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Job No. 22191
Contract No. DE-AC06-93RL12367
Subject Code: 8000 & 8240
Written Response Required? No
OU: N/A
TSD: N/A
ERA: N/A

JAN 05 1995

U.S. Department of Energy
Richland Operations Office
P. O. Box 550, MSIN H4-83
Richland, Washington 99352

Attention: R. D. Freeberg, Director, Environmental Operations Division

Subject: Transmittal of Hanford Site Background: Evaluation of Existing Soil Radionuclide Data

Dear Mr. Freeberg:

This letter and attachments provide an evaluation of existing data on radiological background for soils in the vicinity of the Hanford Site. The primary purpose of this evaluation is to determine the adequacy of existing data to serve as a radiological background baseline for use in ecological and human health risk assessments, cleanup activities, and other environmental activities at the Hanford Site.

The attached report evaluates data which were collected between 1985 and 1992 by Pacific Northwest Laboratory and the Washington State Department of Health. The data include activities for 25 radionuclides and 4 other analytes (gross alpha, gross beta, total uranium, and total thorium), taken from the upper 2.5 cm of soil at over 70 localities within the region of the Hanford Site.

These attachments are not intended as a counterpart to the background report Hanford Site Background: Part 1, Soil Background for Non-Radioactive Analytes (DOE/RL-92-24), which establishes the technical basis for use of the reported data as sitewide background. Technically defensible background concentration levels and a scientific basis for their use as sitewide background cannot be provided at this time based on data quality issues described in the attachments. Because the establishment of Sitewide background requires the data to be complete and representative, evaluation efforts such as geochemical and statistical description and analyses were determined to be unproductive at this time, and are not included in the attachments. A complete description of data characteristics and supporting analyses will be performed and documented after completion of a new data collection effort scheduled for mid-1995. A report on these new data is anticipated to be released in October, 1995.

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Documentation of the existing data, the evaluation process, and interpretations resulting from the evaluation are provided in the attachments. A description of the data sources and types is provided in Attachment 1. The procedures for screening the data and the results of the screening process are described in Attachment 2. Attachment 3 presents the results of the evaluation of existing data. Discussion, conclusions, and recommendations are presented in Attachment 4. The following is a summary of the information contained in the attachments.

Summary of Existing Data Evaluation

The existing data set consists of a total of 3048 laboratory measurements for 29 analytes in 314 samples. These data were screened to distinguish background samples from potentially contaminated samples. The screening process resulted in a data set containing 2107 analyses for 16 radionuclides from 298 samples and 70 localities. The quality and adequacy of the screened data set was evaluated using data quality objective criteria developed for this evaluation. The main criteria included data type, data quantity, analytes of concern, accuracy, precision, detectability, and the completeness, comparability, and representativeness of the data in the context of radiological background conceptual models. Both naturally occurring radionuclides and ubiquitous anthropogenic background radionuclides were included in the evaluation.

These data are useful for providing information on the magnitude of radiological background for soils in the region. However, the data are not representative of soils throughout the unsaturated zone, and generally lack the quality required of a complete radiological background data set for soils. Data gaps and the large uncertainties associated with these data precludes their use in most quantitative applications such as risk assessment. They are, however, the best available documented data on radiological soil background in the region, and should be used to the maximum extent possible.

Only 7 of the 16 radionuclides in the screened data set (^{40}K, ^{90}Sr, ^{137}Cs, ^{226}Ra, ^{234}U, ^{238}U, and $^{239/240}Pu$) were found to be acceptable in terms of data quantity, precision, and detectability. These data have distributions indicative of a single population for each radionuclide, which indicates that the Sitewide conceptual model is valid for radionuclides in soil. The validity of the conceptual model cannot be confirmed with the existing data, however, because the data represent only the upper 2.5 centimeters of an unsaturated zone which is locally over 100 meters thick in the vicinity of the Hanford Site. The uncertainty in the data set from this source alone may exceed 100%.

The existing data for ^{60}Co, ^{106}Ru, ^{134}Cs, ^{154}Eu, ^{232}Th, ^{235}U, ^{238}Pu, and ^{241}Am are largely unusable due to concerns involving accuracy, precision, data quantity, and/or detection. No data were reported for 7 other radionuclides of potential concern (^{99}Tc, ^{125}Sb, ^{152}Eu, ^{233}U, ^{237}Np, ^{241}Pu, and ^{244}Cm). Data on radon flux levels from soils in the vicinity of the Hanford Site are also nonexistent.

The radiological background from soil in this region has contributions from both anthropogenic and naturally occurring radionuclides. The maximum activity levels reported for eight radionuclides in the data set (^{40}K, ^{60}Co, ^{134}Cs, ^{137}Cs, ^{154}Eu, ^{226}Ra, ^{232}Th, ^{238}U) correspond to risk levels in excess of 10^{-6}. The maximum levels of 5 radionuclides (^{40}K, ^{60}Co, ^{137}Cs, ^{226}Ra, ^{232}Th) appear to dominate the terrestrial background dose (>200 mrem), and correspond to levels of baseline risk greater than 10^{-4}. These five include both natural and anthropogenic radionuclides, but only three (^{40}K, ^{137}Cs, ^{226}Ra) have adequate data quality and/or quantity.

Additional Data Needs

The collection and analysis of additional soil samples, based on appropriate data quality objectives, will be necessary in order to provide the quality of data required for use in environmental applications at the Hanford Site. It is recommended that additional data collection involve the following activities: 1) analysis of the archived samples collected from the non-radioactive soil background study, primarily for augmenting the database on naturally occurring radionuclides; 2) collection and analysis of samples at depths greater than 2.5 cm, primarily for anthropogenic radionuclides; 3) collection of data on radon flux levels from soils in the vicinity of the Hanford Site; 4) collection of data which can be used to correlate laboratory and field measurements of isotopic activities and/or energy deposition. The attachments also provide recommendations for improving the measurement process and interlaboratory comparability. The results of efforts to provide new data appropriate for establishing Sitewide radiological background for soil are expected to be available in October, 1995.

Should you have any questions, please contact me at 375-4648 or Roger W. Ovink at 376-5164.

Sincerely,

S. D. Liedle
Manager of Projects

SDL/cw

Attachments:
1) Description of Existing Data
2) Data Screening Procedures and Results
3) Data Evaluation Results
4) Conclusions and Recommendations
5) References
A) Sampling Locations of Existing Data
B) Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations
C) Existing Data that Failed the Screening Process

cc:	J. K. Erickson	(DOE-RL) H4-83, w/a
	A. Foote	(DOE-RL) H4-83, w/a
	R. K. Stewart	(DOE-RL) H4-83, w/a

This page is for concurrence purposes for the transmittal of the Site Background: Evaluation of Existing Soul Radionuclide Data to R. D. Freeberg DOE from S. D. Liedle BHI.

bcc: T.D. LeFrancois (CHI) H4-79, w/a
S.D. Liedle (BHI) H4-79, w/a
L.A. Mihalik (CHI) H4-79, w/a
R.W. Ovink (CHI) H4-79, w/a
L.W. Pamplin (BHI) H4-80, w/a
S.W. Petersen (CHI) H6-07, w/a
K.L. Wescott (CHI) H4-79, w/o
BHI Document Control H4-79, w/a

CONCURRENCE

Date	12/9/94	12/9/94
Initial	SWP	RWO
	SWP	RWO

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ATTACHMENTS

Hanford Site Background: Evaluation of Existing Soil Radionuclide Data

S. W. Petersen, CHI; J. D. Hoover, WHC; T. Legore, BCSR
Prepared by BHI for DOE/RL
December, 1994

ATTACHMENT 1.0 DESCRIPTION OF EXISTING DATA

The data used in this report to evaluate radionuclide background in soil were compiled from two surveillance programs which assess radiation in southeast Washington. Pacific Northwest Laboratory (PNL) collects samples of soil and other media to monitor for contamination from the Hanford Site, and publishes the results annually. Most of the data used in this report can be found in the PNL annual reports, from 1987 to 1992 (e.g., PNL 1992). The State of Washington Department of Health (DOH) also collects and analyzes soil and other samples, in order to monitor the Hanford Site, the Washington Public Power Supply System, the U.S. Ecology site, and other industrial facilities where radioactive material is handled. These data are also published in annual reports (e.g., DOH, 1991). Both of these organizations also collect a limited number of background samples away from the surveillance sites.

Most of the data were obtained in the years 1987 through 1992. Although pre-1987 data are available, only the more recent data were used, for several reasons:

1) These data are publicly available, in the reports cited above.
2) Precision, accuracy, and detection limits of the more recent data are generally of higher quality than older data.
3) It is not necessary to correct for decay in data obtained within the last several years.

The annual reports produced by PNL and DOH include data on vegetation, air, wildlife, and agricultural products. Dose rates from external radiation at a number of locations are also documented in these reports. This report will evaluate data from soil samples collected in the field and analyzed in the laboratory for radioisotopic activities.

The locations from which soil samples were collected and analyzed for radionuclides are shown in Figures 1-1 through 1-3. The PNL sites can be divided into 3 general categories: on-site, perimeter, and distant. Perimeter samples are those located just outside of the Hanford boundary, generally in a downwind direction (to the southeast). Distant locations are at least 10 km away from the Hanford Site, and as much as 70 km from the Site boundary. Several of the sites were sampled by both PNL and DOH, although occasionally at different times and slightly different places. The sample names and locations are identified in Attachment A. All of the data used in this report are contained in Attachments B and C.

The radionuclides typically measured in soil samples collected in the surveillance programs include the naturally-occurring isotopes that contribute significantly to total dose (e.g., ^{40}K, ^{232}Th) and anthropogenic (man-made) radionuclides that are ubiquitous in global fallout (e.g., ^{137}Cs) or that could be a contaminant from the monitored facility (e.g., uranium isotopes). Of the hundreds of radionuclides that could be considered for characterizing background, only a few are of concern when their half-lives, abundances, and threat to human health are evaluated. Perkins and Jenquin (1994) have surveyed the types and amounts of radionuclides that have been produced at Hanford, and suggest that 26

radionuclides be considered for characterizing background. Of these, one is tritium and would not be expected to occur as a solid. The other 25 radionuclides are listed in Table 1-1, along with their half-lives and primary mode of origin (natural or anthropogenic).

The external radiation measurements reported by PNL and DOH were made with thermoluminescent dosimeters (TLDs). These measure natural and anthropogenic sources, including cosmic radiation, radiation from the air and ground, and worldwide fallout. These measurements are reported in milliroentgens per day (mR/day) and/or in millirems per year (mrem/year).

The data collected by PNL and DOH were not intended to be used to characterize background for the Hanford Site, and therefore were not collected in accordance with data quality objectives for background data. Because of this, the data lack a statistically significant number of samples for several of the radionuclides listed on Table 1-1 (e.g., ^{241}Am, ^{152}Eu), or have detection limits higher than or approximately equal to expected background concentrations (e.g., ^{60}Co). The existing data also include some analytes that are not found on Table 1-1. These include ^{7}Be, ^{54}Mn, ^{65}Zn, ^{89}Sr, ^{95}Zr, ^{109}Cd, ^{230}Th, gross α, gross β, total U, and total Th. Most of these have only a few measurements, and will not be considered further in this analysis. Several of these analytes, such as total U and gross β, have a significant number of analyses and are included in the following statistical analysis, although their use for background characterization is limited. The dose rate data for external radiation are also of limited use as background in environmental applications such as risk assessment. These limitations are discussed in Attachment 2.0.

The samples were collected by compositing several samples from the top 2.5 cm of soil, so the data do not provide any information on the activities beneath this depth in the vadose zone. Vertical variation for naturally-occurring analytes has been documented (DOE/RL 1992), and limited vertical variation for some anthropogenic radionuclides has also been measured (Price 1991). Vertical variation trends are discussed further in DOE/RL-94-98 (DOE 1994a).

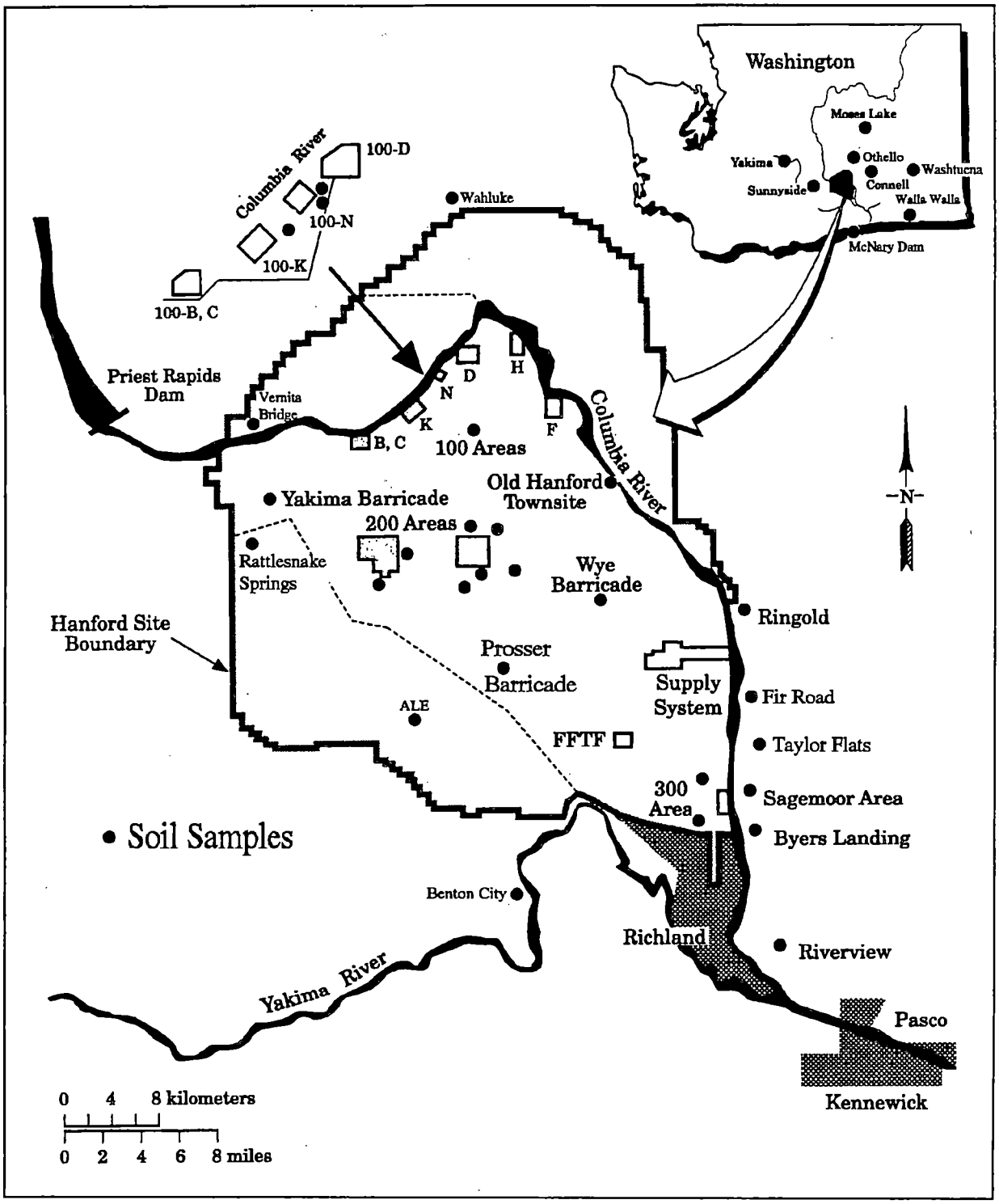

Figure 1-1. Sampling Sites for Pacific Northwest Laboratory Soil Monitoring Program (after PNL 1992).

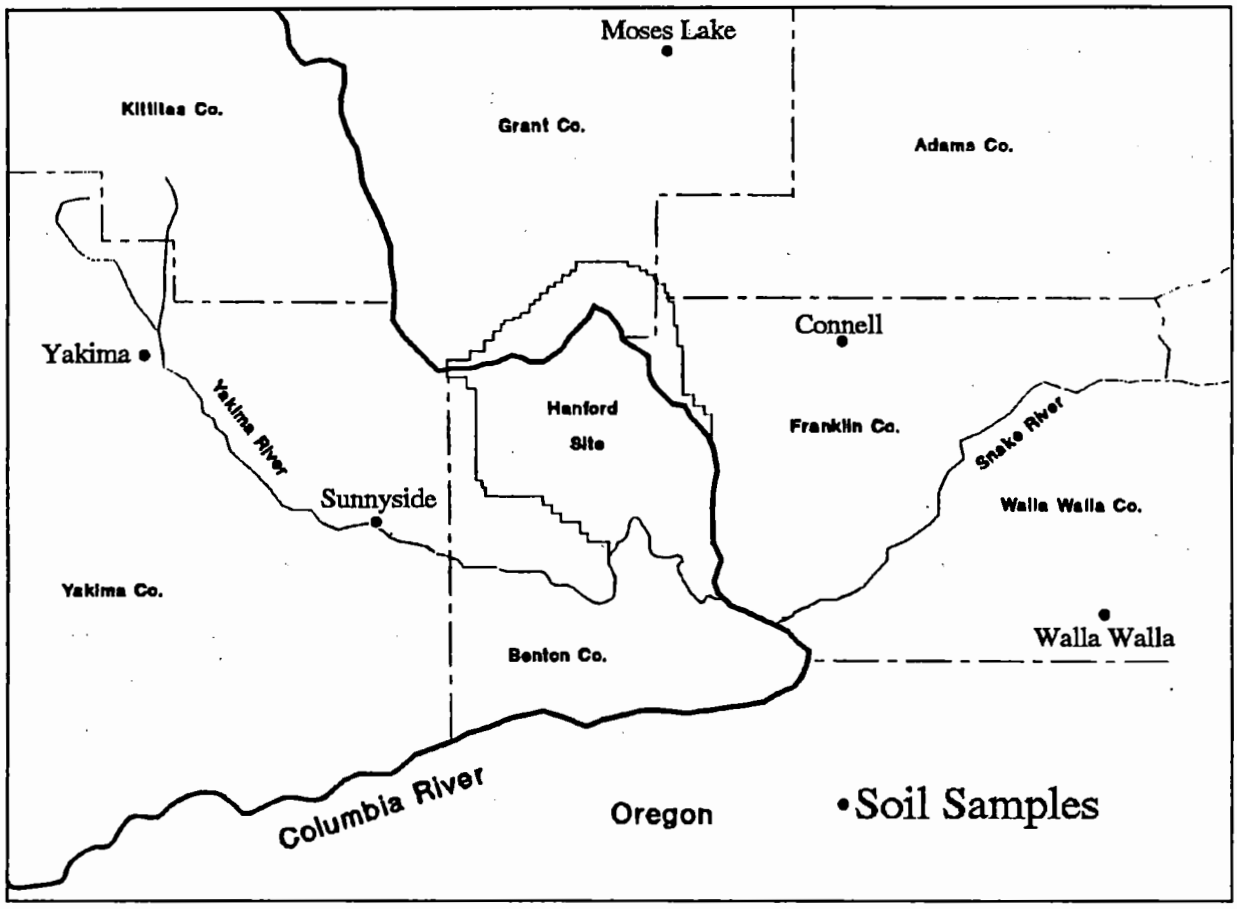

Figure 1-2. Distant Sampling Sites for Department of Health Soil Monitoring Program.

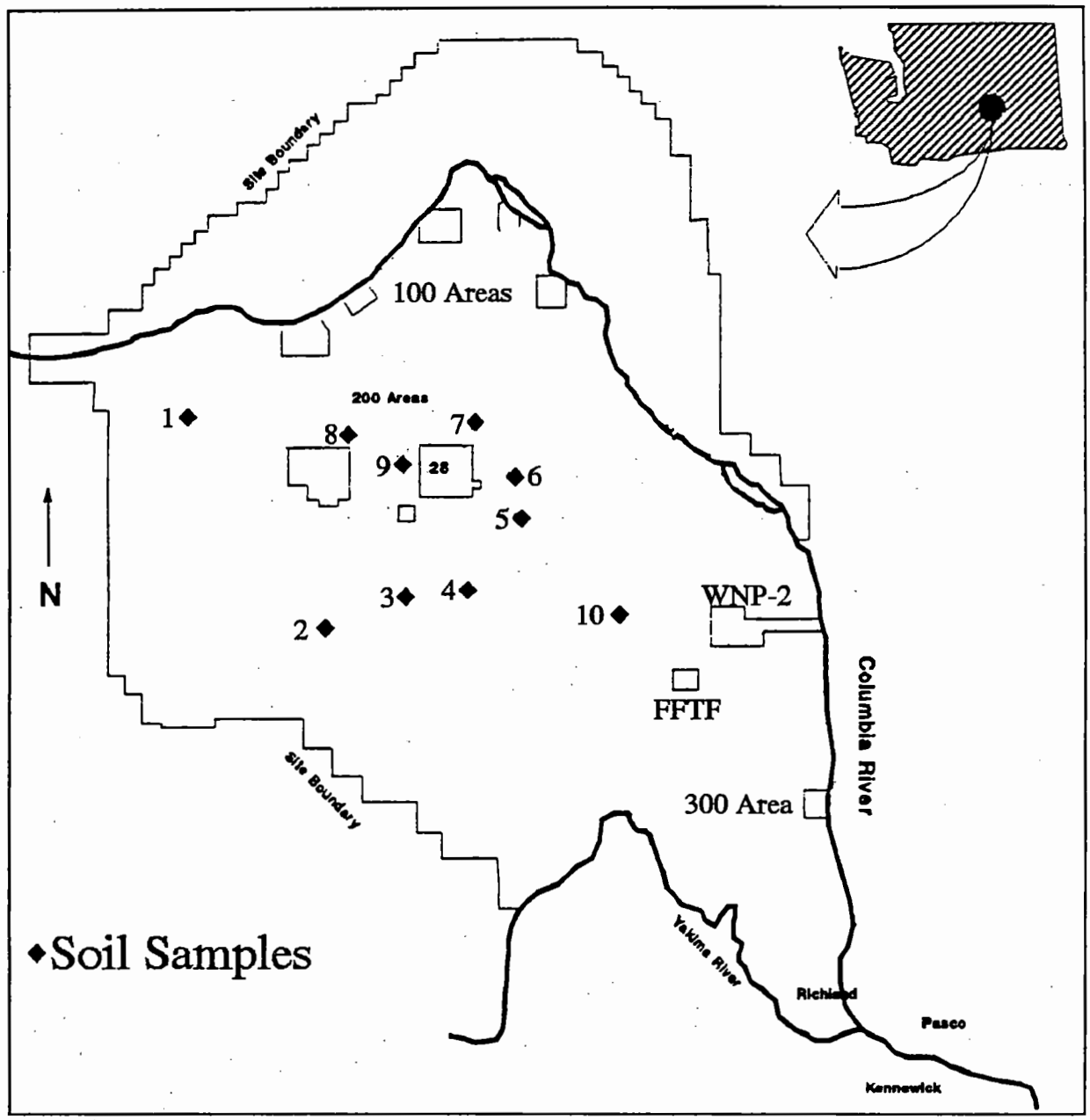

Figure 1-3. On-Site Sampling Locations for Department of Health Soil Monitoring Program.

Table 1-1. Suggested Radionuclides for the Evaluation of Sitewide Background.

Isotope	Symbol	Half-Life
Potassium-40	**^{40}K**	**1.28×10^{9} yr**
Cobalt-60	^{60}Co	5.3 yr
Strontium-90	^{90}Sr	29.1 yr
Technetium-99	^{99}Tc	2.12×10^{5} yr
Ruthenium-106	^{106}Ru	367 days
Antimony-125	^{125}Sb	2.7 yr
Iodine-129	^{129}I	1.57×10^{7} yr
Cesium-134	^{134}Cs	2.06 yr
Cesium-137	^{137}Cs	30.2 yr
Europium-152	^{152}Eu	13.5 yr
Europium-154	^{154}Eu	8.6 yr
Europium-155	^{155}Eu	4.75 yr
Radium-226	**^{226}Ra**	**1600 yr**
Thorium-232	**^{232}Th**	**1.4×10^{10} yr**
Uranium-233	^{233}U	1.6×10^{5} yr
Uranium-234	**^{234}U**	**2.4×10^{5} yr**
Uranium-235	**^{235}U**	**7×10^{8} yr**
Uranium-238	**^{238}U**	**4.5×10^{9} yr**
Neptunium-237	^{237}Np	2.14×10^{6}
Plutonium-238	^{238}Pu	87.7 yr
Plutonium-239	^{239}Pu	2.4×10^{4} yr
Plutonium-240	^{240}Pu	6537 yr
Plutonium-241	^{241}Pu	14.4 yr
Americium-241	^{241}Am	433 yr
Curium-244	^{244}Cu	18.11

Isotopes in **bold** are naturally-occurring.

ATTACHMENT 2.0 DATA SCREENING PROCEDURES AND RESULTS

Evaluation of the existing data involved a screening processes, which separated contaminated samples from data that could be considered representative of background compositions. Only data that passed this screening procedure were further evaluated for adequacy for use as background, as discussed in Attachment 4.0. A description of the procedure used to screen the data and the results of that screening are presented here.

Existing data were organized, screened, and statistically analyzed in order to evaluate the background radionuclide content in soils. The data set was organized in a FoxPro[1] database to provide traceability and an accessible repository for background data. As decisions were made regarding the status of the data, flags were set in the database to either accept or reject the data as representative of background.

2.1 EVALUATION CRITERIA AND DATA QUALITY OBJECTIVES

The adequacy of existing data and the screening criteria employed in the evaluation process were based on the Data Quality Objectives (DQO) process guidelines provided by the Environmental Protection Agency (EPA 1993). A modified version of this process was used that focused on aspects of DQO guidelines appropriate for evaluating existing data.

Background data are primarily used to determine the levels of chemicals and/or radionuclides that occur naturally in uncontaminated media, as compared to analytes present in potentially contaminated media. This data may also include information on processes and characteristics that influence background compositions. For environmental activities, background data are primarily used to define contamination and establish cleanup or performance levels in conjunction with the Resource Conservation and Recovery Act (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), National Resource Damage Assessment (NRDA, a provision of CERCLA), and other applicable regulations.

Another important application of background data is in assessing the levels of baseline risk from the natural uncontaminated environment to which humans or other receptors are exposed. These assessments are used to establish protection concentration levels for risk management and other cleanup decisions, particularly in instances where the background is near or greater than calculated protection levels. Risk assessment applications of radiological data involve the increased risk of cancer death resulting from external and/or internal exposures to radiation.

Regulatory agencies have not as yet reached a decision or concurred on the type(s) of radiological soil background data needed or the specific manner in which the data are to be used for many of the various applications. Based on the guidelines for radiological protection

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[1] FoxPro is a registered trademark of Microsoft Corporation

levels in soil (e.g., DOE-RL 1991; NRC 1994), one or more of several types of background data may be needed. These include: 1) laboratory measurements of isotopic activities, 2) field measurements of isotopic activities, 3) field measurements of potential energy deposition (e.g., rad), and 4) field data relating isotopic activity data to potential energy deposition.

For risk assessment applications, radionuclide-specific activity data are required. The extent to which laboratory and/or field data will be needed has not been determined. Data on both natural and ubiquitous anthropogenic radionuclides will be required for all applications (DOE-RL 1994a). Although there is no accepted suite of radionuclides that are routinely analyzed to evaluate radiological background, the radionuclides of concern for activities at the Hanford Site have been identified based on operations and risk-based considerations (Table 1-1). This list includes the common and ubiquitous natural radionuclides such as ^{40}K, and anthropogenic background radionuclides such as ^{137}Cs.

Background data from TLDs are useful for qualitative and semiquantitative surveillance and monitoring, but because they are geometry-specific measurements of energy deposition these data are not comparable to dose equivalent calculations based on isotopic activities. These data cannot, therefore, be effectively used in risk assessment applications, because the dose equivalent calculated from TLD measurements incorporates several assumptions regarding the relative contribution of specific radionuclides.

Inputs to decisions involving the use of background data also include conceptual models. These background conceptual models serve as the technical basis for evaluating adequate quantity and quality of data in terms of representativeness, completeness, comparability, and for understanding the processes and factors that control and influence the distribution of background radiation in the environment. These models focus on the types, sources, spatial distribution, and relative abundances that occur in soil in the vicinity of the Hanford Site, and are integral to evaluations regarding the viability of a Sitewide versus unit-based approach to the characterization of radiological background.

The conceptual models are based on the recognition that radiological background includes natural and anthropogenic components, and that the occurrences and distribution of these two components for soils in the vicinity of the Hanford Site are not the same. The naturally occurring radionuclides in soil at Hanford are distributed throughout the vadose zone in a manner similar to that of inorganic, nonradioactive analytes (DOE-RL 1992). However, the anthropogenic radionuclides in soil should be largely restricted to the top portion of the soil column, with abundances that vary laterally as a function of climate and geography. In this region, the anthropogenic radionuclides largely occur in the upper several centimeters of soil, and have distinctive activity profiles for each isotope. A more complete description of these conceptual models is provided in DOE-RL-94-98 (DOE/RL 1994a).

The DQO considerations identified by EPA to ensure that adequate and appropriate data are obtained to support risk assessment needs address most of the important evaluation criteria. These include the following:

- Data of sufficient quality and quantity to calculate reliable estimates of exposure point concentrations at appropriate locations.

- Data collected at locations and in media to evaluate whether particular media or pathways are or are not significant.

- Detection limits low enough to allow comparison to risk-based action levels.

- Background level data that provide a basis for differentiating contamination at a site from other possible sources, and that can be used as a basis for establishing action levels.

- QA/QC samples and qualifiers needed to screen data for useability in risk assessment.

The main criteria used in the evaluation of the quality and adequacy of the existing data, therefore, included data type, data quantity, accuracy, precision, detectability, and the completeness, comparability, and representativeness of the data in the context of the conceptual models and analytes of concern. Because of the uncertainty concerning data use, the preliminary recommendations from the regulatory agencies for radiological cleanup levels focusing on background and incremental exposure levels above background were also considered in the evaluations.

The existing data compiled and evaluated here are, therefore, limited to radionuclide activities measured from soil samples collected in the field and analyzed in the laboratory. The evaluation addresses both the quality of these data and the adequacy of the data in terms of the criteria described above.

2.2 SCREENING PROCEDURES

The screening process was designed to identify data that clearly represented background compositions and reject all data from samples that could potentially be contaminated. Statistical tests on individual analytes were performed to identify potential outliers, when there were sufficient analyses to identify and define a single statistically valid population. Where data were insufficient for such tests, comparisons between analytes were made on the basis of correlations with previously tested analytes, to establish the acceptability of the data. Where no basis for comparison of an analyte existed, all the data associated with that analyte were rejected in order to maintain a conservative bias.

The data were screened in several steps, each step either accepting or rejecting a portion of the data. The screening process evaluated all of the radionuclides except ^{40}K, which was presumed to be natural at all locations. None of the activities at Hanford have concentrated, produced, or used ^{40}K, therefore it must all be from naturally occurring sources and all these data were included in the final data set. The various steps of the screening process are described below, along with an explanation for their use.

1) Outliers were identified by first fitting the data to lognormal and Weibull distributions. Data that plotted outside the distribution curves or fell outside the 95% confidence bands were considered potential outliers, and were rejected from the data set if they were associated with a known monitoring location or were on the Hanford Site. Outliers that were not associated with an identifiable waste site (e.g., Sunnyside) were accepted as background. These steps were taken to assure internal consistency of the data, and that the data are of a single distribution. Acceptance of all data from the distant sites not associated with a waste site (i.e., background sites) was made on the presumption that these sites were not contaminated.

2) All data from the same sample as that containing an outlier were rejected. This was done to maintain the integrity and conservatism of the data set.

3) To evaluate possible systematic geographic differences or pervasive contamination of Hanford samples, the data were stratified into three subsets: Hanford, perimeter and distant. The Hanford subset lay within the Hanford Site. The perimeter subset lay near the boundary of the Hanford Site (i.e., Pasco Basin), and the distant subset included all other locations (e.g., Yakima, Walla Walla).

4) Those analytes with sufficient data (total sample size > 80) were tested for statistically significant differences between the three subsets using the Wilcoxon Rank Sum (WRS) test at a 5% significance level (DOE/RL 1994b). Data from the Hanford subset were compared with the distant under the null Hypothesis (H_o): "no significant difference between Hanford and distant subsets". Analytes that either failed to reject H_o or showed Hanford to be less than distant were accepted as background along with the perimeter subset for the same analyte. Where the WRS test did reject H_o, the Hanford subset data were rejected.

5) The analytes from Hanford that were rejected by the above test were used to evaluate the perimeter subset. The WRS test was used to compare the perimeter subset against both the Hanford and distant subsets. Acceptance of the perimeter subset as background depended on rejecting H_o against the Hanford subset and accepting H_o against the distant subset. All other combinations of WRS results led to rejection of the perimeter subset. This test was designed to maintain the conservative bias of the data set by assuming that the perimeter samples are contaminated unless it could be positively demonstrated that they are not.

6) Analytes that could not be evaluated by the WRS test (i.e., had ≤ 80 samples) were screened by comparing them to those that were evaluated by WRS, by constructing a correlation matrix. A "weight of evidence" judgement was then made by using the correlation matrix to compare all analytes to the results of the WRS testing. Analytes with few data that correlated well with subsets accepted by the WRS test were accepted as background. Analytes that correlated well with a subset that was rejected by the WRS test, or those for which no determination could be made because of a weak correlation or no correlation, were rejected from the background database. This

step was taken to maintain internal consistency of the data, as well as its conservative bias.

2.3 SCREENING RESULTS

A description of the screening results for the various methods used are described below. These results document the data that failed the screening process and the justification for their exclusion from the background data evaluation.

2.3.1 Outlier Analysis

The screening process identified 32 possible outliers involving 10 radionuclides. These are listed in Table 2-1, along with their location and value. Twenty-eight of the 32 outliers are located on the Hanford Site. Three of the outliers are for ^{40}K in samples taken east of Hanford. The fourth offsite outlier is for ^{60}Co in a sample from the ACI plant in Yakima, which was the site of a radioactive decontamination and waste compaction facility. The only samples from this list of possible outliers that are included in the final background database are those for ^{40}K, for reasons discussed above.

An additional 151 data were rejected because they were in a sample that contained at least one outlier. These data were primarily ^{60}Co, ^{134}Cs, ^{137}Cs, $^{239,240}Pu$, ^{226}Ra, ^{106}Ru and total U.

2.3.2 Statistical Tests

Using the WRS tests to evaluate Hanford data vs. distant data resulted in rejection of Hanford data for ^{238}Pu, ^{90}Sr, and gross beta. Acceptance of Hanford data as well as the perimeter data was made for ^{60}Co, ^{134}Cs, ^{137}Cs, ^{40}K, $^{239,240}Pu$, ^{226}Ra, ^{106}Ru and total U. The results of this phase of the WRS testing are shown in Table 2-2.

The analytes in the perimeter subset that were associated with rejected Hanford data were compared with both the Hanford and distant samples, using the WRS test. Results of these tests are shown in Table 2-3. Gross β could not be evaluated because of a lack of perimeter samples. This test led to the rejection of ^{90}Sr and ^{238}Pu. The results for both of these radionuclides show that the perimeter data are statistically no different than the Hanford data and are significantly larger than the distant samples. The perimeter data for ^{90}Sr and ^{238}Pu were thus rejected as candidates for background.

2.3.3 Weight of Evidence

The weight of evidence comparisons used a correlation matrix, which led to the acceptance of Hanford and perimeter subset data as background for ^{241}Am, ^{154}Eu, ^{155}Eu, ^{234}U, ^{235}U, ^{238}U. The correlation matrix used all existing data, before the screening procedure was applied.

Data for ^{152}Eu, gross-α, total Th, and ^{232}Th were rejected. There was insufficient evidence, either in the form of correlated samples or direct comparisons of distant data vs Hanford data, upon which to base a decision. The decision to reject the data was judged to be the conservative course of action.

2.4 SUMMARY OF SCREENING RESULTS

The initial screening process led to the rejection of 32 samples containing outliers, most of which were collected from the Hanford Site. All data associated with a sample that contained even one outlier were rejected from the Sitewide database (with the exception of ^{40}K). Statistical tests on the remaining data, which compared the Hanford data to the distant and perimeter subsets, resulted in the rejection of 3 analytes for Hanford and perimeter samples: ^{238}Pu, ^{90}Sr, and gross beta. Further evaluation resulted in also rejecting the perimeter subset data for these analytes. Attachment B contains all of the data that passed all of the screening criteria; data that failed the screening process are tabulated in Attachment C.

The samples collected by PNL and DOH from 1987 to 1992 resulted in 3048 data for 29 analytes and 314 samples. After the initial screening for outliers and associated samples, 2970 data remained. The screening based on comparison of the three subsets identified another 868 samples to be rejected from the database. The entire screening processes rejected 946 data, leaving 2107 data in the database, which was used for the calculations presented and discussed in Attachment 3.0. A summary of the results of the data screening process is presented in Table 2-4.

Table 2-1. Outliers Determined in the Data Screening Processes. Site ID, Site name, and Site Type are further identified in Attachment A. X- and Y-coordinates refer to the Washington Coordinate System of 1983.

Analyte	Value	Site ID	Site Name	Site Type	X-Coordinate	Y-Coordinate
K-40	38.2	16PNL	RIVERVIEW-HARRIS	2	598862.3	102674.7
K-40	25.6	35PNL	WASHTUCNA	4	667932.7	161642.5
K-40	24.8	36PNL	CONNELL	4	624888.5	149477.3
Co-60	42	9DOH	ACI PLANT	3	494715.9	141531.1
Sr-90	34	36DOH	S200E	1	574409.7	130801.8
Sr-90	4.3	42DOH	SW BC	1		
Sr-90	8.8	45DOH	WYE	1	584606.1	127841
Sr-90	7.6	4DOH	200ESE	1	576476.4	134288
Sr-90	10.8	7DOH	216-T-4-1	1		
Sr-90	2.7	9PNL	E OF 200 W GATE	1	571251.1	135691.5
Cs-137	17.9	4PNL	200 ENC	1	575189.6	137829.1
Cs-137	16	4PNL	200 ENC	1	575189.6	137829.1
Cs-137	26.1	4PNL	200 ENC	1	575189.6	137829.1
Cs-137	501	8DOH	216-U-10	1		
U-234	4.4	8DOH	216-U-10	1		
Pu-238	0.21	4DOH	200ESE	1	576476.4	134288
U-238	4.12	8DOH	216-U-10	1		
Total U	3.06	21DOH	HGP	1		
Total U	34	52DOH	WASTE	1		
Total U	9.08	8DOH	216-U-10	1		
Pu-239/240	0.0656	4PNL	200 ENC	1	575189.6	137829.1
Pu-239/240	0.4225	6DOH	216-S-10	1		
Pu-239/240	0.07	7DOH	216-T-4-1	1		
Pu-239/240	0.91	8DOH	216-U-10	1		
Pu-239/240	0.656	9PNL	E OF 200 W GATE	1	571251.1	135691.5
Pu-239/240	0.64	9PNL	E OF 200 W GATE	1	571251.1	135691.5
Pu-239/240	0.17	9PNL	E OF 200 W GATE	1	571251.1	135691.5
Pu-239/240	0.286	9PNL	E OF 200 W GATE	1	571251.1	135691.5
Pu-239/240	0.707	9PNL	E OF 200 W GATE	1	571251.1	135691.5
Pu-239/240	0.53	9PNL	E OF 200 W GATE	1	571251.1	135691.5
Gross Beta	47.3	7DOH	216-T-4-1	1		
Gross Beta	330	8DOH	216-U-10	1		

Table 2-2. Comparison of the Hanford and Distant Data Subsets.
WRS test with H_o = No Significant Difference, α = 5%. Approximate ß determined from table A2.a in DOE/RL (1994b).
Pr is the sample-based probability of a Hanford datum being larger than a distant datum (DOE/RL 1994b).

Analyte	# Hanford data	# Distant data	Test statistic	P-value (1)	Result (2)	P_r value	Approx. Power (3,4)
Co-60	130	60	-0.91	0.179	Accept	0.524	N/A
Cs-134	67	44	-1.59	0.055	Accept	0.437	N/A
Cs-137	185	62	0.1	0.455	Accept	0.495	N/A
Eu-154	66	41	0.29	0.384	Accept	0.530	N/A
Eu-155	66	41	0.01	0.492	Accept	0.479	N/A
Gross ß	122	14	2.20	0.013	**Reject**	0.682	0.49
Pu-238	144	51	2.96	0.001	**Reject**	0.638	≥0.88
Pu-239/240	143	52	1.13	0.129	Accept	0.587	N/A
Ra-226	109	31	0.20	0.418	Accept	0.512	N/A
Ru-106	119	47	0.95	0.17	Accept	0.552	N/A
Sr-90	145	53	3.35	0.000	**Reject**	0.671	≥0.81
Total U	87	11	-2.89	0.001	Accept	0.264	N/A

1: P-value = Probability of the test statistic value or smaller (greater, depending on the sign) occurring. If P-value is $\leq \alpha$, then reject H_o. The sign of the test statistic indicates the direction of the test; i.e. positive means the perimeter subset data is on average larger than the data to which it is being compared.

2: Accept = Accept the null hypothesis of no significant difference between the Hanford data subset and the distant data subset.
Reject = Reject the null hypothesis of no significant difference between the Hanford data subset and the distant data subset.

3: N/A = Not Applicable given result of the test, i.e. accept H_o.

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Table 2-3. Comparison of the Perimeter Data Subset to the Hanford and Distant Data Subsets. WRS test with H_o = No Significant Difference, $\alpha = 5\%$. Approximate ß determined from table A2.a in DOE/RL 1994b. Pr is the sample-based probability of a perimeter datum being larger than a Hanford site or distant datum.

Analyte	# Hanford data	# Perimeter data	Test statistic	P-value (1)	Result (2)
Pu-238	144	48	-1.43	0.074	Accept
Sr-90	145	48	-0.87	0.189	Accept
	# Distant data				
Pu-238	51	48	1.67	0.046	Reject
Sr-90	53	48	2.63	0.004	Reject

1: P-value = Probability of the test statistic value or smaller (greater, depending on the sign) occurring. If P-value is $\leq \alpha$, then reject H_o. The sign of the test statistic indicates the direction of the test; i.e. positive means the Perimeter subset data is on average larger than the data to which it is being compared.

2: Accept = Accept the null hypothesis of no significant difference between the perimeter data subset and Hanford or Distant data subset.

Reject = Reject the null hypothesis of no significant difference between the perimeter data subset and Hanford or Distant data subset.

Table 2-4. Summary of Screening Results

Radionuclide	Number of Samples in Database	Number of Samples Accepted
K-40	276	276
Co-60	244	207
Sr-90	256	53
Ru-106	215	194
Sb-125	2	0
Cs-134	159	146
Cs-137	307	253
Eu-154	155	145
Eu-155	155	145
Ra-226	163	163
Th-232	17	3
Total Th	11	1
U-234	70	59
U-235	43	40
Pu-238	247	51
U-238	78	65
Total U	103	74
Pu-239/240	255	214
Am-241	2	1
Gross Alpha	18	3
Gross Beta	148	14

ATTACHMENT 3.0 DATA EVALUATION RESULTS

The data that passed the screening tests described in Attachment 3.0 were evaluated with respect to several aspects of data quality. The results of these evaluations are presented in this section.

3.1 EVALUATION OF DATA QUALITY

Several aspects of data quality need to be considered before valid interpretations based on the data can be made. The comparability, precision, and representativeness must be evaluated to determine the suitability of the data for its intended use, and the quantity and completeness must be sufficient for the valid application of statistical tests. These and other aspects of data quality are discussed below.

3.1.1 Comparability

In order to use the WRS tests to screen the background database, data from the Hanford, perimeter, and distant subsets must share a common distribution. A common distribution for natural constituents in soils from the Pasco Basin has been demonstrated (DOE/RL 1992); soils from the distant sites having similar characteristics would have a similar compositional distribution for natural components.

The concentration of anthropogenic radionuclides deposited from atmospheric fallout is dependent on the amount of both dry and wet precipitation. In order for the data to be comparable for anthropogenic radionuclides, the total amount of dry and wet precipitation should be approximately equal. The table below presents the annual precipitation and approximate dry:wet fallout ratios for several locations included in the background database. Hanford receives less rainfall than the distant locations, but the relatively greater amount of dry precipitation at Hanford brings total fallout approximately equal to the distant locations.

Approximate fallout for various sampling locations in the background database			
Location	Annual precipitation (inches)	Approximate dry:wet precipitation	Approximate annual fallout
Hanford	6.3	3:1	25
Yakima	8.0	2:1	24
Sunnyside	6.9	2.5:1	24
Walla Walla	16.0	1:1	32

These data suggest that contributions to Hanford soil from fallout should not exceed those of the distant sampling locations. Since the WRS test is used as a one sided test (Ho: Hanford ≤ Distant data) then the results from this test are acceptable. That is, the differences in fallout contributions with location should not bias the concentrations in Hanford samples

above those of the surrounding communities. In applying the null hypothesis in this way, radionuclide concentrations on Hanford may vary up to the levels found in the surrounding communities of Southeastern Washington and still be considered as candidates for use as background.

3.1.2 Data Quantity

In general, data quantity requirements are linked to the type I and type II errors allowable by the data user for specific data applications. Because there is not a definitive understanding of the ultimate use of the data, the amount of data required for a valid statistical analysis is difficult to predict at this time. However, an assessment of the number of analyses for each radionuclide was made, and is presented in Table 3-1. This shows that there is an obvious paucity of data for ^{241}Am (1 datum) and ^{232}Th (3 analyses). These radionuclides were therefore excluded from further evaluation. A related assessment of the amount of data above detection levels is described in the following section.

3.1.3 Precision

Data precision can be assessed by the uncertainties associated with the reported values for radionuclides. The uncertainties reported with the data were used to evaluate detection limits by interpreting a value as not detected if its associated uncertainty was greater than or equal to the measured value (i.e., uncertainty $\geq$ 100%). This approach also eliminated the problem of dealing with the detection limits reported by PNL and DOH, as these are generally different for the two sets of data.

Results of this analysis show that data for 7 of the 16 radionuclides in the database have significantly large uncertainties. A large percentage of the data for ^{60}Co, ^{106}Ru, ^{134}Cs, ^{154}Eu, ^{155}Eu, ^{235}U, and ^{238}Pu are dominated by the measurement uncertainties, as shown in Table 3-1.

The reproducibility of the data was also evaluated by comparing the data reported from the two different laboratories. The possibility of systematic bias in accuracy and/or precision between the laboratories was examined by plotting the measured values against the associated uncertainties. Figures 3-1 through 3-4 show these plots for ^{40}K, ^{60}Co, ^{106}Ru, and ^{137}Cs. Several characteristics of the data are indicated:

- The reported precision errors are noticeably different between the two laboratories, with DOH consistently reporting a smaller precision error than PNL.

- The data from DOH is consistently greater than zero while the PNL data includes negative data.

The source of these differences can include:

- Different spectral peak deconvolution algorithms.

- Different instrument background correction algorithms.

- Different uncertainty reporting conventions (e.g., total error vs. instrument error only).

- Different sample preparation methods.

Figures 3-5 and 3-6 provide a more generalized comparison of the laboratory performance. These bar charts plot the average and standard deviation, by laboratory, for each of the analytes in the data set. For those analytes present in the environment well above the detection limits of the respective labs, the two laboratories provide comparable performance (i.e., ^{40}K, ^{226}Ra, ^{234}U, ^{238}U, ^{137}Cs, ^{90}Sr, and $^{239,240}Pu$). For all other analytes, either no comparison is possible, due to lack of data, or the comparability is poor due to the reasons cited above.

3.1.4 Completeness

Little or no data were reported for 9 of the 25 radionuclides of concern listed in Table 1-1. Data are completely missing for ^{99}Tc, , ^{233}U, ^{237}Np, ^{241}Pu and ^{244}Cm. Limited data (< 25) are reported for ^{125}Sb, ^{152}Eu, ^{232}Th, and ^{241}Am, as well as the field screening parameters Total Th, gross-α and gross-ß.

3.1.5 Representativeness

In order for the data set to be considered representative of background conditions, it should adequately characterize the soil in terms of spatial coverage (both horizontal and vertical) and soil types. The existing data are poor in representing both aspects. Geographic representation is adequate, as the sample locations used by PNL and DOH (Figures 1-1 and 1-2) cover the area of interest, even though they are not optimized for the collection of background data.

Samples in the data set are collected from only the upper 2.5 cm at the sampling locations, so deeper portions of the soil profile are not represented. The range of activities that exist naturally in the soil types found at the Hanford Site, for example, are not well represented. Essentially all of the samples have elevated $^{234}U/^{238}U$ ratios, indicating a strong bias toward anthropogenic rather than natural background levels for uranium. The vertical distribution of the anthropogenic radionuclides may be inadequately represented, because some radionuclides reach their highest concentrations below the surface at levels deeper than 2.5 cm (Price 1991).

3.2 DATA DISTRIBUTION AND STATISTICS

In order to use the data for a preliminary assessment of background, it is necessary to demonstrate that the statistical parameters are based on valid assumptions. The following

assesses the distribution of the data, and presents the statistical values associated with the data.

3.2.1 Distribution of Data

Seven radionuclides were selected for initial fitting to distributions on the basis of the large sample size plus minimum number of data affected by the measurement uncertainty. The radionuclides selected were ^{40}K, ^{90}Sr, ^{137}Cs, ^{226}Ra, ^{234}U, ^{238}U, and $^{239,240}Pu$. Distribution plots of some of these analytes are presented in Figures 3-7 through 3-12, and show fits to both lognormal and Weibull distributions. Table 3-2 gives the parameters of the fitted distributions. Negative values in the data set were treated by setting the value equal to the lowest positive datum. The data were still used to establish the ranking of the data, but were not used in the regression fitting routine.

All of the radionuclides examined demonstrated a good quality fit to both lognormal and Weibull distributions, thus confirming that a single distribution concept for the radionuclide data is feasible for the Columbia Basin region, including Hanford.

The distributions can also be used to assess the validity of the conceptual model and the effectiveness of the screening process discussed in Attachment 2.0. Both the natural and anthropogenic radionuclides exhibit the characteristics of a single population, which indicates that the conceptual model has been adequately developed. The effectiveness of the screening process can be demonstrated by considering ^{90}Sr, which showed significant differences between the Hanford and distant data subsets in the WRS test. After filtering the Hanford and perimeter subsets from the data set, ^{90}Sr shows a single population with a high r^2 (0.99+). This provides confirmation that the screening process is effective.

3.2.2 Summary Statistics

After demonstrating that the screened data conform to a single distribution and can be described as a single population, some summary statistics were computed for each of the analytes for which sufficient data were available. These are presented in Table 3-3. Threshold values computed from the lognormal and Weibull distributions of the screened data are in Table 3-4.

3.3 DATA USE ISSUES

The adequacy of the existing data depends on the way the data are to be used and the type and quality of data required for those uses. The adequacy of the data for risk assessment applications and field use are described in this section.

3.3.1 Risk Assessment Applications

The adequacy of these data for risk assessment applications was evaluated to determine the extent to which the data provide useful information. This aspect of the evaluation

addressed the significance of the reported data with regard to the magnitude of reported activities and the levels of detection needed for risk assessment applications. The constituents of concern that were not analyzed for in the existing data set were also evaluated with respect to their potential contribution to risk. A hazard identification screening approach was employed to provide a basis for evaluating the significance of these data and related data quality issues by comparing the relative contribution of the various radionuclides to calculated dose and risk.

The methods used to calculate dose equivalent and risk from isotopic activities require information and assumptions concerning pathways, potential biological damage (i.e., quality factors), and other aspects of exposures for each radionuclide. For the purpose of this evaluation, the maximum reported values for the background data were used to estimate dose equivalents and risk levels. The estimated dose levels were derived from the dose equivalent (in mrem/yr) per μCi ratios for selected radionuclides under evaluation by DOH. These are based on the model by Till and Moore (1988) for external exposure, and exposure factors calculated using the GENII computer code. Attenuation properties of concrete with a density of 1.5 g/cm^3 were used to represent the soil layer. The risk levels were estimated by the method described in Table 3-5.

It is indicated from these calculations that 8 of the radionuclides (^{40}K, ^{60}Co, ^{134}Cs, ^{137}Cs, ^{154}Eu, ^{226}Ra, ^{232}Th, and ^{238}U) have maximum values that exceed risk levels of 10^{-6}. Five of these (^{40}K, ^{60}Co, ^{137}Cs, ^{226}Ra, and ^{232}Th) account for nearly all of the calculated dose and risk attributable to the 16 radionuclides for which data are reported. The magnitude of the terrestrial background dose is approximately 75 mrem/yr to 220 mrem/yr, which corresponds to baseline risk levels of approximately 10^{-4} to 10^{-3} for the average and maximum background activities, respectively (see Table 3-5). Four of the measured radionuclides (^{40}K, ^{60}Co, ^{137}Cs, and ^{232}Th) account for about 99% of the calculated terrestrial dose (37%, 32%, 22%, and 7%, respectively). Based on these calculations, ^{40}K, ^{60}Co, ^{137}Cs, ^{226}Ra, and ^{232}Th comprise 99% of the total risk calculated for the 16 measured radionuclides (31%, 35%, 16%, 10%, and 8% respectively). These calculations exclude exposure to radon flux emanations from the soil, which on the average, contributes another 200 mrem to the annual dose from background (NCRP 1987). It is notable that both anthropogenic and naturally occurring radionuclides contribute significantly to radiological background for soils in this region, at levels as much as 4 times the average terrestrial dose.

