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A Review of Historical Data on the Radionuclide Content of Soil Samples Collected from the Hanford Site and Vicinity

K. R. Price

November 1988

**Prepared for the U.S. Department of Energy
under Contract DE-AC06-76RLO 1830**

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Pacific Northwest Laboratory
Richland, Washington 99352

PREFACE

In February 1986, the U.S. Department of Energy (DOE) made available to the public numerous documents containing historical information about effluent releases and environmental monitoring at the Hanford Site. The Hanford Health Effects Review Panel reviewed this information and made 33 recommendations.^(a) Environmental Monitoring Recommendation C.6 from the final report prepared by the Review Panel stated: "The panel encourages expanding this program [soil sampling] as a means of estimating the amount of radionuclides deposited at the Hanford Site since the beginning of operations." The recommendation further stated: "Radionuclides to be evaluated should include (but not be limited to) isotopes of plutonium, americium, iodine, strontium, and cesium." The DOE response to the recommendation was that existing data should be reviewed and summarized before undertaking new sampling activities. The information presented in this document is in response to Recommendation C.6, and reviews and summarizes soil sampling results obtained over the years.

(a) "Report of The Hanford Health Effects Review Panel and Recommendations of the Sponsoring Agencies," October 1987, Washington State Department of Social and Health Services, Olympia, Washington.

SUMMARY

The measurement of radioactive materials in soil samples collected from the environs of the Hanford Site has been a routine part of environmental monitoring since 1971. Soil samples have also been collected and analyzed for special-purpose studies. The main objective of this report is to review and summarize the historical record of soil sampling results related to environmental monitoring from the late 1950s through 1987. Other objectives are to publish previously unpublished data and to consolidate results from routine environmental monitoring and special studies into a single document.

The sources of information reviewed included the environmental monitoring computerized data base, historical files, annual environmental monitoring reports, and other Hanford documents. A rigorous evaluation of data from these sources was not conducted, but several observations were made during the course of review:

- Soil sampling has not revealed any gross contamination of the offsite environs from past Hanford operations.
- Some onsite soil sampling locations near facilities have received contamination from past operations at Hanford.
- Results have not indicated a gradual buildup or depletion of contamination at any given soil sampling location.
- Results were noted to vary among aliquots analyzed from a single sample or among multiple samples collected at a single location.
- Hanford-derived radionuclides have been difficult to identify in the presence of worldwide fallout.

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INTRODUCTION

The U.S. Department of Energy's (DOE) Hanford Site is located in a rural region of southeastern Washington and occupies an area of about 560 mi². The Columbia River flows through the northern edge of the Site and forms part of the eastern boundary. The southern boundary of the Site includes the Rattlesnake Hills, which exceed 3200 ft in elevation. The Hanford Project was established in 1943 and was originally designed, built, and operated to produce plutonium for nuclear weapons.

All DOE sites are required to monitor for the presence of radioactive materials in the environment and to report results on an annual basis. The Pacific Northwest Laboratory (PNL)(a) is responsible for sitewide environmental monitoring at Hanford. A routine part of sitewide environmental monitoring since 1971 has been the measurement of radioactive materials in soil samples collected from the onsite as well as offsite environs. In addition to routine sampling, several special-purpose studies for environmental monitoring have been conducted over the years by Hanford scientists.

The main objective of this report is to review and summarize the historical record of results from routine environmental monitoring and special-purpose studies related to environmental monitoring from the late 1950s through 1987. Other objectives are to publish previously unpublished data and to consolidate results from routine environmental monitoring and special studies into a single document. The sources of information reviewed consisted of the environmental monitoring computerized data base, historical files, annual environmental monitoring reports, and other Hanford documents. Except where noted, the conclusions expressed in this report were taken from the reports and documents reviewed and represent the interpretations of the original author(s).

The main body of this report consists of a review of published and unpublished data for radiochemical analyses of soil samples collected on and

(a) PNL is operated for the U.S. Department of Energy by the Battelle Memorial Institute.

off the Site. Appendix A lists onsite sampling locations and includes a map showing where onsite samples have been routinely collected over the years. Included also is a complete listing of analytical results for ^{90}Sr , ^{137}Cs , ^{238}Pu , $^{239,240}\text{Pu}$, ^{241}Am , and uranium. Appendix B contains similar information for offsite sampling locations. Previously unpublished results from special-purpose studies are given in Appendix C.

DISCUSSION AND REVIEW OF RESULTS

Results from soil samples from onsite and offsite locations collected and analyzed over the past 30 years are summarized into two categories for review: results from the routine sampling program and results from special-purpose studies.

ROUTINE SAMPLING PROGRAM RESULTS

The measurement of radioactive materials in soil samples collected from onsite (excluding operating areas) and offsite locations has been a routine part of sitewide environmental monitoring at Hanford since 1971. Monitoring has been documented in annual reports indicating results and conclusions. All published references listed in this report are compiled under LITERATURE CITED; other published annual reports that include soil sampling results from routine environmental monitoring are listed under BIBLIOGRAPHY.

The various reasons for routinely collecting and analyzing soil samples have been described over the years:

- Discover obvious geographical patterns of contamination
- Compare results from onsite locations with those from around the Hanford Site perimeter and with distant locations
- Identify trends or the gradual buildup of contamination in surface soils
- Monitor areas of known contamination for indications of a change of status
- Test the data for unusual results that may reveal previously undetected releases of radioactive materials during Site operations.

Radiochemical analyses dating from 1971 through 1987 have included ^{90}Sr , ^{137}Cs , ^{238}Pu , and $^{239,240}\text{Pu}$. Americium-241 analyses began in 1982 (three locations were sampled and analyzed once in 1977). Uranium analyses began in 1973. Table A.1, Appendix A, lists the 12 onsite sampling locations and Table B.1, Appendix 8, lists the 24 offsite sampling locations. Samples were collected at 0- to 1-in. and 1- to 2-in. depths at each location in 1971 and 1972. Samples were also collected at 2- to 4-, 4- to 8-, and 8- to 12-in. depths at three locations in 1973. All other samples listed in the tables

represent the upper 1-in. layer of surface soil. Figures A.1, Appendix A, and B.1, Appendix B, show the onsite and offsite locations, respectively, where samples have been collected over the years.

Tables A.2 through A.7, Appendix A, list all onsite sampling results, and Tables B.2 through B.7 list all offsite sampling results stored in the environmental monitoring computerized data base for the period 1971 through 1987. The data consist of the sampling date and the result ± 2 standard deviations (counting uncertainty) for ^{90}Sr , ^{137}Cs , ^{238}Pu , $^{239,240}\text{Pu}$, ^{241}Am , and uranium analyses.

Analytical results for the two samples collected at each location in 1971 and 1972 were published in the onsite annual environmental monitoring reports for the respective years (Bramson and Corley 1972a; Bramson, Corley, and Nees 1973). The authors noted a greater radionuclide concentration in the first 1-in. layer of soil compared to the second 1-in. layer at most locations. Some exceptions were acknowledged where an apparent greater concentration was measured in the second 1-in. layer. No reason was given for the exceptions. In 1973, along with 1-in. layer samples taken from onsite and offsite locations, additional samples were taken from 200 East Southeast (ESE), 200 West Area CP 60(a), and 200 East Area CP 59. These additional samples were collected from the 2- to 4-, 4- to 8-, and 8- to 12-in. layers. Results were published in the onsite annual report for 1973 (Nees and Corley 1975). The concentrations of radionuclides were again noted to be greater in the first 1-in. layer of soil than at any lower depth at most locations. No conclusions were stated by the authors for results from these profile samples, but the data show an unexpected presence of radionuclides in some of the deeper samples. The method used to collect the samples was not described.

A PNL report was prepared in 1977 that compared soil sample results for 1971 through 1976 (Miller, Fix, and Bramson 1977). The report concluded that, with the exception of a few locations, the data indicated that Hanford operations had made no significant contribution to existing radionuclide concentrations in soil samples. Most of the radioactivity measured in

(a) Some areas monitored routinely were designated as a Control Plot or "CP."

samples was attributed to natural causes or worldwide atmospheric fallout. Three samples from onsite locations showed traces of contamination. One sample from an island near the Site boundary in the Columbia River north of Richland, Washington, showed elevated levels of ^{60}Co resulting from cooling water discharges from the Hanford reactors. Results from the limited number of profile samples collected in 1971, 1972, and 1973 were not discussed.

Another PNL report summarized routine soil sample results for the 5 years before restart of the PUREX (plutonium and uranium extraction) plant in 1983 (Sula and Price 1983). A large variability in the data was noted, and it was difficult to determine if there was a time-dependent trend in the data for the 5-year period reviewed. The authors concluded that surface soil at some of the 200 Area's sampling locations appeared to contain elevated levels of radioactive materials when compared to offsite locations. No other reviews of results from the routine soil sampling program have been published since sampling began in 1971.

SPECIAL-PURPOSE STUDIES RESULTS

Several special-purpose studies were completed between 1956 and 1987. The following is a chronological summary of these studies. Published results are listed under LITERATURE CITED. Unpublished results obtained from letter reports stored in historical files are reproduced in Appendix C as noted.

1987 - Samples of surface soil (upper inch) were collected in 1987 at the same offsite locations downwind of Hanford that were sampled in 1986 (see entry for 1986). Samples were also collected from the communities of Moses Lake, Connell, Othello, Washtucna, Walla Walla, and Yakima, Washington, and McNary, Oregon. The 1986 and 1987 samples were analyzed for the ^{240}Pu and ^{239}Pu isotopes using the same special and sensitive mass spectrographic method used before to detect the presence of Hanford-derived plutonium (see entry for 1984). The average isotopic ratio of ^{240}Pu to ^{239}Pu for the special samples collected in 1986 and 1987 was 0.176 ± 0.003 . The average ratio indicative of worldwide fallout in soil has been reported as 0.176 ± 0.014 . The study concluded that the $^{239,240}\text{Pu}$ detected in the samples was primarily from worldwide fallout. Results were reported in the

1987 annual environmental monitoring report (Jaquish and Mitchell 1988). The 1987 samples were also analyzed for ^{90}Sr , ^{137}Cs , ^{238}Pu , $^{239,240}\text{Pu}$, and uranium. Results are summarized in Figure C.1 of Appendix C.

- 1986 - Samples of surface soil (upper inch) from eight locations downwind of the Hanford Site were collected from rural areas north of Pasco, Washington. Samples were collected and analyzed in the same manner as routine samples. No unusual conditions were detected. Soil concentrations of ^{90}Sr , ^{137}Cs , $^{239,240}\text{Pu}$, and uranium were similar to nearby routine sampling locations and typical of worldwide fallout. Results were reported in the 1986 annual environmental monitoring report (PNL 1987).
- 1985 - Ten samples of surface soil (upper inch) were collected from the southern perimeter of the Hanford Site at 0.5-mi intervals along Highway 240 and from Horn Rapids Road from the junction of Highway 224 (Benton City highway) to Stevens Drive, Richland, Washington. Samples were collected and analyzed in the same manner as routine samples. Soil concentrations of ^{90}Sr , ^{137}Cs , and $^{239,240}\text{Pu}$ reflected worldwide fallout and were typical for the area when compared to nearby and distant routine sampling locations as published in the 1985 annual report (Price 1986). Results are summarized in Figure C.2 of Appendix C.
- Eight samples of surface soil (upper inch) were collected on Site east of the 200 West Area. Samples were collected and analyzed in the same manner as routine samples. Results for concentrations of $^{239,240}\text{Pu}$ indicated that the spread of contamination known to exist in the area (routine sampling location "East of 200 West Gate") occurred in an easterly direction from the 200 West Area. Results are summarized in Figure C.3 of Appendix C.
 - Four samples of surface soil (upper inch) were collected on Site north of the 200 East Area. Samples were collected and analyzed in the same manner as routine samples. Soil concentrations of ^{90}Sr and ^{137}Cs were known to be elevated in this area (routine sampling location "200 East Northcentral" (ENC). Results indicated that the spread of

contamination extended in a northerly direction from the 200 East Area. Results are summarized in Figure C.4 of Appendix C.

- Two samples of surface soil (upper inch) were collected south of the B-C Cribs Controlled Area. The B-C Cribs Controlled Area is south of the 200 East Area. Samples were collected and analyzed in the same manner as routine samples. No spread of contamination from the B-C Cribs Controlled Area was detected. Soil concentrations of ^{90}Sr , ^{137}Cs , and $^{239,240}\text{Pu}$ were typical for the onsite locations outside of operating areas. Results are summarized in Figure C.5 of Appendix C.

- 1984 - All samples of surface soil (upper inch) routinely collected for analysis in 1984, 1983, and 1982, plus five routine samples collected in 1978, were analyzed for the individual isotopes of plutonium using a special method. Routine analyses measured the amount of plutonium in the sample as $^{239,240}\text{Pu}$ but could not distinguish Hanford-derived plutonium from plutonium contained in worldwide fallout. Results from mass spectrographic analyses for the ^{239}Pu and ^{240}Pu isotopes were used to estimate the percentage of Hanford-derived plutonium in each soil sample. Results from these special analyses indicated that traces of Hanford-derived plutonium historically have been added to the total amount of plutonium detected in samples collected from onsite, onsite-perimeter, and some offsite locations.

