7.5×10^{-18}	2.9×10^{-18}
Area 16, 3545 Substation	08/31/92	1.9×10^{-17}	7.1×10^{-18}
Area 16, 3545 Substation	09/28/92	2.3×10^{-18}	1.6×10^{-18}
Area 16, 3545 Substation	10/26/92	3.2×10^{-18}	1.9×10^{-18}
Area 19, Echo Peak	12/30/91	1.4×10^{-18}	1.8×10^{-18}
Area 19, Echo Peak	02/03/92	3.1×10^{-19}	1.1×10^{-18}
Area 19, Echo Peak	03/02/92	1.8×10^{-18}	1.3×10^{-18}
Area 19, Echo Peak	03/30/92	0.0	0.0
Area 19, Echo Peak	04/28/92	2.5×10^{-18}	1.8×10^{-18}
Area 19, Echo Peak	05/26/92	1.2×10^{-17}	4.4×10^{-18}
Area 19, Echo Peak	06/29/92	0.0	0.0
Area 19, Echo Peak	08/03/92	1.2×10^{-18}	1.2×10^{-18}
Area 19, Echo Peak	08/31/92	5.0×10^{-18}	2.3×10^{-18}
Area 19, Echo Peak	09/28/92	1.3×10^{-18}	1.3×10^{-18}
Area 19, Echo Peak	10/26/92	1.6×10^{-18}	1.6×10^{-18}
Area 19, Pahute Substation	12/30/91	0.0	0.0
Area 19, Pahute Substation	02/03/92	1.0×10^{-18}	1.3×10^{-18}
Area 19, Pahute Substation	03/02/92	2.1×10^{-18}	1.5×10^{-18}
Area 19, Pahute Substation	03/30/92	3.0×10^{-18}	1.7×10^{-18}
Area 19, Pahute Substation	04/28/92	4.9×10^{-18}	3.5×10^{-18}
Area 19, Pahute Substation	05/26/92	0.0	0.0
Area 19, Pahute Substation	06/29/92	8.9×10^{-18}	3.2×10^{-18}
Area 19, Pahute Substation	08/03/92	1.9×10^{-18}	1.9×10^{-18}
Area 19, Pahute Substation	08/31/92	1.4×10^{-18}	1.4×10^{-18}
Area 19, Pahute Substation	09/28/92	2.7×10^{-18}	1.9×10^{-18}
Area 19, Pahute Substation	10/26/92	9.4×10^{-19}	9.4×10^{-19}
Area 20, Dispensary	12/30/91	4.1×10^{-18}	2.1×10^{-18}
Area 20, Dispensary	02/03/92	5.0×10^{-19}	1.6×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{238+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 20, Dispensary	02/03/92	5.0×10^{-19}	1.6×10^{-18}
Area 20, Dispensary	03/02/92	0.0	0.0
Area 20, Dispensary	03/30/92	1.6×10^{-18}	1.6×10^{-18}
Area 20, Dispensary	04/28/92	4.3×10^{-18}	1.9×10^{-18}
Area 20, Dispensary	05/26/92	1.5×10^{-18}	1.5×10^{-18}
Area 20, Dispensary	06/29/92	3.0×10^{-18}	2.1×10^{-18}
Area 20, Dispensary	08/03/92	3.1×10^{-18}	2.2×10^{-18}
Area 20, Dispensary	08/31/92	4.2×10^{-18}	2.5×10^{-18}
Area 20, Dispensary	09/28/92	1.9×10^{-17}	6.0×10^{-17}
Area 20, Dispensary	10/26/92	9.0×10^{-19}	9.0×10^{-19}
Area 23, Building 790	12/30/91	0.0	0.0
Area 23, Building 790	02/03/92	2.8×10^{-18}	2.6×10^{-18}
Area 23, Building 790	03/02/92	0.0	0.0
Area 23, Building 790	03/30/92	9.0×10^{-19}	9.0×10^{-19}
Area 23, Building 790	04/28/92	2.9×10^{-18}	1.5×10^{-18}
Area 23, Building 790	05/26/92	0.0	0.0
Area 23, Building 790	06/29/92	6.7×10^{-18}	2.4×10^{-18}
Area 23, Building 790	08/03/92	5.9×10^{-18}	3.0×10^{-18}
Area 23, Building 790	08/31/92	6.6×10^{-18}	3.0×10^{-18}
Area 23, Building 790	09/28/92	3.0×10^{-18}	2.1×10^{-18}
Area 23, Building 790	10/26/92	0.0	0.0
Area 23, Building 790	11/30/92	8.9×10^{-19}	8.9×10^{-19}
Area 23, Building 790 No. 2	12/30/91	1.5×10^{-19}	8.1×10^{-19}
Area 23, Building 790 No. 2	02/03/92	3.0×10^{-18}	1.9×10^{-18}
Area 23, Building 790 No. 2	03/02/92	2.3×10^{-18}	1.3×10^{-18}
Area 23, Building 790 No. 2	03/30/92	0.0	0.0
Area 23, Building 790 No. 2	04/28/92	6.0×10^{-18}	3.5×10^{-18}
Area 23, Building 790 No. 2	05/26/92	8.8×10^{-18}	2.9×10^{-18}
Area 23, Building 790 No. 2	06/29/92	7.1×10^{-18}	2.6×10^{-18}
Area 23, Building 790 No. 2	08/03/92	2.5×10^{-18}	1.4×10^{-18}
Area 23, Building 790 No. 2	08/31/92	2.3×10^{-18}	1.6×10^{-18}
Area 23, Building 790 No. 2	09/28/92	9.7×10^{-19}	9.7×10^{-19}
Area 23, Building 790 No. 2	10/26/92	1.7×10^{-18}	1.2×10^{-18}
Area 23, Building 790 No. 2	11/30/92	1.5×10^{-18}	1.5×10^{-18}
Area 23, E Boundary	12/30/91	9.7×10^{-20}	7.5×10^{-19}
Area 23, E Boundary	02/03/92	5.6×10^{-20}	2.2×10^{-19}
Area 23, E Boundary	03/02/92	0.0	0.0
Area 23, E Boundary	03/30/92	7.9×10^{-19}	7.9×10^{-19}
Area 23, E Boundary	04/28/92	3.7×10^{-18}	1.4×10^{-18}
Area 23, E Boundary	05/26/92	0.0	0.0

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, E Boundary	08/03/92	7.8×10^{-18}	5.6×10^{-18}
Area 23, E Boundary	08/31/92	1.1×10^{-17}	3.6×10^{-18}
Area 23, E Boundary	09/28/92	2.8×10^{-18}	2.0×10^{-18}
Area 23, E Boundary	10/26/92	3.1×10^{-18}	2.2×10^{-18}
Area 23, H&S Building	12/30/91	3.7×10^{-18}	2.5×10^{-18}
Area 23, H&S Building	02/03/92	-6.9×10^{-19}	1.2×10^{-18}
Area 23, H&S Building	03/02/92	2.6×10^{-18}	1.5×10^{-18}
Area 23, H&S Building	03/30/92	8.0×10^{-19}	8.0×10^{-19}
Area 23, H&S Building	04/28/92	1.2×10^{-18}	1.2×10^{-18}
Area 23, H&S Building	05/26/92	2.5×10^{-17}	1.9×10^{-17}
Area 23, H&S Building	06/29/92	0.0	0.0
Area 23, H&S Building	08/03/92	4.1×10^{-18}	2.4×10^{-18}
Area 23, H&S Building	08/31/92	1.2×10^{-17}	6.2×10^{-18}
Area 23, H&S Building	09/28/92	1.2×10^{-18}	1.2×10^{-18}
Area 23, H&S Building	10/26/92	0.0	0.0
Area 23, H&S Building	11/30/92	1.3×10^{-18}	1.3×10^{-18}
Area 25, E-MAD N	12/30/91	1.2×10^{-18}	1.4×10^{-18}
Area 25, E-MAD N	02/03/92	1.1×10^{-18}	1.4×10^{-18}
Area 25, E-MAD N	03/02/92	0.0	0.0
Area 25, E-MAD N	03/30/92	1.5×10^{-18}	1.1×10^{-18}
Area 25, E-MAD N	04/28/92	0.0	0.0
Area 25, E-MAD N	05/26/92	3.0×10^{-17}	5.4×10^{-18}
Area 25, E-MAD N	06/29/92	8.0×10^{-19}	8.0×10^{-19}
Area 25, E-MAD N	08/03/92	2.6×10^{-18}	1.8×10^{-18}
Area 25, E-MAD N	08/31/92	3.7×10^{-18}	3.7×10^{-18}
Area 25, E-MAD N	09/28/92	7.8×10^{-18}	4.6×10^{-18}
Area 25, E-MAD N	10/26/92	0.0	0.0
Area 25, E-MAD N	11/30/92	8.9×10^{-19}	8.9×10^{-19}
Area 25, NRDS Warehouse	12/30/91	8.0×10^{-19}	1.0×10^{-18}
Area 25, NRDS Warehouse	02/03/92	1.1×10^{-19}	9.6×10^{-19}
Area 25, NRDS Warehouse	03/02/92	9.5×10^{-19}	9.5×10^{-19}
Area 25, NRDS Warehouse	03/30/92	2.7×10^{-18}	1.6×10^{-18}
Area 25, NRDS Warehouse	04/28/92	0.0	0.0
Area 25, NRDS Warehouse	05/26/92	3.5×10^{-16}	6.0×10^{-17}
Area 25, NRDS Warehouse	06/29/92	4.0×10^{-18}	1.8×10^{-18}
Area 25, NRDS Warehouse	08/03/92	3.5×10^{-18}	3.5×10^{-18}
Area 25, NRDS Warehouse	08/31/92	1.4×10^{-18}	1.4×10^{-18}
Area 25, NRDS Warehouse	09/28/92	3.6×10^{-18}	2.1×10^{-18}
Area 25, NRDS Warehouse	10/26/92	1.5×10^{-17}	6.4×10^{-18}
Area 25, NRDS Warehouse	11/30/92	0.0	0.0

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.2 ($^{239+240}\text{Pu}$ in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 27, Cafeteria	12/30/91	0.0	0.0
Area 27, Cafeteria	02/03/92	1.3×10^{-18}	1.4×10^{-18}
Area 27, Cafeteria	03/02/92	9.6×10^{-18}	5.7×10^{-18}
Area 27, Cafeteria	03/30/92	0.0	0.0
Area 27, Cafeteria	04/28/92	0.0	0.0
Area 27, Cafeteria	05/26/92	7.7×10^{-18}	3.2×10^{-18}
Area 27, Cafeteria	06/29/92	1.6×10^{-18}	1.1×10^{-18}
Area 27, Cafeteria	08/03/92	5.8×10^{-18}	2.6×10^{-18}
Area 27, Cafeteria	08/31/92	1.5×10^{-17}	4.9×10^{-18}
Area 27, Cafeteria	09/28/92	1.6×10^{-16}	2.2×10^{-17}
Area 27, Cafeteria	10/26/92	3.3×10^{-18}	2.4×10^{-18}
Area 27, Cafeteria	11/30/92	8.9×10^{-18}	3.2×10^{-18}

Mean MDC: $1.3 \times 10^{-17} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.5 \times 10^{-17} \mu\text{Ci/mL}$

Attachment A.3 Gross Beta in Air - 1992

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 1, BJY	01/06/92	9.6×10^{-15}	7.3×10^{-16}
Area 1, BJY	01/13/92	1.3×10^{-14}	7.1×10^{-16}
Area 1, BJY	01/21/92	4.1×10^{-14}	1.5×10^{-15}
Area 1, BJY	01/27/92	2.6×10^{-14}	1.0×10^{-15}
Area 1, BJY	02/03/92	2.8×10^{-14}	1.1×10^{-15}
Area 1, BJY	02/10/92	4.3×10^{-15}	5.9×10^{-16}
Area 1, BJY	02/18/92	1.5×10^{-14}	9.7×10^{-16}
Area 1, BJY	02/24/92	2.0×10^{-14}	9.4×10^{-16}
Area 1, BJY	03/02/92	9.9×10^{-15}	7.8×10^{-16}
Area 1, BJY	03/09/92	2.0×10^{-14}	9.1×10^{-16}
Area 1, BJY	03/17/92	9.0×10^{-15}	8.4×10^{-16}
Area 1, BJY	03/23/92	8.6×10^{-15}	8.1×10^{-16}
Area 1, BJY	03/30/92	1.8×10^{-14}	9.4×10^{-16}
Area 1, BJY	04/06/92	2.1×10^{-14}	9.7×10^{-16}
Area 1, BJY	04/13/92	1.4×10^{-14}	8.9×10^{-16}
Area 1, BJY	04/20/92	2.1×10^{-14}	9.9×10^{-16}
Area 1, BJY	04/27/92	2.3×10^{-14}	1.0×10^{-15}
Area 1, BJY	05/11/92	1.9×10^{-14}	1.0×10^{-15}
Area 1, BJY	05/18/92	1.4×10^{-14}	8.3×10^{-16}
Area 1, BJY	05/26/92	2.3×10^{-14}	1.1×10^{-15}
Area 1, BJY	06/01/92	2.4×10^{-14}	1.1×10^{-15}
Area 1, BJY	06/08/92	1.9×10^{-14}	9.9×10^{-16}
Area 1, BJY	06/15/92	2.1×10^{-14}	1.0×10^{-15}
Area 1, BJY	06/22/92	2.7×10^{-14}	3.5×10^{-15}
Area 1, BJY	06/29/92	1.2×10^{-14}	1.1×10^{-15}
Area 1, BJY	07/06/92	8.1×10^{-15}	7.5×10^{-16}
Area 1, BJY	07/13/92	4.4×10^{-14}	3.5×10^{-15}
Area 1, BJY	07/20/92	1.4×10^{-14}	1.4×10^{-15}
Area 1, BJY	07/27/92	2.3×10^{-14}	1.1×10^{-15}
Area 1, BJY	08/03/92	2.4×10^{-14}	1.1×10^{-15}
Area 1, BJY	08/10/92	2.2×10^{-14}	1.1×10^{-15}
Area 1, BJY	08/17/92	2.3×10^{-14}	1.3×10^{-15}
Area 1, BJY	08/24/92	2.0×10^{-14}	1.0×10^{-15}
Area 1, BJY	08/31/92	1.1×10^{-15}	6.1×10^{-16}
Area 1, BJY	09/08/92	2.3×10^{-14}	1.2×10^{-15}
Area 1, BJY	09/14/92	1.6×10^{-14}	9.9×10^{-16}
Area 1, BJY	09/21/92	1.4×10^{-14}	9.4×10^{-16}
Area 1, BJY	09/28/92	2.0×10^{-14}	1.0×10^{-15}
Area 1, BJY	10/05/92	2.0×10^{-14}	9.7×10^{-16}
Area 1, BJY	10/13/92	3.7×10^{-14}	1.3×10^{-15}
Area 1, BJY	10/19/92	2.1×10^{-14}	1.1×10^{-15}
Area 1, BJY	10/26/92	1.1×10^{-14}	7.9×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 1, BJY	11/03/92	2.1×10^{-14}	1.1×10^{-15}
Area 1, BJY	11/09/92	1.9×10^{-14}	1.0×10^{-15}
Area 1, BJY	11/16/92	2.0×10^{-14}	1.0×10^{-15}
Area 1, BJY	11/23/92	1.9×10^{-14}	1.0×10^{-15}
Area 1, BJY	11/30/92	1.3×10^{-14}	9.2×10^{-16}
Area 1, BJY	12/07/92	1.5×10^{-14}	1.0×10^{-15}
Area 1, BJY	12/14/92	1.4×10^{-14}	9.9×10^{-16}
Area 1, BJY	12/21/92	2.5×10^{-14}	1.0×10^{-15}
Area 1, BJY	12/29/92	9.7×10^{-15}	1.0×10^{-15}
Area 1, Gravel Pit	01/06/92	9.0×10^{-15}	1.1×10^{-15}
Area 1, Gravel Pit	01/13/92	1.5×10^{-14}	7.9×10^{-16}
Area 1, Gravel Pit	01/21/92	2.7×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	01/27/92	2.3×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	02/03/92	2.4×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	02/10/92	4.3×10^{-15}	5.9×10^{-16}
Area 1, Gravel Pit	02/18/92	1.6×10^{-14}	9.9×10^{-16}
Area 1, Gravel Pit	02/24/92	1.8×10^{-14}	9.1×10^{-16}
Area 1, Gravel Pit	03/02/92	1.0×10^{-14}	7.9×10^{-16}
Area 1, Gravel Pit	03/09/92	2.2×10^{-14}	9.2×10^{-16}
Area 1, Gravel Pit	03/17/92	1.5×10^{-14}	9.3×10^{-16}
Area 1, Gravel Pit	03/23/92	8.0×10^{-15}	7.5×10^{-16}
Area 1, Gravel Pit	03/30/92	1.7×10^{-14}	8.8×10^{-16}
Area 1, Gravel Pit	04/06/92	2.2×10^{-14}	1.4×10^{-15}
Area 1, Gravel Pit	04/13/92	1.2×10^{-14}	1.3×10^{-15}
Area 1, Gravel Pit	04/20/92	1.7×10^{-14}	8.6×10^{-16}
Area 1, Gravel Pit	04/27/92	2.0×10^{-14}	9.1×10^{-16}
Area 1, Gravel Pit	05/04/92	2.1×10^{-14}	9.1×10^{-16}
Area 1, Gravel Pit	05/11/92	1.8×10^{-14}	9.4×10^{-16}
Area 1, Gravel Pit	05/18/92	1.4×10^{-14}	7.8×10^{-16}
Area 1, Gravel Pit	05/26/92	2.0×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	06/01/92	2.1×10^{-14}	9.8×10^{-16}
Area 1, Gravel Pit	06/09/92	1.5×10^{-14}	8.7×10^{-16}
Area 1, Gravel Pit	06/15/92	1.8×10^{-14}	9.1×10^{-16}
Area 1, Gravel Pit	06/22/92	2.1×10^{-14}	9.7×10^{-16}
Area 1, Gravel Pit	06/29/92	1.2×10^{-14}	7.7×10^{-16}
Area 1, Gravel Pit	07/06/92	1.3×10^{-14}	7.9×10^{-16}
Area 1, Gravel Pit	07/20/92	1.8×10^{-14}	9.7×10^{-16}
Area 1, Gravel Pit	07/27/92	2.0×10^{-14}	9.9×10^{-16}
Area 1, Gravel Pit	08/03/92	2.1×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	08/10/92	2.1×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	08/17/92	1.9×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	08/24/92	2.1×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 1, Gravel Pit	08/31/92	2.1×10^{-14}	9.3×10^{-16}
Area 1, Gravel Pit	09/08/92	2.1×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	09/14/92	1.6×10^{-14}	9.6×10^{-16}
Area 1, Gravel Pit	09/21/92	1.7×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	09/28/92	1.8×10^{-14}	9.7×10^{-16}
Area 1, Gravel Pit	10/05/92	1.9×10^{-14}	9.9×10^{-16}
Area 1, Gravel Pit	10/12/92	3.2×10^{-14}	1.2×10^{-15}
Area 1, Gravel Pit	10/19/92	2.0×10^{-14}	1.0×10^{-15}
Area 1, Gravel Pit	10/26/92	1.3×10^{-14}	8.9×10^{-16}
Area 1, Gravel Pit	11/09/92	1.8×10^{-14}	9.8×10^{-16}
Area 1, Gravel Pit	11/16/92	1.7×10^{-14}	9.7×10^{-16}
Area 1, Gravel Pit	11/23/92	1.8×10^{-14}	9.8×10^{-16}
Area 1, Gravel Pit	11/30/92	2.0×10^{-14}	9.2×10^{-16}
Area 1, Gravel Pit	12/08/92	8.5×10^{-15}	8.6×10^{-16}
Area 1, Gravel Pit	12/15/92	1.0×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	12/21/92	2.3×10^{-14}	1.1×10^{-15}
Area 1, Gravel Pit	12/28/92	1.1×10^{-14}	8.9×10^{-16}
Area 2, 2-1 Substation	01/06/92	1.1×10^{-14}	7.8×10^{-16}
Area 2, 2-1 Substation	01/13/92	1.7×10^{-14}	8.3×10^{-16}
Area 2, 2-1 Substation	01/21/92	3.2×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	01/27/92	2.5×10^{-14}	9.8×10^{-16}
Area 2, 2-1 Substation	02/03/92	2.9×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	02/10/92	4.1×10^{-15}	5.9×10^{-16}
Area 2, 2-1 Substation	02/18/92	1.4×10^{-14}	9.4×10^{-16}
Area 2, 2-1 Substation	02/24/92	1.9×10^{-14}	9.1×10^{-16}
Area 2, 2-1 Substation	03/02/92	8.1×10^{-15}	6.7×10^{-16}
Area 2, 2-1 Substation	03/09/92	2.2×10^{-14}	9.9×10^{-16}
Area 2, 2-1 Substation	03/17/92	1.6×10^{-14}	9.8×10^{-16}
Area 2, 2-1 Substation	03/23/92	5.3×10^{-15}	7.2×10^{-16}
Area 2, 2-1 Substation	03/30/92	1.8×10^{-14}	9.3×10^{-16}
Area 2, 2-1 Substation	04/06/92	2.0×10^{-14}	9.3×10^{-16}
Area 2, 2-1 Substation	04/13/92	1.5×10^{-14}	8.6×10^{-16}
Area 2, 2-1 Substation	04/20/92	1.9×10^{-14}	9.3×10^{-16}
Area 2, 2-1 Substation	04/27/92	2.3×10^{-14}	9.8×10^{-16}
Area 2, 2-1 Substation	05/04/92	1.8×10^{-14}	9.2×10^{-16}
Area 2, 2-1 Substation	05/11/92	1.5×10^{-14}	9.0×10^{-16}
Area 2, 2-1 Substation	05/18/92	1.5×10^{-14}	8.3×10^{-16}
Area 2, 2-1 Substation	05/26/92	1.9×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	06/01/92	2.2×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	06/08/92	1.6×10^{-14}	9.3×10^{-16}
Area 2, 2-1 Substation	06/15/92	2.0×10^{-14}	9.9×10^{-16}
Area 2, 2-1 Substation	06/22/92	2.0×10^{-14}	9.8×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 2, 2-1 Substation	06/29/92	1.4×10^{-14}	8.4×10^{-16}
Area 2, 2-1 Substation	07/06/92	1.3×10^{-14}	8.8×10^{-16}
Area 2, 2-1 Substation	07/13/92	1.8×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	07/20/92	1.8×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	07/27/92	2.0×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	08/03/92	2.1×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	08/10/92	2.4×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	08/17/92	2.2×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	08/24/92	2.0×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	08/31/92	2.0×10^{-14}	9.5×10^{-16}
Area 2, 2-1 Substation	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 2, 2-1 Substation	09/14/92	1.6×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	09/21/92	1.8×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	09/28/92	2.1×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	10/05/92	2.3×10^{-14}	1.0×10^{-15}
Area 2, 2-1 Substation	10/13/92	4.1×10^{-14}	1.5×10^{-15}
Area 2, 2-1 Substation	10/19/92	2.3×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	10/26/92	2.0×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	11/09/92	1.7×10^{-14}	1.6×10^{-15}
Area 2, 2-1 Substation	11/16/92	1.2×10^{-13}	6.6×10^{-15}
Area 2, 2-1 Substation	11/23/92	1.9×10^{-14}	1.1×10^{-15}
Area 2, 2-1 Substation	11/30/92	2.3×10^{-14}	4.0×10^{-15}
Area 2, 2-1 Substation	12/07/92	7.5×10^{-15}	9.6×10^{-16}
Area 2, 2-1 Substation	12/14/92	1.3×10^{-14}	9.6×10^{-16}
Area 2, 2-1 Substation	12/21/92	2.1×10^{-14}	9.2×10^{-16}
Area 2, 2-1 Substation	12/29/92	9.4×10^{-15}	9.6×10^{-16}
Area 2, Complex	01/06/92	1.1×10^{-14}	9.3×10^{-16}
Area 2, Complex	01/13/92	1.8×10^{-14}	8.5×10^{-16}
Area 2, Complex	01/21/92	1.9×10^{-14}	9.7×10^{-16}
Area 2, Complex	01/27/92	2.3×10^{-14}	9.6×10^{-16}
Area 2, Complex	02/03/92	2.3×10^{-14}	9.5×10^{-16}
Area 2, Complex	02/10/92	3.0×10^{-15}	5.5×10^{-16}
Area 2, Complex	02/18/92	1.3×10^{-14}	8.7×10^{-16}
Area 2, Complex	02/24/92	1.6×10^{-14}	8.5×10^{-16}
Area 2, Complex	03/02/92	8.6×10^{-15}	7.2×10^{-16}
Area 2, Complex	03/09/92	2.0×10^{-14}	8.6×10^{-16}
Area 2, Complex	03/17/92	1.4×10^{-14}	9.1×10^{-16}
Area 2, Complex	03/23/92	9.4×10^{-15}	7.7×10^{-16}
Area 2, Complex	03/30/92	1.7×10^{-14}	8.7×10^{-16}
Area 2, Complex	04/06/92	2.2×10^{-14}	9.7×10^{-16}
Area 2, Complex	04/13/92	1.3×10^{-14}	8.3×10^{-16}
Area 2, Complex	04/20/92	2.0×10^{-14}	9.0×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 2, Complex	04/27/92	2.2×10^{-14}	9.2×10^{-16}
Area 2, Complex	05/04/92	1.8×10^{-14}	8.6×10^{-16}
Area 2, Complex	05/11/92	1.9×10^{-14}	9.1×10^{-16}
Area 2, Complex	05/18/92	1.4×10^{-14}	7.7×10^{-16}
Area 2, Complex	05/26/92	2.2×10^{-14}	1.1×10^{-15}
Area 2, Complex	06/01/92	2.4×10^{-14}	9.8×10^{-16}
Area 2, Complex	06/08/92	1.6×10^{-14}	8.8×10^{-16}
Area 2, Complex	06/15/92	1.8×10^{-14}	9.0×10^{-16}
Area 2, Complex	06/22/92	2.1×10^{-14}	9.5×10^{-16}
Area 2, Complex	06/29/92	1.3×10^{-14}	7.7×10^{-16}
Area 2, Complex	07/06/92	1.3×10^{-14}	7.9×10^{-16}
Area 2, Complex	07/13/92	1.7×10^{-14}	9.3×10^{-16}
Area 2, Complex	07/20/92	1.8×10^{-14}	9.6×10^{-16}
Area 2, Complex	07/27/92	1.8×10^{-14}	9.7×10^{-16}
Area 2, Complex	08/03/92	1.9×10^{-14}	9.7×10^{-16}
Area 2, Complex	08/10/92	2.0×10^{-14}	3.1×10^{-15}
Area 2, Complex	08/17/92	2.3×10^{-14}	1.0×10^{-15}
Area 2, Complex	08/24/92	2.0×10^{-14}	9.9×10^{-16}
Area 2, Complex	08/31/92	2.1×10^{-14}	9.1×10^{-16}
Area 2, Complex	09/08/92	2.1×10^{-14}	1.1×10^{-15}
Area 2, Complex	09/14/92	1.6×10^{-14}	9.5×10^{-16}
Area 2, Complex	09/21/92	1.8×10^{-14}	9.9×10^{-16}
Area 2, Complex	09/28/92	2.1×10^{-14}	1.0×10^{-15}
Area 2, Complex	10/05/92	2.0×10^{-14}	9.0×10^{-16}
Area 2, Complex	10/13/92	3.6×10^{-14}	1.3×10^{-15}
Area 2, Complex	10/19/92	2.3×10^{-14}	1.0×10^{-15}
Area 2, Complex	10/26/92	1.1×10^{-14}	7.8×10^{-16}
Area 2, Complex	11/03/92	1.8×10^{-14}	1.1×10^{-15}
Area 2, Complex	11/09/92	1.8×10^{-14}	9.7×10^{-16}
Area 2, Complex	11/16/92	1.7×10^{-14}	9.5×10^{-16}
Area 2, Complex	11/23/92	1.9×10^{-14}	9.8×10^{-16}
Area 2, Complex	11/30/92	1.8×10^{-14}	9.7×10^{-16}
Area 2, Complex	12/07/92	1.5×10^{-14}	9.9×10^{-16}
Area 2, Complex	12/14/92	1.2×10^{-14}	9.4×10^{-16}
Area 2, Complex	12/21/92	2.1×10^{-14}	9.1×10^{-16}
Area 2, Complex	12/29/92	9.0×10^{-15}	9.4×10^{-16}
Area 3, 3-300 Bunker	01/06/92	1.1×10^{-14}	8.3×10^{-16}
Area 3, 3-300 Bunker	01/13/92	1.8×10^{-14}	8.8×10^{-16}
Area 3, 3-300 Bunker	01/21/92	3.5×10^{-14}	1.3×10^{-15}
Area 3, 3-300 Bunker	01/27/92	3.1×10^{-14}	1.2×10^{-15}
Area 3, Complex	01/06/92	1.3×10^{-14}	8.4×10^{-16}
Area 3, Complex	01/13/92	1.7×10^{-14}	8.7×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, Complex	01/21/92	3.9×10^{-14}	1.4×10^{-15}
Area 3, Complex	02/03/92	2.3×10^{-14}	1.9×10^{-15}
Area 3, Complex	02/10/92	5.5×10^{-15}	8.4×10^{-16}
Area 3, Complex	02/18/92	1.2×10^{-14}	7.7×10^{-16}
Area 3, Complex	02/24/92	2.0×10^{-14}	9.8×10^{-16}
Area 3, Complex	03/02/92	9.7×10^{-15}	7.5×10^{-16}
Area 3, Complex	03/09/92	2.2×10^{-14}	9.6×10^{-16}
Area 3, Complex	03/17/92	8.1×10^{-15}	7.5×10^{-16}
Area 3, Complex	03/23/92	7.6×10^{-15}	7.7×10^{-16}
Area 3, Complex	03/30/92	1.8×10^{-14}	9.1×10^{-16}
Area 3, Complex	04/06/92	2.3×10^{-14}	9.8×10^{-16}
Area 3, Complex	04/13/92	1.5×10^{-14}	8.5×10^{-16}
Area 3, Complex	04/20/92	2.0×10^{-14}	9.3×10^{-16}
Area 3, Complex	04/27/92	2.2×10^{-14}	9.5×10^{-16}
Area 3, Complex	05/04/92	1.6×10^{-14}	8.6×10^{-16}
Area 3, Complex	05/11/92	1.8×10^{-14}	9.5×10^{-16}
Area 3, Complex	05/18/92	1.4×10^{-14}	8.0×10^{-16}
Area 3, Complex	05/26/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	06/01/92	2.1×10^{-14}	9.4×10^{-16}
Area 3, Complex	06/08/92	1.8×10^{-14}	9.3×10^{-16}
Area 3, Complex	06/15/92	1.8×10^{-14}	9.4×10^{-16}
Area 3, Complex	06/22/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, Complex	06/29/92	1.4×10^{-14}	8.4×10^{-16}
Area 3, Complex	07/06/92	1.3×10^{-14}	8.6×10^{-16}
Area 3, Complex	07/13/92	1.7×10^{-14}	9.7×10^{-16}
Area 3, Complex	07/20/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, Complex	07/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, Complex	08/03/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, Complex	08/10/92	2.2×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/17/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	08/31/92	2.2×10^{-14}	9.5×10^{-16}
Area 3, Complex	09/08/92	2.1×10^{-14}	1.2×10^{-15}
Area 3, Complex	09/14/92	1.7×10^{-14}	1.0×10^{-15}
Area 3, Complex	09/21/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, Complex	09/28/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex	10/05/92	2.0×10^{-14}	9.3×10^{-16}
Area 3, Complex	10/13/92	4.2×10^{-14}	1.4×10^{-15}
Area 3, Complex	10/19/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, Complex	10/26/92	1.4×10^{-14}	8.5×10^{-16}
Area 3, Complex	11/03/92	2.0×10^{-14}	1.2×10^{-15}
Area 3, Complex	11/09/92	1.9×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, Complex	11/16/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, Complex	11/23/92	1.7×10^{-14}	1.0×10^{-15}
Area 3, Complex	11/30/92	2.5×10^{-14}	1.1×10^{-15}
Area 3, Complex	12/07/92	7.1×10^{-15}	8.6×10^{-16}
Area 3, Complex	12/14/92	1.4×10^{-14}	1.0×10^{-15}
Area 3, Complex	12/21/92	2.2×10^{-14}	9.7×10^{-16}
Area 3, Complex	12/29/92	8.2×10^{-15}	9.5×10^{-16}
Area 3, Complex No. 2	01/06/92	9.5×10^{-15}	6.3×10^{-16}
Area 3, Complex No. 2	01/13/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	01/21/92	3.2×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	01/27/92	2.5×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	02/03/92	3.0×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	02/10/92	6.8×10^{-15}	6.5×10^{-16}
Area 3, Complex No. 2	02/18/92	1.4×10^{-14}	9.6×10^{-16}
Area 3, Complex No. 2	02/24/92	2.7×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	03/02/92	1.3×10^{-14}	8.5×10^{-16}
Area 3, Complex No. 2	03/09/92	2.2×10^{-14}	9.5×10^{-16}
Area 3, Complex No. 2	03/17/92	1.4×10^{-14}	9.5×10^{-16}
Area 3, Complex No. 2	03/23/92	9.4×10^{-15}	8.5×10^{-16}
Area 3, Complex No. 2	03/30/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	04/06/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	04/13/92	1.9×10^{-14}	9.6×10^{-16}
Area 3, Complex No. 2	04/20/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	04/27/92	2.5×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	05/04/92	2.0×10^{-14}	9.6×10^{-16}
Area 3, Complex No. 2	05/11/92	1.8×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	05/18/92	1.7×10^{-14}	8.9×10^{-16}
Area 3, Complex No. 2	05/26/92	2.0×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	06/01/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	06/08/92	1.9×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	06/15/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	06/22/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	06/29/92	1.4×10^{-14}	8.9×10^{-16}
Area 3, Complex No. 2	07/06/92	1.3×10^{-14}	9.3×10^{-16}
Area 3, Complex No. 2	07/13/92	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	07/20/92	1.7×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	07/27/92	2.4×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	08/03/92	2.4×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	08/10/92	1.7×10^{-14}	4.0×10^{-15}
Area 3, Complex No. 2	08/17/92	2.5×10^{-14}	1.4×10^{-15}
Area 3, Complex No. 2	08/24/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	08/31/92	2.2×10^{-14}	9.7×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 3, Complex No. 2	09/08/92	2.3×10^{-14}	1.2×10^{-15}
Area 3, Complex No. 2	09/14/92	1.9×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	09/21/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	09/28/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	10/05/92	2.1×10^{-14}	9.6×10^{-16}
Area 3, Complex No. 2	10/13/92	4.0×10^{-14}	1.4×10^{-15}
Area 3, Complex No. 2	10/19/92	2.5×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	10/26/92	2.0×10^{-14}	9.5×10^{-16}
Area 3, Complex No. 2	11/03/92	1.3×10^{-14}	7.1×10^{-16}
Area 3, Complex No. 2	11/09/92	5.1×10^{-14}	2.6×10^{-15}
Area 3, Complex No. 2	11/16/92	2.2×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	11/23/92	2.0×10^{-14}	1.1×10^{-15}
Area 3, Complex No. 2	11/30/92	4.9×10^{-15}	8.1×10^{-16}
Area 3, Complex No. 2	12/07/92	8.6×10^{-15}	9.1×10^{-16}
Area 3, Complex No. 2	12/14/92	1.4×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	12/21/92	2.5×10^{-14}	1.0×10^{-15}
Area 3, Complex No. 2	12/29/92	1.8×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	02/24/92	1.5×10^{-14}	8.9×10^{-16}
Area 3, Mud Plant	03/02/92	2.2×10^{-14}	1.4×10^{-15}
Area 3, Mud Plant	03/09/92	2.2×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	03/17/92	1.1×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	03/23/92	1.1×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	03/30/92	2.2×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	04/06/92	2.2×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	04/13/92	1.8×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	04/20/92	2.4×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	04/27/92	5.0×10^{-15}	7.7×10^{-16}
Area 3, Mud Plant	05/04/92	4.5×10^{-16}	5.3×10^{-16}
Area 3, Mud Plant	05/11/92	2.1×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	05/18/92	1.6×10^{-14}	9.0×10^{-16}
Area 3, Mud Plant	05/26/92	3.0×10^{-14}	1.3×10^{-15}
Area 3, Mud Plant	06/01/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	06/08/92	1.9×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	06/15/92	1.9×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	06/22/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	06/29/92	1.6×10^{-14}	9.5×10^{-16}
Area 3, Mud Plant	07/06/92	1.4×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	07/13/92	1.6×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	07/20/92	1.8×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	07/27/92	2.3×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	08/03/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	08/10/92	2.3×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 3, Mud Plant	08/17/92	2.4×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	08/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	08/31/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	09/08/92	2.2×10^{-14}	1.3×10^{-15}
Area 3, Mud Plant	09/14/92	1.8×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	09/21/92	1.7×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	09/28/92	2.4×10^{-14}	1.3×10^{-15}
Area 3, Mud Plant	10/05/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	10/13/92	4.0×10^{-14}	1.5×10^{-15}
Area 3, Mud Plant	10/19/92	2.4×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	10/26/92	1.1×10^{-14}	8.7×10^{-16}
Area 3, Mud Plant	11/03/92	2.2×10^{-14}	1.3×10^{-15}
Area 3, Mud Plant	11/09/92	1.9×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	11/16/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	11/23/92	1.8×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	11/30/92	2.5×10^{-14}	1.2×10^{-15}
Area 3, Mud Plant	12/07/92	1.6×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	12/14/92	1.3×10^{-14}	1.1×10^{-15}
Area 3, Mud Plant	12/21/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, Mud Plant	12/29/92	9.2×10^{-15}	1.1×10^{-15}
Area 3, U-3ah/at E	01/06/92	9.3×10^{-15}	7.0×10^{-16}
Area 3, U-3ah/at E	01/13/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	01/21/92	2.8×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at E	01/27/92	2.7×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	02/03/92	2.9×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	02/10/92	8.5×10^{-15}	6.8×10^{-16}
Area 3, U-3ah/at E	02/18/92	1.4×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at E	02/24/92	1.8×10^{-14}	8.9×10^{-16}
Area 3, U-3ah/at E	03/02/92	1.5×10^{-14}	8.5×10^{-16}
Area 3, U-3ah/at E	03/09/92	2.3×10^{-14}	9.2×10^{-16}
Area 3, U-3ah/at E	03/17/92	1.6×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	03/23/92	1.0×10^{-14}	8.5×10^{-16}
Area 3, U-3ah/at E	03/30/92	1.7×10^{-14}	8.7×10^{-16}
Area 3, U-3ah/at E	04/06/92	2.1×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at E	04/13/92	1.5×10^{-14}	8.0×10^{-16}
Area 3, U-3ah/at E	04/20/92	2.2×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at E	04/27/92	2.2×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at E	05/04/92	1.9×10^{-14}	9.1×10^{-16}
Area 3, U-3ah/at E	05/11/92	1.8×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at E	05/18/92	1.6×10^{-14}	9.5×10^{-16}
Area 3, U-3ah/at E	05/26/92	2.0×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at E	06/01/92	2.3×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, U-3ah/at E	06/08/92	1.8×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at E	06/15/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	06/22/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	06/29/92	1.1×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at E	07/06/92	1.4×10^{-14}	8.7×10^{-16}
Area 3, U-3ah/at E	07/13/92	1.8×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at E	07/20/92	1.1×10^{-14}	5.9×10^{-16}
Area 3, U-3ah/at E	07/27/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/03/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	08/10/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/17/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/24/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	08/31/92	2.2×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at E	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	09/14/92	1.5×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at E	09/21/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	09/28/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	10/05/92	2.4×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	10/13/92	4.0×10^{-14}	1.4×10^{-15}
Area 3, U-3ah/at E	10/19/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	10/26/92	1.5×10^{-14}	8.6×10^{-16}
Area 3, U-3ah/at E	11/03/92	2.3×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at E	11/09/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	11/16/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at E	11/23/92	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	11/30/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at E	12/07/92	1.5×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at E	12/14/92	1.5×10^{-14}	9.1×10^{-16}
Area 3, U-3ah/at E	12/22/92	1.7×10^{-14}	6.4×10^{-16}
Area 3, U-3ah/at N	01/06/92	1.1×10^{-14}	8.1×10^{-16}
Area 3, U-3ah/at N	01/13/92	1.5×10^{-14}	8.0×10^{-16}
Area 3, U-3ah/at N	01/21/92	3.1×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	01/27/92	2.6×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	02/03/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	02/10/92	1.1×10^{-14}	7.7×10^{-16}
Area 3, U-3ah/at N	02/18/92	1.4×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at N	02/24/92	2.1×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at N	03/02/92	1.0×10^{-14}	8.3×10^{-16}
Area 3, U-3ah/at N	03/09/92	2.4×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	03/17/92	9.7×10^{-15}	8.7×10^{-16}
Area 3, U-3ah/at N	03/23/92	1.0×10^{-14}	8.6×10^{-16}
Area 3, U-3ah/at N	03/30/92	2.1×10^{-14}	1.1×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, U-3ah/at N	04/06/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	04/13/92	1.5×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at N	04/20/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	04/27/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	05/04/92	1.9×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	05/11/92	2.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	05/18/92	1.3×10^{-14}	8.6×10^{-16}
Area 3, U-3ah/at N	05/26/92	2.5×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	06/01/92	3.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	06/08/92	2.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	06/15/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	06/22/92	8.3×10^{-14}	1.9×10^{-15}
Area 3, U-3ah/at N	06/29/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	07/06/92	1.8×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	07/13/92	2.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	07/20/92	2.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	07/27/92	2.4×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	08/03/92	2.7×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	08/10/92	2.8×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	08/17/92	2.8×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	08/24/92	6.5×10^{-14}	3.2×10^{-15}
Area 3, U-3ah/at N	08/31/92	2.4×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	09/08/92	2.5×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	09/14/92	1.9×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	09/21/92	2.3×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	09/28/92	4.6×10^{-14}	2.1×10^{-15}
Area 3, U-3ah/at N	10/05/92	2.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	10/13/92	2.5×10^{-14}	8.9×10^{-16}
Area 3, U-3ah/at N	10/19/92	2.7×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	10/26/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	11/03/92	2.4×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	11/09/92	2.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	11/16/92	2.0×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at N	11/23/92	2.4×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at N	11/30/92	1.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at N	12/07/92	1.5×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	12/14/92	1.5×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at N	12/22/92	2.5×10^{-14}	9.0×10^{-16}
Area 3, U-3ah/at S	01/06/92	1.1×10^{-14}	7.7×10^{-16}
Area 3, U-3ah/at S	01/13/92	1.4×10^{-14}	7.5×10^{-16}
Area 3, U-3ah/at S	01/21/92	3.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	01/27/92	2.2×10^{-14}	9.3×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, U-3ah/at S	02/03/92	3.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	02/10/92	1.1×10^{-14}	7.3×10^{-16}
Area 3, U-3ah/at S	02/18/92	1.4×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at S	02/24/92	1.9×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at S	03/02/92	1.1×10^{-14}	8.1×10^{-16}
Area 3, U-3ah/at S	03/09/92	2.1×10^{-14}	9.4×10^{-16}
Area 3, U-3ah/at S	03/17/92	1.6×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	03/23/92	8.7×10^{-15}	8.2×10^{-16}
Area 3, U-3ah/at S	03/30/92	1.5×10^{-14}	9.2×10^{-16}
Area 3, U-3ah/at S	04/06/92	2.1×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at S	04/13/92	1.6×10^{-14}	9.0×10^{-16}
Area 3, U-3ah/at S	04/20/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	04/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	05/04/92	1.9×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at S	05/11/92	1.7×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	05/18/92	1.6×10^{-14}	9.2×10^{-16}
Area 3, U-3ah/at S	05/26/92	3.5×10^{-14}	1.6×10^{-15}
Area 3, U-3ah/at S	06/01/92	2.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	06/08/92	1.8×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	06/15/92	2.1×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	06/22/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	06/29/92	1.5×10^{-14}	9.3×10^{-16}
Area 3, U-3ah/at S	07/06/92	1.4×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at S	07/13/92	1.7×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	07/20/92	1.7×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	07/27/92	2.5×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	08/03/92	2.4×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	08/10/92	2.6×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	08/17/92	2.5×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	08/24/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	08/31/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	09/08/92	2.3×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	09/14/92	1.6×10^{-14}	9.5×10^{-16}
Area 3, U-3ah/at S	09/21/92	1.7×10^{-14}	9.5×10^{-16}
Area 3, U-3ah/at S	09/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	10/05/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at S	10/13/92	4.3×10^{-14}	1.5×10^{-15}
Area 3, U-3ah/at S	10/19/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	10/26/92	1.5×10^{-14}	8.9×10^{-16}
Area 3, U-3ah/at S	11/03/92	2.1×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at S	11/09/92	2.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	11/16/92	2.2×10^{-14}	1.1×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 3, U-3ah/at S	11/23/92	2.0×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	11/30/92	5.2×10^{-15}	7.4×10^{-16}
Area 3, U-3ah/at S	12/14/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at S	12/22/92	1.8×10^{-14}	6.9×10^{-16}
Area 3, U-3ah/at W	01/06/92	1.4×10^{-14}	8.7×10^{-16}
Area 3, U-3ah/at W	01/13/92	1.7×10^{-14}	8.5×10^{-16}
Area 3, U-3ah/at W	01/21/92	3.2×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	01/27/92	2.9×10^{-14}	1.2×10^{-15}
Area 3, U-3ah/at W	02/03/92	3.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	02/10/92	1.1×10^{-14}	7.4×10^{-16}
Area 3, U-3ah/at W	02/18/92	1.5×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	02/24/92	2.2×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at W	03/02/92	1.2×10^{-14}	8.4×10^{-16}
Area 3, U-3ah/at W	03/09/92	2.4×10^{-14}	9.9×10^{-16}
Area 3, U-3ah/at W	03/17/92	1.5×10^{-14}	9.3×10^{-16}
Area 3, U-3ah/at W	03/23/92	6.8×10^{-15}	8.0×10^{-16}
Area 3, U-3ah/at W	03/30/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	04/06/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	04/13/92	1.8×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at W	04/20/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	04/27/92	2.5×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	05/04/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	05/11/92	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	05/18/92	3.1×10^{-14}	1.8×10^{-15}
Area 3, U-3ah/at W	06/01/92	2.4×10^{-14}	1.4×10^{-15}
Area 3, U-3ah/at W	06/08/92	1.7×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	06/15/92	2.1×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	06/22/92	2.3×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	06/29/92	1.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	07/06/92	1.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	07/13/92	1.8×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	07/20/92	1.8×10^{-14}	1.3×10^{-15}
Area 3, U-3ah/at W	07/27/92	2.3×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	08/03/92	2.1×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	08/10/92	2.4×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	08/17/92	2.3×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	08/24/92	2.0×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	08/31/92	2.2×10^{-14}	9.2×10^{-16}
Area 3, U-3ah/at W	09/08/92	2.2×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	09/14/92	1.8×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	09/21/92	1.9×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	09/28/92	2.3×10^{-14}	1.1×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 3, U-3ah/at W	10/05/92	1.9×10^{-14}	8.9×10^{-16}
Area 3, U-3ah/at W	10/13/92	3.8×10^{-14}	1.4×10^{-15}
Area 3, U-3ah/at W	10/19/92	2.2×10^{-14}	1.0×10^{-15}
Area 3, U-3ah/at W	10/26/92	1.5×10^{-14}	8.3×10^{-16}
Area 3, U-3ah/at W	11/03/92	1.8×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	11/09/92	2.0×10^{-14}	9.8×10^{-16}
Area 3, U-3ah/at W	11/16/92	1.9×10^{-14}	9.6×10^{-16}
Area 3, U-3ah/at W	11/23/92	1.9×10^{-14}	9.7×10^{-16}
Area 3, U-3ah/at W	11/30/92	2.4×10^{-14}	1.1×10^{-15}
Area 3, U-3ah/at W	12/07/92	1.3×10^{-14}	8.5×10^{-16}
Area 3, U-3ah/at W	12/14/92	1.2×10^{-14}	9.1×10^{-16}
Area 5, DOD Yard	01/06/92	1.3×10^{-14}	8.4×10^{-16}
Area 5, DOD Yard	01/13/92	1.9×10^{-14}	9.1×10^{-16}
Area 5, DOD Yard	01/21/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	01/27/92	2.9×10^{-17}	7.1×10^{-16}
Area 5, DOD Yard	02/18/92	6.2×10^{-15}	8.0×10^{-16}
Area 5, DOD Yard	02/24/92	2.1×10^{-14}	9.8×10^{-16}
Area 5, DOD Yard	03/02/92	1.2×10^{-14}	8.3×10^{-16}
Area 5, DOD Yard	03/09/92	2.8×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	03/16/92	1.0×10^{-14}	7.4×10^{-16}
Area 5, DOD Yard	03/24/92	1.0×10^{-14}	8.7×10^{-16}
Area 5, DOD Yard	03/30/92	1.4×10^{-14}	8.0×10^{-16}
Area 5, DOD Yard	04/07/92	2.3×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	04/14/92	7.6×10^{-15}	8.0×10^{-16}
Area 5, DOD Yard	04/20/92	2.4×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	04/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	05/05/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	05/11/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	05/18/92	1.7×10^{-14}	8.8×10^{-16}
Area 5, DOD Yard	05/26/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	06/01/92	2.0×10^{-14}	8.0×10^{-16}
Area 5, DOD Yard	06/09/92	1.5×10^{-14}	9.6×10^{-16}
Area 5, DOD Yard	06/15/92	1.9×10^{-14}	9.2×10^{-16}
Area 5, DOD Yard	06/22/92	2.3×10^{-14}	9.9×10^{-16}
Area 5, DOD Yard	06/29/92	1.3×10^{-14}	7.8×10^{-16}
Area 5, DOD Yard	07/06/92	1.4×10^{-14}	8.1×10^{-16}
Area 5, DOD Yard	07/13/92	1.6×10^{-14}	9.3×10^{-16}
Area 5, DOD Yard	07/20/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	07/27/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, DOD Yard	08/03/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	08/11/92	2.1×10^{-14}	1.6×10^{-15}
Area 5, DOD Yard	08/17/92	2.6×10^{-14}	1.4×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, DOD Yard	08/24/92	2.2×10^{-14}	1.4×10^{-15}
Area 5, DOD Yard	08/31/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, DOD Yard	09/08/92	2.3×10^{-14}	1.5×10^{-15}
Area 5, DOD Yard	09/14/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	09/21/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	09/28/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	10/05/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	10/12/92	3.9×10^{-14}	1.5×10^{-15}
Area 5, DOD Yard	10/19/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, DOD Yard	10/26/92	1.1×10^{-14}	9.2×10^{-16}
Area 5, DOD Yard	11/02/92	1.9×10^{-14}	9.7×10^{-16}
Area 5, DOD Yard	11/09/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	11/16/92	2.3×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	11/23/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, DOD Yard	12/07/92	1.3×10^{-14}	8.2×10^{-16}
Area 5, DOD Yard	12/15/92	1.4×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	12/21/92	2.6×10^{-14}	1.1×10^{-15}
Area 5, DOD Yard	12/28/92	1.0×10^{-14}	8.7×10^{-16}
Area 5, Gate 200	01/13/92	2.4×10^{-14}	9.5×10^{-16}
Area 5, Gate 200	01/21/92	7.3×10^{-14}	1.7×10^{-15}
Area 5, Gate 200	01/27/92	3.6×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	02/03/92	2.5×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	02/10/92	1.2×10^{-15}	5.0×10^{-16}
Area 5, Gate 200	02/18/92	1.3×10^{-15}	6.7×10^{-16}
Area 5, Gate 200	02/24/92	2.0×10^{-14}	9.3×10^{-16}
Area 5, Gate 200	03/02/92	1.5×10^{-14}	8.5×10^{-16}
Area 5, Gate 200	03/09/92	6.1×10^{-14}	1.4×10^{-15}
Area 5, Gate 200	03/16/92	1.8×10^{-14}	8.5×10^{-16}
Area 5, Gate 200	03/24/92	2.9×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	03/30/92	1.9×10^{-14}	8.9×10^{-16}
Area 5, Gate 200	04/07/92	5.4×10^{-14}	1.5×10^{-15}
Area 5, Gate 200	04/14/92	1.6×10^{-14}	9.1×10^{-16}
Area 5, Gate 200	04/20/92	4.2×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	04/28/92	7.7×10^{-14}	1.7×10^{-15}
Area 5, Gate 200	05/05/92	3.0×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	05/11/92	1.9×10^{-14}	9.1×10^{-16}
Area 5, Gate 200	05/18/92	9.8×10^{-16}	5.2×10^{-17}
Area 5, Gate 200	05/26/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	06/01/92	2.2×10^{-14}	9.2×10^{-16}
Area 5, Gate 200	06/09/92	1.6×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	06/15/92	1.9×10^{-14}	9.6×10^{-16}
Area 5, Gate 200	06/22/92	2.3×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Gate 200	06/29/92	1.2×10^{-14}	8.3×10^{-16}
Area 5, Gate 200	07/06/92	1.4×10^{-14}	8.4×10^{-16}
Area 5, Gate 200	07/13/92	4.8×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	07/20/92	1.7×10^{-14}	9.7×10^{-16}
Area 5, Gate 200	07/27/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	08/03/92	5.9×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	08/11/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	08/17/92	2.8×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	08/24/92	2.8×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	08/31/92	2.8×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, Gate 200	09/14/92	1.8×10^{-14}	9.6×10^{-16}
Area 5, Gate 200	09/21/92	1.9×10^{-14}	3.2×10^{-15}
Area 5, Gate 200	09/28/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	10/05/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	10/12/92	4.0×10^{-14}	1.3×10^{-15}
Area 5, Gate 200	10/19/92	2.5×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	10/26/92	1.5×10^{-14}	9.8×10^{-16}
Area 5, Gate 200	11/02/92	6.9×10^{-14}	1.6×10^{-15}
Area 5, Gate 200	11/09/92	2.9×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	11/16/92	2.7×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	11/23/92	1.8×10^{-14}	1.0×10^{-15}
Area 5, Gate 200	11/30/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	12/07/92	1.7×10^{-14}	9.1×10^{-16}
Area 5, Gate 200	12/15/92	3.0×10^{-14}	1.4×10^{-15}
Area 5, Gate 200	12/21/92	3.0×10^{-14}	1.1×10^{-15}
Area 5, Gate 200	12/28/92	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	01/06/92	1.3×10^{-14}	7.7×10^{-16}
Area 5, RWMS No. 1	01/13/92	1.7×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 1	01/21/92	3.7×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 1	01/27/92	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	02/03/92	3.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	02/10/92	2.2×10^{-14}	2.3×10^{-15}
Area 5, RWMS No. 1	02/18/92	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	02/24/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	03/02/92	1.0×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 1	03/09/92	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	03/16/92	1.0×10^{-14}	8.6×10^{-16}
Area 5, RWMS No. 1	03/24/92	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	03/30/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	04/07/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	04/14/92	3.4×10^{-14}	1.9×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 1	04/20/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	04/28/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	05/05/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	05/11/92	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	05/18/92	1.6×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 1	05/26/92	2.6×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 1	06/01/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	06/09/92	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	06/15/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	06/22/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	06/29/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	07/06/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	07/13/92	1.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	07/20/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	07/27/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	08/03/92	2.0×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 1	08/11/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	08/17/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	08/24/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	08/31/92	2.4×10^{-14}	2.0×10^{-15}
Area 5, RWMS No. 1	09/08/92	2.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 1	09/14/92	1.7×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 1	09/21/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	09/28/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 1	10/05/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 1	10/12/92	4.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	10/19/92	3.0×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 1	10/26/92	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	11/02/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 1	11/09/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	11/16/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	11/23/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	11/30/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 1	12/07/92	9.7×10^{-15}	9.6×10^{-16}
Area 5, RWMS No. 1	12/15/92	1.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	12/21/92	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 1	12/28/92	9.9×10^{-15}	1.1×10^{-15}
Area 5, RWMS No. 2	01/13/92	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 2	01/21/92	3.9×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 2	01/27/92	3.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	02/03/92	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	02/10/92	4.3×10^{-15}	7.5×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 2	02/18/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	02/24/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	03/02/92	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	03/09/92	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	03/16/92	9.1×10^{-15}	8.6×10^{-16}
Area 5, RWMS No. 2	03/24/92	3.0×10^{-14}	1.5×10^{-14}
Area 5, RWMS No. 2	03/30/92	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	04/07/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	04/14/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	04/20/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	04/28/92	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	05/05/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	05/11/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	05/18/92	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	05/26/92	3.7×10^{-14}	1.9×10^{-15}
Area 5, RWMS No. 2	06/01/92	2.0×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 2	06/09/92	2.1×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 2	06/15/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	06/22/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	06/29/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	07/06/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	07/13/92	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	07/20/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	07/27/92	2.8×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 2	08/03/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	08/11/92	2.7×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 2	08/17/92	2.7×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 2	08/24/92	2.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 2	08/31/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	09/08/92	2.7×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 2	09/14/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	09/21/92	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	09/28/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 2	10/05/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 2	10/12/92	4.2×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 2	10/19/92	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	10/26/92	1.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 2	11/02/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/09/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/16/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/23/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 2	11/30/92	7.0×10^{-15}	8.9×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 2	12/07/92	1.2×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 2	12/15/92	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	12/21/92	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 2	12/28/92	1.0×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 3	01/13/92	1.7×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 3	01/21/92	3.6×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 3	01/27/92	3.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 3	02/03/92	2.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	02/10/92	3.4×10^{-15}	7.6×10^{-16}
Area 5, RWMS No. 3	02/18/92	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	02/24/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	03/02/92	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	03/09/92	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	03/16/92	1.3×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 3	03/24/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	03/30/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	04/07/92	2.1×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 3	04/14/92	1.3×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 3	04/20/92	3.1×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 3	04/28/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	05/05/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	05/11/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	05/18/92	1.3×10^{-14}	8.1×10^{-16}
Area 5, RWMS No. 3	05/26/92	3.8×10^{-14}	2.1×10^{-15}
Area 5, RWMS No. 3	06/01/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	06/09/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	06/15/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	06/22/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	06/29/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	07/06/92	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	07/13/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	07/20/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	07/27/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	08/03/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	08/11/92	2.4×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 3	08/17/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	08/24/92	2.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 3	08/31/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	09/08/92	2.6×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 3	09/14/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	09/21/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	09/28/92	2.2×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS No. 3	10/05/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 3	10/12/92	4.1×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 3	10/19/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	10/26/92	1.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 3	11/02/92	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	11/09/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	11/16/92	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	11/23/92	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 3	11/30/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 3	12/07/92	1.2×10^{-14}	8.4×10^{-16}
Area 5, RWMS No. 3	12/15/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	12/21/92	3.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 3	12/28/92	1.0×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 4	01/13/92	1.9×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 4	01/21/92	3.8×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 4	01/27/92	3.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	02/03/92	3.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	02/10/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	02/18/92	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	02/24/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	03/02/92	9.1×10^{-15}	9.8×10^{-16}
Area 5, RWMS No. 4	03/09/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	03/16/92	1.0×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 4	03/24/92	9.1×10^{-15}	1.1×10^{-15}
Area 5, RWMS No. 4	03/30/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	04/07/92	2.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 4	04/14/92	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	04/20/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	04/28/92	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	05/05/92	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	05/11/92	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	05/18/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	05/26/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	06/01/92	1.0×10^{-15}	7.3×10^{-16}
Area 5, RWMS No. 4	06/09/92	6.6×10^{-15}	7.2×10^{-16}
Area 5, RWMS No. 4	06/15/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	06/22/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	06/29/92	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	07/06/92	1.5×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 4	07/13/92	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	07/20/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	07/27/92	2.5×10^{-14}	1.4×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 4	08/03/92	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	08/11/92	2.3×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 4	08/17/92	2.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	08/24/92	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	08/31/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	09/08/92	3.0×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 4	09/14/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	09/21/92	2.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 4	09/28/92	2.7×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 4	10/05/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 4	10/12/92	4.0×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 4	10/19/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 4	10/26/92	1.3×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 4	11/02/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	11/09/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	11/16/92	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	11/23/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	11/30/92	5.0×10^{-15}	8.1×10^{-16}
Area 5, RWMS No. 4	12/07/92	9.3×10^{-15}	7.4×10^{-16}
Area 5, RWMS No. 4	12/15/92	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 4	12/21/92	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 4	12/28/92	9.9×10^{-15}	8.5×10^{-16}
Area 5, RWMS No. 5	01/13/92	1.7×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 5	01/21/92	3.6×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 5	01/27/92	2.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	02/03/92	2.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	02/10/92	7.0×10^{-15}	8.0×10^{-16}
Area 5, RWMS No. 5	02/18/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	02/24/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	03/02/92	9.3×10^{-15}	8.5×10^{-16}
Area 5, RWMS No. 5	03/09/92	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	03/16/92	9.2×10^{-15}	8.5×10^{-16}
Area 5, RWMS No. 5	03/24/92	9.1×10^{-15}	1.0×10^{-15}
Area 5, RWMS No. 5	03/30/92	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	04/07/92	2.0×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 5	04/14/92	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	04/20/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	04/28/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	05/05/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	05/11/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	05/18/92	1.6×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 5	05/26/92	1.7×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 5	06/01/92	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	06/09/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	06/15/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	06/22/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	06/29/92	1.3×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 5	07/06/92	1.1×10^{-14}	8.2×10^{-16}
Area 5, RWMS No. 5	07/13/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	07/20/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	07/27/92	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	08/03/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	08/11/92	2.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 5	08/17/92	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	08/24/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	08/31/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	09/08/92	2.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 5	09/14/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	09/21/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	09/28/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	10/05/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 5	10/12/92	4.1×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 5	10/19/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	10/26/92	1.2×10^{-14}	9.0×10^{-16}
Area 5, RWMS No. 5	11/02/92	1.7×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 5	11/09/92	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	11/16/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	11/23/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 5	11/30/92	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 5	12/07/92	1.7×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 5	12/15/92	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	12/21/92	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 5	12/28/92	1.1×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 6	01/13/92	1.7×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 6	01/21/92	3.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 6	01/27/92	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	02/03/92	3.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	02/10/92	1.5×10^{-15}	8.9×10^{-16}
Area 5, RWMS No. 6	02/18/92	1.1×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 6	02/24/92	2.4×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 6	03/02/92	1.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 6	03/09/92	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	03/16/92	2.1×10^{-14}	3.3×10^{-15}
Area 5, RWMS No. 6	03/24/92	1.2×10^{-14}	1.7×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 6	03/30/92	2.1×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 6	04/07/92	1.9×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 6	04/14/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	04/20/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	04/28/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	05/05/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	05/11/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	05/18/92	1.6×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 6	05/26/92	2.9×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 6	06/01/92	2.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	06/09/92	1.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	06/15/92	2.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 6	06/22/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	06/29/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	07/06/92	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	07/13/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	07/20/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	07/27/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	08/03/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	08/11/92	2.4×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 6	08/17/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	08/24/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 6	08/31/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	09/08/92	2.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 6	09/14/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	09/21/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	09/28/92	2.1×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 6	10/05/92	2.2×10^{-14}	9.7×10^{-16}
Area 5, RWMS No. 6	10/12/92	3.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 6	10/19/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	10/26/92	1.3×10^{-14}	9.2×10^{-16}
Area 5, RWMS No. 6	11/02/92	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	11/09/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	11/16/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 6	11/23/92	1.9×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 6	11/30/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	12/07/92	1.4×10^{-14}	8.2×10^{-16}
Area 5, RWMS No. 6	12/15/92	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	12/21/92	2.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 6	12/28/92	1.2×10^{-14}	9.0×10^{-16}
Area 5, RWMS No. 7	01/06/92	1.2×10^{-14}	8.1×10^{-16}
Area 5, RWMS No. 7	01/13/92	1.7×10^{-14}	9.2×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 7	01/21/92	3.5×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 7	01/27/92	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	02/03/92	3.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	02/10/92	9.0×10^{-15}	8.3×10^{-16}
Area 5, RWMS No. 7	02/18/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	02/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	03/02/92	1.1×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 7	03/09/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	03/16/92	1.4×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 7	03/24/92	1.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	03/30/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	04/07/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	04/14/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	04/20/92	2.3×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 7	04/28/92	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	05/05/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	05/11/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	05/18/92	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	05/26/92	2.9×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 7	06/01/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	06/09/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	06/15/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	06/22/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	06/29/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	07/06/92	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	07/13/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	07/20/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	07/27/92	2.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	08/03/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	08/11/92	2.4×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 7	08/17/92	2.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	08/24/92	2.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 7	08/31/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	09/08/92	2.5×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 7	09/14/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	09/21/92	2.1×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	09/28/92	2.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	10/05/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 7	10/12/92	4.2×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 7	10/19/92	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 7	10/26/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 7	11/02/92	2.1×10^{-14}	1.1×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 7	11/09/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	11/16/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	11/23/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 7	11/30/92	3.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	12/07/92	1.5×10^{-14}	9.3×10^{-16}
Area 5, RWMS No. 7	12/15/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	12/21/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 7	12/28/92	1.1×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 8	01/06/92	1.2×10^{-14}	7.7×10^{-16}
Area 5, RWMS No. 8	01/13/92	1.6×10^{-14}	8.9×10^{-16}
Area 5, RWMS No. 8	01/21/92	3.4×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 8	01/27/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	02/03/92	3.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	02/10/92	1.4×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 8	02/18/92	3.6×10^{-14}	2.8×10^{-15}
Area 5, RWMS No. 8	02/24/92	1.5×10^{-14}	7.6×10^{-16}
Area 5, RWMS No. 8	03/02/92	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	03/09/92	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	03/16/92	1.0×10^{-14}	8.8×10^{-16}
Area 5, RWMS No. 8	03/24/92	8.8×10^{-15}	1.0×10^{-15}
Area 5, RWMS No. 8	03/30/92	1.7×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 8	04/07/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	04/14/92	1.8×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 8	04/20/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	04/28/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	05/05/92	1.3×10^{-14}	9.4×10^{-16}
Area 5, RWMS No. 8	05/11/92	2.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 8	05/18/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	05/26/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	06/01/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 8	06/09/92	8.8×10^{-15}	1.0×10^{-15}
Area 5, RWMS No. 8	06/15/92	2.3×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 8	06/22/92	2.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 8	06/29/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	07/06/92	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	07/13/92	1.8×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 8	07/20/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	07/27/92	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	08/03/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	08/11/92	2.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 8	08/17/92	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	08/24/92	2.2×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 8	08/31/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	09/08/92	2.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 8	09/14/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	09/21/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	09/28/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	10/05/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	10/12/92	3.9×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 8	10/19/92	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	10/26/92	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	11/02/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	11/09/92	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	11/16/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	11/23/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	11/30/92	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 8	12/07/92	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 8	12/15/92	1.1×10^{-14}	1.7×10^{-15}
Area 5, RWMS No. 8	12/21/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 8	12/28/92	9.4×10^{-15}	1.1×10^{-15}
Area 5, RWMS No. 9	01/06/92	1.2×10^{-14}	8.2×10^{-16}
Area 5, RWMS No. 9	01/13/92	1.6×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 9	01/21/92	3.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 9	01/27/92	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	02/03/92	3.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	02/10/92	3.9×10^{-15}	7.3×10^{-16}
Area 5, RWMS No. 9	02/18/92	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	02/24/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	03/02/92	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	03/09/92	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	03/16/92	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	03/24/92	1.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	03/30/92	1.7×10^{-14}	9.8×10^{-16}
Area 5, RWMS No. 9	04/07/92	2.0×10^{-14}	9.6×10^{-16}
Area 5, RWMS No. 9	04/14/92	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	04/20/92	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	04/28/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	05/05/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	05/11/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	05/18/92	1.4×10^{-14}	9.5×10^{-16}
Area 5, RWMS No. 9	05/26/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 9	06/01/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	06/09/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	06/15/92	2.0×10^{-14}	1.1×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS No. 9	06/22/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	06/29/92	1.3×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 9	07/06/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	07/13/92	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	07/20/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	07/27/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	08/03/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	08/11/92	2.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS No. 9	08/17/92	2.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 9	08/24/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	08/31/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS No. 9	09/08/92	2.5×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 9	09/14/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	09/21/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	09/28/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS No. 9	10/05/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS No. 9	10/12/92	4.0×10^{-14}	1.6×10^{-15}
Area 5, RWMS No. 9	10/19/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	10/26/92	1.2×10^{-14}	9.1×10^{-16}
Area 5, RWMS No. 9	11/02/92	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 9	11/09/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	11/16/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS No. 9	11/23/92	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS No. 9	12/07/92	1.3×10^{-14}	8.3×10^{-16}
Area 5, RWMS No. 9	12/15/92	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	12/21/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS No. 9	12/28/92	1.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 3	01/13/92	1.5×10^{-14}	8.7×10^{-16}
Area 5, RWMS Pit No. 3	01/21/92	4.1×10^{-14}	1.7×10^{-15}
Area 5, RWMS Pit No. 3	01/27/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	02/03/92	2.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	02/10/92	5.1×10^{-15}	1.6×10^{-15}
Area 5, RWMS Pit No. 3	02/18/92	1.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	02/24/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	03/02/92	1.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 3	03/09/92	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	03/16/92	1.1×10^{-14}	9.4×10^{-16}
Area 5, RWMS Pit No. 3	03/23/92	1.4×10^{-14}	6.5×10^{-16}
Area 5, RWMS Pit No. 3	04/07/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	04/14/92	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	04/20/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	04/28/92	2.4×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS Pit No. 3	05/05/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	05/11/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	05/18/92	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	05/26/92	2.7×10^{-14}	1.5×10^{-15}
Area 5, RWMS Pit No. 3	06/01/92	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	06/09/92	1.2×10^{-14}	9.3×10^{-16}
Area 5, RWMS Pit No. 3	06/15/92	3.8×10^{-14}	2.1×10^{-15}
Area 5, RWMS Pit No. 3	06/22/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	06/29/92	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	07/06/92	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	07/13/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	07/20/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	07/27/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	08/03/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	08/11/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	08/17/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	08/24/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	08/31/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	09/08/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	09/14/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	09/21/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	09/28/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	10/05/92	2.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	10/12/92	4.1×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	10/19/92	1.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 3	10/26/92	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 3	11/02/92	2.1×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	11/09/92	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	11/16/92	2.9×10^{-14}	1.9×10^{-15}
Area 5, RWMS Pit No. 3	11/23/92	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	11/30/92	2.8×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	12/07/92	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 3	12/15/92	1.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS Pit No. 3	12/21/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 3	12/28/92	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	01/13/92	1.7×10^{-14}	9.0×10^{-16}
Area 5, RWMS Pit No. 4	01/21/92	3.7×10^{-14}	1.5×10^{-15}
Area 5, RWMS Pit No. 4	01/27/92	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	02/03/92	2.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	02/10/92	5.8×10^{-15}	7.3×10^{-16}
Area 5, RWMS Pit No. 4	02/18/92	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	02/24/92	1.8×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS Pit No. 4	03/02/92	1.2×10^{-14}	9.0×10^{-18}
Area 5, RWMS Pit No. 4	03/09/92	2.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	03/16/92	1.0×10^{-14}	7.8×10^{-18}
Area 5, RWMS Pit No. 4	03/24/92	1.0×10^{-14}	9.4×10^{-16}
Area 5, RWMS Pit No. 4	03/30/92	1.9×10^{-14}	9.0×10^{-18}
Area 5, RWMS Pit No. 4	04/07/92	1.9×10^{-14}	9.8×10^{-18}
Area 5, RWMS Pit No. 4	04/14/92	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	04/20/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	04/28/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	05/05/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	05/11/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	05/18/92	1.6×10^{-14}	9.6×10^{-16}
Area 5, RWMS Pit No. 4	05/26/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	06/01/92	2.1×10^{-14}	9.8×10^{-18}
Area 5, RWMS Pit No. 4	06/09/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	06/15/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	06/22/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	06/29/92	1.7×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	07/06/92	1.4×10^{-14}	9.7×10^{-16}
Area 5, RWMS Pit No. 4	07/13/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	07/20/92	1.7×10^{-14}	9.5×10^{-18}
Area 5, RWMS Pit No. 4	07/27/92	2.1×10^{-14}	9.8×10^{-18}
Area 5, RWMS Pit No. 4	08/03/92	2.0×10^{-14}	9.0×10^{-18}
Area 5, RWMS Pit No. 4	08/11/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	08/17/92	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	08/24/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	08/31/92	2.1×10^{-14}	8.9×10^{-18}
Area 5, RWMS Pit No. 4	09/08/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	09/14/92	1.7×10^{-14}	9.4×10^{-18}
Area 5, RWMS Pit No. 4	09/21/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS Pit No. 4	09/28/92	2.1×10^{-14}	9.8×10^{-18}
Area 5, RWMS Pit No. 4	10/05/92	2.0×10^{-14}	9.7×10^{-16}
Area 5, RWMS Pit No. 4	10/12/92	3.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	10/19/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	10/26/92	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	11/02/92	2.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS Pit No. 4	11/09/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	11/16/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	11/23/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS Pit No. 4	11/30/92	3.1×10^{-14}	1.4×10^{-15}
Area 5, RWMS Pit No. 4	12/07/92	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS Pit No. 4	12/15/92	1.1×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS Pit No. 4	12/21/92	2.4×10^{-14}	1.6×10^{-15}
Area 5, RWMS Pit No. 4	12/28/92	9.5×10^{-15}	1.6×10^{-15}
Area 5, RWMS TP N	01/13/92	1.9×10^{-14}	8.3×10^{-16}
Area 5, RWMS TP N	01/21/92	3.7×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP N	01/27/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	02/03/92	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP N	02/10/92	6.5×10^{-15}	7.7×10^{-16}
Area 5, RWMS TP N	02/18/92	1.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	02/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	03/02/92	1.1×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP N	03/09/92	2.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP N	03/16/92	9.1×10^{-15}	8.2×10^{-16}
Area 5, RWMS TP N	03/24/92	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	03/30/92	1.9×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP N	04/07/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	04/14/92	1.6×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	04/20/92	2.1×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP N	04/28/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	05/05/92	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	05/11/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	05/18/92	1.7×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP N	05/26/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP N	06/01/92	2.0×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP N	06/09/92	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	06/15/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	06/22/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	06/29/92	1.5×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP N	07/06/92	1.2×10^{-14}	8.9×10^{-16}
Area 5, RWMS TP N	07/13/92	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	07/20/92	1.8×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP N	07/27/92	2.3×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP N	08/03/92	2.1×10^{-14}	9.0×10^{-16}
Area 5, RWMS TP N	08/11/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	08/17/92	2.2×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP N	08/24/92	2.2×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP N	08/31/92	2.0×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP N	09/08/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP N	09/14/92	1.6×10^{-14}	9.2×10^{-16}
Area 5, RWMS TP N	09/21/92	1.9×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP N	09/28/92	2.1×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP N	10/05/92	2.2×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP N	10/12/92	3.8×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS TP N	10/19/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	10/26/92	1.2×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP N	11/02/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	11/09/92	2.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP N	11/16/92	2.2×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP N	11/23/92	2.0×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP N	11/30/92	2.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	12/07/92	1.5×10^{-14}	8.3×10^{-16}
Area 5, RWMS TP N	12/15/92	1.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP N	12/21/92	2.5×10^{-15}	7.2×10^{-16}
Area 5, RWMS TP N	12/28/92	1.1×10^{-14}	8.6×10^{-16}
Area 5, RWMS TP NE	01/13/92	1.7×10^{-14}	8.2×10^{-16}
Area 5, RWMS TP NE	01/21/92	3.9×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP NE	01/27/92	3.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	02/03/92	2.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	02/10/92	3.3×10^{-15}	7.5×10^{-16}
Area 5, RWMS TP NE	02/18/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	02/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	03/02/92	9.6×10^{-15}	9.5×10^{-16}
Area 5, RWMS TP NE	03/09/92	2.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	03/16/92	9.5×10^{-15}	8.6×10^{-16}
Area 5, RWMS TP NE	03/24/92	1.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	03/30/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NE	04/07/92	1.8×10^{-14}	8.1×10^{-16}
Area 5, RWMS TP NE	04/14/92	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	04/20/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	04/28/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	05/05/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	05/11/92	2.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	05/18/92	1.5×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP NE	05/26/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	06/01/92	2.1×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NE	06/09/92	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	06/15/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	06/22/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	06/29/92	1.5×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NE	07/06/92	1.5×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NE	07/13/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	07/20/92	1.9×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	07/27/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	08/03/92	2.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP NE	08/11/92	2.3×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS TP NE	08/17/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	08/24/92	1.4×10^{-14}	6.7×10^{-16}
Area 5, RWMS TP NE	08/31/92	2.2×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP NE	09/08/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	09/14/92	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP NE	09/21/92	2.0×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NE	09/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NE	10/05/92	2.0×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NE	10/12/92	3.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	10/19/92	2.6×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	10/26/92	1.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NE	11/02/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	11/09/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	11/16/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	11/23/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NE	11/30/92	2.4×10^{-14}	1.8×10^{-15}
Area 5, RWMS TP NE	12/07/92	1.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NE	12/15/92	1.3×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NE	12/21/92	3.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NE	12/28/92	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	01/13/92	1.6×10^{-14}	8.9×10^{-16}
Area 5, RWMS TP NW	01/21/92	3.7×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP NW	01/27/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	02/03/92	2.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	02/10/92	8.6×10^{-15}	7.7×10^{-16}
Area 5, RWMS TP NW	02/18/92	1.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	02/24/92	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	03/02/92	9.9×10^{-15}	8.7×10^{-16}
Area 5, RWMS TP NW	03/09/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	03/16/92	9.9×10^{-15}	8.0×10^{-16}
Area 5, RWMS TP NW	03/24/92	1.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	03/30/92	1.9×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP NW	04/07/92	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	04/14/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	04/20/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	04/28/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	05/05/92	1.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	05/11/92	2.4×10^{-14}	1.9×10^{-15}
Area 5, RWMS TP NW	05/18/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	05/26/92	2.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP NW	06/01/92	2.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	06/09/92	2.1×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS TP NW	06/15/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	06/22/92	2.5×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP NW	06/29/92	1.5×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP NW	07/06/92	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	07/13/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	07/20/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	07/27/92	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	08/03/92	2.2×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP NW	08/11/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP NW	08/17/92	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	08/24/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	08/31/92	2.2×10^{-14}	9.1×10^{-16}
Area 5, RWMS TP NW	09/08/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	09/14/92	1.7×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP NW	09/21/92	1.9×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP NW	09/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	10/05/92	2.3×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	10/12/92	4.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	10/19/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	10/26/92	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP NW	11/02/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	11/09/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	11/16/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	11/23/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP NW	12/07/92	1.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP NW	12/15/92	1.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP NW	12/21/92	5.3×10^{-15}	1.1×10^{-15}
Area 5, RWMS TP NW	12/28/92	1.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	01/06/92	1.4×10^{-14}	8.3×10^{-16}
Area 5, RWMS TP S	01/13/92	2.0×10^{-14}	8.4×10^{-16}
Area 5, RWMS TP S	01/21/92	3.3×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP S	01/27/92	3.1×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	02/03/92	2.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	02/10/92	1.0×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP S	02/18/92	1.6×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	02/24/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	03/02/92	1.1×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP S	03/09/92	2.7×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	03/16/92	1.2×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP S	03/24/92	9.7×10^{-15}	1.1×10^{-15}
Area 5, RWMS TP S	03/30/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	04/07/92	2.3×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS TP S	04/14/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	04/20/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	04/28/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	05/05/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP S	05/11/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	05/18/92	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	05/26/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	06/01/92	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	06/09/92	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	06/15/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	06/22/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	06/29/92	1.6×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	07/06/92	1.3×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP S	07/13/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	07/20/92	1.7×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP S	07/27/92	2.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	08/03/92	1.8×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP S	08/11/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	08/17/92	2.1×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP S	08/24/92	2.1×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP S	08/31/92	1.9×10^{-14}	8.8×10^{-16}
Area 5, RWMS TP S	09/08/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP S	09/14/92	1.7×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP S	09/21/92	1.9×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP S	09/28/92	2.0×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP S	10/05/92	2.0×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP S	10/12/92	3.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	10/19/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	10/26/92	1.3×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	11/02/92	1.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	11/09/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	11/16/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	11/23/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	11/30/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP S	12/07/92	1.1×10^{-14}	9.8×10^{-16}
Area 5, RWMS TP S	12/15/92	1.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	12/21/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP S	12/28/92	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	01/06/92	1.1×10^{-14}	7.5×10^{-16}
Area 5, RWMS TP SE	01/13/92	1.8×10^{-14}	7.6×10^{-16}
Area 5, RWMS TP SE	01/21/92	3.6×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP SE	01/27/92	2.9×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, RWMS TP SE	02/03/92	3.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SE	02/10/92	6.1×10^{-15}	7.5×10^{-16}
Area 5, RWMS TP SE	02/18/92	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	02/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	03/02/92	1.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP SE	03/09/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	03/16/92	1.0×10^{-14}	8.3×10^{-16}
Area 5, RWMS TP SE	03/24/92	9.9×10^{-15}	1.0×10^{-15}
Area 5, RWMS TP SE	03/30/92	1.7×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP SE	04/07/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	04/14/92	1.9×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	04/20/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	04/28/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	05/05/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SE	05/11/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	05/18/92	1.5×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP SE	05/26/92	1.9×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SE	06/01/92	2.0×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	06/09/92	2.8×10^{-14}	2.0×10^{-15}
Area 5, RWMS TP SE	06/15/92	1.7×10^{-14}	9.5×10^{-16}
Area 5, RWMS TP SE	06/22/92	2.4×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SE	06/29/92	1.4×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	07/06/92	1.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	07/13/92	1.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	07/20/92	1.8×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	07/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	08/03/92	2.1×10^{-14}	9.3×10^{-16}
Area 5, RWMS TP SE	08/17/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	08/24/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	08/31/92	2.1×10^{-14}	9.2×10^{-16}
Area 5, RWMS TP SE	09/08/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	09/14/92	1.7×10^{-14}	9.7×10^{-16}
Area 5, RWMS TP SE	09/21/92	1.9×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP SE	09/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	10/05/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SE	10/12/92	3.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	10/19/92	2.6×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SE	10/26/92	1.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SE	11/02/92	2.0×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SE	11/09/92	2.8×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP SE	11/16/92	2.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SE	11/23/92	2.2×10^{-14}	1.4×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS TP SE	11/30/92	3.4×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP SE	12/07/92	1.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SE	12/15/92	1.2×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SE	12/21/92	9.4×10^{-15}	1.2×10^{-15}
Area 5, RWMS TP SE	12/28/92	9.8×10^{-15}	1.2×10^{-15}
Area 5, RWMS TP SW	01/06/92	1.3×10^{-14}	8.3×10^{-16}
Area 5, RWMS TP SW	01/13/92	1.8×10^{-14}	8.2×10^{-16}
Area 5, RWMS TP SW	01/21/92	3.6×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP SW	01/27/92	2.9×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	02/03/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	02/10/92	4.7×10^{-15}	7.5×10^{-16}
Area 5, RWMS TP SW	02/18/92	1.5×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	02/24/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	03/02/92	9.1×10^{-15}	9.3×10^{-16}
Area 5, RWMS TP SW	03/09/92	2.7×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	03/16/92	1.6×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP SW	03/24/92	7.7×10^{-15}	8.9×10^{-16}
Area 5, RWMS TP SW	03/30/92	1.8×10^{-14}	9.9×10^{-16}
Area 5, RWMS TP SW	04/07/92	1.9×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	04/14/92	1.8×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	04/20/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	04/28/92	2.2×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	05/05/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	05/11/92	1.8×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	05/18/92	1.5×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	05/26/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SW	06/01/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	06/09/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	06/15/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	06/22/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	06/29/92	1.5×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	07/06/92	1.7×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	07/13/92	1.8×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	07/20/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	07/27/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	08/03/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	08/11/92	2.5×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP SW	08/17/92	2.5×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SW	08/24/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	08/31/92	2.1×10^{-14}	1.2×10^{-15}
Area 5, RWMS TP SW	09/08/92	2.3×10^{-14}	1.5×10^{-15}
Area 5, RWMS TP SW	09/14/92	2.0×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, RWMS TP SW	09/21/92	2.0×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	09/28/92	2.3×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	10/05/92	2.2×10^{-14}	1.3×10^{-15}
Area 5, RWMS TP SW	10/12/92	4.0×10^{-14}	1.6×10^{-15}
Area 5, RWMS TP SW	10/19/92	2.4×10^{-14}	1.4×10^{-15}
Area 5, RWMS TP SW	10/26/92	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	11/02/92	2.1×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	11/09/92	1.5×10^{-14}	9.6×10^{-16}
Area 5, RWMS TP SW	11/16/92	2.2×10^{-14}	1.0×10^{-15}
Area 5, RWMS TP SW	11/23/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	11/30/92	9.9×10^{-15}	8.4×10^{-16}
Area 5, RWMS TP SW	12/07/92	1.1×10^{-14}	8.1×10^{-16}
Area 5, RWMS TP SW	12/15/92	1.2×10^{-14}	1.1×10^{-15}
Area 5, RWMS TP SW	12/21/92	1.1×10^{-14}	9.4×10^{-16}
Area 5, RWMS TP SW	12/28/92	8.9×10^{-15}	8.9×10^{-16}
Area 5, Well 5B	01/13/92	1.7×10^{-14}	8.0×10^{-16}
Area 5, Well 5B	01/21/92	3.6×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	01/27/92	3.0×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	02/03/92	3.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	02/10/92	9.4×10^{-15}	7.6×10^{-16}
Area 5, Well 5B	02/18/92	1.3×10^{-14}	8.1×10^{-16}
Area 5, Well 5B	02/24/92	2.1×10^{-14}	9.3×10^{-16}
Area 5, Well 5B	03/02/92	1.1×10^{-14}	7.8×10^{-16}
Area 5, Well 5B	03/09/92	2.3×10^{-14}	9.7×10^{-16}
Area 5, Well 5B	03/16/92	9.7×10^{-15}	6.9×10^{-16}
Area 5, Well 5B	03/24/92	9.5×10^{-15}	8.4×10^{-16}
Area 5, Well 5B	03/30/92	2.0×10^{-14}	8.4×10^{-16}
Area 5, Well 5B	04/07/92	2.0×10^{-14}	9.3×10^{-16}
Area 5, Well 5B	04/14/92	1.6×10^{-14}	9.9×10^{-16}
Area 5, Well 5B	04/20/92	2.2×10^{-14}	9.0×10^{-16}
Area 5, Well 5B	04/28/92	2.2×10^{-14}	9.7×10^{-16}
Area 5, Well 5B	05/05/92	1.8×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	05/11/92	1.8×10^{-14}	9.1×10^{-16}
Area 5, Well 5B	05/18/92	1.5×10^{-14}	8.0×10^{-16}
Area 5, Well 5B	05/26/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	06/01/92	2.3×10^{-14}	9.2×10^{-16}
Area 5, Well 5B	06/09/92	1.6×10^{-14}	9.7×10^{-16}
Area 5, Well 5B	06/15/92	2.0×10^{-14}	9.8×10^{-16}
Area 5, Well 5B	06/22/92	2.3×10^{-14}	1.7×10^{-15}
Area 5, Well 5B	06/29/92	1.6×10^{-14}	8.8×10^{-16}
Area 5, Well 5B	07/06/92	1.3×10^{-14}	8.6×10^{-16}
Area 5, Well 5B	07/13/92	1.7×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well 5B	07/20/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	07/27/92	2.2×10^{-14}	9.9×10^{-16}
Area 5, Well 5B	08/03/92	2.1×10^{-14}	9.6×10^{-16}
Area 5, Well 5B	08/11/92	2.5×10^{-14}	1.3×10^{-15}
Area 5, Well 5B	08/17/92	2.6×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/24/92	2.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	08/31/92	2.2×10^{-14}	9.9×10^{-16}
Area 5, Well 5B	09/08/92	2.5×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	09/14/92	1.8×10^{-14}	1.0×10^{-15}
Area 5, Well 5B	09/21/92	2.0×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	09/28/92	2.4×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/05/92	2.4×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	10/12/92	4.3×10^{-14}	1.5×10^{-15}
Area 5, Well 5B	10/19/92	2.3×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	10/26/92	1.2×10^{-14}	1.1×10^{-15}
Area 5, Well 5B	11/02/92	2.0×10^{-14}	1.2×10^{-15}
Area 5, Well 5B	11/09/92	2.3×10^{-14}	1.2×10^{-15}
Area 6, Building 6-900	10/26/92	1.3×10^{-14}	8.6×10^{-16}
Area 6, Building 6-900	11/03/92	2.1×10^{-14}	1.2×10^{-15}
Area 6, Building 6-900	11/09/92	2.0×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	11/16/92	2.0×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	11/23/92	2.0×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	11/30/92	3.0×10^{-14}	1.2×10^{-15}
Area 6, Building 6-900	12/07/92	2.0×10^{-14}	1.1×10^{-15}
Area 6, Building 6-900	12/14/92	1.4×10^{-14}	1.0×10^{-15}
Area 6, Building 6-900	12/21/92	2.0×10^{-14}	9.6×10^{-16}
Area 6, Building 6-900	12/29/92	9.6×10^{-15}	1.0×10^{-15}
Area 6, CP-6	01/06/92	1.2×10^{-14}	8.5×10^{-16}
Area 6, CP-6	01/13/92	1.7×10^{-14}	9.0×10^{-16}
Area 6, CP-6	01/21/92	3.4×10^{-14}	1.3×10^{-15}
Area 6, CP-6	01/27/92	2.7×10^{-14}	1.1×10^{-15}
Area 6, CP-6	02/10/92	5.2×10^{-15}	6.6×10^{-16}
Area 6, CP-6	02/18/92	1.4×10^{-14}	9.2×10^{-16}
Area 6, CP-6	02/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 6, CP-6	03/02/92	8.1×10^{-15}	6.2×10^{-16}
Area 6, CP-6	03/09/92	2.3×10^{-14}	9.4×10^{-16}
Area 6, CP-6	03/17/92	1.0×10^{-14}	7.8×10^{-16}
Area 6, CP-6	03/23/92	1.0×10^{-14}	7.8×10^{-16}
Area 6, CP-6	03/30/92	1.7×10^{-14}	8.6×10^{-16}
Area 6, CP-6	04/06/92	2.0×10^{-14}	8.1×10^{-16}
Area 6, CP-6	04/13/92	1.6×10^{-14}	9.7×10^{-16}
Area 6, CP-6	04/20/92	2.0×10^{-14}	8.9×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, CP-6	04/27/92	2.2×10^{-14}	9.3×10^{-16}
Area 6, CP-6	05/04/92	1.9×10^{-14}	8.7×10^{-16}
Area 6, CP-6	05/11/92	1.7×10^{-14}	9.0×10^{-16}
Area 6, CP-6	05/18/92	1.5×10^{-14}	7.8×10^{-16}
Area 6, CP-6	05/26/92	2.4×10^{-14}	1.1×10^{-15}
Area 6, CP-6	06/01/92	1.9×10^{-14}	8.8×10^{-16}
Area 6, CP-6	06/08/92	1.5×10^{-14}	8.5×10^{-16}
Area 6, CP-6	06/15/92	1.7×10^{-14}	8.9×10^{-16}
Area 6, CP-6	06/22/92	2.3×10^{-14}	9.8×10^{-16}
Area 6, CP-6	06/29/92	1.3×10^{-14}	7.8×10^{-16}
Area 6, CP-6	07/06/92	1.3×10^{-14}	8.2×10^{-16}
Area 6, CP-6	07/13/92	1.6×10^{-14}	9.3×10^{-16}
Area 6, CP-6	07/20/92	1.9×10^{-14}	9.8×10^{-16}
Area 6, CP-6	07/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 6, CP-6	08/03/92	2.2×10^{-14}	1.0×10^{-15}
Area 6, CP-6	08/10/92	1.0×10^{-14}	1.6×10^{-14}
Area 6, CP-6	08/17/92	2.4×10^{-14}	1.4×10^{-15}
Area 6, CP-6	08/24/92	2.4×10^{-14}	1.5×10^{-15}
Area 6, CP-6	08/31/92	2.4×10^{-14}	1.2×10^{-15}
Area 6, CP-6	09/08/92	2.3×10^{-14}	1.5×10^{-15}
Area 6, CP-6	09/14/92	6.6×10^{-16}	5.0×10^{-15}
Area 6, CP-6	09/21/92	2.2×10^{-14}	1.7×10^{-15}
Area 6, CP-6	09/28/92	2.3×10^{-14}	1.3×10^{-15}
Area 6, CP-6	10/05/92	2.1×10^{-14}	9.5×10^{-16}
Area 6, CP-6	10/13/92	4.1×10^{-14}	1.4×10^{-15}
Area 6, CP-6	10/19/92	2.4×10^{-14}	1.1×10^{-15}
Area 6, CP-6	10/26/92	1.2×10^{-14}	8.2×10^{-16}
Area 6, CP-6	11/03/92	2.1×10^{-14}	1.2×10^{-15}
Area 6, CP-6	11/09/92	1.9×10^{-14}	1.0×10^{-15}
Area 6, CP-6	11/16/92	2.0×10^{-14}	1.0×10^{-15}
Area 6, CP-6	11/23/92	1.7×10^{-14}	1.0×10^{-15}
Area 6, CP-6	11/30/92	9.8×10^{-15}	8.8×10^{-16}
Area 6, CP-6	12/07/92	1.7×10^{-14}	1.0×10^{-15}
Area 6, CP-6	12/14/92	1.3×10^{-14}	9.7×10^{-16}
Area 6, CP-6	12/21/92	2.0×10^{-14}	9.3×10^{-16}
Area 6, CP-6	12/29/92	8.1×10^{-15}	1.0×10^{-15}
Area 6, Well 3 Complex	01/06/92	1.2×10^{-14}	7.9×10^{-16}
Area 6, Well 3 Complex	01/13/92	1.5×10^{-14}	8.1×10^{-16}
Area 6, Well 3 Complex	01/21/92	3.3×10^{-14}	1.2×10^{-15}
Area 6, Well 3 Complex	01/27/92	2.3×10^{-14}	9.9×10^{-16}
Area 6, Well 3 Complex	02/03/92	2.8×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	02/10/92	8.1×10^{-15}	5.9×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Well 3 Complex	02/18/92	1.6×10^{-14}	9.6×10^{-16}
Area 6, Well 3 Complex	02/24/92	1.8×10^{-14}	8.7×10^{-16}
Area 6, Well 3 Complex	03/02/92	1.3×10^{-14}	8.0×10^{-16}
Area 6, Well 3 Complex	03/09/92	2.1×10^{-14}	8.9×10^{-16}
Area 6, Well 3 Complex	03/17/92	9.4×10^{-15}	8.1×10^{-16}
Area 6, Well 3 Complex	03/23/92	1.1×10^{-14}	8.1×10^{-16}
Area 6, Well 3 Complex	03/30/92	1.7×10^{-14}	8.9×10^{-16}
Area 6, Well 3 Complex	04/06/92	1.9×10^{-14}	8.9×10^{-16}
Area 6, Well 3 Complex	04/13/92	1.5×10^{-14}	8.5×10^{-16}
Area 6, Well 3 Complex	04/20/92	1.5×10^{-14}	8.3×10^{-16}
Area 6, Well 3 Complex	04/27/92	2.3×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	05/04/92	2.0×10^{-14}	9.0×10^{-16}
Area 6, Well 3 Complex	05/11/92	1.7×10^{-14}	9.2×10^{-16}
Area 6, Well 3 Complex	05/18/92	1.4×10^{-14}	7.7×10^{-16}
Area 6, Well 3 Complex	05/26/92	2.5×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	06/01/92	1.9×10^{-14}	9.2×10^{-16}
Area 6, Well 3 Complex	06/08/92	1.7×10^{-14}	9.0×10^{-16}
Area 6, Well 3 Complex	06/15/92	1.7×10^{-14}	9.0×10^{-16}
Area 6, Well 3 Complex	06/22/92	2.3×10^{-14}	9.9×10^{-16}
Area 6, Well 3 Complex	06/29/92	1.5×10^{-14}	8.2×10^{-16}
Area 6, Well 3 Complex	07/06/92	1.1×10^{-14}	8.0×10^{-16}
Area 6, Well 3 Complex	07/13/92	1.7×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	07/20/92	1.9×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	07/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	08/03/92	2.1×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	08/10/92	2.1×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	08/17/92	2.5×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	08/24/92	2.2×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	08/31/92	2.3×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	09/08/92	2.3×10^{-14}	1.2×10^{-15}
Area 6, Well 3 Complex	09/14/92	1.6×10^{-14}	9.7×10^{-16}
Area 6, Well 3 Complex	09/21/92	1.9×10^{-14}	9.9×10^{-16}
Area 6, Well 3 Complex	09/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	10/05/92	2.3×10^{-14}	9.4×10^{-16}
Area 6, Well 3 Complex	10/13/92	3.8×10^{-14}	1.4×10^{-15}
Area 6, Well 3 Complex	10/19/92	2.0×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	10/26/92	1.1×10^{-14}	7.9×10^{-16}
Area 6, Well 3 Complex	11/03/92	2.1×10^{-14}	1.1×10^{-15}
Area 6, Well 3 Complex	11/09/92	1.8×10^{-14}	9.9×10^{-16}
Area 6, Well 3 Complex	11/16/92	2.2×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	11/23/92	1.8×10^{-14}	1.0×10^{-15}
Area 6, Well 3 Complex	11/30/92	2.3×10^{-14}	1.1×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 6, Well 3 Complex	12/07/92	1.3×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	12/14/92	1.1×10^{-14}	9.5×10^{-16}
Area 6, Well 3 Complex	12/21/92	2.3×10^{-14}	9.6×10^{-16}
Area 6, Well 3 Complex	12/29/92	8.1×10^{-15}	9.6×10^{-16}
Area 6, Yucca Complex	01/06/92	1.3×10^{-14}	8.1×10^{-16}
Area 6, Yucca Complex	01/13/92	1.6×10^{-14}	8.2×10^{-16}
Area 6, Yucca Complex	01/21/92	3.2×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	01/27/92	2.6×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	02/03/92	2.9×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	02/10/92	5.6×10^{-15}	6.0×10^{-16}
Area 6, Yucca Complex	02/18/92	1.4×10^{-14}	9.3×10^{-16}
Area 6, Yucca Complex	02/24/92	1.9×10^{-14}	9.1×10^{-16}
Area 6, Yucca Complex	03/02/92	1.0×10^{-14}	7.4×10^{-16}
Area 6, Yucca Complex	03/09/92	2.3×10^{-14}	9.4×10^{-16}
Area 6, Yucca Complex	03/17/92	1.1×10^{-14}	8.4×10^{-16}
Area 6, Yucca Complex	03/23/92	1.1×10^{-14}	8.0×10^{-16}
Area 6, Yucca Complex	03/30/92	1.8×10^{-14}	8.9×10^{-16}
Area 6, Yucca Complex	04/06/92	1.9×10^{-14}	8.1×10^{-16}
Area 6, Yucca Complex	04/13/92	1.6×10^{-14}	9.7×10^{-16}
Area 6, Yucca Complex	04/20/92	2.0×10^{-14}	9.2×10^{-16}
Area 6, Yucca Complex	04/27/92	2.0×10^{-14}	9.3×10^{-16}
Area 6, Yucca Complex	05/04/92	1.7×10^{-14}	8.7×10^{-16}
Area 6, Yucca Complex	05/11/92	1.7×10^{-14}	9.2×10^{-16}
Area 6, Yucca Complex	05/18/92	1.4×10^{-14}	7.8×10^{-16}
Area 6, Yucca Complex	05/26/92	2.3×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	06/01/92	2.0×10^{-14}	9.0×10^{-16}
Area 6, Yucca Complex	06/08/92	1.7×10^{-14}	9.1×10^{-16}
Area 6, Yucca Complex	06/15/92	2.1×10^{-14}	9.6×10^{-16}
Area 6, Yucca Complex	06/22/92	2.1×10^{-14}	9.6×10^{-16}
Area 6, Yucca Complex	06/29/92	1.3×10^{-14}	8.1×10^{-16}
Area 6, Yucca Complex	07/06/92	1.3×10^{-14}	8.4×10^{-16}
Area 6, Yucca Complex	07/13/92	1.7×10^{-14}	9.6×10^{-16}
Area 6, Yucca Complex	07/20/92	1.8×10^{-14}	9.9×10^{-16}
Area 6, Yucca Complex	07/27/92	2.3×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	08/03/92	2.3×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	08/10/92	2.0×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	08/17/92	2.5×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	08/24/92	2.3×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	08/31/92	2.1×10^{-14}	9.3×10^{-16}
Area 6, Yucca Complex	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 6, Yucca Complex	09/14/92	1.8×10^{-14}	9.9×10^{-16}
Area 6, Yucca Complex	09/21/92	1.9×10^{-14}	9.9×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Yucca Complex	09/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	10/05/92	1.8×10^{-14}	8.9×10^{-16}
Area 6, Yucca Complex	10/13/92	3.8×10^{-14}	1.4×10^{-15}
Area 6, Yucca Complex	10/19/92	2.4×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	10/26/92	1.2×10^{-14}	8.0×10^{-16}
Area 6, Yucca Complex	11/03/92	2.1×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	11/09/92	2.0×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	11/16/92	2.4×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	11/23/92	1.8×10^{-14}	1.0×10^{-15}
Area 6, Yucca Complex	11/30/92	2.8×10^{-14}	1.1×10^{-15}
Area 6, Yucca Complex	12/07/92	9.4×10^{-15}	8.9×10^{-16}
Area 6, Yucca Complex	12/14/92	9.3×10^{-15}	6.5×10^{-16}
Area 6, Yucca Complex	12/21/92	3.1×10^{-14}	1.5×10^{-15}
Area 6, Yucca Complex	12/29/92	9.0×10^{-15}	9.9×10^{-16}
Area 7, UE-7ns	01/06/92	8.6×10^{-15}	7.6×10^{-16}
Area 7, UE-7ns	01/13/92	1.5×10^{-14}	7.9×10^{-16}
Area 7, UE-7ns	01/21/92	3.1×10^{-14}	1.2×10^{-15}
Area 7, UE-7ns	01/27/92	2.5×10^{-14}	9.9×10^{-16}
Area 7, UE-7ns	02/10/92	5.0×10^{-15}	6.0×10^{-16}
Area 7, UE-7ns	02/18/92	1.2×10^{-14}	9.0×10^{-16}
Area 7, UE-7ns	02/24/92	1.5×10^{-14}	7.5×10^{-16}
Area 7, UE-7ns	03/02/92	1.1×10^{-14}	8.4×10^{-16}
Area 7, UE-7ns	03/09/92	1.9×10^{-14}	8.7×10^{-16}
Area 7, UE-7ns	03/17/92	8.9×10^{-15}	8.3×10^{-16}
Area 7, UE-7ns	03/23/92	9.4×10^{-15}	8.0×10^{-16}
Area 7, UE-7ns	03/30/92	1.6×10^{-14}	8.8×10^{-16}
Area 7, UE-7ns	04/06/92	1.9×10^{-14}	9.1×10^{-16}
Area 7, UE-7ns	04/13/92	1.4×10^{-14}	8.4×10^{-16}
Area 7, UE-7ns	04/20/92	2.3×10^{-14}	9.7×10^{-16}
Area 7, UE-7ns	04/27/92	2.2×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	05/04/92	1.8×10^{-14}	9.1×10^{-16}
Area 7, UE-7ns	05/11/92	1.7×10^{-14}	9.1×10^{-16}
Area 7, UE-7ns	05/18/92	1.4×10^{-14}	7.9×10^{-16}
Area 7, UE-7ns	05/26/92	2.1×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	06/01/92	2.2×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	06/08/92	1.5×10^{-14}	8.9×10^{-16}
Area 7, UE-7ns	06/15/92	1.9×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	06/22/92	1.9×10^{-14}	9.5×10^{-16}
Area 7, UE-7ns	06/29/92	1.2×10^{-14}	7.9×10^{-16}
Area 7, UE-7ns	07/06/92	1.2×10^{-14}	8.5×10^{-16}
Area 7, UE-7ns	07/13/92	1.6×10^{-14}	9.4×10^{-16}
Area 7, UE-7ns	07/20/92	1.7×10^{-14}	9.9×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 7, UE-7ns	07/27/92	2.1×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	08/03/92	2.0×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	08/10/92	2.2×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	08/17/92	2.3×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	08/24/92	2.2×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	08/31/92	2.1×10^{-14}	9.3×10^{-16}
Area 7, UE-7ns	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 7, UE-7ns	09/14/92	1.6×10^{-14}	9.8×10^{-16}
Area 7, UE-7ns	09/21/92	1.9×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	09/28/92	1.9×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	10/05/92	2.2×10^{-14}	9.6×10^{-16}
Area 7, UE-7ns	10/13/92	4.0×10^{-14}	1.4×10^{-15}
Area 7, UE-7ns	10/19/92	2.0×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	10/26/92	1.2×10^{-14}	8.2×10^{-16}
Area 7, UE-7ns	11/03/92	1.8×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	11/09/92	2.0×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	11/16/92	1.9×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	11/23/92	1.9×10^{-14}	1.0×10^{-15}
Area 7, UE-7ns	11/30/92	1.6×10^{-14}	8.8×10^{-16}
Area 7, UE-7ns	12/07/92	2.2×10^{-14}	1.3×10^{-15}
Area 7, UE-7ns	12/14/92	1.2×10^{-14}	9.8×10^{-16}
Area 7, UE-7ns	12/21/92	2.3×10^{-14}	1.1×10^{-15}
Area 7, UE-7ns	12/29/92	9.6×10^{-15}	1.0×10^{-15}
Area 9, 9-300 Bunker	01/06/92	8.6×10^{-15}	7.4×10^{-16}
Area 9, 9-300 Bunker	01/13/92	2.3×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	01/21/92	3.9×10^{-14}	1.4×10^{-15}
Area 9, 9-300 Bunker	01/27/92	8.9×10^{-15}	3.6×10^{-16}
Area 9, 9-300 Bunker	02/03/92	3.2×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	02/10/92	6.1×10^{-15}	7.3×10^{-16}
Area 9, 9-300 Bunker	02/18/92	1.8×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	02/24/92	2.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	03/02/92	1.6×10^{-14}	9.9×10^{-16}
Area 9, 9-300 Bunker	03/09/92	2.7×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	03/17/92	1.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	03/23/92	9.1×10^{-15}	9.1×10^{-16}
Area 9, 9-300 Bunker	03/30/92	4.6×10^{-14}	3.6×10^{-15}
Area 9, 9-300 Bunker	04/06/92	1.6×10^{-14}	9.2×10^{-16}
Area 9, 9-300 Bunker	04/13/92	1.5×10^{-14}	9.1×10^{-16}
Area 9, 9-300 Bunker	04/20/92	2.2×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	04/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	05/04/92	1.9×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	05/11/92	2.0×10^{-14}	9.7×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

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Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 9, 9-300 Bunker	05/18/92	1.6×10^{-14}	8.4×10^{-16}
Area 9, 9-300 Bunker	05/26/92	3.0×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	06/01/92	2.3×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	06/08/92	1.6×10^{-14}	9.4×10^{-16}
Area 9, 9-300 Bunker	06/15/92	1.4×10^{-14}	1.7×10^{-15}
Area 9, 9-300 Bunker	06/29/92	1.4×10^{-14}	8.5×10^{-16}
Area 9, 9-300 Bunker	07/20/92	1.9×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	07/27/92	2.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/03/92	2.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/10/92	2.4×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/17/92	2.3×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/24/92	2.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	08/31/92	2.2×10^{-14}	9.7×10^{-16}
Area 9, 9-300 Bunker	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	09/21/92	2.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	09/28/92	2.2×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	10/05/92	2.0×10^{-14}	9.6×10^{-16}
Area 9, 9-300 Bunker	10/13/92	3.9×10^{-14}	1.4×10^{-15}
Area 9, 9-300 Bunker	10/19/92	1.6×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	10/26/92	1.4×10^{-14}	8.8×10^{-16}
Area 9, 9-300 Bunker	11/03/92	2.0×10^{-14}	1.2×10^{-15}
Area 9, 9-300 Bunker	11/09/92	2.1×10^{-14}	1.1×10^{-15}
Area 9, 9-300 Bunker	11/16/92	2.0×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	11/23/92	1.8×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	11/30/92	2.8×10^{-14}	1.3×10^{-15}
Area 9, 9-300 Bunker	12/07/92	9.6×10^{-15}	8.7×10^{-16}
Area 9, 9-300 Bunker	12/14/92	1.2×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	12/21/92	2.2×10^{-14}	1.0×10^{-15}
Area 9, 9-300 Bunker	12/29/92	1.0×10^{-14}	9.9×10^{-16}
Area 10, Gate 700	01/06/92	1.3×10^{-14}	8.4×10^{-16}
Area 10, Gate 700	01/13/92	1.8×10^{-14}	8.3×10^{-16}
Area 10, Gate 700	01/21/92	3.4×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	01/27/92	2.7×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	02/03/92	2.9×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	02/10/92	6.8×10^{-15}	1.5×10^{-15}
Area 10, Gate 700	02/18/92	1.5×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	02/24/92	1.9×10^{-14}	8.6×10^{-16}
Area 10, Gate 700	03/02/92	1.5×10^{-14}	8.1×10^{-16}
Area 10, Gate 700	03/09/92	1.9×10^{-14}	8.4×10^{-16}
Area 10, Gate 700	03/17/92	8.3×10^{-15}	7.7×10^{-16}
Area 10, Gate 700	03/23/92	8.6×10^{-15}	7.3×10^{-16}
Area 10, Gate 700	03/30/92	1.7×10^{-14}	8.5×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 10, Gate 700	04/06/92	2.7×10^{-14}	9.9×10^{-16}
Area 10, Gate 700	04/13/92	1.5×10^{-14}	8.4×10^{-16}
Area 10, Gate 700	04/20/92	2.0×10^{-14}	8.9×10^{-16}
Area 10, Gate 700	04/27/92	2.3×10^{-14}	9.4×10^{-16}
Area 10, Gate 700	05/04/92	1.9×10^{-14}	8.7×10^{-16}
Area 10, Gate 700	05/11/92	1.8×10^{-14}	8.9×10^{-16}
Area 10, Gate 700	05/18/92	1.5×10^{-14}	7.8×10^{-16}
Area 10, Gate 700	05/26/92	2.0×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	06/01/92	2.2×10^{-14}	9.6×10^{-16}
Area 10, Gate 700	06/08/92	1.5×10^{-14}	8.6×10^{-16}
Area 10, Gate 700	06/15/92	1.7×10^{-14}	8.9×10^{-16}
Area 10, Gate 700	06/22/92	2.1×10^{-14}	9.4×10^{-16}
Area 10, Gate 700	06/29/92	1.4×10^{-14}	8.0×10^{-16}
Area 10, Gate 700	07/06/92	1.3×10^{-14}	7.9×10^{-16}
Area 10, Gate 700	07/13/92	1.5×10^{-14}	9.0×10^{-16}
Area 10, Gate 700	07/20/92	1.5×10^{-14}	9.1×10^{-16}
Area 10, Gate 700	07/27/92	2.1×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	08/03/92	2.1×10^{-14}	9.9×10^{-16}
Area 10, Gate 700	08/10/92	2.4×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	08/17/92	2.5×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	08/24/92	2.2×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	08/31/92	2.0×10^{-14}	8.9×10^{-16}
Area 10, Gate 700	09/08/92	2.3×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	09/14/92	1.8×10^{-14}	9.7×10^{-16}
Area 10, Gate 700	09/21/92	1.8×10^{-14}	9.8×10^{-16}
Area 10, Gate 700	09/28/92	2.0×10^{-14}	9.9×10^{-16}
Area 10, Gate 700	10/05/92	2.2×10^{-14}	9.3×10^{-16}
Area 10, Gate 700	10/13/92	3.8×10^{-14}	1.4×10^{-15}
Area 10, Gate 700	10/19/92	1.9×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	10/26/92	9.7×10^{-15}	7.7×10^{-16}
Area 10, Gate 700	11/03/92	1.9×10^{-14}	1.1×10^{-15}
Area 10, Gate 700	11/09/92	2.1×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	11/16/92	1.9×10^{-14}	9.9×10^{-16}
Area 10, Gate 700	11/23/92	2.0×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	11/30/92	1.1×10^{-15}	5.5×10^{-17}
Area 10, Gate 700	12/07/92	1.3×10^{-15}	3.3×10^{-16}
Area 10, Gate 700	12/14/92	1.2×10^{-14}	1.2×10^{-15}
Area 10, Gate 700	12/21/92	2.3×10^{-14}	1.0×10^{-15}
Area 10, Gate 700	12/29/92	5.4×10^{-15}	2.0×10^{-15}
Area 11, Gate 293	01/06/92	9.3×10^{-15}	7.2×10^{-16}
Area 11, Gate 293	01/13/92	1.5×10^{-14}	7.8×10^{-16}
Area 11, Gate 293	01/21/92	3.3×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross B in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 11, Gate 293	01/27/92	2.6×10^{-14}	9.8×10^{-16}
Area 11, Gate 293	02/03/92	2.7×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	02/10/92	9.8×10^{-15}	6.7×10^{-16}
Area 11, Gate 293	02/18/92	1.4×10^{-14}	9.0×10^{-16}
Area 11, Gate 293	02/24/92	2.0×10^{-14}	8.9×10^{-16}
Area 11, Gate 293	03/02/92	1.0×10^{-14}	7.4×10^{-16}
Area 11, Gate 293	03/09/92	2.1×10^{-14}	8.7×10^{-16}
Area 11, Gate 293	03/17/92	9.1×10^{-15}	7.8×10^{-16}
Area 11, Gate 293	03/23/92	9.9×10^{-15}	7.9×10^{-16}
Area 11, Gate 293	03/30/92	1.9×10^{-14}	9.0×10^{-16}
Area 11, Gate 293	04/06/92	2.1×10^{-14}	8.4×10^{-16}
Area 11, Gate 293	04/13/92	1.7×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	04/20/92	2.0×10^{-14}	9.3×10^{-16}
Area 11, Gate 293	04/27/92	2.3×10^{-14}	9.6×10^{-16}
Area 11, Gate 293	05/04/92	3.0×10^{-14}	1.4×10^{-15}
Area 11, Gate 293	05/11/92	1.4×10^{-14}	7.1×10^{-16}
Area 11, Gate 293	05/18/92	1.4×10^{-14}	7.8×10^{-16}
Area 11, Gate 293	05/26/92	2.5×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	06/01/92	2.1×10^{-14}	9.6×10^{-16}
Area 11, Gate 293	06/08/92	1.8×10^{-14}	9.3×10^{-16}
Area 11, Gate 293	06/15/92	1.9×10^{-14}	9.5×10^{-16}
Area 11, Gate 293	06/22/92	2.3×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	06/29/92	1.3×10^{-14}	8.1×10^{-16}
Area 11, Gate 293	07/06/92	1.3×10^{-14}	9.0×10^{-16}
Area 11, Gate 293	07/13/92	1.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/20/92	2.0×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	07/27/92	2.3×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	08/03/92	2.5×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	08/10/92	2.3×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	08/17/92	2.6×10^{-14}	1.3×10^{-15}
Area 11, Gate 293	08/24/92	2.2×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	08/31/92	2.1×10^{-14}	9.4×10^{-16}
Area 11, Gate 293	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	09/14/92	1.8×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	09/21/92	1.9×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	09/28/92	2.1×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	10/05/92	2.3×10^{-14}	9.9×10^{-16}
Area 11, Gate 293	10/13/92	3.8×10^{-14}	1.4×10^{-15}
Area 11, Gate 293	10/19/92	2.7×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	10/26/92	1.1×10^{-14}	8.1×10^{-16}
Area 11, Gate 293	11/03/92	2.3×10^{-14}	1.2×10^{-15}
Area 11, Gate 293	11/09/92	2.0×10^{-14}	1.0×10^{-15}