The significance of the contributions of radionuclides such as ^{60}Co and ^{232}Th to terrestrial radiation background is equivocal on the basis of these data, because of their large uncertainties and/or poorly defined distributions. The contributions of ^{60}Co, for example, could be over a third of the background risk and dose, or less than 1%. This is because the largest activity levels for ^{60}Co are over 1000 times larger than the average levels, which are below the detection limit. The significance of components such as ^{232}Th are also uncertain because there are so few data. The activity distributions for all of the key radioisotopes must, therefore, be adequately characterized in order to accurately quantify the levels of dose and risk that can be attributed to soil background.

Although the significance of radionuclides missing from the data set cannot be evaluated, their contribution to the total background dose or baseline risk is not expected to be significant (with the probable exception of radon), based on the relative abundances of the radionuclides expected in fallout.

One of the potentially most important omissions from the existing data set is data for radon flux. Inhalation of gaseous radon from the decay of uranium and thorium and their decay products is the single largest component of background radiation dose to humans, comprising about 55% of total average dose, or about 200 mrem (NCRP 1987). Radon is commonly omitted from the characterization activities, or inadequately accounted for because its effects are presumed to be included with uranium, thorium, and/or radium as a calculable daughter, or when radon exposure or inhalation pathways are excluded from the assessment of baseline risk for other reasons. However, background for radon differs from that for other radionuclides because the levels of radon background are derived not only from the uranium and thorium in the immediate vicinity, but also from the migration and accumulation of radon gas upward through the soil from deeper levels. Thus, the background levels of radon are most appropriately measured in the field as the intrinsic flux at a given location. Data on the radon flux levels can then be used in evaluating the radon contribution to baseline risk for various exposure scenarios. The omission of radon flux measurements from background characterization is, therefore, a primary concern because radon flux is likely to differ from location to location as part of a natural sitewide distribution, and also because radon contribution to background radiation cannot be ignored if incremental dose levels above background are used as cleanup levels. The exclusion of background radon in risk assessment activities could even lead to counterproductive cleanup activities, e.g., in cases where the dose and/or risk from "clean" backfill could exceed that of contaminated soil removed from a site.

New data collected for the purpose of characterizing background are not expected to significantly change the relative contributions to dose and risk of the analytes discussed above. However, the uncertainties associated with some these radionuclides may significantly affect the overall magnitude of the background dose and risk. Based on the conceptual models and previous studies (e.g., Price, 1991), the activity levels of some key anthropogenic radionuclides in the soil are expected to be greater at depths below the upper inch, but probably not by more than a factor of 2. Similarly, the activities of the naturally occurring radionuclides are not likely to differ dramatically from the levels reported here. Calculated background dose or risk could, therefore, be of about the same magnitude as the cumulative uncertainties in these data resulting from poor precision and limited sampling. Based on these estimates, the levels of dose and risk calculated from these data could be underestimated by as much as 100%. One of the most important concerns regarding the adequacy of these data for use in environmental activities at the Hanford Site may, therefore, involve the lack of completeness in characterizing the range of key isotopic activities that exist within the unsaturated zone soils.

3.3.2 Field Use

The existing data cannot practically be used as radiological background for field measurements of soil because of differences in data types and comparability. Radionuclide data obtained from laboratory measurements on 2 g to 1000 g samples are not directly comparable to field measurements of radionuclide activities that represent effective volumes on the order of cubic meters, and which also depend on instrument geometry. The sample-to-sample variance of the data obtained from small samples at a given site can also be much greater than that obtained from most field measurements at the site. There is presently no information available to scale the variance to larger sample sizes or to correlate the two types of data. Use of field instrumentation will require the collection either of direct background measurements on the appropriate scale, or the development of scaling information for comparison of the two data types.

Radionuclide activity data is also not directly comparable to absorbed dose measurements (e.g., TLD data) for the reasons discussed in Attachment 2.0.

3.4 SUMMARY

Interpretations regarding the adequacy of the existing data fall into two categories: (1) the overall quality of the data, and (2) the adequacy of data from the upper 2.5 cm of soil to represent radiological background for the Hanford Site.

The quality of the radiological background data appears to be sufficient to reasonably represent the radionuclide activities in the upper 2.5 cm for 8 of the 25 analytes listed in Table 1-1. The main finding of the evaluation of this data in the context of DQO parameters include the following:

<u>Data Type, Quantity, Detectability, and Completeness:</u>

- The existing data provide activity measurements for 16 radionuclides, gross α, and gross β, from laboratory analyses of samples collected from 70 sampling locations within the region.

- The data for 7 of the 16 reported radionuclides (^{40}K, ^{90}Sr, ^{137}Cs, ^{226}Ra, ^{234}U, ^{238}U, and $^{239/240}Pu$) appear to be adequate in terms of data quantity, precision, and detectability.

- Little or no data were reported for 9 of the potential radionuclides of concern listed in Table 1-1 (^{99}Tc, ^{125}Sb, ^{152}Eu, ^{232}Th, ^{233}U, ^{237}Np, ^{241}Am, ^{241}Pu, and ^{244}Cm).

- Insufficient data are available for evaluation of 2 radionuclides (^{241}Am, ^{232}Th).

Precision and Accuracy:

- Less than 25% of the data for 6 radionuclides (^{60}Co, ^{106}Ru, ^{134}Cs, ^{154}Eu, ^{235}U, ^{238}Pu) are above detection levels.

- Interlaboratory variability is negligible for the 7 radionuclides that have adequate data quality, but the variability is as great as two orders of magnitude for other analytes (e.g., ^{60}Co, ^{238}Pu).

Significance of Reported Background Levels:

- Eight of the radionuclides considered here (^{40}K, ^{60}Co, ^{134}Cs, ^{137}Cs, ^{154}Eu, ^{226}Ra, ^{232}Th, ^{238}U) have maximum naturally occurring concentrations that contribute significantly to baseline risk (i.e., risk levels $> 10^{-6}$).

- Only 3 of the radionuclides that contribute significantly to baseline risk have adequate data quality and/or quantity (^{40}K, ^{137}Cs, ^{226}Ra).

- The contribution to risk from the radionuclides that are unreported or are represented by only a few analyses is unknown.

- The actual contribution to risk is poorly known for those radionuclides that have detection limits which exceed activity levels corresponding to significant risk levels (e.g., ^{60}Co, ^{154}Eu, ^{152}Eu).

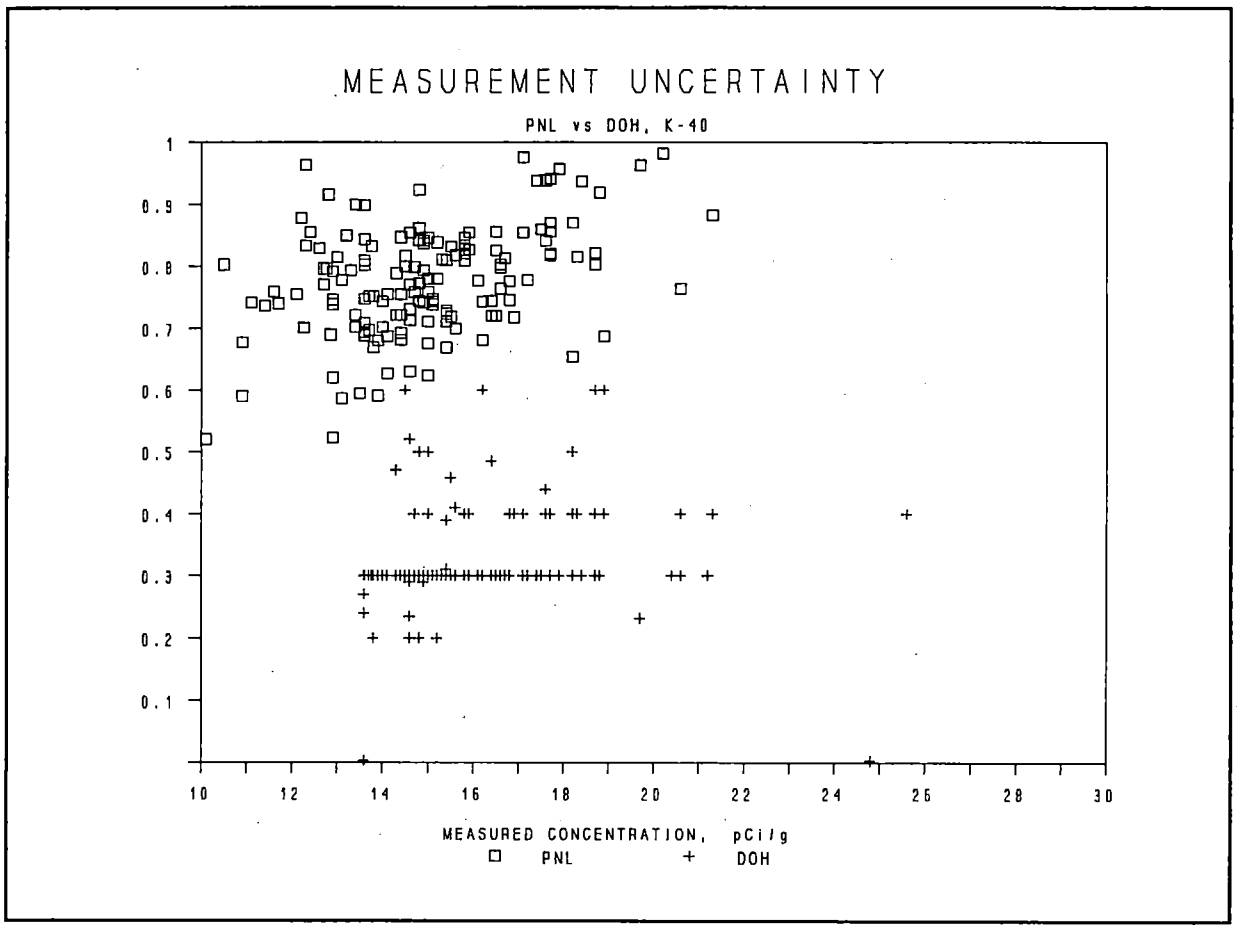

Figure 3-1. Interlaboratory Comparison of Data.
Plot of value vs. uncertainty for screened ^{40}K data.

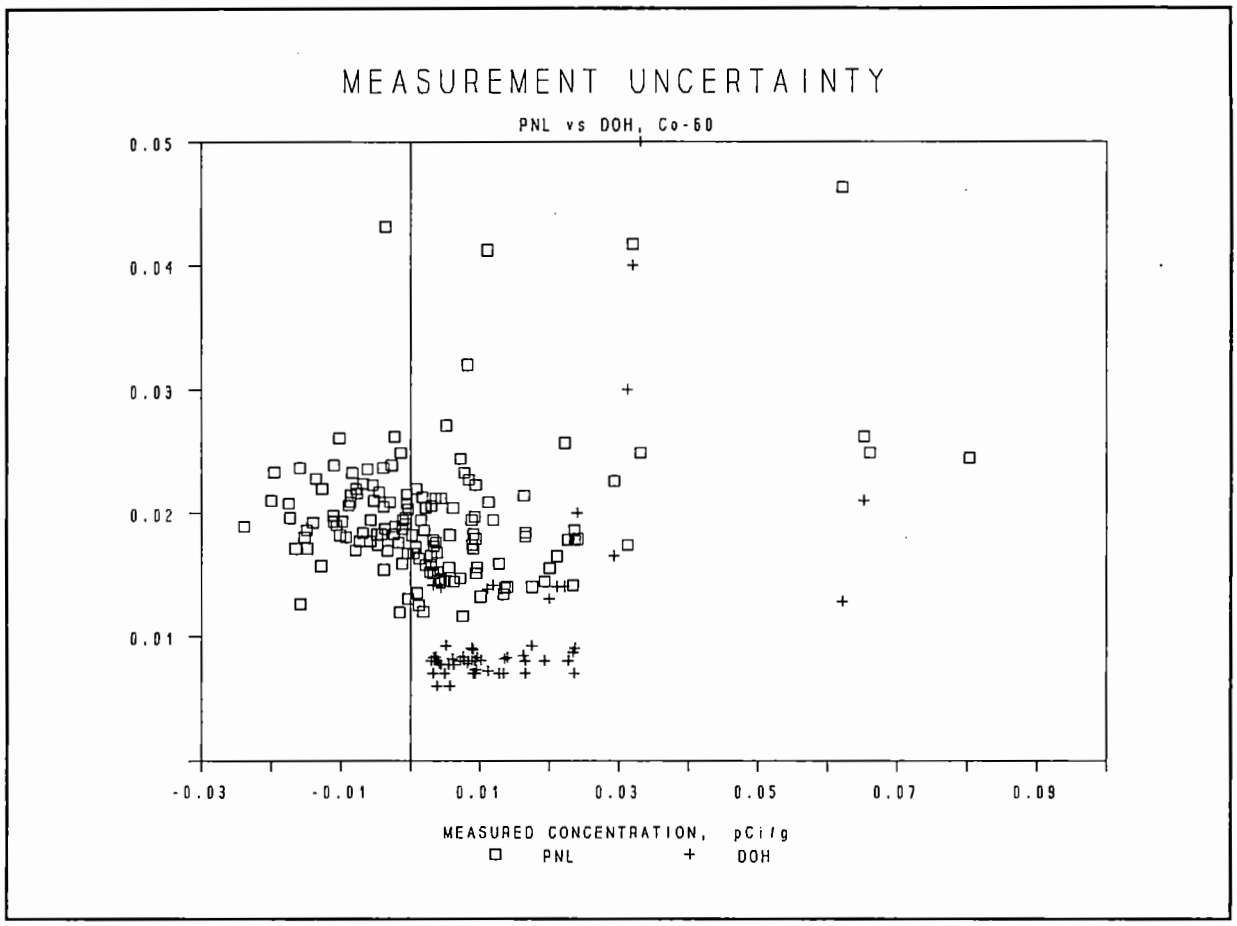

Figure 3-2. Interlaboratory Comparison of Data.
Plot of value vs. uncertainty for screened ^{60}Co data.

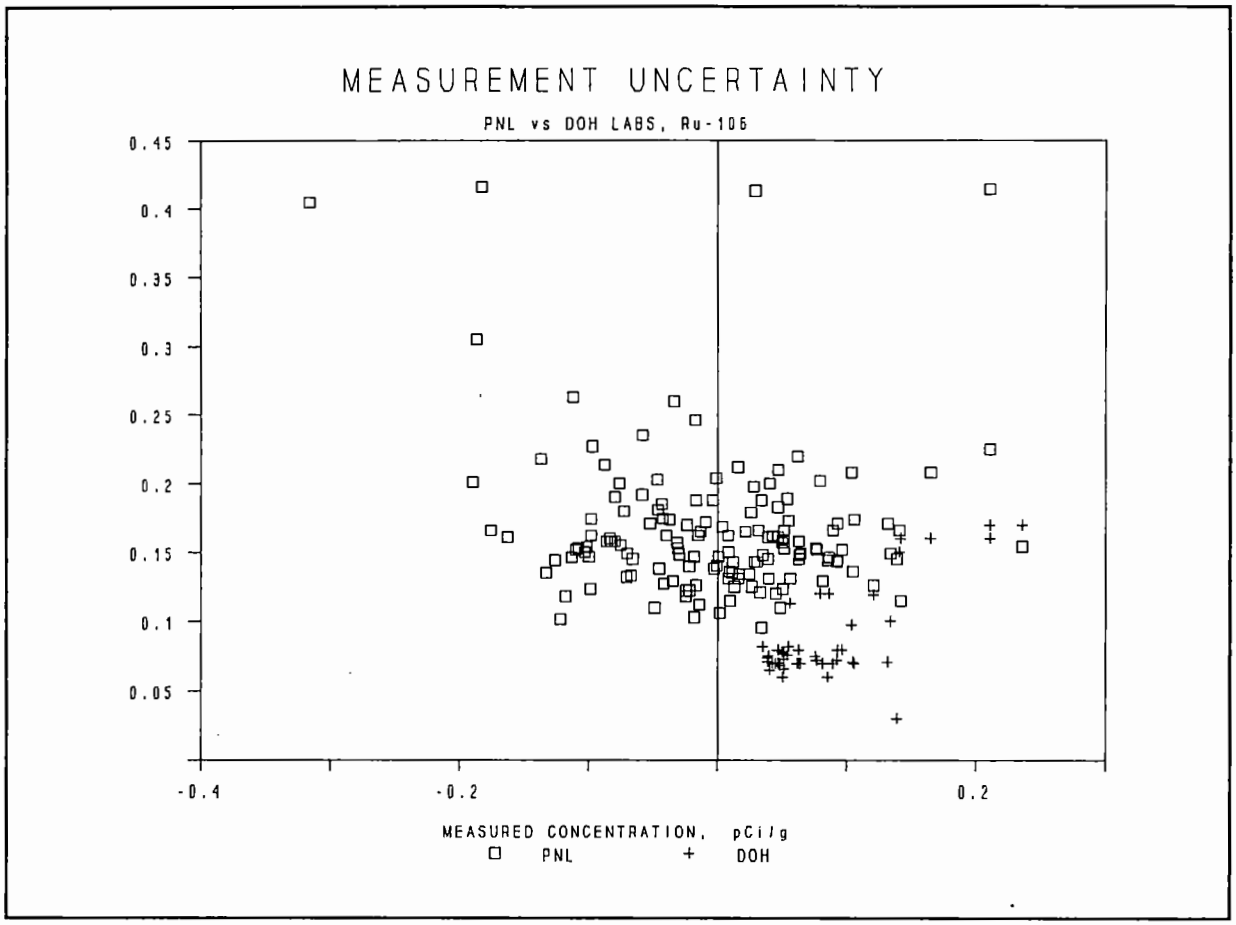

Figure 3-3. Interlaboratory Comparison of Data.
Plot of value vs. uncertainty for screened ^{106}Ru data.

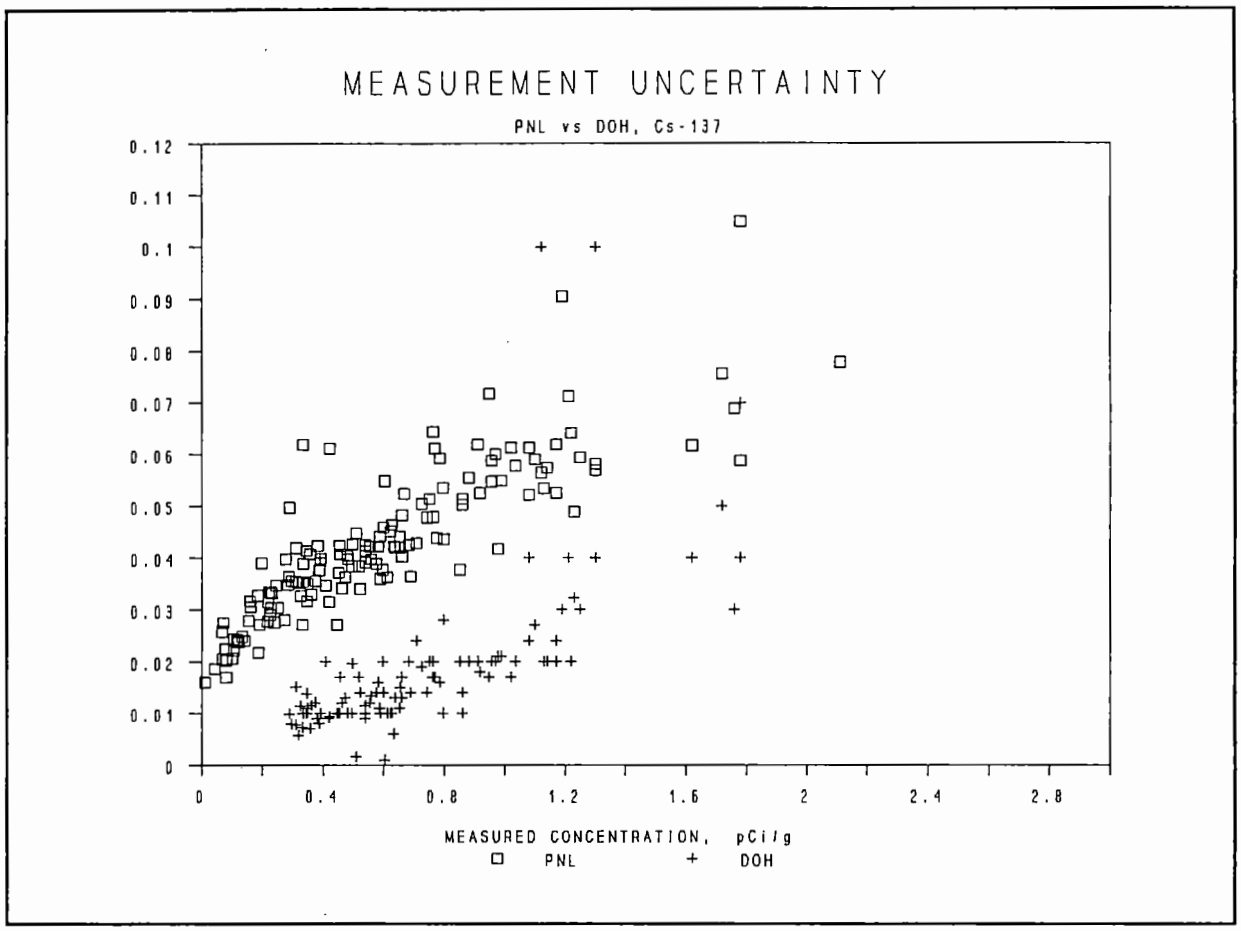

Figure 3-4. Interlaboratory Comparison of Data.
Plot of value vs. uncertainty for screened ^{137}Cs data.

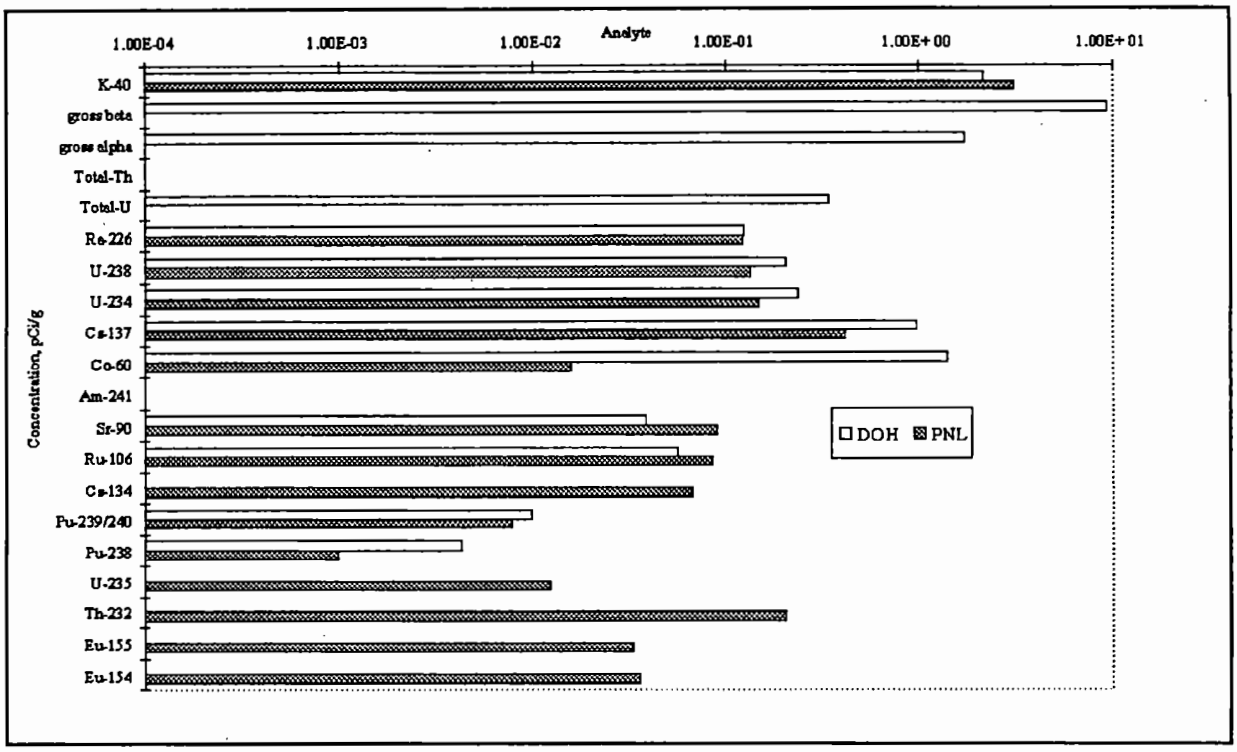

Figure3-5. Comparison of means between PNL and DOH analyses.

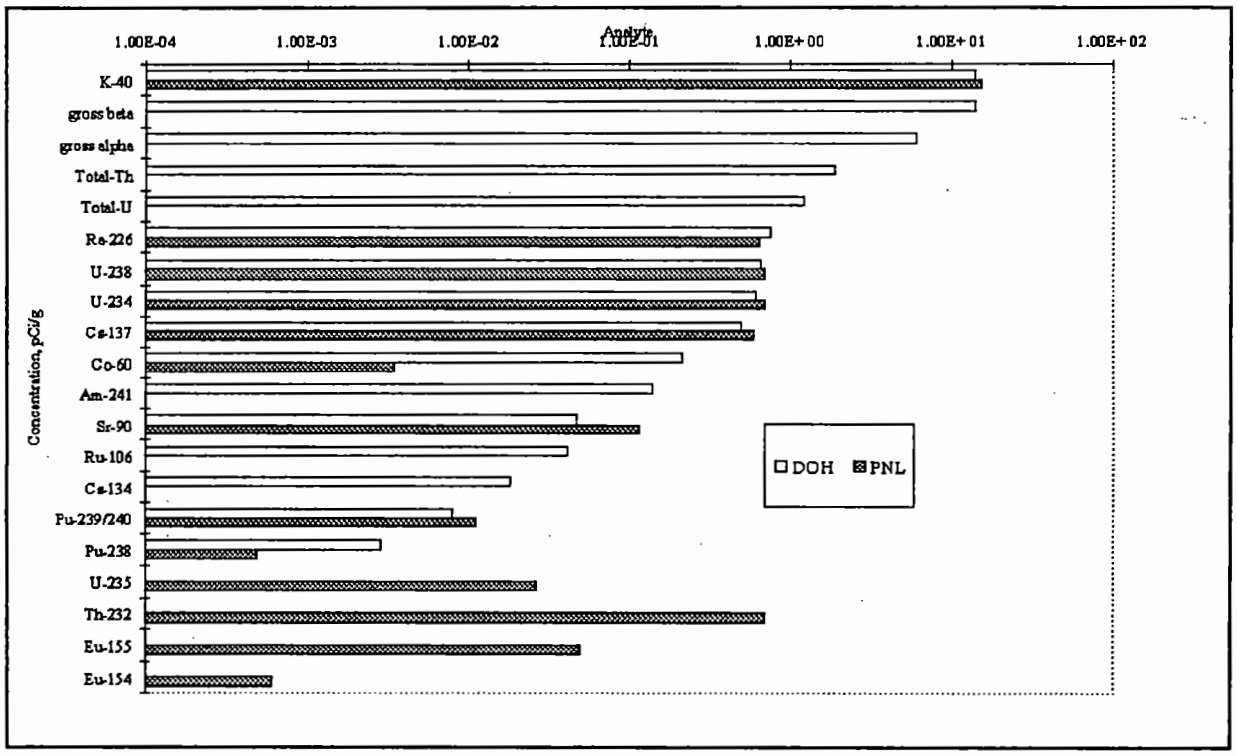

Figure 3-6. Comparison of standard deviations between PNL and DOH analyses.

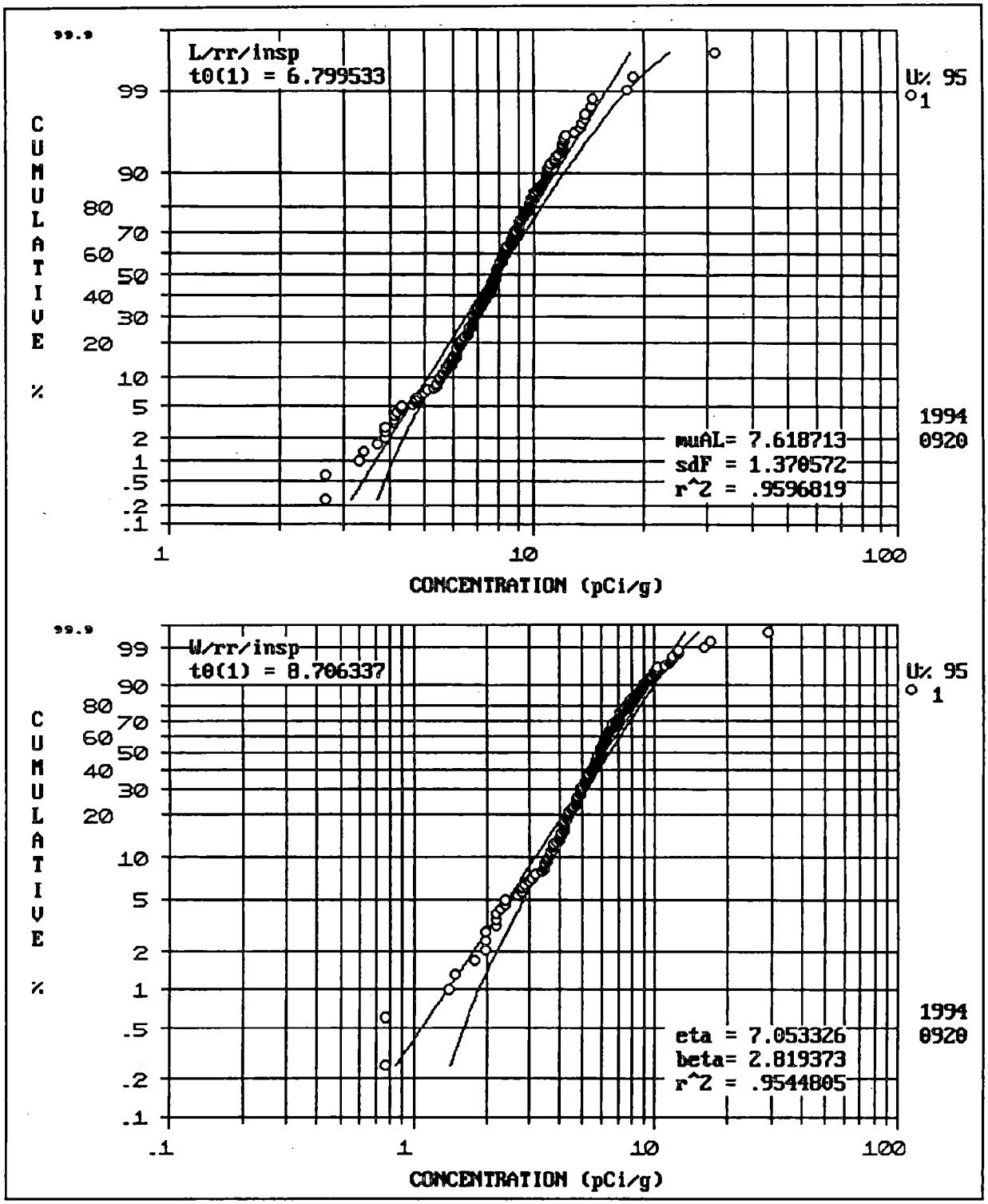

Figure3-7. Lognormal (top) and Weibull (bottom) Distributions for ^{40}K, from the Sitewide Background Data.

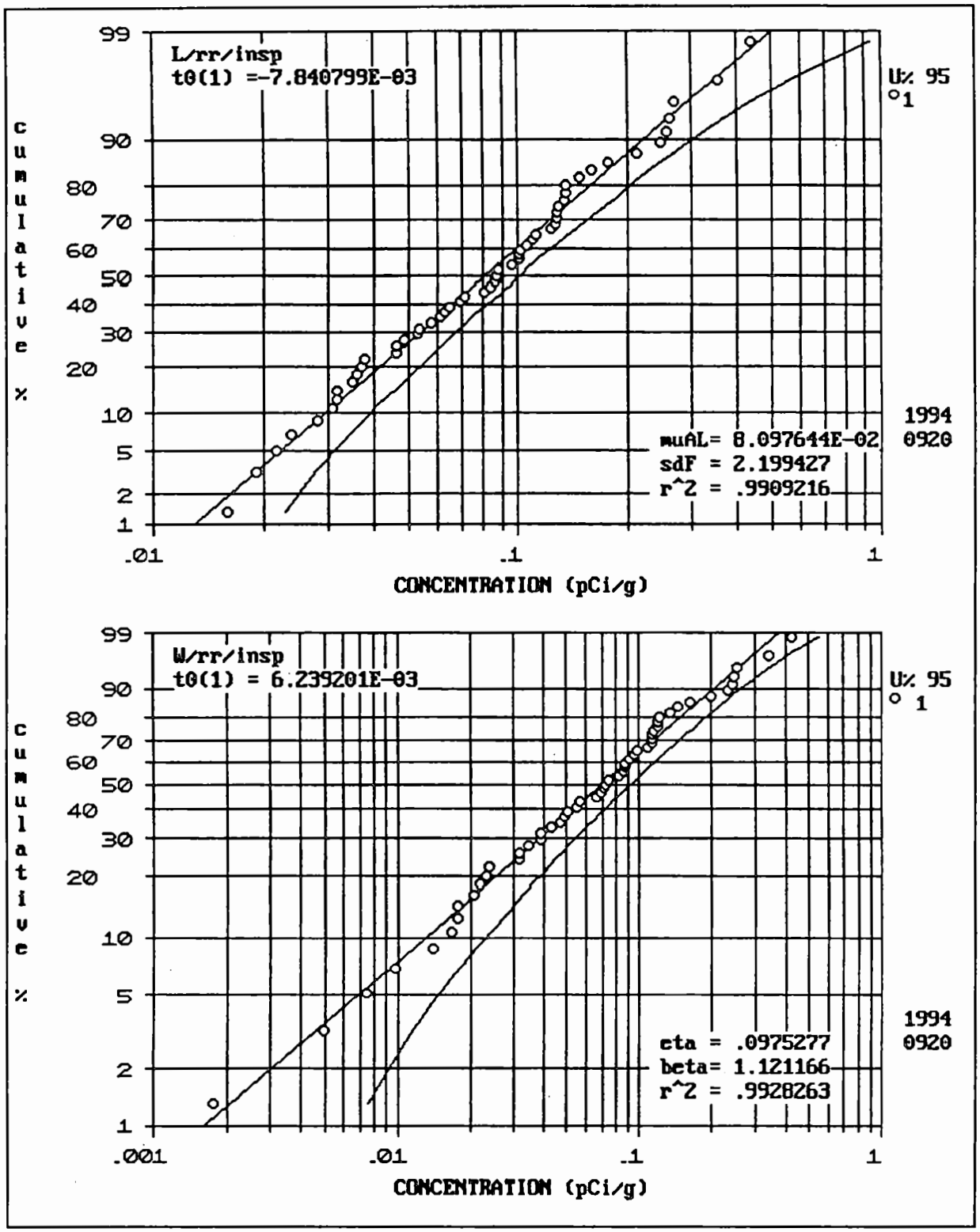

Figure 3-8. Lognormal (top) and Weibull (bottom) Distributions for ^{90}Sr, from the Sitewide Background Data.

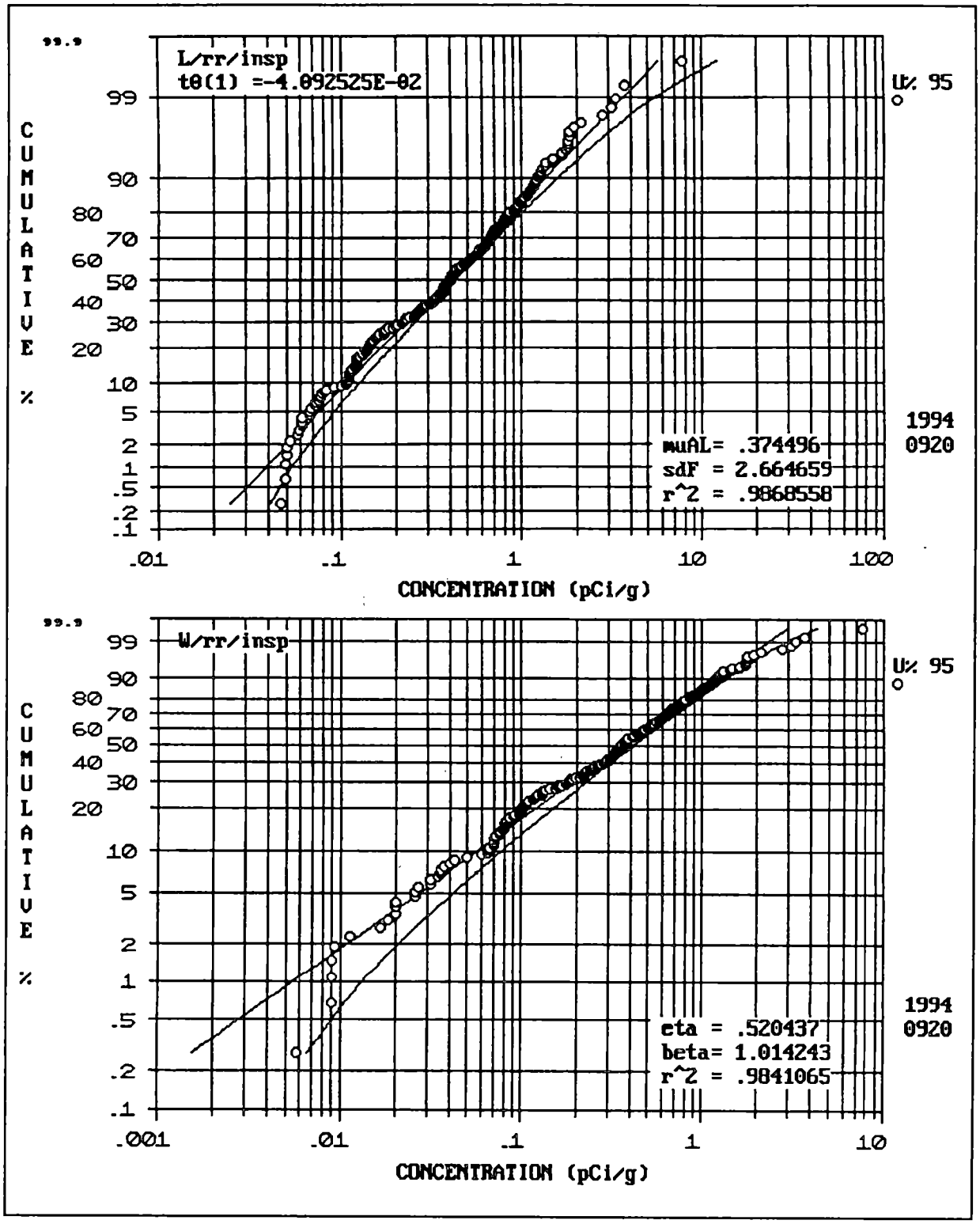

Figure 3-9. Lognormal (top) and Weibull (bottom) Distributions for ^{137}Cs, from the Sitewide Background Data.

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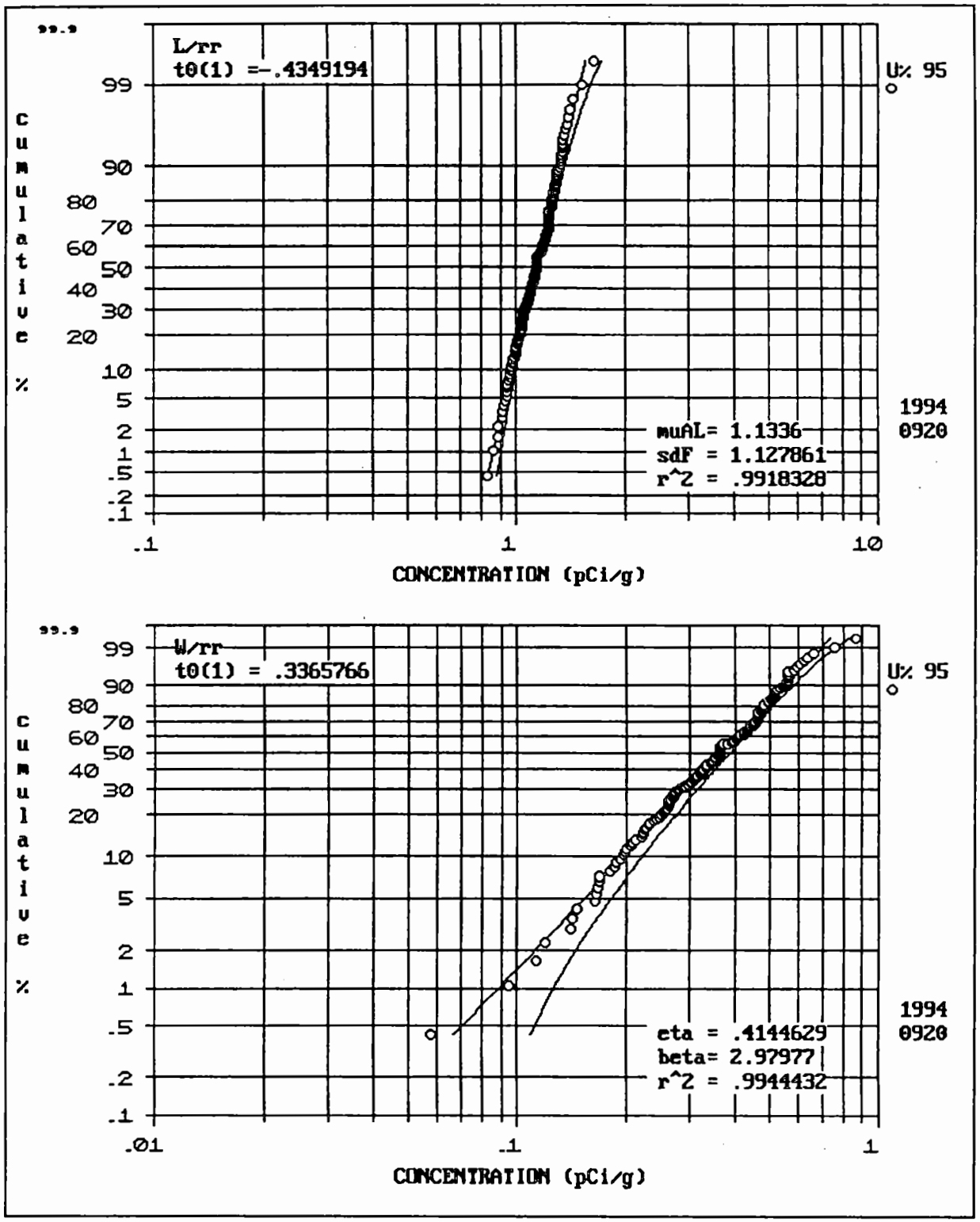

Figure 3-10. Lognormal (top) and Weibull (bottom) Distributions for ^{226}Ra, from the Sitewide Background Data.

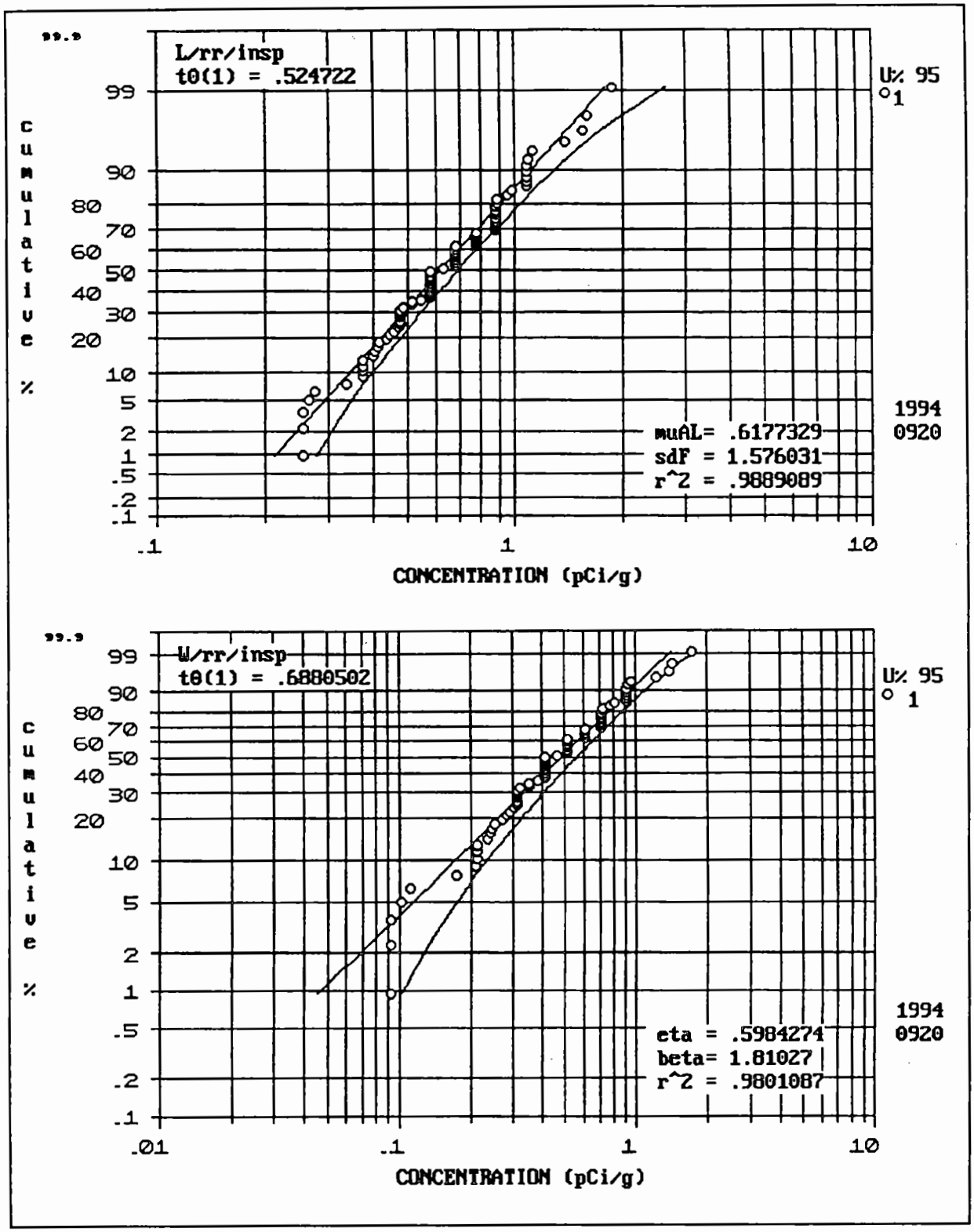

Figure3-11. Lognormal (top) and Weibull (bottom) Distributions for Total U, from the Sitewide Background Data.

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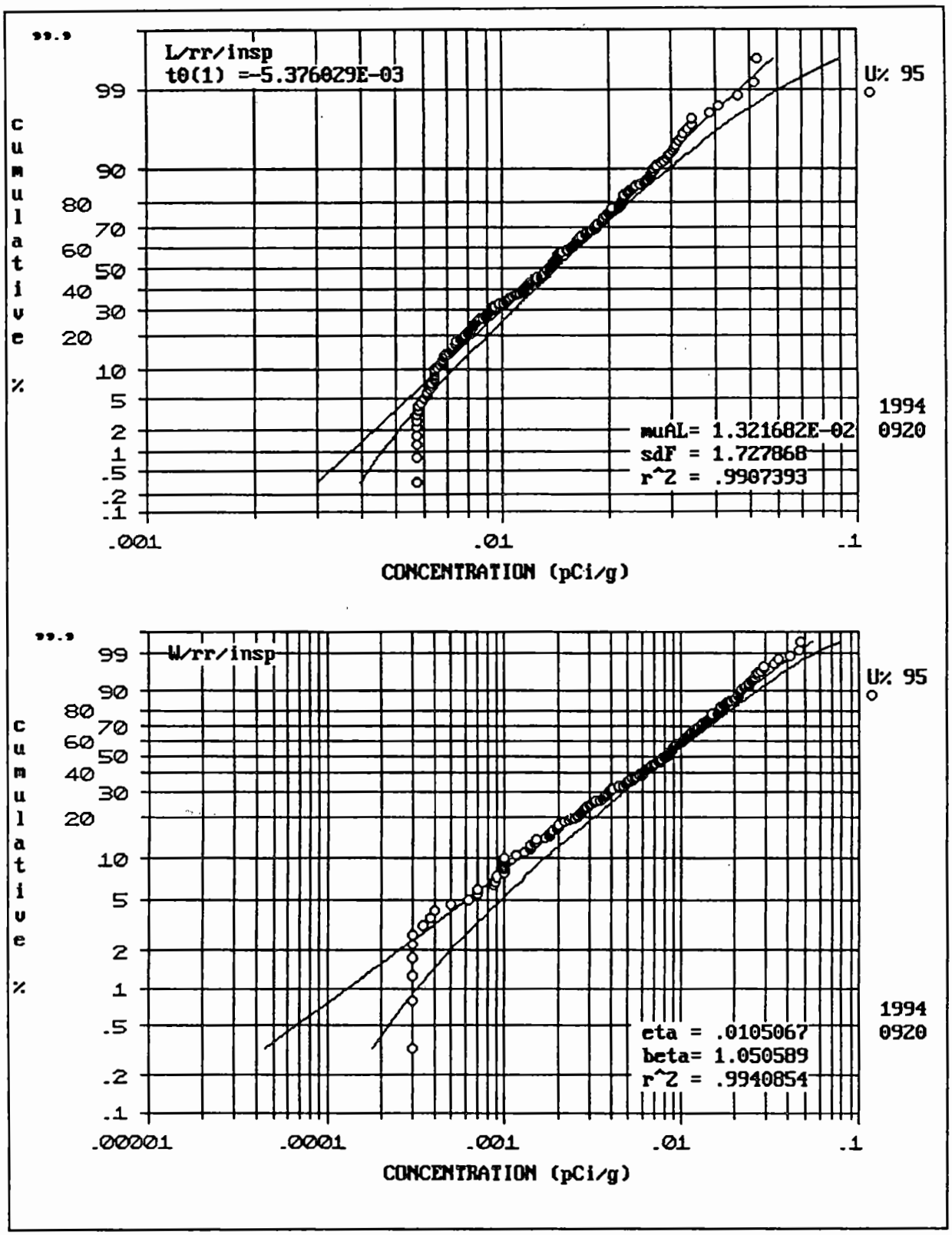

Figure 3-12. Lognormal (top) and Weibull (bottom) Distributions for $^{239,240}Pu$, from the Sitewide Background Data.

Table 3-1. Summary of Number of Screened Samples in Existing Radionuclide Data Set.

	Total Number of Samples = 298				**Numbers of Samples by Location**		
Radionuclide	Total # of Samples	% Complete	Below Detection	%Below Detection	Hanford	Perimeter	Distant
K-40	276	92.6%	0	0.0%	169	48	59
Co-60	207	69.5%	174	84.1%	108	48	51
Sr-90	53	17.8%	0	0.0%	0	0	53
Ru-106	194	65.1%	183	94.3%	99	48	47
Cs-134	146	49.0%	117	80.1%	57	48	41
Cs-137	253	84.9%	8	3.2%	150	48	55
Eu-154	145	48.7%	133	91.7%	56	48	41
Eu-155	145	48.7%	79	54.5%	56	48	41
Ra-226	163	54.7%	0	0.0%	109	23	31
Th-232	3	1.0%	0	0.0%	0	0	3
Total Th	1	0.3%	0	0.0%	0	0	1
U-234	59	19.8%	0	0.0%	28	13	18
U-235	40	13.4%	39	97.5%	15	13	12
Pu-238	51	17.1%	44	86.3%	0	0	51
U-238	65	21.8%	0	0.0%	33	13	19
Total U	74	24.8%	1	1.4%	63	0	11
Pu-239/24	214	71.8%	44	20.6%	119	43	52
Am-241	1	0.3%	0	0.0%	1	0	0
Gross Alpha	3	1.0%	0	0.0%	0	0	3
Gross Beta	14	4.7%	4	28.6%	0	0	14

Table 3-2. Parameters for Fitted Distributions.

		LOGNORMAL				WEIBULL			
ANALYTE	N	t_o	mean (log data)	st.dev. (log data)	R^2	t_o	eta	beta	r^2
		(pCi/g)	(pCi/g)	(pCi/g)		(pCi/g)	(pCi/g)	(pCi/g)	
K-40	276	6.80	2.03	0.315	0.96	8.71	7.05	2.82	0.954
Sr-90	53	-0.0078	-2.51	0.788	0.991	0.0062	0.098	1.12	0.993
Cs-137	253	0.041	-0.982	0.980	0.987	0	0.52	1.01	0.984
Ra-226	163	-0.435	0.125	0.120	0.992	0.337	0.414	2.98	0.994
U-234	59	0.126	-0.670	0.349	0.994	0.342	0.368	1.83	0.993
U-238	65	0.242	-0.896	0.374	0.995	0.373	0.343	2.09	0.985
Total U	74	0.525	-0.482	0.455	0.989	0.688	0.598	1.81	0.98
Pu-239/240	214	-0.0054	-4.32	0.547	0.991	0	0.0105	1.05	0.994

Table 3-3. Statistical Summary of Screened Data. Note the number of data below detection limit for some analytes. All data in pCi/g.