The onsite location of maximum amount of Hanford-derived plutonium was near the 200 West Area (routine sampling location "East of 200 West Gate"). The offsite location of maximum Hanford-derived plutonium was near Benton City (routine sampling location "Benton City"). Soil samples from the Sunnyside area contained virtually no Hanford-derived plutonium. Results were listed in a data table and variability was apparent. Results for samples collected from the same location on successive years differed by as much as a factor of 3. A factor of 1.6 was noted as the maximum difference between duplicate samples collected at the same time from the same location. Results from this special study were reported in the 1985 annual environmental monitoring report (Price 1986).

- 1982 - A special study was conducted on land located off Site across the Columbia River from the 300 Area. Samples of surface soil (upper inch) from the study area were analyzed for uranium and nonradioactive heavy metals (lead, silver, zinc, and copper). Results for the study area were compared to results for samples collected at control sites located both on and off the Hanford Site. The study concluded that operations at Hanford had not resulted in a detectable impact off Site on land located across the River from the 300 Area. Results were reported in a PNL document (Price and Kinnison 1982).
- 1981 - Five samples of surface soil (upper inch) were collected from the site of the proposed Puget Sound Power and Light Company nuclear power generating station 2 mi west of the Wye Barricade. Samples were collected and analyzed in the same manner as routine environmental monitoring samples. Concentrations of ^{90}Sr , ^{137}Cs , and $^{239,240}\text{Pu}$ in the soil samples appeared to typical for the general area and reflected the deposition of worldwide fallout. Results are summarized in Figure C.6 of Appendix C.
- 1980 - A special study was conducted to compare ^{241}Am concentrations in soil samples collected near the PUREX plant with samples collected off Site at a distant upwind location near the town of Moxee, Washington. Soil samples consisted of the upper 0.4-in. layer, the next 0.6-in. layer, or a single sample of the upper 1.0 in. of surface soil. The study concluded that the concentrations of ^{241}Am in samples of surface soil were very low at both sampling sites, but were slightly higher near the PUREX plant, as compared to the offsite location. More precise estimates of ^{241}Am concentrations were noted when surface soil samples included soil crust material consisting of mosses and lichens than when samples were from bare soil. Results were reported in a PNL document (Price, Gilbert, and Gano 1981).
- 1979 - A special study was conducted to determine the ^{239}Pu and ^{240}Pu isotopic content of surface soil samples (upper inch) collected on Site near the southwestern boundary of the Hanford Site. Routine sample collection and analysis procedures were used except that samples from five adjacent sampling locations (located 0.5 mi apart)

were combined into a single composite sample for analysis. Results indicated that samples collected from the general vicinity of the Arid Land Ecology field laboratory located on Site may have had slightly elevated levels of Hanford-derived plutonium compared to other onsite locations, but there was no evidence of a historical acute release of plutonium in a southwesterly direction from Hanford facilities. Results were reported in a PNL document (Price and Dirkes 1981).

- 1978 - A special study was conducted in 1978 to investigate the concentration of ^{129}I in several types of samples collected from various locations on and off the Hanford Site. Surface soil samples (upper inch) were collected from Bend, Oregon; and Centralia, Wenatchee, and the Wooten Game Range near Dayton, Washington. Onsite samples were collected in 1978 near the old Hanford townsite. Data for soil samples collected from the Hanford Site in 1972 and 1974 were also evaluated. Levels of ^{129}I in surface soils collected on Site in 1972, 1974, and 1978 showed a general reduction over the years. This reduction was probably related to the reduction in ^{129}I releases from Hanford during the same time period and perhaps some downward leaching into the soil. Results were reported in a PNL document (Price et al. 1981).
- 1972 - A special radiation survey of the Wahluke Slope on the Hanford Site was conducted in 1972 to provide a basis for releasing the land for unrestricted public use. Thirty-eight surface soil samples (upper 1-in. layer) were collected for analysis in addition to other sampling and radiation measurements. The study concluded that concentrations of ^{90}Sr , ^{137}Cs , and $^{239,240}\text{Pu}$ in samples of surface soil were typical of regional fallout levels. A few exceptions were noted for locations along the Columbia River shoreline where activation products (^{60}Co and ^{65}Zn) had been deposited from reactor cooling water discharged to the River. Results were reported in a PNL document (Bramson and Corley 1972b).
- 1970 - Surface soil samples taken from the upper 0.5 in. of soil were collected in February 1970 at locations near the 200 Areas, at other locations within the Hanford Site boundary, and at locations near the Site perimeter downwind of Hanford. Results for $^{239,240}\text{Pu}$ were

variable with a difference of a factor of 2 that was noted between samples collected from the same site. Differences between aliquots from the same sample were also noted. Variability was attributed to a nonuniform distribution of radionuclides in the soils sampled, but other sources, such as analytical error, could not be ruled out. Data for $^{239,240}\text{Pu}$ and ^{137}Cs concentrations for samples collected near the 200 Areas confirmed that localized areas had been affected by the deposition of effluents released to the atmosphere. Some soil samples contained slightly elevated concentrations of plutonium, as indicated by calculated plutonium to cesium ratios. Data for samples collected elsewhere, either on Site or off Site, provided plutonium to cesium ratios indicative of worldwide fallout and not Hanford operations. Results were reported as a PNL document and presented at a symposium on plutonium in the environment (Corley, Robertson, and Brauer 1972).

- 1970 - Samples from the upper 0.5-in. layer of soil were collected for another study conducted in February and March 1970, at onsite and offsite locations. The samples were analyzed for $^{239,240}\text{Pu}$. Several samples were collected at some locations and analyzed separately. At other locations, a single sample was collected and several aliquots from it were analyzed separately. The results demonstrated that a large degree of variability could occur between separate samples or between aliquots of the same sample. Differences of approximately a factor of 2 were observed, and one pair of sample results differed by a factor of 20. Results are summarized in Figure C.7 of Appendix C.
- 1960 - A radiological background study was conducted at the Plutonium Recycle Test Reactor site in the 300 area before startup of the facility. The study concluded that concentrations of ^{137}Cs , other gamma-emitting radionuclides, and uranium in surface soil samples (unspecified depths) collected at 12 locations within or near the 300 Area were consistent with sample results from other uncontaminated locations on the Hanford Site. Results were reported in a Hanford document (Williams 1960).
- 1957 - A special study was conducted to determine the contribution of ^{90}Sr in the environment from the deposition of effluents released to the

atmosphere at Hanford. Samples were collected in 1956 and 1957 from onsite locations and from offsite locations as far away as Lewiston, Idaho; Davenport, Washington; and Hood River, Oregon. Surface soil samples (upper 0.5 in.) and other types of samples were collected and analyzed. No evidence was obtained to indicate a significant deposition of ^{90}Sr in the environs from Hanford operations (i.e., deposition from Hanford was not measurable above the levels associated with worldwide fallout from nuclear weapons testing). Results were reported in a Hanford document (Silker 1958).

CONCLUSIONS OF REVIEW AND RESULTS

A review of the environmental monitoring data base, historical records, and Hanford documents was conducted to identify data on the concentrations of ^{90}Sr , ^{129}I , ^{137}Cs , ^{238}Pu , $^{239,240}\text{Pu}$ (and the individual isotopes of plutonium), ^{241}Am , and uranium in soil samples collected from the Hanford Site and the local environs over the past 30 years. Most of the data were found in published annual environmental monitoring reports. Results from special-purpose studies are either referenced as published reports or summarized in Appendix C.

A rigorous evaluation of results was not conducted, but several observations were made with respect to the reasons cited (page 3) for the routine collection and analysis of surface soil samples for environmental monitoring.

1. Discover obvious geographical patterns of contamination. Results from soil samples collected from the offsite environs over the years have not shown gross contamination from operations at Hanford or patterns of extensive contamination. Results on the ratios of ^{240}Pu to ^{239}Pu indicated the presence of some Hanford-derived plutonium in samples collected off Site near the downwind Site boundary and near Benton City.
2. Compare results from onsite locations with those from around the Hanford Site perimeter and with distant locations. Samples collected near some onsite facilities contained traces of contamination from past operations when compared to perimeter and distant sampling locations. Radionuclides most frequently identified at enhanced levels were ^{90}Sr , ^{137}Cs , and $^{239,240}\text{Pu}$.
3. Identify trends or the gradual buildup of contamination in surface soils. No documents or data were found that indicated trends or the gradual buildup of contamination. However, slight trends would be difficult to identify because of the wide variability noted in many of the results reported.
4. Monitor areas of known contamination for indications of a change of status. Several areas of known soil contamination have been sampled

routinely since 1971. Results did not show a measurable reduction in the levels of contamination because of transport of materials away from the contaminated areas.

5. Test the data for unusual results that may reveal previously undetected releases of radioactive materials during Site operations. All soil samples for environmental monitoring were reported to contain some radioactive materials, but there was evidence that most of the radioactive materials were from the deposition of worldwide fallout from testing nuclear weapons in the atmosphere. No previously undetected releases of radioactive materials have been revealed by soil sampling.

Soil sampling results have been used to identify the impact from specific operations; for example, plutonium contamination near the 200 West Area and the deposition of activation products along the Columbia River shoreline from reactor cooling water. However, there are limitations to other types of uses of soil sample data. Radionuclide concentration data from routinely collected soil samples have not been useful to quantify an offsite impact from Hanford operations because of the ubiquitous distribution of worldwide fallout and the difficulty of identifying small amounts of Hanford-derived materials in the presence of fallout. No practical way is currently known to separate Hanford-derived materials from fallout when the same radionuclide is present in both sources. The mass spectrographic analysis for plutonium has been used, but it is not a method suitable for routine analysis.

Another limitation on the use of soil sampling data is the variability of results. Analytical results for aliquots from an individual sample or for multiple samples collected at the same location sometimes showed a wide degree of variability. A factor of 2 (200%) was not unusual.

The last limitation concerns estimating the total amount of radioactive materials released to the atmosphere from Hanford operations and deposited onto soil. Unknown and different times of release and deposition, and the different rates of radioactive decay for each radionuclide would preclude the use of soil concentration data to estimate a total release. However, the total amount of a given radionuclide currently present in the soil could be estimated by using appropriate sampling techniques.

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APPENDIX A

ONSITE ROUTINE SOIL SAMPLING LOCATIONS AND RESULTS

TABLE A.1. Onsite Routine Soil Sampling Locations, 1971 through 1987

Location	Map Number	Sample Number	Sample Layer (in.)	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<u>100 Areas</u>																				
NE Corner of 100 N Area	1	6275	0-1					X												
1 Mile NE of 100 N Area	2	0590	0-1												X	X	X	X	X	
1 Mile E of 100 N Area	3	0578	0-1												X	X	X	X	X	X
1 Mile SE of 100 N Trench	4	6320	0-1						X								X			
Wahlake Slope Opposite 100-M	5	6006	0-1		X	X	X	X												
Wahlake Slope Opposite 100-M	5	6029	1-2		X	X														
100 Area Fire Station	6	0580	0-1												X	X	X	X	X	X
100 F Area Control Plot 58	7	6018	0-1	X	X	X	X	X	X											
100 F Area Control Plot 58	7	6041	1-2	X	X															
<u>200 East Area</u>																				
200 East Control Plot 59	8	6019	0-1	X	X	X	X	X												
200 East Control Plot 59	8	6042	1-2	X	X	X														
200 East Control Plot 59	8	6188	2-4			X														
200 East Control Plot 59	8	6189	4-8			X														
200 East Control Plot 59	8	6190	8-12			X														
200 ENC (East North Central)	9	6362	0-1							X	X	X	X	X	X	X	X	X	X	X
1.25 Miles East of PUREX	10	0581	0-1												X	X	X	X	X	X
200 ESE (East South East)	11	6022	0-1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
200 ESE (East South East)	11	6045	1-2	X	X	X														
200 ESE (East South East)	11	6194	2-4			X														
200 ESE (East South East)	11	6195	4-8			X														
200 ESE (East South East)	11	6196	8-12			X														
2 Miles South of PUREX	12	0582	0-1												X	X	X	X	X	X
3 Miles SSW of PUREX	13	0583	0-1												X	X	X	X	X	X
E Side of US Ecology	14	6281	0-1					X	X								X			
<u>200 West Area</u>																				
E of 200 West Gate	15	6276	0-1					X	X	X	X	X	X	X	X	X	X	X	X	X
2 Miles S of 200 West	16	0584	0-1												X	X	X	X	X	
200 West Control Plot 60	17	6020	0-1	X	X	X	X	X												
200 West Control Plot 60	17	6043	1-2	X	X	X														

TABLE A.1. (contd)

Location	Map Number	Sample Number	Sample Layer (in.)	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<u>200 West Area (contd)</u>																				
200 West Control Plot 60	17	6191	2-4			X														
200 West Control Plot 60	17	6192	4-8			X														
200 West Control Plot 60	17	6193	8-12			X														
<u>Other 200 Area Locations</u>																				
200 Area Fire Station	18	6021	0-1	X	X	X														
200 Area Fire Station	18	6044	1-2	X	X															
Gable Pond Control Plot 43	19	6321	0-1						X											
Inter. 45 and Army Loop Rd.	20	6223	0-1				X	X	X											
Army Loop Rd. Contl. Plot 40	21	6226	0-1				X													
Highway 240 Control Plot 54	22	6002	0-1	X	X	X	X													
Highway 240 Control Plot 54	22	6025	1-2	X	X															
<u>300 Area</u>																				
North of 300 Area	23	6322	0-1						X						X	X	X	X	X	X
North Center 300 Area Fence	24	6279	0-1					X												
300 Area South Gate	25	6222	0-1				X													
South of 300 Area	26	6323	0-1						X						X	X	X	X	X	
331 Bldg. Control Plot 60	27	6014	0-1	X	X	X		X												
331 Bldg. Control Plot 60	27	6037	1-2	X	X															
<u>400 Area and Vicinity</u>																				
Wye Barricade	28	6016	0-1	X	X	X				X	X	X	X	X	X	X	X	X		X
Wye Barricade	28	6039	1-2	X	X															
Wye Barricade (QC Dupl. A)	28	0816	0-1												X	X	X	X	X	X
Wye Barricade (QC Dupl. B)	28	0817	0-1												X	X	X	X	X	X
1 Mile N of WFPSS No. 2	29	6324	0-1						X											
1 Mile S of WFPSS No. 2	29	6325	0-1						X											
FFTF Control Plot 62	30	6015	0-1	X	X	X	X													
FFTF Control Plot 62	30	6038	1-2	X	X															
0.5 Mile NE of FFTF	31	6282	0-1					X	X	X	X	X	X	X	X	X	X	X		X
SE Side of FFTF	32	6277	0-1					X		X	X	X	X	X	X	X	X	X	X	