Mean MDC: 1.5×10^{-15} μCi/mL

Standard Deviation of Mean MDC: 3.3×10^{-16} μCi/mL

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 11, Gate 293	11/16/92	2.1×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	11/23/92	1.9×10^{-14}	1.0×10^{-15}
Area 11, Gate 293	11/30/92	2.6×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/07/92	1.4×10^{-14}	9.9×10^{-16}
Area 11, Gate 293	12/14/92	1.5×10^{-14}	1.1×10^{-15}
Area 11, Gate 293	12/21/92	2.0×10^{-14}	9.0×10^{-16}
Area 11, Gate 293	12/29/92	1.0×10^{-14}	1.0×10^{-15}
Area 12, Complex	01/06/92	8.7×10^{-15}	7.7×10^{-16}
Area 12, Complex	01/13/92	1.4×10^{-14}	7.6×10^{-16}
Area 12, Complex	01/21/92	2.5×10^{-14}	1.1×10^{-15}
Area 12, Complex	01/27/92	2.1×10^{-14}	9.6×10^{-16}
Area 12, Complex	02/03/92	2.8×10^{-14}	1.1×10^{-15}
Area 12, Complex	02/10/92	2.6×10^{-15}	6.8×10^{-16}
Area 12, Complex	02/18/92	1.3×10^{-14}	1.1×10^{-15}
Area 12, Complex	02/24/92	1.8×10^{-15}	7.7×10^{-16}
Area 12, Complex	03/02/92	1.1×10^{-14}	9.8×10^{-16}
Area 12, Complex	03/09/92	2.2×10^{-14}	1.1×10^{-15}
Area 12, Complex	03/17/92	6.7×10^{-15}	1.1×10^{-15}
Area 12, Complex	03/23/92	8.4×10^{-15}	1.0×10^{-15}
Area 12, Complex	03/30/92	1.9×10^{-14}	1.2×10^{-15}
Area 12, Complex	04/06/92	2.0×10^{-14}	1.2×10^{-15}
Area 12, Complex	04/13/92	1.2×10^{-14}	1.1×10^{-15}
Area 12, Complex	04/20/92	2.0×10^{-14}	1.2×10^{-15}
Area 12, Complex	04/27/92	2.1×10^{-14}	1.2×10^{-15}
Area 12, Complex	05/04/92	1.9×10^{-14}	1.1×10^{-15}
Area 12, Complex	05/11/92	1.7×10^{-14}	9.8×10^{-16}
Area 12, Complex	05/18/92	1.3×10^{-14}	8.1×10^{-16}
Area 12, Complex	05/26/92	2.8×10^{-14}	1.4×10^{-15}
Area 12, Complex	06/01/92	2.0×10^{-14}	1.0×10^{-15}
Area 12, Complex	06/09/92	1.6×10^{-14}	8.7×10^{-16}
Area 12, Complex	06/15/92	1.6×10^{-14}	8.8×10^{-16}
Area 12, Complex	06/22/92	1.9×10^{-14}	1.1×10^{-15}
Area 12, Complex	06/29/92	1.3×10^{-14}	1.1×10^{-15}
Area 12, Complex	07/06/92	1.4×10^{-14}	1.1×10^{-15}
Area 12, Complex	07/20/92	1.6×10^{-14}	1.2×10^{-15}
Area 12, Complex	07/27/92	1.9×10^{-14}	1.1×10^{-15}
Area 12, Complex	08/03/92	2.2×10^{-14}	1.0×10^{-15}
Area 12, Complex	08/10/92	2.1×10^{-14}	1.0×10^{-15}
Area 12, Complex	08/17/92	2.0×10^{-14}	9.9×10^{-16}
Area 12, Complex	08/24/92	2.2×10^{-14}	9.2×10^{-16}
Area 12, Complex	09/01/92	1.0×10^{-14}	5.2×10^{-16}
Area 12, Complex	09/08/92	2.3×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 12, Complex	09/14/92	1.3×10^{-14}	7.7×10^{-16}
Area 12, Complex	09/21/92	2.2×10^{-13}	1.3×10^{-16}
Area 12, Complex	09/28/92	2.1×10^{-14}	9.9×10^{-16}
Area 12, Complex	10/05/92	5.0×10^{-14}	2.2×10^{-15}
Area 12, Complex	10/13/92	3.5×10^{-14}	1.3×10^{-15}
Area 12, Complex	10/19/92	1.7×10^{-14}	9.5×10^{-16}
Area 12, Complex	10/26/92	9.3×10^{-15}	8.3×10^{-16}
Area 12, Complex	11/02/92	1.6×10^{-14}	9.5×10^{-16}
Area 12, Complex	11/09/92	1.8×10^{-14}	9.5×10^{-16}
Area 12, Complex	11/16/92	1.4×10^{-14}	9.5×10^{-16}
Area 12, Complex	11/23/92	1.6×10^{-14}	9.3×10^{-16}
Area 12, Complex	11/30/92	1.8×10^{-14}	8.7×10^{-16}
Area 12, Complex	12/08/92	7.5×10^{-15}	8.3×10^{-16}
Area 12, Complex	12/15/92	9.4×10^{-15}	1.9×10^{-15}
Area 12, Complex	12/21/92	9.3×10^{-15}	8.5×10^{-16}
Area 12, Complex	12/28/92	1.1×10^{-14}	8.9×10^{-16}
Area 15, EPA Farm	01/06/92	9.1×10^{-15}	6.9×10^{-16}
Area 15, EPA Farm	01/13/92	1.4×10^{-14}	7.7×10^{-16}
Area 15, EPA Farm	01/21/92	2.5×10^{-14}	1.9×10^{-15}
Area 15, EPA Farm	01/27/92	2.4×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	02/03/92	3.0×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	02/10/92	5.8×10^{-15}	1.0×10^{-15}
Area 15, EPA Farm	02/18/92	1.5×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	02/24/92	1.9×10^{-14}	9.5×10^{-16}
Area 15, EPA Farm	03/02/92	1.0×10^{-14}	8.2×10^{-16}
Area 15, EPA Farm	03/09/92	2.1×10^{-14}	9.4×10^{-16}
Area 15, EPA Farm	03/17/92	1.2×10^{-14}	9.4×10^{-16}
Area 15, EPA Farm	03/23/92	1.0×10^{-14}	8.6×10^{-16}
Area 15, EPA Farm	03/30/92	2.5×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	04/06/92	2.2×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	04/13/92	1.7×10^{-14}	1.8×10^{-15}
Area 15, EPA Farm	04/20/92	2.3×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	04/27/92	1.9×10^{-16}	4.3×10^{-16}
Area 15, EPA Farm	05/04/92	4.1×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	05/11/92	2.0×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	05/18/92	1.6×10^{-14}	8.6×10^{-16}
Area 15, EPA Farm	05/26/92	2.6×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	06/01/92	2.5×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	06/08/92	2.0×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	06/15/92	2.0×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	06/22/92	2.4×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	06/29/92	1.5×10^{-14}	9.1×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross B in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 15, EPA Farm	07/06/92	1.6×10^{-14}	9.6×10^{-16}
Area 15, EPA Farm	07/13/92	1.9×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	07/20/92	2.1×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	07/27/92	2.4×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/03/92	2.4×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/10/92	2.8×10^{-14}	1.5×10^{-15}
Area 15, EPA Farm	08/17/92	2.7×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/24/92	2.3×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	08/31/92	2.2×10^{-14}	1.0×10^{-15}
Area 15, EPA Farm	09/08/92	2.6×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	09/14/92	1.8×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	09/21/92	2.1×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	09/28/92	2.4×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	10/05/92	2.3×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	10/13/92	4.4×10^{-14}	1.6×10^{-15}
Area 15, EPA Farm	10/19/92	2.5×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	10/26/92	1.2×10^{-14}	9.0×10^{-16}
Area 15, EPA Farm	11/03/92	2.2×10^{-14}	1.3×10^{-15}
Area 15, EPA Farm	11/09/92	2.0×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	11/16/92	1.9×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	11/23/92	2.1×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	11/30/92	2.5×10^{-14}	1.2×10^{-15}
Area 15, EPA Farm	12/07/92	1.5×10^{-13}	1.1×10^{-16}
Area 15, EPA Farm	12/14/92	1.3×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	12/21/92	2.3×10^{-14}	1.1×10^{-15}
Area 15, EPA Farm	12/29/92	1.5×10^{-14}	1.3×10^{-15}
Area 16, 3545 Substation	01/06/92	8.1×10^{-15}	7.4×10^{-16}
Area 16, 3545 Substation	01/13/92	1.5×10^{-14}	7.4×10^{-16}
Area 16, 3545 Substation	01/21/92	2.5×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	01/27/92	2.3×10^{-14}	9.5×10^{-16}
Area 16, 3545 Substation	02/03/92	2.6×10^{-14}	9.8×10^{-16}
Area 16, 3545 Substation	02/10/92	6.1×10^{-15}	5.9×10^{-16}
Area 16, 3545 Substation	02/18/92	1.3×10^{-14}	8.8×10^{-16}
Area 16, 3545 Substation	02/24/92	1.6×10^{-14}	8.3×10^{-16}
Area 16, 3545 Substation	03/02/92	9.1×10^{-15}	7.1×10^{-16}
Area 16, 3545 Substation	03/09/92	2.0×10^{-14}	8.6×10^{-16}
Area 16, 3545 Substation	03/17/92	6.8×10^{-15}	7.6×10^{-16}
Area 16, 3545 Substation	03/23/92	1.0×10^{-14}	7.8×10^{-16}
Area 16, 3545 Substation	03/30/92	1.5×10^{-14}	8.3×10^{-16}
Area 16, 3545 Substation	04/06/92	1.4×10^{-14}	7.9×10^{-16}
Area 16, 3545 Substation	04/13/92	1.4×10^{-14}	8.5×10^{-16}
Area 16, 3545 Substation	04/20/92	1.9×10^{-14}	5.6×10^{-16}

Mean MDC: 1.5×10^{-15} μCi/mL

Standard Deviation of Mean MDC: 3.3×10^{-16} μCi/mL

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 16, 3545 Substation	05/04/92	1.6×10^{-14}	8.1×10^{-16}
Area 16, 3545 Substation	05/11/92	1.5×10^{-14}	8.9×10^{-16}
Area 16, 3545 Substation	05/18/92	1.4×10^{-14}	7.9×10^{-16}
Area 16, 3545 Substation	05/26/92	2.0×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	06/01/92	2.3×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	06/09/92	1.7×10^{-14}	9.0×10^{-16}
Area 16, 3545 Substation	06/15/92	1.9×10^{-14}	5.9×10^{-16}
Area 16, 3545 Substation	06/29/92	1.4×10^{-14}	8.0×10^{-16}
Area 16, 3545 Substation	07/06/92	1.3×10^{-14}	8.1×10^{-16}
Area 16, 3545 Substation	07/13/92	1.5×10^{-14}	9.3×10^{-16}
Area 16, 3545 Substation	07/20/92	1.8×10^{-14}	9.6×10^{-16}
Area 16, 3545 Substation	07/27/92	2.0×10^{-14}	9.8×10^{-16}
Area 16, 3545 Substation	08/03/92	2.2×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	08/10/92	2.2×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	08/17/92	2.3×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	08/24/92	2.1×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	08/31/92	2.0×10^{-14}	9.0×10^{-16}
Area 16, 3545 Substation	09/08/92	2.4×10^{-14}	1.1×10^{-15}
Area 16, 3545 Substation	09/14/92	1.6×10^{-14}	9.5×10^{-16}
Area 16, 3545 Substation	09/21/92	1.7×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	09/28/92	2.0×10^{-14}	9.9×10^{-16}
Area 16, 3545 Substation	10/05/92	2.1×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	10/12/92	3.4×10^{-14}	1.2×10^{-15}
Area 16, 3545 Substation	10/19/92	2.1×10^{-14}	1.0×10^{-15}
Area 16, 3545 Substation	10/26/92	9.5×10^{-15}	8.4×10^{-16}
Area 16, 3545 Substation	11/02/92	1.8×10^{-14}	6.0×10^{-16}
Area 16, 3545 Substation	11/16/92	1.6×10^{-14}	9.5×10^{-16}
Area 16, 3545 Substation	11/23/92	1.7×10^{-14}	9.5×10^{-16}
Area 16, 3545 Substation	11/30/92	1.3×10^{-14}	3.0×10^{-16}
Area 19, ECHO Peak	01/13/92	1.5×10^{-14}	8.2×10^{-16}
Area 19, ECHO Peak	01/21/92	1.9×10^{-14}	9.8×10^{-16}
Area 19, ECHO Peak	01/27/92	2.1×10^{-14}	9.2×10^{-16}
Area 19, ECHO Peak	02/03/92	9.9×10^{-15}	3.5×10^{-16}
Area 19, ECHO Peak	02/24/92	1.3×10^{-14}	7.9×10^{-16}
Area 19, ECHO Peak	03/02/92	6.8×10^{-15}	6.7×10^{-16}
Area 19, ECHO Peak	03/09/92	1.9×10^{-14}	8.4×10^{-16}
Area 19, ECHO Peak	03/17/92	7.6×10^{-15}	4.4×10^{-16}
Area 19, ECHO Peak	03/30/92	1.7×10^{-14}	8.5×10^{-16}
Area 19, ECHO Peak	04/06/92	1.9×10^{-14}	8.8×10^{-16}
Area 19, ECHO Peak	04/13/92	1.2×10^{-14}	8.1×10^{-16}
Area 19, ECHO Peak	04/20/92	2.1×10^{-14}	9.2×10^{-16}
Area 19, ECHO Peak	04/27/92	2.0×10^{-14}	9.0×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 19, ECHO Peak	05/04/92	1.7×10^{-14}	8.5×10^{-16}
Area 19, ECHO Peak	05/11/92	1.7×10^{-14}	8.9×10^{-16}
Area 19, ECHO Peak	05/18/92	1.5×10^{-14}	7.9×10^{-16}
Area 19, ECHO Peak	05/26/92	1.9×10^{-14}	1.0×10^{-15}
Area 19, ECHO Peak	06/01/92	2.0×10^{-14}	9.4×10^{-16}
Area 19, ECHO Peak	06/09/92	1.6×10^{-14}	9.3×10^{-16}
Area 19, ECHO Peak	06/15/92	1.8×10^{-14}	9.0×10^{-16}
Area 19, ECHO Peak	06/22/92	1.7×10^{-14}	8.9×10^{-16}
Area 19, ECHO Peak	06/29/92	1.1×10^{-14}	7.6×10^{-16}
Area 19, ECHO Peak	07/06/92	1.1×10^{-14}	7.5×10^{-16}
Area 19, ECHO Peak	07/13/92	1.4×10^{-14}	9.1×10^{-16}
Area 19, ECHO Peak	07/20/92	1.5×10^{-14}	9.1×10^{-16}
Area 19, ECHO Peak	07/27/92	2.2×10^{-14}	1.1×10^{-15}
Area 19, ECHO Peak	08/03/92	1.5×10^{-14}	8.6×10^{-16}
Area 19, ECHO Peak	08/10/92	2.0×10^{-14}	9.8×10^{-16}
Area 19, ECHO Peak	08/17/92	2.1×10^{-14}	1.0×10^{-15}
Area 19, ECHO Peak	08/24/92	2.1×10^{-14}	9.9×10^{-16}
Area 19, ECHO Peak	08/31/92	1.9×10^{-14}	9.1×10^{-16}
Area 19, ECHO Peak	09/08/92	2.1×10^{-14}	1.1×10^{-15}
Area 19, ECHO Peak	09/14/92	1.4×10^{-14}	9.1×10^{-16}
Area 19, ECHO Peak	09/21/92	1.6×10^{-14}	9.6×10^{-16}
Area 19, ECHO Peak	09/28/92	2.1×10^{-14}	1.0×10^{-15}
Area 19, ECHO Peak	10/05/92	2.1×10^{-14}	9.0×10^{-16}
Area 19, ECHO Peak	10/13/92	3.3×10^{-14}	1.3×10^{-15}
Area 19, ECHO Peak	10/19/92	1.8×10^{-14}	9.8×10^{-16}
Area 19, ECHO Peak	10/26/92	9.4×10^{-15}	8.6×10^{-16}
Area 19, ECHO Peak	11/02/92	1.4×10^{-14}	9.2×10^{-16}
Area 19, ECHO Peak	11/09/92	1.5×10^{-14}	9.2×10^{-16}
Area 19, ECHO Peak	11/16/92	1.2×10^{-14}	8.0×10^{-16}
Area 19, ECHO Peak	11/24/92	1.9×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	01/06/92	8.7×10^{-15}	7.4×10^{-16}
Area 19, Pahute Substation	01/13/92	1.6×10^{-14}	7.6×10^{-16}
Area 19, Pahute Substation	01/21/92	2.2×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	01/27/92	2.0×10^{-14}	8.9×10^{-16}
Area 19, Pahute Substation	02/03/92	2.3×10^{-14}	9.8×10^{-16}
Area 19, Pahute Substation	02/10/92	4.7×10^{-15}	6.0×10^{-16}
Area 19, Pahute Substation	02/18/92	1.3×10^{-14}	9.2×10^{-16}
Area 19, Pahute Substation	02/24/92	1.2×10^{-14}	8.3×10^{-16}
Area 19, Pahute Substation	03/02/92	1.2×10^{-14}	8.2×10^{-16}
Area 19, Pahute Substation	03/09/92	1.7×10^{-14}	8.5×10^{-16}
Area 19, Pahute Substation	03/17/92	1.5×10^{-14}	9.8×10^{-16}
Area 19, Pahute Substation	03/23/92	1.1×10^{-14}	8.4×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 19, Pahute Substation	03/30/92	1.7×10^{-14}	9.0×10^{-16}
Area 19, Pahute Substation	04/06/92	1.7×10^{-14}	9.0×10^{-16}
Area 19, Pahute Substation	04/13/92	1.5×10^{-14}	9.1×10^{-16}
Area 19, Pahute Substation	04/20/92	2.1×10^{-14}	9.5×10^{-16}
Area 19, Pahute Substation	04/27/92	1.9×10^{-14}	9.5×10^{-16}
Area 19, Pahute Substation	05/04/92	1.6×10^{-14}	8.9×10^{-16}
Area 19, Pahute Substation	05/11/92	1.6×10^{-14}	9.3×10^{-16}
Area 19, Pahute Substation	05/18/92	1.4×10^{-14}	8.1×10^{-16}
Area 19, Pahute Substation	05/26/92	1.7×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	06/01/92	2.0×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	06/09/92	1.5×10^{-14}	9.0×10^{-16}
Area 19, Pahute Substation	06/15/92	1.7×10^{-14}	9.4×10^{-16}
Area 19, Pahute Substation	06/22/92	1.9×10^{-14}	9.7×10^{-16}
Area 19, Pahute Substation	06/29/92	1.2×10^{-14}	8.2×10^{-16}
Area 19, Pahute Substation	07/06/92	1.4×10^{-14}	8.6×10^{-16}
Area 19, Pahute Substation	07/13/92	1.6×10^{-14}	9.8×10^{-16}
Area 19, Pahute Substation	07/20/92	1.7×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	07/27/92	2.0×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	08/03/92	2.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	08/10/92	1.9×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	08/17/92	2.0×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	08/24/92	2.0×10^{-14}	9.6×10^{-16}
Area 19, Pahute Substation	09/01/92	2.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	09/08/92	2.0×10^{-14}	1.2×10^{-15}
Area 19, Pahute Substation	09/14/92	1.5×10^{-14}	9.9×10^{-16}
Area 19, Pahute Substation	09/21/92	1.5×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	09/28/92	2.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	10/05/92	2.1×10^{-14}	9.6×10^{-16}
Area 19, Pahute Substation	10/13/92	3.3×10^{-14}	1.4×10^{-15}
Area 19, Pahute Substation	10/19/92	2.0×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	10/26/92	8.4×10^{-15}	9.1×10^{-16}
Area 19, Pahute Substation	11/02/92	1.5×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	11/09/92	1.7×10^{-14}	1.1×10^{-15}
Area 19, Pahute Substation	11/16/92	1.3×10^{-14}	1.0×10^{-15}
Area 19, Pahute Substation	11/24/92	2.0×10^{-14}	1.8×10^{-15}
Area 20, Dispensary	01/06/92	1.0×10^{-14}	7.9×10^{-16}
Area 20, Dispensary	01/13/92	1.6×10^{-14}	7.8×10^{-16}
Area 20, Dispensary	01/21/92	2.5×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	01/27/92	2.3×10^{-14}	9.6×10^{-16}
Area 20, Dispensary	02/03/92	3.2×10^{-14}	1.6×10^{-15}
Area 20, Dispensary	02/10/92	1.9×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	02/18/92	1.5×10^{-14}	9.4×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 20, Dispensary	02/24/92	4.7×10^{-15}	7.0×10^{-16}
Area 20, Dispensary	03/02/92	8.5×10^{-15}	7.8×10^{-16}
Area 20, Dispensary	03/09/92	2.2×10^{-14}	9.5×10^{-16}
Area 20, Dispensary	03/17/92	1.1×10^{-14}	9.4×10^{-16}
Area 20, Dispensary	03/23/92	1.3×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	03/30/92	1.8×10^{-14}	9.6×10^{-16}
Area 20, Dispensary	04/06/92	1.9×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	04/13/92	1.4×10^{-14}	9.2×10^{-16}
Area 20, Dispensary	04/20/92	2.1×10^{-14}	9.9×10^{-16}
Area 20, Dispensary	04/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	05/04/92	1.7×10^{-14}	9.1×10^{-16}
Area 20, Dispensary	05/11/92	1.8×10^{-14}	9.9×10^{-16}
Area 20, Dispensary	05/18/92	1.7×10^{-14}	8.8×10^{-16}
Area 20, Dispensary	05/26/92	2.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	06/01/92	2.4×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	06/09/92	1.8×10^{-14}	9.8×10^{-16}
Area 20, Dispensary	06/15/92	1.8×10^{-14}	9.8×10^{-16}
Area 20, Dispensary	06/22/92	2.0×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	06/29/92	1.5×10^{-14}	8.8×10^{-16}
Area 20, Dispensary	07/06/92	1.5×10^{-14}	8.9×10^{-16}
Area 20, Dispensary	07/13/92	1.4×10^{-14}	9.9×10^{-16}
Area 20, Dispensary	07/20/92	1.7×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	07/27/92	2.8×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	08/03/92	1.8×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	08/10/92	2.3×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	08/17/92	2.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	08/24/92	2.0×10^{-14}	9.8×10^{-16}
Area 20, Dispensary	09/01/92	1.9×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	09/08/92	2.2×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	09/14/92	1.6×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	09/21/92	1.6×10^{-14}	1.0×10^{-15}
Area 20, Dispensary	09/28/92	2.1×10^{-14}	1.1×10^{-15}
Area 20, Dispensary	10/05/92	2.2×10^{-14}	9.9×10^{-16}
Area 20, Dispensary	10/13/92	3.6×10^{-14}	1.4×10^{-15}
Area 20, Dispensary	10/19/92	2.3×10^{-14}	1.2×10^{-15}
Area 20, Dispensary	10/26/92	1.1×10^{-14}	9.6×10^{-16}
Area 20, Dispensary	11/02/92	1.3×10^{-14}	8.5×10^{-16}
Area 20, Dispensary	11/09/92	2.3×10^{-14}	1.3×10^{-15}
Area 20, Dispensary	11/16/92	1.6×10^{-14}	9.5×10^{-16}
Area 20, Dispensary	11/24/92	2.2×10^{-14}	1.3×10^{-15}
Area 23, Building 790	01/13/92	1.4×10^{-14}	7.0×10^{-16}
Area 23, Building 790	01/21/92	3.5×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Building 790	01/27/92	2.9×10^{-14}	1.0×10^{-15}
Area 23, Building 790	02/03/92	2.7×10^{-14}	9.9×10^{-16}
Area 23, Building 790	02/10/92	1.1×10^{-14}	6.9×10^{-16}
Area 23, Building 790	02/18/92	1.3×10^{-14}	9.0×10^{-16}
Area 23, Building 790	02/24/92	1.8×10^{-14}	8.6×10^{-16}
Area 23, Building 790	03/02/92	9.6×10^{-15}	7.2×10^{-16}
Area 23, Building 790	03/09/92	2.4×10^{-14}	9.5×10^{-16}
Area 23, Building 790	03/16/92	9.6×10^{-15}	6.6×10^{-16}
Area 23, Building 790	03/24/92	9.6×10^{-15}	8.2×10^{-16}
Area 23, Building 790	03/30/92	1.8×10^{-14}	8.7×10^{-16}
Area 23, Building 790	04/07/92	1.9×10^{-14}	9.1×10^{-16}
Area 23, Building 790	04/14/92	1.4×10^{-14}	9.1×10^{-16}
Area 23, Building 790	04/20/92	2.0×10^{-14}	8.4×10^{-16}
Area 23, Building 790	04/28/92	2.1×10^{-14}	9.4×10^{-16}
Area 23, Building 790	05/05/92	1.7×10^{-14}	1.0×10^{-15}
Area 23, Building 790	05/11/92	1.7×10^{-14}	9.2×10^{-16}
Area 23, Building 790	05/18/92	5.6×10^{-15}	3.0×10^{-16}
Area 23, Building 790	05/26/92	1.9×10^{-14}	1.0×10^{-15}
Area 23, Building 790	06/01/92	2.1×10^{-14}	8.8×10^{-16}
Area 23, Building 790	06/09/92	1.5×10^{-14}	9.2×10^{-16}
Area 23, Building 790	06/15/92	1.9×10^{-14}	9.2×10^{-16}
Area 23, Building 790	06/22/92	2.0×10^{-14}	9.4×10^{-16}
Area 23, Building 790	06/29/92	1.3×10^{-14}	7.9×10^{-16}
Area 23, Building 790	07/06/92	1.2×10^{-14}	8.9×10^{-16}
Area 23, Building 790	07/13/92	1.6×10^{-14}	1.1×10^{-15}
Area 23, Building 790	07/20/92	1.8×10^{-14}	9.6×10^{-16}
Area 23, Building 790	07/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 23, Building 790	08/03/92	2.0×10^{-14}	9.1×10^{-16}
Area 23, Building 790	08/11/92	2.3×10^{-14}	1.2×10^{-15}
Area 23, Building 790	08/17/92	2.1×10^{-14}	1.0×10^{-15}
Area 23, Building 790	08/24/92	1.9×10^{-14}	1.0×10^{-15}
Area 23, Building 790	08/31/92	1.8×10^{-14}	9.0×10^{-16}
Area 23, Building 790	09/08/92	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790	09/14/92	1.4×10^{-14}	9.0×10^{-16}
Area 23, Building 790	09/21/92	1.8×10^{-14}	1.0×10^{-15}
Area 23, Building 790	09/28/92	2.0×10^{-14}	1.0×10^{-15}
Area 23, Building 790	10/05/92	1.9×10^{-14}	9.9×10^{-16}
Area 23, Building 790	10/12/92	2.8×10^{-14}	4.1×10^{-15}
Area 23, Building 790	10/19/92	2.2×10^{-14}	1.1×10^{-15}
Area 23, Building 790	10/26/92	8.4×10^{-15}	8.4×10^{-16}
Area 23, Building 790	11/02/92	1.6×10^{-14}	9.5×10^{-16}
Area 23, Building 790	11/09/92	1.9×10^{-14}	9.8×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Building 790	11/16/92	2.2×10^{-14}	1.0×10^{-15}
Area 23, Building 790	11/23/92	1.9×10^{-14}	9.8×10^{-16}
Area 23, Building 790	11/30/92	2.4×10^{-14}	1.0×10^{-15}
Area 23, Building 790	12/07/92	9.8×10^{-15}	7.5×10^{-16}
Area 23, Building 790	12/15/92	1.1×10^{-14}	1.0×10^{-15}
Area 23, Building 790	12/21/92	2.5×10^{-14}	1.1×10^{-15}
Area 23, Building 790	12/28/92	7.1×10^{-15}	8.2×10^{-16}
Area 23, Building 790 No. 2	01/13/92	1.7×10^{-14}	7.9×10^{-16}
Area 23, Building 790 No. 2	01/21/92	3.2×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	01/27/92	2.3×10^{-14}	9.7×10^{-16}
Area 23, Building 790 No. 2	02/03/92	2.7×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	02/10/92	8.4×10^{-15}	6.5×10^{-16}
Area 23, Building 790 No. 2	02/18/92	1.3×10^{-14}	8.9×10^{-16}
Area 23, Building 790 No. 2	02/24/92	1.8×10^{-14}	8.8×10^{-16}
Area 23, Building 790 No. 2	03/02/92	8.8×10^{-15}	7.2×10^{-16}
Area 23, Building 790 No. 2	03/09/92	2.3×10^{-14}	9.7×10^{-16}
Area 23, Building 790 No. 2	03/16/92	7.4×10^{-15}	6.4×10^{-16}
Area 23, Building 790 No. 2	03/24/92	9.3×10^{-15}	8.3×10^{-16}
Area 23, Building 790 No. 2	03/30/92	1.6×10^{-14}	7.7×10^{-16}
Area 23, Building 790 No. 2	04/07/92	1.7×10^{-14}	8.7×10^{-16}
Area 23, Building 790 No. 2	04/14/92	1.4×10^{-14}	9.0×10^{-16}
Area 23, Building 790 No. 2	04/20/92	1.9×10^{-14}	8.4×10^{-16}
Area 23, Building 790 No. 2	04/28/92	2.0×10^{-14}	9.5×10^{-16}
Area 23, Building 790 No. 2	05/05/92	1.8×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	05/11/92	1.8×10^{-14}	9.1×10^{-16}
Area 23, Building 790 No. 2	05/18/92	1.6×10^{-14}	8.0×10^{-16}
Area 23, Building 790 No. 2	05/26/92	2.1×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	06/01/92	2.2×10^{-14}	9.1×10^{-16}
Area 23, Building 790 No. 2	06/09/92	1.5×10^{-14}	9.6×10^{-16}
Area 23, Building 790 No. 2	06/15/92	1.9×10^{-14}	9.4×10^{-16}
Area 23, Building 790 No. 2	06/22/92	2.1×10^{-14}	9.7×10^{-16}
Area 23, Building 790 No. 2	06/29/92	1.3×10^{-14}	8.0×10^{-16}
Area 23, Building 790 No. 2	07/06/92	1.1×10^{-14}	8.1×10^{-16}
Area 23, Building 790 No. 2	07/13/92	1.4×10^{-14}	9.3×10^{-16}
Area 23, Building 790 No. 2	07/20/92	1.9×10^{-14}	9.9×10^{-16}
Area 23, Building 790 No. 2	07/27/92	2.4×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	08/03/92	2.2×10^{-14}	9.6×10^{-16}
Area 23, Building 790 No. 2	08/11/92	2.5×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	08/17/92	2.3×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	08/24/92	1.6×10^{-14}	9.7×10^{-16}
Area 23, Building 790 No. 2	08/31/92	1.9×10^{-14}	9.1×10^{-16}
Area 23, Building 790 No. 2	09/08/92	2.3×10^{-14}	1.2×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Building 790 No. 2	09/14/92	1.7×10^{-14}	9.4×10^{-16}
Area 23, Building 790 No. 2	09/21/92	1.7×10^{-14}	9.9×10^{-16}
Area 23, Building 790 No. 2	09/28/92	2.1×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	10/05/92	2.3×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	10/12/92	3.3×10^{-14}	1.2×10^{-15}
Area 23, Building 790 No. 2	10/19/92	2.3×10^{-14}	1.1×10^{-15}
Area 23, Building 790 No. 2	10/26/92	1.2×10^{-14}	9.2×10^{-16}
Area 23, Building 790 No. 2	11/02/92	1.7×10^{-14}	9.9×10^{-16}
Area 23, Building 790 No. 2	11/09/92	1.8×10^{-14}	9.8×10^{-16}
Area 23, Building 790 No. 2	11/23/92	2.0×10^{-14}	9.5×10^{-16}
Area 23, Building 790 No. 2	11/30/92	4.3×10^{-16}	6.7×10^{-16}
Area 23, Building 790 No. 2	12/07/92	1.1×10^{-14}	7.8×10^{-16}
Area 23, Building 790 No. 2	12/15/92	1.0×10^{-14}	1.0×10^{-15}
Area 23, Building 790 No. 2	12/21/92	5.9×10^{-15}	7.9×10^{-16}
Area 23, Building 790 No. 2	12/28/92	8.3×10^{-15}	8.4×10^{-16}
Area 23, E Boundary	01/13/92	1.7×10^{-14}	7.9×10^{-16}
Area 23, E Boundary	01/21/92	3.5×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	01/27/92	2.9×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	02/03/92	2.9×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	02/10/92	6.1×10^{-15}	7.6×10^{-15}
Area 23, E Boundary	02/18/92	1.5×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	02/24/92	1.9×10^{-14}	8.9×10^{-16}
Area 23, E Boundary	03/02/92	8.1×10^{-15}	6.7×10^{-16}
Area 23, E Boundary	03/09/92	2.4×10^{-14}	9.6×10^{-16}
Area 23, E Boundary	03/16/92	8.3×10^{-15}	6.4×10^{-16}
Area 23, E Boundary	03/24/92	8.7×10^{-15}	8.1×10^{-16}
Area 23, E Boundary	03/30/92	1.8×10^{-14}	8.1×10^{-16}
Area 23, E Boundary	04/07/92	1.9×10^{-14}	9.3×10^{-16}
Area 23, E Boundary	04/14/92	1.5×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	04/20/92	2.0×10^{-14}	8.7×10^{-16}
Area 23, E Boundary	04/28/92	2.2×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	05/05/92	1.9×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	05/11/92	1.9×10^{-14}	9.8×10^{-16}
Area 23, E Boundary	05/18/92	1.5×10^{-14}	8.2×10^{-16}
Area 23, E Boundary	05/26/92	2.0×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	06/01/92	2.3×10^{-14}	9.6×10^{-16}
Area 23, E Boundary	06/09/92	1.6×10^{-14}	9.9×10^{-16}
Area 23, E Boundary	06/15/92	1.9×10^{-14}	9.7×10^{-16}
Area 23, E Boundary	06/22/92	2.3×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	06/29/92	1.3×10^{-14}	8.4×10^{-16}
Area 23, E Boundary	07/06/92	1.4×10^{-14}	8.8×10^{-16}
Area 23, E Boundary	07/13/92	1.5×10^{-14}	9.9×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, E Boundary	07/20/92	1.7×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	08/03/92	2.3×10^{-14}	9.9×10^{-16}
Area 23, E Boundary	08/11/92	2.5×10^{-14}	1.3×10^{-15}
Area 23, E Boundary	08/17/92	2.4×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	08/24/92	2.5×10^{-14}	2.1×10^{-15}
Area 23, E Boundary	08/31/92	2.0×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	09/08/92	2.2×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	09/14/92	1.7×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	09/21/92	2.1×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	09/28/92	2.3×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	10/05/92	2.4×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	10/12/92	4.0×10^{-14}	1.3×10^{-15}
Area 23, E Boundary	10/19/92	2.5×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	10/26/92	1.5×10^{-14}	1.0×10^{-15}
Area 23, E Boundary	11/02/92	1.9×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	11/09/92	2.1×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	11/16/92	2.2×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	12/07/92	1.1×10^{-14}	8.3×10^{-16}
Area 23, E Boundary	12/15/92	1.3×10^{-14}	1.1×10^{-15}
Area 23, E Boundary	12/21/92	2.6×10^{-14}	1.2×10^{-15}
Area 23, E Boundary	12/28/92	1.2×10^{-14}	9.7×10^{-16}
Area 23, H&S Building	01/13/92	1.6×10^{-14}	7.9×10^{-16}
Area 23, H&S Building	01/21/92	3.1×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	01/27/92	2.7×10^{-14}	9.9×10^{-16}
Area 23, H&S Building	02/03/92	2.6×10^{-14}	9.8×10^{-16}
Area 23, H&S Building	02/10/92	7.0×10^{-15}	6.2×10^{-16}
Area 23, H&S Building	02/18/92	1.4×10^{-14}	9.0×10^{-16}
Area 23, H&S Building	02/24/92	1.6×10^{-14}	8.3×10^{-16}
Area 23, H&S Building	03/02/92	1.1×10^{-14}	7.5×10^{-16}
Area 23, H&S Building	03/09/92	2.2×10^{-14}	9.3×10^{-16}
Area 23, H&S Building	03/16/92	8.7×10^{-15}	6.4×10^{-16}
Area 23, H&S Building	03/24/92	7.5×10^{-15}	7.9×10^{-16}
Area 23, H&S Building	03/30/92	2.5×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	04/07/92	1.2×10^{-14}	6.3×10^{-16}
Area 23, H&S Building	04/14/92	1.2×10^{-14}	9.0×10^{-16}
Area 23, H&S Building	04/20/92	1.8×10^{-14}	8.0×10^{-16}
Area 23, H&S Building	04/28/92	2.1×10^{-14}	9.4×10^{-16}
Area 23, H&S Building	05/05/92	1.8×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	05/11/92	2.0×10^{-14}	9.3×10^{-16}
Area 23, H&S Building	05/18/92	1.5×10^{-14}	7.6×10^{-16}
Area 23, H&S Building	05/26/92	2.7×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	06/01/92	1.9×10^{-14}	8.4×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, H&S Building	06/09/92	1.5×10^{-14}	9.1×10^{-16}
Area 23, H&S Building	06/15/92	1.9×10^{-14}	9.2×10^{-16}
Area 23, H&S Building	06/22/92	2.0×10^{-14}	9.6×10^{-16}
Area 23, H&S Building	06/29/92	2.6×10^{-15}	7.1×10^{-15}
Area 23, H&S Building	07/06/92	1.2×10^{-14}	8.1×10^{-16}
Area 23, H&S Building	07/13/92	1.5×10^{-14}	9.2×10^{-16}
Area 23, H&S Building	07/20/92	2.0×10^{-14}	9.8×10^{-16}
Area 23, H&S Building	07/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	08/03/92	2.1×10^{-14}	9.1×10^{-16}
Area 23, H&S Building	08/11/92	2.4×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	08/17/92	2.2×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	08/24/92	2.0×10^{-14}	9.9×10^{-16}
Area 23, H&S Building	08/31/92	2.0×10^{-14}	9.0×10^{-16}
Area 23, H&S Building	09/08/92	2.4×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	09/14/92	1.5×10^{-14}	9.4×10^{-16}
Area 23, H&S Building	09/21/92	1.8×10^{-14}	9.4×10^{-16}
Area 23, H&S Building	09/28/92	2.1×10^{-14}	9.9×10^{-16}
Area 23, H&S Building	10/05/92	2.3×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	10/12/92	3.5×10^{-14}	1.2×10^{-15}
Area 23, H&S Building	10/19/92	2.5×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	10/26/92	1.1×10^{-14}	8.7×10^{-16}
Area 23, H&S Building	11/02/92	1.8×10^{-14}	9.7×10^{-16}
Area 23, H&S Building	11/09/92	2.0×10^{-14}	9.7×10^{-16}
Area 23, H&S Building	11/16/92	2.1×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	11/23/92	2.1×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	11/30/92	9.0×10^{-15}	8.3×10^{-16}
Area 23, H&S Building	12/07/92	1.6×10^{-14}	8.5×10^{-16}
Area 23, H&S Building	12/15/92	1.3×10^{-14}	1.0×10^{-15}
Area 23, H&S Building	12/21/92	2.6×10^{-14}	1.1×10^{-15}
Area 23, H&S Building	12/28/92	7.5×10^{-15}	8.3×10^{-16}
Area 25, E-MAD N	01/13/92	1.4×10^{-14}	7.7×10^{-16}
Area 25, E-MAD N	01/21/92	2.9×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	01/27/92	2.5×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	02/03/92	2.9×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	02/10/92	5.1×10^{-15}	6.1×10^{-16}
Area 25, E-MAD N	02/18/92	1.2×10^{-14}	9.2×10^{-16}
Area 25, E-MAD N	02/24/92	1.9×10^{-14}	9.4×10^{-16}
Area 25, E-MAD N	03/02/92	9.0×10^{-15}	7.6×10^{-16}
Area 25, E-MAD N	03/09/92	2.5×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	03/16/92	7.8×10^{-15}	6.4×10^{-16}
Area 25, E-MAD N	03/24/92	1.0×10^{-14}	8.5×10^{-16}
Area 25, E-MAD N	03/30/92	2.7×10^{-14}	1.3×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, E-MAD N	04/07/92	6.6×10^{-15}	3.1×10^{-16}
Area 25, E-MAD N	04/14/92	1.4×10^{-14}	8.6×10^{-16}
Area 25, E-MAD N	04/20/92	1.9×10^{-14}	8.4×10^{-16}
Area 25, E-MAD N	04/28/92	2.0×10^{-14}	9.2×10^{-16}
Area 25, E-MAD N	05/05/92	1.7×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	05/11/92	8.3×10^{-15}	8.1×10^{-16}
Area 25, E-MAD N	05/18/92	1.3×10^{-14}	7.5×10^{-16}
Area 25, E-MAD N	05/26/92	2.0×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	06/01/92	2.2×10^{-14}	9.0×10^{-16}
Area 25, E-MAD N	06/09/92	1.6×10^{-14}	9.4×10^{-16}
Area 25, E-MAD N	06/15/92	1.7×10^{-14}	9.0×10^{-16}
Area 25, E-MAD N	06/22/92	2.3×10^{-14}	9.8×10^{-16}
Area 25, E-MAD N	06/29/92	1.3×10^{-14}	7.9×10^{-16}
Area 25, E-MAD N	07/06/92	1.2×10^{-14}	8.1×10^{-16}
Area 25, E-MAD N	07/13/92	1.5×10^{-14}	9.4×10^{-16}
Area 25, E-MAD N	07/20/92	1.7×10^{-14}	9.4×10^{-16}
Area 25, E-MAD N	07/27/92	2.2×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	08/03/92	2.1×10^{-14}	9.3×10^{-16}
Area 25, E-MAD N	08/11/92	2.2×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	08/17/92	2.3×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	08/24/92	2.0×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	08/31/92	2.1×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	09/08/92	2.1×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	09/14/92	1.7×10^{-14}	1.3×10^{-15}
Area 25, E-MAD N	09/21/92	1.7×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	09/28/92	2.0×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	10/05/92	2.3×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	10/12/92	3.0×10^{-14}	3.8×10^{-15}
Area 25, E-MAD N	10/19/92	3.8×10^{-14}	7.5×10^{-16}
Area 25, E-MAD N	10/26/92	1.0×10^{-14}	1.2×10^{-15}
Area 25, E-MAD N	11/02/92	1.7×10^{-14}	9.9×10^{-16}
Area 25, E-MAD N	11/09/92	1.9×10^{-14}	9.8×10^{-16}
Area 25, E-MAD N	11/16/92	2.1×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	11/23/92	1.9×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	11/30/92	2.5×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	12/07/92	1.1×10^{-14}	8.1×10^{-16}
Area 25, E-MAD N	12/15/92	1.2×10^{-14}	1.0×10^{-15}
Area 25, E-MAD N	12/21/92	1.6×10^{-14}	1.1×10^{-15}
Area 25, E-MAD N	12/28/92	7.6×10^{-15}	8.6×10^{-16}
Area 25, NRDS Warehouse	01/13/92	1.4×10^{-14}	7.5×10^{-16}
Area 25, NRDS Warehouse	01/21/92	2.5×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	01/27/92	2.3×10^{-14}	9.2×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, NRDS Warehouse	02/03/92	2.9×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	02/10/92	5.3×10^{-15}	6.0×10^{-16}
Area 25, NRDS Warehouse	02/18/92	1.5×10^{-14}	9.3×10^{-16}
Area 25, NRDS Warehouse	02/24/92	1.8×10^{-14}	8.8×10^{-16}
Area 25, NRDS Warehouse	03/02/92	1.0×10^{-14}	7.4×10^{-16}
Area 25, NRDS Warehouse	03/09/92	2.4×10^{-14}	9.7×10^{-16}
Area 25, NRDS Warehouse	03/16/92	8.8×10^{-15}	6.6×10^{-16}
Area 25, NRDS Warehouse	03/24/92	9.0×10^{-15}	8.4×10^{-16}
Area 25, NRDS Warehouse	03/30/92	9.4×10^{-15}	6.7×10^{-16}
Area 25, NRDS Warehouse	04/07/92	2.0×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	04/14/92	1.2×10^{-14}	9.2×10^{-16}
Area 25, NRDS Warehouse	04/20/92	2.8×10^{-14}	1.3×10^{-15}
Area 25, NRDS Warehouse	04/28/92	2.0×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	05/05/92	1.7×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	05/11/92	1.5×10^{-14}	8.7×10^{-16}
Area 25, NRDS Warehouse	05/18/92	1.6×10^{-14}	8.6×10^{-16}
Area 25, NRDS Warehouse	05/26/92	2.1×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	06/01/92	2.1×10^{-14}	9.0×10^{-16}
Area 25, NRDS Warehouse	06/09/92	1.8×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	06/15/92	1.7×10^{-14}	9.5×10^{-16}
Area 25, NRDS Warehouse	06/22/92	2.0×10^{-14}	9.6×10^{-16}
Area 25, NRDS Warehouse	06/29/92	1.4×10^{-14}	8.3×10^{-16}
Area 25, NRDS Warehouse	07/06/92	1.3×10^{-14}	8.5×10^{-16}
Area 25, NRDS Warehouse	07/13/92	1.4×10^{-14}	9.7×10^{-16}
Area 25, NRDS Warehouse	07/20/92	1.8×10^{-14}	9.7×10^{-16}
Area 25, NRDS Warehouse	07/27/92	2.1×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	08/03/92	2.1×10^{-14}	9.5×10^{-16}
Area 25, NRDS Warehouse	08/11/92	2.0×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	08/17/92	2.4×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/24/92	2.1×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	08/31/92	2.0×10^{-14}	9.1×10^{-16}
Area 25, NRDS Warehouse	09/08/92	2.3×10^{-14}	1.3×10^{-15}
Area 25, NRDS Warehouse	09/14/92	1.7×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	09/21/92	1.8×10^{-14}	9.9×10^{-16}
Area 25, NRDS Warehouse	09/28/92	2.1×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	10/05/92	2.0×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	10/12/92	4.0×10^{-14}	1.3×10^{-15}
Area 25, NRDS Warehouse	10/19/92	2.5×10^{-14}	1.2×10^{-15}
Area 25, NRDS Warehouse	10/26/92	1.0×10^{-14}	8.4×10^{-16}
Area 25, NRDS Warehouse	11/02/92	1.8×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	11/09/92	1.9×10^{-14}	1.0×10^{-15}
Area 25, NRDS Warehouse	11/16/92	1.9×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, NRDS Warehouse	11/23/92	1.8×10^{-14}	9.9×10^{-16}
Area 25, NRDS Warehouse	11/30/92	7.2×10^{-15}	8.2×10^{-16}
Area 25, NRDS Warehouse	12/07/92	8.7×10^{-15}	7.6×10^{-16}
Area 25, NRDS Warehouse	12/15/92	1.4×10^{-14}	1.1×10^{-15}
Area 25, NRDS Warehouse	12/21/92	1.4×10^{-14}	9.5×10^{-16}
Area 25, NRDS Warehouse	12/28/92	9.0×10^{-15}	8.8×10^{-16}
Area 27, Cafeteria	01/13/92	1.6×10^{-14}	7.9×10^{-16}
Area 27, Cafeteria	01/21/92	3.2×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	01/27/92	2.5×10^{-14}	9.9×10^{-16}
Area 27, Cafeteria	02/03/92	1.1×10^{-14}	4.6×10^{-16}
Area 27, Cafeteria	02/10/92	5.1×10^{-15}	6.0×10^{-16}
Area 27, Cafeteria	02/18/92	1.1×10^{-14}	8.8×10^{-16}
Area 27, Cafeteria	02/24/92	1.4×10^{-14}	8.3×10^{-16}
Area 27, Cafeteria	03/02/92	1.4×10^{-14}	8.4×10^{-16}
Area 27, Cafeteria	03/09/92	2.7×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	03/16/92	1.0×10^{-14}	6.9×10^{-16}
Area 27, Cafeteria	03/24/92	8.6×10^{-15}	8.3×10^{-16}
Area 27, Cafeteria	03/30/92	1.7×10^{-14}	7.9×10^{-16}
Area 27, Cafeteria	04/07/92	1.8×10^{-14}	8.9×10^{-16}
Area 27, Cafeteria	04/14/92	1.5×10^{-14}	9.6×10^{-16}
Area 27, Cafeteria	04/20/92	1.9×10^{-14}	8.6×10^{-16}
Area 27, Cafeteria	04/28/92	2.1×10^{-14}	9.6×10^{-16}
Area 27, Cafeteria	05/05/92	1.8×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	05/11/92	1.7×10^{-14}	9.0×10^{-16}
Area 27, Cafeteria	05/18/92	1.3×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	06/01/92	2.4×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	06/09/92	1.6×10^{-14}	9.9×10^{-16}
Area 27, Cafeteria	06/15/92	1.9×10^{-14}	9.7×10^{-16}
Area 27, Cafeteria	06/22/92	2.2×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	06/29/92	1.3×10^{-14}	8.4×10^{-16}
Area 27, Cafeteria	07/06/92	1.3×10^{-14}	8.7×10^{-16}
Area 27, Cafeteria	07/13/92	1.5×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	07/20/92	2.0×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	07/27/92	2.2×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	08/03/92	2.1×10^{-14}	9.9×10^{-16}
Area 27, Cafeteria	08/11/92	2.3×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	08/17/92	2.4×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	08/24/92	2.0×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	08/31/92	2.1×10^{-14}	9.9×10^{-16}
Area 27, Cafeteria	09/08/92	2.4×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	09/14/92	1.7×10^{-14}	1.0×10^{-15}
Area 27, Cafeteria	09/21/92	1.8×10^{-14}	1.0×10^{-15}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.3 (Gross β in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 27, Cafeteria	09/28/92	2.4×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	10/05/92	2.4×10^{-14}	1.1×10^{-15}
Area 27, Cafeteria	10/12/92	3.8×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	10/19/92	2.5×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	10/26/92	9.8×10^{-15}	1.1×10^{-15}
Area 27, Cafeteria	11/02/92	1.9×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	11/09/92	2.0×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	11/16/92	1.6×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	11/23/92	2.2×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	11/30/92	2.7×10^{-16}	9.3×10^{-16}
Area 27, Cafeteria	12/07/92	1.3×10^{-14}	8.6×10^{-16}
Area 27, Cafeteria	12/15/92	1.1×10^{-14}	1.2×10^{-15}
Area 27, Cafeteria	12/21/92	2.3×10^{-14}	1.3×10^{-15}
Area 27, Cafeteria	12/28/92	8.8×10^{-15}	9.4×10^{-16}

Mean MDC: $1.5 \times 10^{-15} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.3 \times 10^{-16} \mu\text{Ci/mL}$

Attachment A.4 Gamma-Emitting Radionuclides in Air - 1992

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 1, BJY	01/06/92	1.3×10^{-13}	3.3×10^{-14}	^7Be
Area 1, BJY	01/13/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 1, BJY	01/21/92	2.6×10^{-13}	5.8×10^{-14}	^7Be
Area 1, BJY	01/27/92	1.7×10^{-13}	4.0×10^{-14}	^7Be
Area 1, BJY	02/03/92	7.9×10^{-14}	4.0×10^{-14}	^7Be
Area 1, BJY	02/10/92	4.3×10^{-14}	2.4×10^{-14}	^7Be
Area 1, BJY	02/18/92	1.8×10^{-13}	5.0×10^{-14}	^7Be
Area 1, BJY	02/24/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 1, BJY	03/02/92	4.6×10^{-14}	2.8×10^{-14}	^7Be
Area 1, BJY	03/09/92	2.2×10^{-13}	4.0×10^{-14}	^7Be
Area 1, BJY	03/23/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 1, BJY	03/30/92	2.3×10^{-13}	5.5×10^{-14}	^7Be
Area 1, BJY	04/06/92	1.4×10^{-13}	4.3×10^{-14}	^7Be
Area 1, BJY	04/13/92	2.4×10^{-13}	4.7×10^{-14}	^7Be
Area 1, BJY	04/20/94	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 1, BJY	04/28/92	1.7×10^{-13}	4.0×10^{-14}	^7Be
Area 1, BJY	05/04/92	2.6×10^{-13}	6.2×10^{-14}	^7Be
Area 1, BJY	05/11/92	2.3×10^{-13}	5.5×10^{-14}	^7Be
Area 1, BJY	05/18/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 1, BJY	05/26/92	2.1×10^{-13}	5.7×10^{-14}	^7Be
Area 1, BJY	06/01/92	2.4×10^{-13}	5.4×10^{-14}	^7Be
Area 1, BJY	06/08/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 1, BJY	06/15/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 1, BJY	06/29/92	2.4×10^{-13}	5.7×10^{-14}	^7Be
Area 1, BJY	07/06/92	7.1×10^{-14}	2.8×10^{-14}	^7Be
Area 1, BJY	07/13/92	4.6×10^{-13}	1.3×10^{-13}	^7Be
Area 1, BJY	07/20/92	1.4×10^{-13}	6.1×10^{-14}	^7Be
Area 1, BJY	07/27/92	2.3×10^{-13}	5.4×10^{-14}	^7Be
Area 1, BJY	08/03/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 1, BJY	08/10/92	1.9×10^{-13}	4.8×10^{-14}	^7Be
Area 1, BJY	08/17/92	3.4×10^{-13}	6.3×10^{-14}	^7Be
Area 1, BJY	08/24/92	2.9×10^{-13}	4.9×10^{-14}	^7Be
Area 1, BJY	08/31/92	1.4×10^{-13}	3.0×10^{-14}	^7Be
Area 1, BJY	09/08/92	2.7×10^{-13}	6.5×10^{-14}	^7Be
Area 1, BJY	09/14/92	1.4×10^{-13}	4.2×10^{-14}	^7Be
Area 1, BJY	09/21/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 1, BJY	09/28/92	2.3×10^{-13}	4.3×10^{-14}	^7Be
Area 1, BJY	10/05/92	2.0×10^{-13}	3.9×10^{-14}	^7Be
Area 1, BJY	10/13/92	2.0×10^{-13}	4.3×10^{-14}	^7Be
Area 1, BJY	10/26/92	8.0×10^{-14}	3.2×10^{-14}	^7Be
Area 1, BJY	11/03/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 1, BJY	11/09/92	1.7×10^{-13}	4.0×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 1, BJY	11/16/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 1, BJY	11/23/92	9.9×10^{-14}	3.3×10^{-14}	^7Be
Area 1, BJY	11/30/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 1, BJY	12/07/92	7.2×10^{-14}	3.1×10^{-14}	^7Be
Area 1, BJY	12/14/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 1, BJY	12/21/92	2.0×10^{-13}	3.9×10^{-14}	^7Be
Area 1, BJY	12/29/92	1.4×10^{-13}	4.5×10^{-14}	^7Be
Area 1, Gravel Pit	01/13/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 1, Gravel Pit	01/21/92	1.8×10^{-13}	4.3×10^{-14}	^7Be
Area 1, Gravel Pit	01/27/92	1.8×10^{-13}	4.9×10^{-14}	^7Be
Area 1, Gravel Pit	02/03/92	1.4×10^{-13}	3.9×10^{-14}	^7Be
Area 1, Gravel Pit	02/10/92	6.0×10^{-14}	2.4×10^{-14}	^7Be
Area 1, Gravel Pit	02/18/92	1.0×10^{-13}	3.6×10^{-14}	^7Be
Area 1, Gravel Pit	02/24/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 1, Gravel Pit	03/02/92	7.3×10^{-14}	2.9×10^{-14}	^7Be
Area 1, Gravel Pit	03/09/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 1, Gravel Pit	03/17/92	9.0×10^{-14}	3.3×10^{-14}	^7Be
Area 1, Gravel Pit	03/23/92	1.0×10^{-13}	3.3×10^{-14}	^7Be
Area 1, Gravel Pit	03/30/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 1, Gravel Pit	04/06/92	2.1×10^{-13}	6.8×10^{-14}	^7Be
Area 1, Gravel Pit	04/13/92	2.7×10^{-13}	6.5×10^{-14}	^7Be
Area 1, Gravel Pit	04/20/92	1.9×10^{-13}	3.9×10^{-14}	^7Be
Area 1, Gravel Pit	04/27/92	3.5×10^{-13}	5.6×10^{-14}	^7Be
Area 1, Gravel Pit	05/04/92	2.4×10^{-13}	4.7×10^{-14}	^7Be
Area 1, Gravel Pit	05/11/92	2.8×10^{-13}	5.0×10^{-14}	^7Be
Area 1, Gravel Pit	05/18/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 1, Gravel Pit	05/26/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 1, Gravel Pit	06/01/92	2.1×10^{-13}	6.0×10^{-14}	^7Be
Area 1, Gravel Pit	06/09/92	2.2×10^{-13}	5.6×10^{-14}	^7Be
Area 1, Gravel Pit	06/15/92	2.4×10^{-13}	5.6×10^{-14}	^7Be
Area 1, Gravel Pit	06/22/92	2.4×10^{-13}	4.5×10^{-14}	^7Be
Area 1, Gravel Pit	06/29/92	1.5×10^{-13}	4.3×10^{-14}	^7Be
Area 1, Gravel Pit	07/06/92	1.1×10^{-13}	3.7×10^{-14}	^7Be
Area 1, Gravel Pit	07/20/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 1, Gravel Pit	07/27/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 1, Gravel Pit	08/03/92	1.4×10^{-13}	3.6×10^{-14}	^7Be
Area 1, Gravel Pit	08/10/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 1, Gravel Pit	08/17/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 1, Gravel Pit	08/24/92	2.9×10^{-13}	5.6×10^{-14}	^7Be
Area 1, Gravel Pit	08/31/92	2.2×10^{-13}	4.1×10^{-14}	^7Be
Area 1, Gravel Pit	09/08/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 1, Gravel Pit	09/14/92	1.9×10^{-13}	4.5×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 1, Gravel Pit	09/21/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 1, Gravel Pit	09/28/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 1, Gravel Pit	10/05/92	2.1×10^{-13}	5.2×10^{-14}	^7Be
Area 1, Gravel Pit	10/12/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 1, Gravel Pit	10/19/92	2.3×10^{-13}	5.3×10^{-14}	^7Be
Area 1, Gravel Pit	10/26/92	1.2×10^{-13}	3.5×10^{-14}	^7Be
Area 1, Gravel Pit	11/09/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 1, Gravel Pit	11/16/92	1.1×10^{-13}	3.2×10^{-14}	^7Be
Area 1, Gravel Pit	11/30/92	1.1×10^{-13}	3.5×10^{-14}	^7Be
Area 1, Gravel Pit	12/08/92	6.1×10^{-14}	2.4×10^{-14}	^7Be
Area 1, Gravel Pit	12/15/92	1.6×10^{-13}	4.2×10^{-14}	^7Be
Area 1, Gravel Pit	12/21/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 1, Gravel Pit	12/28/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 2, 2-1 Substation	01/06/92	1.0×10^{-13}	3.2×10^{-14}	^7Be
Area 2, 2-1 Substation	01/13/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 2, 2-1 Substation	01/21/92	2.7×10^{-13}	5.1×10^{-14}	^7Be
Area 2, 2-1 Substation	01/27/92	1.6×10^{-13}	3.9×10^{-14}	^7Be
Area 2, 2-1 Substation	02/03/92	1.2×10^{-13}	3.9×10^{-14}	^7Be
Area 2, 2-1 Substation	02/18/92	1.4×10^{-13}	4.9×10^{-14}	^7Be
Area 2, 2-1 Substation	02/24/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 2, 2-1 Substation	03/02/92	8.6×10^{-14}	2.8×10^{-14}	^7Be
Area 2, 2-1 Substation	03/09/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 2, 2-1 Substation	03/17/92	1.4×10^{-13}	4.2×10^{-14}	^7Be
Area 2, 2-1 Substation	03/23/92	9.6×10^{-14}	3.5×10^{-14}	^7Be
Area 2, 2-1 Substation	03/30/92	1.1×10^{-13}	3.7×10^{-14}	^7Be
Area 2, 2-1 Substation	04/06/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 2, 2-1 Substation	04/13/92	2.5×10^{-13}	4.6×10^{-14}	^7Be
Area 2, 2-1 Substation	04/20/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 2, 2-1 Substation	05/04/92	2.2×10^{-13}	5.7×10^{-14}	^7Be
Area 2, 2-1 Substation	05/11/92	1.7×10^{-13}	4.3×10^{-14}	^7Be
Area 2, 2-1 Substation	05/18/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 2, 2-1 Substation	05/26/92	1.8×10^{-13}	5.7×10^{-14}	^7Be
Area 2, 2-1 Substation	06/01/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 2, 2-1 Substation	06/08/92	1.4×10^{-13}	4.5×10^{-14}	^7Be
Area 2, 2-1 Substation	06/15/92	1.7×10^{-13}	4.2×10^{-14}	^7Be
Area 2, 2-1 Substation	06/22/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 2, 2-1 Substation	06/29/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 2, 2-1 Substation	07/06/92	8.3×10^{-14}	3.3×10^{-14}	^7Be
Area 2, 2-1 Substation	07/13/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 2, 2-1 Substation	07/20/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 2, 2-1 Substation	07/27/92	1.6×10^{-13}	4.9×10^{-14}	^7Be
Area 2, 2-1 Substation	08/03/92	2.5×10^{-13}	5.5×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 2, 2-1 Substation	08/10/92	2.3×10^{-13}	5.1×10^{-14}	^7Be
Area 2, 2-1 Substation	08/17/92	2.5×10^{-13}	4.8×10^{-14}	^7Be
Area 2, 2-1 Substation	08/24/92	2.4×10^{-13}	4.5×10^{-14}	^7Be
Area 2, 2-1 Substation	08/31/92	3.3×10^{-13}	5.3×10^{-14}	^7Be
Area 2, 2-1 Substation	09/08/92	2.9×10^{-13}	6.5×10^{-14}	^7Be
Area 2, 2-1 Substation	09/14/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 2, 2-1 Substation	09/21/92	2.6×10^{-13}	4.9×10^{-14}	^7Be
Area 2, 2-1 Substation	09/28/92	2.7×10^{-13}	4.9×10^{-14}	^7Be
Area 2, 2-1 Substation	10/05/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 2, 2-1 Substation	10/13/92	3.5×10^{-13}	6.1×10^{-14}	^7Be
Area 2, 2-1 Substation	10/19/92	1.7×10^{-13}	5.3×10^{-14}	^7Be
Area 2, 2-1 Substation	10/26/92	1.8×10^{-13}	5.0×10^{-14}	^7Be
Area 2, 2-1 Substation	11/09/92	1.3×10^{-13}	4.8×10^{-14}	^7Be
Area 2, 2-1 Substation	11/16/92	1.0×10^{-12}	2.6×10^{-13}	^7Be
Area 2, 2-1 Substation	11/23/92	7.7×10^{-14}	2.8×10^{-14}	^7Be
Area 2, 2-1 Substation	12/07/92	7.1×10^{-14}	3.3×10^{-14}	^7Be
Area 2, 2-1 Substation	12/14/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 2, 2-1 Substation	12/21/92	2.1×10^{-13}	3.8×10^{-14}	^7Be
Area 2, 2-1 Substation	12/29/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 2, Complex	01/06/92	1.2×10^{-13}	3.9×10^{-14}	^7Be
Area 2, Complex	01/13/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 2, Complex	01/21/92	2.2×10^{-13}	4.7×10^{-14}	^7Be
Area 2, Complex	01/27/92	1.7×10^{-13}	4.3×10^{-14}	^7Be
Area 2, Complex	02/03/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 2, Complex	02/18/92	1.1×10^{-13}	3.5×10^{-14}	^7Be
Area 2, Complex	02/24/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 2, Complex	03/02/92	1.1×10^{-13}	3.4×10^{-14}	^7Be
Area 2, Complex	03/09/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 2, Complex	03/09/92	4.7×10^{-15}	3.2×10^{-15}	^{208}Tl
Area 2, Complex	03/17/92	1.0×10^{-13}	3.4×10^{-14}	^7Be
Area 2, Complex	03/23/92	6.6×10^{-14}	3.2×10^{-14}	^7Be
Area 2, Complex	03/30/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 2, Complex	04/06/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 2, Complex	04/13/92	2.3×10^{-13}	4.3×10^{-14}	^7Be
Area 2, Complex	04/20/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 2, Complex	04/27/92	3.4×10^{-13}	5.5×10^{-14}	^7Be
Area 2, Complex	05/04/92	3.1×10^{-13}	5.3×10^{-14}	^7Be
Area 2, Complex	05/11/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 2, Complex	05/18/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 2, Complex	05/26/92	3.0×10^{-13}	5.8×10^{-14}	^7Be
Area 2, Complex	06/01/92	1.6×10^{-13}	5.3×10^{-14}	^7Be
Area 2, Complex	06/08/92	2.1×10^{-13}	5.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 2, Complex	06/15/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 2, Complex	06/22/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 2, Complex	06/29/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 2, Complex	07/06/92	1.2×10^{-13}	4.0×10^{-14}	^7Be
Area 2, Complex	07/13/92	1.6×10^{-13}	3.6×10^{-14}	^7Be
Area 2, Complex	07/20/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 2, Complex	07/27/92	1.9×10^{-13}	5.5×10^{-14}	^7Be
Area 2, Complex	08/03/92	2.4×10^{-13}	5.0×10^{-14}	^7Be
Area 2, Complex	08/10/92	2.9×10^{-13}	1.4×10^{-13}	^7Be
Area 2, Complex	08/17/92	2.5×10^{-13}	5.1×10^{-14}	^7Be
Area 2, Complex	08/24/92	2.0×10^{-13}	4.9×10^{-14}	^7Be
Area 2, Complex	08/31/92	2.3×10^{-13}	4.2×10^{-14}	^7Be
Area 2, Complex	09/08/92	2.4×10^{-13}	5.6×10^{-14}	^7Be
Area 2, Complex	09/14/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 2, Complex	09/21/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 2, Complex	09/28/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 2, Complex	10/05/92	1.9×10^{-13}	4.2×10^{-14}	^7Be
Area 2, Complex	10/13/92	2.4×10^{-13}	4.9×10^{-14}	^7Be
Area 2, Complex	10/19/92	2.4×10^{-13}	5.1×10^{-14}	^7Be
Area 2, Complex	10/26/92	8.5×10^{-14}	3.1×10^{-14}	^7Be
Area 2, Complex	11/03/92	2.0×10^{-13}	4.3×10^{-14}	^7Be
Area 2, Complex	11/09/92	2.5×10^{-13}	4.6×10^{-14}	^7Be
Area 2, Complex	11/16/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 2, Complex	11/23/92	5.7×10^{-14}	2.6×10^{-14}	^7Be
Area 2, Complex	11/30/92	1.4×10^{-13}	3.5×10^{-14}	^7Be
Area 2, Complex	12/07/92	6.9×10^{-14}	2.8×10^{-14}	^7Be
Area 2, Complex	12/14/92	1.2×10^{-13}	3.3×10^{-14}	^7Be
Area 2, Complex	12/21/92	2.1×10^{-13}	3.9×10^{-14}	^7Be
Area 2, Complex	12/29/92	2.0×10^{-13}	5.2×10^{-14}	^7Be
Area 3, 3-300 Bunker	01/06/92	1.7×10^{-13}	4.2×10^{-14}	^7Be
Area 3, 3-300 Bunker	01/13/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 3, 3-300 Bunker	01/21/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 3, 3-300 Bunker	01/27/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex	01/06/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 3, Complex	01/13/92	1.4×10^{-13}	4.1×10^{-14}	^7Be
Area 3, Complex	01/21/92	2.5×10^{-13}	5.6×10^{-14}	^7Be
Area 3, Complex	02/10/92	9.7×10^{-14}	4.0×10^{-14}	^7Be
Area 3, Complex	02/18/92	8.5×10^{-14}	3.6×10^{-14}	^7Be
Area 3, Complex	02/24/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 3, Complex	03/09/92	2.4×10^{-13}	4.5×10^{-14}	^7Be
Area 3, Complex	03/17/92	1.1×10^{-13}	4.1×10^{-14}	^7Be
Area 3, Complex	03/23/92	9.2×10^{-14}	3.3×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 3, Complex	03/30/92	1.5×10^{-13}	4.5×10^{-14}	^7Be
Area 3, Complex	04/06/92	2.4×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex	04/13/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 3, Complex	04/20/92	2.8×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex	05/04/92	2.5×10^{-13}	5.8×10^{-14}	^7Be
Area 3, Complex	05/11/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex	05/18/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 3, Complex	05/26/92	2.7×10^{-13}	6.4×10^{-14}	^7Be
Area 3, Complex	06/01/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 3, Complex	06/08/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 3, Complex	06/15/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 3, Complex	06/22/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 3, Complex	06/29/92	2.4×10^{-13}	5.1×10^{-14}	^7Be
Area 3, Complex	07/06/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 3, Complex	07/13/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 3, Complex	07/20/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 3, Complex	07/27/92	1.7×10^{-13}	4.9×10^{-14}	^7Be
Area 3, Complex	08/03/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 3, Complex	08/10/92	1.4×10^{-13}	4.2×10^{-14}	^7Be
Area 3, Complex	08/17/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 3, Complex	08/24/92	2.5×10^{-13}	4.7×10^{-14}	^7Be
Area 3, Complex	08/31/92	3.1×10^{-13}	5.7×10^{-14}	^7Be
Area 3, Complex	09/08/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 3, Complex	09/14/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex	09/21/92	2.5×10^{-13}	4.7×10^{-14}	^7Be
Area 3, Complex	09/28/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 3, Complex	10/05/92	1.8×10^{-13}	3.7×10^{-14}	^7Be
Area 3, Complex	10/13/92	2.5×10^{-13}	5.1×10^{-14}	^7Be
Area 3, Complex	10/19/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex	10/26/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 3, Complex	11/03/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 3, Complex	11/09/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 3, Complex	11/16/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 3, Complex	11/23/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 3, Complex	11/30/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 3, Complex	12/07/92	7.0×10^{-14}	3.3×10^{-14}	^7Be
Area 3, Complex	12/14/92	1.9×10^{-13}	4.2×10^{-14}	^7Be
Area 3, Complex	12/21/92	2.4×10^{-13}	4.4×10^{-14}	^7Be
Area 3, Complex	12/29/92	1.4×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex No. 2	01/06/92	6.9×10^{-14}	2.5×10^{-14}	^7Be
Area 3, Complex No. 2	01/13/92	2.0×10^{-13}	5.8×10^{-14}	^7Be
Area 3, Complex No. 2	01/21/92	1.7×10^{-13}	4.4×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 3, Complex No. 2	01/27/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 3, Complex No. 2	02/03/92	1.2×10^{-13}	4.2×10^{-14}	^7Be
Area 3, Complex No. 2	02/24/92	2.7×10^{-13}	5.3×10^{-14}	^7Be
Area 3, Complex No. 2	03/02/92	1.1×10^{-13}	3.1×10^{-14}	^7Be
Area 3, Complex No. 2	03/09/92	1.9×10^{-13}	3.8×10^{-14}	^7Be
Area 3, Complex No. 2	03/17/92	1.3×10^{-13}	4.5×10^{-14}	^7Be
Area 3, Complex No. 2	03/23/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 3, Complex No. 2	03/30/92	1.6×10^{-13}	4.6×10^{-14}	^7Be
Area 3, Complex No. 2	04/06/92	2.8×10^{-13}	5.2×10^{-14}	^7Be
Area 3, Complex No. 2	04/13/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 3, Complex No. 2	04/20/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 3, Complex No. 2	05/04/92	3.7×10^{-13}	6.9×10^{-14}	^7Be
Area 3, Complex No. 2	05/11/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 3, Complex No. 2	05/18/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 3, Complex No. 2	05/26/92	2.6×10^{-13}	6.7×10^{-14}	^7Be
Area 3, Complex No. 2	06/01/92	1.9×10^{-13}	5.1×10^{-14}	^7Be
Area 3, Complex No. 2	06/08/92	1.5×10^{-13}	4.3×10^{-14}	^7Be
Area 3, Complex No. 2	06/15/92	2.4×10^{-13}	5.1×10^{-14}	^7Be
Area 3, Complex No. 2	06/22/92	2.7×10^{-13}	5.9×10^{-14}	^7Be
Area 3, Complex No. 2	06/29/92	2.3×10^{-13}	5.5×10^{-14}	^7Be
Area 3, Complex No. 2	07/06/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 3, Complex No. 2	07/13/92	2.4×10^{-13}	6.7×10^{-14}	^7Be
Area 3, Complex No. 2	07/20/92	3.1×10^{-13}	6.2×10^{-14}	^7Be
Area 3, Complex No. 2	07/27/92	2.0×10^{-13}	5.5×10^{-14}	^7Be
Area 3, Complex No. 2	08/03/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 3, Complex No. 2	08/17/92	3.6×10^{-13}	6.6×10^{-14}	^7Be
Area 3, Complex No. 2	08/24/92	2.9×10^{-13}	5.1×10^{-14}	^7Be
Area 3, Complex No. 2	08/31/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 3, Complex No. 2	09/08/92	1.7×10^{-13}	4.3×10^{-14}	^7Be
Area 3, Complex No. 2	09/14/92	2.8×10^{-13}	5.8×10^{-14}	^7Be
Area 3, Complex No. 2	09/21/92	2.9×10^{-13}	5.2×10^{-14}	^7Be
Area 3, Complex No. 2	09/28/92	2.0×10^{-13}	5.1×10^{-14}	^7Be
Area 3, Complex No. 2	10/05/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 3, Complex No. 2	10/13/92	2.9×10^{-13}	5.6×10^{-14}	^7Be
Area 3, Complex No. 2	10/19/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 3, Complex No. 2	10/26/92	1.5×10^{-13}	3.6×10^{-14}	^7Be
Area 3, Complex No. 2	11/03/92	1.1×10^{-13}	2.6×10^{-14}	^7Be
Area 3, Complex No. 2	11/09/92	4.4×10^{-13}	1.1×10^{-13}	^7Be
Area 3, Complex No. 2	11/16/92	1.1×10^{-13}	3.9×10^{-14}	^7Be
Area 3, Complex No. 2	11/23/92	1.3×10^{-13}	3.7×10^{-14}	^7Be
Area 3, Complex No. 2	11/30/92	1.0×10^{-13}	3.2×10^{-14}	^7Be
Area 3, Complex No. 2	12/14/92	1.3×10^{-13}	3.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>		<u>Radio-nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 3, Complex No. 2	12/21/92	2.6×10^{-13}	4.6×10^{-14}	⁷ Be
Area 3, Complex No. 2	12/29/92	1.9×10^{-13}	5.5×10^{-14}	⁷ Be
Area 3, Mud Plant	02/24/92	2.0×10^{-13}	4.3×10^{-14}	⁷ Be
Area 3, Mud Plant	03/09/92	2.7×10^{-13}	5.1×10^{-14}	⁷ Be
Area 3, Mud Plant	03/17/92	1.1×10^{-13}	5.0×10^{-14}	⁷ Be
Area 3, Mud Plant	03/23/92	1.3×10^{-13}	4.1×10^{-14}	⁷ Be
Area 3, Mud Plant	03/30/92	1.1×10^{-13}	5.2×10^{-14}	⁷ Be
Area 3, Mud Plant	04/06/92	2.1×10^{-13}	5.3×10^{-14}	⁷ Be
Area 3, Mud Plant	04/13/92	2.2×10^{-13}	4.9×10^{-14}	⁷ Be
Area 3, Mud Plant	04/20/92	3.4×10^{-13}	6.0×10^{-14}	⁷ Be
Area 3, Mud Plant	05/11/92	1.6×10^{-13}	5.1×10^{-14}	⁷ Be
Area 3, Mud Plant	05/18/92	1.8×10^{-13}	4.1×10^{-14}	⁷ Be
Area 3, Mud Plant	05/26/92	2.0×10^{-13}	6.3×10^{-14}	⁷ Be
Area 3, Mud Plant	06/01/92	2.4×10^{-13}	5.2×10^{-14}	⁷ Be
Area 3, Mud Plant	06/08/92	1.9×10^{-13}	5.0×10^{-14}	⁷ Be
Area 3, Mud Plant	06/15/92	2.0×10^{-13}	4.7×10^{-14}	⁷ Be
Area 3, Mud Plant	06/22/92	2.3×10^{-13}	5.7×10^{-14}	⁷ Be
Area 3, Mud Plant	06/29/92	2.6×10^{-13}	5.9×10^{-14}	⁷ Be
Area 3, Mud Plant	07/06/92	1.5×10^{-13}	4.0×10^{-14}	⁷ Be
Area 3, Mud Plant	07/13/92	2.0×10^{-13}	5.4×10^{-14}	⁷ Be
Area 3, Mud Plant	07/20/92	2.4×10^{-13}	6.1×10^{-14}	⁷ Be
Area 3, Mud Plant	07/27/92	1.8×10^{-13}	5.1×10^{-14}	⁷ Be
Area 3, Mud Plant	08/03/92	1.7×10^{-13}	4.1×10^{-14}	⁷ Be
Area 3, Mud Plant	08/10/92	1.2×10^{-13}	3.6×10^{-14}	⁷ Be
Area 3, Mud Plant	08/17/92	2.5×10^{-13}	5.0×10^{-14}	⁷ Be
Area 3, Mud Plant	08/24/92	2.4×10^{-13}	4.7×10^{-14}	⁷ Be
Area 3, Mud Plant	08/31/92	2.0×10^{-13}	5.1×10^{-14}	⁷ Be
Area 3, Mud Plant	09/08/92	1.8×10^{-13}	4.7×10^{-14}	⁷ Be
Area 3, Mud Plant	09/14/92	2.1×10^{-13}	5.4×10^{-14}	⁷ Be
Area 3, Mud Plant	09/21/92	2.0×10^{-13}	4.4×10^{-14}	⁷ Be
Area 3, Mud Plant	09/28/92	2.6×10^{-13}	6.3×10^{-14}	⁷ Be
Area 3, Mud Plant	10/05/92	2.3×10^{-13}	4.4×10^{-14}	⁷ Be
Area 3, Mud Plant	10/13/92	2.8×10^{-13}	6.1×10^{-14}	⁷ Be
Area 3, Mud Plant	10/19/92	2.6×10^{-13}	5.2×10^{-14}	⁷ Be
Area 3, Mud Plant	10/26/92	1.3×10^{-13}	4.5×10^{-14}	⁷ Be
Area 3, Mud Plant	11/03/92	2.2×10^{-13}	5.6×10^{-14}	⁷ Be
Area 3, Mud Plant	11/09/92	2.0×10^{-13}	4.5×10^{-14}	⁷ Be
Area 3, Mud Plant	11/16/92	1.3×10^{-13}	4.2×10^{-14}	⁷ Be
Area 3, Mud Plant	11/23/92	1.3×10^{-13}	3.6×10^{-14}	⁷ Be
Area 3, Mud Plant	11/30/92	2.5×10^{-13}	4.8×10^{-14}	⁷ Be
Area 3, Mud Plant	12/14/92	1.9×10^{-13}	4.4×10^{-14}	⁷ Be
Area 3, Mud Plant	12/21/92	2.4×10^{-13}	4.5×10^{-14}	⁷ Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 3, Mud Plant	12/29/92	1.6×10^{-13}	5.0×10^{-14}	^7Be
Area 3, U-3ah/at E	01/06/92	9.7×10^{-14}	2.9×10^{-14}	^7Be
Area 3, U-3ah/at E	01/13/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at E	01/21/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 3, U-3ah/at E	01/27/92	2.4×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at E	02/03/92	1.1×10^{-13}	3.6×10^{-14}	^7Be
Area 3, U-3ah/at E	02/10/92	6.8×10^{-14}	2.6×10^{-14}	^7Be
Area 3, U-3ah/at E	02/18/92	1.3×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at E	02/24/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at E	03/02/92	9.2×10^{-14}	3.1×10^{-14}	^7Be
Area 3, U-3ah/at E	03/09/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at E	03/23/92	1.2×10^{-13}	3.9×10^{-14}	^7Be
Area 3, U-3ah/at E	03/30/92	1.1×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at E	04/06/92	2.4×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at E	04/13/92	2.6×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at E	04/20/92	1.5×10^{-13}	3.6×10^{-14}	^7Be
Area 3, U-3ah/at E	05/04/92	2.7×10^{-13}	5.8×10^{-14}	^7Be
Area 3, U-3ah/at E	05/11/92	2.6×10^{-13}	5.1×10^{-14}	^7Be
Area 3, U-3ah/at E	05/18/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at E	05/26/92	2.3×10^{-13}	5.4×10^{-14}	^7Be
Area 3, U-3ah/at E	06/01/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at E	06/08/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at E	06/15/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 3, U-3ah/at E	06/22/92	2.3×10^{-13}	5.7×10^{-14}	^7Be
Area 3, U-3ah/at E	06/29/92	1.5×10^{-13}	5.9×10^{-14}	^7Be
Area 3, U-3ah/at E	07/06/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 3, U-3ah/at E	07/13/92	2.0×10^{-13}	5.3×10^{-14}	^7Be
Area 3, U-3ah/at E	07/20/92	1.4×10^{-13}	3.4×10^{-14}	^7Be
Area 3, U-3ah/at E	07/27/92	2.7×10^{-13}	6.1×10^{-14}	^7Be
Area 3, U-3ah/at E	08/03/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 3, U-3ah/at E	08/10/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 3, U-3ah/at E	08/17/92	2.8×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at E	08/24/92	3.0×10^{-13}	5.2×10^{-14}	^7Be
Area 3, U-3ah/at E	08/31/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at E	09/08/92	2.7×10^{-13}	6.3×10^{-14}	^7Be
Area 3, U-3ah/at E	09/14/92	2.5×10^{-13}	5.4×10^{-14}	^7Be
Area 3, U-3ah/at E	09/21/92	2.5×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at E	09/28/92	3.0×10^{-13}	5.2×10^{-14}	^7Be
Area 3, U-3ah/at E	10/05/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at E	10/13/92	2.8×10^{-13}	5.4×10^{-14}	^7Be
Area 3, U-3ah/at E	10/19/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 3, U-3ah/at E	10/26/92	1.2×10^{-13}	3.8×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 3, U-3ah/at E	11/03/92	1.6×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at E	11/09/92	1.9×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at E	11/16/92	1.6×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at E	11/23/92	8.7×10^{-14}	3.2×10^{-14}	^7Be
Area 3, U-3ah/at E	11/30/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at E	12/07/92	4.7×10^{-14}	2.5×10^{-14}	^7Be
Area 3, U-3ah/at E	12/14/92	1.6×10^{-13}	4.0×10^{-14}	^7Be
Area 3, U-3ah/at E	12/22/92	1.8×10^{-13}	2.9×10^{-14}	^7Be
Area 3, U-3ah/at N	01/06/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 3, U-3ah/at N	01/13/92	1.8×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at N	01/21/92	2.3×10^{-13}	4.9×10^{-14}	^7Be
Area 3, U-3ah/at N	01/27/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at N	02/03/92	7.2×10^{-14}	3.9×10^{-14}	^7Be
Area 3, U-3ah/at N	02/18/92	1.3×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at N	02/24/92	2.7×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at N	03/02/92	6.6×10^{-14}	2.7×10^{-14}	^7Be
Area 3, U-3ah/at N	03/09/92	1.8×10^{-13}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at N	03/17/92	1.0×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at N	03/23/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at N	03/30/92	1.9×10^{-13}	5.1×10^{-14}	^7Be
Area 3, U-3ah/at N	04/06/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 3, U-3ah/at N	04/13/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at N	04/20/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at N	05/04/92	3.0×10^{-13}	6.9×10^{-14}	^7Be
Area 3, U-3ah/at N	05/11/92	2.3×10^{-13}	5.4×10^{-14}	^7Be
Area 3, U-3ah/at N	05/18/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at N	05/26/92	3.3×10^{-13}	7.4×10^{-14}	^7Be
Area 3, U-3ah/at N	06/01/92	2.7×10^{-13}	5.7×10^{-14}	^7Be
Area 3, U-3ah/at N	06/08/92	2.2×10^{-13}	5.3×10^{-14}	^7Be
Area 3, U-3ah/at N	06/15/92	2.9×10^{-13}	5.8×10^{-14}	^7Be
Area 3, U-3ah/at N	06/22/92	3.4×10^{-13}	6.8×10^{-14}	^7Be
Area 3, U-3ah/at N	06/29/92	3.5×10^{-13}	5.9×10^{-14}	^7Be
Area 3, U-3ah/at N	07/06/92	1.2×10^{-13}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at N	07/13/92	2.2×10^{-13}	5.8×10^{-14}	^7Be
Area 3, U-3ah/at N	07/13/92	5.4×10^{-15}	2.1×10^{-15}	^{57}Co
Area 3, U-3ah/at N	07/20/92	2.6×10^{-13}	6.0×10^{-14}	^7Be
Area 3, U-3ah/at N	07/27/92	2.6×10^{-13}	6.5×10^{-14}	^7Be
Area 3, U-3ah/at N	08/10/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at N	08/17/92	2.8×10^{-13}	5.6×10^{-14}	^7Be
Area 3, U-3ah/at N	08/24/92	7.6×10^{-13}	1.4×10^{-13}	^7Be
Area 3, U-3ah/at N	08/31/92	2.4×10^{-13}	5.9×10^{-14}	^7Be
Area 3, U-3ah/at N	09/08/92	2.7×10^{-13}	6.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 3, U-3ah/at N	09/14/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at N	09/21/92	3.3×10^{-13}	5.7×10^{-14}	^7Be
Area 3, U-3ah/at N	09/28/92	3.6×10^{-13}	9.5×10^{-14}	^7Be
Area 3, U-3ah/at N	10/05/92	2.8×10^{-13}	4.9×10^{-14}	^7Be
Area 3, U-3ah/at N	10/13/92	1.3×10^{-13}	2.8×10^{-14}	^7Be
Area 3, U-3ah/at N	10/19/92	2.9×10^{-13}	5.4×10^{-14}	^7Be
Area 3, U-3ah/at N	10/26/92	1.5×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at N	11/03/92	2.7×10^{-13}	5.6×10^{-14}	^7Be
Area 3, U-3ah/at N	11/09/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at N	11/16/92	2.4×10^{-13}	5.8×10^{-14}	^7Be
Area 3, U-3ah/at N	11/23/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at N	11/30/92	2.7×10^{-13}	5.5×10^{-14}	^7Be
Area 3, U-3ah/at N	12/07/92	7.6×10^{-14}	3.6×10^{-14}	^7Be
Area 3, U-3ah/at N	12/14/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 3, U-3ah/at N	12/22/92	2.8×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at S	01/06/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 3, U-3ah/at S	01/13/92	9.4×10^{-14}	3.3×10^{-14}	^7Be
Area 3, U-3ah/at S	01/21/92	1.9×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at S	01/27/92	1.6×10^{-13}	3.6×10^{-14}	^7Be
Area 3, U-3ah/at S	02/03/92	1.1×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at S	02/10/92	8.0×10^{-14}	2.8×10^{-14}	^7Be
Area 3, U-3ah/at S	02/18/92	9.2×10^{-14}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at S	02/24/92	2.4×10^{-13}	4.7×10^{-14}	^7Be
Area 3, U-3ah/at S	03/02/92	1.0×10^{-13}	3.3×10^{-14}	^7Be
Area 3, U-3ah/at S	03/09/92	2.3×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at S	03/17/92	7.5×10^{-14}	4.0×10^{-14}	^7Be
Area 3, U-3ah/at S	03/23/92	1.2×10^{-13}	3.9×10^{-14}	^7Be
Area 3, U-3ah/at S	03/30/92	9.5×10^{-14}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at S	04/06/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at S	04/13/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 3, U-3ah/at S	04/20/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at S	05/04/92	2.4×10^{-13}	6.0×10^{-14}	^7Be
Area 3, U-3ah/at S	05/11/92	2.6×10^{-13}	5.5×10^{-14}	^7Be
Area 3, U-3ah/at S	05/18/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at S	05/26/92	2.0×10^{-13}	7.3×10^{-14}	^7Be
Area 3, U-3ah/at S	06/01/92	3.5×10^{-13}	6.6×10^{-14}	^7Be
Area 3, U-3ah/at S	06/08/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at S	06/15/92	2.7×10^{-13}	5.4×10^{-14}	^7Be
Area 3, U-3ah/at S	06/22/92	1.5×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at S	06/29/92	2.2×10^{-13}	4.7×10^{-14}	^7Be
Area 3, U-3ah/at S	07/06/92	9.6×10^{-14}	3.4×10^{-14}	^7Be
Area 3, U-3ah/at S	07/13/92	1.7×10^{-13}	5.1×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 3, U-3ah/at S	07/20/92	2.4×10^{-13}	6.2×10^{-14}	^7Be
Area 3, U-3ah/at S	07/27/92	1.7×10^{-13}	5.7×10^{-14}	^7Be
Area 3, U-3ah/at S	08/03/92	3.1×10^{-13}	6.4×10^{-14}	^7Be
Area 3, U-3ah/at S	08/10/92	1.6×10^{-13}	4.1×10^{-14}	^7Be
Area 3, U-3ah/at S	08/17/92	2.5×10^{-13}	4.9×10^{-14}	^7Be
Area 3, U-3ah/at S	08/24/92	2.9×10^{-13}	5.2×10^{-14}	^7Be
Area 3, U-3ah/at S	08/31/92	2.8×10^{-13}	5.4×10^{-14}	^7Be
Area 3, U-3ah/at S	09/08/92	2.3×10^{-13}	5.7×10^{-14}	^7Be
Area 3, U-3ah/at S	09/14/92	2.5×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at S	09/21/92	2.4×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at S	09/28/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 3, U-3ah/at S	10/05/92	2.3×10^{-13}	4.3×10^{-14}	^7Be
Area 3, U-3ah/at S	10/13/92	3.3×10^{-13}	6.3×10^{-14}	^7Be
Area 3, U-3ah/at S	10/19/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 3, U-3ah/at S	10/26/92	8.8×10^{-14}	3.1×10^{-14}	^7Be
Area 3, U-3ah/at S	11/03/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 3, U-3ah/at S	11/09/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at S	11/16/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at S	11/23/92	1.1×10^{-13}	3.4×10^{-14}	^7Be
Area 3, U-3ah/at S	11/30/92	4.1×10^{-14}	2.3×10^{-14}	^7Be
Area 3, U-3ah/at S	12/14/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 3, U-3ah/at S	12/22/92	2.3×10^{-13}	3.4×10^{-14}	^7Be
Area 3, U-3ah/at W	01/06/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 3, U-3ah/at W	01/13/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at W	01/21/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at W	01/27/92	1.9×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at W	02/03/92	1.4×10^{-13}	4.3×10^{-14}	^7Be
Area 3, U-3ah/at W	02/18/92	1.1×10^{-13}	5.3×10^{-14}	^7Be
Area 3, U-3ah/at W	02/24/92	2.7×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at W	02/24/92	7.9×10^{-14}	6.0×10^{-14}	^{99}Tc
Area 3, U-3ah/at W	03/02/92	7.7×10^{-14}	3.0×10^{-14}	^7Be
Area 3, U-3ah/at W	03/09/92	2.4×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at W	03/17/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 3, U-3ah/at W	03/23/92	1.2×10^{-13}	3.9×10^{-14}	^7Be
Area 3, U-3ah/at W	03/30/92	1.6×10^{-13}	5.0×10^{-14}	^7Be
Area 3, U-3ah/at W	04/06/92	3.0×10^{-13}	5.3×10^{-14}	^7Be
Area 3, U-3ah/at W	04/13/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at W	04/20/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 3, U-3ah/at W	05/04/92	3.3×10^{-13}	7.1×10^{-14}	^7Be
Area 3, U-3ah/at W	05/11/92	1.8×10^{-13}	4.6×10^{-14}	^7Be
Area 3, U-3ah/at W	05/18/92	3.2×10^{-13}	8.1×10^{-14}	^7Be
Area 3, U-3ah/at W	06/01/92	2.0×10^{-13}	6.4×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 3, U-3ah/at W	06/08/92	2.2×10^{-13}	6.2×10^{-14}	^7Be
Area 3, U-3ah/at W	06/15/92	3.0×10^{-13}	6.8×10^{-14}	^7Be
Area 3, U-3ah/at W	06/22/92	2.4×10^{-13}	6.2×10^{-14}	^7Be
Area 3, U-3ah/at W	06/29/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 3, U-3ah/at W	07/06/92	8.2×10^{-14}	3.9×10^{-14}	^7Be
Area 3, U-3ah/at W	07/13/92	1.6×10^{-13}	5.8×10^{-14}	^7Be
Area 3, U-3ah/at W	07/20/92	2.2×10^{-13}	6.2×10^{-14}	^7Be
Area 3, U-3ah/at W	07/27/92	1.9×10^{-13}	5.1×10^{-14}	^7Be
Area 3, U-3ah/at W	08/03/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 3, U-3ah/at W	08/10/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 3, U-3ah/at W	08/17/92	2.3×10^{-13}	4.3×10^{-14}	^7Be
Area 3, U-3ah/at W	08/24/92	3.2×10^{-13}	5.0×10^{-14}	^7Be
Area 3, U-3ah/at W	08/31/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at W	09/08/92	2.1×10^{-13}	5.5×10^{-14}	^7Be
Area 3, U-3ah/at W	09/14/92	1.9×10^{-13}	5.3×10^{-14}	^7Be
Area 3, U-3ah/at W	09/21/92	3.0×10^{-13}	5.2×10^{-14}	^7Be
Area 3, U-3ah/at W	09/28/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 3, U-3ah/at W	10/05/92	1.9×10^{-13}	3.8×10^{-14}	^7Be
Area 3, U-3ah/at W	10/13/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 3, U-3ah/at W	10/19/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 3, U-3ah/at W	10/26/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 3, U-3ah/at W	11/03/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 3, U-3ah/at W	11/09/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 3, U-3ah/at W	11/16/92	1.8×10^{-13}	4.5×10^{-14}	^7Be
Area 3, U-3ah/at W	11/23/92	8.8×10^{-14}	3.3×10^{-14}	^7Be
Area 3, U-3ah/at W	11/30/92	2.2×10^{-13}	4.3×10^{-14}	^7Be
Area 3, U-3ah/at W	12/07/92	5.1×10^{-14}	2.1×10^{-14}	^7Be
Area 3, U-3ah/at W	12/14/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 5, DOD Yard	01/06/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 5, DOD Yard	01/13/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 5, DOD Yard	01/21/92	1.1×10^{-13}	4.0×10^{-14}	^7Be
Area 5, DOD Yard	02/18/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 5, DOD Yard	02/24/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 5, DOD Yard	03/02/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 5, DOD Yard	03/09/92	2.5×10^{-13}	4.7×10^{-14}	^7Be
Area 5, DOD Yard	03/16/92	1.6×10^{-13}	3.6×10^{-14}	^7Be
Area 5, DOD Yard	03/24/92	1.2×10^{-13}	3.9×10^{-14}	^7Be
Area 5, DOD Yard	03/30/92	9.6×10^{-14}	3.3×10^{-14}	^7Be
Area 5, DOD Yard	04/07/92	2.5×10^{-13}	4.8×10^{-14}	^7Be
Area 5, DOD Yard	04/14/92	1.6×10^{-13}	4.6×10^{-14}	^7Be
Area 5, DOD Yard	04/20/92	2.7×10^{-13}	4.7×10^{-14}	^7Be
Area 5, DOD Yard	05/05/92	2.5×10^{-13}	5.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, DOD Yard	05/11/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 5, DOD Yard	05/18/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 5, DOD Yard	05/26/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 5, DOD Yard	06/01/92	2.0×10^{-13}	4.0×10^{-14}	^7Be
Area 5, DOD Yard	06/09/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 5, DOD Yard	06/15/92	3.3×10^{-13}	5.5×10^{-14}	^7Be
Area 5, DOD Yard	06/22/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 5, DOD Yard	06/29/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 5, DOD Yard	07/06/92	1.0×10^{-13}	4.3×10^{-14}	^7Be
Area 5, DOD Yard	07/13/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 5, DOD Yard	07/20/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 5, DOD Yard	07/27/92	2.6×10^{-13}	7.4×10^{-14}	^7Be
Area 5, DOD Yard	08/03/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 5, DOD Yard	08/11/92	1.8×10^{-13}	5.4×10^{-14}	^7Be
Area 5, DOD Yard	08/17/92	2.6×10^{-13}	5.5×10^{-14}	^7Be
Area 5, DOD Yard	08/24/92	3.0×10^{-13}	6.1×10^{-14}	^7Be
Area 5, DOD Yard	08/31/92	2.3×10^{-13}	6.1×10^{-14}	^7Be
Area 5, DOD Yard	09/08/92	2.4×10^{-13}	6.0×10^{-14}	^7Be
Area 5, DOD Yard	09/14/92	3.0×10^{-13}	5.9×10^{-14}	^7Be
Area 5, DOD Yard	09/21/92	2.7×10^{-13}	6.9×10^{-14}	^7Be
Area 5, DOD Yard	09/28/92	2.7×10^{-13}	5.6×10^{-14}	^7Be
Area 5, DOD Yard	10/05/92	2.8×10^{-13}	5.6×10^{-14}	^7Be
Area 5, DOD Yard	10/12/92	2.8×10^{-13}	6.5×10^{-14}	^7Be
Area 5, DOD Yard	10/19/92	2.3×10^{-13}	5.6×10^{-14}	^7Be
Area 5, DOD Yard	10/26/92	8.2×10^{-14}	3.3×10^{-14}	^7Be
Area 5, DOD Yard	11/02/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 5, DOD Yard	11/09/92	2.1×10^{-13}	4.7×10^{-14}	^7Be
Area 5, DOD Yard	11/16/92	9.4×10^{-14}	3.4×10^{-14}	^7Be
Area 5, DOD Yard	11/23/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 5, DOD Yard	11/30/92	1.4×10^{-13}	3.5×10^{-14}	^7Be
Area 5, DOD Yard	12/15/92	1.3×10^{-13}	4.1×10^{-14}	^7Be
Area 5, DOD Yard	12/21/92	2.1×10^{-13}	4.0×10^{-14}	^7Be
Area 5, DOD Yard	12/28/92	9.0×10^{-14}	3.7×10^{-14}	^7Be
Area 5, Gate 200 S	01/13/92	1.4×10^{-13}	3.9×10^{-14}	^7Be
Area 5, Gate 200 S	01/21/92	1.7×10^{-13}	4.5×10^{-14}	^7Be
Area 5, Gate 200 S	01/27/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 5, Gate 200 S	02/24/92	2.1×10^{-13}	4.0×10^{-14}	^7Be
Area 5, Gate 200 S	03/02/92	4.7×10^{-14}	2.4×10^{-14}	^7Be
Area 5, Gate 200 S	03/09/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 5, Gate 200 S	03/16/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 5, Gate 200 S	03/24/92	9.0×10^{-14}	2.9×10^{-14}	^7Be
Area 5, Gate 200 S	03/30/92	1.4×10^{-13}	3.4×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, Gate 200 S	04/07/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 5, Gate 200 S	04/14/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Gate 200 S	04/20/92	2.3×10^{-13}	3.8×10^{-14}	^7Be
Area 5, Gate 200 S	04/20/92	6.6×10^{-15}	2.8×10^{-15}	^{208}Tl
Area 5, Gate 200 S	04/28/92	2.8×10^{-13}	4.7×10^{-14}	^7Be
Area 5, Gate 200 S	05/05/92	2.5×10^{-13}	4.7×10^{-14}	^7Be
Area 5, Gate 200 S	05/11/92	2.1×10^{-13}	4.5×10^{-14}	^7Be
Area 5, Gate 200 S	05/18/92	1.7×10^{-14}	3.0×10^{-15}	^7Be
Area 5, Gate 200 S	05/26/92	2.9×10^{-13}	5.5×10^{-14}	^7Be
Area 5, Gate 200 S	06/01/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 5, Gate 200 S	06/09/92	2.3×10^{-13}	6.0×10^{-14}	^7Be
Area 5, Gate 200 S	06/15/92	2.8×10^{-13}	5.8×10^{-14}	^7Be
Area 5, Gate 200 S	06/22/92	1.6×10^{-13}	4.6×10^{-14}	^7Be
Area 5, Gate 200 S	06/29/92	2.4×10^{-13}	4.3×10^{-14}	^7Be
Area 5, Gate 200 S	07/06/92	1.5×10^{-13}	4.0×10^{-14}	^7Be
Area 5, Gate 200 S	07/13/92	1.8×10^{-13}	4.2×10^{-14}	^7Be
Area 5, Gate 200 S	07/20/92	1.9×10^{-13}	3.8×10^{-14}	^7Be
Area 5, Gate 200 S	07/27/92	2.0×10^{-13}	5.0×10^{-14}	^7Be
Area 5, Gate 200 S	08/03/92	1.9×10^{-13}	3.5×10^{-14}	^7Be
Area 5, Gate 200 S	08/11/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 5, Gate 200 S	08/17/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 5, Gate 200 S	08/24/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 5, Gate 200 S	08/31/92	2.9×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Gate 200 S	09/08/92	2.5×10^{-13}	4.9×10^{-14}	^7Be
Area 5, Gate 200 S	09/14/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 5, Gate 200 S	09/21/92	2.8×10^{-13}	1.3×10^{-13}	^7Be
Area 5, Gate 200 S	09/28/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 5, Gate 200 S	10/05/92	2.5×10^{-13}	4.3×10^{-14}	^7Be
Area 5, Gate 200 S	10/12/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 5, Gate 200 S	10/19/92	1.7×10^{-13}	3.6×10^{-14}	^7Be
Area 5, Gate 200 S	10/26/92	1.3×10^{-13}	3.9×10^{-14}	^7Be
Area 5, Gate 200 S	11/02/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 5, Gate 200 S	11/09/92	1.1×10^{-13}	3.2×10^{-14}	^7Be
Area 5, Gate 200 S	11/16/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 5, Gate 200 S	11/23/92	8.2×10^{-14}	2.8×10^{-14}	^7Be
Area 5, Gate 200 S	11/30/92	2.4×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Gate 200 S	12/07/92	4.3×10^{-14}	2.0×10^{-14}	^7Be
Area 5, Gate 200 S	12/15/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Gate 200 S	12/21/92	2.3×10^{-13}	4.0×10^{-14}	^7Be
Area 5, Gate 200 S	12/28/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 1	01/06/92	1.3×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 1	01/13/92	2.4×10^{-13}	4.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 1	01/21/92	1.5×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 1	01/27/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 1	02/03/92	1.4×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 1	02/18/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 1	02/24/92	3.0×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS No. 1	03/09/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 1	03/16/92	7.1×10^{-14}	3.1×10^{-14}	^7Be
Area 5, RWMS No. 1	03/24/92	9.9×10^{-14}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 1	03/30/92	1.6×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 1	04/07/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 1	04/14/92	5.5×10^{-13}	1.2×10^{-13}	^7Be
Area 5, RWMS No. 1	04/20/92	2.6×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 1	05/05/92	3.5×10^{-13}	7.0×10^{-14}	^7Be
Area 5, RWMS No. 1	05/11/92	1.7×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 1	05/18/92	1.8×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS No. 1	05/26/92	2.8×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS No. 1	06/01/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 1	06/09/92	2.4×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS No. 1	06/15/92	2.3×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 1	06/22/92	2.0×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 1	06/29/92	2.6×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS No. 1	07/13/92	1.6×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 1	07/20/92	1.6×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 1	07/27/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 1	08/03/92	1.4×10^{-13}	3.3×10^{-14}	^7Be
Area 5, RWMS No. 1	08/11/92	1.4×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 1	08/17/92	3.1×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 1	08/24/92	3.0×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 1	08/31/92	2.5×10^{-13}	9.1×10^{-14}	^7Be
Area 5, RWMS No. 1	09/08/92	2.0×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 1	09/14/92	2.7×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 1	09/21/92	3.1×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 1	09/28/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 1	10/05/92	2.6×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 1	10/12/92	2.9×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 1	10/19/92	2.5×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS No. 1	11/02/92	2.0×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 1	11/09/92	1.2×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 1	11/16/92	1.4×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 1	11/23/92	7.6×10^{-14}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 1	11/30/92	1.3×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 1	12/07/92	9.9×10^{-14}	4.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 1	12/15/92	2.2×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 1	12/21/92	2.6×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 1	12/28/92	1.3×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 2	01/13/92	1.7×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 2	01/21/92	2.4×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 2	01/27/92	2.5×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 2	02/03/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS No. 2	02/10/92	6.4×10^{-14}	2.6×10^{-14}	^7Be
Area 5, RWMS No. 2	02/18/92	1.3×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 2	02/24/92	2.6×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 2	03/02/92	1.2×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 2	03/09/92	2.2×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 2	03/16/92	8.9×10^{-14}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 2	03/30/92	1.4×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 2	04/07/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 2	04/14/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 2	04/20/92	2.5×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 2	04/28/92	2.3×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 2	05/05/92	2.8×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS No. 2	05/11/92	2.5×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 2	05/18/92	2.6×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 2	05/26/92	3.3×10^{-13}	7.8×10^{-14}	^7Be
Area 5, RWMS No. 2	06/01/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS No. 2	06/09/92	2.8×10^{-13}	9.3×10^{-14}	^7Be
Area 5, RWMS No. 2	06/15/92	2.4×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 2	06/22/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 2	06/29/92	2.0×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 2	07/06/92	1.5×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 2	07/13/92	1.9×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS No. 2	07/20/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 2	07/27/92	1.3×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS No. 2	08/11/92	1.6×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 2	08/17/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 2	08/24/92	3.3×10^{-13}	7.1×10^{-14}	^7Be
Area 5, RWMS No. 2	08/31/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 2	09/08/92	1.9×10^{-13}	7.0×10^{-14}	^7Be
Area 5, RWMS No. 2	09/14/92	2.9×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS No. 2	09/21/92	1.4×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 2	09/28/92	2.1×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 2	10/05/92	2.9×10^{-13}	6.8×10^{-14}	^7Be
Area 5, RWMS No. 2	10/12/92	2.6×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 2	10/19/92	2.6×10^{-13}	8.3×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	<u>μCi/mL</u>		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 2	10/26/92	1.5×10^{-13}	4.4×10^{-14}	⁷ Be
Area 5, RWMS No. 2	11/02/92	2.2×10^{-13}	5.4×10^{-14}	⁷ Be
Area 5, RWMS No. 2	11/09/92	1.5×10^{-13}	3.8×10^{-14}	⁷ Be
Area 5, RWMS No. 2	11/16/92	1.2×10^{-13}	3.5×10^{-14}	⁷ Be
Area 5, RWMS No. 2	11/23/92	8.7×10^{-14}	3.2×10^{-14}	⁷ Be
Area 5, RWMS No. 2	11/30/92	2.1×10^{-13}	5.7×10^{-14}	⁷ Be
Area 5, RWMS No. 2	12/07/92	4.1×10^{-14}	2.2×10^{-14}	⁷ Be
Area 5, RWMS No. 2	12/15/92	1.8×10^{-13}	5.9×10^{-14}	⁷ Be
Area 5, RWMS No. 2	12/21/92	1.5×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS No. 2	12/28/92	1.6×10^{-13}	4.6×10^{-14}	⁷ Be
Area 5, RWMS No. 3	01/13/92	1.3×10^{-13}	4.1×10^{-14}	⁷ Be
Area 5, RWMS No. 3	01/21/92	1.7×10^{-13}	6.0×10^{-14}	⁷ Be
Area 5, RWMS No. 3	01/21/92	1.1×10^{-13}	8.1×10^{-14}	⁴⁰ K
Area 5, RWMS No. 3	01/27/92	1.8×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS No. 3	02/03/92	1.1×10^{-13}	4.0×10^{-14}	⁷ Be
Area 5, RWMS No. 3	02/10/92	7.1×10^{-14}	3.4×10^{-14}	⁷ Be
Area 5, RWMS No. 3	02/18/92	1.1×10^{-13}	4.4×10^{-14}	⁷ Be
Area 5, RWMS No. 3	02/24/92	2.5×10^{-13}	5.4×10^{-14}	⁷ Be
Area 5, RWMS No. 3	03/02/92	9.7×10^{-14}	4.6×10^{-14}	⁷ Be
Area 5, RWMS No. 3	03/09/92	1.5×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS No. 3	03/30/92	1.5×10^{-13}	4.2×10^{-14}	⁷ Be
Area 5, RWMS No. 3	04/07/92	1.6×10^{-13}	3.8×10^{-14}	⁷ Be
Area 5, RWMS No. 3	04/14/92	1.8×10^{-13}	4.0×10^{-14}	⁷ Be
Area 5, RWMS No. 3	04/20/92	2.7×10^{-13}	6.7×10^{-14}	⁷ Be
Area 5, RWMS No. 3	04/28/92	2.3×10^{-13}	5.9×10^{-14}	⁷ Be
Area 5, RWMS No. 3	05/05/92	2.4×10^{-13}	6.3×10^{-14}	⁷ Be
Area 5, RWMS No. 3	05/11/92	2.5×10^{-13}	6.0×10^{-14}	⁷ Be
Area 5, RWMS No. 3	05/18/92	2.1×10^{-13}	4.3×10^{-14}	⁷ Be
Area 5, RWMS No. 3	06/01/92	2.0×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS No. 3	06/09/92	2.6×10^{-13}	7.4×10^{-14}	⁷ Be
Area 5, RWMS No. 3	06/15/92	2.1×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS No. 3	06/22/92	2.2×10^{-13}	5.0×10^{-14}	⁷ Be
Area 5, RWMS No. 3	06/29/92	1.6×10^{-13}	4.4×10^{-14}	⁷ Be
Area 5, RWMS No. 3	07/06/92	9.2×10^{-14}	3.6×10^{-14}	⁷ Be
Area 5, RWMS No. 3	07/13/92	2.2×10^{-13}	6.1×10^{-14}	⁷ Be
Area 5, RWMS No. 3	07/20/92	2.0×10^{-13}	5.0×10^{-14}	⁷ Be
Area 5, RWMS No. 3	07/27/92	2.1×10^{-13}	5.1×10^{-14}	⁷ Be
Area 5, RWMS No. 3	08/03/92	2.1×10^{-13}	4.6×10^{-14}	⁷ Be
Area 5, RWMS No. 3	08/11/92	1.8×10^{-13}	6.4×10^{-14}	⁷ Be
Area 5, RWMS No. 3	08/17/92	2.4×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS No. 3	08/24/92	3.8×10^{-13}	7.6×10^{-14}	⁷ Be
Area 5, RWMS No. 3	08/31/92	2.0×10^{-13}	4.7×10^{-14}	⁷ Be