Analyte	N	Mean	Variance	Minimum	25%	50%	75%	Maximum	Below Detection
K-40	276	14.8	7.85	0.159	13.4	14.6	15.9	38.2	0
Co-60	207	0.0666	0.600	-0.236	-3.65e-03	1.95e-03	9.29e-03	11	174
Sr-90	53	0.0997	7.58e-03	8.00e-03	0.0383	0.0789	0.1208	0.432	0
Ru-106	194	8.43e-03	6.59e-03	-0.316	-0.03538	0.0117	0.05125	0.236	183
Cs-134	146	-0.0303	4.48e-03	-0.275	-0.06357	-0.012	6.11e-03	0.0848	117
Cs-137	253	0.549	0.506	-0.0017	0.122	0.36	0.709	7.65	8
Eu-154	145	6.00e-04	1.28e-03	-0.0907	-0.02515	2.61e-03	0.0219	0.0978	133
Eu-155	145	0.0497	1.12e-03	-0.036	0.0299	0.0473	0.0672	0.163	79
Ra-226	163	0.707	0.0187	0.394	0.601	0.7	0.8	1.2	0
Th-232	3	0.687	0.0429	0.479	0.584	0.689	0.791	0.893	0
Total Th	1	1.9	NA	1.9	1.9	1.9	1.9	1.9	0
U-234	59	0.6688	0.0344	0.390	0.5165	0.632	0.7725	1.18	0
U-235	40	0.02634	1.52e-04	-4.15e-03	0.0184	0.02365	0.03572	0.0552	39
U-238	65	0.6784	0.0274	0.406	0.56	0.658	0.764	1.23	0
Total U	74	1.207	0.120	0.103	1	1.125	1.4	2.41	1
Pu-238	51	9.00e-04	4.57e-06	-5.00e-04	1.14e-04	2.83e-04	5.98e-04	0.013	44
Am-241	1	0.14	NA	0.140	0.14	0.14	0.14	0.14	0
Pu-239/240	214	9.99e-03	7.59e-05	-5.00e-03	3.09e-03	8.35e-03	0.0143	0.047	44
Gross Alpha	3	6	3	5	5	5	6.5	8	0
Gross Beta	14	13.89	87.5	0.0180	4.016	18.5	19.3	26	4

Table 3-4. Confidence Intervals and Upper Confidence Levels for All Samples.
All data in pCi/g.

	WEIBULL						
ANALYTE	50%	80%	80% UCL	90%	90% UCL	95%	95% UCL
K-40	14.91	17.11	17.41	18.21	18.61	19.11	19.71
Sr-90	0.08	0.16	0.20	0.22	0.28	0.27	0.36
Cs-137	0.36	0.83	0.94	1.18	1.35	1.54	1.78
Ra-226	0.71	0.83	0.85	0.89	0.92	0.94	0.98
U-234	0.642	0.822	0.892	0.922	1.022	1.012	1.122
U-238	0.663	0.803	0.863	0.883	0.953	0.953	1.043
Total U	1.18	1.48	1.57	1.64	1.78	1.79	1.97
Pu-239/240	0.0074	0.017	0.019	0.023	0.027	0.03	0.035
	LOGNORMAL						
	50%	80%	80% UCL	90%	90% UCL	95%	95% UCL
K-40	14.4	16.7	17.2	18.2	18.9	19.6	20.5
Sr-90	0.072	0.152	0.202	0.212	0.302	0.292	0.432
Cs-137	0.33	0.82	0.96	1.28	1.53	1.84	2.3
Ra-226	0.70	0.83	0.85	0.89	0.93	0.95	1
U-234	0.636	0.816	0.896	0.926	1.036	1.036	1.206
U-238	0.652	0.802	0.872	0.902	1.002	0.992	1.142
Total U	1.14	1.43	1.55	1.64	1.81	1.82	2.11
Pu-239/240	0.0184	0.0264	0.0284	0.0324	0.0354	0.3254	0.0424

Table 3-5. Comparison of Existing Sitewide Background Data Set to Risk-Based Screening Levels from HSBRAM (DOE/RL 1991). Concentrations in pCi/g.

Analyte	Sample Average*	Maximum *	95%UCL (Weibull)	Concentration to Reach 10^{-4} Risk	Risk from 75% Sample Background Concentrations	Risk from Maximum Background Concentrations	Risk from 95% UCL (Weibull) Background Concentrations,
K-40	15	38.2	19.7	7.71	1.95e-04	4.97e-04	2.56e-04
Co-60	0.067	11		1.95	3.44e-06	5.64e-04	
Sr-90	0.10	0.432	0.36	3790	3.58e-09	1.55e-08	1.29e-08
Ru-106	8.4e-03	0.236		128	6.55e-09	1.84e-07	
Cs-134	-3e-03	0.0848		8.09	-3.72e-08	1.05e-06	
Cs-137	0.55	7.65	1.78	2.88	1.91e-05	2.65e-04	6.18e-05
Eu-154	6e-04	0.0978		2.65	2.26e-08	3.69e-06	
Eu-155	0.05	0.163		301	1.67e-08	5.43e-08	
Ra-226	0.71	1.2	0.98	0.707	1.00e-04	1.69e-04	1.38e-04
Th-232	0.69	0.893		0.724	9.52e-05	1.23e-04	
U-234	0.67	1.18	1.122	326	2.06e-07	3.62e-07	3.44e-07
U-235	0.026	0.0552		16.5	1.57e-07	3.34e-07	
U-238	0.68	1.23	1.043	68.3	9.93e-07	1.80e-06	1.52e-06
Pu-238	9e-04	0.013		156	5.78e-10	8.35e-09	
Pu-239/240	0.01	0.04	0.035	139	7.18e-09	2.87e-08	2.51e-08
Am-241	0.14	0.14		131	1.07e-07	1.07e-07	
Total Risk					4.14e-04	1.63e-03	4.56e-04
* = All data from initially screened data set; see Table 3-1 for % of data below detection limit							

The thresholds computed for the screened data were compared to risk levels for the individual radionuclides. The risk levels used are modified from the screening levels described in Section 2.1 in Revision 2 of the Hanford Site Baseline Risk Assessment Methodology (HSBRAM; DOE/RL 1991). Modifications to the HSBRAM calculations included the incorporation of an inhalation pathway, and using a time integral over the exposure period where direct ingestion of trace amounts of soil the first 6 years are at a higher rate than the last 24 years.

ATTACHMENT 4.0 CONCLUSIONS AND RECOMMENDATIONS

Radiological activity data were evaluated to determine their adequacy to represent background for environmental applications at the Hanford Site. These data were collected and reported by PNL and DOH on samples collected from over 70 localities throughout the region. The extent to which the soil samples are representative of those in the vicinity of the Hanford Site is unknown, because they were obtained from only the upper 2.5 cm of the vadose zone. However, data from several of the best-measured radionuclides describe a single population for each isotope (see Figures 3-7 through 3-12). This indicates that the Sitewide approach of characterizing the distribution of both naturally occurring and anthropogenic background components may be viable.

The existing data provide valuable information on the magnitude of radiological background for soils in the region, but are not of appropriate quality to comprehensively evaluate background conditions. Data for only 16 of the 25 radionuclides of concern listed in Table 1-1 are included in the data set. Of these, the data for 7 radionuclides have adequate quality for the measurement process. Most of the data quality deficiencies are due to a lack of data for 11 of the radionuclides of concern, and inadequate precision and detection levels for 6 of the radionuclides analyzed. Not all of these deficiencies may be significant for risk assessment applications, however, because only 5 of the 16 radionuclides measured contribute significantly to background dose and baseline risk (^{40}K, ^{60}Co, ^{137}Cs, ^{226}Ra, and ^{232}Th). These five include both natural and anthropogenic radionuclides whose maximum values collectively account for over 200 mrem of the terrestrial background dose. These radionuclides individually contribute to baseline risk at levels over 10^{-4}. Total risk from the maximum values of these 5 radionuclides is in excess of 10^{-3}. Although is not yet clear precisely how radiological data on soil will be used at the Hanford Site, risk assessment applications will require data on isotopic activity data.

The most important concerns regarding the quality and adequacy of these data for risk assessment applications are the uncertainties associated with the data for key radionuclides, and the lack of any data for radon. Large measurement uncertainties are associated with the data for two key radionuclides (^{60}Co and ^{232}Th), due to poor precision and few measurements above detection. There is also significant uncertainty in all of the data because the upper 2.5 cm of soil cannot be regarded as complete or representative for the radiological background levels of natural or anthropogenic components throughout the unsaturated zone. This source of uncertainty alone could be as large as 100% of the measured activities. The background activity levels of most other unanalyzed radionuclides in the soils are not expected to contribute significantly to the background dose or baseline risk, with the exception of radon, for which appropriate background data (i.e., radon flux) are not available. A more accurate, complete, and representative characterization of the range and distribution of radiological background components in soils (with the exception of radon flux) is expected to be obtained by October, 1995.

There are also concerns regarding the measurement process because there are no regulatory protocols for radioisotopic measurements, standardized methods for sample preparation, measurement methods (e.g., shielding, geometry, handling of spectral data), or instrument specifications (e.g., detector resolution and efficiency). As a consequence, data obtained at different times and/or from different labs may not be comparable. Decisions regarding the presence or absence of contamination and the meeting of cleanup goals could, in some instances, be driven as much by the differences in laboratory performance as by any real differences at a waste site.

4.1 RECOMMENDATIONS:

Recommendations are presented in the following section concerning the use of the existing data, additional data needs, and activities that can be undertaken to satisfy these data needs in an efficient and cost-effective manner. Based on the evaluations presented here, the following are recommended regarding the use of these data in environmental activities at the Hanford Site.

- The existing data are the best data available for radiological background in soil and should be used to the maximum extent possible.

- These data do not represent radiological background levels for soils in the unsaturated zone other than the upper 2.5 cm, and users are cautioned against using these data for comparison to deeper soils and/or most quantitative uses such as risk assessment.

- The background data for 7 of the radionuclides (^{40}K, ^{90}Sr, ^{137}Cs, ^{226}Ra, ^{234}U, ^{238}U, $^{239/240}Pu$) are of sufficient quality for use in preliminary screening activities; however, only 3 of these radionuclides (^{40}K, ^{137}Cs, ^{226}Ra) contribute significantly to baseline risk.

- The existing data for ^{60}Co, ^{106}Ru, ^{134}Cs, ^{154}Eu, ^{155}Eu, ^{232}Th, ^{235}U, ^{238}Pu, and ^{241}Am are largely unusable due to concerns involving accuracy, precision, data quantity, and detection.

It is recommended that new data obtained by future sampling and analysis efforts augment the current database by emphasizing the following:

- A greater quantity of data, particularly for key radionuclides such as ^{232}Th that have the potential to contribute significantly to risk.

- Improved detectability for key radionuclides, such as ^{60}Co, that are below the levels of health-based concern.

- Analysis of all of the radionuclides of concern.

- Improved precision in terms of uncertainties associated with individual measurements and interlaboratory variability.

- Improved accuracy, perhaps by analyzing a control sample with every batch.

- Data on anthropogenic radionuclides from depths extending to at least 10 cm.

- Data on naturally occurring radionuclides based on samples representing the scale of variability in soils of the Hanford Site and vicinity.

- Data appropriate for establishing a basis for relating laboratory-determined background data to field measurements of isotopic activities and/or energy deposition (e.g., rad).

As in the characterization of soil background for non-radioactive analytes, data collection efforts based on appropriate DQOs and designed specifically for the purpose of characterizing background will provide the quality of data required for use in environmental applications (e.g., as Sitewide background). Based on the evaluation of the existing data, it is recommended that new data be collected according to the following guidelines:

- Analysis of archived samples from the soil background characterization efforts for non-radioactive analytes, primarily for naturally occurring radionuclides. These soil samples have been shown to be adequate for representing naturally occurring analytes in the soils, and for justifying their use as Sitewide background.

- Acquisition of additional data on anthropogenic radionuclides from depths greater than 2.5 cm. Some of these radionuclides exhibit substantial distribution with depth, and may have their greatest concentrations below the upper 2.5 cm.

- Collection of background data on radon flux levels from soils in the vicinity of the Hanford Site.

- Collection of data which can be used to correlate laboratory and field measurements of isotopic activities and energy deposition. This comparison will be required if field measurements are used in environmental activities.

The measurement process and interlaboratory comparability of data could also be improved in several ways, including:

- Restricting the majority of the measurements to a single laboratory.

- Including routine blind standard samples with every batch sent to each laboratory. The blind samples could be used to "correct" the data to a standard.

- Establishing a regular laboratory performance monitoring and assessment program that would develop standard correction factors applied to all data from a lab (i.e. batch independent correction factors).

- Establishing an interlaboratory program for method development and qualification leading to uniform, comparable performance of qualified labs.

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This last item is currently underway in a multistate effort called the Quality Assurance Task Force, led by the Washington State DOH. Eight laboratories are cooperating by comparing quality control samples, in the interest of standardizing procedures and results. It is recommended that coordination with the task force be maintained in future background work on radionuclides.

ATTACHMENT 5.0 REFERENCES

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Till, John E., and R. E. Moore, 1988, *A Pathway Analysis Approach for Determining Acceptable Levels of Contamination of Radionuclides in Soil*, Health Physics Society, September, 1988.

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Table A-1. Sampling Locations of Existing Data (Sheet 1 of 3).

SITEID	SITENAME	NORTHING	EASTING	SITETYPE	*COLOC
1DOH	100N FIRE	572394.78600	145209.46700	1a	3PNL
1PNL	NE OF 100 N AREA	572655.73210	150881.95880	1	
2DOH	100N-1	571296.62700	149365.01000	1a	
2PNL	E OF 100 N AREA	573200.58200	148850.91140	1	
3DOH	116-C-1			1a	
3PNL	100 AREA FIRE STAT	572394.78600	145209.46700	1a	
4DOH	200ESE	576476.40700	134288.01900	1a	6PNL
4PNL	200 ENC	575189.62700	137829.06900	1	
5DOH	200GTE	571251.12700	135691.49800	1	9PNL
5PNL	E OF 200 E	577301.79000	135732.51700	1a	
6DOH	216-S-10			1a	
6PNL	200 ESE	576476.40700	134288.01900	1a	
7DOH	216-T-4-1			1a	
7PNL	SW OF B/C/ Cribs	572137.75100	131441.21350	1a	
8DOH	216-U-10			1a	
8PNL	S OF 200 E	574409.67120	130801.76940	1a	
9DOH	ACI PLANT (Yakima)	494715.87200	141531.09000	3	
9PNL	E OF 200 W GATE	571251.12700	135691.49800	1	
10DOH	ACI-1 (Yakima)			3	
10PNL	S OF 200 W	568070.69910	131394.07300	1	
11DOH	ACI-2			3	
11PNL	400 E	588421.16370	124282.75860	1	
12DOH	ACI (Yakima)	496973.74900	137361.32300	5	
12PNL	SE SIDE OF FFTF	589438.12640	121500.82070	1	
13DOH	ARMY LOOP	568070.69910	131394.07300	1	10PNL
13PNL	NORTH 300 AREA	593823.76290	116304.63370	1	
14DOH	CEMETERY (Yakima)	4967163.1623	138303.78350	5	
14PNL	HANFORD TOWNSITE	584875.44300	139836.10100	1	
15DOH	CONNELL	624888.47370	149477.31880	4	36PNL
15PNL	WYE BARRICADE	584606.13330	127841.03340	1	
16DOH	E200E	577301.79000	135732.51700	1a	5PNL
16PNL	RIVRVIEW-HARRIS	598862.27630	102674.70290	2	
17DOH	ENVIRONMENT(Yakima)			5	
17PNL	BYERS LANDING	595483.54230	115960.36270	2	
18DOH	FRONT DRIVE (Yakima)			3	
18PNL	SAGEMOOR FARM	595680.15760	118131.17200	2	
19DOH	HANFORD TOWN	584875.44300	139836.10100	1	14PNL
19PNL	TAYLOR FLATS NO. 2	595629.02350	121373.04710	2	

Table A-1. Sampling Locations of Existing Data (Sheet 2 of 3).

SITEID	SITENAME	NORTHING	EASTING	SITETYPE	*COLOC
20DOH	HEALTH			1a	
20PNL	W END OF FIR ROAD	595972.17390	123008.15740	2	
21DOH	HGP			1a	
21PNL	RINGOLD AREA	595453.14980	132523.55850	2	
22DOH	INDEPENDENCE(S'side)	538418.24920	109402.15840	5	
22PNL	BERG RANCH	589663.69620	156984.12020	2	
23DOH	LAB			1a	
23PNL	WAHLUKE SLOPE	567940.53050	156551.87820	2	
24DOH	MOSES LAKE	594260.92000	199909.58000	5	34PNL
24PNL	N END VERNITA BRIDGE	559491.64590	146068.83160	2	
25DOH	MW-5			1a	
25PNL	YAKIMA BARRICADE	581721.26200	138436.38100	1	
26DOH	MW-8			1a	
26PNL	RATTLESNAKE SPRINGS	562370.78940	130424.44310	2	
27DOH	N-51			1a	
27PNL	ALE FIELD LAB	577587.64010	116983.33250	2	
28DOH	N200E	575189.62700	137829.06900	1	4PNL
28PNL	PROSSER BARRICADE	582786.99320	117644.58710	2	
29DOH	NE CORNER	572524.44800	134394.94000	1	
29PNL	SOUTH 300 AREA	593768.86480	114877.55200	1	
30DOH	NW CORNER	572243.31600	134169.25100	1a	
30PNL	BENTON CITY	577454.97210	110497.72810	5	
31DOH	P-11			1a	
31PNL	SUNNYSIDE	538394.78910	113107.06420	5	
32DOH	R.C.S. OFFICE			1a	
32PNL	WALLA WALLA	664943.40990	83724.07390	4	
33DOH	RT 11A-9	569856.88400	138209.69100	1	
33PNL	MC NARY DAM	592946.61280	69232.91690	4	
34DOH	S 1	589485.79600	125039.86100	1	
34PNL	MOSES LAKE AREA	594260.92000	199909.58000	5	
35DOH	S 21	591894.53200	127321.46700	1	
35PNL	WASHTUCNA	667932.65190	161642.45230	4	
36DOH	S200E	574409.67120	130801.76940	1a	8PNL
36PNL	CONNELL	624888.47370	149477.31880	4	
37DOH	SE CORNER	572539.31500	133794.84800	1a	
37PNL	OTHELLO	601622.29250	167568.83610	4	
38DOH	SIDE DRIVE (Yakima)			3	
38PNL	YAKIMA	499909.89130	143551.84410	5	

Table A-1. Sampling Locations of Existing Data (Sheet 3 of 3).

SITEID	SITENAME	NORTHING	EASTING	SITETYPE	*COLOC
39DOH	STA 10			1a	
40DOH	STA 7			1a	
41DOH	SUNNYSIDE			5	31PNL
42DOH	SW BC			1a	7PNL
43DOH	SW CORNER	572270.84100	133791.63300	1a	
44DOH	WALK GATE (Yakima)			3	
45DOH	WYE	584606.13330	127841.03340	1	15PNL
46DOH	YAKIMA B.	581721.26200	138436.38100	1	25PNL
47DOH	Z DITCH			1a	

Northing and Easting: according the Washington Coordinate System of 1983

Site Type:
- 1 - Hanford Site monitoring, not known to be contaminated
- 1a - Hanford Site, possibly affected by contamination
- 2 - Perimeter
- 3 - Distant, monitoring, possibly affected by contamination
- 4 - Distant, downwind of Hanford
- 5 - Distant, upwind of Hanford

* Colocated. Samples collected by PNL and DOH located at the same sites.