TABLE A.1. (contd)

Location	Map Number	Sample Number	Sample Layer (in.)	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
<u>Other Onsite Locations</u>																				
N End of Vernita Bridge	33	6005	0-1	X	X	X	X								X	X	X	X	X	
N End of Vernita Bridge	33	6028	1-2	X	X															
Hanford Townsite	34	6017	0-1	X	X	X		X	X	X	X	X	X	X	X	X	X	X		X
Hanford Townsite	34	6040	1-2	X	X															
Prosser Barricade	35	6225	0-1				X	X		X	X	X	X	X	X	X	X	X	X	
ERC (Emer. Reloc. Center)	36	6001	0-1	X	X	X	X													
ERC (Emer. Reloc. Center)	36	6024	1-2	X	X															
E of Arid Land Ecol. Lab	37	6278	0-1					X	X	X	X	X	X	X	X	X	X	X		X
Rattlesnake Springs	38	6003	0-1	X	X	X	X								X	X	X	X	X	X
Rattlesnake Springs	38	6026	1-2	X	X															
Yakima Barricade	39	6004	0-1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
Yakima Barricade	39	6027	1-2	X	X

FIGURE A.1. Onsite Routine Soil Sampling Locations, 1971 to 1987

TABLE A.2. Strontium-90 Concentrations in Soil at Onsite Locations

100 Areas

NE Corner of 100 N Area			
6275	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.2110E+01	0.000E+00

Wahluke Slope Opposite 100-N			
6029	Depth 1-2 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4570E-01	0.000E+00
09/29/71		0.1560E+00	0.000E+00

1 Mile NE of 100 N Area			
0590	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/30/86		0.2390E+00	0.100E-01
06/24/85		0.2750E+00	0.241E-01
05/17/84		0.2940E+00	0.166E-01
08/05/83		0.7000E+00	0.227E-01
08/24/82		0.1980E+00	0.324E-01

100 Area Fire Station			
0580	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.3310E+00	0.123E-01
04/30/86		0.3430E+00	0.106E-01
05/30/85		0.5650E+00	0.212E-01
05/17/84		0.4530E+00	0.237E-01
08/05/83		0.1670E+01	0.327E-01
08/24/82		0.2810E+00	0.352E-01

1 Mile E of 100 N Area			
0578	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.3070E+00	0.135E-01
04/30/86		0.2190E+00	0.103E-01
06/24/85		0.4390E+00	0.299E-01
05/17/84		0.2170E+00	0.117E-01
08/11/83		0.8520E+00	0.258E-01
08/24/82		0.1530E+00	0.587E-01

100 F Area Control Plot 58			
6018	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.1890E+00	0.000E+00
08/18/75		0.3300E+00	0.000E+00
09/24/74		0.3170E+00	0.000E+00
10/25/73		0.2850E+00	0.450E-02
10/25/72		0.2850E+00	0.000E+00
09/30/71		0.4090E+00	0.000E+00

1 Mile SE of 100 N Trench			
6320	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.3230E+00	0.190E-01
08/11/76		0.2210E+00	0.000E+00

100 F Area Control Plot 58			
6041	Depth 1-2 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1040E+00	0.000E+00
09/30/71		0.1000E-02	0.000E+00

Wahluke Slope Opposite 100-N			
6006	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.2520E-01	0.000E+00
10/25/73		0.3130E+00	0.520E-02
10/25/72		0.3830E-01	0.000E+00
09/29/71		0.1280E+00	0.000E+00

TABLE A.2. (contd)

200 East Area200 East Control Plot 59
6019 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.2810E+00	0.000E+00
09/24/74		0.7600E+00	0.000E+00
10/25/73		0.1240E+00	0.360E-02
10/25/72		0.2100E+00	0.000E+00
09/30/71		0.1020E+00	0.000E+00

200 East Control Plot 59
6042 Depth 1-2 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.8260E-01	0.270E-02
10/25/72		0.5210E-01	0.000E+00

200 East Control Plot 59
6188 Depth 2-4 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1640E-01	0.230E-02

200 East Control Plot 59
6189 Depth 4-8 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.0000E+00	0.230E-02

200 East Control Plot 59
6190 Depth 8-12 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2030E-01	0.230E-02

200 ENC (East North Central)
6362 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1130E+01	0.406E-01
04/30/86		0.6140E+00	0.143E-01
05/31/85		0.1180E+01	0.275E-01
05/17/84		0.1960E+00	0.194E+00
08/12/83		0.2720E+01	0.466E-01
08/30/82		0.9310E+00	0.128E+00
08/10/81	1	0.6300E+00	0.630E-02
08/10/81		0.4520E+00	0.230E-01
08/05/80		0.6950E+00	0.570E-01
09/11/79		0.9540E+00	0.150E-01
08/10/78		0.6980E+00	0.170E-01
06/14/77		<0.2250E-02	0.150E-01

1.25 Miles East of PUREX
0581 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.3440E+00	0.202E-01
04/30/86		0.3920E+00	0.129E-01
05/31/85		0.9000E+00	0.294E-01
05/15/84		0.7260E+00	0.482E-01
08/05/83		0.7760E+00	0.327E-01
08/24/82		0.3340E+00	0.883E-01

TABLE A.2. (contd)

200 East Area

200 ESE (East South East)			
6022	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2380E+00	0.177E-01
04/29/86		0.2700E+00	0.941E-02
06/12/85		0.1970E+00	0.184E-01
05/15/84		0.4360E+00	0.575E-01
08/12/83		0.1280E+01	0.283E-01
08/30/82		0.2940E+00	0.482E-01
08/10/81		0.1800E+00	0.670E-02
08/05/80		0.2900E+00	0.230E-01
09/11/79		0.2640E+00	0.900E-02
08/10/78		0.5910E-01	0.450E-02
06/14/77		0.6130E-01	0.470E-02
08/11/76		0.1820E+00	0.000E+00
08/18/75	5	0.7330E+00	0.000E+00
08/18/75	1	0.5610E+00	0.000E+00
08/18/75	2	0.4370E+00	0.000E+00
08/18/75	4	0.3490E+00	0.000E+00
08/18/75	3	0.4500E+00	0.000E+00
09/24/74		0.1010E+00	0.000E+00
10/25/73		0.4690E+00	0.540E-02
10/25/72		0.7070E+00	0.000E+00
09/30/71		0.7570E+00	0.000E+00

200 ESE (East South East)			
6045	Depth 1-2 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2180E+00	0.360E-02
10/25/72		0.2990E+00	0.000E+00
09/30/71		0.1220E+00	0.000E+00

200 ESE (East South East)			
6194	Depth 2-4 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1860E+00	0.410E-02

200 ESE (East South East)			
6195	Depth 4-8 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.9230E-02	0.230E-02

200 ESE (East South East)			
6196	Depth 8-12 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1370E-01	0.230E-02

2 Miles South of PUREX			
0582	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1110E+00	0.116E-01
04/30/86		0.5370E+00	0.148E-01
06/24/85		0.1370E+00	0.141E-01
05/15/84		0.5020E+00	0.105E+00
08/05/83		0.3790E+00	0.200E-01
08/24/82		0.1800E+00	0.459E-01

3 Miles SSW of PUREX			
0583	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2010E-01	0.520E-02
04/30/86		0.1130E+00	0.662E-02
06/24/85		0.3930E+00	0.227E-01
05/15/84		0.1160E+00	0.504E-01
08/05/83		0.7930E+00	0.332E-01
08/24/82		0.1300E+00	0.998E-01

E Side of US Ecology			
6281	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.9670E-01	0.116E-01
08/11/76		0.2450E+00	0.000E+00
08/18/75		0.5770E-01	0.000E+00

TABLE A.2. (contd)

200 West Area

E of 200 West Gate 6276 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.3800E+00	0.199E-01
05/01/86		0.5610E+00	0.143E-01
05/31/85		0.6050E+00	0.387E-01
05/15/84		0.3340E+00	0.222E-01
08/12/83		0.2560E+01	0.480E-01
08/30/82		0.4770E+00	0.105E+00
08/10/81		0.4810E+00	0.270E-01
08/04/80		0.8250E+00	0.950E-02
09/11/79		0.1110E+01	0.180E-01
08/09/78		0.1320E-01	0.320E-02
06/14/77		0.1530E+00	0.720E-02
08/11/76		0.2540E+00	0.000E+00
08/18/75		0.2930E+00	0.000E+00

2 Miles S of 200 West 0584 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/01/86		0.2300E+00	0.153E-01
05/31/85		0.3720E+00	0.266E-01
05/17/84		0.1390E+00	0.228E-01
08/05/83		0.2770E+00	0.153E-01
08/24/82		0.5760E-01	0.458E-02

200 West Control Plot 60 6020 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.2250E+00	0.000E+00
09/24/74		0.3130E+00	0.000E+00
10/25/73		0.6580E-01	0.230E-02
10/25/72		0.3940E+00	0.000E+00
09/29/71		0.6520E+00	0.000E+00

200 West Control Plot 60 6043 Depth 1-2 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1280E+00	0.340E-02
10/25/72		0.5050E-01	0.000E+00
09/30/71		0.1100E+00	0.000E+00

200 West Control Plot 60 6191 Depth 2-4 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.9460E-02	0.230E-02

200 West Control Plot 60 6192 Depth 4-8 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.4730E-02	0.230E-02

200 West Control Plot 60 6193 Depth 8-12 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.1130E-02	0.250E-02

Other 200 Area Locations

200 Area Fire Station 6021 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.3830E-01	0.230E-02
10/25/72		0.2220E+00	0.000E+00
09/30/71		0.2210E+00	0.000E+00

200 Area Fire Station 6044 Depth 1-2 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1080E+00	0.000E+00
09/30/71		0.3000E-01	0.000E+00

TABLE A.2. (contd)

Other 200 Area Locations

Gable Pond Control Plot 43
6321 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.1020E+00	0.000E+00

Inter. 4S and Army Loop Rd.
6223 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.4100E-01	0.000E+00
08/18/75		0.3250E+00	0.000E+00
09/24/74		0.8640E-01	0.000E+00

Army Loop Rd. Cont'l. Plot 40
6226 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1310E-01	0.000E+00

Highway 240 Control Plot 54
6002 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.4600E-01	0.000E+00
10/25/73		0.4260E-01	0.230E-02
10/25/72		0.2050E+00	0.000E+00
09/29/71		0.1610E+00	0.000E+00

Highway 240 Control Plot 54
6025 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.9380E-01	0.000E+00
09/29/71		0.3200E-01	0.000E+00

300 Area

North of 300 Area
6322 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.2380E+00	0.143E-01
11/25/86		0.1840E+00	0.181E-01
05/31/85		0.3230E+00	0.232E-01
05/16/84		0.5810E+00	0.287E-01
08/11/83		0.7330E+00	0.225E-01
09/03/82		0.2220E+00	0.343E-01
08/10/76		0.7240E-01	0.000E+00

North Center 300 Area Fence
6279 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.9300E+00	0.000E+00

300 Area South Gate
6222 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1230E+00	0.000E+00

South of 300 Area
6323 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.3100E+00	0.110E-01
05/31/85		0.5080E+00	0.248E-01
05/16/84		0.3470E+00	0.150E-01
08/11/83		0.1360E+01	0.386E-01
09/03/82		0.2400E+00	0.145E+00
08/10/76		0.5520E-01	0.000E+00

TABLE A.2. (contd)

300 Area331 Bldg. Control Plot 50
6014 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.4570E-01	0.000E+00
10/25/73		0.1420E-01	0.230E-02
10/25/72		0.5140E-01	0.000E+00
09/30/71		0.2760E+00	0.000E+00

Wye Barricade (QC Dupl. A)
0816 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1250E+00	0.826E-02
04/29/86		0.4510E-01	0.453E-02
07/03/85		0.2610E+00	0.219E-01
06/06/84		0.1580E+00	0.119E-01
08/11/83		0.9190E+00	0.252E-01
08/16/82		0.2400E+00	0.511E-01

331 Bldg. Control Plot 50
6037 Depth 1-2 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.5730E-01	0.000E+00
09/30/71		0.1960E+00	0.000E+00

Wye Barricade (QC Dupl. B)
0817 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1580E+00	0.942E-02
04/29/86		0.4130E-01	0.432E-02
07/03/85		0.4410E+00	0.247E-01
06/06/84		0.1430E+00	0.834E-02
08/11/83		0.9350E+00	0.287E-01
08/16/82		0.2420E+00	0.422E-01