Mean MDC: 1.2×10^{-08} μCi/mL

Standard Deviation of Mean MDC: 3.5×10^{-07} μCi/mL

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 3	09/08/92	1.7×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS No. 3	09/14/92	2.8×10^{-13}	6.7×10^{-14}	^7Be
Area 5, RWMS No. 3	09/21/92	2.4×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 3	09/28/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 3	10/05/92	2.1×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 3	10/12/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 3	10/19/92	1.9×10^{-13}	8.0×10^{-14}	^7Be
Area 5, RWMS No. 3	10/26/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 3	11/02/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 3	11/09/92	1.0×10^{-13}	3.2×10^{-14}	^7Be
Area 5, RWMS No. 3	11/16/92	1.4×10^{-13}	3.6×10^{-14}	^7Be
Area 5, RWMS No. 3	11/23/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 3	11/30/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 3	12/07/92	8.6×10^{-14}	2.8×10^{-14}	^7Be
Area 5, RWMS No. 3	12/15/92	1.1×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 3	12/21/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 3	12/28/92	1.5×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 4	01/13/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 4	01/21/92	2.8×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS No. 4	01/27/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 4	02/03/92	1.3×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS No. 4	02/03/92	1.0×10^{-13}	2.6×10^{-14}	^7Be
Area 5, RWMS No. 4	02/10/92	6.7×10^{-14}	2.9×10^{-14}	^7Be
Area 5, RWMS No. 4	02/18/92	1.8×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 4	02/24/92	1.9×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 4	03/02/92	1.1×10^{-13}	2.5×10^{-14}	^7Be
Area 5, RWMS No. 4	03/09/92	2.5×10^{-13}	6.7×10^{-14}	^7Be
Area 5, RWMS No. 4	03/16/92	8.3×10^{-14}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 4	03/30/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS No. 4	03/30/92	1.5×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 4	04/07/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 4	04/14/92	2.1×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 4	04/20/92	1.9×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS No. 4	04/28/92	1.3×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS No. 4	04/28/92	3.2×10^{-13}	7.1×10^{-14}	^7Be
Area 5, RWMS No. 4	05/05/92	3.2×10^{-13}	7.0×10^{-14}	^7Be
Area 5, RWMS No. 4	05/11/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 4	05/18/92	3.4×10^{-13}	7.0×10^{-14}	^7Be
Area 5, RWMS No. 4	05/26/92	2.6×10^{-14}	5.7×10^{-15}	^7Be
Area 5, RWMS No. 4	05/26/92	2.3×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS No. 4	06/01/92	9.2×10^{-15}	2.9×10^{-15}	^7Be
Area 5, RWMS No. 4	06/09/92	7.7×10^{-14}	3.9×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 4	06/15/92	2.6×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS No. 4	06/22/92	2.3×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 4	06/29/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 4	06/29/92	1.3×10^{-13}	2.2×10^{-14}	^7Be
Area 5, RWMS No. 4	07/06/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS No. 4	07/13/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 4	07/20/92	2.3×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 4	07/27/92	2.3×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 4	08/03/92	2.9×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 4	08/11/92	1.7×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 4	08/17/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 4	08/24/92	2.9×10^{-13}	6.9×10^{-14}	^7Be
Area 5, RWMS No. 4	08/31/92	3.0×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 4	08/31/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS No. 4	09/08/92	2.3×10^{-13}	7.0×10^{-14}	^7Be
Area 5, RWMS No. 4	09/14/92	1.4×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 4	09/21/92	2.7×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 4	09/28/92	2.0×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 4	10/05/92	2.7×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS No. 4	10/12/92	2.9×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 4	10/19/92	2.1×10^{-13}	8.0×10^{-14}	^7Be
Area 5, RWMS No. 4	10/26/92	1.1×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 4	11/02/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 4	11/09/92	1.0×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 4	11/16/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 4	11/23/92	7.8×10^{-14}	2.9×10^{-14}	^7Be
Area 5, RWMS No. 4	11/30/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 4	12/07/92	5.5×10^{-14}	2.1×10^{-14}	^7Be
Area 5, RWMS No. 4	12/15/92	1.2×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS No. 4	12/21/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 4	12/28/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS No. 5	01/13/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 5	01/21/92	2.5×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 5	01/27/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 5	02/03/92	1.3×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS No. 5	02/10/92	8.9×10^{-14}	3.1×10^{-14}	^7Be
Area 5, RWMS No. 5	02/18/92	1.1×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 5	02/24/92	2.1×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 5	03/09/92	1.5×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 5	03/16/92	9.2×10^{-14}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 5	03/30/92	1.2×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS No. 5	04/07/92	1.2×10^{-13}	3.4×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 5	04/14/92	2.8×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 5	04/20/92	2.7×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS No. 5	04/28/92	1.6×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 5	05/05/92	3.4×10^{-13}	6.7×10^{-14}	^7Be
Area 5, RWMS No. 5	05/11/92	2.3×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS No. 5	05/18/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 5	05/26/92	2.0×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 5	06/01/92	2.3×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 5	06/09/92	2.9×10^{-13}	7.5×10^{-14}	^7Be
Area 5, RWMS No. 5	06/15/92	2.3×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 5	06/22/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 5	06/29/92	1.4×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 5	07/06/92	8.2×10^{-14}	2.9×10^{-14}	^7Be
Area 5, RWMS No. 5	07/13/92	1.7×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 5	07/20/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 5	07/27/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 5	08/03/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 5	08/11/92	1.9×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 5	08/17/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 5	08/24/92	3.0×10^{-13}	7.4×10^{-14}	^7Be
Area 5, RWMS No. 5	08/31/92	3.0×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 5	09/08/92	3.1×10^{-13}	7.2×10^{-14}	^7Be
Area 5, RWMS No. 5	09/14/92	1.1×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 5	09/21/92	2.0×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 5	09/28/92	1.5×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 5	10/05/92	2.3×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 5	10/12/92	2.1×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 5	10/19/92	2.1×10^{-13}	8.7×10^{-14}	^7Be
Area 5, RWMS No. 5	10/26/92	1.2×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 5	11/02/92	1.8×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 5	11/09/92	1.5×10^{-13}	3.6×10^{-14}	^7Be
Area 5, RWMS No. 5	11/16/92	1.4×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 5	11/23/92	7.7×10^{-14}	2.8×10^{-14}	^7Be
Area 5, RWMS No. 5	11/30/92	1.5×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 5	12/07/92	4.0×10^{-14}	2.1×10^{-14}	^7Be
Area 5, RWMS No. 5	12/15/92	1.4×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS No. 5	12/21/92	2.0×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 5	12/28/92	1.5×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 6	01/13/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 6	01/21/92	1.5×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 6	01/27/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 6	02/03/92	1.1×10^{-13}	3.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 6	02/18/92	1.2×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 6	02/24/92	2.1×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS No. 6	03/02/92	1.4×10^{-13}	7.2×10^{-14}	^7Be
Area 5, RWMS No. 6	03/09/92	1.3×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 6	03/30/92	7.8×10^{-14}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 6	04/07/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 6	04/14/92	2.4×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 6	04/20/92	1.6×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 6	04/28/92	2.6×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS No. 6	05/05/92	2.7×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS No. 6	05/11/92	2.7×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 6	05/18/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 6	05/26/92	2.9×10^{-13}	7.4×10^{-14}	^7Be
Area 5, RWMS No. 6	06/01/92	2.4×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 6	06/09/92	3.5×10^{-13}	9.1×10^{-14}	^7Be
Area 5, RWMS No. 6	06/15/92	2.5×10^{-13}	6.7×10^{-14}	^7Be
Area 5, RWMS No. 6	06/22/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 6	06/29/92	1.8×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 6	07/06/92	9.5×10^{-14}	3.6×10^{-14}	^7Be
Area 5, RWMS No. 6	07/13/92	2.2×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 6	07/20/92	2.4×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 6	07/27/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 6	08/03/92	1.6×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 6	08/11/92	1.3×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 6	08/17/92	1.6×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 6	08/24/92	3.0×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS No. 6	08/31/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 6	09/08/92	3.3×10^{-13}	7.5×10^{-14}	^7Be
Area 5, RWMS No. 6	09/14/92	1.8×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 6	09/21/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 6	09/28/92	2.7×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 6	10/05/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 6	10/12/92	1.8×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS No. 6	10/19/92	2.3×10^{-13}	7.1×10^{-14}	^7Be
Area 5, RWMS No. 6	10/26/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 6	11/02/92	1.6×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS No. 6	11/09/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 6	11/16/92	1.1×10^{-13}	3.1×10^{-14}	^7Be
Area 5, RWMS No. 6	11/23/92	8.1×10^{-14}	3.6×10^{-14}	^7Be
Area 5, RWMS No. 6	11/30/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 6	12/07/92	5.6×10^{-14}	2.3×10^{-14}	^7Be
Area 5, RWMS No. 6	12/15/92	1.9×10^{-13}	5.3×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 6	12/21/92	2.4×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 6	12/28/92	1.3×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 7	01/06/92	1.2×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 7	01/13/92	1.1×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 7	01/21/92	1.3×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 7	01/27/92	2.1×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 7	02/03/92	1.0×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 7	02/18/92	1.7×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 7	02/24/92	2.2×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 7	03/02/92	8.9×10^{-14}	3.6×10^{-14}	^7Be
Area 5, RWMS No. 7	03/09/92	1.9×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 7	03/16/92	1.1×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 7	03/24/92	9.9×10^{-14}	4.2×10^{-14}	^7Be
Area 5, RWMS No. 7	03/30/92	9.1×10^{-14}	3.6×10^{-14}	^7Be
Area 5, RWMS No. 7	04/07/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 7	04/14/92	2.8×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS No. 7	04/20/92	2.4×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 7	05/05/92	3.3×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 7	05/11/92	2.3×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS No. 7	05/18/92	1.9×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 7	05/26/92	2.3×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 7	06/01/92	2.7×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 7	06/09/92	2.7×10^{-13}	7.5×10^{-14}	^7Be
Area 5, RWMS No. 7	06/15/92	4.2×10^{-13}	7.4×10^{-14}	^7Be
Area 5, RWMS No. 7	06/22/92	1.9×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 7	06/29/92	2.6×10^{-13}	7.1×10^{-14}	^7Be
Area 5, RWMS No. 7	07/06/92	1.8×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 7	07/13/92	2.3×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 7	07/20/92	1.9×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 7	07/27/92	1.7×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 7	08/03/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 7	08/11/92	1.4×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 7	08/17/92	3.7×10^{-13}	6.9×10^{-14}	^7Be
Area 5, RWMS No. 7	08/24/92	3.0×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 7	08/31/92	3.0×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 7	09/08/92	2.3×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS No. 7	09/14/92	2.4×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 7	09/21/92	2.7×10^{-13}	6.7×10^{-14}	^7Be
Area 5, RWMS No. 7	09/28/92	3.2×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS No. 7	10/05/92	2.4×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 7	10/12/92	2.8×10^{-13}	7.3×10^{-14}	^7Be
Area 5, RWMS No. 7	10/26/92	2.0×10^{-13}	5.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 7	11/02/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 7	11/09/92	1.9×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 7	11/16/92	1.7×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 7	11/23/92	1.2×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 7	11/30/92	1.5×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 7	12/15/92	1.7×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS No. 7	12/21/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 7	12/28/92	2.5×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 8	01/06/92	1.3×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 8	01/13/92	1.4×10^{-13}	3.3×10^{-14}	^7Be
Area 5, RWMS No. 8	01/21/92	1.6×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 8	01/27/92	2.8×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 8	02/03/92	9.2×10^{-14}	3.5×10^{-14}	^7Be
Area 5, RWMS No. 8	02/18/92	2.1×10^{-13}	7.6×10^{-14}	^7Be
Area 5, RWMS No. 8	02/24/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 8	03/02/92	6.8×10^{-14}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 8	03/09/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 8	03/16/92	1.2×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 8	03/24/92	1.6×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 8	03/30/92	7.9×10^{-14}	3.0×10^{-14}	^7Be
Area 5, RWMS No. 8	04/07/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 8	04/14/92	1.7×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 8	04/20/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 8	05/05/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS No. 8	05/11/92	2.6×10^{-13}	7.3×10^{-14}	^7Be
Area 5, RWMS No. 8	05/18/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS No. 8	05/26/92	2.5×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 8	06/01/92	2.0×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS No. 8	06/09/92	1.1×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 8	06/15/92	3.9×10^{-13}	8.3×10^{-14}	^7Be
Area 5, RWMS No. 8	06/22/92	2.2×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 8	06/29/92	2.2×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS No. 8	07/06/92	1.6×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 8	07/13/92	1.8×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 8	07/20/92	1.8×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS No. 8	07/27/92	3.1×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS No. 8	08/03/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 8	08/11/92	2.0×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 8	08/17/92	2.4×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 8	08/24/92	2.6×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS No. 8	08/31/92	2.8×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 8	09/08/92	2.3×10^{-13}	5.7×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 8	09/14/92	2.4×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 8	09/21/92	2.3×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS No. 8	09/28/92	2.6×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS No. 8	10/05/92	2.8×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 8	10/12/92	3.2×10^{-13}	7.7×10^{-14}	^7Be
Area 5, RWMS No. 8	10/19/92	2.4×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS No. 8	10/26/92	1.5×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 8	11/02/92	2.2×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 8	11/09/92	1.7×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 8	11/16/92	1.8×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS No. 8	11/23/92	1.2×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS No. 8	11/30/92	9.5×10^{-14}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 8	12/15/92	1.6×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS No. 8	12/21/92	2.0×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 8	12/28/92	1.7×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 9	01/06/92	1.2×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 9	01/13/92	1.8×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS No. 9	01/21/92	1.0×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS No. 9	01/27/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 9	02/03/92	9.1×10^{-14}	3.2×10^{-14}	^7Be
Area 5, RWMS No. 9	02/18/92	7.6×10^{-14}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 9	02/24/92	1.0×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS No. 9	03/02/92	7.3×10^{-14}	3.4×10^{-14}	^7Be
Area 5, RWMS No. 9	03/09/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 9	03/16/92	1.6×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS No. 9	03/24/92	1.3×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 9	03/30/92	1.6×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 9	04/07/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS No. 9	04/14/92	1.7×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 9	04/20/92	2.9×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 9	05/05/92	2.4×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS No. 9	05/11/92	2.8×10^{-13}	6.8×10^{-14}	^7Be
Area 5, RWMS No. 9	05/18/92	1.4×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS No. 9	05/26/92	2.4×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS No. 9	06/01/92	2.0×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 9	06/09/92	2.0×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 9	06/15/92	2.9×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS No. 9	06/22/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS No. 9	06/29/92	1.6×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS No. 9	07/13/92	2.3×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 9	07/20/92	1.4×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 9	07/27/92	2.1×10^{-13}	6.1×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS No. 9	08/03/92	1.5×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS No. 9	08/11/92	8.9×10^{-14}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 9	08/17/92	2.9×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 9	08/24/92	2.9×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 9	08/31/92	3.0×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 9	09/08/92	3.0×10^{-13}	6.9×10^{-14}	^7Be
Area 5, RWMS No. 9	09/14/92	2.8×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS No. 9	09/21/92	2.5×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS No. 9	09/28/92	2.6×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS No. 9	10/05/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS No. 9	10/12/92	2.3×10^{-13}	6.8×10^{-14}	^7Be
Area 5, RWMS No. 9	10/19/92	2.6×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS No. 9	10/26/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS No. 9	11/02/92	1.9×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 9	11/09/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS No. 9	11/16/92	9.9×10^{-14}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 9	11/23/92	8.9×10^{-14}	3.0×10^{-14}	^7Be
Area 5, RWMS No. 9	11/30/92	1.4×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS No. 9	12/07/92	8.1×10^{-14}	3.1×10^{-14}	^7Be
Area 5, RWMS No. 9	12/15/92	1.3×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS No. 9	12/21/92	2.8×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS No. 9	12/28/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	01/13/92	1.2×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	01/21/92	2.2×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	01/27/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	02/03/92	1.1×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	02/18/92	2.6×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	02/24/92	2.2×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	03/09/92	2.1×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	03/16/92	1.6×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	03/23/92	1.1×10^{-13}	2.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	04/07/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	04/14/92	1.9×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	04/20/92	2.3×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	04/28/92	3.2×10^{-13}	6.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	05/05/92	3.2×10^{-13}	6.9×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	05/11/92	2.6×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	05/18/92	2.6×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	05/26/92	2.5×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	06/01/92	2.2×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	06/09/92	2.8×10^{-13}	6.6×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	06/15/92	5.0×10^{-13}	1.0×10^{-13}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS Pit No. 3	06/22/92	1.9×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	06/29/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	07/06/92	1.2×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	07/13/92	1.9×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	07/20/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	07/27/92	2.2×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	08/03/92	2.5×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	08/11/92	1.3×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	08/17/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	08/24/92	3.0×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	08/31/92	3.4×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	09/08/92	2.9×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	09/14/92	1.5×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	09/21/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	09/28/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	10/05/92	2.7×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	10/12/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	10/19/92	1.3×10^{-13}	9.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	10/26/92	1.3×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	11/02/92	2.5×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	11/09/92	1.5×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	11/16/92	1.9×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	11/23/92	1.1×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	11/30/92	2.0×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	12/15/92	1.4×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	12/21/92	2.6×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS Pit No. 3	12/28/92	2.0×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	01/13/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	01/21/92	3.0×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	01/27/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	02/03/92	1.2×10^{-13}	3.3×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	02/18/92	1.4×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	02/24/92	1.8×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	03/09/92	1.5×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	03/16/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	03/24/92	1.3×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	03/30/92	1.0×10^{-13}	3.3×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	04/07/92	2.1×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	04/14/92	1.4×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	04/20/92	2.9×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	05/05/92	2.4×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS Pit No. 4	05/11/92	2.1×10^{-13}	5.9×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	<u>μCi/mL</u>		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS Pit No. 4	05/18/92	1.9×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	05/26/92	1.4×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	06/01/92	3.1×10^{-13}	5.9×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	06/09/92	1.5×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	06/15/92	2.5×10^{-13}	5.6×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	06/22/92	1.3×10^{-13}	4.0×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	06/29/92	2.0×10^{-13}	5.4×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	07/06/92	1.9×10^{-13}	5.5×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	07/13/92	2.3×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	07/20/92	1.7×10^{-13}	3.8×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	07/27/92	1.8×10^{-13}	4.9×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	08/03/92	1.7×10^{-13}	3.6×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	08/11/92	1.6×10^{-13}	3.9×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	08/17/92	2.3×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	08/24/92	2.5×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	08/31/92	3.0×10^{-13}	4.7×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	09/08/92	2.5×10^{-13}	4.9×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	09/14/92	1.7×10^{-13}	4.4×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	09/21/92	1.9×10^{-13}	4.1×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	09/28/92	1.4×10^{-13}	3.5×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	10/05/92	2.7×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	10/12/92	1.6×10^{-13}	3.6×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	10/19/92	2.2×10^{-13}	8.4×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	10/26/92	1.5×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	11/02/92	1.3×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	11/09/92	1.7×10^{-13}	4.4×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	11/16/92	1.8×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	11/30/92	2.4×10^{-13}	6.2×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	12/15/92	1.2×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	12/21/92	1.4×10^{-13}	6.4×10^{-14}	⁷ Be
Area 5, RWMS Pit No. 4	12/28/92	1.5×10^{-13}	6.0×10^{-14}	⁷ Be
Area 5, RWMS TP N	01/13/92	2.2×10^{-13}	4.0×10^{-14}	⁷ Be
Area 5, RWMS TP N	01/21/92	2.2×10^{-13}	5.7×10^{-14}	⁷ Be
Area 5, RWMS TP N	01/27/92	2.1×10^{-13}	5.0×10^{-14}	⁷ Be
Area 5, RWMS TP N	02/03/92	7.4×10^{-14}	3.0×10^{-14}	⁷ Be
Area 5, RWMS TP N	02/10/92	6.2×10^{-14}	3.5×10^{-14}	⁷ Be
Area 5, RWMS TP N	02/18/92	1.4×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS TP N	02/24/92	2.0×10^{-13}	5.4×10^{-14}	⁷ Be
Area 5, RWMS TP N	03/02/92	7.6×10^{-14}	3.4×10^{-14}	⁷ Be
Area 5, RWMS TP N	03/09/92	1.9×10^{-13}	4.9×10^{-14}	⁷ Be
Area 5, RWMS TP N	03/16/92	1.3×10^{-13}	3.6×10^{-14}	⁷ Be
Area 5, RWMS TP N	03/24/92	1.1×10^{-13}	4.3×10^{-14}	⁷ Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS TP N	03/30/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS TP N	04/07/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP N	04/14/92	1.5×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP N	04/20/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS TP N	05/05/92	2.1×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS TP N	05/11/92	1.9×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS TP N	05/18/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP N	05/26/92	1.9×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS TP N	06/01/92	2.2×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP N	06/09/92	1.8×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP N	06/15/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP N	06/22/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP N	06/29/92	1.4×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP N	07/06/92	1.8×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS TP N	07/13/92	2.6×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP N	07/20/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS TP N	07/27/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP N	08/03/92	1.4×10^{-13}	3.1×10^{-14}	^7Be
Area 5, RWMS TP N	08/11/92	1.2×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS TP N	08/17/92	2.6×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP N	08/24/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP N	08/31/92	2.7×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP N	09/08/92	2.8×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP N	09/14/92	2.6×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP N	09/21/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP N	09/28/92	2.3×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP N	10/05/92	2.4×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP N	10/12/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP N	10/19/92	1.4×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP N	10/26/92	1.2×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS TP N	11/02/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP N	11/09/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP N	11/16/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS TP N	11/23/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 5, RWMS TP N	11/30/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS TP N	12/07/92	5.8×10^{-14}	2.3×10^{-14}	^7Be
Area 5, RWMS TP N	12/15/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP N	12/21/92	7.6×10^{-14}	2.9×10^{-14}	^7Be
Area 5, RWMS TP N	12/28/92	1.3×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP NE	01/13/92	1.4×10^{-13}	3.0×10^{-14}	^7Be
Area 5, RWMS TP NE	01/21/92	2.4×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS TP NE	01/27/92	2.0×10^{-13}	4.7×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	<u>$\mu\text{Ci/mL}$</u>		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS TP NE	02/03/92	1.0×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS TP NE	02/18/92	1.7×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP NE	02/24/92	1.6×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS TP NE	03/02/92	9.0×10^{-14}	3.7×10^{-14}	^7Be
Area 5, RWMS TP NE	03/09/92	1.7×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP NE	03/16/92	1.7×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS TP NE	03/24/92	1.6×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP NE	03/30/92	1.7×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP NE	04/07/92	1.7×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS TP NE	04/14/92	2.1×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS TP NE	04/20/92	2.4×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP NE	05/05/92	2.2×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP NE	05/11/92	2.7×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS TP NE	05/18/92	1.9×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP NE	05/26/92	2.4×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP NE	06/01/92	2.4×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS TP NE	06/09/92	2.4×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP NE	06/15/92	3.1×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS TP NE	06/22/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP NE	06/29/92	2.1×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS TP NE	07/06/92	1.3×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP NE	07/13/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP NE	07/20/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS TP NE	07/27/92	2.9×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS TP NE	08/03/92	1.4×10^{-13}	3.2×10^{-14}	^7Be
Area 5, RWMS TP NE	08/11/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS TP NE	08/17/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP NE	08/24/92	1.5×10^{-13}	3.2×10^{-14}	^7Be
Area 5, RWMS TP NE	08/31/92	2.7×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP NE	09/08/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP NE	09/14/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP NE	09/21/92	3.1×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS TP NE	09/28/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP NE	10/05/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP NE	10/12/92	2.8×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS TP NE	10/19/92	1.7×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS TP NE	10/26/92	1.5×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP NE	11/02/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP NE	11/09/92	2.7×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS TP NE	11/16/92	9.2×10^{-14}	3.6×10^{-14}	^7Be
Area 5, RWMS TP NE	11/30/92	1.0×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS TP NE	12/07/92	7.6×10^{-14}	3.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>		<u>Radio- nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 5, RWMS TP NE	12/15/92	2.1×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS TP NE	12/21/92	2.5×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS TP NE	12/28/92	1.5×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP NW	01/13/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP NW	01/21/92	1.7×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP NW	01/27/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP NW	02/03/92	8.6×10^{-14}	3.5×10^{-14}	^7Be
Area 5, RWMS TP NW	02/10/92	8.9×10^{-14}	3.9×10^{-14}	^7Be
Area 5, RWMS TP NW	02/18/92	1.2×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS TP NW	02/18/92	7.7×10^{-14}	5.7×10^{-14}	^{40}K
Area 5, RWMS TP NW	02/24/92	2.4×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS TP NW	03/09/92	2.1×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP NW	03/16/92	1.1×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS TP NW	03/24/92	1.3×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP NW	03/30/92	1.1×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS TP NW	04/07/92	2.6×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS TP NW	04/14/92	2.7×10^{-13}	6.9×10^{-14}	^7Be
Area 5, RWMS TP NW	04/20/92	2.8×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS TP NW	05/05/92	2.5×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS TP NW	05/11/92	3.4×10^{-13}	1.1×10^{-13}	^7Be
Area 5, RWMS TP NW	05/18/92	1.9×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP NW	05/26/92	2.2×10^{-13}	6.7×10^{-14}	^7Be
Area 5, RWMS TP NW	06/01/92	2.5×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS TP NW	06/09/92	2.3×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP NW	06/15/92	2.6×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP NW	06/22/92	2.4×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS TP NW	06/29/92	1.4×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP NW	07/13/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP NW	07/20/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP NW	07/27/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP NW	08/03/92	2.0×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS TP NW	08/11/92	1.7×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS TP NW	08/17/92	2.5×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP NW	08/24/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS TP NW	08/31/92	3.0×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP NW	09/08/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP NW	09/14/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP NW	09/21/92	2.3×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP NW	09/28/92	2.1×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP NW	10/05/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS TP NW	10/12/92	2.8×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS TP NW	10/19/92	3.1×10^{-13}	6.9×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS TP NW	10/26/92	1.3×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS TP NW	11/02/92	2.2×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP NW	11/09/92	1.8×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP NW	11/16/92	1.7×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP NW	11/30/92	1.4×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP NW	12/15/92	2.2×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP NW	12/21/92	1.5×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP NW	12/28/92	1.3×10^{-13}	4.9×10^{-14}	^7Be
Area 5, RWMS TP S	01/06/92	1.5×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP S	01/13/92	1.8×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS TP S	01/21/92	2.4×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS TP S	01/27/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP S	02/03/92	1.4×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS TP S	02/10/92	9.2×10^{-14}	4.4×10^{-14}	^7Be
Area 5, RWMS TP S	02/18/92	5.7×10^{-15}	4.2×10^{-15}	^{208}Tl
Area 5, RWMS TP S	02/18/92	1.6×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP S	02/24/92	3.0×10^{-13}	6.9×10^{-14}	^7Be
Area 5, RWMS TP S	03/02/92	8.6×10^{-14}	3.7×10^{-14}	^7Be
Area 5, RWMS TP S	03/09/92	2.0×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS TP S	03/16/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS TP S	03/30/92	1.4×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS TP S	04/07/92	2.5×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS TP S	04/14/92	2.6×10^{-13}	7.2×10^{-14}	^7Be
Area 5, RWMS TP S	04/20/92	2.1×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP S	05/05/92	3.3×10^{-13}	7.0×10^{-14}	^7Be
Area 5, RWMS TP S	05/05/92	7.3×10^{-15}	4.4×10^{-15}	^{208}Tl
Area 5, RWMS TP S	05/11/92	2.0×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS TP S	05/18/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP S	05/26/92	2.4×10^{-13}	5.9×10^{-14}	^7Be
Area 5, RWMS TP S	06/01/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP S	06/09/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP S	06/15/92	3.1×10^{-13}	6.3×10^{-14}	^7Be
Area 5, RWMS TP S	06/22/92	1.2×10^{-13}	3.8×10^{-14}	^7Be
Area 5, RWMS TP S	06/29/92	1.7×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP S	07/06/92	1.3×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP S	07/13/92	1.8×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP S	07/20/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS TP S	07/27/92	1.6×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP S	08/03/92	1.8×10^{-13}	3.5×10^{-14}	^7Be
Area 5, RWMS TP S	08/11/92	1.1×10^{-13}	3.4×10^{-14}	^7Be
Area 5, RWMS TP S	08/17/92	2.8×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP S	08/24/92	2.4×10^{-13}	4.4×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	<u>μCi/mL</u>		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS TP S	08/31/92	2.7×10^{-13}	4.6×10^{-14}	⁷ Be
Area 5, RWMS TP S	09/08/92	2.3×10^{-13}	4.8×10^{-14}	⁷ Be
Area 5, RWMS TP S	09/14/92	2.4×10^{-13}	4.5×10^{-14}	⁷ Be
Area 5, RWMS TP S	09/21/92	2.4×10^{-13}	5.0×10^{-14}	⁷ Be
Area 5, RWMS TP S	09/28/92	2.4×10^{-13}	5.4×10^{-14}	⁷ Be
Area 5, RWMS TP S	10/05/92	2.1×10^{-13}	4.6×10^{-14}	⁷ Be
Area 5, RWMS TP S	10/12/92	2.5×10^{-13}	5.4×10^{-14}	⁷ Be
Area 5, RWMS TP S	10/19/92	1.5×10^{-13}	5.7×10^{-14}	⁷ Be
Area 5, RWMS TP S	10/26/92	1.3×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS TP S	11/02/92	1.8×10^{-13}	4.8×10^{-14}	⁷ Be
Area 5, RWMS TP S	11/09/92	1.4×10^{-13}	4.8×10^{-14}	⁷ Be
Area 5, RWMS TP S	11/16/92	1.3×10^{-13}	4.0×10^{-14}	⁷ Be
Area 5, RWMS TP S	11/23/92	1.3×10^{-13}	4.4×10^{-14}	⁷ Be
Area 5, RWMS TP S	11/30/92	1.9×10^{-13}	4.7×10^{-14}	⁷ Be
Area 5, RWMS TP S	12/15/92	2.0×10^{-13}	5.7×10^{-14}	⁷ Be
Area 5, RWMS TP S	12/21/92	2.0×10^{-13}	5.0×10^{-14}	⁷ Be
Area 5, RWMS TP S	12/28/92	1.5×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS TP SE	01/06/92	1.2×10^{-13}	3.8×10^{-14}	⁷ Be
Area 5, RWMS TP SE	01/13/92	2.0×10^{-13}	3.5×10^{-14}	⁷ Be
Area 5, RWMS TP SE	01/21/92	2.4×10^{-13}	6.2×10^{-14}	⁷ Be
Area 5, RWMS TP SE	01/27/92	2.5×10^{-13}	5.3×10^{-14}	⁷ Be
Area 5, RWMS TP SE	02/03/92	7.7×10^{-14}	3.3×10^{-14}	⁷ Be
Area 5, RWMS TP SE	02/18/92	1.2×10^{-13}	3.7×10^{-14}	⁷ Be
Area 5, RWMS TP SE	02/24/92	2.3×10^{-13}	5.7×10^{-14}	⁷ Be
Area 5, RWMS TP SE	03/02/92	8.0×10^{-14}	3.2×10^{-14}	⁷ Be
Area 5, RWMS TP SE	03/09/92	2.3×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS TP SE	03/16/92	1.3×10^{-13}	3.6×10^{-14}	⁷ Be
Area 5, RWMS TP SE	03/30/92	1.8×10^{-13}	4.2×10^{-14}	⁷ Be
Area 5, RWMS TP SE	04/07/92	2.1×10^{-13}	4.8×10^{-14}	⁷ Be
Area 5, RWMS TP SE	04/14/92	2.0×10^{-13}	6.3×10^{-14}	⁷ Be
Area 5, RWMS TP SE	04/20/92	2.2×10^{-13}	4.7×10^{-14}	⁷ Be
Area 5, RWMS TP SE	05/05/92	2.9×10^{-13}	6.4×10^{-14}	⁷ Be
Area 5, RWMS TP SE	05/11/92	2.3×10^{-13}	6.5×10^{-14}	⁷ Be
Area 5, RWMS TP SE	05/18/92	1.5×10^{-13}	4.3×10^{-14}	⁷ Be
Area 5, RWMS TP SE	05/26/92	2.5×10^{-13}	6.4×10^{-14}	⁷ Be
Area 5, RWMS TP SE	06/01/92	1.8×10^{-13}	4.7×10^{-14}	⁷ Be
Area 5, RWMS TP SE	06/09/92	3.4×10^{-13}	9.5×10^{-14}	⁷ Be
Area 5, RWMS TP SE	06/15/92	2.5×10^{-13}	5.1×10^{-14}	⁷ Be
Area 5, RWMS TP SE	06/22/92	2.3×10^{-13}	5.2×10^{-14}	⁷ Be
Area 5, RWMS TP SE	06/29/92	2.6×10^{-13}	6.5×10^{-14}	⁷ Be
Area 5, RWMS TP SE	07/06/92	1.7×10^{-13}	5.6×10^{-14}	⁷ Be
Area 5, RWMS TP SE	07/13/92	2.6×10^{-13}	5.9×10^{-14}	⁷ Be

Mean MDC: 1.2×10^{-08} μCi/mL

Standard Deviation of Mean MDC: 3.5×10^{-07} μCi/mL

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS TP SE	07/20/92	1.0×10^{-13}	3.3×10^{-14}	^7Be
Area 5, RWMS TP SE	07/27/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP SE	08/03/92	1.7×10^{-13}	3.6×10^{-14}	^7Be
Area 5, RWMS TP SE	08/17/92	2.9×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP SE	08/24/92	2.9×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP SE	08/31/92	2.6×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP SE	09/08/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP SE	09/14/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS TP SE	09/21/92	3.2×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS TP SE	09/28/92	2.5×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP SE	10/05/92	1.7×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP SE	10/12/92	2.8×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP SE	10/19/92	3.0×10^{-13}	7.1×10^{-14}	^7Be
Area 5, RWMS TP SE	10/26/92	1.2×10^{-13}	4.6×10^{-14}	^7Be
Area 5, RWMS TP SE	11/02/92	2.6×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP SE	11/09/92	3.3×10^{-13}	7.1×10^{-14}	^7Be
Area 5, RWMS TP SE	11/16/92	2.0×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP SE	11/23/92	1.2×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP SE	11/30/92	2.5×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS TP SE	12/15/92	1.2×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP SE	12/21/92	1.9×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP SE	12/28/92	1.5×10^{-13}	5.5×10^{-14}	^7Be
Area 5, RWMS TP SW	01/06/92	9.1×10^{-14}	3.8×10^{-14}	^7Be
Area 5, RWMS TP SW	01/13/92	1.4×10^{-13}	3.3×10^{-14}	^7Be
Area 5, RWMS TP SW	01/21/92	1.8×10^{-13}	6.0×10^{-14}	^7Be
Area 5, RWMS TP SW	01/27/92	2.4×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP SW	02/03/92	1.4×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP SW	02/18/92	1.6×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP SW	02/24/92	2.1×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP SW	03/09/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP SW	03/16/92	1.3×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS TP SW	03/24/92	1.2×10^{-13}	4.1×10^{-14}	^7Be
Area 5, RWMS TP SW	03/30/92	1.3×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS TP SW	04/07/92	1.4×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS TP SW	04/14/92	2.5×10^{-13}	7.0×10^{-14}	^7Be
Area 5, RWMS TP SW	04/20/92	3.0×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS TP SW	05/05/92	2.9×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS TP SW	05/11/92	1.4×10^{-13}	5.1×10^{-14}	^7Be
Area 5, RWMS TP SW	05/18/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP SW	05/26/92	2.0×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS TP SW	06/01/92	2.6×10^{-13}	5.7×10^{-14}	^7Be
Area 5, RWMS TP SW	06/09/92	2.1×10^{-13}	6.1×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, RWMS TP SW	06/15/92	3.3×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS TP SW	06/22/92	2.4×10^{-13}	5.4×10^{-14}	^7Be
Area 5, RWMS TP SW	06/29/92	2.4×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP SW	07/13/92	1.7×10^{-13}	5.0×10^{-14}	^7Be
Area 5, RWMS TP SW	07/20/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 5, RWMS TP SW	07/27/92	2.6×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP SW	08/03/92	1.8×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP SW	08/11/92	2.0×10^{-13}	5.3×10^{-14}	^7Be
Area 5, RWMS TP SW	08/17/92	2.8×10^{-13}	5.6×10^{-14}	^7Be
Area 5, RWMS TP SW	08/24/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP SW	08/31/92	2.6×10^{-13}	5.2×10^{-14}	^7Be
Area 5, RWMS TP SW	09/08/92	2.9×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS TP SW	09/14/92	2.8×10^{-13}	5.8×10^{-14}	^7Be
Area 5, RWMS TP SW	09/21/92	2.6×10^{-13}	6.2×10^{-14}	^7Be
Area 5, RWMS TP SW	09/28/92	2.0×10^{-13}	6.1×10^{-14}	^7Be
Area 5, RWMS TP SW	10/05/92	1.2×10^{-13}	4.7×10^{-14}	^7Be
Area 5, RWMS TP SW	10/12/92	2.8×10^{-13}	6.4×10^{-14}	^7Be
Area 5, RWMS TP SW	10/19/92	2.6×10^{-13}	6.5×10^{-14}	^7Be
Area 5, RWMS TP SW	10/26/92	1.0×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP SW	11/02/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 5, RWMS TP SW	11/09/92	1.5×10^{-13}	4.4×10^{-14}	^7Be
Area 5, RWMS TP SW	11/16/92	1.6×10^{-13}	3.9×10^{-14}	^7Be
Area 5, RWMS TP SW	11/23/92	9.1×10^{-14}	3.8×10^{-14}	^7Be
Area 5, RWMS TP SW	11/30/92	1.4×10^{-13}	3.7×10^{-14}	^7Be
Area 5, RWMS TP SW	12/07/92	8.2×10^{-14}	3.1×10^{-14}	^7Be
Area 5, RWMS TP SW	12/15/92	1.7×10^{-13}	4.3×10^{-14}	^7Be
Area 5, RWMS TP SW	12/21/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 5, RWMS TP SW	12/28/92	1.1×10^{-13}	4.2×10^{-14}	^7Be
Area 5, Well 5B	01/13/92	1.6×10^{-13}	3.5×10^{-14}	^7Be
Area 5, Well 5B	01/21/92	2.4×10^{-13}	4.9×10^{-14}	^7Be
Area 5, Well 5B	01/27/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 5, Well 5B	02/03/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 5, Well 5B	02/10/92	6.8×10^{-14}	2.7×10^{-14}	^7Be
Area 5, Well 5B	02/18/92	1.1×10^{-13}	3.1×10^{-14}	^7Be
Area 5, Well 5B	02/24/92	2.4×10^{-13}	4.3×10^{-14}	^7Be
Area 5, Well 5B	03/02/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 5, Well 5B	03/09/92	1.6×10^{-13}	4.3×10^{-14}	^7Be
Area 5, Well 5B	03/16/92	5.2×10^{-14}	2.3×10^{-14}	^7Be
Area 5, Well 5B	03/24/92	1.4×10^{-13}	4.9×10^{-14}	^7Be
Area 5, Well 5B	03/30/92	1.3×10^{-13}	3.2×10^{-14}	^7Be
Area 5, Well 5B	04/07/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 5, Well 5B	04/14/92	2.1×10^{-13}	4.5×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 5, Well 5B	04/20/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Well 5B	04/28/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 5, Well 5B	05/05/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 5, Well 5B	05/11/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 5, Well 5B	05/18/92	2.6×10^{-13}	4.8×10^{-14}	^7Be
Area 5, Well 5B	05/26/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 5, Well 5B	06/01/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 5, Well 5B	06/09/92	2.3×10^{-13}	5.9×10^{-14}	^7Be
Area 5, Well 5B	06/15/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 5, Well 5B	06/22/92	2.3×10^{-13}	6.9×10^{-14}	^7Be
Area 5, Well 5B	06/29/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Well 5B	07/06/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 5, Well 5B	07/13/92	1.8×10^{-13}	4.9×10^{-14}	^7Be
Area 5, Well 5B	07/20/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Well 5B	07/27/92	2.0×10^{-13}	4.0×10^{-14}	^7Be
Area 5, Well 5B	08/03/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Well 5B	08/11/92	1.7×10^{-13}	4.9×10^{-14}	^7Be
Area 5, Well 5B	08/17/92	2.5×10^{-13}	4.8×10^{-14}	^7Be
Area 5, Well 5B	08/24/92	2.8×10^{-13}	5.4×10^{-14}	^7Be
Area 5, Well 5B	08/31/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 5, Well 5B	09/08/92	2.5×10^{-13}	6.0×10^{-14}	^7Be
Area 5, Well 5B	09/14/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 5, Well 5B	09/21/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 5, Well 5B	09/28/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 5, Well 5B	10/05/92	2.3×10^{-13}	5.7×10^{-14}	^7Be
Area 5, Well 5B	10/12/92	1.9×10^{-13}	4.5×10^{-14}	^7Be
Area 5, Well 5B	10/19/92	2.6×10^{-13}	8.0×10^{-14}	^7Be
Area 5, Well 5B	10/26/92	1.5×10^{-13}	5.1×10^{-14}	^7Be
Area 5, Well 5B	11/02/92	2.4×10^{-13}	5.8×10^{-14}	^7Be
Area 5, Well 5B	11/09/92	1.4×10^{-13}	3.9×10^{-14}	^7Be
Area 6, Building 6-900	10/26/92	1.1×10^{-13}	3.2×10^{-14}	^7Be
Area 6, Building 6-900	11/03/92	2.5×10^{-13}	5.1×10^{-14}	^7Be
Area 6, Building 6-900	11/09/92	1.7×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Building 6-900	11/16/92	1.5×10^{-13}	4.3×10^{-14}	^7Be
Area 6, Building 6-900	11/23/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 6, Building 6-900	11/30/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 6, Building 6-900	12/07/92	8.3×10^{-14}	3.6×10^{-14}	^7Be
Area 6, Building 6-900	12/14/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 6, Building 6-900	12/21/92	2.3×10^{-13}	4.2×10^{-14}	^7Be
Area 6, Building 6-900	12/29/92	1.7×10^{-13}	5.2×10^{-14}	^7Be
Area 6, CP-6	01/06/92	1.5×10^{-13}	4.9×10^{-14}	^7Be
Area 6, CP-6	01/13/92	1.7×10^{-13}	4.4×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 6, CP-6	01/27/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 6, CP-6	02/10/92	5.4×10^{-14}	2.4×10^{-14}	^7Be
Area 6, CP-6	02/18/92	1.2×10^{-13}	4.2×10^{-14}	^7Be
Area 6, CP-6	02/24/92	2.9×10^{-13}	5.3×10^{-14}	^7Be
Area 6, CP-6	03/09/92	2.2×10^{-13}	4.0×10^{-14}	^7Be
Area 6, CP-6	03/17/92	5.7×10^{-14}	3.3×10^{-14}	^7Be
Area 6, CP-6	03/23/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 6, CP-6	03/30/92	1.3×10^{-13}	3.8×10^{-14}	^7Be
Area 6, CP-6	04/06/92	1.8×10^{-13}	3.6×10^{-14}	^7Be
Area 6, CP-6	04/13/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 6, CP-6	04/20/92	2.2×10^{-13}	4.2×10^{-14}	^7Be
Area 6, CP-6	05/04/92	2.8×10^{-13}	5.9×10^{-14}	^7Be
Area 6, CP-6	05/11/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 6, CP-6	05/18/92	1.7×10^{-13}	3.7×10^{-14}	^7Be
Area 6, CP-6	05/26/92	2.9×10^{-13}	6.5×10^{-14}	^7Be
Area 6, CP-6	06/01/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 6, CP-6	06/08/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 6, CP-6	06/15/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 6, CP-6	06/22/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 6, CP-6	06/29/92	1.7×10^{-13}	5.1×10^{-14}	^7Be
Area 6, CP-6	07/06/92	8.7×10^{-14}	2.9×10^{-14}	^7Be
Area 6, CP-6	07/13/92	2.5×10^{-13}	5.1×10^{-14}	^7Be
Area 6, CP-6	07/20/92	2.4×10^{-13}	5.2×10^{-14}	^7Be
Area 6, CP-6	07/27/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 6, CP-6	08/03/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 6, CP-6	08/17/92	2.4×10^{-13}	5.6×10^{-14}	^7Be
Area 6, CP-6	08/24/92	2.2×10^{-13}	5.5×10^{-14}	^7Be
Area 6, CP-6	08/31/92	2.7×10^{-13}	6.3×10^{-14}	^7Be
Area 6, CP-6	09/08/92	3.4×10^{-13}	6.7×10^{-14}	^7Be
Area 6, CP-6	09/14/92	7.2×10^{-15}	1.9×10^{-15}	^7Be
Area 6, CP-6	09/21/92	3.5×10^{-13}	9.1×10^{-14}	^7Be
Area 6, CP-6	09/28/92	3.0×10^{-13}	6.9×10^{-14}	^7Be
Area 6, CP-6	10/05/92	2.5×10^{-13}	4.3×10^{-14}	^7Be
Area 6, CP-6	10/13/92	3.0×10^{-13}	6.1×10^{-14}	^7Be
Area 6, CP-6	10/19/92	2.4×10^{-13}	4.7×10^{-14}	^7Be
Area 6, CP-6	10/26/92	1.2×10^{-13}	3.1×10^{-14}	^7Be
Area 6, CP-6	11/03/92	1.6×10^{-13}	4.3×10^{-14}	^7Be
Area 6, CP-6	11/09/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 6, CP-6	11/16/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 6, CP-6	11/23/92	1.0×10^{-13}	3.0×10^{-14}	^7Be
Area 6, CP-6	11/30/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 6, CP-6	12/07/92	7.1×10^{-14}	3.4×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 6, CP-6	12/14/92	1.4×10^{-13}	3.6×10^{-14}	^7Be
Area 6, CP-6	12/21/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 6, CP-6	12/29/92	9.4×10^{-14}	4.0×10^{-14}	^7Be
Area 6, Well 3 Complex	01/06/92	1.6×10^{-13}	4.6×10^{-14}	^7Be
Area 6, Well 3 Complex	01/13/92	1.3×10^{-13}	3.8×10^{-14}	^7Be
Area 6, Well 3 Complex	01/21/92	2.4×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Well 3 Complex	01/27/92	1.6×10^{-13}	3.8×10^{-14}	^7Be
Area 6, Well 3 Complex	02/03/92	1.6×10^{-13}	4.3×10^{-14}	^7Be
Area 6, Well 3 Complex	02/18/92	1.7×10^{-13}	4.8×10^{-14}	^7Be
Area 6, Well 3 Complex	02/24/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 6, Well 3 Complex	03/02/92	8.3×10^{-14}	2.9×10^{-14}	^7Be
Area 6, Well 3 Complex	03/09/92	2.0×10^{-13}	3.8×10^{-14}	^7Be
Area 6, Well 3 Complex	03/17/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 6, Well 3 Complex	03/23/92	7.1×10^{-14}	2.9×10^{-14}	^7Be
Area 6, Well 3 Complex	03/30/92	5.6×10^{-14}	3.2×10^{-14}	^7Be
Area 6, Well 3 Complex	04/06/92	2.0×10^{-13}	4.3×10^{-14}	^7Be
Area 6, Well 3 Complex	04/13/92	2.2×10^{-13}	4.2×10^{-14}	^7Be
Area 6, Well 3 Complex	04/20/92	1.0×10^{-13}	3.7×10^{-14}	^7Be
Area 6, Well 3 Complex	05/04/92	2.9×10^{-13}	5.8×10^{-14}	^7Be
Area 6, Well 3 Complex	05/11/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Well 3 Complex	05/18/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 6, Well 3 Complex	05/26/92	1.3×10^{-13}	4.6×10^{-14}	^7Be
Area 6, Well 3 Complex	06/01/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 6, Well 3 Complex	06/08/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 6, Well 3 Complex	06/15/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Well 3 Complex	06/22/92	2.6×10^{-13}	5.4×10^{-14}	^7Be
Area 6, Well 3 Complex	06/29/92	2.1×10^{-13}	4.7×10^{-14}	^7Be
Area 6, Well 3 Complex	07/06/92	1.2×10^{-13}	3.3×10^{-14}	^7Be
Area 6, Well 3 Complex	07/13/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Well 3 Complex	07/20/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 6, Well 3 Complex	07/27/92	2.1×10^{-13}	4.9×10^{-14}	^7Be
Area 6, Well 3 Complex	08/03/92	2.5×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Well 3 Complex	08/10/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 6, Well 3 Complex	08/17/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 6, Well 3 Complex	08/24/92	2.3×10^{-13}	4.3×10^{-14}	^7Be
Area 6, Well 3 Complex	08/31/92	3.2×10^{-13}	5.6×10^{-14}	^7Be
Area 6, Well 3 Complex	09/08/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 6, Well 3 Complex	09/14/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Well 3 Complex	09/21/92	2.4×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Well 3 Complex	09/28/92	2.9×10^{-13}	5.6×10^{-14}	^7Be
Area 6, Well 3 Complex	10/05/92	2.3×10^{-13}	4.1×10^{-14}	^7Be
Area 6, Well 3 Complex	10/13/92	2.5×10^{-13}	5.8×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 6, Well 3 Complex	10/19/92	1.7×10^{-13}	4.0×10^{-14}	^7Be
Area 6, Well 3 Complex	10/26/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 6, Well 3 Complex	11/03/92	1.4×10^{-13}	3.7×10^{-14}	^7Be
Area 6, Well 3 Complex	11/09/92	1.9×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Well 3 Complex	11/16/92	1.2×10^{-13}	4.1×10^{-14}	^7Be
Area 6, Well 3 Complex	11/23/92	1.2×10^{-13}	3.5×10^{-14}	^7Be
Area 6, Well 3 Complex	11/30/92	2.2×10^{-13}	4.2×10^{-14}	^7Be
Area 6, Well 3 Complex	12/07/92	6.9×10^{-14}	3.6×10^{-14}	^7Be
Area 6, Well 3 Complex	12/14/92	2.2×10^{-13}	4.3×10^{-14}	^7Be
Area 6, Well 3 Complex	12/21/92	2.0×10^{-13}	3.9×10^{-14}	^7Be
Area 6, Well 3 Complex	12/29/92	2.0×10^{-13}	5.4×10^{-14}	^7Be
Area 6, Yucca Complex	01/06/92	8.2×10^{-14}	4.0×10^{-14}	^7Be
Area 6, Yucca Complex	01/13/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 6, Yucca Complex	01/21/92	1.7×10^{-13}	4.1×10^{-14}	^7Be
Area 6, Yucca Complex	01/27/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 6, Yucca Complex	02/03/92	7.5×10^{-14}	4.1×10^{-14}	^7Be
Area 6, Yucca Complex	02/10/92	4.4×10^{-14}	2.0×10^{-14}	^7Be
Area 6, Yucca Complex	02/18/92	1.5×10^{-13}	4.9×10^{-14}	^7Be
Area 6, Yucca Complex	02/24/92	2.2×10^{-13}	4.2×10^{-14}	^7Be
Area 6, Yucca Complex	03/02/92	6.5×10^{-14}	2.7×10^{-14}	^7Be
Area 6, Yucca Complex	03/09/92	1.5×10^{-13}	3.4×10^{-14}	^7Be
Area 6, Yucca Complex	03/17/92	9.8×10^{-14}	3.9×10^{-14}	^7Be
Area 6, Yucca Complex	03/23/92	6.6×10^{-14}	2.8×10^{-14}	^7Be
Area 6, Yucca Complex	03/30/92	1.1×10^{-13}	4.1×10^{-14}	^7Be
Area 6, Yucca Complex	04/06/92	1.8×10^{-13}	3.7×10^{-14}	^7Be
Area 6, Yucca Complex	04/13/92	1.8×10^{-13}	4.6×10^{-14}	^7Be
Area 6, Yucca Complex	04/20/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 6, Yucca Complex	05/04/92	2.4×10^{-13}	5.3×10^{-14}	^7Be
Area 6, Yucca Complex	05/11/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 6, Yucca Complex	05/18/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 6, Yucca Complex	05/26/92	3.5×10^{-13}	7.1×10^{-14}	^7Be
Area 6, Yucca Complex	06/01/92	2.5×10^{-13}	4.9×10^{-14}	^7Be
Area 6, Yucca Complex	06/08/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 6, Yucca Complex	06/15/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Yucca Complex	06/22/92	2.8×10^{-13}	5.6×10^{-14}	^7Be
Area 6, Yucca Complex	06/29/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 6, Yucca Complex	07/06/92	8.5×10^{-14}	2.9×10^{-14}	^7Be
Area 6, Yucca Complex	07/13/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 6, Yucca Complex	07/20/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Yucca Complex	07/27/92	2.6×10^{-13}	5.2×10^{-14}	^7Be
Area 6, Yucca Complex	08/03/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 6, Yucca Complex	08/10/92	1.0×10^{-13}	3.0×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 6, Yucca Complex	08/17/92	2.9×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Yucca Complex	08/24/92	2.6×10^{-13}	4.6×10^{-14}	^7Be
Area 6, Yucca Complex	08/31/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Yucca Complex	09/08/92	3.0×10^{-13}	5.4×10^{-14}	^7Be
Area 6, Yucca Complex	09/14/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 6, Yucca Complex	09/21/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Yucca Complex	09/28/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 6, Yucca Complex	10/05/92	1.7×10^{-13}	3.5×10^{-14}	^7Be
Area 6, Yucca Complex	10/13/92	2.7×10^{-13}	6.0×10^{-14}	^7Be
Area 6, Yucca Complex	10/19/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 6, Yucca Complex	10/26/92	1.2×10^{-13}	3.2×10^{-14}	^7Be
Area 6, Yucca Complex	11/03/92	2.4×10^{-13}	5.0×10^{-14}	^7Be
Area 6, Yucca Complex	11/09/92	1.7×10^{-13}	4.5×10^{-14}	^7Be
Area 6, Yucca Complex	11/16/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 6, Yucca Complex	11/23/92	8.5×10^{-14}	3.1×10^{-14}	^7Be
Area 6, Yucca Complex	11/30/92	1.7×10^{-13}	4.0×10^{-14}	^7Be
Area 6, Yucca Complex	12/07/92	4.9×10^{-14}	2.8×10^{-14}	^7Be
Area 6, Yucca Complex	12/14/92	1.4×10^{-13}	2.9×10^{-14}	^7Be
Area 6, Yucca Complex	12/21/92	4.3×10^{-13}	7.6×10^{-14}	^7Be
Area 6, Yucca Complex	12/29/92	1.6×10^{-13}	5.0×10^{-14}	^7Be
Area 7, UE-7ns	01/06/92	9.9×10^{-14}	3.2×10^{-14}	^7Be
Area 7, UE-7ns	01/13/92	1.6×10^{-13}	4.0×10^{-14}	^7Be
Area 7, UE-7ns	01/21/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 7, UE-7ns	01/27/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 7, UE-7ns	02/10/92	5.2×10^{-14}	2.4×10^{-14}	^7Be
Area 7, UE-7ns	02/18/92	9.9×10^{-14}	4.1×10^{-14}	^7Be
Area 7, UE-7ns	02/24/92	1.3×10^{-13}	3.3×10^{-14}	^7Be
Area 7, UE-7ns	03/02/92	1.4×10^{-13}	3.7×10^{-14}	^7Be
Area 7, UE-7ns	03/09/92	1.8×10^{-13}	3.6×10^{-14}	^7Be
Area 7, UE-7ns	03/23/92	7.8×10^{-14}	3.1×10^{-14}	^7Be
Area 7, UE-7ns	03/30/92	1.6×10^{-13}	4.7×10^{-14}	^7Be
Area 7, UE-7ns	04/06/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 7, UE-7ns	04/13/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 7, UE-7ns	04/20/92	1.5×10^{-13}	3.6×10^{-14}	^7Be
Area 7, UE-7ns	05/04/92	2.7×10^{-13}	6.0×10^{-14}	^7Be
Area 7, UE-7ns	05/11/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 7, UE-7ns	05/18/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 7, UE-7ns	05/26/92	1.7×10^{-13}	5.5×10^{-14}	^7Be
Area 7, UE-7ns	06/01/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 7, UE-7ns	06/08/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 7, UE-7ns	06/15/92	1.9×10^{-13}	4.7×10^{-14}	^7Be
Area 7, UE-7ns	06/22/92	1.7×10^{-13}	4.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 7, UE-7ns	06/29/92	2.4×10^{-13}	4.5×10^{-14}	^7Be
Area 7, UE-7ns	07/06/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 7, UE-7ns	07/13/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 7, UE-7ns	07/20/92	2.3×10^{-13}	5.3×10^{-14}	^7Be
Area 7, UE-7ns	07/27/92	2.0×10^{-13}	5.0×10^{-14}	^7Be
Area 7, UE-7ns	08/03/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 7, UE-7ns	08/10/92	2.2×10^{-13}	5.1×10^{-14}	^7Be
Area 7, UE-7ns	08/17/92	2.7×10^{-13}	4.9×10^{-14}	^7Be
Area 7, UE-7ns	08/24/92	2.9×10^{-13}	4.9×10^{-14}	^7Be
Area 7, UE-7ns	08/31/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 7, UE-7ns	09/08/92	1.9×10^{-13}	5.9×10^{-14}	^7Be
Area 7, UE-7ns	09/14/92	2.6×10^{-13}	5.3×10^{-14}	^7Be
Area 7, UE-7ns	09/21/92	3.7×10^{-13}	5.6×10^{-14}	^7Be
Area 7, UE-7ns	09/28/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 7, UE-7ns	10/05/92	2.1×10^{-13}	3.9×10^{-14}	^7Be
Area 7, UE-7ns	10/13/92	2.6×10^{-13}	5.3×10^{-14}	^7Be
Area 7, UE-7ns	10/19/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 7, UE-7ns	10/26/92	1.2×10^{-13}	3.8×10^{-14}	^7Be
Area 7, UE-7ns	11/03/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 7, UE-7ns	11/09/92	2.2×10^{-13}	4.3×10^{-14}	^7Be
Area 7, UE-7ns	11/16/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 7, UE-7ns	11/23/92	1.1×10^{-13}	3.5×10^{-14}	^7Be
Area 7, UE-7ns	11/30/92	1.2×10^{-13}	3.1×10^{-14}	^7Be
Area 7, UE-7ns	12/14/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 7, UE-7ns	12/21/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 7, UE-7ns	12/29/92	1.9×10^{-13}	5.2×10^{-14}	^7Be
Area 9, 9-300 Bunker	01/06/92	9.1×10^{-14}	2.8×10^{-14}	^7Be
Area 9, 9-300 Bunker	01/13/92	2.8×10^{-13}	6.4×10^{-14}	^7Be
Area 9, 9-300 Bunker	01/21/92	3.1×10^{-13}	6.2×10^{-14}	^7Be
Area 9, 9-300 Bunker	01/27/92	4.7×10^{-14}	1.5×10^{-14}	^7Be
Area 9, 9-300 Bunker	02/03/92	1.2×10^{-13}	3.8×10^{-14}	^7Be
Area 9, 9-300 Bunker	02/10/92	4.9×10^{-14}	2.5×10^{-14}	^7Be
Area 9, 9-300 Bunker	02/18/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 9, 9-300 Bunker	02/24/92	1.4×10^{-13}	4.1×10^{-14}	^7Be
Area 9, 9-300 Bunker	03/02/92	1.2×10^{-13}	4.0×10^{-14}	^7Be
Area 9, 9-300 Bunker	03/09/92	1.9×10^{-13}	4.8×10^{-14}	^7Be
Area 9, 9-300 Bunker	03/17/92	8.8×10^{-14}	4.0×10^{-14}	^7Be
Area 9, 9-300 Bunker	03/23/92	8.3×10^{-14}	4.0×10^{-14}	^7Be
Area 9, 9-300 Bunker	03/30/92	4.4×10^{-13}	1.7×10^{-13}	^7Be
Area 9, 9-300 Bunker	04/06/92	1.5×10^{-13}	4.6×10^{-14}	^7Be
Area 9, 9-300 Bunker	04/13/92	2.5×10^{-13}	4.7×10^{-14}	^7Be
Area 9, 9-300 Bunker	04/20/92	1.9×10^{-13}	4.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 9, 9-300 Bunker	04/27/92	4.4×10^{-13}	6.5×10^{-14}	^7Be
Area 9, 9-300 Bunker	05/04/92	2.8×10^{-13}	5.6×10^{-14}	^7Be
Area 9, 9-300 Bunker	05/11/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 9, 9-300 Bunker	05/18/92	2.2×10^{-13}	4.3×10^{-14}	^7Be
Area 9, 9-300 Bunker	05/26/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 9, 9-300 Bunker	06/01/92	1.2×10^{-13}	4.7×10^{-14}	^7Be
Area 9, 9-300 Bunker	06/08/92	2.2×10^{-13}	5.9×10^{-14}	^7Be
Area 9, 9-300 Bunker	06/29/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 9, 9-300 Bunker	07/20/92	1.8×10^{-13}	5.7×10^{-14}	^7Be
Area 9, 9-300 Bunker	07/27/92	2.4×10^{-13}	5.7×10^{-14}	^7Be
Area 9, 9-300 Bunker	08/03/92	2.4×10^{-13}	5.1×10^{-14}	^7Be
Area 9, 9-300 Bunker	08/10/92	1.7×10^{-13}	4.8×10^{-14}	^7Be
Area 9, 9-300 Bunker	08/17/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 9, 9-300 Bunker	08/24/92	3.2×10^{-13}	6.1×10^{-14}	^7Be
Area 9, 9-300 Bunker	08/31/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 9, 9-300 Bunker	09/08/92	2.8×10^{-13}	5.7×10^{-14}	^7Be
Area 9, 9-300 Bunker	09/21/92	2.8×10^{-13}	5.2×10^{-14}	^7Be
Area 9, 9-300 Bunker	09/28/92	2.4×10^{-13}	4.6×10^{-14}	^7Be
Area 9, 9-300 Bunker	10/05/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 9, 9-300 Bunker	10/13/92	2.2×10^{-13}	4.7×10^{-14}	^7Be
Area 9, 9-300 Bunker	10/19/92	1.9×10^{-13}	4.8×10^{-14}	^7Be
Area 9, 9-300 Bunker	10/26/92	7.5×10^{-14}	3.0×10^{-14}	^7Be
Area 9, 9-300 Bunker	11/03/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 9, 9-300 Bunker	11/09/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 9, 9-300 Bunker	11/16/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 9, 9-300 Bunker	11/23/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 9, 9-300 Bunker	11/30/92	1.8×10^{-13}	4.3×10^{-14}	^7Be
Area 9, 9-300 Bunker	12/14/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 9, 9-300 Bunker	12/21/92	2.2×10^{-13}	4.3×10^{-14}	^7Be
Area 9, 9-300 Bunker	12/29/92	1.5×10^{-13}	4.9×10^{-14}	^7Be
Area 10, Gate 700	01/06/92	1.1×10^{-13}	3.4×10^{-14}	^7Be
Area 10, Gate 700	01/13/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 10, Gate 700	01/21/92	1.5×10^{-13}	4.0×10^{-14}	^7Be
Area 10, Gate 700	01/27/92	2.0×10^{-13}	5.0×10^{-14}	^7Be
Area 10, Gate 700	02/03/92	6.7×10^{-14}	3.2×10^{-14}	^7Be
Area 10, Gate 700	02/18/92	1.9×10^{-13}	4.9×10^{-14}	^7Be
Area 10, Gate 700	02/24/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 10, Gate 700	03/02/92	1.1×10^{-13}	3.1×10^{-14}	^7Be
Area 10, Gate 700	03/09/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 10, Gate 700	03/17/92	9.8×10^{-14}	3.0×10^{-14}	^7Be
Area 10, Gate 700	03/23/92	9.9×10^{-14}	3.1×10^{-14}	^7Be
Area 10, Gate 700	03/30/92	1.3×10^{-13}	3.3×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 10, Gate 700	04/06/92	1.5×10^{-13}	4.7×10^{-14}	^7Be
Area 10, Gate 700	04/13/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 10, Gate 700	04/20/92	1.6×10^{-13}	3.6×10^{-14}	^7Be
Area 10, Gate 700	04/27/92	2.4×10^{-13}	4.5×10^{-14}	^7Be
Area 10, Gate 700	05/04/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 10, Gate 700	05/11/92	1.5×10^{-13}	3.9×10^{-14}	^7Be
Area 10, Gate 700	05/18/92	2.2×10^{-13}	4.2×10^{-14}	^7Be
Area 10, Gate 700	05/26/92	2.1×10^{-13}	4.5×10^{-14}	^7Be
Area 10, Gate 700	06/01/92	2.1×10^{-13}	6.1×10^{-14}	^7Be
Area 10, Gate 700	06/08/92	2.3×10^{-13}	5.8×10^{-14}	^7Be
Area 10, Gate 700	06/15/92	2.6×10^{-13}	5.9×10^{-14}	^7Be
Area 10, Gate 700	06/22/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 10, Gate 700	06/29/92	2.2×10^{-13}	4.2×10^{-14}	^7Be
Area 10, Gate 700	07/06/92	1.9×10^{-13}	4.7×10^{-14}	^7Be
Area 10, Gate 700	07/13/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 10, Gate 700	07/20/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 10, Gate 700	07/27/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 10, Gate 700	08/03/92	1.7×10^{-13}	4.3×10^{-14}	^7Be
Area 10, Gate 700	08/10/92	2.2×10^{-13}	5.4×10^{-14}	^7Be
Area 10, Gate 700	08/17/92	2.8×10^{-13}	5.5×10^{-14}	^7Be
Area 10, Gate 700	08/24/92	2.4×10^{-13}	5.1×10^{-14}	^7Be
Area 10, Gate 700	08/31/92	2.4×10^{-13}	4.4×10^{-14}	^7Be
Area 10, Gate 700	09/08/92	2.0×10^{-13}	5.1×10^{-14}	^7Be
Area 10, Gate 700	09/14/92	2.3×10^{-13}	4.9×10^{-14}	^7Be
Area 10, Gate 700	09/21/92	2.8×10^{-13}	5.0×10^{-14}	^7Be
Area 10, Gate 700	09/28/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 10, Gate 700	10/05/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 10, Gate 700	10/13/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 10, Gate 700	10/19/92	1.4×10^{-13}	4.1×10^{-14}	^7Be
Area 10, Gate 700	10/26/92	1.2×10^{-13}	3.5×10^{-14}	^7Be
Area 10, Gate 700	11/03/92	1.3×10^{-13}	3.8×10^{-14}	^7Be
Area 10, Gate 700	11/09/92	2.5×10^{-13}	4.6×10^{-14}	^7Be
Area 10, Gate 700	11/16/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 10, Gate 700	11/23/92	9.0×10^{-14}	3.0×10^{-14}	^7Be
Area 10, Gate 700	11/30/92	6.7×10^{-15}	1.8×10^{-15}	^7Be
Area 10, Gate 700	12/14/92	2.3×10^{-13}	5.1×10^{-14}	^7Be
Area 10, Gate 700	12/21/92	2.8×10^{-13}	4.6×10^{-14}	^7Be
Area 10, Gate 700	12/29/92	2.0×10^{-13}	9.0×10^{-14}	^7Be
Area 11, Gate 293	01/06/92	1.3×10^{-13}	4.3×10^{-14}	^7Be
Area 11, Gate 293	01/13/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 11, Gate 293	01/21/92	2.5×10^{-13}	4.8×10^{-14}	^7Be
Area 11, Gate 293	01/27/92	2.0×10^{-13}	4.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 11, Gate 293	02/03/92	1.1×10^{-13}	3.9×10^{-14}	^7Be
Area 11, Gate 293	02/10/92	3.3×10^{-14}	1.9×10^{-14}	^7Be
Area 11, Gate 293	02/18/92	9.4×10^{-14}	4.2×10^{-14}	^7Be
Area 11, Gate 293	02/24/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 11, Gate 293	03/02/92	6.5×10^{-14}	2.5×10^{-14}	^7Be
Area 11, Gate 293	03/09/92	1.6×10^{-13}	3.3×10^{-14}	^7Be
Area 11, Gate 293	03/17/92	1.1×10^{-13}	3.9×10^{-14}	^7Be
Area 11, Gate 293	03/23/92	1.1×10^{-13}	3.6×10^{-14}	^7Be
Area 11, Gate 293	03/30/92	1.9×10^{-13}	4.8×10^{-14}	^7Be
Area 11, Gate 293	04/06/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 11, Gate 293	04/13/92	2.2×10^{-13}	4.7×10^{-14}	^7Be
Area 11, Gate 293	04/20/92	2.4×10^{-13}	4.5×10^{-14}	^7Be
Area 11, Gate 293	05/04/92	4.9×10^{-13}	9.6×10^{-14}	^7Be
Area 11, Gate 293	05/11/92	1.5×10^{-13}	3.4×10^{-14}	^7Be
Area 11, Gate 293	05/18/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 11, Gate 293	05/26/92	2.3×10^{-13}	6.0×10^{-14}	^7Be
Area 11, Gate 293	06/01/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 11, Gate 293	06/08/92	1.7×10^{-13}	4.3×10^{-14}	^7Be
Area 11, Gate 293	06/15/92	2.5×10^{-13}	4.9×10^{-14}	^7Be
Area 11, Gate 293	06/22/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 11, Gate 293	06/29/92	2.2×10^{-13}	5.1×10^{-14}	^7Be
Area 11, Gate 293	07/06/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 11, Gate 293	07/13/92	1.5×10^{-13}	5.1×10^{-14}	^7Be
Area 11, Gate 293	07/20/92	2.2×10^{-13}	5.5×10^{-14}	^7Be
Area 11, Gate 293	07/27/92	1.8×10^{-13}	5.0×10^{-14}	^7Be
Area 11, Gate 293	08/03/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 11, Gate 293	08/10/92	1.9×10^{-13}	4.7×10^{-14}	^7Be
Area 11, Gate 293	08/17/92	3.2×10^{-13}	5.9×10^{-14}	^7Be
Area 11, Gate 293	08/24/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 11, Gate 293	08/31/92	2.3×10^{-13}	5.1×10^{-14}	^7Be
Area 11, Gate 293	09/08/92	1.6×10^{-13}	4.3×10^{-14}	^7Be
Area 11, Gate 293	09/14/92	2.7×10^{-13}	4.7×10^{-14}	^7Be
Area 11, Gate 293	09/21/92	2.3×10^{-13}	5.6×10^{-14}	^7Be
Area 11, Gate 293	09/28/92	2.7×10^{-13}	5.7×10^{-14}	^7Be
Area 11, Gate 293	10/05/92	2.0×10^{-13}	4.0×10^{-14}	^7Be
Area 11, Gate 293	10/13/92	2.3×10^{-13}	5.8×10^{-14}	^7Be
Area 11, Gate 293	10/19/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 11, Gate 293	10/26/92	1.6×10^{-13}	3.5×10^{-14}	^7Be
Area 11, Gate 293	11/03/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 11, Gate 293	11/09/92	1.2×10^{-13}	4.1×10^{-14}	^7Be
Area 11, Gate 293	11/16/92	1.2×10^{-13}	4.6×10^{-14}	^7Be
Area 11, Gate 293	11/23/92	7.2×10^{-14}	2.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>		<u>Radio- nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 11, Gate 293	11/30/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 11, Gate 293	12/07/92	5.6×10^{-14}	2.9×10^{-14}	^7Be
Area 11, Gate 293	12/14/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 11, Gate 293	12/21/92	2.3×10^{-13}	4.1×10^{-14}	^7Be
Area 11, Gate 293	12/29/92	1.7×10^{-13}	5.1×10^{-14}	^7Be
Area 12, Complex	01/06/92	7.5×10^{-14}	3.0×10^{-14}	^7Be
Area 12, Complex	01/13/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 12, Complex	01/21/92	1.1×10^{-13}	3.6×10^{-14}	^7Be
Area 12, Complex	01/27/92	1.8×10^{-13}	5.1×10^{-14}	^7Be
Area 12, Complex	02/03/92	1.1×10^{-13}	3.9×10^{-14}	^7Be
Area 12, Complex	02/10/92	6.2×10^{-14}	4.6×10^{-14}	^{40}K
Area 12, Complex	02/18/92	2.4×10^{-13}	5.8×10^{-14}	^7Be
Area 12, Complex	02/24/92	6.8×10^{-14}	3.1×10^{-14}	^7Be
Area 12, Complex	03/02/92	1.3×10^{-13}	4.8×10^{-14}	^7Be
Area 12, Complex	03/09/92	1.9×10^{-13}	5.3×10^{-14}	^7Be
Area 12, Complex	03/23/92	8.9×10^{-14}	4.0×10^{-14}	^7Be
Area 12, Complex	03/30/92	1.3×10^{-13}	4.3×10^{-14}	^7Be
Area 12, Complex	04/06/92	1.5×10^{-13}	6.0×10^{-14}	^7Be
Area 12, Complex	04/13/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 12, Complex	04/20/92	2.4×10^{-13}	5.5×10^{-14}	^7Be
Area 12, Complex	04/27/92	2.9×10^{-13}	6.5×10^{-14}	^7Be
Area 12, Complex	05/04/92	2.5×10^{-13}	5.5×10^{-14}	^7Be
Area 12, Complex	05/11/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 12, Complex	05/18/92	2.4×10^{-13}	4.7×10^{-14}	^7Be
Area 12, Complex	05/26/92	2.8×10^{-13}	6.5×10^{-14}	^7Be
Area 12, Complex	06/01/92	1.4×10^{-13}	5.3×10^{-14}	^7Be
Area 12, Complex	06/09/92	2.4×10^{-13}	5.5×10^{-14}	^7Be
Area 12, Complex	06/15/92	2.6×10^{-13}	5.5×10^{-14}	^7Be
Area 12, Complex	06/22/92	2.7×10^{-13}	5.4×10^{-14}	^7Be
Area 12, Complex	06/29/92	2.4×10^{-13}	6.8×10^{-14}	^7Be
Area 12, Complex	07/06/92	1.1×10^{-13}	4.8×10^{-14}	^7Be
Area 12, Complex	07/20/92	2.1×10^{-13}	6.1×10^{-14}	^7Be
Area 12, Complex	07/27/92	1.6×10^{-13}	3.8×10^{-14}	^7Be
Area 12, Complex	08/03/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 12, Complex	08/10/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 12, Complex	08/17/92	2.6×10^{-13}	5.3×10^{-14}	^7Be
Area 12, Complex	08/24/92	3.0×10^{-13}	5.3×10^{-14}	^7Be
Area 12, Complex	09/01/92	9.4×10^{-14}	2.2×10^{-14}	^7Be
Area 12, Complex	09/08/92	3.6×10^{-13}	7.2×10^{-14}	^7Be
Area 12, Complex	09/14/92	2.0×10^{-13}	4.3×10^{-14}	^7Be
Area 12, Complex	09/21/92	3.2×10^{-12}	5.8×10^{-13}	^7Be
Area 12, Complex	09/28/92	2.1×10^{-13}	4.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	<u>$\mu\text{Ci/mL}$</u>		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 12, Complex	10/05/92	4.2×10^{-13}	9.6×10^{-14}	^7Be
Area 12, Complex	10/13/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 12, Complex	10/19/92	1.6×10^{-13}	4.2×10^{-14}	^7Be
Area 12, Complex	10/26/92	9.5×10^{-14}	3.0×10^{-14}	^7Be
Area 12, Complex	11/02/92	1.4×10^{-13}	3.5×10^{-14}	^7Be
Area 12, Complex	11/09/92	1.6×10^{-13}	3.6×10^{-14}	^7Be
Area 12, Complex	11/16/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 12, Complex	11/23/92	6.8×10^{-14}	3.3×10^{-14}	^7Be
Area 12, Complex	11/30/92	1.3×10^{-13}	3.1×10^{-14}	^7Be
Area 12, Complex	12/08/92	5.2×10^{-14}	2.5×10^{-14}	^7Be
Area 12, Complex	12/15/92	2.3×10^{-13}	7.3×10^{-14}	^7Be
Area 12, Complex	12/21/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 12, Complex	12/28/92	1.4×10^{-13}	4.6×10^{-14}	^7Be
Area 12, P Tunnel Portal	01/21/92	1.4×10^{-13}	6.4×10^{-14}	^7Be
Area 12, P Tunnel Portal	02/19/92	3.5×10^{-14}	7.7×10^{-15}	^{208}Tl
Area 12, P Tunnel Portal	02/24/92	7.5×10^{-14}	3.8×10^{-14}	^7Be
Area 12, P Tunnel Portal	03/09/92	1.1×10^{-13}	4.2×10^{-14}	^7Be
Area 12, P Tunnel Portal	03/09/92	4.8×10^{-14}	8.4×10^{-15}	^{208}Tl
Area 12, P Tunnel Portal	03/16/92	9.5×10^{-14}	3.4×10^{-14}	^7Be
Area 12, P Tunnel Portal	03/24/92	1.8×10^{-13}	7.9×10^{-14}	^7Be
Area 12, P Tunnel Portal	04/01/92	1.8×10^{-13}	5.0×10^{-14}	^7Be
Area 12, P Tunnel Portal	04/06/92	1.8×10^{-13}	5.5×10^{-14}	^7Be
Area 12, P Tunnel Portal	04/13/92	1.9×10^{-13}	4.2×10^{-14}	^7Be
Area 12, P Tunnel Portal	04/21/92	1.6×10^{-13}	5.4×10^{-14}	^7Be
Area 12, P Tunnel Portal	04/27/92	1.9×10^{-13}	6.3×10^{-14}	^7Be
Area 12, P Tunnel Portal	04/27/92	1.9×10^{-13}	1.4×10^{-13}	^{40}K
Area 12, P Tunnel Portal	04/27/92	9.5×10^{-12}	6.3×10^{-13}	^{133}Xe
Area 12, P Tunnel Portal	04/27/92	5.5×10^{-12}	3.1×10^{-13}	^{131}I
Area 12, P Tunnel Portal	05/05/92	2.3×10^{-12}	1.6×10^{-13}	^{131}I
Area 12, P Tunnel Portal	05/11/92	2.6×10^{-13}	3.2×10^{-14}	^{131}I
Area 12, P Tunnel Portal	05/11/92	1.4×10^{-13}	3.8×10^{-14}	^7Be
Area 12, P Tunnel Portal	05/11/92	1.0×10^{-13}	6.2×10^{-14}	^{40}K
Area 12, P Tunnel Portal	05/20/92	1.4×10^{-13}	6.0×10^{-14}	^7Be
Area 12, P Tunnel Portal	05/20/92	1.0×10^{-13}	3.1×10^{-14}	^{131}I
Area 12, P Tunnel Portal	06/03/92	1.6×10^{-13}	7.4×10^{-14}	^7Be
Area 12, P Tunnel Portal	06/10/92	2.3×10^{-13}	7.2×10^{-14}	^7Be
Area 12, P Tunnel Portal	06/17/92	2.8×10^{-13}	1.0×10^{-13}	^7Be
Area 12, P Tunnel Portal	06/24/92	1.3×10^{-13}	3.8×10^{-14}	^7Be
Area 12, P Tunnel Portal	07/02/92	2.2×10^{-13}	6.8×10^{-14}	^7Be
Area 12, P Tunnel Portal	07/14/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 12, P Tunnel Portal	07/22/92	1.7×10^{-13}	5.0×10^{-14}	^7Be
Area 12, P Tunnel Portal	07/28/92	1.7×10^{-13}	4.5×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 12, P Tunnel Portal	08/04/92	3.8×10^{-14}	1.1×10^{-14}	^{95}Nb
Area 12, P Tunnel Portal	08/04/92	7.6×10^{-13}	5.1×10^{-14}	^{141}Ce
Area 12, P Tunnel Portal	08/04/92	9.8×10^{-14}	2.5×10^{-14}	^{140}La
Area 12, P Tunnel Portal	08/04/92	2.1×10^{-13}	5.9×10^{-14}	^7Be
Area 12, P Tunnel Portal	08/04/92	7.6×10^{-14}	1.3×10^{-14}	^{103}Ru
Area 12, P Tunnel Portal	08/11/92	1.1×10^{-13}	2.4×10^{-14}	^{95}Zr
Area 12, P Tunnel Portal	08/11/92	2.2×10^{-14}	9.2×10^{-15}	^{137}Cs
Area 12, P Tunnel Portal	08/11/92	2.6×10^{-13}	2.8×10^{-14}	^{103}Ru
Area 12, P Tunnel Portal	08/11/92	2.2×10^{-13}	4.7×10^{-14}	^{140}La
Area 12, P Tunnel Portal	08/11/92	2.7×10^{-13}	7.9×10^{-14}	^{140}Ba
Area 12, P Tunnel Portal	08/11/92	2.3×10^{-12}	1.3×10^{-13}	^{141}Ce
Area 12, P Tunnel Portal	08/11/92	1.3×10^{-13}	2.3×10^{-14}	^{95}Nb
Area 12, P Tunnel Portal	08/18/92	6.1×10^{-14}	1.3×10^{-14}	^{141}Ce
Area 12, P Tunnel Portal	08/18/92	2.0×10^{-13}	7.0×10^{-14}	^7Be
Area 12, P Tunnel Portal	08/18/92	2.9×10^{-14}	1.1×10^{-14}	^{131}I
Area 12, P Tunnel Portal	08/25/92	1.4×10^{-13}	5.9×10^{-14}	^7Be
Area 12, P Tunnel Portal	09/01/92	2.5×10^{-13}	9.8×10^{-14}	^7Be
Area 12, P Tunnel Portal	09/01/92	7.1×10^{-14}	1.6×10^{-14}	^{141}Ce
Area 12, P Tunnel Portal	09/09/92	2.3×10^{-13}	8.9×10^{-14}	^7Be
Area 12, P Tunnel Portal	09/15/92	1.3×10^{-13}	5.5×10^{-14}	^7Be
Area 12, P Tunnel Portal	09/22/92	1.1×10^{-13}	4.9×10^{-14}	^7Be
Area 12, P Tunnel Portal	09/29/92	7.8×10^{-14}	2.9×10^{-14}	^7Be
Area 12, P Tunnel Portal	10/06/92	2.4×10^{-13}	9.4×10^{-14}	^7Be
Area 12, P Tunnel Portal	10/20/92	1.5×10^{-13}	6.3×10^{-14}	^7Be
Area 12, P Tunnel Portal	10/27/92	9.5×10^{-14}	4.1×10^{-14}	^7Be
Area 12, P Tunnel Portal	11/04/92	2.0×10^{-13}	6.8×10^{-14}	^7Be
Area 12, P Tunnel Portal	11/17/92	1.2×10^{-13}	4.3×10^{-14}	^7Be
Area 12, P Tunnel Portal	11/25/92	1.4×10^{-13}	2.7×10^{-14}	^{208}Tl
Area 12, P Tunnel Portal	12/01/92	1.3×10^{-13}	1.8×10^{-14}	^{208}Tl
Area 15, EPA Farm	01/06/92	6.4×10^{-14}	2.3×10^{-14}	^7Be
Area 15, EPA Farm	01/13/92	1.6×10^{-13}	4.0×10^{-14}	^7Be
Area 15, EPA Farm	01/21/92	2.8×10^{-13}	8.1×10^{-14}	^7Be
Area 15, EPA Farm	01/27/92	2.1×10^{-13}	4.9×10^{-14}	^7Be
Area 15, EPA Farm	02/03/92	1.2×10^{-13}	3.5×10^{-14}	^7Be
Area 15, EPA Farm	02/10/92	7.1×10^{-14}	4.0×10^{-14}	^7Be
Area 15, EPA Farm	02/18/92	1.6×10^{-13}	5.0×10^{-14}	^7Be
Area 15, EPA Farm	02/24/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 15, EPA Farm	03/02/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 15, EPA Farm	03/09/92	2.8×10^{-13}	5.2×10^{-14}	^7Be
Area 15, EPA Farm	03/17/92	1.0×10^{-13}	4.0×10^{-14}	^7Be
Area 15, EPA Farm	03/23/92	4.7×10^{-14}	3.1×10^{-14}	^7Be
Area 15, EPA Farm	03/30/92	1.5×10^{-13}	3.9×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 15, EPA Farm	04/06/92	2.4×10^{-13}	5.5×10^{-14}	^7Be
Area 15, EPA Farm	04/13/92	1.2×10^{-13}	5.7×10^{-14}	^7Be
Area 15, EPA Farm	04/20/92	1.1×10^{-13}	3.5×10^{-14}	^7Be
Area 15, EPA Farm	05/04/92	6.1×10^{-13}	8.1×10^{-14}	^7Be
Area 15, EPA Farm	05/11/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 15, EPA Farm	05/18/92	2.6×10^{-13}	4.8×10^{-14}	^7Be
Area 15, EPA Farm	05/26/92	2.7×10^{-13}	5.9×10^{-14}	^7Be
Area 15, EPA Farm	06/01/92	2.0×10^{-13}	5.8×10^{-14}	^7Be
Area 15, EPA Farm	06/08/92	3.5×10^{-13}	7.2×10^{-14}	^7Be
Area 15, EPA Farm	06/15/92	3.4×10^{-13}	6.9×10^{-14}	^7Be
Area 15, EPA Farm	06/22/92	2.8×10^{-13}	5.3×10^{-14}	^7Be
Area 15, EPA Farm	06/29/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 15, EPA Farm	07/06/92	1.6×10^{-13}	4.9×10^{-14}	^7Be
Area 15, EPA Farm	07/13/92	1.6×10^{-13}	4.1×10^{-14}	^7Be
Area 15, EPA Farm	07/20/92	2.5×10^{-13}	5.9×10^{-14}	^7Be
Area 15, EPA Farm	07/27/92	2.7×10^{-13}	6.0×10^{-14}	^7Be
Area 15, EPA Farm	08/03/92	2.4×10^{-13}	6.0×10^{-14}	^7Be
Area 15, EPA Farm	08/10/92	2.6×10^{-13}	7.7×10^{-14}	^7Be
Area 15, EPA Farm	08/17/92	3.4×10^{-13}	7.5×10^{-14}	^7Be
Area 15, EPA Farm	08/24/92	3.1×10^{-13}	6.3×10^{-14}	^7Be
Area 15, EPA Farm	08/31/92	2.4×10^{-13}	4.6×10^{-14}	^7Be
Area 15, EPA Farm	09/08/92	3.3×10^{-13}	7.0×10^{-14}	^7Be
Area 15, EPA Farm	09/14/92	2.1×10^{-13}	5.4×10^{-14}	^7Be
Area 15, EPA Farm	09/21/92	3.3×10^{-13}	5.8×10^{-14}	^7Be
Area 15, EPA Farm	09/28/92	2.8×10^{-13}	5.4×10^{-14}	^7Be
Area 15, EPA Farm	10/05/92	2.8×10^{-13}	5.4×10^{-14}	^7Be
Area 15, EPA Farm	10/13/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 15, EPA Farm	10/19/92	1.5×10^{-13}	5.1×10^{-14}	^7Be
Area 15, EPA Farm	10/26/92	1.4×10^{-13}	4.2×10^{-14}	^7Be
Area 15, EPA Farm	11/03/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 15, EPA Farm	11/09/92	1.8×10^{-13}	4.2×10^{-14}	^7Be
Area 15, EPA Farm	11/16/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 15, EPA Farm	11/23/92	7.2×10^{-14}	3.1×10^{-14}	^7Be
Area 15, EPA Farm	11/30/92	2.1×10^{-13}	4.6×10^{-14}	^7Be
Area 15, EPA Farm	12/07/92	8.2×10^{-13}	3.2×10^{-13}	^7Be
Area 15, EPA Farm	12/14/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 15, EPA Farm	12/21/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 15, EPA Farm	12/29/92	2.8×10^{-13}	6.7×10^{-14}	^7Be
Area 16, 3545 Substation	01/06/92	1.4×10^{-13}	4.4×10^{-14}	^7Be
Area 16, 3545 Substation	01/13/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 16, 3545 Substation	01/21/92	1.6×10^{-13}	3.9×10^{-14}	^7Be
Area 16, 3545 Substation	01/27/92	1.9×10^{-13}	4.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 16, 3545 Substation	02/03/92	1.1×10^{-13}	3.2×10^{-14}	^7Be
Area 16, 3545 Substation	02/10/92	7.3×10^{-14}	2.5×10^{-14}	^7Be
Area 16, 3545 Substation	02/18/92	1.3×10^{-13}	3.7×10^{-14}	^7Be
Area 16, 3545 Substation	02/24/92	1.4×10^{-13}	3.4×10^{-14}	^7Be
Area 16, 3545 Substation	03/02/92	7.8×10^{-14}	3.1×10^{-14}	^7Be
Area 16, 3545 Substation	03/09/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 16, 3545 Substation	03/17/92	9.2×10^{-14}	3.3×10^{-14}	^7Be
Area 16, 3545 Substation	03/23/92	9.0×10^{-14}	3.1×10^{-14}	^7Be
Area 16, 3545 Substation	03/30/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 16, 3545 Substation	04/06/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 16, 3545 Substation	04/13/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 16, 3545 Substation	04/20/92	1.7×10^{-13}	2.9×10^{-14}	^7Be
Area 16, 3545 Substation	05/04/92	2.4×10^{-13}	4.6×10^{-14}	^7Be
Area 16, 3545 Substation	05/11/92	2.2×10^{-13}	6.7×10^{-14}	^7Be
Area 16, 3545 Substation	05/18/92	2.3×10^{-13}	4.3×10^{-14}	^7Be
Area 16, 3545 Substation	05/26/92	1.7×10^{-13}	4.3×10^{-14}	^7Be
Area 16, 3545 Substation	06/01/92	2.6×10^{-13}	6.0×10^{-14}	^7Be
Area 16, 3545 Substation	06/09/92	2.1×10^{-13}	5.5×10^{-14}	^7Be
Area 16, 3545 Substation	06/15/92	2.5×10^{-13}	3.4×10^{-14}	^7Be
Area 16, 3545 Substation	06/29/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 16, 3545 Substation	07/06/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 16, 3545 Substation	07/13/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 16, 3545 Substation	07/20/92	3.1×10^{-13}	6.0×10^{-14}	^7Be
Area 16, 3545 Substation	07/27/92	1.7×10^{-13}	3.7×10^{-14}	^7Be
Area 16, 3545 Substation	08/03/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 16, 3545 Substation	08/10/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 16, 3545 Substation	08/17/92	3.1×10^{-13}	5.8×10^{-14}	^7Be
Area 16, 3545 Substation	08/24/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 16, 3545 Substation	08/31/92	1.8×10^{-13}	4.2×10^{-14}	^7Be
Area 16, 3545 Substation	09/08/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 16, 3545 Substation	09/14/92	9.2×10^{-14}	6.8×10^{-14}	^{40}K
Area 16, 3545 Substation	09/14/92	2.6×10^{-13}	5.4×10^{-14}	^7Be
Area 16, 3545 Substation	09/21/92	2.1×10^{-13}	5.2×10^{-14}	^7Be
Area 16, 3545 Substation	09/28/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 16, 3545 Substation	10/05/92	1.9×10^{-13}	4.7×10^{-14}	^7Be
Area 16, 3545 Substation	10/12/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 16, 3545 Substation	10/19/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 16, 3545 Substation	10/26/92	1.0×10^{-13}	3.3×10^{-14}	^7Be
Area 16, 3545 Substation	11/02/92	2.4×10^{-13}	3.3×10^{-14}	^7Be
Area 16, 3545 Substation	11/16/92	1.4×10^{-13}	3.5×10^{-14}	^7Be
Area 16, 3545 Substation	11/23/92	7.6×10^{-14}	2.8×10^{-14}	^7Be
Area 16, 3545 Substation	11/30/92	1.9×10^{-13}	2.0×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 19, Echo Peak	01/13/92	2.2×10^{-13}	4.9×10^{-14}	^7Be
Area 19, Echo Peak	01/21/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 19, Echo Peak	01/27/92	1.2×10^{-13}	3.8×10^{-14}	^7Be
Area 19, Echo Peak	02/03/92	6.7×10^{-14}	1.4×10^{-14}	^7Be
Area 19, Echo Peak	02/24/92	1.0×10^{-13}	3.0×10^{-14}	^7Be
Area 19, Echo Peak	03/02/92	1.0×10^{-13}	3.1×10^{-14}	^7Be
Area 19, Echo Peak	03/09/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 19, Echo Peak	03/17/92	9.4×10^{-14}	2.5×10^{-14}	^7Be
Area 19, Echo Peak	03/30/92	1.8×10^{-13}	3.8×10^{-14}	^7Be
Area 19, Echo Peak	04/06/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 19, Echo Peak	04/13/92	1.9×10^{-13}	3.9×10^{-14}	^7Be
Area 19, Echo Peak	04/20/92	2.2×10^{-13}	4.2×10^{-14}	^7Be
Area 19, Echo Peak	04/27/92	2.9×10^{-13}	4.9×10^{-14}	^7Be
Area 19, Echo Peak	05/04/92	2.7×10^{-13}	4.9×10^{-14}	^7Be
Area 19, Echo Peak	05/11/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 19, Echo Peak	05/18/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 19, Echo Peak	05/26/92	2.3×10^{-13}	5.1×10^{-14}	^7Be
Area 19, Echo Peak	06/01/92	1.8×10^{-13}	5.1×10^{-14}	^7Be
Area 19, Echo Peak	06/09/92	3.0×10^{-13}	6.6×10^{-14}	^7Be
Area 19, Echo Peak	06/15/92	2.1×10^{-13}	5.0×10^{-14}	^7Be
Area 19, Echo Peak	06/22/92	2.4×10^{-13}	4.4×10^{-14}	^7Be
Area 19, Echo Peak	06/29/92	1.5×10^{-13}	4.3×10^{-14}	^7Be
Area 19, Echo Peak	07/06/92	1.4×10^{-13}	4.2×10^{-14}	^7Be
Area 19, Echo Peak	07/13/92	1.4×10^{-13}	3.5×10^{-14}	^7Be
Area 19, Echo Peak	07/20/92	2.1×10^{-13}	4.7×10^{-14}	^7Be
Area 19, Echo Peak	07/27/92	1.6×10^{-13}	3.9×10^{-14}	^7Be
Area 19, Echo Peak	08/03/92	1.7×10^{-13}	4.1×10^{-14}	^7Be
Area 19, Echo Peak	08/10/92	1.7×10^{-13}	4.5×10^{-14}	^7Be
Area 19, Echo Peak	08/17/92	2.1×10^{-13}	4.7×10^{-14}	^7Be
Area 19, Echo Peak	08/24/92	2.6×10^{-13}	5.1×10^{-14}	^7Be
Area 19, Echo Peak	08/31/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 19, Echo Peak	09/08/92	1.9×10^{-13}	5.7×10^{-14}	^7Be
Area 19, Echo Peak	09/14/92	2.0×10^{-13}	4.8×10^{-14}	^7Be
Area 19, Echo Peak	09/21/92	2.4×10^{-13}	4.6×10^{-14}	^7Be
Area 19, Echo Peak	09/28/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 19, Echo Peak	10/05/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 19, Echo Peak	10/13/92	1.7×10^{-13}	4.1×10^{-14}	^7Be
Area 19, Echo Peak	10/19/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 19, Echo Peak	10/26/92	1.4×10^{-13}	3.7×10^{-14}	^7Be
Area 19, Echo Peak	11/02/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 19, Echo Peak	11/09/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 19, Echo Peak	11/16/92	1.1×10^{-13}	2.9×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>		<u>Radio-nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 19, Echo Peak	11/24/92	1.0×10^{-13}	3.4×10^{-14}	⁷ Be
Area 19, Pahute Substation	01/06/92	1.3×10^{-13}	4.0×10^{-14}	⁷ Be
Area 19, Pahute Substation	01/13/92	1.4×10^{-13}	3.7×10^{-14}	⁷ Be
Area 19, Pahute Substation	01/21/92	1.4×10^{-13}	3.8×10^{-14}	⁷ Be
Area 19, Pahute Substation	01/27/92	1.2×10^{-13}	3.7×10^{-14}	⁷ Be
Area 19, Pahute Substation	02/03/92	1.3×10^{-13}	3.5×10^{-14}	⁷ Be
Area 19, Pahute Substation	02/10/92	8.1×10^{-14}	2.5×10^{-14}	⁷ Be
Area 19, Pahute Substation	02/18/92	1.6×10^{-13}	4.1×10^{-14}	⁷ Be
Area 19, Pahute Substation	02/24/92	1.3×10^{-13}	3.7×10^{-14}	⁷ Be
Area 19, Pahute Substation	03/02/92	7.4×10^{-14}	3.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	03/09/92	1.7×10^{-13}	4.1×10^{-14}	⁷ Be
Area 19, Pahute Substation	03/17/92	1.3×10^{-13}	3.9×10^{-14}	⁷ Be
Area 19, Pahute Substation	03/23/92	1.1×10^{-13}	3.5×10^{-14}	⁷ Be
Area 19, Pahute Substation	03/30/92	1.8×10^{-13}	4.5×10^{-14}	⁷ Be
Area 19, Pahute Substation	04/06/92	2.0×10^{-13}	5.5×10^{-14}	⁷ Be
Area 19, Pahute Substation	04/13/92	1.8×10^{-13}	4.0×10^{-14}	⁷ Be
Area 19, Pahute Substation	04/20/92	2.0×10^{-13}	4.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	04/27/92	2.7×10^{-13}	5.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	05/04/92	1.8×10^{-13}	4.7×10^{-14}	⁷ Be
Area 19, Pahute Substation	05/11/92	2.3×10^{-13}	4.6×10^{-14}	⁷ Be
Area 19, Pahute Substation	05/18/92	1.2×10^{-13}	3.3×10^{-14}	⁷ Be
Area 19, Pahute Substation	05/26/92	1.9×10^{-13}	4.7×10^{-14}	⁷ Be
Area 19, Pahute Substation	06/01/92	2.1×10^{-13}	5.8×10^{-14}	⁷ Be
Area 19, Pahute Substation	06/09/92	1.9×10^{-13}	5.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	06/15/92	2.2×10^{-13}	5.9×10^{-14}	⁷ Be
Area 19, Pahute Substation	06/22/92	2.3×10^{-13}	4.6×10^{-14}	⁷ Be
Area 19, Pahute Substation	06/29/92	1.5×10^{-13}	4.5×10^{-14}	⁷ Be
Area 19, Pahute Substation	07/06/92	1.1×10^{-13}	4.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	07/13/92	1.7×10^{-13}	4.0×10^{-14}	⁷ Be
Area 19, Pahute Substation	07/20/92	2.3×10^{-13}	5.1×10^{-14}	⁷ Be
Area 19, Pahute Substation	07/27/92	1.7×10^{-13}	4.0×10^{-14}	⁷ Be
Area 19, Pahute Substation	08/03/92	2.7×10^{-13}	6.0×10^{-14}	⁷ Be
Area 19, Pahute Substation	08/10/92	1.7×10^{-13}	4.8×10^{-14}	⁷ Be
Area 19, Pahute Substation	08/17/92	2.7×10^{-13}	5.6×10^{-14}	⁷ Be
Area 19, Pahute Substation	08/24/92	2.0×10^{-13}	4.5×10^{-14}	⁷ Be
Area 19, Pahute Substation	09/01/92	2.5×10^{-13}	4.9×10^{-14}	⁷ Be
Area 19, Pahute Substation	09/08/92	2.3×10^{-13}	5.9×10^{-14}	⁷ Be
Area 19, Pahute Substation	09/14/92	2.1×10^{-13}	5.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	09/21/92	3.1×10^{-13}	5.8×10^{-14}	⁷ Be
Area 19, Pahute Substation	09/28/92	1.8×10^{-13}	4.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	10/05/92	1.7×10^{-13}	4.2×10^{-14}	⁷ Be
Area 19, Pahute Substation	10/13/92	2.2×10^{-13}	5.0×10^{-14}	⁷ Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 19, Pahute Substation	10/19/92	1.7×10^{-13}	5.2×10^{-14}	^7Be
Area 19, Pahute Substation	10/26/92	1.2×10^{-13}	3.6×10^{-14}	^7Be
Area 19, Pahute Substation	11/02/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 19, Pahute Substation	11/09/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 19, Pahute Substation	11/16/92	1.4×10^{-13}	3.7×10^{-14}	^7Be
Area 20, Dispensary	01/06/92	1.2×10^{-13}	4.0×10^{-14}	^7Be
Area 20, Dispensary	01/13/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 20, Dispensary	01/21/92	1.6×10^{-13}	4.1×10^{-14}	^7Be
Area 20, Dispensary	01/27/92	1.8×10^{-13}	4.5×10^{-14}	^7Be
Area 20, Dispensary	02/18/92	1.5×10^{-13}	4.2×10^{-14}	^7Be
Area 20, Dispensary	02/24/92	1.0×10^{-13}	3.3×10^{-14}	^7Be
Area 20, Dispensary	03/02/92	1.2×10^{-13}	3.5×10^{-14}	^7Be
Area 20, Dispensary	03/09/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 20, Dispensary	03/17/92	1.1×10^{-13}	3.5×10^{-14}	^7Be
Area 20, Dispensary	03/23/92	1.1×10^{-13}	4.3×10^{-14}	^7Be
Area 20, Dispensary	03/30/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 20, Dispensary	04/06/92	1.5×10^{-13}	5.0×10^{-14}	^7Be
Area 20, Dispensary	04/13/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 20, Dispensary	04/20/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 20, Dispensary	04/27/92	2.8×10^{-13}	5.2×10^{-14}	^7Be
Area 20, Dispensary	05/04/92	2.3×10^{-13}	4.9×10^{-14}	^7Be
Area 20, Dispensary	05/11/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 20, Dispensary	05/18/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 20, Dispensary	05/26/92	2.6×10^{-13}	5.5×10^{-14}	^7Be
Area 20, Dispensary	06/01/92	1.9×10^{-13}	5.9×10^{-14}	^7Be
Area 20, Dispensary	06/09/92	2.6×10^{-13}	6.3×10^{-14}	^7Be
Area 20, Dispensary	06/15/92	2.0×10^{-13}	5.2×10^{-14}	^7Be
Area 20, Dispensary	06/22/92	2.5×10^{-13}	5.3×10^{-14}	^7Be
Area 20, Dispensary	06/29/92	1.6×10^{-13}	4.8×10^{-14}	^7Be
Area 20, Dispensary	07/13/92	2.1×10^{-13}	4.5×10^{-14}	^7Be
Area 20, Dispensary	07/20/92	2.3×10^{-13}	5.9×10^{-14}	^7Be
Area 20, Dispensary	07/27/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 20, Dispensary	08/03/92	1.9×10^{-13}	5.1×10^{-14}	^7Be
Area 20, Dispensary	08/10/92	1.9×10^{-13}	5.0×10^{-14}	^7Be
Area 20, Dispensary	08/17/92	2.5×10^{-13}	5.5×10^{-14}	^7Be
Area 20, Dispensary	08/24/92	2.7×10^{-13}	4.6×10^{-14}	^7Be
Area 20, Dispensary	09/01/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 20, Dispensary	09/08/92	2.5×10^{-13}	5.6×10^{-14}	^7Be
Area 20, Dispensary	09/14/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 20, Dispensary	09/21/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 20, Dispensary	09/28/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 20, Dispensary	10/05/92	1.9×10^{-13}	4.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>		<u>Radio- nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 20, Dispensary	10/13/92	2.9×10^{-13}	5.6×10^{-14}	^7Be
Area 20, Dispensary	10/19/92	1.6×10^{-13}	4.7×10^{-14}	^7Be
Area 20, Dispensary	10/26/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 20, Dispensary	11/02/92	1.7×10^{-13}	3.6×10^{-14}	^7Be
Area 20, Dispensary	11/09/92	2.6×10^{-13}	5.7×10^{-14}	^7Be
Area 20, Dispensary	11/16/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 20, Dispensary	11/24/92	1.2×10^{-13}	4.7×10^{-14}	^7Be
Area 23, Building 790	01/13/92	1.1×10^{-13}	2.8×10^{-14}	^7Be
Area 23, Building 790	01/21/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 23, Building 790	01/27/92	1.7×10^{-13}	3.6×10^{-14}	^7Be
Area 23, Building 790	02/03/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 23, Building 790	02/10/92	5.4×10^{-14}	2.3×10^{-14}	^7Be
Area 23, Building 790	02/18/92	9.6×10^{-14}	3.7×10^{-14}	^7Be
Area 23, Building 790	02/24/92	2.2×10^{-13}	4.0×10^{-14}	^7Be
Area 23, Building 790	03/02/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 23, Building 790	03/09/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790	03/16/92	6.8×10^{-14}	2.4×10^{-14}	^7Be
Area 23, Building 790	03/24/92	1.0×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790	03/30/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 23, Building 790	04/07/92	1.2×10^{-13}	3.3×10^{-14}	^7Be
Area 23, Building 790	04/14/92	2.5×10^{-13}	4.7×10^{-14}	^7Be
Area 23, Building 790	04/20/92	2.7×10^{-13}	4.9×10^{-14}	^7Be
Area 23, Building 790	04/28/92	2.1×10^{-13}	4.5×10^{-14}	^7Be
Area 23, Building 790	05/05/92	2.8×10^{-13}	5.4×10^{-14}	^7Be
Area 23, Building 790	05/11/92	1.7×10^{-13}	4.0×10^{-14}	^7Be
Area 23, Building 790	05/18/92	8.4×10^{-14}	1.6×10^{-14}	^7Be
Area 23, Building 790	05/26/92	2.2×10^{-13}	6.3×10^{-14}	^7Be
Area 23, Building 790	06/01/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 23, Building 790	06/09/92	2.2×10^{-13}	6.0×10^{-14}	^7Be
Area 23, Building 790	06/15/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 23, Building 790	06/22/92	2.3×10^{-13}	4.3×10^{-14}	^7Be
Area 23, Building 790	06/29/92	1.9×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790	07/06/92	1.2×10^{-13}	3.5×10^{-14}	^7Be
Area 23, Building 790	07/13/92	2.2×10^{-13}	5.4×10^{-14}	^7Be
Area 23, Building 790	07/20/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790	07/27/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 23, Building 790	08/03/92	2.0×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790	08/11/92	1.7×10^{-13}	4.7×10^{-14}	^7Be
Area 23, Building 790	08/17/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790	08/24/92	2.7×10^{-13}	5.4×10^{-14}	^7Be
Area 23, Building 790	08/31/92	1.9×10^{-13}	3.8×10^{-14}	^7Be
Area 23, Building 790	09/08/92	2.0×10^{-13}	5.3×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 23, Building 790	09/14/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 23, Building 790	09/21/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790	09/28/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 23, Building 790	10/05/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 23, Building 790	10/19/92	2.7×10^{-13}	7.4×10^{-14}	^7Be
Area 23, Building 790	10/26/92	1.0×10^{-13}	3.6×10^{-14}	^7Be
Area 23, Building 790	11/02/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 23, Building 790	11/09/92	9.5×10^{-14}	3.0×10^{-14}	^7Be
Area 23, Building 790	11/16/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 23, Building 790	11/23/92	7.3×10^{-14}	2.6×10^{-14}	^7Be
Area 23, Building 790	11/30/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 23, Building 790	12/07/92	1.1×10^{-13}	3.0×10^{-14}	^7Be
Area 23, Building 790	12/15/92	1.4×10^{-13}	5.3×10^{-14}	^7Be
Area 23, Building 790	12/21/92	2.4×10^{-13}	5.0×10^{-14}	^7Be
Area 23, Building 790	12/28/92	1.6×10^{-13}	3.8×10^{-14}	^7Be
Area 23, Building 790 No. 2	01/13/92	1.4×10^{-13}	3.2×10^{-14}	^7Be
Area 23, Building 790 No. 2	01/21/92	2.5×10^{-13}	4.5×10^{-14}	^7Be
Area 23, Building 790 No. 2	01/27/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790 No. 2	02/03/92	3.1×10^{-15}	2.3×10^{-15}	^{208}Tl
Area 23, Building 790 No. 2	02/03/92	8.3×10^{-14}	2.7×10^{-14}	^7Be
Area 23, Building 790 No. 2	02/10/92	6.3×10^{-14}	2.0×10^{-14}	^7Be
Area 23, Building 790 No. 2	02/18/92	1.5×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790 No. 2	02/24/92	2.0×10^{-13}	3.7×10^{-14}	^7Be
Area 23, Building 790 No. 2	03/02/92	9.1×10^{-14}	3.4×10^{-14}	^7Be
Area 23, Building 790 No. 2	03/09/92	1.6×10^{-13}	4.3×10^{-14}	^7Be
Area 23, Building 790 No. 2	03/16/92	7.7×10^{-14}	2.6×10^{-14}	^7Be
Area 23, Building 790 No. 2	03/24/92	7.7×10^{-14}	3.5×10^{-14}	^7Be
Area 23, Building 790 No. 2	03/30/92	1.0×10^{-13}	2.8×10^{-14}	^7Be
Area 23, Building 790 No. 2	04/07/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 23, Building 790 No. 2	04/14/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 23, Building 790 No. 2	04/20/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 23, Building 790 No. 2	04/28/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 23, Building 790 No. 2	05/05/92	3.3×10^{-13}	6.0×10^{-14}	^7Be
Area 23, Building 790 No. 2	05/11/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790 No. 2	05/18/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790 No. 2	05/26/92	2.2×10^{-13}	4.8×10^{-14}	^7Be
Area 23, Building 790 No. 2	06/01/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 23, Building 790 No. 2	06/09/92	2.6×10^{-13}	6.3×10^{-14}	^7Be
Area 23, Building 790 No. 2	06/15/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 23, Building 790 No. 2	06/22/92	2.0×10^{-13}	4.4×10^{-14}	^7Be
Area 23, Building 790 No. 2	06/29/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790 No. 2	07/06/92	1.1×10^{-13}	3.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	<u>μCi/mL</u>		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 23, Building 790 No. 2	07/13/92	1.8×10^{-13}	4.5×10^{-14}	^7Be
Area 23, Building 790 No. 2	07/20/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 23, Building 790 No. 2	07/27/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 23, Building 790 No. 2	08/03/92	1.9×10^{-13}	3.8×10^{-14}	^7Be
Area 23, Building 790 No. 2	08/11/92	1.5×10^{-13}	4.5×10^{-14}	^7Be
Area 23, Building 790 No. 2	08/17/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790 No. 2	08/24/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 23, Building 790 No. 2	08/31/92	1.6×10^{-13}	3.6×10^{-14}	^7Be
Area 23, Building 790 No. 2	09/08/92	2.5×10^{-13}	5.7×10^{-14}	^7Be
Area 23, Building 790 No. 2	09/14/92	2.6×10^{-13}	5.6×10^{-14}	^7Be
Area 23, Building 790 No. 2	09/21/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 23, Building 790 No. 2	09/28/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790 No. 2	10/05/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790 No. 2	10/12/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 23, Building 790 No. 2	10/19/92	2.1×10^{-13}	6.9×10^{-14}	^7Be
Area 23, Building 790 No. 2	10/26/92	1.2×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790 No. 2	11/02/92	1.7×10^{-13}	4.6×10^{-14}	^7Be
Area 23, Building 790 No. 2	11/09/92	1.2×10^{-13}	3.2×10^{-14}	^7Be
Area 23, Building 790 No. 2	11/23/92	6.2×10^{-14}	2.5×10^{-14}	^7Be
Area 23, Building 790 No. 2	12/07/92	8.5×10^{-14}	3.2×10^{-14}	^7Be
Area 23, Building 790 No. 2	12/15/92	1.5×10^{-13}	4.9×10^{-14}	^7Be
Area 23, Building 790 No. 2	12/21/92	1.5×10^{-13}	4.1×10^{-14}	^7Be
Area 23, Building 790 No. 2	12/28/92	1.2×10^{-13}	3.2×10^{-14}	^7Be
Area 23, E Boundary	01/13/92	1.1×10^{-13}	3.0×10^{-14}	^7Be
Area 23, E Boundary	01/21/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 23, E Boundary	01/21/92	1.0×10^{-13}	5.5×10^{-14}	^{40}K
Area 23, E Boundary	01/27/92	1.8×10^{-13}	3.7×10^{-14}	^7Be
Area 23, E Boundary	02/18/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 23, E Boundary	02/24/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 23, E Boundary	03/02/92	5.8×10^{-14}	3.2×10^{-14}	^7Be
Area 23, E Boundary	03/09/92	2.3×10^{-13}	5.0×10^{-14}	^7Be
Area 23, E Boundary	03/16/92	8.8×10^{-14}	2.6×10^{-14}	^7Be
Area 23, E Boundary	03/24/92	9.3×10^{-14}	4.0×10^{-14}	^7Be
Area 23, E Boundary	03/30/92	1.2×10^{-13}	3.1×10^{-14}	^7Be
Area 23, E Boundary	04/07/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 23, E Boundary	04/14/92	2.3×10^{-13}	4.9×10^{-14}	^7Be
Area 23, E Boundary	04/20/92	2.7×10^{-13}	4.8×10^{-14}	^7Be
Area 23, E Boundary	04/28/92	1.8×10^{-13}	4.8×10^{-14}	^7Be
Area 23, E Boundary	05/05/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 23, E Boundary	05/11/92	1.9×10^{-13}	4.2×10^{-14}	^7Be
Area 23, E Boundary	05/18/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 23, E Boundary	05/26/92	1.6×10^{-13}	4.3×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 23, E Boundary	06/01/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 23, E Boundary	06/09/92	2.6×10^{-13}	6.3×10^{-14}	^7Be
Area 23, E Boundary	06/15/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 23, E Boundary	06/22/92	2.7×10^{-13}	4.8×10^{-14}	^7Be
Area 23, E Boundary	06/29/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 23, E Boundary	07/06/92	1.2×10^{-13}	3.4×10^{-14}	^7Be
Area 23, E Boundary	07/13/92	1.9×10^{-13}	4.7×10^{-14}	^7Be
Area 23, E Boundary	07/20/92	2.3×10^{-13}	4.5×10^{-14}	^7Be
Area 23, E Boundary	08/03/92	2.2×10^{-13}	4.0×10^{-14}	^7Be
Area 23, E Boundary	08/11/92	2.2×10^{-13}	6.1×10^{-14}	^7Be
Area 23, E Boundary	08/17/92	2.2×10^{-13}	4.4×10^{-14}	^7Be
Area 23, E Boundary	08/24/92	3.7×10^{-13}	1.1×10^{-13}	^7Be
Area 23, E Boundary	08/31/92	2.3×10^{-13}	5.3×10^{-14}	^7Be
Area 23, E Boundary	09/08/92	2.6×10^{-13}	5.9×10^{-14}	^7Be
Area 23, E Boundary	09/14/92	2.1×10^{-13}	5.2×10^{-14}	^7Be
Area 23, E Boundary	09/21/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 23, E Boundary	09/28/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 23, E Boundary	10/05/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 23, E Boundary	10/12/92	2.0×10^{-13}	4.2×10^{-14}	^7Be
Area 23, E Boundary	10/19/92	2.3×10^{-13}	7.7×10^{-14}	^7Be
Area 23, E Boundary	10/26/92	1.9×10^{-13}	5.0×10^{-14}	^7Be
Area 23, E Boundary	11/02/92	2.7×10^{-13}	5.5×10^{-14}	^7Be
Area 23, E Boundary	11/09/92	1.3×10^{-13}	3.6×10^{-14}	^7Be
Area 23, E Boundary	11/16/92	1.5×10^{-13}	3.7×10^{-14}	^7Be
Area 23, E Boundary	11/30/92	2.7×10^{-13}	5.8×10^{-14}	^7Be
Area 23, E Boundary	12/07/92	8.9×10^{-14}	3.0×10^{-14}	^7Be
Area 23, E Boundary	12/15/92	1.7×10^{-13}	5.1×10^{-14}	^7Be
Area 23, E Boundary	12/21/92	2.8×10^{-13}	5.8×10^{-14}	^7Be
Area 23, E Boundary	12/28/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 23, H&S Building	01/13/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 23, H&S Building	01/21/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 23, H&S Building	01/27/92	1.9×10^{-13}	3.7×10^{-14}	^7Be
Area 23, H&S Building	02/03/92	7.5×10^{-14}	2.8×10^{-14}	^7Be
Area 23, H&S Building	02/10/92	5.6×10^{-14}	2.4×10^{-14}	^7Be
Area 23, H&S Building	02/18/92	1.2×10^{-13}	3.7×10^{-14}	^7Be
Area 23, H&S Building	02/24/92	2.3×10^{-13}	4.1×10^{-14}	^7Be
Area 23, H&S Building	03/02/92	1.1×10^{-13}	3.9×10^{-14}	^7Be
Area 23, H&S Building	03/09/92	1.6×10^{-13}	4.1×10^{-14}	^7Be
Area 23, H&S Building	03/16/92	3.9×10^{-14}	1.9×10^{-14}	^7Be
Area 23, H&S Building	03/24/92	1.4×10^{-13}	4.6×10^{-14}	^7Be
Area 23, H&S Building	03/30/92	1.2×10^{-13}	3.6×10^{-14}	^7Be
Area 23, H&S Building	04/07/92	1.1×10^{-13}	2.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 23, H&S Building	04/14/92	1.9×10^{-13}	4.3×10^{-14}	^7Be
Area 23, H&S Building	04/20/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 23, H&S Building	04/28/92	3.1×10^{-13}	5.4×10^{-14}	^7Be
Area 23, H&S Building	05/05/92	2.8×10^{-13}	5.2×10^{-14}	^7Be
Area 23, H&S Building	05/11/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 23, H&S Building	05/18/92	2.5×10^{-13}	4.4×10^{-14}	^7Be
Area 23, H&S Building	05/26/92	1.9×10^{-13}	4.6×10^{-14}	^7Be
Area 23, H&S Building	06/01/92	2.5×10^{-13}	4.5×10^{-14}	^7Be
Area 23, H&S Building	06/09/92	2.0×10^{-13}	5.4×10^{-14}	^7Be
Area 23, H&S Building	06/15/92	1.9×10^{-13}	4.2×10^{-14}	^7Be
Area 23, H&S Building	06/22/92	2.7×10^{-13}	4.7×10^{-14}	^7Be
Area 23, H&S Building	07/06/92	1.2×10^{-13}	3.8×10^{-14}	^7Be
Area 23, H&S Building	07/13/92	2.0×10^{-13}	4.6×10^{-14}	^7Be
Area 23, H&S Building	07/20/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 23, H&S Building	07/27/92	1.5×10^{-13}	3.5×10^{-14}	^7Be
Area 23, H&S Building	08/03/92	2.0×10^{-13}	3.8×10^{-14}	^7Be
Area 23, H&S Building	08/11/92	1.6×10^{-13}	4.5×10^{-14}	^7Be
Area 23, H&S Building	08/17/92	1.8×10^{-13}	3.8×10^{-14}	^7Be
Area 23, H&S Building	08/24/92	2.3×10^{-13}	4.7×10^{-14}	^7Be
Area 23, H&S Building	08/31/92	1.7×10^{-13}	3.6×10^{-14}	^7Be
Area 23, H&S Building	09/08/92	2.6×10^{-13}	6.3×10^{-14}	^7Be
Area 23, H&S Building	09/14/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 23, H&S Building	09/21/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 23, H&S Building	09/28/92	1.9×10^{-13}	3.9×10^{-14}	^7Be
Area 23, H&S Building	10/05/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 23, H&S Building	10/12/92	1.9×10^{-13}	3.9×10^{-14}	^7Be
Area 23, H&S Building	10/19/92	2.4×10^{-13}	7.0×10^{-14}	^7Be
Area 23, H&S Building	10/26/92	1.0×10^{-13}	3.6×10^{-14}	^7Be
Area 23, H&S Building	11/02/92	1.8×10^{-13}	5.4×10^{-14}	^7Be
Area 23, H&S Building	11/09/92	1.9×10^{-13}	3.9×10^{-14}	^7Be
Area 23, H&S Building	11/16/92	1.2×10^{-13}	3.2×10^{-14}	^7Be
Area 23, H&S Building	11/30/92	2.7×10^{-13}	5.5×10^{-14}	^7Be
Area 23, H&S Building	12/07/92	1.1×10^{-13}	3.0×10^{-14}	^7Be
Area 23, H&S Building	12/15/92	2.3×10^{-13}	5.3×10^{-14}	^7Be
Area 23, H&S Building	12/21/92	1.6×10^{-13}	4.4×10^{-14}	^7Be
Area 23, H&S Building	12/28/92	1.5×10^{-13}	3.9×10^{-14}	^7Be
Area 25, E-MAD N	01/13/92	1.3×10^{-13}	3.2×10^{-14}	^7Be
Area 25, E-MAD N	01/21/92	2.2×10^{-13}	4.3×10^{-14}	^7Be
Area 25, E-MAD N	01/27/92	2.0×10^{-13}	4.5×10^{-14}	^7Be
Area 25, E-MAD N	02/03/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 25, E-MAD N	02/03/92	7.7×10^{-14}	2.0×10^{-14}	^7Be
Area 25, E-MAD N	02/10/92	4.1×10^{-14}	2.2×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>		<u>Radio-nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 25, E-MAD N	02/18/92	1.3×10^{-13}	4.1×10^{-14}	^7Be
Area 25, E-MAD N	02/24/92	1.9×10^{-13}	4.1×10^{-14}	^7Be
Area 25, E-MAD N	03/02/92	6.1×10^{-14}	1.2×10^{-14}	^7Be
Area 25, E-MAD N	03/02/92	7.6×10^{-14}	3.4×10^{-14}	^7Be
Area 25, E-MAD N	03/09/92	1.9×10^{-13}	4.7×10^{-14}	^7Be
Area 25, E-MAD N	03/16/92	7.9×10^{-14}	2.6×10^{-14}	^7Be
Area 25, E-MAD N	03/24/92	9.5×10^{-14}	3.8×10^{-14}	^7Be
Area 25, E-MAD N	03/30/92	1.5×10^{-13}	4.5×10^{-14}	^7Be
Area 25, E-MAD N	03/30/92	9.9×10^{-14}	2.0×10^{-14}	^7Be
Area 25, E-MAD N	04/07/92	5.3×10^{-14}	1.3×10^{-14}	^7Be
Area 25, E-MAD N	04/14/92	2.3×10^{-13}	4.4×10^{-14}	^7Be
Area 25, E-MAD N	04/20/92	2.3×10^{-13}	4.6×10^{-14}	^7Be
Area 25, E-MAD N	04/28/92	2.2×10^{-13}	4.6×10^{-14}	^7Be
Area 25, E-MAD N	04/28/92	1.3×10^{-13}	3.0×10^{-14}	^7Be
Area 25, E-MAD N	05/05/92	2.9×10^{-13}	5.6×10^{-14}	^7Be
Area 25, E-MAD N	05/11/92	9.6×10^{-14}	3.4×10^{-14}	^7Be
Area 25, E-MAD N	05/18/92	2.5×10^{-13}	4.5×10^{-14}	^7Be
Area 25, E-MAD N	05/26/92	2.3×10^{-13}	4.8×10^{-14}	^7Be
Area 25, E-MAD N	05/26/92	1.5×10^{-13}	2.3×10^{-14}	^7Be
Area 25, E-MAD N	06/01/92	2.1×10^{-13}	4.5×10^{-14}	^7Be
Area 25, E-MAD N	06/09/92	2.4×10^{-13}	6.2×10^{-14}	^7Be
Area 25, E-MAD N	06/15/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 25, E-MAD N	06/22/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 25, E-MAD N	06/29/92	1.1×10^{-13}	1.9×10^{-14}	^7Be
Area 25, E-MAD N	06/29/92	2.1×10^{-13}	4.1×10^{-14}	^7Be
Area 25, E-MAD N	07/06/92	1.2×10^{-13}	3.2×10^{-14}	^7Be
Area 25, E-MAD N	07/13/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 25, E-MAD N	07/20/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 25, E-MAD N	07/27/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 25, E-MAD N	08/03/92	1.7×10^{-13}	3.6×10^{-14}	^7Be
Area 25, E-MAD N	08/11/92	1.2×10^{-13}	4.8×10^{-14}	^7Be
Area 25, E-MAD N	08/17/92	1.8×10^{-13}	3.8×10^{-14}	^7Be
Area 25, E-MAD N	08/24/92	2.5×10^{-13}	5.0×10^{-14}	^7Be
Area 25, E-MAD N	08/31/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 25, E-MAD N	08/31/92	2.2×10^{-13}	4.1×10^{-14}	^7Be
Area 25, E-MAD N	09/08/92	2.5×10^{-13}	5.8×10^{-14}	^7Be
Area 25, E-MAD N	09/14/92	1.5×10^{-13}	5.8×10^{-14}	^7Be
Area 25, E-MAD N	09/21/92	2.0×10^{-13}	5.0×10^{-14}	^7Be
Area 25, E-MAD N	09/28/92	1.8×10^{-13}	3.9×10^{-14}	^7Be
Area 25, E-MAD N	10/05/92	2.2×10^{-13}	5.0×10^{-14}	^7Be
Area 25, E-MAD N	10/19/92	2.9×10^{-11}	$2.7 \times 10^{-11} \text{ } ^{214}\text{Pb}$	
Area 25, E-MAD N	10/26/92	1.6×10^{-13}	5.6×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 25, E-MAD N	11/02/92	2.2×10^{-13}	5.1×10^{-14}	^7Be
Area 25, E-MAD N	11/09/92	2.0×10^{-13}	4.0×10^{-14}	^7Be
Area 25, E-MAD N	11/16/92	9.9×10^{-14}	3.0×10^{-14}	^7Be
Area 25, E-MAD N	11/23/92	9.0×10^{-14}	2.8×10^{-14}	^7Be
Area 25, E-MAD N	11/30/92	2.4×10^{-13}	5.2×10^{-14}	^7Be
Area 25, E-MAD N	12/07/92	7.2×10^{-14}	2.5×10^{-14}	^7Be
Area 25, E-MAD N	12/15/92	1.4×10^{-13}	4.9×10^{-14}	^7Be
Area 25, E-MAD N	12/21/92	2.7×10^{-13}	6.8×10^{-14}	^7Be
Area 25, E-MAD N	12/28/92	1.4×10^{-13}	3.7×10^{-14}	^7Be
Area 25, NRDS Warehouse	01/13/92	1.1×10^{-13}	3.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	01/21/92	1.6×10^{-13}	3.8×10^{-14}	^7Be
Area 25, NRDS Warehouse	01/27/92	1.4×10^{-13}	3.3×10^{-14}	^7Be
Area 25, NRDS Warehouse	02/03/92	8.0×10^{-14}	2.7×10^{-14}	^7Be
Area 25, NRDS Warehouse	02/10/92	4.2×10^{-14}	1.9×10^{-14}	^7Be
Area 25, NRDS Warehouse	02/18/92	1.0×10^{-13}	3.6×10^{-14}	^7Be
Area 25, NRDS Warehouse	02/24/92	2.2×10^{-13}	4.1×10^{-14}	^7Be
Area 25, NRDS Warehouse	03/09/92	1.5×10^{-13}	4.6×10^{-14}	^7Be
Area 25, NRDS Warehouse	03/16/92	4.0×10^{-14}	1.9×10^{-14}	^7Be
Area 25, NRDS Warehouse	03/30/92	5.8×10^{-14}	2.4×10^{-14}	^7Be
Area 25, NRDS Warehouse	04/07/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 25, NRDS Warehouse	04/14/92	1.6×10^{-13}	4.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	04/20/92	3.3×10^{-13}	6.9×10^{-14}	^7Be
Area 25, NRDS Warehouse	04/28/92	2.5×10^{-13}	5.4×10^{-14}	^7Be
Area 25, NRDS Warehouse	05/05/92	2.3×10^{-13}	5.2×10^{-14}	^7Be
Area 25, NRDS Warehouse	05/11/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 25, NRDS Warehouse	05/18/92	2.5×10^{-13}	4.6×10^{-14}	^7Be
Area 25, NRDS Warehouse	05/26/92	2.5×10^{-13}	5.2×10^{-14}	^7Be
Area 25, NRDS Warehouse	06/01/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	06/09/92	3.0×10^{-13}	7.2×10^{-14}	^7Be
Area 25, NRDS Warehouse	06/15/92	2.5×10^{-13}	4.9×10^{-14}	^7Be
Area 25, NRDS Warehouse	06/22/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 25, NRDS Warehouse	06/29/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 25, NRDS Warehouse	07/06/92	9.4×10^{-14}	3.2×10^{-14}	^7Be
Area 25, NRDS Warehouse	07/13/92	1.8×10^{-13}	4.6×10^{-14}	^7Be
Area 25, NRDS Warehouse	07/20/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 25, NRDS Warehouse	07/27/92	1.8×10^{-13}	4.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	08/03/92	2.3×10^{-13}	4.2×10^{-14}	^7Be
Area 25, NRDS Warehouse	08/11/92	1.3×10^{-13}	4.7×10^{-14}	^7Be
Area 25, NRDS Warehouse	08/17/92	2.1×10^{-13}	4.2×10^{-14}	^7Be
Area 25, NRDS Warehouse	08/24/92	3.3×10^{-13}	6.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	08/31/92	1.8×10^{-13}	3.7×10^{-14}	^7Be
Area 25, NRDS Warehouse	09/08/92	1.8×10^{-13}	5.5×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 25, NRDS Warehouse	09/14/92	2.2×10^{-13}	5.2×10^{-14}	^7Be
Area 25, NRDS Warehouse	09/21/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	09/28/92	1.6×10^{-13}	3.7×10^{-14}	^7Be
Area 25, NRDS Warehouse	10/05/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 25, NRDS Warehouse	10/12/92	2.0×10^{-13}	4.1×10^{-14}	^7Be
Area 25, NRDS Warehouse	10/19/92	2.5×10^{-13}	8.1×10^{-14}	^7Be
Area 25, NRDS Warehouse	10/26/92	1.3×10^{-13}	4.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	11/02/92	2.1×10^{-13}	4.8×10^{-14}	^7Be
Area 25, NRDS Warehouse	11/09/92	1.9×10^{-13}	4.0×10^{-14}	^7Be
Area 25, NRDS Warehouse	11/16/92	1.3×10^{-13}	3.5×10^{-14}	^7Be
Area 25, NRDS Warehouse	11/23/92	9.1×10^{-14}	2.8×10^{-14}	^7Be
Area 25, NRDS Warehouse	11/30/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 25, NRDS Warehouse	12/07/92	7.4×10^{-14}	2.6×10^{-14}	^7Be
Area 25, NRDS Warehouse	12/15/92	1.4×10^{-13}	4.9×10^{-14}	^7Be
Area 25, NRDS Warehouse	12/21/92	2.5×10^{-13}	5.4×10^{-14}	^7Be
Area 25, NRDS Warehouse	12/28/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 27, Cafeteria	01/13/92	1.4×10^{-13}	3.2×10^{-14}	^7Be
Area 27, Cafeteria	01/21/92	2.4×10^{-13}	4.8×10^{-14}	^7Be
Area 27, Cafeteria	01/27/92	1.7×10^{-13}	3.9×10^{-14}	^7Be
Area 27, Cafeteria	02/03/92	5.3×10^{-14}	1.5×10^{-14}	^7Be
Area 27, Cafeteria	02/10/92	3.9×10^{-14}	1.9×10^{-14}	^7Be
Area 27, Cafeteria	02/18/92	1.2×10^{-13}	3.8×10^{-14}	^7Be
Area 27, Cafeteria	02/24/92	2.6×10^{-13}	4.4×10^{-14}	^7Be
Area 27, Cafeteria	03/02/92	8.4×10^{-14}	3.7×10^{-14}	^7Be
Area 27, Cafeteria	03/09/92	2.0×10^{-13}	4.9×10^{-14}	^7Be
Area 27, Cafeteria	03/16/92	7.4×10^{-14}	2.8×10^{-14}	^7Be
Area 27, Cafeteria	03/24/92	1.2×10^{-13}	4.8×10^{-14}	^7Be
Area 27, Cafeteria	03/30/92	9.7×10^{-14}	2.8×10^{-14}	^7Be
Area 27, Cafeteria	04/07/92	1.3×10^{-13}	3.4×10^{-14}	^7Be
Area 27, Cafeteria	04/14/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 27, Cafeteria	04/20/92	2.5×10^{-13}	4.8×10^{-14}	^7Be
Area 27, Cafeteria	04/28/92	2.8×10^{-13}	5.3×10^{-14}	^7Be
Area 27, Cafeteria	05/05/92	2.0×10^{-13}	4.7×10^{-14}	^7Be
Area 27, Cafeteria	05/11/92	2.6×10^{-13}	4.7×10^{-14}	^7Be
Area 27, Cafeteria	05/18/92	2.7×10^{-13}	6.0×10^{-14}	^7Be
Area 27, Cafeteria	06/01/92	1.8×10^{-13}	4.4×10^{-14}	^7Be
Area 27, Cafeteria	06/09/92	2.8×10^{-13}	6.6×10^{-14}	^7Be
Area 27, Cafeteria	06/15/92	1.9×10^{-13}	4.4×10^{-14}	^7Be
Area 27, Cafeteria	06/22/92	2.4×10^{-13}	4.6×10^{-14}	^7Be
Area 27, Cafeteria	06/29/92	1.7×10^{-13}	4.0×10^{-14}	^7Be
Area 27, Cafeteria	07/06/92	1.1×10^{-13}	3.3×10^{-14}	^7Be
Area 27, Cafeteria	07/13/92	1.6×10^{-13}	4.5×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.4 (Gamma-Emitting Radionuclides in Air - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>		<u>Radio-nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 27, Cafeteria	07/20/92	2.1×10^{-13}	4.3×10^{-14}	^7Be
Area 27, Cafeteria	07/27/92	1.5×10^{-13}	3.8×10^{-14}	^7Be
Area 27, Cafeteria	08/03/92	2.7×10^{-13}	4.6×10^{-14}	^7Be
Area 27, Cafeteria	08/11/92	1.1×10^{-13}	5.2×10^{-14}	^7Be
Area 27, Cafeteria	08/17/92	2.2×10^{-13}	4.5×10^{-14}	^7Be
Area 27, Cafeteria	08/24/92	3.0×10^{-13}	5.8×10^{-14}	^7Be
Area 27, Cafeteria	08/31/92	1.7×10^{-13}	3.8×10^{-14}	^7Be
Area 27, Cafeteria	09/08/92	2.2×10^{-13}	5.5×10^{-14}	^7Be
Area 27, Cafeteria	09/14/92	2.3×10^{-13}	5.4×10^{-14}	^7Be
Area 27, Cafeteria	09/21/92	2.1×10^{-13}	4.4×10^{-14}	^7Be
Area 27, Cafeteria	09/28/92	1.8×10^{-13}	4.1×10^{-14}	^7Be
Area 27, Cafeteria	10/05/92	2.4×10^{-13}	5.5×10^{-14}	^7Be
Area 27, Cafeteria	10/12/92	1.7×10^{-13}	4.0×10^{-14}	^7Be
Area 27, Cafeteria	10/19/92	1.7×10^{-13}	7.8×10^{-14}	^7Be
Area 27, Cafeteria	10/26/92	1.5×10^{-13}	4.8×10^{-14}	^7Be
Area 27, Cafeteria	11/02/92	1.5×10^{-13}	5.1×10^{-14}	^7Be
Area 27, Cafeteria	11/09/92	1.7×10^{-13}	4.4×10^{-14}	^7Be
Area 27, Cafeteria	11/16/92	9.5×10^{-14}	3.6×10^{-14}	^7Be
Area 27, Cafeteria	12/07/92	7.2×10^{-14}	2.5×10^{-14}	^7Be
Area 27, Cafeteria	12/15/92	1.0×10^{-13}	4.1×10^{-14}	^7Be
Area 27, Cafeteria	12/21/92	2.2×10^{-13}	5.9×10^{-14}	^7Be
Area 27, Cafeteria	12/28/92	1.6×10^{-13}	4.5×10^{-14}	^7Be