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 1 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16DOH	1a	Am-241	07/31/91	0.1400	0.0400	0.0600	pCi/g
1DOH	1a	Co-60	07/31/91	-0.0028	0.0139	0.0200	pCi/g
1PNL	1	Co-60	06/06/88	0.0653	0.0262	0.0200	pCi/g
1PNL	1	Co-60	05/03/89	0.0009	0.0220	0.0200	pCi/g
1PNL	1	Co-60	08/14/91	-0.0127	0.0220	0.0200	pCi/g
2DOH	1a	Co-60	07/31/91	0.3010	0.0210	0.0200	pCi/g
2PNL	1	Co-60	04/29/87	0.0661	0.0249	0.0200	pCi/g
2PNL	1	Co-60	06/06/88	0.0804	0.0245	0.0200	pCi/g
2PNL	1	Co-60	05/05/89	0.0293	0.0226	0.0200	pCi/g
2PNL	1	Co-60	08/14/91	0.0331	0.0249	0.0200	pCi/g
3PNL	1a	Co-60	04/29/87	0.0092	0.0197	0.0200	pCi/g
3PNL	1a	Co-60	06/06/88	-0.0014	0.0249	0.0200	pCi/g
3PNL	1a	Co-60	05/02/89	-0.0140	0.0192	0.0200	pCi/g
3PNL	1a	Co-60	07/31/91	0.0072	0.0244	0.0200	pCi/g
5DOH	1	Co-60	06/27/89	0.0070	0.0070	0.0100	pCi/g
5DOH	1	Co-60	06/26/90	0.0100	0.0080	0.0100	pCi/g
5DOH	1	Co-60	07/31/91	-0.0015	0.0092	0.0200	pCi/g
5PNL	1a	Co-60	05/07/87	-0.0003	0.0130	0.0200	pCi/g
5PNL	1a	Co-60	06/06/88	-0.0098	0.0193	0.0200	pCi/g
5PNL	1a	Co-60	05/02/89	-0.0005	0.0208	0.0200	pCi/g
5PNL	1a	Co-60	07/31/91	-0.0021	0.0189	0.0200	pCi/g
6PNL	1a	Co-60	05/07/87	-0.0015	0.0119	0.0200	pCi/g
6PNL	1a	Co-60	03/22/88	-0.0165	0.0171	0.0200	pCi/g
6PNL	1a	Co-60	05/02/89	0.0088	0.0194	0.0200	pCi/g
6PNL	1a	Co-60	07/31/91	0.0236	0.0186	0.0200	pCi/g
7PNL	1a	Co-60	05/07/87	0.0193	0.0144	0.0200	pCi/g
7PNL	1a	Co-60	06/06/88	0.0136	0.0139	0.0200	pCi/g
7PNL	1a	Co-60	05/03/89	-0.0012	0.0187	0.0200	pCi/g
7PNL	1a	Co-60	08/13/91	0.0039	0.0168	0.0200	pCi/g
8PNL	1a	Co-60	05/07/87	0.0200	0.0155	0.0200	pCi/g
8PNL	1a	Co-60	06/07/88	-0.0018	0.0176	0.0200	pCi/g
8PNL	1a	Co-60	05/03/89	-0.0047	0.0174	0.0200	pCi/g
8PNL	1a	Co-60	08/13/91	0.0052	0.0271	0.0200	pCi/g
10PNL	1	Co-60	06/07/88	0.0139	0.0140	0.0200	pCi/g
10PNL	1	Co-60	05/03/89	0.0004	0.0167	0.0200	pCi/g
10PNL	1	Co-60	08/13/91	0.0112	0.0209	0.0200	pCi/g
11PNL	1	Co-60	04/29/87	-0.0175	0.0208	0.0200	pCi/g
11PNL	1	Co-60	06/09/88	0.0062	0.0144	0.0200	pCi/g
11PNL	1	Co-60	05/03/89	0.0012	0.0125	0.0200	pCi/g
11PNL	1	Co-60	08/13/91	0.0036	0.0212	0.0200	pCi/g
12DOH	5	Co-60	08/01/91	-0.0030	0.0078	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 2 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
12PNL	1	Co-60	06/09/88	0.0013	0.0163	0.0200	pCi/g
12PNL	1	Co-60	05/03/89	0.0134	0.0134	0.0200	pCi/g
12PNL	1	Co-60	08/13/91	0.0033	0.0151	0.0200	pCi/g
13DOH	1	Co-60	06/27/89	-0.0020	0.0070	0.0100	pCi/g
13DOH	1	Co-60	06/26/90	0.0140	0.0080	0.0100	pCi/g
13PNL	1	Co-60	04/29/87	-0.0110	0.0193	0.0200	pCi/g
13PNL	1	Co-60	06/09/88	-0.0007	0.0196	0.0200	pCi/g
13PNL	1	Co-60	05/02/89	0.0094	0.0151	0.0200	pCi/g
13PNL	1	Co-60	08/08/91	-0.0004	0.0167	0.0200	pCi/g
14DOH	5	Co-60	07/01/92	-0.0002	0.0077	0.0200	pCi/g
14PNL	1	Co-60	04/29/87	-0.0200	0.0210	0.0200	pCi/g
14PNL	1	Co-60	06/06/88	-0.0159	0.0237	0.0200	pCi/g
14PNL	1	Co-60	05/02/89	-0.0038	0.0154	0.0200	pCi/g
14PNL	1	Co-60	07/31/91	-0.0128	0.0157	0.0200	pCi/g
15DOH	4	Co-60	08/01/91	0.0037	0.0073	0.0200	pCi/g
15PNL	1	Co-60	04/29/87	0.0028	0.0152	0.0200	pCi/g
15PNL	1	Co-60	05/25/88	0.0030	0.0165	0.0200	pCi/g
15PNL	1	Co-60	05/03/89	0.0211	0.0165	0.0200	pCi/g
15PNL	1	Co-60	07/31/91	0.0101	0.0132	0.0200	pCi/g
16DOH	1a	Co-60	06/27/89	0.0065	0.0072	0.0100	pCi/g
16DOH	1a	Co-60	06/26/90	-0.0100	0.0080	0.0100	pCi/g
16DOH	1a	Co-60	07/31/91	0.0662	0.0128	0.0200	pCi/g
16PNL	2	Co-60	05/15/87	-0.0111	0.0198	0.0200	pCi/g
16PNL	2	Co-60	06/20/88	-0.0106	0.0190	0.0200	pCi/g
16PNL	2	Co-60	05/08/89	0.0009	0.0135	0.0200	pCi/g
16PNL	2	Co-60	08/08/91	0.0622	0.0463	0.0200	pCi/g
16PNL	2	Co-60	07/28/92	0.0222	0.0257	0.0200	pCi/g
17DOH	5	Co-60	03/20/85	1.8250	0.2000	0.0100	pCi/g
17DOH	5	Co-60	03/22/85	11.0000	2.1401	0.0100	pCi/g
17PNL	2	Co-60	05/15/87	0.0175	0.0140	0.0200	pCi/g
17PNL	2	Co-60	06/20/88	0.0040	0.0152	0.0200	pCi/g
17PNL	2	Co-60	05/10/89	-0.0048	0.0183	0.0200	pCi/g
17PNL	2	Co-60	10/04/90	-0.0068	0.0224	0.0200	pCi/g
17PNL	2	Co-60	08/08/91	-0.0033	0.0169	0.0200	pCi/g
17PNL	2	Co-60	06/23/92	0.0030	0.0158	0.0200	pCi/g
18PNL	2	Co-60	05/15/87	0.0094	0.0179	0.0200	pCi/g
18PNL	2	Co-60	04/01/88	0.0072	0.0147	0.0200	pCi/g
18PNL	2	Co-60	05/10/89	-0.0079	0.0170	0.0200	pCi/g
18PNL	2	Co-60	10/04/90	-0.0152	0.0180	0.0200	pCi/g
18PNL	2	Co-60	08/08/91	-0.0053	0.0210	0.0200	pCi/g
18PNL	2	Co-60	07/27/92	0.0084	0.0227	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 3 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
19DOH	1	Co-60	07/31/91	-0.0022	0.0077	0.0200	pCi/g
19PNL	2	Co-60	05/15/87	-0.0102	0.0261	0.0200	pCi/g
19PNL	2	Co-60	06/20/88	-0.0085	0.0209	0.0200	pCi/g
19PNL	2	Co-60	05/10/89	-0.0023	0.0262	0.0200	pCi/g
19PNL	2	Co-60	10/04/90	-0.0029	0.0209	0.0200	pCi/g
20DOH	1a	Co-60	01/17/85	0.0500	0.0500	0.0100	pCi/g
20PNL	2	Co-60	05/15/87	-0.0006	0.0215	0.0200	pCi/g
20PNL	2	Co-60	06/20/88	-0.0011	0.0194	0.0200	pCi/g
20PNL	2	Co-60	05/10/89	0.0240	0.0179	0.0200	pCi/g
21PNL	2	Co-60	05/15/87	0.0163	0.0214	0.0200	pCi/g
21PNL	2	Co-60	04/01/88	0.0313	0.0174	0.0200	pCi/g
21PNL	2	Co-60	05/10/89	0.0061	0.0204	0.0200	pCi/g
21PNL	2	Co-60	10/08/90	-0.0093	0.0180	0.0200	pCi/g
21PNL	2	Co-60	08/08/91	0.0000	0.0218	0.0200	pCi/g
21PNL	2	Co-60	07/28/92	0.0082	0.0320	0.0200	pCi/g
22DOH	5	Co-60	07/01/92	0.0042	0.0083	0.0200	pCi/g
22PNL	2	Co-60	05/26/87	0.0056	0.0182	0.0200	pCi/g
22PNL	2	Co-60	06/10/88	0.0044	0.0146	0.0200	pCi/g
22PNL	2	Co-60	05/09/89	-0.0076	0.0216	0.0200	pCi/g
22PNL	2	Co-60	10/08/90	0.0119	0.0194	0.0200	pCi/g
23DOH	1a	Co-60	11/06/91	0.0072	0.0082	0.0200	pCi/g
23PNL	2	Co-60	05/26/87	0.0096	0.0156	0.0200	pCi/g
23PNL	2	Co-60	06/10/88	0.0033	0.0178	0.0200	pCi/g
23PNL	2	Co-60	05/05/89	0.0015	0.0194	0.0200	pCi/g
23PNL	2	Co-60	10/03/90	-0.0007	0.0191	0.0200	pCi/g
24DOH	5	Co-60	08/01/91	0.0070	0.0141	0.0200	pCi/g
24PNL	2	Co-60	06/10/88	0.0165	0.0181	0.0200	pCi/g
24PNL	2	Co-60	05/05/89	-0.0084	0.0233	0.0200	pCi/g
25DOH	1a	Co-60	11/05/91	-0.0062	0.0083	0.0200	pCi/g
25PNL	1	Co-60	05/07/87	-0.0058	0.0177	0.0200	pCi/g
25PNL	1	Co-60	05/25/88	0.0127	0.0159	0.0200	pCi/g
25PNL	1	Co-60	05/05/89	-0.0149	0.0186	0.0200	pCi/g
25PNL	1	Co-60	07/31/91	-0.0037	0.0187	0.0200	pCi/g
26DOH	1a	Co-60	11/06/91	0.0045	0.0081	0.0200	pCi/g
26PNL	2	Co-60	05/07/87	-0.0239	0.0189	0.0200	pCi/g
26PNL	2	Co-60	06/07/88	0.0018	0.0120	0.0200	pCi/g
26PNL	2	Co-60	05/05/89	0.0075	0.0116	0.0200	pCi/g
27DOH	1a	Co-60	06/30/92	0.0213	0.0165	0.0200	pCi/g
27PNL	2	Co-60	05/20/87	-0.0054	0.0223	0.0200	pCi/g
27PNL	2	Co-60	06/08/88	-0.0136	0.0228	0.0200	pCi/g
27PNL	2	Co-60	05/05/89	0.0002	0.0182	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 4 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
28DOH	1	Co-60	06/27/89	0.0003	0.0080	0.0100	pCi/g
28DOH	1	Co-60	06/26/90	0.0079	0.0083	0.0100	pCi/g
28DOH	1	Co-60	07/31/91	-0.0071	0.0141	0.0200	pCi/g
28PNL	2	Co-60	05/25/88	0.0041	0.0145	0.0200	pCi/g
28PNL	2	Co-60	05/03/89	-0.0024	0.0183	0.0200	pCi/g
29DOH	1	Co-60	11/19/85	0.0200	0.0200	0.0100	pCi/g
29DOH	1	Co-60	11/07/89	-0.0010	0.0060	0.0100	pCi/g
29DOH	1	Co-60	11/05/90	0.0010	0.0080	0.0200	pCi/g
29DOH	1	Co-60	11/06/91	-0.0013	0.0077	0.0200	pCi/g
29PNL	1	Co-60	06/09/88	-0.0101	0.0182	0.0200	pCi/g
29PNL	1	Co-60	05/02/89	-0.0173	0.0196	0.0200	pCi/g
29PNL	1	Co-60	08/08/91	-0.0039	0.0237	0.0200	pCi/g
30DOH	1a	Co-60	11/19/85	0.0130	0.0130	0.0100	pCi/g
30DOH	1a	Co-60	11/07/89	0.0007	0.0080	0.0100	pCi/g
30DOH	1a	Co-60	11/05/90	0.0030	0.0070	0.0200	pCi/g
30DOH	1a	Co-60	11/06/91	0.0005	0.0083	0.0200	pCi/g
30PNL	5	Co-60	05/20/87	-0.0012	0.0159	0.0200	pCi/g
30PNL	5	Co-60	03/21/88	-0.0061	0.0236	0.0200	pCi/g
30PNL	5	Co-60	05/09/89	-0.0068	0.0184	0.0200	pCi/g
31PNL	5	Co-60	05/21/87	-0.0078	0.0220	0.0200	pCi/g
31PNL	5	Co-60	05/24/88	0.0091	0.0183	0.0200	pCi/g
31PNL	5	Co-60	05/09/89	-0.0041	0.0183	0.0200	pCi/g
31PNL	5	Co-60	10/03/90	-0.0045	0.0217	0.0200	pCi/g
31PNL	5	Co-60	08/01/91	-0.0027	0.0239	0.0200	pCi/g
31PNL	5	Co-60	07/01/92	-0.0158	0.0126	0.0200	pCi/g
32DOH	1a	Co-60	06/26/90	0.0008	0.0078	0.0100	pCi/g
32PNL	4	Co-60	05/29/87	0.0090	0.0171	0.0200	pCi/g
32PNL	4	Co-60	05/27/88	0.0022	0.0158	0.0200	pCi/g
32PNL	4	Co-60	05/08/89	-0.0110	0.0239	0.0200	pCi/g
32PNL	4	Co-60	10/03/90	0.0111	0.0412	0.0200	pCi/g
33DOH	1	Co-60	06/27/89	0.0120	0.0080	0.0100	pCi/g
33DOH	1	Co-60	06/26/90	0.0012	0.0090	0.0100	pCi/g
33DOH	1	Co-60	07/31/91	-0.0004	0.0082	0.0200	pCi/g
33PNL	4	Co-60	05/29/87	-0.0089	0.0206	0.0200	pCi/g
33PNL	4	Co-60	05/27/88	0.0088	0.0174	0.0200	pCi/g
33PNL	4	Co-60	05/08/89	-0.0073	0.0177	0.0200	pCi/g
33PNL	4	Co-60	10/03/90	0.0077	0.0233	0.0200	pCi/g
34DOH	1	Co-60	05/28/85	0.0400	0.0400	0.0100	pCi/g
34DOH	1	Co-60	05/02/89	0.0030	0.0080	0.0100	pCi/g
34DOH	1	Co-60	05/08/90	-0.0070	0.0070	0.0100	pCi/g
34DOH	1	Co-60	05/16/91	-0.2360	0.0080	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 5 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
34DOH	1	Co-60	05/14/92	0.0100	0.0092	0.0200	pCi/g
34PNL	5	Co-60	05/08/87	0.0036	0.0176	0.0200	pCi/g
34PNL	5	Co-60	06/17/88	0.0227	0.0178	0.0200	pCi/g
34PNL	5	Co-60	05/08/89	0.0017	0.0213	0.0200	pCi/g
34PNL	5	Co-60	10/05/90	0.0094	0.0223	0.0200	pCi/g
34PNL	5	Co-60	08/01/91	0.0034	0.0173	0.0200	pCi/g
35DOH	1	Co-60	05/28/85	0.0300	0.0300	0.0100	pCi/g
35DOH	1	Co-60	05/02/89	0.0150	0.0070	0.0100	pCi/g
35DOH	1	Co-60	05/08/90	-0.0030	0.0060	0.0100	pCi/g
35DOH	1	Co-60	05/16/91	0.0083	0.0084	0.0200	pCi/g
35DOH	1	Co-60	05/14/92	0.0147	0.0087	0.0200	pCi/g
35PNL	4	Co-60	05/08/87	0.0008	0.0173	0.0200	pCi/g
35PNL	4	Co-60	06/17/88	-0.0057	0.0194	0.0200	pCi/g
35PNL	4	Co-60	05/08/89	-0.0004	0.0203	0.0200	pCi/g
35PNL	4	Co-60	10/03/90	0.0320	0.0417	0.0200	pCi/g
36PNL	4	Co-60	05/26/87	-0.0148	0.0171	0.0200	pCi/g
36PNL	4	Co-60	06/10/88	0.0165	0.0184	0.0200	pCi/g
36PNL	4	Co-60	05/09/89	0.0030	0.0206	0.0200	pCi/g
36PNL	4	Co-60	10/05/90	-0.0035	0.0431	0.0200	pCi/g
36PNL	4	Co-60	08/01/91	0.0000	0.0239	0.0200	pCi/g
37DOH	1a	Co-60	11/19/85	0.0140	0.0140	0.0100	pCi/g
37DOH	1a	Co-60	11/07/89	-0.0050	0.0080	0.0100	pCi/g
37DOH	1a	Co-60	11/05/90	0.0020	0.0080	0.0200	pCi/g
37PNL	4	Co-60	05/26/87	-0.0086	0.0214	0.0200	pCi/g
37PNL	4	Co-60	06/10/88	0.0055	0.0156	0.0200	pCi/g
37PNL	4	Co-60	05/09/89	-0.0038	0.0205	0.0200	pCi/g
37PNL	4	Co-60	10/05/90	0.0044	0.0212	0.0200	pCi/g
38PNL	5	Co-60	05/21/87	-0.0196	0.0233	0.0200	pCi/g
38PNL	5	Co-60	06/08/88	0.0020	0.0186	0.0200	pCi/g
38PNL	5	Co-60	05/09/89	0.0234	0.0141	0.0200	pCi/g
38PNL	5	Co-60	10/03/90	0.0237	0.0178	0.0200	pCi/g
38PNL	5	Co-60	08/01/91	0.0021	0.0204	0.0200	pCi/g
38PNL	5	Co-60	07/01/92	0.0050	0.0145	0.0200	pCi/g
39DOH	1a	Co-60	11/07/89	0.0090	0.0070	0.0100	pCi/g
39DOH	1a	Co-60	11/05/90	-0.0030	0.0080	0.0200	pCi/g
41DOH	5	Co-60	06/27/89	0.0030	0.0080	0.0100	pCi/g
41DOH	5	Co-60	06/26/90	0.0160	0.0090	0.0100	pCi/g
41DOH	5	Co-60	08/01/91	0.0045	0.0138	0.0200	pCi/g
43DOH	1a	Co-60	11/19/85	0.0140	0.0140	0.0100	pCi/g
43DOH	1a	Co-60	11/07/89	0.0003	0.0080	0.0100	pCi/g
43DOH	1a	Co-60	11/05/90	0.0070	0.0070	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 6 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
46DOH	1	Co-60	06/27/89	0.0030	0.0070	0.0100	pCi/g
46DOH	1	Co-60	06/26/90	0.0030	0.0089	0.0100	pCi/g
46DOH	1	Co-60	07/31/91	-0.0036	0.0083	0.0200	pCi/g
1PNL	1	Cs-134	06/06/88	-0.0212	0.0175	0.0200	pCi/g
1PNL	1	Cs-134	05/03/89	-0.0522	0.0199	0.0200	pCi/g
1PNL	1	Cs-134	08/14/91	-0.0522	0.0192	0.0200	pCi/g
2PNL	1	Cs-134	04/29/87	0.0102	0.0202	0.0200	pCi/g
2PNL	1	Cs-134	06/06/88	-0.0046	0.0160	0.0200	pCi/g
2PNL	1	Cs-134	05/05/89	-0.0481	0.0191	0.0200	pCi/g
2PNL	1	Cs-134	08/14/91	-0.0108	0.0158	0.0200	pCi/g
3PNL	1a	Cs-134	04/29/87	0.0730	0.0188	0.0200	pCi/g
3PNL	1a	Cs-134	06/06/88	0.0127	0.0196	0.0200	pCi/g
3PNL	1a	Cs-134	05/02/89	-0.0561	0.0205	0.0200	pCi/g
3PNL	1a	Cs-134	07/31/91	-0.1630	0.0290	0.0200	pCi/g
5PNL	1a	Cs-134	05/07/87	0.0128	0.0162	0.0200	pCi/g
5PNL	1a	Cs-134	06/06/88	-0.0882	0.0220	0.0200	pCi/g
5PNL	1a	Cs-134	05/02/89	-0.0507	0.0232	0.0200	pCi/g
5PNL	1a	Cs-134	07/31/91	-0.0314	0.0185	0.0200	pCi/g
6PNL	1a	Cs-134	05/07/87	0.0294	0.0154	0.0200	pCi/g
6PNL	1a	Cs-134	03/22/88	-0.0758	0.0196	0.0200	pCi/g
6PNL	1a	Cs-134	05/02/89	-0.0112	0.0171	0.0200	pCi/g
6PNL	1a	Cs-134	07/31/91	-0.1860	0.0245	0.0200	pCi/g
7PNL	1a	Cs-134	05/07/87	0.0345	0.0182	0.0200	pCi/g
7PNL	1a	Cs-134	06/06/88	-0.0093	0.0129	0.0200	pCi/g
7PNL	1a	Cs-134	05/03/89	-0.0198	0.0140	0.0200	pCi/g
7PNL	1a	Cs-134	08/13/91	-0.0424	0.0178	0.0200	pCi/g
8PNL	1a	Cs-134	05/07/87	0.0395	0.0187	0.0200	pCi/g
8PNL	1a	Cs-134	06/07/88	-0.0276	0.0159	0.0200	pCi/g
8PNL	1a	Cs-134	05/03/89	0.0019	0.0143	0.0200	pCi/g
8PNL	1a	Cs-134	08/13/91	-0.1540	0.0304	0.0200	pCi/g
10PNL	1	Cs-134	06/07/88	-0.0045	0.0119	0.0200	pCi/g
10PNL	1	Cs-134	05/03/89	-0.0665	0.0189	0.0200	pCi/g
10PNL	1	Cs-134	08/13/91	-0.2500	0.0292	0.0200	pCi/g
11PNL	1	Cs-134	04/29/87	0.0513	0.0177	0.0200	pCi/g
11PNL	1	Cs-134	06/09/88	-0.0042	0.0124	0.0200	pCi/g
11PNL	1	Cs-134	05/03/89	-0.0082	0.0109	0.0200	pCi/g
11PNL	1	Cs-134	08/13/91	-0.2160	0.0292	0.0200	pCi/g
12PNL	1	Cs-134	06/09/88	-0.0865	0.0177	0.0200	pCi/g
12PNL	1	Cs-134	05/03/89	0.0032	0.0141	0.0200	pCi/g
12PNL	1	Cs-134	08/13/91	-0.0451	0.0155	0.0200	pCi/g
13PNL	1	Cs-134	04/29/87	0.0451	0.0315	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 7 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
13PNL	1	Cs-134	06/09/88	-0.0100	0.0162	0.0200	pCi/g
13PNL	1	Cs-134	05/02/89	-0.0147	0.0140	0.0200	pCi/g
13PNL	1	Cs-134	08/08/91	-0.1640	0.0237	0.0200	pCi/g
14PNL	1	Cs-134	04/29/87	0.0777	0.0202	0.0200	pCi/g
14PNL	1	Cs-134	06/06/88	-0.0024	0.0166	0.0200	pCi/g
14PNL	1	Cs-134	05/02/89	-0.0609	0.0188	0.0200	pCi/g
14PNL	1	Cs-134	07/31/91	-0.0512	0.0157	0.0200	pCi/g
15PNL	1	Cs-134	04/29/87	0.0207	0.0176	0.0200	pCi/g
15PNL	1	Cs-134	05/25/88	0.0054	0.0120	0.0200	pCi/g
15PNL	1	Cs-134	05/03/89	0.0000	0.0157	0.0200	pCi/g
15PNL	1	Cs-134	07/31/91	-0.0451	0.0157	0.0200	pCi/g
16DOH	1a	Cs-134	06/03/87	0.0180	0.0090	0.0200	pCi/g
16PNL	2	Cs-134	05/15/87	0.0446	0.0157	0.0200	pCi/g
16PNL	2	Cs-134	06/20/88	-0.0356	0.0178	0.0200	pCi/g
16PNL	2	Cs-134	05/08/89	-0.0013	0.0120	0.0200	pCi/g
16PNL	2	Cs-134	08/08/91	-0.2750	0.0532	0.0200	pCi/g
16PNL	2	Cs-134	07/28/92	-0.1280	0.0296	0.0200	pCi/g
17PNL	2	Cs-134	05/15/87	0.0369	0.0225	0.0200	pCi/g
17PNL	2	Cs-134	06/20/88	-0.0759	0.0166	0.0200	pCi/g
17PNL	2	Cs-134	05/10/89	-0.0305	0.0183	0.0200	pCi/g
17PNL	2	Cs-134	10/04/90	-0.0775	0.0238	0.0200	pCi/g
17PNL	2	Cs-134	08/08/91	-0.0121	0.0157	0.0200	pCi/g
17PNL	2	Cs-134	06/23/92	-0.1120	0.0165	0.0200	pCi/g
18PNL	2	Cs-134	05/15/87	0.0486	0.0219	0.0200	pCi/g
18PNL	2	Cs-134	04/01/88	-0.0030	0.0131	0.0200	pCi/g
18PNL	2	Cs-134	05/10/89	-0.0367	0.0168	0.0200	pCi/g
18PNL	2	Cs-134	10/04/90	-0.0756	0.0210	0.0200	pCi/g
18PNL	2	Cs-134	08/08/91	-0.0294	0.0172	0.0200	pCi/g
18PNL	2	Cs-134	07/27/92	0.0046	0.0242	0.0200	pCi/g
19PNL	2	Cs-134	05/15/87	0.0848	0.0282	0.0200	pCi/g
19PNL	2	Cs-134	06/20/88	0.0002	0.0211	0.0200	pCi/g
19PNL	2	Cs-134	05/10/89	0.0007	0.0225	0.0200	pCi/g
19PNL	2	Cs-134	10/04/90	-0.1170	0.0234	0.0200	pCi/g
20PNL	2	Cs-134	05/15/87	0.0712	0.0266	0.0200	pCi/g
20PNL	2	Cs-134	06/20/88	-0.0035	0.0158	0.0200	pCi/g
20PNL	2	Cs-134	05/10/89	-0.0571	0.0201	0.0200	pCi/g
21PNL	2	Cs-134	05/15/87	0.0736	0.0257	0.0200	pCi/g
21PNL	2	Cs-134	04/01/88	-0.0518	0.0181	0.0200	pCi/g
21PNL	2	Cs-134	05/10/89	-0.0153	0.0196	0.0200	pCi/g
21PNL	2	Cs-134	10/08/90	-0.0946	0.0226	0.0200	pCi/g
21PNL	2	Cs-134	08/08/91	-0.0660	0.0230	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 8 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
21PNL	2	Cs-134	07/28/92	-0.0261	0.0290	0.0200	pCi/g
22PNL	2	Cs-134	05/26/87	0.0331	0.0264	0.0200	pCi/g
22PNL	2	Cs-134	06/10/88	0.0009	0.0145	0.0200	pCi/g
22PNL	2	Cs-134	05/09/89	-0.0056	0.0194	0.0200	pCi/g
22PNL	2	Cs-134	10/08/90	-0.0831	0.0211	0.0200	pCi/g
23PNL	2	Cs-134	05/26/87	0.0420	0.0194	0.0200	pCi/g
23PNL	2	Cs-134	06/10/88	0.0038	0.0159	0.0200	pCi/g
23PNL	2	Cs-134	05/05/89	-0.0110	0.0162	0.0200	pCi/g
23PNL	2	Cs-134	10/03/90	-0.0848	0.0234	0.0200	pCi/g
24PNL	2	Cs-134	06/10/88	-0.1020	0.0218	0.0200	pCi/g
24PNL	2	Cs-134	05/05/89	-0.0750	0.0231	0.0200	pCi/g
25PNL	1	Cs-134	05/07/87	0.0288	0.0247	0.0200	pCi/g
25PNL	1	Cs-134	05/25/88	-0.1050	0.0197	0.0200	pCi/g
25PNL	1	Cs-134	05/05/89	-0.0599	0.0166	0.0200	pCi/g
25PNL	1	Cs-134	07/31/91	-0.2620	0.0285	0.0200	pCi/g
26PNL	2	Cs-134	05/07/87	0.0483	0.0209	0.0200	pCi/g
26PNL	2	Cs-134	06/07/88	0.0046	0.0103	0.0200	pCi/g
26PNL	2	Cs-134	05/05/89	-0.0086	0.0125	0.0200	pCi/g
27PNL	2	Cs-134	05/20/87	0.0050	0.0293	0.0200	pCi/g
27PNL	2	Cs-134	06/08/88	-0.0199	0.0158	0.0200	pCi/g
27PNL	2	Cs-134	05/05/89	0.0068	0.0172	0.0200	pCi/g
28PNL	2	Cs-134	05/25/88	0.0091	0.0113	0.0200	pCi/g
28PNL	2	Cs-134	05/03/89	-0.0103	0.0152	0.0200	pCi/g
29PNL	1	Cs-134	06/09/88	-0.0675	0.0195	0.0200	pCi/g
29PNL	1	Cs-134	05/02/89	-0.0032	0.0176	0.0200	pCi/g
29PNL	1	Cs-134	08/08/91	-0.0742	0.0246	0.0200	pCi/g
30PNL	5	Cs-134	05/20/87	0.0247	0.0224	0.0200	pCi/g
30PNL	5	Cs-134	03/21/88	0.0225	0.0215	0.0200	pCi/g
30PNL	5	Cs-134	05/09/89	0.0037	0.0170	0.0200	pCi/g
31PNL	5	Cs-134	05/21/87	0.0419	0.0226	0.0200	pCi/g
31PNL	5	Cs-134	05/24/88	-0.0124	0.0175	0.0200	pCi/g
31PNL	5	Cs-134	05/09/89	-0.0334	0.0188	0.0200	pCi/g
31PNL	5	Cs-134	10/03/90	-0.1630	0.0336	0.0200	pCi/g
31PNL	5	Cs-134	08/01/91	-0.1180	0.0297	0.0200	pCi/g
31PNL	5	Cs-134	07/01/92	-0.0026	0.0095	0.0200	pCi/g
32PNL	4	Cs-134	05/29/87	0.0715	0.0215	0.0200	pCi/g
32PNL	4	Cs-134	05/27/88	0.0410	0.0145	0.0200	pCi/g
32PNL	4	Cs-134	05/08/89	-0.0479	0.0241	0.0200	pCi/g
32PNL	4	Cs-134	10/03/90	-0.1510	0.0485	0.0200	pCi/g
33PNL	4	Cs-134	05/29/87	0.0491	0.0238	0.0200	pCi/g
33PNL	4	Cs-134	05/27/88	-0.0119	0.0156	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 9 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
33PNL	4	Cs-134	05/08/89	0.0063	0.0150	0.0200	pCi/g
33PNL	4	Cs-134	10/03/90	-0.0643	0.0266	0.0200	pCi/g
34PNL	5	Cs-134	05/08/87	0.0272	0.0235	0.0200	pCi/g
34PNL	5	Cs-134	06/17/88	-0.0223	0.0176	0.0200	pCi/g
34PNL	5	Cs-134	05/08/89	-0.0156	0.0171	0.0200	pCi/g
34PNL	5	Cs-134	10/05/90	-0.0629	0.0258	0.0200	pCi/g
34PNL	5	Cs-134	08/01/91	-0.0471	0.0214	0.0200	pCi/g
35PNL	4	Cs-134	05/08/87	0.0269	0.0185	0.0200	pCi/g
35PNL	4	Cs-134	06/17/88	0.0088	0.0185	0.0200	pCi/g
35PNL	4	Cs-134	05/08/89	0.0052	0.0166	0.0200	pCi/g
35PNL	4	Cs-134	10/03/90	-0.1390	0.0429	0.0200	pCi/g
36PNL	4	Cs-134	05/26/87	0.0393	0.0182	0.0200	pCi/g
36PNL	4	Cs-134	06/10/88	0.0006	0.0146	0.0200	pCi/g
36PNL	4	Cs-134	05/09/89	-0.0012	0.0168	0.0200	pCi/g
36PNL	4	Cs-134	10/05/90	-0.0739	0.0416	0.0200	pCi/g
36PNL	4	Cs-134	08/01/91	-0.1050	0.0261	0.0200	pCi/g
37PNL	4	Cs-134	05/26/87	0.0545	0.0259	0.0200	pCi/g
37PNL	4	Cs-134	06/10/88	-0.0185	0.0156	0.0200	pCi/g
37PNL	4	Cs-134	05/09/89	-0.0271	0.0172	0.0200	pCi/g
37PNL	4	Cs-134	10/05/90	-0.0638	0.0243	0.0200	pCi/g
38PNL	5	Cs-134	05/21/87	0.0542	0.0247	0.0200	pCi/g
38PNL	5	Cs-134	06/08/88	-0.0352	0.0179	0.0200	pCi/g
38PNL	5	Cs-134	05/09/89	0.0005	0.0137	0.0200	pCi/g
38PNL	5	Cs-134	10/03/90	-0.0761	0.0243	0.0200	pCi/g
38PNL	5	Cs-134	08/01/91	-0.0033	0.0156	0.0200	pCi/g
38PNL	5	Cs-134	07/01/92	-0.1620	0.0173	0.0200	pCi/g
1DOH	1a	Cs-137	07/31/91	0.3360	0.0280	0.0200	pCi/g
1PNL	1	Cs-137	06/06/88	0.7960	0.0535	0.0150	pCi/g
1PNL	1	Cs-137	05/03/89	0.9560	0.0547	0.0150	pCi/g
1PNL	1	Cs-137	08/14/91	0.6520	0.0441	0.0150	pCi/g
2DOH	1a	Cs-137	07/31/91	0.1010	0.0160	0.0200	pCi/g
2PNL	1	Cs-137	04/29/87	1.0800	0.0521	0.0150	pCi/g
2PNL	1	Cs-137	06/06/88	0.7430	0.0478	0.0150	pCi/g
2PNL	1	Cs-137	05/05/89	0.6270	0.0464	0.0150	pCi/g
2PNL	1	Cs-137	08/14/91	0.7680	0.0611	0.0150	pCi/g
3DOH	1a	Cs-137	05/14/87	0.1750	0.0110	0.0100	pCi/g
3PNL	1a	Cs-137	04/29/87	1.3000	0.0581	0.0150	pCi/g
3PNL	1a	Cs-137	06/06/88	1.2100	0.0712	0.0150	pCi/g
3PNL	1a	Cs-137	05/02/89	1.1200	0.0564	0.0150	pCi/g
3PNL	1a	Cs-137	07/31/91	0.3120	0.0419	0.0150	pCi/g
5DOH	1	Cs-137	09/24/85	0.0700	0.0100	0.0100	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 10 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
5DOH	1	Cs-137	08/05/86	0.1220	0.0010	0.0100	pCi/g
5DOH	1	Cs-137	06/03/87	0.1300	0.0100	0.0100	pCi/g
5DOH	1	Cs-137	06/21/88	0.0970	0.0090	0.0100	pCi/g
5DOH	1	Cs-137	06/27/89	0.0990	0.0120	0.0100	pCi/g
5DOH	1	Cs-137	06/26/90	0.4200	0.0200	0.0100	pCi/g
5DOH	1	Cs-137	07/31/91	0.1760	0.0150	0.0200	pCi/g
5PNL	1a	Cs-137	05/07/87	0.6890	0.0364	0.0150	pCi/g
5PNL	1a	Cs-137	06/06/88	1.7600	0.0689	0.0150	pCi/g
5PNL	1a	Cs-137	05/02/89	2.1100	0.0778	0.0150	pCi/g
5PNL	1a	Cs-137	07/31/91	1.1300	0.0534	0.0150	pCi/g
6PNL	1a	Cs-137	05/07/87	0.6130	0.0363	0.0150	pCi/g
6PNL	1a	Cs-137	03/22/88	1.6200	0.0617	0.0150	pCi/g
6PNL	1a	Cs-137	05/02/89	0.5870	0.0441	0.0150	pCi/g
6PNL	1a	Cs-137	07/31/91	0.4080	0.0346	0.0150	pCi/g
7PNL	1a	Cs-137	05/07/87	0.0113	0.0160	0.0150	pCi/g
7PNL	1a	Cs-137	06/06/88	0.0423	0.0186	0.0150	pCi/g
7PNL	1a	Cs-137	05/03/89	0.5180	0.0384	0.0150	pCi/g
7PNL	1a	Cs-137	08/13/91	0.3460	0.0316	0.0150	pCi/g
8PNL	1a	Cs-137	05/07/87	0.1340	0.0248	0.0150	pCi/g
8PNL	1a	Cs-137	06/07/88	0.5760	0.0388	0.0150	pCi/g
8PNL	1a	Cs-137	05/03/89	0.7990	0.0436	0.0150	pCi/g
8PNL	1a	Cs-137	08/13/91	0.3570	0.0407	0.0150	pCi/g
10PNL	1	Cs-137	06/07/88	0.4940	0.0384	0.0150	pCi/g
10PNL	1	Cs-137	05/03/89	0.6330	0.0423	0.0150	pCi/g
10PNL	1	Cs-137	08/13/91	0.4960	0.0426	0.0150	pCi/g
11PNL	1	Cs-137	04/29/87	0.3250	0.0326	0.0150	pCi/g
11PNL	1	Cs-137	06/09/88	0.2390	0.0276	0.0150	pCi/g
11PNL	1	Cs-137	05/03/89	0.1860	0.0218	0.0150	pCi/g
11PNL	1	Cs-137	08/13/91	0.3870	0.0375	0.0150	pCi/g
12DOH	5	Cs-137	08/01/91	0.3720	0.0180	0.0200	pCi/g
12PNL	1	Cs-137	06/09/88	0.1180	0.0242	0.0150	pCi/g
12PNL	1	Cs-137	05/03/89	0.2170	0.0278	0.0150	pCi/g
12PNL	1	Cs-137	08/13/91	0.1420	0.0240	0.0150	pCi/g
13DOH	1	Cs-137	09/24/85	0.0850	0.0170	0.0100	pCi/g
13DOH	1	Cs-137	08/05/86	0.0999	0.0134	0.0100	pCi/g
13DOH	1	Cs-137	06/03/87	0.1310	0.0060	0.0100	pCi/g
13DOH	1	Cs-137	06/21/88	0.0800	0.0100	0.0100	pCi/g
13DOH	1	Cs-137	06/27/89	0.0750	0.0120	0.0100	pCi/g
13DOH	1	Cs-137	06/26/90	0.0750	0.0130	0.0100	pCi/g
13PNL	1	Cs-137	04/29/87	1.1700	0.0618	0.0150	pCi/g
13PNL	1	Cs-137	06/09/88	0.5090	0.0447	0.0150	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 11 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
13PNL	1	Cs-137	05/02/89	1.2300	0.0489	0.0150	pCi/g
13PNL	1	Cs-137	08/08/91	0.7090	0.0429	0.0150	pCi/g
14DOH	5	Cs-137	07/01/92	0.4680	0.0210	0.0200	pCi/g
14PNL	1	Cs-137	04/29/87	1.1400	0.0574	0.0150	pCi/g
14PNL	1	Cs-137	06/06/88	0.8820	0.0554	0.0150	pCi/g
14PNL	1	Cs-137	05/02/89	1.1700	0.0525	0.0150	pCi/g
14PNL	1	Cs-137	07/31/91	0.2710	0.0280	0.0150	pCi/g
15DOH	4	Cs-137	08/01/91	0.3300	0.0160	0.0200	pCi/g
15PNL	1	Cs-137	04/29/87	0.5880	0.0359	0.0150	pCi/g
15PNL	1	Cs-137	05/25/88	0.5590	0.0397	0.0150	pCi/g
15PNL	1	Cs-137	05/03/89	0.3910	0.0399	0.0150	pCi/g
15PNL	1	Cs-137	07/31/91	0.6600	0.0403	0.0150	pCi/g
16DOH	1a	Cs-137	09/26/85	2.7500	0.0500	0.0100	pCi/g
16DOH	1a	Cs-137	08/05/86	1.4400	0.0322	0.0100	pCi/g
16DOH	1a	Cs-137	06/03/87	3.2800	0.0400	0.0100	pCi/g
16DOH	1a	Cs-137	06/21/88	3.0700	0.0300	0.0100	pCi/g
16DOH	1a	Cs-137	06/27/89	0.5090	0.0170	0.0100	pCi/g
16DOH	1a	Cs-137	06/26/90	0.8900	0.0200	0.0100	pCi/g
16DOH	1a	Cs-137	07/31/91	1.4500	0.0300	0.0200	pCi/g
16PNL	2	Cs-137	05/15/87	0.8600	0.0503	0.0150	pCi/g
16PNL	2	Cs-137	06/20/88	1.3000	0.0569	0.0150	pCi/g
16PNL	2	Cs-137	05/08/89	0.4510	0.0371	0.0150	pCi/g
16PNL	2	Cs-137	08/08/91	1.7800	0.1050	0.0150	pCi/g
16PNL	2	Cs-137	07/28/92	0.1970	0.0390	0.0150	pCi/g
17DOH	5	Cs-137	03/20/85	0.6500	0.1000	0.0100	pCi/g
17DOH	5	Cs-137	03/22/85	7.6500	1.4160	0.0100	pCi/g
17PNL	2	Cs-137	05/15/87	0.2270	0.0304	0.0150	pCi/g
17PNL	2	Cs-137	06/20/88	0.5230	0.0340	0.0150	pCi/g
17PNL	2	Cs-137	05/10/89	0.6820	0.0425	0.0150	pCi/g
17PNL	2	Cs-137	10/04/90	0.6230	0.0451	0.0150	pCi/g
17PNL	2	Cs-137	08/08/91	0.5970	0.0377	0.0150	pCi/g
17PNL	2	Cs-137	06/23/92	0.8520	0.0377	0.0150	pCi/g
18PNL	2	Cs-137	05/15/87	0.1170	0.0241	0.0150	pCi/g
18PNL	2	Cs-137	04/01/88	0.9780	0.0417	0.0150	pCi/g
18PNL	2	Cs-137	05/10/89	0.1210	0.0237	0.0150	pCi/g
18PNL	2	Cs-137	10/04/90	0.1060	0.0244	0.0150	pCi/g
18PNL	2	Cs-137	08/08/91	0.4730	0.0363	0.0150	pCi/g
18PNL	2	Cs-137	07/27/92	0.4210	0.0611	0.0150	pCi/g
19DOH	1	Cs-137	07/31/91	0.2630	0.0140	0.0200	pCi/g
19PNL	2	Cs-137	05/15/87	0.6040	0.0548	0.0150	pCi/g
19PNL	2	Cs-137	06/20/88	0.3900	0.0377	0.0150	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 12 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
19PNL	2	Cs-137	05/10/89	0.7850	0.0592	0.0150	pCi/g
19PNL	2	Cs-137	10/04/90	0.1020	0.0206	0.0150	pCi/g
20DOH	1a	Cs-137	01/17/85	0.0200	0.0100	0.0100	pCi/g
20PNL	2	Cs-137	05/15/87	0.2270	0.0333	0.0150	pCi/g
20PNL	2	Cs-137	06/20/88	0.2840	0.0348	0.0150	pCi/g
20PNL	2	Cs-137	05/10/89	1.2500	0.0594	0.0150	pCi/g
21PNL	2	Cs-137	05/15/87	1.0200	0.0613	0.0150	pCi/g
21PNL	2	Cs-137	04/01/88	1.7800	0.0587	0.0150	pCi/g
21PNL	2	Cs-137	05/10/89	1.7200	0.0756	0.0150	pCi/g
21PNL	2	Cs-137	10/08/90	0.5830	0.0422	0.0150	pCi/g
21PNL	2	Cs-137	08/08/91	0.7260	0.0504	0.0150	pCi/g
21PNL	2	Cs-137	07/28/92	0.9470	0.0717	0.0150	pCi/g
22DOH	5	Cs-137	07/01/92	0.4340	0.0210	0.0200	pCi/g
22PNL	2	Cs-137	05/26/87	0.3100	0.0354	0.0150	pCi/g
22PNL	2	Cs-137	06/10/88	0.3470	0.0316	0.0150	pCi/g
22PNL	2	Cs-137	05/09/89	0.4530	0.0424	0.0150	pCi/g
22PNL	2	Cs-137	10/08/90	0.6370	0.0421	0.0150	pCi/g
23DOH	1a	Cs-137	11/06/91	0.0165	0.0114	0.0200	pCi/g
23PNL	2	Cs-137	05/26/87	0.1590	0.0316	0.0150	pCi/g
23PNL	2	Cs-137	06/10/88	0.2220	0.0334	0.0150	pCi/g
23PNL	2	Cs-137	05/05/89	0.2500	0.0304	0.0150	pCi/g
23PNL	2	Cs-137	10/03/90	0.2240	0.0290	0.0150	pCi/g
24DOH	5	Cs-137	08/01/91	0.0090	0.0151	0.0200	pCi/g
24PNL	2	Cs-137	06/10/88	0.1910	0.0271	0.0150	pCi/g
24PNL	2	Cs-137	05/05/89	0.6600	0.0482	0.0150	pCi/g
25DOH	1a	Cs-137	11/05/91	0.0259	0.0138	0.0200	pCi/g
25PNL	1	Cs-137	05/07/87	0.0806	0.0203	0.0150	pCi/g
25PNL	1	Cs-137	05/25/88	0.0784	0.0225	0.0150	pCi/g
25PNL	1	Cs-137	05/05/89	0.5390	0.0392	0.0150	pCi/g
25PNL	1	Cs-137	07/31/91	0.3620	0.0329	0.0150	pCi/g
26DOH	1a	Cs-137	11/06/91	0.0259	0.0100	0.0200	pCi/g
26PNL	2	Cs-137	05/07/87	0.3190	0.0352	0.0150	pCi/g
26PNL	2	Cs-137	06/07/88	0.0811	0.0170	0.0150	pCi/g
26PNL	2	Cs-137	05/05/89	0.4620	0.0341	0.0150	pCi/g
27DOH	1a	Cs-137	06/30/92	1.1200	0.0400	0.0200	pCi/g
27PNL	2	Cs-137	05/20/87	1.0800	0.0613	0.0150	pCi/g
27PNL	2	Cs-137	06/08/88	0.9880	0.0549	0.0150	pCi/g
27PNL	2	Cs-137	05/05/89	0.9570	0.0587	0.0150	pCi/g
28DOH	1	Cs-137	09/26/85	1.7400	0.1000	0.0100	pCi/g
28DOH	1	Cs-137	08/05/86	1.7400	0.0400	0.0100	pCi/g
28DOH	1	Cs-137	06/03/87	1.2900	0.0200	0.0100	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 13 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
28DOH	1	Cs-137	06/21/88	0.7500	0.0200	0.0100	pCi/g
28DOH	1	Cs-137	06/27/89	0.8050	0.0240	0.0100	pCi/g
28DOH	1	Cs-137	06/26/90	1.9000	0.0000	0.0100	pCi/g
28DOH	1	Cs-137	07/31/91	1.6200	0.0400	0.0200	pCi/g
28PNL	2	Cs-137	05/25/88	0.3320	0.0271	0.0150	pCi/g
28PNL	2	Cs-137	05/03/89	0.8610	0.0514	0.0150	pCi/g
29DOH	1	Cs-137	11/19/85	0.0800	0.0100	0.0100	pCi/g
29DOH	1	Cs-137	11/10/86	0.1040	0.0110	0.0100	pCi/g
29DOH	1	Cs-137	10/27/88	0.0963	0.0115	0.0100	pCi/g
29DOH	1	Cs-137	11/07/89	0.0800	0.0100	0.0100	pCi/g
29DOH	1	Cs-137	11/05/90	0.0600	0.0200	0.0200	pCi/g
29DOH	1	Cs-137	11/06/91	0.1650	0.0130	0.0200	pCi/g
29PNL	1	Cs-137	06/09/88	0.7740	0.0439	0.0150	pCi/g
29PNL	1	Cs-137	05/02/89	1.1000	0.0590	0.0150	pCi/g
29PNL	1	Cs-137	08/08/91	0.7510	0.0514	0.0150	pCi/g
30DOH	1a	Cs-137	11/19/85	0.0910	0.0100	0.0100	pCi/g
30DOH	1a	Cs-137	11/10/86	0.3130	0.0170	0.0100	pCi/g
30DOH	1a	Cs-137	10/27/88	0.3600	0.0140	0.0100	pCi/g
30DOH	1a	Cs-137	11/07/89	0.3800	0.0200	0.0100	pCi/g
30DOH	1a	Cs-137	11/05/90	0.2900	0.0200	0.0200	pCi/g
30DOH	1a	Cs-137	11/06/91	0.2430	0.0140	0.0200	pCi/g
30PNL	5	Cs-137	05/20/87	0.6540	0.0421	0.0150	pCi/g
30PNL	5	Cs-137	03/21/88	0.9100	0.0618	0.0150	pCi/g
30PNL	5	Cs-137	05/09/89	0.7630	0.0479	0.0150	pCi/g
31DOH	1a	Cs-137	06/04/87	0.1860	0.0170	0.0100	pCi/g
31PNL	5	Cs-137	05/21/87	0.2870	0.0364	0.0150	pCi/g
31PNL	5	Cs-137	05/24/88	1.0350	0.0578	0.0150	pCi/g
31PNL	5	Cs-137	05/09/89	0.4810	0.0398	0.0150	pCi/g
31PNL	5	Cs-137	10/03/90	1.2200	0.0641	0.0150	pCi/g
31PNL	5	Cs-137	08/01/91	0.0668	0.0258	0.0150	pCi/g
31PNL	5	Cs-137	07/01/92	0.4200	0.0315	0.0150	pCi/g
32DOH	1a	Cs-137	06/26/90	0.1100	0.0100	0.0100	pCi/g
32PNL	4	Cs-137	05/29/87	0.0695	0.0205	0.0150	pCi/g
32PNL	4	Cs-137	05/27/88	0.2320	0.0332	0.0150	pCi/g
32PNL	4	Cs-137	05/08/89	0.0720	0.0275	0.0150	pCi/g
32PNL	4	Cs-137	10/03/90	0.3330	0.0619	0.0150	pCi/g
33DOH	1	Cs-137	09/26/85	3.6900	0.0700	0.0100	pCi/g
33DOH	1	Cs-137	08/05/86	0.6200	0.0400	0.0100	pCi/g
33DOH	1	Cs-137	06/03/87	0.0370	0.0080	0.0100	pCi/g
33DOH	1	Cs-137	06/21/88	0.0650	0.0090	0.0100	pCi/g
33DOH	1	Cs-137	06/27/89	0.5200	0.0200	0.0100	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 14 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
33DOH	1	Cs-137	06/26/90	0.4200	0.0200	0.0100	pCi/g
33DOH	1	Cs-137	07/31/91	0.3080	0.0170	0.0200	pCi/g
33PNL	4	Cs-137	05/29/87	0.2960	0.0354	0.0150	pCi/g
33PNL	4	Cs-137	05/27/88	0.4790	0.0405	0.0150	pCi/g
33PNL	4	Cs-137	05/08/89	0.5400	0.0425	0.0150	pCi/g
33PNL	4	Cs-137	10/03/90	0.2760	0.0398	0.0150	pCi/g
34DOH	1	Cs-137	05/28/85	0.2100	0.2100	0.0100	pCi/g
34DOH	1	Cs-137	05/20/87	0.1150	0.0140	0.0100	pCi/g
34DOH	1	Cs-137	05/17/88	0.3300	0.0100	0.0100	pCi/g
34DOH	1	Cs-137	05/02/89	1.0500	0.0300	0.0100	pCi/g
34DOH	1	Cs-137	05/08/90	0.3700	0.0200	0.0100	pCi/g
34DOH	1	Cs-137	05/16/91	0.6370	0.0240	0.0200	pCi/g
34DOH	1	Cs-137	05/14/92	0.2490	0.0240	0.0200	pCi/g
34PNL	5	Cs-137	05/08/87	0.1545	0.0279	0.0150	pCi/g
34PNL	5	Cs-137	06/17/88	0.3820	0.0424	0.0150	pCi/g
34PNL	5	Cs-137	05/08/89	0.1830	0.0327	0.0150	pCi/g
34PNL	5	Cs-137	10/05/90	0.2430	0.0346	0.0150	pCi/g
34PNL	5	Cs-137	08/01/91	-0.0017	0.0201	0.0150	pCi/g
35DOH	1	Cs-137	05/28/85	0.0400	0.0400	0.0100	pCi/g
35DOH	1	Cs-137	05/14/86	0.3240	0.2870	0.0100	pCi/g
35DOH	1	Cs-137	05/20/87	0.0346	0.0115	0.0100	pCi/g
35DOH	1	Cs-137	05/17/88	0.0310	0.0070	0.0100	pCi/g
35DOH	1	Cs-137	05/02/89	0.0270	0.0100	0.0100	pCi/g
35DOH	1	Cs-137	05/08/90	0.0360	0.0090	0.0100	pCi/g
35DOH	1	Cs-137	05/16/91	0.0355	0.0121	0.0200	pCi/g
35DOH	1	Cs-137	05/14/92	0.0057	0.0099	0.0200	pCi/g
35PNL	4	Cs-137	05/08/87	0.3755	0.0355	0.0150	pCi/g
35PNL	4	Cs-137	06/17/88	0.9690	0.0600	0.0150	pCi/g
35PNL	4	Cs-137	05/08/89	0.9170	0.0525	0.0150	pCi/g
35PNL	4	Cs-137	10/03/90	0.2880	0.0497	0.0150	pCi/g
36PNL	4	Cs-137	05/26/87	0.3500	0.0350	0.0150	pCi/g
36PNL	4	Cs-137	06/10/88	0.4560	0.0407	0.0150	pCi/g
36PNL	4	Cs-137	05/09/89	0.6680	0.0524	0.0150	pCi/g
36PNL	4	Cs-137	10/05/90	1.1900	0.0905	0.0150	pCi/g
36PNL	4	Cs-137	08/01/91	0.3340	0.0388	0.0150	pCi/g
37DOH	1a	Cs-137	11/19/85	0.1300	0.0100	0.0100	pCi/g
37DOH	1a	Cs-137	11/10/86	0.0090	0.0078	0.0100	pCi/g
37DOH	1a	Cs-137	10/27/88	0.0093	0.0058	0.0100	pCi/g
37DOH	1a	Cs-137	11/07/89	0.0200	0.0100	0.0100	pCi/g
37DOH	1a	Cs-137	11/05/90	0.0500	0.0100	0.0200	pCi/g
37PNL	4	Cs-137	05/26/87	0.7630	0.0643	0.0150	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 15 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
37PNL	4	Cs-137	06/10/88	0.2190	0.0314	0.0150	pCi/g
37PNL	4	Cs-137	05/09/89	0.5390	0.0413	0.0150	pCi/g
37PNL	4	Cs-137	10/05/90	0.3440	0.0413	0.0150	pCi/g
38PNL	5	Cs-137	05/21/87	0.1610	0.0305	0.0150	pCi/g
38PNL	5	Cs-137	06/08/88	0.1050	0.0222	0.0150	pCi/g
38PNL	5	Cs-137	05/09/89	0.5550	0.0423	0.0150	pCi/g
38PNL	5	Cs-137	10/03/90	0.5990	0.0459	0.0150	pCi/g
38PNL	5	Cs-137	08/01/91	0.3340	0.0353	0.0150	pCi/g
38PNL	5	Cs-137	07/01/92	0.4450	0.0271	0.0150	pCi/g
39DOH	1a	Cs-137	10/27/88	0.1000	0.0140	0.0100	pCi/g
39DOH	1a	Cs-137	11/07/89	0.3700	0.0200	0.0100	pCi/g
39DOH	1a	Cs-137	11/05/90	0.2900	0.0200	0.0200	pCi/g
40DOH	1a	Cs-137	10/27/88	0.0089	0.0079	0.0100	pCi/g
41DOH	5	Cs-137	09/23/85	0.1100	0.0200	0.0100	pCi/g
41DOH	5	Cs-137	08/05/86	0.0836	0.0016	0.0100	pCi/g
41DOH	5	Cs-137	06/03/87	0.0700	0.0100	0.0100	pCi/g
41DOH	5	Cs-137	06/21/88	0.0700	0.0100	0.0100	pCi/g
41DOH	5	Cs-137	06/27/89	0.0900	0.0140	0.0100	pCi/g
41DOH	5	Cs-137	06/26/90	0.0720	0.0170	0.0100	pCi/g
41DOH	5	Cs-137	08/01/91	0.0820	0.0196	0.0200	pCi/g
43DOH	1a	Cs-137	11/19/85	0.1800	0.0130	0.0100	pCi/g
43DOH	1a	Cs-137	11/10/86	0.0650	0.0094	0.0100	pCi/g
43DOH	1a	Cs-137	10/27/88	0.0181	0.0072	0.0100	pCi/g
43DOH	1a	Cs-137	11/07/89	0.0310	0.0110	0.0100	pCi/g
43DOH	1a	Cs-137	11/05/90	0.0200	0.0100	0.0200	pCi/g
46DOH	1	Cs-137	09/24/85	0.3400	0.0200	0.0100	pCi/g
46DOH	1	Cs-137	08/05/86	0.6490	0.0270	0.0100	pCi/g
46DOH	1	Cs-137	06/03/87	0.3600	0.0100	0.0100	pCi/g
46DOH	1	Cs-137	06/21/88	0.7200	0.0200	0.0100	pCi/g
46DOH	1	Cs-137	06/27/89	0.2300	0.0200	0.0100	pCi/g
46DOH	1	Cs-137	06/26/90	0.1300	0.0100	0.0100	pCi/g
46DOH	1	Cs-137	07/31/91	0.3770	0.0170	0.0200	pCi/g
47DOH	1a	Cs-137	12/16/87	0.2520	0.0190	0.0100	pCi/g
1PNL	1	Eu-154	06/06/88	0.0199	0.0558	0.0500	pCi/g
1PNL	1	Eu-154	05/03/89	0.0327	0.0644	0.0500	pCi/g
1PNL	1	Eu-154	08/14/91	0.0144	0.0598	0.0500	pCi/g
2PNL	1	Eu-154	04/29/87	-0.0056	0.0528	0.0500	pCi/g
2PNL	1	Eu-154	06/06/88	-0.0456	0.0545	0.0500	pCi/g
2PNL	1	Eu-154	05/05/89	0.0309	0.0623	0.0500	pCi/g
2PNL	1	Eu-154	08/14/91	0.0193	0.0585	0.0500	pCi/g
3PNL	1a	Eu-154	04/29/87	-0.0038	0.0546	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 16 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
3PNL	1a	Eu-154	06/06/88	-0.0637	0.0678	0.0500	pCi/g
3PNL	1a	Eu-154	05/02/89	0.0121	0.0650	0.0500	pCi/g
3PNL	1a	Eu-154	07/31/91	0.0148	0.0739	0.0500	pCi/g
5PNL	1a	Eu-154	05/07/87	-0.0305	0.0455	0.0500	pCi/g
5PNL	1a	Eu-154	06/06/88	-0.0187	0.0576	0.0500	pCi/g
5PNL	1a	Eu-154	05/02/89	0.0084	0.0692	0.0500	pCi/g
5PNL	1a	Eu-154	07/31/91	0.0126	0.0632	0.0500	pCi/g
6PNL	1a	Eu-154	05/07/87	0.0049	0.0411	0.0500	pCi/g
6PNL	1a	Eu-154	03/22/88	0.0287	0.0507	0.0500	pCi/g
6PNL	1a	Eu-154	05/02/89	0.0404	0.0627	0.0500	pCi/g
6PNL	1a	Eu-154	07/31/91	-0.0466	0.0659	0.0500	pCi/g
7PNL	1a	Eu-154	05/07/87	-0.0164	0.0580	0.0500	pCi/g
7PNL	1a	Eu-154	06/06/88	-0.0164	0.0536	0.0500	pCi/g
7PNL	1a	Eu-154	05/03/89	0.0283	0.0485	0.0500	pCi/g
7PNL	1a	Eu-154	08/13/91	-0.0510	0.0633	0.0500	pCi/g
8PNL	1a	Eu-154	05/07/87	0.0320	0.0490	0.0500	pCi/g
8PNL	1a	Eu-154	06/07/88	0.0261	0.0575	0.0500	pCi/g
8PNL	1a	Eu-154	05/03/89	-0.0811	0.0609	0.0500	pCi/g
8PNL	1a	Eu-154	08/13/91	-0.0062	0.0748	0.0500	pCi/g
10PNL	1	Eu-154	06/07/88	0.0119	0.0480	0.0500	pCi/g
10PNL	1	Eu-154	05/03/89	0.0020	0.0548	0.0500	pCi/g
10PNL	1	Eu-154	08/13/91	0.0039	0.0674	0.0500	pCi/g
11PNL	1	Eu-154	04/29/87	-0.0451	0.0612	0.0500	pCi/g
11PNL	1	Eu-154	06/09/88	-0.0296	0.0589	0.0500	pCi/g
11PNL	1	Eu-154	05/03/89	0.0642	0.0386	0.0500	pCi/g
11PNL	1	Eu-154	08/13/91	-0.0315	0.0742	0.0500	pCi/g
12PNL	1	Eu-154	06/09/88	0.0141	0.0533	0.0500	pCi/g
12PNL	1	Eu-154	05/03/89	0.0507	0.0518	0.0500	pCi/g
12PNL	1	Eu-154	08/13/91	0.0075	0.0530	0.0500	pCi/g
13PNL	1	Eu-154	04/29/87	0.0399	0.0489	0.0500	pCi/g
13PNL	1	Eu-154	06/09/88	0.0077	0.0568	0.0500	pCi/g
13PNL	1	Eu-154	05/02/89	-0.0083	0.0472	0.0500	pCi/g
13PNL	1	Eu-154	08/08/91	-0.0381	0.0617	0.0500	pCi/g
14PNL	1	Eu-154	04/29/87	-0.0217	0.0600	0.0500	pCi/g
14PNL	1	Eu-154	06/06/88	0.0248	0.0781	0.0500	pCi/g
14PNL	1	Eu-154	05/02/89	-0.0381	0.0580	0.0500	pCi/g
14PNL	1	Eu-154	07/31/91	-0.0162	0.0538	0.0500	pCi/g
15PNL	1	Eu-154	04/29/87	0.0085	0.0429	0.0500	pCi/g
15PNL	1	Eu-154	05/25/88	0.0138	0.0585	0.0500	pCi/g
15PNL	1	Eu-154	05/03/89	0.0323	0.0594	0.0500	pCi/g
15PNL	1	Eu-154	07/31/91	0.0158	0.0480	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 17 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16PNL	2	Eu-154	05/15/87	0.0052	0.0599	0.0500	pCi/g
16PNL	2	Eu-154	06/20/88	0.0189	0.0646	0.0500	pCi/g
16PNL	2	Eu-154	05/08/89	-0.0675	0.0563	0.0500	pCi/g
16PNL	2	Eu-154	08/08/91	0.0964	0.1520	0.0500	pCi/g
16PNL	2	Eu-154	07/28/92	-0.0907	0.0889	0.0500	pCi/g
17PNL	2	Eu-154	05/15/87	-0.0119	0.0579	0.0500	pCi/g
17PNL	2	Eu-154	06/20/88	-0.0295	0.0511	0.0500	pCi/g
17PNL	2	Eu-154	05/10/89	-0.0012	0.0606	0.0500	pCi/g
17PNL	2	Eu-154	10/04/90	0.0464	0.0628	0.0500	pCi/g
17PNL	2	Eu-154	08/08/91	-0.0519	0.0627	0.0500	pCi/g
17PNL	2	Eu-154	06/23/92	0.0398	0.0534	0.0500	pCi/g
18PNL	2	Eu-154	05/15/87	0.0012	0.0579	0.0500	pCi/g
18PNL	2	Eu-154	04/01/88	0.0111	0.0477	0.0500	pCi/g
18PNL	2	Eu-154	05/10/89	0.0468	0.0561	0.0500	pCi/g
18PNL	2	Eu-154	10/04/90	-0.0328	0.0608	0.0500	pCi/g
18PNL	2	Eu-154	08/08/91	-0.0318	0.0580	0.0500	pCi/g
18PNL	2	Eu-154	07/27/92	-0.0250	0.1020	0.0500	pCi/g
19PNL	2	Eu-154	05/15/87	0.0745	0.0723	0.0500	pCi/g
19PNL	2	Eu-154	06/20/88	0.0162	0.0718	0.0500	pCi/g
19PNL	2	Eu-154	05/10/89	0.0692	0.0827	0.0500	pCi/g
19PNL	2	Eu-154	10/04/90	0.0036	0.0679	0.0500	pCi/g
20PNL	2	Eu-154	05/15/87	-0.0353	0.0760	0.0500	pCi/g
20PNL	2	Eu-154	06/20/88	0.0102	0.0596	0.0500	pCi/g
20PNL	2	Eu-154	05/10/89	0.0780	0.0603	0.0500	pCi/g
21PNL	2	Eu-154	05/15/87	0.0246	0.0652	0.0500	pCi/g
21PNL	2	Eu-154	04/01/88	-0.0156	0.0582	0.0500	pCi/g
21PNL	2	Eu-154	05/10/89	-0.0098	0.0628	0.0500	pCi/g
21PNL	2	Eu-154	10/08/90	0.0129	0.0599	0.0500	pCi/g
21PNL	2	Eu-154	08/08/91	0.0511	0.0723	0.0500	pCi/g
21PNL	2	Eu-154	07/28/92	0.0978	0.1060	0.0500	pCi/g
22PNL	2	Eu-154	05/26/87	-0.0685	0.0664	0.0500	pCi/g
22PNL	2	Eu-154	06/10/88	0.0022	0.0470	0.0500	pCi/g
22PNL	2	Eu-154	05/09/89	-0.0416	0.0718	0.0500	pCi/g
22PNL	2	Eu-154	10/08/90	0.0396	0.0569	0.0500	pCi/g
23PNL	2	Eu-154	05/26/87	0.0477	0.0512	0.0500	pCi/g
23PNL	2	Eu-154	06/10/88	-0.0010	0.0664	0.0500	pCi/g
23PNL	2	Eu-154	05/05/89	0.0155	0.0655	0.0500	pCi/g
23PNL	2	Eu-154	10/03/90	0.0026	0.0655	0.0500	pCi/g
24PNL	2	Eu-154	06/10/88	0.0122	0.0659	0.0500	pCi/g
24PNL	2	Eu-154	05/05/89	-0.0195	0.0766	0.0500	pCi/g
25PNL	1	Eu-154	05/07/87	-0.0269	0.0598	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 18 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
25PNL	1	Eu-154	05/25/88	0.0557	0.0556	0.0500	pCi/g
25PNL	1	Eu-154	05/05/89	-0.0079	0.0601	0.0500	pCi/g
25PNL	1	Eu-154	07/31/91	-0.0682	0.0620	0.0500	pCi/g
26PNL	2	Eu-154	05/07/87	-0.0361	0.0610	0.0500	pCi/g
26PNL	2	Eu-154	06/07/88	0.0091	0.0441	0.0500	pCi/g
26PNL	2	Eu-154	05/05/89	0.0186	0.0447	0.0500	pCi/g
27PNL	2	Eu-154	05/20/87	0.0000	0.0676	0.0500	pCi/g
27PNL	2	Eu-154	06/08/88	0.0023	0.0576	0.0500	pCi/g
27PNL	2	Eu-154	05/05/89	0.0000	0.0616	0.0500	pCi/g
28PNL	2	Eu-154	05/25/88	0.0194	0.0422	0.0500	pCi/g
28PNL	2	Eu-154	05/03/89	0.0274	0.0655	0.0500	pCi/g
29PNL	1	Eu-154	06/09/88	-0.0012	0.0553	0.0500	pCi/g
29PNL	1	Eu-154	05/02/89	-0.0078	0.0579	0.0500	pCi/g
29PNL	1	Eu-154	08/08/91	-0.0270	0.0687	0.0500	pCi/g
30PNL	5	Eu-154	05/20/87	-0.0457	0.0579	0.0500	pCi/g
30PNL	5	Eu-154	03/21/88	-0.0057	0.0665	0.0500	pCi/g
30PNL	5	Eu-154	05/09/89	-0.0520	0.0552	0.0500	pCi/g