400 Area and Vicinity

Wye Barricade

6016 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1830E+00	0.878E-02
07/03/85		0.3070E+00	0.186E-01
05/15/84		0.3050E+00	0.442E-01
08/11/83		0.8100E+00	0.258E-01
08/16/82		0.2100E+00	0.265E-01
08/10/81		0.1980E+00	0.230E-01
08/05/80		0.2320E+00	0.680E-02
09/11/79		0.2600E+00	0.870E-02
08/08/78		0.3690E-01	0.370E-02
06/14/77		0.1400E+00	0.810E-02
10/25/73		0.1340E+00	0.360E-02
10/25/72		0.2850E+00	0.000E+00
09/30/71		0.2170E+00	0.000E+00

1 Mile N of WPPSS No. 2

6324 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.6940E-02	0.000E+00

1 Mile S of WPPSS No. 2

6325 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.1520E+00	0.000E+00

Wye Barricade

6039 Depth 1-2 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1750E+00	0.000E+00

FFTF Control Plot 62

6015 Depth 0-1 in.

Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1780E-01	0.000E+00
10/25/73		0.7570E-01	0.270E-02
10/25/72		0.4530E-01	0.000E+00
09/30/71		0.9100E-01	0.000E+00

TABLE A.2. (contd)

400 Area and Vicinity

FFTF Control Plot 62
6038 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1920E-01	0.000E+00
09/30/71		0.9100E-01	0.000E+00

0.5 Mile NE of FFTF
6282 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.8550E-01	0.850E-02
06/05/85		0.1720E+00	0.179E-01
05/17/84		0.1780E+00	0.208E-01
08/12/83		0.5190E+00	0.204E-01
08/30/82		0.4150E-01	0.350E-01
08/10/81		0.3780E-01	0.740E-02
08/05/80		0.4160E-01	0.110E-01
09/11/79		0.8530E-01	0.670E-02
08/08/78		0.4260E-01	0.460E-02
06/14/77		0.1850E-01	0.360E-02
08/10/76		0.3160E+00	0.000E+00
08/20/75		0.5940E-01	0.000E+00

SE Side of FFTF
6277 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.4380E-01	0.486E-02
06/05/85		0.1960E+00	0.165E-01
05/17/84		0.3200E-01	0.536E-01
08/12/83		0.5410E+00	0.188E-01
08/30/82		0.4700E-01	0.450E-01
08/10/81		0.4930E-01	0.230E-02
08/05/80		0.8790E-01	0.670E-02
09/11/79		0.7650E-01	0.670E-02
08/08/78		0.8750E-02	0.330E-02
06/14/77		0.1310E+00	0.770E-02
08/20/75		0.1730E+00	0.000E+00

Other Onsite Locations

N End of Vernita Bridge
6005 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/02/86		0.8800E-01	0.608E-02
06/11/85		0.3090E+00	0.209E-01
05/31/84		0.1670E+00	0.149E-01
08/11/83		0.5190E+00	0.172E-01
08/24/82		0.1080E+00	0.655E-01
09/23/74		0.2520E-01	0.000E+00
10/25/73		0.1270E+00	0.320E-02
10/25/72		0.9650E-01	0.000E+00
09/29/71		0.8000E-01	0.000E+00

N End of Vernita Bridge
6028 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4330E-01	0.000E+00
09/29/71		0.8000E-01	0.000E+00

Hanford Townsite
6017 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.2880E+00	0.118E-01
06/12/85		0.2460E+00	0.207E-01
05/17/84		0.3110E+00	0.293E-01
08/12/83		0.1920E+01	0.478E-01
08/30/82		0.2420E+00	0.797E-01
08/10/81		0.3990E+00	0.430E-02
08/05/80		0.2280E+00	0.700E-02
09/11/79		0.2040E+00	0.860E-02
08/08/78		0.3120E-01	0.370E-02
06/14/77		0.3400E-01	0.360E-02
08/11/76		0.1230E+00	0.000E+00
08/18/75		0.4050E+00	0.000E+00
10/25/73		0.3320E+00	0.520E-02
10/25/72		0.3340E+00	0.000E+00
09/30/71		0.6720E+00	0.000E+00

TABLE A.2. (contd)

Other Onsite Locations

Hanford Townsite
6040 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.2570E+00	0.000E+00
09/30/71		0.7600E-01	0.000E+00

Prosser Barricade
6225 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.1720E+00	0.833E-02
06/06/85		0.4510E+00	0.262E-01
05/15/84		0.3610E+00	0.217E-01
08/23/83		0.1110E+01	0.273E-01
08/16/82		0.2910E+00	0.184E-01
08/11/81		0.1330E+00	0.740E-02
08/04/80		<0.3150E-02	0.680E-02
09/12/79		0.1070E+00	0.670E-02
08/08/78		0.1600E+00	0.770E-02
06/14/77		0.1130E+00	0.650E-02
08/19/75		0.1770E+00	0.000E+00
09/24/74		0.4790E+00	0.000E+00

ERC (Emer. Reloc. Center)
6001 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1750E-01	0.000E+00
10/25/73		0.7570E-01	0.270E-02
10/25/72		0.9650E-01	0.000E+00
09/30/71		0.1490E+00	0.000E+00

ERC (Emer. Reloc. Center)
6024 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3440E-01	0.000E+00
09/30/71		0.1020E+00	0.000E+00

E of Arid Land Ecol. Lab
6278 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.3980E+00	0.256E-01
06/12/85		0.6070E+00	0.349E-01
05/24/84		0.3580E+00	0.394E-01
08/23/83		0.1630E+01	0.323E-01
08/16/82		0.3000E+00	0.584E-01
08/13/81		0.2720E+00	0.340E-01
08/05/80		<0.0000E+00	0.680E-02
09/12/79		0.3700E+00	0.100E-01
08/10/78		0.5770E-02	0.330E-02
06/14/77		0.7570E-01	0.560E-02
08/10/76		0.1540E-01	0.000E+00
08/20/75		0.4690E+00	0.000E+00

Rattlesnake Springs
6003 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1230E+00	0.134E-01
05/23/86		0.1800E+00	0.801E-02
06/06/85		0.3280E+00	0.243E-01
05/24/84		0.7450E-01	0.883E-02
08/11/83		0.8880E+00	0.331E-01
09/02/82		0.1710E+00	0.381E-01
09/23/74		0.3440E+00	0.000E+00
10/25/73		0.7300E-01	0.270E-02
10/25/72		0.1380E-01	0.000E+00

Rattlesnake Springs
6026 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3060E-01	0.000E+00
09/29/71		0.4400E-01	0.000E+00

TABLE A.2. (contd)

Other Onsite Locations

Yakima Barricade			
6004	Depth 0-1 in.		Sr-90
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87	---	0.6390E-01	0.121E-01
06/06/85		0.5370E+00	0.293E-01
05/24/84		0.1340E+00	0.173E-01
08/11/83		0.5910E+00	0.226E-01
08/17/82		0.9040E-01	0.337E-02
08/11/81		0.2230E+00	0.230E-01
08/04/80		0.1600E-01	0.700E-02
09/11/79		0.2290E+00	0.120E-01
08/08/78		0.9490E-02	0.300E-02
06/14/77		0.1300E-01	0.340E-02
08/10/76		0.1520E+00	0.000E+00
08/19/75		0.1210E+00	0.000E+00
09/23/74		0.1310E-01	0.000E+00
10/25/73		0.1660E+00	0.380E-02
10/25/72		0.1170E+00	0.000E+00
09/29/71		0.1590E+00	0.000E+00

Yakima Barricade			
6027	Depth 1-2 in.		Sr-90
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72	---	0.1070E+00	0.000E+00
09/29/71		0.1590E+00	0.000E+00

TABLE A.3. Cesium-137 Concentrations in Soil at Onsite Locations

100 Areas

NE Corner of 100 N Area
6275 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.1180E+01	0.000E+00

Wahluke Slope Opposite 100-N
6029 Depth 1-2 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4790E+00	0.000E+00
09/29/71		0.7470E-01	0.000E+00

1 Mile NE of 100 N Area
0590 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/30/86		0.8120E+00	0.484E-01
06/24/85		0.7620E+00	0.457E-01
05/17/84		0.7040E+00	0.482E-01
08/05/83		0.4790E+00	0.403E-01
08/24/82		0.6690E+00	0.812E-01

100 Area Fire Station
0580 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1300E+01	0.581E-01
04/30/86		0.1580E+01	0.679E-01
05/30/85		0.1160E+01	0.430E-01
05/17/84		0.9840E+00	0.589E-01
08/05/83		0.1410E+01	0.662E-01
08/24/82		0.9850E+00	0.603E-01

1 Mile E of 100 N Area
0578 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1080E+01	0.521E-01
04/30/86		0.5540E+00	0.392E-01
06/24/85		0.6200E+00	0.437E-01
05/17/84		0.6660E+00	0.445E-01
08/11/83		0.7670E+00	0.515E-01
08/24/82		0.5390E+00	0.391E-01

100 F Area Control Plot 58
6018 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.4790E+00	0.000E+00
08/18/75		0.9200E+00	0.000E+00
09/24/74		0.6110E+00	0.000E+00
10/25/73		0.7330E+00	0.000E+00
10/25/72		0.6500E+00	0.000E+00
09/30/71		0.5120E+00	0.000E+00

1 Mile SE of 100 N Trench
6320 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.8180E+00	0.487E-01
08/11/76		0.4180E+00	0.000E+00

100 F Area Control Plot 58
6041 Depth 1-2 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4070E+00	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

Wahluke Slope Opposite 100-N
6006 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.1470E+00	0.000E+00
10/25/73		0.1200E+01	0.000E+00
10/25/72		0.6520E+00	0.000E+00
09/29/71		0.8180E+00	0.000E+00

TABLE A.3. (contd)

200 East Area

200 E Control Plot 59
6019 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.2460E+01	0.000E+00
09/24/74		0.2910E+01	0.000E+00
10/25/73		0.3430E+00	0.000E+00
10/25/72		0.4880E+00	0.000E+00
09/30/71		0.1290E+00	0.000E+00

200 E Control Plot 59
6042 Depth 1-2 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1700E+00	0.000E+00
10/25/72		0.2980E+00	0.000E+00
09/29/71		0.5400E-01	0.000E+00

200 E Control Plot 59
6188 Depth 2-4 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.3600E-01	0.000E+00

200 E Control Plot 59
6189 Depth 4-8 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1040E+00	0.000E+00

200 E Control Plot 59
6190 Depth 8-12 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2300E-01	0.000E+00

200 ENC (East North Central)
6362 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1600E+02	0.191E+00
04/30/86		0.9570E+01	0.146E+00
05/31/85		0.2280E+02	0.229E+00
05/17/84		0.2120E+02	0.233E+00
08/12/83		0.2810E+02	0.328E+00
08/30/82		0.2240E+02	0.373E+00
08/10/81	1	0.1810E+02	0.160E+00
08/10/81		0.1240E+02	0.160E+00
08/05/80		0.2750E+02	0.440E+00
09/11/79		0.3520E+02	0.500E+00
08/10/78		0.1640E+01	0.120E+00
06/14/77		0.2860E+02	0.480E+00

1.25 Miles East of PUREX
0581 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.6890E+00	0.364E-01
04/30/86		0.1400E+01	0.543E-01
05/31/85		0.3010E+01	0.900E-01
05/15/84		0.1410E+01	0.573E-01
08/05/83		0.1290E+01	0.669E-01
08/24/82		0.1450E+01	0.978E-01

TABLE A.3. (contd)

200 East Area

200 ESE (East South East)
6022 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.6130E+00	0.363E-01
04/29/86		0.3730E+00	0.279E-01
06/12/85		0.5500E+00	0.341E-01
05/15/84		0.5310E+00	0.379E-01
08/12/83		0.1560E+00	0.262E-01
08/30/82		0.1790E+01	0.756E-01
08/10/81		0.1160E+01	0.500E-01
08/05/80		0.1170E+01	0.870E-01
09/11/79		0.2270E+01	0.120E+00
08/10/78		0.1990E+02	0.390E+00
06/14/77		0.5680E+00	0.710E-01
08/11/76		0.8390E+00	0.000E+00
08/18/75	5	0.1530E+01	0.000E+00
08/18/75	1	0.1140E+01	0.000E+00
08/18/75	2	0.1040E+01	0.000E+00
08/18/75	4	0.1160E+01	0.000E+00
08/18/75	3	0.1190E+01	0.000E+00
09/24/74		0.1450E+01	0.000E+00
10/25/73		0.2250E+01	0.000E+00
10/25/72		0.1820E+01	0.000E+00
09/30/71		0.1420E+01	0.000E+00

200 ESE (East South East)
6045 Depth 1-2 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.4600E+00	0.000E+00
10/25/72		0.1410E+00	0.000E+00
09/30/71		0.1070E+00	0.000E+00

200 ESE (East South East)
6194 Depth 2-4 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.9270E-01	0.000E+00

200 ESE (East South East)
6195 Depth 4-8 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1000E+00	0.000E+00

200 ESE (East South East)
6196 Depth 8-12 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1150E-01	0.000E+00

2 Miles South of PUREX
0582 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1340E+00	0.248E-01
04/30/86		0.7110E+00	0.413E-01
06/24/85		0.5620E+00	0.394E-01
05/15/84		0.1390E+00	0.203E-01
08/05/83		0.1500E+00	0.255E-01
08/24/82		0.5400E+00	0.721E-01

3 Miles SSW of PUREX
0583 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<0.1130E-01	0.160E-01
04/30/86		0.1170E+00	0.218E-01
06/24/85		0.1370E+00	0.208E-01
05/15/84		0.6390E-01	0.216E-01
08/05/83		0.3060E+00	0.369E-01
08/24/82		0.3130E+00	0.625E-01

E Side of US Ecology
6281 Depth 0-1 in.

Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.2080E-01	0.184E-01
08/11/76		0.6600E+00	0.000E+00
08/18/75		0.2160E+00	0.000E+00

TABLE A.3. (contd)

200 West Area

E of 200 West Gate			
6276	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1300E+01	0.536E-01
05/01/86		0.3080E+01	0.907E-01
05/31/85		0.1970E+01	0.693E-01
05/15/84		0.5850E+00	0.413E-01
08/12/83		0.5660E+01	0.152E+00
08/30/82		0.3210E+01	0.101E+00
08/10/81		0.2530E+01	0.750E-01
08/04/80		0.4780E+01	0.180E+00
09/11/79		0.3840E+01	0.170E+00
08/09/78		0.4200E+01	0.180E+00
06/14/77		0.9710E+00	0.900E-01
08/11/76		0.9070E+00	0.000E+00
08/18/75		0.3010E+01	0.000E+00

2 Miles S of 200 West			
0584	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/01/86		0.4950E+00	0.388E-01
05/31/85		0.3020E+00	0.303E-01
05/17/84		0.1670E+00	0.286E-01
08/05/83		0.6900E-01	0.216E-01
08/24/82		0.2110E+00	0.622E-01

200 West Control Plot 60			
6020	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.3500E+00	0.000E+00
09/24/74		0.5340E+00	0.000E+00
10/25/73		0.2360E+01	0.000E+00
10/25/72		0.1440E+01	0.000E+00
09/29/71		0.1640E+01	0.000E+00

200 West Control Plot 60			
6043	Depth 1-2 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.4410E+00	0.000E+00
10/25/72		0.3080E+00	0.000E+00
09/30/71		0.1190E+00	0.000E+00

200 West Control Plot 60			
6191	Depth 2-4 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1540E-01	0.000E+00

200 West Control Plot 60			
6192	Depth 4-8 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.3570E-01	0.000E+00

200 West Control Plot 60			
6193	Depth 8-12 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.3610E-01	0.000E+00

Other 200 Area Locations

200 Area Fire Station			
6021	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.6140E+00	0.000E+00
10/25/72		0.2370E+00	0.000E+00
09/30/71		0.6090E+00	0.000E+00

200 Area Fire Station			
6044	Depth 1-2 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.2900E+00	0.000E+00
09/30/71		0.1260E+00	0.000E+00

TABLE A.3. (contd)

Other 200 Area Locations

Gable Pond Control Plot 43

6321	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.9120E+00	0.000E+00

Inter. 4S and Army Loop Rd.

6223	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.1790E+00	0.000E+00
08/18/75		0.5760E+00	0.000E+00
09/24/74		0.7190E+00	0.000E+00

Army Loop Rd. Contl. Plot 40

6226	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1680E+00	0.000E+00

Highway 240 Control Plot 54

6002	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.3660E+00	0.000E+00
10/25/73		0.1820E+00	0.000E+00
10/25/72		0.5070E+00	0.000E+00
09/29/71		0.3290E+00	0.000E+00

Highway 240 Control Plot 54

6025	Depth 1-2 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1890E+00	0.000E+00
09/29/71		0.5980E-01	0.000E+00

300 Area

North of 300 Area

6322	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1170E+01	0.618E-01
11/25/86		0.4180E+00	0.346E-01
04/29/86		0.6680E+00	0.468E-01
05/31/85		0.4600E+00	0.437E-01
05/16/84		0.4310E+00	0.375E-01
08/11/83		0.5290E+00	0.412E-01
09/03/82		0.8500E+00	0.516E-01
08/10/76		0.4800E+00	0.000E+00

North Center 300 Area Fence

6279	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.5920E+00	0.000E+00

300 Area South Gate

6222	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1500E+01	0.000E+00

South of 300 Area

6323	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.6810E+00	0.434E-01
05/31/85		0.8830E+00	0.490E-01
05/16/84		0.1090E+01	0.584E-01
08/11/83		0.1100E+01	0.621E-01
09/03/82		0.1090E+01	0.582E-01
08/10/76		0.5420E+00	0.000E+00

TABLE A.3. (contd)

300 Area

331 Bldg. Control Plot 50 6014 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

08/20/75		0.5700E-01	0.000E+00
10/25/73		0.4450E-01	0.000E+00
10/25/72		0.1480E+00	0.000E+00
09/30/71		0.1290E+01	0.000E+00

331 Bldg. Control Plot 50 6037 Depth 1-2 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

10/25/72		0.2460E+00	0.000E+00
09/30/71		0.2040E+00	0.000E+00

400 Area and Vicinity

Wye Barricade 6016 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

04/29/87		0.5880E+00	0.359E-01
07/03/85		0.1320E+01	0.578E-01
05/15/84		0.6800E+00	0.398E-01
08/11/83		0.8420E+00	0.543E-01
08/16/82		0.1060E+01	0.566E-01
08/10/81		0.6880E+00	0.390E-01
08/05/80		0.1080E+01	0.960E-01
09/11/79		0.7930E+00	0.720E-01
08/08/78		0.5960E+00	0.710E-01
06/14/77		0.6010E+00	0.720E-01
10/25/73		0.7080E+00	0.000E+00
10/25/72		0.7610E+00	0.000E+00
09/30/71		0.5250E+00	0.000E+00

Wye Barricade 6039 Depth 1-2 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

10/25/72		0.4160E+00	0.000E+00
09/30/71		0.2940E+00	0.000E+00

Wye Barricade (QC Dupl. A) 0816 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

04/29/87		0.3490E+00	0.321E-01
04/29/86		0.5210E-01	0.189E-01
07/03/85		0.8540E+00	0.461E-01
06/06/84		0.2320E+00	0.256E-01
08/11/83		0.7720E+00	0.523E-01
08/16/82		0.1160E+01	0.830E-01

Wye Barricade (QC Dupl. B) 0817 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

04/29/87		0.5360E+00	0.442E-01
04/29/86		0.3260E-01	0.134E-01
07/03/85		0.9850E+00	0.489E-01
06/06/84		0.3120E+00	0.344E-01
08/11/83		0.8850E+00	0.526E-01
08/16/82		0.1140E+01	0.925E-01

1 Mile N of WPPSS No. 2 6324 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

08/10/76		<-0.1580E-01	0.000E+00

1 Mile S of WPPSS No. 2 6325 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

08/10/76		0.4740E+00	0.000E+00

TABLE A.3. (contd)

400 Area and Vicinity

FFTF Control Plot 62			
6015	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1360E+00	0.000E+00
10/25/73		0.2640E+00	0.000E+00
10/25/72		0.1310E+00	0.000E+00
09/30/71		0.1940E+00	0.000E+00

FFTF Control Plot 62			
6038	Depth 1-2 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.5200E-01	0.000E+00
09/30/71		0.2350E-01	0.000E+00

SE Side of FFTF			
6277	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.4440E-01	0.169E-01
06/05/85		0.8300E-01	0.212E-01
05/17/84		0.8010E-01	0.194E-01
08/12/83		0.1980E+00	0.309E-01
08/30/82		0.1940E+00	0.300E-01
08/10/81		0.7840E-01	0.170E-01
08/05/80		0.4020E+00	0.530E-01
09/11/79		0.1900E+00	0.430E-01
08/08/78		0.3780E+00	0.580E-01
06/14/77		0.5190E+00	0.680E-01
08/20/75		0.1770E+00	0.000E+00

Other Onsite Locations

0.5 Mile NE of FFTF			
6282	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.3250E+00	0.326E-01
06/05/85		0.8030E-01	0.272E-01
05/17/84		0.1170E+00	0.243E-01
08/12/83		0.1770E+00	0.273E-01
08/30/82		0.1260E+00	0.230E-01
08/10/81		0.1050E+00	0.180E-01
08/05/80		0.2170E+00	0.410E-01
09/11/79		0.1880E+00	0.390E-01
08/08/78		0.1370E+00	0.370E-01
06/14/77		0.1680E+01	0.120E+00
08/10/76		0.6270E+00	0.000E+00
08/20/75		0.1960E-01	0.000E+00

N End of Vernita Bridge			
6005	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/02/86		0.2000E+00	0.349E-01
06/11/85		0.4550E+00	0.369E-01
05/31/84		0.2650E+00	0.341E-01
08/11/83		0.5530E+00	0.478E-01
08/24/82		0.5800E+00	0.651E-01
09/23/74		0.9860E-01	0.000E+00
10/25/73		0.3880E+00	0.000E+00
10/25/72		0.2630E+00	0.000E+00
09/29/71		0.4780E+00	0.000E+00

N End of Vernita Bridge			
6028	Depth 1-2 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1720E+00	0.000E+00
09/29/71		0.8130E-01	0.000E+00

TABLE A.3. (contd)

Other Onsite Locations

Hanford Townsite			
6017	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1140E+01	0.574E-01
06/12/85		0.1100E+01	0.544E-01
05/17/84		0.9130E+00	0.533E-01
08/12/83		0.1020E+01	0.711E-01
08/30/82		0.9610E+00	0.803E-01
08/10/81		0.1570E+01	0.600E-01
08/05/80		0.1680E+01	0.120E+00
09/11/79		0.1090E+01	0.930E-01
08/08/78		0.8370E+00	0.840E-01
06/14/77		0.7660E+00	0.810E-01
08/11/76		0.5310E+00	0.000E+00
08/18/75		0.1970E+01	0.000E+00
10/25/73		0.1230E+01	0.000E+00
10/25/72		0.1250E+01	0.000E+00
09/30/71		0.9830E+00	0.000E+00

ERC (Emer. Reloc. Center)			
6001	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.1060E+00	0.000E+00
10/25/73		0.1260E+01	0.000E+00
10/25/72		0.4200E-01	0.000E+00
09/30/71		0.8030E+00	0.000E+00

ERC (Emer. Reloc. Center)			
6024	Depth 1-2 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3000E-02	0.000E+00
09/30/71		0.6430E-01	0.000E+00

Hanford Townsite			
6040	Depth 1-2 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3110E+00	0.000E+00
09/30/71		0.4120E-01	0.000E+00

E of Arid Land Ecol. Lab			
6278	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.1080E+01	0.613E-01
06/12/85		0.1560E+01	0.688E-01
05/24/84		0.5480E+00	0.427E-01
08/23/83		0.1480E+01	0.689E-01
08/16/82		0.1130E+01	0.103E+00
08/13/81		0.3690E+00	0.290E-01
08/05/80		0.1180E+01	0.100E+00
09/12/79		0.1070E+01	0.930E-01
08/10/78		0.6060E+00	0.690E-01
06/14/77		0.9730E+00	0.900E-01
08/10/76		0.3950E+00	0.000E+00
08/20/75		0.1550E+01	0.000E+00

Prosser Barricade			
6225	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.3170E+00	0.324E-01
06/06/85		0.7320E+00	0.488E-01
05/15/84		0.1520E+00	0.253E-01
08/23/83		0.7670E+00	0.533E-01
08/16/82		0.1190E+01	0.606E-01
08/11/81		0.2140E+00	0.230E-01
08/04/80		0.9450E+00	0.800E-01
09/12/79		0.9170E+00	0.850E-01
08/08/78		0.5970E+00	0.710E-01
06/14/77		0.8160E+00	0.830E-01
08/19/75		0.2040E+00	0.000E+00
09/24/74		0.9060E+00	0.000E+00

TABLE A.3. (contd)

Other Onsite Locations

Rattlesnake Springs			
6003	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.3190E+00	0.352E-01
05/23/86		0.3700E+00	0.352E-01
06/06/85		0.4630E+00	0.368E-01
05/24/84		0.1400E+00	0.306E-01
08/11/83		0.5170E+00	0.454E-01
09/02/82		0.7010E+00	0.501E-01
09/23/74		0.9550E+00	0.000E+00
10/25/73		0.1470E+01	0.000E+00
10/25/72		0.1520E+01	0.000E+00
09/29/71		0.9690E+00	0.000E+00

Yakima Barricade			
6027	Depth 1-2 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3570E+00	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

Rattlesnake Springs			
6026	Depth 1-2 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3510E+00	0.000E+00
09/29/71		0.1360E+00	0.000E+00

Yakima Barricade			
6004	Depth 0-1 in.	Cs-137	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.8060E-01	0.203E-01
06/06/85		0.1070E+01	0.661E-01
05/24/84		0.1020E+00	0.275E-01
08/11/83		0.6970E+00	0.535E-01
08/17/82		0.4150E+00	0.362E-01
08/11/81		0.3140E+00	0.270E-01
08/04/80		0.7730E+00	0.740E-01
09/11/79		0.8170E+00	0.830E-01
08/08/78		0.2720E+00	0.510E-01
06/14/77		0.6160E+00	0.730E-01
08/10/76		0.3920E+00	0.000E+00
08/19/75		0.9500E-01	0.000E+00
09/23/74		0.1100E+00	0.000E+00
10/25/73		0.5860E+00	0.000E+00
10/25/72		0.2580E+00	0.000E+00
09/29/71		0.1740E+00	0.000E+00

TABLE A.4. Plutonium-238 Concentrations in Soil at Onsite Locations

100 Areas

NE Corner of 100 N Area 6275 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.1820E-02	0.000E+00

Wahlake Slope Opposite 100-N 6029 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.6350E-02	0.000E+00
09/29/71		0.3000E-02	0.000E+00