Mean MDC: $1.2 \times 10^{-08} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $3.5 \times 10^{-07} \mu\text{Ci/mL}$

Attachment A.5 Duplicates Gross Beta in Air - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Original</u>	<u>Duplicate</u>
Area 1, Gravel Pit	01/06/92	9.0×10^{-15}	6.2×10^{-15}
Area 1, Gravel Pit	06/15/92	1.8×10^{-14}	1.8×10^{-14}
Area 2, 2-1 Substation	12/21/92	2.1×10^{-14}	2.2×10^{-14}
Area 3, Complex	11/09/92	1.9×10^{-14}	1.9×10^{-14}
Area 3, Complex No. 2	10/26/92	2.0×10^{-14}	1.1×10^{-14}
Area 3, Mud Plant	11/16/92	2.1×10^{-14}	2.0×10^{-14}
Area 3, U-3ah/at N	11/23/92	2.4×10^{-14}	1.8×10^{-14}
Area 3, U-3ah/at W	11/09/92	2.0×10^{-14}	5.7×10^{-14}
Area 3, U-3ah/at W	11/16/92	1.9×10^{-14}	9.6×10^{-12}
Area 3, U-3ah/at W	11/23/92	1.9×10^{-14}	9.7×10^{-12}
Area 3, U-3ah/at W	11/30/92	2.4×10^{-14}	1.1×10^{-13}
Area 3, U-3ah/at W	12/07/92	1.3×10^{-14}	8.5×10^{-12}
Area 3, U-3ah/at W	12/14/92	1.2×10^{-14}	9.1×10^{-12}
Area 5, DOD Yard	07/13/92	1.6×10^{-14}	1.5×10^{-14}
Area 5, Gate 200	01/27/92	3.6×10^{-14}	3.2×10^{-14}
Area 5, RWMS No. 1	03/16/92	1.0×10^{-14}	9.4×10^{-15}
Area 5, RWMS No. 2	07/20/92	2.0×10^{-14}	1.7×10^{-14}
Area 5, RWMS No. 3	04/07/92	2.1×10^{-14}	1.8×10^{-14}
Area 5, RWMS No. 4	08/03/92	2.6×10^{-14}	2.1×10^{-14}
Area 5, RWMS No. 5	08/11/92	2.5×10^{-14}	2.2×10^{-14}
Area 5, RWMS No. 6	08/17/92	2.5×10^{-14}	2.2×10^{-14}
Area 5, RWMS No. 7	08/24/92	2.5×10^{-14}	2.3×10^{-14}
Area 5, RWMS No. 8	08/31/92	2.2×10^{-14}	2.0×10^{-14}
Area 5, RWMS No. 9	09/08/92	2.5×10^{-14}	2.4×10^{-14}
Area 6, CP-6	09/21/92	2.2×10^{-14}	1.9×10^{-14}
Area 6, Well 3 Complex	09/21/92	1.9×10^{-14}	2.0×10^{-14}
Area 6, Yucca Complex	09/28/92	2.2×10^{-14}	2.1×10^{-14}
Area 11, Gate 293	10/05/92	2.3×10^{-14}	2.2×10^{-14}
Area 12, Complex	06/09/92	1.6×10^{-14}	1.6×10^{-14}
Area 16, 3545 Substation	01/13/92	1.5×10^{-14}	1.4×10^{-14}
Area 16, 3545 Substation	05/04/92	1.6×10^{-14}	1.7×10^{-14}
Area 19, Pahute Substation	05/26/92	1.7×10^{-14}	1.7×10^{-14}
Area 20, Dispensary	05/18/92	1.7×10^{-14}	1.3×10^{-14}
Area 23, Building 790	02/03/92	2.7×10^{-14}	2.4×10^{-14}
Area 23, Building 790 No .2	02/10/92	8.4×10^{-15}	4.2×10^{-15}
Area 23, Building 790 No .2	02/18/92	1.3×10^{-14}	8.9×10^{-12}
Area 23, Building 790 No .2	06/22/92	2.1×10^{-14}	2.1×10^{-14}
Area 23, E Boundary	01/21/92	3.5×10^{-14}	3.2×10^{-14}
Area 23, E Boundary	06/29/92	1.3×10^{-14}	1.2×10^{-14}
Area 25, E-MAD N	03/02/92	9.0×10^{-15}	2.2×10^{-14}
Area 25, NRDS Warehouse	02/24/92	1.8×10^{-14}	1.8×10^{-14}
Area 27, Cafeteria	02/18/92	1.1×10^{-14}	1.3×10^{-14}
Area 27, Cafeteria	09/14/92	1.6×10^{-14}	1.0×10^{-14}

APPENDIX B

ONSITE TRITIUM IN AIR

Robert R. Kinnison

Seventeen samplers for airborne tritiated water vapor were placed at locations on the NTS as described in Volume I, Section 5. Table B.1 displays the sampling locations, dates of sampling, observed concentration in picocuries per milliliter, and analytic standard deviation for the 360 analyses performed in 1992. 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 = 360
 Arithmetic mean = 4.62×10^{-6} pCi/mL
 Median = 2.02×10^{-6}
 Standard deviation = 10.32×10^{-6}
 Minimum value = -1.06×10^{-6}
 Maximum value = 113.00×10^{-6}

The first quartile of the data is 0.40×10^{-6} pCi/mL and the third quartile is 5.22×10^{-6} pCi/mL, half the data values are between these statistics. These simple statistics are greatly influenced by the large value of 113×10^{-6} at RWMS #9 for sampling starting January 23.

Table B.1 Tritiated Water Vapor in Air Sampling Results - 1992

Sampling Location	Collection Dates	pCi/mL	
		Concentration	Standard Deviation (s)
Area 1, BJY	01/09/92	9.2×10^{-7}	3.2×10^{-7}
Area 1, BJY	01/22/92	1.0×10^{-5}	4.9×10^{-7}
Area 1, BJY	02/05/92	-1.1×10^{-6}	8.0×10^{-7}
Area 1, BJY	02/20/92	2.0×10^{-7}	4.8×10^{-8}
Area 1, BJY	03/05/92	1.2×10^{-6}	4.9×10^{-7}
Area 1, BJY	03/19/92	1.6×10^{-7}	6.3×10^{-7}
Area 1, BJY	04/01/92	1.9×10^{-7}	2.9×10^{-7}
Area 1, BJY	04/16/92	2.0×10^{-6}	4.2×10^{-7}
Area 1, BJY	04/29/92	5.4×10^{-8}	3.1×10^{-8}
Area 1, BJY	05/13/92	7.0×10^{-7}	9.9×10^{-8}
Area 1, BJY	05/28/92	1.2×10^{-7}	3.5×10^{-8}
Area 1, BJY	06/11/92	2.0×10^{-6}	2.0×10^{-7}
Area 1, BJY	06/25/92	6.3×10^{-7}	1.8×10^{-7}
Area 1, BJY	07/08/92	9.0×10^{-7}	1.4×10^{-7}
Area 1, BJY	07/22/92	1.5×10^{-6}	2.3×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 4.5×10^{-6} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>pCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, BJY	08/06/92	2.6×10^{-6}	2.4×10^{-7}
Area 1, BJY	08/20/92	2.3×10^{-6}	2.6×10^{-7}
Area 1, BJY	09/03/92	2.6×10^{-6}	3.2×10^{-7}
Area 1, BJY	09/16/92	1.5×10^{-6}	3.8×10^{-7}
Area 1, BJY	10/28/92	3.0×10^{-7}	3.9×10^{-7}
Area 1, BJY	11/18/92	6.7×10^{-7}	2.8×10^{-7}
Area 1, BJY	12/08/92	1.4×10^{-6}	3.9×10^{-7}
Area 1, BJY	12/22/92	5.5×10^{-7}	4.2×10^{-7}
Area 5, RWMS No. 1	01/09/92	4.7×10^{-6}	3.1×10^{-7}
Area 5, RWMS No. 1	01/23/92	1.2×10^{-5}	3.7×10^{-7}
Area 5, RWMS No. 1	02/05/92	3.2×10^{-6}	8.8×10^{-7}
Area 5, RWMS No. 1	02/20/92	4.0×10^{-7}	5.4×10^{-8}
Area 5, RWMS No. 1	03/03/92	5.6×10^{-6}	7.8×10^{-7}
Area 5, RWMS No. 1	03/18/92	3.2×10^{-6}	7.3×10^{-7}
Area 5, RWMS No. 1	04/01/92	1.8×10^{-6}	5.5×10^{-7}
Area 5, RWMS No. 1	04/16/92	3.3×10^{-6}	4.2×10^{-7}
Area 5, RWMS No. 1	04/29/92	4.5×10^{-6}	5.3×10^{-7}
Area 5, RWMS No. 1	05/13/92	1.8×10^{-5}	3.9×10^{-7}
Area 5, RWMS No. 1	06/24/92	4.3×10^{-7}	8.7×10^{-8}
Area 5, RWMS No. 1	07/23/92	4.8×10^{-6}	6.7×10^{-7}
Area 5, RWMS No. 1	08/05/92	4.1×10^{-6}	5.0×10^{-7}
Area 5, RWMS No. 1	08/20/92	2.0×10^{-6}	3.4×10^{-7}
Area 5, RWMS No. 1	09/03/92	2.2×10^{-6}	4.1×10^{-7}
Area 5, RWMS No. 1	10/08/92	4.2×10^{-6}	4.0×10^{-7}
Area 5, RWMS No. 1	10/28/92	3.2×10^{-6}	3.7×10^{-7}
Area 5, RWMS No. 1	11/17/92	3.5×10^{-6}	3.2×10^{-7}
Area 5, RWMS No. 1	12/08/92	2.0×10^{-6}	4.4×10^{-7}
Area 5, RWMS No. 1	12/22/92	1.4×10^{-6}	4.9×10^{-7}
Area 5, RWMS No. 2	01/09/92	3.3×10^{-6}	3.1×10^{-7}
Area 5, RWMS No. 2	01/23/92	6.6×10^{-5}	7.1×10^{-7}
Area 5, RWMS No. 2	02/05/92	2.3×10^{-6}	7.9×10^{-7}
Area 5, RWMS No. 2	02/20/92	3.4×10^{-7}	5.1×10^{-8}
Area 5, RWMS No. 2	03/03/92	4.3×10^{-6}	5.9×10^{-7}
Area 5, RWMS No. 2	03/18/92	1.5×10^{-6}	7.3×10^{-7}
Area 5, RWMS No. 2	04/01/92	2.9×10^{-6}	4.6×10^{-7}
Area 5, RWMS No. 2	04/16/92	4.8×10^{-6}	3.1×10^{-7}
Area 5, RWMS No. 2	04/29/92	6.5×10^{-6}	4.3×10^{-7}
Area 5, RWMS No. 2	05/13/92	5.9×10^{-6}	4.0×10^{-7}
Area 5, RWMS No. 2	05/28/92	2.4×10^{-6}	3.0×10^{-7}
Area 5, RWMS No. 2	06/24/92	1.9×10^{-6}	1.2×10^{-7}
Area 5, RWMS No. 2	07/08/92	2.8×10^{-6}	2.4×10^{-7}
Area 5, RWMS No. 2	07/23/92	7.0×10^{-6}	4.3×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mLStandard Deviation of Mean MDC: 4.5×10^{-8} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

Sampling Location	Collection Dates	pCi/mL	
		Concentration	Standard Deviation (s)
Area 5, RWMS No. 2	08/05/92	4.9×10^{-6}	2.6×10^{-7}
Area 5, RWMS No. 2	08/20/92	6.5×10^{-6}	3.5×10^{-7}
Area 5, RWMS No. 2	09/03/92	6.0×10^{-6}	3.5×10^{-7}
Area 5, RWMS No. 2	10/08/92	5.5×10^{-6}	4.7×10^{-7}
Area 5, RWMS No. 2	10/28/92	6.1×10^{-6}	4.5×10^{-7}
Area 5, RWMS No. 2	11/17/92	2.7×10^{-6}	2.5×10^{-7}
Area 5, RWMS No. 2	12/08/92	2.9×10^{-6}	4.3×10^{-7}
Area 5, RWMS No. 2	12/22/92	1.1×10^{-6}	5.6×10^{-7}
Area 5, RWMS No. 3	01/09/92	3.8×10^{-6}	3.5×10^{-7}
Area 5, RWMS No. 3	01/23/92	3.0×10^{-5}	6.2×10^{-7}
Area 5, RWMS No. 3	02/05/92	2.2×10^{-6}	1.0×10^{-6}
Area 5, RWMS No. 3	02/20/92	3.1×10^{-7}	6.1×10^{-8}
Area 5, RWMS No. 3	03/03/92	3.3×10^{-6}	6.8×10^{-7}
Area 5, RWMS No. 3	03/18/92	3.3×10^{-6}	8.8×10^{-7}
Area 5, RWMS No. 3	04/01/92	3.5×10^{-6}	6.4×10^{-7}
Area 5, RWMS No. 3	04/29/92	2.8×10^{-6}	4.9×10^{-7}
Area 5, RWMS No. 3	05/13/92	1.2×10^{-6}	1.4×10^{-7}
Area 5, RWMS No. 3	05/28/92	1.2×10^{-6}	1.6×10^{-7}
Area 5, RWMS No. 3	06/11/92	5.4×10^{-6}	3.8×10^{-7}
Area 5, RWMS No. 3	06/24/92	3.9×10^{-6}	2.9×10^{-7}
Area 5, RWMS No. 3	07/08/92	1.7×10^{-6}	3.0×10^{-7}
Area 5, RWMS No. 3	07/23/92	6.0×10^{-6}	4.5×10^{-7}
Area 5, RWMS No. 3	08/05/92	1.7×10^{-6}	3.0×10^{-7}
Area 5, RWMS No. 3	08/20/92	3.2×10^{-6}	3.4×10^{-7}
Area 5, RWMS No. 3	09/03/92	3.9×10^{-6}	3.9×10^{-7}
Area 5, RWMS No. 3	10/08/92	3.8×10^{-7}	9.2×10^{-8}
Area 5, RWMS No. 3	10/28/92	5.4×10^{-6}	5.9×10^{-7}
Area 5, RWMS No. 3	11/17/92	2.3×10^{-6}	2.6×10^{-7}
Area 5, RWMS No. 3	12/08/92	3.7×10^{-6}	4.2×10^{-7}
Area 5, RWMS No. 3	12/22/92	2.1×10^{-6}	6.0×10^{-7}
Area 5, RWMS No. 4	01/09/92	2.9×10^{-6}	3.4×10^{-7}
Area 5, RWMS No. 4	01/23/92	4.8×10^{-6}	3.8×10^{-7}
Area 5, RWMS No. 4	02/05/92	2.9×10^{-6}	1.0×10^{-6}
Area 5, RWMS No. 4	02/20/92	2.7×10^{-7}	5.9×10^{-8}
Area 5, RWMS No. 4	03/03/92	5.2×10^{-6}	7.6×10^{-7}
Area 5, RWMS No. 4	03/18/92	4.6×10^{-6}	9.0×10^{-7}
Area 5, RWMS No. 4	04/01/92	2.6×10^{-6}	7.0×10^{-7}
Area 5, RWMS No. 4	04/16/92	3.0×10^{-6}	4.8×10^{-7}
Area 5, RWMS No. 4	04/29/92	5.0×10^{-6}	6.2×10^{-7}
Area 5, RWMS No. 4	05/13/92	8.3×10^{-6}	4.9×10^{-7}
Area 5, RWMS No. 4	06/24/92	1.1×10^{-5}	3.8×10^{-7}
Area 5, RWMS No. 4	07/08/92	1.2×10^{-6}	1.1×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mLStandard Deviation of Mean MDC: 4.5×10^{-6} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

Sampling Location	Collection Dates	pCi/mL	
		Concentration	Standard Deviation (s)
Area 5, RWMS No. 4	07/23/92	5.8×10^{-6}	2.6×10^{-7}
Area 5, RWMS No. 4	08/05/92	1.7×10^{-5}	4.6×10^{-7}
Area 5, RWMS No. 4	08/20/92	1.2×10^{-5}	3.4×10^{-7}
Area 5, RWMS No. 4	09/03/92	1.4×10^{-5}	4.3×10^{-7}
Area 5, RWMS No. 4	10/08/92	1.7×10^{-5}	4.8×10^{-7}
Area 5, RWMS No. 4	10/28/92	9.2×10^{-6}	3.8×10^{-7}
Area 5, RWMS No. 4	11/17/92	4.2×10^{-6}	2.7×10^{-7}
Area 5, RWMS No. 4	12/08/92	3.5×10^{-6}	6.3×10^{-7}
Area 5, RWMS No. 4	12/22/92	9.3×10^{-7}	2.9×10^{-7}
Area 5, RWMS No. 5	01/09/92	3.7×10^{-6}	3.5×10^{-7}
Area 5, RWMS No. 5	01/23/92	6.6×10^{-6}	4.0×10^{-7}
Area 5, RWMS No. 5	02/05/92	1.5×10^{-6}	6.1×10^{-7}
Area 5, RWMS No. 5	02/20/92	3.6×10^{-7}	4.4×10^{-8}
Area 5, RWMS No. 5	03/03/92	5.0×10^{-6}	5.3×10^{-7}
Area 5, RWMS No. 5	03/18/92	1.2×10^{-6}	6.1×10^{-7}
Area 5, RWMS No. 5	04/01/92	1.0×10^{-6}	3.4×10^{-7}
Area 5, RWMS No. 5	04/16/92	1.3×10^{-6}	3.3×10^{-7}
Area 5, RWMS No. 5	04/29/92	1.9×10^{-7}	5.4×10^{-8}
Area 5, RWMS No. 5	05/13/92	2.7×10^{-6}	2.0×10^{-7}
Area 5, RWMS No. 5	05/28/92	3.4×10^{-6}	2.0×10^{-7}
Area 5, RWMS No. 5	07/08/92	4.4×10^{-6}	1.6×10^{-7}
Area 5, RWMS No. 5	08/05/92	1.2×10^{-5}	9.0×10^{-7}
Area 5, RWMS No. 5	08/20/92	5.6×10^{-6}	4.8×10^{-7}
Area 5, RWMS No. 5	09/03/92	7.4×10^{-6}	5.2×10^{-7}
Area 5, RWMS No. 5	10/08/92	7.5×10^{-6}	6.5×10^{-7}
Area 5, RWMS No. 5	10/28/92	2.8×10^{-6}	3.3×10^{-7}
Area 5, RWMS No. 5	11/17/92	5.3×10^{-6}	4.0×10^{-7}
Area 5, RWMS No. 5	12/08/92	6.1×10^{-6}	9.2×10^{-7}
Area 5, RWMS No. 5	12/22/92	1.4×10^{-6}	4.4×10^{-7}
Area 5, RWMS No. 6	01/09/92	3.2×10^{-6}	2.1×10^{-7}
Area 5, RWMS No. 6	01/23/92	6.2×10^{-6}	3.9×10^{-7}
Area 5, RWMS No. 6	02/05/92	4.7×10^{-6}	8.7×10^{-7}
Area 5, RWMS No. 6	02/20/92	3.9×10^{-7}	5.4×10^{-8}
Area 5, RWMS No. 6	03/03/92	6.1×10^{-6}	6.9×10^{-7}
Area 5, RWMS No. 6	03/18/92	2.5×10^{-6}	8.1×10^{-7}
Area 5, RWMS No. 6	04/01/92	3.6×10^{-6}	6.2×10^{-7}
Area 5, RWMS No. 6	04/16/92	9.9×10^{-7}	4.3×10^{-7}
Area 5, RWMS No. 6	04/29/92	4.3×10^{-6}	6.5×10^{-7}
Area 5, RWMS No. 6	05/13/92	2.3×10^{-6}	4.8×10^{-7}
Area 5, RWMS No. 6	06/24/92	5.2×10^{-6}	2.2×10^{-7}
Area 5, RWMS No. 6	07/08/92	3.8×10^{-7}	4.8×10^{-8}
Area 5, RWMS No. 6	07/23/92	6.9×10^{-6}	6.4×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 4.5×10^{-8} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

Sampling Location	Collection Dates	pCi/mL	
		Concentration	Standard Deviation (s)
Area 5, RWMS No. 6	08/05/92	4.2×10^{-6}	5.6×10^{-7}
Area 5, RWMS No. 6	08/20/92	3.1×10^{-6}	4.4×10^{-7}
Area 5, RWMS No. 6	09/03/92	1.1×10^{-6}	3.4×10^{-7}
Area 5, RWMS No. 6	10/08/92	7.7×10^{-6}	5.5×10^{-7}
Area 5, RWMS No. 6	10/28/92	5.7×10^{-6}	5.6×10^{-7}
Area 5, RWMS No. 6	11/17/92	8.5×10^{-6}	8.3×10^{-7}
Area 5, RWMS No. 6	12/22/92	2.8×10^{-6}	4.5×10^{-7}
Area 5, RWMS No. 7	01/09/92	9.4×10^{-6}	4.1×10^{-7}
Area 5, RWMS No. 7	01/23/92	7.3×10^{-6}	4.2×10^{-7}
Area 5, RWMS No. 7	02/05/92	5.7×10^{-6}	7.5×10^{-7}
Area 5, RWMS No. 7	02/20/92	6.1×10^{-7}	6.2×10^{-8}
Area 5, RWMS No. 7	03/03/92	7.7×10^{-6}	8.6×10^{-7}
Area 5, RWMS No. 7	03/18/92	6.5×10^{-6}	2.0×10^{-6}
Area 5, RWMS No. 7	04/01/92	7.2×10^{-6}	6.0×10^{-7}
Area 5, RWMS No. 7	04/16/92	2.6×10^{-6}	9.9×10^{-7}
Area 5, RWMS No. 7	04/29/92	4.7×10^{-6}	4.0×10^{-7}
Area 5, RWMS No. 7	05/13/92	6.7×10^{-6}	4.6×10^{-7}
Area 5, RWMS No. 7	06/24/92	3.7×10^{-7}	1.0×10^{-7}
Area 5, RWMS No. 7	07/23/92	4.9×10^{-5}	1.4×10^{-6}
Area 5, RWMS No. 7	08/05/92	6.1×10^{-6}	4.0×10^{-7}
Area 5, RWMS No. 7	08/20/92	6.5×10^{-6}	6.4×10^{-7}
Area 5, RWMS No. 7	09/03/92	6.0×10^{-6}	5.8×10^{-7}
Area 5, RWMS No. 7	10/08/92	1.5×10^{-5}	9.0×10^{-7}
Area 5, RWMS No. 7	10/28/92	2.4×10^{-5}	8.4×10^{-7}
Area 5, RWMS No. 7	11/17/92	2.7×10^{-5}	6.7×10^{-7}
Area 5, RWMS No. 7	12/08/92	4.7×10^{-6}	6.1×10^{-7}
Area 5, RWMS No. 7	12/22/92	3.7×10^{-5}	1.2×10^{-6}
Area 5, RWMS No. 8	01/09/92	9.2×10^{-6}	4.0×10^{-7}
Area 5, RWMS No. 8	01/23/92	2.3×10^{-5}	5.2×10^{-7}
Area 5, RWMS No. 8	02/05/92	4.6×10^{-6}	8.7×10^{-7}
Area 5, RWMS No. 8	02/20/92	6.0×10^{-7}	6.0×10^{-8}
Area 5, RWMS No. 8	03/03/92	3.4×10^{-6}	6.5×10^{-7}
Area 5, RWMS No. 8	03/18/92	5.9×10^{-6}	1.7×10^{-6}
Area 5, RWMS No. 8	04/01/92	2.5×10^{-6}	5.3×10^{-7}
Area 5, RWMS No. 8	04/16/92	4.7×10^{-6}	5.1×10^{-7}
Area 5, RWMS No. 8	04/29/92	3.6×10^{-6}	6.9×10^{-7}
Area 5, RWMS No. 8	05/13/92	6.8×10^{-6}	2.8×10^{-7}
Area 5, RWMS No. 8	05/28/92	6.0×10^{-7}	5.6×10^{-8}
Area 5, RWMS No. 8	06/11/92	6.0×10^{-7}	1.3×10^{-7}
Area 5, RWMS No. 8	06/24/92	1.2×10^{-6}	3.3×10^{-7}
Area 5, RWMS No. 8	07/08/92	3.7×10^{-6}	2.9×10^{-7}
Area 5, RWMS No. 8	07/23/92	5.2×10^{-6}	4.5×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 4.5×10^{-6} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

Sampling Location	Collection Dates	pCi/mL	
		Concentration	Standard Deviation (s)
Area 5, RWMS No. 8	08/05/92	3.3×10^{-6}	2.9×10^{-7}
Area 5, RWMS No. 8	08/20/92	2.5×10^{-6}	3.1×10^{-7}
Area 5, RWMS No. 8	09/03/92	1.9×10^{-6}	3.8×10^{-7}
Area 5, RWMS No. 8	10/08/92	5.3×10^{-6}	6.1×10^{-7}
Area 5, RWMS No. 8	10/28/92	7.8×10^{-6}	5.6×10^{-7}
Area 5, RWMS No. 8	11/17/92	6.2×10^{-6}	4.1×10^{-7}
Area 5, RWMS No. 8	12/08/92	6.4×10^{-6}	5.8×10^{-7}
Area 5, RWMS No. 8	12/22/92	5.1×10^{-6}	6.5×10^{-7}
Area 5, RWMS No. 9	01/09/92	1.3×10^{-5}	4.6×10^{-7}
Area 5, RWMS No. 9	01/23/92	1.1×10^{-4}	1.0×10^{-6}
Area 5, RWMS No. 9	02/05/92	5.8×10^{-6}	9.8×10^{-7}
Area 5, RWMS No. 9	02/20/92	2.9×10^{-7}	2.4×10^{-8}
Area 5, RWMS No. 9	03/03/92	1.1×10^{-5}	8.6×10^{-7}
Area 5, RWMS No. 9	03/18/92	5.7×10^{-6}	8.9×10^{-7}
Area 5, RWMS No. 9	04/16/92	5.2×10^{-6}	5.6×10^{-7}
Area 5, RWMS No. 9	04/29/92	8.5×10^{-6}	7.4×10^{-7}
Area 5, RWMS No. 9	05/13/92	1.3×10^{-6}	2.4×10^{-7}
Area 5, RWMS No. 9	05/28/92	4.5×10^{-6}	5.7×10^{-7}
Area 5, RWMS No. 9	06/11/92	6.1×10^{-7}	1.5×10^{-7}
Area 5, RWMS No. 9	06/24/92	3.1×10^{-5}	8.9×10^{-7}
Area 5, RWMS No. 9	07/08/92	6.9×10^{-7}	1.2×10^{-7}
Area 5, RWMS No. 9	07/23/92	8.8×10^{-6}	6.7×10^{-7}
Area 5, RWMS No. 9	08/05/92	8.1×10^{-6}	6.0×10^{-7}
Area 5, RWMS No. 9	08/20/92	4.3×10^{-6}	4.6×10^{-7}
Area 5, RWMS No. 9	09/03/92	4.0×10^{-6}	4.1×10^{-7}
Area 5, RWMS No. 9	10/08/92	5.3×10^{-6}	4.2×10^{-7}
Area 5, RWMS No. 9	10/28/92	9.9×10^{-6}	5.7×10^{-7}
Area 5, RWMS No. 9	11/17/92	7.3×10^{-6}	3.7×10^{-7}
Area 5, RWMS No. 9	12/08/92	1.2×10^{-5}	1.0×10^{-6}
Area 5, RWMS No. 9	12/22/92	4.7×10^{-6}	6.9×10^{-7}
Area 10, Gate 700 S	01/09/92	7.9×10^{-7}	2.9×10^{-7}
Area 10, Gate 700 S	01/22/92	4.9×10^{-7}	3.4×10^{-7}
Area 10, Gate 700 S	02/05/92	-3.0×10^{-7}	6.1×10^{-7}
Area 10, Gate 700 S	02/20/92	6.1×10^{-8}	3.1×10^{-8}
Area 10, Gate 700 S	03/05/92	5.5×10^{-7}	3.7×10^{-7}
Area 10, Gate 700 S	03/19/92	8.1×10^{-7}	6.4×10^{-7}
Area 10, Gate 700 S	04/01/92	-4.0×10^{-8}	2.7×10^{-7}
Area 10, Gate 700 S	04/16/92	2.4×10^{-7}	3.9×10^{-7}
Area 10, Gate 700 S	04/29/92	2.5×10^{-7}	1.5×10^{-7}
Area 10, Gate 700 S	05/13/92	2.6×10^{-7}	1.7×10^{-7}
Area 10, Gate 700 S	05/28/92	4.7×10^{-7}	1.1×10^{-7}
Area 10, Gate 700 S	06/11/92	6.7×10^{-8}	7.9×10^{-8}

Mean MDC: 1.2×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 4.5×10^{-6} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>pCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 10, Gate 700 S	06/25/92	-1.3×10^{-8}	4.4×10^{-8}
Area 10, Gate 700 S	07/08/92	1.7×10^{-7}	1.3×10^{-7}
Area 10, Gate 700 S	07/22/92	3.1×10^{-7}	8.6×10^{-8}
Area 10, Gate 700 S	08/06/92	4.7×10^{-7}	3.2×10^{-7}
Area 10, Gate 700 S	08/20/92	8.2×10^{-7}	2.8×10^{-7}
Area 10, Gate 700 S	09/03/92	2.5×10^{-6}	1.0×10^{-6}
Area 10, Gate 700 S	10/08/92	8.8×10^{-9}	3.4×10^{-7}
Area 10, Gate 700 S	10/28/92	3.3×10^{-6}	3.7×10^{-7}
Area 10, Gate 700 S	11/18/92	7.2×10^{-7}	2.9×10^{-7}
Area 10, Gate 700 S	12/08/92	2.3×10^{-6}	4.0×10^{-7}
Area 10, Gate 700 S	12/22/92	3.5×10^{-7}	5.1×10^{-7}
Area 12, Base Camp	01/09/92	3.3×10^{-6}	3.0×10^{-7}
Area 12, Base Camp	02/05/92	-6.9×10^{-7}	7.4×10^{-7}
Area 12, Base Camp	02/20/92	1.1×10^{-7}	3.4×10^{-8}
Area 12, Base Camp	03/05/92	5.3×10^{-7}	3.4×10^{-7}
Area 12, Base Camp	03/19/92	3.6×10^{-7}	5.7×10^{-7}
Area 12, Base Camp	04/01/92	-6.1×10^{-9}	2.5×10^{-7}
Area 12, Base Camp	04/16/92	1.1×10^{-6}	3.8×10^{-7}
Area 12, Base Camp	05/13/92	3.1×10^{-7}	2.8×10^{-7}
Area 12, Base Camp	05/28/92	5.9×10^{-7}	2.1×10^{-7}
Area 12, Base Camp	06/11/92	3.1×10^{-7}	1.7×10^{-7}
Area 12, Base Camp	06/25/92	-5.1×10^{-8}	1.8×10^{-7}
Area 12, Base Camp	07/08/92	4.2×10^{-7}	1.8×10^{-7}
Area 12, Base Camp	07/22/92	1.6×10^{-7}	7.7×10^{-8}
Area 12, Base Camp	10/08/92	3.1×10^{-7}	3.3×10^{-7}
Area 12, Base Camp	10/28/92	1.5×10^{-6}	4.2×10^{-7}
Area 12, Base Camp	11/18/92	8.5×10^{-7}	2.9×10^{-7}
Area 12, Base Camp	12/08/92	7.1×10^{-7}	2.9×10^{-7}
Area 12, Base Camp	12/22/92	-8.9×10^{-8}	5.3×10^{-7}
Area 15, EPA Farm	01/09/92	6.2×10^{-5}	1.3×10^{-6}
Area 15, EPA Farm	02/05/92	8.4×10^{-6}	9.8×10^{-7}
Area 15, EPA Farm	02/20/92	6.4×10^{-7}	5.9×10^{-8}
Area 15, EPA Farm	03/05/92	9.1×10^{-6}	5.9×10^{-7}
Area 15, EPA Farm	03/19/92	4.5×10^{-6}	4.9×10^{-7}
Area 15, EPA Farm	04/01/92	1.0×10^{-5}	5.3×10^{-7}
Area 15, EPA Farm	04/16/92	1.1×10^{-5}	5.2×10^{-7}
Area 15, EPA Farm	04/29/92	7.2×10^{-7}	9.8×10^{-8}
Area 15, EPA Farm	05/13/92	9.5×10^{-6}	5.7×10^{-7}
Area 15, EPA Farm	05/28/92	3.2×10^{-6}	2.1×10^{-7}
Area 15, EPA Farm	06/11/92	8.2×10^{-6}	3.3×10^{-7}
Area 15, EPA Farm	06/25/92	5.1×10^{-6}	4.4×10^{-7}
Area 15, EPA Farm	10/28/92	6.0×10^{-7}	1.3×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 4.5×10^{-6} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>pCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 15, EPA Farm	11/18/92	8.9×10^{-6}	4.1×10^{-7}
Area 15, EPA Farm	12/08/92	1.3×10^{-5}	5.6×10^{-7}
Area 15, EPA Farm	12/22/92	7.7×10^{-6}	6.9×10^{-7}
Area 23, H&S Building	01/09/92	-1.2×10^{-7}	3.0×10^{-7}
Area 23, H&S Building	01/22/92	8.3×10^{-7}	3.2×10^{-7}
Area 23, H&S Building	02/05/92	-1.4×10^{-7}	5.0×10^{-7}
Area 23, H&S Building	02/20/92	3.2×10^{-8}	2.7×10^{-8}
Area 23, H&S Building	03/05/92	4.9×10^{-7}	3.9×10^{-7}
Area 23, H&S Building	03/19/92	3.8×10^{-7}	3.8×10^{-7}
Area 23, H&S Building	04/01/92	-1.7×10^{-7}	2.3×10^{-7}
Area 23, H&S Building	04/16/92	1.1×10^{-7}	3.4×10^{-7}
Area 23, H&S Building	04/29/92	2.5×10^{-9}	3.2×10^{-8}
Area 23, H&S Building	05/13/92	1.9×10^{-7}	1.1×10^{-7}
Area 23, H&S Building	05/28/92	2.0×10^{-7}	1.6×10^{-7}
Area 23, H&S Building	06/11/92	2.1×10^{-7}	1.1×10^{-7}
Area 23, H&S Building	06/25/92	4.4×10^{-6}	2.6×10^{-7}
Area 23, H&S Building	07/08/92	4.9×10^{-7}	1.7×10^{-7}
Area 23, H&S Building	07/22/92	7.0×10^{-8}	2.1×10^{-7}
Area 23, H&S Building	08/06/92	5.0×10^{-7}	1.4×10^{-7}
Area 23, H&S Building	08/20/92	-3.2×10^{-7}	3.1×10^{-7}
Area 23, H&S Building	09/03/92	-7.2×10^{-8}	3.5×10^{-7}
Area 23, H&S Building	09/16/92	-1.3×10^{-7}	2.3×10^{-7}
Area 23, H&S Building	10/28/92	2.0×10^{-6}	2.2×10^{-7}
Area 23, H&S Building	11/18/92	1.7×10^{-7}	2.7×10^{-7}
Area 23, H&S Building	12/08/92	2.3×10^{-6}	4.6×10^{-7}
Area 23, H&S Building	12/22/92	6.9×10^{-7}	3.1×10^{-7}
Area 23, E Boundary	01/09/92	4.2×10^{-7}	3.2×10^{-7}
Area 23, E Boundary	01/22/92	2.0×10^{-8}	3.5×10^{-7}
Area 23, E Boundary	02/05/92	-8.0×10^{-7}	8.2×10^{-7}
Area 23, E Boundary	02/20/92	1.6×10^{-8}	3.7×10^{-8}
Area 23, E Boundary	03/05/92	7.3×10^{-7}	4.9×10^{-7}
Area 23, E Boundary	04/01/92	-4.8×10^{-7}	2.8×10^{-7}
Area 23, E Boundary	04/16/92	7.8×10^{-9}	3.2×10^{-7}
Area 23, E Boundary	04/29/92	3.3×10^{-7}	4.4×10^{-7}
Area 23, E Boundary	05/13/92	4.3×10^{-7}	3.0×10^{-7}
Area 23, E Boundary	05/28/92	1.6×10^{-7}	1.5×10^{-7}
Area 23, E Boundary	06/11/92	1.7×10^{-6}	3.7×10^{-7}
Area 23, E Boundary	06/25/92	-2.4×10^{-8}	5.1×10^{-7}
Area 23, E Boundary	07/08/92	4.1×10^{-7}	1.4×10^{-7}
Area 23, E Boundary	07/22/92	2.2×10^{-8}	2.3×10^{-7}
Area 23, E Boundary	08/06/92	3.8×10^{-7}	1.3×10^{-7}
Area 23, E Boundary	08/20/92	2.0×10^{-7}	2.7×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 4.5×10^{-6} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>pCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, E Boundary	09/03/92	2.8×10^{-8}	1.8×10^{-7}
Area 23, E Boundary	09/16/92	-2.2×10^{-7}	3.2×10^{-7}
Area 23, E Boundary	10/28/92	1.9×10^{-7}	2.8×10^{-7}
Area 23, E Boundary	11/18/92	6.6×10^{-7}	2.2×10^{-7}
Area 23, E Boundary	12/08/92	1.1×10^{-6}	2.7×10^{-7}
Area 23, E Boundary	12/22/92	4.9×10^{-7}	3.1×10^{-7}
Area 23, Building 790 No. 2	01/09/92	5.3×10^{-7}	3.3×10^{-7}
Area 23, Building 790 No. 2	01/22/92	1.2×10^{-6}	2.3×10^{-7}
Area 23, Building 790 No. 2	02/05/92	-1.5×10^{-7}	5.3×10^{-7}
Area 23, Building 790 No. 2	02/20/92	3.1×10^{-8}	3.6×10^{-8}
Area 23, Building 790 No. 2	03/05/92	1.4×10^{-7}	7.6×10^{-8}
Area 23, Building 790 No. 2	03/19/92	1.5×10^{-7}	4.9×10^{-7}
Area 23, Building 790 No. 2	04/01/92	-3.3×10^{-7}	3.2×10^{-7}
Area 23, Building 790 No. 2	04/16/92	-1.3×10^{-7}	2.7×10^{-7}
Area 23, Building 790 No. 2	04/29/92	2.4×10^{-7}	1.9×10^{-7}
Area 23, Building 790 No. 2	05/13/92	3.9×10^{-7}	2.9×10^{-7}
Area 23, Building 790 No. 2	05/28/92	1.5×10^{-7}	1.3×10^{-7}
Area 23, Building 790 No. 2	06/11/92	-1.1×10^{-8}	1.2×10^{-7}
Area 23, Building 790 No. 2	06/25/92	3.2×10^{-8}	1.3×10^{-7}
Area 23, Building 790 No. 2	07/08/92	4.0×10^{-7}	1.1×10^{-7}
Area 23, Building 790 No. 2	07/22/92	-9.9×10^{-8}	1.8×10^{-7}
Area 23, Building 790 No. 2	08/06/92	7.4×10^{-7}	1.9×10^{-7}
Area 23, Building 790 No. 2	08/20/92	1.5×10^{-7}	2.3×10^{-7}
Area 23, Building 790 No. 2	09/03/92	1.6×10^{-7}	2.9×10^{-7}
Area 23, Building 790 No. 2	09/16/92	4.1×10^{-7}	7.6×10^{-7}
Area 23, Building 790 No. 2	10/28/92	-1.2×10^{-7}	4.2×10^{-7}
Area 23, Building 790 No. 2	12/08/92	9.0×10^{-7}	1.4×10^{-6}
Area 23, Building 790 No. 2	12/22/92	1.2×10^{-5}	3.9×10^{-6}
Area 25, E-MAD N	01/09/92	4.6×10^{-7}	3.1×10^{-7}
Area 25, E-MAD N	01/23/92	8.3×10^{-6}	3.9×10^{-7}
Area 25, E-MAD N	02/05/92	-2.4×10^{-7}	6.3×10^{-7}
Area 25, E-MAD N	02/20/92	9.7×10^{-7}	5.3×10^{-8}
Area 25, E-MAD N	03/03/92	4.6×10^{-7}	3.3×10^{-7}
Area 25, E-MAD N	03/18/92	8.8×10^{-5}	1.2×10^{-6}
Area 25, E-MAD N	04/01/92	-2.1×10^{-7}	2.4×10^{-7}
Area 25, E-MAD N	04/16/92	1.3×10^{-5}	5.0×10^{-7}
Area 25, E-MAD N	04/29/92	1.9×10^{-7}	2.0×10^{-7}
Area 25, E-MAD N	05/13/92	4.4×10^{-6}	3.6×10^{-7}
Area 25, E-MAD N	05/28/92	2.1×10^{-7}	1.2×10^{-7}
Area 25, E-MAD N	06/11/92	1.0×10^{-6}	1.2×10^{-7}
Area 25, E-MAD N	06/24/92	8.2×10^{-8}	2.4×10^{-8}
Area 25, E-MAD N	07/08/92	1.3×10^{-6}	9.1×10^{-8}

Mean MDC: 1.2×10^{-06} pCi/mLStandard Deviation of Mean MDC: 4.5×10^{-06} pCi/mL

Table B.1 (Tritiated Water Vapor in Air Sampling Results - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>pCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, E-MAD N	07/23/92	1.3×10^{-6}	7.7×10^{-8}
Area 25, E-MAD N	08/05/92	2.9×10^{-6}	6.5×10^{-7}
Area 25, E-MAD N	08/20/92	2.7×10^{-7}	3.5×10^{-7}
Area 25, E-MAD N	09/03/92	3.4×10^{-7}	3.3×10^{-7}
Area 25, E-MAD N	10/08/92	9.5×10^{-7}	5.6×10^{-7}
Area 25, E-MAD N	10/28/92	9.3×10^{-7}	4.9×10^{-7}
Area 25, E-MAD N	11/17/92	9.2×10^{-7}	6.4×10^{-7}
Area 25, E-MAD N	12/08/92	4.8×10^{-6}	1.3×10^{-6}
Area 25, E-MAD N	12/22/92	1.6×10^{-6}	4.9×10^{-7}

Mean MDC: 1.2×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 4.5×10^{-6} pCi/mL

Figures B.1 through B.17 are time series plots of the data in Table B.1, one figure for each sampling location. The data values are represented by an "x," the solid line shows the detection limit, and the dotted lines give the approximate upper and lower 95 percent confidence intervals for the data (calculated as the data value plus or minus twice the analytical standard deviation). The 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 some of the radiological waste management (RWMS) sampling stations while most of the plots have a range of zero to twenty. Values over one hundred have been deleted from the plots, but are indicated by arrows at the top of some plots. Figure B.18 shows all the data combined in one plot; this plot does not contain any confidence intervals or detection limits, and the highest value has been deleted. 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.

DATA ANALYSIS

Examination of the figures shows two items of note. First, a few values above 50×10^{-6} pCi/mL are found mostly in the data for the radiological waste management site (RWMS). These are probably related to activities at this site. Second, Figure B.18 shows a pattern of most of the data values near zero with the number of data values decreasing as concentration values increase. 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.1 Time Series Plot of BJY Tritium Results

Figure B.3 Time Series Plot of RWMS No. 2 Tritium

Figure B.2 Time Series Plot of RWMS No. 1 Tritium

Figure B.4 Time Series Plot of RWMS No. 3 Tritium

Figure B.5 Time Series Plot of RWMS No. 4 Tritium

Figure B.7 Time Series Plot of RWMS No. 6 Tritium

Figure B.6 Time Series Plot of RWMS No. 5 Tritium

Figure B.8 Time Series Plot of RWMS No. 7 Tritium

Figure B.9 Time Series Plot of RWMS No. 8 Tritium

Figure B.10 Time Series Plot, RWMS No. 9 Tritium

Figure B.11 Time Series Plot of Gate 700 Tritium

Figure B.12 Time Series Plot of Area 12 Tritium

Figure B.13 Time Series Plot of EPA Farm Tritium

Figure B.15 Time Series Plot, East Boundary Tritium

Figure B.14 Time Series Plot, H&S Building Roof Tritium

Figure B.16 Time Series Plot, Building 790 No. 2 Tritium

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

Figure B.19 is a typical probability plot of the tritium in air data, a time series plot of the same data was shown in Figure B.18. Figure B.19 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 Figure B.19. The same procedure was repeated using the natural logarithms of the data and the resulting plot is shown in Figure B.20. This figure now shows the data approximately falling on a straight line.

The correlation coefficient test for goodness of fit indicates a fit to a normal distribution if values over 50 and the two lowest values are removed. Thus, the conclusion of these tests is that this data set has a lognormal data distribution. This goodness-of-fit process was repeated for the data from each sampling location. Most of the data sets are not fit by a normal distribution. If an occasional low outlier is removed, all the data sets are fit by a lognormal distribution, thus this was chosen as the distribution for statistical testing of the data. 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 data value over 100 was removed before the table was calculated. 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

Figure B.18 Time Series Plot of All Tritium Data

Figure B.19 Normal Probability Plot of All Tritium Results

that, except for the EPA Farm and E-MAD, concentrations are slightly lower or about the same this year, although the difference is not statistically significant. An examination of Figures B.1 to B.18 indicates no reason to suspect any time trends within the tritium data, 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 scaled by multiplying by 10^{16} , then logarithmically transformed before this test because the data are lognormally distributed. Also, the negative values and the value over 100 were removed. The

output of this procedure is given in Table B.3. Note that the mean values and confidence intervals are of the natural logarithms of the data, thus exponential transform action gives the data median and the confidence interval of the median. The analysis of variance table shows strong evidence of differences between group means, and the plot of confidence intervals suggests how the means are grouped. The analysis of variance "groupings" denotes the 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 two groupings of stations: those with negative logarithms of the median and E-MAD, and the remaining stations with positive logarithms of their medians. This corresponds to those stations listed in Table B.2 with medians less than 1.0 in the first group, and the remaining stations in the second group. The analysis of variance also identified a third significant group which forms a transition between the groups described above. This consists of stations BJY, E-MAD and RWMS No. 3. The list of "stations" has been rearranged by increasing magnitude of the means to facilitate the comparison of the grouped medians in Table B.3.

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^{-33}), the statistical conclusion is that there are differences between the station means, as was discussed in the previous paragraph.

Figure B.20 Lognormal Probability Plot of All Tritium Results

Table B.2 1992 Descriptive Statistics by Sampling Station

<u>Station</u>	<u>Number</u>	<u>10⁻⁶ pCi/mL</u>				
		<u>Mean</u>	<u>Standard Deviation</u>	<u>Median</u>	<u>1st Quartile</u>	<u>3rd Quartile</u>
BJY	23	1.37	2.09	0.90	0.20	1.95
RWMS No. 1	20	4.21	4.05	3.23	1.99	4.66
RWMS No. 2	22	6.68	13.28	3.78	2.35	5.98
RWMS No. 3	22	4.16	6.04	3.24	1.72	3.90
RWMS No. 4	21	6.47	5.12	4.80	2.91	10.36
RWMS No. 5	20	3.99	3.04	3.55	1.36	5.97
RWMS No. 6	20	3.99	2.39	3.90	2.36	6.00
RWMS No. 7	20	11.69	12.73	6.61	4.98	13.53
RWMS No. 8	23	4.95	4.56	4.64	2.45	6.18
RWMS No. 9	22	12.04	23.43	5.76	4.27	10.24
Gate 700	23	0.63	0.88	0.35	0.07	0.79
Area 12 Complex	18	0.54	0.83	0.34	0.08	0.74
EPA Farm	16	10.21	14.48	8.29	3.56	10.10
H&S Building Roof	23	0.53	1.06	0.19	-0.07	0.50
East Boundary	22	0.36	0.64	0.27	0.01	0.53
Building 790	22	0.76	2.52	0.15	-0.03	0.44
E-MAD	<u>23</u>	<u>7.61</u>	<u>20.22</u>	<u>0.95</u>	<u>0.27</u>	<u>2.86</u>
All	360	4.62	10.32	2.02	0.40	5.22

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

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of the Squares</u>	<u>Mean Square</u>	<u>F- Statistic</u>	<u>p Value</u>
Area	16	401.59	25.10	16.90	0.000
Error	<u>316</u>	<u>469.33</u>	1.49		
Total	332	870.92			

Table B.3 (Analysis of Variance on the Natural Log of Tritium in Air Concentrations, cont.)

<u>Station</u>	<u>N</u>	<u>Ln of Median</u>	<u>Standard Deviation</u>	Individual 95 Percent Confidence Intervals CIs for Ln Median Based on Pooled Standard Deviation
E Boundary	18	-1.458	1.616	(--*--)
H&S Building	17	-1.268	1.756	(--*--)
790 Building	16	-1.188	1.434	(--*--)
Gate 700	20	-0.962	1.367	(--*--)
Area 12	14	-0.676	0.885	(--*--)
BJY	22	-0.253	1.228	(--*--)
E-MAD	21	0.319	1.778	(--*--)
RWMS No. 3	22	0.971	0.941	(--*--)
RWMS No. 5	20	0.993	1.061	(--*--)
RWMS No. 1	20	1.091	0.897	(--*--)
RWMS No. 6	20	1.103	0.913	(--*--)
RWMS No. 8	23	1.256	0.912	(--*--)
RWMS No. 2	22	1.303	0.962	(--*--)
RWMS No. 4	21	1.492	1.019	(--*--)
RWMS No. 9	21	1.547	1.124	(--*--)
EPA Farm	16	1.711	1.231	(--*--)
RWMS No. 7	20	1.923	1.183	(--*--)
Pooled Standard Deviation = 1.219				-1.5 0.0 1.5 3.0

APPENDIX C

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

Lawrence E. Barker

Sampling locations, sampling dates, measured concentrations, and analytic standard deviations for ^{90}Sr , gross alpha, ^{238}Pu , $^{239+240}\text{Pu}$, 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

The arithmetic mean and standard deviation are for the network, respectively, 1.8×10^{-9} and 3.9×10^{-9} $\mu\text{Ci/mL}$ (6.7×10^{-2} and 1.4×10^{-1} Bq/L). Almost 95 percent of the measured concentrations were positive. Of the positive concentrations, a geometric mean of 4.9×10^{-10} $\mu\text{Ci/mL}$ (1.8×10^{-2} Bq/L) and a geometric standard deviation of 4.6 was observed.

No probability distribution was found that fit the ^{90}Sr concentrations particularly well. In Figure C.1, natural logarithms of concentrations from Area 12 are plotted versus normal scores. Were the distribution of ^{90}Sr concentrations lognormally distributed, a straight line would result. This does not happen. This plot is typical of ^{90}Sr concentrations. Similar analyses with other distributions failed to find a reasonable fit. Hence, concentrations are compared among NTS operational areas by means of the rank-based Kruskal-Wallis test. The Kruskal-Wallis test consists of replacing each observation with its rank among the combined sample (smallest observation is replaced with '1', second smallest is replaced with '2', etc.) and performing an ANOVA on the ranks. This procedure, which compares medians rather than means, 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.

The results of this analysis appear in Table C.1. There a statistic is calculated for each NTS operational area which, if concentrations in all NTS operational areas had the same median, would have a standard normal distribution. This appears 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 mean rank for that row deviates from the overall mean rank. If all categories have the same median, the Kruskal-Wallis statistic has a chi-square distribution with degrees of freedom one less than the number of categories.

Tables C.1 and C.2 show that without making parametric assumptions, we cannot show that observed ^{90}Sr concentrations differ among categories of water samples.

The Kruskal-Wallis test failed to find statistically significant differences among NTS operational areas in ^{90}Sr concentrations. Although the overall test statistic was not statistically significant, the Z-value associated with data from Area 12 was large. Similarly, the largest median

Figure C.1 Plot of Natural Logarithm of ^{90}Sr Concentrations in Water from Area 12 ($\mu\text{Ci/mL}$) versus Normal Scores

Table C.1 Results of Kruskal-Wallis Test for Equality of Median ^{90}Sr Concentrations $\times 10^{10}$ among NTS Operational Areas of Water Samples ($\mu\text{Ci/mL}$)

NTS Operational Area	Number	Median	Average Rank	Z- Value
19	2	1.45	10.0	-1.33
5	4	2.42	16.5	-0.79
20	2	1.61	10.5	-1.27
23	4	3.70	23.3	0.40
6	7	3.83	19.1	-0.45
16	2	4.02	20.0	-0.12
25	3	4.44	21.3	0.05
2	2	4.48	22.5	0.18
18	3	6.47	20.3	-0.10
3	2	6.89	20.0	-0.12
12	10	33.78	27.7	2.03
Overall	41		21.0	

Kruskal-Wallis Statistic = 7.30 Degrees of Freedom = 10 p-Value = 0.697

Table C.2 Results of Kruskal-Wallis Test for Equality of Median Gross Alpha Concentrations $\times 10^9$ among NTS Operational Areas ($\mu\text{Ci/mL}$)

NTS Operational Area	Number	Median	Average Rank	Z- Value
18	4	0.48	10.2	-2.66
2	5	0.73	11.1	-2.89
25	11	1.40	21.0	-2.97
3	1	3.20	29.0	-0.48
12	4	3.21	37.5	-0.22
23	10	6.08	44.4	0.65
20	3	6.53	51.0	0.85
5	5	7.00	53.3	1.34
6	24	7.43	47.7	1.97
27	4	8.62	49.6	1.21
1	4	8.62	49.6	0.86
16	4	9.55	58.0	1.61
Overall	79		40.0	

Kruskal-Wallis Statistic = 32.29 Degrees of Freedom = 11 p-Value = 0.001

concentration was that of Area 12. This is not surprising, as water from tunnels in Rainier Mesa, where much experimental activity occurs, drains into the containment ponds in Area 12. The overall lack of significance, even with the large Z-value associated with results from Area 12, can be attributed to most NTS Operational Areas having average ranks close to the overall mean rank, and therefore having Z-values near zero.

As all but a handful of samples analyzed for ^{90}Sr were collected during the month of July, it is not possible to determine if temporal trends existed.

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. Figure C.2 shows that approximately one quarter of the data were below the limit of detection. 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 part of the variance attributable to sampling error is estimated by one half the squared average difference between sample splits; the equivalent standard deviation is the square root of this variance. For ^{90}Sr , the observed standard deviation arising from duplicates was $8.8 \times 10^{-10} \mu\text{Ci/mL}$ ($3.2 \times 10^{-2} \text{ Bq/L}$). This is a very small portion of the overall standard deviation, $3.9 \times 10^{-9} \mu\text{Ci/mL}$ ($1.4 \times 10^{-1} \text{ Bq/L}$). As all duplicates come from containment ponds, generalizing this number to the entire data set might not be valid.

Figure C.2 Histogram of Coefficient of Variation of Observed Concentrations of ^{90}Sr

GROSS ALPHA

The arithmetic mean of all observed concentrations of gross alpha in water was 6.6×10^{-9} $\mu\text{Ci/mL}$ (2.4×10^{-1} Bq/L) and the standard deviation was 9.0×10^{-9} $\mu\text{Ci/mL}$ (3.3×10^{-1} Bq/L). Due to subtraction of background, approximately 4 percent of the observed gross alpha concentrations in water were negative. Ignoring these values and calculating the geometric mean and standard deviation with the remaining data, the geometric mean and standard deviation were, respectively, 3.5×10^{-9} $\mu\text{Ci/mL}$ (1.3×10^{-1} Bq/L) and 3.5.

Neither the normal nor lognormal distribution fit the data, either combined or broken down into smaller subsets. This is illustrated in Figure C.3, where concentrations ($\times 10^9$) were plotted versus normal scores. As a straight line indicates normality, the normal distribution does not fit the data. The lognormal distribution's fit was similarly poor. Hence, rather than a classical ANOVA, the Kruskal-Wallis test, discussed in the preceding section, was used. Concentrations are compared among NTS operational areas and among months of sampling.

In Table C.2, samples are compared among NTS operational areas. Here, differences among areas are highly statistically significant. Statistical significance is primarily attributable to smaller concentrations in Areas 18, 2, and 25. Medians for each NTS operational area should not be taken too seriously; for areas other than Area 6, they are based on very small numbers of measurements.

In Table C.3, concentrations are compared by month of sampling. No statistically significant differences are found. To assess measurement error in measured gross α concentrations, we consider empirical coefficients of variation. A histogram of the empirical coefficient of variation for all measured concentrations, omitting two observations for which the coefficient of variation

Figure C.3 Plot of Concentrations of Gross α in Water $\times 10^9$ ($\mu\text{Ci/mL}$) versus Normal Scores

Table C.3 Results of Kruskal-Wallis Test for Equality of Median Gross Alpha Concentrations $\times 10^9$ among Months ($\mu\text{Ci/mL}$)

<u>Month</u>	<u>Number</u>	<u>Median</u>	<u>Average Rank</u>	<u>Z-Value</u>
January	16	7.86	49.3	1.81
March	8	4.68	35.9	-0.54
April	9	6.99	45.4	0.76
May	1	1.52	24.5	-0.68
June	9	6.04	35.6	-0.61
July	10	7.82	47.1	1.05
September	9	4.32	29.8	-1.42
November	11	4.12	33.0	-1.08
December	6	3.42	38.0	-0.22
Overall	79		40.0	

Kruskal-Wallis Statistic = 7.97 Degrees of Freedom = 8 p-Value = 0.438

Figure C.4 Histogram of Empirical Coefficients of Variation of Measured Gross α Concentrations in Water

was greater than 1.0, appears in Figure C.4. In general, coefficients of variation for gross alpha tend to be small. In particular, note the absence of the large coefficients of variation that occur for many other contaminants.

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. The part of the variance attributable to sampling error is estimated by one half the squared average difference between sample splits; the equivalent standard deviation is the square root of this variance. For gross alpha, the observed standard deviation arising from duplicates was 5.0×10^{-9} $\mu\text{Ci/mL}$ (1.9×10^{-1} Bq/L). Hence, sampling standard deviation accounts for an appreciable portion of the overall standard deviation of gross alpha in water, 9.0×10^{-9} $\mu\text{Ci/mL}$ (3.3×10^{-1} Bq/L).

PLUTONIUM-238

The arithmetic mean and standard deviation of the ^{238}Pu concentrations of all water samples were, respectively, 1.4×10^{-11} $\mu\text{Ci/mL}$ (5.2×10^{-4} Bq/L) and 1.1×10^{-10} $\mu\text{Ci/mL}$ (4.1×10^{-3} Bq/L). As approximately 30 percent of the concentrations were negative, due to subtraction of background, and 38 percent were actual zeros, no geometric mean or standard deviation is calculated.

An exploratory data analysis revealed that no probability distribution fitted the data particularly well. This is illustrated in Figure C.5, where observed concentrations from Area 12, multiplied by 10^{11} , are plotted versus normal scores. A straight line indicates a normal distribution. Clearly, a normal distribution is not an adequate fit; the large number of non-positive

Figure C.5 Plot of ^{238}Pu Concentration $\times 10^{11}$ ($\mu\text{Ci/mL}$) from Area 12 versus Normal Scores

observations indicates the lognormal distribution is not an adequate fit. Usually, the rank-based Kruskal-Wallis test would be used if neither normality nor lognormality seemed adequate. However, the large number of zeros (ties among ranked observations) would cause the Kruskal-Wallis test to be of low power. Hence, concentrations are compared by means of classical ANOVA, and the results are viewed as approximations.

Concentrations are compared, both across NTS operational area and month of sample collection, by a two-way ANOVA. The ANOVA, presented in Table C.4, shows concentrations differ among NTS operational areas, but not among months of sample collection.

Concentrations are compared among NTS operational areas in Table C.5. Tukey's multiple comparison test indicates that concentrations in Area 12 can be distinguished from those in Area 6. The relatively small number of measurements in other Areas makes comparisons difficult. As no patterns were evident, comparison of concentrations over month of sample collections is not reported here.

To assess measurement error in measured ^{238}Pu concentrations, we consider empirical coefficients of variation (analytical error). A histogram of the empirical coefficient of variation for non-zero measured concentrations appears in Figure C.6. Five coefficients of variation that exceed 13.0 are omitted to facilitate interpretation of the histogram. The histogram indicates that empirical coefficients of variation for ^{238}Pu in water might have more than one mode. An exploratory data analysis revealed no relationship between coefficients of variation and NTS operational area, sampling station, or date of sampling. Although the reason for this phenomenon is unknown, it is thought to not result from sampling variation, as it was observed in the 1991 data. The large number of large values of empirical coefficient of

Table C.4 Two-Way Analysis of Variance on ^{238}Pu Concentrations $\times 10^{11}$ ($\mu\text{Ci/mL}$)

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sequential Sum of Squares</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational						
Area	14	3861.8	3734.4	266.7	2.14	0.011
Month	10	853.0	853.0	85.3	0.69	0.737
Error	<u>187</u>	<u>23277.8</u>	23277.8	124.5		
Total	211	27992.6				

Table C.5 One-Way Analysis of Variance on ^{238}Pu Concentrations $\times 10^{11}$ ($\mu\text{Ci/mL}$) Comparing Concentrations among NTS Operational Areas

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational					
Area	14	3862	276	2.25	0.007
Error	<u>197</u>	<u>24131</u>	122		
Total	211	27993			

<u>NTS Operational Area</u>	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Individual 95 Percent CIs for the Mean Based on Pooled Standard Deviation</u>
3	8	-3.17	8.25	(-----*-----)
7	3	-2.82	8.35	(-----*-----)
2	16	-1.83	2.54	(-----*-----)
20	7	-1.69	3.36	(-----*-----)
23	17	-0.78	2.23	(-----*-----)
5	21	-0.75	2.30	(-----*-----)
6	37	-0.71	2.02	(-----*-----)
19	8	-0.71	1.22	(-----*-----)
18	12	-0.67	2.19	(-----*-----)
25	17	-0.65	2.05	(-----*-----)
29	2	-0.63	1.44	(-----*-----)
27	3	0.12	0.21	(-----*-----)
16	8	0.37	3.41	(-----*-----)
1	3	2.15	3.73	(-----*-----)
12	50	8.99	21.56	(-----*-----)

Pooled Standard Deviation = 11.07

-10 0 10

Figure C.6 Histogram of Empirical Coefficients of Variation for ^{238}Pu Concentrations in Water

variation indicates that observed concentrations of ^{238}Pu are often well below the limit of detection. 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. The part of the variance attributable to sampling error is estimated by one half the squared average difference between sample splits; the equivalent standard deviation is the square root of this variance. For ^{238}Pu in water, the observed standard deviation arising from duplicates was $6.1 \times 10^{-11} \mu\text{Ci/mL}$ ($2.2 \times 10^{-3} \text{ Bq/L}$). Hence, sampling standard deviation is an appreciable portion of the overall standard deviation of ^{238}Pu in water, $1.1 \times 10^{-10} \mu\text{Ci/mL}$ ($4.1 \times 10^{-3} \text{ Bq/L}$). As all samples chosen for duplicate analysis came from tunnel effluents, tunnel containment ponds, or Yucca Waste Pond, it is not known if this result can be generalized to the remainder of the data.

PLUTONIUM-239+240

The arithmetic mean and standard deviation of the measured $^{239+240}\text{Pu}$ concentrations were, respectively, $3.3 \times 10^{-10} \mu\text{Ci/mL}$ ($1.2 \times 10^{-2} \text{ Bq/L}$) and $1.1 \times 10^{-9} \mu\text{Ci/mL}$ ($4.1 \times 10^{-2} \text{ Bq/L}$). As subtraction of background caused 23 percent of the measured concentrations to be negative, no geometric mean or standard deviation is calculated. Additionally, 24 percent of the observations were true zeros.

No probability distribution was found that fit the data particularly well. This is illustrated in Figure C.7, where concentrations from samples collected in Area 12 ($\times 10^{10}$) are plotted versus normal scores. As distributions from other NTS operational areas are similar in

Figure C.7 Plot of Concentrations of $^{239+240}\text{Pu} \times 10^{10}$ ($\mu\text{Ci/mL}$) from samples collected in Area 12 ($\times 10^{10}$) versus Normal Scores

appearance, these plots are not presented. The non-linearity of the plot indicates the non-normality of the data. Due to the large number of non-positive observations, the lognormal distribution did not fit the data either. Due to the large number of zeroes, the rank-based Kruskal-Wallis test would have low power. Hence, classical ANOVA is used and the results should be viewed as an approximation.

A comparison of $^{239+240}\text{Pu}$ concentrations $\times 10^{10}$ ($\mu\text{Ci/mL}$) among NTS operational areas and month of sampling appears in Table C.6. Differences among operational areas is highly statistically significant, while differences among months is not. A one-way ANOVA, comparing concentrations among NTS operational areas, appears in Table C.7. As variances are not even approximately constant among NTS operational areas, the calculated confidence intervals are, at best, approximations. Tukey's multiple comparison test distinguishes samples collected in Area 12 from those collected elsewhere. This is not surprising, as water from Rainier Mesa, where considerable experimental activity occurs, drains into containment ponds in Area 12.

An exploratory data analysis showed no difference in concentrations over time, and is not reported in detail here. This supports the conclusion reached from the two-way ANOVA table that appears in Table C.6.

To assess measurement error in measured $^{239+240}\text{Pu}$ concentrations, we consider empirical coefficients of variation. A histogram of the empirical coefficient of variation for all measured concentrations appears in Figure C.8. Six coefficients of variation that exceed 7.0 are omitted to facilitate interpretation of the histogram. As many of the empirical coefficients of variation are large, many of the observed concentrations are well below the limit of detection. Although

Table C.6 Two-Way Analysis of Variance on $^{239+240}\text{Pu}$ Concentrations $\times 10^{10}$ ($\mu\text{Ci/ml}$) on Water Samples

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sequential Sum of Squares</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational						
Area	14	6850.9	736.9	409.8	3.69	0.000
Month	10	562.0	562.0	56.2	0.51	0.885
Error	<u>184</u>	<u>20440.6</u>	20440.6	111.1		
Total	208	27853.5				

Table C.7 One-Way Analysis of Variance on $^{239+240}\text{Pu}$ Concentrations $\times 10^{10}$ ($\mu\text{Ci/mL}$) Comparing Concentrations among NTS Operational Areas

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational					
Area	14	6851	489	4.52	0.000
Error	<u>194</u>	<u>21003</u>	108		
Total	208	27853			

<u>NTS Operational Area</u>	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Individual 95 Percent CIs for Mean Based on Pooled Standard Deviation</u>
27	3	-0.02	0.03	(-----*-----)
1	3	-0.01	0.04	(-----*-----)
29	2	0.00	0.00	(-----*-----)
2	12	0.01	0.04	(-----*-----)
5	21	0.02	0.08	(---*---)
16	8	0.03	0.13	(-----*-----)
19	8	0.03	0.12	(-----*-----)
18	12	0.06	0.13	(-----*-----)
25	19	0.09	0.28	(-----*-----)
6	39	0.10	0.33	(---*---)
20	7	0.15	0.30	(-----*-----)
3	8	0.74	1.82	(-----*-----)
23	17	0.78	3.23	(-----*-----)
7	3	3.72	2.24	(-----*-----)
12	47	13.90	21.26	(---*---)
Pooled Standard Deviation = 10.40				-----+-----+-----+-----+
				-10 0 10 20

Figure C.8 Histogram of Empirical Coefficients of Variation for $^{239+240}\text{Pu}$ Samples in Water

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.13. The part of the variance attributable to sampling error is estimated by one half the squared average difference between sample splits; the equivalent standard deviation is the square root of this variance. For $^{239+240}\text{Pu}$ in water, the observed standard deviation arising from duplicates was $4.1 \times 10^{-10} \mu\text{Ci/mL}$ ($1.5 \times 10^{-2} \text{ Bq/L}$). Hence, sampling standard deviation is a small portion of the overall standard deviation of $^{239+240}\text{Pu}$ in water, $1.1 \times 10^{-9} \mu\text{Ci/mL}$ ($4.1 \times 10^{-2} \text{ Bq/L}$). As all samples chosen for duplicate analysis came from tunnel effluents, tunnel containment ponds, or Yucca Waste Pond, it is not known if this result can be generalized to the remainder of the data.

GROSS BETA

The arithmetic mean of observed gross beta concentrations was $3.0 \times 10^{-8} \mu\text{Ci/mL}$ (1.1 Bq/L), with a standard deviation of $1.2 \times 10^{-7} \mu\text{Ci/mL}$ (4.4 Bq/L). More than 96 percent of the observed concentrations were positive. The geometric mean and standard deviation of the positive measurements were, respectively, $7.1 \times 10^{-8} \mu\text{Ci/mL}$ (2.6 Bq/L) and 3.4.

In Figure C.9, natural logarithms of gross beta in water concentrations collected from the Mercury sampling station 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

Figure C.9 Plot of Natural Logarithms of Gross β in Water collected at the Mercury Sampling Station versus Normal Scores

stations, not reproduced here, were generally similar. Hence, the few non-positive measurements will be ignored and the positive ones will be treated as lognormally distributed.

Prior to comparing concentrations among sampling stations and months of collection, three atypical observations (those having both large influence on the ANOVA table and very large standardized residuals) are screened from the data. Two of these, from Area 6 Bottled Water on November 3 and from Area 12 N Tunnel Pond 3 on May 12, are orders of magnitude smaller than the limit of detection. The third, Area 7 Reitman Seep, collected on November 17, is atypically large. Samples from Reitman Seep are often muddy and muddiness of water samples often causes inflated beta readings. This might explain the anomalous observation.

In Table C.8, the table resulting from an ANOVA performed on logarithms of positive observed concentrations appears, indicating concentrations differ by both sampling station and month of collection. One-way ANOVAs were conducted for comparing concentrations among sampling stations and month of sample collection.

Comparisons among sampling stations revealed a complex pattern, difficult to describe. A sense of it can be obtained from Table C.9, where concentrations are compared among NTS operational areas, distinguishing samples from containment ponds and tunnel effluents in Area 12 from other samples from Area 12. Tukey's multiple comparison test allows the operational areas to be divided into groups having similar concentrations. One group is composed of samples from Area 12 containment ponds and tunnel effluents and samples from Area 7. The other group consists of all other samples. This is not surprising. Water from Rainier Mesa,

Table C.8 Analysis of Variance on Natural Logarithms of Gross Beta in Water

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sequential Sum of Squares</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
Sampling Station	59	1134.145	1131.962	19.186	112.64	0.000
Month	11	5.413	5.413	0.492	2.89	0.001
Error	<u>785</u>	<u>133.712</u>	133.712	0.170		
Total	855	1273.270				

Table C.9 One-Way Analysis of Variance on Natural Logarithms of gross Beta ($\mu\text{Ci/mL}$) Comparing Concentrations among NTS Operational Areas

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational Area	15	585.212	39.014	47.63	0.000
Error	<u>840</u>	<u>688.058</u>	0.819		
Total	855	1273.270			

<u>NTS Operational Area</u>	<u>Number</u>	<u>Mean</u>	<u>Standard Deviation</u>	<u>Individual 95 Percent CIs for Mean Based on Pooled Standard Deviation</u>	
19	22	-19.865	0.490	(--*--)	
20	20	-19.437	0.609	(--*--)	
2	74	-19.425	0.336	(-*--)	
18	31	-19.403	0.327	(-*--)	
23	78	-19.234	0.445	(-*--)	
25	92	-19.147	0.268	(-*--)	
12B	81	-19.083	0.723	(-*--)	
16	23	-18.973	0.295	(--*--)	
27	40	-18.824	0.342	(-*--)	
1	48	-18.780	0.203	(--*--)	
6	169	-18.766	1.311	(*)	
5	58	-18.692	0.194	(-*--)	
29	5	-18.617	0.202	(-----*-----)	
3	28	-18.386	0.186	(--*--)	
7	7	-17.140	0.144		(-----*-----)
12A	80	-16.415	1.950		(-*--)
Pooled Standard Deviation = 0.905				-19.2	-18.0 -16.8

Key: Area 12A = Containment ponds and Tunnel Effluent in Area 12
Area 12B = All other sampling stations in Area 12

where experimental activity occurs, drains into containment ponds in Area 12, and hence beta concentrations are greater than in other areas. The only sampling station in Area 7 is Reitman Seep, which often produces muddy samples. Muddy samples are known to yield inflated beta readings. Concentrations in samples from the remainder of NTS are uniformly small.

A one-way ANOVA of natural logarithms of gross beta concentrations, compared by month of sampling, appears in Table C.10. Although the one-way ANOVA fails to distinguish among months, a pattern, in which concentrations are greatest at the first and last of the year and dip at mid-year, is apparent to the eye. This pattern is confirmed by applying Von Nuemann's test for trend to the monthly means, yielding a p-value of 0.009. The temporal patterns during the first nine months of 1992 can be attributed to the decrease in the rate of experimental activity. Accounting for the increase during the final three months is difficult. Given the small size of the increase, as compared to sample standard deviations, simple sampling variability cannot be ruled out as an explanation.

Measurement error for gross beta concentrations is generally small. Hence, all but a relative handful of measured gross beta in water concentrations are above the limit of detection. To quantify this, the coefficient of variation was calculated for each observation. This appears as a histogram in Figure C.10. Ten coefficients of variation greater than 6.5 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. The part of the variance attributable to sampling error is estimated by one half the squared average difference between sample splits; the equivalent standard deviation is the square root of this variance. For gross beta in water, the observed standard deviation arising from duplicates was 5.8×10^{-8} $\mu\text{Ci/mL}$ (2.1×10^0 Bq/L). Hence, sampling standard deviation is a small portion of the overall standard deviation of gross beta in water, 1.2×10^{-7} $\mu\text{Ci/mL}$ (4.4×10^0 Bq/L). As all samples chosen for duplicate analysis came from tunnel effluents, tunnel containment ponds, or Yucca Waste Pond, it is not known if this result can be generalized to the remainder of the data.

GAMMA-EMITTING RADIONUCLIDES

The only gamma-emitting radionuclides found in more than two water sample were the following: ^{214}Bi , ^{137}Cs , ^{212}Pb , ^{214}Pb . Of these, all but ^{137}Cs are naturally occurring, and ^{137}Cs

Table C.10 One-Way Analysis of Variance on Natural Logarithms of gross Beta ($\mu\text{Ci/mL}$) Comparing Concentrations among Month Samples Were Collected

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
Month	11	7.60	0.69	0.46	0.927
Error	<u>844</u>	<u>1265.67</u>	1.50		
Total	855	1273.27			

Table C.10 (One-Way Analysis of Variance on Natural Logarithms of gross Beta ($\mu\text{Ci/mL}$) Comparing Concentrations among Month Samples Were Collected, cont.)

Month	Number	Mean	Standard Deviation	Individual 95 Percent CIs for Mean Based on Pooled Standard Deviation
January	56	-18.545	1.028	(-----*-----)
February	70	-18.674	1.402	(-----*-----)
March	63	-18.692	1.378	(-----*-----)
April	72	-18.740	1.279	(-----*-----)
May	70	-18.734	1.133	(-----*-----)
June	79	-18.793	1.192	(-----*-----)
July	77	-18.802	1.201	(-----*-----)
August	81	-18.921	1.016	(-----*-----)
September	79	-18.907	1.338	(-----*-----)
October	76	-18.747	1.203	(-----*-----)
November	74	-18.751	1.144	(-----*-----)
December	59	-18.724	1.331	(-----*-----)
Pooled Standard Deviation = 1.225				-19.2 -18.9 -18.6 -18.3

was only found in water samples directly associated with experimental activity, such as the containment ponds in Area 12. The number of samples containing each of these radionuclides, as well as the arithmetic mean, standard deviation, geometric mean, and geometric standard deviation appear in Table C.11.

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

The arithmetic mean and standard deviation of the observed concentrations were, respectively, 5.9×10^{-8} and $3.2 \times 10^{-7} \mu\text{Ci/mL}$ (2.2×10^0 and $1.1 \times 10^1 \text{ Bq/L}$). Since approximately 45 percent of the concentrations were either negative, from subtraction of background, or true zero, no geometric mean or standard deviation was calculated.

Table C.11 Summary of Concentrations of Gamma-Emitting Radionuclides in Water

Radio-nuclide	Number of Samples	Arithmetic Mean $\mu\text{Ci/mL}$ (Bq/L)	Standard Deviation $\mu\text{Ci/mL}$ (Bq/L)	Geometric Mean $\mu\text{Ci/mL}$ (Bq/L)	Geometric Standard Deviation
²¹⁴ Bi	11	9.3×10^{-7} (3.4×10^1)	7.3×10^{-7} (2.7×10^1)	7.4×10^{-7} (2.7×10^1)	2.0
¹³⁷ Cs	34	2.4×10^{-7} (8.9×10^0)	2.0×10^{-7} (7.4×10^0)	2.0×10^{-7} (7.4×10^0)	1.7
²¹² Pb	48	1.4×10^{-7} (5.2×10^0)	8.4×10^{-8} (3.1×10^0)	1.3×10^{-7} (4.8×10^0)	1.4
²¹⁴ Pb	37	2.1×10^{-6} (7.8×10^1)	4.0×10^{-6} (1.5×10^2)	1.0×10^{-6} (3.7×10^1)	3.0

Figure C.10 Histogram of Empirical Coefficients of Variation of Measured Gross β Concentrations in Water

An exploratory data analysis revealed that the normal distribution fitted the data reasonably well. This is illustrated in Figure C.11, where concentrations from Area 6 Cafeteria ($\mu\text{Ci/mL}$) $\times 10^7$, are plotted versus normal scores. As concentrations from other sampling stations are similar, they are not plotted. Points falling on a straight line indicates a normal distribution. Although the points in Figure C.11 do not perfectly follow a straight line, it is thought that the normal distribution is an adequate approximation.

Concentrations ($\mu\text{Ci/mL}$), $\times 10^7$, are compared, both across sampling stations and month of sample collection, by a two-way ANOVA. The ANOVA, presented in Table C.12, shows concentrations differ by both categories. Table C.12 shows that concentrations differ among months of sample collection, but not among sampling stations. The lack of difference among sampling stations is not surprising; all sampling stations, other than containment ponds and Yucca Pond, show uniformly low concentrations of ^3H . Samples from Area 6 Yucca Pond are omitted, for reasons discussed later.

Table C.12 Two-Way Analysis of Variance on ^3H Concentrations $\times 10^7$ ($\mu\text{Ci/ml}$) on Water Samples from Sources Other than Containment Ponds

Source	Degrees of Freedom	Sequential Sum of Squares	Sum of Squares	Mean Square	F-Statistic	p-Value
Sampling Station	48	101.19	85.682	1.785	0.89	0.688
Month	11	205.93	205.929	18.721	9.32	0.000
Error	770	1547.49	1547.492	2.010		
Total	829	1854.61

Figure C.11 Plot of Tritium Concentrations $\times 10^7$ ($\mu\text{Ci/mL}$) In Samples from Area 6 Cafeteria versus Normal Scores

Concentrations are compared among months in Table C.13. The ANOVA table shows that results differ strongly among months. However, Tukey's multiple comparison test identifies a complicated pattern of significance which is hard to describe in words. The most prominent feature is the generally decreasing trend of ^3H concentrations. As these ^3H concentrations are almost all below the limit of detection, interpretation is difficult.

Area 6 Yucca Pond was omitted from the calculations that went into Table C.13. An exploratory data analysis suggested ^3H concentrations from Yucca Pond belonged to a different population than those from other sampling stations, both in terms of mean concentration and in behavior over time. In view of the use of Yucca Pond in decontamination activities, it is not surprising that the average ^3H concentration there was greater than at other sampling locations. The behavior of samples from Area 6 Yucca Pond over time is depicted in Figure C.12, where concentrations of ^3H , $\times 10^7$, are plotted versus month of sample collection (1 = January, 2 = February, etc.). The steady decline can be attributed partially to reduced need for decontamination, due to the decrease in experimental activity. Additionally, dilution, caused by the washing of trucks used in the Groundwater Characterization Program, accounts for some of the decreased concentration. To assess measurement error in ^3H concentrations, we consider empirical coefficients of variation. A histogram of the empirical coefficients of variation, excluding 41 outliers greater than 14., appears in Figure C.13. A substantial number of the coefficients of variation are large. This indicates that a large number of samples in this category (springs, wells, potable end-points, etc.) were below the limit of detection, as expected.

Water from Containment Ponds

The arithmetic mean and standard deviation of ^3H concentrations in samples from containment ponds are, respectively, 1.9×10^{-2} and 2.5×10^{-2} $\mu\text{Ci/mL}$ (7.0×10^5 and 9.2×10^5 Bq/L). All observed concentrations were positive. The geometric mean was 3.3×10^{-3} $\mu\text{Ci/mL}$ ($1.2 \times$

Figure C.12 Plot of ^3H Concentrations, $\times 10^7$, ($\mu\text{Ci/mL}$), at Area 6 Yucca Pond versus Month of Sample Collection

Figure C.13 Histogram of Empirical Coefficients of Variation for ^3H in Water Samples from Sources Other than Containment Ponds

Table C.13 Analysis of Variance on Concentrations $\times 10^7$ ($\mu\text{Ci/mL}$) of ^3H in Water Samples other than Containment Ponds

Source	Degrees of Freedom	Sum of Squares	Mean Square	F-Statistic	p-Value
Month	11	221.44	20.13	0.08	0.000
Error	818	1633.17	2.00		
Total	829	1854.61			

Month	Number	Mean	Standard Deviation	Individual 95 Percent CIs for Mean Based on Pooled Standard Deviation
January	52	1.306	1.546	(---*---)
February	72	0.682	1.149	(---*---)
March	54	0.203	1.253	(---*---)
April	75	0.517	1.548	(---*---)
May	67	0.558	1.268	(---*---)
June	75	-0.222	0.983	(---*---)
July	80	-0.056	1.049	(---*---)
August	76	0.788	2.117	(---*---)
September	71	0.279	1.147	(---*---)
October	81	-0.715	1.389	(---*---)
November	71	0.256	1.592	(---*---)
December	56	-0.292	1.549	(---*---)
Pooled Standard Deviation = 1.413				-0.80 -0.00 0.80 1.60

10^5 Bq/L) and the geometric standard deviation was 9.3. No distribution was found which fit the data well. This is illustrated in Figure C.14, where measured concentrations from T Tunnel Effluent, ($\mu\text{Ci/mL}$) $\times 10^7$, are plotted versus normal scores. Of all sampling locations, these data come closest to fitting either a normal or lognormal distribution. Because the data are neither normal nor lognormal, the rank-based Kruskal-Wallis test was used for comparisons among sampling locations and months of sampling.

The results of the Kruskal-Wallis test, comparing sampling locations, appears in Table C.14. It can readily be seen that concentrations in water samples associated with N Tunnel are smallest, samples associated with T Tunnel have the greatest concentration, and samples associated with E Tunnel have intermediate concentrations.

The p-value of the Kruskal-Wallis test comparing concentrations over months was 0.944. As no statistically significant or visually suggestive temporal pattern was found, these results are not reported in detail.

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.15. 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. Original data and duplicates appear in Attachment C.15. The part of the variance attributable to sampling error is estimated by one half the squared average difference between sample splits; the

Figure C.14 Concentrations of ^3H in Water Samples $\times 10^7$ ($\mu\text{Ci/mL}$) from T Tunnel Effluent versus Normal Scores

Figure C.15 Histogram of Empirical Coefficients of Variation of ^3H Concentrations in Water

Table C.14 Results of Kruskal-Wallis Test for Equality of Median ^3H Concentrations in Containment Ponds among Sampling Locations ($\mu\text{Ci/mL}$)

<u>Sampling Location</u>	<u>Number</u>	<u>Median</u>	<u>Average Rank</u>	<u>Z-Value</u>
N Tunnel Effluent	15	3.58×10^{-04}	22.1	-3.97
N Tunnel Pond No. 1	4	3.83×10^{-04}	20.1	-2.07
N Tunnel Pond No. 2	12	4.31×10^{-04}	24.4	-3.18
N Tunnel Pond No. 3	10	4.37×10^{-04}	27.9	-2.44
E Tunnel Pond No. 1	5	1.98×10^{-03}	46.0	-0.17
E Tunnel Effluent	13	2.03×10^{-03}	49.8	0.25
T Tunnel Pond No. 3	6	3.33×10^{-02}	69.7	1.99
T Tunnel Pond No. 2	11	5.57×10^{-02}	76.2	3.61
T Tunnel Effluent	14	5.66×10^{-02}	73.7	3.78
T Tunnel Pond No. 1	5	5.71×10^{-02}	82.2	2.85
Overall	95		48.0	

Kruskal-Wallis Statistic = 66.65 Degrees of Freedom = 9 p-Value = 0.000

equivalent standard deviation is the square root of this variance. For ^3H in water from containment ponds, the observed standard deviation arising from duplicates was $8.2 \times 10^{-3} \mu\text{Ci/mL}$ ($3.0 \times 10^{-5} \text{Bq/L}$). Hence, sampling standard deviation is a small, but not necessarily negligible, portion of the total standard deviation of ^3H in water from containment ponds, $2.5 \times 10^{-2} \mu\text{Ci/mL}$ ($9.2 \times 10^{-5} \text{Bq/L}$).