31PNL	5	Eu-154	05/21/87	-0.0106	0.0717	0.0500	pCi/g
31PNL	5	Eu-154	05/24/88	-0.0201	0.0560	0.0500	pCi/g
31PNL	5	Eu-154	05/09/89	-0.0365	0.0661	0.0500	pCi/g
31PNL	5	Eu-154	10/03/90	0.0284	0.0773	0.0500	pCi/g
31PNL	5	Eu-154	08/01/91	-0.0417	0.0807	0.0500	pCi/g
31PNL	5	Eu-154	07/01/92	-0.0142	0.0416	0.0500	pCi/g
32PNL	4	Eu-154	05/29/87	-0.0422	0.0648	0.0500	pCi/g
32PNL	4	Eu-154	05/27/88	-0.0222	0.0654	0.0500	pCi/g
32PNL	4	Eu-154	05/08/89	0.0211	0.0858	0.0500	pCi/g
32PNL	4	Eu-154	10/03/90	0.0403	0.1170	0.0500	pCi/g
33PNL	4	Eu-154	05/29/87	0.0213	0.0629	0.0500	pCi/g
33PNL	4	Eu-154	05/27/88	0.0251	0.0498	0.0500	pCi/g
33PNL	4	Eu-154	05/08/89	-0.0009	0.0647	0.0500	pCi/g
33PNL	4	Eu-154	10/03/90	0.0034	0.0742	0.0500	pCi/g
34PNL	5	Eu-154	05/08/87	-0.0252	0.0680	0.0500	pCi/g
34PNL	5	Eu-154	06/17/88	-0.0121	0.0696	0.0500	pCi/g
34PNL	5	Eu-154	05/08/89	-0.0593	0.0633	0.0500	pCi/g
34PNL	5	Eu-154	10/05/90	0.0687	0.0671	0.0500	pCi/g
34PNL	5	Eu-154	08/01/91	-0.0402	0.0631	0.0500	pCi/g
35PNL	4	Eu-154	05/08/87	-0.0424	0.0553	0.0500	pCi/g
35PNL	4	Eu-154	06/17/88	0.0324	0.0533	0.0500	pCi/g
35PNL	4	Eu-154	05/08/89	0.0430	0.0567	0.0500	pCi/g
35PNL	4	Eu-154	10/03/90	-0.0205	0.1340	0.0500	pCi/g
36PNL	4	Eu-154	05/26/87	-0.0142	0.0527	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 18 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
25PNL	1	Eu-154	05/25/88	0.0557	0.0556	0.0500	pCi/g
25PNL	1	Eu-154	05/05/89	-0.0079	0.0601	0.0500	pCi/g
25PNL	1	Eu-154	07/31/91	-0.0682	0.0620	0.0500	pCi/g
26PNL	2	Eu-154	05/07/87	-0.0361	0.0610	0.0500	pCi/g
26PNL	2	Eu-154	06/07/88	0.0091	0.0441	0.0500	pCi/g
26PNL	2	Eu-154	05/05/89	0.0186	0.0447	0.0500	pCi/g
27PNL	2	Eu-154	05/20/87	0.0000	0.0676	0.0500	pCi/g
27PNL	2	Eu-154	06/08/88	0.0023	0.0576	0.0500	pCi/g
27PNL	2	Eu-154	05/05/89	0.0000	0.0616	0.0500	pCi/g
28PNL	2	Eu-154	05/25/88	0.0194	0.0422	0.0500	pCi/g
28PNL	2	Eu-154	05/03/89	0.0274	0.0655	0.0500	pCi/g
29PNL	1	Eu-154	06/09/88	-0.0012	0.0553	0.0500	pCi/g
29PNL	1	Eu-154	05/02/89	-0.0078	0.0579	0.0500	pCi/g
29PNL	1	Eu-154	08/08/91	-0.0270	0.0687	0.0500	pCi/g
30PNL	5	Eu-154	05/20/87	-0.0457	0.0579	0.0500	pCi/g
30PNL	5	Eu-154	03/21/88	-0.0057	0.0665	0.0500	pCi/g
30PNL	5	Eu-154	05/09/89	-0.0520	0.0552	0.0500	pCi/g
31PNL	5	Eu-154	05/21/87	-0.0106	0.0717	0.0500	pCi/g
31PNL	5	Eu-154	05/24/88	-0.0201	0.0560	0.0500	pCi/g
31PNL	5	Eu-154	05/09/89	-0.0365	0.0661	0.0500	pCi/g
31PNL	5	Eu-154	10/03/90	0.0284	0.0773	0.0500	pCi/g
31PNL	5	Eu-154	08/01/91	-0.0417	0.0807	0.0500	pCi/g
31PNL	5	Eu-154	07/01/92	-0.0142	0.0416	0.0500	pCi/g
32PNL	4	Eu-154	05/29/87	-0.0422	0.0648	0.0500	pCi/g
32PNL	4	Eu-154	05/27/88	-0.0222	0.0654	0.0500	pCi/g
32PNL	4	Eu-154	05/08/89	0.0211	0.0858	0.0500	pCi/g
32PNL	4	Eu-154	10/03/90	0.0403	0.1170	0.0500	pCi/g
33PNL	4	Eu-154	05/29/87	0.0213	0.0629	0.0500	pCi/g
33PNL	4	Eu-154	05/27/88	0.0251	0.0498	0.0500	pCi/g
33PNL	4	Eu-154	05/08/89	-0.0009	0.0647	0.0500	pCi/g
33PNL	4	Eu-154	10/03/90	0.0034	0.0742	0.0500	pCi/g
34PNL	5	Eu-154	05/08/87	-0.0252	0.0680	0.0500	pCi/g
34PNL	5	Eu-154	06/17/88	-0.0121	0.0696	0.0500	pCi/g
34PNL	5	Eu-154	05/08/89	-0.0593	0.0633	0.0500	pCi/g
34PNL	5	Eu-154	10/05/90	0.0687	0.0671	0.0500	pCi/g
34PNL	5	Eu-154	08/01/91	-0.0402	0.0631	0.0500	pCi/g
35PNL	4	Eu-154	05/08/87	-0.0424	0.0553	0.0500	pCi/g
35PNL	4	Eu-154	06/17/88	0.0324	0.0533	0.0500	pCi/g
35PNL	4	Eu-154	05/08/89	0.0430	0.0567	0.0500	pCi/g
35PNL	4	Eu-154	10/03/90	-0.0205	0.1340	0.0500	pCi/g
36PNL	4	Eu-154	05/26/87	-0.0142	0.0527	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 19 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
36PNL	4	Eu-154	06/10/88	-0.0024	0.0567	0.0500	pCi/g
36PNL	4	Eu-154	05/09/89	0.0132	0.0607	0.0500	pCi/g
36PNL	4	Eu-154	10/05/90	0.0219	0.1360	0.0500	pCi/g
36PNL	4	Eu-154	08/01/91	0.0503	0.0724	0.0500	pCi/g
37PNL	4	Eu-154	05/26/87	0.0070	0.0709	0.0500	pCi/g
37PNL	4	Eu-154	06/10/88	0.0039	0.0502	0.0500	pCi/g
37PNL	4	Eu-154	05/09/89	0.0315	0.0583	0.0500	pCi/g
37PNL	4	Eu-154	10/05/90	-0.0348	0.0884	0.0500	pCi/g
38PNL	5	Eu-154	05/21/87	-0.0623	0.0746	0.0500	pCi/g
38PNL	5	Eu-154	06/08/88	0.0358	0.0554	0.0500	pCi/g
38PNL	5	Eu-154	05/09/89	-0.0274	0.0548	0.0500	pCi/g
38PNL	5	Eu-154	10/03/90	0.0149	0.0654	0.0500	pCi/g
38PNL	5	Eu-154	08/01/91	0.0542	0.0596	0.0500	pCi/g
38PNL	5	Eu-154	07/01/92	-0.0530	0.0459	0.0500	pCi/g
1PNL	1	Eu-155	06/06/88	0.0341	0.0537	0.0500	pCi/g
1PNL	1	Eu-155	05/03/89	0.0452	0.0642	0.0500	pCi/g
1PNL	1	Eu-155	08/14/91	0.0665	0.0659	0.0500	pCi/g
2PNL	1	Eu-155	04/29/87	0.1060	0.0528	0.0500	pCi/g
2PNL	1	Eu-155	06/06/88	0.0503	0.0494	0.0500	pCi/g
2PNL	1	Eu-155	05/05/89	0.0207	0.0626	0.0500	pCi/g
2PNL	1	Eu-155	08/14/91	0.1010	0.0571	0.0500	pCi/g
3PNL	1a	Eu-155	04/29/87	0.0528	0.0484	0.0500	pCi/g
3PNL	1a	Eu-155	06/06/88	0.1110	0.0744	0.0500	pCi/g
3PNL	1a	Eu-155	05/02/89	0.0492	0.0638	0.0500	pCi/g
3PNL	1a	Eu-155	07/31/91	0.0936	0.1000	0.0500	pCi/g
5PNL	1a	Eu-155	05/07/87	0.0086	0.0377	0.0500	pCi/g
5PNL	1a	Eu-155	06/06/88	0.0394	0.0614	0.0500	pCi/g
5PNL	1a	Eu-155	05/02/89	0.0755	0.0752	0.0500	pCi/g
5PNL	1a	Eu-155	07/31/91	-0.0048	0.0620	0.0500	pCi/g
6PNL	1a	Eu-155	05/07/87	-0.0063	0.0373	0.0500	pCi/g
6PNL	1a	Eu-155	03/22/88	0.0394	0.0490	0.0500	pCi/g
6PNL	1a	Eu-155	05/02/89	0.0468	0.0505	0.0500	pCi/g
6PNL	1a	Eu-155	07/31/91	0.0299	0.0600	0.0500	pCi/g
7PNL	1a	Eu-155	05/07/87	0.0498	0.0573	0.0500	pCi/g
7PNL	1a	Eu-155	06/06/88	0.0627	0.0455	0.0500	pCi/g
7PNL	1a	Eu-155	05/03/89	0.0385	0.0463	0.0500	pCi/g
7PNL	1a	Eu-155	08/13/91	0.0446	0.0489	0.0500	pCi/g
8PNL	1a	Eu-155	05/07/87	0.0007	0.0518	0.0500	pCi/g
8PNL	1a	Eu-155	06/07/88	0.0369	0.0566	0.0500	pCi/g
8PNL	1a	Eu-155	05/03/89	0.0332	0.0527	0.0500	pCi/g
8PNL	1a	Eu-155	08/13/91	0.0502	0.1080	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 20 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
10PNL	1	Eu-155	06/07/88	0.0478	0.0527	0.0500	pCi/g
10PNL	1	Eu-155	05/03/89	0.0836	0.0622	0.0500	pCi/g
10PNL	1	Eu-155	08/13/91	0.0607	0.0707	0.0500	pCi/g
11PNL	1	Eu-155	04/29/87	0.0088	0.0445	0.0500	pCi/g
11PNL	1	Eu-155	06/09/88	0.0635	0.0590	0.0500	pCi/g
11PNL	1	Eu-155	05/03/89	0.0051	0.0358	0.0500	pCi/g
11PNL	1	Eu-155	08/13/91	0.0727	0.0671	0.0500	pCi/g
12PNL	1	Eu-155	06/09/88	-0.0213	0.0524	0.0500	pCi/g
12PNL	1	Eu-155	05/03/89	0.0359	0.0418	0.0500	pCi/g
12PNL	1	Eu-155	08/13/91	0.0571	0.0431	0.0500	pCi/g
13PNL	1	Eu-155	04/29/87	0.0133	0.0775	0.0500	pCi/g
13PNL	1	Eu-155	06/09/88	0.0257	0.0620	0.0500	pCi/g
13PNL	1	Eu-155	05/02/89	0.0311	0.0424	0.0500	pCi/g
13PNL	1	Eu-155	08/08/91	0.0825	0.0596	0.0500	pCi/g
14PNL	1	Eu-155	04/29/87	0.0413	0.0637	0.0500	pCi/g
14PNL	1	Eu-155	06/06/88	0.1440	0.0740	0.0500	pCi/g
14PNL	1	Eu-155	05/02/89	0.0380	0.0506	0.0500	pCi/g
14PNL	1	Eu-155	07/31/91	0.0121	0.0420	0.0500	pCi/g
15PNL	1	Eu-155	04/29/87	0.0207	0.0358	0.0500	pCi/g
15PNL	1	Eu-155	05/25/88	0.0967	0.0688	0.0500	pCi/g
15PNL	1	Eu-155	05/03/89	0.0486	0.0468	0.0500	pCi/g
15PNL	1	Eu-155	07/31/91	0.0334	0.0423	0.0500	pCi/g
16PNL	2	Eu-155	05/15/87	0.0750	0.0536	0.0500	pCi/g
16PNL	2	Eu-155	06/20/88	0.0835	0.0685	0.0500	pCi/g
16PNL	2	Eu-155	05/08/89	0.0460	0.0413	0.0500	pCi/g
16PNL	2	Eu-155	08/08/91	0.1040	0.1890	0.0500	pCi/g
16PNL	2	Eu-155	07/28/92	0.0659	0.0795	0.0500	pCi/g
17PNL	2	Eu-155	05/15/87	0.0144	0.0556	0.0500	pCi/g
17PNL	2	Eu-155	06/20/88	0.0168	0.0498	0.0500	pCi/g
17PNL	2	Eu-155	05/10/89	0.0430	0.0615	0.0500	pCi/g
17PNL	2	Eu-155	10/04/90	0.0846	0.0609	0.0500	pCi/g
17PNL	2	Eu-155	08/08/91	0.0879	0.0590	0.0500	pCi/g
17PNL	2	Eu-155	06/23/92	0.0934	0.0505	0.0500	pCi/g
18PNL	2	Eu-155	05/15/87	0.1010	0.0548	0.0500	pCi/g
18PNL	2	Eu-155	04/01/88	0.0763	0.0556	0.0500	pCi/g
18PNL	2	Eu-155	05/10/89	0.0615	0.0624	0.0500	pCi/g
18PNL	2	Eu-155	10/04/90	0.0492	0.0479	0.0500	pCi/g
18PNL	2	Eu-155	08/08/91	0.0224	0.0627	0.0500	pCi/g
18PNL	2	Eu-155	07/27/92	0.1450	0.0714	0.0500	pCi/g
19PNL	2	Eu-155	05/15/87	0.0672	0.0798	0.0500	pCi/g
19PNL	2	Eu-155	06/20/88	0.0452	0.0673	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 21 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
19PNL	2	Eu-155	05/10/89	0.1300	0.0979	0.0500	pCi/g
19PNL	2	Eu-155	10/04/90	0.0678	0.0500	0.0500	pCi/g
20PNL	2	Eu-155	05/15/87	0.0163	0.0788	0.0500	pCi/g
20PNL	2	Eu-155	06/20/88	0.0793	0.0586	0.0500	pCi/g
20PNL	2	Eu-155	05/10/89	0.0563	0.0600	0.0500	pCi/g
21PNL	2	Eu-155	05/15/87	0.0817	0.0745	0.0500	pCi/g
21PNL	2	Eu-155	04/01/88	0.0592	0.0565	0.0500	pCi/g
21PNL	2	Eu-155	05/10/89	0.0837	0.0642	0.0500	pCi/g
21PNL	2	Eu-155	10/08/90	0.0476	0.0503	0.0500	pCi/g
21PNL	2	Eu-155	08/08/91	0.0991	0.0581	0.0500	pCi/g
21PNL	2	Eu-155	07/28/92	0.0452	0.1010	0.0500	pCi/g
22PNL	2	Eu-155	05/26/87	0.0563	0.0591	0.0500	pCi/g
22PNL	2	Eu-155	06/10/88	0.0345	0.0504	0.0500	pCi/g
22PNL	2	Eu-155	05/09/89	0.0411	0.0789	0.0500	pCi/g
22PNL	2	Eu-155	10/08/90	0.0100	0.0577	0.0500	pCi/g
23PNL	2	Eu-155	05/26/87	0.0548	0.0506	0.0500	pCi/g
23PNL	2	Eu-155	06/10/88	-0.0031	0.0700	0.0500	pCi/g
23PNL	2	Eu-155	05/05/89	0.0562	0.0660	0.0500	pCi/g
23PNL	2	Eu-155	10/03/90	0.0329	0.0512	0.0500	pCi/g
24PNL	2	Eu-155	06/10/88	0.0520	0.0617	0.0500	pCi/g
24PNL	2	Eu-155	05/05/89	-0.0132	0.0816	0.0500	pCi/g
25PNL	1	Eu-155	05/07/87	0.0653	0.0726	0.0500	pCi/g
25PNL	1	Eu-155	05/25/88	0.0559	0.0567	0.0500	pCi/g
25PNL	1	Eu-155	05/05/89	-0.0024	0.0565	0.0500	pCi/g
25PNL	1	Eu-155	07/31/91	0.0206	0.0626	0.0500	pCi/g
26PNL	2	Eu-155	05/07/87	0.0039	0.0558	0.0500	pCi/g
26PNL	2	Eu-155	06/07/88	0.0189	0.0376	0.0500	pCi/g
26PNL	2	Eu-155	05/05/89	0.0461	0.0396	0.0500	pCi/g
27PNL	2	Eu-155	05/20/87	0.0673	0.0694	0.0500	pCi/g
27PNL	2	Eu-155	06/08/88	0.0573	0.0767	0.0500	pCi/g
27PNL	2	Eu-155	05/05/89	0.0366	0.0583	0.0500	pCi/g
28PNL	2	Eu-155	05/25/88	0.0131	0.0439	0.0500	pCi/g
28PNL	2	Eu-155	05/03/89	0.0189	0.0500	0.0500	pCi/g
29PNL	1	Eu-155	06/09/88	0.0346	0.0571	0.0500	pCi/g
29PNL	1	Eu-155	05/02/89	0.0698	0.0546	0.0500	pCi/g
29PNL	1	Eu-155	08/08/91	0.0473	0.0880	0.0500	pCi/g
30PNL	5	Eu-155	05/20/87	0.0275	0.0444	0.0500	pCi/g
30PNL	5	Eu-155	03/21/88	0.1090	0.0781	0.0500	pCi/g
30PNL	5	Eu-155	05/09/89	0.0580	0.0557	0.0500	pCi/g
31PNL	5	Eu-155	05/21/87	0.0390	0.0621	0.0500	pCi/g
31PNL	5	Eu-155	05/24/88	0.0566	0.0568	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 22 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
31PNL	5	Eu-155	05/09/89	0.0391	0.0676	0.0500	pCi/g
31PNL	5	Eu-155	10/03/90	0.0229	0.0806	0.0500	pCi/g
31PNL	5	Eu-155	08/01/91	0.0234	0.1010	0.0500	pCi/g
31PNL	5	Eu-155	07/01/92	0.0353	0.0366	0.0500	pCi/g
32PNL	4	Eu-155	05/29/87	0.0750	0.0587	0.0500	pCi/g
32PNL	4	Eu-155	05/27/88	0.0436	0.0581	0.0500	pCi/g
32PNL	4	Eu-155	05/08/89	0.0654	0.0716	0.0500	pCi/g
32PNL	4	Eu-155	10/03/90	-0.0360	0.1650	0.0500	pCi/g
33PNL	4	Eu-155	05/29/87	0.0304	0.0630	0.0500	pCi/g
33PNL	4	Eu-155	05/27/88	0.0459	0.0596	0.0500	pCi/g
33PNL	4	Eu-155	05/08/89	0.0630	0.0691	0.0500	pCi/g
33PNL	4	Eu-155	10/03/90	0.0368	0.0962	0.0500	pCi/g
34PNL	5	Eu-155	05/08/87	0.0181	0.0678	0.0500	pCi/g
34PNL	5	Eu-155	06/17/88	0.0271	0.0516	0.0500	pCi/g
34PNL	5	Eu-155	05/08/89	0.0174	0.0477	0.0500	pCi/g
34PNL	5	Eu-155	10/05/90	0.0986	0.0517	0.0500	pCi/g
34PNL	5	Eu-155	08/01/91	0.0870	0.0517	0.0500	pCi/g
35PNL	4	Eu-155	05/08/87	0.0305	0.0477	0.0500	pCi/g
35PNL	4	Eu-155	06/17/88	0.0025	0.0646	0.0500	pCi/g
35PNL	4	Eu-155	05/08/89	0.1000	0.0533	0.0500	pCi/g
35PNL	4	Eu-155	10/03/90	0.1630	0.1160	0.0500	pCi/g
36PNL	4	Eu-155	05/26/87	0.0421	0.0520	0.0500	pCi/g
36PNL	4	Eu-155	06/10/88	0.0352	0.0526	0.0500	pCi/g
36PNL	4	Eu-155	05/09/89	0.0501	0.0548	0.0500	pCi/g
36PNL	4	Eu-155	10/05/90	0.0965	0.1330	0.0500	pCi/g
36PNL	4	Eu-155	08/01/91	0.0145	0.0924	0.0500	pCi/g
37PNL	4	Eu-155	05/26/87	0.0568	0.0792	0.0500	pCi/g
37PNL	4	Eu-155	06/10/88	0.0075	0.0473	0.0500	pCi/g
37PNL	4	Eu-155	05/09/89	0.0376	0.0551	0.0500	pCi/g
37PNL	4	Eu-155	10/05/90	0.0954	0.0772	0.0500	pCi/g
38PNL	5	Eu-155	05/21/87	0.0048	0.0757	0.0500	pCi/g
38PNL	5	Eu-155	06/08/88	0.0557	0.0570	0.0500	pCi/g
38PNL	5	Eu-155	05/09/89	0.0530	0.0452	0.0500	pCi/g
38PNL	5	Eu-155	10/03/90	0.0767	0.0513	0.0500	pCi/g
38PNL	5	Eu-155	08/01/91	0.0542	0.0631	0.0500	pCi/g
38PNL	5	Eu-155	07/01/92	0.0532	0.0457	0.0500	pCi/g
17DOH	5	Gross Alph	03/20/85	5.0000	5.0000	4.0000	pCi/g
17DOH	5	Gross Alph	03/22/85	5.0000	5.0000	4.0000	pCi/g
41DOH	5	Gross Alph	08/05/86	8.0000	1.0000	4.0000	pCi/g
12DOH	5	Gross Beta	08/01/91	0.0180	0.0030	1.0000	pCi/g
14DOH	5	Gross Beta	07/01/92	18.0000	3.0000	1.0000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 23 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
15DOH	4	Gross Beta	08/01/91	0.0180	0.0030	1.0000	pCi/g
17DOH	5	Gross Beta	03/20/85	19.0000	2.0000	1.0000	pCi/g
17DOH	5	Gross Beta	03/22/85	26.0000	2.0000	1.0000	pCi/g
22DOH	5	Gross Beta	07/01/92	20.0000	3.0000	1.0000	pCi/g
24DOH	5	Gross Beta	08/01/91	0.0220	0.0030	1.0000	pCi/g
41DOH	5	Gross Beta	09/23/85	19.0000	2.0000	1.0000	pCi/g
41DOH	5	Gross Beta	08/05/86	19.0000	1.0000	1.0000	pCi/g
41DOH	5	Gross Beta	06/03/87	19.4000	1.5000	1.0000	pCi/g
41DOH	5	Gross Beta	06/21/88	16.0000	2.0000	1.0000	pCi/g
41DOH	5	Gross Beta	06/27/89	20.0000	2.0000	1.0000	pCi/g
41DOH	5	Gross Beta	06/26/90	18.0000	3.0000	1.0000	pCi/g
41DOH	5	Gross Beta	08/01/91	0.0200	0.0030	1.0000	pCi/g
1DOH	1a	K-40	07/31/91	16.2000	0.6000	0.1000	pCi/g
1PNL	1	K-40	06/06/88	13.0000	0.8140	0.3500	pCi/g
1PNL	1	K-40	05/03/89	17.7000	0.8710	0.3500	pCi/g
1PNL	1	K-40	08/14/91	14.6000	0.7700	0.3500	pCi/g
2DOH	1a	K-40	07/31/91	15.9000	0.4000	0.1000	pCi/g
2PNL	1	K-40	04/29/87	14.6000	0.7130	0.3500	pCi/g
2PNL	1	K-40	06/06/88	12.9000	0.7460	0.3500	pCi/g
2PNL	1	K-40	05/05/89	15.5000	0.8320	0.3500	pCi/g
2PNL	1	K-40	08/14/91	14.8000	0.8620	0.3500	pCi/g
3DOH	1a	K-40	05/14/87	10.7000	0.2400	0.1000	pCi/g
3PNL	1a	K-40	04/29/87	13.6000	0.7480	0.3500	pCi/g
3PNL	1a	K-40	06/06/88	12.8000	0.9160	0.3500	pCi/g
3PNL	1a	K-40	05/02/89	15.8000	0.8090	0.3500	pCi/g
3PNL	1a	K-40	07/31/91	14.5000	0.8170	0.3500	pCi/g
4DOH	1a	K-40	08/05/86	13.1000	0.2340	0.1000	pCi/g
4DOH	1a	K-40	06/03/87	11.9000	0.2000	0.1000	pCi/g
4DOH	1a	K-40	06/21/88	13.8000	0.3000	0.1000	pCi/g
4DOH	1a	K-40	06/27/89	13.2000	0.3000	0.1000	pCi/g
4DOH	1a	K-40	06/26/90	14.1000	0.3000	0.1000	pCi/g
4DOH	1a	K-40	07/31/91	15.2000	0.3000	0.1000	pCi/g
4PNL	1	K-40	05/07/87	14.3000	0.7220	0.3500	pCi/g
4PNL	1	K-40	03/22/88	15.4000	0.8100	0.3500	pCi/g
4PNL	1	K-40	05/02/89	15.9000	0.8270	0.3500	pCi/g
4PNL	1	K-40	08/13/91	16.6000	0.7640	0.3500	pCi/g
5DOH	1	K-40	08/05/86	14.5000	0.4000	0.1000	pCi/g
5DOH	1	K-40	06/03/87	11.5000	0.3000	0.1000	pCi/g
5DOH	1	K-40	06/21/88	14.2000	0.3000	0.1000	pCi/g
5DOH	1	K-40	06/27/89	14.0000	0.3000	0.1000	pCi/g
5DOH	1	K-40	06/26/90	15.4000	0.3000	0.1000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 24 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
5DOH	1	K-40	07/31/91	15.2000	0.4000	0.1000	pCi/g
5PNL	1a	K-40	05/07/87	13.9000	0.5910	0.3500	pCi/g
5PNL	1a	K-40	06/06/88	14.4000	0.7550	0.3500	pCi/g
5PNL	1a	K-40	05/02/89	14.8000	0.8420	0.3500	pCi/g
5PNL	1a	K-40	07/31/91	13.6000	0.7090	0.3500	pCi/g
6DOH	1a	K-40	05/20/87	14.4500	0.4583	0.1000	pCi/g
6PNL	1a	K-40	05/07/87	13.1000	0.5860	0.3500	pCi/g
6PNL	1a	K-40	03/22/88	13.4000	0.7020	0.3500	pCi/g
6PNL	1a	K-40	05/02/89	15.2000	0.8390	0.3500	pCi/g
6PNL	1a	K-40	07/31/91	14.4000	0.7220	0.3500	pCi/g
7DOH	1a	K-40	05/19/87	19.0000	0.7200	0.1000	pCi/g
7PNL	1a	K-40	05/07/87	16.5000	0.7210	0.3500	pCi/g
7PNL	1a	K-40	06/06/88	15.6000	0.7000	0.3500	pCi/g
7PNL	1a	K-40	05/03/89	16.2000	0.7440	0.3500	pCi/g
7PNL	1a	K-40	08/13/91	16.6000	0.7980	0.3500	pCi/g
8DOH	1a	K-40	05/13/87	14.9000	1.5000	0.1000	pCi/g
8PNL	1a	K-40	05/07/87	16.9000	0.7180	0.3500	pCi/g
8PNL	1a	K-40	06/07/88	16.4000	0.7200	0.3500	pCi/g
8PNL	1a	K-40	05/03/89	16.4000	0.7450	0.3500	pCi/g
8PNL	1a	K-40	08/13/91	17.4000	0.9380	0.3500	pCi/g
9PNL	1	K-40	05/07/87	13.8000	0.6690	0.3500	pCi/g
9PNL	1	K-40	03/31/88	15.0000	0.6240	0.3500	pCi/g
9PNL	1	K-40	04/05/88	17.2000	0.7780	0.3500	pCi/g
9PNL	1	K-40	05/03/89	14.7000	0.7580	0.3500	pCi/g
9PNL	1	K-40	10/04/90	12.7000	0.7710	0.3500	pCi/g
9PNL	1	K-40	08/13/91	12.9000	0.7390	0.3500	pCi/g
10DOH	3	K-40	08/18/89	10.7000	2.6000	0.1000	pCi/g
10PNL	1	K-40	06/07/88	14.1000	0.6870	0.3500	pCi/g
10PNL	1	K-40	05/03/89	15.1000	0.7390	0.3500	pCi/g
10PNL	1	K-40	08/13/91	16.5000	0.8260	0.3500	pCi/g
11DOH	3	K-40	08/18/89	9.4700	0.2700	0.1000	pCi/g
11PNL	1	K-40	04/29/87	15.1000	0.7470	0.3500	pCi/g
11PNL	1	K-40	06/09/88	13.9000	0.6800	0.3500	pCi/g
11PNL	1	K-40	05/03/89	10.1000	0.5200	0.3500	pCi/g
11PNL	1	K-40	08/13/91	15.8000	0.8460	0.3500	pCi/g
12DOH	5	K-40	08/01/91	12.9000	0.3000	0.1000	pCi/g
12PNL	1	K-40	06/09/88	15.0000	0.7110	0.3500	pCi/g
12PNL	1	K-40	05/03/89	13.4000	0.7220	0.3500	pCi/g
12PNL	1	K-40	08/13/91	14.4000	0.6920	0.3500	pCi/g
13DOH	1	K-40	08/05/86	15.5000	0.4400	0.1000	pCi/g
13DOH	1	K-40	06/03/87	11.0000	0.3000	0.1000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 25 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
13DOH	1	K-40	06/21/88	14.6000	0.3000	0.1000	pCi/g
13DOH	1	K-40	06/27/89	14.9000	0.3000	0.1000	pCi/g
13DOH	1	K-40	06/26/90	15.8000	0.3000	0.1000	pCi/g
13PNL	1	K-40	04/29/87	15.9000	0.8550	0.3500	pCi/g
13PNL	1	K-40	06/09/88	16.5000	0.8560	0.3500	pCi/g
13PNL	1	K-40	05/02/89	12.9000	0.6200	0.3500	pCi/g
13PNL	1	K-40	08/08/91	15.1000	0.7440	0.3500	pCi/g
14DOH	5	K-40	07/01/92	13.0000	0.3000	0.1000	pCi/g
14PNL	1	K-40	04/29/87	15.8000	0.8200	0.3500	pCi/g
14PNL	1	K-40	06/06/88	14.4000	0.8470	0.3500	pCi/g
14PNL	1	K-40	05/02/89	13.7000	0.6970	0.3500	pCi/g
14PNL	1	K-40	07/31/91	14.4000	0.6810	0.3500	pCi/g
15DOH	4	K-40	08/01/91	13.6000	0.3000	0.1000	pCi/g
15PNL	1	K-40	04/29/87	14.6000	0.6300	0.3500	pCi/g
15PNL	1	K-40	05/25/88	16.8000	0.7760	0.3500	pCi/g
15PNL	1	K-40	05/03/89	15.2000	0.7800	0.3500	pCi/g
15PNL	1	K-40	07/31/91	15.0000	0.6760	0.3500	pCi/g
16DOH	1a	K-40	08/05/86	14.2000	0.3900	0.1000	pCi/g
16DOH	1a	K-40	06/03/87	12.5000	0.3000	0.1000	pCi/g
16DOH	1a	K-40	06/21/88	14.3000	0.3000	0.1000	pCi/g
16DOH	1a	K-40	06/27/89	14.1000	0.3000	0.1000	pCi/g
16DOH	1a	K-40	06/26/90	14.9000	0.3000	0.1000	pCi/g
16DOH	1a	K-40	07/31/91	13.5000	0.3000	0.1000	pCi/g
16PNL	2	K-40	05/15/87	18.2000	0.8710	0.3500	pCi/g
16PNL	2	K-40	06/20/88	16.6000	0.8030	0.3500	pCi/g
16PNL	2	K-40	05/08/89	18.7000	0.8030	0.3500	pCi/g
16PNL	2	K-40	08/08/91	38.2000	1.7700	0.3500	pCi/g
16PNL	2	K-40	07/28/92	18.9000	1.0300	0.3500	pCi/g
17DOH	5	K-40	03/20/85	14.0000	2.0000	0.1000	pCi/g
17DOH	5	K-40	03/22/85	14.0000	2.0000	0.1000	pCi/g
17PNL	2	K-40	05/15/87	15.0000	0.7590	0.3500	pCi/g
17PNL	2	K-40	06/20/88	15.4000	0.6690	0.3500	pCi/g
17PNL	2	K-40	05/10/89	18.7000	0.8220	0.3500	pCi/g
17PNL	2	K-40	10/04/90	17.6000	0.8410	0.3500	pCi/g
17PNL	2	K-40	08/08/91	15.4000	0.7240	0.3500	pCi/g
17PNL	2	K-40	06/23/92	18.2000	0.6540	0.3500	pCi/g
18DOH	3	K-40	09/27/89	10.2000	0.3000	0.1000	pCi/g
18PNL	2	K-40	05/15/87	17.7000	0.8180	0.3500	pCi/g
18PNL	2	K-40	04/01/88	18.9000	0.6870	0.3500	pCi/g
18PNL	2	K-40	05/10/89	17.7000	0.8200	0.3500	pCi/g
18PNL	2	K-40	10/04/90	16.8000	0.7460	0.3500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 26 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
18PNL	2	K-40	08/08/91	14.6000	0.7310	0.3500	pCi/g
18PNL	2	K-40	07/27/92	20.4000	1.3700	0.3500	pCi/g
19DOH	1	K-40	07/31/91	16.1000	0.3000	0.1000	pCi/g
19PNL	2	K-40	05/15/87	18.2000	1.0800	0.3500	pCi/g
19PNL	2	K-40	06/20/88	18.4000	0.9370	0.3500	pCi/g
19PNL	2	K-40	05/10/89	20.6000	1.1000	0.3500	pCi/g
19PNL	2	K-40	10/04/90	21.3000	0.8830	0.3500	pCi/g
20DOH	1a	K-40	01/17/85	14.1000	0.3000	0.1000	pCi/g
20PNL	2	K-40	05/15/87	19.7000	0.9630	0.3500	pCi/g
20PNL	2	K-40	06/20/88	17.7000	0.8560	0.3500	pCi/g
20PNL	2	K-40	05/10/89	16.7000	0.8130	0.3500	pCi/g
21DOH	1a	K-40	06/30/92	16.8000	0.4000	0.1000	pCi/g
21PNL	2	K-40	05/15/87	17.9000	0.9570	0.3500	pCi/g
21PNL	2	K-40	04/01/88	20.6000	0.7640	0.3500	pCi/g
21PNL	2	K-40	05/10/89	17.6000	0.9390	0.3500	pCi/g
21PNL	2	K-40	10/08/90	18.3000	0.8160	0.3500	pCi/g
21PNL	2	K-40	08/08/91	18.8000	0.9190	0.3500	pCi/g
21PNL	2	K-40	07/28/92	18.7000	1.1900	0.3500	pCi/g
22DOH	5	K-40	07/01/92	12.9000	0.3000	0.1000	pCi/g
22PNL	2	K-40	05/26/87	13.8000	0.7520	0.3500	pCi/g
22PNL	2	K-40	06/10/88	13.6000	0.6890	0.3500	pCi/g
22PNL	2	K-40	05/09/89	13.2000	0.8500	0.3500	pCi/g
22PNL	2	K-40	10/08/90	14.0000	0.7430	0.3500	pCi/g
23PNL	2	K-40	05/26/87	15.4000	0.7110	0.3500	pCi/g
23PNL	2	K-40	06/10/88	12.7000	0.7960	0.3500	pCi/g
23PNL	2	K-40	05/05/89	14.3000	0.7890	0.3500	pCi/g
23PNL	2	K-40	10/03/90	15.0000	0.7800	0.3500	pCi/g
24DOH	5	K-40	08/01/91	14.6000	0.6000	0.1000	pCi/g
24PNL	2	K-40	06/10/88	17.5000	0.8600	0.3500	pCi/g
24PNL	2	K-40	05/05/89	20.2000	0.9820	0.3500	pCi/g
25PNL	1	K-40	05/07/87	14.9000	0.8410	0.3500	pCi/g
25PNL	1	K-40	05/25/88	15.5000	0.7190	0.3500	pCi/g
25PNL	1	K-40	05/05/89	14.9000	0.7410	0.3500	pCi/g
25PNL	1	K-40	07/31/91	14.0000	0.7020	0.3500	pCi/g
26PNL	2	K-40	05/07/87	13.7000	0.7520	0.3500	pCi/g
26PNL	2	K-40	06/07/88	14.1000	0.6270	0.3500	pCi/g
26PNL	2	K-40	05/05/89	10.9000	0.5900	0.3500	pCi/g
27DOH	1a	K-40	06/30/92	13.8000	0.5000	0.1000	pCi/g
27PNL	2	K-40	05/20/87	15.0000	0.8460	0.3500	pCi/g
27PNL	2	K-40	06/08/88	15.3000	0.8110	0.3500	pCi/g
27PNL	2	K-40	05/05/89	14.9000	0.8370	0.3500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 27 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
28DOH	1	K-40	08/05/86	13.5000	0.5000	0.1000	pCi/g
28DOH	1	K-40	06/03/87	12.2000	0.3000	0.1000	pCi/g
28DOH	1	K-40	06/21/88	14.9000	0.3000	0.1000	pCi/g
28DOH	1	K-40	06/27/89	13.9000	0.4000	0.1000	pCi/g
28DOH	1	K-40	06/26/90	0.1590	0.0030	0.1000	pCi/g
28DOH	1	K-40	07/31/91	16.5000	0.6000	0.1000	pCi/g
28PNL	2	K-40	05/25/88	16.2000	0.6810	0.3500	pCi/g
28PNL	2	K-40	05/03/89	17.1000	0.8550	0.3500	pCi/g
29DOH	1	K-40	11/19/85	14.3000	0.3100	0.1000	pCi/g
29DOH	1	K-40	11/10/86	14.8000	0.3000	0.1000	pCi/g
29DOH	1	K-40	10/27/88	14.7000	0.3000	0.1000	pCi/g
29DOH	1	K-40	11/07/89	13.4000	0.3000	0.1000	pCi/g
29DOH	1	K-40	11/05/90	15.5000	0.4000	0.1000	pCi/g
29PNL	1	K-40	06/09/88	14.8000	0.7450	0.3500	pCi/g
29PNL	1	K-40	05/02/89	15.8000	0.8340	0.3500	pCi/g
29PNL	1	K-40	08/08/91	11.1000	0.7410	0.3500	pCi/g
30DOH	1a	K-40	11/19/85	13.6000	0.2900	0.1000	pCi/g
30DOH	1a	K-40	11/10/86	14.5000	0.3000	0.1000	pCi/g
30DOH	1a	K-40	10/27/88	13.4000	0.2000	0.1000	pCi/g
30DOH	1a	K-40	11/07/89	14.6000	0.3000	0.1000	pCi/g
30DOH	1a	K-40	11/05/90	13.0000	0.3000	0.1000	pCi/g
30PNL	5	K-40	05/20/87	15.4000	0.7290	0.3500	pCi/g
30PNL	5	K-40	03/21/88	17.1000	0.9760	0.3500	pCi/g
30PNL	5	K-40	05/09/89	14.5000	0.8000	0.3500	pCi/g
31DOH	1a	K-40	06/04/87	15.8000	0.5000	0.1000	pCi/g
31PNL	5	K-40	05/21/87	13.1000	0.7780	0.3500	pCi/g
31PNL	5	K-40	05/24/88	12.7500	0.7960	0.3500	pCi/g
31PNL	5	K-40	05/09/89	12.9000	0.7910	0.3500	pCi/g
31PNL	5	K-40	10/03/90	13.6000	0.8090	0.3500	pCi/g
31PNL	5	K-40	08/01/91	13.6000	0.8990	0.3500	pCi/g
31PNL	5	K-40	07/01/92	13.5000	0.5950	0.3500	pCi/g
32DOH	1a	K-40	06/26/90	14.0000	0.3000	0.1000	pCi/g
32PNL	4	K-40	05/29/87	16.1000	0.7768	0.3500	pCi/g
32PNL	4	K-40	05/27/88	14.8000	0.7730	0.3500	pCi/g
32PNL	4	K-40	05/08/89	17.7000	0.9410	0.3500	pCi/g
32PNL	4	K-40	10/03/90	21.2000	1.5000	0.3500	pCi/g
33DOH	1	K-40	08/05/86	12.5000	0.4700	0.1000	pCi/g
33DOH	1	K-40	06/03/87	12.4000	0.3000	0.1000	pCi/g
33DOH	1	K-40	06/21/88	17.2000	0.3000	0.1000	pCi/g
33DOH	1	K-40	06/27/89	14.4000	0.3000	0.1000	pCi/g
33DOH	1	K-40	06/26/90	16.1000	0.4000	0.1000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 28 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
33DOH	1	K-40	07/31/91	15.9000	0.4000	0.1000	pCi/g
33PNL	4	K-40	05/29/87	15.6000	0.8181	0.3500	pCi/g
33PNL	4	K-40	05/27/88	14.1000	0.7550	0.3500	pCi/g
33PNL	4	K-40	05/08/89	14.7000	0.7990	0.3500	pCi/g
33PNL	4	K-40	10/03/90	12.3000	0.9630	0.3500	pCi/g
34DOH	1	K-40	05/28/85	12.5000	12.5000	0.1000	pCi/g
34DOH	1	K-40	05/14/86	13.4000	0.4000	0.1000	pCi/g
34DOH	1	K-40	05/20/87	15.8000	0.4000	0.1000	pCi/g
34DOH	1	K-40	05/17/88	13.4000	0.2000	0.1000	pCi/g
34DOH	1	K-40	05/02/89	14.6000	0.3000	0.1000	pCi/g
34PNL	5	K-40	05/08/87	12.4000	0.8545	0.3500	pCi/g
34PNL	5	K-40	06/17/88	13.6000	0.8430	0.3500	pCi/g
34PNL	5	K-40	05/08/89	12.3000	0.8330	0.3500	pCi/g
34PNL	5	K-40	10/05/90	12.2000	0.8780	0.3500	pCi/g
34PNL	5	K-40	08/01/91	14.9000	0.7940	0.3500	pCi/g
35DOH	1	K-40	05/28/85	11.5000	11.5000	0.1000	pCi/g
35DOH	1	K-40	05/14/86	14.5000	0.4000	0.1000	pCi/g
35DOH	1	K-40	05/20/87	17.8000	0.4000	0.1000	pCi/g
35DOH	1	K-40	05/17/88	16.1000	0.3000	0.1000	pCi/g
35DOH	1	K-40	05/02/89	17.2000	0.3000	0.1000	pCi/g
35PNL	4	K-40	05/08/87	12.2500	0.7003	0.3500	pCi/g
35PNL	4	K-40	06/17/88	10.5000	0.8020	0.3500	pCi/g
35PNL	4	K-40	05/08/89	13.3000	0.7930	0.3500	pCi/g
35PNL	4	K-40	10/03/90	25.6000	1.5300	0.3500	pCi/g
36DOH	1a	K-40	08/05/86	16.6000	0.2310	0.1000	pCi/g
36DOH	1a	K-40	06/03/87	13.4000	0.3000	0.1000	pCi/g
36DOH	1a	K-40	06/21/88	16.6000	30.0000	0.1000	pCi/g
36DOH	1a	K-40	06/27/89	17.3000	0.4000	0.1000	pCi/g
36DOH	1a	K-40	06/26/90	17.5000	0.0030	0.1000	pCi/g
36PNL	4	K-40	05/26/87	12.8500	0.6900	0.3500	pCi/g
36PNL	4	K-40	06/10/88	11.4000	0.7360	0.3500	pCi/g
36PNL	4	K-40	05/09/89	14.6000	0.8540	0.3500	pCi/g
36PNL	4	K-40	10/05/90	24.8000	1.5300	0.3500	pCi/g
36PNL	4	K-40	08/01/91	12.6000	0.8290	0.3500	pCi/g
37DOH	1a	K-40	11/19/85	13.1000	0.2900	0.1000	pCi/g
37DOH	1a	K-40	11/10/86	15.6000	0.3000	0.1000	pCi/g
37DOH	1a	K-40	10/27/88	12.2000	0.3000	0.1000	pCi/g
37DOH	1a	K-40	11/07/89	15.6000	0.3000	0.1000	pCi/g
37DOH	1a	K-40	11/05/90	15.2000	0.4000	0.1000	pCi/g
37PNL	4	K-40	05/26/87	14.8000	0.9235	0.3500	pCi/g
37PNL	4	K-40	06/10/88	11.7000	0.7400	0.3500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 29 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
37PNL	4	K-40	05/09/89	13.6000	0.8020	0.3500	pCi/g
37PNL	4	K-40	10/05/90	13.4000	0.9000	0.3500	pCi/g
38DOH	3	K-40	09/27/89	10.9000	0.3000	0.1000	pCi/g
38PNL	5	K-40	05/21/87	13.7500	0.8329	0.3500	pCi/g
38PNL	5	K-40	06/08/88	13.6000	0.6930	0.3500	pCi/g
38PNL	5	K-40	05/09/89	10.9000	0.6770	0.3500	pCi/g
38PNL	5	K-40	10/03/90	11.6000	0.7590	0.3500	pCi/g
38PNL	5	K-40	08/01/91	12.1000	0.7550	0.3500	pCi/g
38PNL	5	K-40	07/01/92	12.9000	0.5230	0.3500	pCi/g
39DOH	1a	K-40	10/27/88	14.9000	0.3000	0.1000	pCi/g
39DOH	1a	K-40	11/07/89	14.5000	0.3000	0.1000	pCi/g
39DOH	1a	K-40	11/05/90	14.6000	0.3000	0.1000	pCi/g
40DOH	1a	K-40	10/27/88	12.4000	0.3000	0.1000	pCi/g
41DOH	5	K-40	08/05/86	13.2000	0.5200	0.1000	pCi/g
41DOH	5	K-40	06/03/87	11.1000	0.3000	0.1000	pCi/g
41DOH	5	K-40	06/21/88	12.9000	0.3000	0.1000	pCi/g
41DOH	5	K-40	06/27/89	11.8000	0.3000	0.1000	pCi/g
41DOH	5	K-40	06/26/90	13.5000	0.3000	0.1000	pCi/g
41DOH	5	K-40	08/01/91	13.1000	0.6000	0.1000	pCi/g
42DOH	1a	K-40	08/05/86	14.5000	0.4100	0.1000	pCi/g
42DOH	1a	K-40	06/03/87	13.7000	0.3000	0.1000	pCi/g
42DOH	1a	K-40	06/21/88	15.4000	0.3000	0.1000	pCi/g
42DOH	1a	K-40	06/27/89	16.6000	0.4000	0.1000	pCi/g
42DOH	1a	K-40	06/26/90	16.8000	0.3000	0.1000	pCi/g
43DOH	1a	K-40	11/19/85	13.8000	0.3000	0.1000	pCi/g
43DOH	1a	K-40	11/10/86	14.4000	0.3000	0.1000	pCi/g
43DOH	1a	K-40	10/27/88	14.1000	0.2000	0.1000	pCi/g
43DOH	1a	K-40	11/07/89	15.4000	0.3000	0.1000	pCi/g
43DOH	1a	K-40	11/05/90	15.0000	0.4000	0.1000	pCi/g
44DOH	3	K-40	09/27/89	10.7000	0.3000	0.1000	pCi/g
45DOH	1	K-40	08/05/86	14.6000	0.4000	0.1000	pCi/g
45DOH	1	K-40	06/03/87	12.7000	0.3000	0.1000	pCi/g
45DOH	1	K-40	06/21/88	15.8000	0.3000	0.1000	pCi/g
45DOH	1	K-40	06/27/89	12.9000	0.3000	0.1000	pCi/g
45DOH	1	K-40	06/26/90	15.7000	0.3000	0.1000	pCi/g
45DOH	1	K-40	07/31/91	16.4000	0.3000	0.1000	pCi/g
46DOH	1	K-40	08/05/86	14.7000	0.4850	0.1000	pCi/g
46DOH	1	K-40	06/03/87	12.5000	0.3000	0.1000	pCi/g
46DOH	1	K-40	06/21/88	14.6000	0.3000	0.1000	pCi/g
46DOH	1	K-40	06/27/89	14.0000	0.3000	0.1000	pCi/g
46DOH	1	K-40	06/26/90	15.4000	0.3000	0.1000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 30 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
46DOH	1	K-40	07/31/91	15.8000	0.4000	0.1000	pCi/g
12DOH	5	Pu-238	08/01/91	0.0000	0.0026	0.0300	pCi/g
14DOH	5	Pu-238	07/01/92	0.0008	0.0024	0.0300	pCi/g
15DOH	4	Pu-238	08/01/91	0.0009	0.0028	0.0300	pCi/g
22DOH	5	Pu-238	07/01/92	-0.0005	0.0013	0.0300	pCi/g
24DOH	5	Pu-238	08/01/91	-0.0001	0.0022	0.0300	pCi/g
30PNL	5	Pu-238	05/20/87	0.0003	0.0002	0.0006	pCi/g
30PNL	5	Pu-238	03/21/88	0.0006	0.0003	0.0006	pCi/g
30PNL	5	Pu-238	05/09/89	0.0007	0.0003	0.0006	pCi/g
31PNL	5	Pu-238	05/21/87	0.0002	0.0002	0.0006	pCi/g
31PNL	5	Pu-238	05/24/88	0.0008	0.0003	0.0006	pCi/g
31PNL	5	Pu-238	05/09/89	0.0003	0.0003	0.0006	pCi/g
31PNL	5	Pu-238	10/03/90	0.0062	0.0015	0.0006	pCi/g
31PNL	5	Pu-238	08/01/91	0.0001	0.0003	0.0006	pCi/g
31PNL	5	Pu-238	07/01/92	0.0002	0.0002	0.0006	pCi/g
32PNL	4	Pu-238	05/29/87	0.0000	0.0002	0.0006	pCi/g
32PNL	4	Pu-238	05/27/88	0.0001	0.0001	0.0006	pCi/g
32PNL	4	Pu-238	05/08/89	0.0000	0.0003	0.0006	pCi/g
32PNL	4	Pu-238	10/03/90	0.0024	0.0005	0.0006	pCi/g
33PNL	4	Pu-238	05/29/87	0.0001	0.0001	0.0006	pCi/g
33PNL	4	Pu-238	05/27/88	0.0003	0.0002	0.0006	pCi/g
33PNL	4	Pu-238	05/08/89	0.0005	0.0005	0.0006	pCi/g
33PNL	4	Pu-238	10/03/90	0.0003	0.0002	0.0006	pCi/g
34PNL	5	Pu-238	05/08/87	0.0000	0.0001	0.0006	pCi/g
34PNL	5	Pu-238	06/17/88	0.0004	0.0003	0.0006	pCi/g
34PNL	5	Pu-238	05/08/89	0.0000	0.0001	0.0006	pCi/g
34PNL	5	Pu-238	10/05/90	0.0003	0.0002	0.0006	pCi/g
34PNL	5	Pu-238	08/01/91	0.0001	0.0002	0.0006	pCi/g
35PNL	4	Pu-238	05/08/87	0.0001	0.0002	0.0006	pCi/g
35PNL	4	Pu-238	06/17/88	0.0006	0.0003	0.0006	pCi/g
35PNL	4	Pu-238	05/08/89	0.0005	0.0004	0.0006	pCi/g
35PNL	4	Pu-238	10/03/90	0.0000	0.0001	0.0006	pCi/g
36PNL	4	Pu-238	05/26/87	0.0003	0.0002	0.0006	pCi/g
36PNL	4	Pu-238	06/10/88	0.0003	0.0002	0.0006	pCi/g
36PNL	4	Pu-238	05/09/89	0.0005	0.0004	0.0006	pCi/g
36PNL	4	Pu-238	10/05/90	0.0011	0.0003	0.0006	pCi/g
36PNL	4	Pu-238	08/01/91	0.0001	0.0002	0.0006	pCi/g
37PNL	4	Pu-238	05/26/87	0.0004	0.0003	0.0006	pCi/g
37PNL	4	Pu-238	06/10/88	0.0002	0.0002	0.0006	pCi/g
37PNL	4	Pu-238	05/09/89	0.0001	0.0003	0.0006	pCi/g
37PNL	4	Pu-238	10/05/90	0.0001	0.0001	0.0006	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 31 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
38PNL	5	Pu-238	05/21/87	0.0001	0.0002	0.0006	pCi/g
38PNL	5	Pu-238	06/08/88	0.0001	0.0002	0.0006	pCi/g
38PNL	5	Pu-238	05/09/89	0.0002	0.0002	0.0006	pCi/g
38PNL	5	Pu-238	10/03/90	0.0004	0.0002	0.0006	pCi/g
38PNL	5	Pu-238	08/01/91	0.0004	0.0004	0.0006	pCi/g
38PNL	5	Pu-238	07/01/92	0.0007	0.0003	0.0006	pCi/g
41DOH	5	Pu-238	06/03/87	0.0027	0.0025	0.0300	pCi/g
41DOH	5	Pu-238	06/21/88	0.0060	0.0041	0.0300	pCi/g
41DOH	5	Pu-238	06/27/89	0.0004	0.0029	0.0300	pCi/g
41DOH	5	Pu-238	06/26/90	0.0130	0.0100	0.0300	pCi/g
41DOH	5	Pu-238	08/01/91	0.0025	0.0032	0.0300	pCi/g
1DOH	1a	Pu-239/240	07/31/91	0.0063	0.0020	0.0060	pCi/g
1PNL	1	Pu-239/240	06/06/88	0.0114	0.0011	0.0006	pCi/g
1PNL	1	Pu-239/240	05/03/89	0.0166	0.0020	0.0006	pCi/g
1PNL	1	Pu-239/240	08/14/91	0.0129	0.0013	0.0006	pCi/g
2DOH	1a	Pu-239/240	07/31/91	0.0009	0.0010	0.0060	pCi/g
2PNL	1	Pu-239/240	04/29/87	0.0233	0.0020	0.0006	pCi/g
2PNL	1	Pu-239/240	06/06/88	0.0186	0.0016	0.0006	pCi/g
2PNL	1	Pu-239/240	05/05/89	0.0131	0.0011	0.0006	pCi/g
2PNL	1	Pu-239/240	08/14/91	0.0177	0.0020	0.0006	pCi/g
3DOH	1a	Pu-239/240	05/14/87	0.0076	0.0026	0.0060	pCi/g
3PNL	1a	Pu-239/240	04/29/87	0.0165	0.0014	0.0006	pCi/g
3PNL	1a	Pu-239/240	06/06/88	0.0267	0.0018	0.0006	pCi/g
3PNL	1a	Pu-239/240	05/02/89	0.0262	0.0023	0.0006	pCi/g
3PNL	1a	Pu-239/240	07/31/91	0.0049	0.0009	0.0006	pCi/g
5DOH	1	Pu-239/240	08/05/86	0.0040	0.0030	0.0060	pCi/g
5DOH	1	Pu-239/240	06/03/87	0.0065	0.0022	0.0060	pCi/g
5DOH	1	Pu-239/240	06/21/88	0.0055	0.0025	0.0060	pCi/g
5DOH	1	Pu-239/240	06/27/89	0.0029	0.0020	0.0060	pCi/g
5DOH	1	Pu-239/240	06/26/90	0.0130	0.0040	0.0060	pCi/g
5DOH	1	Pu-239/240	07/31/91	0.0028	0.0019	0.0060	pCi/g
5PNL	1a	Pu-239/240	05/07/87	0.0091	0.0013	0.0006	pCi/g
5PNL	1a	Pu-239/240	06/06/88	0.0168	0.0012	0.0006	pCi/g
5PNL	1a	Pu-239/240	05/02/89	0.0177	0.0023	0.0006	pCi/g
5PNL	1a	Pu-239/240	07/31/91	0.0090	0.0012	0.0006	pCi/g
6PNL	1a	Pu-239/240	05/07/87	0.0118	0.0012	0.0006	pCi/g
6PNL	1a	Pu-239/240	03/22/88	0.0356	0.0022	0.0006	pCi/g
6PNL	1a	Pu-239/240	05/02/89	0.0105	0.0013	0.0006	pCi/g
6PNL	1a	Pu-239/240	07/31/91	0.0080	0.0011	0.0006	pCi/g
7PNL	1a	Pu-239/240	05/07/87	0.0006	0.0003	0.0006	pCi/g
7PNL	1a	Pu-239/240	06/06/88	0.0015	0.0004	0.0006	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 32 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
7PNL	1a	Pu-239/240	05/03/89	0.0140	0.0015	0.0006	pCi/g
7PNL	1a	Pu-239/240	08/13/91	0.0084	0.0015	0.0006	pCi/g
8PNL	1a	Pu-239/240	05/07/87	0.0027	0.0005	0.0006	pCi/g
8PNL	1a	Pu-239/240	06/07/88	0.0130	0.0011	0.0006	pCi/g
8PNL	1a	Pu-239/240	05/03/89	0.0150	0.0022	0.0006	pCi/g
8PNL	1a	Pu-239/240	08/13/91	0.0104	0.0012	0.0006	pCi/g
10PNL	1	Pu-239/240	06/07/88	0.0147	0.0013	0.0006	pCi/g
10PNL	1	Pu-239/240	05/03/89	0.0220	0.0019	0.0006	pCi/g
10PNL	1	Pu-239/240	08/13/91	0.0214	0.0029	0.0006	pCi/g
11PNL	1	Pu-239/240	04/29/87	0.0055	0.0008	0.0006	pCi/g
11PNL	1	Pu-239/240	06/09/88	0.0049	0.0007	0.0006	pCi/g
11PNL	1	Pu-239/240	05/03/89	0.0038	0.0011	0.0006	pCi/g
11PNL	1	Pu-239/240	08/13/91	0.0085	0.0012	0.0006	pCi/g
12DOH	5	Pu-239/240	08/01/91	0.0087	0.0027	0.0060	pCi/g
12PNL	1	Pu-239/240	06/09/88	0.0032	0.0006	0.0006	pCi/g
12PNL	1	Pu-239/240	05/03/89	0.0064	0.0011	0.0006	pCi/g
12PNL	1	Pu-239/240	08/13/91	0.0040	0.0007	0.0006	pCi/g
13DOH	1	Pu-239/240	08/05/86	0.0050	0.0030	0.0060	pCi/g
13DOH	1	Pu-239/240	06/03/87	0.0072	0.0025	0.0060	pCi/g
13DOH	1	Pu-239/240	06/21/88	0.0026	0.0021	0.0060	pCi/g
13DOH	1	Pu-239/240	06/27/89	0.0005	0.0012	0.0060	pCi/g
13DOH	1	Pu-239/240	06/26/90	0.0009	0.0034	0.0060	pCi/g
13PNL	1	Pu-239/240	04/29/87	0.0143	0.0013	0.0006	pCi/g
13PNL	1	Pu-239/240	06/09/88	0.0108	0.0011	0.0006	pCi/g
13PNL	1	Pu-239/240	05/02/89	0.0239	0.0021	0.0006	pCi/g
13PNL	1	Pu-239/240	08/08/91	0.0173	0.0016	0.0006	pCi/g
14DOH	5	Pu-239/240	07/01/92	0.0092	0.0033	0.0060	pCi/g
14PNL	1	Pu-239/240	04/29/87	0.0192	0.0023	0.0006	pCi/g
14PNL	1	Pu-239/240	06/06/88	0.0209	0.0016	0.0006	pCi/g
14PNL	1	Pu-239/240	05/02/89	0.0270	0.0026	0.0006	pCi/g
14PNL	1	Pu-239/240	07/31/91	0.0037	0.0008	0.0006	pCi/g
15DOH	4	Pu-239/240	08/01/91	0.0022	0.0015	0.0060	pCi/g
15PNL	1	Pu-239/240	04/29/87	0.0107	0.0010	0.0006	pCi/g
15PNL	1	Pu-239/240	05/25/88	0.0083	0.0009	0.0006	pCi/g
15PNL	1	Pu-239/240	05/03/89	0.0075	0.0013	0.0006	pCi/g
15PNL	1	Pu-239/240	07/31/91	0.0168	0.0026	0.0006	pCi/g
16DOH	1a	Pu-239/240	08/05/86	0.0140	0.0050	0.0060	pCi/g
16DOH	1a	Pu-239/240	06/03/87	0.0470	0.0080	0.0060	pCi/g
16DOH	1a	Pu-239/240	06/21/88	0.0210	0.0060	0.0060	pCi/g
16DOH	1a	Pu-239/240	06/27/89	0.0047	0.0026	0.0060	pCi/g
16DOH	1a	Pu-239/240	06/26/90	0.0110	0.0040	0.0060	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 33 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16DOH	1a	Pu-239/240	07/31/91	0.0120	0.0020	0.0060	pCi/g
17PNL	2	Pu-239/240	05/15/87	0.0035	0.0006	0.0006	pCi/g
17PNL	2	Pu-239/240	06/20/88	0.0098	0.0011	0.0006	pCi/g
17PNL	2	Pu-239/240	05/10/89	0.0138	0.0016	0.0006	pCi/g
17PNL	2	Pu-239/240	10/04/90	0.0090	0.0014	0.0006	pCi/g
17PNL	2	Pu-239/240	08/08/91	0.0133	0.0015	0.0006	pCi/g
17PNL	2	Pu-239/240	06/23/92	0.0204	0.0016	0.0006	pCi/g
18PNL	2	Pu-239/240	05/15/87	0.0018	0.0005	0.0006	pCi/g
18PNL	2	Pu-239/240	04/01/88	0.0198	0.0016	0.0006	pCi/g
18PNL	2	Pu-239/240	05/10/89	0.0019	0.0005	0.0006	pCi/g
18PNL	2	Pu-239/240	10/04/90	0.0014	0.0008	0.0006	pCi/g
18PNL	2	Pu-239/240	08/08/91	0.0094	0.0011	0.0006	pCi/g
18PNL	2	Pu-239/240	07/27/92	0.0066	0.0008	0.0006	pCi/g
19DOH	1	Pu-239/240	07/31/91	0.0036	0.0023	0.0060	pCi/g
19PNL	2	Pu-239/240	05/15/87	0.0109	0.0012	0.0006	pCi/g
19PNL	2	Pu-239/240	06/20/88	0.0044	0.0008	0.0006	pCi/g
19PNL	2	Pu-239/240	05/10/89	0.0149	0.0014	0.0006	pCi/g
19PNL	2	Pu-239/240	10/04/90	0.0004	0.0003	0.0006	pCi/g
20PNL	2	Pu-239/240	05/15/87	0.0029	0.0007	0.0006	pCi/g
20PNL	2	Pu-239/240	06/20/88	0.0044	0.0008	0.0006	pCi/g
20PNL	2	Pu-239/240	05/10/89	0.0280	0.0018	0.0006	pCi/g
21PNL	2	Pu-239/240	05/15/87	0.0168	0.0017	0.0006	pCi/g
21PNL	2	Pu-239/240	04/01/88	0.0331	0.0022	0.0006	pCi/g
21PNL	2	Pu-239/240	05/10/89	0.0289	0.0027	0.0006	pCi/g
21PNL	2	Pu-239/240	10/08/90	0.0112	0.0012	0.0006	pCi/g
21PNL	2	Pu-239/240	08/08/91	0.0183	0.0021	0.0006	pCi/g
21PNL	2	Pu-239/240	07/28/92	0.0214	0.0018	0.0006	pCi/g
22DOH	5	Pu-239/240	07/01/92	0.0090	0.0025	0.0060	pCi/g
22PNL	2	Pu-239/240	05/26/87	0.0061	0.0010	0.0006	pCi/g
22PNL	2	Pu-239/240	06/10/88	0.0083	0.0010	0.0006	pCi/g
22PNL	2	Pu-239/240	05/09/89	0.0091	0.0018	0.0006	pCi/g
22PNL	2	Pu-239/240	10/08/90	0.0124	0.0014	0.0006	pCi/g
23DOH	1a	Pu-239/240	11/06/91	0.0010	0.0020	0.0060	pCi/g
23PNL	2	Pu-239/240	05/26/87	0.0029	0.0008	0.0006	pCi/g
23PNL	2	Pu-239/240	06/10/88	0.0067	0.0009	0.0006	pCi/g
23PNL	2	Pu-239/240	05/05/89	0.0053	0.0008	0.0006	pCi/g
23PNL	2	Pu-239/240	10/03/90	0.0071	0.0010	0.0006	pCi/g
24DOH	5	Pu-239/240	08/01/91	0.0003	0.0008	0.0060	pCi/g
24PNL	2	Pu-239/240	06/10/88	0.0032	0.0006	0.0006	pCi/g
24PNL	2	Pu-239/240	05/05/89	0.0131	0.0018	0.0006	pCi/g
25DOH	1a	Pu-239/240	11/05/91	0.0010	0.0020	0.0060	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 34 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
25PNL	1	Pu-239/240	05/07/87	0.0015	0.0004	0.0006	pCi/g
25PNL	1	Pu-239/240	05/25/88	0.0027	0.0006	0.0006	pCi/g
25PNL	1	Pu-239/240	05/05/89	0.0114	0.0011	0.0006	pCi/g
25PNL	1	Pu-239/240	07/31/91	0.0050	0.0009	0.0006	pCi/g
26DOH	1a	Pu-239/240	11/06/91	0.0010	0.0010	0.0060	pCi/g
26PNL	2	Pu-239/240	05/07/87	0.0061	0.0008	0.0006	pCi/g
26PNL	2	Pu-239/240	06/07/88	0.0018	0.0005	0.0006	pCi/g
26PNL	2	Pu-239/240	05/05/89	0.0107	0.0013	0.0006	pCi/g
27DOH	1a	Pu-239/240	06/30/92	0.0220	0.0030	0.0060	pCi/g
27PNL	2	Pu-239/240	05/20/87	0.0243	0.0020	0.0006	pCi/g
27PNL	2	Pu-239/240	06/08/88	0.0255	0.0017	0.0006	pCi/g
27PNL	2	Pu-239/240	05/05/89	0.0212	0.0016	0.0006	pCi/g
28DOH	1	Pu-239/240	08/05/86	0.0100	0.0040	0.0060	pCi/g
28DOH	1	Pu-239/240	06/03/87	0.0089	0.0036	0.0060	pCi/g
28DOH	1	Pu-239/240	06/21/88	0.0037	0.0024	0.0060	pCi/g
28DOH	1	Pu-239/240	06/27/89	0.0018	0.0021	0.0060	pCi/g
28DOH	1	Pu-239/240	06/26/90	0.0410	0.0040	0.0060	pCi/g
28DOH	1	Pu-239/240	07/31/91	0.0050	0.0017	0.0060	pCi/g
28PNL	2	Pu-239/240	05/25/88	0.0062	0.0008	0.0006	pCi/g
28PNL	2	Pu-239/240	05/03/89	0.0181	0.0017	0.0006	pCi/g
29DOH	1	Pu-239/240	10/27/88	0.0020	0.0020	0.0060	pCi/g
29DOH	1	Pu-239/240	11/07/89	0.0024	0.0020	0.0060	pCi/g
29DOH	1	Pu-239/240	11/05/90	-0.0020	0.0020	0.0060	pCi/g
29DOH	1	Pu-239/240	11/06/91	0.0020	0.0020	0.0060	pCi/g
29PNL	1	Pu-239/240	06/09/88	0.0165	0.0013	0.0006	pCi/g
29PNL	1	Pu-239/240	05/02/89	0.0254	0.0021	0.0006	pCi/g
29PNL	1	Pu-239/240	08/08/91	0.0201	0.0017	0.0006	pCi/g
30DOH	1a	Pu-239/240	10/27/88	0.0140	0.0040	0.0060	pCi/g