1 Mile NE of 100 N Area 0590 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/30/86		0.3790E-03	0.219E-03
06/24/85		<0.1530E-03	0.188E-03
05/17/84		0.3580E-03	0.354E-03
08/05/83		<0.2730E-03	0.385E-03
08/24/82		0.1420E-02	0.113E-02

100 Area Fire Station 0580 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.5540E-03	0.254E-03
04/30/86		0.1200E-02	0.412E-03
05/30/85		0.7050E-03	0.286E-03
05/17/84		0.7410E-03	0.320E-03
08/05/83		<.1000E-03	0.500E-03
08/24/82		<0.1120E-03	0.774E-03

1 Mile E of 100 N Area 0578 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.6450E-03	0.338E-03
04/30/86		0.7500E-03	0.353E-03
06/24/85		0.2850E-03	0.187E-03
05/17/84		<0.4550E-03	0.643E-03
08/11/83		<0.3180E-03	0.337E-03
08/24/82		<0.5840E-03	0.886E-03

100 F Area Control Plot 58 6018 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.1440E-03	0.000E+00
08/18/75		0.6910E-03	0.000E+00
09/24/74		0.2330E-03	0.000E+00
10/25/73		<0.1300E-02	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
09/30/71		0.2630E-02	0.000E+00

1 Mile SE of 100 N Trench 6320 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.6980E-03	0.368E-03
08/11/76		<.1390E-03	0.000E+00

100 F Area Control Plot 58 6041 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

Wahlake Slope Opposite 100-N 6006 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.8480E-03	0.000E+00
10/25/73		<0.1560E-02	0.300E-02
10/25/72		0.1550E-02	0.000E+00
09/29/71		0.2500E-02	0.000E+00

TABLE A.4. (contd)

200 East Area

200 E Control Plot 59			
6019	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		<-.4640E-02	0.000E+00
09/24/74		0.1990E+00	0.000E+00
10/25/73		0.2340E+00	0.000E+00
10/25/72		0.2610E+00	0.000E+00
09/30/71		0.2860E-01	0.000E+00

200 E Control Plot 59			
6042	Depth 1-2 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.1820E-02	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
09/29/71		0.2000E-02	0.000E+00

200 E Control Plot 59			
6188	Depth 2-4 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.8480E-02	0.300E-02

200 E Control Plot 59			
6189	Depth 4-8 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.0000E+00	0.300E-02

200 E Control Plot 59			
6190	Depth 8-12 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.4360E-02	0.300E-02

200 ENC (East North Central)			
6362	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.4310E-03	0.268E-03
04/30/86		0.4300E-03	0.259E-03
05/31/85		0.1150E-02	0.373E-03
05/17/84		<0.6070E-03	0.607E-03
08/12/83		0.1260E-02	0.103E-02
08/30/82		<0.1250E-02	0.176E-02
08/10/81	1	<0.3460E-03	0.560E-03
08/10/81		0.3080E-01	0.210E-02
08/05/80		0.1720E-02	0.600E-03
09/11/79		0.1420E-02	0.120E-02
08/10/78		<0.1190E-02	0.230E-02
06/14/77		0.9180E-02	0.320E-02

1.25 Miles East of PUREX			
0581	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<0.1220E-03	0.213E-03
04/30/86		0.6410E-03	0.340E-03
05/31/85		0.4030E-03	0.214E-03
05/15/84		0.4890E-03	0.311E-03
08/05/83		<0.4340E-03	0.434E-03
08/24/82		<-.7350E-03	0.451E-03

TABLE A.4. (contd)

200 East Area

200 ESE (East South East) 6022 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.3800E-03	0.231E-03
04/29/86		0.3740E-03	0.249E-03
06/12/85		0.5470E-03	0.264E-03
05/15/84		<0.2290E-03	0.341E-03
08/12/83		<0.7510E-03	0.868E-03
08/30/82		<0.2410E-03	0.981E-03
08/10/81		<0.1130E-02	0.120E-02
08/05/80			
09/11/79		<0.1890E-03	0.360E-03
08/10/78		<-0.4710E-03	0.100E-02
06/14/77		0.2610E-02	0.170E-02
08/11/76		0.1930E-03	0.000E+00
08/18/75	5	0.1920E-03	0.000E+00
08/18/75	1	0.1410E-03	0.000E+00
08/18/75	2	0.7720E-03	0.000E+00
08/18/75	4	<0.0000E+00	0.000E+00
08/18/75	3	<0.0000E+00	0.000E+00
09/24/74		0.4170E-03	0.000E+00
10/25/73		<0.5890E-03	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
09/30/71		0.5000E-03	0.000E+00

200 ESE (East South East) 6045 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.3290E-03	0.300E-02
10/25/72		0.8020E-04	0.000E+00
09/30/71		0.1900E-02	0.000E+00

200 ESE (East South East) 6194 Depth 2-4 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.7690E-03	0.300E-02

200 ESE (East South East) 6195 Depth 4-8 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.5990E-03	0.300E-02

200 ESE (East South East) 6196 Depth 8-12 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.1720E-02	0.300E-02

2 Miles South of PUREX 0582 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<0.1010E-03	0.125E-03
04/30/86		0.1700E-03	0.139E-03
06/24/85		<0.1440E-03	0.365E-03
05/15/84		<0.9090E-03	0.151E-02
08/05/83		<0.1580E-03	0.223E-03
08/24/82		<-0.3400E-03	0.389E-03

3 Miles SSW of PUREX 0583 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<-0.1660E-04	0.716E-04
04/30/86		<0.2180E-03	0.267E-03
06/24/85		0.8860E-03	0.429E-03
05/15/84		<0.4800E-04	0.551E-03
08/05/83		0.4280E-03	0.286E-03
08/24/82		<-0.1270E-04	0.277E-03

E Side of US Ecology 6281 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		<0.3210E-03	0.368E-03
08/11/76		0.9740E-02	0.000E+00
08/18/75		0.3980E-03	0.000E+00

TABLE A.4. (contd)

200 West Area

E of 200 West Gate 6276 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2110E-02	0.486E-03
05/01/86		0.5270E-02	0.757E-03
05/31/85		0.5740E-02	0.914E-03
05/15/84		0.1400E-02	0.572E-03
08/12/83		0.9130E-02	0.286E-02
08/30/82		0.8190E-02	0.181E-02
08/10/81		0.4600E-02	0.910E-03
08/04/80		0.9790E-02	0.210E-02
09/11/79		0.7350E-02	0.220E-02
08/09/78		0.6130E-02	0.240E-02
06/14/77		0.8650E-02	0.450E-02
08/11/76		0.2000E-02	0.000E+00
08/18/75		0.5140E-02	0.000E+00

2 Miles S of 200 West 0584 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/01/86		0.3460E-03	0.216E-03
05/31/85		0.1940E-03	0.170E-03
05/17/84		<0.7740E-03	0.100E-02
08/05/83		<0.5680E-03	0.955E-03
08/24/82		<- .4520E-03	0.615E-03

200 West Control Plot 60 6020 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.3420E-04	0.000E+00
09/24/74		0.1380E-02	0.000E+00
10/25/73		<0.2270E-02	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
09/30/71		0.8400E-02	0.000E+00

200 West Control Plot 60 6043 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.9400E-03	0.300E-02
10/25/72		0.6560E-02	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

200 West Control Plot 60 6191 Depth 2-4 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.8430E-03	0.300E-02

200 West Control Plot 60 6192 Depth 4-8 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.6660E-03	0.300E-02

200 West Control Plot 60 6193 Depth 8-12 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.2440E-02	0.300E-02

Other 200 Area Locations

200 Area Fire Station 6021 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.2090E-02	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
09/30/71		0.4800E-02	0.000E+00

200 Area Fire Station 6044 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
09/30/71		0.3200E-02	0.000E+00

TABLE A.4. (contd)

Other 200 Area Locations

Gable Pond Control Plot 43
6321 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.1490E-02	0.000E+00

Inter. 4S and Army Loop Rd.
6223 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.2040E-03	0.000E+00
08/18/75		0.2350E-04	0.000E+00
09/24/74		0.1110E-02	0.000E+00

Army Loop Rd. Contl. Plot 40
6226 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.3020E-03	0.000E+00

Highway 240 Control Plot 54
6002 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.5960E-03	0.000E+00
10/25/73		<0.1990E-03	0.300E-02
10/25/72		0.3160E-02	0.000E+00
09/30/71		0.5000E-03	0.000E+00
09/29/71		<0.0000E+00	0.000E+00

Highway 240 Control Plot 54
6025 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4580E-02	0.000E+00
09/29/71		0.4000E-02	0.000E+00

100 Area

North of 300 Area
6322 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.6500E-03	0.277E-03
11/25/86		<0.1530E-03	0.252E-03
05/31/85		0.2060E-03	0.165E-03
05/16/84		<0.0000E+00	0.000E+00
08/11/83		0.4310E-03	0.352E-03
09/03/82		0.3870E-02	0.172E-02
08/10/76		0.7110E-03	0.000E+00

North Center 300 Area Fence
6279 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.5910E-03	0.000E+00

300 Area South Gate
6222 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.6740E-03	0.000E+00

South of 300 Area
6323 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.4320E-03	0.223E-03
05/31/85		0.3140E-03	0.199E-03
05/16/84		0.3450E-03	0.310E-03
08/11/83		0.1040E-02	0.302E-03
09/03/82		<0.1030E-04	0.642E-03
08/10/76		0.3990E-03	0.000E+00

TABLE A.4. (contd)

300 Area

331 Bldg. Control Plot 50 6014 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.9090E-01	0.000E+00
10/25/73		<0.0000E+00	0.000E+00
10/25/72		<0.0000E+00	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

331 Bldg. Control Plot 50 6037 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1180E-01	0.000E+00
09/30/71		0.1000E-03	0.000E+00

400 Area and Vicinity

Wye Barricade 6016 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.6450E-03	0.253E-03
07/03/85		0.5840E-03	0.282E-03
05/15/84		0.9770E-03	0.829E-03
08/11/83		0.4920E-03	0.372E-03
08/16/82		<0.5760E-03	0.796E-03
08/10/81		<-0.3980E-03	0.350E-03
08/05/80		0.8920E-03	0.870E-03
09/11/79		<0.2450E-03	0.840E-03
08/08/78		0.1740E-02	0.150E-02
06/14/77		0.5620E-02	0.410E-02
10/25/73		<0.1660E-02	0.300E-02
10/25/72		0.3390E-02	0.000E+00
09/30/71		0.2000E-03	0.000E+00

Wye Barricade 6039 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4770E-02	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

Wye Barricade (QC Dupl. A) 0816 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.4640E-03	0.258E-03
04/29/86		<0.1620E-03	0.188E-03
07/03/85		0.3080E-03	0.231E-03
06/06/84		<0.0000E+00	0.000E+00
08/11/83		0.3870E-03	0.293E-03
08/16/82		<0.1210E-03	0.676E-03

Wye Barricade (QC Dupl. B) 0817 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		<0.0000E+00	0.000E+00
04/29/86		<0.3460E-04	0.693E-04
07/03/85		0.1000E-02	0.486E-03
06/06/84		0.9390E-03	0.664E-03
08/11/83		0.6540E-03	0.335E-03
08/16/82		0.8040E-03	0.771E-03

1 Mile N of WPPSS No. 2 6324 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.1700E-02	0.000E+00

1 Mile S of WPPSS No. 2 6325 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.1390E-02	0.000E+00

FFTF Control Plot 62 6015 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.3340E-04	0.000E+00
10/25/73		<0.1040E-02	0.300E-02
10/25/72		0.3700E-02	0.000E+00
09/30/71		0.1870E-02	0.000E+00

TABLE A.4. (contd)

400 Area and Vicinity

FFTF Control Plot 62
6038 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.6050E-02	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

0.5 Mile NE of FFTF
6282 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.2600E-03	0.165E-03
06/05/85		<0.4050E-04	0.744E-04
05/17/84		<0.1250E-02	0.501E-03
08/12/83		<0.0000E+00	0.000E+00
08/30/82		<-0.3760E-03	0.751E-03
08/10/81		<-0.9620E-03	0.280E-03
08/05/80		<0.2510E-03	0.870E-03
09/11/79		<-0.4310E-03	0.120E-02
08/08/78		<0.1370E-03	0.340E-02
06/14/77		<-0.6460E-03	0.670E-01
08/10/76		0.1060E-02	0.000E+00
08/20/75		<0.0000E+00	0.000E+00

SE Side of FFTF
6277 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.2070E-03	0.156E-03
06/05/85		<0.2350E-04	0.923E-04
05/17/84		0.2770E-03	0.195E-03
08/12/83		<0.0000E+00	0.000E+00
08/30/82		<-0.7340E-03	0.492E-03
08/10/81		0.1080E-02	0.670E-03
08/05/80		0.2310E-02	0.120E-02
09/11/79		<0.1910E-03	0.960E-03
08/08/78		0.4690E-02	0.240E-02
06/14/77		0.8400E-02	0.260E-02
08/20/75		0.7550E-04	0.000E+00

Other Onsite Locations

N End of Vernita Bridge
6005 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/02/86		0.2150E-03	0.152E-03
06/11/85		0.2200E-03	0.191E-03
05/31/84		<0.7450E-03	0.860E-03
08/11/83		<0.0000E+00	0.000E+00
08/24/82		<0.2680E-03	0.892E-03
09/23/74		0.2600E-02	0.000E+00
10/25/73		<0.1120E-02	0.300E-02
10/25/72		0.7950E-02	0.000E+00
09/29/71		0.5000E-03	0.000E+00