^{226}Ra and ^{228}Ra

The arithmetic mean of all observed ^{226}Ra concentrations was $1.2 \times 10^{-9} \mu\text{Ci/mL}$ ($4.4 \times 10^{-2} \text{Bq/L}$) and the standard deviation was $1.4 \times 10^{-9} \mu\text{Ci/mL}$ ($5.2 \times 10^{-2} \text{Bq/L}$). Due to subtraction of background, approximately 15 percent of the observed concentrations were negative. Ignoring these values and calculating the geometric mean and standard deviation with the remaining data, the geometric mean and standard deviation were, respectively, $8.7 \times 10^{-10} \mu\text{Ci/mL}$ ($3.2 \times 10^{-2} \text{Bq/L}$) and 3.4.

An exploratory data analysis revealed that the normal distribution fitted the data reasonably well. This is illustrated in Figure C.16, where observed concentrations ($\mu\text{Ci/mL}$) from Area 6, multiplied by 10^{10} , are plotted versus normal scores. A straight line indicates a normal distribution. Although the points in Figure C.16 do not perfectly follow a straight line, it is thought that the normal distribution is an adequate approximation.

Analyses are performed omitting a single unusual observation (Area 20 Water Well, collected on 04/06/92). Concentrations are compared, both across NTS operational areas and month of sample collection, by a two-way ANOVA. The ANOVA, presented in Table C.15, shows concentrations differ among neither NTS operational areas nor among months of sample collection by a greater amount than sampling variation could plausibly account for.

Measurement error for ^{226}Ra concentrations is generally small. To quantify this, the coefficient of variation was calculated for each non-zero observation. This appears as a histogram in Figure C.17. One coefficient of variation greater than 5.0 was omitted to enhance readability. As Figure C.17 suggests, many ^{226}Ra concentrations were below the limit of detection.

Figure C.16 Plot of ^{226}Ra Concentrations $\times 10^{10}$ ($\mu\text{Ci/mL}$) from Area 6 versus Normal Scores

Figure C.17 Histogram of Empirical Coefficients of Variation of ^{226}Ra Concentrations in Water

Table C.15 Analysis of Variance on Concentrations $\times 10^{-10}$ ($\mu\text{Ci/mL}$) of ^{226}Ra in Water Samples

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sequential Sum of Squares</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational						
Area	7	1573.9	1379.9	197.1	1.76	0.136
Month	4	935.0	935.0	233.7	2.09	0.109
Error	<u>28</u>	<u>3163.9</u>	3136.9	112.0		
Total	39	5672.8				

The arithmetic mean of all observed ^{226}Ra concentrations was $1.9 \times 10^{-10} \mu\text{Ci/mL}$ ($7.0 \times 10^{-3} \text{ Bq/L}$) and the standard deviation was $6.1 \times 10^{-10} \mu\text{Ci/mL}$ ($2.2 \times 10^{-2} \text{ Bq/L}$). Due to subtraction of background, approximately 44 percent of the observed concentrations were negative. Therefore, no geometric mean or standard deviation were calculated.

An exploratory data analysis revealed that the normal distribution fitted the data reasonably well. This is illustrated in Figure C.18, where observed concentrations from Area 6, multiplied by 10^{10} are plotted versus normal scores. A straight line indicates a normal distribution. Although the points in Figure C.18 follow a straight line in, at best, a crude manner, it is thought that the normal distribution is an adequate approximation.

Figure C.18 Plot of ^{226}Ra Concentrations, Times 10^{10} , from Area 6 versus Normal Scores

Concentrations are compared, both across NTS operational areas and month of sample collection, by a two-way ANOVA. The ANOVA, presented in Table C.16, shows concentrations differ among neither NTS operational areas nor among months of sample collection by a greater amount than sampling variation could plausibly account for.

Measurement error for ^{228}Ra concentrations is generally small. To quantify this, the coefficient of variation was calculated for each non-zero observation. This appears as a histogram in Figure C.19. Two coefficients of variation greater than 5.0 were omitted to enhance readability. As Figure C.19 suggests, many ^{228}Ra concentrations were below the limit of detection.

Table C.16 Analysis of Variance on Concentrations $\times 10^{10}$ ($\mu\text{Ci/mL}$) of ^{228}Ra in Water Samples

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sequential Sum of Squares</u>	<u>Sum of Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p-Value</u>
NTS Operational						
Area	7	474.00	461.23	65.89	1.92	0.102
Month	4	40.01	40.01	10.00	0.29	0.881
Error	<u>29</u>	<u>994.88</u>	994.88	34.31		
Total	40	1508.89

Figure C.19 Histogram of Empirical Coefficients of Variation of ^{228}Ra Concentrations in Water

Attachment C.1 ^{90}Sr in Water - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 2, Mud Plant	07/03/92	7.0×10^{-10}	2.1×10^{-10}
Area 2, Well 2 Reservoir	07/03/92	2.0×10^{-10}	9.2×10^{-11}
Area 3, Mud Plant	07/08/92	1.3×10^{-09}	5.3×10^{-11}
Area 3, Well A Reservoir	07/08/92	1.2×10^{-10}	4.0×10^{-10}
Area 5, Canoe Spring	07/16/92	1.5×10^{-10}	1.7×10^{-10}
Area 5, Well 5-B Reservoir	07/08/92	3.3×10^{-10}	9.3×10^{-11}
Area 5, Well 5-C	07/13/92	5.9×10^{-10}	1.4×10^{-10}
Area 5, Well UE-5c	07/13/92	1.4×10^{-10}	1.4×10^{-10}
Area 6, Sewage	07/14/92	3.8×10^{-10}	1.6×10^{-10}
Area 6, Well 3 Reservoir	07/03/92	1.3×10^{-09}	2.5×10^{-10}
Area 6, Well 4	07/13/92	8.6×10^{-11}	4.8×10^{-11}
Area 6, Well C	07/13/92	1.1×10^{-10}	3.4×10^{-10}
Area 6, Well C-1	07/13/92	7.1×10^{-10}	2.0×10^{-10}
Area 6, Well C-1 Reservoir	07/09/92	-4.0×10^{-11}	1.3×10^{-11}
Area 6, Yucca Pond	07/09/92	1.4×10^{-09}	4.9×10^{-10}
Area 12, Captain Jack Spring	07/15/92	6.3×10^{-10}	2.7×10^{-10}
Area 12, E Tunnel Effluent	07/21/92	7.4×10^{-09}	6.1×10^{-10}
Area 12, E Tunnel Pond No. 1	07/21/92	6.1×10^{-09}	4.4×10^{-10}
Area 12, N Tunnel Effluent	07/21/92	6.1×10^{-11}	4.9×10^{-11}
Area 12, N Tunnel Pond No. 2	07/21/92	1.5×10^{-10}	2.0×10^{-10}
Area 12, Sewage	07/21/92	2.1×10^{-10}	1.6×10^{-10}
Area 12, T Tunnel Effluent	07/21/92	9.5×10^{-09}	5.1×10^{-10}
Area 12, T Tunnel Pond No. 2	07/21/92	1.7×10^{-08}	6.8×10^{-10}
Area 12, T Tunnel Pond No. 3	07/21/92	1.6×10^{-08}	6.5×10^{-10}
Area 12, White Rock Spring	07/13/92	4.8×10^{-10}	1.8×10^{-10}
Area 16, Tippihah Spring	07/15/92	6.2×10^{-10}	2.0×10^{-10}
Area 16, Well UE-16d	07/13/92	1.9×10^{-10}	1.2×10^{-10}
Area 18, Camp 17 Reservoir	07/07/92	6.5×10^{-10}	2.1×10^{-10}
Area 18, Well 8	07/13/92	-1.5×10^{-11}	1.2×10^{-11}
Area 18, Well 8 Reservoir	07/07/92	6.6×10^{-10}	3.3×10^{-10}
Area 19, Well UE-19c	07/13/92	1.3×10^{-10}	1.4×10^{-10}
Area 19, Well UE-19c Reservoir	07/09/92	1.6×10^{-10}	1.2×10^{-10}
Area 20, Water Well	07/13/92	3.0×10^{-10}	1.1×10^{-10}
Area 20, Well 20	07/09/92	2.0×10^{-11}	2.7×10^{-11}
Area 23, Army Well No. 1	07/13/92	4.1×10^{-10}	1.3×10^{-10}
Area 23, H&S Sump	07/22/92	4.4×10^{-09}	1.0×10^{-09}
Area 23, Sewage	07/14/92	2.2×10^{-10}	1.4×10^{-10}
Area 23, Swimming Pool	07/09/92	3.3×10^{-10}	1.7×10^{-10}
Area 25, Well J-11 Reservoir	07/08/92	2.6×10^{-10}	1.5×10^{-10}
Area 25, Well J-12	07/13/92	4.6×10^{-10}	1.6×10^{-10}
Area 25, Well J-13	07/13/92	4.4×10^{-10}	1.6×10^{-10}

Mean MDC: $1.9 \times 10^{-10} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.2 \times 10^{-10} \mu\text{Ci/mL}$

Attachment C.2 Gross Alpha in Water [potable wells and end points] - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, Building 101	01/13/92	1.4×10^{-08}	1.5×10^{-09}
Area 1, Building 101	03/30/92	9.8×10^{-09}	1.3×10^{-09}
Area 1, Building 101	06/29/92	7.4×10^{-09}	8.6×10^{-10}
Area 1, Building 101	09/28/92	4.7×10^{-10}	2.7×10^{-10}
Area 2, Rest Room	01/13/92	4.7×10^{-10}	3.0×10^{-10}
Area 2, Rest Room	03/30/92	4.3×10^{-10}	3.4×10^{-10}
Area 2, Rest Room	06/29/92	8.4×10^{-10}	3.1×10^{-10}
Area 2, Rest Room	09/28/92	1.1×10^{-09}	3.4×10^{-10}
Area 2, Rest Room	12/29/92	7.3×10^{-10}	2.8×10^{-10}
Area 3, Cafeteria	01/13/92	3.2×10^{-09}	9.9×10^{-10}
Area 5, Well 5C	01/22/92	7.0×10^{-09}	8.9×10^{-10}
Area 5, Well 5C	04/06/92	1.4×10^{-08}	1.5×10^{-09}
Area 5, Well 5C	07/13/92	1.1×10^{-08}	1.0×10^{-09}
Area 5, Well 5C	10/05/92	6.1×10^{-09}	7.8×10^{-10}
Area 6, Bottled Water	01/13/92	1.7×10^{-10}	1.7×10^{-10}
Area 6, Bottled Water	03/30/92	-1.3×10^{-10}	1.7×10^{-10}
Area 6, Bottled Water	06/29/92	1.9×10^{-10}	1.3×10^{-10}
Area 6, Bottled Water	09/28/92	-1.7×10^{-10}	9.9×10^{-11}
Area 6, Bottled Water	12/29/92	-1.2×10^{-10}	1.0×10^{-10}
Area 6, Building 6-900	06/29/92	6.0×10^{-09}	7.8×10^{-10}
Area 6, Building 6-900	09/28/92	4.3×10^{-09}	1.1×10^{-09}
Area 6, Building 6-900	12/29/92	2.0×10^{-08}	1.8×10^{-09}
Area 6, Cafeteria	01/13/92	1.2×10^{-08}	2.0×10^{-09}
Area 6, Cafeteria	03/30/92	1.1×10^{-08}	1.8×10^{-09}
Area 6, Cafeteria	06/29/92	9.9×10^{-09}	9.8×10^{-10}
Area 6, Cafeteria	09/28/92	7.9×10^{-09}	1.3×10^{-09}
Area 6, Cafeteria	12/29/92	1.4×10^{-08}	1.1×10^{-09}
Area 6, Well C	01/27/92	1.9×10^{-08}	2.6×10^{-09}
Area 6, Well C	04/06/92	9.9×10^{-09}	1.3×10^{-09}
Area 6, Well C	07/13/92	1.2×10^{-08}	1.1×10^{-09}
Area 6, Well C	10/05/92	5.3×10^{-09}	7.3×10^{-10}
Area 6, Well C-1	01/27/92	1.7×10^{-08}	3.4×10^{-09}
Area 6, Well C-1	04/06/92	8.4×10^{-09}	1.2×10^{-09}
Area 6, Well C-1	07/13/92	5.4×10^{-09}	8.0×10^{-10}
Area 6, Well C-1	10/05/92	6.5×10^{-09}	8.3×10^{-10}
Area 6, Well 4	01/27/92	4.6×10^{-09}	7.3×10^{-10}
Area 6, Well 4	04/06/92	7.0×10^{-09}	9.6×10^{-10}
Area 6, Well 4	07/13/92	8.6×10^{-09}	9.1×10^{-10}
Area 6, Well 4	10/05/92	4.1×10^{-09}	6.2×10^{-10}
Area 12, Cafeteria	01/13/92	7.3×10^{-10}	3.1×10^{-10}

Mean MDC: 1.1×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.1×10^{-10} μCi/mL

Attachment C.2 (Gross Alpha in Water [potable wells and end points] - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, Cafeteria	03/30/92	1.0×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	06/29/92	8.8×10^{-10}	3.2×10^{-10}
Area 12, Cafeteria	09/28/92	5.4×10^{-09}	7.8×10^{-10}
Area 16, Well UE-16d	01/27/92	8.7×10^{-09}	1.2×10^{-09}
Area 16, Well UE-16d	04/06/92	1.5×10^{-08}	1.6×10^{-09}
Area 16, Well UE-16d	07/13/92	1.0×10^{-08}	1.1×10^{-09}
Area 16, Well UE-16d	10/05/92	3.7×10^{-09}	6.6×10^{-10}
Area 18, Well 8	01/27/92	1.3×10^{-09}	3.7×10^{-10}
Area 18, Well 8	04/06/92	6.8×10^{-11}	3.9×10^{-10}
Area 18, Well 8	07/13/92	5.3×10^{-10}	3.1×10^{-10}
Area 18, Well 8	10/05/92	4.3×10^{-10}	1.7×10^{-10}
Area 20, Water Well	04/06/92	6.5×10^{-09}	7.7×10^{-10}
Area 20, Water Well	07/13/92	8.7×10^{-09}	8.9×10^{-10}
Area 20, Water Well	10/05/92	6.5×10^{-09}	6.7×10^{-10}
Area 23, H&S Sump	10/22/92	4.3×10^{-09}	1.0×10^{-09}
Area 23, Army Well No. 1	01/22/92	4.2×10^{-09}	8.7×10^{-10}
Area 23, Army Well No. 1	04/06/92	2.6×10^{-09}	9.3×10^{-10}
Area 23, Army Well No. 1	07/13/92	7.1×10^{-09}	8.7×10^{-10}
Area 23, Army Well No. 1	10/05/92	3.8×10^{-09}	6.4×10^{-10}
Area 23, Mercury	01/13/92	1.1×10^{-08}	1.2×10^{-09}
Area 23, Mercury	03/30/92	8.1×10^{-09}	1.8×10^{-09}
Area 23, Mercury	06/29/92	6.8×10^{-09}	8.3×10^{-10}
Area 23, Mercury	09/28/92	7.3×10^{-09}	8.3×10^{-10}
Area 23, Mercury	12/28/92	5.3×10^{-09}	7.2×10^{-10}
Area 25, Building 4221	01/13/92	8.8×10^{-10}	3.8×10^{-10}
Area 25, Building 4221	03/30/92	1.3×10^{-09}	4.6×10^{-10}
Area 25, Building 4221	06/29/92	2.5×10^{-09}	5.2×10^{-10}
Area 25, Building 4221	09/28/92	1.2×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	12/28/92	1.5×10^{-09}	4.5×10^{-10}
Area 25, Well J-12	05/12/92	1.5×10^{-09}	4.5×10^{-10}
Area 25, Well J-12	07/13/92	2.2×10^{-09}	4.9×10^{-10}
Area 25, Well J-12	10/05/92	1.4×10^{-09}	4.0×10^{-10}
Area 25, Well J-13	01/22/92	1.5×10^{-09}	4.4×10^{-10}
Area 25, Well J-13	04/06/92	5.4×10^{-10}	4.3×10^{-10}
Area 25, Well J-13	07/13/92	1.1×10^{-09}	4.4×10^{-10}
Area 25, Well J-13	10/05/92	1.6×10^{-09}	4.0×10^{-10}
Area 27, Cafeteria	01/13/92	1.1×10^{-08}	1.8×10^{-09}
Area 27, Cafeteria	03/30/92	8.1×10^{-09}	8.9×10^{-10}
Area 27, Cafeteria	06/29/92	7.4×10^{-09}	8.5×10^{-10}
Area 27, Cafeteria	09/28/92	5.2×10^{-09}	1.1×10^{-09}

Mean MDC: 1.1×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.1×10^{-10} μCi/mL

Attachment C.3 ^{238}Pu in Water - 1992

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 1, Building 101	03/30/92	6.5×10^{-11}	5.4×10^{-11}
Area 1, Building 101	06/29/92	0.0	0.0
Area 1, Building 101	09/28/92	0.0	0.0
Area 2, Mud Plant	01/08/92	-5.1×10^{-11}	3.7×10^{-11}
Area 2, Mud Plant	04/23/92	-3.9×10^{-11}	3.1×10^{-11}
Area 2, Mud Plant	07/03/92	3.4×10^{-12}	3.4×10^{-12}
Area 2, Mud Plant	10/14/92	0.0	0.0
Area 2, Rest Room	03/30/92	-5.2×10^{-11}	2.7×10^{-11}
Area 2, Rest Room	06/29/92	0.0	0.0
Area 2, Rest Room	09/28/92	0.0	0.0
Area 2, Rest Room	12/29/92	0.0	0.0
Area 2, Well 2 Reservoir	01/08/92	-4.0×10^{-11}	2.7×10^{-11}
Area 2, Well 2 Reservoir	04/08/92	-6.3×10^{-11}	3.3×10^{-11}
Area 2, Well 2 Reservoir	07/03/92	0.0	0.0
Area 2, Well 2 Reservoir	10/14/92	0.0	0.0
Area 3, Mud Plant	01/08/92	3.3×10^{-12}	3.1×10^{-11}
Area 3, Mud Plant	04/08/92	-2.3×10^{-10}	1.1×10^{-10}
Area 3, Mud Plant	07/08/92	0.0	0.0
Area 3, Mud Plant	10/21/92	4.5×10^{-12}	3.2×10^{-12}
Area 3, Well A Reservoir	01/08/92	-6.6×10^{-12}	3.4×10^{-11}
Area 3, Well A Reservoir	04/08/92	-2.0×10^{-11}	3.3×10^{-11}
Area 3, Well A Reservoir	07/08/92	0.0	0.0
Area 3, Well A Reservoir	10/15/92	0.0	0.0
Area 5, Cane Spring	01/08/92	2.8×10^{-12}	3.1×10^{-11}
Area 5, Cane Spring	04/08/92	3.6×10^{-11}	4.5×10^{-11}
Area 5, Cane Spring	07/16/92	3.6×10^{-12}	3.6×10^{-12}
Area 5, Cane Spring	10/21/92	0.0	0.0
Area 5, Well UE-5c Reservoir	01/06/92	-6.2×10^{-11}	2.7×10^{-11}
Area 5, Well UE-5c Reservoir	04/08/92	-3.6×10^{-11}	4.8×10^{-11}
Area 5, Well UE-5c Reservoir	07/08/92	0.0	0.0
Area 5, Well UE-5c Reservoir	10/06/92	0.0	0.0
Area 5, Well 5B	10/05/92	0.0	0.0
Area 5, Well 5B Reservoir	01/06/92	7.2×10^{-12}	3.2×10^{-11}
Area 5, Well 5B Reservoir	04/08/92	1.5×10^{-11}	2.9×10^{-11}
Area 5, Well 5B Reservoir	07/08/92	5.9×10^{-12}	4.2×10^{-12}
Area 5, Well 5B Reservoir	10/06/92	0.0	0.0
Area 5, Well 5C	01/22/92	-2.3×10^{-11}	3.5×10^{-11}
Area 5, Well 5C	04/06/92	-2.0×10^{-11}	2.5×10^{-11}
Area 5, Well 5C	07/13/92	3.6×10^{-12}	3.6×10^{-12}
Area 5, Well 5C	10/05/92	0.0	0.0

Mean MDC: $5.0 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $9.6 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.3 (^{238}Pu in Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 5, Well UE-5c	01/22/92	-4.5×10^{-11}	3.8×10^{-11}
Area 5, Well UE-5c	05/12/92	-4.5×10^{-11}	4.3×10^{-11}
Area 5, Well UE-5c	07/13/92	0.0	0.0
Area 5, Well UE-5c	11/09/92	0.0	0.0
Area 6, Bottled Water	03/30/92	-2.9×10^{-11}	3.1×10^{-11}
Area 6, Bottled Water	06/29/92	0.0	0.0
Area 6, Bottled Water	09/28/92	0.0	0.0
Area 6, Bottled Water	12/29/92	0.0	0.0
Area 6, Building 6-900	06/29/92	0.0	0.0
Area 6, Building 6-900	09/28/92	0.0	0.0
Area 6, Building 6-900	12/29/92	2.1×10^{-12}	2.1×10^{-12}
Area 6, Cafeteria	03/30/92	-1.1×10^{-11}	3.1×10^{-11}
Area 6, Cafeteria	06/29/92	0.0	0.0
Area 6, Cafeteria	09/28/92	2.2×10^{-12}	2.2×10^{-12}
Area 6, Cafeteria	12/29/92	0.0	0.0
Area 6, Sewage	07/14/92	0.0	0.0
Area 6, Sewage	10/15/92	0.0	0.0
Area 6, Well C	01/27/92	-2.2×10^{-11}	2.9×10^{-11}
Area 6, Well C	04/06/92	4.5×10^{-12}	3.3×10^{-11}
Area 6, Well C	07/13/92	0.0	0.0
Area 6, Well C	10/05/92	0.0	0.0
Area 6, Well C-1	01/27/92	-5.4×10^{-11}	2.8×10^{-11}
Area 6, Well C-1	04/06/92	2.8×10^{-12}	3.5×10^{-11}
Area 6, Well C-1	07/13/92	0.0	0.0
Area 6, Well C-1	10/05/92	0.0	0.0
Area 6, Well C-1 Reservoir	01/07/92	-2.7×10^{-11}	2.8×10^{-11}
Area 6, Well C-1 Reservoir	04/08/92	8.1×10^{-12}	3.1×10^{-11}
Area 6, Well C-1 Reservoir	07/09/92	0.0	0.0
Area 6, Well C-1 Reservoir	10/06/92	5.5×10^{-12}	5.5×10^{-12}
Area 6, Well 3 Reservoir	01/08/92	-2.0×10^{-11}	2.7×10^{-11}
Area 6, Well 3 Reservoir	04/08/92	-2.4×10^{-11}	2.7×10^{-11}
Area 6, Well 3 Reservoir	07/03/92	0.0	0.0
Area 6, Well 3 Reservoir	10/15/92	4.5×10^{-12}	3.2×10^{-12}
Area 6, Well 4	01/27/92	-5.6×10^{-11}	2.9×10^{-11}
Area 6, Well 4	04/06/92	-3.6×10^{-11}	4.4×10^{-11}
Area 6, Well 4	07/13/92	0.0	0.0
Area 6, Well 4	10/05/92	0.0	0.0
Area 6, Yucca Pond	01/15/92	2.6×10^{-12}	5.1×10^{-11}
Area 6, Yucca Pond	04/27/92	-6.4×10^{-11}	9.4×10^{-11}
Area 6, Yucca Pond	07/09/92	5.1×10^{-12}	5.1×10^{-12}

Mean MDC: $5.0 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $9.6 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.3 (^{238}Pu in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Yucca Pond	10/06/92	4.2×10^{-11}	4.3×10^{-11}
Area 7, Reitman Seep	01/15/92	-1.2×10^{-10}	5.7×10^{-11}
Area 7, Reitman Seep	04/08/92	3.5×10^{-11}	5.3×10^{-11}
Area 7, Reitman Seep	11/17/92	3.6×10^{-12}	3.6×10^{-12}
Area 12, Cafeteria	03/30/92	-1.8×10^{-11}	3.4×10^{-11}
Area 12, Cafeteria	06/29/92	2.7×10^{-12}	2.7×10^{-12}
Area 12, Cafeteria	09/28/92	0.0	0.0
Area 12, Captain Jack Spring	01/15/92	-2.5×10^{-11}	3.5×10^{-11}
Area 12, Captain Jack Spring	04/23/92	-1.9×10^{-11}	3.3×10^{-11}
Area 12, Captain Jack Spring	07/15/92	0.0	0.0
Area 12, Captain Jack Spring	10/21/92	1.9×10^{-12}	1.9×10^{-12}
Area 12, E Tunnel Effluent	01/15/92	7.8×10^{-10}	9.4×10^{-11}
Area 12, E Tunnel Effluent	04/09/92	6.4×10^{-10}	1.0×10^{-10}
Area 12, E Tunnel Effluent	07/21/92	6.4×10^{-10}	1.3×10^{-10}
Area 12, E Tunnel Effluent	10/20/92	5.8×10^{-10}	7.0×10^{-11}
Area 12, E Tunnel Pond No. 1	07/21/92	6.1×10^{-10}	8.2×10^{-11}
Area 12, E Tunnel Pond No. 1	10/20/92	6.2×10^{-10}	6.3×10^{-11}
Area 12, Gold Meadows Spring	04/08/92	-4.8×10^{-13}	3.3×10^{-11}
Area 12, N Tunnel Effluent	01/15/92	-3.0×10^{-11}	4.1×10^{-11}
Area 12, N Tunnel Effluent	04/09/92	-9.1×10^{-11}	6.8×10^{-11}
Area 12, N Tunnel Effluent	07/21/92	7.2×10^{-12}	7.2×10^{-12}
Area 12, N Tunnel Effluent	10/20/92	6.7×10^{-12}	6.7×10^{-12}
Area 12, N Tunnel Pond No. 1	01/15/92	-2.5×10^{-11}	4.6×10^{-11}
Area 12, N Tunnel Pond No. 1	04/09/92	-7.3×10^{-11}	5.4×10^{-11}
Area 12, N Tunnel Pond No. 2	02/12/92	-1.6×10^{-11}	4.6×10^{-11}
Area 12, N Tunnel Pond No. 2	04/09/92	-8.4×10^{-11}	4.6×10^{-11}
Area 12, N Tunnel Pond No. 2	07/21/92	2.7×10^{-11}	1.9×10^{-11}
Area 12, N Tunnel Pond No. 2	10/20/92	0.0	0.0
Area 12, N Tunnel Pond No. 3	02/12/92	8.6×10^{-11}	4.0×10^{-11}
Area 12, N Tunnel Pond No. 3	04/09/92	-7.9×10^{-11}	6.4×10^{-11}
Area 12, N Tunnel Pond No. 3	07/21/92	1.4×10^{-11}	7.9×10^{-12}
Area 12, N Tunnel Pond No. 3	10/20/92	0.0	0.0
Area 12, Sewage	01/15/92	-3.3×10^{-11}	3.4×10^{-11}
Area 12, Sewage	04/23/92	1.3×10^{-11}	3.4×10^{-11}
Area 12, Sewage Pond	01/08/92	-3.4×10^{-11}	3.8×10^{-11}
Area 12, Sewage Pond	04/22/92	-2.8×10^{-12}	2.9×10^{-11}
Area 12, Sewage Pond	07/21/92	0.0	0.0
Area 12, Sewage Pond	10/27/92	0.0	0.0
Area 12, T Tunnel Effluent	01/15/92	2.5×10^{-11}	4.5×10^{-11}
Area 12, T Tunnel Effluent	04/09/92	7.1×10^{-11}	5.2×10^{-11}

Mean MDC: $5.0 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $9.6 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.3 (^{238}Pu In Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 12, T Tunnel Effluent	07/21/92	7.8×10^{-11}	5.6×10^{-11}
Area 12, T Tunnel Effluent	10/20/92	6.4×10^{-11}	3.2×10^{-11}
Area 12, T Tunnel Pond No. 1	02/12/92	6.8×10^{-11}	1.0×10^{-10}
Area 12, T Tunnel Pond No. 1	04/09/92	7.7×10^{-11}	5.3×10^{-11}
Area 12, T Tunnel Pond No. 2	02/12/92	6.9×10^{-11}	5.7×10^{-11}
Area 12, T Tunnel Pond No. 2	04/09/92	9.1×10^{-11}	6.7×10^{-11}
Area 12, T Tunnel Pond No. 2	07/21/92	1.2×10^{-10}	3.4×10^{-11}
Area 12, T Tunnel Pond No. 2	10/20/92	1.5×10^{-10}	2.7×10^{-11}
Area 12, T Tunnel Pond No. 3	07/21/92	7.1×10^{-11}	2.5×10^{-11}
Area 12, T Tunnel Pond No. 3	10/20/92	1.7×10^{-10}	4.4×10^{-11}
Area 12, White Rock Spring	01/15/92	-5.3×10^{-11}	2.9×10^{-11}
Area 12, White Rock Spring	04/08/92	-7.3×10^{-12}	3.9×10^{-11}
Area 12, White Rock Spring	07/13/92	0.0	0.0
Area 12, White Rock Spring	10/05/92	0.0	0.0
Area 16, Tippipah Spring	01/08/92	-4.3×10^{-11}	2.9×10^{-11}
Area 16, Tippipah Spring	04/22/92	-3.1×10^{-11}	5.1×10^{-11}
Area 16, Tippipah Spring	07/15/92	0.0	0.0
Area 16, Tippipah Spring	10/14/92	0.0	0.0
Area 16, Well UE-16d	01/27/92	5.1×10^{-11}	3.3×10^{-11}
Area 16, Well UE-16d	04/06/92	5.3×10^{-11}	4.0×10^{-11}
Area 16, Well UE-16d	07/13/92	0.0	0.0
Area 16, Well UE-16d	10/05/92	0.0	0.0
Area 18, Camp 17 Reservoir	01/08/92	-1.8×10^{-11}	3.9×10^{-11}
Area 18, Camp 17 Reservoir	04/08/92	3.7×10^{-11}	3.7×10^{-11}
Area 18, Camp 17 Reservoir	07/07/92	3.9×10^{-12}	3.9×10^{-12}
Area 18, Camp 17 Reservoir	10/07/92	0.0	0.0
Area 18, Well 8	01/27/92	-1.5×10^{-11}	2.9×10^{-11}
Area 18, Well 8	04/06/92	-3.3×10^{-11}	3.0×10^{-11}
Area 18, Well 8	07/13/92	0.0	0.0
Area 18, Well 8	10/05/92	0.0	0.0
Area 18, Well 8 Reservoir	01/14/92	-5.2×10^{-11}	3.3×10^{-11}
Area 18, Well 8 Reservoir	04/08/92	-8.7×10^{-12}	3.2×10^{-11}
Area 18, Well 8 Reservoir	07/07/92	5.1×10^{-12}	3.6×10^{-12}
Area 18, Well 8 Reservoir	10/07/92	0.0	0.0
Area 19, Well UE-19c	01/27/92	-1.1×10^{-11}	3.0×10^{-11}
Area 19, Well UE-19c	04/06/92	-1.3×10^{-11}	3.0×10^{-11}
Area 19, Well UE-19c	07/13/92	2.9×10^{-12}	2.9×10^{-12}
Area 19, Well UE-19c	10/05/92	0.0	0.0
Area 19, Well UE-19c Reservoir	01/14/92	-1.5×10^{-12}	3.1×10^{-11}
Area 19, Well UE-19c Reservoir	04/07/92	-3.4×10^{-11}	2.9×10^{-11}

Mean MDC: $5.0 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $9.6 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.3 (^{238}Pu in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 19, Well UE-19c Reservoir	07/09/92	0.0	0.0
Area 19, Well UE-19c Reservoir	10/07/92	0.0	0.0
Area 20, Well 20	01/15/92	-7.3×10^{-11}	3.1×10^{-11}
Area 20, Well 20	04/07/92	7.3×10^{-12}	3.0×10^{-11}
Area 20, Well 20	07/09/92	0.0	0.0
Area 20, Well 20	10/07/92	5.2×10^{-12}	5.2×10^{-12}
Area 20, Water Well	04/06/92	-5.8×10^{-11}	3.5×10^{-11}
Area 20, Water Well	07/13/92	0.0	0.0
Area 20, Water Well	10/05/92	0.0	0.0
Area 23, Army Well No. 1	01/22/92	-6.2×10^{-11}	3.5×10^{-11}
Area 23, Army Well No. 1	04/06/92	1.2×10^{-12}	3.5×10^{-11}
Area 23, Army Well No. 1	07/13/92	0.0	0.0
Area 23, Army Well No. 1	10/05/92	0.0	0.0
Area 23, H&S Sump	10/22/92	1.4×10^{-11}	1.4×10^{-11}
Area 23, Mercury	03/30/92	2.0×10^{-11}	3.0×10^{-11}
Area 23, Mercury	06/29/92	0.0	0.0
Area 23, Mercury	09/28/92	0.0	0.0
Area 23, Mercury	12/28/92	0.0	0.0
Area 23, Swimming Pool	01/16/92	-3.9×10^{-11}	1.9×10^{-11}
Area 23, Swimming Pool	04/21/92	-2.0×10^{-11}	2.9×10^{-11}
Area 23, Swimming Pool	07/09/92	0.0	0.0
Area 23, Swimming Pool	10/06/92	0.0	0.0
Area 23, Sewage	01/16/92	5.3×10^{-12}	4.0×10^{-11}
Area 23, Sewage	04/21/92	-5.1×10^{-11}	3.5×10^{-11}
Area 23, Sewage	07/14/92	0.0	0.0
Area 23, Sewage	10/14/92	0.0	0.0
Area 25, Building 4221	03/30/92	8.8×10^{-12}	3.0×10^{-11}
Area 25, Building 4221	06/29/92	0.0	0.0
Area 25, Building 4221	09/28/92	0.0	0.0
Area 25, Building 4221	12/28/92	0.0	0.0
Area 25, Well J-11 Reservoir	01/08/92	-5.6×10^{-11}	3.6×10^{-11}
Area 25, Well J-11 Reservoir	04/08/92	2.1×10^{-11}	3.5×10^{-11}
Area 25, Well J-11 Reservoir	07/08/92	0.0	0.0
Area 25, Well J-11 Reservoir	10/06/92	0.0	0.0
Area 25, Well J-12	05/12/92	-4.6×10^{-12}	3.0×10^{-11}
Area 25, Well J-12	07/13/92	0.0	0.0
Area 25, Well J-12	10/05/92	0.0	0.0
Area 25, Well J-12 Reservoir	01/08/92	-4.5×10^{-11}	2.7×10^{-11}
Area 25, Well J-12 Reservoir	04/08/92	-1.5×10^{-11}	3.5×10^{-11}
Area 25, Well J-13	01/22/92	-3.6×10^{-11}	3.5×10^{-11}

Mean MDC: $5.0 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $9.6 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.3 (^{238}Pu in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, Well J-13	04/06/92	1.4×10^{-11}	2.9×10^{-11}
Area 25, Well J-13	07/13/92	0.0	0.0
Area 25, Well J-13	10/05/92	2.2×10^{-12}	2.2×10^{-12}
Area 27, Cafeteria	03/30/92	3.6×10^{-12}	2.9×10^{-11}
Area 27, Cafeteria	06/29/92	0.0	0.0
Area 27, Cafeteria	09/28/92	0.0	0.0
Area 29, Topopah Spring	01/14/92	-1.6×10^{-11}	3.0×10^{-11}
Area 29, Topopah Spring	04/23/92	3.9×10^{-12}	4.1×10^{-11}

Mean MDC: $5.0 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $9.6 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.4 ²³⁹⁺²⁴⁰Pu in Water - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, Building 101	03/30/92	-5.1×10^{-12}	1.3×10^{-11}
Area 1, Building 101	06/29/92	0.0	0.0
Area 1, Building 101	09/28/92	2.0×10^{-12}	2.0×10^{-12}
Area 2, Mud Plant	01/08/92	2.9×10^{-12}	9.5×10^{-12}
Area 2, Mud Plant	04/23/92	-5.1×10^{-12}	6.2×10^{-12}
Area 2, Mud Plant	07/03/92	1.0×10^{-11}	5.9×10^{-12}
Area 2, Mud Plant	10/14/92	0.0	0.0
Area 2, Rest Room	03/30/92	2.0×10^{-13}	6.5×10^{-12}
Area 2, Rest Room	06/29/92	0.0	0.0
Area 2, Rest Room	09/28/92	0.0	0.0
Area 2, Rest Room	12/29/92	0.0	0.0
Area 2, Well 2 Reservoir	01/08/92	-2.5×10^{-12}	5.5×10^{-12}
Area 2, Well 2 Reservoir	04/08/92	2.4×10^{-12}	8.8×10^{-12}
Area 2, Well 2 Reservoir	07/03/92	0.0	0.0
Area 2, Well 2 Reservoir	10/14/92	0.0	0.0
Area 3, Mud Plant	01/08/92	2.5×10^{-11}	1.1×10^{-11}
Area 3, Mud Plant	04/08/92	-5.1×10^{-12}	3.2×10^{-11}
Area 3, Mud Plant	07/08/92	3.4×10^{-11}	1.2×10^{-11}
Area 3, Mud Plant	10/21/92	5.2×10^{-10}	4.1×10^{-11}
Area 3, Well A Reservoir	01/08/92	1.3×10^{-12}	8.1×10^{-12}
Area 3, Well A Reservoir	04/08/92	1.9×10^{-12}	8.5×10^{-12}
Area 3, Well A Reservoir	07/08/92	8.3×10^{-12}	4.1×10^{-12}
Area 3, Well A Reservoir	10/15/92	3.8×10^{-12}	2.7×10^{-12}
Area 5, Cane Spring	01/08/92	-5.1×10^{-12}	6.1×10^{-12}
Area 5, Cane Spring	04/08/92	-1.1×10^{-11}	8.2×10^{-12}
Area 5, Cane Spring	07/16/92	3.6×10^{-12}	3.6×10^{-12}
Area 5, Cane Spring	10/21/92	0.0	0.0
Area 5, Well 5B	10/05/92	7.0×10^{-12}	4.9×10^{-12}
Area 5, Well 5B Reservoir	01/06/92	1.3×10^{-11}	9.4×10^{-12}
Area 5, Well 5B Reservoir	04/08/92	2.7×10^{-12}	6.8×10^{-12}
Area 5, Well 5B Reservoir	07/08/92	2.4×10^{-11}	8.4×10^{-12}
Area 5, Well 5B Reservoir	10/06/92	5.5×10^{-12}	5.5×10^{-12}
Area 5, Well 5C	01/22/92	-1.5×10^{-12}	8.1×10^{-12}
Area 5, Well 5C	04/06/92	-7.2×10^{-12}	3.9×10^{-12}
Area 5, Well 5C	07/13/92	3.6×10^{-12}	3.6×10^{-12}
Area 5, Well 5C	10/05/92	5.1×10^{-12}	3.6×10^{-12}
Area 5, Well UE-5c	01/22/92	-9.6×10^{-12}	6.4×10^{-12}
Area 5, Well UE-5c	05/12/92	-5.0×10^{-12}	1.0×10^{-11}
Area 5, Well UE-5c	07/13/92	1.2×10^{-11}	5.4×10^{-12}
Area 5, Well UE-5c	11/09/92	0.0	0.0
Area 5, Well UE-5c Reservoir	01/06/92	-2.7×10^{-12}	5.3×10^{-12}
Area 5, Well UE-5c Reservoir	04/08/92	-5.3×10^{-12}	1.2×10^{-11}

Mean MDC: 2.4×10^{-11} μCi/mL

Standard Deviation of Mean MDC: 2.2×10^{-11} μCi/mL

Attachment C.4 ($^{239+240}\text{Pu}$ in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well UE-5c Reservoir	07/08/92	6.4×10^{-12}	4.6×10^{-12}
Area 5, Well UE-5c Reservoir	10/06/92	0.0	0.0
Area 6, Bottled Water	03/30/92	-5.2×10^{-12}	5.6×10^{-12}
Area 6, Bottled Water	06/29/92	0.0	0.0
Area 6, Bottled Water	09/28/92	0.0	0.0
Area 6, Bottled Water	12/29/92	0.0	0.0
Area 6, Building 6-900	06/29/92	5.1×10^{-12}	5.1×10^{-12}
Area 6, Building 6-900	09/28/92	0.0	0.0
Area 6, Building 6-900	12/29/92	0.0	0.0
Area 6, Cafeteria	03/30/92	-5.2×10^{-12}	6.1×10^{-12}
Area 6, Cafeteria	06/29/92	0.0	0.0
Area 6, Cafeteria	09/28/92	0.0	0.0
Area 6, Cafeteria	12/29/92	1.8×10^{-12}	1.8×10^{-12}
Area 6, Sewage	01/15/92	1.2×10^{-11}	1.0×10^{-11}
Area 6, Sewage	04/23/92	-8.9×10^{-12}	5.8×10^{-12}
Area 6, Sewage	07/14/92	1.3×10^{-11}	7.4×10^{-12}
Area 6, Sewage	10/15/92	6.3×10^{-11}	1.2×10^{-11}
Area 6, Well C	01/27/92	-1.8×10^{-13}	6.4×10^{-12}
Area 6, Well C	04/06/92	-5.2×10^{-12}	6.0×10^{-12}
Area 6, Well C	07/13/92	0.0	0.0
Area 6, Well C	10/05/92	0.0	0.0
Area 6, Well C-1	01/27/92	-9.9×10^{-13}	5.9×10^{-12}
Area 6, Well C-1	04/06/92	-5.2×10^{-12}	5.9×10^{-12}
Area 6, Well C-1	07/13/92	0.0	0.0
Area 6, Well C-1	10/05/92	3.1×10^{-12}	3.1×10^{-12}
Area 6, Well C-1 Reservoir	01/07/92	7.2×10^{-12}	7.6×10^{-12}
Area 6, Well C-1 Reservoir	04/08/92	-5.4×10^{-12}	6.0×10^{-12}
Area 6, Well C-1 Reservoir	07/09/92	0.0	0.0
Area 6, Well C-1 Reservoir	10/06/92	2.2×10^{-11}	1.1×10^{-11}
Area 6, Well 3 Reservoir	01/08/92	-5.4×10^{-12}	4.6×10^{-12}
Area 6, Well 3 Reservoir	04/08/92	-5.1×10^{-12}	5.1×10^{-12}
Area 6, Well 3 Reservoir	07/03/92	5.1×10^{-12}	3.6×10^{-12}
Area 6, Well 3 Reservoir	10/15/92	0.0	0.0
Area 6, Well 4	01/27/92	-5.2×10^{-12}	5.2×10^{-12}
Area 6, Well 4	04/06/92	6.2×10^{-12}	1.3×10^{-11}
Area 6, Well 4	07/13/92	3.5×10^{-12}	3.5×10^{-12}
Area 6, Well 4	10/05/92	0.0	0.0
Area 6, Yucca Pond	01/15/92	3.0×10^{-11}	1.8×10^{-11}
Area 6, Yucca Pond	04/27/92	2.8×10^{-11}	2.9×10^{-11}
Area 6, Yucca Pond	07/09/92	1.8×10^{-10}	3.1×10^{-11}
Area 6, Yucca Pond	10/06/92	8.5×10^{-11}	6.1×10^{-11}
Area 7, Reitman Seep	01/15/92	6.3×10^{-10}	8.4×10^{-11}

Mean MDC: $2.4 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $2.2 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.4 ($^{239+240}\text{Pu}$ in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 7, Reitman Seep	04/08/92	2.7×10^{-10}	5.5×10^{-11}
Area 7, Reitman Seep	11/17/92	2.2×10^{-10}	2.9×10^{-11}
Area 12, Cafeteria	03/30/92	-1.4×10^{-12}	8.1×10^{-12}
Area 12, Cafeteria	06/29/92	0.0	0.0
Area 12, Cafeteria	09/28/92	0.0	0.0
Area 12, Captain Jack Spring	01/15/92	2.1×10^{-12}	8.7×10^{-12}
Area 12, Captain Jack Spring	04/23/92	-2.4×10^{-12}	6.8×10^{-12}
Area 12, Captain Jack Spring	07/15/92	2.0×10^{-11}	8.8×10^{-12}
Area 12, Captain Jack Spring	10/21/92	3.8×10^{-12}	2.7×10^{-12}
Area 12, E Tunnel Effluent	01/15/92	6.9×10^{-09}	4.5×10^{-10}
Area 12, E Tunnel Effluent	04/09/92	5.9×10^{-09}	4.3×10^{-10}
Area 12, E Tunnel Effluent	07/21/92	5.8×10^{-09}	6.3×10^{-10}
Area 12, E Tunnel Effluent	10/20/92	6.5×10^{-09}	3.9×10^{-10}
Area 12, E Tunnel Pond No. 1	07/21/92	5.5×10^{-09}	4.1×10^{-10}
Area 12, E Tunnel Pond No. 1	10/20/92	5.2×10^{-09}	3.0×10^{-10}
Area 12, Gold Meadows Spring	04/08/92	-1.4×10^{-12}	7.7×10^{-12}
Area 12, N Tunnel Effluent	01/15/92	-4.6×10^{-12}	8.5×10^{-12}
Area 12, N Tunnel Effluent	04/09/92	1.6×10^{-11}	1.7×10^{-11}
Area 12, N Tunnel Effluent	07/21/92	4.3×10^{-11}	1.8×10^{-11}
Area 12, N Tunnel Effluent	10/20/92	1.3×10^{-11}	9.5×10^{-12}
Area 12, N Tunnel Pond No. 1	01/15/92	1.4×10^{-11}	1.3×10^{-11}
Area 12, N Tunnel Pond No. 1	04/09/92	-3.8×10^{-12}	1.1×10^{-11}
Area 12, N Tunnel Pond No. 2	02/12/92	1.7×10^{-11}	1.3×10^{-11}
Area 12, N Tunnel Pond No. 2	04/09/92	1.7×10^{-11}	1.5×10^{-11}
Area 12, N Tunnel Pond No. 2	07/21/92	8.2×10^{-11}	3.4×10^{-11}
Area 12, N Tunnel Pond No. 2	10/20/92	6.4×10^{-12}	6.4×10^{-12}
Area 12, N Tunnel Pond No. 3	02/12/92	1.0×10^{-09}	6.5×10^{-11}
Area 12, N Tunnel Pond No. 3	04/09/92	2.3×10^{-11}	2.1×10^{-11}
Area 12, N Tunnel Pond No. 3	07/21/92	7.7×10^{-11}	1.9×10^{-11}
Area 12, N Tunnel Pond No. 3	10/20/92	1.8×10^{-11}	1.0×10^{-11}
Area 12, Sewage Pond	01/08/92	-9.9×10^{-12}	6.9×10^{-12}
Area 12, Sewage Pond	04/22/92	-5.2×10^{-12}	5.4×10^{-12}
Area 12, Sewage Pond	07/21/92	7.0×10^{-12}	7.1×10^{-12}
Area 12, Sewage Pond	10/27/92	0.0	0.0
Area 12, T Tunnel Effluent	01/15/92	2.4×10^{-10}	3.4×10^{-11}
Area 12, T Tunnel Effluent	04/09/92	3.1×10^{-10}	4.2×10^{-11}
Area 12, T Tunnel Effluent	07/21/92	1.9×10^{-09}	3.7×10^{-10}
Area 12, T Tunnel Effluent	10/20/92	3.8×10^{-09}	4.1×10^{-10}
Area 12, T Tunnel Pond No. 1	02/12/92	2.3×10^{-09}	3.0×10^{-10}
Area 12, T Tunnel Pond No. 1	04/09/92	1.9×10^{-09}	1.4×10^{-10}
Area 12, T Tunnel Pond No. 2	02/12/92	4.0×10^{-09}	2.5×10^{-10}
Area 12, T Tunnel Pond No. 2	04/09/92	1.8×10^{-09}	1.8×10^{-10}
Area 12, T Tunnel Pond No. 2	07/21/92	2.5×10^{-09}	2.3×10^{-10}

Mean MDC: $2.4 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $2.2 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.4 ($^{239+240}\text{Pu}$ in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, T Tunnel Pond No. 2	10/20/92	3.7×10^{-09}	2.2×10^{-10}
Area 12, T Tunnel Pond No. 3	07/21/92	3.1×10^{-09}	2.6×10^{-10}
Area 12, T Tunnel Pond No. 3	10/20/92	2.7×10^{-09}	2.5×10^{-10}
Area 12, White Rock	01/15/92	8.6×10^{-12}	7.4×10^{-12}
Area 12, White Rock	04/08/92	8.5×10^{-12}	1.1×10^{-11}
Area 12, White Rock	07/13/92	7.3×10^{-12}	4.2×10^{-12}
Area 12, White Rock	10/05/92	0.0	0.0
Area 16, Tippihah Spring	01/08/92	6.9×10^{-12}	8.4×10^{-12}
Area 16, Tippihah Spring	04/22/92	-1.4×10^{-11}	1.2×10^{-11}
Area 16, Tippihah Spring	07/15/92	0.0	0.0
Area 16, Tippihah Spring	10/14/92	3.1×10^{-12}	3.1×10^{-12}
Area 16, Well UE-16d	01/27/92	3.1×10^{-11}	1.2×10^{-11}
Area 16, Well UE-16d	04/06/92	-5.3×10^{-12}	7.4×10^{-12}
Area 16, Well UE-16d	07/13/92	0.0	0.0
Area 16, Well UE-16d	10/05/92	2.7×10^{-12}	2.7×10^{-12}
Area 18, Camp 17 Reservoir	01/08/92	-1.1×10^{-11}	7.7×10^{-12}
Area 18, Camp 17 Reservoir	04/08/92	2.9×10^{-12}	9.1×10^{-12}
Area 18, Camp 17 Reservoir	07/07/92	0.0	0.0
Area 18, Camp 17 Reservoir	10/07/92	2.4×10^{-11}	2.4×10^{-11}
Area 18, Well 8	01/27/92	3.1×10^{-11}	1.1×10^{-11}
Area 18, Well 8	04/06/92	-8.6×10^{-12}	5.5×10^{-12}
Area 18, Well 8	07/13/92	6.2×10^{-12}	6.2×10^{-12}
Area 18, Well 8	10/05/92	0.0	0.0
Area 18, Well 8 Reservoir	01/14/92	4.9×10^{-12}	8.5×10^{-12}
Area 18, Well 8 Reservoir	04/08/92	-2.0×10^{-12}	6.6×10^{-12}
Area 18, Well 8 Reservoir	07/07/92	2.5×10^{-11}	8.1×10^{-12}
Area 18, Well 8 Reservoir	10/07/92	0.0	0.0
Area 19, Well UE-19c	01/27/92	-8.1×10^{-12}	4.7×10^{-12}
Area 19, Well UE-19c	04/06/92	3.0×10^{-12}	7.2×10^{-12}
Area 19, Well UE-19c	07/13/92	2.6×10^{-11}	8.7×10^{-12}
Area 19, Well UE-19c	10/05/92	5.5×10^{-12}	3.2×10^{-12}
Area 19, Well UE-19c Reservoir	01/14/92	-5.2×10^{-12}	5.7×10^{-12}
Area 19, Well UE-19c Reservoir	04/07/92	-8.3×10^{-12}	5.3×10^{-12}
Area 19, Well UE-19c Reservoir	07/09/92	0.0	0.0
Area 19, Well UE-19c Reservoir	10/07/92	1.2×10^{-11}	8.4×10^{-12}
Area 20, Water Well	04/06/92	1.8×10^{-12}	8.1×10^{-12}
Area 20, Water Well	07/13/92	0.0	0.0
Area 20, Water Well	10/05/92	0.0	0.0
Area 20, Well 20	01/15/92	8.1×10^{-11}	1.7×10^{-11}
Area 20, Well 20	04/07/92	6.3×10^{-13}	6.8×10^{-12}
Area 20, Well 20	07/09/92	8.4×10^{-12}	5.9×10^{-12}
Area 20, Well 20	10/07/92	1.0×10^{-11}	7.4×10^{-12}

Mean MDC: $2.4 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $2.2 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.4 ($^{239+240}\text{Pu}$ in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Army Well No. 1	01/22/92	-9.6×10^{-12}	6.2×10^{-12}
Area 23, Army Well No. 1	04/06/92	2.0×10^{-12}	8.4×10^{-12}
Area 23, Army Well No. 1	07/13/92	0.0	0.0
Area 23, Army Well No. 1	10/05/92	0.0	0.0
Area 23, H&S Sump	10/22/92	1.3×10^{-09}	2.0×10^{-10}
Area 23, Mercury	03/30/92	2.3×10^{-13}	6.8×10^{-12}
Area 23, Mercury	06/29/92	0.0	0.0
Area 23, Mercury	09/28/92	0.0	0.0
Area 23, Mercury	12/28/92	0.0	0.0
Area 23, Sewage	01/16/92	8.5×10^{-12}	1.1×10^{-11}
Area 23, Sewage	04/21/92	-1.5×10^{-12}	8.1×10^{-12}
Area 23, Sewage	07/14/92	0.0	0.0
Area 23, Sewage	10/14/92	0.0	0.0
Area 23, Swimming Pool	01/16/92	5.9×10^{-12}	4.8×10^{-12}
Area 23, Swimming Pool	04/21/92	-5.1×10^{-12}	5.5×10^{-12}
Area 23, Swimming Pool	07/09/92	0.0	0.0
Area 23, Swimming Pool	10/06/92	3.6×10^{-12}	3.6×10^{-12}
Area 25, Building 4221	03/30/92	1.7×10^{-11}	9.6×10^{-12}
Area 25, Building 4221	06/29/92	0.0	0.0
Area 25, Building 4221	09/28/92	0.0	0.0
Area 25, Building 4221	12/28/92	0.0	0.0
Area 25, Well J-11 Reservoir	01/08/92	-4.9×10^{-12}	8.2×10^{-12}
Area 25, Well J-11 Reservoir	04/08/92	-8.5×10^{-12}	5.4×10^{-12}
Area 25, Well J-11 Reservoir	07/08/92	1.1×10^{-10}	2.0×10^{-11}
Area 25, Well J-11 Reservoir	10/06/92	4.3×10^{-12}	4.3×10^{-12}
Area 25, Well J-12	05/12/92	-8.0×10^{-12}	4.9×10^{-12}
Area 25, Well J-12	07/13/92	9.4×10^{-12}	9.4×10^{-12}
Area 25, Well J-12	10/05/92	4.2×10^{-12}	4.1×10^{-12}
Area 25, Well J-12 Reservoir	01/08/92	-7.8×10^{-12}	4.6×10^{-12}
Area 25, Well J-12 Reservoir	04/08/92	-8.8×10^{-12}	5.6×10^{-12}
Area 25, Well J-12 Reservoir	07/08/92	9.1×10^{-12}	4.6×10^{-12}
Area 25, Well J-12 Reservoir	10/06/92	4.1×10^{-12}	4.1×10^{-12}
Area 25, Well J-13	01/22/92	2.3×10^{-12}	9.0×10^{-12}
Area 25, Well J-13	04/06/92	5.0×10^{-11}	1.4×10^{-11}
Area 25, Well J-13	07/13/92	0.0	0.0
Area 25, Well J-13	10/05/92	0.0	0.0
Area 27, Cafeteria	03/30/92	-5.2×10^{-12}	5.3×10^{-12}
Area 27, Cafeteria	06/29/92	0.0	0.0
Area 27, Cafeteria	09/28/92	0.0	0.0
Area 29, Topopah Spring	01/14/92	1.6×10^{-13}	6.5×10^{-12}
Area 29, Topopah Spring	04/23/92	3.7×10^{-13}	1.1×10^{-11}

Mean MDC: $2.4 \times 10^{-11} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $2.2 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.5 Gross Beta in Water - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, Building 101	01/21/92	8.9×10^{-09}	6.1×10^{-10}
Area 1, Building 101	01/27/92	8.2×10^{-09}	5.7×10^{-10}
Area 1, Building 101	02/03/92	6.9×10^{-09}	5.8×10^{-10}
Area 1, Building 101	02/10/92	7.6×10^{-09}	5.8×10^{-10}
Area 1, Building 101	02/18/92	8.8×10^{-09}	5.9×10^{-10}
Area 1, Building 101	02/24/92	8.5×10^{-09}	5.9×10^{-10}
Area 1, Building 101	03/02/92	8.8×10^{-09}	5.8×10^{-10}
Area 1, Building 101	03/09/92	7.6×10^{-09}	5.8×10^{-10}
Area 1, Building 101	03/17/92	7.7×10^{-09}	5.8×10^{-10}
Area 1, Building 101	03/23/92	3.4×10^{-09}	5.4×10^{-10}
Area 1, Building 101	03/30/92	7.9×10^{-09}	6.2×10^{-10}
Area 1, Building 101	04/06/92	8.2×10^{-09}	6.2×10^{-10}
Area 1, Building 101	04/13/92	6.4×10^{-09}	5.7×10^{-10}
Area 1, Building 101	04/20/92	8.8×10^{-09}	6.0×10^{-10}
Area 1, Building 101	04/27/92	7.1×10^{-09}	6.1×10^{-10}
Area 1, Building 101	05/04/92	8.5×10^{-09}	6.4×10^{-10}
Area 1, Building 101	05/11/92	8.4×10^{-09}	6.1×10^{-10}
Area 1, Building 101	05/18/92	7.2×10^{-09}	6.5×10^{-10}
Area 1, Building 101	05/26/92	6.5×10^{-09}	6.3×10^{-10}
Area 1, Building 101	06/01/92	8.4×10^{-09}	5.7×10^{-10}
Area 1, Building 101	06/08/92	6.4×10^{-09}	5.6×10^{-10}
Area 1, Building 101	06/15/92	7.3×10^{-09}	5.6×10^{-10}
Area 1, Building 101	06/22/92	7.0×10^{-09}	5.9×10^{-10}
Area 1, Building 101	06/29/92	6.4×10^{-09}	4.5×10^{-10}
Area 1, Building 101	07/06/92	7.4×10^{-09}	4.5×10^{-10}
Area 1, Building 101	07/13/92	6.4×10^{-09}	4.4×10^{-10}
Area 1, Building 101	07/20/92	6.1×10^{-09}	4.6×10^{-10}
Area 1, Building 101	07/27/92	5.8×10^{-09}	4.2×10^{-10}
Area 1, Building 101	08/03/92	7.4×10^{-09}	4.8×10^{-10}
Area 1, Building 101	08/10/92	6.2×10^{-09}	4.3×10^{-10}
Area 1, Building 101	08/17/92	7.3×10^{-09}	4.4×10^{-10}
Area 1, Building 101	08/24/92	6.7×10^{-09}	4.6×10^{-10}
Area 1, Building 101	09/01/92	5.0×10^{-09}	4.2×10^{-10}
Area 1, Building 101	09/08/92	7.7×10^{-09}	4.5×10^{-10}
Area 1, Building 101	09/14/92	7.3×10^{-09}	4.6×10^{-10}
Area 1, Building 101	09/21/92	6.9×10^{-09}	4.6×10^{-10}
Area 1, Building 101	09/28/92	3.1×10^{-09}	3.9×10^{-10}
Area 1, Building 101	10/05/92	6.4×10^{-09}	4.4×10^{-10}
Area 1, Building 101	10/12/92	7.8×10^{-09}	4.7×10^{-10}
Area 1, Building 101	10/19/92	6.1×10^{-09}	4.5×10^{-10}
Area 1, Building 101	10/26/92	7.3×10^{-09}	4.6×10^{-10}
Area 1, Building 101	11/02/92	7.5×10^{-09}	4.4×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, Building 101	11/09/92	7.1×10^{-09}	4.6×10^{-10}
Area 1, Building 101	11/16/92	7.8×10^{-09}	4.9×10^{-10}
Area 1, Building 101	11/23/92	7.0×10^{-09}	4.4×10^{-10}
Area 1, Building 101	11/30/92	6.8×10^{-09}	4.7×10^{-10}
Area 1, Building 101	12/08/92	6.1×10^{-09}	4.2×10^{-10}
Area 1, Building 101	12/15/92	7.0×10^{-09}	4.5×10^{-10}
Area 2, Mud Plant	01/08/92	4.1×10^{-09}	5.2×10^{-10}
Area 2, Mud Plant	02/12/92	3.9×10^{-09}	5.3×10^{-10}
Area 2, Mud Plant	03/11/92	3.5×10^{-09}	4.9×10^{-10}
Area 2, Mud Plant	04/23/92	4.1×10^{-09}	5.1×10^{-10}
Area 2, Mud Plant	05/07/92	3.9×10^{-09}	5.0×10^{-10}
Area 2, Mud Plant	06/09/92	3.6×10^{-09}	4.9×10^{-10}
Area 2, Mud Plant	07/03/92	3.5×10^{-09}	4.2×10^{-10}
Area 2, Mud Plant	08/17/92	3.6×10^{-09}	3.9×10^{-10}
Area 2, Mud Plant	09/02/92	4.0×10^{-09}	4.2×10^{-10}
Area 2, Mud Plant	10/14/92	6.8×10^{-09}	4.4×10^{-10}
Area 2, Mud Plant	11/05/92	3.1×10^{-09}	4.1×10^{-10}
Area 2, Mud Plant	12/03/92	3.6×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	01/21/92	4.6×10^{-09}	5.3×10^{-10}
Area 2, Rest Room	01/27/92	3.2×10^{-09}	4.8×10^{-10}
Area 2, Rest Room	02/03/92	3.4×10^{-09}	5.0×10^{-10}
Area 2, Rest Room	02/10/92	3.0×10^{-09}	5.0×10^{-10}
Area 2, Rest Room	02/18/92	2.9×10^{-09}	4.7×10^{-10}
Area 2, Rest Room	02/24/92	3.1×10^{-09}	5.1×10^{-10}
Area 2, Rest Room	03/02/92	3.6×10^{-09}	4.9×10^{-10}
Area 2, Rest Room	03/09/92	3.1×10^{-09}	4.9×10^{-10}
Area 2, Rest Room	03/17/92	3.3×10^{-09}	4.8×10^{-10}
Area 2, Rest Room	03/23/92	4.2×10^{-09}	8.6×10^{-10}
Area 2, Rest Room	03/30/92	2.7×10^{-09}	5.0×10^{-10}
Area 2, Rest Room	04/06/92	3.5×10^{-09}	5.3×10^{-10}
Area 2, Rest Room	04/13/92	4.2×10^{-09}	5.1×10^{-10}
Area 2, Rest Room	04/20/92	4.6×10^{-09}	5.0×10^{-10}
Area 2, Rest Room	04/27/92	3.8×10^{-09}	5.6×10^{-10}
Area 2, Rest Room	05/04/92	3.8×10^{-09}	5.5×10^{-10}
Area 2, Rest Room	05/11/92	3.4×10^{-09}	4.8×10^{-10}
Area 2, Rest Room	05/18/92	2.6×10^{-09}	5.4×10^{-10}
Area 2, Rest Room	05/26/92	2.3×10^{-09}	5.2×10^{-10}
Area 2, Rest Room	06/01/92	3.2×10^{-09}	4.8×10^{-10}
Area 2, Rest Room	06/08/92	2.9×10^{-09}	4.9×10^{-10}
Area 2, Rest Room	06/15/92	2.9×10^{-09}	4.8×10^{-10}
Area 2, Rest Room	06/22/92	3.0×10^{-09}	4.9×10^{-10}
Area 2, Rest Room	06/29/92	3.5×10^{-09}	4.0×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 2, Rest Room	07/06/92	3.2×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	07/13/92	3.2×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	07/20/92	2.5×10^{-09}	4.4×10^{-10}
Area 2, Rest Room	07/27/92	3.1×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	08/03/92	3.3×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	08/10/92	3.8×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	08/17/92	3.7×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	08/24/92	2.6×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	08/31/92	3.0×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	09/08/92	3.0×10^{-09}	3.8×10^{-10}
Area 2, Rest Room	09/14/92	3.0×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	09/21/92	3.0×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	09/28/92	3.7×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	10/05/92	2.8×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	10/13/92	2.4×10^{-09}	4.2×10^{-10}
Area 2, Rest Room	10/19/92	2.8×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	10/26/92	2.5×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	11/03/92	3.4×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	11/09/92	2.5×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	11/16/92	2.9×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	11/23/92	2.6×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	11/30/92	2.7×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	12/07/92	2.9×10^{-09}	4.1×10^{-10}
Area 2, Rest Room	12/14/92	2.8×10^{-09}	3.9×10^{-10}
Area 2, Rest Room	12/22/92	2.4×10^{-09}	4.0×10^{-10}
Area 2, Rest Room	12/29/92	3.4×10^{-09}	4.0×10^{-10}
Area 2, Well 2 Reservoir	01/08/92	7.8×10^{-09}	5.5×10^{-10}
Area 2, Well 2 Reservoir	02/12/92	6.2×10^{-09}	5.8×10^{-10}
Area 2, Well 2 Reservoir	03/11/92	5.2×10^{-09}	5.2×10^{-10}
Area 2, Well 2 Reservoir	04/08/92	7.4×10^{-09}	6.3×10^{-10}
Area 2, Well 2 Reservoir	05/07/92	7.4×10^{-09}	5.6×10^{-10}
Area 2, Well 2 Reservoir	06/09/92	1.0×10^{-08}	6.0×10^{-10}
Area 2, Well 2 Reservoir	07/03/92	9.5×10^{-09}	4.9×10^{-10}
Area 2, Well 2 Reservoir	08/17/92	7.0×10^{-09}	4.5×10^{-10}
Area 2, Well 2 Reservoir	09/02/92	6.3×10^{-09}	4.4×10^{-10}
Area 2, Well 2 Reservoir	10/14/92	4.3×10^{-09}	4.0×10^{-10}
Area 2, Well 2 Reservoir	11/05/92	5.2×10^{-09}	4.4×10^{-10}
Area 2, Well 2 Reservoir	12/03/92	7.0×10^{-09}	4.5×10^{-10}
Area 3, Cafeteria	01/21/92	1.3×10^{-08}	6.7×10^{-10}
Area 3, Cafeteria	01/27/92	1.0×10^{-08}	6.3×10^{-10}
Area 3, Cafeteria	02/03/92	1.0×10^{-08}	6.6×10^{-10}
Area 3, Cafeteria	02/10/92	1.2×10^{-08}	6.5×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 3, Mud Plant	01/08/92	1.7×10^{-08}	6.8×10^{-10}
Area 3, Mud Plant	02/05/92	1.1×10^{-08}	6.1×10^{-10}
Area 3, Mud Plant	03/04/92	1.1×10^{-08}	6.0×10^{-10}
Area 3, Mud Plant	04/08/92	1.0×10^{-08}	6.0×10^{-10}
Area 3, Mud Plant	05/07/92	1.3×10^{-08}	6.4×10^{-10}
Area 3, Mud Plant	06/03/92	1.1×10^{-08}	6.0×10^{-10}
Area 3, Mud Plant	07/08/92	7.7×10^{-09}	4.5×10^{-10}
Area 3, Mud Plant	08/12/92	8.6×10^{-09}	4.7×10^{-10}
Area 3, Mud Plant	09/01/92	8.2×10^{-09}	4.6×10^{-10}
Area 3, Mud Plant	10/21/92	9.9×10^{-09}	5.0×10^{-10}
Area 3, Mud Plant	11/05/92	9.8×10^{-09}	5.0×10^{-10}
Area 3, Mud Plant	12/02/92	8.3×10^{-09}	4.6×10^{-10}
Area 3, Well A Reservoir	01/08/92	1.2×10^{-08}	6.6×10^{-10}
Area 3, Well A Reservoir	02/05/92	1.0×10^{-08}	6.0×10^{-10}
Area 3, Well A Reservoir	03/18/92	1.3×10^{-08}	6.7×10^{-10}
Area 3, Well A Reservoir	04/08/92	1.3×10^{-08}	6.7×10^{-10}
Area 3, Well A Reservoir	05/07/92	1.1×10^{-08}	6.0×10^{-10}
Area 3, Well A Reservoir	06/03/92	9.8×10^{-09}	6.1×10^{-10}
Area 3, Well A Reservoir	07/08/92	8.9×10^{-09}	4.7×10^{-10}
Area 3, Well A Reservoir	08/12/92	8.8×10^{-09}	4.7×10^{-10}
Area 3, Well A Reservoir	09/01/92	8.4×10^{-09}	4.8×10^{-10}
Area 3, Well A Reservoir	10/15/92	9.0×10^{-09}	4.8×10^{-10}
Area 3, Well A Reservoir	11/10/92	1.1×10^{-08}	5.2×10^{-10}
Area 3, Well A Reservoir	12/02/92	8.1×10^{-09}	4.5×10^{-10}
Area 5, Cane Spring	01/08/92	7.7×10^{-09}	5.6×10^{-10}
Area 5, Cane Spring	02/19/92	7.2×10^{-09}	5.7×10^{-10}
Area 5, Cane Spring	03/17/92	6.3×10^{-09}	5.5×10^{-10}
Area 5, Cane Spring	04/08/92	7.7×10^{-09}	6.2×10^{-10}
Area 5, Cane Spring	05/19/92	6.7×10^{-09}	5.9×10^{-10}
Area 5, Cane Spring	06/04/92	7.6×10^{-09}	6.1×10^{-10}
Area 5, Cane Spring	07/16/92	7.8×10^{-09}	4.8×10^{-10}
Area 5, Cane Spring	08/19/92	6.4×10^{-09}	4.4×10^{-10}
Area 5, Cane Spring	09/10/92	6.4×10^{-09}	4.6×10^{-10}
Area 5, Cane Spring	10/21/92	6.2×10^{-09}	4.5×10^{-10}
Area 5, Cane Spring	11/24/92	6.8×10^{-09}	4.5×10^{-10}
Area 5, Cane Spring	12/22/92	5.5×10^{-09}	4.4×10^{-10}
Area 5, Well UE-5c	01/22/92	7.5×10^{-09}	6.1×10^{-10}
Area 5, Well UE-5c	02/24/92	8.4×10^{-09}	5.6×10^{-10}
Area 5, Well UE-5c	05/12/92	8.2×10^{-09}	6.2×10^{-10}
Area 5, Well UE-5c	06/02/92	1.4×10^{-08}	6.3×10^{-10}
Area 5, Well UE-5c	07/13/92	6.8×10^{-09}	4.5×10^{-10}
Area 5, Well UE-5c	08/04/92	6.1×10^{-09}	4.3×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well UE-5c	09/01/92	5.7×10^{-09}	4.3×10^{-10}
Area 5, Well UE-5c	11/09/92	1.4×10^{-08}	5.5×10^{-10}
Area 5, Well UE-5c	12/02/92	5.9×10^{-09}	4.6×10^{-10}
Area 5, Well UE-5c Reservoir	01/06/92	7.2×10^{-09}	5.5×10^{-10}
Area 5, Well UE-5c Reservoir	02/06/92	7.8×10^{-09}	5.5×10^{-10}
Area 5, Well UE-5c Reservoir	03/04/92	8.7×10^{-09}	6.1×10^{-10}
Area 5, Well UE-5c Reservoir	04/08/92	8.6×10^{-09}	6.5×10^{-10}
Area 5, Well UE-5c Reservoir	05/06/92	8.7×10^{-09}	6.4×10^{-10}
Area 5, Well UE-5c Reservoir	06/03/92	7.4×10^{-09}	5.6×10^{-10}
Area 5, Well UE-5c Reservoir	07/08/92	7.6×10^{-09}	4.6×10^{-10}
Area 5, Well UE-5c Reservoir	08/12/92	7.4×10^{-09}	4.5×10^{-10}
Area 5, Well UE-5c Reservoir	09/01/92	7.3×10^{-09}	5.0×10^{-10}
Area 5, Well UE-5c Reservoir	10/06/92	7.8×10^{-09}	4.5×10^{-10}
Area 5, Well UE-5c Reservoir	11/18/92	6.6×10^{-09}	4.6×10^{-10}
Area 5, Well UE-5c Reservoir	12/03/92	6.7×10^{-09}	4.4×10^{-10}
Area 5, Well 5B	08/04/92	4.6×10^{-09}	4.4×10^{-10}
Area 5, Well 5B	10/05/92	6.3×10^{-09}	4.3×10^{-10}
Area 5, Well 5B Reservoir	01/06/92	8.5×10^{-09}	5.7×10^{-10}
Area 5, Well 5B Reservoir	02/10/92	7.8×10^{-09}	5.8×10^{-10}
Area 5, Well 5B Reservoir	03/04/92	9.9×10^{-09}	6.0×10^{-10}
Area 5, Well 5B Reservoir	04/08/92	8.4×10^{-09}	6.2×10^{-10}
Area 5, Well 5B Reservoir	05/06/92	9.3×10^{-09}	6.5×10^{-10}
Area 5, Well 5B Reservoir	06/03/92	9.0×10^{-09}	5.8×10^{-10}
Area 5, Well 5B Reservoir	07/08/92	8.1×10^{-09}	4.6×10^{-10}
Area 5, Well 5B Reservoir	08/12/92	7.2×10^{-09}	4.5×10^{-10}
Area 5, Well 5B Reservoir	09/01/92	6.8×10^{-09}	4.5×10^{-10}
Area 5, Well 5B Reservoir	10/06/92	8.0×10^{-09}	4.6×10^{-10}
Area 5, Well 5B Reservoir	11/18/92	8.4×10^{-09}	4.9×10^{-10}
Area 5, Well 5B Reservoir	12/03/92	8.6×10^{-09}	4.6×10^{-10}
Area 5, Well 5C	01/22/92	8.7×10^{-09}	6.3×10^{-10}
Area 5, Well 5C	02/24/92	8.3×10^{-09}	5.8×10^{-10}
Area 5, Well 5C	04/06/92	9.4×10^{-09}	6.5×10^{-10}
Area 5, Well 5C	05/12/92	1.1×10^{-08}	6.1×10^{-10}
Area 5, Well 5C	06/02/92	7.2×10^{-09}	5.7×10^{-10}
Area 5, Well 5C	07/13/92	8.7×10^{-09}	5.2×10^{-10}
Area 5, Well 5C	08/04/92	6.4×10^{-09}	4.6×10^{-10}
Area 5, Well 5C	09/01/92	6.8×10^{-09}	4.5×10^{-10}
Area 5, Well 5C	10/05/92	7.2×10^{-09}	4.5×10^{-10}
Area 5, Well 5C	11/09/92	7.6×10^{-09}	4.9×10^{-10}
Area 5, Well 5C	12/02/92	7.7×10^{-09}	4.9×10^{-10}
Area 6, Bottled Water	01/21/92	1.0×10^{-08}	4.2×10^{-10}
Area 6, Bottled Water	01/27/92	-9.9×10^{-12}	3.8×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Bottled Water	02/03/92	2.3×10^{-10}	4.1×10^{-10}
Area 6, Bottled Water	02/10/92	-1.7×10^{-10}	4.0×10^{-10}
Area 6, Bottled Water	02/18/92	2.5×10^{-10}	4.0×10^{-10}
Area 6, Bottled Water	02/24/92	-2.1×10^{-11}	4.0×10^{-10}
Area 6, Bottled Water	03/02/92	1.3×10^{-10}	3.8×10^{-10}
Area 6, Bottled Water	03/09/92	-1.0×10^{-11}	4.1×10^{-10}
Area 6, Bottled Water	03/17/92	-1.1×10^{-10}	4.0×10^{-10}
Area 6, Bottled Water	03/23/92	-5.6×10^{-10}	7.0×10^{-10}
Area 6, Bottled Water	03/30/92	-1.8×10^{-10}	4.2×10^{-10}
Area 6, Bottled Water	04/06/92	-5.8×10^{-11}	4.2×10^{-10}
Area 6, Bottled Water	04/13/92	-3.1×10^{-10}	3.9×10^{-10}
Area 6, Bottled Water	04/20/92	1.4×10^{-10}	3.8×10^{-10}
Area 6, Bottled Water	04/27/92	2.1×10^{-10}	4.2×10^{-10}
Area 6, Bottled Water	05/04/92	3.4×10^{-10}	4.3×10^{-10}
Area 6, Bottled Water	05/11/92	-4.2×10^{-10}	3.9×10^{-10}
Area 6, Bottled Water	05/18/92	-6.7×10^{-10}	4.4×10^{-10}
Area 6, Bottled Water	05/26/92	-7.9×10^{-10}	4.4×10^{-10}
Area 6, Bottled Water	06/01/92	-6.0×10^{-10}	3.9×10^{-10}
Area 6, Bottled Water	06/08/92	-8.6×10^{-10}	3.7×10^{-10}
Area 6, Bottled Water	06/15/92	-2.8×10^{-10}	3.7×10^{-10}
Area 6, Bottled Water	06/22/92	-7.1×10^{-10}	3.8×10^{-10}
Area 6, Bottled Water	06/29/92	1.2×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	07/06/92	5.0×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	07/13/92	-3.1×10^{-11}	3.4×10^{-10}
Area 6, Bottled Water	07/20/92	2.2×10^{-10}	3.5×10^{-10}
Area 6, Bottled Water	07/27/92	-5.8×10^{-11}	3.4×10^{-10}
Area 6, Bottled Water	08/03/92	-4.0×10^{-11}	3.5×10^{-10}
Area 6, Bottled Water	08/10/92	6.6×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	08/17/92	-7.5×10^{-11}	3.6×10^{-10}
Area 6, Bottled Water	08/24/92	2.0×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	08/31/92	5.9×10^{-10}	3.6×10^{-10}
Area 6, Bottled Water	09/08/92	-2.7×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	09/14/92	5.8×10^{-11}	3.3×10^{-10}
Area 6, Bottled Water	09/21/92	3.0×10^{-10}	3.3×10^{-10}
Area 6, Bottled Water	09/28/92	7.9×10^{-11}	3.3×10^{-10}
Area 6, Bottled Water	10/05/92	9.6×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	10/13/92	-1.3×10^{-09}	3.4×10^{-09}
Area 6, Bottled Water	10/19/92	-2.6×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	10/26/92	-2.7×10^{-10}	3.7×10^{-10}
Area 6, Bottled Water	11/03/92	9.4×10^{-13}	3.2×10^{-10}
Area 6, Bottled Water	11/09/92	-9.8×10^{-11}	3.4×10^{-10}
Area 6, Bottled Water	11/16/92	-2.1×10^{-10}	3.3×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Bottled Water	11/23/92	9.3×10^{-09}	4.8×10^{-10}
Area 6, Bottled Water	11/30/92	-3.8×10^{-10}	3.4×10^{-10}
Area 6, Bottled Water	12/07/92	8.8×10^{-11}	3.0×10^{-10}
Area 6, Bottled Water	12/14/92	-2.4×10^{-10}	3.2×10^{-10}
Area 6, Bottled Water	12/22/92	-1.7×10^{-10}	3.8×10^{-10}
Area 6, Bottled Water	12/29/92	-3.8×10^{-10}	3.2×10^{-10}
Area 6, Cafeteria	01/21/92	1.1×10^{-08}	6.8×10^{-10}
Area 6, Cafeteria	01/27/92	9.6×10^{-09}	6.3×10^{-10}
Area 6, Cafeteria	02/03/92	1.1×10^{-08}	6.5×10^{-10}
Area 6, Cafeteria	02/10/92	9.9×10^{-09}	6.2×10^{-10}
Area 6, Cafeteria	02/18/92	9.1×10^{-09}	6.2×10^{-10}
Area 6, Cafeteria	02/24/92	1.0×10^{-08}	6.2×10^{-10}
Area 6, Cafeteria	03/02/92	9.6×10^{-09}	6.4×10^{-10}
Area 6, Cafeteria	03/09/92	9.7×10^{-09}	6.2×10^{-10}
Area 6, Cafeteria	03/17/92	9.6×10^{-09}	6.1×10^{-10}
Area 6, Cafeteria	03/23/92	1.0×10^{-08}	6.6×10^{-10}
Area 6, Cafeteria	03/30/92	9.9×10^{-09}	1.3×10^{-09}
Area 6, Cafeteria	04/06/92	3.4×10^{-09}	5.5×10^{-10}
Area 6, Cafeteria	04/13/92	4.8×10^{-09}	5.4×10^{-10}
Area 6, Cafeteria	04/20/92	1.4×10^{-08}	6.5×10^{-10}
Area 6, Cafeteria	04/27/92	1.1×10^{-08}	6.8×10^{-10}
Area 6, Cafeteria	05/04/92	8.6×10^{-09}	6.5×10^{-10}
Area 6, Cafeteria	05/11/92	9.4×10^{-09}	6.1×10^{-10}
Area 6, Cafeteria	05/18/92	6.4×10^{-09}	6.3×10^{-10}
Area 6, Cafeteria	05/26/92	7.1×10^{-09}	6.6×10^{-10}
Area 6, Cafeteria	06/01/92	8.1×10^{-09}	5.9×10^{-10}
Area 6, Cafeteria	06/08/92	8.7×10^{-09}	6.0×10^{-10}
Area 6, Cafeteria	06/15/92	7.6×10^{-09}	5.9×10^{-10}
Area 6, Cafeteria	06/22/92	9.0×10^{-09}	6.1×10^{-10}
Area 6, Cafeteria	06/29/92	6.4×10^{-09}	4.4×10^{-10}
Area 6, Cafeteria	07/06/92	8.4×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	07/13/92	8.6×10^{-09}	4.7×10^{-10}
Area 6, Cafeteria	07/20/92	8.0×10^{-09}	5.2×10^{-10}
Area 6, Cafeteria	07/27/92	9.3×10^{-09}	5.0×10^{-10}
Area 6, Cafeteria	08/03/92	7.4×10^{-09}	4.9×10^{-10}
Area 6, Cafeteria	08/10/92	8.9×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	08/17/92	7.9×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	08/24/92	8.8×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	08/31/92	9.5×10^{-09}	5.0×10^{-10}
Area 6, Cafeteria	09/08/92	8.2×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	09/14/92	8.4×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	09/21/92	8.3×10^{-09}	4.8×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Cafeteria	09/28/92	1.0×10^{-08}	8.2×10^{-10}
Area 6, Cafeteria	10/05/92	1.0×10^{-08}	4.9×10^{-10}
Area 6, Cafeteria	10/13/92	9.0×10^{-09}	5.0×10^{-10}
Area 6, Cafeteria	10/19/92	9.8×10^{-09}	4.9×10^{-10}
Area 6, Cafeteria	10/26/92	7.6×10^{-09}	4.8×10^{-10}
Area 6, Cafeteria	11/03/92	9.9×10^{-09}	4.7×10^{-10}
Area 6, Cafeteria	11/09/92	9.0×10^{-09}	5.1×10^{-10}
Area 6, Cafeteria	11/16/92	7.8×10^{-09}	5.2×10^{-10}
Area 6, Cafeteria	11/23/92	8.5×10^{-09}	4.7×10^{-10}
Area 6, Cafeteria	11/30/92	7.2×10^{-09}	4.5×10^{-10}
Area 6, Cafeteria	12/07/92	1.1×10^{-08}	5.1×10^{-10}
Area 6, Cafeteria	12/14/92	7.5×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	12/22/92	7.8×10^{-09}	4.6×10^{-10}
Area 6, Cafeteria	12/29/92	7.6×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	06/29/92	4.1×10^{-09}	4.1×10^{-10}
Area 6, Building 6-900	07/06/92	7.6×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	07/13/92	7.2×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	07/20/92	8.2×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	07/27/92	7.4×10^{-09}	4.9×10^{-10}
Area 6, Building 6-900	08/03/92	7.8×10^{-09}	4.9×10^{-10}
Area 6, Building 6-900	08/10/92	7.7×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	08/17/92	7.4×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	08/24/92	7.5×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	08/31/92	8.3×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	09/08/92	8.6×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	09/14/92	8.1×10^{-09}	4.7×10^{-10}
Area 6, Building 6-900	09/21/92	8.9×10^{-09}	5.0×10^{-10}
Area 6, Building 6-900	09/28/92	7.7×10^{-09}	7.7×10^{-10}
Area 6, Building 6-900	10/05/92	3.1×10^{-09}	4.1×10^{-10}
Area 6, Building 6-900	10/13/92	8.5×10^{-09}	5.1×10^{-10}
Area 6, Building 6-900	10/19/92	7.4×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	10/26/92	9.0×10^{-09}	5.0×10^{-10}
Area 6, Building 6-900	11/03/92	8.3×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	11/09/92	1.0×10^{-08}	5.2×10^{-10}
Area 6, Building 6-900	11/16/92	8.3×10^{-09}	4.8×10^{-10}
Area 6, Building 6-900	11/23/92	7.2×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	11/30/92	8.0×10^{-09}	4.5×10^{-10}
Area 6, Building 6-900	12/07/92	9.0×10^{-09}	4.9×10^{-10}
Area 6, Building 6-900	12/14/92	7.7×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	12/22/92	7.7×10^{-09}	4.6×10^{-10}
Area 6, Building 6-900	12/29/92	1.2×10^{-08}	7.8×10^{-10}
Area 6, Sewage	01/15/92	4.1×10^{-08}	1.1×10^{-09}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta In Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Sewage	04/23/92	2.5×10^{-08}	9.6×10^{-10}
Area 6, Sewage	07/14/92	2.1×10^{-08}	6.3×10^{-10}
Area 6, Sewage	10/15/92	7.5×10^{-08}	2.1×10^{-09}
Area 6, Well C	01/27/92	9.3×10^{-09}	2.4×10^{-09}
Area 6, Well C	02/24/92	1.6×10^{-08}	6.7×10^{-10}
Area 6, Well C	04/06/92	9.5×10^{-09}	6.5×10^{-10}
Area 6, Well C	05/12/92	1.7×10^{-08}	6.9×10^{-10}
Area 6, Well C	06/02/92	1.9×10^{-08}	6.9×10^{-10}
Area 6, Well C	07/13/92	1.3×10^{-08}	5.8×10^{-10}
Area 6, Well C	08/04/92	1.4×10^{-08}	5.4×10^{-10}
Area 6, Well C	09/01/92	1.4×10^{-08}	5.3×10^{-10}
Area 6, Well C	10/05/92	8.6×10^{-09}	4.5×10^{-10}
Area 6, Well C	11/09/92	1.5×10^{-08}	5.5×10^{-10}
Area 6, Well C	12/02/92	1.5×10^{-08}	5.3×10^{-10}
Area 6, Well C-1	01/27/92	2.3×10^{-08}	4.3×10^{-09}
Area 6, Well C-1	02/24/92	1.5×10^{-08}	6.6×10^{-10}
Area 6, Well C-1	04/06/92	7.6×10^{-09}	6.3×10^{-10}
Area 6, Well C-1	05/12/92	1.9×10^{-08}	7.0×10^{-10}
Area 6, Well C-1	06/02/92	1.5×10^{-08}	6.7×10^{-10}
Area 6, Well C-1	07/13/92	7.1×10^{-09}	5.3×10^{-10}
Area 6, Well C-1	08/04/92	1.1×10^{-08}	5.1×10^{-10}
Area 6, Well C-1	09/01/92	1.6×10^{-08}	5.6×10^{-10}
Area 6, Well C-1	10/05/92	1.1×10^{-08}	4.8×10^{-10}
Area 6, Well C-1	11/09/92	1.5×10^{-08}	5.7×10^{-10}
Area 6, Well C-1	12/02/92	1.5×10^{-08}	5.3×10^{-10}
Area 6, Well C-1 Reservoir	01/07/92	1.2×10^{-08}	6.4×10^{-10}
Area 6, Well C-1 Reservoir	02/06/92	1.2×10^{-08}	6.8×10^{-10}
Area 6, Well C-1 Reservoir	03/04/92	6.9×10^{-09}	5.7×10^{-10}
Area 6, Well C-1 Reservoir	04/08/92	1.5×10^{-08}	6.9×10^{-10}
Area 6, Well C-1 Reservoir	05/06/92	1.1×10^{-08}	6.9×10^{-10}
Area 6, Well C-1 Reservoir	06/03/92	9.0×10^{-09}	5.5×10^{-10}
Area 6, Well C-1 Reservoir	07/09/92	1.0×10^{-08}	5.1×10^{-10}
Area 6, Well C-1 Reservoir	08/12/92	1.1×10^{-08}	4.8×10^{-10}
Area 6, Well C-1 Reservoir	09/01/92	1.0×10^{-08}	4.8×10^{-10}
Area 6, Well C-1 Reservoir	10/06/92	1.1×10^{-08}	4.9×10^{-10}
Area 6, Well C-1 Reservoir	11/19/92	1.3×10^{-08}	5.1×10^{-10}
Area 6, Well C-1 Reservoir	12/22/92	1.1×10^{-08}	5.5×10^{-10}
Area 6, Well 3 Reservoir	01/08/92	1.2×10^{-08}	6.4×10^{-10}
Area 6, Well 3 Reservoir	02/05/92	1.1×10^{-08}	5.9×10^{-10}
Area 6, Well 3 Reservoir	03/04/92	1.2×10^{-08}	6.1×10^{-10}
Area 6, Well 3 Reservoir	04/08/92	1.3×10^{-08}	6.3×10^{-10}
Area 6, Well 3 Reservoir	05/06/92	1.9×10^{-09}	5.5×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 6, Well 3 Reservoir	06/03/92	1.1×10^{-08}	6.4×10^{-10}
Area 6, Well 3 Reservoir	07/03/92	9.3×10^{-09}	4.6×10^{-10}
Area 6, Well 3 Reservoir	08/12/92	9.6×10^{-09}	4.9×10^{-10}
Area 6, Well 3 Reservoir	09/01/92	7.6×10^{-09}	4.6×10^{-10}
Area 6, Well 3 Reservoir	10/15/92	1.0×10^{-08}	5.1×10^{-10}
Area 6, Well 3 Reservoir	11/05/92	1.2×10^{-08}	5.3×10^{-10}
Area 6, Well 3 Reservoir	12/03/92	8.5×10^{-09}	4.7×10^{-10}
Area 6, Well 4	01/27/92	7.4×10^{-09}	6.0×10^{-10}
Area 6, Well 4	02/24/92	7.3×10^{-09}	5.5×10^{-10}
Area 6, Well 4	04/06/92	7.3×10^{-09}	6.3×10^{-10}
Area 6, Well 4	05/12/92	7.8×10^{-09}	5.6×10^{-10}
Area 6, Well 4	06/02/92	8.0×10^{-09}	5.6×10^{-10}
Area 6, Well 4	07/13/92	7.9×10^{-09}	5.2×10^{-10}
Area 6, Well 4	08/04/92	6.2×10^{-09}	4.3×10^{-10}
Area 6, Well 4	09/01/92	6.9×10^{-09}	4.5×10^{-10}
Area 6, Well 4	10/05/92	5.9×10^{-09}	4.2×10^{-10}
Area 6, Well 4	11/09/92	6.4×10^{-09}	4.7×10^{-10}
Area 6, Well 4	12/02/92	5.6×10^{-09}	4.4×10^{-10}
Area 6, Yucca Pond	01/15/92	6.2×10^{-08}	5.0×10^{-09}
Area 6, Yucca Pond	02/12/92	5.4×10^{-08}	1.7×10^{-08}
Area 6, Yucca Pond	03/11/92	4.8×10^{-08}	1.5×10^{-08}
Area 6, Yucca Pond	04/27/92	2.1×10^{-08}	1.8×10^{-08}
Area 6, Yucca Pond	05/14/92	6.1×10^{-08}	2.0×10^{-08}
Area 6, Yucca Pond	06/03/92	4.7×10^{-08}	1.6×10^{-08}
Area 6, Yucca Pond	07/09/92	6.2×10^{-08}	1.1×10^{-08}
Area 6, Yucca Pond	08/20/92	2.1×10^{-08}	1.6×10^{-08}
Area 6, Yucca Pond	09/02/92	1.2×10^{-08}	1.2×10^{-08}
Area 6, Yucca Pond	10/06/92	4.6×10^{-08}	1.3×10^{-08}
Area 6, Yucca Pond	11/19/92	3.9×10^{-08}	1.3×10^{-08}
Area 6, Yucca Pond	12/03/92	4.2×10^{-08}	1.1×10^{-08}
Area 7, Reitman Seep	01/15/92	3.2×10^{-08}	9.2×10^{-10}
Area 7, Reitman Seep	02/12/92	4.0×10^{-08}	1.8×10^{-09}
Area 7, Reitman Seep	04/08/92	3.3×10^{-08}	1.3×10^{-09}
Area 7, Reitman Seep	05/07/92	3.1×10^{-08}	1.1×10^{-09}
Area 7, Reitman Seep	06/17/92	4.4×10^{-08}	1.0×10^{-09}
Area 7, Reitman Seep	09/09/92	3.4×10^{-08}	7.8×10^{-10}
Area 7, Reitman Seep	11/17/92	1.5×10^{-07}	2.5×10^{-08}
Area 7, Reitman Seep	12/02/92	4.1×10^{-08}	9.8×10^{-10}
Area 12, Cafeteria	01/21/92	4.1×10^{-08}	5.0×10^{-10}
Area 12, Cafeteria	01/27/92	4.9×10^{-08}	7.9×10^{-10}
Area 12, Cafeteria	02/03/92	3.4×10^{-09}	4.9×10^{-10}
Area 12, Cafeteria	02/10/92	3.7×10^{-09}	5.0×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, Cafeteria	02/18/92	3.8×10^{-09}	4.7×10^{-10}
Area 12, Cafeteria	02/24/92	3.3×10^{-09}	4.9×10^{-10}
Area 12, Cafeteria	03/02/92	3.4×10^{-09}	4.8×10^{-10}
Area 12, Cafeteria	03/09/92	3.7×10^{-09}	4.9×10^{-10}
Area 12, Cafeteria	03/17/92	3.2×10^{-09}	4.5×10^{-10}
Area 12, Cafeteria	03/23/92	7.4×10^{-09}	6.1×10^{-10}
Area 12, Cafeteria	03/30/92	3.5×10^{-09}	5.3×10^{-10}
Area 12, Cafeteria	04/06/92	2.4×10^{-09}	5.1×10^{-10}
Area 12, Cafeteria	04/13/92	3.5×10^{-09}	5.1×10^{-10}
Area 12, Cafeteria	04/20/92	4.8×10^{-09}	5.2×10^{-10}
Area 12, Cafeteria	04/27/92	3.9×10^{-09}	5.6×10^{-10}
Area 12, Cafeteria	05/04/92	3.5×10^{-09}	5.4×10^{-10}
Area 12, Cafeteria	05/11/92	3.8×10^{-09}	5.0×10^{-10}
Area 12, Cafeteria	05/18/92	1.5×10^{-09}	5.3×10^{-10}
Area 12, Cafeteria	05/26/92	2.3×10^{-09}	5.4×10^{-10}
Area 12, Cafeteria	06/01/92	3.3×10^{-09}	4.9×10^{-10}
Area 12, Cafeteria	06/08/92	2.3×10^{-09}	4.8×10^{-10}
Area 12, Cafeteria	06/15/92	3.2×10^{-09}	4.9×10^{-10}
Area 12, Cafeteria	06/22/92	3.2×10^{-09}	5.4×10^{-10}
Area 12, Cafeteria	06/29/92	3.3×10^{-09}	4.0×10^{-10}
Area 12, Cafeteria	07/06/92	2.9×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	07/13/92	3.5×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	07/20/92	2.2×10^{-09}	4.1×10^{-10}
Area 12, Cafeteria	07/27/92	2.9×10^{-09}	4.1×10^{-10}
Area 12, Cafeteria	08/03/92	1.4×10^{-09}	4.0×10^{-10}
Area 12, Cafeteria	08/10/92	3.7×10^{-09}	4.0×10^{-10}
Area 12, Cafeteria	08/17/92	4.1×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	08/24/92	2.8×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	09/01/92	3.5×10^{-09}	4.0×10^{-10}
Area 12, Cafeteria	09/08/92	3.1×10^{-09}	4.0×10^{-10}
Area 12, Cafeteria	09/14/92	3.7×10^{-09}	4.2×10^{-10}
Area 12, Cafeteria	09/21/92	3.0×10^{-09}	4.1×10^{-10}
Area 12, Cafeteria	09/28/92	6.8×10^{-09}	4.5×10^{-10}
Area 12, Cafeteria	10/05/92	8.5×10^{-09}	4.9×10^{-10}
Area 12, Cafeteria	10/12/92	2.2×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	10/19/92	2.6×10^{-09}	4.0×10^{-10}
Area 12, Cafeteria	10/26/92	2.9×10^{-09}	4.1×10^{-10}
Area 12, Cafeteria	11/02/92	2.9×10^{-09}	3.8×10^{-10}
Area 12, Cafeteria	11/09/92	2.0×10^{-09}	4.4×10^{-10}
Area 12, Cafeteria	11/16/92	3.7×10^{-09}	4.2×10^{-10}
Area 12, Cafeteria	11/23/92	3.0×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	11/30/92	3.4×10^{-09}	4.0×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 12, Cafeteria	12/08/92	3.2×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	12/15/92	2.3×10^{-09}	3.9×10^{-10}
Area 12, Cafeteria	12/22/92	2.4×10^{-09}	3.9×10^{-10}
Area 12, Captain Jack Spring	01/15/92	9.0×10^{-09}	5.8×10^{-10}
Area 12, Captain Jack Spring	02/27/92	6.9×10^{-09}	5.3×10^{-10}
Area 12, Captain Jack Spring	03/18/92	5.8×10^{-09}	5.6×10^{-10}
Area 12, Captain Jack Spring	04/23/92	2.1×10^{-09}	1.0×10^{-09}
Area 12, Captain Jack Spring	05/21/92	9.0×10^{-09}	5.6×10^{-10}
Area 12, Captain Jack Spring	06/11/92	7.6×10^{-09}	5.5×10^{-10}
Area 12, Captain Jack Spring	07/15/92	6.1×10^{-09}	4.6×10^{-10}
Area 12, Captain Jack Spring	08/12/92	7.9×10^{-09}	4.5×10^{-10}
Area 12, Captain Jack Spring	09/09/92	7.5×10^{-09}	4.5×10^{-10}
Area 12, Captain Jack Spring	10/21/92	6.3×10^{-09}	4.5×10^{-10}
Area 12, Captain Jack Spring	11/24/92	6.1×10^{-09}	4.4×10^{-10}
Area 12, E Tunnel Effluent	01/15/92	7.6×10^{-08}	3.2×10^{-09}
Area 12, E Tunnel Effluent	02/12/92	4.7×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Effluent	03/11/92	9.3×10^{-08}	1.3×10^{-08}
Area 12, E Tunnel Effluent	04/09/92	7.7×10^{-08}	1.6×10^{-08}
Area 12, E Tunnel Effluent	05/12/92	5.0×10^{-08}	1.7×10^{-08}
Area 12, E Tunnel Effluent	06/09/92	6.4×10^{-08}	1.4×10^{-08}
Area 12, E Tunnel Effluent	07/21/92	4.1×10^{-08}	1.0×10^{-08}
Area 12, E Tunnel Effluent	08/27/92	5.5×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Effluent	09/03/92	4.9×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Effluent	10/20/92	6.4×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Effluent	11/18/92	7.8×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Effluent	12/02/92	6.6×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Pond No. 1	07/21/92	5.1×10^{-08}	1.1×10^{-08}
Area 12, E Tunnel Pond No. 1	08/18/92	7.9×10^{-09}	1.9×10^{-08}
Area 12, E Tunnel Pond No. 1	09/03/92	1.5×10^{-09}	1.0×10^{-08}
Area 12, E Tunnel Pond No. 1	10/20/92	5.9×10^{-08}	1.2×10^{-08}
Area 12, E Tunnel Pond No. 1	11/18/92	7.8×10^{-08}	1.2×10^{-08}
Area 12, Gold Meadows Spring	04/08/92	7.9×10^{-09}	5.8×10^{-10}
Area 12, Gold Meadows Spring	05/21/92	1.2×10^{-08}	6.4×10^{-10}
Area 12, Gold Meadows Spring	06/03/92	9.7×10^{-09}	5.4×10^{-10}
Area 12, Gold Meadows Spring	08/19/92	2.8×10^{-08}	6.4×10^{-10}
Area 12, Gold Meadows Spring	09/02/92	2.5×10^{-08}	6.2×10^{-10}
Area 12, N Tunnel Effluent	01/15/92	5.9×10^{-09}	2.3×10^{-09}
Area 12, N Tunnel Effluent	02/12/92	-2.1×10^{-09}	1.1×10^{-08}
Area 12, N Tunnel Effluent	03/11/92	3.2×10^{-09}	1.4×10^{-08}
Area 12, N Tunnel Effluent	04/09/92	1.1×10^{-08}	1.5×10^{-08}
Area 12, N Tunnel Effluent	05/12/92	-5.3×10^{-09}	1.5×10^{-08}
Area 12, N Tunnel Effluent	06/16/92	1.4×10^{-08}	1.5×10^{-08}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, N Tunnel Effluent	07/21/92	4.3×10^{-09}	9.5×10^{-09}
Area 12, N Tunnel Effluent	08/18/92	2.8×10^{-09}	1.4×10^{-08}
Area 12, N Tunnel Effluent	09/03/92	2.0×10^{-08}	1.0×10^{-08}
Area 12, N Tunnel Effluent	10/20/92	6.0×10^{-09}	1.1×10^{-08}
Area 12, N Tunnel Effluent	11/18/92	8.4×10^{-09}	1.1×10^{-08}
Area 12, N Tunnel Effluent	12/02/92	9.5×10^{-09}	1.0×10^{-08}
Area 12, N Tunnel Pond No. 1	01/15/92	3.2×10^{-09}	2.3×10^{-09}
Area 12, N Tunnel Pond No. 1	04/09/92	1.2×10^{-08}	1.5×10^{-08}
Area 12, N Tunnel Pond No. 1	05/12/92	8.6×10^{-09}	1.6×10^{-08}
Area 12, N Tunnel Pond No. 1	06/16/92	-3.7×10^{-10}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 2	02/12/92	8.4×10^{-08}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 2	03/11/92	7.5×10^{-09}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	04/09/92	1.8×10^{-08}	1.5×10^{-08}
Area 12, N Tunnel Pond No. 2	05/12/92	7.5×10^{-09}	1.6×10^{-08}
Area 12, N Tunnel Pond No. 2	06/16/92	1.3×10^{-08}	1.5×10^{-08}
Area 12, N Tunnel Pond No. 2	07/21/92	1.0×10^{-08}	9.8×10^{-09}
Area 12, N Tunnel Pond No. 2	08/18/92	-5.1×10^{-09}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 2	09/03/92	1.5×10^{-08}	1.1×10^{-08}
Area 12, N Tunnel Pond No. 2	10/20/92	2.0×10^{-09}	9.9×10^{-09}
Area 12, N Tunnel Pond No. 2	11/18/92	1.2×10^{-08}	1.1×10^{-08}
Area 12, N Tunnel Pond No. 2	12/02/92	-1.8×10^{-08}	1.0×10^{-08}
Area 12, N Tunnel Pond No. 3	02/12/92	1.1×10^{-07}	1.4×10^{-08}
Area 12, N Tunnel Pond No. 3	03/11/92	2.9×10^{-08}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 3	04/09/92	-3.1×10^{-09}	1.5×10^{-08}
Area 12, N Tunnel Pond No. 3	05/12/92	-3.7×10^{-09}	1.5×10^{-08}
Area 12, N Tunnel Pond No. 3	06/16/92	1.4×10^{-09}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 3	07/21/92	1.3×10^{-08}	9.6×10^{-09}
Area 12, N Tunnel Pond No. 3	08/18/92	2.8×10^{-08}	1.6×10^{-08}
Area 12, N Tunnel Pond No. 3	09/03/92	1.9×10^{-08}	1.0×10^{-08}
Area 12, N Tunnel Pond No. 3	10/20/92	2.1×10^{-08}	9.9×10^{-09}
Area 12, N Tunnel Pond No. 3	11/18/92	5.1×10^{-07}	1.7×10^{-08}
Area 12, Sewage Pond	01/08/92	1.9×10^{-08}	6.9×10^{-10}
Area 12, Sewage Pond	04/22/92	1.0×10^{-08}	6.1×10^{-10}
Area 12, Sewage Pond	07/21/92	2.7×10^{-08}	7.0×10^{-10}
Area 12, Sewage Pond	10/27/92	2.7×10^{-08}	9.4×10^{-10}
Area 12, T Tunnel Effluent	01/15/92	1.3×10^{-06}	8.9×10^{-09}
Area 12, T Tunnel Effluent	02/12/92	9.3×10^{-07}	2.2×10^{-08}
Area 12, T Tunnel Effluent	03/11/92	1.0×10^{-06}	2.1×10^{-08}
Area 12, T Tunnel Effluent	04/09/92	6.9×10^{-07}	2.2×10^{-08}
Area 12, T Tunnel Effluent	05/14/92	7.1×10^{-07}	2.3×10^{-08}
Area 12, T Tunnel Effluent	06/09/92	7.6×10^{-07}	2.3×10^{-08}
Area 12, T Tunnel Effluent	07/21/92	4.6×10^{-07}	1.5×10^{-08}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, T Tunnel Effluent	08/18/92	2.4×10^{-07}	1.8×10^{-08}
Area 12, T Tunnel Effluent	09/03/92	4.2×10^{-07}	1.5×10^{-08}
Area 12, T Tunnel Effluent	10/20/92	4.9×10^{-07}	1.6×10^{-08}
Area 12, T Tunnel Effluent	11/18/92	4.9×10^{-07}	1.8×10^{-08}
Area 12, T Tunnel Effluent	12/02/92	7.1×10^{-07}	1.8×10^{-08}
Area 12, T Tunnel Pond No. 1	02/12/92	8.6×10^{-07}	1.8×10^{-08}
Area 12, T Tunnel Pond No. 1	03/11/92	8.9×10^{-07}	2.0×10^{-08}
Area 12, T Tunnel Pond No. 1	04/09/92	4.9×10^{-07}	2.1×10^{-08}
Area 12, T Tunnel Pond No. 1	05/14/92	5.6×10^{-07}	2.2×10^{-08}
Area 12, T Tunnel Pond No. 1	06/09/92	4.9×10^{-07}	1.7×10^{-08}
Area 12, T Tunnel Pond No. 2	02/12/92	5.6×10^{-07}	1.6×10^{-08}
Area 12, T Tunnel Pond No. 2	03/11/92	9.3×10^{-07}	2.0×10^{-08}
Area 12, T Tunnel Pond No. 2	04/09/92	4.8×10^{-07}	2.0×10^{-08}
Area 12, T Tunnel Pond No. 2	05/14/92	1.2×10^{-07}	1.7×10^{-08}
Area 12, T Tunnel Pond No. 2	06/09/92	5.1×10^{-07}	1.8×10^{-08}
Area 12, T Tunnel Pond No. 2	07/21/92	5.4×10^{-07}	1.6×10^{-08}
Area 12, T Tunnel Pond No. 2	08/18/92	1.8×10^{-07}	1.8×10^{-08}
Area 12, T Tunnel Pond No. 2	09/03/92	3.3×10^{-07}	1.5×10^{-08}
Area 12, T Tunnel Pond No. 2	10/20/92	6.3×10^{-07}	1.9×10^{-08}
Area 12, T Tunnel Pond No. 2	11/18/92	6.0×10^{-07}	1.8×10^{-08}
Area 12, T Tunnel Pond No. 2	12/02/92	4.3×10^{-07}	1.6×10^{-08}
Area 12, T Tunnel Pond No. 3	07/21/92	4.8×10^{-07}	1.5×10^{-08}
Area 12, T Tunnel Pond No. 3	08/18/92	8.4×10^{-08}	1.4×10^{-08}
Area 12, T Tunnel Pond No. 3	09/03/92	1.1×10^{-06}	2.3×10^{-08}
Area 12, T Tunnel Pond No. 3	10/20/92	5.8×10^{-07}	1.7×10^{-08}
Area 12, T Tunnel Pond No. 3	11/18/92	-4.3×10^{-09}	1.1×10^{-08}
Area 12, T Tunnel Pond No. 3	12/02/92	5.3×10^{-07}	1.6×10^{-08}
Area 12, White Rock Spring	01/15/92	1.0×10^{-08}	6.0×10^{-10}
Area 12, White Rock Spring	02/12/92	8.5×10^{-09}	8.4×10^{-10}
Area 12, White Rock Spring	03/05/92	1.6×10^{-08}	7.1×10^{-10}
Area 12, White Rock Spring	04/08/92	1.4×10^{-08}	7.1×10^{-10}
Area 12, White Rock Spring	05/07/92	1.5×10^{-08}	8.3×10^{-10}
Area 12, White Rock Spring	06/04/92	1.5×10^{-08}	6.5×10^{-10}
Area 12, White Rock Spring	07/13/92	1.0×10^{-08}	4.7×10^{-10}
Area 12, White Rock Spring	08/11/92	2.0×10^{-08}	6.5×10^{-10}
Area 12, White Rock Spring	09/09/92	1.0×10^{-08}	5.0×10^{-10}
Area 12, White Rock Spring	10/05/92	9.5×10^{-09}	4.7×10^{-10}
Area 12, White Rock Spring	11/17/92	9.2×10^{-09}	4.9×10^{-10}
Area 12, White Rock Spring	12/01/92	1.2×10^{-08}	5.1×10^{-10}
Area 16, Tippipah Spring	01/08/92	6.7×10^{-09}	5.5×10^{-10}
Area 16, Tippipah Spring	02/04/92	6.1×10^{-09}	5.6×10^{-10}
Area 16, Tippipah Spring	03/04/92	5.9×10^{-09}	5.3×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 16, Tippipah Spring	04/22/92	4.3×10^{-09}	5.1×10^{-10}
Area 16, Tippipah Spring	05/18/92	4.0×10^{-09}	5.5×10^{-10}
Area 16, Tippipah Spring	06/04/92	4.2×10^{-09}	4.9×10^{-10}
Area 16, Tippipah Spring	07/15/92	4.3×10^{-09}	4.4×10^{-10}
Area 16, Tippipah Spring	08/18/92	4.2×10^{-09}	4.0×10^{-10}
Area 16, Tippipah Spring	09/30/92	3.6×10^{-09}	4.1×10^{-10}
Area 16, Tippipah Spring	10/14/92	4.3×10^{-09}	4.1×10^{-10}
Area 16, Tippipah Spring	11/18/92	4.3×10^{-09}	4.3×10^{-10}
Area 16, Tippipah Spring	12/03/92	4.2×10^{-09}	4.1×10^{-10}
Area 16, Well UE-16d	01/27/92	9.8×10^{-09}	1.0×10^{-09}
Area 16, Well UE-16d	02/24/92	6.9×10^{-09}	5.5×10^{-10}
Area 16, Well UE-16d	04/06/92	6.5×10^{-09}	6.3×10^{-10}
Area 16, Well UE-16d	05/12/92	8.9×10^{-09}	5.8×10^{-10}
Area 16, Well UE-16d	06/02/92	6.8×10^{-09}	5.6×10^{-10}
Area 16, Well UE-16d	07/13/92	8.9×10^{-09}	5.3×10^{-10}
Area 16, Well UE-16d	08/04/92	7.0×10^{-09}	4.4×10^{-10}
Area 16, Well UE-16d	09/01/92	7.2×10^{-09}	4.6×10^{-10}
Area 16, Well UE-16d	10/05/92	6.5×10^{-09}	4.3×10^{-10}
Area 16, Well UE-16d	11/09/92	6.5×10^{-09}	4.6×10^{-10}
Area 16, Well UE-16d	12/02/92	7.0×10^{-09}	4.5×10^{-10}
Area 18, Camp 17 Reservoir	01/08/92	4.9×10^{-09}	5.1×10^{-10}
Area 18, Camp 17 Reservoir	02/04/92	3.4×10^{-09}	5.2×10^{-10}
Area 18, Camp 17 Reservoir	03/04/92	3.7×10^{-09}	5.0×10^{-10}
Area 18, Camp 17 Reservoir	04/08/92	2.8×10^{-09}	5.2×10^{-10}
Area 18, Camp 17 Reservoir	05/18/92	3.9×10^{-09}	5.6×10^{-10}
Area 18, Camp 17 Reservoir	06/03/92	3.0×10^{-09}	4.8×10^{-10}
Area 18, Camp 17 Reservoir	07/07/92	2.3×10^{-09}	3.8×10^{-10}
Area 18, Camp 17 Reservoir	08/12/92	4.5×10^{-09}	4.0×10^{-10}
Area 18, Camp 17 Reservoir	09/10/92	3.1×10^{-09}	3.9×10^{-10}
Area 18, Camp 17 Reservoir	10/07/92	3.6×10^{-09}	4.1×10^{-10}
Area 18, Camp 17 Reservoir	11/04/92	3.1×10^{-09}	4.2×10^{-10}
Area 18, Well 8	01/27/92	4.2×10^{-09}	5.4×10^{-10}
Area 18, Well 8	02/24/92	3.5×10^{-09}	4.9×10^{-10}
Area 18, Well 8	04/06/92	3.9×10^{-09}	5.6×10^{-10}
Area 18, Well 8	05/12/92	3.7×10^{-09}	4.9×10^{-10}
Area 18, Well 8	06/02/92	4.3×10^{-09}	4.9×10^{-10}
Area 18, Well 8	07/13/92	4.5×10^{-09}	4.8×10^{-10}
Area 18, Well 8	08/04/92	2.9×10^{-09}	4.1×10^{-10}
Area 18, Well 8	09/01/92	3.4×10^{-09}	4.1×10^{-10}
Area 18, Well 8	10/05/92	1.6×10^{-09}	3.7×10^{-10}
Area 18, Well 8	11/09/92	3.7×10^{-09}	4.2×10^{-10}
Area 18, Well 8	12/02/92	3.4×10^{-09}	4.0×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 18, Well 8 Reservoir	01/14/92	8.4×10^{-09}	5.5×10^{-10}
Area 18, Well 8 Reservoir	02/04/92	7.0×10^{-09}	5.5×10^{-10}
Area 18, Well 8 Reservoir	03/04/92	4.5×10^{-09}	4.9×10^{-10}
Area 18, Well 8 Reservoir	04/08/92	4.7×10^{-09}	5.4×10^{-10}
Area 18, Well 8 Reservoir	05/18/92	6.6×10^{-09}	5.9×10^{-10}
Area 18, Well 8 Reservoir	06/03/92	3.2×10^{-09}	4.7×10^{-10}
Area 18, Well 8 Reservoir	07/07/92	4.0×10^{-09}	4.3×10^{-10}
Area 18, Well 8 Reservoir	09/10/92	4.3×10^{-09}	4.1×10^{-10}
Area 18, Well 8 Reservoir	10/07/92	2.2×10^{-09}	3.8×10^{-10}
Area 19, Well UE-19c	01/27/92	3.5×10^{-09}	5.2×10^{-10}
Area 19, Well UE-19c	02/24/92	1.2×10^{-09}	4.6×10^{-10}
Area 19, Well UE-19c	04/06/92	7.8×10^{-09}	5.6×10^{-10}
Area 19, Well UE-19c	05/12/92	1.9×10^{-09}	4.6×10^{-10}
Area 19, Well UE-19c	06/02/92	2.2×10^{-09}	4.6×10^{-10}
Area 19, Well UE-19c	07/13/92	3.3×10^{-09}	3.9×10^{-10}
Area 19, Well UE-19c	08/04/92	1.2×10^{-09}	3.6×10^{-10}
Area 19, Well UE-19c	09/01/92	2.0×10^{-09}	3.9×10^{-10}
Area 19, Well UE-19c	09/10/92	3.1×10^{-09}	4.0×10^{-10}
Area 19, Well UE-19c	10/05/92	1.2×10^{-09}	3.8×10^{-10}
Area 19, Well UE-19c	11/24/92	1.9×10^{-09}	3.8×10^{-10}
Area 19, Well UE-19c	12/02/92	3.8×10^{-09}	4.5×10^{-10}
Area 19, Well UE-19c Reservoir	01/14/92	1.3×10^{-09}	4.6×10^{-10}
Area 19, Well UE-19c Reservoir	02/04/92	1.7×10^{-09}	5.1×10^{-10}
Area 19, Well UE-19c Reservoir	03/05/92	1.6×10^{-09}	4.4×10^{-10}
Area 19, Well UE-19c Reservoir	04/07/92	1.6×10^{-09}	4.5×10^{-10}
Area 19, Well UE-19c Reservoir	05/18/92	2.8×10^{-09}	5.5×10^{-10}
Area 19, Well UE-19c Reservoir	06/02/92	2.3×10^{-09}	4.6×10^{-10}
Area 19, Well UE-19c Reservoir	07/09/92	2.8×10^{-09}	4.3×10^{-10}
Area 19, Well UE-19c Reservoir	08/12/92	3.8×10^{-09}	4.1×10^{-10}
Area 19, Well UE-19c Reservoir	10/07/92	4.4×10^{-09}	4.1×10^{-10}
Area 19, Well UE-19c Reservoir	11/04/92	3.1×10^{-09}	4.2×10^{-10}
Area 20, Water Well	04/06/92	4.3×10^{-09}	5.6×10^{-10}
Area 20, Water Well	05/12/92	7.1×10^{-09}	5.5×10^{-10}
Area 20, Water Well	06/02/92	5.3×10^{-09}	5.2×10^{-10}
Area 20, Water Well	07/13/92	6.1×10^{-09}	5.0×10^{-10}
Area 20, Water Well	08/04/92	2.0×10^{-09}	3.8×10^{-10}
Area 20, Water Well	09/01/92	4.1×10^{-09}	4.3×10^{-10}
Area 20, Water Well	10/05/92	4.6×10^{-09}	4.0×10^{-10}
Area 20, Water Well	11/24/92	7.9×10^{-09}	4.6×10^{-10}
Area 20, Water Well	12/02/92	8.9×10^{-09}	4.9×10^{-10}
Area 20, Well 20	01/15/92	1.2×10^{-08}	6.1×10^{-10}
Area 20, Well 20	02/04/92	1.3×10^{-09}	4.6×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 20, Well 20	03/05/92	1.9×10^{-09}	4.9×10^{-10}
Area 20, Well 20	04/07/92	2.2×10^{-09}	4.9×10^{-10}
Area 20, Well 20	05/05/92	3.6×10^{-09}	5.0×10^{-10}
Area 20, Well 20	06/02/92	2.3×10^{-09}	4.7×10^{-10}
Area 20, Well 20	07/09/92	2.2×10^{-09}	4.1×10^{-10}
Area 20, Well 20	08/12/92	2.9×10^{-09}	3.8×10^{-10}
Area 20, Well 20	09/10/92	2.3×10^{-09}	3.8×10^{-10}
Area 20, Well 20	10/07/92	3.4×10^{-09}	3.9×10^{-10}
Area 20, Well 20	11/04/92	2.1×10^{-09}	4.0×10^{-10}
Area 23, Army Well No. 1	01/22/92	7.9×10^{-09}	6.5×10^{-10}
Area 23, Army Well No. 1	02/24/92	7.4×10^{-09}	5.5×10^{-10}
Area 23, Army Well No. 1	04/06/92	7.0×10^{-09}	6.2×10^{-10}
Area 23, Army Well No. 1	05/12/92	6.1×10^{-09}	5.4×10^{-10}
Area 23, Army Well No. 1	06/02/92	6.3×10^{-09}	5.5×10^{-10}
Area 23, Army Well No. 1	07/13/92	7.1×10^{-09}	5.0×10^{-10}
Area 23, Army Well No. 1	08/04/92	6.1×10^{-09}	4.5×10^{-10}
Area 23, Army Well No. 1	09/01/92	6.2×10^{-09}	4.3×10^{-10}
Area 23, Army Well No. 1	10/05/92	5.3×10^{-09}	4.3×10^{-10}
Area 23, Army Well No. 1	11/09/92	6.2×10^{-09}	4.8×10^{-10}
Area 23, Army Well No. 1	12/02/92	5.9×10^{-09}	4.3×10^{-10}
Area 23, H&S Sump	10/22/92	4.9×10^{-09}	1.8×10^{-09}
Area 23, Mercury	01/21/92	3.4×10^{-09}	5.3×10^{-10}
Area 23, Mercury	01/27/92	3.6×10^{-09}	5.4×10^{-10}
Area 23, Mercury	02/03/92	2.2×10^{-09}	5.3×10^{-10}
Area 23, Mercury	02/10/92	2.8×10^{-09}	5.4×10^{-10}
Area 23, Mercury	02/18/92	3.8×10^{-09}	5.6×10^{-10}
Area 23, Mercury	02/24/92	3.4×10^{-09}	5.4×10^{-10}
Area 23, Mercury	03/02/92	3.3×10^{-09}	5.3×10^{-10}
Area 23, Mercury	03/09/92	2.3×10^{-09}	5.2×10^{-10}
Area 23, Mercury	03/16/92	6.9×10^{-09}	5.5×10^{-10}
Area 23, Mercury	03/24/92	7.5×10^{-09}	9.5×10^{-10}
Area 23, Mercury	03/30/92	4.8×10^{-09}	1.6×10^{-09}
Area 23, Mercury	04/07/92	2.8×10^{-09}	5.8×10^{-10}
Area 23, Mercury	04/14/92	6.1×10^{-09}	5.7×10^{-10}
Area 23, Mercury	04/20/92	5.0×10^{-09}	5.3×10^{-10}
Area 23, Mercury	04/28/92	4.3×10^{-09}	5.7×10^{-10}
Area 23, Mercury	05/05/92	4.6×10^{-09}	5.7×10^{-10}
Area 23, Mercury	05/11/92	4.9×10^{-09}	5.4×10^{-10}
Area 23, Mercury	05/18/92	6.4×10^{-09}	6.3×10^{-10}
Area 23, Mercury	05/26/92	3.9×10^{-09}	6.0×10^{-10}
Area 23, Mercury	06/01/92	4.5×10^{-09}	5.3×10^{-10}
Area 23, Mercury	06/09/92	3.9×10^{-09}	5.3×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Mercury	06/15/92	3.8×10^{-09}	5.3×10^{-10}
Area 23, Mercury	06/22/92	5.8×10^{-09}	5.4×10^{-10}
Area 23, Mercury	06/29/92	4.3×10^{-09}	4.1×10^{-10}
Area 23, Mercury	07/06/92	2.0×10^{-09}	3.7×10^{-10}
Area 23, Mercury	07/13/92	3.7×10^{-09}	4.0×10^{-10}
Area 23, Mercury	07/20/92	4.0×10^{-09}	4.1×10^{-10}
Area 23, Mercury	07/27/92	4.2×10^{-09}	4.3×10^{-10}
Area 23, Mercury	08/03/92	4.6×10^{-09}	4.4×10^{-10}
Area 23, Mercury	08/11/92	7.2×10^{-09}	4.3×10^{-10}
Area 23, Mercury	08/17/92	5.8×10^{-09}	4.2×10^{-10}
Area 23, Mercury	08/24/92	4.9×10^{-09}	4.1×10^{-10}
Area 23, Mercury	08/31/92	5.7×10^{-09}	4.4×10^{-10}
Area 23, Mercury	09/08/92	4.3×10^{-09}	4.2×10^{-10}
Area 23, Mercury	09/14/92	2.5×10^{-09}	3.8×10^{-10}
Area 23, Mercury	09/21/92	4.3×10^{-09}	4.1×10^{-10}
Area 23, Mercury	09/28/92	5.7×10^{-09}	4.2×10^{-10}
Area 23, Mercury	10/05/92	4.6×10^{-09}	4.1×10^{-10}
Area 23, Mercury	10/12/92	4.9×10^{-09}	4.4×10^{-10}
Area 23, Mercury	10/19/92	3.7×10^{-09}	4.0×10^{-10}
Area 23, Mercury	10/26/92	2.2×10^{-09}	4.1×10^{-10}
Area 23, Mercury	11/02/92	3.8×10^{-09}	4.0×10^{-10}
Area 23, Mercury	11/09/92	2.8×10^{-09}	4.2×10^{-10}
Area 23, Mercury	11/16/92	2.6×10^{-09}	4.1×10^{-10}
Area 23, Mercury	11/23/92	4.3×10^{-09}	4.1×10^{-10}
Area 23, Mercury	11/30/92	1.8×10^{-09}	3.7×10^{-10}
Area 23, Mercury	12/07/92	2.9×10^{-09}	3.9×10^{-10}
Area 23, Mercury	12/15/92	3.5×10^{-09}	4.0×10^{-10}
Area 23, Mercury	12/22/92	4.0×10^{-09}	4.1×10^{-10}
Area 23, Mercury	12/28/92	2.6×10^{-09}	3.9×10^{-10}
Area 23, Sewage	01/16/92	1.3×10^{-08}	6.5×10^{-10}
Area 23, Sewage	04/21/92	8.4×10^{-09}	6.1×10^{-10}
Area 23, Sewage	07/14/92	1.7×10^{-08}	5.9×10^{-10}
Area 23, Sewage	10/14/92	1.5×10^{-08}	5.8×10^{-10}
Area 23, Swimming Pool	01/16/92	3.5×10^{-09}	5.2×10^{-10}
Area 23, Swimming Pool	02/27/92	3.2×10^{-09}	4.2×10^{-10}
Area 23, Swimming Pool	03/18/92	3.6×10^{-09}	5.7×10^{-10}
Area 23, Swimming Pool	04/21/92	1.5×10^{-09}	5.1×10^{-10}
Area 23, Swimming Pool	05/12/92	4.3×10^{-09}	5.5×10^{-10}
Area 23, Swimming Pool	06/04/92	4.0×10^{-09}	5.4×10^{-10}
Area 23, Swimming Pool	07/09/92	3.1×10^{-09}	4.3×10^{-10}
Area 23, Swimming Pool	08/12/92	4.6×10^{-09}	4.1×10^{-10}
Area 23, Swimming Pool	09/02/92	3.7×10^{-09}	4.0×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Swimming Pool	10/06/92	8.8×10^{-09}	4.7×10^{-10}
Area 23, Swimming Pool	11/19/92	3.0×10^{-09}	3.9×10^{-10}
Area 23, Swimming Pool	12/03/92	3.7×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	01/21/92	6.1×10^{-09}	5.8×10^{-10}
Area 25, Building 4221	01/27/92	4.5×10^{-09}	5.4×10^{-10}
Area 25, Building 4221	02/03/92	4.6×10^{-09}	5.4×10^{-10}
Area 25, Building 4221	02/10/92	4.3×10^{-09}	5.3×10^{-10}
Area 25, Building 4221	02/18/92	4.9×10^{-09}	5.4×10^{-10}
Area 25, Building 4221	02/24/92	4.1×10^{-09}	5.1×10^{-10}
Area 25, Building 4221	03/02/92	4.5×10^{-09}	5.3×10^{-10}
Area 25, Building 4221	03/09/92	4.9×10^{-09}	5.2×10^{-10}
Area 25, Building 4221	03/16/92	4.8×10^{-09}	5.1×10^{-10}
Area 25, Building 4221	03/24/92	5.1×10^{-09}	5.9×10^{-10}
Area 25, Building 4221	03/30/92	4.8×10^{-09}	5.6×10^{-10}
Area 25, Building 4221	04/07/92	4.8×10^{-09}	6.0×10^{-10}
Area 25, Building 4221	04/14/92	5.6×10^{-09}	5.4×10^{-10}
Area 25, Building 4221	04/20/92	6.0×10^{-09}	5.4×10^{-10}
Area 25, Building 4221	04/28/92	5.6×10^{-09}	5.5×10^{-10}
Area 25, Building 4221	05/05/92	5.9×10^{-09}	5.7×10^{-10}
Area 25, Building 4221	05/11/92	5.1×10^{-09}	5.5×10^{-10}
Area 25, Building 4221	05/18/92	4.2×10^{-09}	5.8×10^{-10}
Area 25, Building 4221	05/26/92	3.8×10^{-09}	5.6×10^{-10}
Area 25, Building 4221	06/01/92	5.8×10^{-09}	6.0×10^{-10}
Area 25, Building 4221	06/09/92	4.1×10^{-09}	5.3×10^{-10}
Area 25, Building 4221	06/15/92	4.5×10^{-09}	5.3×10^{-10}
Area 25, Building 4221	06/22/92	5.0×10^{-09}	5.3×10^{-10}
Area 25, Building 4221	06/29/92	5.0×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	07/06/92	5.1×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	07/13/92	8.4×10^{-09}	4.7×10^{-10}
Area 25, Building 4221	07/20/92	4.2×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	07/27/92	1.8×10^{-09}	3.9×10^{-10}
Area 25, Building 4221	08/03/92	4.1×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	08/11/92	3.6×10^{-09}	4.0×10^{-10}
Area 25, Building 4221	08/17/92	5.0×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	08/24/92	3.9×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	08/31/92	4.5×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	09/08/92	4.2×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	09/14/92	4.1×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	09/21/92	4.5×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	09/28/92	4.3×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	10/05/92	2.8×10^{-09}	3.9×10^{-10}
Area 25, Building 4221	10/12/92	4.6×10^{-09}	4.5×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, Building 4221	10/19/92	3.1×10^{-09}	3.8×10^{-10}
Area 25, Building 4221	10/26/92	3.4×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	11/02/92	4.7×10^{-09}	4.3×10^{-10}
Area 25, Building 4221	11/09/92	3.9×10^{-09}	4.2×10^{-10}
Area 25, Building 4221	11/16/92	3.7×10^{-09}	4.4×10^{-10}
Area 25, Building 4221	11/23/92	4.2×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	11/30/92	3.6×10^{-09}	4.0×10^{-10}
Area 25, Building 4221	12/07/92	4.2×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	12/15/92	4.4×10^{-09}	4.0×10^{-10}
Area 25, Building 4221	12/22/92	4.0×10^{-09}	4.1×10^{-10}
Area 25, Building 4221	12/28/92	3.1×10^{-09}	4.0×10^{-10}
Area 25, Well J-11 Reservoir	01/08/92	6.2×10^{-09}	5.2×10^{-10}
Area 25, Well J-11 Reservoir	02/11/92	5.2×10^{-09}	5.3×10^{-10}
Area 25, Well J-11 Reservoir	03/10/92	5.5×10^{-09}	5.8×10^{-10}
Area 25, Well J-11 Reservoir	05/06/92	7.0×10^{-09}	6.1×10^{-10}
Area 25, Well J-11 Reservoir	06/04/92	5.8×10^{-09}	5.3×10^{-10}
Area 25, Well J-11 Reservoir	07/08/92	4.7×10^{-09}	4.2×10^{-10}
Area 25, Well J-11 Reservoir	08/12/92	6.8×10^{-09}	4.4×10^{-10}
Area 25, Well J-11 Reservoir	09/02/92	4.3×10^{-09}	4.3×10^{-10}
Area 25, Well J-11 Reservoir	10/06/92	4.0×10^{-09}	4.0×10^{-10}
Area 25, Well J-11 Reservoir	11/18/92	6.0×10^{-09}	4.7×10^{-10}
Area 25, Well J-11 Reservoir	12/01/92	6.6×10^{-09}	4.5×10^{-10}
Area 25, Well J-12	05/12/92	5.0×10^{-09}	5.6×10^{-10}
Area 25, Well J-12	06/02/92	4.7×10^{-09}	5.2×10^{-10}
Area 25, Well J-12	07/13/92	5.0×10^{-09}	4.8×10^{-10}
Area 25, Well J-12	08/04/92	4.0×10^{-09}	4.2×10^{-10}
Area 25, Well J-12	09/01/92	4.5×10^{-09}	4.2×10^{-10}
Area 25, Well J-12	10/05/92	4.6×10^{-09}	4.1×10^{-10}
Area 25, Well J-12	11/09/92	4.1×10^{-09}	4.4×10^{-10}
Area 25, Well J-12	12/02/92	4.9×10^{-09}	4.1×10^{-10}
Area 25, Well J-12 Reservoir	01/08/92	8.4×10^{-09}	5.7×10^{-10}
Area 25, Well J-12 Reservoir	02/11/92	7.9×10^{-09}	5.9×10^{-10}
Area 25, Well J-12 Reservoir	03/10/92	6.4×10^{-09}	5.7×10^{-10}
Area 25, Well J-12 Reservoir	04/08/92	1.1×10^{-08}	6.6×10^{-10}
Area 25, Well J-12 Reservoir	05/06/92	8.0×10^{-09}	6.5×10^{-10}
Area 25, Well J-12 Reservoir	06/04/92	7.7×10^{-09}	5.5×10^{-10}
Area 25, Well J-12 Reservoir	07/08/92	6.9×10^{-09}	4.4×10^{-10}
Area 25, Well J-12 Reservoir	08/12/92	7.2×10^{-09}	4.6×10^{-10}
Area 25, Well J-12 Reservoir	09/02/92	7.5×10^{-09}	4.5×10^{-10}
Area 25, Well J-12 Reservoir	10/06/92	5.6×10^{-09}	4.3×10^{-10}
Area 25, Well J-12 Reservoir	11/18/92	5.4×10^{-09}	4.4×10^{-10}
Area 25, Well J-12 Reservoir	12/01/92	7.2×10^{-09}	4.6×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, Well J-13	01/22/92	4.8×10^{-09}	5.7×10^{-10}
Area 25, Well J-13	02/24/92	4.4×10^{-09}	5.1×10^{-10}
Area 25, Well J-13	04/06/92	4.5×10^{-09}	5.7×10^{-10}
Area 25, Well J-13	05/12/92	3.5×10^{-09}	4.5×10^{-10}
Area 25, Well J-13	06/02/92	4.7×10^{-09}	5.1×10^{-10}
Area 25, Well J-13	07/13/92	5.9×10^{-09}	5.0×10^{-10}
Area 25, Well J-13	08/04/92	3.1×10^{-09}	4.2×10^{-10}
Area 25, Well J-13	09/01/92	4.6×10^{-09}	4.2×10^{-10}
Area 25, Well J-13	10/05/92	3.8×10^{-09}	4.0×10^{-10}
Area 25, Well J-13	11/09/92	4.0×10^{-09}	4.1×10^{-10}
Area 25, Well J-13	12/02/92	4.9×10^{-09}	4.2×10^{-10}
Area 27, Cafeteria	01/21/92	1.2×10^{-08}	6.9×10^{-10}
Area 27, Cafeteria	01/27/92	1.0×10^{-08}	6.1×10^{-10}
Area 27, Cafeteria	02/03/92	1.1×10^{-08}	6.2×10^{-10}
Area 27, Cafeteria	02/10/92	9.1×10^{-09}	6.0×10^{-10}
Area 27, Cafeteria	02/18/92	1.1×10^{-08}	6.7×10^{-10}
Area 27, Cafeteria	02/24/92	9.5×10^{-09}	6.2×10^{-10}
Area 27, Cafeteria	03/02/92	1.2×10^{-08}	6.5×10^{-10}
Area 27, Cafeteria	03/09/92	9.2×10^{-09}	6.3×10^{-10}
Area 27, Cafeteria	03/16/92	9.9×10^{-09}	6.0×10^{-10}
Area 27, Cafeteria	03/24/92	1.0×10^{-08}	6.6×10^{-10}
Area 27, Cafeteria	03/30/92	1.1×10^{-08}	6.5×10^{-10}
Area 27, Cafeteria	04/07/92	6.2×10^{-09}	6.2×10^{-10}
Area 27, Cafeteria	04/14/92	9.3×10^{-09}	6.1×10^{-10}
Area 27, Cafeteria	04/20/92	8.9×10^{-09}	6.5×10^{-10}
Area 27, Cafeteria	04/28/92	4.9×10^{-09}	5.7×10^{-10}
Area 27, Cafeteria	05/05/92	6.6×10^{-09}	6.2×10^{-10}
Area 27, Cafeteria	05/11/92	6.9×10^{-09}	5.6×10^{-10}
Area 27, Cafeteria	05/18/92	6.7×10^{-09}	6.3×10^{-10}
Area 27, Cafeteria	05/26/92	5.9×10^{-09}	6.0×10^{-10}
Area 27, Cafeteria	06/01/92	6.0×10^{-09}	5.4×10^{-10}
Area 27, Cafeteria	06/09/92	5.0×10^{-09}	5.4×10^{-10}
Area 27, Cafeteria	06/15/92	4.2×10^{-09}	5.3×10^{-10}
Area 27, Cafeteria	06/22/92	5.5×10^{-09}	5.5×10^{-10}
Area 27, Cafeteria	06/29/92	5.2×10^{-09}	4.2×10^{-10}
Area 27, Cafeteria	07/06/92	4.6×10^{-09}	4.2×10^{-10}
Area 27, Cafeteria	07/13/92	4.3×10^{-09}	4.2×10^{-10}
Area 27, Cafeteria	07/20/92	3.6×10^{-09}	4.3×10^{-10}
Area 27, Cafeteria	07/27/92	4.0×10^{-09}	4.3×10^{-10}
Area 27, Cafeteria	08/03/92	5.4×10^{-09}	4.5×10^{-10}
Area 27, Cafeteria	08/11/92	4.7×10^{-09}	4.0×10^{-10}
Area 27, Cafeteria	08/17/92	5.4×10^{-09}	4.2×10^{-10}