30DOH	1a	Pu-239/240	11/07/89	0.0110	0.0030	0.0060	pCi/g
30DOH	1a	Pu-239/240	11/05/90	0.0090	0.0040	0.0060	pCi/g
30DOH	1a	Pu-239/240	11/06/91	0.0040	0.0030	0.0060	pCi/g
30PNL	5	Pu-239/240	05/20/87	0.0143	0.0013	0.0006	pCi/g
30PNL	5	Pu-239/240	03/21/88	0.0143	0.0016	0.0006	pCi/g
30PNL	5	Pu-239/240	05/09/89	0.0149	0.0014	0.0006	pCi/g
31DOH	1a	Pu-239/240	06/04/87	0.0007	0.0030	0.0060	pCi/g
31PNL	5	Pu-239/240	05/21/87	0.0061	0.0010	0.0006	pCi/g
31PNL	5	Pu-239/240	05/24/88	0.0226	0.0015	0.0006	pCi/g
31PNL	5	Pu-239/240	05/09/89	0.0106	0.0017	0.0006	pCi/g
31PNL	5	Pu-239/240	10/03/90	0.0291	0.0033	0.0006	pCi/g
31PNL	5	Pu-239/240	08/01/91	0.0009	0.0006	0.0006	pCi/g
31PNL	5	Pu-239/240	07/01/92	0.0077	0.0012	0.0006	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 35 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
32DOH	1a	Pu-239/240	06/26/90	0.0007	0.0036	0.0060	pCi/g
32PNL	4	Pu-239/240	05/29/87	0.0013	0.0006	0.0006	pCi/g
32PNL	4	Pu-239/240	05/27/88	0.0030	0.0006	0.0006	pCi/g
32PNL	4	Pu-239/240	05/08/89	0.0003	0.0005	0.0006	pCi/g
32PNL	4	Pu-239/240	10/03/90	0.0031	0.0005	0.0006	pCi/g
33DOH	1	Pu-239/240	08/05/86	0.0250	0.0060	0.0060	pCi/g
33DOH	1	Pu-239/240	06/03/87	0.0015	0.0016	0.0060	pCi/g
33DOH	1	Pu-239/240	06/21/88	0.0460	0.0060	0.0060	pCi/g
33DOH	1	Pu-239/240	06/27/89	0.0150	0.0040	0.0060	pCi/g
33DOH	1	Pu-239/240	06/26/90	0.0160	0.0060	0.0060	pCi/g
33DOH	1	Pu-239/240	07/31/91	0.0084	0.0028	0.0060	pCi/g
33PNL	4	Pu-239/240	05/29/87	0.0058	0.0009	0.0006	pCi/g
33PNL	4	Pu-239/240	05/27/88	0.0089	0.0011	0.0006	pCi/g
33PNL	4	Pu-239/240	05/08/89	0.0088	0.0018	0.0006	pCi/g
33PNL	4	Pu-239/240	10/03/90	0.0061	0.0008	0.0006	pCi/g
34PNL	5	Pu-239/240	05/08/87	0.0025	0.0007	0.0006	pCi/g
34PNL	5	Pu-239/240	06/17/88	0.0085	0.0011	0.0006	pCi/g
34PNL	5	Pu-239/240	05/08/89	0.0020	0.0007	0.0006	pCi/g
34PNL	5	Pu-239/240	10/05/90	0.0041	0.0006	0.0006	pCi/g
34PNL	5	Pu-239/240	08/01/91	0.0000	0.0002	0.0006	pCi/g
35PNL	4	Pu-239/240	05/08/87	0.0056	0.0010	0.0006	pCi/g
35PNL	4	Pu-239/240	06/17/88	0.0163	0.0014	0.0006	pCi/g
35PNL	4	Pu-239/240	05/08/89	0.0168	0.0024	0.0006	pCi/g
35PNL	4	Pu-239/240	10/03/90	0.0026	0.0006	0.0006	pCi/g
36PNL	4	Pu-239/240	05/26/87	0.0068	0.0008	0.0006	pCi/g
36PNL	4	Pu-239/240	06/10/88	0.0078	0.0010	0.0006	pCi/g
36PNL	4	Pu-239/240	05/09/89	0.0102	0.0018	0.0006	pCi/g
36PNL	4	Pu-239/240	10/05/90	0.0164	0.0013	0.0006	pCi/g
36PNL	4	Pu-239/240	08/01/91	0.0040	0.0008	0.0006	pCi/g
37DOH	1a	Pu-239/240	10/27/88	0.0004	0.0010	0.0060	pCi/g
37DOH	1a	Pu-239/240	11/07/89	0.0010	0.0010	0.0060	pCi/g
37DOH	1a	Pu-239/240	11/05/90	0.0003	0.0033	0.0060	pCi/g
37PNL	4	Pu-239/240	05/26/87	0.0125	0.0015	0.0006	pCi/g
37PNL	4	Pu-239/240	06/10/88	0.0038	0.0007	0.0006	pCi/g
37PNL	4	Pu-239/240	05/09/89	0.0080	0.0016	0.0006	pCi/g
37PNL	4	Pu-239/240	10/05/90	0.0077	0.0009	0.0006	pCi/g
38PNL	5	Pu-239/240	05/21/87	0.0028	0.0007	0.0006	pCi/g
38PNL	5	Pu-239/240	06/08/88	0.0012	0.0005	0.0006	pCi/g
38PNL	5	Pu-239/240	05/09/89	0.0103	0.0010	0.0006	pCi/g
38PNL	5	Pu-239/240	10/03/90	0.0106	0.0011	0.0006	pCi/g
38PNL	5	Pu-239/240	08/01/91	0.0086	0.0015	0.0006	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 36 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
38PNL	5	Pu-239/240	07/01/92	0.0078	0.0011	0.0006	pCi/g
39DOH	1a	Pu-239/240	10/27/88	0.0051	0.0030	0.0060	pCi/g
39DOH	1a	Pu-239/240	11/07/89	0.0020	0.0020	0.0060	pCi/g
39DOH	1a	Pu-239/240	11/05/90	0.0060	0.0040	0.0060	pCi/g
40DOH	1a	Pu-239/240	10/27/88	0.0010	0.0020	0.0060	pCi/g
41DOH	5	Pu-239/240	08/05/86	0.0120	0.0050	0.0060	pCi/g
41DOH	5	Pu-239/240	06/03/87	0.0036	0.0021	0.0060	pCi/g
41DOH	5	Pu-239/240	06/21/88	0.0023	0.0022	0.0060	pCi/g
41DOH	5	Pu-239/240	06/27/89	0.0017	0.0023	0.0060	pCi/g
41DOH	5	Pu-239/240	06/26/90	-0.0050	0.0040	0.0060	pCi/g
41DOH	5	Pu-239/240	08/01/91	0.0014	0.0014	0.0060	pCi/g
43DOH	1a	Pu-239/240	10/27/88	0.0240	0.0160	0.0060	pCi/g
43DOH	1a	Pu-239/240	11/07/89	0.0010	0.0010	0.0060	pCi/g
43DOH	1a	Pu-239/240	11/05/90	0.0003	0.0044	0.0060	pCi/g
46DOH	1	Pu-239/240	08/05/86	0.0140	0.0050	0.0060	pCi/g
46DOH	1	Pu-239/240	06/03/87	0.0120	0.0040	0.0060	pCi/g
46DOH	1	Pu-239/240	06/21/88	0.0210	0.0050	0.0060	pCi/g
46DOH	1	Pu-239/240	06/27/89	0.0086	0.0032	0.0060	pCi/g
46DOH	1	Pu-239/240	06/26/90	0.0014	0.0039	0.0060	pCi/g
46DOH	1	Pu-239/240	07/31/91	0.0071	0.0019	0.0060	pCi/g
1DOH	1a	Ra-226	07/31/91	0.8000	0.0330	0.0800	pCi/g
1PNL	1	Ra-226	06/06/88	0.5960	0.0661	0.0000	pCi/g
2DOH	1a	Ra-226	07/31/91	0.4560	0.0170	0.0800	pCi/g
2PNL	1	Ra-226	04/29/87	0.7340	0.0569	0.0000	pCi/g
2PNL	1	Ra-226	06/06/88	0.5570	0.0630	0.0000	pCi/g
3DOH	1a	Ra-226	05/14/87	0.5600	0.0100	0.1000	pCi/g
3PNL	1a	Ra-226	04/29/87	0.6450	0.0630	0.0000	pCi/g
3PNL	1a	Ra-226	06/06/88	0.5930	0.0726	0.0000	pCi/g
4DOH	1a	Ra-226	09/26/85	0.7000	0.1000	0.1000	pCi/g
4DOH	1a	Ra-226	08/05/86	0.6000	0.1000	0.1000	pCi/g
4DOH	1a	Ra-226	06/03/87	0.6700	0.0200	0.0200	pCi/g
4DOH	1a	Ra-226	06/21/88	0.6600	0.0200	0.1000	pCi/g
4DOH	1a	Ra-226	06/27/89	0.7000	0.0200	0.0200	pCi/g
4DOH	1a	Ra-226	06/26/90	0.7000	0.0700	0.0200	pCi/g
4DOH	1a	Ra-226	07/31/91	0.6700	0.0170	0.0800	pCi/g
4PNL	1	Ra-226	05/07/87	0.6890	0.0819	0.0000	pCi/g
4PNL	1	Ra-226	03/22/88	0.6840	0.0880	0.0000	pCi/g
5DOH	1	Ra-226	09/24/85	0.7000	0.1000	0.1000	pCi/g
5DOH	1	Ra-226	08/05/86	0.9000	0.1000	0.1000	pCi/g
5DOH	1	Ra-226	06/03/87	0.8000	0.0200	0.0200	pCi/g
5DOH	1	Ra-226	06/21/88	0.8300	0.0200	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 37 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
5DOH	1	Ra-226	06/27/89	0.8300	0.0200	0.0200	pCi/g
5DOH	1	Ra-226	06/26/90	0.7800	0.0700	0.0200	pCi/g
5DOH	1	Ra-226	07/31/91	0.7620	0.0230	0.1000	pCi/g
5PNL	1a	Ra-226	05/07/87	0.5680	0.0460	0.0000	pCi/g
5PNL	1a	Ra-226	06/06/88	0.6220	0.0601	0.0000	pCi/g
6DOH	1a	Ra-226	05/20/87	0.5300	0.0180	0.0200	pCi/g
6PNL	1a	Ra-226	05/07/87	0.5220	0.0427	0.0000	pCi/g
6PNL	1a	Ra-226	03/22/88	0.5610	0.0544	0.0000	pCi/g
7DOH	1a	Ra-226	05/19/87	0.8900	0.0300	0.0200	pCi/g
7PNL	1a	Ra-226	05/07/87	0.5360	0.0505	0.0000	pCi/g
7PNL	1a	Ra-226	06/06/88	0.5020	0.0501	0.0000	pCi/g
8DOH	1a	Ra-226	05/13/87	0.6300	0.2300	0.0200	pCi/g
8PNL	1a	Ra-226	05/07/87	0.6720	0.0528	0.0000	pCi/g
8PNL	1a	Ra-226	06/07/88	0.5940	0.0555	0.0000	pCi/g
9PNL	1	Ra-226	05/07/87	0.6330	0.0541	0.0000	pCi/g
9PNL	1	Ra-226	03/31/88	0.7430	0.0555	0.0000	pCi/g
9PNL	1	Ra-226	04/05/88	0.8700	0.0734	0.0000	pCi/g
9PNL	1	Ra-226	10/04/90	0.6470	0.0765	0.0000	pCi/g
10PNL	1	Ra-226	06/07/88	0.5460	0.0522	0.0000	pCi/g
11PNL	1	Ra-226	04/29/87	0.6020	0.0521	0.0000	pCi/g
11PNL	1	Ra-226	06/09/88	0.5440	0.0486	0.0000	pCi/g
12DOH	5	Ra-226	08/01/91	0.6970	0.0210	0.0800	pCi/g
12PNL	1	Ra-226	06/09/88	0.5180	0.0478	0.0000	pCi/g
13DOH	1	Ra-226	09/24/85	0.6000	0.1000	0.1000	pCi/g
13DOH	1	Ra-226	08/05/86	0.7000	0.2000	0.1000	pCi/g
13DOH	1	Ra-226	06/03/87	0.7900	0.0200	0.0200	pCi/g
13DOH	1	Ra-226	06/21/88	0.6500	0.0200	0.0200	pCi/g
13DOH	1	Ra-226	06/27/89	0.7000	0.0200	0.0200	pCi/g
13DOH	1	Ra-226	06/26/90	0.6400	0.0700	0.0200	pCi/g
13PNL	1	Ra-226	04/29/87	0.5040	0.0585	0.0000	pCi/g
13PNL	1	Ra-226	06/09/88	0.4490	0.0574	0.0000	pCi/g
14DOH	5	Ra-226	07/01/92	0.6620	0.0200	0.0800	pCi/g
14PNL	1	Ra-226	04/29/87	0.8510	0.0704	0.0000	pCi/g
14PNL	1	Ra-226	06/06/88	0.6170	0.0639	0.0000	pCi/g
15DOH	4	Ra-226	08/01/91	0.5060	0.0180	0.0800	pCi/g
15PNL	1	Ra-226	04/29/87	0.4790	0.0430	0.0000	pCi/g
15PNL	1	Ra-226	05/25/88	0.5650	0.0520	0.0000	pCi/g
16DOH	1a	Ra-226	09/26/85	0.8000	0.1000	0.1000	pCi/g
16DOH	1a	Ra-226	08/05/86	1.2000	0.1000	0.1000	pCi/g
16DOH	1a	Ra-226	06/03/87	0.8600	0.0200	0.0200	pCi/g
16DOH	1a	Ra-226	06/21/88	0.8100	0.0200	0.0200	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 38 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16DOH	1a	Ra-226	06/27/89	0.8200	0.0200	0.0200	pCi/g
16DOH	1a	Ra-226	06/26/90	0.7000	0.0700	0.0200	pCi/g
16DOH	1a	Ra-226	07/31/91	0.7980	0.0200	0.0800	pCi/g
16PNL	2	Ra-226	05/15/87	0.5380	0.0557	0.0000	pCi/g
16PNL	2	Ra-226	06/20/88	0.5340	0.0550	0.0000	pCi/g
17PNL	2	Ra-226	05/15/87	0.7450	0.0614	0.0000	pCi/g
17PNL	2	Ra-226	06/20/88	0.5490	0.0499	0.0000	pCi/g
18PNL	2	Ra-226	05/15/87	0.6900	0.0704	0.0000	pCi/g
18PNL	2	Ra-226	04/01/88	0.6640	0.0492	0.0000	pCi/g
18PNL	2	Ra-226	10/04/90	0.5240	0.0514	0.0000	pCi/g
19DOH	1	Ra-226	07/31/91	0.7070	0.0190	0.0800	pCi/g
19PNL	2	Ra-226	05/15/87	0.7920	0.0814	0.0000	pCi/g
19PNL	2	Ra-226	06/20/88	0.6710	0.0740	0.0000	pCi/g
20PNL	2	Ra-226	05/15/87	0.9610	0.0747	0.0000	pCi/g
20PNL	2	Ra-226	06/20/88	0.5750	0.0603	0.0000	pCi/g
21DOH	1a	Ra-226	06/30/92	0.9710	0.0250	0.0800	pCi/g
21PNL	2	Ra-226	05/15/87	0.7490	0.0721	0.0000	pCi/g
21PNL	2	Ra-226	04/01/88	0.8480	0.0579	0.0000	pCi/g
22DOH	5	Ra-226	07/01/92	0.8140	0.0250	0.0800	pCi/g
22PNL	2	Ra-226	05/26/87	0.7780	0.0628	0.0000	pCi/g
22PNL	2	Ra-226	06/10/88	0.6800	0.0587	0.0000	pCi/g
23PNL	2	Ra-226	05/26/87	0.7430	0.0558	0.0000	pCi/g
23PNL	2	Ra-226	06/10/88	0.6150	0.0722	0.0000	pCi/g
24DOH	5	Ra-226	08/01/91	0.8150	0.0360	0.0800	pCi/g
24PNL	2	Ra-226	06/10/88	0.7030	0.0658	0.0000	pCi/g
25PNL	1	Ra-226	05/07/87	0.7170	0.0636	0.0000	pCi/g
25PNL	1	Ra-226	05/25/88	0.5840	0.0566	0.0000	pCi/g
26PNL	2	Ra-226	05/07/87	0.6300	0.0587	0.0000	pCi/g
26PNL	2	Ra-226	06/07/88	0.3940	0.0420	0.0000	pCi/g
27DOH	1a	Ra-226	06/30/92	0.7700	0.0350	0.0800	pCi/g
27PNL	2	Ra-226	05/20/87	0.8870	0.0738	0.0000	pCi/g
27PNL	2	Ra-226	06/08/88	0.7470	0.0680	0.0000	pCi/g
28DOH	1	Ra-226	09/26/85	0.8000	0.1000	0.1000	pCi/g
28DOH	1	Ra-226	08/05/86	0.8000	0.1000	0.1000	pCi/g
28DOH	1	Ra-226	06/03/87	0.8900	0.0200	0.0200	pCi/g
28DOH	1	Ra-226	06/21/88	0.8600	0.0200	0.0200	pCi/g
28DOH	1	Ra-226	06/27/89	0.8500	0.0300	0.0200	pCi/g
28DOH	1	Ra-226	06/26/90	0.6900	0.0800	0.0200	pCi/g
28DOH	1	Ra-226	07/31/91	0.8480	0.0320	0.0800	pCi/g
28PNL	2	Ra-226	05/25/88	0.4310	0.0426	0.0000	pCi/g
29PNL	1	Ra-226	06/09/88	0.5800	0.0546	0.0000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 39 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
30PNL	5	Ra-226	05/20/87	0.7910	0.0595	0.0000	pCi/g
30PNL	5	Ra-226	03/21/88	0.8960	0.0864	0.0000	pCi/g
31DOH	1a	Ra-226	06/04/87	0.5000	0.0200	0.0200	pCi/g
31PNL	5	Ra-226	05/21/87	0.8440	0.0768	0.0000	pCi/g
31PNL	5	Ra-226	05/24/88	0.6590	0.0677	0.0000	pCi/g
31PNL	5	Ra-226	10/03/90	0.6070	0.0668	0.0000	pCi/g
32DOH	1a	Ra-226	06/26/90	0.6400	0.0600	0.0200	pCi/g
32PNL	4	Ra-226	05/29/87	0.8545	0.0666	0.0000	pCi/g
32PNL	4	Ra-226	05/27/88	0.6620	0.0595	0.0000	pCi/g
33DOH	1	Ra-226	09/26/85	0.8000	0.1000	0.1000	pCi/g
33DOH	1	Ra-226	08/05/86	1.0000	0.1000	0.1000	pCi/g
33DOH	1	Ra-226	06/03/87	0.8800	0.0200	0.0200	pCi/g
33DOH	1	Ra-226	06/21/88	1.0900	0.0200	0.0200	pCi/g
33DOH	1	Ra-226	06/27/89	0.8300	0.0300	0.0200	pCi/g
33DOH	1	Ra-226	06/26/90	0.7700	0.0700	0.0200	pCi/g
33DOH	1	Ra-226	07/31/91	0.7720	0.0200	0.0800	pCi/g
33PNL	4	Ra-226	05/29/87	0.6515	0.0605	0.0000	pCi/g
33PNL	4	Ra-226	05/27/88	0.5870	0.0640	0.0000	pCi/g
34PNL	5	Ra-226	05/08/87	0.5910	0.0689	0.0000	pCi/g
34PNL	5	Ra-226	06/17/88	0.6080	0.0691	0.0000	pCi/g
35PNL	4	Ra-226	05/08/87	0.6060	0.0559	0.0000	pCi/g
35PNL	4	Ra-226	06/17/88	0.4830	0.0768	0.0000	pCi/g
36DOH	1a	Ra-226	09/26/85	0.7000	0.1000	0.1000	pCi/g
36DOH	1a	Ra-226	08/05/86	0.8000	0.1000	0.1000	pCi/g
36DOH	1a	Ra-226	06/03/87	0.7300	0.0200	0.0200	pCi/g
36DOH	1a	Ra-226	06/21/88	0.7600	0.0200	0.0200	pCi/g
36DOH	1a	Ra-226	06/27/89	0.9000	0.0200	0.0200	pCi/g
36DOH	1a	Ra-226	06/26/90	0.7900	0.0700	0.0200	pCi/g
36PNL	4	Ra-226	05/26/87	0.5680	0.0541	0.0000	pCi/g
36PNL	4	Ra-226	06/10/88	0.4770	0.0576	0.0000	pCi/g
37PNL	4	Ra-226	05/26/87	0.8195	0.0798	0.0000	pCi/g
37PNL	4	Ra-226	06/10/88	0.5060	0.0626	0.0000	pCi/g
38PNL	5	Ra-226	05/21/87	0.7880	0.0714	0.0000	pCi/g
38PNL	5	Ra-226	06/08/88	0.7310	0.0607	0.0000	pCi/g
41DOH	5	Ra-226	09/23/85	0.7000	0.1000	0.1000	pCi/g
41DOH	5	Ra-226	08/05/86	0.9000	0.1000	0.1000	pCi/g
41DOH	5	Ra-226	06/03/87	0.7600	0.0200	0.0200	pCi/g
41DOH	5	Ra-226	06/21/88	0.8400	0.0200	0.0200	pCi/g
41DOH	5	Ra-226	06/27/89	0.8200	0.0300	0.0200	pCi/g
41DOH	5	Ra-226	06/26/90	0.9000	0.0800	0.0200	pCi/g
41DOH	5	Ra-226	08/01/91	0.6520	0.0290	0.0800	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 40 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
42DOH	1a	Ra-226	09/26/85	0.6000	0.1000	0.1000	pCi/g
42DOH	1a	Ra-226	08/05/86	0.8000	0.1000	0.1000	pCi/g
42DOH	1a	Ra-226	06/03/87	0.7400	0.0200	0.0200	pCi/g
42DOH	1a	Ra-226	06/21/88	0.9400	0.0200	0.0200	pCi/g
42DOH	1a	Ra-226	06/27/89	0.9200	0.0300	0.0200	pCi/g
42DOH	1a	Ra-226	06/26/90	0.6800	0.0700	0.0200	pCi/g
45DOH	1	Ra-226	08/05/86	0.6000	0.2000	0.1000	pCi/g
45DOH	1	Ra-226	06/03/87	0.6600	0.0100	0.0200	pCi/g
45DOH	1	Ra-226	06/21/88	0.6800	0.0200	0.0200	pCi/g
45DOH	1	Ra-226	06/27/89	0.5600	0.0200	0.0200	pCi/g
45DOH	1	Ra-226	06/26/90	0.6100	0.0600	0.0200	pCi/g
45DOH	1	Ra-226	07/31/91	0.6100	0.0170	0.0800	pCi/g
46DOH	1	Ra-226	09/24/85	0.8000	0.1000	0.1000	pCi/g
46DOH	1	Ra-226	08/05/86	0.7000	0.1000	0.1000	pCi/g
46DOH	1	Ra-226	06/03/87	0.8500	0.0200	0.0200	pCi/g
46DOH	1	Ra-226	06/21/88	0.9300	0.0200	0.0200	pCi/g
46DOH	1	Ra-226	06/27/89	0.8200	0.0200	0.0200	pCi/g
46DOH	1	Ra-226	06/26/90	0.7700	0.0700	0.0200	pCi/g
46DOH	1	Ra-226	07/31/91	0.7800	0.0190	0.0800	pCi/g
1DOH	1a	Ru-106	07/31/91	0.0390	0.1200	0.2000	pCi/g
1PNL	1	Ru-106	06/06/88	-0.0092	0.1720	0.1700	pCi/g
1PNL	1	Ru-106	05/03/89	0.1320	0.1710	0.1700	pCi/g
1PNL	1	Ru-106	08/14/91	-0.0524	0.1710	0.1700	pCi/g
2DOH	1a	Ru-106	07/31/91	-0.0356	0.0741	0.2000	pCi/g
2PNL	1	Ru-106	04/29/87	-0.1030	0.1500	0.1700	pCi/g
2PNL	1	Ru-106	06/06/88	0.0814	0.1290	0.1700	pCi/g
2PNL	1	Ru-106	05/05/89	-0.0836	0.1600	0.1700	pCi/g
2PNL	1	Ru-106	08/14/91	-0.0371	0.1740	0.1700	pCi/g
3PNL	1a	Ru-106	04/29/87	-0.0149	0.1620	0.1700	pCi/g
3PNL	1a	Ru-106	06/06/88	-0.0038	0.1880	0.1700	pCi/g
3PNL	1a	Ru-106	05/02/89	-0.0130	0.1650	0.1700	pCi/g
3PNL	1a	Ru-106	07/31/91	0.0159	0.2120	0.1700	pCi/g
5DOH	1	Ru-106	06/27/89	-0.0100	0.0700	0.1000	pCi/g
5DOH	1	Ru-106	06/26/90	0.0220	0.0800	0.1000	pCi/g
5DOH	1	Ru-106	07/31/91	0.0619	0.0976	0.2000	pCi/g
5PNL	1a	Ru-106	05/07/87	-0.1180	0.1180	0.1700	pCi/g
5PNL	1a	Ru-106	06/06/88	0.0761	0.1530	0.1700	pCi/g
5PNL	1a	Ru-106	05/02/89	0.0342	0.1880	0.1700	pCi/g
5PNL	1a	Ru-106	07/31/91	0.0008	0.1470	0.1700	pCi/g
6PNL	1a	Ru-106	05/07/87	0.0016	0.1060	0.1700	pCi/g
6PNL	1a	Ru-106	03/22/88	0.0390	0.1450	0.1700	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 41 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
6PNL	1a	Ru-106	05/02/89	-0.0313	0.1570	0.1700	pCi/g
6PNL	1a	Ru-106	07/31/91	-0.1760	0.1660	0.1700	pCi/g
7PNL	1a	Ru-106	05/07/87	0.1420	0.1150	0.1700	pCi/g
7PNL	1a	Ru-106	06/06/88	-0.0243	0.1220	0.1700	pCi/g
7PNL	1a	Ru-106	05/03/89	0.0328	0.1210	0.1700	pCi/g
7PNL	1a	Ru-106	08/13/91	0.0514	0.1590	0.1700	pCi/g
8PNL	1a	Ru-106	05/07/87	0.0131	0.1250	0.1700	pCi/g
8PNL	1a	Ru-106	06/07/88	0.1340	0.1490	0.1700	pCi/g
8PNL	1a	Ru-106	05/03/89	0.0304	0.1430	0.1700	pCi/g
8PNL	1a	Ru-106	08/13/91	-0.0582	0.2350	0.1700	pCi/g
10PNL	1	Ru-106	06/07/88	-0.0347	0.1290	0.1700	pCi/g
10PNL	1	Ru-106	05/03/89	0.0167	0.1340	0.1700	pCi/g
10PNL	1	Ru-106	08/13/91	-0.0727	0.1800	0.1700	pCi/g
11PNL	1	Ru-106	04/29/87	-0.0708	0.1320	0.1700	pCi/g
11PNL	1	Ru-106	06/09/88	0.0245	0.1340	0.1700	pCi/g
11PNL	1	Ru-106	05/03/89	-0.0182	0.1030	0.1700	pCi/g
11PNL	1	Ru-106	08/13/91	-0.0239	0.1700	0.1700	pCi/g
12DOH	5	Ru-106	08/01/91	-0.0328	0.0712	0.2000	pCi/g
12PNL	1	Ru-106	06/09/88	0.0160	0.1310	0.1700	pCi/g
12PNL	1	Ru-106	05/03/89	-0.0170	0.1260	0.1700	pCi/g
12PNL	1	Ru-106	08/13/91	-0.0417	0.1270	0.1700	pCi/g
13DOH	1	Ru-106	06/27/89	0.0330	0.0720	0.1000	pCi/g
13DOH	1	Ru-106	06/26/90	0.0330	0.0750	0.1000	pCi/g
13PNL	1	Ru-106	04/29/87	0.0898	0.1660	0.1700	pCi/g
13PNL	1	Ru-106	06/09/88	-0.1080	0.1530	0.1700	pCi/g
13PNL	1	Ru-106	05/02/89	-0.0669	0.1330	0.1700	pCi/g
13PNL	1	Ru-106	08/08/91	0.0771	0.1520	0.1700	pCi/g
14PNL	1	Ru-106	04/29/87	0.0392	0.1610	0.1700	pCi/g
14PNL	1	Ru-106	06/06/88	-0.0167	0.1880	0.1700	pCi/g
14PNL	1	Ru-106	05/02/89	-0.0182	0.1470	0.1700	pCi/g
14PNL	1	Ru-106	07/31/91	0.0082	0.1310	0.1700	pCi/g
15DOH	4	Ru-106	08/01/91	-0.0152	0.0653	0.2000	pCi/g
15PNL	1	Ru-106	04/29/87	-0.0490	0.1100	0.1700	pCi/g
15PNL	1	Ru-106	05/25/88	-0.0455	0.1380	0.1700	pCi/g
15PNL	1	Ru-106	05/03/89	-0.0027	0.1380	0.1700	pCi/g
15PNL	1	Ru-106	07/31/91	-0.0007	0.1400	0.1700	pCi/g
16DOH	1a	Ru-106	06/27/89	0.0200	0.0700	0.1000	pCi/g
16DOH	1a	Ru-106	06/26/90	0.0190	78.3000	0.1000	pCi/g
16DOH	1a	Ru-106	07/31/91	-0.0080	0.0702	0.2000	pCi/g
16PNL	2	Ru-106	05/15/87	0.0000	0.1500	0.1700	pCi/g
16PNL	2	Ru-106	06/20/88	-0.0306	0.1530	0.1700	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 42 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16PNL	2	Ru-106	05/08/89	-0.0985	0.1230	0.1700	pCi/g
16PNL	2	Ru-106	08/08/91	0.0295	0.4130	0.1700	pCi/g
16PNL	2	Ru-106	07/28/92	-0.0970	0.2270	0.1700	pCi/g
17PNL	2	Ru-106	05/15/87	0.0396	0.1310	0.1700	pCi/g
17PNL	2	Ru-106	06/20/88	0.0453	0.1200	0.1700	pCi/g
17PNL	2	Ru-106	05/10/89	0.0516	0.1530	0.1700	pCi/g
17PNL	2	Ru-106	10/04/90	0.0621	0.2200	0.1700	pCi/g
17PNL	2	Ru-106	08/08/91	0.0119	0.1430	0.1700	pCi/g
17PNL	2	Ru-106	06/23/92	-0.0219	0.1220	0.1700	pCi/g
18PNL	2	Ru-106	05/15/87	-0.1130	0.1460	0.1700	pCi/g
18PNL	2	Ru-106	04/01/88	-0.0246	0.1180	0.1700	pCi/g
18PNL	2	Ru-106	05/10/89	0.1390	0.1450	0.1700	pCi/g
18PNL	2	Ru-106	10/04/90	0.0795	0.2020	0.1700	pCi/g
18PNL	2	Ru-106	08/08/91	0.0925	0.1430	0.1700	pCi/g
18PNL	2	Ru-106	07/27/92	-0.0171	0.2460	0.1700	pCi/g
19DOH	1	Ru-106	07/31/91	-0.0036	0.0685	0.2000	pCi/g
19PNL	2	Ru-106	05/15/87	-0.0878	0.2140	0.1700	pCi/g
19PNL	2	Ru-106	06/20/88	0.1060	0.1740	0.1700	pCi/g
19PNL	2	Ru-106	05/10/89	0.1040	0.2080	0.1700	pCi/g
19PNL	2	Ru-106	10/04/90	-0.0010	0.2040	0.1700	pCi/g
20DOH	1a	Ru-106	01/17/85	0.1100	0.0300	0.1000	pCi/g
20PNL	2	Ru-106	05/15/87	0.0964	0.1520	0.1700	pCi/g
20PNL	2	Ru-106	06/20/88	0.0646	0.1490	0.1700	pCi/g
20PNL	2	Ru-106	05/10/89	0.0081	0.1620	0.1700	pCi/g
21PNL	2	Ru-106	05/15/87	0.1410	0.1660	0.1700	pCi/g
21PNL	2	Ru-106	04/01/88	-0.1260	0.1440	0.1700	pCi/g
21PNL	2	Ru-106	05/10/89	0.0541	0.1890	0.1700	pCi/g
21PNL	2	Ru-106	10/08/90	-0.0795	0.1900	0.1700	pCi/g
21PNL	2	Ru-106	08/08/91	-0.0584	0.1920	0.1700	pCi/g
21PNL	2	Ru-106	07/28/92	-0.0336	0.2600	0.1700	pCi/g
22PNL	2	Ru-106	05/26/87	-0.0702	0.1490	0.1700	pCi/g
22PNL	2	Ru-106	06/10/88	0.0115	0.1350	0.1700	pCi/g
22PNL	2	Ru-106	05/09/89	-0.0431	0.1850	0.1700	pCi/g
22PNL	2	Ru-106	10/08/90	-0.1370	0.2180	0.1700	pCi/g
23DOH	1a	Ru-106	11/06/91	-0.0273	0.0754	0.2000	pCi/g
23PNL	2	Ru-106	05/26/87	0.1210	0.1260	0.1700	pCi/g
23PNL	2	Ru-106	06/10/88	0.0315	0.1660	0.1700	pCi/g
23PNL	2	Ru-106	05/05/89	0.0630	0.1450	0.1700	pCi/g
23PNL	2	Ru-106	10/03/90	-0.1900	0.2010	0.1700	pCi/g
24DOH	5	Ru-106	08/01/91	0.0410	0.1200	0.2000	pCi/g
24PNL	2	Ru-106	06/10/88	-0.0981	0.1620	0.1700	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 43 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
24PNL	2	Ru-106	05/05/89	0.0408	0.2000	0.1700	pCi/g
25DOH	1a	Ru-106	11/05/91	0.0840	0.0710	0.2000	pCi/g
25PNL	1	Ru-106	05/07/87	-0.0751	0.1550	0.1700	pCi/g
25PNL	1	Ru-106	05/25/88	0.0855	0.1440	0.1700	pCi/g
25PNL	1	Ru-106	05/05/89	0.0092	0.1360	0.1700	pCi/g
25PNL	1	Ru-106	07/31/91	0.0427	0.1620	0.1700	pCi/g
26DOH	1a	Ru-106	11/06/91	0.0241	0.0698	0.2000	pCi/g
26PNL	2	Ru-106	05/07/87	-0.1330	0.1350	0.1700	pCi/g
26PNL	2	Ru-106	06/07/88	0.0344	0.0956	0.1700	pCi/g
26PNL	2	Ru-106	05/05/89	0.0098	0.1150	0.1700	pCi/g
27PNL	2	Ru-106	05/20/87	0.2360	0.1540	0.1700	pCi/g
27PNL	2	Ru-106	06/08/88	0.0258	0.1790	0.1700	pCi/g
27PNL	2	Ru-106	05/05/89	0.0929	0.1710	0.1700	pCi/g
28DOH	1	Ru-106	06/27/89	0.0200	0.0800	0.1000	pCi/g
28DOH	1	Ru-106	06/26/90	-0.0480	0.0820	0.1000	pCi/g
28DOH	1	Ru-106	07/31/91	0.0810	0.1190	0.2000	pCi/g
28PNL	2	Ru-106	05/25/88	-0.0143	0.1120	0.1700	pCi/g
28PNL	2	Ru-106	05/03/89	-0.0660	0.1450	0.1700	pCi/g
29DOH	1	Ru-106	11/19/85	0.1700	0.1700	0.1000	pCi/g
29DOH	1	Ru-106	11/07/89	0.0400	0.0600	0.1000	pCi/g
29DOH	1	Ru-106	11/05/90	0.0500	0.0800	0.2000	pCi/g
29DOH	1	Ru-106	11/06/91	0.0444	0.0699	0.2000	pCi/g
29PNL	1	Ru-106	06/09/88	0.0929	0.1440	0.1700	pCi/g
29PNL	1	Ru-106	05/02/89	0.0084	0.1500	0.1700	pCi/g
29PNL	1	Ru-106	08/08/91	-0.0762	0.2000	0.1700	pCi/g
30DOH	1a	Ru-106	11/19/85	0.1600	0.1600	0.1000	pCi/g
30DOH	1a	Ru-106	11/07/89	0.1000	0.1000	0.1000	pCi/g
30DOH	1a	Ru-106	11/05/90	0.0400	0.0700	0.2000	pCi/g
30DOH	1a	Ru-106	11/06/91	0.0051	0.0732	0.2000	pCi/g
30PNL	5	Ru-106	05/20/87	0.0563	0.1310	0.1700	pCi/g
30PNL	5	Ru-106	03/21/88	0.0469	0.1830	0.1700	pCi/g
30PNL	5	Ru-106	05/09/89	-0.0859	0.1580	0.1700	pCi/g
31PNL	5	Ru-106	05/21/87	0.0350	0.1480	0.1700	pCi/g
31PNL	5	Ru-106	05/24/88	-0.0395	0.1620	0.1700	pCi/g
31PNL	5	Ru-106	05/09/89	0.0631	0.1580	0.1700	pCi/g
31PNL	5	Ru-106	10/03/90	-0.1870	0.3050	0.1700	pCi/g
31PNL	5	Ru-106	08/01/91	0.2110	0.2250	0.1700	pCi/g
31PNL	5	Ru-106	07/01/92	-0.1220	0.1020	0.1700	pCi/g
32DOH	1a	Ru-106	06/26/90	0.0070	0.0660	0.1000	pCi/g
32PNL	4	Ru-106	05/29/87	-0.1015	0.1537	0.1700	pCi/g
32PNL	4	Ru-106	05/27/88	-0.0824	0.1580	0.1700	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 44 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
32PNL	4	Ru-106	05/08/89	-0.0462	0.1810	0.1700	pCi/g
32PNL	4	Ru-106	10/03/90	-0.1830	0.4160	0.1700	pCi/g
33DOH	1	Ru-106	06/27/89	0.0710	0.0700	0.1000	pCi/g
33DOH	1	Ru-106	06/26/90	0.0110	0.0760	0.1000	pCi/g
33DOH	1	Ru-106	07/31/91	0.0455	0.0723	0.2000	pCi/g
33PNL	4	Ru-106	05/29/87	-0.0295	0.1485	0.1700	pCi/g
33PNL	4	Ru-106	05/27/88	-0.1100	0.1520	0.1700	pCi/g
33PNL	4	Ru-106	05/08/89	0.0515	0.1660	0.1700	pCi/g
33PNL	4	Ru-106	10/03/90	-0.1120	0.2630	0.1700	pCi/g
34DOH	1	Ru-106	05/28/85	0.1700	0.1700	0.1000	pCi/g
34PNL	5	Ru-106	05/08/87	0.0865	0.1460	0.1700	pCi/g
34PNL	5	Ru-106	06/17/88	-0.1630	0.1610	0.1700	pCi/g
34PNL	5	Ru-106	05/08/89	0.0468	0.1610	0.1700	pCi/g
34PNL	5	Ru-106	10/05/90	0.0473	0.2100	0.1700	pCi/g
34PNL	5	Ru-106	08/01/91	0.0551	0.1730	0.1700	pCi/g
35DOH	1	Ru-106	05/28/85	0.1600	0.1600	0.1000	pCi/g
35PNL	4	Ru-106	05/08/87	-0.0221	0.1395	0.1700	pCi/g
35PNL	4	Ru-106	06/17/88	0.0501	0.1570	0.1700	pCi/g
35PNL	4	Ru-106	05/08/89	-0.0998	0.1470	0.1700	pCi/g
35PNL	4	Ru-106	10/03/90	-0.3160	0.4050	0.1700	pCi/g
36PNL	4	Ru-106	05/26/87	0.0268	0.1250	0.1700	pCi/g
36PNL	4	Ru-106	06/10/88	0.0287	0.1430	0.1700	pCi/g
36PNL	4	Ru-106	05/09/89	0.0219	0.1650	0.1700	pCi/g
36PNL	4	Ru-106	10/05/90	0.2110	0.4140	0.1700	pCi/g
36PNL	4	Ru-106	08/01/91	0.0283	0.1980	0.1700	pCi/g
37DOH	1a	Ru-106	11/19/85	0.1500	0.1500	0.1000	pCi/g
37DOH	1a	Ru-106	11/07/89	0.0300	0.0700	0.1000	pCi/g
37DOH	1a	Ru-106	11/05/90	0.0500	0.0800	0.2000	pCi/g
37PNL	4	Ru-106	05/26/87	-0.0982	0.1745	0.1700	pCi/g
37PNL	4	Ru-106	06/10/88	0.1050	0.1360	0.1700	pCi/g
37PNL	4	Ru-106	05/09/89	0.0635	0.1480	0.1700	pCi/g
37PNL	4	Ru-106	10/05/90	0.1650	0.2080	0.1700	pCi/g
38PNL	5	Ru-106	05/21/87	0.0036	0.1685	0.1700	pCi/g
38PNL	5	Ru-106	06/08/88	-0.0796	0.1580	0.1700	pCi/g
38PNL	5	Ru-106	05/09/89	0.0508	0.1230	0.1700	pCi/g
38PNL	5	Ru-106	10/03/90	-0.0468	0.2030	0.1700	pCi/g
38PNL	5	Ru-106	08/01/91	-0.0427	0.1750	0.1700	pCi/g
38PNL	5	Ru-106	07/01/92	0.0487	0.1100	0.1700	pCi/g
39DOH	1a	Ru-106	11/07/89	0.0020	0.0600	0.1000	pCi/g
39DOH	1a	Ru-106	11/05/90	-0.0100	0.0700	0.2000	pCi/g
41DOH	5	Ru-106	06/27/89	0.0600	0.0800	0.1000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 45 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
41DOH	5	Ru-106	06/26/90	0.0160	0.0820	0.1000	pCi/g
41DOH	5	Ru-106	08/01/91	0.0180	0.1130	0.2000	pCi/g
43DOH	1a	Ru-106	11/19/85	0.1600	0.1600	0.1000	pCi/g
43DOH	1a	Ru-106	11/07/89	-0.0100	0.0700	0.1000	pCi/g
43DOH	1a	Ru-106	11/05/90	0.0010	0.0780	0.2000	pCi/g
46DOH	1	Ru-106	06/27/89	-0.0100	0.0800	0.1000	pCi/g
46DOH	1	Ru-106	06/26/90	0.0070	0.0770	0.1000	pCi/g
46DOH	1	Ru-106	07/31/91	0.0702	0.0710	0.2000	pCi/g
12DOH	5	Sr-90	08/01/91	0.1040	0.0070	0.0030	pCi/g
14DOH	5	Sr-90	07/01/92	0.1200	0.0100	0.0030	pCi/g
15DOH	4	Sr-90	08/01/91	0.0550	0.0040	0.0030	pCi/g
22DOH	5	Sr-90	07/01/92	0.0980	0.0060	0.0030	pCi/g
24DOH	5	Sr-90	08/01/91	0.0080	0.0040	0.0030	pCi/g
30PNL	5	Sr-90	05/20/87	0.2400	0.0139	0.0050	pCi/g
30PNL	5	Sr-90	03/21/88	0.4320	0.0189	0.0050	pCi/g
30PNL	5	Sr-90	05/09/89	0.1690	0.0089	0.0050	pCi/g
31PNL	5	Sr-90	05/21/87	0.2540	0.0221	0.0050	pCi/g
31PNL	5	Sr-90	05/24/88	0.2615	0.0107	0.0050	pCi/g
31PNL	5	Sr-90	05/09/89	0.1280	0.0082	0.0050	pCi/g
31PNL	5	Sr-90	10/03/90	0.3480	0.0134	0.0050	pCi/g
31PNL	5	Sr-90	08/01/91	0.0293	0.0061	0.0050	pCi/g
31PNL	5	Sr-90	07/01/92	0.0383	0.0047	0.0050	pCi/g
32PNL	4	Sr-90	05/29/87	0.0202	0.0057	0.0050	pCi/g
32PNL	4	Sr-90	05/27/88	0.0408	0.0043	0.0050	pCi/g
32PNL	4	Sr-90	05/08/89	0.0112	0.0052	0.0050	pCi/g
32PNL	4	Sr-90	10/03/90	0.0455	0.0058	0.0050	pCi/g
33PNL	4	Sr-90	05/29/87	0.0727	0.0086	0.0050	pCi/g
33PNL	4	Sr-90	05/27/88	0.1270	0.0075	0.0050	pCi/g
33PNL	4	Sr-90	05/08/89	0.0882	0.0067	0.0050	pCi/g
33PNL	4	Sr-90	10/03/90	0.0789	0.0080	0.0050	pCi/g
34PNL	5	Sr-90	05/08/87	0.0633	0.0102	0.0050	pCi/g
34PNL	5	Sr-90	06/17/88	0.0781	0.0059	0.0050	pCi/g
34PNL	5	Sr-90	05/08/89	0.0531	0.0053	0.0050	pCi/g
34PNL	5	Sr-90	10/05/90	0.0612	0.0086	0.0050	pCi/g
34PNL	5	Sr-90	08/01/91	0.0137	0.0043	0.0050	pCi/g
35PNL	4	Sr-90	05/08/87	0.1147	0.0118	0.0050	pCi/g
35PNL	4	Sr-90	06/17/88	0.2500	0.0114	0.0050	pCi/g
35PNL	4	Sr-90	05/08/89	0.1200	0.0075	0.0050	pCi/g
35PNL	4	Sr-90	10/03/90	0.0496	0.0060	0.0050	pCi/g
36PNL	4	Sr-90	05/26/87	0.1208	0.0103	0.0050	pCi/g
36PNL	4	Sr-90	06/10/88	0.0931	0.0067	0.0050	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 46 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
36PNL	4	Sr-90	05/09/89	0.1400	0.0088	0.0050	pCi/g
36PNL	4	Sr-90	10/05/90	0.2040	0.0125	0.0050	pCi/g
36PNL	4	Sr-90	08/01/91	0.0940	0.0106	0.0050	pCi/g
37PNL	4	Sr-90	05/26/87	0.1520	0.0114	0.0050	pCi/g
37PNL	4	Sr-90	06/10/88	0.0383	0.0045	0.0050	pCi/g
37PNL	4	Sr-90	05/09/89	0.0803	0.0076	0.0050	pCi/g
37PNL	4	Sr-90	10/05/90	0.0759	0.0078	0.0050	pCi/g
38PNL	5	Sr-90	05/21/87	0.0570	0.0083	0.0050	pCi/g
38PNL	5	Sr-90	06/08/88	0.0924	0.0089	0.0050	pCi/g
38PNL	5	Sr-90	05/09/89	0.1020	0.0070	0.0050	pCi/g
38PNL	5	Sr-90	10/03/90	0.1260	0.0085	0.0050	pCi/g
38PNL	5	Sr-90	08/01/91	0.1190	0.0111	0.0050	pCi/g
38PNL	5	Sr-90	07/01/92	0.0452	0.0052	0.0050	pCi/g
41DOH	5	Sr-90	09/23/85	0.0280	0.0020	0.0030	pCi/g
41DOH	5	Sr-90	08/05/86	0.0300	0.0010	0.0030	pCi/g
41DOH	5	Sr-90	06/03/87	0.0160	0.0040	0.0030	pCi/g
41DOH	5	Sr-90	06/21/88	0.0240	0.0040	0.0030	pCi/g
41DOH	5	Sr-90	06/27/89	0.0270	0.0080	0.0030	pCi/g
41DOH	5	Sr-90	06/26/90	0.0230	0.0050	0.0030	pCi/g
41DOH	5	Sr-90	08/01/91	0.0240	0.0040	0.0030	pCi/g
34PNL	5	Th-232	06/17/88	0.6890	0.1130	0.0000	pCi/g
35PNL	4	Th-232	06/17/88	0.4790	0.1100	0.0000	pCi/g
38PNL	5	Th-232	06/08/88	0.8930	0.1040	0.0000	pCi/g
41DOH	5	Total Th	08/05/86	1.9000	0.1000	0.1000	pCi/g
1DOH	1a	Total U	07/31/91	0.8620	0.4120	0.4000	pCi/g
2DOH	1a	Total U	07/31/91	0.9240	0.2500	0.4000	pCi/g
3DOH	1a	Total U	05/14/87	0.8990	0.1060	0.2000	pCi/g
5DOH	1	Total U	08/05/86	1.4000	0.2000	0.2000	pCi/g
5DOH	1	Total U	06/03/87	1.3000	0.2000	0.2000	pCi/g
5DOH	1	Total U	06/21/88	0.7800	0.2500	0.1000	pCi/g
5DOH	1	Total U	06/27/89	1.2000	0.4000	0.1000	pCi/g
5DOH	1	Total U	06/26/90	1.4000	0.2000	0.2000	pCi/g
5DOH	1	Total U	07/31/91	1.4700	0.3100	0.2000	pCi/g
12DOH	5	Total U	08/01/91	1.1500	0.2600	0.4000	pCi/g
13DOH	1	Total U	08/05/86	1.0000	0.2000	0.2000	pCi/g
13DOH	1	Total U	06/03/87	1.2000	0.2000	0.2000	pCi/g
13DOH	1	Total U	06/21/88	0.9800	0.2200	0.1000	pCi/g
13DOH	1	Total U	06/27/89	1.1000	0.3000	0.1000	pCi/g
13DOH	1	Total U	06/26/90	1.2000	0.2000	0.2000	pCi/g
14DOH	5	Total U	07/01/92	1.6100	0.2500	0.4000	pCi/g
15DOH	4	Total U	08/01/91	0.9350	0.2380	0.4000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 47 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16DOH	1a	Total U	08/05/86	1.5000	0.2000	0.2000	pCi/g
16DOH	1a	Total U	06/03/87	1.4000	0.2000	0.2000	pCi/g
16DOH	1a	Total U	06/21/88	1.3000	0.3000	0.1000	pCi/g
16DOH	1a	Total U	06/27/89	1.1000	0.3000	0.1000	pCi/g
16DOH	1a	Total U	06/26/90	0.7900	0.1600	0.2000	pCi/g
16DOH	1a	Total U	07/31/91	1.4100	0.4300	0.4000	pCi/g
19DOH	1	Total U	07/31/91	2.1200	0.2400	0.4000	pCi/g
22DOH	5	Total U	07/01/92	2.4100	0.3800	0.4000	pCi/g
23DOH	1a	Total U	11/06/91	1.0100	0.3400	0.4000	pCi/g
24DOH	5	Total U	08/01/91	2.0800	0.4600	0.4000	pCi/g
25DOH	1a	Total U	11/05/91	1.0700	0.3200	0.4000	pCi/g
26DOH	1a	Total U	11/06/91	0.9600	0.3180	0.4000	pCi/g
27DOH	1a	Total U	06/30/92	1.6400	0.4900	0.4000	pCi/g
28DOH	1	Total U	08/05/86	1.4000	0.2000	0.2000	pCi/g
28DOH	1	Total U	06/03/87	1.2000	0.2000	0.2000	pCi/g
28DOH	1	Total U	06/21/88	0.9400	0.1300	0.1000	pCi/g
28DOH	1	Total U	06/27/89	1.0000	0.4000	0.1000	pCi/g
28DOH	1	Total U	06/26/90	1.1000	0.1000	0.2000	pCi/g
28DOH	1	Total U	07/31/91	1.0400	0.5000	0.4000	pCi/g
29DOH	1	Total U	10/27/88	1.2000	0.1000	0.2000	pCi/g
29DOH	1	Total U	11/07/89	1.0000	0.3000	0.1000	pCi/g
29DOH	1	Total U	11/05/90	0.6000	0.1000	0.4000	pCi/g
29DOH	1	Total U	11/06/91	1.1000	0.3300	0.4000	pCi/g
30DOH	1a	Total U	10/27/88	1.4000	0.1000	0.2000	pCi/g
30DOH	1a	Total U	11/07/89	1.2000	0.3000	0.1000	pCi/g
30DOH	1a	Total U	11/05/90	0.9000	0.3000	0.4000	pCi/g
30DOH	1a	Total U	11/06/91	0.1030	0.0320	0.4000	pCi/g
31DOH	1a	Total U	06/04/87	1.4100	0.1400	0.2000	pCi/g
32DOH	1a	Total U	06/26/90	0.9300	0.1300	0.2000	pCi/g
33DOH	1	Total U	08/05/86	1.3000	0.1000	0.2000	pCi/g
33DOH	1	Total U	06/03/87	0.9700	0.1200	0.2000	pCi/g
33DOH	1	Total U	06/21/88	1.4000	0.3000	0.1000	pCi/g
33DOH	1	Total U	06/27/89	1.1000	0.3000	0.1000	pCi/g
33DOH	1	Total U	06/26/90	1.6000	0.2000	0.2000	pCi/g
33DOH	1	Total U	07/31/91	0.9950	0.2140	0.4000	pCi/g
37DOH	1a	Total U	10/27/88	1.6000	0.2000	0.2000	pCi/g
37DOH	1a	Total U	11/07/89	1.6000	0.3000	0.1000	pCi/g
37DOH	1a	Total U	11/05/90	0.9000	0.3000	0.4000	pCi/g
39DOH	1a	Total U	10/27/88	1.6000	0.1000	0.2000	pCi/g
39DOH	1a	Total U	11/07/89	0.9000	0.3000	0.1000	pCi/g
39DOH	1a	Total U	11/05/90	0.8000	0.3000	0.4000	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 48 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
40DOH	1a	Total U	10/27/88	1.1000	0.1000	0.2000	pCi/g
41DOH	5	Total U	08/05/86	1.3000	0.2000	0.2000	pCi/g
41DOH	5	Total U	06/03/87	1.9000	0.2000	0.2000	pCi/g
41DOH	5	Total U	06/21/88	1.2000	0.2000	0.1000	pCi/g
41DOH	5	Total U	06/27/89	1.6000	0.4000	0.1000	pCi/g
41DOH	5	Total U	06/26/90	1.1000	0.1000	0.2000	pCi/g
41DOH	5	Total U	08/01/91	1.3000	0.4400	0.4000	pCi/g
43DOH	1a	Total U	10/27/88	1.0000	0.1000	0.2000	pCi/g
43DOH	1a	Total U	11/07/89	1.0000	0.3000	0.1000	pCi/g
43DOH	1a	Total U	11/05/90	1.1000	0.1000	0.4000	pCi/g
46DOH	1	Total U	08/05/86	1.4000	0.2000	0.2000	pCi/g
46DOH	1	Total U	06/03/87	1.4000	0.2000	0.2000	pCi/g
46DOH	1	Total U	06/21/88	1.2000	0.3000	0.1000	pCi/g
46DOH	1	Total U	06/27/89	1.1000	0.2000	0.1000	pCi/g
46DOH	1	Total U	06/26/90	1.1000	0.2000	0.2000	pCi/g
46DOH	1	Total U	07/31/91	1.0400	0.2600	0.4000	pCi/g
1DOH	1a	U-234	07/31/91	0.4230	0.2060	0.0050	pCi/g
1PNL	1	U-234	08/14/91	0.7570	0.1150	0.0500	pCi/g
2DOH	1a	U-234	07/31/91	0.4530	0.1250	0.0000	pCi/g
2PNL	1	U-234	08/14/91	0.6050	0.0937	0.0500	pCi/g
3DOH	1a	U-234	05/14/87	0.4810	0.0750	0.0050	pCi/g
3PNL	1a	U-234	07/31/91	0.6260	0.0784	0.0500	pCi/g
5DOH	1	U-234	06/26/90	0.6100	0.1200	0.0050	pCi/g
5PNL	1a	U-234	07/31/91	0.9060	0.2080	0.0500	pCi/g
6PNL	1a	U-234	07/31/91	0.6540	0.0922	0.0500	pCi/g
7PNL	1a	U-234	08/13/91	0.5150	0.0975	0.0500	pCi/g
8PNL	1a	U-234	08/13/91	0.8940	0.1140	0.0500	pCi/g
10PNL	1	U-234	08/13/91	0.6870	0.0898	0.0500	pCi/g
11PNL	1	U-234	08/13/91	0.7100	0.1220	0.0500	pCi/g
12DOH	5	U-234	08/01/91	0.5630	0.1300	0.0050	pCi/g
12PNL	1	U-234	08/13/91	0.7000	0.1140	0.0500	pCi/g
13DOH	1	U-234	06/26/90	0.4700	0.1100	0.0050	pCi/g
13PNL	1	U-234	08/08/91	1.1100	0.1040	0.0500	pCi/g
14DOH	5	U-234	07/01/92	0.7880	0.1270	0.0000	pCi/g
14PNL	1	U-234	07/31/91	0.7360	0.0810	0.0500	pCi/g
15DOH	4	U-234	08/01/91	0.4590	0.1190	0.0050	pCi/g
15PNL	1	U-234	07/31/91	0.6130	0.0539	0.0500	pCi/g
16DOH	1a	U-234	06/26/90	0.4100	0.1100	0.0050	pCi/g
16PNL	2	U-234	08/08/91	0.8730	0.0879	0.0500	pCi/g
16PNL	2	U-234	07/28/92	0.8560	0.0593	0.0500	pCi/g
17PNL	2	U-234	10/04/90	0.5270	0.0862	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 49 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
17PNL	2	U-234	08/08/91	0.6860	0.0811	0.0500	pCi/g
18PNL	2	U-234	10/04/90	0.7520	0.0942	0.0500	pCi/g
18PNL	2	U-234	08/08/91	0.9360	0.0905	0.0500	pCi/g
18PNL	2	U-234	07/27/92	0.6680	0.0506	0.0500	pCi/g
19DOH	1	U-234	07/31/91	1.0400	0.1200	0.0050	pCi/g
19PNL	2	U-234	10/04/90	0.9240	0.0796	0.0500	pCi/g
21PNL	2	U-234	10/08/90	0.7200	0.0763	0.0500	pCi/g
21PNL	2	U-234	08/08/91	0.8930	0.0931	0.0500	pCi/g
21PNL	2	U-234	07/28/92	0.6680	0.0524	0.0500	pCi/g
22DOH	5	U-234	07/01/92	1.1800	0.1900	0.0000	pCi/g
22PNL	2	U-234	10/08/90	0.5810	0.0731	0.0500	pCi/g
23PNL	2	U-234	10/03/90	0.5400	0.0667	0.0500	pCi/g
24DOH	5	U-234	08/01/91	1.0200	0.2300	0.0050	pCi/g
25PNL	1	U-234	07/31/91	0.7470	0.0573	0.0500	pCi/g
27DOH	1a	U-234	06/30/92	0.7880	0.2470	0.0000	pCi/g
28DOH	1	U-234	06/26/90	0.4800	0.0900	0.0050	pCi/g
29PNL	1	U-234	08/08/91	0.7950	0.0874	0.0500	pCi/g
31DOH	1a	U-234	06/04/87	0.6200	0.1000	0.0050	pCi/g
31PNL	5	U-234	10/03/90	0.5760	0.0970	0.0500	pCi/g
31PNL	5	U-234	08/01/91	0.6320	0.0760	0.0500	pCi/g
32DOH	1a	U-234	06/26/90	0.3900	0.0900	0.0050	pCi/g
32PNL	4	U-234	10/03/90	0.7000	0.0748	0.0500	pCi/g
33DOH	1	U-234	06/26/90	0.6400	0.1400	0.0050	pCi/g
33PNL	4	U-234	10/03/90	0.9030	0.0850	0.0500	pCi/g
34PNL	5	U-234	10/05/90	0.5010	0.0681	0.0500	pCi/g
34PNL	5	U-234	08/01/91	0.6190	0.0827	0.0500	pCi/g
35PNL	4	U-234	10/03/90	0.5040	0.0677	0.0500	pCi/g
36PNL	4	U-234	10/05/90	0.5330	0.0749	0.0500	pCi/g
36PNL	4	U-234	08/01/91	0.5800	0.0742	0.0500	pCi/g
37PNL	4	U-234	10/05/90	0.5140	0.0703	0.0500	pCi/g
38PNL	5	U-234	10/03/90	0.5060	0.0647	0.0500	pCi/g
38PNL	5	U-234	08/01/91	0.5180	0.0680	0.0500	pCi/g
41DOH	5	U-234	06/26/90	0.4900	0.0900	0.0050	pCi/g
46DOH	1	U-234	06/26/90	0.3900	0.1100	0.0050	pCi/g
1PNL	1	U-235	08/14/91	0.0110	0.0171	0.0500	pCi/g
2PNL	1	U-235	08/14/91	0.0222	0.0198	0.0500	pCi/g
3PNL	1a	U-235	07/31/91	0.0278	0.0177	0.0500	pCi/g
5PNL	1a	U-235	07/31/91	0.0188	0.0324	0.0500	pCi/g
6PNL	1a	U-235	07/31/91	0.0228	0.0189	0.0500	pCi/g
7PNL	1a	U-235	08/13/91	-0.0042	0.0120	0.0500	pCi/g
8PNL	1a	U-235	08/13/91	0.0383	0.0346	0.0500	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 50 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
10PNL	1	U-235	08/13/91	0.0162	0.0163	0.0500	pCi/g
11PNL	1	U-235	08/13/91	0.0208	0.0223	0.0500	pCi/g
12PNL	1	U-235	08/13/91	0.0277	0.0255	0.0500	pCi/g
13PNL	1	U-235	08/08/91	0.0400	0.0208	0.0500	pCi/g
14PNL	1	U-235	07/31/91	0.0344	0.0181	0.0500	pCi/g
15PNL	1	U-235	07/31/91	0.0219	0.0109	0.0500	pCi/g
16PNL	2	U-235	08/08/91	0.0408	0.0196	0.0500	pCi/g
16PNL	2	U-235	07/28/92	0.0373	0.0126	0.0500	pCi/g
17PNL	2	U-235	10/04/90	0.0143	0.0166	0.0500	pCi/g
17PNL	2	U-235	08/08/91	0.0097	0.0113	0.0500	pCi/g
18PNL	2	U-235	10/04/90	0.0427	0.0264	0.0500	pCi/g
18PNL	2	U-235	08/08/91	0.0460	0.0209	0.0500	pCi/g
18PNL	2	U-235	07/27/92	0.0215	0.0096	0.0500	pCi/g
19PNL	2	U-235	10/04/90	0.0476	0.0195	0.0500	pCi/g
21PNL	2	U-235	10/08/90	0.0308	0.0165	0.0500	pCi/g
21PNL	2	U-235	08/08/91	0.0287	0.0176	0.0500	pCi/g
21PNL	2	U-235	07/28/92	0.0169	0.0094	0.0500	pCi/g
22PNL	2	U-235	10/08/90	0.0238	0.0159	0.0500	pCi/g
23PNL	2	U-235	10/03/90	0.0066	0.0097	0.0500	pCi/g
25PNL	1	U-235	07/31/91	0.0399	0.0138	0.0500	pCi/g
29PNL	1	U-235	08/08/91	0.0552	0.0237	0.0500	pCi/g
31PNL	5	U-235	10/03/90	0.0271	0.0247	0.0500	pCi/g
31PNL	5	U-235	08/01/91	0.0212	0.0152	0.0500	pCi/g
32PNL	4	U-235	10/03/90	0.0361	0.0176	0.0500	pCi/g
33PNL	4	U-235	10/03/90	0.0172	0.0128	0.0500	pCi/g
34PNL	5	U-235	10/05/90	0.0288	0.0171	0.0500	pCi/g
34PNL	5	U-235	08/01/91	0.0356	0.0205	0.0500	pCi/g
35PNL	4	U-235	10/03/90	0.0126	0.0145	0.0500	pCi/g
36PNL	4	U-235	10/05/90	0.0235	0.0167	0.0500	pCi/g
36PNL	4	U-235	08/01/91	0.0213	0.0159	0.0500	pCi/g
37PNL	4	U-235	10/05/90	0.0342	0.0189	0.0500	pCi/g
38PNL	5	U-235	10/03/90	0.0195	0.0158	0.0500	pCi/g
38PNL	5	U-235	08/01/91	0.0170	0.0134	0.0500	pCi/g
1DOH	1a	U-238	07/31/91	0.4390	0.2060	0.4000	pCi/g
1PNL	1	U-238	08/14/91	0.6690	0.1080	0.0500	pCi/g
2DOH	1a	U-238	07/31/91	0.4710	0.1250	0.4000	pCi/g
2PNL	1	U-238	08/14/91	0.6870	0.0986	0.0500	pCi/g
3DOH	1a	U-238	05/14/87	0.4060	0.0700	0.0030	pCi/g
3PNL	1a	U-238	07/31/91	0.5450	0.0727	0.0500	pCi/g
5DOH	1	U-238	06/26/90	0.5600	0.0900	0.0030	pCi/g
5DOH	1	U-238	07/31/91	0.7490	0.1550	0.0030	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 51 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
5PNL	1a	U-238	07/31/91	0.8410	0.1990	0.0500	pCi/g
6PNL	1a	U-238	07/31/91	0.6650	0.0924	0.0500	pCi/g
7PNL	1a	U-238	08/13/91	0.6910	0.1110	0.0500	pCi/g
8PNL	1a	U-238	08/13/91	0.9570	0.1210	0.0500	pCi/g
10PNL	1	U-238	08/13/91	0.6100	0.0841	0.0500	pCi/g
11PNL	1	U-238	08/13/91	0.5770	0.1090	0.0500	pCi/g
12DOH	5	U-238	08/01/91	0.5850	0.1300	0.4000	pCi/g
12PNL	1	U-238	08/13/91	0.7480	0.1170	0.0500	pCi/g
13DOH	1	U-238	06/26/90	0.6100	0.1000	0.0030	pCi/g
13PNL	1	U-238	08/08/91	1.0200	0.0994	0.0500	pCi/g
14DOH	5	U-238	07/01/92	0.8190	0.1270	0.4000	pCi/g
14PNL	1	U-238	07/31/91	0.8870	0.0880	0.0500	pCi/g
15DOH	4	U-238	08/01/91	0.4760	0.1190	0.4000	pCi/g
15PNL	1	U-238	07/31/91	0.6140	0.0535	0.0500	pCi/g
16DOH	1a	U-238	06/26/90	0.5100	0.0900	0.0030	pCi/g
16DOH	1a	U-238	07/31/91	0.7200	0.2170	0.4000	pCi/g
16PNL	2	U-238	08/08/91	0.8320	0.0853	0.0500	pCi/g
16PNL	2	U-238	07/28/92	0.8390	0.0586	0.0500	pCi/g
17PNL	2	U-238	10/04/90	0.6790	0.0966	0.0500	pCi/g
17PNL	2	U-238	08/08/91	0.7640	0.0850	0.0500	pCi/g
18PNL	2	U-238	10/04/90	0.7650	0.0954	0.0500	pCi/g
18PNL	2	U-238	08/08/91	0.8640	0.0865	0.0500	pCi/g
18PNL	2	U-238	07/27/92	0.6480	0.0497	0.0500	pCi/g
19DOH	1	U-238	07/31/91	1.0800	0.1200	0.4000	pCi/g
19PNL	2	U-238	10/04/90	0.9050	0.0784	0.0500	pCi/g
21PNL	2	U-238	10/08/90	0.6910	0.0743	0.0500	pCi/g
21PNL	2	U-238	08/08/91	0.8310	0.0893	0.0500	pCi/g
21PNL	2	U-238	07/28/92	0.6820	0.0525	0.0500	pCi/g
22DOH	5	U-238	07/01/92	1.2300	0.1900	0.4000	pCi/g
22PNL	2	U-238	10/08/90	0.6290	0.0753	0.0500	pCi/g
23PNL	2	U-238	10/03/90	0.5430	0.0663	0.0500	pCi/g
24DOH	5	U-238	08/01/91	1.0600	0.2300	0.4000	pCi/g
25PNL	1	U-238	07/31/91	0.7110	0.0557	0.0500	pCi/g
27DOH	1a	U-238	06/30/92	0.8180	0.2470	0.4000	pCi/g
28DOH	1	U-238	06/26/90	0.6100	0.0800	0.0030	pCi/g
28DOH	1	U-238	07/31/91	0.5290	0.2510	0.4000	pCi/g
29PNL	1	U-238	08/08/91	0.7140	0.0823	0.0500	pCi/g
31DOH	1a	U-238	06/04/87	0.6600	0.1000	0.0030	pCi/g
31PNL	5	U-238	10/03/90	0.5670	0.0954	0.0500	pCi/g
31PNL	5	U-238	08/01/91	0.6390	0.0757	0.0500	pCi/g
32DOH	1a	U-238	06/26/90	0.5600	0.0800	0.0030	pCi/g