N End of Vernita Bridge
6028 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
09/29/71		0.1800E-02	0.000E+00

Hanford Townsite
6017 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.4950E-03	0.374E-03
06/12/85		0.3680E-03	0.231E-03
05/17/84		<0.0000E+00	0.000E+00
08/12/83		<0.0000E+00	0.000E+00
08/30/82		<0.7160E-04	0.738E-03
08/10/81		<-0.3040E-03	0.300E-03
08/05/80		0.5600E-02	0.120E-02
09/11/79		0.3460E-02	0.320E-02
08/08/78		<-0.5240E-04	0.140E-02
06/14/77		<0.9870E-03	0.990E-03
08/11/76		<-0.1310E-04	0.000E+00
08/18/75		0.4720E-03	0.000E+00
10/25/73		<0.2520E-02	0.300E-02
10/25/72		0.4920E-02	0.000E+00
09/30/71		0.4900E-02	0.000E+00

TABLE A.4. (contd)

Other Onsite Locations

Hanford Townsite
6040 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
09/30/71		0.3000E-02	0.000E+00

Prosser Barricade
6225 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.1840E-03	0.174E-03
06/06/85		0.4190E-03	0.293E-03
05/15/84		<0.7070E-03	0.777E-03
08/23/83		0.1460E-02	0.119E-02
08/16/82		0.1270E-02	0.113E-02
08/11/81		<-0.3890E-03	0.480E-03
08/04/80			
09/12/79		<-0.3610E-03	0.600E-03
08/08/78		<-0.1190E-02	0.240E-02
06/14/77		<0.3220E-02	0.390E-02
08/19/75		0.9300E-03	0.000E+00
09/24/74		0.6620E-03	0.000E+00

ERC (Emer. Reloc. Center)
6001 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		<0.0000E+00	0.000E+00
10/25/73		<0.1630E-02	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

ERC (Emer. Reloc. Center)
6024 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1060E-01	0.000E+00
09/30/71		0.3280E-02	0.000E+00

E of Arid Land Ecol. Lab
6278 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.9910E-03	0.417E-03
06/12/85		0.8750E-03	0.342E-03
05/24/84		<0.1590E-03	0.237E-03
08/23/83		0.1620E-02	0.115E-02
08/16/82		<0.6080E-03	0.620E-03
08/13/81		0.9660E-03	0.560E-03
08/05/80		0.3110E-02	0.130E-02
09/12/79		0.1800E-02	0.150E-02
08/10/78		<-0.1010E-02	0.190E-02
06/14/77		<0.2250E-03	0.110E-02
08/10/76		0.4860E-03	0.000E+00
08/20/75		0.7600E-04	0.000E+00

Rattlesnake Springs
6003 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.4370E-03	0.231E-03
05/23/86		0.1810E-03	0.137E-03
06/06/85		0.6330E-03	0.281E-03
05/24/84		<0.0000E+00	0.000E+00
08/11/83		<0.0000E+00	0.000E+00
09/02/82		<0.4670E-03	0.669E-03
09/23/74		0.4660E-03	0.000E+00
10/25/73		<0.8090E-03	0.300E-02
10/25/72		0.1670E-02	0.000E+00
09/29/71		0.6000E-02	0.000E+00

Rattlesnake Springs
6026 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1170E-02	0.000E+00
09/29/71		<0.0000E+00	0.000E+00

TABLE A.4. (contd)

Other Onsite Locations

Yakima Barricade			
6004	Depth 0-1 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<0.2740E-04	0.920E-04
06/06/85		0.2880E-03	0.197E-03
05/24/84		<-.6980E-04	0.140E-03
08/11/83		0.2070E-02	0.782E-03
08/17/82		<-.2490E-04	0.469E-03
08/11/81		0.9350E-02	0.170E-02
08/04/80		0.3600E-02	0.130E-02
09/11/79		<-.8780E-03	0.550E-03
08/08/78		<-.9180E-03	0.220E-02
06/14/77		0.4540E-02	0.270E-02
08/10/76		0.7830E-03	0.000E+00
08/19/75		0.2170E-03	0.000E+00
09/23/74		0.6770E-03	0.000E+00
10/25/73		<0.1180E-02	0.300E-02
10/25/72		0.3310E-02	0.000E+00
09/29/71		0.4000E-02	0.000E+00

Yakima Barricade			
6027	Depth 1-2 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
09/29/71		0.3000E-02	0.000E+00

TABLE A.5. Plutonium-239,240 Concentrations in Soil at Onsite Locations

100 Areas

NE Corner of 100 N Area
6275 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.3400E-01	0.000E+00

Wahluke Slope Opposite 100-N
6029 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.2200E-01	0.000E+00
09/29/71		0.3000E-02	0.000E+00

1 Mile NE of 100 N Area
0590 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/30/86		0.1450E-01	0.136E-02
06/24/85		0.1570E-01	0.156E-02
05/17/84		0.1460E-01	0.184E-02
08/05/83		0.1160E-01	0.252E-02
08/24/82		0.1480E-01	0.282E-02

100 Area Fire Station
0580 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1650E-01	0.139E-02
04/30/86		0.2960E-01	0.204E-02
05/30/85		0.2410E-01	0.160E-02
05/17/84		0.2090E-01	0.169E-02
08/05/83		0.2220E-02	0.147E-02
08/24/82		0.1630E-01	0.285E-02

1 Mile E of 100 N Area
0578 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.2330E-01	0.195E-02
04/30/86		0.1180E-01	0.140E-02
06/24/85		0.1250E-01	0.114E-02
05/17/84		0.1640E-01	0.274E-02
08/11/83		0.6900E-02	0.142E-02
08/24/82		0.2610E-01	0.329E-02

100 F Area Control Plot 58
6018 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.7670E-02	0.000E+00
08/18/75		0.1570E-01	0.000E+00
09/24/74		0.1450E-01	0.000E+00
10/25/73		0.6370E-02	0.100E-02
10/25/72		0.9000E-02	0.000E+00
09/30/71		0.1300E-01	0.000E+00

1 Mile SE of 100 N Trench
6320 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.1340E-01	0.156E-02
08/11/76		0.4290E-02	0.000E+00

100 F Area Control Plot 58
6041 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.5000E-02	0.000E+00
09/30/71		0.2000E-02	0.000E+00

Wahluke Slope Opposite 100-N
6006 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.4120E-02	0.000E+00
10/25/73		0.1990E-01	0.100E-02
10/25/72		0.1500E-01	0.000E+00
09/29/71		0.9000E-02	0.000E+00

TABLE A.5. (contd)

200 East Area

200 E Control Plot 59
6019 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.2250E-01	0.000E+00
09/24/74		0.5020E-01	0.000E+00
10/25/73		0.1270E-01	0.100E-02
10/25/72		0.9000E-02	0.000E+00
09/30/71		0.2000E-02	0.000E+00

200 E Control Plot 59
6042 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.9330E-02	0.100E-02
10/25/72		0.9000E-02	0.000E+00
09/30/71		0.3000E-02	0.000E+00

200 E Control Plot 59
6188 Depth 2-4 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.4390E-02	0.100E-02

200 E Control Plot 59
6189 Depth 4-8 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.4800E-03	0.100E-02

200 E Control Plot 59
6190 Depth 8-12 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1410E-01	0.100E-02

200 ENC (East North Central)
6362 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.3090E-01	0.214E-02
04/30/86		0.1460E-01	0.151E-02
05/31/85		0.2970E-01	0.188E-02
05/17/84		0.3260E-01	0.444E-02
08/12/83		0.5110E-01	0.653E-02
08/30/82		0.5880E-01	0.858E-02
08/10/81	1	0.2360E-01	0.220E-02
08/10/81		0.4210E-01	0.240E-02
08/05/80		0.2610E-01	0.190E-02
09/11/79		0.5630E-01	0.550E-02
08/10/78		0.1350E-01	0.460E-02
06/14/77		0.2450E-01	0.500E-02

1.25 Miles East of PUREX
0581 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.9060E-02	0.126E-02
04/30/86		0.1060E-01	0.131E-02
05/31/85		0.2580E-01	0.165E-02
05/15/84		0.1240E-01	0.152E-02
08/05/83		0.1080E-01	0.218E-02
08/24/82		0.1450E-01	0.244E-02

TABLE A.5. (contd)

200 East Area

200 ESE (East South East)
6022 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1180E-01	0.120E-02
04/29/86		0.8390E-02	0.118E-02
06/12/85		0.2160E-01	0.161E-02
05/15/84		0.9130E-02	0.168E-02
08/12/83		0.2840E-01	0.537E-02
08/30/82		0.2350E-01	0.408E-02
08/10/81		0.2630E-01	0.400E-02
08/05/80			
09/11/79		0.2900E-01	0.190E-02
08/10/78		0.1980E-01	0.370E-02
06/14/77		0.6180E-02	0.230E-02
08/11/76		0.1360E-01	0.000E+00
08/18/75	5	0.1680E-01	0.000E+00
08/18/75	1	0.2210E-01	0.000E+00
08/18/75	2	0.1390E-01	0.000E+00
08/18/75	4	0.1650E-01	0.000E+00
08/18/75	3	0.1290E-01	0.000E+00
09/24/74		0.1730E-01	0.000E+00
10/25/73		0.3580E-01	
10/25/72		0.2300E-01	0.000E+00
09/30/71		0.1700E-01	0.000E+00

200 ESE (East South East)
6045 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2080E-01	0.100E-02
10/25/72		0.8000E-02	0.000E+00
09/30/71		0.7000E-02	0.000E+00

200 ESE (East South East)
6194 Depth 2-4 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.5210E-02	0.100E-02

200 ESE (East South East)
6195 Depth 4-8 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.6580E-03	0.100E-02

200 ESE (East South East)
6196 Depth 8-12 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.0000E+00	0.100E-02

2 Miles South of PUREX
0582 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2680E-02	0.525E-03
04/30/86		0.6700E-02	0.871E-03
06/24/85		0.4110E-02	0.145E-02
05/15/84		0.5610E-02	0.311E-02
08/05/83		0.8800E-02	0.166E-02
08/24/82		0.1150E-01	0.137E-02

3 Miles SSW of PUREX
0583 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.6200E-03	0.303E-03
04/30/86		0.4030E-02	0.949E-03
06/24/85		0.2380E-01	0.219E-02
05/15/84		0.3400E-02	0.188E-02
08/05/83		0.7590E-02	0.120E-02
08/24/82		0.1190E-01	0.990E-03

E Side of US Ecology
6281 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		<0.3210E-03	0.368E-03
08/11/76		0.4050E-01	0.000E+00
08/18/75		0.6290E-03	0.000E+00

TABLE A.5. (contd)

200 West Area

E of 200 West Gate 6276 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1700E+00	0.430E-02
05/01/86		0.3370E+00	0.605E-02
05/31/85		0.3270E+00	0.686E-02
05/15/84		0.7370E-01	0.415E-02
08/12/83		0.8310E+00	0.272E-01
08/30/82		0.7780E+00	0.165E-01
08/10/81		0.4200E+00	0.750E-02
08/04/80		0.6300E+00	0.160E-01
09/11/79		0.8330E+00	0.220E-01
08/09/78		0.5610E+00	0.200E-01
06/14/77		0.1650E+00	0.170E-01
08/11/76		0.7570E-01	0.000E+00
08/18/75		0.3060E+00	0.000E+00

2 Miles S of 200 West 0584 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/01/86		0.1250E-01	0.120E-02
05/31/85		0.9420E-02	0.109E-02
05/17/84		0.3620E-02	0.187E-02
08/05/83		<0.6160E-03	0.947E-03
08/24/82		0.3550E-02	0.154E-02

200 West Control Plot 60 6020 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.7660E-02	0.000E+00
09/24/74		0.2810E-01	0.000E+00
10/25/73		0.4530E-01	0.100E-02
10/25/72		0.2100E-01	0.000E+00
09/29/71		0.2900E-01	0.000E+00

200 West Control Plot 60 6043 Depth 1-2 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1120E-01	0.100E-02
10/25/72		0.9000E-02	0.000E+00
09/30/71		0.2000E-02	0.000E+00

200 West Control Plot 60 6191 Depth 2-4 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.0000E+00	0.100E-02

200 West Control Plot 60 6192 Depth 4-8 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.3120E-03	0.100E-02

200 West Control Plot 60 6193 Depth 8-12 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		<0.2400E-03	0.100E-02

Other 200 Area Locations

200 Area Fire Station 6021 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2280E-01	0.100E-02
10/25/72		0.1700E-01	0.000E+00
09/30/71		0.8000E-02	0.000E+00

200 Area Fire Station 6044 Depth 1-2 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1200E-01	0.000E+00
09/30/71		0.3000E-02	0.000E+00

TABLE A.5. (contd)

Other 200 Area Locations

Gable Pond Control Plot 43
6321 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.7020E-02	0.000E+00

Inter. 4S and Army Loop Rd.
6223 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.2960E-02	0.000E+00
08/18/75		0.7920E-02	0.000E+00
09/24/74		<0.0000E+00	0.000E+00

Army Loop Rd. Contl. Plot 40
6226 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.4860E-02	0.000E+00

Highway 240 Control Plot 54
6002 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.1310E-01	0.000E+00
10/25/73		0.4120E-02	0.100E-02
10/25/72		0.6000E-02	0.000E+00
09/29/71		0.2000E-02	0.000E+00

Highway 240 Control Plot 54
6025 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4000E-02	0.000E+00
09/29/71		0.1800E-01	0.000E+00