Mean MDC: 3.6×10^{-09} μCi/mL

Standard Deviation of Mean MDC: 7.8×10^{-09} μCi/mL

Attachment C.5 (Gross Beta in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 27, Cafeteria	08/24/92	4.7×10^{-09}	4.2×10^{-10}
Area 27, Cafeteria	08/31/92	5.6×10^{-09}	4.3×10^{-10}
Area 27, Cafeteria	09/08/92	5.3×10^{-09}	4.3×10^{-10}
Area 27, Cafeteria	09/14/92	4.6×10^{-09}	4.1×10^{-10}
Area 27, Cafeteria	09/21/92	5.9×10^{-09}	4.3×10^{-10}
Area 27, Cafeteria	09/28/92	7.0×10^{-09}	8.6×10^{-10}
Area 27, Cafeteria	10/05/92	7.1×10^{-09}	4.7×10^{-10}
Area 27, Cafeteria	10/12/92	8.4×10^{-09}	4.9×10^{-10}
Area 27, Cafeteria	10/19/92	6.6×10^{-09}	4.6×10^{-10}
Area 29, Topopah Spring	01/14/92	1.1×10^{-08}	5.9×10^{-10}
Area 29, Topopah Spring	02/19/92	7.4×10^{-09}	5.9×10^{-10}
Area 29, Topopah Spring	04/23/92	6.7×10^{-09}	5.3×10^{-10}
Area 29, Topopah Spring	05/21/92	7.4×10^{-09}	5.5×10^{-10}
Area 29, Topopah Spring	06/04/92	9.5×10^{-09}	5.9×10^{-10}

Mean MDC: $3.6 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.8 \times 10^{-09} \mu\text{Ci/mL}$

Attachment C.6 Gamma-Emitting Radionuclides in Water - 1992

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 1, Building 101	01/21/92	8.2×10^{-07}	2.8×10^{-07}	^{214}Pb
Area 1, Building 101	01/27/92	3.5×10^{-07}	1.9×10^{-07}	^{214}Bi
Area 1, Building 101	06/08/92	7.6×10^{-07}	5.6×10^{-07}	^{214}Pb
Area 1, Building 101	06/15/92	7.8×10^{-07}	3.4×10^{-07}	^{214}Pb
Area 1, Building 101	07/13/92	1.4×10^{-07}	6.1×10^{-08}	^{212}Pb
Area 2, Mud Plant	11/05/92	1.1×10^{-07}	4.7×10^{-08}	^{212}Pb
Area 2, Well 2 Reservoir	05/07/92	2.0×10^{-07}	6.7×10^{-08}	^{212}Pb
Area 2, Well 2 Reservoir	06/09/92	9.3×10^{-08}	4.2×10^{-08}	^{212}Pb
Area 3, Well A Reservoir	02/05/92	1.5×10^{-07}	5.7×10^{-08}	^{212}Pb
Area 3, Well A Reservoir	06/03/92	1.1×10^{-07}	5.1×10^{-08}	^{212}Pb
Area 5, Cane Spring	07/16/92	1.3×10^{-07}	5.8×10^{-08}	^{212}Pb
Area 5, Cane Spring	10/21/92	5.7×10^{-08}	2.2×10^{-08}	^{214}Pb
Area 5, Well 5B Reservoir	01/06/92	5.8×10^{-07}	3.2×10^{-07}	^{214}Pb
Area 5, Well 5C	02/24/92	1.1×10^{-06}	4.5×10^{-07}	^{214}Pb
Area 5, Well UE-5c	01/22/92	1.2×10^{-06}	6.1×10^{-07}	^{214}Bi
Area 5, Well UE-5c	01/22/92	9.3×10^{-07}	4.7×10^{-07}	^{214}Pb
Area 5, Well UE-5c Reservoir	08/12/92	1.6×10^{-07}	5.1×10^{-08}	^{212}Pb
Area 5, Well UE-5c Reservoir	09/01/92	2.6×10^{-07}	9.9×10^{-08}	^{214}Pb
Area 6, Bottled Water	04/27/92	1.3×10^{-07}	6.6×10^{-08}	^{212}Pb
Area 6, Bottled Water	06/01/92	1.3×10^{-07}	4.9×10^{-08}	^{212}Pb
Area 6, Bottled Water	07/06/92	1.7×10^{-07}	6.3×10^{-08}	^{212}Pb
Area 6, Bottled Water	08/31/92	1.7×10^{-07}	6.2×10^{-08}	^{212}Pb
Area 6, Bottled Water	09/21/92	1.2×10^{-07}	6.8×10^{-08}	^{212}Pb
Area 6, Bottled Water	11/16/92	1.1×10^{-07}	4.6×10^{-08}	^{212}Pb
Area 6, Building 6-900	08/31/92	1.2×10^{-07}	5.3×10^{-08}	^{212}Pb
Area 6, Cafeteria	01/27/92	1.4×10^{-07}	6.8×10^{-08}	^{212}Pb
Area 6, Cafeteria	01/27/92	4.4×10^{-07}	1.7×10^{-07}	^{214}Bi
Area 6, Cafeteria	05/26/92	1.1×10^{-07}	4.3×10^{-08}	^{212}Pb
Area 6, Cafeteria	06/29/92	1.0×10^{-07}	4.5×10^{-08}	^{212}Pb
Area 6, Cafeteria	08/03/92	9.8×10^{-08}	4.2×10^{-08}	^{212}Pb
Area 6, Well C	01/27/92	4.1×10^{-07}	1.8×10^{-07}	^{214}Pb
Area 6, Well C	05/12/92	1.3×10^{-07}	7.0×10^{-08}	^{212}Pb
Area 6, Well C	06/02/92	2.8×10^{-07}	6.8×10^{-08}	^{212}Pb
Area 6, Well C-1	01/27/92	4.7×10^{-07}	2.0×10^{-07}	^{214}Pb
Area 6, Well C-1 Reservoir	02/06/92	9.4×10^{-08}	5.1×10^{-08}	^{212}Pb
Area 6, Well 4	01/27/92	6.0×10^{-07}	2.6×10^{-07}	^{214}Bi
Area 6, Well 4	01/27/92	4.4×10^{-07}	1.8×10^{-07}	^{214}Pb
Area 6, Well 4	04/06/92	5.5×10^{-06}	2.5×10^{-06}	^{214}Pb
Area 6, Well 4	08/04/92	1.0×10^{-07}	5.0×10^{-08}	^{212}Pb

Mean MDC: $1.2 \times 10^{-06} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.8 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.6 (Gamma-Emitting Radionuclides in Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio- nuclide
		Concentration	Standard Deviation (s)	
Area 6, Sewage	10/15/92	1.5×10^{-07}	7.1×10^{-08}	^{212}Pb
Area 6, Yucca Pond	02/12/92	9.3×10^{-08}	4.1×10^{-08}	^{212}Pb
Area 7, Reitman Seep	05/07/92	2.2×10^{-05}	1.2×10^{-05}	^{214}Pb
Area 7, Reitman Seep	06/17/92	1.6×10^{-07}	5.6×10^{-08}	^{212}Pb
Area 12, Cafeteria	02/10/92	1.6×10^{-07}	9.2×10^{-08}	^{214}Pb
Area 12, Cafeteria	02/24/92	2.5×10^{-07}	1.4×10^{-07}	^{214}Pb
Area 12, Cafeteria	02/24/92	1.6×10^{-07}	5.6×10^{-08}	^{212}Pb
Area 12, Cafeteria	02/24/92	2.1×10^{-07}	9.9×10^{-08}	^{214}Bi
Area 12, Cafeteria	03/30/92	9.4×10^{-08}	5.1×10^{-08}	^{212}Pb
Area 12, Cafeteria	06/01/92	1.0×10^{-06}	4.9×10^{-07}	^{214}Pb
Area 12, Cafeteria	08/24/92	2.5×10^{-07}	1.1×10^{-07}	^{214}Pb
Area 12, Cafeteria	09/14/92	1.6×10^{-07}	5.7×10^{-08}	^{212}Pb
Area 12, Captain Jack Spring	01/15/92	2.9×10^{-06}	1.7×10^{-06}	^{214}Bi
Area 12, Captain Jack Spring	02/27/92	1.2×10^{-06}	5.2×10^{-07}	^{214}Bi
Area 12, Captain Jack Spring	02/27/92	1.3×10^{-06}	4.4×10^{-07}	^{214}Pb
Area 12, Captain Jack Spring	03/18/92	8.9×10^{-08}	5.4×10^{-08}	^{212}Pb
Area 12, Captain Jack Spring	05/21/92	1.6×10^{-07}	5.2×10^{-08}	^{212}Pb
Area 12, E Tunnel Effluent	04/09/92	6.3×10^{-08}	4.2×10^{-08}	^{137}Cs
Area 12, E Tunnel Pond No. 1	07/21/92	1.7×10^{-07}	6.8×10^{-08}	^{137}Cs
Area 12, E Tunnel Pond No. 1	08/18/92	1.5×10^{-07}	6.5×10^{-08}	^{137}Cs
Area 12, E Tunnel Pond No. 1	11/18/92	7.8×10^{-08}	4.8×10^{-08}	^{137}Cs
Area 12, N Tunnel Effluent	07/21/92	1.3×10^{-06}	5.1×10^{-07}	^{214}Pb
Area 12, N Tunnel Pond No. 2	02/12/92	1.3×10^{-07}	5.6×10^{-08}	^{212}Pb
Area 12, N Tunnel Pond No. 2	02/12/92	1.1×10^{-06}	6.3×10^{-07}	^{40}K
Area 12, N Tunnel Pond No. 3	11/18/92	2.7×10^{-07}	7.3×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	01/15/92	3.2×10^{-07}	7.5×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	02/12/92	2.6×10^{-07}	7.0×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	03/11/92	2.4×10^{-07}	8.4×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	04/09/92	4.1×10^{-07}	8.3×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	05/14/92	2.6×10^{-07}	8.3×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	06/09/92	2.9×10^{-07}	7.2×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	07/21/92	2.9×10^{-07}	9.0×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	07/21/92	1.9×10^{-07}	8.8×10^{-08}	^{212}Pb
Area 12, T Tunnel Effluent	08/18/92	3.0×10^{-07}	8.6×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	09/03/92	2.5×10^{-07}	7.7×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	10/20/92	2.2×10^{-07}	7.3×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	11/18/92	1.9×10^{-07}	6.1×10^{-08}	^{137}Cs
Area 12, T Tunnel Effluent	12/02/92	2.5×10^{-07}	6.7×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 1	02/12/92	5.4×10^{-07}	8.8×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 1	02/12/92	3.0×10^{-07}	9.8×10^{-08}	^{125}Sb

Mean MDC: $1.2 \times 10^{-06} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.8 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.6 (Gamma-Emitting Radionuclides in Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$		Radio-nuclide
		Concentration	Standard Deviation (s)	
Area 12, T Tunnel Pond No. 1	02/12/92	1.5×10^{-06}	4.2×10^{-07}	^{106}Ru
Area 12, T Tunnel Pond No. 1	04/09/92	1.0×10^{-07}	4.7×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 1	05/14/92	6.4×10^{-06}	2.6×10^{-06}	^{214}Pb
Area 12, T Tunnel Pond No. 1	06/09/92	2.2×10^{-07}	6.8×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	02/12/92	1.6×10^{-07}	5.5×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	03/11/92	1.8×10^{-07}	7.5×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	04/09/92	1.7×10^{-07}	5.9×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	06/09/92	1.3×10^{-07}	5.5×10^{-08}	^{212}Pb
Area 12, T Tunnel Pond No. 2	06/09/92	2.0×10^{-07}	6.3×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	07/21/92	2.6×10^{-07}	7.8×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	08/18/92	1.3×10^{-07}	6.8×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	09/03/92	1.5×10^{-07}	7.1×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	10/20/92	3.1×10^{-07}	1.4×10^{-07}	^{125}Sb
Area 12, T Tunnel Pond No. 2	10/20/92	1.9×10^{-07}	7.6×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	11/18/92	1.5×10^{-07}	6.1×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 2	12/02/92	1.1×10^{-07}	4.8×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 3	07/21/92	9.6×10^{-08}	6.5×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 3	08/18/92	1.0×10^{-07}	6.6×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 3	09/03/92	1.1×10^{-06}	5.2×10^{-07}	^{106}Ru
Area 12, T Tunnel Pond No. 3	09/03/92	1.2×10^{-06}	1.7×10^{-07}	^{137}Cs
Area 12, T Tunnel Pond No. 3	10/20/92	1.7×10^{-07}	7.9×10^{-08}	^{137}Cs
Area 12, T Tunnel Pond No. 3	12/02/92	2.2×10^{-07}	6.4×10^{-08}	^{137}Cs
Area 12, White Rock Spring	01/15/92	1.0×10^{-07}	4.2×10^{-08}	^{212}Pb
Area 12, White Rock Spring	03/05/92	2.0×10^{-06}	8.5×10^{-07}	^{214}Pb
Area 12, White Rock Spring	07/13/92	9.6×10^{-07}	3.9×10^{-07}	^{214}Pb
Area 12, White Rock Spring	09/09/92	8.8×10^{-07}	3.4×10^{-07}	^{214}Bi
Area 12, White Rock Spring	09/09/92	7.1×10^{-07}	2.9×10^{-07}	^{214}Pb
Area 16, Tippipah Spring	04/22/92	1.7×10^{-07}	7.6×10^{-08}	^{212}Pb
Area 16, Tippipah Spring	06/04/92	7.7×10^{-07}	3.9×10^{-07}	^{214}Pb
Area 16, Well UE-16d	01/27/92	9.9×10^{-07}	3.6×10^{-07}	^{214}Bi
Area 16, Well UE-16d	01/27/92	8.3×10^{-07}	2.4×10^{-07}	^{214}Pb
Area 16, Well UE-16d	09/01/92	2.3×10^{-06}	9.5×10^{-07}	^{214}Pb
Area 18, Well 8	01/27/92	5.7×10^{-07}	2.6×10^{-07}	^{214}Bi
Area 18, Well 8	01/27/92	3.5×10^{-07}	2.1×10^{-07}	^{214}Pb
Area 18, Well 8	02/24/92	9.8×10^{-07}	6.4×10^{-07}	^{214}Pb
Area 19, Well UE-19c	02/24/92	1.7×10^{-06}	6.2×10^{-07}	^{214}Pb
Area 19, Well UE-19c	08/04/92	2.0×10^{-06}	7.3×10^{-07}	^{214}Pb
Area 19, Well UE-19c Reservoir	06/02/92	9.9×10^{-08}	4.1×10^{-08}	^{212}Pb
Area 20, Well 20	06/02/92	1.3×10^{-07}	4.9×10^{-08}	^{212}Pb
Area 23, Mercury	01/21/92	8.8×10^{-07}	3.0×10^{-07}	^{214}Pb

Mean MDC: $1.2 \times 10^{-06} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.8 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.6 (Gamma-Emitting Radionuclides in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>		<u>Radio-nuclide</u>
		<u>Concentration</u>	<u>Standard Deviation (s)</u>	
Area 23, Mercury	05/11/92	1.2×10^{-05}	5.2×10^{-06}	^{214}Pb
Area 23, Mercury	06/09/92	1.3×10^{-07}	4.6×10^{-08}	^{212}Pb
Area 23, Mercury	06/22/92	1.1×10^{-06}	4.7×10^{-07}	^{214}Pb
Area 23, Sewage	10/14/92	1.6×10^{-07}	5.8×10^{-08}	^{212}Pb
Area 25, Building 4221	02/24/92	1.2×10^{-07}	7.4×10^{-08}	^{212}Pb
Area 25, Building 4221	03/16/92	3.1×10^{-07}	1.4×10^{-07}	^{214}Pb
Area 25, Building 4221	09/21/92	1.5×10^{-07}	5.6×10^{-08}	^{212}Pb
Area 25, Well J-12 Reservoir	08/12/92	8.6×10^{-08}	4.8×10^{-08}	^{212}Pb
Area 25, Well J-13	02/24/92	6.5×10^{-07}	2.8×10^{-07}	^{212}Pb
Area 27, Cafeteria	01/21/92	1.6×10^{-07}	5.6×10^{-08}	^{212}Pb
Area 27, Cafeteria	02/24/92	2.0×10^{-07}	1.2×10^{-07}	^{214}Pb
Area 27, Cafeteria	03/16/92	1.8×10^{-07}	8.6×10^{-08}	^{212}Pb
Area 27, Cafeteria	06/29/92	8.6×10^{-08}	3.9×10^{-08}	^{212}Pb
Area 29, Topopah Spring	01/14/92	1.1×10^{-07}	5.0×10^{-08}	^{212}Pb

Mean MDC: $1.2 \times 10^{-06} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.8 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 Tritium in Water - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, Building 101	01/21/92	2.1×10^{-07}	1.4×10^{-07}
Area 1, Building 101	01/27/92	2.0×10^{-07}	1.3×10^{-07}
Area 1, Building 101	02/03/92	1.5×10^{-07}	1.3×10^{-07}
Area 1, Building 101	02/10/92	2.5×10^{-07}	1.4×10^{-07}
Area 1, Building 101	02/18/92	-1.1×10^{-07}	1.3×10^{-07}
Area 1, Building 101	02/24/92	1.5×10^{-08}	1.4×10^{-07}
Area 1, Building 101	03/02/92	-2.2×10^{-08}	1.4×10^{-07}
Area 1, Building 101	03/09/92	-1.1×10^{-07}	1.3×10^{-07}
Area 1, Building 101	03/17/92	7.1×10^{-08}	1.2×10^{-07}
Area 1, Building 101	03/23/92	-1.7×10^{-07}	1.3×10^{-07}
Area 1, Building 101	03/30/92	-3.5×10^{-08}	1.3×10^{-07}
Area 1, Building 101	04/06/92	1.1×10^{-07}	1.3×10^{-07}
Area 1, Building 101	04/13/92	9.6×10^{-08}	1.3×10^{-07}
Area 1, Building 101	04/20/92	1.1×10^{-07}	1.3×10^{-07}
Area 1, Building 101	04/27/92	-1.5×10^{-07}	1.3×10^{-07}
Area 1, Building 101	05/04/92	-2.4×10^{-07}	1.3×10^{-07}
Area 1, Building 101	05/11/92	1.6×10^{-07}	1.3×10^{-07}
Area 1, Building 101	05/18/92	-9.5×10^{-08}	1.3×10^{-07}
Area 1, Building 101	05/26/92	2.0×10^{-07}	1.3×10^{-07}
Area 1, Building 101	06/01/92	4.1×10^{-08}	1.3×10^{-07}
Area 1, Building 101	06/08/92	-8.4×10^{-08}	1.3×10^{-07}
Area 1, Building 101	06/15/92	-4.2×10^{-08}	1.3×10^{-07}
Area 1, Building 101	06/22/92	-1.3×10^{-07}	1.3×10^{-07}
Area 1, Building 101	06/29/92	1.3×10^{-07}	1.3×10^{-07}
Area 1, Building 101	07/06/92	-1.3×10^{-07}	1.3×10^{-07}
Area 1, Building 101	07/13/92	4.3×10^{-08}	1.3×10^{-07}
Area 1, Building 101	07/20/92	-4.8×10^{-08}	1.3×10^{-07}
Area 1, Building 101	07/27/92	-2.5×10^{-08}	1.3×10^{-07}
Area 1, Building 101	08/03/92	-1.2×10^{-07}	1.3×10^{-07}
Area 1, Building 101	08/10/92	-8.1×10^{-08}	2.6×10^{-07}
Area 1, Building 101	08/17/92	3.5×10^{-07}	1.3×10^{-07}
Area 1, Building 101	08/24/92	-3.1×10^{-07}	1.3×10^{-07}
Area 1, Building 101	09/01/92	-6.5×10^{-09}	1.3×10^{-07}
Area 1, Building 101	09/08/92	-1.2×10^{-07}	1.3×10^{-07}
Area 1, Building 101	09/14/92	1.6×10^{-07}	1.3×10^{-07}
Area 1, Building 101	09/21/92	7.5×10^{-08}	1.3×10^{-07}
Area 1, Building 101	09/28/92	6.6×10^{-09}	1.3×10^{-07}
Area 1, Building 101	10/05/92	-2.3×10^{-07}	1.3×10^{-07}
Area 1, Building 101	10/12/92	3.7×10^{-08}	1.3×10^{-07}
Area 1, Building 101	10/19/92	-1.3×10^{-07}	1.3×10^{-07}
Area 1, Building 101	10/26/92	-5.9×10^{-08}	1.3×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-08} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 1, Building 101	11/02/92	4.1×10^{-08}	1.3×10^{-07}
Area 1, Building 101	11/09/92	-2.0×10^{-08}	1.3×10^{-07}
Area 1, Building 101	11/16/92	2.1×10^{-08}	1.3×10^{-07}
Area 1, Building 101	11/23/92	3.1×10^{-08}	1.3×10^{-07}
Area 1, Building 101	11/30/92	1.3×10^{-08}	1.3×10^{-07}
Area 1, Building 101	12/08/92	3.2×10^{-07}	1.4×10^{-07}
Area 1, Building 101	12/15/92	-2.3×10^{-07}	1.6×10^{-07}
Area 2, Mud Plant	01/08/92	-1.4×10^{-08}	1.4×10^{-07}
Area 2, Mud Plant	02/12/92	1.3×10^{-07}	1.3×10^{-07}
Area 2, Mud Plant	03/11/92	1.2×10^{-07}	1.3×10^{-07}
Area 2, Mud Plant	04/23/92	2.8×10^{-07}	1.3×10^{-07}
Area 2, Mud Plant	05/07/92	1.5×10^{-07}	1.3×10^{-07}
Area 2, Mud Plant	06/09/92	-5.6×10^{-08}	1.3×10^{-07}
Area 2, Mud Plant	07/03/92	-5.6×10^{-08}	1.3×10^{-07}
Area 2, Mud Plant	08/17/92	3.1×10^{-07}	1.3×10^{-07}
Area 2, Mud Plant	09/02/92	-3.4×10^{-08}	1.3×10^{-07}
Area 2, Mud Plant	10/14/92	4.0×10^{-08}	1.3×10^{-07}
Area 2, Mud Plant	11/05/92	-2.3×10^{-08}	1.3×10^{-07}
Area 2, Mud Plant	12/03/92	5.9×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	01/21/92	1.3×10^{-07}	1.4×10^{-07}
Area 2, Rest Room	01/27/92	6.2×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	02/03/92	1.5×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	02/10/92	1.2×10^{-07}	1.4×10^{-07}
Area 2, Rest Room	02/18/92	-3.0×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	02/24/92	-2.2×10^{-07}	1.4×10^{-07}
Area 2, Rest Room	03/02/92	3.3×10^{-08}	1.4×10^{-07}
Area 2, Rest Room	03/09/92	3.5×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	03/17/92	1.3×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	03/23/92	-1.0×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	03/30/92	-1.9×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	04/06/92	-2.0×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	04/13/92	4.4×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	04/20/92	5.3×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	04/27/92	-2.2×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	05/04/92	-2.5×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	05/11/92	9.0×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	05/18/92	1.0×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	05/26/92	1.8×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	06/01/92	6.9×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	06/08/92	-4.4×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	06/15/92	7.3×10^{-08}	1.4×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 2, Rest Room	06/22/92	2.0×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	06/29/92	2.1×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	07/06/92	-6.7×10^{-09}	1.3×10^{-07}
Area 2, Rest Room	07/13/92	5.5×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	07/20/92	3.8×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	07/27/92	-1.3×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	08/03/92	1.3×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	08/10/92	5.0×10^{-08}	2.6×10^{-07}
Area 2, Rest Room	08/17/92	2.4×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	08/24/92	4.6×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	08/31/92	-9.8×10^{-09}	1.3×10^{-07}
Area 2, Rest Room	09/08/92	1.2×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	09/14/92	5.2×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	09/21/92	2.4×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	09/28/92	-2.4×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	10/05/92	-1.8×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	10/13/92	6.6×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	10/19/92	-2.5×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	10/26/92	6.4×10^{-07}	1.4×10^{-07}
Area 2, Rest Room	11/03/92	-6.1×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	11/09/92	-7.2×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	11/16/92	-1.3×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	11/23/92	-9.6×10^{-08}	1.3×10^{-07}
Area 2, Rest Room	11/30/92	1.9×10^{-07}	1.3×10^{-07}
Area 2, Rest Room	12/07/92	-3.3×10^{-09}	1.3×10^{-07}
Area 2, Rest Room	12/14/92	-4.1×10^{-07}	1.6×10^{-07}
Area 2, Rest Room	12/22/92	-1.2×10^{-07}	1.8×10^{-07}
Area 2, Rest Room	12/29/92	-2.0×10^{-08}	1.9×10^{-07}
Area 2, Well 2 Reservoir	01/08/92	-2.4×10^{-07}	1.4×10^{-07}
Area 2, Well 2 Reservoir	02/12/92	-1.0×10^{-07}	1.3×10^{-07}
Area 2, Well 2 Reservoir	03/11/92	2.5×10^{-07}	1.3×10^{-07}
Area 2, Well 2 Reservoir	04/08/92	-6.9×10^{-09}	1.3×10^{-07}
Area 2, Well 2 Reservoir	05/07/92	1.7×10^{-07}	1.3×10^{-07}
Area 2, Well 2 Reservoir	06/09/92	2.2×10^{-08}	1.3×10^{-07}
Area 2, Well 2 Reservoir	07/03/92	3.5×10^{-08}	1.4×10^{-07}
Area 2, Well 2 Reservoir	08/17/92	2.9×10^{-07}	1.3×10^{-07}
Area 2, Well 2 Reservoir	09/02/92	2.7×10^{-08}	1.3×10^{-07}
Area 2, Well 2 Reservoir	10/14/92	-8.4×10^{-08}	1.3×10^{-07}
Area 2, Well 2 Reservoir	11/05/92	-1.1×10^{-07}	1.3×10^{-07}
Area 2, Well 2 Reservoir	12/03/92	4.7×10^{-08}	1.3×10^{-07}
Area 3, Cafeteria	01/21/92	1.9×10^{-07}	1.4×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-08} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 3, Cafeteria	01/27/92	1.6×10^{-07}	1.3×10^{-07}
Area 3, Cafeteria	02/03/92	2.2×10^{-08}	1.3×10^{-07}
Area 3, Cafeteria	02/10/92	2.4×10^{-07}	1.4×10^{-07}
Area 3, Mud Plant	01/08/92	-2.1×10^{-08}	1.4×10^{-07}
Area 3, Mud Plant	02/05/92	2.6×10^{-07}	1.3×10^{-07}
Area 3, Mud Plant	03/04/92	2.3×10^{-07}	1.4×10^{-07}
Area 3, Mud Plant	04/08/92	3.1×10^{-07}	1.3×10^{-07}
Area 3, Mud Plant	05/07/92	1.8×10^{-07}	1.3×10^{-07}
Area 3, Mud Plant	06/03/92	-9.4×10^{-08}	1.3×10^{-07}
Area 3, Mud Plant	07/08/92	-2.1×10^{-08}	1.4×10^{-07}
Area 3, Mud Plant	08/12/92	2.1×10^{-07}	1.3×10^{-07}
Area 3, Mud Plant	09/01/92	1.3×10^{-07}	1.3×10^{-07}
Area 3, Mud Plant	10/21/92	3.8×10^{-08}	1.3×10^{-07}
Area 3, Mud Plant	11/05/92	5.2×10^{-08}	1.3×10^{-07}
Area 3, Mud Plant	12/02/92	-1.9×10^{-07}	1.6×10^{-07}
Area 3, Well A Reservoir	01/08/92	-4.6×10^{-08}	1.4×10^{-07}
Area 3, Well A Reservoir	02/05/92	2.7×10^{-07}	1.3×10^{-07}
Area 3, Well A Reservoir	03/18/92	3.8×10^{-08}	1.3×10^{-07}
Area 3, Well A Reservoir	04/08/92	2.5×10^{-07}	1.3×10^{-07}
Area 3, Well A Reservoir	05/07/92	1.6×10^{-07}	1.3×10^{-07}
Area 3, Well A Reservoir	06/03/92	-9.4×10^{-08}	1.3×10^{-07}
Area 3, Well A Reservoir	07/08/92	-8.3×10^{-08}	1.3×10^{-07}
Area 3, Well A Reservoir	08/12/92	9.7×10^{-09}	1.2×10^{-07}
Area 3, Well A Reservoir	09/01/92	-1.2×10^{-07}	1.3×10^{-07}
Area 3, Well A Reservoir	10/15/92	-1.4×10^{-07}	1.3×10^{-07}
Area 3, Well A Reservoir	11/10/92	-7.9×10^{-08}	1.3×10^{-07}
Area 3, Well A Reservoir	12/02/92	-1.9×10^{-07}	1.6×10^{-07}
Area 5, Cane Spring	01/08/92	-2.5×10^{-08}	1.4×10^{-07}
Area 5, Cane Spring	02/19/92	5.1×10^{-08}	1.3×10^{-07}
Area 5, Cane Spring	03/17/92	-9.7×10^{-09}	1.2×10^{-07}
Area 5, Cane Spring	04/08/92	-2.6×10^{-07}	1.3×10^{-07}
Area 5, Cane Spring	05/19/92	2.2×10^{-07}	1.3×10^{-07}
Area 5, Cane Spring	06/04/92	-1.7×10^{-07}	1.3×10^{-07}
Area 5, Cane Spring	07/16/92	2.0×10^{-08}	1.3×10^{-07}
Area 5, Cane Spring	08/19/92	-1.4×10^{-07}	1.3×10^{-07}
Area 5, Cane Spring	09/10/92	1.0×10^{-07}	1.3×10^{-07}
Area 5, Cane Spring	10/21/92	-1.8×10^{-07}	1.3×10^{-07}
Area 5, Cane Spring	11/24/92	4.0×10^{-08}	1.3×10^{-07}
Area 5, Cane Spring	12/22/92	3.4×10^{-08}	1.9×10^{-07}
Area 5, Well UE-5c	01/22/92	2.3×10^{-07}	1.4×10^{-07}
Area 5, Well UE-5c	02/24/92	-1.0×10^{-09}	4.3×10^{-09}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-08} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well UE-5c	02/24/92	4.8×10^{-08}	1.4×10^{-07}
Area 5, Well UE-5c	05/12/92	-1.0×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c	06/02/92	-2.2×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c	07/13/92	-1.5×10^{-07}	1.3×10^{-07}
Area 5, Well UE-5c	08/04/92	3.4×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c	09/01/92	-4.1×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c	11/09/92	-5.7×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c	12/02/92	2.7×10^{-07}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	01/06/92	-2.1×10^{-08}	1.4×10^{-07}
Area 5, Well UE-5c Reservoir	02/06/92	2.1×10^{-07}	1.2×10^{-07}
Area 5, Well UE-5c Reservoir	03/04/92	-1.2×10^{-07}	1.4×10^{-07}
Area 5, Well UE-5c Reservoir	04/08/92	-4.5×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	05/06/92	1.8×10^{-07}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	06/03/92	-2.8×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	07/08/92	-1.4×10^{-07}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	08/12/92	1.6×10^{-07}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	09/01/92	4.3×10^{-08}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	10/06/92	-1.9×10^{-07}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	11/18/92	1.7×10^{-07}	1.3×10^{-07}
Area 5, Well UE-5c Reservoir	12/03/92	-2.3×10^{-08}	1.3×10^{-07}
Area 5, Well 5B	08/04/92	1.4×10^{-07}	1.3×10^{-07}
Area 5, Well 5B	10/05/92	-2.0×10^{-07}	1.3×10^{-07}
Area 5, Well 5B	10/05/92	3.9×10^{-09}	6.6×10^{-09}
Area 5, Well 5B Reservoir	01/06/92	-1.9×10^{-07}	1.4×10^{-07}
Area 5, Well 5B Reservoir	02/10/92	1.4×10^{-07}	1.2×10^{-07}
Area 5, Well 5B Reservoir	03/04/92	1.8×10^{-07}	1.4×10^{-07}
Area 5, Well 5B Reservoir	04/08/92	-2.1×10^{-07}	1.3×10^{-07}
Area 5, Well 5B Reservoir	05/06/92	-2.2×10^{-08}	1.3×10^{-07}
Area 5, Well 5B Reservoir	06/03/92	-2.1×10^{-08}	1.3×10^{-07}
Area 5, Well 5B Reservoir	07/08/92	-1.0×10^{-07}	1.3×10^{-07}
Area 5, Well 5B Reservoir	08/12/92	7.6×10^{-07}	1.3×10^{-07}
Area 5, Well 5B Reservoir	09/01/92	-1.6×10^{-07}	1.3×10^{-07}
Area 5, Well 5B Reservoir	10/06/92	-9.9×10^{-08}	1.3×10^{-07}
Area 5, Well 5B Reservoir	11/18/92	-9.6×10^{-08}	1.2×10^{-07}
Area 5, Well 5B Reservoir	12/03/92	2.3×10^{-10}	1.3×10^{-07}
Area 5, Well 5C	01/22/92	2.0×10^{-07}	1.4×10^{-07}
Area 5, Well 5C	02/24/92	-4.1×10^{-09}	4.2×10^{-09}
Area 5, Well 5C	02/24/92	1.4×10^{-07}	1.4×10^{-07}
Area 5, Well 5C	04/06/92	-1.4×10^{-07}	1.2×10^{-07}
Area 5, Well 5C	04/06/92	-3.0×10^{-10}	4.2×10^{-09}
Area 5, Well 5C	05/12/92	-8.2×10^{-08}	1.3×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-06} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well 5C	06/02/92	4.1×10^{-08}	1.3×10^{-07}
Area 5, Well 5C	07/13/92	-1.8×10^{-09}	4.1×10^{-09}
Area 5, Well 5C	07/13/92	1.6×10^{-08}	1.3×10^{-07}
Area 5, Well 5C	08/04/92	2.4×10^{-08}	1.3×10^{-07}
Area 5, Well 5C	09/01/92	8.4×10^{-08}	1.3×10^{-07}
Area 5, Well 5C	10/05/92	-2.9×10^{-07}	1.3×10^{-07}
Area 5, Well 5C	10/05/92	-2.4×10^{-08}	6.6×10^{-09}
Area 5, Well 5C	11/09/92	7.2×10^{-08}	1.3×10^{-07}
Area 5, Well 5C	12/02/92	4.1×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	01/21/92	1.3×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	01/27/92	7.5×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	02/03/92	3.8×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	02/10/92	1.6×10^{-07}	1.4×10^{-07}
Area 6, Bottled Water	02/18/92	-5.0×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	02/24/92	-9.0×10^{-08}	1.4×10^{-07}
Area 6, Bottled Water	03/02/92	7.8×10^{-08}	1.4×10^{-07}
Area 6, Bottled Water	03/09/92	-1.0×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	03/17/92	3.6×10^{-08}	1.2×10^{-07}
Area 6, Bottled Water	03/23/92	-3.4×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	03/30/92	-2.4×10^{-07}	1.2×10^{-07}
Area 6, Bottled Water	04/06/92	1.2×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	04/13/92	5.8×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	04/20/92	3.1×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	04/27/92	-2.2×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	05/04/92	-1.6×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	05/11/92	2.0×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	05/18/92	-1.2×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	05/26/92	1.7×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	06/01/92	-3.5×10^{-09}	1.3×10^{-07}
Area 6, Bottled Water	06/08/92	-9.1×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	06/15/92	-5.9×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	06/22/92	-7.8×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	06/29/92	5.6×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	07/06/92	-1.6×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	07/13/92	8.0×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	07/20/92	4.8×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	07/27/92	-1.6×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	08/03/92	2.0×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	08/10/92	-1.4×10^{-07}	2.6×10^{-07}
Area 6, Bottled Water	08/17/92	2.3×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	08/24/92	5.2×10^{-07}	1.4×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-06} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Bottled Water	08/31/92	3.3×10^{-09}	1.3×10^{-07}
Area 6, Bottled Water	09/08/92	-6.5×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	09/14/92	-7.8×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	09/21/92	2.0×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	09/28/92	-4.6×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	10/05/92	-1.1×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	10/13/92	-1.8×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	10/19/92	-7.6×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	10/26/92	-4.3×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	11/03/92	-2.6×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	11/09/92	-3.0×10^{-07}	1.6×10^{-07}
Area 6, Bottled Water	11/16/92	4.1×10^{-08}	1.3×10^{-07}
Area 6, Bottled Water	11/23/92	1.1×10^{-07}	1.3×10^{-07}
Area 6, Bottled Water	11/30/92	6.6×10^{-09}	1.3×10^{-07}
Area 6, Bottled Water	12/07/92	2.8×10^{-07}	1.4×10^{-07}
Area 6, Bottled Water	12/14/92	1.0×10^{-07}	1.7×10^{-07}
Area 6, Bottled Water	12/22/92	-2.4×10^{-07}	1.8×10^{-07}
Area 6, Bottled Water	12/29/92	-2.5×10^{-07}	1.9×10^{-07}
Area 6, Building 6-900	06/29/92	-6.5×10^{-09}	1.3×10^{-07}
Area 6, Building 6-900	07/06/92	6.0×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	07/13/92	-1.4×10^{-07}	1.2×10^{-07}
Area 6, Building 6-900	07/20/92	-3.1×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	07/27/92	-3.1×10^{-09}	1.3×10^{-07}
Area 6, Building 6-900	08/03/92	1.9×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	08/10/92	9.3×10^{-08}	2.6×10^{-07}
Area 6, Building 6-900	08/17/92	2.7×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	08/24/92	-1.4×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	08/31/92	9.8×10^{-09}	1.3×10^{-07}
Area 6, Building 6-900	09/08/92	-1.8×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	09/14/92	-1.1×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	09/21/92	7.5×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	09/28/92	-1.3×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	10/05/92	-2.4×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	10/13/92	-4.6×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	10/19/92	-3.3×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	10/26/92	-1.3×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	11/03/92	2.4×10^{-10}	1.3×10^{-07}
Area 6, Building 6-900	11/09/92	-2.1×10^{-07}	1.3×10^{-07}
Area 6, Building 6-900	11/16/92	-5.9×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	11/23/92	1.0×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	11/30/92	9.9×10^{-09}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-08} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Building 6-900	12/07/92	-3.0×10^{-08}	1.3×10^{-07}
Area 6, Building 6-900	12/14/92	6.2×10^{-08}	1.7×10^{-07}
Area 6, Building 6-900	12/22/92	-1.6×10^{-07}	1.8×10^{-07}
Area 6, Building 6-900	12/29/92	-2.0×10^{-08}	1.9×10^{-07}
Area 6, Cafeteria	01/21/92	1.2×10^{-07}	1.4×10^{-07}
Area 6, Cafeteria	01/27/92	9.0×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	02/03/92	-9.4×10^{-09}	1.3×10^{-07}
Area 6, Cafeteria	02/10/92	2.4×10^{-07}	1.4×10^{-07}
Area 6, Cafeteria	02/18/92	-1.5×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	02/24/92	3.8×10^{-09}	1.4×10^{-07}
Area 6, Cafeteria	03/02/92	9.6×10^{-08}	1.4×10^{-07}
Area 6, Cafeteria	03/09/92	7.3×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	03/17/92	9.4×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	03/23/92	-2.0×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	03/30/92	-1.3×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	04/06/92	1.9×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	04/13/92	2.4×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	04/20/92	2.0×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	04/27/92	-4.9×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	05/04/92	-1.7×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	05/11/92	6.2×10^{-09}	1.3×10^{-07}
Area 6, Cafeteria	05/18/92	1.8×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	05/26/92	1.0×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	06/01/92	2.0×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	06/08/92	-4.1×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	06/15/92	1.5×10^{-07}	1.4×10^{-07}
Area 6, Cafeteria	06/22/92	6.5×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	06/29/92	2.0×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	07/06/92	6.7×10^{-09}	1.3×10^{-07}
Area 6, Cafeteria	07/13/92	8.0×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	07/20/92	-1.0×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	07/27/92	9.4×10^{-09}	1.3×10^{-07}
Area 6, Cafeteria	08/03/92	4.6×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	08/10/92	-3.1×10^{-08}	2.6×10^{-07}
Area 6, Cafeteria	08/17/92	1.9×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	08/24/92	-1.6×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	08/31/92	5.2×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	09/08/92	-3.6×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	09/14/92	1.1×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	09/21/92	3.1×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	09/28/92	9.6×10^{-08}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-08} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Cafeteria	10/05/92	-1.1×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	10/13/92	3.3×10^{-09}	1.3×10^{-07}
Area 6, Cafeteria	10/19/92	3.3×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	10/26/92	-4.9×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	11/03/92	-9.9×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	11/09/92	9.1×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	11/16/92	-1.8×10^{-07}	1.3×10^{-07}
Area 6, Cafeteria	11/23/92	4.5×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	11/30/92	-2.3×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	12/07/92	3.0×10^{-08}	1.3×10^{-07}
Area 6, Cafeteria	12/14/92	-2.3×10^{-07}	1.6×10^{-07}
Area 6, Cafeteria	12/22/92	-1.6×10^{-07}	1.8×10^{-07}
Area 6, Cafeteria	12/29/92	-4.0×10^{-08}	1.9×10^{-07}
Area 6, Sewage	01/15/92	2.3×10^{-07}	1.3×10^{-07}
Area 6, Sewage	04/23/92	-1.4×10^{-07}	1.3×10^{-07}
Area 6, Sewage	07/14/92	-5.0×10^{-08}	1.3×10^{-07}
Area 6, Sewage	10/15/92	-1.0×10^{-08}	1.3×10^{-07}
Area 6, Well C	01/27/92	3.0×10^{-07}	1.4×10^{-07}
Area 6, Well C	02/24/92	5.3×10^{-09}	4.5×10^{-09}
Area 6, Well C	02/24/92	1.5×10^{-08}	1.4×10^{-07}
Area 6, Well C	04/06/92	7.0×10^{-08}	1.3×10^{-07}
Area 6, Well C	04/06/92	2.3×10^{-08}	4.5×10^{-09}
Area 6, Well C	05/12/92	2.0×10^{-07}	1.3×10^{-07}
Area 6, Well C	06/02/92	-4.4×10^{-08}	1.3×10^{-07}
Area 6, Well C	07/13/92	1.5×10^{-08}	4.4×10^{-09}
Area 6, Well C	07/13/92	1.9×10^{-07}	1.3×10^{-07}
Area 6, Well C	08/04/92	3.1×10^{-08}	1.3×10^{-07}
Area 6, Well C	09/01/92	2.1×10^{-07}	1.3×10^{-07}
Area 6, Well C	10/05/92	-9.1×10^{-09}	6.8×10^{-09}
Area 6, Well C	10/05/92	-1.5×10^{-07}	1.3×10^{-07}
Area 6, Well C	11/09/92	2.8×10^{-08}	1.2×10^{-07}
Area 6, Well C	12/02/92	1.1×10^{-07}	1.3×10^{-07}
Area 6, Well C-1	01/27/92	2.0×10^{-07}	1.4×10^{-07}
Area 6, Well C-1	02/24/92	1.2×10^{-09}	4.5×10^{-09}
Area 6, Well C-1	02/24/92	1.3×10^{-07}	1.4×10^{-07}
Area 6, Well C-1	04/06/92	4.3×10^{-09}	4.2×10^{-09}
Area 6, Well C-1	04/06/92	3.2×10^{-07}	1.3×10^{-07}
Area 6, Well C-1	05/12/92	2.4×10^{-07}	1.3×10^{-07}
Area 6, Well C-1	06/02/92	-4.4×10^{-08}	1.3×10^{-07}
Area 6, Well C-1	07/13/92	5.2×10^{-09}	4.2×10^{-09}
Area 6, Well C-1	07/13/92	1.9×10^{-07}	1.3×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-06} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Well C-1	08/04/92	1.0×10^{-07}	1.3×10^{-07}
Area 6, Well C-1	09/01/92	7.5×10^{-08}	1.3×10^{-07}
Area 6, Well C-1	10/05/92	-7.0×10^{-08}	1.3×10^{-07}
Area 6, Well C-1	10/05/92	-1.7×10^{-08}	6.7×10^{-08}
Area 6, Well C-1	11/09/92	1.2×10^{-07}	1.3×10^{-07}
Area 6, Well C-1	12/02/92	-1.2×10^{-07}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	01/07/92	-7.8×10^{-08}	1.4×10^{-07}
Area 6, Well C-1 Reservoir	02/06/92	2.7×10^{-07}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	03/04/92	-4.1×10^{-08}	1.4×10^{-07}
Area 6, Well C-1 Reservoir	04/08/92	1.7×10^{-07}	1.2×10^{-07}
Area 6, Well C-1 Reservoir	05/06/92	4.7×10^{-08}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	06/03/92	-1.8×10^{-07}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	07/09/92	7.6×10^{-08}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	08/12/92	1.4×10^{-07}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	09/01/92	2.3×10^{-10}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	10/06/92	-6.8×10^{-08}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	11/19/92	-6.9×10^{-08}	1.3×10^{-07}
Area 6, Well C-1 Reservoir	12/22/92	-2.6×10^{-07}	1.8×10^{-07}
Area 6, Well 3 Reservoir	01/08/92	2.5×10^{-10}	1.4×10^{-07}
Area 6, Well 3 Reservoir	02/05/92	2.5×10^{-07}	1.3×10^{-07}
Area 6, Well 3 Reservoir	03/04/92	8.1×10^{-08}	1.4×10^{-07}
Area 6, Well 3 Reservoir	04/08/92	1.5×10^{-07}	1.2×10^{-07}
Area 6, Well 3 Reservoir	05/06/92	-6.0×10^{-08}	1.3×10^{-07}
Area 6, Well 3 Reservoir	06/03/92	-2.0×10^{-07}	1.3×10^{-07}
Area 6, Well 3 Reservoir	07/03/92	-1.6×10^{-07}	1.3×10^{-07}
Area 6, Well 3 Reservoir	08/12/92	9.1×10^{-08}	1.3×10^{-07}
Area 6, Well 3 Reservoir	09/01/92	-1.2×10^{-07}	1.3×10^{-07}
Area 6, Well 3 Reservoir	10/15/92	-1.5×10^{-07}	1.3×10^{-07}
Area 6, Well 3 Reservoir	11/05/92	-2.3×10^{-07}	1.3×10^{-07}
Area 6, Well 3 Reservoir	12/03/92	-4.0×10^{-08}	1.3×10^{-07}
Area 6, Well 4	01/27/92	2.0×10^{-07}	1.4×10^{-07}
Area 6, Well 4	02/24/92	-1.2×10^{-09}	4.3×10^{-08}
Area 6, Well 4	02/24/92	1.2×10^{-07}	1.4×10^{-07}
Area 6, Well 4	04/06/92	4.4×10^{-10}	4.2×10^{-08}
Area 6, Well 4	04/06/92	6.1×10^{-08}	1.3×10^{-07}
Area 6, Well 4	05/12/92	-1.3×10^{-08}	1.3×10^{-07}
Area 6, Well 4	06/02/92	-8.8×10^{-08}	1.3×10^{-07}
Area 6, Well 4	07/13/92	-1.9×10^{-09}	4.2×10^{-08}
Area 6, Well 4	07/13/92	1.4×10^{-07}	1.3×10^{-07}
Area 6, Well 4	08/04/92	1.5×10^{-07}	1.3×10^{-07}
Area 6, Well 4	09/01/92	1.6×10^{-08}	1.3×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-06} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 6, Well 4	10/05/92	-6.3×10^{-08}	1.3×10^{-07}
Area 6, Well 4	10/05/92	-2.3×10^{-08}	6.6×10^{-09}
Area 6, Well 4	11/09/92	1.5×10^{-07}	1.3×10^{-07}
Area 6, Well 4	12/02/92	-1.3×10^{-07}	1.3×10^{-07}
Area 6, Yucca Pond	01/15/92	3.8×10^{-08}	1.8×10^{-07}
Area 6, Yucca Pond	02/12/92	2.3×10^{-08}	1.6×10^{-07}
Area 6, Yucca Pond	03/11/92	3.1×10^{-08}	1.6×10^{-07}
Area 6, Yucca Pond	04/27/92	2.7×10^{-08}	1.6×10^{-07}
Area 6, Yucca Pond	05/14/92	2.3×10^{-08}	1.5×10^{-07}
Area 6, Yucca Pond	06/03/92	2.2×10^{-08}	1.6×10^{-07}
Area 6, Yucca Pond	07/09/92	1.9×10^{-08}	1.5×10^{-07}
Area 6, Yucca Pond	08/20/92	1.9×10^{-08}	1.5×10^{-07}
Area 6, Yucca Pond	09/02/92	1.7×10^{-08}	1.5×10^{-07}
Area 6, Yucca Pond	10/06/92	1.4×10^{-08}	1.4×10^{-07}
Area 6, Yucca Pond	11/19/92	1.2×10^{-08}	1.7×10^{-07}
Area 6, Yucca Pond	11/19/92	2.7×10^{-08}	1.6×10^{-07}
Area 6, Yucca Pond	12/03/92	8.4×10^{-07}	3.7×10^{-07}
Area 6, Yucca Pond	12/03/92	9.8×10^{-07}	1.7×10^{-07}
Area 7, Reitman Seep	01/15/92	5.0×10^{-08}	1.3×10^{-07}
Area 7, Reitman Seep	02/12/92	-2.4×10^{-08}	1.3×10^{-07}
Area 7, Reitman Seep	04/08/92	-9.7×10^{-08}	1.3×10^{-07}
Area 7, Reitman Seep	05/07/92	1.7×10^{-07}	1.3×10^{-07}
Area 7, Reitman Seep	06/17/92	6.9×10^{-09}	1.3×10^{-07}
Area 7, Reitman Seep	09/09/92	1.1×10^{-07}	1.3×10^{-07}
Area 7, Reitman Seep	11/17/92	8.8×10^{-07}	1.4×10^{-07}
Area 7, Reitman Seep	12/02/92	-3.4×10^{-07}	1.6×10^{-07}
Area 12, Cafeteria	01/21/92	4.2×10^{-07}	1.4×10^{-07}
Area 12, Cafeteria	01/27/92	2.0×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	02/03/92	1.5×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	02/10/92	1.0×10^{-08}	1.4×10^{-07}
Area 12, Cafeteria	02/18/92	-1.3×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	02/24/92	-3.4×10^{-08}	1.4×10^{-07}
Area 12, Cafeteria	03/02/92	1.9×10^{-08}	1.4×10^{-07}
Area 12, Cafeteria	03/09/92	-2.4×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	03/17/92	-2.9×10^{-08}	1.2×10^{-07}
Area 12, Cafeteria	03/23/92	-6.7×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	03/30/92	-1.8×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	04/06/92	-5.1×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	04/13/92	2.7×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	04/20/92	1.6×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	04/27/92	-5.2×10^{-08}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-08} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, Cafeteria	05/04/92	-1.7×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	05/11/92	2.7×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	05/18/92	4.1×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	05/26/92	1.5×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	06/01/92	6.9×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	06/08/92	-3.8×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	06/15/92	-1.6×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	06/22/92	-5.1×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	06/29/92	1.6×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	07/06/92	3.4×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	07/13/92	-1.1×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	07/20/92	1.4×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	07/27/92	7.2×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	08/03/92	6.3×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	08/10/92	-5.0×10^{-07}	2.5×10^{-07}
Area 12, Cafeteria	08/17/92	2.7×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	08/24/92	-1.7×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	09/01/92	2.0×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	09/08/92	2.3×10^{-10}	1.3×10^{-07}
Area 12, Cafeteria	09/14/92	8.8×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	09/21/92	1.8×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	09/28/92	-3.3×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	10/05/92	-5.3×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	10/12/92	3.0×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	10/19/92	2.3×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	10/26/92	5.9×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	11/02/92	-1.3×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	11/09/92	-6.8×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	11/16/92	-9.3×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	11/23/92	2.1×10^{-07}	1.3×10^{-07}
Area 12, Cafeteria	11/30/92	-1.6×10^{-07}	1.2×10^{-07}
Area 12, Cafeteria	12/08/92	7.6×10^{-08}	1.3×10^{-07}
Area 12, Cafeteria	12/15/92	-1.7×10^{-07}	1.6×10^{-07}
Area 12, Cafeteria	12/22/92	-6.8×10^{-08}	1.8×10^{-07}
Area 12, Captain Jack Spring	01/15/92	3.4×10^{-07}	1.3×10^{-07}
Area 12, Captain Jack Spring	02/27/92	-1.7×10^{-08}	1.3×10^{-07}
Area 12, Captain Jack Spring	03/18/92	7.5×10^{-08}	1.3×10^{-07}
Area 12, Captain Jack Spring	04/23/92	1.3×10^{-07}	1.2×10^{-07}
Area 12, Captain Jack Spring	05/21/92	1.5×10^{-07}	1.3×10^{-07}
Area 12, Captain Jack Spring	06/11/92	-5.9×10^{-08}	1.3×10^{-07}
Area 12, Captain Jack Spring	07/15/92	-7.6×10^{-08}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, Captain Jack Spring	08/12/92	1.1×10^{-07}	1.3×10^{-07}
Area 12, Captain Jack Spring	09/09/92	-9.8×10^{-09}	1.3×10^{-07}
Area 12, Captain Jack Spring	10/21/92	-1.9×10^{-07}	1.3×10^{-07}
Area 12, Captain Jack Spring	11/24/92	1.2×10^{-07}	1.3×10^{-07}
Area 12, E Tunnel Effluent	01/15/92	2.2×10^{-03}	2.8×10^{-06}
Area 12, E Tunnel Effluent	02/12/92	1.7×10^{-03}	2.4×10^{-06}
Area 12, E Tunnel Effluent	03/11/92	2.2×10^{-03}	2.7×10^{-06}
Area 12, E Tunnel Effluent	04/09/92	2.1×10^{-03}	2.7×10^{-06}
Area 12, E Tunnel Effluent	05/12/92	2.0×10^{-03}	2.5×10^{-06}
Area 12, E Tunnel Effluent	06/09/92	2.1×10^{-03}	2.7×10^{-06}
Area 12, E Tunnel Effluent	07/21/92	2.1×10^{-03}	2.5×10^{-06}
Area 12, E Tunnel Effluent	08/27/92	2.0×10^{-03}	2.6×10^{-06}
Area 12, E Tunnel Effluent	09/03/92	2.0×10^{-03}	2.6×10^{-06}
Area 12, E Tunnel Effluent	10/20/92	2.0×10^{-03}	2.5×10^{-06}
Area 12, E Tunnel Effluent	11/18/92	1.6×10^{-03}	2.6×10^{-06}
Area 12, E Tunnel Effluent	11/18/92	2.0×10^{-03}	2.6×10^{-06}
Area 12, E Tunnel Effluent	12/02/92	2.0×10^{-03}	6.9×10^{-06}
Area 12, E Tunnel Pond No. 1	07/21/92	2.0×10^{-03}	2.5×10^{-06}
Area 12, E Tunnel Pond No. 1	08/18/92	1.9×10^{-03}	2.4×10^{-06}
Area 12, E Tunnel Pond No. 1	09/03/92	2.0×10^{-03}	2.6×10^{-06}
Area 12, E Tunnel Pond No. 1	10/20/92	1.9×10^{-03}	2.5×10^{-06}
Area 12, E Tunnel Pond No. 1	11/18/92	2.0×10^{-03}	2.6×10^{-06}
Area 12, Gold Meadows Spring	04/08/92	2.4×10^{-10}	1.3×10^{-07}
Area 12, Gold Meadows Spring	05/21/92	-6.3×10^{-08}	1.3×10^{-07}
Area 12, Gold Meadows Spring	06/03/92	1.9×10^{-08}	1.3×10^{-07}
Area 12, Gold Meadows Spring	08/19/92	1.8×10^{-07}	1.3×10^{-07}
Area 12, Gold Meadows Spring	09/02/92	3.7×10^{-08}	1.3×10^{-07}
Area 12, N Tunnel Effluent	01/15/92	2.9×10^{-04}	1.0×10^{-06}
Area 12, N Tunnel Effluent	02/12/92	2.5×10^{-04}	9.3×10^{-07}
Area 12, N Tunnel Effluent	03/11/92	3.6×10^{-02}	1.1×10^{-06}
Area 12, N Tunnel Effluent	04/09/92	3.6×10^{-04}	1.1×10^{-06}
Area 12, N Tunnel Effluent	05/12/92	3.3×10^{-04}	1.0×10^{-06}
Area 12, N Tunnel Effluent	06/16/92	8.6×10^{-04}	1.7×10^{-06}
Area 12, N Tunnel Effluent	06/16/92	8.8×10^{-04}	1.7×10^{-06}
Area 12, N Tunnel Effluent	07/21/92	4.3×10^{-04}	1.2×10^{-06}
Area 12, N Tunnel Effluent	08/18/92	5.2×10^{-04}	1.3×10^{-06}
Area 12, N Tunnel Effluent	09/03/92	4.3×10^{-05}	4.0×10^{-07}
Area 12, N Tunnel Effluent	10/20/92	1.5×10^{-04}	6.9×10^{-07}
Area 12, N Tunnel Effluent	11/18/92	1.4×10^{-03}	2.2×10^{-06}
Area 12, N Tunnel Effluent	11/18/92	1.1×10^{-03}	2.1×10^{-06}
Area 12, N Tunnel Effluent	12/02/92	1.5×10^{-04}	8.2×10^{-06}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-06} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, N Tunnel Effluent	12/02/92	2.0×10^{-04}	2.2×10^{-08}
Area 12, N Tunnel Pond No. 1	01/15/92	3.5×10^{-04}	1.1×10^{-08}
Area 12, N Tunnel Pond No. 1	04/09/92	4.9×10^{-04}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 1	05/12/92	3.3×10^{-04}	1.0×10^{-08}
Area 12, N Tunnel Pond No. 1	06/16/92	4.1×10^{-04}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	02/12/92	8.5×10^{-05}	5.5×10^{-07}
Area 12, N Tunnel Pond No. 2	03/11/92	2.6×10^{-04}	9.3×10^{-07}
Area 12, N Tunnel Pond No. 2	04/09/92	4.0×10^{-04}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	05/12/92	4.7×10^{-04}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	06/16/92	4.2×10^{-04}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	07/21/92	3.5×10^{-04}	1.1×10^{-08}
Area 12, N Tunnel Pond No. 2	08/18/92	5.1×10^{-04}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 2	09/03/92	4.4×10^{-04}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	10/20/92	2.1×10^{-03}	2.5×10^{-08}
Area 12, N Tunnel Pond No. 2	11/18/92	1.5×10^{-03}	2.2×10^{-08}
Area 12, N Tunnel Pond No. 2	11/18/92	1.1×10^{-03}	2.2×10^{-08}
Area 12, N Tunnel Pond No. 2	12/02/92	2.8×10^{-04}	2.6×10^{-08}
Area 12, N Tunnel Pond No. 3	02/12/92	9.9×10^{-05}	6.0×10^{-07}
Area 12, N Tunnel Pond No. 3	03/11/92	2.7×10^{-04}	9.5×10^{-07}
Area 12, N Tunnel Pond No. 3	04/09/92	4.8×10^{-04}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 3	05/12/92	4.3×10^{-04}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 3	06/16/92	2.7×10^{-04}	9.7×10^{-07}
Area 12, N Tunnel Pond No. 3	07/21/92	3.6×10^{-04}	1.1×10^{-08}
Area 12, N Tunnel Pond No. 3	08/18/92	5.1×10^{-04}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 3	09/03/92	4.4×10^{-04}	1.2×10^{-08}
Area 12, N Tunnel Pond No. 3	10/20/92	2.3×10^{-03}	2.7×10^{-08}
Area 12, N Tunnel Pond No. 3	11/18/92	5.2×10^{-02}	8.2×10^{-05}
Area 12, Sewage Pond	01/08/92	-8.5×10^{-08}	1.4×10^{-07}
Area 12, Sewage Pond	04/22/92	4.9×10^{-07}	1.3×10^{-07}
Area 12, Sewage Pond	07/21/92	1.0×10^{-07}	1.3×10^{-07}
Area 12, Sewage Pond	10/27/92	9.9×10^{-08}	1.3×10^{-07}
Area 12, T Tunnel Effluent	01/15/92	1.8×10^{-04}	1.3×10^{-08}
Area 12, T Tunnel Effluent	02/12/92	6.3×10^{-02}	1.5×10^{-04}
Area 12, T Tunnel Effluent	03/11/92	5.7×10^{-02}	1.1×10^{-04}
Area 12, T Tunnel Effluent	04/09/92	6.4×10^{-02}	1.0×10^{-04}
Area 12, T Tunnel Effluent	05/14/92	5.8×10^{-02}	9.2×10^{-05}
Area 12, T Tunnel Effluent	06/09/92	5.6×10^{-02}	8.9×10^{-05}
Area 12, T Tunnel Effluent	07/21/92	3.0×10^{-02}	4.7×10^{-05}
Area 12, T Tunnel Effluent	08/18/92	6.2×10^{-02}	9.8×10^{-05}
Area 12, T Tunnel Effluent	09/03/92	5.8×10^{-02}	9.1×10^{-05}
Area 12, T Tunnel Effluent	10/20/92	3.7×10^{-02}	5.8×10^{-05}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 12, T Tunnel Effluent	10/20/92	1.2×10^{-02}	2.0×10^{-05}
Area 12, T Tunnel Effluent	11/18/92	4.1×10^{-02}	6.4×10^{-05}
Area 12, T Tunnel Effluent	11/18/92	4.6×10^{-02}	7.3×10^{-05}
Area 12, T Tunnel Effluent	12/02/92	6.1×10^{-02}	1.2×10^{-04}
Area 12, T Tunnel Pond No. 1	02/12/92	6.1×10^{-02}	1.4×10^{-04}
Area 12, T Tunnel Pond No. 1	03/11/92	5.7×10^{-02}	1.1×10^{-04}
Area 12, T Tunnel Pond No. 1	04/09/92	5.7×10^{-02}	8.9×10^{-05}
Area 12, T Tunnel Pond No. 1	05/14/92	5.8×10^{-02}	9.2×10^{-05}
Area 12, T Tunnel Pond No. 1	06/09/92	5.3×10^{-02}	8.4×10^{-05}
Area 12, T Tunnel Pond No. 2	02/12/92	4.9×10^{-02}	1.3×10^{-04}
Area 12, T Tunnel Pond No. 2	03/11/92	5.7×10^{-02}	1.1×10^{-04}
Area 12, T Tunnel Pond No. 2	04/09/92	5.7×10^{-02}	8.9×10^{-05}
Area 12, T Tunnel Pond No. 2	05/14/92	5.8×10^{-02}	9.2×10^{-05}
Area 12, T Tunnel Pond No. 2	06/09/92	5.0×10^{-02}	7.9×10^{-05}
Area 12, T Tunnel Pond No. 2	07/21/92	5.8×10^{-02}	9.1×10^{-05}
Area 12, T Tunnel Pond No. 2	08/18/92	5.4×10^{-02}	8.6×10^{-05}
Area 12, T Tunnel Pond No. 2	09/03/92	5.8×10^{-02}	9.1×10^{-05}
Area 12, T Tunnel Pond No. 2	10/20/92	1.2×10^{-02}	2.0×10^{-05}
Area 12, T Tunnel Pond No. 2	11/18/92	5.2×10^{-02}	8.2×10^{-05}
Area 12, T Tunnel Pond No. 2	12/02/92	5.6×10^{-02}	1.2×10^{-04}
Area 12, T Tunnel Pond No. 3	07/21/92	5.4×10^{-02}	8.6×10^{-05}
Area 12, T Tunnel Pond No. 3	08/18/92	5.8×10^{-02}	9.1×10^{-05}
Area 12, T Tunnel Pond No. 3	09/03/92	1.2×10^{-02}	2.0×10^{-05}
Area 12, T Tunnel Pond No. 3	10/20/92	1.2×10^{-02}	2.0×10^{-05}
Area 12, T Tunnel Pond No. 3	11/18/92	1.7×10^{-03}	2.4×10^{-06}
Area 12, T Tunnel Pond No. 3	12/02/92	6.5×10^{-02}	1.3×10^{-04}
Area 12, White Rock Spring	01/15/92	3.3×10^{-07}	1.3×10^{-07}
Area 12, White Rock Spring	02/12/92	-2.7×10^{-08}	1.3×10^{-07}
Area 12, White Rock Spring	03/05/92	2.8×10^{-08}	1.3×10^{-07}
Area 12, White Rock Spring	04/08/92	6.9×10^{-09}	1.3×10^{-07}
Area 12, White Rock Spring	05/07/92	1.1×10^{-07}	1.3×10^{-07}
Area 12, White Rock Spring	06/04/92	-1.2×10^{-07}	1.3×10^{-07}
Area 12, White Rock Spring	07/13/92	-3.6×10^{-07}	1.3×10^{-07}
Area 12, White Rock Spring	08/11/92	1.5×10^{-07}	1.3×10^{-07}
Area 12, White Rock Spring	08/11/92	9.3×10^{-07}	1.4×10^{-07}
Area 12, White Rock Spring	09/09/92	-3.0×10^{-08}	1.3×10^{-07}
Area 12, White Rock Spring	10/05/92	3.4×10^{-08}	1.3×10^{-07}
Area 12, White Rock Spring	11/17/92	1.3×10^{-07}	1.3×10^{-07}
Area 12, White Rock Spring	12/01/92	2.1×10^{-07}	1.4×10^{-07}
Area 16, Tippipah Spring	01/08/92	-7.1×10^{-09}	1.4×10^{-07}
Area 16, Tippipah Spring	02/04/92	2.6×10^{-07}	1.3×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-06} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

Sampling Location	Collection Dates	$\mu\text{Ci/mL}$	
		Concentration	Standard Deviation (s)
Area 16, Tippipah Spring	03/04/92	2.2×10^{-07}	1.4×10^{-07}
Area 16, Tippipah Spring	04/22/92	1.9×10^{-07}	1.2×10^{-07}
Area 16, Tippipah Spring	05/18/92	1.0×10^{-07}	1.3×10^{-07}
Area 16, Tippipah Spring	06/04/92	-1.3×10^{-08}	1.3×10^{-07}
Area 16, Tippipah Spring	07/15/92	2.3×10^{-07}	1.3×10^{-07}
Area 16, Tippipah Spring	08/18/92	1.5×10^{-07}	1.3×10^{-07}
Area 16, Tippipah Spring	09/30/92	-5.0×10^{-08}	1.3×10^{-07}
Area 16, Tippipah Spring	10/14/92	-2.5×10^{-08}	1.3×10^{-07}
Area 16, Tippipah Spring	11/18/92	4.0×10^{-08}	1.3×10^{-07}
Area 16, Tippipah Spring	12/03/92	4.0×10^{-08}	1.3×10^{-07}
Area 16, Well UE-16d	01/27/92	2.8×10^{-07}	1.4×10^{-07}
Area 16, Well UE-16d	02/24/92	-3.5×10^{-09}	4.2×10^{-09}
Area 16, Well UE-16d	02/24/92	5.2×10^{-08}	1.4×10^{-07}
Area 16, Well UE-16d	04/06/92	-7.4×10^{-10}	4.2×10^{-09}
Area 16, Well UE-16d	04/06/92	3.5×10^{-08}	1.3×10^{-07}
Area 16, Well UE-16d	05/12/92	-8.5×10^{-08}	1.3×10^{-07}
Area 16, Well UE-16d	06/02/92	-3.2×10^{-08}	1.3×10^{-07}
Area 16, Well UE-16d	07/13/92	-2.1×10^{-09}	4.1×10^{-09}
Area 16, Well UE-16d	07/13/92	2.5×10^{-07}	1.3×10^{-07}
Area 16, Well UE-16d	08/04/92	-9.2×10^{-08}	1.3×10^{-07}
Area 16, Well UE-16d	09/01/92	5.6×10^{-08}	1.3×10^{-07}
Area 16, Well UE-16d	10/05/92	-2.6×10^{-08}	6.5×10^{-09}
Area 16, Well UE-16d	10/05/92	-2.3×10^{-07}	1.3×10^{-07}
Area 16, Well UE-16d	11/09/92	4.0×10^{-07}	1.3×10^{-07}
Area 16, Well UE-16d	12/02/92	9.7×10^{-08}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	01/08/92	-3.2×10^{-08}	1.4×10^{-07}
Area 18, Camp 17 Reservoir	02/04/92	1.8×10^{-07}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	03/04/92	-9.4×10^{-08}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	04/08/92	-8.3×10^{-08}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	05/18/92	1.5×10^{-07}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	06/03/92	-1.6×10^{-07}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	07/07/92	-2.4×10^{-08}	1.4×10^{-07}
Area 18, Camp 17 Reservoir	08/12/92	-2.8×10^{-07}	1.2×10^{-07}
Area 18, Camp 17 Reservoir	09/10/92	8.5×10^{-08}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	10/07/92	1.4×10^{-07}	1.3×10^{-07}
Area 18, Camp 17 Reservoir	11/04/92	-6.5×10^{-09}	1.3×10^{-07}
Area 18, Well 8	01/27/92	9.8×10^{-08}	1.4×10^{-07}
Area 18, Well 8	02/24/92	-7.4×10^{-09}	1.4×10^{-07}
Area 18, Well 8	02/24/92	-3.3×10^{-09}	4.5×10^{-09}
Area 18, Well 8	04/06/92	7.3×10^{-10}	4.2×10^{-09}
Area 18, Well 8	04/06/92	9.0×10^{-08}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 18, Well 8	05/12/92	2.2×10^{-08}	1.3×10^{-07}
Area 18, Well 8	06/02/92	-3.2×10^{-08}	1.3×10^{-07}
Area 18, Well 8	07/13/92	-2.3×10^{-09}	4.0×10^{-09}
Area 18, Well 8	07/13/92	1.0×10^{-07}	1.3×10^{-07}
Area 18, Well 8	08/04/92	-1.5×10^{-07}	1.3×10^{-07}
Area 18, Well 8	09/01/92	-5.3×10^{-08}	1.3×10^{-07}
Area 18, Well 8	10/05/92	-5.0×10^{-08}	1.3×10^{-07}
Area 18, Well 8	10/05/92	-3.0×10^{-08}	6.6×10^{-09}
Area 18, Well 8	11/09/92	-3.1×10^{-09}	1.2×10^{-07}
Area 18, Well 8	12/02/92	-3.1×10^{-09}	1.3×10^{-07}
Area 18, Well 8 Reservoir	01/14/92	1.1×10^{-07}	1.3×10^{-07}
Area 18, Well 8 Reservoir	02/04/92	2.3×10^{-07}	1.3×10^{-07}
Area 18, Well 8 Reservoir	03/04/92	-1.0×10^{-07}	1.3×10^{-07}
Area 18, Well 8 Reservoir	04/08/92	-6.9×10^{-08}	1.3×10^{-07}
Area 18, Well 8 Reservoir	05/18/92	2.5×10^{-07}	1.3×10^{-07}
Area 18, Well 8 Reservoir	06/03/92	3.5×10^{-08}	1.3×10^{-07}
Area 18, Well 8 Reservoir	07/07/92	-2.4×10^{-07}	1.3×10^{-07}
Area 18, Well 8 Reservoir	09/10/92	5.6×10^{-08}	1.3×10^{-07}
Area 18, Well 8 Reservoir	10/07/92	-2.5×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c	01/27/92	3.6×10^{-07}	1.4×10^{-07}
Area 19, Well UE-19c	02/24/92	6.0×10^{-10}	4.4×10^{-09}
Area 19, Well UE-19c	02/24/92	3.3×10^{-08}	1.4×10^{-07}
Area 19, Well UE-19c	04/06/92	2.9×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c	05/12/92	-1.3×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c	06/02/92	3.8×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c	07/13/92	-1.9×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c	08/04/92	-9.2×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c	09/01/92	5.9×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c	09/10/92	5.9×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c	10/05/92	-1.2×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c	11/24/92	1.3×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c	12/02/92	-2.8×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	01/14/92	3.8×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	02/04/92	2.3×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	03/05/92	-4.2×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	04/07/92	2.6×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	05/18/92	1.9×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	06/02/92	-4.1×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	07/09/92	7.9×10^{-08}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	08/12/92	-1.4×10^{-07}	1.3×10^{-07}
Area 19, Well UE-19c Reservoir	10/07/92	6.5×10^{-08}	1.3×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-08} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 19, Well UE-19c Reservoir	11/04/92	1.1×10^{-07}	1.3×10^{-07}
Area 20, Water Well	04/06/92	-1.6×10^{-07}	1.2×10^{-07}
Area 20, Water Well	04/06/92	4.6×10^{-10}	4.4×10^{-09}
Area 20, Water Well	05/12/92	-6.6×10^{-08}	1.3×10^{-07}
Area 20, Water Well	06/02/92	2.2×10^{-08}	1.3×10^{-07}
Area 20, Water Well	07/13/92	1.0×10^{-07}	1.3×10^{-07}
Area 20, Water Well	07/13/92	4.3×10^{-10}	4.2×10^{-09}
Area 20, Water Well	08/04/92	6.2×10^{-08}	1.3×10^{-07}
Area 20, Water Well	09/01/92	-7.9×10^{-08}	1.3×10^{-07}
Area 20, Water Well	10/05/92	-2.9×10^{-07}	1.3×10^{-07}
Area 20, Water Well	10/05/92	-1.1×10^{-09}	7.0×10^{-09}
Area 20, Water Well	11/24/92	4.0×10^{-08}	1.3×10^{-07}
Area 20, Water Well	12/02/92	9.4×10^{-08}	1.3×10^{-07}
Area 20, Well 20	01/15/92	1.5×10^{-07}	1.3×10^{-07}
Area 20, Well 20	02/04/92	3.9×10^{-07}	1.3×10^{-07}
Area 20, Well 20	03/05/92	-5.2×10^{-08}	1.3×10^{-07}
Area 20, Well 20	04/07/92	1.5×10^{-07}	1.2×10^{-07}
Area 20, Well 20	05/05/92	1.2×10^{-07}	1.3×10^{-07}
Area 20, Well 20	06/02/92	-1.6×10^{-07}	1.3×10^{-07}
Area 20, Well 20	07/09/92	6.3×10^{-08}	1.3×10^{-07}
Area 20, Well 20	08/12/92	-2.3×10^{-07}	1.2×10^{-07}
Area 20, Well 20	09/10/92	8.8×10^{-08}	1.3×10^{-07}
Area 20, Well 20	10/07/92	-3.1×10^{-08}	1.3×10^{-07}
Area 20, Well 20	11/04/92	3.9×10^{-08}	1.3×10^{-07}
Area 23, Army Well No. 1	01/22/92	4.5×10^{-07}	1.4×10^{-07}
Area 23, Army Well No. 1	02/24/92	2.6×10^{-08}	1.4×10^{-07}
Area 23, Army Well No. 1	02/24/92	3.9×10^{-09}	4.4×10^{-09}
Area 23, Army Well No. 1	04/06/92	-7.4×10^{-08}	1.3×10^{-07}
Area 23, Army Well No. 1	04/06/92	1.5×10^{-09}	4.6×10^{-09}
Area 23, Army Well No. 1	05/12/92	1.1×10^{-07}	1.3×10^{-07}
Area 23, Army Well No. 1	06/02/92	-9.4×10^{-08}	1.3×10^{-07}
Area 23, Army Well No. 1	07/13/92	-2.1×10^{-09}	4.2×10^{-09}
Area 23, Army Well No. 1	07/13/92	4.6×10^{-08}	1.3×10^{-07}
Area 23, Army Well No. 1	08/04/92	4.4×10^{-08}	1.3×10^{-07}
Area 23, Army Well No. 1	09/01/92	-3.0×10^{-08}	1.3×10^{-07}
Area 23, Army Well No. 1	10/05/92	-2.9×10^{-07}	1.3×10^{-07}
Area 23, Army Well No. 1	10/05/92	-2.5×10^{-08}	6.5×10^{-09}
Area 23, Army Well No. 1	11/09/92	1.6×10^{-07}	1.3×10^{-07}
Area 23, Army Well No. 1	12/02/92	-1.3×10^{-07}	1.3×10^{-07}
Area 23, H&S Sump	10/22/92	1.1×10^{-07}	1.3×10^{-07}
Area 23, Mercury	01/21/92	3.5×10^{-07}	1.4×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-08} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Mercury	01/27/92	-3.4×10^{-08}	1.3×10^{-07}
Area 23, Mercury	02/03/92	4.7×10^{-08}	1.3×10^{-07}
Area 23, Mercury	02/10/92	2.7×10^{-07}	1.4×10^{-07}
Area 23, Mercury	02/18/92	3.0×10^{-08}	1.3×10^{-07}
Area 23, Mercury	02/24/92	3.8×10^{-09}	1.4×10^{-07}
Area 23, Mercury	03/02/92	1.7×10^{-07}	1.4×10^{-07}
Area 23, Mercury	03/09/92	7.3×10^{-08}	1.3×10^{-07}
Area 23, Mercury	03/16/92	3.2×10^{-07}	1.3×10^{-07}
Area 23, Mercury	03/24/92	-1.0×10^{-08}	1.3×10^{-07}
Area 23, Mercury	03/30/92	-8.3×10^{-08}	1.3×10^{-07}
Area 23, Mercury	04/07/92	-8.9×10^{-08}	1.3×10^{-07}
Area 23, Mercury	04/14/92	1.0×10^{-07}	1.3×10^{-07}
Area 23, Mercury	04/20/92	-3.8×10^{-08}	1.2×10^{-07}
Area 23, Mercury	04/28/92	3.3×10^{-09}	1.3×10^{-07}
Area 23, Mercury	05/05/92	-2.3×10^{-07}	1.3×10^{-07}
Area 23, Mercury	05/11/92	3.1×10^{-07}	1.3×10^{-07}
Area 23, Mercury	05/18/92	2.2×10^{-10}	1.3×10^{-07}
Area 23, Mercury	05/26/92	1.3×10^{-07}	1.3×10^{-07}
Area 23, Mercury	06/01/92	2.4×10^{-07}	1.3×10^{-07}
Area 23, Mercury	06/09/92	-1.0×10^{-07}	1.3×10^{-07}
Area 23, Mercury	06/15/92	4.6×10^{-08}	1.3×10^{-07}
Area 23, Mercury	06/22/92	-8.2×10^{-08}	1.3×10^{-07}
Area 23, Mercury	06/29/92	-1.6×10^{-07}	1.2×10^{-07}
Area 23, Mercury	07/06/92	1.7×10^{-08}	1.3×10^{-07}
Area 23, Mercury	07/13/92	-9.2×10^{-08}	1.3×10^{-07}
Area 23, Mercury	07/20/92	3.5×10^{-08}	1.3×10^{-07}
Area 23, Mercury	07/27/92	-1.4×10^{-07}	1.3×10^{-07}
Area 23, Mercury	08/03/92	6.9×10^{-08}	1.3×10^{-07}
Area 23, Mercury	08/11/92	-9.9×10^{-08}	2.5×10^{-07}
Area 23, Mercury	08/17/92	2.4×10^{-07}	1.3×10^{-07}
Area 23, Mercury	08/24/92	-3.3×10^{-09}	1.3×10^{-07}
Area 23, Mercury	08/31/92	2.0×10^{-08}	1.3×10^{-07}
Area 23, Mercury	09/08/92	6.2×10^{-08}	1.3×10^{-07}
Area 23, Mercury	09/14/92	4.0×10^{-07}	1.3×10^{-07}
Area 23, Mercury	09/21/92	1.2×10^{-07}	1.3×10^{-07}
Area 23, Mercury	09/28/92	-2.0×10^{-08}	1.3×10^{-07}
Area 23, Mercury	10/05/92	-3.7×10^{-07}	1.3×10^{-07}
Area 23, Mercury	10/12/92	-2.3×10^{-07}	1.3×10^{-07}
Area 23, Mercury	10/19/92	-8.3×10^{-08}	1.3×10^{-07}
Area 23, Mercury	10/26/92	-1.7×10^{-07}	1.3×10^{-07}

Mean MDC: 5.4×10^{-07} μCi/mL

Standard Deviation of Mean MDC: 1.9×10^{-08} μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 23, Mercury	11/02/92	-1.7 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Mercury	11/09/92	6.5 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Mercury	11/16/92	2.4 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Mercury	11/23/92	-1.0 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Mercury	11/30/92	2.5 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Mercury	12/07/92	5.0 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Mercury	12/15/92	-1.4 x 10 ⁻⁰⁷	1.6 x 10 ⁻⁰⁷
Area 23, Mercury	12/22/92	-6.3 x 10 ⁻⁰⁸	1.8 x 10 ⁻⁰⁷
Area 23, Mercury	12/28/92	2.4 x 10 ⁻⁰⁷	2.0 x 10 ⁻⁰⁷
Area 23, Sewage	01/16/92	1.6 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Sewage	04/21/92	3.5 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Sewage	07/14/92	6.6 x 10 ⁻⁰⁹	1.3 x 10 ⁻⁰⁷
Area 23, Sewage	10/14/92	-9.5 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	01/16/92	6.8 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	02/27/92	-1.0 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	03/18/92	-1.4 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	04/21/92	3.2 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	05/12/92	-5.3 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	06/04/92	3.1 x 10 ⁻⁰⁹	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	07/09/92	-5.3 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	08/12/92	8.4 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	09/02/92	2.1 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	10/06/92	-9.9 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	11/19/92	1.4 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 23, Swimming Pool	12/03/92	2.6 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	01/21/92	6.6 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	01/27/92	2.5 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	02/03/92	-1.3 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	02/10/92	1.4 x 10 ⁻⁰⁷	1.4 x 10 ⁻⁰⁷
Area 25, Building 4221	02/18/92	7.3 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	02/24/92	1.2 x 10 ⁻⁰⁷	1.4 x 10 ⁻⁰⁷
Area 25, Building 4221	03/02/92	2.3 x 10 ⁻⁰⁷	1.4 x 10 ⁻⁰⁷
Area 25, Building 4221	03/09/92	-1.2 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	03/16/92	6.5 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	03/24/92	-2.0 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	03/30/92	-4.2 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	04/07/92	5.8 x 10 ⁻⁰⁸	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	04/14/92	2.1 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	04/20/92	-3.1 x 10 ⁻⁰⁹	1.3 x 10 ⁻⁰⁷
Area 25, Building 4221	04/28/92	-1.2 x 10 ⁻⁰⁷	1.3 x 10 ⁻⁰⁷

Mean MDC: 5.4 x 10⁻⁰⁷ μCi/mL

Standard Deviation of Mean MDC: 1.9 x 10⁻⁰⁸ μCi/mL

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, Building 4221	05/05/92	2.2×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	05/11/92	2.2×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	05/18/92	9.8×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	05/26/92	6.6×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	06/01/92	-6.9×10^{-09}	1.3×10^{-07}
Area 25, Building 4221	06/09/92	-1.7×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	06/15/92	-1.4×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	06/22/92	-8.5×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	06/29/92	9.8×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	07/06/92	4.0×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	07/13/92	-4.6×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	07/20/92	9.6×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	07/27/92	-1.3×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	08/03/92	1.1×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	08/11/92	8.7×10^{-08}	2.6×10^{-07}
Area 25, Building 4221	08/17/92	3.5×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	08/24/92	-1.2×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	08/31/92	5.6×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	09/08/92	6.6×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	09/14/92	1.6×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	09/21/92	1.5×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	09/28/92	-1.4×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	10/05/92	-6.0×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	10/12/92	3.2×10^{-07}	1.4×10^{-07}
Area 25, Building 4221	10/19/92	-2.5×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	10/26/92	-2.0×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	11/02/92	-8.5×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	11/09/92	-6.2×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	11/16/92	-5.5×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	11/23/92	3.1×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	11/30/92	1.5×10^{-07}	1.3×10^{-07}
Area 25, Building 4221	12/07/92	-9.6×10^{-08}	1.3×10^{-07}
Area 25, Building 4221	12/15/92	-9.9×10^{-08}	1.6×10^{-07}
Area 25, Building 4221	12/22/92	-2.4×10^{-07}	1.8×10^{-07}
Area 25, Building 4221	12/28/92	1.6×10^{-07}	2.0×10^{-07}
Area 25, Well J-11 Reservoir	01/08/92	4.2×10^{-08}	1.4×10^{-07}
Area 25, Well J-11 Reservoir	02/11/92	6.3×10^{-09}	1.2×10^{-07}
Area 25, Well J-11 Reservoir	03/10/92	2.8×10^{-07}	1.3×10^{-07}
Area 25, Well J-11 Reservoir	05/06/92	-6.3×10^{-08}	1.3×10^{-07}
Area 25, Well J-11 Reservoir	06/04/92	3.8×10^{-08}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, Well J-11 Reservoir	07/08/92	-1.5×10^{-07}	1.3×10^{-07}
Area 25, Well J-11 Reservoir	08/12/92	2.1×10^{-07}	1.3×10^{-07}
Area 25, Well J-11 Reservoir	09/02/92	8.1×10^{-08}	1.3×10^{-07}
Area 25, Well J-11 Reservoir	10/06/92	-4.3×10^{-08}	1.3×10^{-07}
Area 25, Well J-11 Reservoir	11/18/92	1.6×10^{-07}	1.3×10^{-07}
Area 25, Well J-11 Reservoir	12/01/92	9.9×10^{-08}	1.3×10^{-07}
Area 25, Well J-12	05/12/92	-7.2×10^{-08}	1.3×10^{-07}
Area 25, Well J-12	05/12/92	-2.4×10^{-09}	3.9×10^{-09}
Area 25, Well J-12	06/02/92	2.5×10^{-08}	1.3×10^{-07}
Area 25, Well J-12	07/13/92	-2.4×10^{-09}	4.2×10^{-09}
Area 25, Well J-12	07/13/92	2.6×10^{-07}	1.3×10^{-07}
Area 25, Well J-12	08/04/92	6.2×10^{-08}	1.3×10^{-07}
Area 25, Well J-12	09/01/92	-1.0×10^{-08}	1.3×10^{-07}
Area 25, Well J-12	10/05/92	-1.6×10^{-07}	1.3×10^{-07}
Area 25, Well J-12	10/05/92	-3.0×10^{-08}	6.6×10^{-09}
Area 25, Well J-12	11/09/92	1.2×10^{-07}	1.3×10^{-07}
Area 25, Well J-12	12/02/92	8.1×10^{-08}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	01/08/92	1.8×10^{-08}	1.4×10^{-07}
Area 25, Well J-12 Reservoir	02/11/92	1.0×10^{-07}	1.2×10^{-07}
Area 25, Well J-12 Reservoir	03/10/92	1.2×10^{-07}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	04/08/92	-3.5×10^{-08}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	05/06/92	7.9×10^{-08}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	06/04/92	2.2×10^{-10}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	07/08/92	-2.3×10^{-07}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	08/12/92	5.5×10^{-08}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	09/02/92	-1.0×10^{-08}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	10/06/92	-1.5×10^{-07}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	11/18/92	1.4×10^{-07}	1.3×10^{-07}
Area 25, Well J-12 Reservoir	12/01/92	-2.0×10^{-08}	1.3×10^{-07}
Area 25, Well J-13	01/22/92	3.3×10^{-07}	1.4×10^{-07}
Area 25, Well J-13	02/24/92	1.5×10^{-10}	4.3×10^{-09}
Area 25, Well J-13	02/24/92	1.3×10^{-07}	1.4×10^{-07}
Area 25, Well J-13	04/06/92	1.6×10^{-08}	1.3×10^{-07}
Area 25, Well J-13	04/06/92	2.3×10^{-09}	4.2×10^{-09}
Area 25, Well J-13	05/12/92	-2.2×10^{-08}	1.3×10^{-07}
Area 25, Well J-13	06/02/92	-7.9×10^{-08}	1.3×10^{-07}
Area 25, Well J-13	07/13/92	-2.6×10^{-09}	4.2×10^{-09}
Area 25, Well J-13	07/13/92	2.0×10^{-08}	1.3×10^{-07}
Area 25, Well J-13	08/04/92	3.1×10^{-08}	1.3×10^{-07}
Area 25, Well J-13	09/01/92	1.1×10^{-07}	1.3×10^{-07}
Area 25, Well J-13	10/05/92	-2.6×10^{-08}	6.5×10^{-09}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 25, Well J-13	10/05/92	-2.3×10^{-07}	1.3×10^{-07}
Area 25, Well J-13	11/09/92	1.2×10^{-07}	1.3×10^{-07}
Area 25, Well J-13	12/02/92	9.4×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	01/21/92	8.2×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	01/27/92	1.7×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	02/03/92	-1.3×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	02/10/92	1.1×10^{-07}	1.4×10^{-07}
Area 27, Cafeteria	02/18/92	-1.7×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	02/24/92	-1.1×10^{-08}	1.4×10^{-07}
Area 27, Cafeteria	03/02/92	3.0×10^{-08}	1.4×10^{-07}
Area 27, Cafeteria	03/09/92	1.0×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	03/16/92	9.7×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	03/24/92	-1.0×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	03/30/92	-1.3×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	04/07/92	-5.1×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	04/14/92	8.6×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	04/20/92	1.2×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	04/28/92	-1.0×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	05/05/92	-3.1×10^{-09}	1.3×10^{-07}
Area 27, Cafeteria	05/11/92	1.4×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	05/18/92	1.3×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	05/26/92	1.2×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	06/01/92	1.2×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	06/09/92	-2.6×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	06/15/92	-1.2×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	06/22/92	1.4×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	06/29/92	1.2×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	07/06/92	7.1×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	07/13/92	-9.5×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	07/20/92	-2.4×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	07/27/92	-1.6×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	08/03/92	1.7×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	08/11/92	8.1×10^{-08}	2.6×10^{-07}
Area 27, Cafeteria	08/17/92	3.9×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	08/24/92	-2.1×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	08/31/92	3.6×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	09/08/92	-1.4×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	09/14/92	9.4×10^{-09}	1.3×10^{-07}
Area 27, Cafeteria	09/21/92	3.1×10^{-08}	1.3×10^{-07}
Area 27, Cafeteria	09/28/92	-2.2×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	10/05/92	-1.5×10^{-07}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.7 (Tritium in Water - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 27, Cafeteria	10/12/92	-1.9×10^{-07}	1.3×10^{-07}
Area 27, Cafeteria	10/19/92	-1.9×10^{-07}	1.3×10^{-07}
Area 29, Topopah Spring	01/14/92	3.0×10^{-07}	1.3×10^{-07}
Area 29, Topopah Spring	02/19/92	6.8×10^{-08}	1.3×10^{-07}
Area 29, Topopah Spring	04/23/92	2.8×10^{-07}	1.3×10^{-07}
Area 29, Topopah Spring	05/21/92	1.4×10^{-07}	1.3×10^{-07}
Area 29, Topopah Spring	06/04/92	-3.8×10^{-08}	1.3×10^{-07}