Table B-1. Screened Data, Used to Calculate Preliminary Radionuclide Background Concentrations (Sheet 52 of 52).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
32PNL	4	U-238	10/03/90	0.6950	0.0738	0.0500	pCi/g
33DOH	1	U-238	06/26/90	0.5600	0.1100	0.0030	pCi/g
33DOH	1	U-238	07/31/91	0.5070	0.1070	0.4000	pCi/g
33PNL	4	U-238	10/03/90	0.8360	0.0814	0.0500	pCi/g
34PNL	5	U-238	10/05/90	0.4600	0.0648	0.0500	pCi/g
34PNL	5	U-238	08/01/91	0.5800	0.0796	0.0500	pCi/g
35PNL	4	U-238	10/03/90	0.5330	0.0689	0.0500	pCi/g
36PNL	4	U-238	10/05/90	0.6580	0.0823	0.0500	pCi/g
36PNL	4	U-238	08/01/91	0.5580	0.0723	0.0500	pCi/g
37PNL	4	U-238	10/05/90	0.5260	0.0704	0.0500	pCi/g
38PNL	5	U-238	10/03/90	0.4970	0.0638	0.0500	pCi/g
38PNL	5	U-238	08/01/91	0.5470	0.0690	0.0500	pCi/g
41DOH	5	U-238	06/26/90	0.6300	0.0900	0.0030	pCi/g
41DOH	5	U-238	08/01/91	0.6630	0.2180	0.4000	pCi/g
46DOH	1	U-238	06/26/90	0.6100	0.1000	0.0030	pCi/g
46DOH	1	U-238	07/31/91	0.5300	0.1310	0.4000	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 1 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
6DOH	1a	Am-241	05/20/87	0.1250	0.0390	0.0200	pCi/g
15DOH	4	Be-7	08/01/91	0.1980	0.0910	0.1000	pCi/g
30DOH	1a	Be-7	11/06/91	0.2250	0.1210	0.1000	pCi/g
45DOH	1	Be-7	06/21/88	0.1500	0.0900	0.0870	pCi/g
9DOH	3	Cd-109	09/24/86	0.8105	0.4599	0.2900	pCi/g
4DOH	1a	Co-60	06/27/89	0.0020	0.0070	0.0100	pCi/g
4DOH	1a	Co-60	06/26/90	-0.0020	0.0082	0.0100	pCi/g
4DOH	1a	Co-60	07/31/91	0.0063	0.0072	0.0200	pCi/g
4PNL	1	Co-60	05/07/87	-0.0215	0.0170	0.0200	pCi/g
4PNL	1	Co-60	03/22/88	0.0176	0.0189	0.0200	pCi/g
4PNL	1	Co-60	05/02/89	-0.0098	0.0188	0.0200	pCi/g
4PNL	1	Co-60	08/13/91	0.0015	0.0172	0.0200	pCi/g
8DOH	1a	Co-60	05/13/87	0.3350	0.0880	0.0100	pCi/g
9DOH	3	Co-60	09/25/85	0.3900	0.0200	0.0100	pCi/g
9DOH	3	Co-60	09/26/85	2.9000	0.0400	0.0100	pCi/g
9DOH	3	Co-60	09/24/86	6.1200	0.1245	0.0100	pCi/g
9DOH	3	Co-60	12/17/86	42.0000	0.6000	0.0100	pCi/g
9DOH	3	Co-60	09/23/87	0.0095	0.0029	0.0100	pCi/g
9PNL	1	Co-60	05/07/87	0.0503	0.0138	0.0200	pCi/g
9PNL	1	Co-60	03/31/88	0.0196	0.0163	0.0200	pCi/g
9PNL	1	Co-60	04/05/88	0.0162	0.0220	0.0200	pCi/g
9PNL	1	Co-60	05/03/89	0.0134	0.0164	0.0200	pCi/g
9PNL	1	Co-60	10/04/90	0.0066	0.0252	0.0200	pCi/g
9PNL	1	Co-60	08/13/91	-0.0070	0.0221	0.0200	pCi/g
10DOH	3	Co-60	08/18/89	0.4400	0.0200	0.0100	pCi/g
11DOH	3	Co-60	08/18/89	0.7710	0.0250	0.0100	pCi/g
18DOH	3	Co-60	09/27/89	0.2700	0.0200	0.0100	pCi/g
21DOH	1a	Co-60	06/30/92	0.0099	0.0101	0.0200	pCi/g
36DOH	1a	Co-60	06/27/89	-0.0040	0.0080	0.0100	pCi/g
36DOH	1a	Co-60	06/26/90	0.0080	0.0085	0.0100	pCi/g
38DOH	3	Co-60	09/27/89	0.0810	0.0100	0.0100	pCi/g
42DOH	1a	Co-60	06/27/89	-0.0040	0.0090	0.0100	pCi/g
42DOH	1a	Co-60	06/26/90	0.0068	0.0087	0.0100	pCi/g
44DOH	3	Co-60	09/27/89	0.0300	0.0150	0.0100	pCi/g
45DOH	1	Co-60	06/27/89	0.0060	0.0060	0.0100	pCi/g
45DOH	1	Co-60	06/26/90	0.0001	0.0076	0.0100	pCi/g
45DOH	1	Co-60	07/31/91	-0.0023	0.0075	0.0200	pCi/g
49DOH	0	Co-60	05/28/85	0.0400	0.0400	0.0100	pCi/g
49DOH	0	Co-60	05/02/89	0.0050	0.0070	0.0100	pCi/g
49DOH	0	Co-60	05/08/90	0.0080	0.0060	0.0100	pCi/g
49DOH	0	Co-60	05/16/91	0.0084	0.0081	0.0200	pCi/g
49DOH	0	Co-60	05/14/92	0.0108	0.0095	0.0200	pCi/g
4PNL	1	Cs-134	05/07/87	0.0384	0.0219	0.0200	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 2 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
4PNL	1	Cs-134	03/22/88	-0.0825	0.0322	0.0200	pCi/g
4PNL	1	Cs-134	05/02/89	-0.0666	0.0303	0.0200	pCi/g
4PNL	1	Cs-134	08/13/91	-0.0395	0.0171	0.0200	pCi/g
9PNL	1	Cs-134	05/07/87	0.0418	0.0201	0.0200	pCi/g
9PNL	1	Cs-134	03/31/88	0.0006	0.0149	0.0200	pCi/g
9PNL	1	Cs-134	04/05/88	-0.0306	0.0214	0.0200	pCi/g
9PNL	1	Cs-134	05/03/89	-0.0736	0.0210	0.0200	pCi/g
9PNL	1	Cs-134	10/04/90	-0.1360	0.0321	0.0200	pCi/g
9PNL	1	Cs-134	08/13/91	-0.0205	0.0183	0.0200	pCi/g
10DOH	3	Cs-134	08/18/89	0.0233	0.0078	0.0200	pCi/g
11DOH	3	Cs-134	08/18/89	0.0452	0.0097	0.0200	pCi/g
18DOH	3	Cs-134	09/27/89	0.0300	0.0100	0.0200	pCi/g
4DOH	1a	Cs-137	09/26/85	0.5800	0.0300	0.0100	pCi/g
4DOH	1a	Cs-137	08/05/86	0.0891	0.0073	0.0100	pCi/g
4DOH	1a	Cs-137	06/03/87	0.1200	0.0100	0.0100	pCi/g
4DOH	1a	Cs-137	06/21/88	0.0720	0.0080	0.0100	pCi/g
4DOH	1a	Cs-137	06/27/89	0.3820	0.0170	0.0100	pCi/g
4DOH	1a	Cs-137	06/26/90	0.1300	0.0100	0.0100	pCi/g
4DOH	1a	Cs-137	07/31/91	0.5040	0.0150	0.0200	pCi/g
4PNL	1	Cs-137	05/07/87	16.0000	0.1910	0.0150	pCi/g
4PNL	1	Cs-137	03/22/88	26.1000	0.2610	0.0150	pCi/g
4PNL	1	Cs-137	05/02/89	17.9000	0.2090	0.0150	pCi/g
4PNL	1	Cs-137	08/13/91	0.2950	0.0295	0.0150	pCi/g
6DOH	1a	Cs-137	05/20/87	0.4062	0.0205	0.0100	pCi/g
7DOH	1a	Cs-137	05/19/87	0.0813	0.0292	0.0100	pCi/g
8DOH	1a	Cs-137	05/13/87	501.0000	2.0000	0.0100	pCi/g
9DOH	3	Cs-137	09/24/86	0.1228	0.0327	0.0100	pCi/g
9DOH	3	Cs-137	12/17/86	0.8000	0.1400	0.0100	pCi/g
9PNL	1	Cs-137	05/07/87	1.3000	0.0536	0.0150	pCi/g
9PNL	1	Cs-137	03/31/88	4.7300	0.0857	0.0150	pCi/g
9PNL	1	Cs-137	04/05/88	6.0600	0.1150	0.0150	pCi/g
9PNL	1	Cs-137	05/03/89	2.9800	0.0846	0.0150	pCi/g
9PNL	1	Cs-137	10/04/90	3.8600	0.1050	0.0150	pCi/g
9PNL	1	Cs-137	08/13/91	1.6000	0.0647	0.0150	pCi/g
10DOH	3	Cs-137	08/18/89	0.1030	0.0140	0.0100	pCi/g
11DOH	3	Cs-137	08/18/89	0.2350	0.0170	0.0100	pCi/g
18DOH	3	Cs-137	09/27/89	0.1300	0.0100	0.0100	pCi/g
21DOH	1a	Cs-137	06/30/92	0.2750	0.0190	0.0200	pCi/g
36DOH	1a	Cs-137	09/26/85	0.2700	0.0200	0.0100	pCi/g
36DOH	1a	Cs-137	08/05/86	0.7240	0.0261	0.0100	pCi/g
36DOH	1a	Cs-137	06/03/87	0.4800	0.0100	0.0100	pCi/g
36DOH	1a	Cs-137	06/21/88	0.2300	0.0100	0.0100	pCi/g
36DOH	1a	Cs-137	06/27/89	0.1610	0.0150	0.0100	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 3 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
36DOH	1a	Cs-137	06/26/90	0.2800	0.0200	0.0100	pCi/g
38DOH	3	Cs-137	09/27/89	0.0600	0.0100	0.0100	pCi/g
42DOH	1a	Cs-137	09/26/85	0.0800	0.0200	0.0100	pCi/g
42DOH	1a	Cs-137	08/05/86	0.0560	0.0134	0.0100	pCi/g
42DOH	1a	Cs-137	06/03/87	0.0570	0.0080	0.0100	pCi/g
42DOH	1a	Cs-137	06/21/88	0.0590	0.0010	0.0100	pCi/g
42DOH	1a	Cs-137	06/27/89	0.0613	0.0127	0.0100	pCi/g
42DOH	1a	Cs-137	06/26/90	0.0490	0.0110	0.0100	pCi/g
44DOH	3	Cs-137	09/27/89	0.0360	0.0120	0.0100	pCi/g
45DOH	1	Cs-137	08/05/86	0.2300	0.0084	0.0100	pCi/g
45DOH	1	Cs-137	06/03/87	0.0870	0.0090	0.0100	pCi/g
45DOH	1	Cs-137	06/21/88	0.1600	0.0100	0.0100	pCi/g
45DOH	1	Cs-137	06/27/89	0.0850	0.0120	0.0100	pCi/g
45DOH	1	Cs-137	06/26/90	0.1400	0.0100	0.0100	pCi/g
45DOH	1	Cs-137	07/31/91	1.1900	0.0200	0.0200	pCi/g
49DOH	0	Cs-137	05/28/85	0.4000	0.4000	0.0100	pCi/g
49DOH	0	Cs-137	05/14/86	0.2600	0.0280	0.0100	pCi/g
49DOH	0	Cs-137	05/20/87	0.1690	0.0150	0.0100	pCi/g
49DOH	0	Cs-137	05/17/88	0.3200	0.0100	0.0100	pCi/g
49DOH	0	Cs-137	05/02/89	0.7000	0.0200	0.0100	pCi/g
49DOH	0	Cs-137	05/08/90	0.3400	0.0200	0.0100	pCi/g
49DOH	0	Cs-137	05/16/91	0.6170	0.0250	0.0200	pCi/g
49DOH	0	Cs-137	05/14/92	0.6660	0.0260	0.0200	pCi/g
3DOH	1a	Eu-152	05/14/87	0.2910	0.0280	0.0400	pCi/g
4PNL	1	Eu-154	05/07/87	-0.0202	0.0539	0.0500	pCi/g
4PNL	1	Eu-154	03/22/88	-0.0681	0.0674	0.0500	pCi/g
4PNL	1	Eu-154	05/02/89	0.0478	0.0661	0.0500	pCi/g
4PNL	1	Eu-154	08/13/91	-0.0321	0.0550	0.0500	pCi/g
9PNL	1	Eu-154	05/07/87	0.0031	0.0500	0.0500	pCi/g
9PNL	1	Eu-154	03/31/88	0.0169	0.0399	0.0500	pCi/g
9PNL	1	Eu-154	04/05/88	-0.0144	0.0686	0.0500	pCi/g
9PNL	1	Eu-154	05/03/89	0.0054	0.0563	0.0500	pCi/g
9PNL	1	Eu-154	10/04/90	-0.0624	0.0764	0.0500	pCi/g
9PNL	1	Eu-154	08/13/91	0.0040	0.0603	0.0500	pCi/g
4PNL	1	Eu-155	05/07/87	0.0873	0.0856	0.0500	pCi/g
4PNL	1	Eu-155	03/22/88	-0.0703	0.0943	0.0500	pCi/g
4PNL	1	Eu-155	05/02/89	0.1230	0.0982	0.0500	pCi/g
4PNL	1	Eu-155	08/13/91	0.0286	0.0458	0.0500	pCi/g
9PNL	1	Eu-155	05/07/87	0.0324	0.0526	0.0500	pCi/g
9PNL	1	Eu-155	03/31/88	0.0736	0.0654	0.0500	pCi/g
9PNL	1	Eu-155	04/05/88	0.0924	0.0762	0.0500	pCi/g
9PNL	1	Eu-155	05/03/89	0.0319	0.0663	0.0500	pCi/g
9PNL	1	Eu-155	10/04/90	0.0364	0.0865	0.0500	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 4 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
9PNL	1	Eu-155	08/13/91	0.0610	0.0706	0.0500	pCi/g
4DOH	1a	Gross Alph	08/05/86	8.0000	1.0000	4.0000	pCi/g
5DOH	1	Gross Alph	08/05/86	8.0000	1.0000	4.0000	pCi/g
13DOH	1	Gross Alph	08/05/86	11.0000	1.0000	4.0000	pCi/g
16DOH	1a	Gross Alph	08/05/86	5.0000	1.0000	4.0000	pCi/g
20DOH	1a	Gross Alph	01/17/85	13.0000	13.0000	4.0000	pCi/g
28DOH	1	Gross Alph	08/05/86	9.0000	1.0000	4.0000	pCi/g
29DOH	1	Gross Alph	11/19/85	10.0000	10.0000	4.0000	pCi/g
30DOH	1a	Gross Alph	11/19/85	10.0000	10.0000	4.0000	pCi/g
33DOH	1	Gross Alph	08/05/86	12.0000	1.0000	4.0000	pCi/g
36DOH	1a	Gross Alph	08/05/86	8.0000	1.0000	4.0000	pCi/g
37DOH	1a	Gross Alph	11/19/85	10.0000	10.0000	4.0000	pCi/g
42DOH	1a	Gross Alph	08/05/86	10.0000	1.0000	4.0000	pCi/g
43DOH	1a	Gross Alph	11/19/85	10.0000	10.0000	4.0000	pCi/g
45DOH	1	Gross Alph	08/05/86	4.0000	1.0000	4.0000	pCi/g
46DOH	1	Gross Alph	08/05/86	10.0000	1.0000	4.0000	pCi/g
1DOH	1a	Gross Beta	07/31/91	0.0220	0.0030	1.0000	pCi/g
2DOH	1a	Gross Beta	07/31/91	0.0210	0.0030	1.0000	pCi/g
3DOH	1a	Gross Beta	05/14/87	15.2000	1.4000	1.0000	pCi/g
4DOH	1a	Gross Beta	09/26/85	21.0000	2.0000	1.0000	pCi/g
4DOH	1a	Gross Beta	08/05/86	20.0000	1.6000	1.0000	pCi/g
4DOH	1a	Gross Beta	06/03/87	16.0000	1.0000	1.0000	pCi/g
4DOH	1a	Gross Beta	06/21/88	10.0000	2.0000	1.0000	pCi/g
4DOH	1a	Gross Beta	06/27/89	19.0000	3.0000	1.0000	pCi/g
4DOH	1a	Gross Beta	06/26/90	18.0000	3.0000	1.0000	pCi/g
4DOH	1a	Gross Beta	07/31/91	0.0190	0.0030	1.0000	pCi/g
5DOH	1	Gross Beta	09/24/85	22.0000	2.0000	1.0000	pCi/g
5DOH	1	Gross Beta	08/05/86	21.0000	1.0000	1.0000	pCi/g
5DOH	1	Gross Beta	06/03/87	21.0000	1.6000	1.0000	pCi/g
5DOH	1	Gross Beta	06/21/88	16.0000	2.0000	1.0000	pCi/g
5DOH	1	Gross Beta	06/27/89	22.0000	2.0000	1.0000	pCi/g
5DOH	1	Gross Beta	06/26/90	20.0000	3.0000	1.0000	pCi/g
5DOH	1	Gross Beta	07/31/91	0.0210	0.0030	1.0000	pCi/g
6DOH	1a	Gross Beta	05/20/87	21.3500	10.1110	1.0000	pCi/g
7DOH	1a	Gross Beta	05/19/87	47.3000	1.8000	1.0000	pCi/g
8DOH	1a	Gross Beta	05/13/87	330.0000	6.0000	1.0000	pCi/g
13DOH	1	Gross Beta	09/24/85	21.0000	2.0000	1.0000	pCi/g
13DOH	1	Gross Beta	08/05/86	21.0000	1.0000	1.0000	pCi/g
13DOH	1	Gross Beta	06/03/87	19.0000	2.0000	1.0000	pCi/g
13DOH	1	Gross Beta	06/21/88	17.0000	2.0000	1.0000	pCi/g
13DOH	1	Gross Beta	06/27/89	22.0000	3.0000	1.0000	pCi/g
13DOH	1	Gross Beta	06/26/90	19.0000	3.0000	1.0000	pCi/g
16DOH	1a	Gross Beta	09/26/85	27.0000	2.0000	1.0000	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 5 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16DOH	1a	Gross Beta	08/05/86	23.0000	1.0000	1.0000	pCi/g
16DOH	1a	Gross Beta	06/03/87	27.1000	1.7000	1.0000	pCi/g
16DOH	1a	Gross Beta	06/21/88	19.0000	2.0000	1.0000	pCi/g
16DOH	1a	Gross Beta	06/27/89	22.0000	3.0000	1.0000	pCi/g
16DOH	1a	Gross Beta	06/26/90	20.0000	3.0000	1.0000	pCi/g
16DOH	1a	Gross Beta	07/31/91	0.0220	0.0030	1.0000	pCi/g
19DOH	1	Gross Beta	07/31/91	0.0190	0.0030	1.0000	pCi/g
20DOH	1a	Gross Beta	01/17/85	15.0000	2.0000	1.0000	pCi/g
21DOH	1a	Gross Beta	06/30/92	26.0000	3.0000	1.0000	pCi/g
23DOH	1a	Gross Beta	11/06/91	18.0000	2.0000	1.0000	pCi/g
25DOH	1a	Gross Beta	11/05/91	19.0000	2.0000	1.0000	pCi/g
26DOH	1a	Gross Beta	11/06/91	20.0000	2.2000	1.0000	pCi/g
27DOH	1a	Gross Beta	06/30/92	24.0000	3.0000	1.0000	pCi/g
28DOH	1	Gross Beta	09/26/85	26.0000	2.0000	1.0000	pCi/g
28DOH	1	Gross Beta	08/05/86	22.0000	1.0000	1.0000	pCi/g
28DOH	1	Gross Beta	06/03/87	24.0000	2.0000	1.0000	pCi/g
28DOH	1	Gross Beta	06/21/88	16.0000	2.0000	1.0000	pCi/g
28DOH	1	Gross Beta	06/27/89	24.0000	2.0000	1.0000	pCi/g
28DOH	1	Gross Beta	06/26/90	21.0000	3.0000	1.0000	pCi/g
28DOH	1	Gross Beta	07/31/91	0.0230	0.0030	1.0000	pCi/g
29DOH	1	Gross Beta	11/19/85	20.0000	1.0000	1.0000	pCi/g
29DOH	1	Gross Beta	11/10/86	20.0000	1.0000	1.0000	pCi/g
29DOH	1	Gross Beta	10/27/88	22.0000	2.0000	1.0000	pCi/g
29DOH	1	Gross Beta	11/07/89	18.0000	3.0000	1.0000	pCi/g
29DOH	1	Gross Beta	11/05/90	20.0000	3.0000	1.0000	pCi/g
29DOH	1	Gross Beta	11/06/91	18.0000	2.0000	1.0000	pCi/g
30DOH	1a	Gross Beta	11/19/85	20.0000	1.0000	1.0000	pCi/g
30DOH	1a	Gross Beta	11/10/86	20.1000	1.2900	1.0000	pCi/g
30DOH	1a	Gross Beta	10/27/88	19.0000	2.0000	1.0000	pCi/g
30DOH	1a	Gross Beta	11/07/89	18.0000	3.0000	1.0000	pCi/g
30DOH	1a	Gross Beta	11/05/90	19.0000	3.0000	1.0000	pCi/g
30DOH	1a	Gross Beta	11/06/91	20.1000	2.2000	1.0000	pCi/g
31DOH	1a	Gross Beta	06/04/87	20.6000	1.6000	1.0000	pCi/g
32DOH	1a	Gross Beta	06/26/90	17.0000	2.0000	1.0000	pCi/g
33DOH	1	Gross Beta	09/26/85	26.0000	2.0000	1.0000	pCi/g
33DOH	1	Gross Beta	08/05/86	22.0000	1.0000	1.0000	pCi/g
33DOH	1	Gross Beta	06/03/87	21.6000	1.6000	1.0000	pCi/g
33DOH	1	Gross Beta	06/21/88	17.0000	1.8000	1.0000	pCi/g
33DOH	1	Gross Beta	06/27/89	22.0000	3.0000	1.0000	pCi/g
33DOH	1	Gross Beta	06/26/90	18.0000	3.0000	1.0000	pCi/g
33DOH	1	Gross Beta	07/31/91	0.0210	0.0030	1.0000	pCi/g
34DOH	1	Gross Beta	05/28/85	20.0000	1.0000	1.0000	pCi/g
34DOH	1	Gross Beta	05/14/86	12.2000	0.9000	1.0000	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 6 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
34DOH	1	Gross Beta	05/20/87	21.0000	2.6000	1.0000	pCi/g
34DOH	1	Gross Beta	05/17/88	21.0000	2.0000	1.0000	pCi/g
34DOH	1	Gross Beta	05/02/89	25.0000	2.0000	1.0000	pCi/g
34DOH	1	Gross Beta	05/08/90	20.5000	2.2000	1.0000	pCi/g
34DOH	1	Gross Beta	05/16/91	18.5000	2.1000	1.0000	pCi/g
34DOH	1	Gross Beta	05/14/92	19.8000	2.9000	1.0000	pCi/g
35DOH	1	Gross Beta	05/28/85	15.0000	1.0000	1.0000	pCi/g
35DOH	1	Gross Beta	05/14/86	14.7000	1.0000	1.0000	pCi/g
35DOH	1	Gross Beta	05/20/87	22.7000	2.7000	1.0000	pCi/g
35DOH	1	Gross Beta	05/17/88	22.0000	2.0000	1.0000	pCi/g
35DOH	1	Gross Beta	05/02/89	24.0000	3.0000	1.0000	pCi/g
35DOH	1	Gross Beta	05/08/90	17.3000	2.0000	1.0000	pCi/g
35DOH	1	Gross Beta	05/16/91	18.6000	2.1000	1.0000	pCi/g
35DOH	1	Gross Beta	05/14/92	15.3000	2.5000	1.0000	pCi/g
36DOH	1a	Gross Beta	09/26/85	21.0000	2.0000	1.0000	pCi/g
36DOH	1a	Gross Beta	08/05/86	27.0000	1.0000	1.0000	pCi/g
36DOH	1a	Gross Beta	06/03/87	24.0000	2.0000	1.0000	pCi/g
36DOH	1a	Gross Beta	06/21/88	23.0000	2.0000	1.0000	pCi/g
36DOH	1a	Gross Beta	06/27/89	24.0000	3.0000	1.0000	pCi/g
36DOH	1a	Gross Beta	06/26/90	23.0000	3.0000	1.0000	pCi/g
37DOH	1a	Gross Beta	11/19/85	18.0000	1.0000	1.0000	pCi/g
37DOH	1a	Gross Beta	11/10/86	21.0000	1.3000	1.0000	pCi/g
37DOH	1a	Gross Beta	10/27/88	21.0000	2.0000	1.0000	pCi/g
37DOH	1a	Gross Beta	11/07/89	19.0000	3.0000	1.0000	pCi/g
37DOH	1a	Gross Beta	11/05/90	19.0000	3.0000	1.0000	pCi/g
39DOH	1a	Gross Beta	10/27/88	21.0000	2.0000	1.0000	pCi/g
39DOH	1a	Gross Beta	11/07/89	19.0000	3.0000	1.0000	pCi/g
39DOH	1a	Gross Beta	11/05/90	17.0000	3.0000	1.0000	pCi/g
40DOH	1a	Gross Beta	10/27/88	18.0000	2.0000	1.0000	pCi/g
42DOH	1a	Gross Beta	09/26/85	24.0000	2.0000	1.0000	pCi/g
42DOH	1a	Gross Beta	08/05/86	22.0000	1.0000	1.0000	pCi/g
42DOH	1a	Gross Beta	06/03/87	22.6000	1.6000	1.0000	pCi/g
42DOH	1a	Gross Beta	06/21/88	17.0000	2.0000	1.0000	pCi/g
42DOH	1a	Gross Beta	06/27/89	21.0000	3.0000	1.0000	pCi/g
42DOH	1a	Gross Beta	06/26/90	20.0000	3.0000	1.0000	pCi/g
43DOH	1a	Gross Beta	11/19/85	19.0000	1.0000	1.0000	pCi/g
43DOH	1a	Gross Beta	11/10/86	20.1000	1.3000	1.0000	pCi/g
43DOH	1a	Gross Beta	10/27/88	21.0000	2.0000	1.0000	pCi/g
43DOH	1a	Gross Beta	11/07/89	20.0000	3.0000	1.0000	pCi/g
43DOH	1a	Gross Beta	11/05/90	17.0000	3.0000	1.0000	pCi/g
45DOH	1	Gross Beta	08/05/86	19.0000	1.0000	1.0000	pCi/g
45DOH	1	Gross Beta	06/03/87	19.0000	1.5000	1.0000	pCi/g
45DOH	1	Gross Beta	06/21/88	13.6000	1.6000	1.0000	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 7 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
45DOH	1	Gross Beta	06/27/89	16.0000	3.0000	1.0000	pCi/g
45DOH	1	Gross Beta	06/26/90	18.0000	3.0000	1.0000	pCi/g
45DOH	1	Gross Beta	07/31/91	0.0220	0.0030	1.0000	pCi/g
46DOH	1	Gross Beta	09/24/85	22.0000	2.0000	1.0000	pCi/g
46DOH	1	Gross Beta	08/05/86	23.0000	1.0000	1.0000	pCi/g
46DOH	1	Gross Beta	06/03/87	23.0000	1.6000	1.0000	pCi/g
46DOH	1	Gross Beta	06/21/88	18.0000	2.0000	1.0000	pCi/g
46DOH	1	Gross Beta	06/27/89	22.0000	3.0000	1.0000	pCi/g
46DOH	1	Gross Beta	06/26/90	18.0000	3.0000	1.0000	pCi/g
46DOH	1	Gross Beta	07/31/91	0.0220	0.0030	1.0000	pCi/g
47DOH	1a	Gross Beta	12/16/87	17.2000	0.5000	1.0000	pCi/g
49DOH	0	Gross Beta	05/28/85	20.0000	1.0000	1.0000	pCi/g
49DOH	0	Gross Beta	05/14/86	15.2000	1.0000	1.0000	pCi/g
49DOH	0	Gross Beta	05/20/87	21.9000	1.6000	1.0000	pCi/g
49DOH	0	Gross Beta	05/17/88	21.0000	2.0000	1.0000	pCi/g
49DOH	0	Gross Beta	05/02/89	23.0000	3.0000	1.0000	pCi/g
49DOH	0	Gross Beta	05/08/90	19.7000	2.0000	1.0000	pCi/g
49DOH	0	Gross Beta	05/16/91	19.9000	2.2000	1.0000	pCi/g
49DOH	0	Gross Beta	05/14/92	19.9000	2.9000	1.0000	pCi/g
50DOH	0	Gross Beta	10/27/88	20.0000	2.0000	1.0000	pCi/g
51DOH	0	Gross Beta	10/27/88	20.0000	2.0000	1.0000	pCi/g
49DOH	0	K-40	05/28/85	13.3000	13.3000	0.1000	pCi/g
49DOH	0	K-40	05/14/86	14.6000	0.4000	0.1000	pCi/g
49DOH	0	K-40	05/20/87	15.9000	0.4000	0.1000	pCi/g
49DOH	0	K-40	05/17/88	15.6000	0.2000	0.1000	pCi/g
49DOH	0	K-40	05/02/89	15.1000	0.3000	0.1000	pCi/g
50DOH	0	K-40	10/27/88	12.2000	0.2000	0.1000	pCi/g
51DOH	0	K-40	10/27/88	11.8000	0.2000	0.1000	pCi/g
20DOH	1a	Mn-54	01/17/85	0.0100	0.0100	0.0100	pCi/g
29DOH	1	Mn-54	11/19/85	0.0200	0.0200	0.0100	pCi/g
30DOH	1a	Mn-54	11/19/85	0.0220	0.0100	0.0100	pCi/g
34DOH	1	Mn-54	05/28/85	0.0300	0.0300	0.0100	pCi/g
35DOH	1	Mn-54	05/28/85	0.0300	0.0300	0.0100	pCi/g
37DOH	1a	Mn-54	11/19/85	0.0290	0.0100	0.0100	pCi/g
43DOH	1a	Mn-54	11/19/85	0.0210	0.0210	0.0100	pCi/g
49DOH	0	Mn-54	05/28/85	0.0400	0.0400	0.0100	pCi/g
1DOH	1a	Pu-238	07/31/91	0.0012	0.0024	0.0300	pCi/g
1PNL	1	Pu-238	06/06/88	0.0003	0.0002	0.0006	pCi/g
1PNL	1	Pu-238	05/03/89	0.0003	0.0003	0.0006	pCi/g
1PNL	1	Pu-238	08/14/91	0.0007	0.0003	0.0006	pCi/g
2DOH	1a	Pu-238	07/31/91	0.0002	0.0022	0.0300	pCi/g
2PNL	1	Pu-238	04/29/87	0.0006	0.0003	0.0006	pCi/g
2PNL	1	Pu-238	06/06/88	0.0008	0.0003	0.0006	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 8 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
2PNL	1	Pu-238	05/05/89	0.0005	0.0002	0.0006	pCi/g
2PNL	1	Pu-238	08/14/91	0.0004	0.0003	0.0006	pCi/g
3DOH	1a	Pu-238	05/14/87	0.0060	0.0130	0.0300	pCi/g
3PNL	1a	Pu-238	04/29/87	0.0006	0.0003	0.0006	pCi/g
3PNL	1a	Pu-238	06/06/88	0.0007	0.0003	0.0006	pCi/g
3PNL	1a	Pu-238	05/02/89	0.0004	0.0003	0.0006	pCi/g
3PNL	1a	Pu-238	07/31/91	0.0001	0.0002	0.0006	pCi/g
4DOH	1a	Pu-238	06/03/87	0.0028	0.0023	0.0300	pCi/g
4DOH	1a	Pu-238	06/21/88	-0.0005	0.0040	0.0300	pCi/g
4DOH	1a	Pu-238	06/27/89	0.0027	0.0030	0.0300	pCi/g
4DOH	1a	Pu-238	06/26/90	0.2100	0.0089	0.0300	pCi/g
4DOH	1a	Pu-238	07/31/91	-0.0005	0.0030	0.0300	pCi/g
4PNL	1	Pu-238	05/07/87	0.0004	0.0003	0.0006	pCi/g
4PNL	1	Pu-238	03/22/88	0.0017	0.0006	0.0006	pCi/g
4PNL	1	Pu-238	05/02/89	0.0007	0.0005	0.0006	pCi/g
4PNL	1	Pu-238	08/13/91	0.0004	0.0002	0.0006	pCi/g
5DOH	1	Pu-238	06/03/87	0.0016	0.0020	0.0300	pCi/g
5DOH	1	Pu-238	06/21/88	0.0016	0.0021	0.0300	pCi/g
5DOH	1	Pu-238	06/27/89	0.0001	0.0020	0.0300	pCi/g
5DOH	1	Pu-238	06/26/90	0.0230	0.0090	0.0300	pCi/g
5DOH	1	Pu-238	07/31/91	0.0012	0.0035	0.0300	pCi/g
5PNL	1a	Pu-238	05/07/87	0.0001	0.0002	0.0006	pCi/g
5PNL	1a	Pu-238	06/06/88	0.0004	0.0002	0.0006	pCi/g
5PNL	1a	Pu-238	05/02/89	0.0008	0.0005	0.0006	pCi/g
5PNL	1a	Pu-238	07/31/91	0.0002	0.0002	0.0006	pCi/g
6DOH	1a	Pu-238	05/20/87	0.0078	0.0226	0.0300	pCi/g
6PNL	1a	Pu-238	05/07/87	0.0004	0.0002	0.0006	pCi/g
6PNL	1a	Pu-238	03/22/88	0.0011	0.0004	0.0006	pCi/g
6PNL	1a	Pu-238	05/02/89	0.0005	0.0003	0.0006	pCi/g
6PNL	1a	Pu-238	07/31/91	0.0002	0.0002	0.0006	pCi/g
7DOH	1a	Pu-238	05/19/87	0.0020	0.0125	0.0300	pCi/g
7PNL	1a	Pu-238	05/07/87	0.0000	0.0001	0.0006	pCi/g
7PNL	1a	Pu-238	06/06/88	0.0000	0.0001	0.0006	pCi/g
7PNL	1a	Pu-238	05/03/89	0.0010	0.0004	0.0006	pCi/g
7PNL	1a	Pu-238	08/13/91	0.0005	0.0004	0.0006	pCi/g
8DOH	1a	Pu-238	05/13/87	0.0330	0.0130	0.0300	pCi/g
8PNL	1a	Pu-238	05/07/87	0.0001	0.0001	0.0006	pCi/g
8PNL	1a	Pu-238	06/07/88	0.0005	0.0002	0.0006	pCi/g
8PNL	1a	Pu-238	05/03/89	0.0005	0.0004	0.0006	pCi/g
8PNL	1a	Pu-238	08/13/91	0.0004	0.0002	0.0006	pCi/g
9PNL	1	Pu-238	05/07/87	0.0021	0.0005	0.0006	pCi/g
9PNL	1	Pu-238	03/31/88	0.0093	0.0010	0.0006	pCi/g
9PNL	1	Pu-238	04/05/88	0.0106	0.0010	0.0006	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 9 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
9PNL	1	Pu-238	05/03/89	0.0054	0.0010	0.0006	pCi/g
9PNL	1	Pu-238	10/04/90	0.0396	0.0031	0.0006	pCi/g
9PNL	1	Pu-238	08/13/91	0.0031	0.0006	0.0006	pCi/g
10PNL	1	Pu-238	06/07/88	0.0006	0.0003	0.0006	pCi/g
10PNL	1	Pu-238	05/03/89	0.0009	0.0004	0.0006	pCi/g
10PNL	1	Pu-238	08/13/91	0.0007	0.0005	0.0006	pCi/g
11PNL	1	Pu-238	04/29/87	0.0003	0.0002	0.0006	pCi/g
11PNL	1	Pu-238	06/09/88	0.0002	0.0001	0.0006	pCi/g
11PNL	1	Pu-238	05/03/89	0.0005	0.0004	0.0006	pCi/g
11PNL	1	Pu-238	08/13/91	0.0004	0.0003	0.0006	pCi/g
12PNL	1	Pu-238	06/09/88	0.0002	0.0002	0.0006	pCi/g
12PNL	1	Pu-238	05/03/89	0.0002	0.0002	0.0006	pCi/g
12PNL	1	Pu-238	08/13/91	0.0001	0.0002	0.0006	pCi/g
13DOH	1	Pu-238	06/03/87	0.0002	0.0018	0.0300	pCi/g
13DOH	1	Pu-238	06/21/88	0.0013	0.0025	0.0300	pCi/g
13DOH	1	Pu-238	06/27/89	0.0020	0.0022	0.0300	pCi/g
13DOH	1	Pu-238	06/26/90	0.0140	0.0090	0.0300	pCi/g
13PNL	1	Pu-238	04/29/87	0.0007	0.0003	0.0006	pCi/g
13PNL	1	Pu-238	06/09/88	0.0003	0.0002	0.0006	pCi/g
13PNL	1	Pu-238	05/02/89	0.0008	0.0004	0.0006	pCi/g
13PNL	1	Pu-238	08/08/91	0.0005	0.0003	0.0006	pCi/g
14PNL	1	Pu-238	04/29/87	0.0005	0.0004	0.0006	pCi/g
14PNL	1	Pu-238	06/06/88	0.0007	0.0003	0.0006	pCi/g
14PNL	1	Pu-238	05/02/89	0.0008	0.0005	0.0006	pCi/g
14PNL	1	Pu-238	07/31/91	0.0000	0.0001	0.0006	pCi/g
15PNL	1	Pu-238	04/29/87	0.0006	0.0003	0.0006	pCi/g
15PNL	1	Pu-238	05/25/88	0.0004	0.0002	0.0006	pCi/g
15PNL	1	Pu-238	05/03/89	0.0002	0.0002	0.0006	pCi/g
15PNL	1	Pu-238	07/31/91	0.0005	0.0005	0.0006	pCi/g
16DOH	1a	Pu-238	06/03/87	0.0034	0.0026	0.0300	pCi/g
16DOH	1a	Pu-238	06/21/88	0.0005	0.0030	0.0300	pCi/g
16DOH	1a	Pu-238	06/27/89	0.0013	0.0025	0.0300	pCi/g
16DOH	1a	Pu-238	06/26/90	0.0160	0.0110	0.0300	pCi/g
16DOH	1a	Pu-238	07/31/91	0.0012	0.0019	0.0300	pCi/g
16PNL	2	Pu-238	05/15/87	0.0003	0.0002	0.0006	pCi/g
16PNL	2	Pu-238	06/20/88	0.0011	0.0004	0.0006	pCi/g
16PNL	2	Pu-238	05/08/89	0.0003	0.0002	0.0006	pCi/g
16PNL	2	Pu-238	08/08/91	0.0003	0.0003	0.0006	pCi/g
16PNL	2	Pu-238	07/28/92	0.0001	0.0001	0.0006	pCi/g
17PNL	2	Pu-238	05/15/87	0.0001	0.0001	0.0006	pCi/g
17PNL	2	Pu-238	06/20/88	0.0007	0.0003	0.0006	pCi/g
17PNL	2	Pu-238	05/10/89	0.0014	0.0005	0.0006	pCi/g
17PNL	2	Pu-238	10/04/90	0.0011	0.0006	0.0006	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 10 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
17PNL	2	Pu-238	08/08/91	0.0004	0.0003	0.0006	pCi/g
17PNL	2	Pu-238	06/23/92	0.0009	0.0003	0.0006	pCi/g
18PNL	2	Pu-238	05/15/87	0.0000	0.0001	0.0006	pCi/g
18PNL	2	Pu-238	04/01/88	0.0009	0.0003	0.0006	pCi/g
18PNL	2	Pu-238	05/10/89	0.0006	0.0003	0.0006	pCi/g
18PNL	2	Pu-238	10/04/90	0.0022	0.0009	0.0006	pCi/g
18PNL	2	Pu-238	08/08/91	0.0002	0.0002	0.0006	pCi/g
18PNL	2	Pu-238	07/27/92	0.0002	0.0002	0.0006	pCi/g
19DOH	1	Pu-238	07/31/91	0.0026	0.0043	0.0300	pCi/g
19PNL	2	Pu-238	05/15/87	0.0005	0.0003	0.0006	pCi/g
19PNL	2	Pu-238	06/20/88	0.0002	0.0002	0.0006	pCi/g
19PNL	2	Pu-238	05/10/89	0.0012	0.0004	0.0006	pCi/g
19PNL	2	Pu-238	10/04/90	0.0001	0.0001	0.0006	pCi/g
20PNL	2	Pu-238	05/15/87	0.0001	0.0001	0.0006	pCi/g
20PNL	2	Pu-238	06/20/88	0.0001	0.0002	0.0006	pCi/g
20PNL	2	Pu-238	05/10/89	0.0009	0.0003	0.0006	pCi/g
21DOH	1a	Pu-238	06/30/92	0.0009	0.0011	0.0300	pCi/g
21PNL	2	Pu-238	05/15/87	0.0007	0.0004	0.0006	pCi/g
21PNL	2	Pu-238	04/01/88	0.0014	0.0004	0.0006	pCi/g
21PNL	2	Pu-238	05/10/89	0.0020	0.0007	0.0006	pCi/g
21PNL	2	Pu-238	10/08/90	0.0025	0.0006	0.0006	pCi/g
21PNL	2	Pu-238	08/08/91	0.0015	0.0006	0.0006	pCi/g
21PNL	2	Pu-238	07/28/92	0.0008	0.0004	0.0006	pCi/g
22PNL	2	Pu-238	05/26/87	0.0001	0.0002	0.0006	pCi/g
22PNL	2	Pu-238	06/10/88	0.0003	0.0002	0.0006	pCi/g
22PNL	2	Pu-238	05/09/89	0.0002	0.0002	0.0006	pCi/g
22PNL	2	Pu-238	10/08/90	0.0011	0.0005	0.0006	pCi/g
23DOH	1a	Pu-238	11/06/91	-0.0010	0.0030	0.0300	pCi/g
23PNL	2	Pu-238	05/26/87	0.0000	0.0001	0.0006	pCi/g
23PNL	2	Pu-238	06/10/88	0.0001	0.0002	0.0006	pCi/g
23PNL	2	Pu-238	05/05/89	0.0001	0.0002	0.0006	pCi/g
23PNL	2	Pu-238	10/03/90	0.0006	0.0004	0.0006	pCi/g
24PNL	2	Pu-238	06/10/88	0.0002	0.0001	0.0006	pCi/g
24PNL	2	Pu-238	05/05/89	0.0006	0.0004	0.0006	pCi/g
25DOH	1a	Pu-238	11/05/91	-0.0010	0.0030	0.0300	pCi/g
25PNL	1	Pu-238	05/07/87	0.0000	0.0001	0.0006	pCi/g
25PNL	1	Pu-238	05/25/88	0.0002	0.0002	0.0006	pCi/g
25PNL	1	Pu-238	05/05/89	0.0003	0.0002	0.0006	pCi/g
25PNL	1	Pu-238	07/31/91	0.0002	0.0002	0.0006	pCi/g
26DOH	1a	Pu-238	11/06/91	-0.0010	0.0030	0.0300	pCi/g
26PNL	2	Pu-238	05/07/87	0.0004	0.0002	0.0006	pCi/g
26PNL	2	Pu-238	06/07/88	0.0000	0.0001	0.0006	pCi/g
26PNL	2	Pu-238	05/05/89	0.0006	0.0003	0.0006	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 11 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
27DOH	1a	Pu-238	06/30/92	0.0008	0.0012	0.0300	pCi/g
27PNL	2	Pu-238	05/20/87	0.0010	0.0004	0.0006	pCi/g
27PNL	2	Pu-238	06/08/88	0.0011	0.0004	0.0006	pCi/g
27PNL	2	Pu-238	05/05/89	0.0009	0.0003	0.0006	pCi/g
28DOH	1	Pu-238	06/03/87	0.0027	0.0029	0.0300	pCi/g
28DOH	1	Pu-238	06/21/88	0.0033	0.0030	0.0300	pCi/g
28DOH	1	Pu-238	06/27/89	0.0011	0.0027	0.0300	pCi/g
28DOH	1	Pu-238	06/26/90	0.0140	0.0080	0.0300	pCi/g
28DOH	1	Pu-238	07/31/91	-0.0003	0.0017	0.0300	pCi/g
28PNL	2	Pu-238	05/25/88	0.0001	0.0001	0.0006	pCi/g
28PNL	2	Pu-238	05/03/89	0.0033	0.0007	0.0006	pCi/g
29DOH	1	Pu-238	10/27/88	0.0000	0.0020	0.0300	pCi/g
29DOH	1	Pu-238	11/07/89	0.0001	0.0022	0.0300	pCi/g
29DOH	1	Pu-238	11/05/90	-0.0050	0.0070	0.0300	pCi/g
29DOH	1	Pu-238	11/06/91	0.0010	0.0040	0.0300	pCi/g
29PNL	1	Pu-238	06/09/88	0.0008	0.0003	0.0006	pCi/g
29PNL	1	Pu-238	05/02/89	0.0008	0.0004	0.0006	pCi/g
29PNL	1	Pu-238	08/08/91	0.0004	0.0002	0.0006	pCi/g
30DOH	1a	Pu-238	10/27/88	0.0010	0.0020	0.0300	pCi/g
30DOH	1a	Pu-238	11/07/89	0.0010	0.0020	0.0300	pCi/g
30DOH	1a	Pu-238	11/05/90	0.0090	0.0070	0.0300	pCi/g
30DOH	1a	Pu-238	11/06/91	0.0060	0.0040	0.0300	pCi/g
31DOH	1a	Pu-238	06/04/87	-0.0001	0.0090	0.0300	pCi/g
32DOH	1a	Pu-238	06/26/90	0.0100	0.0100	0.0300	pCi/g
33DOH	1	Pu-238	06/03/87	0.0025	0.0028	0.0300	pCi/g
33DOH	1	Pu-238	06/21/88	0.0013	0.0024	0.0300	pCi/g
33DOH	1	Pu-238	06/27/89	0.0012	0.0029	0.0300	pCi/g
33DOH	1	Pu-238	06/26/90	0.0250	0.0120	0.0300	pCi/g
33DOH	1	Pu-238	07/31/91	-0.0007	0.0029	0.0300	pCi/g
36DOH	1a	Pu-238	06/03/87	0.0001	0.0030	0.0300	pCi/g
36DOH	1a	Pu-238	06/21/88	0.0003	0.0020	0.0300	pCi/g
36DOH	1a	Pu-238	06/27/89	0.0040	0.0026	0.0300	pCi/g
36DOH	1a	Pu-238	06/26/90	0.0006	0.0034	0.0300	pCi/g
37DOH	1a	Pu-238	10/27/88	0.0004	0.0020	0.0300	pCi/g
37DOH	1a	Pu-238	11/07/89	-0.0010	0.0010	0.0300	pCi/g
37DOH	1a	Pu-238	11/05/90	-0.0070	0.0090	0.0300	pCi/g
39DOH	1a	Pu-238	10/27/88	0.0002	0.0030	0.0300	pCi/g
39DOH	1a	Pu-238	11/07/89	0.0090	0.0050	0.0300	pCi/g
39DOH	1a	Pu-238	11/05/90	-0.0080	0.0080	0.0300	pCi/g
40DOH	1a	Pu-238	10/27/88	-0.0010	0.0020	0.0300	pCi/g
42DOH	1a	Pu-238	06/03/87	0.0024	0.0024	0.0300	pCi/g
42DOH	1a	Pu-238	06/21/88	0.0010	0.0030	0.0300	pCi/g
42DOH	1a	Pu-238	06/27/89	-0.0003	0.0026	0.0300	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 12 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
42DOH	1a	Pu-238	06/26/90	0.0000	0.0050	0.0300	pCi/g
43DOH	1a	Pu-238	10/27/88	0.0020	0.0020	0.0300	pCi/g
43DOH	1a	Pu-238	11/07/89	0.0010	0.0020	0.0300	pCi/g
43DOH	1a	Pu-238	11/05/90	0.0020	0.0090	0.0300	pCi/g
45DOH	1	Pu-238	06/03/87	0.0034	0.0026	0.0300	pCi/g
45DOH	1	Pu-238	06/21/88	0.0010	0.0018	0.0300	pCi/g
45DOH	1	Pu-238	06/27/89	0.0027	0.0028	0.0300	pCi/g
45DOH	1	Pu-238	06/26/90	0.0067	0.0098	0.0300	pCi/g
45DOH	1	Pu-238	07/31/91	0.0003	0.0029	0.0300	pCi/g
46DOH	1	Pu-238	06/03/87	0.0038	0.0040	0.0300	pCi/g
46DOH	1	Pu-238	06/21/88	0.0046	0.0003	0.0300	pCi/g
46DOH	1	Pu-238	06/27/89	0.0004	0.0021	0.0300	pCi/g
46DOH	1	Pu-238	06/26/90	0.0200	0.0090	0.0300	pCi/g
46DOH	1	Pu-238	07/31/91	0.0001	0.0017	0.0300	pCi/g
49DOH	0	Pu-238	05/02/89	0.0020	0.0020	0.0300	pCi/g
50DOH	0	Pu-238	10/27/88	-0.0007	0.0020	0.0300	pCi/g
51DOH	0	Pu-238	10/27/88	-0.0009	0.0020	0.0300	pCi/g
4DOH	1a	Pu-239/240	08/05/86	0.0030	0.0030	0.0060	pCi/g
4DOH	1a	Pu-239/240	06/03/87	0.0011	0.0015	0.0060	pCi/g
4DOH	1a	Pu-239/240	06/21/88	-0.0005	0.0020	0.0060	pCi/g
4DOH	1a	Pu-239/240	06/27/89	0.0043	0.0023	0.0060	pCi/g
4DOH	1a	Pu-239/240	06/26/90	-0.0001	0.0033	0.0060	pCi/g
4DOH	1a	Pu-239/240	07/31/91	0.0040	0.0021	0.0060	pCi/g
4PNL	1	Pu-239/240	05/07/87	0.0309	0.0021	0.0006	pCi/g
4PNL	1	Pu-239/240	03/22/88	0.0656	0.0035	0.0006	pCi/g
4PNL	1	Pu-239/240	05/02/89	0.0314	0.0029	0.0006	pCi/g
4PNL	1	Pu-239/240	08/13/91	0.0170	0.0014	0.0006	pCi/g
6DOH	1a	Pu-239/240	05/20/87	0.4225	0.0276	0.0060	pCi/g
7DOH	1a	Pu-239/240	05/19/87	0.0700	0.0100	0.0060	pCi/g
8DOH	1a	Pu-239/240	05/13/87	0.9100	0.0300	0.0060	pCi/g
9PNL	1	Pu-239/240	05/07/87	0.1700	0.0043	0.0006	pCi/g
9PNL	1	Pu-239/240	03/31/88	0.6400	0.0083	0.0006	pCi/g
9PNL	1	Pu-239/240	04/05/88	0.7070	0.0078	0.0006	pCi/g
9PNL	1	Pu-239/240	05/03/89	0.5300	0.0100	0.0006	pCi/g
9PNL	1	Pu-239/240	10/04/90	0.6560	0.0125	0.0006	pCi/g
9PNL	1	Pu-239/240	08/13/91	0.2860	0.0055	0.0006	pCi/g
16PNL	2	Pu-239/240	05/15/87	0.0150	0.0012	0.0006	pCi/g
16PNL	2	Pu-239/240	06/20/88	0.0216	0.0017	0.0006	pCi/g
16PNL	2	Pu-239/240	08/08/91	0.0197	0.0021	0.0006	pCi/g
16PNL	2	Pu-239/240	07/28/92	0.0043	0.0007	0.0006	pCi/g
21DOH	1a	Pu-239/240	06/30/92	0.0069	0.0017	0.0060	pCi/g
36DOH	1a	Pu-239/240	08/05/86	0.0110	0.0050	0.0060	pCi/g
36DOH	1a	Pu-239/240	06/03/87	0.0072	0.0038	0.0060	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 13 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
36DOH	1a	Pu-239/240	06/21/88	0.0064	0.0026	0.0060	pCi/g
36DOH	1a	Pu-239/240	06/27/89	0.0049	0.0021	0.0060	pCi/g
36DOH	1a	Pu-239/240	06/26/90	0.0054	0.0029	0.0060	pCi/g
42DOH	1a	Pu-239/240	06/03/87	0.0009	0.0012	0.0060	pCi/g
42DOH	1a	Pu-239/240	06/21/88	0.0003	0.0010	0.0060	pCi/g
42DOH	1a	Pu-239/240	06/27/89	0.0006	0.0015	0.0060	pCi/g
42DOH	1a	Pu-239/240	06/26/90	0.0012	0.0026	0.0060	pCi/g
45DOH	1	Pu-239/240	06/03/87	0.0022	0.0017	0.0060	pCi/g
45DOH	1	Pu-239/240	06/21/88	0.0026	0.0018	0.0060	pCi/g
45DOH	1	Pu-239/240	06/27/89	0.0015	0.0017	0.0060	pCi/g
45DOH	1	Pu-239/240	06/26/90	0.0013	0.0044	0.0060	pCi/g
45DOH	1	Pu-239/240	07/31/91	0.0130	0.0030	0.0060	pCi/g
49DOH	0	Pu-239/240	05/02/89	0.0250	0.0040	0.0060	pCi/g
50DOH	0	Pu-239/240	10/27/88	0.0004	0.0010	0.0060	pCi/g
51DOH	0	Pu-239/240	10/27/88	0.0004	0.0010	0.0060	pCi/g
4DOH	1a	Ru-106	06/27/89	0.0100	0.0600	0.1000	pCi/g
4DOH	1a	Ru-106	06/26/90	0.0860	0.0730	0.1000	pCi/g
4DOH	1a	Ru-106	07/31/91	0.0123	0.0611	0.2000	pCi/g
4PNL	1	Ru-106	05/07/87	0.0311	0.2240	0.1700	pCi/g
4PNL	1	Ru-106	03/22/88	-0.0521	0.2810	0.1700	pCi/g
4PNL	1	Ru-106	05/02/89	-0.3240	0.2850	0.1700	pCi/g
4PNL	1	Ru-106	08/13/91	0.0522	0.1560	0.1700	pCi/g
9PNL	1	Ru-106	05/07/87	0.1390	0.1250	0.1700	pCi/g
9PNL	1	Ru-106	03/31/88	0.0172	0.1290	0.1700	pCi/g
9PNL	1	Ru-106	04/05/88	-0.0190	0.1910	0.1700	pCi/g
9PNL	1	Ru-106	05/03/89	-0.0105	0.1680	0.1700	pCi/g
9PNL	1	Ru-106	10/04/90	0.3980	0.2970	0.1700	pCi/g
9PNL	1	Ru-106	08/13/91	-0.1330	0.1820	0.1700	pCi/g
36DOH	1a	Ru-106	06/27/89	0.1000	0.0700	0.1000	pCi/g
36DOH	1a	Ru-106	06/26/90	-0.0460	0.0760	0.1000	pCi/g
42DOH	1a	Ru-106	06/27/89	0.0020	0.0008	0.1000	pCi/g
42DOH	1a	Ru-106	06/26/90	-0.0490	0.0770	0.1000	pCi/g
45DOH	1	Ru-106	06/27/89	0.0400	0.0600	0.1000	pCi/g
45DOH	1	Ru-106	06/26/90	0.0060	0.0710	0.1000	pCi/g
45DOH	1	Ru-106	07/31/91	0.0390	0.0660	0.2000	pCi/g
49DOH	0	Ru-106	05/28/85	0.1900	0.1900	0.1000	pCi/g
9DOH	3	Sb-125	09/24/86	0.4010	0.0877	0.0300	pCi/g
9DOH	3	Sb-125	12/17/86	2.0000	0.3000	0.0300	pCi/g
1DOH	1a	Sr-89	07/31/91	-0.0500	0.0400	0.0030	pCi/g
2DOH	1a	Sr-89	07/31/91	-5.8000	2.1000	0.0030	pCi/g
3DOH	1a	Sr-89	05/14/87	-0.0830	0.0100	0.0030	pCi/g
4DOH	1a	Sr-89	09/26/85	0.1050	0.0100	0.0030	pCi/g
4DOH	1a	Sr-89	08/05/86	0.0060	0.0040	0.0030	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 14 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
4DOH	1a	Sr-89	06/21/88	0.0100	0.0400	0.0030	pCi/g
4DOH	1a	Sr-89	06/27/89	-0.0500	0.0500	0.0030	pCi/g
4DOH	1a	Sr-89	06/26/90	-67.0000	11.0000	0.0030	pCi/g
4DOH	1a	Sr-89	07/31/91	-0.0280	0.0300	0.0030	pCi/g
5DOH	1	Sr-89	09/24/85	0.0270	0.0100	0.0030	pCi/g
5DOH	1	Sr-89	08/05/86	0.0280	0.0140	0.0030	pCi/g
5DOH	1	Sr-89	06/21/88	0.0260	0.0500	0.0030	pCi/g
5DOH	1	Sr-89	06/27/89	0.0110	0.0170	0.0030	pCi/g
5DOH	1	Sr-89	06/26/90	0.0200	0.1400	0.0030	pCi/g
5DOH	1	Sr-89	07/31/91	-0.0040	0.0300	0.0030	pCi/g
6DOH	1a	Sr-89	05/20/87	0.0980	0.0501	0.0030	pCi/g
7DOH	1a	Sr-89	05/19/87	-18.2000	2.1000	0.0030	pCi/g
8DOH	1a	Sr-89	05/13/87	0.2600	0.0200	0.0030	pCi/g
12DOH	5	Sr-89	08/01/91	-0.0230	0.0400	0.0030	pCi/g
13DOH	1	Sr-89	09/24/85	0.0170	0.0010	0.0030	pCi/g
13DOH	1	Sr-89	08/05/86	0.0110	0.0040	0.0030	pCi/g
13DOH	1	Sr-89	06/21/88	0.0250	0.0150	0.0030	pCi/g
13DOH	1	Sr-89	06/27/89	0.0040	0.0230	0.0030	pCi/g
13DOH	1	Sr-89	06/26/90	0.0130	0.0500	0.0030	pCi/g
15DOH	4	Sr-89	08/01/91	0.0200	0.0200	0.0030	pCi/g
16DOH	1a	Sr-89	09/26/85	0.2230	0.0100	0.0030	pCi/g
16DOH	1a	Sr-89	08/05/86	0.0530	0.0040	0.0030	pCi/g
16DOH	1a	Sr-89	06/21/88	-0.0500	0.1300	0.0030	pCi/g
16DOH	1a	Sr-89	06/27/89	0.0030	0.0500	0.0030	pCi/g
16DOH	1a	Sr-89	06/26/90	-0.3500	0.0100	0.0030	pCi/g
16DOH	1a	Sr-89	07/31/91	-0.0700	0.0500	0.0030	pCi/g
19DOH	1	Sr-89	07/31/91	-0.0300	0.0200	0.0030	pCi/g
24DOH	5	Sr-89	08/01/91	0.0050	0.0200	0.0030	pCi/g
28DOH	1	Sr-89	09/26/85	0.1000	0.1000	0.0030	pCi/g
28DOH	1	Sr-89	08/05/86	-0.0050	0.0050	0.0030	pCi/g
28DOH	1	Sr-89	06/21/88	0.0100	0.0200	0.0030	pCi/g
28DOH	1	Sr-89	06/27/89	-0.0160	0.0340	0.0030	pCi/g
28DOH	1	Sr-89	06/26/90	-0.0200	0.1200	0.0030	pCi/g
28DOH	1	Sr-89	07/31/91	-0.0020	0.0700	0.0030	pCi/g
31DOH	1a	Sr-89	06/04/87	0.0010	0.0001	0.0030	pCi/g
32DOH	1a	Sr-89	06/26/90	-0.0160	0.0400	0.0030	pCi/g
33DOH	1	Sr-89	09/26/85	0.0650	0.0050	0.0030	pCi/g
33DOH	1	Sr-89	08/05/86	-0.0010	0.0010	0.0030	pCi/g
33DOH	1	Sr-89	06/21/88	0.0900	0.1100	0.0030	pCi/g
33DOH	1	Sr-89	06/27/89	0.0130	0.0200	0.0030	pCi/g
33DOH	1	Sr-89	06/26/90	-0.0030	0.0830	0.0030	pCi/g
33DOH	1	Sr-89	07/31/91	-0.0130	0.0300	0.0030	pCi/g
34DOH	1	Sr-89	05/28/85	0.1000	0.1000	0.0030	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 15 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
34DOH	1	Sr-89	05/20/87	0.0313	0.0042	0.0030	pCi/g
34DOH	1	Sr-89	05/17/88	-0.0200	0.0300	0.0030	pCi/g
35DOH	1	Sr-89	05/28/85	0.1000	0.1000	0.0030	pCi/g
35DOH	1	Sr-89	05/20/87	0.0115	0.0043	0.0030	pCi/g
35DOH	1	Sr-89	05/17/88	0.0020	0.0130	0.0030	pCi/g
36DOH	1a	Sr-89	09/26/85	0.1070	0.0100	0.0030	pCi/g
36DOH	1a	Sr-89	08/05/86	-0.0160	0.0160	0.0030	pCi/g
36DOH	1a	Sr-89	06/21/88	0.0600	0.0600	0.0030	pCi/g
36DOH	1a	Sr-89	06/27/89	0.0070	0.0170	0.0030	pCi/g
36DOH	1a	Sr-89	06/26/90	-220.0000	20.0000	0.0030	pCi/g
41DOH	5	Sr-89	09/23/85	0.0200	0.0100	0.0030	pCi/g
41DOH	5	Sr-89	08/05/86	0.0060	0.0030	0.0030	pCi/g
41DOH	5	Sr-89	06/21/88	-0.0040	0.0090	0.0030	pCi/g
41DOH	5	Sr-89	06/27/89	0.0020	0.0320	0.0030	pCi/g
41DOH	5	Sr-89	06/26/90	-0.0020	0.0750	0.0030	pCi/g
41DOH	5	Sr-89	08/01/91	0.0020	0.0200	0.0030	pCi/g
42DOH	1a	Sr-89	09/26/85	0.0010	0.0010	0.0030	pCi/g
42DOH	1a	Sr-89	08/05/86	0.0060	0.0030	0.0030	pCi/g
42DOH	1a	Sr-89	06/21/88	-0.0030	0.0300	0.0030	pCi/g
42DOH	1a	Sr-89	06/27/89	0.0030	0.0110	0.0030	pCi/g
42DOH	1a	Sr-89	06/26/90	-27.0000	8.0000	0.0030	pCi/g
45DOH	1	Sr-89	08/05/86	0.0130	0.0040	0.0030	pCi/g
45DOH	1	Sr-89	06/21/88	0.0110	0.0400	0.0030	pCi/g
45DOH	1	Sr-89	06/27/89	0.0003	0.0470	0.0030	pCi/g
45DOH	1	Sr-89	06/26/90	-59.0000	11.0000	0.0030	pCi/g
45DOH	1	Sr-89	07/31/91	-0.0550	0.0300	0.0030	pCi/g
46DOH	1	Sr-89	09/24/85	0.0700	0.0100	0.0030	pCi/g
46DOH	1	Sr-89	08/05/86	0.0510	0.0100	0.0030	pCi/g
46DOH	1	Sr-89	06/21/88	0.0001	0.0500	0.0030	pCi/g
46DOH	1	Sr-89	06/27/89	0.0050	0.0300	0.0030	pCi/g
46DOH	1	Sr-89	06/26/90	0.0400	0.0900	0.0030	pCi/g
46DOH	1	Sr-89	07/31/91	-0.0100	0.0300	0.0030	pCi/g
49DOH	0	Sr-89	05/28/85	0.1000	0.1000	0.0030	pCi/g
49DOH	0	Sr-89	05/20/87	0.0017	0.0001	0.0030	pCi/g
49DOH	0	Sr-89	05/17/88	0.0300	0.0400	0.0030	pCi/g
1DOH	1a	Sr-90	07/31/91	0.1190	0.0070	0.0030	pCi/g
1PNL	1	Sr-90	06/06/88	0.1070	0.0073	0.0050	pCi/g
1PNL	1	Sr-90	05/03/89	0.1840	0.0092	0.0050	pCi/g
1PNL	1	Sr-90	08/14/91	0.1520	0.0120	0.0050	pCi/g
2DOH	1a	Sr-90	07/31/91	1.3300	0.0200	0.0030	pCi/g
2PNL	1	Sr-90	04/29/87	0.3070	0.0135	0.0050	pCi/g
2PNL	1	Sr-90	06/06/88	0.2190	0.0110	0.0050	pCi/g
2PNL	1	Sr-90	05/05/89	0.1700	0.0097	0.0050	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 16 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
2PNL	1	Sr-90	08/14/91	0.1600	0.0116	0.0050	pCi/g
3DOH	1a	Sr-90	05/14/87	0.0290	0.0020	0.0030	pCi/g
3PNL	1a	Sr-90	04/29/87	0.3310	0.0123	0.0050	pCi/g
3PNL	1a	Sr-90	06/06/88	0.2810	0.0158	0.0050	pCi/g
3PNL	1a	Sr-90	05/02/89	0.3070	0.0127	0.0050	pCi/g
3PNL	1a	Sr-90	07/31/91	0.1310	0.0110	0.0050	pCi/g
4DOH	1a	Sr-90	09/26/85	0.1700	0.0030	0.0030	pCi/g
4DOH	1a	Sr-90	08/05/86	0.0460	0.0010	0.0030	pCi/g
4DOH	1a	Sr-90	06/03/87	0.0390	0.0050	0.0030	pCi/g
4DOH	1a	Sr-90	06/21/88	0.0250	0.0040	0.0030	pCi/g
4DOH	1a	Sr-90	06/27/89	0.1400	0.0100	0.0030	pCi/g
4DOH	1a	Sr-90	06/26/90	7.6000	1.0000	0.0030	pCi/g
4DOH	1a	Sr-90	07/31/91	0.1060	0.0060	0.0030	pCi/g
4PNL	1	Sr-90	05/07/87	1.1300	0.0406	0.0050	pCi/g
4PNL	1	Sr-90	03/22/88	0.7740	0.0234	0.0050	pCi/g
4PNL	1	Sr-90	05/02/89	0.5760	0.0493	0.0050	pCi/g
4PNL	1	Sr-90	08/13/91	0.4090	0.0129	0.0050	pCi/g
5DOH	1	Sr-90	09/24/85	0.0350	0.0010	0.0030	pCi/g
5DOH	1	Sr-90	08/05/86	0.0330	0.0020	0.0030	pCi/g
5DOH	1	Sr-90	06/03/87	0.0260	0.0030	0.0030	pCi/g
5DOH	1	Sr-90	06/21/88	0.0430	0.0060	0.0030	pCi/g
5DOH	1	Sr-90	06/27/89	0.0230	0.0030	0.0030	pCi/g
5DOH	1	Sr-90	06/26/90	0.1100	0.0100	0.0030	pCi/g
5DOH	1	Sr-90	07/31/91	0.0570	0.0050	0.0030	pCi/g
5PNL	1a	Sr-90	05/07/87	0.3440	0.0202	0.0050	pCi/g
5PNL	1a	Sr-90	06/06/88	0.5730	0.0226	0.0050	pCi/g
5PNL	1a	Sr-90	05/02/89	0.4130	0.0164	0.0050	pCi/g
5PNL	1a	Sr-90	07/31/91	0.3450	0.0127	0.0050	pCi/g
6DOH	1a	Sr-90	05/20/87	0.1144	0.0247	0.0030	pCi/g
6PNL	1a	Sr-90	05/07/87	0.2380	0.0177	0.0050	pCi/g
6PNL	1a	Sr-90	03/22/88	0.5890	0.0210	0.0050	pCi/g
6PNL	1a	Sr-90	05/02/89	0.1250	0.0075	0.0050	pCi/g
6PNL	1a	Sr-90	07/31/91	0.1730	0.0142	0.0050	pCi/g
7DOH	1a	Sr-90	05/19/87	10.8000	0.1000	0.0030	pCi/g
7PNL	1a	Sr-90	05/07/87	0.0201	0.0052	0.0050	pCi/g
7PNL	1a	Sr-90	06/06/88	0.0398	0.0051	0.0050	pCi/g
7PNL	1a	Sr-90	05/03/89	0.1190	0.0076	0.0050	pCi/g
7PNL	1a	Sr-90	08/13/91	0.1020	0.0096	0.0050	pCi/g
8DOH	1a	Sr-90	05/13/87	0.7600	0.0200	0.0030	pCi/g
8PNL	1a	Sr-90	05/07/87	0.1110	0.0116	0.0050	pCi/g
8PNL	1a	Sr-90	06/07/88	0.2330	0.0103	0.0050	pCi/g
8PNL	1a	Sr-90	05/03/89	0.2790	0.0114	0.0050	pCi/g
8PNL	1a	Sr-90	08/13/91	0.2140	0.0134	0.0050	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 17 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
9PNL	1	Sr-90	05/07/87	0.3800	0.0199	0.0050	pCi/g
9PNL	1	Sr-90	03/31/88	0.8200	0.0192	0.0050	pCi/g
9PNL	1	Sr-90	04/05/88	0.6060	0.0215	0.0050	pCi/g
9PNL	1	Sr-90	05/03/89	0.4950	0.0169	0.0050	pCi/g
9PNL	1	Sr-90	10/04/90	2.7000	0.0714	0.0050	pCi/g
9PNL	1	Sr-90	08/13/91	0.3740	0.0176	0.0050	pCi/g
10PNL	1	Sr-90	06/07/88	0.1400	0.0079	0.0050	pCi/g
10PNL	1	Sr-90	05/03/89	0.1430	0.0081	0.0050	pCi/g
10PNL	1	Sr-90	08/13/91	0.1570	0.0118	0.0050	pCi/g
11PNL	1	Sr-90	04/29/87	0.0855	0.0085	0.0050	pCi/g
11PNL	1	Sr-90	06/09/88	0.0919	0.0062	0.0050	pCi/g
11PNL	1	Sr-90	05/03/89	0.0499	0.0054	0.0050	pCi/g
11PNL	1	Sr-90	08/13/91	0.0959	0.0072	0.0050	pCi/g
12PNL	1	Sr-90	06/09/88	0.0700	0.0060	0.0050	pCi/g
12PNL	1	Sr-90	05/03/89	0.0623	0.0059	0.0050	pCi/g
12PNL	1	Sr-90	08/13/91	0.0506	0.0077	0.0050	pCi/g
13DOH	1	Sr-90	09/24/85	0.0310	0.0020	0.0030	pCi/g
13DOH	1	Sr-90	08/05/86	0.0370	0.0200	0.0030	pCi/g
13DOH	1	Sr-90	06/03/87	0.1200	0.0100	0.0030	pCi/g
13DOH	1	Sr-90	06/21/88	0.0230	0.0060	0.0030	pCi/g
13DOH	1	Sr-90	06/27/89	0.0370	0.0050	0.0030	pCi/g
13DOH	1	Sr-90	06/26/90	0.0220	0.0040	0.0030	pCi/g
13PNL	1	Sr-90	04/29/87	0.2380	0.0143	0.0050	pCi/g
13PNL	1	Sr-90	06/09/88	0.1250	0.0074	0.0050	pCi/g
13PNL	1	Sr-90	05/02/89	0.1520	0.0080	0.0050	pCi/g
13PNL	1	Sr-90	08/08/91	0.1670	0.0094	0.0050	pCi/g
14PNL	1	Sr-90	04/29/87	0.2880	0.0118	0.0050	pCi/g
14PNL	1	Sr-90	06/06/88	0.1250	0.0083	0.0050	pCi/g
14PNL	1	Sr-90	05/02/89	0.2830	0.0120	0.0050	pCi/g
14PNL	1	Sr-90	07/31/91	0.0574	0.0062	0.0050	pCi/g
15PNL	1	Sr-90	04/29/87	0.1830	0.0088	0.0050	pCi/g
15PNL	1	Sr-90	05/25/88	0.1380	0.0074	0.0050	pCi/g
15PNL	1	Sr-90	05/03/89	0.1060	0.0073	0.0050	pCi/g
15PNL	1	Sr-90	07/31/91	0.2310	0.0158	0.0050	pCi/g
16DOH	1a	Sr-90	09/26/85	0.4320	0.0040	0.0030	pCi/g
16DOH	1a	Sr-90	08/05/86	0.3600	0.0040	0.0030	pCi/g
16DOH	1a	Sr-90	06/03/87	0.5280	0.0450	0.0030	pCi/g
16DOH	1a	Sr-90	06/21/88	0.6300	0.0200	0.0030	pCi/g
16DOH	1a	Sr-90	06/27/89	0.1600	0.8000	0.0030	pCi/g
16DOH	1a	Sr-90	06/26/90	0.2800	0.0100	0.0030	pCi/g
16DOH	1a	Sr-90	07/31/91	0.2800	0.0100	0.0030	pCi/g
16PNL	2	Sr-90	05/15/87	0.1870	0.0135	0.0050	pCi/g
16PNL	2	Sr-90	06/20/88	0.2280	0.0094	0.0050	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 18 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
16PNL	2	Sr-90	05/08/89	0.0685	0.0056	0.0050	pCi/g
16PNL	2	Sr-90	08/08/91	0.1450	0.0117	0.0050	pCi/g
16PNL	2	Sr-90	07/28/92	0.0623	0.0078	0.0050	pCi/g
17PNL	2	Sr-90	05/15/87	0.0822	0.0105	0.0050	pCi/g
17PNL	2	Sr-90	06/20/88	0.0991	0.0061	0.0050	pCi/g
17PNL	2	Sr-90	05/10/89	0.1250	0.0079	0.0050	pCi/g
17PNL	2	Sr-90	10/04/90	0.1220	0.0096	0.0050	pCi/g
17PNL	2	Sr-90	08/08/91	0.1210	0.0081	0.0050	pCi/g
17PNL	2	Sr-90	06/23/92	0.1460	0.0086	0.0050	pCi/g
18PNL	2	Sr-90	05/15/87	0.0410	0.0076	0.0050	pCi/g
18PNL	2	Sr-90	04/01/88	0.2020	0.0109	0.0050	pCi/g
18PNL	2	Sr-90	05/10/89	0.0282	0.0041	0.0050	pCi/g
18PNL	2	Sr-90	10/04/90	0.0378	0.0077	0.0050	pCi/g
18PNL	2	Sr-90	08/08/91	0.1350	0.0079	0.0050	pCi/g
18PNL	2	Sr-90	07/27/92	0.0851	0.0081	0.0050	pCi/g
19DOH	1	Sr-90	07/31/91	0.0500	0.0100	0.0030	pCi/g
19PNL	2	Sr-90	05/15/87	0.0974	0.0101	0.0050	pCi/g
19PNL	2	Sr-90	06/20/88	0.0604	0.0051	0.0050	pCi/g
19PNL	2	Sr-90	05/10/89	0.1580	0.0091	0.0050	pCi/g
19PNL	2	Sr-90	10/04/90	0.0229	0.0049	0.0050	pCi/g
20PNL	2	Sr-90	05/15/87	0.0536	0.0078	0.0050	pCi/g
20PNL	2	Sr-90	06/20/88	0.0798	0.0065	0.0050	pCi/g
20PNL	2	Sr-90	05/10/89	0.1990	0.0099	0.0050	pCi/g
21DOH	1a	Sr-90	06/30/92	0.0270	0.0030	0.0030	pCi/g
21PNL	2	Sr-90	05/15/87	0.2080	0.0140	0.0050	pCi/g
21PNL	2	Sr-90	04/01/88	0.2850	0.0129	0.0050	pCi/g
21PNL	2	Sr-90	05/10/89	0.1510	0.0086	0.0050	pCi/g
21PNL	2	Sr-90	10/08/90	0.1210	0.0121	0.0050	pCi/g
21PNL	2	Sr-90	08/08/91	0.2030	0.0140	0.0050	pCi/g
21PNL	2	Sr-90	07/28/92	0.1370	0.0082	0.0050	pCi/g
22PNL	2	Sr-90	05/26/87	0.1960	0.0136	0.0050	pCi/g
22PNL	2	Sr-90	06/10/88	0.1010	0.0069	0.0050	pCi/g
22PNL	2	Sr-90	05/09/89	0.0922	0.0066	0.0050	pCi/g
22PNL	2	Sr-90	10/08/90	0.1380	0.0120	0.0050	pCi/g
23PNL	2	Sr-90	05/26/87	0.0747	0.0101	0.0050	pCi/g
23PNL	2	Sr-90	06/10/88	0.0930	0.0068	0.0050	pCi/g
23PNL	2	Sr-90	05/05/89	0.0658	0.0055	0.0050	pCi/g
23PNL	2	Sr-90	10/03/90	0.0628	0.0077	0.0050	pCi/g
24PNL	2	Sr-90	06/10/88	0.0728	0.0064	0.0050	pCi/g
24PNL	2	Sr-90	05/05/89	0.1240	0.0079	0.0050	pCi/g
25PNL	1	Sr-90	05/07/87	0.0639	0.0121	0.0050	pCi/g
25PNL	1	Sr-90	05/25/88	0.0687	0.0062	0.0050	pCi/g
25PNL	1	Sr-90	05/05/89	0.1290	0.0083	0.0050	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 19 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
25PNL	1	Sr-90	07/31/91	0.1430	0.0121	0.0050	pCi/g
26PNL	2	Sr-90	05/07/87	0.1230	0.0134	0.0050	pCi/g
26PNL	2	Sr-90	06/07/88	0.0391	0.0048	0.0050	pCi/g
26PNL	2	Sr-90	05/05/89	0.0913	0.0067	0.0050	pCi/g
27DOH	1a	Sr-90	06/30/92	0.2200	0.0100	0.0030	pCi/g
27PNL	2	Sr-90	05/20/87	0.3980	0.0256	0.0050	pCi/g
27PNL	2	Sr-90	06/08/88	0.3390	0.0119	0.0050	pCi/g
27PNL	2	Sr-90	05/05/89	0.2610	0.0106	0.0050	pCi/g
28DOH	1	Sr-90	09/26/85	0.3550	0.0050	0.0030	pCi/g
28DOH	1	Sr-90	08/05/86	0.1850	0.0140	0.0030	pCi/g
28DOH	1	Sr-90	06/03/87	0.2100	0.0100	0.0030	pCi/g
28DOH	1	Sr-90	06/21/88	0.0700	0.0100	0.0030	pCi/g
28DOH	1	Sr-90	06/27/89	0.1100	0.8000	0.0030	pCi/g
28DOH	1	Sr-90	06/26/90	0.1600	0.0100	0.0030	pCi/g
28DOH	1	Sr-90	07/31/91	0.2310	0.0120	0.0030	pCi/g
28PNL	2	Sr-90	05/25/88	0.1070	0.0074	0.0050	pCi/g
28PNL	2	Sr-90	05/03/89	0.2440	0.0114	0.0050	pCi/g
29PNL	1	Sr-90	06/09/88	0.2670	0.0118	0.0050	pCi/g
29PNL	1	Sr-90	05/02/89	0.2960	0.0114	0.0050	pCi/g
29PNL	1	Sr-90	08/08/91	0.3260	0.0122	0.0050	pCi/g
31DOH	1a	Sr-90	06/04/87	0.0430	0.0020	0.0030	pCi/g
32DOH	1a	Sr-90	06/26/90	0.0210	0.0040	0.0030	pCi/g
33DOH	1	Sr-90	09/26/85	0.3300	0.0050	0.0030	pCi/g
33DOH	1	Sr-90	08/05/86	0.1200	0.0030	0.0030	pCi/g
33DOH	1	Sr-90	06/03/87	0.0170	0.0010	0.0030	pCi/g
33DOH	1	Sr-90	06/21/88	0.1810	0.0090	0.0030	pCi/g
33DOH	1	Sr-90	06/27/89	0.0930	0.0050	0.0030	pCi/g
33DOH	1	Sr-90	06/26/90	0.0670	0.0050	0.0030	pCi/g
33DOH	1	Sr-90	07/31/91	0.0580	0.0050	0.0030	pCi/g
34DOH	1	Sr-90	05/28/85	0.1040	0.0050	0.0030	pCi/g
34DOH	1	Sr-90	05/14/86	0.0490	0.0010	0.0030	pCi/g
34DOH	1	Sr-90	05/20/87	0.0452	0.0023	0.0030	pCi/g
34DOH	1	Sr-90	05/17/88	0.1900	0.0100	0.0030	pCi/g
35DOH	1	Sr-90	05/28/85	0.0060	0.0020	0.0030	pCi/g
35DOH	1	Sr-90	05/14/86	0.1000	0.0020	0.0030	pCi/g
35DOH	1	Sr-90	05/20/87	0.0080	0.0014	0.0030	pCi/g
35DOH	1	Sr-90	05/17/88	0.0080	0.0040	0.0030	pCi/g
36DOH	1a	Sr-90	09/26/85	0.1890	0.0030	0.0030	pCi/g
36DOH	1a	Sr-90	08/05/86	0.8900	0.0100	0.0030	pCi/g
36DOH	1a	Sr-90	06/03/87	0.3100	0.0100	0.0030	pCi/g
36DOH	1a	Sr-90	06/21/88	0.1300	0.0800	0.0030	pCi/g
36DOH	1a	Sr-90	06/27/89	0.0900	0.0050	0.0030	pCi/g
36DOH	1a	Sr-90	06/26/90	34.0000	2.0000	0.0030	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 20 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
42DOH	1a	Sr-90	09/26/85	0.2020	0.0040	0.0030	pCi/g
42DOH	1a	Sr-90	08/05/86	0.0380	0.0020	0.0030	pCi/g
42DOH	1a	Sr-90	06/03/87	0.0260	0.0020	0.0030	pCi/g
42DOH	1a	Sr-90	06/21/88	0.0470	0.0040	0.0030	pCi/g
42DOH	1a	Sr-90	06/27/89	0.0330	0.0040	0.0030	pCi/g
42DOH	1a	Sr-90	06/26/90	4.3000	0.8000	0.0030	pCi/g
45DOH	1	Sr-90	08/05/86	0.0860	0.0020	0.0030	pCi/g
45DOH	1	Sr-90	06/03/87	0.0260	0.0020	0.0030	pCi/g
45DOH	1	Sr-90	06/21/88	0.0390	0.0050	0.0030	pCi/g
45DOH	1	Sr-90	06/27/89	0.0340	0.0090	0.0030	pCi/g
45DOH	1	Sr-90	06/26/90	8.8000	1.0000	0.0030	pCi/g
45DOH	1	Sr-90	07/31/91	0.1640	0.0070	0.0030	pCi/g
46DOH	1	Sr-90	09/24/85	0.1300	0.0100	0.0030	pCi/g
46DOH	1	Sr-90	08/05/86	0.1990	0.0040	0.0030	pCi/g
46DOH	1	Sr-90	06/03/87	0.0670	0.0040	0.0030	pCi/g
46DOH	1	Sr-90	06/21/88	0.1500	0.0200	0.0030	pCi/g
46DOH	1	Sr-90	06/27/89	0.0510	0.0060	0.0030	pCi/g
46DOH	1	Sr-90	06/26/90	0.0420	0.0050	0.0030	pCi/g
46DOH	1	Sr-90	07/31/91	0.1100	0.0100	0.0030	pCi/g
49DOH	0	Sr-90	05/28/85	0.1560	0.0060	0.0030	pCi/g
49DOH	0	Sr-90	05/14/86	0.1220	0.0020	0.0030	pCi/g
49DOH	0	Sr-90	05/20/87	0.0508	0.0025	0.0030	pCi/g
49DOH	0	Sr-90	05/17/88	0.1400	0.0100	0.0030	pCi/g
3DOH	1a	Th-230	05/14/87	0.3200	0.0300	0.1000	pCi/g
6DOH	1a	Th-230	05/20/87	0.4475	0.0229	0.1000	pCi/g
7DOH	1a	Th-230	05/19/87	0.5200	0.0200	0.1000	pCi/g
8DOH	1a	Th-230	05/13/87	0.5900	0.0200	0.1000	pCi/g
31DOH	1a	Th-230	06/04/87	0.5200	0.0200	0.1000	pCi/g
3DOH	1a	Th-232	05/14/87	0.3500	0.0200	0.0140	pCi/g
6DOH	1a	Th-232	05/20/87	0.4925	0.0200	0.0140	pCi/g
7DOH	1a	Th-232	05/19/87	0.5600	0.0200	0.0140	pCi/g
8DOH	1a	Th-232	05/13/87	0.6800	0.0200	0.0140	pCi/g
8PNL	1a	Th-232	06/07/88	0.9520	0.1000	0.0000	pCi/g
10PNL	1	Th-232	06/07/88	0.6500	0.1020	0.0000	pCi/g
16PNL	2	Th-232	06/20/88	0.7520	0.1140	0.0000	pCi/g
17PNL	2	Th-232	06/20/88	0.8110	0.0920	0.0000	pCi/g
19PNL	2	Th-232	06/20/88	1.1600	0.1430	0.0000	pCi/g
20PNL	2	Th-232	06/20/88	0.9790	0.1190	0.0000	pCi/g
22PNL	2	Th-232	06/10/88	0.7710	0.1120	0.0000	pCi/g
26PNL	2	Th-232	06/07/88	0.6380	0.0841	0.0000	pCi/g
27PNL	2	Th-232	06/08/88	1.0200	0.1240	0.0000	pCi/g
31DOH	1a	Th-232	06/04/87	0.6000	0.0200	0.0140	pCi/g
4DOH	1a	Total Th	08/05/86	2.2000	0.1000	0.1000	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 21 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
5DOH	1	Total Th	08/05/86	0.0020	0.1000	0.1000	pCi/g
13DOH	1	Total Th	08/05/86	2.2000	0.2000	0.1000	pCi/g
16DOH	1a	Total Th	08/05/86	2.5000	0.2000	0.1000	pCi/g
28DOH	1	Total Th	08/05/86	2.9000	0.1000	0.1000	pCi/g
33DOH	1	Total Th	08/05/86	2.5000	0.1000	0.1000	pCi/g
36DOH	1a	Total Th	08/05/86	2.4000	0.2000	0.1000	pCi/g
42DOH	1a	Total Th	08/05/86	2.5000	0.2000	0.1000	pCi/g
45DOH	1	Total Th	08/05/86	1.7000	0.1000	0.1000	pCi/g
46DOH	1	Total Th	08/05/86	2.9000	0.1000	0.1000	pCi/g
4DOH	1a	Total U	08/05/86	0.8000	0.1000	0.2000	pCi/g
4DOH	1a	Total U	06/03/87	0.9500	0.1000	0.2000	pCi/g
4DOH	1a	Total U	06/21/88	0.7700	0.2000	0.1000	pCi/g
4DOH	1a	Total U	06/27/89	1.0000	0.3000	0.1000	pCi/g
4DOH	1a	Total U	06/26/90	0.5500	0.1300	0.2000	pCi/g
4DOH	1a	Total U	07/31/91	0.7230	0.2200	0.4000	pCi/g
6DOH	1a	Total U	05/20/87	1.2000	0.1228	0.2000	pCi/g
7DOH	1a	Total U	05/19/87	1.3600	0.1200	0.2000	pCi/g
8DOH	1a	Total U	05/13/87	9.0800	0.2800	0.2000	pCi/g
21DOH	1a	Total U	06/30/92	3.0600	0.3200	0.4000	pCi/g
36DOH	1a	Total U	08/05/86	1.2000	0.1000	0.2000	pCi/g
36DOH	1a	Total U	06/03/87	0.9000	0.1000	0.2000	pCi/g
36DOH	1a	Total U	06/21/88	0.8600	0.1600	0.1000	pCi/g
36DOH	1a	Total U	06/27/89	1.3000	0.4000	0.1000	pCi/g
36DOH	1a	Total U	06/26/90	1.4000	0.2000	0.2000	pCi/g
42DOH	1a	Total U	08/05/86	0.9000	0.1000	0.2000	pCi/g
42DOH	1a	Total U	06/03/87	1.1000	0.2000	0.2000	pCi/g
42DOH	1a	Total U	06/21/88	1.2000	0.3000	0.1000	pCi/g
42DOH	1a	Total U	06/27/89	1.5000	0.4000	0.1000	pCi/g
42DOH	1a	Total U	06/26/90	1.0000	0.2000	0.2000	pCi/g
45DOH	1	Total U	08/05/86	0.8000	0.1000	0.2000	pCi/g
45DOH	1	Total U	06/03/87	0.9000	0.1000	0.2000	pCi/g
45DOH	1	Total U	06/21/88	0.7700	0.1200	0.1000	pCi/g
45DOH	1	Total U	06/27/89	0.8000	0.3000	0.1000	pCi/g
45DOH	1	Total U	06/26/90	1.0000	0.2000	0.2000	pCi/g
45DOH	1	Total U	07/31/91	0.5830	0.2300	0.4000	pCi/g
50DOH	0	Total U	10/27/88	1.5000	0.2000	0.2000	pCi/g
51DOH	0	Total U	10/27/88	1.0000	0.1000	0.2000	pCi/g
52DOH	0	Total U	08/16/90	34.0000	1.0000	0.2000	pCi/g
4DOH	1a	U-234	06/26/90	0.3000	0.0900	0.0050	pCi/g
4PNL	1	U-234	08/13/91	0.6050	0.1140	0.0500	pCi/g
6DOH	1a	U-234	05/20/87	0.5300	0.0800	0.0050	pCi/g
7DOH	1a	U-234	05/19/87	0.6500	0.0800	0.0050	pCi/g
8DOH	1a	U-234	05/13/87	4.4000	0.1900	0.0050	pCi/g