Mean MDC: $5.4 \times 10^{-07} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.9 \times 10^{-06} \mu\text{Ci/mL}$

Attachment C.8 ^{226}Ra in Water - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well 5B	10/05/92	-9.0×10^{-11}	5.2×10^{-10}
Area 5, Well 5C	02/24/92	6.1×10^{-10}	5.8×10^{-10}
Area 5, Well 5C	04/06/92	5.0×10^{-10}	9.2×10^{-10}
Area 5, Well 5C	07/13/92	2.5×10^{-09}	1.2×10^{-09}
Area 5, Well 5C	10/05/92	1.7×10^{-11}	2.5×10^{-11}
Area 5, Well UE-5c	02/24/92	-2.5×10^{-10}	6.0×10^{-10}
Area 6, Well 4	02/24/92	6.0×10^{-11}	3.0×10^{-10}
Area 6, Well 4	04/06/92	1.4×10^{-09}	9.1×10^{-10}
Area 6, Well 4	07/13/92	0.0	0.0
Area 6, Well 4	10/05/92	5.9×10^{-10}	7.4×10^{-10}
Area 6, Well C	02/24/92	3.7×10^{-10}	4.8×10^{-10}
Area 6, Well C	04/06/92	3.0×10^{-09}	6.9×10^{-10}
Area 6, Well C	07/13/92	2.1×10^{-09}	1.0×10^{-09}
Area 6, Well C	10/05/92	4.5×10^{-09}	9.3×10^{-10}
Area 6, Well C-1	02/24/92	2.3×10^{-09}	6.5×10^{-10}
Area 6, Well C-1	04/06/92	2.2×10^{-09}	9.1×10^{-10}
Area 6, Well C-1	07/13/92	7.1×10^{-10}	1.2×10^{-09}
Area 6, Well C-1	10/05/92	1.1×10^{-09}	7.6×10^{-10}
Area 16, Well UE-16d	02/24/92	3.2×10^{-10}	5.5×10^{-10}
Area 16, Well UE-16d	04/06/92	2.9×10^{-09}	7.6×10^{-10}
Area 16, Well UE-16d	07/13/92	2.5×10^{-09}	8.5×10^{-10}
Area 16, Well UE-16d	10/05/92	3.5×10^{-09}	8.2×10^{-10}
Area 18, Well 8	02/24/92	-6.0×10^{-10}	5.7×10^{-10}
Area 18, Well 8	04/06/92	1.2×10^{-09}	1.0×10^{-09}
Area 18, Well 8	07/13/92	5.0×10^{-10}	4.4×10^{-10}
Area 18, Well 8	10/05/92	-1.2×10^{-10}	3.4×10^{-10}
Area 19, Well UE-19c	02/24/92	2.8×10^{-10}	7.1×10^{-10}
Area 20, Water Well	04/06/92	6.5×10^{-09}	6.2×10^{-09}
Area 20, Water Well	07/13/92	1.1×10^{-09}	5.3×10^{-10}
Area 20, Water Well	10/05/92	1.5×10^{-09}	5.9×10^{-10}
Area 23, Army Well	02/24/92	4.4×10^{-10}	5.8×10^{-10}
Area 23, Army Well	04/06/92	1.6×10^{-09}	9.3×10^{-10}
Area 23, Army Well	07/13/92	2.8×10^{-09}	1.0×10^{-09}
Area 23, Army Well	10/05/92	1.1×10^{-09}	7.3×10^{-10}
Area 25, Well J-12	07/13/92	3.2×10^{-10}	6.6×10^{-10}
Area 25, Well J-12	10/05/92	3.0×10^{-10}	3.1×10^{-10}
Area 25, Well J-13	02/24/92	3.2×10^{-10}	8.2×10^{-10}
Area 25, Well J-13	04/06/92	2.7×10^{-09}	8.7×10^{-10}
Area 25, Well J-13	05/12/92	5.1×10^{-10}	6.8×10^{-10}
Area 25, Well J-13	07/13/92	$0.0 \times 10^{+00}$	$0.0 \times 10^{+00}$
Area 25, Well J-13	10/05/92	2.5×10^{-10}	5.1×10^{-10}

Mean MDC: $2.5 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $6.7 \times 10^{-10} \mu\text{Ci/mL}$

Attachment C.9 ^{228}Ra in Water - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Concentration</u>	<u>Standard Deviation (s)</u>
Area 5, Well 5B	10/05/92	-7.8×10^{-10}	3.1×10^{-10}
Area 5, Well 5C	02/24/92	-1.8×10^{-10}	2.4×10^{-10}
Area 5, Well 5C	04/06/92	0.0	0.0
Area 5, Well 5C	07/13/92	-1.3×10^{-09}	8.0×10^{-10}
Area 5, Well 5C	10/05/92	-1.8×10^{-10}	1.8×10^{-10}
Area 5, Well UE-5c	02/24/92	6.6×10^{-10}	3.4×10^{-10}
Area 6, Well C	02/24/92	6.9×10^{-10}	2.7×10^{-10}
Area 6, Well C	04/06/92	7.6×10^{-10}	4.6×10^{-10}
Area 6, Well C	07/13/92	7.3×10^{-10}	7.8×10^{-10}
Area 6, Well C	10/05/92	9.1×10^{-10}	7.3×10^{-10}
Area 6, Well C-1	02/24/92	-4.5×10^{-11}	2.5×10^{-10}
Area 6, Well C-1	04/06/92	1.6×10^{-09}	6.9×10^{-10}
Area 6, Well C-1	07/13/92	-2.7×10^{-10}	9.4×10^{-10}
Area 6, Well C-1	10/05/92	1.2×10^{-09}	6.2×10^{-10}
Area 6, Well 4	02/24/92	4.0×10^{-10}	3.1×10^{-10}
Area 6, Well 4	04/06/92	0.0	0.0
Area 6, Well 4	07/13/92	8.2×10^{-10}	7.0×10^{-10}
Area 6, Well 4	10/05/92	5.1×10^{-10}	6.0×10^{-10}
Area 16, Well UE-16d	02/24/92	-1.3×10^{-10}	2.4×10^{-10}
Area 16, Well UE-16d	04/06/92	-6.0×10^{-10}	3.8×10^{-10}
Area 16, Well UE-16d	07/13/92	1.8×10^{-09}	7.3×10^{-10}
Area 16, Well UE-16d	10/05/92	3.1×10^{-10}	2.4×10^{-10}
Area 18, Well 8	02/24/92	1.5×10^{-10}	2.9×10^{-10}
Area 18, Well 8	04/06/92	2.3×10^{-10}	7.0×10^{-10}
Area 18, Well 8	07/13/92	0.0	0.0
Area 18, Well 8	10/05/92	-7.9×10^{-10}	4.6×10^{-10}
Area 19, Well UE-19c	02/24/92	-1.7×10^{-10}	3.1×10^{-10}
Area 20, Water Well	04/06/92	-2.1×10^{-10}	5.9×10^{-10}
Area 20, Water Well	07/13/92	-2.7×10^{-10}	3.6×10^{-10}
Area 20, Water Well	10/05/92	-3.5×10^{-10}	3.2×10^{-10}
Area 23, Army Well	02/24/92	4.6×10^{-11}	1.3×10^{-10}
Area 23, Army Well	04/06/92	6.0×10^{-10}	6.4×10^{-10}
Area 23, Army Well	07/13/92	1.8×10^{-10}	6.5×10^{-10}
Area 23, Army Well	10/05/92	3.6×10^{-10}	6.6×10^{-10}
Area 25, Well J-12	07/13/92	2.2×10^{-10}	5.3×10^{-10}
Area 25, Well J-12	10/05/92	-4.4×10^{-10}	4.1×10^{-10}
Area 25, Well J-13	02/24/92	1.3×10^{-10}	3.4×10^{-10}
Area 25, Well J-13	04/06/92	3.5×10^{-10}	5.4×10^{-10}
Area 25, Well J-13	05/12/92	-3.2×10^{-10}	4.4×10^{-10}
Area 25, Well J-13	07/13/92	7.2×10^{-10}	1.1×10^{-09}
Area 25, Well J-13	10/05/92	3.6×10^{-10}	4.2×10^{-10}

Mean MDC: $1.9 \times 10^{-09} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $7.0 \times 10^{-10} \mu\text{Ci/mL}$

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Attachment C.10 Duplicates: ^{90}Sr in Water [containment ponds] - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Original</u>	<u>Duplicate</u>
Area 12, E Tunnel Effluent	07/21/92	7.4×10^{-09}	4.9×10^{-09}
Area 12, E Tunnel Pond No. 1	07/21/92	6.1×10^{-09}	7.2×10^{-09}
Area 12, N Tunnel Effluent	07/21/92	6.1×10^{-11}	5.9×10^{-10}
Area 12, N Tunnel Pond No. 2	07/21/92	1.5×10^{-10}	5.1×10^{-10}
Area 12, T Tunnel Effluent	07/21/92	9.5×10^{-09}	1.0×10^{-08}
Area 12, T Tunnel Pond No. 2	07/21/92	1.7×10^{-08}	1.8×10^{-08}
Area 12, T Tunnel Pond No. 3	07/21/92	1.6×10^{-08}	1.7×10^{-08}

Typical Limit of Detection: $1.0 \times 10^{-9} \mu\text{Ci/mL}$

Attachment C.11 Duplicates: Gross Alpha in Water [potable water and end points] - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Original</u>	<u>Duplicate</u>
Area 1, Building 101	01/13/92	1.4×10^{-08}	8.4×10^{-09}
Area 1, Building 101	03/30/92	9.8×10^{-09}	7.8×10^{-09}
Area 1, Building 101	06/29/92	7.4×10^{-09}	1.5×10^{-08}
Area 1, Building 101	09/28/92	4.7×10^{-10}	7.1×10^{-09}
Area 2, Rest Room	01/13/92	4.7×10^{-10}	5.7×10^{-10}
Area 2, Rest Room	03/30/92	4.3×10^{-10}	2.3×10^{-10}
Area 2, Rest Room	06/29/92	8.4×10^{-10}	3.3×10^{-10}
Area 2, Rest Room	09/28/92	1.1×10^{-09}	6.4×10^{-10}
Area 2, Rest Room	12/29/92	7.3×10^{-10}	6.4×10^{-10}
Area 3, Cafeteria	01/13/92	3.2×10^{-09}	8.4×10^{-09}
Area 6, Bottled Water	01/13/92	1.7×10^{-10}	6.5×10^{-11}
Area 6, Bottled Water	03/30/92	-1.3×10^{-10}	-1.3×10^{-10}
Area 6, Bottled Water	06/29/92	1.9×10^{-10}	1.3×10^{-10}
Area 6, Bottled Water	09/28/92	-1.7×10^{-10}	-6.7×10^{-11}
Area 6, Bottled Water	12/29/92	-1.2×10^{-10}	9.6×10^{-11}
Area 6, Building 6-900	06/29/92	6.0×10^{-09}	3.8×10^{-08}
Area 6, Building 6-900	09/28/92	4.3×10^{-09}	9.4×10^{-09}
Area 6, Building 6-900	12/29/92	2.0×10^{-08}	1.5×10^{-08}
Area 6, Cafeteria	01/13/92	1.2×10^{-08}	6.9×10^{-09}
Area 6, Cafeteria	03/30/92	1.1×10^{-08}	4.7×10^{-09}
Area 6, Cafeteria	06/29/92	9.9×10^{-09}	3.3×10^{-08}
Area 6, Cafeteria	09/28/92	7.9×10^{-09}	1.1×10^{-08}
Area 6, Cafeteria	12/29/92	1.4×10^{-08}	1.2×10^{-08}
Area 12, Cafeteria	01/13/92	7.3×10^{-10}	4.1×10^{-10}
Area 12, Cafeteria	06/29/92	8.8×10^{-10}	4.8×10^{-10}
Area 12, Cafeteria	09/28/92	5.4×10^{-09}	7.7×10^{-10}
Area 23, Mercury	01/13/92	1.1×10^{-08}	7.9×10^{-09}
Area 23, Mercury	03/30/92	8.1×10^{-09}	7.1×10^{-09}
Area 23, Mercury	06/29/92	6.9×10^{-09}	3.5×10^{-09}
Area 23, Mercury	09/28/92	7.3×10^{-09}	6.7×10^{-09}
Area 23, Mercury	12/28/92	5.3×10^{-09}	5.6×10^{-09}
Area 25, Building 4221	01/13/92	8.8×10^{-10}	1.3×10^{-09}
Area 25, Building 4221	03/30/92	1.3×10^{-09}	9.9×10^{-10}
Area 25, Building 4221	06/29/92	2.5×10^{-09}	9.5×10^{-10}
Area 25, Building 4221	09/28/92	1.2×10^{-09}	2.0×10^{-09}
Area 25, Building 4221	12/28/92	1.5×10^{-09}	1.4×10^{-09}
Area 27, Cafeteria	01/13/92	1.1×10^{-08}	1.2×10^{-08}
Area 27, Cafeteria	03/30/92	8.1×10^{-09}	1.9×10^{-08}
Area 27, Cafeteria	06/29/92	7.4×10^{-09}	1.3×10^{-08}
Area 27, Cafeteria	09/28/92	5.6×10^{-09}	5.2×10^{-09}

Typical limit of detection: 2.0×10^{-9} μCi/mL

Attachment C.13 Duplicates: $^{239+240}\text{Pu}$ in Water [containment ponds] - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>$\mu\text{Ci/mL}$</u>	
		<u>Original</u>	<u>Duplicate</u>
Area 6, Yucca Pond	01/15/92	3.0×10^{-11}	4.8×10^{-11}
Area 6, Yucca Pond	04/27/92	2.8×10^{-11}	2.9×10^{-11}
Area 12, E Tunnel Effluent	01/15/92	6.9×10^{-09}	6.6×10^{-09}
Area 12, E Tunnel Effluent	04/09/92	5.9×10^{-09}	5.0×10^{-09}
Area 12, E Tunnel Effluent	07/21/92	5.8×10^{-09}	5.5×10^{-09}
Area 12, E Tunnel Effluent	10/20/92	6.5×10^{-09}	5.5×10^{-09}
Area 12, E Tunnel Pond No. 1	07/21/92	5.5×10^{-09}	5.1×10^{-09}
Area 12, E Tunnel Pond No. 1	10/20/92	5.2×10^{-09}	5.3×10^{-09}
Area 12, N Tunnel Effluent	01/15/92	-4.6×10^{-12}	-1.7×10^{-11}
Area 12, N Tunnel Effluent	04/09/92	1.6×10^{-11}	-8.8×10^{-12}
Area 12, N Tunnel Effluent	07/21/92	1.9×10^{-09}	1.0×10^{-10}
Area 12, N Tunnel Effluent	10/20/92	1.3×10^{-11}	2.6×10^{-11}
Area 12, N Tunnel Pond No. 1	01/15/92	1.4×10^{-11}	-3.1×10^{-12}
Area 12, N Tunnel Pond No. 1	04/09/92	-3.8×10^{-12}	1.2×10^{-11}
Area 12, N Tunnel Pond No. 2	02/12/92	1.7×10^{-11}	-1.3×10^{-12}
Area 12, N Tunnel Pond No. 2	04/09/92	1.7×10^{-11}	7.1×10^{-12}
Area 12, N Tunnel Pond No. 2	07/21/92	8.2×10^{-11}	3.3×10^{-11}
Area 12, N Tunnel Pond No. 2	10/20/92	6.4×10^{-12}	3.4×10^{-11}
Area 12, N Tunnel Pond No. 3	02/12/92	1.0×10^{-09}	2.8×10^{-11}
Area 12, N Tunnel Pond No. 3	04/09/92	2.3×10^{-11}	-8.6×10^{-12}
Area 12, N Tunnel Pond No. 3	07/21/92	7.7×10^{-11}	1.5×10^{-10}
Area 12, N Tunnel Pond No. 3	10/20/92	1.8×10^{-11}	2.9×10^{-11}
Area 12, T Tunnel Effluent	01/15/92	2.4×10^{-10}	3.1×10^{-10}
Area 12, T Tunnel Effluent	04/09/92	3.1×10^{-10}	2.8×10^{-10}
Area 12, T Tunnel Effluent	07/21/92	1.9×10^{-09}	2.2×10^{-09}
Area 12, T Tunnel Effluent	10/20/92	3.8×10^{-09}	3.6×10^{-09}
Area 12, T Tunnel Pond No. 1	02/12/92	2.3×10^{-09}	1.6×10^{-09}
Area 12, T Tunnel Pond No. 1	04/09/92	1.9×10^{-09}	1.5×10^{-11}
Area 12, T Tunnel Pond No. 2	02/12/92	4.0×10^{-09}	3.4×10^{-09}
Area 12, T Tunnel Pond No. 2	04/09/92	1.8×10^{-09}	1.6×10^{-09}
Area 12, T Tunnel Pond No. 2	07/21/92	2.5×10^{-09}	3.2×10^{-09}
Area 12, T Tunnel Pond No. 2	10/20/92	3.7×10^{-09}	4.0×10^{-09}
Area 12, T Tunnel Pond No. 3	07/21/92	3.1×10^{-09}	2.9×10^{-09}
Area 12, T Tunnel Pond No. 3	10/20/92	2.7×10^{-09}	2.5×10^{-09}

Typical Limit of Detection: $5.0 \times 10^{-11} \mu\text{Ci/mL}$

Attachment C.14 (Duplicates: Gross Beta in Water [containment Ponds] - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Original</u>	<u>Duplicate</u>
Area 12, N Tunnel Pond No. 1	04/09/92	1.2×10^{-08}	2.3×10^{-09}
Area 12, N Tunnel Pond No. 1	05/12/92	8.6×10^{-09}	-8.1×10^{-09}
Area 12, N Tunnel Pond No. 1	06/16/92	-3.7×10^{-10}	1.8×10^{-08}
Area 12, N Tunnel Pond No. 2	02/12/92	8.4×10^{-08}	8.9×10^{-08}
Area 12, N Tunnel Pond No. 2	03/11/92	7.5×10^{-09}	1.7×10^{-08}
Area 12, N Tunnel Pond No. 2	04/09/92	1.8×10^{-08}	6.9×10^{-09}
Area 12, N Tunnel Pond No. 2	05/12/92	7.5×10^{-09}	2.5×10^{-08}
Area 12, N Tunnel Pond No. 2	06/16/92	1.3×10^{-08}	1.5×10^{-08}
Area 12, N Tunnel Pond No. 2	07/21/92	1.0×10^{-08}	6.9×10^{-09}
Area 12, N Tunnel Pond No. 2	08/18/92	-5.1×10^{-09}	-1.2×10^{-08}
Area 12, N Tunnel Pond No. 2	09/03/92	1.5×10^{-08}	1.7×10^{-08}
Area 12, N Tunnel Pond No. 2	10/20/92	2.0×10^{-09}	3.0×10^{-09}
Area 12, N Tunnel Pond No. 2	12/02/92	-1.8×10^{-08}	-2.7×10^{-10}
Area 12, N Tunnel Pond No. 3	02/12/92	1.1×10^{-07}	7.3×10^{-08}
Area 12, N Tunnel Pond No. 3	03/11/92	2.9×10^{-08}	1.3×10^{-08}
Area 12, N Tunnel Pond No. 3	04/09/92	-3.1×10^{-09}	4.6×10^{-09}
Area 12, N Tunnel Pond No. 3	05/12/92	4.1×10^{-11}	7.6×10^{-09}
Area 12, N Tunnel Pond No. 3	06/16/92	1.4×10^{-08}	1.2×10^{-09}
Area 12, N Tunnel Pond No. 3	07/21/92	1.3×10^{-08}	-5.1×10^{-09}
Area 12, N Tunnel Pond No. 3	08/18/92	2.8×10^{-08}	1.1×10^{-09}
Area 12, N Tunnel Pond No. 3	09/03/92	1.9×10^{-08}	7.0×10^{-09}
Area 12, N Tunnel Pond No. 3	10/20/92	2.1×10^{-08}	-8.7×10^{-09}
Area 12, T Tunnel Effluent	01/15/92	1.3×10^{-06}	1.7×10^{-06}
Area 12, T Tunnel Effluent	02/12/92	9.3×10^{-07}	9.9×10^{-07}
Area 12, T Tunnel Effluent	03/11/92	1.0×10^{-06}	1.1×10^{-06}
Area 12, T Tunnel Effluent	04/09/92	6.9×10^{-07}	6.4×10^{-07}
Area 12, T Tunnel Effluent	05/14/92	7.1×10^{-07}	7.8×10^{-07}
Area 12, T Tunnel Effluent	06/09/92	7.6×10^{-07}	6.9×10^{-07}
Area 12, T Tunnel Effluent	07/21/92	4.6×10^{-07}	5.0×10^{-07}
Area 12, T Tunnel Effluent	08/18/92	2.4×10^{-07}	3.0×10^{-07}
Area 12, T Tunnel Effluent	09/03/92	4.2×10^{-07}	4.5×10^{-07}
Area 12, T Tunnel Effluent	10/20/92	4.9×10^{-07}	4.6×10^{-07}
Area 12, T Tunnel Effluent	12/02/92	7.1×10^{-07}	6.5×10^{-07}
Area 12, T Tunnel Pond No. 1	02/12/92	8.6×10^{-07}	1.0×10^{-06}
Area 12, T Tunnel Pond No. 1	03/11/92	8.9×10^{-07}	9.1×10^{-07}
Area 12, T Tunnel Pond No. 1	04/09/92	4.9×10^{-07}	4.7×10^{-07}
Area 12, T Tunnel Pond No. 1	05/14/92	5.6×10^{-07}	5.9×10^{-07}
Area 12, T Tunnel Pond No. 1	06/09/92	4.9×10^{-07}	5.3×10^{-07}
Area 12, T Tunnel Pond No. 2	02/12/92	5.6×10^{-07}	6.0×10^{-07}

Typical limit of detection: 3.0×10^{-9} μCi/mL

Attachment C.15 Duplicates: Tritium in Water [containment ponds] - 1992

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Original</u>	<u>Duplicate</u>
Area 6, Yucca Pond	01/15/92	3.8×10^{-06}	3.8×10^{-06}
Area 6, Yucca Pond	02/12/92	2.3×10^{-06}	3.2×10^{-06}
Area 6, Yucca Pond	03/11/92	3.1×10^{-06}	3.2×10^{-06}
Area 6, Yucca Pond	04/27/92	2.7×10^{-06}	2.6×10^{-06}
Area 6, Yucca Pond	05/14/92	2.3×10^{-06}	2.6×10^{-06}
Area 6, Yucca Pond	06/03/92	2.2×10^{-06}	2.5×10^{-06}
Area 6, Yucca Pond	07/09/92	1.9×10^{-06}	2.2×10^{-06}
Area 6, Yucca Pond	08/20/92	1.9×10^{-06}	2.2×10^{-06}
Area 6, Yucca Pond	09/02/92	1.7×10^{-06}	1.7×10^{-06}
Area 6, Yucca Pond	10/06/92	1.4×10^{-06}	1.4×10^{-06}
Area 6, Yucca Pond	11/19/92	1.2×10^{-06}	1.2×10^{-06}
Area 6, Yucca Pond	11/19/92	2.7×10^{-06}	1.6×10^{-06}
Area 6, Yucca Pond	12/03/92	8.4×10^{-07}	1.2×10^{-06}
Area 6, Yucca Pond	12/03/92	9.8×10^{-07}	1.4×10^{-07}
Area 12, E Tunnel Effluent	01/15/92	2.2×10^{-03}	2.2×10^{-03}
Area 12, E Tunnel Effluent	02/12/92	1.7×10^{-03}	2.2×10^{-03}
Area 12, E Tunnel Effluent	03/11/92	2.2×10^{-03}	2.2×10^{-03}
Area 12, E Tunnel Effluent	04/09/92	2.1×10^{-03}	2.2×10^{-03}
Area 12, E Tunnel Effluent	05/12/92	2.0×10^{-03}	2.1×10^{-03}
Area 12, E Tunnel Effluent	06/09/92	2.1×10^{-03}	2.2×10^{-03}
Area 12, E Tunnel Effluent	07/21/92	2.1×10^{-03}	2.1×10^{-03}
Area 12, E Tunnel Effluent	08/27/92	2.0×10^{-03}	2.0×10^{-03}
Area 12, E Tunnel Effluent	09/03/92	2.0×10^{-03}	2.0×10^{-03}
Area 12, E Tunnel Effluent	10/20/92	2.0×10^{-03}	2.0×10^{-03}
Area 12, E Tunnel Effluent	12/02/92	2.0×10^{-03}	2.0×10^{-03}
Area 12, E Tunnel Pond No. 1	07/21/92	2.0×10^{-03}	2.0×10^{-03}
Area 12, E Tunnel Pond No. 1	08/18/92	1.9×10^{-03}	1.8×10^{-03}
Area 12, E Tunnel Pond No. 1	09/03/92	2.0×10^{-03}	2.0×10^{-03}
Area 12, E Tunnel Pond No. 1	10/20/92	1.9×10^{-03}	1.9×10^{-03}
Area 12, N Tunnel Effluent	01/15/92	2.9×10^{-04}	2.9×10^{-04}
Area 12, N Tunnel Effluent	02/12/92	2.5×10^{-04}	3.8×10^{-04}
Area 12, N Tunnel Effluent	03/11/92	3.6×10^{-04}	3.4×10^{-04}
Area 12, N Tunnel Effluent	04/09/92	3.6×10^{-04}	3.6×10^{-04}
Area 12, N Tunnel Effluent	05/12/92	3.3×10^{-04}	3.5×10^{-04}
Area 12, N Tunnel Effluent	06/16/92	8.6×10^{-04}	8.4×10^{-04}
Area 12, N Tunnel Effluent	07/21/92	4.3×10^{-04}	4.5×10^{-04}
Area 12, N Tunnel Effluent	08/18/92	5.2×10^{-04}	4.1×10^{-04}
Area 12, N Tunnel Effluent	09/03/92	4.3×10^{-05}	4.5×10^{-04}
Area 12, N Tunnel Effluent	10/20/92	1.5×10^{-04}	1.5×10^{-04}

Typical Limit of Detection: 3.0×10^{-7} μCi/mL

Attachment C.15 (Duplicates: Tritium in Water [containment ponds] -1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>μCi/mL</u>	
		<u>Original</u>	<u>Duplicate</u>
Area 12, T Tunnel Pond No. 1	04/09/92	5.7×10^{-02}	5.6×10^{-02}
Area 12, T Tunnel Pond No. 1	05/14/92	5.8×10^{-02}	5.8×10^{-02}
Area 12, T Tunnel Pond No. 1	06/09/92	5.3×10^{-02}	1.4×10^{-02}
Area 12, T Tunnel Pond No. 2	02/12/92	4.9×10^{-02}	4.8×10^{-02}
Area 12, T Tunnel Pond No. 2	03/11/92	5.7×10^{-02}	5.7×10^{-02}
Area 12, T Tunnel Pond No. 2	04/09/92	5.7×10^{-02}	5.6×10^{-02}
Area 12, T Tunnel Pond No. 2	05/14/92	5.8×10^{-02}	5.8×10^{-02}
Area 12, T Tunnel Pond No. 2	06/09/92	5.0×10^{-02}	1.4×10^{-02}
Area 12, T Tunnel Pond No. 2	08/18/92	5.4×10^{-02}	5.4×10^{-02}
Area 12, T Tunnel Pond No. 2	09/03/92	5.8×10^{-02}	5.4×10^{-02}
Area 12, T Tunnel Pond No. 2	10/20/92	1.2×10^{-02}	5.5×10^{-02}
Area 12, T Tunnel Pond No. 2	12/02/92	5.6×10^{-02}	5.6×10^{-02}
Area 12, T Tunnel Pond No. 3	07/21/92	5.4×10^{-02}	5.8×10^{-02}
Area 12, T Tunnel Pond No. 3	10/20/92	1.2×10^{-02}	5.4×10^{-02}
Area 12, T Tunnel Pond No. 3	12/02/92	6.5×10^{-02}	5.6×10^{-02}

Typical Limit of Detection: $3. \times 10^{-7}$ μCi/mL

APPENDIX D

SUMMARY OF 1992 RESULTS OF OFFSITE RADIOLOGICAL MONITORING

Statistical treatment of these data will appear in the 1992 EPA Offsite Environmental Monitoring Report.

Table D.1 Gross Beta Results for the Offsite Standby Air Surveillance Network - 1992

<u>Gross Beta Concentration (10^{-14} $\mu\text{Ci/mL}$)</u>					
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>
Little Rock, AR	4	2.75	1.40	2.04	0.63
Globe, AZ	4	2.77	1.06	1.75	0.76
Kingman, AZ	3	2.44	0.59	1.45	0.93
Tuscon, AZ	4	2.26	0.84	1.79	0.65
Winslow, AZ	4	5.51	1.45	3.14	1.79
Yuma, AZ	3	2.49	1.37	1.97	0.56
Alturas, CA	4	1.76	0.06	0.91	0.81
Baker, CA	3	2.34	1.74	1.99	0.31
Bishop, CA	5	3.00	1.21	1.89	0.69
Chico, CA	3	3.12	1.44	2.07	0.91
Indio, CA	4	4.08	1.81	2.73	0.96
Lone Pine, CA	3	2.59	1.24	1.75	0.73
Needles, CA	2	2.37	1.18	1.77	0.84
Ridgecrest, CA	2	0.15	0.08	0.11	0.05
Santa Rosa, CA	3	2.52	0.20	1.40	1.16
Cortez, CO	3	2.95	2.50	2.72	0.22
Denver, CO	3	2.12	1.67	1.93	0.23
Grand Junction, CO	3	2.52	1.63	2.00	0.46
Mountain Home, ID	3	3.35	0.51	1.66	1.50
Nampa, ID	4	2.35	0.76	1.66	0.75
Pocatello, ID	2	1.58	1.08	1.33	0.35
Fort Dodge, IA	3	2.22	1.30	1.71	0.47
Iowa City, IA	2	2.37	1.96	2.16	0.29
Dodge City, KS	4	2.21	1.67	1.98	0.26
Monroe, LA	3	2.59	1.29	1.87	0.66
Minneapolis, MN	4	2.38	0.91	1.58	0.73
Clayton, MO	4	3.11	1.52	2.06	0.74

Mean MDC: 2.50×10^{-15} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 3.07×10^{-16} $\mu\text{Ci/mL}$

MDC = Minimum Detectable Concentration

Table D.1 (Gross Beta Results for the Offsite Standby Air Surveillance Network - 1992, cont.)

<u>Gross Beta Concentration (10^{-14} $\mu\text{Ci/mL}$)</u>					
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>
Joplin, MO	4	3.17	0.90	2.01	1.04
St. Joseph, MO	3	2.11	-0.06	0.71	1.21
Great Falls, MT	4	1.59	0.98	1.22	0.26
Kalispell, MT	2	1.90	1.40	1.65	0.35
Miles City, MT	4	2.30	1.26	1.77	0.52
North Platte, NE	3	2.69	1.51	2.09	0.59
Adaven-Uhalde Ranch, NV	8	2.83	0.52	1.64	0.80
Battle Mountain, NV	5	2.19	1.53	1.89	0.24
Blue Jay, NV	4	2.49	1.05	1.46	0.69
Clark Station, NV	4	2.70	1.18	1.73	0.69
Current-Angle					
Worm Ranch, NV	4	2.10	1.39	1.60	0.34
Currie Maint. Station, NV	4	1.78	0.76	1.16	0.44
Duckwater, NV	4	1.42	1.07	1.26	0.15
Elko, NV	3	1.28	0.04	0.67	0.62
Eureka, NV	4	1.56	0.83	1.18	0.31
Fallon, NV	3	3.56	1.65	2.73	0.98
Geyser Ranch, NV	4	3.23	1.28	2.19	0.81
Lida, NV	2	1.77	1.37	1.57	0.28
Lovelock, NV	4	2.11	1.28	1.64	0.39
Lund, NV	4	1.43	0.33	1.03	0.50
Mesquite, NV	2	4.27	3.40	3.83	0.62
Reno, NV	4	1.73	1.04	1.34	0.30
Round Mountain, NV	3	1.64	1.06	1.30	0.30
Wells, NV	5	1.78	0.86	1.34	0.38
Winnemucca, NV	4	1.55	0.89	1.21	0.37
Albuquerque, NM	4	2.52	1.08	1.69	0.67
Carlsbad, NM	4	2.59	0.93	1.52	0.79
Shiprock, NM	3	1.84	1.35	1.59	0.24
Bismarck, ND	4	2.18	0.94	1.57	0.56
Fargo, ND	4	3.35	1.32	2.00	0.92
Williston, ND	4	5.93	1.19	2.53	2.27
Muskogee, OK	-	Quarterly sampling not performed			
Burns, OR	1	1.07	1.07	1.07	--
Medford, OR	4	2.36	0.39	1.26	1.00
Rapid City, SD	-	Quarterly sampling not performed			
Amarillo, TX	4	3.18	1.59	2.08	0.74
Austin, TX	3	1.54	1.06	1.28	0.24

Mean MDC: 2.50×10^{-15} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 3.07×10^{-16} $\mu\text{Ci/mL}$

MDC Minimum Detectable Concentration

Table D.1 (Gross Beta Results for the Offsite Standby Air Surveillance Network - 1992, cont.)

<u>Gross Beta Concentration (10^{-14} $\mu\text{Ci/mL}$)</u>					
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>
Midland, TX	2	1.59	0.66	1.12	0.66
Tyler, TX	2	1.60	1.25	1.43	0.25
Bryce Canyon, UT	4	1.96	1.59	1.79	0.17
Enterprise, UT	6	2.25	1.61	1.94	0.25
Garrison, UT	2	1.41	1.02	1.21	0.28
Logan, UT	4	3.13	1.93	2.33	0.55
Parowan, UT	4	1.59	0.99	1.39	0.27
Vernal, UT	4	2.39	0.57	1.52	0.86
Wendover, UT	4	1.94	1.23	1.58	0.37
Seattle, WA	4	1.37	0.57	0.91	0.34
Spokane, WA	4	3.01	1.29	2.25	0.73
Rock Springs, WY	4	3.40	1.56	2.09	0.88
Worland, WY	4	1.97	1.40	1.63	0.27

Mean MDC: 2.50×10^{-15} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 3.07×10^{-16} $\mu\text{Ci/mL}$

MDC Minimum Detectable Concentration

Table D.2 Gross Alpha Results for the Offsite Standby Air Surveillance Network - 1992

<u>Gross Alpha Concentration (10^{-15} $\mu\text{Ci/mL}$)</u>					
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>
Little Rock, AR	4	2.1	0.6	1.3	0.72
Globe, AZ	4	2.1	1.4	1.8	0.40
Kingman, AZ	3	2.2	0.2	1.2	1.0
Tuscon, AZ	4	1.4	0.4	0.97	0.43
Winslow, AZ	4	2.8	0.8	1.5	0.92
Yuma, AZ	3	1.7	0.5	1.2	0.62
Alturas, CA	4	1.6	0.0	0.62	0.69
Baker, CA	3	2.7	2.0	2.4	0.35
Bishop, CA	5	2.3	1.4	2.0	0.37
Chico, CA	3	1.7	0.2	0.83	0.78

Mean MDC: 7.70×10^{-16} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 2.49×10^{-16} $\mu\text{Ci/mL}$

MDC Minimum Detectable Concentration

Table D.2 (Gross Alpha Results for the Offsite Standby Air Surveillance Network - 1992, cont.)

<u>Gross Alpha Concentration (10^{-15} $\mu\text{Ci/mL}$)</u>					
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>
Indio, CA	4	1.5	1.1	1.3	0.17
Lone Pine, CA	3	1.1	1.0	1.0	0.06
Needles, CA	2	1.5	1.0	1.2	0.35
Ridgecrest, CA	2	0.6	0.0	0.30	0.42
Santa Rosa, CA	3	2.1	0.6	1.2	0.78
Cortez, CO	3	2.1	0.6	1.5	0.81
Denver, CO	3	0.8	0.5	0.63	0.15
Grand Junction, CO	3	1.9	1.1	1.6	0.44
Mountain Home, ID	3	2.6	0.2	1.2	1.2
Nampa, ID	4	1.5	0.4	0.90	0.53
Pocatello, ID	2	1.2	0.7	0.95	0.35
Fort Dodge, IA	3	2.0	1.3	1.6	0.36
Iowa City, IA	2	0.7	0.6	0.65	0.07
Dodge City, KS	4	0.9	0.3	0.70	0.27
Monroe, LA	3	1.4	0.4	0.77	0.55
Minneapolis, MN	4	1.7	-0.1	0.80	0.77
Clayton, MO	4	1.0	0.5	0.82	0.24
Joplin, MO	4	2.3	0.5	1.1	0.82
St. Joseph, MO	3	1.8	-0.1	0.70	0.98
Great Falls, MT	4	2.7	0.4	1.6	1.2
Kalispell, MT	2	0.9	0.5	0.70	0.28
Miles City, MT	4	3.1	2.2	2.8	0.39
North Platte, NE	3	1.3	0.7	0.93	0.32
Adaven-Uhalde Ranch, NV	8	2.2	0.1	1.0	0.83
Battle Mountain, NV	5	1.7	0.0	0.88	0.71
Blue Jay, NV	4	2.2	0.6	1.2	0.71
Clark Station, NV	4	1.3	0.1	0.60	0.50
Currant-Angle					
Worm Ranch, NV	4	1.1	0.5	0.82	0.25
Currie Maint. Station, NV	4	1.8	0.0	0.95	0.84
Duckwater, NV	4	1.2	0.9	1.0	0.14
Elko, NV	3	1.6	0.1	0.87	0.75
Eureka, NV	4	1.2	0.2	0.72	0.43
Fallon, NV	3	3.0	1.1	1.7	1.1

Mean MDC: 7.70×10^{-16} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 2.49×10^{-16} $\mu\text{Ci/mL}$

MDC Minimum Detectable Concentration

Table D.2 (Gross Alpha Results for the Offsite Standby Air Surveillance Network - 1992, cont.)

<u>Gross Alpha Concentration (10^{-15} $\mu\text{Ci/mL}$)</u>					
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>
Geyser Ranch, NV	4	2.3	0.4	1.6	0.90
Lida, NV	2	0.7	0.4	0.55	0.21
Lovelock, NV	4	1.1	0.3	0.75	0.34
Lund, NV	4	3.1	0.2	1.3	1.3
Mesquite, NV	2	3.9	1.7	2.8	1.6
Reno, NV	4	1.3	0.1	0.60	0.56
Round Mountain, NV	3	1.6	0.4	0.87	0.64
Wells, NV	5	1.6	0.2	1.0	0.54
Winnemucca, NV	4	0.6	0.1	0.32	0.26
Albuquerque, NM	4	1.6	0.4	1.1	0.51
Carlsbad, NM	4	1.6	0.1	0.70	0.67
Shiprock, NM	3	1.5	0.0	0.87	0.78
Bismarck, ND	4	1.3	0.0	0.75	0.54
Fargo, ND	4	3.8	0.4	1.3	1.6
Williston, ND	4	7.4	0.8	2.6	3.2
Muskogee, OK	-	Quarterly sampling not performed			
Burns, OR	1	1.1	1.1	1.1	--
Medford, OR	4	2.1	0.1	0.82	0.88
Rapid City, SD	-	Quarterly sampling not performed			
Amarillo, TX	4	3.6	0.7	2.0	1.3
Austin, TX	3	0.8	0.4	0.67	0.23
Midland, TX	2	0.5	0.5	0.50	0.00
Tyler, TX	2	1.0	0.4	0.70	0.42
Bryce Canyon, UT	4	1.4	0.9	1.0	0.24
Enterprise, UT	6	2.3	0.6	1.2	0.63
Garrison, UT	2	1.3	0.5	0.90	0.57
Logan, UT	4	1.2	0.5	0.80	0.32
Parowan, UT	4	1.8	0.9	1.3	0.39
Vernal, UT	4	2.6	0.0	1.2	1.2
Wendover, UT	4	1.5	0.4	1.0	0.46
Seattle, WA	4	1.8	-0.3	0.65	0.89
Spokane, WA	4	1.0	0.3	0.65	0.31
Rock Springs, WY	4	1.5	0.2	0.85	0.53
Worland, WY	4	2.1	-0.1	1.1	0.91

Mean MDC: 7.70×10^{-16} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 2.49×10^{-16} $\mu\text{Ci/mL}$

MDC Minimum Detectable Concentration

Table D.3 Offsite Atmospheric Plutonium Results for Standby Samplers - 1992

<u>^{238}Pu Concentration (10^{-18} $\mu\text{Ci/mL}$)</u>						
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>	<u>Mean as %DCG</u>
AZ (Winslow & Tucson)	6	24.9	-18.4	-0.133	14.2	NA
CA (Bishop & Ridgecrest)	4	6.64	-8.48	-0.712	8.15	NA
CO (Denver & Cortez)	6	22.5	-11.9	0.325	13.7	<0.01
ID (Nampa & Mountain Home)	6	14.2	-18.5	-2.47	11.1	NA
MO (Clayton & Joplin)	6	16.5	-11.9	-0.155	9.86	NA
MT (Great Falls & Miles City)	6	12.1	-6.60	0.132	8.08	<0.01
NM (Albuquerque & Carlsbad)	6	85.7	-6.69	11.9	36.3	0.04
ND (Bismarck & Fargo)	6	<0.001	-18.5	-6.20	8.42	NA
OR (Burns & Medford)	6	33.3	-49.9	-10.5	29.3	NA
TX (Austin & Amarillo)	6	<0.001	-38.9	-17.6	15.5	NA
UT (Logan & Vernal)	6	<0.001	-21.8	-8.72	9.21	NA
WA (Seattle & Spokane)	6	<0.001	-4.44	-1.48	2.29	NA
WY (Worland & Rock Springs)	6	22.2	-8.97	2.14	12.5	0.01

Mean MDC: 3.86×10^{-17} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 2.43×10^{-17} $\mu\text{Ci/mL}$

DCG Derived Concentration Guide; Established by DOE Order as 3×10^{-15} $\mu\text{Ci/mL}$

<u>$^{239+240}\text{Pu}$ Concentration (10^{-18} $\mu\text{Ci/mL}$)</u>						
AZ (Winslow & Tucson)	6	14.6	-9.21	1.51	9.39	0.01
CA (Bishop & Ridgecrest)	4	10.5	-8.48	0.505	7.77	<0.01
CO (Denver & Cortez)	6	9.16	-7.49	0.912	5.47	<0.01
ID (Nampa & Mountain Home)	6	7.11	-10.5	-2.75	6.37	NA
MO (Clayton & Joplin)	6	13.1	-16.5	-2.38	9.79	NA
MT (Great Falls & Miles City)	6	13.2	<0.001	5.82	4.00	0.03
NM (Albuquerque & Carlsbad)	6	120.	-3.76	19.4	49.5	0.10
ND (Bismarck & Fargo)	6	3.04	-9.26	-3.95	4.76	NA
OR (Burns & Medford)	6	11.1	-24.9	-3.98	12.2	NA
TX (Austin & Amarillo)	6	16.9	-7.79	0.193	9.04	<0.01
UT (Logan & Vernal)	6	4.82	-6.89	-0.715	3.81	NA
WA (Seattle & Spokane)	6	12.1	-5.94	3.07	6.56	0.02
WY (Worland & Rock Springs)	6	3.70	-8.97	-3.21	5.21	NA

Mean MDC: 2.97×10^{-17} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 1.84×10^{-17} $\mu\text{Ci/mL}$

DCG Derived Concentration Guide; Established by DOE Order as 2×10^{-15} $\mu\text{Ci/mL}$

MDC Minimum Detectable Concentration

NA Not applicable, result is less than MDC

Table D.4 Offsite Atmospheric Tritium Results for Standby Samplers - 1992

<u>HTO Concentration (10^{-7} pCi/mL)</u>						
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>	<u>Mean as %DCG</u>
Shoshone, CA	4	25.8	4.47	14.2	9.03	0.01
Austin, NV	2	4.90	-5.22	-0.157	7.15	NA
Caliente, NV	1	-11.6	-11.6	-11.6	--	NA
Ely, NV	1	-5.53	-5.53	-5.53	--	NA
Cedar City, UT	3	8.78	-13.8	-3.18	11.3	NA
Delta, UT	1	-3.99	-3.99	-3.99	--	NA
Milford, UT	1	15.9	15.9	15.9	--	0.02

Mean MDC: 4.89×10^{-6} pCi/mL

Standard Deviation of Mean MDC: 2.40×10^{-6} pCi/mL

DCG Derived Concentration Guide; Established by DOE Order as 1×10^{-2} pCi/mL

MDC Minimum Detectable Concentration

NA Not applicable, result is less than MDC

Table D.5 Offsite Noble Gas Results for Standby Samplers - 1992

<u>^{85}Kr Concentration (10^{-11} $\mu\text{Ci/mL}$)</u>						
<u>Sampling Location</u>	<u>Number</u>	<u>Maximum</u>	<u>Minimum</u>	<u>Arithmetic Mean</u>	<u>Standard Deviation</u>	<u>Mean as %DCG</u>
Shoshone, CA	2	2.86	2.65	2.75	0.14	0.01
Austin, NV	2	2.55	2.44	2.50	0.08	0.01
Caliente, NV	2	2.76	2.34	2.55	0.30	0.01
Ely, NV	1	2.35	2.35	2.35	--	0.01
Cedar City, UT	4	2.82	2.11	2.55	0.33	0.01
Delta, UT	1	2.80	2.80	2.80	--	0.01
Milford, UT	-	Quarterly sampling was not performed				
Salt Lake City, UT	-	Quarterly sampling was not performed				

Mean MDC: 5.82×10^{-12} $\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: 1.40×10^{-12} $\mu\text{Ci/mL}$

DCG Derived Concentration Guide; Established by DOE Order as 3×10^{-7} $\mu\text{Ci/mL}$

MDC Minimum Detectable Concentration

Table D.5 (Offsite Noble Gas Results for Standby Samplers - 1992, cont.)

<u>Sampling Location</u>	<u>Number</u>	<u>¹³³Xe Concentration (10⁻¹² μCi/mL)</u>		<u>Arithmetic</u>	<u>Standard</u>	<u>Mean as</u>
		<u>Maximum</u>	<u>Minimum</u>	<u>Mean</u>	<u>Deviation</u>	<u>%DCG</u>
Shoshone, CA	2	0.880	0.285	0.582	0.421	0.01
Austin, NV	2	0.000	-12.1	-6.07	8.59	NA
Caliente, NV	2	0.328	-0.438	-0.055	0.542	NA
Ely, NV	1	-3.21	-3.21	-3.21	--	NA
Cedar City, UT	4	1.73	-16.8	-4.63	8.34	NA
Delta, UT	1	0.000	0.000	0.000	--	NA
Milford, UT	-	Quarterly sampling was not performed				
Salt Lake City, UT	-	Quarterly sampling was not performed				

Mean MDC: 1.68 x 10⁻¹¹ μCi/mL

Standard Deviation of Mean MDC: 6.96 x 10⁻¹² μCi/mL

DCG Derived Concentration Guide; Established by DOE Order as 5 x 10⁻⁸ μCi/mL

MDC Minimum Detectable Concentration

NA Not applicable, result is less than MDC

Table D.6 Standby Milk Surveillance Network Radiochemical Analyses Results - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration ± 1s (MDC)^(a)</u>		
		<u>³H</u> <u>x 10⁻⁹ μCi/mL^(b)</u>	<u>⁸⁹Sr</u> <u>x 10⁻⁹ μCi/mL^(b)</u>	<u>⁹⁰Sr</u> <u>x 10⁻⁹ μCi/mL^(b)</u>
Little Rock, AR Borden's	06/18	206 ± 84 (270)	0.59 ± 1.1 (1.1)	2.6 ± 0.48 (1.4) ^(c)
Russellville, AR Arkansas Tech Univ	06/18	153 ± 83 (271)	0.087 ± 0.85 (1.1)	0.86 ± 0.37 (1.4)
Taylor, AZ Sunrise Dairy	10/18	385 ± 124 (400)	N/A	-0.29 ± 0.40 (1.5)
Tucson, AZ University of Arizona	10/20	296 ± 130 (421)	N/A	-0.40 ± 0.32 (1.4)
Bakersfield, CA Favorite Foods, Inc	10/05	368 ± 128 (413)	-0.47 ± 1.1 (1.5)	0.63 ± 0.40 (1.5)

(a) Minimum Detectable Concentration (MDC)

(b) Multiply the results by 3.7 x 10⁻⁷ to obtain Bq/L

(c) Result is greater than the MDC of analysis

N/A Not Analyzed

Table D.6 (Standby Milk Surveillance Radiochemical Network Analyses Results - 1992, cont.)

Sampling Location	Collection Date in 1992	Concentration $\pm 1s$ (MDC) ^(a)		
		³ H $\times 10^{-9} \mu\text{Ci/mL}^{(b)}$	⁸⁹ Sr $\times 10^{-9} \mu\text{Ci/mL}^{(b)}$	⁹⁰ Sr $\times 10^{-9} \mu\text{Ci/mL}^{(b)}$
Orland, CA Meadow Glen/Jerseyland	10/21	213 $\pm$ 119 (386)	N/A	-0.20 $\pm$ 0.35 (1.4)
Redding, CA McColl's Dairy Prod	11/04	47 $\pm$ 123 (403)	0.021 $\pm$ 1.8 (2.8)	0.65 $\pm$ 0.40 (1.6)
Willows, CA Glenn Milk Producers Assn	10/19	468 $\pm$ 121 (387) ^(c)	N/A	-0.075 $\pm$ 0.41 (1.5)
Delta, CO Meadow Gold Dairy	05/20	210 $\pm$ 75 (240)	0.96 $\pm$ 0.68 (0.99)	-0.025 $\pm$ 0.32 (1.3)
Denver, CO Safeway Dairy Plant	05/11	90 $\pm$ 75 (240)	1.8 $\pm$ 0.85 (1.2) ^(c)	0.052 $\pm$ 0.35 (1.3)
Quincy, IL Prairie Farms Dairy	06/19	260 $\pm$ 86 (280)	-0.34 $\pm$ 0.90 (1.1)	1.7 $\pm$ 0.41 (1.4) ^(c)
Boise, ID Meadow Gold Dairies	08/31	69 $\pm$ 120 (400)	N/A	0.41 $\pm$ 0.34 (1.4)
Idaho Falls, ID Reed's Dairy	08/07	55 $\pm$ 77 (250)	N/A	1.1 $\pm$ 0.41 (1.5)
Dubuque, IA Swiss Valley Farms	08/03	-6.9 $\pm$ 75 (250)	N/A	1.3 $\pm$ 0.36 (1.3)
Ellis, KS Mid-America Dairyman	06/03	54 $\pm$ 71 (230)	0.30 $\pm$ 0.87 (1.2)	0.65 $\pm$ 0.37 (1.4)
Sabetha, KS Mid-America Dairyman	06/15	180 $\pm$ 73 (240)	-0.26 $\pm$ 0.99 (1.3)	1.6 $\pm$ 0.42 (1.5) ^(c)
Baton Rouge, LA Borden's Dairy	04/14	96 $\pm$ 69 (230)	0.46 $\pm$ 0.94 (1.1)	1.8 $\pm$ 0.42 (1.4) ^(c)
Monroe, LA Borden's Dairy	04/30	86 $\pm$ 72 (230)	0.96 $\pm$ 1 (1.3)	1.5 $\pm$ 0.39 (1.3) ^(c)
New Orleans, LA Brown's Velvet Dry.	04/09	79 $\pm$ 70 (230)	0.54 $\pm$ 0.85 (0.99)	1.4 $\pm$ 0.44 (1.4)

(a) Minimum Detectable Concentration (MDC)

(b) Multiply the results by 3.7×10^{-7} to obtain Bq/L

(c) Result is greater than the MDC of analysis

N/A Not Analyzed

Table D.6 (Standby Milk Surveillance Radiochemical Network Analyses Results - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s (MDC)^(a)</u>		
		³ H <u>$\times 10^{-9}$ μCi/mL^(b)</u>	⁸⁹ Sr <u>$\times 10^{-9}$ μCi/mL^(b)</u>	⁹⁰ Sr <u>$\times 10^{-9}$ μCi/mL^(b)</u>
Fosston, MN Land O' Lakes Inc	04/28	94 $\pm$ 72 (230)	1.6 $\pm$ 1.1 (1.3)	1.7 $\pm$ 0.41 (1.3) ^(c)
Rochester, MN Assoc Milk Prod Inc	05/26	53 $\pm$ 71 (230)	0.22 $\pm$ 1.1 (1.4)	1.4 $\pm$ 0.42 (1.4)
Monett, MO Mid-America Dairy Inc	07/27	-68 $\pm$ 76 (250)	N/A	1.8 $\pm$ 0.42 (1.4) ^(c)
Chillicothe, MO Mid-America Dairymen	09/03	410 $\pm$ 130 (410) ^(c)	N/A	1.6 $\pm$ 0.34 (1.3) ^(c)
Billings, MT Meadow Gold Dairy	07/17	320 $\pm$ 86 (270) ^(c)	0.82 $\pm$ 0.77 (0.86)	1.7 $\pm$ 0.42 (1.3) ^(c)
Great Falls, MT Meadow Gold Dairy	07/16	300 $\pm$ 85 (270) ^(c)	N/A	1.4 $\pm$ 0.43 (1.5)
Norfolk, NE Gillette Dairy	07/14	170 $\pm$ 83 (270)	2 $\pm$ 0.80 (0.93) ^(c)	1 $\pm$ 0.42 (1.3)
North Platte, NE Mid-America Dairymen	07/27	46 $\pm$ 78 (260)	N/A	1.5 $\pm$ 0.40 (1.4) ^(c)
Albuquerque, NM Borden's Valley Gold	09/08	290 $\pm$ 122 (390)	N/A	0.53 $\pm$ 0.42 (1.5)
La Plata, NM River Edge Dairy	07/11	300 $\pm$ 90 (290) ^(c)	-0.60 $\pm$ 0.65 (0.93)	1.3 $\pm$ 0.34 (1.3)
Bismarck, ND Bridgeman Creamery	04/14	-70 $\pm$ 68 (230)	0.063 $\pm$ 0.82 (1)	2 $\pm$ 0.38 (1.3) ^(c)
Grand Forks, ND Minnesota Dairy	04/22	82 $\pm$ 71 (230)	-0.74 $\pm$ 0.77 (1)	1.6 $\pm$ 0.38 (1.4) ^(c)
Enid, OK AMPI Goldspot Div	06/08	130 $\pm$ 71 (230)	0.94 $\pm$ 1.1 (1.3)	1 $\pm$ 0.43 (1.5)
McAlester, OK Jackie Brannon Corp	07/16	240 $\pm$ 87 (280)	0.21 $\pm$ 0.70 (0.91)	1 $\pm$ 0.37 (1.3)

(a) Minimum Detectable Concentration (MDC)

(b) Multiply the results by 3.7×10^{-7} to obtain Bq/L

(c) Result is greater than the MDC of analysis

N/A Not Analyzed

Table D.6 (Standby Milk Surveillance Radiochemical Network Analyses Results - 1992, cont.)

Sampling Location	Collection Date in 1992	Concentration $\pm$ 1s (MDC) ^(a)		
		³ H $\times 10^{-9}$ μ Ci/mL ^(b)	⁸⁹ Sr $\times 10^{-9}$ μ Ci/mL ^(b)	⁹⁰ Sr $\times 10^{-9}$ μ Ci/mL ^(b)
Medford, OR Dairygold Farms	07/13	170 $\pm$ 83 (270)	-0.22 $\pm$ 0.59 (0.89)	0.86 $\pm$ 0.32 (1.3)
Salem, OR Curly's Dairy	07/06	100 $\pm$ 84 (280)	0.047 $\pm$ 0.68 (0.99)	1.2 $\pm$ 0.34 (1.3)
Tillamook, OR Tillamook Creamery	08/17	-6.4 $\pm$ 78 (260)	N/A	0.81 $\pm$ 0.36 (1.4)
Rapid City, SD Gillette Dairy	04/06	67 $\pm$ 69 (230)	1 $\pm$ 0.82 (1.1)	-0.065 $\pm$ 0.39 (1.5)
Sioux Falls, SD Lakeside Dairy	04/02	25 $\pm$ 70 (230)	0.66 $\pm$ 0.93 (1.2)	0.84 $\pm$ 0.43 (1.5)
Sulphur Springs, TX Tommy Rue Potts Dairy	11/13	108 $\pm$ 91 (296)	0.24 $\pm$ 1 (1.2)	1.7 $\pm$ 0.45 (1.4) ^(c)
Windthorst, TX Lloyd Wolf Dairy	11/13	153 $\pm$ 118 (387)	-3.3 $\pm$ 0.90 (1.2)	1.2 $\pm$ 0.39 (1.4)
Beaver, UT Cache Valley Dairy	05/26	130 $\pm$ 74 (240)	0.80 $\pm$ 0.65 (0.91)	0.22 $\pm$ 0.33 (1.3)
Provo, UT BYU Dairy Products	06/15	92 $\pm$ 73 (240)	0.39 $\pm$ 0.80 (1.2)	0.38 $\pm$ 0.35 (1.4)
Cheyenne, WY Dairy Gold Foods	07/15	210 $\pm$ 87 (280)	0.62 $\pm$ 0.70 (0.86)	1.3 $\pm$ 0.38 (1.3)
Sheridan, WY Mydland Dairy	05/19	41 $\pm$ 76 (250)	1.3 $\pm$ 0.85 (1) ^(c)	0.99 $\pm$ 0.40 (1.3)

(a) Minimum Detectable Concentration (MDC)

(b) Multiply the results by 3.7×10^{-7} to obtain Bq/L

(c) Result is greater than the MDC of analysis

N/A Not Analyzed

Table D.7 Standby Milk Surveillance Network Gamma Spectrometry Results - 1992

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

<u>Sampling Location</u>	<u>Collection Date</u>	<u>Sampling Location</u>	<u>Collection Date</u>
Duncan, AZ		Cal Poly University Dairy	10/27
Lunt Dairy	09/23	Soledad, CA	
Tempe, AZ		Correction Training Industry	10/20
United Dairymen of Arizona	10/07	Tracy, CA	
Batesville, AR		Deuel Vocational Institute	10/20
Hills Valley Foods	06/24	Colorado Springs, CO	
Fayetteville, AR		Sinton Dairy	07/10
University Of Arkansas	06/10	Greeley, CO	
Chino, CA		Meadow Gold Dairy	07/08
CA Institute for Men	10/27	Ft Collins, CO	
Crescent City, CA		Poudre Valley Creamery	06/08
Rumiano Cheese Company	10/16	Caldwell, ID	
Fernbridge, CA		Darigold Inc.	08/31
Humboldt Creamery Assn	10/16	Pocatello, ID	
Fresno, CA		Rowland's Meadowgold Dairy	08/06
CA State University Creamery	10/19	Twin Falls, ID	
Helendale, CA		Triangle Young's Dairy	08/03
Osterkamp Dairy No. 2	10/07	Kimballton, IA	
Holtville, CA		Assoc. Milk Pro.Inc(AMPI)	06/10
Schaffner & Son Dairy	10/05	Lake Mills, IA	
Lompoc, CA		Lake Mills Coop Creamery	06/01
Federal Penitentiary Camp	10/27	Lemars, IA	
Long Beach, CA		Wells Dairy	06/10
Paul's Dairy	10/26	Manhattan, KS	
Manchester, CA		Kansas State University	06/11
Point Arena Dairies	10/14	Lafayette, LA	
Manteca, CA		Borden's	04/28
Supremo Foods	11/20	New Orleans, LA	
Modesto, CA		Walker Roemer Dairy	04/09
Foster Farms - Jersey Dairy	12/03	Shreveport, LA	
Petaluma, CA		Foremost Dairy	05/11
Point Reyes Seashore Dairy	10/14	Fergus Falls, MN	
San Jose, CA		Mid-America Dairymen	04/08
Marquez Bros Mexican Cheese	10/07	Browerville, MN	
San Luis Obispo, CA		Land O' Lakes, Inc.	04/28

Table D.7 (Standby Milk Surveillance Network Gamma Spectrometry Results - 1992, cont.)

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

<u>Sampling Location</u>	<u>Collection Date</u>	<u>Sampling Location</u>	<u>Collection Date</u>
Nicollet, MN		Klamath Falls, OR	
Doug Schultz Farm	05/09	Klamath Dairy Products	07/22
Jackson, MO		Myrtle Point, OR	
Mid-America Dairyman Inc	06/23	Safeway Stores Inc	08/03
Jefferson City, MO		Ontario, OR	
Central Dairy Company	07/23	Eastway Dairy	09/01
Bozeman, MT		Portland, OR	
Country Classic-DBA-Darigold	07/28	Darigold Farms	07/27
Kalispell, MT		Redmond, OR	
Equity Supply Co	07/20	Eberhard's Creamery Inc	07/14
Omaha, NE		Ethan, SD	
Roberts Dairy, Marshall Green	07/28	Ethan Dairy Products	04/07
Chappell, NE		Volga, SD	
Leprino Foods	07/06	Land O'Lakes Inc	07/09
Superior, NE		Canyon, TX	
Mid-America Dairyman	09/08	West Texas State Dairy	11/06
Fargo, ND		Corpus Christi, TX	
Cass Clay Creamery	04/24	Hygeia Milk Plant	11/16
Minot, ND		Fabens, TX	
Bridgemen Creamery	04/13	Island Dairy - El Paso County	12/01
Las Vegas, NV		Glen Rose TX	
Anderson Dairy	10/07	Dewayne Hankins Dairy	11/09
Reno, NV		Richfield, UT	
Model Dairy	10/19	Ideal Dairy	05/18
Yerington, NV		Smithfield, UT	
Valley Dairy	10/26	Cache Valley Dairy	05/27
Coalgate, OK		Moses Lake, WA	
Larry Krebs Dairy	06/15	Safeway Stores, Inc	10/05
Claremore, OK		Riverton, WY	
Swan Brothers Dairy	06/17	Western Dairyman's Co-op	07/07
Stillwater, OK		Thayne, WY	
OK State University Dairy	06/17	Western Dairyman's Co-op	06/08
Grants Pass, OR			
Valley Of Rouge Dairy	07/07		
Junction City, OR			
Lockmead Farms Inc	07/20		

Table D.8 Long-Term Hydrological Monitoring Program Analytical Results for Locations in the NTS Vicinity - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Amargosa Valley, NV			
Well Mary Nickell's	02/06	1.3 $\pm$ 2.2	NA
	08/04	46 $\pm$ 140	NA
Shoshone, CA			
Shoshone Spring	02/04	0.0 $\pm$ 1.8	NA
	08/05	82 $\pm$ 140	NA
Adaven, NV			
Adaven Spring	01/14	32 $\pm$ 2	0.04
	07/01	-110 $\pm$ 110	NA
Alamo, NV			
Well 4 City	01/16	0.0 $\pm$ 1.7	NA
	07/02	-45 $\pm$ 110	NA
Ash Meadows, NV			
Crystal Pool	05/07	4.6 $\pm$ 3.7	NA
	11/02	140 $\pm$ 140	NA
Fairbanks Springs	05/07	-2.3 $\pm$ 4.6	NA
	11/02	-410 $\pm$ 140	NA
Spring-17S-50E-14cac	06/08	-4.1 $\pm$ 1.7	NA
	12/14	370 $\pm$ 140	NA
Well 18S-51E-7db	05/07	1.9 $\pm$ 3.8	NA
	11/02	52 $\pm$ 140	NA
Beatty, NV			
U.S. Ecology	06/08	1.9 $\pm$ 2.0	NA
	12/08	320 $\pm$ 140	NA
Specie Springs	03/04	-82 $\pm$ 130	NA
	07/09	4.6 $\pm$ 1.6	NA
Tolicha Peak	02/05	-32 $\pm$ 130	NA
	08/05	0.21 $\pm$ 1.7	NA
Well 11S-48-1dd Coffers	01/08	110 $\pm$ 130	NA
	07/09	2.7 $\pm$ 1.5	NA
Well 12S-47E-7dbd City	01/07	240 $\pm$ 130	NA
	07/09	3.0 $\pm$ 1.5	NA
Well Road D Spicers	02/05	85 $\pm$ 130	NA
	08/05	-1.9 $\pm$ 1.7	NA
Younghans Ranch (House Well)	06/11	-1.3 $\pm$ 1.9	NA
	12/09	-81 $\pm$ 140	NA
Boulder City, NV			
Lake Mead Intake	03/06	-32 $\pm$ 130	NA
	05/07	58 $\pm$ 2	0.06
	09/03	62 $\pm$ 2	0.07
Clark Station, NV			
Well 6 TTR	02/04	-21 $\pm$ 130	NA
	08/05	1.8 $\pm$ 1.6	NA

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium
 NA Not Applicable: tritium result is <MDC or water is nonpotable

Table D.8 (Long-Term Hydrological Monitoring Program Analytical Results for Locations in the NTS Vicinity - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Hiko, NV			
Crystal Springs	01/16	-2.9 $\pm$ 1.6	NA
	07/02	33 $\pm$ 120	NA
Indian Springs, NV			
Well 1 Sewer Company	03/03	25 $\pm$ 130	NA
	09/10	1.1 $\pm$ 2.6	NA
Well 2 US Air Force	03/03	-120 $\pm$ 130	NA
	09/03	1.5 $\pm$ 1.3	NA
Johnnie, NV			
Well Johnnie Mine	03/03	96 $\pm$ 130	NA
	09/10	6.0 $\pm$ 1.7	0.01
Las Vegas, NV			
Well 28 Water District	09/03	-0.50 $\pm$ 1.3	NA
	10/08	-1.3 $\pm$ 1.7	NA
Lathrop Wells, NV			
City 15S-50E-18cdc	04/06	1.5 $\pm$ 2.2	NA
	10/16	-14 $\pm$ 140	NA
Nyala, NV			
Sharp's Ranch	02/04	-92 $\pm$ 130	NA
	08/03	0.81 $\pm$ 1.6	NA
Oasis Valley, NV			
Goss Springs	02/05	-11 $\pm$ 130	NA
	08/05	0.0 $\pm$ 1.9	NA
Pahrump, NV			
Calvada Well	02/04	0.0 $\pm$ 1.5	NA
	08/05	110 $\pm$ 140	NA
Rachel, NV			
Wells 7 & 8 Penoyer	06/03	44 $\pm$ 100	NA
	09/21	0.63 $\pm$ 1.4	NA
Well 13 Penoyer	06/03	-160 $\pm$ 110	NA
	09/09	-0.89 $\pm$ 1.8	NA
Well Penoyer Culinary	04/01	39 $\pm$ 130	NA
	10/06	-0.21 $\pm$ 1.6	NA
Templute, NV			
Union Carbide Well	02/12	-150 $\pm$ 130	NA
	08/06	-2.0 $\pm$ 1.9	NA
Tonopah, NV			
City Well	03/03	120 $\pm$ 130	NA
	09/08	4.2 $\pm$ 1.4	NA
Warm Springs, NV			
Twin Springs Ranch	04/01	-290 $\pm$ 130	NA
	10/01	-0.47 $\pm$ 1.2	NA

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium
 NA Not Applicable: tritium result is <MDC or water is nonpotable

Table D.9 Long-Term Hydrological Monitoring Program Analytical Results for Project Faultless - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Blue Jay, NV			
Hot Creek Ranch Spring	02/24	Not Sampled - Spring and well dry	
Maintenance Station	02/24	0.0 $\pm$ 1.4	NA
Well Bias	02/25	4.2 $\pm$ 1.8	NA
Well HTH-1	02/25	0.73 $\pm$ 1.2	NA
Well HTH-2	02/25	1.4 $\pm$ 1.2	NA
Well Six Mile	02/25	0.9 $\pm$ 1.5	NA

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

NA Not applicable: the tritium result is <MDC or water is known to be nonpotable

Table D.10 Long-Term Hydrological Monitoring Program Analytical Results for Project Shoal - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Frenchmen Station, NV			
Hunt's Station	03/11	0.88 $\pm$ 1.5	NA
Smith/James Springs	03/11	56 $\pm$ 2	0.06
Spring Windmill	03/11	Not Sampled - Well dry	
Well Flowing	03/11	-1.1 $\pm$ 1.8	NA
Well H-3	10/21	-0.38 $\pm$ 1.6	NA*
Well HS-1	03/11	0.86 $\pm$ 1.5	NA

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

NA Not applicable: the tritium result is <MDC or water is known to be nonpotable

Additional analyses greater than MDC

<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
U-234	0.14	0.02	0.03	$10^{-9}\mu\text{Ci/mL}$
U-238	0.042	0.011	0.02	$10^{-9}\mu\text{Ci/mL}$

Table D.11 Long-Term Hydrological Monitoring Program Analytical Results for Project Rullison - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Rullison, CO			
Lee Hayward Ranch	06/09	160 $\pm$ 3	0.18
Potter Ranch	06/09	67 $\pm$ 2	0.07
Robert Searcy Ranch	06/09	78 $\pm$ 2	0.09
Felix Sefcovic Ranch	06/09	57 $\pm$ 2	0.06
Grand Valley, CO			
Battlement Creek	06/09	63 $\pm$ 2	0.07
City Springs	06/09	0.43 $\pm$ 1.5	NA
Albert Gardner Ranch	06/09	98 $\pm$ 3	0.11
Spring 300 Yd. N of GZ	06/09	63 $\pm$ 2	0.07
Well CER Test	06/09	48 $\pm$ 2	0.05

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

NA Not applicable: the tritium result is <MDC or water is known to be nonpotable

Table D.12 Long-Term Hydrological Monitoring Program Analytical Results for Rio Blanco - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Rio Blanco, CO			
B-1 Equity Camp (spring)	06/10	49 $\pm$ 2	0.05
CER No.1 Black Sulfur (spring)	06/10	57 $\pm$ 3	0.06
CER No.4 Black Sulfur (spring)	06/10	50 $\pm$ 2	0.06
Fawn Creek 1	06/10	21 $\pm$ 2	0.02
Fawn Creek 3	06/10	26 $\pm$ 2	0.03
Fawn Creek 500 Ft Upstream	06/10	26 $\pm$ 2	0.03
Fawn Creek 500 Ft Downstream	06/10	26 $\pm$ 2	0.03
Fawn Creek 6800 Ft Upstream	06/10	26 $\pm$ 2	0.03
Fawn Creek 8400 Ft Downstream	06/10	29 $\pm$ 2	0.03
Johnson Artesian Well	06/10	-1.8 $\pm$ 2.3	NA
Brennan Windmill (well)	06/10	3.7 $\pm$ 1.6	NA
Well RB-D-01	06/11	-2.1 $\pm$ 1.3	NA
Well RB-D-03	06/11	0.75 $\pm$ 1.4	NA
Well RB-S-03	06/11	1.7 $\pm$ 1.5	NA

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

NA Not applicable: the tritium result is <MDC or water is known to be nonpotable

Table D.13 Long-Term Hydrological Monitoring Program Analytical Results for Project Gnome - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Malaga, NM			
Well 1 Pecos Pumping Station	06/17	-2.6 ± 1.5	NA
Well DD-1	06/16	$6.5 \times 10^{+07} \pm 3.2 \times 10^{+05}$	NA ^(b)
Well LRL-7	06/16	$12,000 \pm 170$	NA ^(c)
Well PHS 6	06/15	37 ± 2	0.04
Well PHS 8	06/15	15 ± 2	0.02
Well PHS 9	06/15	0.14 ± 2.4	NA
Well PHS 10	06/15	-2.0 ± 1.9	NA
Well USGS 1	06/15	-0.40 ± 1.1	NA
Well USGS 4	06/16	$120,000 \pm 420$	NA ^(d)
Well USGS 8	06/16	$91,000 \pm 370$	NA ^(e)

Carlsbad, NM

Well 7 City	06/18	-0.98 ± 1.0	NA
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Loving, NM

Well 2 City	06/17	8.2 ± 1.6	<0.01
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(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

(b,c,d,e) Additional analyses greater than MDC

NA Not applicable: the tritium result is <MDC or water is not potable

Additional analyses greater than MDC

	<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
(b)	Cs-137	550,000	26,000	NA	$10^{-9}\mu\text{Ci/mL}$
	Sr-90	13,000	1200	2900	$10^{-9}\mu\text{Ci/mL}$
(c)	Cs-137	200	11	NA	$10^{-9}\mu\text{Ci/mL}$
(d)	Sr-90	6200	18	59	$10^{-9}\mu\text{Ci/mL}$
(e)	Cs-137	69	1	NA	$10^{-9}\mu\text{Ci/mL}$
	Sr-90	5100	16	53	$10^{-9}\mu\text{Ci/mL}$

Table D.14 Long-Term Hydrological Monitoring Program Analytical Results for Project Gasbuggy - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Gobernador, NM			
Arnold Ranch	04/14	Not Sampled - Road washed out	
Bixler Ranch	04/16	13 $\pm$ 2	0.01
Bubbling Springs	04/14	42 $\pm$ 2	0.05
Cave Springs	04/14	75 $\pm$ 3	0.08
Cedar Springs	04/14	55 $\pm$ 3	0.06
La Jara Creek	04/15	70 $\pm$ 3	0.08
Lower Burro Canyon	04/15	0.0 $\pm$ 1.8	NA
Pond N of Well 30.3.32.343	04/15	34 $\pm$ 3	0.04 ^(b)
Well EPNG 10-36	04/16	33 $\pm$ 2	0.04 ^(c)
	09/16	364 $\pm$ 4	0.40 ^(d)
Well Jicarilla 1	04/15	19 $\pm$ 2	0.02 ^(e)
Well 28.3.33.233 (South)	04/16	Windmill inoperative	
Windmill 2	04/15	-1.3 $\pm$ 2.2	NA

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

(b) Sample estimated to be 90 percent rainwater

(c) pH and conductivity indicate sample predominantly rainwater

(d) Resampled, additional analysis greater than MDC shown below

(e) Sample from stock tank

NA Not applicable: the tritium result is <MDC or water is known to be nonpotable

Additional analyses greater than MDC

	<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
(d)	Cs-137	6.0	0.85	0.83	$10^{-9}\mu\text{Ci/mL}$

Table D.15 Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble - 1992

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium $10^{-9}\mu\text{Ci/mL}$</u>	<u>Percent of Concentration Guide^(a)</u>
Onsite Sampling Locations			
Baxterville, MS			
Half Moon Creek	04/26	15 $\pm$ 1	0.02
	04/27	27 $\pm$ 2	0.03
Half Moon Creek Overflow	04/26	690 $\pm$ 5	0.8
	04/27	590 $\pm$ 4	0.7
Pond West Of GZ	04/26	16 $\pm$ 2	0.02
	04/27	14 $\pm$ 2	0.02
REECo Pit Drainage-A	04/26	31 $\pm$ 2	0.03
REECO Pit Drainage-B	04/26	1300 $\pm$ 110	1.5
REECO Pit Drainage-C	04/26	560 $\pm$ 4	0.6
Well E-7	04/28	6.0 $\pm$ 1.8	0.01
Well HM-1	04/27	1.8 $\pm$ 1.6	NA
	04/27	0.0 $\pm$ 1.6	NA
Well HM-2A	04/27	-2.3 $\pm$ 2.0	NA
	04/27	-1.6 $\pm$ 1.5	NA
Well HM-2B	04/27	2.1 $\pm$ 1.9	NA
	04/27	-4.5 $\pm$ 1.3	NA
Well HM-3	04/27	3.3 $\pm$ 2.0	NA
	04/27	-0.88 $\pm$ 1.6	NA
Well HM-L	04/27	1300 $\pm$ 110	1.5
	04/27	610 $\pm$ 4	0.7
Well HM-L2	04/27	2.4 $\pm$ 2.1	NA
	04/27	-3.0 $\pm$ 1.8	NA
Well HM-S	04/26	7100 $\pm$ 140	7.9
	04/27	6700 $\pm$ 140	7.5

- (a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium
 (b) Formerly the residence of Talmadge S. Saucier
 (c) New sampling location
 (d,e,f) Additional analyses that are greater than MDC
 (g) Additional analyses greater than MDC
 NA Not applicable: tritium results <MDC or water is known to be nonpotable

Additional analysis greater than MDC

	<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
(d)	U-234	0.038	0.012	0.026	$10^{-9}\mu\text{Ci/mL}$
	U-236	0.021	0.007	0.01	$10^{-9}\mu\text{Ci/mL}$
(e)	U-238	0.018	0.009	0.014	$10^{-9}\mu\text{Ci/mL}$
(f)	U-234	0.099	0.018	0.036	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.057	0.011	0.009	$10^{-9}\mu\text{Ci/mL}$
(g)	U-234	0.14	0.02	0.01	pCi/L
	U-238	0.12	0.02	0.01	pCi/L

Table D.15 (Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium (pCi/L)</u>	<u>Percent of Concentration Guide^(a)</u>
Onsite Sampling Locations			
Well HMH-1	04/26	5800 $\pm$ 140	6.5
	04/27	14,000 $\pm$ 170	16
Well HMH-2	04/26	5100 $\pm$ 130	5.7
	04/27	13,000 $\pm$ 170	14
Well HMH-3	04/26	11 $\pm$ 1	0.01
	04/27	27 $\pm$ 2	0.03
Well HMH-4	04/26	13 $\pm$ 2	0.01
	04/27	15 $\pm$ 1	0.02
Well HMH-5	04/26	1900 $\pm$ 120	2.1
	04/27	2100 $\pm$ 120	2.3
Well HMH-6	04/26	72 $\pm$ 2	0.08
	04/27	57 $\pm$ 3	0.06
Well HMH-7	04/26	Not Sampled - Well under water	
	04/27	Not Sampled - Well under water	
Well HMH-8	04/26	13 $\pm$ 2	0.01
	04/27	20 $\pm$ 2	0.02
Well HMH-9	04/26	87 $\pm$ 2	0.1
	04/27	91 $\pm$ 3	0.1
Well HMH-10	04/26	300 $\pm$ 3	0.3
	04/27	260 $\pm$ 4	0.3
Well HMH-11	04/26	23 $\pm$ 2	0.03
	04/27	28 $\pm$ 2	0.03
Well HMH-12	04/26	12 $\pm$ 2	0.01
	04/27	12 $\pm$ 3	0.01
Well HMH-13	04/26	11 $\pm$ 2	0.01
	04/27	7.6 $\pm$ 1.9	0.01

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

(b) Formerly the residence of Talmadge S. Saucier

(c) New sampling location

(d,e,f) Additional analyses that are greater than MDC

(g) Additional analyses greater than MDC

NA Not applicable: tritium results <MDC or water is known to be nonpotable

Additional analysis greater than MDC

	<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
(d)	U-234	0.038	0.012	0.026	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.021	0.007	0.01	$10^{-9}\mu\text{Ci/mL}$
(e)	U-238	0.018	0.009	0.014	$10^{-9}\mu\text{Ci/mL}$
(f)	U-234	0.099	0.018	0.036	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.057	0.011	0.009	$10^{-9}\mu\text{Ci/mL}$
(g)	U-234	0.14	0.02	0.01	pCi/L
	U-238	0.12	0.02	0.01	pCi/L

Table D.15 (Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium (pCi/L)</u>	<u>Percent of Concentration Guide^(a)</u>
Onsite Sampling Locations			
Well HMH-14	04/26	Not Sampled - Well dry	
	04/27	Not Sampled - Well dry	
Well HMH-15	04/26	12 $\pm$ 2	0.01
	04/27	9.1 $\pm$ 2.3	0.01
Well HMH-16	04/26	75 $\pm$ 2	0.08
	04/27	120 $\pm$ 3	0.1
Well HT-2C	04/28	9.0 $\pm$ 1.5	0.01
Well HT-4	04/28	6.1 $\pm$ 2.5	NA
Well HT-5	04/28	0.99 $\pm$ 1.69	NA

Offsite Sampling Locations

Baxterville, MS

Little Creek #1	04/28	20 $\pm$ 2	0.02
Lower Little Creek #2	04/28	18 $\pm$ 1	0.02
Salt Dome Hunting Club	04/29	24 $\pm$ 2	0.03
Salt Dome Timber Co.	04/27	27 $\pm$ 2	0.03
Anderson Pond	04/27	8.5 $\pm$ 1.3	0.01
Anderson, Billy Ray	04/27	16 $\pm$ 2	0.02
Anderson, Regina	04/27	Not Sampled - No one home	
Anderson, Robert Harvey	04/27	17 $\pm$ 2	0.02
Anderson, Robert Lowell, Sr.	04/27	20 $\pm$ 2	0.02
Anderson, Robert Lowell, Jr.	04/27	17 $\pm$ 1	0.02

- (a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium
 (b) Formerly the residence of Talmadge S. Saucier
 (c) New sampling location
 (d,e,f) Additional analyses that are greater than MDC
 (g) Additional analyses greater than MDC
 NA Not applicable: tritium results <MDC or water is known to be nonpotable

Additional analysis greater than MDC

	<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
(d)	U-234	0.038	0.012	0.026	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.021	0.007	0.01	$10^{-9}\mu\text{Ci/mL}$
(e)	U-238	0.018	0.009	0.014	$10^{-9}\mu\text{Ci/mL}$
(f)	U-234	0.099	0.018	0.036	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.057	0.011	0.009	$10^{-9}\mu\text{Ci/mL}$
(g)	U-234	0.14	0.02	0.01	pCi/L
	U-238	0.12	0.02	0.01	pCi/L

Table D.15 (Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium (pCi/L)</u>	<u>Percent of Concentration Guide^(a)</u>
Bilbo, Timothy	04/28	24 $\pm$ 2	0.03 ^(b)
Burge, Joe	04/27	18 $\pm$ 2	0.02
Offsite Sampling Locations			
Chambliss, B.	04/28	-0.85 $\pm$ 1.43	NA
Daniels, Ray	04/29	15 $\pm$ 2	0.02
Daniels, Webster Jr.	04/29	18 $\pm$ 2	0.02
Daniels Fish Pond Well #2	04/29	19 $\pm$ 2	0.02
Kelly Gertrude	04/27	-0.87 $\pm$ 1.54	NA
King, Rhonda	04/27	20 $\pm$ 2	0.02
Lee, P. T.	04/27	45 $\pm$ 2	0.05
Mills, A. C.	04/27	-0.90 $\pm$ 1.59	NA
Mills, Roy	04/29	18 $\pm$ 2	0.02
Nobles Pond	04/27	18 $\pm$ 2	0.02
Noble's Quail House	04/27	59 $\pm$ 5	0.07
Noble, W. H., Jr.	04/27	37 $\pm$ 2	0.04
Ready, R. C.	04/29	Not Sampled - on City Water	
Saucier, Dennis	04/28	41 $\pm$ 3	0.05
Saucier, Wilma/Yancy	04/28	3.1 $\pm$ 1.7	NA
Smith, Rita	04/27	Not Sampled - Moved, Well Down	
Well Ascot 2	04/28	Not Sampled - Well In Water	
City Well	04/29	26 $\pm$ 2	0.03
Columbia, MS			
Dennis, Buddy	04/28	21 $\pm$ 3	0.02
Dennis, Marvin	04/28	14 $\pm$ 3	0.02
City Well 64B	04/28	6.8 $\pm$ 2.1	0.01

(a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium

(b) Formerly the residence of Talmadge S. Saucier

(c) New sampling location

(d,e,f) Additional analyses that are greater than MDC

(g) Additional analyses greater than MDC

NA Not applicable: tritium results <MDC or water is known to be nonpotable

Additional analysis greater than MDC

	<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
(d)	U-234	0.038	0.012	0.026	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.021	0.007	0.01	$10^{-9}\mu\text{Ci/mL}$
(e)	U-238	0.018	0.009	0.014	$10^{-9}\mu\text{Ci/mL}$
(f)	U-234	0.099	0.018	0.036	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.057	0.011	0.009	$10^{-9}\mu\text{Ci/mL}$
(g)	U-234	0.14	0.02	0.01	pCi/L
	U-238	0.12	0.02	0.01	pCi/L

Table D.15 (Long-Term Hydrological Monitoring Program Analytical Results for Project Dribble - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Date in 1992</u>	<u>Concentration $\pm$ 1s of Tritium (pCi/L)</u>	<u>Percent of Concentration Guide^(a)</u>
Lumberton, MS			
Anderson, G. W.	04/27	19 $\pm$ 3	0.02
Anderson, Lee L.	04/29	20 $\pm$ 1	0.02
Offsite Sampling Locations			
Bond, Bradley K.	04/29	16 $\pm$ 3	0.02
Cox, Eddie	04/27	28 $\pm$ 2	0.03
Gil Ray's Crawfish Pond	04/27	7.0 $\pm$ 1.6	0.01
Gipson, Herman	04/28	-1.8 $\pm$ 1.5	NA
Gipson, Hewie	04/27	23 $\pm$ 3	0.03 ^{(c)(d)}
Gipson, Phillip	04/27	21 $\pm$ 4	0.02 ^{(c)(e)}
Graham, Sylvester	04/28	-2.0 $\pm$ 1.8	NA
Hartfield, Ray	04/28	-2.8 $\pm$ 3.8	NA ^{(c)(f)}
Moree, Rita-House Well	04/28	Not Sampled - Moved, Well Down	
Beach, Donald	04/27	Not Sampled - Moved, Well Down	
Powers, Sharon	04/29	13 $\pm$ 2	0.01
Rushing, Debra	04/28	27 $\pm$ 2	0.03
Saul, Lee L.	04/28	0.0 $\pm$ 1.7	NA
Smith, E. J.	04/28	18 $\pm$ 4	0.02
Smith, Howard	04/28	1.5 $\pm$ 2.2	NA
Smith, Howard-Pond	04/29	12 $\pm$ 3	0.01
Thompson, Roswell	04/28	28 $\pm$ 5	0.03 ^{(c)(g)}
Well 2 City	04/29	2.2 $\pm$ 2.0	NA
Purvis, MS			
Burge Willie Ray and Grace	04/27	15 $\pm$ 3	0.02
City Supply	04/27	2.9 $\pm$ 1.8	NA
Gil, Ray House Well	04/27	-2.9 $\pm$ 1.6	NA

- (a) Derived from the ^3H ALI in ICRP-30 as 90,000 pCi/L tritium
 (b) Formerly the residence of Talmadge S. Saucier
 (c) New sampling location
 (d,e,f) Additional analyses that are greater than MDC
 (g) Additional analyses greater than MDC
 NA Not applicable: tritium results <MDC or water is known to be nonpotable

Additional analysis greater than MDC

	<u>Analysis</u>	<u>Result</u>	<u>1 sigma</u>	<u>MDC</u>	<u>Units</u>
(d)	U-234	0.038	0.012	0.026	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.021	0.007	0.01	$10^{-9}\mu\text{Ci/mL}$
(e)	U-238	0.018	0.009	0.014	$10^{-9}\mu\text{Ci/mL}$
(f)	U-234	0.099	0.018	0.036	$10^{-9}\mu\text{Ci/mL}$
	U-238	0.057	0.011	0.009	$10^{-9}\mu\text{Ci/mL}$
(g)	U-234	0.14	0.02	0.01	pCi/L
	U-238	0.12	0.02	0.01	pCi/L

APPENDIX E

RADIOACTIVE NOBLE GASES IN AIR ONSITE

Robert R. Kinnison

The 1992 data consist of krypton and xenon concentrations from ten permanent stations collected over the entire year, and several portable stations used for short periods of time to monitor test events. There are a few changes in station locations from the 1991 report. Three permanent stations have been added: The Pahute Substation in Area 19, the Gate 400 station in Area 18, and the DDZ77 station in Area 20. Also, portable stations were used at locations different from the 1991 sampling locations. The event monitoring is discussed in detail in Section 5.1.1 of Volume I of this annual report. The information is comprised of (1) an alphabetic station description, (2) the dates of sample collection, (3) the krypton and xenon concentrations in $\mu\text{Ci/mL}$ with one analytic standard deviation (1s), and the analytic Minimum Detectable Concentrations (MDC). The units of 10^{-12} microcuries per milliliter are equivalent to picocuries per 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 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 MDC of approximately $8 \times 10^{-12} \mu\text{Ci/mL}$ and 77 percent of the xenon data are below its detection limit of about $24 \times 10^{-12} \mu\text{Ci/mL}$. Some of the rows of Table E.1 show all data values are missing, this indicates that a sample was collected on the given dates but, for some reason, no results were obtained.

Table E.1 Sample Results for ^{133}Xe and ^{85}Kr - 1992

Sampling Location	Collection Dates	Krypton $10^{-12} \mu\text{Ci/mL} \pm 1s$	Xenon $10^{-12} \mu\text{Ci/mL} \pm 1(s)$
Area 1, BJY	01/06/92	22.7 ± 0.65	15.5 ± 4.20
Area 1, BJY	01/13/92	20.8 ± 0.75	8.9 ± 4.50
Area 1, BJY	01/21/92	25.1 ± 0.85	15.2 ± 3.85
Area 1, BJY	01/27/92	23.5 ± 1.45	-6.5 ± 7.50
Area 1, BJY	02/03/92	24.0 ± 1.00	* *
Area 1, BJY	02/10/92	25.3 ± 1.10	12.3 ± 5.00
Area 1, BJY	02/18/92	* *	8.7 ± 7.80
Area 1, BJY	02/24/92	21.4 ± 1.00	18.6 ± 8.10
Area 1, BJY	03/02/92	* *	* *
Area 1, BJY	03/11/92	30.0 ± 1.90	41 ± 314.80

Mean Xe MDC: $23.9 \times 10^{-12} \mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12} \mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12} \mu\text{Ci/mL}$
Approximate Value

- (a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1s$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(s)$
Area 1, BJY	03/17/92	20.6 $\pm$ 1.05	-37.9 $\pm$ 10.65
Area 1, BJY	03/24/92	27.4 $\pm$ 0.95	66.8 $\pm$ 10.50
Area 1, BJY	03/30/92	24.4 $\pm$ 0.85	30.3 $\pm$ 8.05
Area 1, BJY	04/06/92	22.7 $\pm$ 1.10	32.2 $\pm$ 23.15
Area 1, BJY	04/13/92	* *	-70.2 $\pm$ 41.30
Area 1, BJY	04/20/92	21.4 $\pm$ 1.20	-20.6 $\pm$ 18.85
Area 1, BJY	04/27/92	28.8 $\pm$ 1.25	-10.1 $\pm$ 8.55
Area 1, BJY	05/04/92	31.5 $\pm$ 1.20	17.8 $\pm$ 11.05
Area 1, BJY	05/12/92	29.5 $\pm$ 0.80	5.4 $\pm$ 10.40
Area 1, BJY	05/18/92	* *	91.0 $\pm$ 10.40
Area 1, BJY	05/26/92	* *	10.8 $\pm$ 7.30
Area 1, BJY	06/02/92	31.6 $\pm$ 1.20	9.3 $\pm$ 5.35
Area 1, BJY	06/08/92	28.8 $\pm$ 0.70	11.2 $\pm$ 3.60
Area 1, BJY	06/15/92	26.0 $\pm$ 0.80	20.9 $\pm$ 6.15
Area 1, BJY	06/22/92	34.5 $\pm$ 1.00	27.2 $\pm$ 4.10
Area 1, BJY	06/29/92	25.3 $\pm$ 0.60	28.0 $\pm$ 31.45
Area 1, BJY	07/07/92	18.1 $\pm$ 0.70	61.5 $\pm$ 37.40
Area 1, BJY	07/14/92	26.4 $\pm$ 0.80	-15.0 $\pm$ 4.00
Area 1, BJY	07/22/92	17.4 $\pm$ 0.85	-13.9 $\pm$ 4.55
Area 1, BJY	07/27/92	* *	29.3 $\pm$ 3.35
Area 1, BJY	08/03/92	28.4 $\pm$ 0.70	5.3 $\pm$ 5.40
Area 1, BJY	08/10/92	29.8 $\pm$ 1.00	-1.2 $\pm$ 7.05
Area 1, BJY	08/18/92	26.3 $\pm$ 0.75	15.2 $\pm$ 5.35
Area 1, BJY	08/24/92	23.7 $\pm$ 0.70	4.3 $\pm$ 3.65
Area 1, BJY	08/31/92	32.6 $\pm$ 0.90	3.2 $\pm$ 3.15
Area 1, BJY	09/08/92	36.8 $\pm$ 1.40	64.1 $\pm$ 22.55
Area 1, BJY	09/14/92	20.2 $\pm$ 0.85	-10.6 $\pm$ 5.95
Area 1, BJY	09/22/92	21.8 $\pm$ 0.90	24.9 $\pm$ 20.25
Area 1, BJY	09/29/92	32.5 $\pm$ 0.75	109.9 $\pm$ 13.45
Area 1, BJY	10/05/92	24.9 $\pm$ 0.85	-0.4 $\pm$ 7.05
Area 1, BJY	10/14/92	23.1 $\pm$ 0.85	-21.5 $\pm$ 9.05
Area 1, BJY	10/20/92	24.4 $\pm$ 0.65	-4.8 $\pm$ 3.95
Area 1, BJY	10/26/92	13.0 $\pm$ 1.75	3.6 $\pm$ 3.50
Area 1, BJY	11/03/92	25.1 $\pm$ 0.55	-13.7 $\pm$ 3.60
Area 1, BJY	11/10/92	21.6 $\pm$ 0.60	-7.1 $\pm$ 2.00
Area 1, BJY	11/16/92	30.2 $\pm$ 0.60	7.5 $\pm$ 1.95
Area 1, BJY	11/23/92	30.2 $\pm$ 0.75	4.7 $\pm$ 3.45

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

(a) Probably invalid because of cross-contamination

* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1s$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(s)$
Area 1, BJY	11/30/92	24.3 $\pm$ 0.60	-3.6 $\pm$ 2.00
Area 1, BJY	12/07/92	36.6 $\pm$ 0.95	29 $\pm$ 53.15
Area 1, BJY	12/14/92	29.9 $\pm$ 0.80	16.2 $\pm$ 2.95
Area 1, BJY	12/21/92	* * *	*
Area 1, BJY	12/30/92	19.0 $\pm$ 0.75	-5.2 $\pm$ 2.20
Area 1, Gravel Pit	01/07/92	* *	12.5 $\pm$ 4.35
Area 1, Gravel Pit	01/13/92	22.9 $\pm$ 0.65	69.1 $\pm$ 10.90
Area 1, Gravel Pit	01/21/92	24.6 $\pm$ 1.15	10.2 $\pm$ 4.15
Area 1, Gravel Pit	01/27/92	22.1 $\pm$ 0.70	18.8 $\pm$ 5.95
Area 1, Gravel Pit	02/03/92	27.0 $\pm$ 0.95	-13.8 $\pm$ 8.05
Area 1, Gravel Pit	02/10/92	35.0 $\pm$ 1.20	* *
Area 1, Gravel Pit	02/18/92	22.8 $\pm$ 1.35	14.7 $\pm$ 9.05
Area 1, Gravel Pit	02/24/92	23.8 $\pm$ 0.75	6.1 $\pm$ 8.40
Area 1, Gravel Pit	03/02/92	23.8 $\pm$ 0.75	4.7 $\pm$ 7.55
Area 1, Gravel Pit	03/09/92	37.8 $\pm$ 0.80	16.4 $\pm$ 2.85
Area 1, Gravel Pit	03/17/92	20.1 $\pm$ 1.00	22.2 $\pm$ 9.55
Area 1, Gravel Pit	03/24/92	19.2 $\pm$ 0.85	52.8 $\pm$ 9.90
Area 1, Gravel Pit	03/30/92	24.4 $\pm$ 0.90	19.8 $\pm$ 7.20
Area 1, Gravel Pit	04/07/92	20.7 $\pm$ 1.00	31.2 $\pm$ 22.40
Area 1, Gravel Pit	04/13/92	23.4 $\pm$ 1.55	10.5 $\pm$ 55.50
Area 1, Gravel Pit	04/20/92	^(a) 473.0 $\pm$ 2.50	^(a) 10137.0 $\pm$ 13.00
Area 1, Gravel Pit	04/30/92	37.9 $\pm$ 0.80	111.0 $\pm$ 2.55
Area 1, Gravel Pit	05/04/92	24.7 $\pm$ 0.80	65.8 $\pm$ 32.80
Area 1, Gravel Pit	05/13/92	10.4 $\pm$ 0.90	-20.1 $\pm$ 19.85
Area 1, Gravel Pit	05/19/92	^(a) 450.4 $\pm$ 2.25	^(a) 821.8 $\pm$ 7.70
Area 1, Gravel Pit	05/26/92	5.8 $\pm$ 1.25	12.2 $\pm$ 3.65
Area 1, Gravel Pit	06/02/92	28.2 $\pm$ 1.00	17.0 $\pm$ 8.30
Area 1, Gravel Pit	06/09/92	63.5 $\pm$ 1.15	56.2 $\pm$ 15.00
Area 1, Gravel Pit	06/15/92	24.1 $\pm$ 0.85	-33.7 $\pm$ 17.00
Area 1, Gravel Pit	06/23/92	26.3 $\pm$ 1.05	-3.7 $\pm$ 4.40
Area 1, Gravel Pit	06/29/92	29.0 $\pm$ 0.90	173.7 $\pm$ 63.85
Area 1, Gravel Pit	07/06/92	22.6 $\pm$ 1.05	-14.6 $\pm$ 6.60
Area 1, Gravel Pit	07/13/92	11.9 $\pm$ 0.90	-10.1 $\pm$ 7.45
Area 1, Gravel Pit	07/20/92	25.0 $\pm$ 1.20	-59.1 $\pm$ 16.80
Area 1, Gravel Pit	07/27/92	33.5 $\pm$ 1.15	* *
Area 1, Gravel Pit	08/03/92	* *	94.68 $\pm$ 47.20
Area 1, Gravel Pit	08/10/92	25.3 $\pm$ 0.90	-19.47 $\pm$ 17.80

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

(a) Probably invalid because of cross-contamination

* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1\text{s}$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(\text{s})$
Area 1, Gravel Pit	08/17/92	19.0 $\pm$ 1.00	-1.9 $\pm$ 5.10
Area 1, Gravel Pit	08/24/92	24.7 $\pm$ 0.80	1.8 $\pm$ 2.60
Area 1, Gravel Pit	08/31/92	26.1 $\pm$ 0.60	4.6 $\pm$ 5.20
Area 1, Gravel Pit	09/08/92	22.4 $\pm$ 0.65	40.7 $\pm$ 0.85
Area 1, Gravel Pit	09/14/92	25.7 $\pm$ 0.70	-29.0 $\pm$ 9.75
Area 1, Gravel Pit	09/21/92	22.1 $\pm$ 0.70	8.2 $\pm$ 3.60
Area 1, Gravel Pit	09/28/92	77.1 $\pm$ 1.30	61.0 $\pm$ 7.90
Area 1, Gravel Pit	10/05/92	27.5 $\pm$ 0.65	-14.9 $\pm$ 6.35
Area 1, Gravel Pit	10/12/92	24.0 $\pm$ 0.70	-10.4 $\pm$ 5.35
Area 1, Gravel Pit	10/19/92	27.1 $\pm$ 0.65	-14.1 $\pm$ 2.60
Area 1, Gravel Pit	10/26/92	27.6 $\pm$ 1.55	3.3 $\pm$ 4.95
Area 1, Gravel Pit	11/02/92	22.3 $\pm$ 0.70	-32.3 $\pm$ 8.40
Area 1, Gravel Pit	11/09/92	31.4 $\pm$ 1.00	35.0 $\pm$ 8.05
Area 1, Gravel Pit	11/16/92	28.9 $\pm$ 0.60	0.8 $\pm$ 1.90
Area 1, Gravel Pit	11/23/92	25.1 $\pm$ 0.75	-16.6 $\pm$ 6.80
Area 1, Gravel Pit	11/30/92	23.8 $\pm$ 0.60	10.3 $\pm$ 5.40
Area 1, Gravel Pit	12/08/92	23.8 $\pm$ 0.65	-1.2 $\pm$ 2.25
Area 1, Gravel Pit	12/15/92	24.2 $\pm$ 0.55	3.3 $\pm$ 1.95
Area 1, Gravel Pit	12/21/92	32.9 $\pm$ 0.95	-5.5 $\pm$ 1.50
Area 1, Gravel Pit	12/28/92	26.9 $\pm$ 0.80	17.4 $\pm$ 1.75
Area 5, Gate 200 S	01/06/92	21.3 $\pm$ 0.75	3.1 $\pm$ 2.75
Area 5, Gate 200 S	01/21/92	25.8 $\pm$ 0.60	2.7 $\pm$ 2.35
Area 5, Gate 200 S	01/29/92	26.6 $\pm$ 0.90	14.5 $\pm$ 8.75
Area 5, Gate 200 S	02/03/92	14.1 $\pm$ 1.10	3.7 $\pm$ 4.50
Area 5, Gate 200 S	02/11/92	22.6 $\pm$ 0.90	28.3 $\pm$ 9.95
Area 5, Gate 200 S	02/18/92	19.1 $\pm$ 1.35	10.4 $\pm$ 7.45
Area 5, Gate 200 S	02/24/92	23.4 $\pm$ 0.80	1.2 $\pm$ 2.75
Area 5, Gate 200 S	03/02/92	25.6 $\pm$ 1.15	28.1 $\pm$ 18.15
Area 5, Gate 200 S	03/09/92	38.9 $\pm$ 1.00	6.5 $\pm$ 8.55
Area 5, Gate 200 S	03/16/92	25.8 $\pm$ 0.70	-1.8 $\pm$ 3.75
Area 5, Gate 200 S	03/24/92	31.7 $\pm$ 0.85	39.3 $\pm$ 7.05
Area 5, Gate 200 S	03/30/92	^(a) 6619.9 $\pm$ 9.45	^(a) 1785.5 $\pm$ 4.25
Area 5, Gate 200 S	04/07/92	23.6 $\pm$ 0.80	143.7 $\pm$ 31.10
Area 5, Gate 200 S	04/13/92	19.0 $\pm$ 1.10	-2.7 $\pm$ 22.75
Area 5, Gate 200 S	04/20/92	48.5 $\pm$ 1.20	255.0 $\pm$ 6.80
Area 5, Gate 200 S	04/29/92	45.2 $\pm$ 1.00	129.0 $\pm$ 2.85
Area 5, Gate 200 S	05/05/92	* *	* *

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

(a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1\text{s}$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(\text{s})$
Area 5, Gate 200 S	05/13/92	* *	* *
Area 5, Gate 200 S	05/18/92	23.5 ± 0.65	8.5 ± 8.80
Area 5, Gate 200 S	05/26/92	24.8 ± 0.70	19.0 ± 5.00
Area 5, Gate 200 S	06/01/92	30.4 ± 0.90	-12.3 ± 5.05
Area 5, Gate 200 S	06/09/92	28.2 ± 1.00	-10.3 ± 25.65
Area 5, Gate 200 S	06/15/92	23.1 ± 0.80	22.7 ± 5.95
Area 5, Gate 200 S	06/22/92	25.2 ± 0.70	-4.1 ± 5.75
Area 5, Gate 200 S	06/29/92	25.2 ± 0.70	-4.1 ± 5.75
Area 5, Gate 200 S	07/06/92	23.1 ± 0.70	-0.2 ± 5.00
Area 5, Gate 200 S	07/14/92	25.2 ± 0.70	4.1 ± 4.70
Area 5, Gate 200 S	07/20/92	28.9 ± 0.85	-22.8 ± 9.10
Area 5, Gate 200 S	07/27/92	35.2 ± 0.75	47.1 ± 6.65
Area 5, Gate 200 S	08/03/92	23.8 ± 0.85	-30.4 ± 11.00
Area 5, Gate 200 S	08/10/92	25.8 ± 0.90	-7.6 ± 5.70
Area 5, Gate 200 S	08/17/92	23.7 ± 0.90	61.7 ± 15.50
Area 5, Gate 200 S	08/24/92	23.9 ± 0.65	3.8 ± 2.25
Area 5, Gate 200 S	08/31/92	25.0 ± 0.70	105.0 ± 1.50
Area 5, Gate 200 S	09/08/92	27.9 ± 0.55	* *
Area 5, Gate 200 S	09/14/92	24.2 ± 0.85	-16.1 ± 12.75
Area 5, Gate 200 S	09/21/92	* *	36.5 ± 12.30
Area 5, Gate 200 S	09/29/92	29.8 ± 1.60	-3.5 ± 2.40
Area 5, Gate 200 S	10/05/92	38.8 ± 0.80	28.3 ± 4.40
Area 5, Gate 200 S	10/12/92	23.1 ± 0.70	3.8 ± 3.75
Area 5, Gate 200 S	10/20/92	27.1 ± 0.85	-2.8 ± 3.45
Area 5, Gate 200 S	10/26/92	24.4 ± 0.60	-10.6 ± 11.65
Area 5, Gate 200 S	11/02/92	* *	-6.3 ± 1.80
Area 5, Gate 200 S	11/09/92	* *	* *
Area 5, Gate 200 S	11/19/92	24.4 ± 0.95	7.4 ± 6.65
Area 5, Gate 200 S	11/30/92	27.3 ± 1.00	-4.2 ± 2.05
Area 5, Gate 200 S	12/03/92	20.4 ± 0.80	-9.7 ± 2.75
Area 5, Gate 200 S	12/08/92	24.3 ± 0.75	-5.6 ± 2.90
Area 5, Gate 200 S	12/15/92	21.4 ± 0.65	5.8 ± 2.25
Area 5, Gate 200 S	12/21/92	21.5 ± 0.75	2.4 ± 1.95
Area 5, Gate 200 S	12/28/92	34.2 ± 0.70	20.6 ± 2.55
Area 12, Camp	01/07/92	24.8 ± 0.90	14.9 ± 4.60
Area 12, Camp	01/13/92	21.8 ± 0.70	34.7 ± 5.70
Area 12, Camp	01/21/92	26.2 ± 0.70	8.1 ± 2.60

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

- (a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1\text{s}$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(\text{s})$
Area 12, Camp	01/27/92	19.8 $\pm$ 0.75	81.9 $\pm$ 2.20
Area 12, Camp	02/03/92	27.5 $\pm$ 0.70	* *
Area 12, Camp	02/10/92	20.6 $\pm$ 1.20	* *
Area 12, Camp	02/18/92	24.4 $\pm$ 0.90	-3 $\pm$ 36.35
Area 12, Camp	02/24/92	25.3 $\pm$ 0.70	6 $\pm$ 13.40
Area 12, Camp	03/02/92	23.6 $\pm$ 0.60	* $\pm$ 2.85
Area 12, Camp	03/09/92	32.3 $\pm$ 0.60	13 $\pm$ 42.25
Area 12, Camp	03/17/92	27.6 $\pm$ 0.75	-4 $\pm$ 24.00
Area 12, Camp	03/23/92	* *	1.4 $\pm$ 9.20
Area 12, Camp	03/30/92	22.4 $\pm$ 0.75	19.0 $\pm$ 6.10
Area 12, Camp	04/08/92	16.1 $\pm$ 0.85	6.0 $\pm$ 4.30
Area 12, Camp	04/15/92	32.0 $\pm$ 0.95	50.5 $\pm$ 13.45
Area 12, Camp	04/20/92	25.9 $\pm$ 0.65	120.0 $\pm$ 21.00
Area 12, Camp	04/27/92	37.1 $\pm$ 0.60	63.0 $\pm$ 3.65
Area 12, Camp	05/04/92	26.3 $\pm$ 0.95	* *
Area 12, Camp	05/12/92	17.6 $\pm$ 0.65	-31.6 $\pm$ 23.30
Area 12, Camp	05/19/92	20.6 $\pm$ 0.70	-20.5 $\pm$ 10.25
Area 12, Camp	05/27/92	30.8 $\pm$ 0.90	32.4 $\pm$ 23.55
Area 12, Camp	06/02/92	31.0 $\pm$ 0.85	11.7 $\pm$ 8.10
Area 12, Camp	06/08/92	25.8 $\pm$ 0.75	16.6 $\pm$ 6.05
Area 12, Camp	06/15/92	30.0 $\pm$ 0.80	25.6 $\pm$ 5.90
Area 12, Camp	06/22/92	18.7 $\pm$ 1.05	1.0 $\pm$ 4.10
Area 12, Camp	06/29/92	28.9 $\pm$ 1.15	84.7 $\pm$ 20.50
Area 12, Camp	07/06/92	22.9 $\pm$ 0.95	-204.6 $\pm$ 11.90
Area 12, Camp	07/13/92	28.3 $\pm$ 0.65	-18.0 $\pm$ 9.55
Area 12, Camp	07/20/92	19.8 $\pm$ 0.90	* *
Area 12, Camp	07/27/92	* *	* *
Area 12, Camp	08/03/92	24.6 $\pm$ 0.75	-22.5 $\pm$ 26.05
Area 12, Camp	08/10/92	26.3 $\pm$ 0.75	7.5 $\pm$ 8.15
Area 12, Camp	08/17/92	68.8 $\pm$ 1.05	-8.1 $\pm$ 4.65
Area 12, Camp	08/24/92	24.6 $\pm$ 1.55	10.4 $\pm$ 3.25
Area 12, Camp	09/01/92	23.8 $\pm$ 0.80	16.3 $\pm$ 5.20
Area 12, Camp	09/08/92	22.5 $\pm$ 0.95	1.6 $\pm$ 2.50
Area 12, Camp	09/14/92	23.9 $\pm$ 0.70	-7.3 $\pm$ 5.30
Area 12, Camp	09/21/92	26.7 $\pm$ 1.10	7.2 $\pm$ 10.90
Area 12, Camp	09/28/92	22.0 $\pm$ 2.10	-77.1 $\pm$ 26.70

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

- (a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1\text{s}$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(\text{s})$
Area 12, Camp	10/05/92	20.2 $\pm$ 0.65	60.3 $\pm$ 53.90
Area 12, Camp	10/13/92	23.0 $\pm$ 0.90	-7.1 $\pm$ 5.00
Area 12, Camp	10/19/92	25.2 $\pm$ 0.75	-4.9 $\pm$ 2.75
Area 12, Camp	10/26/92	21.2 $\pm$ 0.75	4.1 $\pm$ 4.10
Area 12, Camp	11/02/92	27.1 $\pm$ 0.75	-11.5 $\pm$ 7.65
Area 12, Camp	11/09/92	36.2 $\pm$ 0.60	0.1 $\pm$ 3.85
Area 12, Camp	11/16/92	* *	2.0 $\pm$ 2.30
Area 12, Camp	11/30/92	23.8 $\pm$ 0.75	11.4 $\pm$ 6.10
Area 12, Camp	11/30/92	21.5 $\pm$ 0.70	-16.5 $\pm$ 4.15
Area 12, Camp	12/08/92	25.3 $\pm$ 0.70	-5.6 $\pm$ 2.25
Area 12, Camp	12/15/92	21.0 $\pm$ 1.25	-7.1 $\pm$ 5.10
Area 12, Camp	12/21/92	* *	-6.0 $\pm$ 2.55
Area 12, Camp	12/28/92	* *	* *
Area 15, EPA Farm	01/05/92	20.8 $\pm$ 1.20	12.0 $\pm$ 6.50
Area 15, EPA Farm	01/13/92	* *	16.1 $\pm$ 2.15
Area 15, EPA Farm	01/21/92	* *	* *
Area 15, EPA Farm	01/27/92	22.6 $\pm$ 1.00	34.9 $\pm$ 5.25
Area 15, EPA Farm	02/03/92	21.2 $\pm$ 0.95	18.1 $\pm$ 4.05
Area 15, EPA Farm	02/10/92	* *	* *
Area 15, EPA Farm	02/18/92	* *	-8.4 $\pm$ 8.05
Area 15, EPA Farm	02/24/92	* *	* *
Area 15, EPA Farm	03/02/92	^(a) 4140.0 $\pm$ 5.00	^(a) 1074.0 $\pm$ 2.00
Area 15, EPA Farm	03/09/92	* *	* *
Area 15, EPA Farm	03/17/92	22.3 $\pm$ 0.60	11.0 $\pm$ 3.70
Area 15, EPA Farm	03/24/92	* *	51.8 $\pm$ 12.15
Area 15, EPA Farm	03/30/92	15.8 $\pm$ 1.85	44.6 $\pm$ 20.90
Area 15, EPA Farm	04/07/92	* *	* *
Area 15, EPA Farm	04/13/92	23.1 $\pm$ 1.05	-129.0 $\pm$ 59.50
Area 15, EPA Farm	04/20/92	* *	-22.0 $\pm$ 13.40
Area 15, EPA Farm	04/27/92	44.2 $\pm$ 2.10	147.0 $\pm$ 3.50
Area 15, EPA Farm	05/04/92	29.0 $\pm$ 0.90	5.1 $\pm$ 9.60
Area 15, EPA Farm	05/12/92	26.5 $\pm$ 0.70	56.3 $\pm$ 15.00
Area 15, EPA Farm	05/18/92	22.8 $\pm$ 0.80	-31.4 $\pm$ 11.70
Area 15, EPA Farm	05/26/92	* *	* *
Area 15, EPA Farm	06/02/92	* *	* *
Area 15, EPA Farm	06/08/92	29.0 $\pm$ 0.70	186.0 $\pm$ 51.00

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

(a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1s$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(s)$
Area 15, EPA Farm	06/15/92	30.1 $\pm$ 11.30	18.5 $\pm$ 4.05
Area 15, EPA Farm	06/22/92	53.9 $\pm$ 0.80	-0.2 $\pm$ 3.30
Area 15, EPA Farm	06/29/92	28.5 $\pm$ 0.90	41.1 $\pm$ 15.50
Area 15, EPA Farm	07/06/92	26.7 $\pm$ 0.65	* $\pm$ 9.65
Area 15, EPA Farm	07/13/92	21.7 $\pm$ 0.60	-7.6 $\pm$ 3.45
Area 15, EPA Farm	07/20/92	29.3 $\pm$ 6.25	-9.2 $\pm$ 5.90
Area 15, EPA Farm	07/27/92	26.2 $\pm$ 0.85	9.0 $\pm$ 5.85
Area 15, EPA Farm	08/03/92	26.0 $\pm$ 1.00	7.1 $\pm$ 9.40
Area 15, EPA Farm	08/10/92	27.9 $\pm$ 1.10	9.2 $\pm$ 23.45
Area 15, EPA Farm	08/17/92	20.7 $\pm$ 0.60	37.5 $\pm$ 7.85
Area 15, EPA Farm	08/24/92	25.3 $\pm$ 0.70	-0.6 $\pm$ 2.25
Area 15, EPA Farm	08/31/92	22.7 $\pm$ 0.80	13.5 $\pm$ 3.20
Area 15, EPA Farm	09/14/92	21.6 $\pm$ 0.95	8.9 $\pm$ 7.05
Area 15, EPA Farm	09/29/92	* *	61.3 $\pm$ 10.50
Area 15, EPA Farm	10/05/92	* *	* *
Area 15, EPA Farm	10/14/92	20.1 $\pm$ 0.60	-9.3 $\pm$ 4.75
Area 15, EPA Farm	10/19/92	19.8 $\pm$ 0.75	-16.0 $\pm$ 2.20
Area 15, EPA Farm	10/26/92	24.5 $\pm$ 0.60	-2.1 $\pm$ 3.80
Area 15, EPA Farm	11/03/92	23.2 $\pm$ 1.25	-13.9 $\pm$ 4.45
Area 15, EPA Farm	11/09/92	25.7 $\pm$ 0.60	-8.6 $\pm$ 2.10
Area 15, EPA Farm	11/16/92	25.7 $\pm$ 1.45	8.0 $\pm$ 2.10
Area 15, EPA Farm	11/23/92	41.6 $\pm$ 0.60	8.4 $\pm$ 8.25
Area 15, EPA Farm	11/30/92	23.2 $\pm$ 0.60	-3.5 $\pm$ 2.85
Area 15, EPA Farm	12/07/92	34.8 $\pm$ 0.95	45.7 $\pm$ 5.35
Area 15, EPA Farm	12/14/92	20.6 $\pm$ 0.50	0.7 $\pm$ 2.40
Area 15, EPA Farm	12/21/92	24.9 $\pm$ 0.85	3.0 $\pm$ 2.60
Area 15, EPA Farm	12/29/92	23.6 $\pm$ 0.75	4.0 $\pm$ 2.80
Area 18, Gate 400	04/07/92	26.4 $\pm$ 0.75	99.2 $\pm$ 23.15
Area 18, Gate 400	04/13/92	47.4 $\pm$ 0.85	^(a) 679.0 $\pm$ 19.00
Area 18, Gate 400	04/21/92	26.0 $\pm$ 0.75	21.9 $\pm$ 15.40
Area 18, Gate 400	04/27/92	37.0 $\pm$ 0.75	107.0 $\pm$ 2.60
Area 18, Gate 400	05/04/92	29.8 $\pm$ 0.80	28.3 $\pm$ 8.25
Area 18, Gate 400	05/11/92	26.6 $\pm$ 0.70	30.2 $\pm$ 8.60
Area 18, Gate 400	05/18/92	24.2 $\pm$ 0.65	29.8 $\pm$ 16.20
Area 18, Gate 400	05/28/92	43.1 $\pm$ 0.80	128.2 $\pm$ 2.55
Area 18, Gate 400	06/01/92	25.8 $\pm$ 1.00	20.5 $\pm$ 12.25

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

(a) Probably invalid because of cross-contamination

* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1\text{s}$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(\text{s})$
Area 18, Gate 400	06/08/92	26.6 $\pm$ 1.90	54.0 $\pm$ 28.75
Area 18, Gate 400	06/15/92	27.3 $\pm$ 1.15	7.7 $\pm$ 6.65
Area 18, Gate 400	06/22/92	25.9 $\pm$ 0.85	-1.1 $\pm$ 5.55
Area 18, Gate 400	06/29/92	9.4 $\pm$ 0.80	-21.6 $\pm$ 28.20
Area 18, Gate 400	07/06/92	6.2 $\pm$ 0.95	31.4 $\pm$ 9.25
Area 18, Gate 400	07/13/92	-4.9 $\pm$ 1.05	0.3 $\pm$ 7.55
Area 18, Gate 400	07/20/92	21.1 $\pm$ 1.20	-62.1 $\pm$ 11.50
Area 18, Gate 400	07/27/92	* *	-23.6 $\pm$ 8.90
Area 18, Gate 400	08/04/92	24.8 $\pm$ 0.75	-7.1 $\pm$ 4.45
Area 18, Gate 400	08/10/92	38.8 $\pm$ 0.80	52.9 $\pm$ 15.80
Area 18, Gate 400	08/17/92	20.4 $\pm$ 0.60	1.6 $\pm$ 2.35
Area 18, Gate 400	08/24/92	23.1 $\pm$ 0.60	-7.6 $\pm$ 2.35
Area 18, Gate 400	08/31/92	21.0 $\pm$ 0.60	16.0 $\pm$ 4.80
Area 18, Gate 400	09/08/92	22.5 $\pm$ 0.75	0.7 $\pm$ 3.30
Area 18, Gate 400	09/14/92	21.6 $\pm$ 0.60	-5.4 $\pm$ 4.45
Area 18, Gate 400	09/21/92	22.8 $\pm$ 0.70	13.2 $\pm$ 6.00
Area 18, Gate 400	09/28/92	24.1 $\pm$ 1.00	* *
Area 18, Gate 400	10/05/92	22.0 $\pm$ 0.60	1.3 $\pm$ 6.85
Area 18, Gate 400	10/19/92	20.1 $\pm$ 0.65	-7.4 $\pm$ 2.10
Area 18, Gate 400	10/26/92	25.5 $\pm$ 0.60	1.6 $\pm$ 2.95
Area 18, Gate 400	11/02/92	23.5 $\pm$ 0.65	-31.5 $\pm$ 5.75
Area 18, Gate 400	11/09/92	26.5 $\pm$ 0.70	-11.4 $\pm$ 5.30
Area 18, Gate 400	11/16/92	24.8 $\pm$ 0.60	-13.1 $\pm$ 7.50
Area 18, Gate 400	11/23/92	23.3 $\pm$ 0.55	4.9 $\pm$ 4.75
Area 18, Gate 400	12/30/92	26.3 $\pm$ 0.85	5.8 $\pm$ 2.00
Area 19, Pahute Sbst.	03/31/92	27.4 $\pm$ 0.55	2.8 $\pm$ 1.80
Area 19, Pahute Sbst.	04/07/92	23.3 $\pm$ 0.95	23.0 $\pm$ 7.65
Area 19, Pahute Sbst.	04/15/92	7.4 $\pm$ 1.00	-11.7 $\pm$ 10.20
Area 19, Pahute Sbst.	04/21/92	22.0 $\pm$ 1.90	1.1 $\pm$ 17.70
Area 19, Pahute Sbst.	04/27/92	25.9 $\pm$ 0.90	22.7 $\pm$ 5.95
Area 19, Pahute Sbst.	05/04/92	30.0 $\pm$ 0.95	78.5 $\pm$ 11.45
Area 19, Pahute Sbst.	05/11/92	29.9 $\pm$ 1.10	17.0 $\pm$ 18.50
Area 19, Pahute Sbst.	05/18/92	20.3 $\pm$ 0.70	7.5 $\pm$ 8.70
Area 19, Pahute Sbst.	05/28/92	27.7 $\pm$ 0.80	40.7 $\pm$ 7.30
Area 19, Pahute Sbst.	06/01/92	28.0 $\pm$ 0.90	5.8 $\pm$ 12.70
Area 19, Pahute Sbst.	06/16/92	* *	15.5 $\pm$ 4.70

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

- (a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1s$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(s)$
Area 19, Pahute Sbst.	06/22/92	* *	* *
Area 19, Pahute Sbst.	06/29/92	* *	* *
Area 19, Pahute Sbst.	07/06/92	24.4 $\pm$ 1.35	2.2 $\pm$ 10.05
Area 19, Pahute Sbst.	07/14/92	23.3 $\pm$ 0.75	-71.5 $\pm$ 17.85
Area 19, Pahute Sbst.	07/20/92	25.1 $\pm$ 0.85	-2.8 $\pm$ 3.45
Area 19, Pahute Sbst.	07/27/92	23.8 $\pm$ 0.85	5.2 $\pm$ 7.80
Area 19, Pahute Sbst.	08/10/92	28.1 $\pm$ 0.85	9.4 $\pm$ 16.40
Area 19, Pahute Sbst.	08/17/92	20.7 $\pm$ 0.75	-6.0 $\pm$ 3.40
Area 19, Pahute Sbst.	08/24/92	25.1 $\pm$ 1.00	1.4 $\pm$ 8.60
Area 19, Pahute Sbst.	09/01/92	25.3 $\pm$ 0.85	43.5 $\pm$ 8.70
Area 19, Pahute Sbst.	09/08/92	20.6 $\pm$ 0.85	2.0 $\pm$ 3.05
Area 19, Pahute Sbst.	09/14/92	21.4 $\pm$ 0.60	-2.2 $\pm$ 2.65
Area 19, Pahute Sbst.	09/21/92	23.5 $\pm$ 0.80	-5.6 $\pm$ 4.05
Area 19, Pahute Sbst.	09/28/92	14.9 $\pm$ 1.70	-37.4 $\pm$ 7.95
Area 19, Pahute Sbst.	10/05/92	26.3 $\pm$ 0.80	47.3 $\pm$ 56.55
Area 19, Pahute Sbst.	10/13/92	25.9 $\pm$ 1.00	-24.5 $\pm$ 6.70
Area 19, Pahute Sbst.	10/19/92	33.3 $\pm$ 0.85	-17.0 $\pm$ 3.50
Area 19, Pahute Sbst.	10/26/92	39.9 $\pm$ 1.45	7.8 $\pm$ 12.25
Area 19, Pahute Sbst.	11/02/92	19.4 $\pm$ 0.90	-41.5 $\pm$ 11.05
Area 19, Pahute Sbst.	11/09/92	21.0 $\pm$ 0.75	-25.4 $\pm$ 10.05
Area 19, Pahute Sbst.	11/16/92	23.7 $\pm$ 0.75	-8.5 $\pm$ 6.55
Area 19, Pahute Sbst.	11/23/92	23.9 $\pm$ 0.90	-32.6 $\pm$ 8.20
Area 19, U-19bg RAM #2	03/27/92	21.1 $\pm$ 0.90	13.1 $\pm$ 6.65
Area 19, U-19bg RAM #2	04/02/92	21.9 $\pm$ 0.60	5.7 $\pm$ 2.10
Area 19, U-19bg RAM #2	04/07/92	19.4 $\pm$ 0.85	10.5 $\pm$ 6.70
Area 19, U-19bg RAM #2	04/13/92	19.1 $\pm$ 0.55	2.1 $\pm$ 6.45
Area 19, U-19bg RAM #8	03/27/92	30.0 $\pm$ 0.70	-2.5 $\pm$ 3.95
Area 19, U-19bg RAM #8	04/07/92	17.8 $\pm$ 1.00	-7.5 $\pm$ 11.90
Area 19, U-19bg RAM #8	04/13/92	25.6 $\pm$ 0.70	18.7 $\pm$ 6.60
Area 19, U-19bg RAM #8	04/20/92	26.0 $\pm$ 1.30	42.3 $\pm$ 13.60
Area 20, Camp	01/07/92	49.5 $\pm$ 0.85	34.8 $\pm$ 3.95
Area 20, Camp	01/13/92	24.8 $\pm$ 0.70	31.3 $\pm$ 28.10
Area 20, Camp	01/21/92	30.7 $\pm$ 0.90	10.4 $\pm$ 2.95
Area 20, Camp	01/27/92	38.0 $\pm$ 0.85	14.7 $\pm$ 3.75
Area 20, Camp	02/03/92	48.1 $\pm$ 1.05	37.4 $\pm$ 5.00
Area 20, Camp	02/10/92	31.1 $\pm$ 1.70	53.2 $\pm$ 6.35

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

- (a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1s$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(s)$
Area 20, Camp	02/18/92	24.6 $\pm$ 1.25	13.3 $\pm$ 8.40
Area 20, Camp	02/24/92	29.6 $\pm$ 0.85	13.3 $\pm$ 5.45
Area 20, Camp	03/02/92	34.4 $\pm$ 0.70	1.8 $\pm$ 1.20
Area 20, Camp	03/09/92	34.2 $\pm$ 1.10	7.8 $\pm$ 2.25
Area 20, Camp	03/17/92	21.4 $\pm$ 2.10	3.8 $\pm$ 2.35
Area 20, Camp	03/23/92	41.9 $\pm$ 0.65	48.0 $\pm$ 7.95
Area 20, Camp	03/30/92	19.1 $\pm$ 0.85	-24.3 $\pm$ 10.10
Area 20, Camp	04/06/92	29.8 $\pm$ 0.85	121.8 $\pm$ 17.60
Area 20, Camp	04/13/92	* *	-19.9 $\pm$ 25.25
Area 20, Camp	04/20/92	30.1 $\pm$ 0.95	* *
Area 20, Camp	04/27/92	31.6 $\pm$ 0.75	* *
Area 20, Camp	05/04/92	32.2 $\pm$ 0.70	27.5 $\pm$ 20.65
Area 20, Camp	05/11/92	29.3 $\pm$ 0.80	-59.3 $\pm$ 13.20
Area 20, Camp	05/18/92	30.6 $\pm$ 1.05	55.0 $\pm$ 9.50
Area 20, Camp	05/26/92	28.6 $\pm$ 1.00	19.2 $\pm$ 11.85
Area 20, Camp	06/01/92	30.0 $\pm$ 0.75	* *
Area 20, Camp	06/08/92	31.3 $\pm$ 1.00	-28.0 $\pm$ 11.25
Area 20, Camp	06/15/92	27.9 $\pm$ 0.75	26.2 $\pm$ 5.60
Area 20, Camp	06/22/92	* *	* *
Area 20, Camp	06/29/92	31.5 $\pm$ 1.55	66.1 $\pm$ 17.75
Area 20, Camp	07/06/92	25.5 $\pm$ 0.95	8.2 $\pm$ 11.45
Area 20, Camp	07/13/92	19.9 $\pm$ 2.60	-14.5 $\pm$ 5.65
Area 20, Camp	07/27/92	20.4 $\pm$ 2.40	2.2 $\pm$ 5.40
Area 20, Camp	08/10/92	30.3 $\pm$ 0.95	9.9 $\pm$ 176.00
Area 20, Camp	08/24/92	30.1 $\pm$ 0.70	4.8 $\pm$ 3.50
Area 20, Camp	09/01/92	24.1 $\pm$ 0.75	-0.9 $\pm$ 5.40
Area 20, Camp	09/14/92	26.0 $\pm$ 0.85	-11.5 $\pm$ 4.60
Area 20, Camp	09/21/92	27.4 $\pm$ 1.20	15.8 $\pm$ 5.50
Area 20, Camp	09/28/92	-5.0 $\pm$ 1.45	-6.4 $\pm$ 5.15
Area 20, Camp	09/28/92	29.6 $\pm$ 0.70	* *
Area 20, Camp	10/05/92	32.3 $\pm$ 0.70	* *
Area 20, Camp	10/13/92	38.3 $\pm$ 0.80	-9.5 $\pm$ 4.10
Area 20, Camp	10/19/92	21.2 $\pm$ 0.85	1.3 $\pm$ 2.20
Area 20, Camp	10/26/92	39.6 $\pm$ 2.15	-5.4 $\pm$ 7.55
Area 20, Camp	11/02/92	24.4 $\pm$ 0.80	-9.6 $\pm$ 6.35
Area 20, Camp	11/09/92	30.0 $\pm$ 0.80	-11.3 $\pm$ 6.95

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

(a) Probably invalid because of cross-contamination

* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

Sampling Location	Collection Dates	Krypton $10^{-12}\mu\text{Ci/mL} \pm 1\text{s}$	Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(\text{s})$
Area 20, Camp	11/16/92	39.9 $\pm$ 0.90	21.4 $\pm$ 5.75
Area 20, Camp	11/23/92	24.6 $\pm$ 0.75	-3.9 $\pm$ 6.30
Area 20, DDZ77 Trans.	07/06/92	22.3 $\pm$ 0.75	-8.5 $\pm$ 9.05
Area 20, DDZ77 Trans.	07/14/92	23.7 $\pm$ 0.65	-2.0 $\pm$ 3.10
Area 20, DDZ77 Trans.	07/27/92	27.0 $\pm$ 0.65	0.9 $\pm$ 5.80
Area 20, DDZ77 Trans.	08/03/92	25.0 $\pm$ 0.75	-7.9 $\pm$ 6.40
Area 20, DDZ77 Trans.	08/10/92	30.6 $\pm$ 0.95	-0.4 $\pm$ 12.30
Area 20, DDZ77 Trans.	08/17/92	26.5 $\pm$ 1.00	-6.6 $\pm$ 2.65
Area 20, DDZ77 Trans.	08/24/92	* *	-4.1 $\pm$ 29.70
Area 20, DDZ77 Trans.	09/01/92	22.9 $\pm$ 0.70	-1.4 $\pm$ 4.65
Area 20, DDZ77 Trans.	09/08/92	24.4 $\pm$ 0.70	6.2 $\pm$ 2.55
Area 20, DDZ77 Trans.	09/14/92	23.3 $\pm$ 0.75	-34.8 $\pm$ 13.45
Area 20, DDZ77 Trans.	09/21/92	21.9 $\pm$ 0.70	2.2 $\pm$ 5.85
Area 20, DDZ77 Trans.	09/28/92	22.0 $\pm$ 1.45	-1.3 $\pm$ 8.55
Area 20, DDZ77 Trans.	10/05/92	21.9 $\pm$ 0.65	-3.4 $\pm$ 15.00
Area 20, DDZ77 Trans.	10/13/92	25.9 $\pm$ 0.60	4.0 $\pm$ 4.35
Area 20, DDZ77 Trans.	10/19/92	23.2 $\pm$ 0.70	-11.7 $\pm$ 3.65
Area 20, DDZ77 Trans.	10/26/92	30.6 $\pm$ 0.70	-2.3 $\pm$ 3.80
Area 20, DDZ77 Trans.	11/02/92	19.7 $\pm$ 0.70	-12.7 $\pm$ 7.30
Area 20, DDZ77 Trans.	11/09/92	20.9 $\pm$ 0.60	1.4 $\pm$ 4.95
Area 20, DDZ77 Trans.	11/16/92	26.1 $\pm$ 0.65	-12.2 $\pm$ 4.65
Area 20, DDZ77 Trans.	11/23/92	24.2 $\pm$ 0.95	8.8 $\pm$ 5.65
Area 25, E-MAD N	01/06/92	* *	-43.6 $\pm$ 11.75
Area 25, E-MAD N	01/13/92	24.1 $\pm$ 0.75	5.5 $\pm$ 3.30
Area 25, E-MAD N	01/21/92	26.9 $\pm$ 0.85	60.4 $\pm$ 6.60
Area 25, E-MAD N	02/03/92	24.1 $\pm$ 0.85	8.9 $\pm$ 2.85
Area 25, E-MAD N	02/18/92	20.8 $\pm$ 0.70	5.3 $\pm$ 6.45
Area 25, E-MAD N	02/24/92	30.3 $\pm$ 0.80	18.2 $\pm$ 5.40
Area 25, E-MAD N	03/02/92	28.0 $\pm$ 0.60	5.0 $\pm$ 2.15
Area 25, E-MAD N	03/09/92	22.8 $\pm$ 1.00	6.4 $\pm$ 3.70
Area 25, E-MAD N	03/16/92	25.7 $\pm$ 0.55	-8.7 $\pm$ 4.50
Area 25, E-MAD N	03/24/92	9.7 $\pm$ 0.70	4.9 $\pm$ 6.35
Area 25, E-MAD N	03/30/92	24.7 $\pm$ 1.10	-7.5 $\pm$ 8.35
Area 25, E-MAD N	04/07/92	24.0 $\pm$ 0.70	-207.8 $\pm$ 35.00
Area 25, E-MAD N	04/14/92	141.0 $\pm$ 1.00	-11.8 $\pm$ 29.70
Area 25, E-MAD N	04/20/92	36.0 $\pm$ 0.60	182.0 $\pm$ 10.95

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

- (a) Probably invalid because of cross-contamination
* Missing data value

Table E.1 (Sample Results for ^{133}Xe and ^{85}Kr - 1992, cont.)

<u>Sampling Location</u>	<u>Collection Dates</u>	<u>Krypton $10^{-12}\mu\text{Ci/mL} \pm 1\text{s}$</u>	<u>Xenon $10^{-12}\mu\text{Ci/mL} \pm 1(\text{s})$</u>
Area 25, E-MAD N	04/29/92	61.8 $\pm$ 0.85	201.0 $\pm$ 4.70
Area 25, E-MAD N	05/05/92	30.2 $\pm$ 0.80	7.7 $\pm$ 16.25
Area 25, E-MAD N	05/11/92	24.5 $\pm$ 1.10	39.6 $\pm$ 29.10
Area 25, E-MAD N	05/18/92	22.4 $\pm$ 0.65	-30.4 $\pm$ 2.50
Area 25, E-MAD N	05/26/92	15.2 $\pm$ 0.90	28.7 $\pm$ 8.25
Area 25, E-MAD N	06/01/92	28.6 $\pm$ 0.75	-3.3 $\pm$ 5.00
Area 25, E-MAD N	06/09/92	28.2 $\pm$ 0.90	-46.2 $\pm$ 17.25
Area 25, E-MAD N	06/15/92	27.0 $\pm$ 0.70	13.4 $\pm$ 4.90
Area 25, E-MAD N	06/22/92	26.0 $\pm$ 1.30	28.1 $\pm$ 4.60
Area 25, E-MAD N	06/29/92	10.3 $\pm$ 2.60	7.8 $\pm$ 11.90
Area 25, E-MAD N	07/06/92	26.3 $\pm$ 0.80	4.6 $\pm$ 9.65
Area 25, E-MAD N	07/14/92	18.9 $\pm$ 3.00	12.8 $\pm$ 6.25
Area 25, E-MAD N	07/20/92	26.1 $\pm$ 0.75	-10.5 $\pm$ 6.85
Area 25, E-MAD N	07/27/92	29.3 $\pm$ 0.85	118.9 $\pm$ 24.20
Area 25, E-MAD N	08/03/92	23.7 $\pm$ 1.90	31.3 $\pm$ 16.15
Area 25, E-MAD N	08/11/92	22.3 $\pm$ 0.75	-0.3 $\pm$ 2.50
Area 25, E-MAD N	08/17/92	22.2 $\pm$ 1.80	-15.0 $\pm$ 9.15
Area 25, E-MAD N	08/24/92	27.2 $\pm$ 0.95	1.2 $\pm$ 4.65
Area 25, E-MAD N	08/31/92	* *	-3.2 $\pm$ 2.65
Area 25, E-MAD N	09/08/92	34.6 $\pm$ 0.70	16.5 $\pm$ 5.50
Area 25, E-MAD N	09/14/92	24.2 $\pm$ 1.30	-5.6 $\pm$ 13.00
Area 25, E-MAD N	09/21/92	14.8 $\pm$ 2.20	-31.5 $\pm$ 8.60
Area 25, E-MAD N	09/29/92	20.0 $\pm$ 3.10	-1.7 $\pm$ 13.35
Area 25, E-MAD N	10/05/92	20.2 $\pm$ 1.85	-31.6 $\pm$ 18.20
Area 25, E-MAD N	10/14/92	23.5 $\pm$ 1.15	-28.8 $\pm$ 5.30
Area 25, E-MAD N	10/20/92	22.2 $\pm$ 0.70	-5.8 $\pm$ 2.40
Area 25, E-MAD N	10/26/92	26.4 $\pm$ 0.75	-5.4 $\pm$ 2.55
Area 25, E-MAD N	11/04/92	19.1 $\pm$ 1.50	-21.8 $\pm$ 8.45
Area 25, E-MAD N	11/10/92	* *	* *
Area 25, E-MAD N	11/17/92	25.8 $\pm$ 0.90	0.1 $\pm$ 7.85
Area 25, E-MAD N	11/23/92	27.2 $\pm$ 1.30	-2.0 $\pm$ 4.65
Area 25, E-MAD N	11/30/92	25.2 $\pm$ 0.60	-20.5 $\pm$ 9.30
Area 25, E-MAD N	12/08/92	22.8 $\pm$ 0.75	-3.1 $\pm$ 2.10
Area 25, E-MAD N	12/15/92	* *	* *
Area 25, E-MAD N	12/21/92	* *	* *
Area 25, E-MAD N	12/28/92	30.4 $\pm$ 0.75	33.3 $\pm$ 4.05

Mean Xe MDC: $23.9 \times 10^{-12}\mu\text{Ci/mL}$
Mean Kr MDC: $8.0 \times 10^{-12}\mu\text{Ci/mL}$

Standard Deviation of Mean MDC: $1.1 \times 10^{-12}\mu\text{Ci/mL}$
Approximate Value

- (a) Probably invalid because of cross-contamination
* Missing data value

XENON DATA

Figure E.1 shows the data from all the environmental stations combined. Several very high values have been removed from the data before these plots were made. These values are considered to be invalid by the health physicist in charge of the data collection, and the analytical laboratory notes for these samples note problems such as contamination or no decay observed for the xenon. These data values are marked with ^(a) in Table E.1. The removed xenon data values are 10137.0 for Gravel pit sampling beginning on 4/20, 821.6 for gravel pit sampling beginning 5/19, 1785.5 for gate 200 sampling beginning 3/30, 1074.0 for EPA Farm sampling beginning 3/2, and 679.0 for Gate 400 sampling beginning 4/13. Note that all these high xenon values are associated with corresponding high krypton values, except for the Gate 400 data. Figures E.2 through E.11 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. Missing values in the detection limit data have been plotted as the average of adjacent values (in these plots the numbers represent plotting locations where more than one data point is located). Note that the ordinate scale for the all data plot is different from the other plots. All of the ordinate values are in units of picocuries per cubic meter, the same units as used in Table E.1. The time used for the abscissa is the month and day that sampling ended converted into month and fraction of the month by dividing the day of the month by 32 and adding this fraction to the month index.

Figure E.1 Time Series Plot of All 1992 Xe Results

Figure E.2 Time Series Plot of 1992 BJJ Xe Results

Figure E.4 Time Series Plot of 1992 Gate 200 South Xe Results

Figure E.3 Time Series Plot of 1992 Gravel Pit Xe Results

Figure E.5 Time Series Plot of 1992 Area 12 Camp Xe Results

Figure E.6 Time Series Plot of 1992 EPA Farm Xe Results

Figure E.7 Time Series Plot of 1992 Area 20 Camp Xe Results

Figure E.8 Time Series Plot of 1992 E-MAD Xe Results

Figure E.9 Time Series Plot of 1992 Pahute Substation Xe Results

Figure E.10 Time Series Plot, 1992 Gate 400 Xe Results

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 below the detection limit. The occasional high values seem to occur mostly in the late spring with most occurring during the months of March through September when six nuclear events were conducted (see Table 5.2). Of the 409 xenon data values shown in these figures, 77 percent are below the detection limit and 37 percent are below zero.

Figure E.12 is a normal probability plot of the data in Table E.1 with only the highest data value deleted, and Figure E.13 is a lognormal probability plot of this 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. The results of this test suggest that there is around a 75 percent chance that these data are lognormally distributed if the two lowest and one highest values in Figure E.13 are deleted. 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.12 and E.13 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 consider the "fuzziness" of the data measures by the analytical standard deviations. This table is divided into two parts; the first gives the statistics for the

Figure E.11 Time Series Plot of 1992 DDZ77 Trans. Pit Xe Results

Figure E.12 Normal Probability Plot of Xe Data

permanent environmental monitoring stations and the second gives the statistics for the special monitoring of the event locations.

In Table E.2 the first quartile of the data is the point at which 25 percent of the data values are lower and 75 percent higher. Likewise, in the third quartile, 75 percent of the data values are lower and 25 percent higher. A comparison of the quartiles and medians shows that the medians are closer to the first quartile than to the third quartile, which indicates the data are skewed, a property of lognormal distributions. The values in this table

are noticeably lower than the corresponding values in the 1991 report.

The final statistical analysis tested for differences between sampling stations. The data from the DDZ77 Transformer station was left out of this analysis because all the data values from that station are less than the Minimum Detectable Concentration, and are thus unreliable. This station is located in the northwest corner of Area 20 away from any locations that were used for nuclear testing, thus it is expected that no xenon exist at this sampling station. 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

Figure E.13 Lognormal Probability Plot of Xe Data

Table E.2 Descriptive Statistics of Xe Data for 1992^(a)

<u>Environmental Stations</u>	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Standard Deviation</u>	<u>1st Quartile</u>	<u>3rd Quartile</u>	<u>Maximum</u>
BJY	49	12.4	8.9	30.2	-5.0	26.1	109.9
Gravel Pit ^(b)	48	14.7	7.2	40.1	-10.3	21.6	173.7
Gate 200 S ^(b)	46	19.3	3.8	49.9	-4.1	24.1	255.0
Area 12 Camp	45	5.7	4.1	45.9	-7.1	16.5	120.0
EPA Farm ^(b)	40	14.9	8.2	47.0	-6.6	30.8	186.0
Area 20 Camp	38	11.7	8.0	30.9	-7.2	26.5	121.8
E-MAD	47	6.3	0.1	56.8	-10.5	13.4	201.0
Pahute Sbst.	31	1.5	2.0	28.8	-11.7	15.5	78.5
Gate 400 ^(b)	32	14.5	3.3	39.4	-7.3	29.4	128.2
DDZ77 Trans.	20	-4.3	-2.2	9.3	-8.4	1.3	8.8
All	396	10.6	4.1	41.6	-7.1	19.0	255.0

<u>Environmental Stations</u>	<u>Number Missing Values</u>	<u>Number Less Than MDC</u>	<u>Number Less Than Zero</u>
BJY	3	36	16
Gravel Pit	4	37	17
Gate 200 S	5	34	18
Area 12 Camp	7	36	17
EPA Farm	10	30	14
Area 20 Camp	6	29	13
E-MAD	3	38	23
Pahute Sbst.	2	25	13
Gate 400	2	23	11
DDZ77 Trans.	0	20	14
All	42	308	156

<u>Event-Related Stations</u>	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Standard Deviation</u>	<u>1st Quartile</u>	<u>3rd Quartile</u>	<u>Maximum</u>
U-19bg RAM 2	4	7.9	8.1	4.9	3.0	12.5	13.1
U-19bg RAM 8	4	12.8	8.1	22.7	-6.2	36.4	42.3

<u>Environmental Stations</u>	<u>Number Missing Values</u>	<u>Number Less Than MDC</u>	<u>Number Less Than Zero</u>
U-19bg RAM 2	0	4	0
U-19bg RAM 8	0	3	2

(a) Values in the table are in units of pCi/m³

(b) Values above 500 deleted before calculations

* Missing Data Value

error discussed in the previous paragraph. The changes in sample sizes in Table E.3 are due to the deleted data values. The standard deviations given in Table E.3 are the standard deviations calculated from the logarithms of the data for each station and thus should not be compared to those in Table E.2. The standard deviation of the logarithms of 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 0.796 says that there is no statistical probability that the stations are not equal, and the graphic showing great overlapping of the group confidence intervals supports this conclusion.

If replicate analyses of the samples were available, there would be an additional line in the ANOVA table between the "error" and "total" lines. The error line measures the variability between different samples from the same station. The new line would measure variability between different analyses of each sample. Such replicate analyses are not available, but the analytic standard deviations in Table E.1 are measurements of the same source of errors. The transformed standard deviations from Table E.1 cannot be used in an analysis of variance because they have no degrees of freedom or equivalent, but their effect can be approximated. The sum of the analytical variances (after transformation) is an approximation of what would be the within-replicates sum of the squares if it were available, and the mean of these values approximates the corresponding mean square error. The 376 remaining

Table E.3 One-Way Analysis of the Variance on Xe Concentrations between Stations
(ln [pCi/m³])

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of the Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Area	8	8.55	1.07	0.58	0.796
Error	<u>225</u>	<u>416.55</u>	1.85		
Total	233	425.10			

<u>Station</u>	<u>N</u>	<u>Log of Median</u>	<u>Standard Deviation</u>	<u>Individual 95 Percent Confidence Intervals CIs for Ln Median Based on Pooled Standard Deviation</u>	
BJY	33	2.831	0.939	(-----*-----)	
Gravel Pit	31	2.826	1.258	(-----*-----)	
Gate 200 S	28	2.705	1.404	(-----*-----)	
Area 12 Camp	28	2.408	1.575	(-----*-----)	
EPA Farm	26	2.824	1.244	(-----*-----)	
Area 20 Camp	25	2.721	1.166	(-----*-----)	
E-MAD N	24	2.570	1.629	(-----*-----)	
Pahute Sbst.	18	2.233	1.298	(-----*-----)	
Gate 400	21	2.484	1.727	(-----*-----)	
Pooled Standard Deviation = 1.361				2.00	2.50 3.00

transformed analytical variances have a sum of 10837. This sum was highly influenced by two data cases with mean values very close to zero which made the corresponding coefficients of variation -38.5 and 78.5. When squared these account for 71 percent of the variance sum. Deleting these two values gives 374 cases with a sum of 3193 and a mean of 8.5. Comparing this 8.5 to the error mean square of 1.85 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 except that detection limits are not reported for krypton; the krypton MDC's are approximately 8×10^{-12} $\mu\text{Ci/mL}$. Figures E.14 through E.24 are the krypton counterparts of Figures E.1 through E.11. As for xenon, no plots are given for the event related sampling stations. In all the krypton plots and statistical analyses that follow, four very high values have been deleted from the data; these data are marked with a check mark in Table E.1. These values are considered to be invalid by the health physicist responsible for the noble gas data. The probable cause of these high values is cross-contamination of the samples. These deleted values are: the value of 473.0 at the Gravel Pit for the starting sample date of 4/20, the value of 450.0 at the Gravel Pit for the starting sampling date of 5/26, the value of 6619.9 at the Gate 200 station for the starting sampling date of 3/30, and the value of 4140.0 at the EPA Farm for the starting sampling date of 3/17.

In general these plots show most of the values around environmental background levels. Figure E.20, the Area 20 Camp sampling location, shows values that are somewhat higher than the other locations. Note that the ordinate scale in figure E.14 differs from that of the other figures on these pages.

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.14 Time Series Plot of All 1992Kr Results

Figure E.15 Time Series Plot of 1992 BJJ Kr Results

Figure E.16 Time Series Plot of 1992 Gravel Pit Kr Results

Figure E.17 Time Series Plot of 1992 Gate 200 South Kr Results

Figure E.18 Time Series Plot of 1992 Area 12 Camp Kr Results

Figure E.19 Time Series Plot of 1992 EPA Farm Kr Results

Figure E.20 Time Series Plot of 1992 Area 20 Camp Kr Results

Figure E.22 Time Series Plot of 1992 Pahute Substation Kr Results

Figure E.21 Time Series Plot of 1992 E-MAD Kr Results

Figure E.23 Time Series Plot of 1992 Gate 400 Kr Results

Figure E.24 Time Series Plot of 1992 DDZ77 Transformer Kr Results

All of the groups fit lognormal distributions if an occasional high or low outlier was removed from the data. Five of the ten environmental stations 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 0.00288 for 398 data values from the ten permanent environmental sampling stations. The between-replicates mean square error from the ANOVA was 0.0812. The within-replicates error would inflate the ANOVA mean squared error by less than four percent if included in the statistics. Since a variance inflation of four percent is small, the counting errors were not used in the formal statistical analyses.

A one-way ANOVA was used to compare seven areas for equality of krypton data means using the natural logarithms of the data. The ANOVA output is shown in Table E.5. The

Table E.4 Descriptive Statistics of 1992 Kr Data (pCi/m³)

<u>Environmental Stations</u>	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Standard Deviation</u>	<u>1st Quartile</u>	<u>3rd Quartile</u>	<u>Maximum</u>
BJY	45	25.81	25.10	5.10	22.25	29.85	36.80
Gravel Pit	48	26.63	24.65	10.98	22.65	27.58	77.10
Gate 200	45	26.56	25.00	6.48	23.25	28.05	48.50
Area 12 Camp	47	25.85	24.60	7.78	21.80	27.50	68.80
EPA Farm	36	26.27	24.70	7.34	21.85	28.35	53.90
Area 20 Camp	42	29.50	30.00	8.71	24.75	32.22	49.50
E-MAD	45	27.66	24.70	18.89	22.25	27.60	141.00
Pahute Sbst.	30	24.38	24.15	5.62	21.30	27.48	39.90
Gate 400	33	24.52	24.80	9.37	21.80	26.55	47.40
DDZ77 Trans.	<u>19</u>	<u>24.32</u>	<u>23.70</u>	<u>2.94</u>	<u>22.00</u>	<u>26.10</u>	<u>30.60</u>
All	390	26.37	25.00	9.73	22.50	28.65	141.00

<u>Environmental Stations</u>	<u>Number Missing Values</u>	<u>Number Less Than Zero</u>
BJY	7	0
Gravel Pit	4	0
Gate 200 S	6	0
Area 12 Camp	5	0
EPA Farm	14	0
Area 20 Camp	2	1
E-MAD	5	0
Pahute Sbst.	3	0
Gate 400	1	1
DDZ77 Trans.	<u>1</u>	<u>0</u>
All	48	2

<u>Event-Related Stations</u>	<u>N</u>	<u>Mean</u>	<u>Median</u>	<u>Standard Deviation</u>	<u>1st Quartile</u>	<u>3rd Quartile</u>	<u>Maximum</u>
U-19bg RAM 2	4	20.38	20.25	1.35	19.18	21.70	21.90
U-19bg RAM 8	4	24.85	25.80	5.10	19.75	29.00	30.00

<u>Environmental Stations</u>	<u>Number Missing Values</u>	<u>Number Less Than Zero</u>
U-19bg RAM 2	0	0
U-19bg RAM 8	0	0

Table E.5 One-Way Analysis of Variance on Natural Logarithm of Kr Concentrations for Differences between Stations ($\ln[pCi/m^3]$)

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of the Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Area	9	1.3269	0.1474	1.82	0.064
Error	<u>378</u>	<u>30.7017</u>	0.0812		
Total	387	32.0286			

<u>Station</u>	<u>N</u>	<u>Log of Median</u>	<u>Standard Deviation</u>	Individual 95 Percent Confidence Intervals CIs for Ln Median Based on Pooled Standard Deviation			
				-----+-----+-----+-----+			
BJY	45	3.2307	0.2070	(-----*-----)			
Gravel Pit	48	3.2143	0.3773	(-----*-----)			
Gate 200	45	3.2538	0.2223	(-----*-----)			
Area 12	47	3.2229	0.2302	(-----*-----)			
EPA Farm	36	3.2382	0.2370	(-----*-----)			
Area 20	41	3.3886	0.2198	(-----*-----)			
E-MAD	45	3.2197	0.3942	(-----*-----)			
Pahute Sbst.	30	3.1612	0.2841	(-----*-----)			
Gate 400	32	3.1810	0.3676	(-----*-----)			
DDZ77	19	3.1847	0.1174	(-----*-----)			
				-----+-----+-----+-----+			
Pooled Standard Deviation = 0.2850				3.12	3.24	3.36	3.48

mean of the logarithms of data is the logarithm of the median of the original data. The standard deviation of the logarithms of data is the coefficient of variation of the original data. In an ANOVA table the degrees of freedom, sum of squares, mean squares, and the computed value of the F-statistic are shown; the "p Value" is the probability associated with the F-statistic. This is the probability that significant differences between the stations would be found if in fact the null hypothesis were true. Since this probability is small, but 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 Area 20 mean value was found to be significantly higher than the remaining stations in 1990 and 1991 and the mean values are about the same for all these years. A close examination of the Analysis of Variance tables shows that in 1992 the Error Mean Square is about twice as large as in prior years, and this accounts for the loss of significance.

The assumed cause of the higher levels in Area 20 is atmospheric pumping from past underground events in Areas 19 and 20.

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 1992 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.

Because of analytical problems associated with very low activity samples, 93 percent of the xenon duplicate data was reported as missing values. The remaining data were insufficient for a statistical analysis. Most of the krypton duplicate data was successfully obtained, 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 sampling dates. The Minimum Detectable Concentration (MDC) for all the krypton duplicate analyses was approximately $8 \times 10^{-12} \mu\text{Ci/mL}$ (8 pCi/m^3).

Table E.6 Duplicate Results for ^{85}Kr - 1992

Identification Number	Location	Sampling Dates		Krypton $10^{-12} \mu\text{Ci/mL} \pm 1s$
		Start	End	
201	BJY	01/21/92	01/27/92	25.1 $\pm$ 0.9
201	BJY	01/21/92	01/27/92	27.0 $\pm$ 2.1
201	BJY	05/12/92	05/18/92	29.5 $\pm$ 0.8
201	BJY	05/12/92	05/18/92	26.0 $\pm$ 1.0
201	BJY	06/15/92	06/22/92	26.0 $\pm$ 0.8
201	BJY	06/15/92	06/22/92	23.2 $\pm$ 0.9
201	BJY	07/07/92	07/14/92	6.8 $\pm$ 0.6
201	BJY	07/07/92	07/14/92	18.1 $\pm$ 0.7
201	BJY	08/10/92	08/18/92	29.8 $\pm$ 1.0
201	BJY	08/10/92	08/18/92	18.8 $\pm$ 0.9
201	BJY	11/16/92	11/23/92	30.2 $\pm$ 0.6
201	BJY	11/16/92	11/23/92	25.7 $\pm$ 0.6
201	BJY	11/23/92	11/30/92	30.2 $\pm$ 0.8
201	BJY	11/23/92	11/30/92	22.1 $\pm$ 0.5
201	BJY	11/30/92	12/07/92	24.3 $\pm$ 0.6
201	BJY	11/30/92	12/07/92	39.1 $\pm$ 0.8
202	Gravel Pit	01/21/92	01/27/92	24.6 $\pm$ 1.1
202	Gravel Pit	01/21/92	01/27/92	21.4 $\pm$ 1.0
202	Gravel Pit	02/03/92	02/10/92	4.7 $\pm$ 4.2
202	Gravel Pit	02/03/92	02/10/92	27.0 $\pm$ 0.9
202	Gravel Pit	02/24/92	03/02/92	23.8 $\pm$ 0.8
202	Gravel Pit	02/24/92	03/02/92	24.6 $\pm$ 0.9
202	Gravel Pit	03/17/92	03/24/92	20.1 $\pm$ 1.0
202	Gravel Pit	03/17/92	03/24/92	24.4 $\pm$ 0.9
202	Gravel Pit	06/15/92	06/23/92	131.0 $\pm$ 1.0
202	Gravel Pit	06/15/92	06/23/92	24.1 $\pm$ 0.9
202	Gravel Pit	07/06/92	07/13/92	22.6 $\pm$ 1.0
202	Gravel Pit	07/06/92	07/13/92	26.7 $\pm$ 1.4
202	Gravel Pit	07/13/92	07/20/92	11.9 $\pm$ 0.9
202	Gravel Pit	07/13/92	07/20/92	19.9 $\pm$ 1.0
202	Gravel Pit	08/17/92	08/24/92	19.0 $\pm$ 1.0

Table E.6 (Duplicate Results for ^{85}Kr - 1992, cont.)

Identification Number	Location	Sampling Dates		Krypton $10^{-12} \mu\text{Ci/mL} \pm 1\text{s}$
		Start	End	
202	Gravel Pit	08/17/92	08/24/92	20.5 $\pm$ 0.7
202	Gravel Pit	11/02/92	11/09/92	22.3 $\pm$ 0.7
202	Gravel Pit	11/02/92	11/09/92	28.0 $\pm$ 0.7
202	Gravel Pit	12/08/92	12/15/92	23.8 $\pm$ 0.6
202	Gravel Pit	12/08/92	12/15/92	30.9 $\pm$ 0.6
203	Gate 200 S	01/21/92	01/27/92	25.8 $\pm$ 0.6
203	Gate 200 S	01/21/92	01/27/92	28.6 $\pm$ 0.9
203	Gate 200 S	02/03/92	02/11/92	14.1 $\pm$ 1.1
203	Gate 200 S	02/03/92	02/11/92	6.9 $\pm$ 0.8
203	Gate 200 S	02/18/92	02/24/92	19.1 $\pm$ 1.4
203	Gate 200 S	02/18/92	02/24/92	25.0 $\pm$ 0.9
203	Gate 200 S	02/24/92	03/02/92	23.4 $\pm$ 0.8
203	Gate 200 S	02/24/92	03/02/92	24.9 $\pm$ 0.9
203	Gate 200 S	03/24/92	03/30/92	31.7 $\pm$ 0.9
203	Gate 200 S	03/24/92	03/30/92	24.5 $\pm$ 0.7
203	Gate 200 S	08/17/92	08/24/92	23.7 $\pm$ 0.9
203	Gate 200 S	08/17/92	08/24/92	27.8 $\pm$ 1.0
203	Gate 200 S	09/08/92	09/14/92	27.9 $\pm$ 0.6
203	Gate 200 S	09/08/92	09/14/92	31.1 $\pm$ 0.6
203	Gate 200 S	10/05/92	10/12/92	38.8 $\pm$ 0.8
203	Gate 200 S	10/05/92	10/12/92	22.7 $\pm$ 0.8
204	Area 12 Camp	01/13/92	01/21/92	21.8 $\pm$ 0.7
204	Area 12 Camp	01/13/92	01/21/92	25.8 $\pm$ 0.9
204	Area 12 Camp	02/24/92	03/02/92	25.3 $\pm$ 0.7
204	Area 12 Camp	02/24/92	03/02/92	25.9 $\pm$ 0.8
204	Area 12 Camp	04/08/92	04/15/92	16.1 $\pm$ 0.9
204	Area 12 Camp	04/08/92	04/15/92	24.6 $\pm$ 0.6
204	Area 12 Camp	06/22/92	06/29/92	18.7 $\pm$ 1.0
204	Area 12 Camp	06/22/92	06/29/92	38.5 $\pm$ 0.8
204	Area 12 Camp	07/20/92	07/27/92	19.8 $\pm$ 0.9
204	Area 12 Camp	07/20/92	07/27/92	12.4 $\pm$ 0.8
204	Area 12 Camp	10/05/92	10/13/92	7.5 $\pm$ 1.7
204	Area 12 Camp	10/05/92	10/13/92	20.2 $\pm$ 0.6
204	Area 12 Camp	10/19/92	10/26/92	-3.3 $\pm$ 0.6
204	Area 12 Camp	10/19/92	10/26/92	25.2 $\pm$ 0.8
204	Area 12 Camp	12/08/92	12/15/92	25.3 $\pm$ 0.7
204	Area 12 Camp	12/08/92	10/15/92	24.8 $\pm$ 0.6
205	EPA Farm	06/22/92	06/29/92	53.9 $\pm$ 0.8
205	EPA Farm	06/22/92	06/29/92	59.0 $\pm$ 0.9
205	EPA Farm	07/20/92	07/27/92	29.3 $\pm$ 6.2
205	EPA Farm	07/20/92	07/27/92	24.6 $\pm$ 0.6
205	EPA Farm	11/16/92	11/23/92	25.7 $\pm$ 1.5

Table E.6 (Duplicate Results for ^{85}Kr - 1992, cont.)

Identification Number	Location	Sampling Dates		Krypton $10^{-12} \mu\text{Ci/mL} \pm 1s$
		Start	End	
205	EPA Farm	11/16/92	11/23/92	28.6 $\pm$ 0.6
206	Area 20 Camp	01/07/92	01/13/92	49.5 $\pm$ 0.9
206	Area 20 Camp	01/07/92	01/13/92	46.7 $\pm$ 0.8
206	Area 20 Camp	03/02/92	03/09/92	34.4 $\pm$ 0.7
206	Area 20 Camp	03/02/92	03/09/92	41.6 $\pm$ 0.8
206	Area 20 Camp	03/09/92	03/17/92	34.2 $\pm$ 1.1
206	Area 20 Camp	03/09/92	03/17/92	25.6 $\pm$ 0.6
206	Area 20 Camp	03/23/92	03/30/92	41.9 $\pm$ 0.6
206	Area 20 Camp	03/23/92	03/30/92	36.3 $\pm$ 1.0
206	Area 20 Camp	03/30/92	04/06/92	19.1 $\pm$ 0.9
206	Area 20 Camp	03/30/92	04/06/92	19.0 $\pm$ 0.9
206	Area 20 Camp	05/04/92	05/11/92	32.2 $\pm$ 0.7
206	Area 20 Camp	05/04/92	05/11/92	36.0 $\pm$ 0.9
206	Area 20 Camp	09/14/92	09/21/92	26.0 $\pm$ 0.9
206	Area 20 Camp	09/14/92	09/21/92	30.0 $\pm$ 0.9
206	Area 20 Camp	11/09/92	11/16/92	30.0 $\pm$ 0.8
206	Area 20 Camp	11/09/92	11/16/92	25.1 $\pm$ 0.9
206	Area 20 Camp	11/16/92	11/24/92	39.9 $\pm$ 0.9
206	Area 20 Camp	11/16/92	11/24/92	38.3 $\pm$ 0.8
207	E-MAD N	01/13/92	01/21/92	24.1 $\pm$ 0.8
207	E-MAD N	01/13/92	01/21/92	23.9 $\pm$ 0.6
207	E-MAD N	01/21/92	01/28/92	26.9 $\pm$ 0.9
207	E-MAD N	01/21/92	01/28/92	24.5 $\pm$ 0.9
207	E-MAD N	02/03/92	02/10/92	24.1 $\pm$ 0.9
207	E-MAD N	02/03/92	02/10/92	19.4 $\pm$ 0.8
207	E-MAD N	03/24/92	03/30/92	9.7 $\pm$ 0.7
207	E-MAD N	03/24/92	03/30/92	18.2 $\pm$ 1.0
207	E-MAD N	05/05/92	05/11/92	30.2 $\pm$ 0.8
207	E-MAD N	05/05/92	05/11/92	27.1 $\pm$ 1.0
207	E-MAD N	06/15/92	06/22/92	27.0 $\pm$ 0.7
207	E-MAD N	06/15/92	06/22/92	24.6 $\pm$ 0.8
207	E-MAD N	07/14/92	07/20/92	18.9 $\pm$ 3.0
207	E-MAD N	07/14/92	07/20/92	28.6 $\pm$ 0.9
207	E-MAD N	10/26/92	11/04/92	26.4 $\pm$ 0.8
207	E-MAD N	10/26/92	11/04/92	31.6 $\pm$ 0.7
213	U-19bg RAM #2	04/07/92	04/13/92	19.4 $\pm$ 0.9
213	U-19bg RAM #2	04/07/92	04/13/92	19.6 $\pm$ 0.4
214	U-19bg RAM #8	04/07/92	04/13/92	17.8 $\pm$ 1.0
214	U-19bg RAM #8	04/07/92	04/13/92	20.4 $\pm$ 0.6
215	Pahute Sbst.	04/07/92	04/15/92	23.3 $\pm$ 0.9
215	Pahute Sbst.	04/07/92	04/15/92	27.1 $\pm$ 0.7
215	Pahute Sbst.	09/14/92	09/21/92	21.4 $\pm$ 0.6

Table E.6 (Duplicate Results for ^{85}Kr - 1992, cont.)

Identification Number	Location	Sampling Dates		Krypton $10^{-12} \mu\text{Ci/mL} \pm 1s$
		Start	End	
215	Pahute Sbst.	09/14/92	09/21/92	22.1 $\pm$ 0.7
215	Pahute Sbst.	09/28/92	10/05/92	14.9 $\pm$ 1.7
215	Pahute Sbst.	09/28/92	10/05/92	14.9 $\pm$ 0.9
215	Pahute Sbst.	11/02/92	11/09/92	19.4 $\pm$ 0.9
215	Pahute Sbst.	11/02/92	11/09/92	25.3 $\pm$ 0.7
216	Gate 400	05/18/92	05/26/92	24.2 $\pm$ 0.6
216	Gate 400	05/18/92	05/26/92	21.5 $\pm$ 1.2
216	Gate 400	06/29/92	07/06/92	9.4 $\pm$ 0.8
216	Gate 400	06/29/92	07/06/92	0.4 $\pm$ 1.5
216	Gate 400	07/06/92	07/13/92	6.2 $\pm$ 0.9
216	Gate 400	07/06/92	07/13/92	2.3 $\pm$ 2.3
216	Gate 400	09/14/92	09/21/92	21.6 $\pm$ 0.6
216	Gate 400	09/14/92	09/21/92	20.5 $\pm$ 0.8
222	DDZ77 Trans.	07/27/92	08/03/92	27.0 $\pm$ 0.6
222	DDZ77 Trans.	07/27/92	08/03/92	26.2 $\pm$ 0.6
222	DDZ77 Trans.	08/17/92	08/24/92	26.5 $\pm$ 1.0
222	DDZ77 Trans.	08/17/92	08/24/92	25.0 $\pm$ 0.6
222	DDZ77 Trans.	09/01/92	09/08/92	22.9 $\pm$ 0.7
222	DDZ77 Trans.	09/01/92	09/08/92	23.7 $\pm$ 0.8
222	DDZ77 Trans.	09/21/92	09/28/92	21.9 $\pm$ 0.7
222	DDZ77 Trans.	09/21/92	09/28/92	17.0 $\pm$ 2.7
222	DDZ77 Trans.	10/26/92	11/02/92	30.6 $\pm$ 0.7
222	DDZ77 Trans.	10/26/92	11/02/92	23.7 $\pm$ 0.9
222	DDZ77 Trans.	11/02/92	11/09/92	19.7 $\pm$ 0.7
222	DDZ77 Trans.	11/02/92	11/09/92	25.5 $\pm$ 0.7
222	DDZ77 Trans.	11/09/92	11/16/92	20.9 $\pm$ 0.6
222	DDZ77 Trans.	11/09/92	11/16/92	26.1 $\pm$ 0.6

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 was found to follow a lognormal statistical distribution, which was expected since the regular data follows this distribution. The probability plots did indicate that the value of 131 pCi/m³ which occurred at the Gravel Pit for the sample collected between 6/15 and 6/23 was a statistical outlier, thus it and the associated duplicate were removed from the data set before the statistical analyses. Since the data is lognormally distributed, the statistical analyses were performed on the logarithms of the data values. Since logarithms of negative numbers are imaginary numbers, the value of -3.3 pCi/m³ cannot be used. This value occurred at the Area 12 Camp for the sample collected from 10/19 to 10/26. This negative value and the associated duplicate were also removed from the data set before the statistical analyses.

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 twelve locations sampled with duplicate

analyses, the duplicates have no association with the duplicates of other sampling locations, 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 has another characteristic that is important to the analysis of variance; it is statistically "unbalanced." A "balanced" data set is one in which the number of samples collected at each of the twelve locations is the same. Since the actual number of samples ranges from one at the two U-19bg stations to nine at the Gravel Pit and Area 20 locations, the data is unbalanced. Using unbalanced data in an analysis of variance results in probabilities for the several hypotheses test that are only close approximations of the true probabilities.

The results of the nested analysis of variance are given in Table E.7. This table shows that there was a significant difference (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. The significant differences between locations was examined using a Duncan's Multiple Comparisons procedure. This is provided by the statistical program used for the analysis of variance. This procedure shows Gate 400 has a significantly lower krypton median than all other locations, and there are no significant differences between the remaining locations. This conclusion seems to be highly influenced by the low Gate 400 duplicate reading of 0.04 for the 6/29 to 7/6 sample. An examination of the data plots that follow shows that the range of the Gate 400 duplicates for this date is by

Table E.7 Analysis of Variance on Logarithms of Duplicate Krypton Data

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of the Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Locations	11	13.26968	1.206335	3.82	.0004
Samples within locations	57	18.01558	.3160628	2.15	.0013
Duplicates within samples	69	10.13722	.1469162		
Total	137	41.42248			

<u>Location</u>	<u>Log Median</u>	<u>Median (pCi/m³)</u>
Gate 400	2.0411	7.7
U-19bg RAM #8	2.9474	19.1
U-19bg RAM #2	2.9704	19.5
Area 12 Camp	3.0245	20.6
Pahute Sbst.	3.0257	20.6
Gravel Pit	3.0305	20.7
E-MAD N	3.1496	23.3
Gate 200 S	3.1506	23.4
BJY	3.1699	23.8
DDZ77 Trans.	3.1701	23.8
Area 20 Camp	3.4821	32.5
EPA Farm	3.5408	34.5

far the largest in the data. This pattern is also notably different than that obtained from the regular krypton data in the previous section of this appendix, and also in previous years, which was a pattern of Area 20 data being somewhat higher than other locations. 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.25 through E.34. Plots for the two U-19bg stations are not given because there is only one sampling time for each of those stations. The values of the duplicates for the U-19bg stations are all close to 20, which has a natural logarithm of about 3. 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 $\mu\text{Ci/mL}$ on a logarithmic scale to indicate the concentrations as usually used for reporting. The dotted lines connect the two paired duplicated from each sample. Examination of Figures E.25 to E.34 shows that most of the data is within the range of natural logarithms of 2 to 4. The data from the unplotted U-19bg stations is also within this range. The most obvious difference is the low values and wide ranges of values in the middle of the year at the Gate 400 location. Deleting the Gate 400 data from the analysis of variance did not change the significance of the "samples within stations" part of the analysis so this station does not account for all the variability over time. The plots indicate that some of the other locations show an occasional wide 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 0.10996. This is close to the corresponding analysis of variance number measuring the variability between duplicates, 0.1469162 from the last line of the mean-square column in Table E.7. The statistical method for 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 0.077 which is slightly greater than the customary critical value of 0.05, thus it is concluded that the between duplicates errors and the analytical errors are not significantly different for krypton in air in 1992.

The analysis of only the krypton duplicate data yielded three statistical conclusions. There are significant differences between the sampling locations. This conclusion was also obtained from the analysis of the non-duplicate krypton data, but the patterns of differences were not in agreement. The duplicate data showed a pattern of low values at the Gate 400 location. The non-duplicate data showed a pattern of high values in Area 20 that was significant in 1991 but

Figure E.25 Time Series Plot of BJY Duplicate Data

Figure E.27 Time Series Plot of Gate 200 Data

Figure E.26 Time Series Plot of Gravel Pit Data

Figure E.28 Time Series Plot of Area 12 Camp Data

Figure E.29 Time Series Plot of EPA Farm Data

Figure E.31 Time Series Plot of E-MAD Duplicate Data

Figure E.30 Time Series Plot of Area 20 Camp Data

Figure E.32 Time Series Plot of Pahute Data

Figure E.33 Time Series Plot of Gate 400 Data

Figure E.34 Time Series Plot of DDZ77 Duplicate Data

not in 1992 because of increased variance. 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 no 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. Examination of the data plots indicates that this final test is considerably influenced by a few large ranges of values between duplicate pairs.

APPENDIX F

ONSITE THERMOLUMINESCENT DOSIMETER DATA

Robert R. Kinnison

Thermoluminescent dosimeters (TLDs) were placed at 187 environmental monitoring stations at the NTS. The dosimeters were exchanged quarterly and read at the Reynolds Electrical & Engineering Co., Inc., Radiological Laboratory in Mercury. Tables F.1 and F.2 show the individual and control data, respectively. "Area" refers to the NTS area within which the sampling point is located, and "Location" identifies the sampling station within each area. An asterisk in this table denotes a missing data value.

The 24 control locations are summarized in Table F.2 as well as being listed by area in Table F.1. The control dosimeters are located in places thought to be at background exposure levels. The Area given in Table F.1 and Table F.2 for the boundary stations gives the Area that is adjacent to the sampling station, these stations are close to or just outside of the NTS boundary. 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. These stations were positioned in locations expected to be at background exposure levels and the 1990, 1991 and 1992 data confirm that the exposures are indeed background. Thus, for 1992 the boundary data has been included with the control data.

Eight TLD Area locations have been changed from the 1991 report. Stake A-106 has been changed from Area 20 to Area 18. Stake OB-11.5 has been changed from Area 6 to Area 3. Stake J-16 has been changed from Area 18 to Area 20. Boundary Station 352 has been changed from Area 19 to Area 20. Boundary station 356 has been changed from Area 8 to Area 15. Boundary Station 360 has been changed from Area 11 to Area 5. These changes are all from one Area to an adjacent Area and were made because of more accurate survey information. During 1991 and 1992 the locations of all sampling stations were accurately surveyed using Global Positioning System equipment. Prior to this the locations were "eyeballed" from maps. This more accurate location information accounts for 6 of the 8 changes. Boundary Station 347 has been changed from Area 28 to Area 25 and Boundary Station 348 has been changed from Area 31 to Area 25. Areas 28 and 31 are outdated area designations that are now included within Area 25.

In 1992 DOE implemented a policy change to the effect that the high mesa areas are closed during the winter months. This was for the purpose of saving the expense of snow plowing the roads. This policy also resulted in closing the access to many of the TLD sampling stations in Areas 19 and 20 for the fourth quarter of 1992. These stations should be accessible by the end of the first quarter of 1993, and at that time a fourth quarter 1992 and first quarter 1993 combination exposure measurement will be obtained.

Table F.1 TLD Network Gamma Exposure Rates - 1992

<u>Area/Location</u>		<u>1st Quarter (mR/day)</u>	<u>2nd Quarter (mR/day)</u>	<u>3rd Quarter (mR/day)</u>	<u>4th Quarter (mR/day)</u>	<u>Annual Average (mR/day)</u>	<u>Annual Total (mR/yr)</u>
1	BJY	0.30	0.29	0.31	0.32	0.31	113
1	Sandbag Storage Hut	0.43	0.31	*	*	0.37	135
1	Stake TH-27	*	0.29	0.31	0.33	0.31	113
1	Stake TH-38	0.36	0.33	0.35	0.39	0.36	132
2	Cable Yard	0.42	0.44	0.46	0.68	0.50	183
2	Stake L-9	0.57	0.58	0.61	0.63	0.60	220
2	Stake M-140	0.40	0.41	0.44	0.43	0.42	154
2	Stake M-150	0.43	0.41	0.43	0.47	0.44	161
2	Stake N-8	3.34	2.89	2.85	3.11	3.05	1116
2	Stake TH-58	0.32	0.26	0.30	0.32	0.30	110
3	U-3ah/at E	0.34	0.41	0.46	0.47	0.42	154
3	U-3ah/at N	0.36	0.43	0.43	0.43	0.41	150
3	U-3ah/at S	0.49	0.53	0.56	0.58	0.54	198
3	U-3ah/at S Gate	0.36	0.39	0.43	0.45	0.41	150
3	U-3ah/at W	0.35	0.38	0.41	0.42	0.39	143
3	Boundary TLD Station 358	0.22	0.19	0.28	0.26	0.24	88
3	LANL Trailers	0.33	0.37	0.40	0.41	0.38	139
3	Stake A-6.5	0.46	0.49	0.52	0.50	0.49	179
3	Stake OB-11.5	0.34	0.36	*	0.41	0.37	135
3	Stake OB-20	0.24	*	0.31	0.30	0.28	102
3	U-3ax/bl NE	0.72	0.78	0.80	0.76	0.77	282
3	U-3ax/bl NW	0.47	0.48	0.55	0.57	0.52	190
3	U-3ax/bl S	0.41	0.46	0.60	0.48	0.49	179
3	U-3ax/bl SE	0.48	0.51	0.57	0.51	0.52	190
3	U-3by N	0.75	0.75	0.80	0.86	0.79	289
3	U-3by S	0.44	*	0.50	0.49	0.48	176
3	U-3bz N	0.55	0.59	0.62	0.62	0.60	220
3	U-3bz S	0.37	0.39	0.50	0.48	0.44	161
3	U-3cj N	0.38	*	0.48	0.44	0.43	157
3	U-3co N	2.61	2.52	2.73	2.84	2.68	981
3	U-3co S	1.67	1.69	1.79	1.85	1.75	641
3	U-3du N	0.45	0.46	0.51	*	0.47	172
3	U-3du S	0.44	0.53	0.51	0.54	0.51	187
3	U-3ey S	0.36	0.41	0.45	0.45	0.42	154
4	Stake A-9	3.76	3.27	3.42	3.45	3.48	1274
4	Stake M-130	0.35	0.37	0.51	0.38	0.40	146
4	Stake TH-48	0.38	0.34	0.38	*	0.37	135
5	Boundary TLD Station 360	0.17	0.18	0.25	0.23	0.21	77
5	RWMS E 1000'	0.36	0.38	0.37	0.41	0.38	139
5	RWMS E 1500'	0.36	0.36	0.38	0.41	0.38	139
5	RWMS E 500'	0.36	0.34	0.36	0.40	0.37	135
5	RWMS E Gate	0.88	0.62	0.58	0.67	0.69	253
5	RWMS MSM-1 E	3.33	3.06	3.08	3.77	3.31	1211
5	RWMS MSM-1 NNE	7.86	8.06	7.71	9.73	8.34	3052
5	RWMS MSM-1 NNW	*	2.69	2.41	3.42	2.84	1039

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1992, cont.)

<u>Area/Location</u>	<u>1st Quarter (mR/day)</u>	<u>2nd Quarter (mR/day)</u>	<u>3rd Quarter (mR/day)</u>	<u>4th Quarter (mR/day)</u>	<u>Annual Average (mR/day)</u>	<u>Annual Total (mR/yr)</u>
5 RWMS MSM-1 NE	1.95	1.63	1.47	2.13	1.80	659
5 RWMS MSM-1 NW	3.14	2.66	*	3.21	3.00	1098
5 RWMS MSM-1 SSE	2.98	4.45	3.80	5.08	4.08	1493
5 RWMS MSM-1 SSW	2.88	2.68	2.50	3.45	2.88	1054
5 RWMS MSM-1 SE	1.75	1.45	1.58	1.80	1.65	604
5 RWMS MSM-1 SW	3.03	2.85	2.80	3.44	3.03	1109
5 RWMS MSM-1 W	6.17	6.81	*	8.94	7.31	2196
5 RWMS MSM-2 E	10.45	10.48	10.39	13.28	11.15	4081
5 RWMS MSM-2 N	7.09	7.16	6.52	8.26	7.26	2657
5 RWMS MSM-2 NE	4.42	0.33	3.69	4.77	3.30	1208
5 RWMS MSM-2 NW	4.65	4.36	3.76	5.41	4.55	1665
5 RWMS MSM-2 S	4.88	5.58	*	6.53	5.66	2072
5 RWMS MSM-2 SE	*	3.31	3.19	3.95	3.48	1274
5 RWMS MSM-2 SW	3.58	3.31	3.10	3.88	3.47	1270
5 RWMS MSM-2 W	9.59	8.39	9.91	13.43	10.33	2605
5 RWMS N 1000'	0.36	0.41	0.39	0.42	0.40	146
5 RWMS N 1500'	0.35	0.37	0.37	*	0.36	132
5 RWMS N 500'	0.35	0.35	0.38	0.45	0.38	139
5 RWMS NE Corner	0.33	0.35	0.32	0.40	0.35	128
5 RWMS NW Corner	0.36	0.38	0.40	0.43	0.39	143
5 RWMS Office	0.36	0.33	0.31	0.38	0.35	128
5 RWMS Pit 3 N Side	0.38	0.40	0.41	*	0.40	146
5 RWMS Pit 3 S Side	0.36	0.37	0.41	*	0.38	139
5 RWMS Pit 4 N Side	0.38	0.42	0.45	*	0.42	154
5 RWMS Pit 4 S Side	0.39	0.40	*	*	0.40	146
5 RWMS S 500'	0.36	0.39	0.39	0.45	0.40	146
5 RWMS S Gate	0.36	0.33	0.33	0.40	0.36	132
5 RWMS SW Corner	0.33	0.36	0.37	0.64	0.43	157
5 RWMS TRU Pad N	1.44	1.32	1.62	2.85	1.81	466
5 RWMS TRU Pad NE	0.90	1.51	0.91	1.33	1.16	286
5 RWMS TRU Pad NW	0.65	0.83	0.46	0.59	0.63	231
5 RWMS TRU Pad S	1.44	1.96	1.72	2.05	1.79	655
5 RWMS TRU Pad SE	0.64	0.61	0.59	0.74	0.65	238
5 RWMS TRU Pad SW	0.63	0.45	0.46	0.52	0.52	190
5 RWMS W 1000'	0.38	0.37	0.39	0.44	0.40	146
5 RWMS W 1500'	0.35	0.38	0.42	0.43	0.40	146
5 RWMS W 500'	0.35	0.36	0.36	0.42	0.37	135
5 Well 5B	0.30	0.32	0.32	*	0.31	113
6 CP-2 Logistic Desk	0.21	0.20	0.24	0.26	0.23	84
6 CP-50 Calibration Bench	0.27	0.22	*	0.27	0.25	91
6 CP-50 Calibration Door	0.50	0.39	0.38	0.49	0.44	161
6 CP-6	0.19	0.21	0.24	0.26	0.23	84
6 Decon Pad Back Room	0.23	0.24	0.25	0.26	0.25	91
6 Decon Pad Office	0.26	0.26	*	0.25	0.26	95

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1992, cont.)

<u>Area/Location</u>	<u>1st Quarter (mR/day)</u>	<u>2nd Quarter (mR/day)</u>	<u>3rd Quarter (mR/day)</u>	<u>4th Quarter (mR/day)</u>	<u>Annual Average (mR/day)</u>	<u>Annual Total (mR/yr)</u>
6 Stake TH-1	*	0.26	0.24	0.26	0.25	91
6 Stake TH-18	*	0.26	0.31	0.34	0.30	110
6 Stake TH-9	0.32	0.30	0.35	0.36	0.33	121
6 Well 3	0.35	*	0.37	0.37	0.36	132
6 Yucca Oil Storage Area	0.28	0.28	0.33	0.34	0.31	113
7 7-300 Bunker	1.07	1.05	0.93	1.04	1.02	373
7 Reitmann Seep	0.32	0.41	0.41	0.43	0.39	143
7 UE-7ns	0.35	0.38	0.51	0.37	0.40	146
8 Stake K-25	0.35	0.34	0.32	0.37	0.35	128
9 9-300 Bunker	0.40	0.42	0.41	0.43	0.42	154
9 U-9cw S	0.31	0.37	0.38	0.39	0.36	132
9 V&G Road Junction	0.33	0.32	0.32	0.34	0.33	121
10 Boundary TLD Station 357	0.32	0.23	0.29	0.27	0.28	
10 Circle & L Road	0.38	0.42	0.48	0.41	0.42	154
10 Sedan E Visitor Box	0.43	0.47	0.45	0.49	0.46	168
10 Sedan W	1.19	1.16	1.17	1.23	1.19	436
10 Stake A-24	0.52	0.55	0.53	0.56	0.54	198
10 Stake CA-14	0.41	0.42	0.43	*	0.42	154
11 Boundary TLD Station 359	0.41	0.45	0.52	0.51	0.47	172
11 Gate 293	0.34	0.38	0.43	0.41	0.39	143
12 Boundary TLD Station 355	0.30	0.33	*	0.34	0.32	117
12 Building 12-10	0.41	0.37	0.37	0.45	0.40	146
12 Stake M-168	*	*	0.39	0.38	0.39	143
12 Stake M-170	0.38	0.32	0.36	0.35	0.35	128
12 Stake M-175	0.38	0.34	0.37	0.37	0.37	135
12 Stake TH-68.5	0.33	0.28	0.33	0.34	0.32	117
12 T Tunnel No. 2 Pond	1.34	1.34	1.41	1.20	1.32	483
12 Upper Haines Lake	0.33	0.32	*	0.31	0.32	117
12 Upper N Pond	0.41	0.37	0.39	0.41	0.40	146
15 Boundary TLD Station 356	0.43	0.45	0.50	0.49	0.47	172
15 EPA Complex	0.36	0.36	0.34	0.35	0.35	128
15 Lamp Shack	0.43	0.42	0.42	0.43	0.43	157
15 Office	0.33	0.33	0.33	0.37	0.34	124
15 Substation U-15e	0.28	0.30	0.32	0.32	0.31	113
17 Stake M-185	0.39	0.37	0.37	0.39	0.38	139
17 Stake M-190	0.45	0.45	0.44	0.44	0.45	165
18 Stake A-106	0.53	0.44	*	*	0.49	179
18 Stake M-196	0.45	0.40	0.44	0.44	0.43	157
18 Stake P-35	0.47	0.43	*	0.49	0.46	168
18 Stake P-39	0.35	0.42	0.43	0.47	0.42	154
19 Boundary TLD Station 353	*	*	*	0.41	0.41	150
19 Boundary TLD Station 354	0.24	0.47	0.51	0.47	0.42	154
19 Stake C-16	0.44	0.44	0.45	0.50	0.46	168
19 Stake C-25	0.46	0.42	0.47	0.49	0.46	168

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1992, cont.)

<u>Area/Location</u>	<u>1st Quarter (mR/day)</u>	<u>2nd Quarter (mR/day)</u>	<u>3rd Quarter (mR/day)</u>	<u>4th Quarter (mR/day)</u>	<u>Annual Average (mR/day)</u>	<u>Annual Total (mR/yr)</u>
19 Stake C-27	0.46	0.43	0.48	0.51	0.47	172
19 Stake C-31	0.47	0.44	0.48	0.52	0.48	176
19 Stake P-41	0.50	0.43	0.48	0.51	0.48	176
19 Stake P-46	0.43	0.41	0.39	0.47	0.43	157
19 Stake P-54	0.44	0.41	0.41	0.45	0.43	157
19 Stake P-59	0.50	0.46	0.50	0.52	0.50	183
19 Stake P-66	0.47	0.44	0.49	0.51	0.48	176
19 Stake P-71	0.46	0.45	0.46	0.49	0.47	172
19 Stake P-77	0.51	0.46	0.57	*	0.51	187
19 Stake P-88	0.56	0.52	0.64	*	0.57	209
19 Stake P-91	0.56	0.50	0.57	*	0.54	198
19 Stake P-98	0.50	0.44	0.51	*	0.48	176
19 Stake R-18	0.90	0.43	0.52	*	0.62	227
19 Stake R-26	1.00	0.45	0.56	*	0.67	245
19 Stake R-29	0.98	0.46	0.54	*	0.66	242
19 Stake R-3	1.06	0.49	0.56	*	0.70	256
19 Stake R-8	1.06	0.48	0.57	*	0.70	256
19 Upper Well UE-19c Reservoir	0.43	0.40	*	*	0.42	154
20 Boundary TLD Station 350	0.51	*	0.60	0.57	0.56	205
20 Boundary TLD Station 351	0.45	0.50	0.58	0.50	0.51	187
20 Boundary TLD Station 352	0.27	*	0.35	0.34	0.32	117
20 P&K Road Junction	0.49	0.41	0.49	*	0.46	168
20 Stake J-16	*	0.41	0.51	*	0.46	168
20 Stake J-24	0.51	0.38	0.56	*	0.48	176
20 Stake J-31	2.03	*	1.03	*	1.53	360
20 Stake J-6	*	0.42	0.45	*	0.44	161
20 Stake P-116.5	0.49	0.40	0.51	*	0.47	172
20 Stake P-120.5	0.46	0.40	0.50	*	0.45	165
20 Stake P-124	0.50	0.41	0.52	*	0.48	176
20 Stake P-129.5	0.53	0.42	0.53	*	0.49	179
20 Stake P-134.5	0.49	0.40	0.52	0.46	0.47	172
22 Boundary TLD Station 346	0.21	0.19	0.24	0.23	0.22	81
22 Desert Rock Control Tower	0.21	0.19	0.21	0.23	0.21	77
23 Building 180 Scaler Room	0.46	0.33	0.33	0.30	0.36	132
23 Building 190 Bench Drawer	0.27	0.24	0.28	0.30	0.27	99
23 Building 610 Bay	1.78	4.79	2.39	3.64	3.15	1153
23 Building 610 Gate	0.22	0.18	0.19	*	0.20	73
23 Building 650 Dosimetry	0.15	0.17	0.19	0.20	0.18	66
23 Building 650 Roof	0.15	0.16	0.19	0.20	0.18	66
23 Building 650 Storage Room	0.27	0.26	0.24	0.25	0.26	95
23 Gate 100	0.17	0.17	0.19	0.20	0.18	66
23 Post Office	0.22	0.20	*	0.26	0.23	84
25 Boundary TLD Station 347	0.32	0.29	0.34	0.34	0.32	117
25 Boundary TLD Station 348	0.49	0.39	0.53	0.46	0.47	172

* Missing data value

Table F.1 (TLD Network Gamma Exposure Rates - 1992, cont.)

<u>Area/Location</u>	<u>1st Quarter (mR/day)</u>	<u>2nd Quarter (mR/day)</u>	<u>3rd Quarter (mR/day)</u>	<u>4th Quarter (mR/day)</u>	<u>Annual Average (mR/day)</u>	<u>Annual Total (mR/yr)</u>
25 25-4P Gate	0.37	0.36	0.35	0.44	0.38	139
25 25-7P Gate	0.35	0.32	0.35	0.41	0.36	132
25 E-MAD E	0.35	0.32	0.34	0.40	0.35	128
25 E-MAD N	0.30	0.29	0.33	0.37	0.32	117
25 E-MAD S	0.33	0.32	0.33	0.38	0.34	124
25 E-MAD W	0.30	0.31	0.32	0.37	0.33	121
25 Henre	0.35	0.33	0.35	0.41	0.36	132
25 NRDS Warehouse	0.35	0.36	0.35	0.41	0.37	135
27 Area 27 Cafeteria	0.37	0.35	0.40	0.42	0.39	143
30 Boundary TLD Station 349	0.51	0.46	0.52	0.46	0.49	179

* Missing data value

Table F.2 Summary of Control TLD Data for 1992

<u>Area/Location</u>	<u>1st Quarter (mR/day)</u>	<u>2nd Quarter (mR/day)</u>	<u>3rd Quarter (mR/day)</u>	<u>4th Quarter (mR/day)</u>	<u>Annual Average (mR/day)</u>	<u>Annual Total (mR/yr)</u>
5 Well 5B	0.30	0.32	0.32	*	0.31	113
6 CP-6	0.19	0.21	0.24	0.26	0.23	84
6 Yucca Oil Storage Area	0.28	0.28	0.33	0.34	0.31	113
23 Building 650 Dosimetry	0.15	0.17	0.19	0.20	0.18	66
23 Building 650 Roof	0.15	0.16	0.19	0.20	0.18	66
23 Post Office	0.22	0.20	*	0.26	0.23	84
25 HENRE	0.35	0.33	0.35	0.41	0.36	132
25 NRDS Warehouse	0.35	0.36	0.35	0.41	0.37	135
27 Area 27 Cafeteria	0.37	0.35	0.40	0.42	0.39	143
22 Boundary TLD Station 346	0.21	0.19	0.24	0.23	0.22	81
25 Boundary TLD Station 347	0.32	0.29	0.34	0.34	0.32	117
25 Boundary TLD Station 348	0.49	0.39	0.53	0.46	0.47	172
30 Boundary TLD Station 349	0.51	0.46	0.52	0.46	0.49	179
20 Boundary TLD Station 350	0.51	*	0.60	0.57	0.56	205
20 Boundary TLD Station 351	0.45	0.50	0.58	0.50	0.51	187
20 Boundary TLD Station 352	0.27	*	0.35	0.34	0.32	117
19 Boundary TLD Station 353	*	*	*	0.41	0.41	150
19 Boundary TLD Station 354	0.24	0.47	0.51	0.47	0.42	154
12 Boundary TLD Station 355	0.30	0.33	*	0.34	0.32	117
15 Boundary TLD Station 356	0.43	0.45	0.50	0.49	0.47	172
10 Boundary TLD Station 357	0.32	0.23	0.29	0.27	0.28	102
3 Boundary TLD Station 358	0.22	0.19	0.28	0.26	0.24	88
11 Boundary TLD Station 359	0.41	0.45	0.52	0.51	0.47	172
5 Boundary TLD Station 360	0.17	0.18	0.25	0.23	0.21	77

* Missing data value

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 occurs, in the data subset used for the figure there were three values of 0.35 millirem per day which has a natural logarithm of -1.05, and so on. "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 0.980 with a sample size of 21. From the tables, the probability of a Gaussian distribution is approximately 0.50. Since Figure F.1 uses the logarithms of the data values, this figure shows a reasonable fit to a lognormal statistical distribution.

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 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 the 1990 and 1991 annual reports it was found that the data collected in Area 5 adjacent to the Mound Strategic Material (MSM) storage site, monitoring station names including

Figure F.1 Typical Lognormal Probability Plot

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 monitoring. This condition continued into 1992 and thus the data from the MSM monitoring stations were not used for the evaluation of environmental exposures again in 1992. The MSM data are included in Table F.1.

One way that the special case of the MSM data was recognized was by a segmented shape of its probability plot. A second situation of this type was identified in 1991 and 1992. Figure F.2 is the probability plot for the second quarter data from Area 5. A line has been drawn in at about an exposure level of 0.5 millirem 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 first, third and fourth 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 0.50 millirem 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 for high levels of radioisotopes. During 1992 the TRU Pad was reconfigured, thus there was substantial activity there and reason for changes in exposure levels over the year. Because these increased exposures are from a known radiation source they are not environmental exposures and, like the MSM data, were deleted from the data used for environmental assessment.

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 0.40 mR/day (last year this mean was 0.42 mR/day). 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. These areas are posted as high radiation areas used for temporary storage of radioactive waste from other DOE facilities. The mean of these data is about 10 times higher than the mean of other NTS areas. The atypically high values caused by the reconfiguration of the Area 5 Transuranic pad are also not included in Table F.3.

Figure F.2 Typical Mixed Distribution Probability Plot

Table F.3 Atypical Data Values [mR/day] - 1992 TLD Data

<u>Area Location</u>	<u>Quarter</u>	<u>Atypical Data</u>	<u>Group Mean</u>
Area 2, Stake 2N-8	1	3.34	0.43
Area 2, Stake 2N-8	2	2.89	0.42
Area 2, Stake 2N-8	3	2.85	0.45
Area 2, Stake 2N-8	4	3.11	0.51
Area 3, U-3co N	1	2.61	0.42
Area 3, U-3co N	2	2.52	0.47
Area 3, U-3co N	3	2.73	0.51
Area 3, U-3co N	4	2.84	0.50
Area 3, U-3co S	1	1.67	0.42
Area 3, U-3co S	2	1.69	0.47
Area 3, U-3co S	3	1.79	0.51
Area 3, U-3co S	4	1.85	0.50
Area 4, Stake 4A-9	1	3.76	0.37
Area 4, Stake 4A-9	2	3.27	0.36
Area 4, Stake 4A-9	3	3.42	0.46
Area 4, Stake 4A-9	4	3.45	0.38
Area 7, 7-300 Bunker	1	1.07	0.36
Area 7, 7-300 Bunker	2	1.05	0.40
Area 7, 7-300 Bunker	3	0.93	0.46
Area 7, 7-300 Bunker	4	1.04	0.40
Area 10, Sedan W	1	1.19	0.41
Area 10, Sedan W	2	1.16	0.42
Area 10, Sedan W	3	1.17	0.44
Area 10, Sedan W	4	1.23	0.43
Area 12, T Tunnel No. 2 Pond	1	1.34	0.36
Area 12, T Tunnel No. 2 Pond	2	1.34	0.33
Area 12, T Tunnel No. 2 Pond	3	1.41	0.37
Area 12, T Tunnel No. 2 Pond	4	1.20	0.37
Area 19, Stake R-18	1	0.90	0.46
Area 19, Stake R-26	1	1.00	0.46
Area 19, Stake R-29	1	0.98	0.46
Area 19, Stake R-3	1	1.06	0.46
Area 19, Stake R-8	1	1.06	0.46
Area 20, Stake J-31	1	2.03	0.47
Area 20, Stake J-31	2	*	0.42
Area 20, Stake J-31	3	1.03	0.51
Area 20, Stake J-31	4	*	0.47
Area 23 Building 610 Bay	1	1.76	0.24
Area 23 Building 610 Bay	2	4.79	0.21
Area 23 Building 610 Bay	3	2.39	0.23
Area 23 Building 610 Bay	4	3.64	0.24

* Missing data value

Table F.3 is almost identical to the corresponding tables in the 1990 and 1991 annual reports. 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 atypically high values in Area 19 for all R-stakes and for the first quarter is new in 1992 and have no known cause. 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 were also atypically high.

All but one of the remaining atypical values are from sampling stations located in Yucca Flat or in areas known to be contaminated from early atmospheric testing. The one remaining atypical value is from the sampling station at Stake J-31, in the far northwest corner of the NTS, about one mile north of the PALANQUIN and CABRIOLET test sites. These two cratering tests occurred in the mid 1960s, and the plumes from them travelled northward. The annual arithmetic average mR/day at Stake 2N-8 for 1992 is 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 83, while the column totals have sample sizes from 148 to 170. This is statistically a very important characteristic because it strongly influences the way patterns of significant differences can be elucidated.

The first step in the formal statistical analysis of these data was to perform a two-way Analysis of Variance (ANOVA) to simultaneously test for differences between areas and differences between quarters. 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 using all the data; that is, without removing the atypical values and the data from known areas of high radiation. This showed differences between areas and no differences between quarters with no interactions. Examination of Table F.4 column means suggest that the fourth quarter mean might be higher than the means of the other quarters. However, with all the atypical and known high values included, many of the data sets for one area and one quarter have high variances and this tends to lower the significance of apparent differences. The analysis with the atypical values, MSM-1 data, MSM-2 and the transuranic pad data removed showed differences between areas and quarters with no interactions. Removing the fourth quarter data resulted in borderline ($p=0.050$) significant differences among the first three quarters and no interactions. Analyzing the data for only the first and second quarters, and only the third and fourth quarters, still showed highly significant differences between areas but very low significances for differences between quarters with no interactions. Thus, it appears that, with just the environmental data, the overall averages for the first and second quarters are slightly

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

Area	Quarter					Area	Quarter				
	1	2	3	4	All		1	2	3	4	All
1	3 0.36	4 0.31	3 0.32	3 0.35	13 0.33	12	7 0.36	7 0.33	6 0.37	8 0.37	28 0.36
2	5 0.43	5 0.42	5 0.45	5 0.51	20 0.45	15	5 0.37	5 0.37	5 0.38	5 0.39	20 0.38
3	22 0.42	19 0.47	21 0.51	21 0.50	83 0.47	17	2 0.42	2 0.41	2 0.41	2 0.42	8 0.41
4	2 0.37	2 0.36	2 0.45	1 0.38	7 0.39	18	4 0.45	4 0.42	2 0.44	3 0.47	13 0.44
5	22 0.37	22 0.37	21 0.38	16 0.44	81 0.39	19	16 0.46	21 0.45	20 0.51	12 0.49	69 0.48
5.1 ^(a)	16 4.86	18 4.40	15 4.39	18 5.80	67 4.89	20	10 0.47	10 0.42	12 0.51	4 0.47	36 0.47
5.2 ^(b)	6 0.95	6 1.11	6 0.96	6 1.35	24 1.09	22	2 0.21	2 0.19	2 0.23	2 0.23	8 0.21
6	9 0.29	10 0.26	9 0.30	11 0.31	39 0.29	23	8 0.24	8 0.21	7 0.23	7 0.24	30 0.23
7	2 0.36	2 0.40	2 0.46	2 0.40	8 0.40	25	10 0.35	10 0.33	10 0.40	10 0.40	40 0.36
8	1 0.35	1 0.34	1 0.32	1 0.37	4 0.35	27	1 0.37	1 0.35	1 0.40	1 0.42	4 0.39
9	3 0.35	3 0.37	3 0.37	3 0.39	12 0.37	30	1 0.51	1 0.46	1 0.52	1 0.46	4 0.49
10	5 0.41	5 0.42	5 0.44	4 0.43	19 0.42	Column Means All Data	164 0.84	170 0.83	163 0.81	148 1.11	645 0.89
11	2 0.38	2 0.42	2 0.48	2 0.46	8 0.43	Column Means Excluding (a),(b)	142 0.39	146 0.38	142 0.42	124 0.42	554 0.40

(a) The area coded as 5.1 refers to only the MSM-1 and MSM-2 locations.

(b) The area coded as 5.2 refers to only the transuranic pad locations.

but significantly lower than the overall averages for the third and fourth quarters. The ANOVA table for the data without atypical values and radiation areas, for all areas and all quarters, is shown in Table F.5.

This table shows the same pattern of differences between quarters and areas as the analyses with all the data. In addition, Table F.5 shows no interaction between quarters and areas.

Table F.5 Analysis of Variance on Edited Data

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of the Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Area	21	23.11113	1.10053	26.65	0.000
Quarter	3	0.42830	0.14277	3.46	0.016
Area X Quarter	63	0.90404	0.01435	0.35	1.000
Error	466	19.24258	0.04129		

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 are now being used for testing, such as Yucca Valley which contains Areas 1, 2, 3, 4, 7, and 9, contain numerous sampling stations while Area 29 contains none because it is a rugged mountainous area that has never been used for testing.

Statistically it would be desirable to aggregate the sampling locations into groups of more equal size, however the grouping must be upon *a priori* considerations of sampling station characteristics. The current grouping, with the very unequal number of data per group, is based on *a priori* considerations. The NTS areas were originally established as areas for a particular testing program, 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 1992 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 third and fourth quarters are higher than during the first and second quarters.

APPENDIX G

HISTORICAL TRENDS IN ONSITE THERMOLUMINESCENT DOSIMETER DATA

Robert R. Kinnison

Thermoluminescent dosimeters (TLDs) have been used for ambient gamma monitoring within the NTS for a number of years. This monitoring started in 1977 with 10 stations chosen to be close to workers. 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.

BACKGROUND DATA

Table G.1 displays the annual average millirem per day data from the nine designated background stations for the years in which the monitoring network has been relatively unchanged, 1981 to the present.

The nine data points per year are too few for a statistical review of distributional properties. The review of the statistical properties of all the TLD data (this report, Appendix F, and previous years annual reports) concludes that TLD data is 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 the analysis of variance results produced by the MINITAB Statistical Software System.

Table G.1 Average Annual Millirem per Day for Background TLD Stations

Location	Year											
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Bldg. 650 Dosimetry	.21	.19	.21	.15	.13	.31	.14	.26	.20	.20	.19	.18
Bldg. 650 Roof	.18	.18	.18	.14	.12	.13	.17	.24	.19	.19	.19	.18
Area 27 Cafeteria	.41	.37	.39	.32	.29	.27	.38	.49	.40	.40	.42	.39
CP-6	.25	.20	.25	.18	.17	.13	.21	.36	.12	.12	.24	.23
HENRE Site	.39	.37	.36	.30	.28	.27	.34	.47	.39	.39	.40	.36
NRDS Warehouse	.40	.38	.36	.32	.28	.28	.39	.45	.39	.39	.39	.37
Post Office	.20	.18	.18	.14	.13	.16	.24	.29	.23	.23	.24	.23
Well 5B	.38	.33	.33	.27	.26	.22	.33	.43	.34	.34	.37	.31
Yucca Oil Storage	.30	.28	.28	.23	.21	.22	.31	.29	.32	.32	.33	.31

Table G.2 One-Way Analysis of Variance for Differences Among Years

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of the Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Year	11	2.541	0.231	1.92	0.046
Error	<u>96</u>	<u>11.553</u>	0.120		
Total	107	14.074			

<u>Year</u>	<u>N</u>	<u>Log Mean</u>	<u>Standard Deviation</u>	<u>Median</u>	Individual 95 Percent Confidence Intervals Standard for the Log of the Median Based on a Pooled Standard Deviation
81	9	-1.2436	0.3310	0.2883	(-----*-----)
82	9	-1.3375	0.3339	0.2625	(-----*-----)
83	9	-1.3048	0.3041	0.2712	(-----*-----)
84	9	-1.5340	0.3558	0.2157	(-----*-----)
85	9	-1.6294	0.3692	0.1960	(-----*-----)
86	9	-1.5560	0.3352	0.2110	(-----*-----)
87	9	-1.3341	0.3681	0.2634	(-----*-----)
88	9	-1.0442	0.2786	0.3520	(-----*-----)
89	9	-1.3195	0.4147	0.2672	(-----*-----)
90	9	-1.3195	0.4147	0.2673	(-----*-----)
91	9	-1.2227	0.3224	0.2944	(-----*-----)
92	9	-1.2965	0.3029	0.2735	(-----*-----)
Pooled Standard Deviation = 0.3503					-----+-----+-----+-----+-----
					-1.80 -1.50 -1.20 -0.90

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. The median for comparison, the U.S. average exposure is generally assumed to be 100 millirem per year. The median is the antilogarithm of the mean of the logarithms of the data.

Table G.2 indicates that there are some 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 since a probability of 0.046 is only slightly smaller than 0.05 so one would expect that there are few significant differences between the years. An examination of the means and confidence intervals plot part of Table G.2 suggest that perhaps the means for 1985 and 1986 are significantly smaller than the mean for 1988. 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, rather the data for 1985 and 1986 seem to be all shifted towards lower values and the data from 1988 are all shifted high. The statistical significance of these possible differences between years were 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 there was only one significant difference between years, 1985 is different from 1988. Furthermore, 1985 is not significantly different

from any years other than 1988, and 1988 is not significantly different from any years other than 1985. The higher values in 1988 are likely due to the calibration problem discussed at the end of the first paragraph of this chapter. If this is the case, and the 1988 values could be adjusted to be similar to the values for 1987 and 1989, then there would be no significant difference between any of the years.

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

For the data collected using the Panasonic TLD's, from 1987 to the present, it is reasonable to use all the data for examination for possible trends. 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. These data are presented in Table G.3; 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 data at the end of Table G.3, are "boundary" stations, which 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

Station Name	<u>Year</u>					
	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Area 1, BJY	144	172	141	139	112	113
Area 1, Sandbag Storage Hut	149	135	130	132	135	135
Area 1, Stake TH-27	*	*	158	125	125	113
Area 1, Stake TH-38	146	157	129	139	139	132
Area 2, Cable Yard	*	164	314	167	167	183
Area 2, Stake M-140	159	168	154	150	150	154
Area 2, Stake M-150	176	181	163	152	153	161
Area 2, Stake 2L-9	324	339	251	236	230	220
Area 2, Stake TH-58	116	151	108	112	114	110
Area 2, Stake 2N-8	2046	1905	1581	1445	1130	1116
Area 3, LANL Trailers	*	139	147	141	147	139
Area 3, Stake OB-11.5	*	230	225	145	148	135
Area 3, Stake 3A-6.5	*	*	149	186	*	179

* Missing data value

Table G. 3 (Average Annual Millirem per Year for NTS Environmental Monitoring TLDs, cont.)

Station Name	Year					
	1987	1988	1989	1990	1991	1992
Area 3, D & OB Rd. Jct.	*	102	108	104	*	*
Area 3, U-3ah/at N	*	*	*	151	158	150
Area 3, U-3ah/at W	*	*	*	150	158	143
Area 3, U-3ah/at S Gate	*	*	*	152	172	150
Area 3, U-3ah/at S	*	*	*	227	231	198
Area 3, U-3ah/at E	*	*	*	148	145	154
Area 3, U-3ax/bl NE	408	374	340	319	321	282
Area 3, U-3ax/bl NW	209	*	213	208	210	190
Area 3, U-3ax/bl SE	223	217	202	196	198	190
Area 3, U-3ax/bl S	193	193	179	173	181	179
Area 3, U-3by N	623	388	326	310	311	289
Area 3, U-3by S	186	206	187	181	190	176
Area 3, U-3bz N	234	281	239	230	217	220
Area 3, U-3bz S	170	183	170	164	165	161
Area 3, U-3cj S/N	*	164	160	196	*	157
Area 3, U-3co N	1134	1110	1218	1147	827	981
Area 3, U-3co S	758	770	752	710	708	641
Area 3, U-3du N	206	186	192	186	190	172
Area 3, U-3du S	195	241	223	203	202	187
Area 3, U-3ey S	*	347	167	159	164	154
Area 4, Stake M-130	183	161	139	135	145	146
Area 4, Stake 4A-9	1641	1484	1497	1408	1115	1274
Area 4, Stake TH-48	144	166	148	148	146	135
Area 5, RWMS E 1000	149	184	148	144	137	139
Area 5, RWMS E 1500	146	175	139	139	145	139
Area 5, RWMS E 500	349	177	140	139	148	135
Area 5, RWMS E Gate	170	162	139	136	273	253
Area 5, RWMS N 1000	150	175	148	141	152	146
Area 5, RWMS N 1500	168	172	149	139	146	132
Area 5, RWMS N 500	146	228	154	152	158	139
Area 5, RWMS NE Corner	168	183	144	139	132	128
Area 5, RWMS NW Corner	162	186	153	145	151	143
Area 5, RWMS Office	101	128	121	110	140	128
Area 5, RWMS S 500	113	183	146	142	150	146
Area 5, RWMS S Gate	278	558	142	119	146	132
Area 5, RWMS SW Corner	135	168	142	136	143	157
Area 5, RWMS W 1000	148	190	156	153	160	146
Area 5, RWMS W 1500	145	204	152	149	154	146
Area 5, RWMS W 500	152	179	148	142	151	135
Area 5, RWMS Pit 3 N Side	*	*	*	140	168	146

* Missing data value

Table G. 3 (Average Annual Millirem per Year for NTS Environmental Monitoring TLDs, cont.)

Station Name	Year					
	1987	1988	1989	1990	1991	1992
Area 5, RWMS Pit 3 S Side	*	*	*	132	149	139
Area 5, RWMS Pit 4 N Side	*	*	*	148	161	154
Area 5, RWMS Pit 4 S Side	*	*	*	176	161	146
Area 5, RWMS TRU NE	*	*	*	177	286	425
Area 5, RWMS TRU N	*	*	*	829	466	662
Area 5, RWMS TRU NW	*	*	*	140	225	231
Area 5, RWMS TRU SW	*	*	*	124	325	190
Area 5, RWMS TRU S	*	*	*	180	562	655
Area 5, RWMS TRU SE	*	*	*	125	325	238
Area 5, Well 5B	119	157	129	125	133	113
Area 6, CP-2 Logistic Desk	81	80	83	88	88	84
Area 6, CP-50 Calib. Bench	127	120	91	111	88	91
Area 6, CP-50 Inst. Calib. Door	136	126	148	162	186	161
Area 6, CP-6	76	131	100	90	86	84
Area 6, Decon Pad Back Room	92	117	108	111	106	91
Area 6, Decon Pad Office	105	117	82	120	123	95
Area 6, Stake TH-1	110	100	90	91	91	91
Area 6, Stake TH-9	146	146	121	126	127	121
Area 6, Stake TH-18	131	128	105	110	112	110
Area 6, Well 3	*	135	130	123	128	132
Area 6, Yucca Oil Storage Area	112	106	115	116	120	113
Area 7, 7-300 Bunker	461	485	385	375	376	373
Area 8, Stake 8K-25	120	150	126	122	124	128
Area 9, 9-300 Bunker	149	179	151	148	147	154
Area 10, Stake 10A-24	240	263	225	210	186	198
Area 10, Circle & L Road	155	175	146	142	147	154
Area 10, Sedan E Visitor Box	188	210	174	174	175	168
Area 10, Sedan W	611	626	520	482	459	436
Area 10, Stake CA-14	*	204	172	153	148	154
Area 11, Gate 293	133	158	153	132	151	143
Area 12, Building 12-10	132	139	116	146	147	146
Area 12, Stake M-168	146	124	112	143	153	143
Area 12, Stake M-170	168	319	108	138	139	128
Area 12, Stake M-175	141	131	119	147	149	135
Area 12, Stake TH-68.5	123	131	92	119	122	117
Area 12, T-Tunnel No. 2 Pond	349	358	340	295	527	483
Area 12, Upper Haines Lake	138	157	102	131	130	117
Area 12, Upper N Pond	148	195	124	155	156	146
Area 15, EPA Farm	134	155	134	124	129	128
Area 15, Lamp Shack	144	170	145	143	147	157
Area 15, Office	*	*	112	109	125	124
Area 15, Storage Shed U-15e	151	173	147	77	*	*
Area 15, Sub Station U-15e	129	137	254	109	111	113

* Missing data value

Table G. 3 (Average Annual Millirem per Year for NTS Environmental Monitoring TLDs, cont.)

Station Name	Year					
	1987	1988	1989	1990	1991	1992
Area 17, Stake M-185	149	142	153	154	153	139
Area 17, Stake M-190	153	201	166	174	177	165
Area 18, Stake M-196	163	219	165	171	177	157
Area 18, Stake P-35	175	204	172	179	176	168
Area 18, Stake P-39	175	131	167	128	171	154
Area 19, Stake C-16	163	203	164	168	170	168
Area 19, Stake C-25	151	199	166	172	175	168
Area 19, Stake C-27	182	192	174	178	185	172
Area 19, Stake C-31	689	262	164	174	178	176
Area 19, Stake P-41	185	214	186	183	169	176
Area 19, Stake P-46	152	179	156	162	166	157
Area 19, Stake P-54	158	181	156	154	160	157
Area 19, Stake P-59	185	214	185	190	194	183
Area 19, Stake P-66	176	270	193	187	191	176
Area 19, Stake P-71	185	199	172	174	182	172
Area 19, Stake P-77	173	199	190	192	185	187
Area 19, Stake P-88	207	307	182	200	196	209
Area 19, Stake P-91	178	188	189	188	193	198
Area 19, Stake P-98	*	*	*	177	173	176
Area 19, Stake R-3	191	208	191	195	190	256
Area 19, Stake R-8	*	*	*	197	184	256
Area 19, Stake R-18	*	*	*	170	165	227
Area 19, Stake R-26	*	186	177	178	172	245
Area 19, Stake R-29	*	*	*	172	167	242
Area 19, Upper Well UE-19c Res.	*	192	163	172	179	154
Area 20, Stake A-106 (now Area 18)	*	292	120	177	186	179
Area 20, P & K Rd Jct	*	184	164	169	170	168
Area 20, Stake P-116.5	172	186	202	170	170	172
Area 20, Stake P-120.5	193	175	165	166	162	165
Area 20, Stake P-124	175	197	171	174	157	176
Area 20, Stake P-129.5	180	186	179	183	180	179
Area 20, Stake P-134.5	172	186	118	174	166	172
Area 20, Stake J-6	*	175	181	188	184	161
Area 20, Stake J-16	181	188	167	131	165	168
Area 20, Stake J-24	167	190	222	168	168	176
Area 20, Stake J-31	423	443	386	380	360	560
Area 22, Desert Rock Control Tower	68	84	78	83	87	77
Area 23, Building 190 In Bench Drawer	195	270	181	156	97	99
Area 23, Building 610 Gate	75	88	68	75	71	73
Area 23, Building 610 Bay	952	801	382	674	928	1153

* Missing data value

Table G. 3 (Average Annual Millirem per Year for NTS Environmental Monitoring TLDs, cont.)

Station Name	Year					
	1987	1988	1989	1990	1991	1992
Area 23, Building 650 Dosimetry	51	95	69	73	69	66
Area 23, Building 650 Roof	62	86	64	69	69	66
Area 23, Building 650 Storage Room	140	126	76	87	110	95
Area 23, Gate 100	62	91	69	71	71	66
Area 23, Post Office	89	106	83	83	86	84
Area 23, Building 180 Scaler Room	95	139	110	113	127	132
Area 25, 25-4P Gate	134	173	146	145	151	139
Area 25, 25-7P Gate	130	179	137	159	161	132
Area 25, E-MAD E	134	173	135	135	141	128
Area 25, E-MAD N	109	148	121	125	128	117
Area 25, E-MAD S	133	161	134	134	140	124
Area 25, E-MAD W	124	153	219	128	134	121
Area 25, Henre	123	170	138	143	147	132
Area 25, NRDS Warehouse	144	166	139	142	144	135
Area 27, Area 27 Cafe	139	179	118	146	154	143
Area 3, Boundary Station 358	60	84	88	88	79	88
Area 5, Boundary Station 360	30	82	80	81	74	77
Area 10, Boundary Station 357	82	93	91	95	147	102
Area 11, Boundary Station 359	116	175	172	175	165	172
Area 12, Boundary Station 355	115	135	135	114	119	117
Area 15, Boundary station 356	144	178	179	180	170	172
Area 30, Boundary Station 349	201	184	179	174	155	179
Area 19, Boundary Station 354	146	252	204	165	163	154
Area 19, Boundary Station 353	214	181	212	157	171	150
Area 20, Boundary Station 350	172	201	208	207	193	205
Area 20, Boundary Station 352	134	60	208	113	101	117
Area 20, Boundary Station 351	202	193	106	173	169	187
Area 22, Boundary Station 346	158	84	77	83	74	81
Area 25, Boundary Station 347	145	117	99	119	110	117
Area 25, Boundary Station 348	*	146	164	165	137	172

* Missing data value

The statistical procedures used to analyze all the data 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 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 accepted at the 95% confidence level since the tabled probability of 0.097 is larger than the critical value of 0.05. The plot of the means and confidence intervals suggests that this probability is close to the critical value only because of the 1988 data. 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 the 1988 data less reliable than the data from the other years.

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 ($p=0.86$) 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

<u>Source</u>	<u>Degrees of Freedom</u>	<u>Sum of the Squares</u>	<u>Mean Square</u>	<u>F-Statistic</u>	<u>p Value</u>
Year	5	2.385	0.477	1.87	0.097
Error	906	231.147	0.255		
Total	911	233.532			

<u>Year</u>	<u>N</u>	<u>Log Mean</u>	<u>Standard Deviation</u>	<u>Median</u>	Individual 95 Percent Confidence Intervals for the Log of the Median Based on a Pooled Standard Deviation
87	130	5.1162	0.5973	166.7	(-----*-----)
88	143	5.2218	0.5139	185.3	(-----*-----)
89	147	5.0689	0.4971	159.0	(-----*-----)
90	166	5.0680	0.4672	158.9	(-----*-----)
91	162	5.1098	0.4670	165.6	(-----*-----)
92	164	5.0922	0.4980	162.7	(-----*-----)
Pooled Standard Deviation = 0.5051					-----+-----+-----+-----+-----
					5.00 5.10 5.20 5.30

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 nine designated background stations for the years 1981 through 1992 showed that the 1988 mean was significantly higher than the 1985 mean, 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 was 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 starting with the introduction of Panasonic TLDs in 1987 and continuing through the present. These data also showed no significant differences between years and thus no historical trend is evident.

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