Table C-1. Existing Data That Failed the Screening Process (Sheet 22 of 22).

Site ID	Site Type	Analyte	Sample Date	Value	Error	Det. Limit	Units
9PNL	1	U-234	10/04/90	0.7730	0.1070	0.0500	pCi/g
9PNL	1	U-234	08/13/91	0.7940	0.0943	0.0500	pCi/g
21DOH	1a	U-234	06/30/92	1.5000	0.1600	0.0000	pCi/g
36DOH	1a	U-234	06/26/90	0.6800	0.1200	0.0050	pCi/g
42DOH	1a	U-234	06/26/90	0.5000	0.1000	0.0050	pCi/g
45DOH	1	U-234	06/26/90	0.4500	0.1400	0.0050	pCi/g
4PNL	1	U-235	08/13/91	0.0267	0.0252	0.0500	pCi/g
9PNL	1	U-235	10/04/90	0.0460	0.0268	0.0500	pCi/g
9PNL	1	U-235	08/13/91	0.0191	0.0164	0.0500	pCi/g
4DOH	1a	U-238	06/26/90	0.3400	0.0700	0.0030	pCi/g
4DOH	1a	U-238	07/31/91	0.3680	0.1100	0.4000	pCi/g
4PNL	1	U-238	08/13/91	0.5350	0.1060	0.0500	pCi/g
6DOH	1a	U-238	05/20/87	0.5600	0.0826	0.0030	pCi/g
7DOH	1a	U-238	05/19/87	0.6600	0.0800	0.0030	pCi/g
8DOH	1a	U-238	05/13/87	4.1200	0.1900	0.0030	pCi/g
9PNL	1	U-238	10/04/90	0.8260	0.1100	0.0500	pCi/g
9PNL	1	U-238	08/13/91	0.6820	0.0870	0.0500	pCi/g
21DOH	1a	U-238	06/30/92	1.5600	0.1600	0.4000	pCi/g
36DOH	1a	U-238	06/26/90	0.6000	0.0900	0.0030	pCi/g
42DOH	1a	U-238	06/26/90	0.7000	0.1000	0.0030	pCi/g
45DOH	1	U-238	06/26/90	0.4700	0.1100	0.0030	pCi/g
45DOH	1	U-238	07/31/91	0.2970	0.1150	0.4000	pCi/g
20DOH	1a	Zn-65	01/17/85	0.0500	0.0500	0.0400	pCi/g
29DOH	1	Zn-65	11/19/85	0.0600	0.0600	0.0400	pCi/g
30DOH	1a	Zn-65	11/19/85	0.0550	0.0550	0.0400	pCi/g
34DOH	1	Zn-65	05/28/85	0.1000	0.1000	0.0400	pCi/g
35DOH	1	Zn-65	05/28/85	0.0900	0.0900	0.0400	pCi/g
37DOH	1a	Zn-65	11/19/85	0.0570	0.0570	0.0400	pCi/g
43DOH	1a	Zn-65	11/19/85	0.0600	0.0600	0.0400	pCi/g
49DOH	0	Zn-65	05/28/85	0.1100	0.1100	0.0400	pCi/g
20DOH	1a	Zr-95	01/17/85	0.0500	0.0500	0.0300	pCi/g
29DOH	1	Zr-95	11/19/85	0.2900	0.2900	0.0300	pCi/g
30DOH	1a	Zr-95	11/19/85	0.2600	0.2600	0.0300	pCi/g
34DOH	1	Zr-95	05/28/85	0.0200	0.0200	0.0300	pCi/g
35DOH	1	Zr-95	05/28/85	0.0200	0.0200	0.0300	pCi/g
37DOH	1a	Zr-95	11/19/85	0.2800	0.2800	0.0300	pCi/g
43DOH	1a	Zr-95	11/19/85	0.3000	0.3000	0.0300	pCi/g
49DOH	0	Zr-95	05/28/85	0.0300	0.0300	0.0300	pCi/g