300 Area

North of 300 Area
6322 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1430E-01	0.130E-02
11/25/86		0.7580E-02	0.963E-03
05/31/85		0.1010E-01	0.108E-02
05/16/84		0.6360E-02	0.285E-02
08/11/83		0.1340E-01	0.196E-02
09/03/82		0.1580E-01	0.312E-02
08/10/76		0.8130E-02	0.000E+00

North Center 300 Area Fence
6279 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.1060E-01	0.000E+00

300 Area South Gate
6222 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.2190E-01	0.000E+00

South of 300 Area
6323 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.1460E-01	0.130E-02
05/31/85		0.1770E-01	0.149E-02
05/16/84		0.2150E-01	0.232E-02
08/11/83		0.2160E-01	0.130E-02
09/03/82		0.1920E-01	0.281E-02
08/10/76		0.9420E-02	0.000E+00

TABLE A.5. (contd)

300 Area

331 Bldg. Control Plot 50
6014 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.7140E-03	0.000E+00
10/25/73		<0.7300E-03	0.100E-02
10/25/72		0.3000E-02	0.000E+00
09/30/71		0.1400E-01	0.000E+00

331 Bldg. Control Plot 50
6037 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3000E-02	0.000E+00
09/30/71		0.5000E-02	0.000E+00

400 Area and Vicinity

Wye Barricade
6016 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1070E-01	0.103E-02
07/03/85		0.1730E-01	0.149E-02
05/15/84		0.1380E-01	0.233E-02
08/11/83		0.1670E-01	0.216E-02
08/16/82		0.1800E-01	0.270E-02
08/10/81		0.1160E-01	0.130E-02
08/05/80		0.1300E-01	0.230E-02
09/11/79		0.1780E-01	0.290E-02
08/08/78		0.6310E-02	0.210E-02
06/14/77		0.9480E-02	0.490E-02
10/25/73		0.1160E-01	0.000E+00
10/25/72		0.1400E-01	0.000E+00
09/30/71		0.1400E-01	0.000E+00

Wye Barricade
6039 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1600E-01	0.000E+00
09/30/71		0.9000E-02	0.000E+00

Wye Barricade (QC Dupl. A)
0816 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.6350E-02	0.952E-03
04/29/86		0.1680E-02	0.602E-03
07/03/85		0.7930E-02	0.113E-02
06/06/84		0.4870E-02	0.325E-02
08/11/83		0.1050E-01	0.152E-02
08/16/82		0.1960E-01	0.278E-02

Wye Barricade (QC Dupl. B)
0817 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.8230E-02	0.993E-03
04/29/86		0.1730E-02	0.489E-03
07/03/85		0.2070E-01	0.217E-02
06/06/84		0.5980E-02	0.168E-02
08/11/83		0.1710E-01	0.163E-02
08/16/82		0.1690E-01	0.226E-02

1 Mile N of WPPSS No. 2
6324 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.8190E-03	0.000E+00

1 Mile S of WPPSS No. 2
6325 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.1330E-01	0.000E+00

TABLE A.5. (contd)

400 Area and Vicinity

FFTF Control Plot 62 6015 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

09/24/74		0.2820E-02	0.000E+00
10/25/73		0.3490E-02	0.100E-02
10/25/72		0.5000E-02	0.000E+00
09/30/71		0.4000E-02	0.000E+00

FFTF Control Plot 62 6038 Depth 1-2 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

10/25/72		0.1100E-01	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

SE Side of FFTF 6277 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

04/29/86		0.6780E-03	0.283E-03
06/05/85		0.2050E-02	0.494E-03
05/17/84		0.8680E-02	0.106E-02
08/12/83		0.4290E-02	0.179E-02
08/30/82		0.5070E-02	0.194E-02
08/10/81		0.2970E-02	0.820E-03
08/05/80		0.6970E-02	0.170E-02
09/11/79		0.2430E-01	0.410E-02
08/08/78		0.5360E-02	0.230E-02
06/14/77		0.8610E-02	0.260E-02
08/20/75		0.2700E-02	0.000E+00

Other Onsite Locations

0.5 Mile NE of FFTF 6282 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

04/29/87		0.5540E-02	0.760E-03
06/05/85		0.2500E-02	0.503E-03
05/17/84		<0.2100E-02	0.669E-03
08/12/83		0.2870E-02	0.667E-03
08/30/82		0.2410E-02	0.130E-02
08/10/81		0.2610E-02	0.790E-03
08/05/80		0.3880E-02	0.160E-02
09/11/79		0.2410E-02	0.230E-02
08/08/78		<0.1700E-02	0.360E-02
06/14/77		0.1650E+00	0.120E+00
08/10/76		0.1340E-01	0.000E+00
08/20/75		0.9250E-03	0.000E+00

N End of Vernita Bridge 6005 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

05/02/86		0.3030E-02	0.576E-03
06/11/85		0.9460E-02	0.105E-02
05/31/84		0.5950E-02	0.243E-02
08/11/83		0.1500E-01	0.261E-02
08/24/82		0.8910E-02	0.234E-02
09/23/74		0.4440E-02	0.000E+00
10/25/73		0.1270E-01	0.000E+00
10/25/72		0.3000E-02	0.000E+00
09/29/71		0.7000E-02	0.000E+00

N End of Vernita Bridge 6028 Depth 1-2 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.

10/25/72		0.6000E-03	0.000E+00
09/29/71		0.5000E-02	0.000E+00

TABLE A.5. (contd)

Other Onsite Locations

Hanford Townsite
6017 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1920E-01	0.233E-02
06/12/85		0.5850E-02	0.880E-03
05/17/84		0.1560E-01	0.270E-02
08/12/83		0.2110E-01	0.366E-02
08/30/82		0.1530E-01	0.277E-02
08/10/81		0.2310E-01	0.160E-02
08/05/80		0.4190E-01	0.290E-02
09/11/79		0.1980E-01	0.670E-02
08/08/78		<.1720E-03	0.110E-02
06/14/77		0.1880E-01	0.290E-02
08/11/76		0.1090E-01	0.000E+00
08/18/75		0.1960E-01	0.000E+00
10/25/73		0.1500E-01	0.000E+00
10/25/72		0.2400E-01	0.000E+00
09/30/71		0.2200E-01	0.000E+00

ERC (Emer. Reloc. Center)
6001 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.2540E-02	0.000E+00
10/25/73		0.1850E-01	0.000E+00
10/25/72		0.9000E-02	0.000E+00
09/30/71		0.1500E-01	0.000E+00

ERC (Emer. Reloc. Center)
6024 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1300E-01	0.000E+00
09/30/71		0.5000E-02	0.000E+00

Hanford Townsite
6040 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4000E-02	0.000E+00
09/30/71		<0.0000E+00	0.000E+00

E of Arid Land Ecol. Lab
6278 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.2430E-01	0.201E-02
06/12/85		0.3420E-01	0.210E-02
05/24/84		0.9100E-02	0.139E-02
08/23/83		0.3110E-01	0.502E-02
08/16/82		0.2950E-01	0.242E-02
08/13/81		0.1010E-01	0.120E-02
08/05/80		0.2300E-01	0.310E-02
09/12/79		0.2800E-01	0.480E-02
08/10/78		0.5620E-02	0.360E-02
06/14/77		0.1670E-01	0.350E-02
08/10/76		0.5840E-02	0.000E+00
08/20/75		0.1310E-01	0.000E+00

Prosser Barricade
6225 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.7820E-02	0.987E-03
06/06/85		0.1920E-01	0.188E-02
05/15/84		0.3870E-02	0.161E-02
08/23/83		0.2030E-01	0.443E-02
08/16/82		0.3290E-01	0.428E-02
08/11/81		0.5850E-02	0.120E-02
08/04/80			
09/12/79		0.1600E-01	0.310E-02
08/08/78		0.1140E-01	0.520E-02
06/14/77		0.1370E-01	0.610E-02
08/19/75		0.4480E-02	0.000E+00
09/24/74		0.1010E-01	0.000E+00

TABLE A.5. (contd)

Other Onsite Locations

Rattlesnake Springs
6003 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.6080E-02	0.814E-03
05/23/86		0.5730E-02	0.772E-03
06/06/85		0.8530E-02	0.985E-03
05/24/84		0.3150E-02	0.162E-02
08/11/83		0.2590E-01	0.487E-02
09/02/82		0.1930E-01	0.242E-02
09/23/74		0.1810E-01	0.000E+00
10/25/73		0.3910E-01	0.000E+00
10/25/72		0.1100E-01	0.000E+00
09/29/71		0.1800E-01	0.000E+00

Yakima Barricade
6027 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.5000E-02	0.000E+00
09/29/71		0.3000E-02	0.000E+00

Rattlesnake Springs
6026 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.6000E-02	0.000E+00
09/29/71		0.4000E-03	0.000E+00

Yakima Barricade
6004 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1510E-02	0.404E-03
06/06/85		0.2150E-01	0.154E-02
05/24/84		0.1570E-02	0.105E-02
08/11/83		0.1410E-01	0.204E-02
08/17/82		0.1060E-01	0.148E-02
08/11/81		0.1770E-01	0.220E-02
08/04/80		0.1700E-01	0.260E-02
09/11/79		0.4500E-02	0.200E-02
08/08/78		0.1960E-01	0.660E-02
06/14/77		0.8270E-02	0.330E-02
08/10/76		0.5720E-02	0.000E+00
08/19/75		0.4800E-02	0.000E+00
09/23/74		0.3440E-02	0.000E+00
10/25/73		0.1220E-01	0.000E+00
10/25/72		0.9000E-02	0.000E+00
09/29/71		0.5000E-02	0.000E+00

TABLE A.6. Americium-241 Concentrations in Soil at Onsite Locations

200 East Area

200 ENC (East North Central)			
6362	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/31/85		0.5960E-02	0.397E-02
05/17/84		<0.7780E-02	0.788E-02
08/12/83		<-0.2040E-02	0.217E-02
08/30/82		<0.2610E-01	0.335E-01
06/14/77		0.8530E-01	0.670E-01

3 Miles SSW of PUREX			
0583	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<0.7010E-02	0.162E-01
04/30/86		<-0.3030E-03	0.574E-02
06/24/85		0.1220E-01	0.654E-02
05/15/84		<0.2640E-02	0.665E-02
08/05/83		<0.1700E-02	0.653E-02
08/24/82		<0.1070E-01	0.270E-01

1.25 Miles East of PUREX			
0581	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/31/85		<-0.3020E-04	0.249E-02
05/15/84		0.2610E-02	0.249E-02
08/05/83		<0.2010E-02	0.370E-02
08/24/82		<0.1020E-02	0.325E-01

200 West Area

E of 200 West Gate			
6276	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<0.1550E-01	0.167E-01
05/01/86		0.5280E-01	0.194E-01
05/31/85		0.2290E-01	0.727E-02
05/15/84		<0.4040E-01	0.546E-01
08/12/83		0.6980E-01	0.280E-01
08/30/82		0.5300E-01	0.334E-01
06/14/77		<0.2170E-01	0.730E-01

200 ESE (East South East)			
6022	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		<0.1920E-01	0.223E-01
04/29/86		<0.5550E-02	0.780E-02
06/12/85		0.8000E-02	0.581E-02
05/15/84		<0.3070E-02	0.560E-02
08/12/83		<-0.1400E-02	0.347E-02
08/30/82		0.5920E-01	0.256E-01
06/14/77		<0.5940E-01	0.670E-01

2 Miles S of 200 West			
0584	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/31/85		<0.3220E-02	0.351E-02
05/17/84		<0.4420E-02	0.636E-02
08/05/83		<0.1580E-02	0.515E-02
08/24/82		0.3110E-01	0.255E-01

2 Miles South of PUREX			
0582	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/24/85		<0.7830E-03	0.361E-02
05/15/84		<-0.1160E-02	0.331E-02
08/05/83		<0.4430E-02	0.471E-02
08/24/82		<-0.6800E-02	0.312E-01

TABLE A.6. (contd)

400 Area and Vicinity

Wye Barricade			
6016	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
07/03/85		0.4420E-02	0.338E-02
05/15/84		<0.1550E-02	0.643E-02
08/11/83		<0.4110E-02	0.507E-02
08/16/82		0.3010E-01	0.264E-01
06/14/77		<0.3840E-01	0.670E-01

Wye Barricade (QC Dupl. A)			
0816	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		<0.1620E-02	0.405E-02
04/29/86		<0.8460E-02	0.975E-02
07/03/85		0.6000E-02	0.510E-02
06/06/84		0.5850E-02	0.988E-03
08/11/83		<0.1600E-02	0.425E-02
08/16/82		<-0.1930E-01	0.303E-01

Wye Barricade (QC Dupl. B)			
0817	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		<0.3480E-03	0.568E-02
04/29/86		0.9870E-02	0.890E-02
07/03/85		0.5760E-02	0.332E-02
06/06/84		<0.1560E-02	0.287E-02
08/11/83		0.9520E-02	0.820E-02
08/16/82		<0.6800E-02	0.343E-01

0.5 Mile NE of FFTF			
6282	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.5460E-01	0.670E-01

SE Side of FFTF			
6277	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.6680E-01	0.660E-01

Other Onsite Locations

Hanford Townsite			
6017	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/12/85		<0.2030E-02	0.495E-02
05/17/84		<0.1810E-02	0.369E-02
08/12/83		0.1260E-01	0.950E-02
08/30/82		<-0.3260E-01	0.371E-01
06/14/77		0.3640E-01	0.000E+00

Prosser Barricade			
6225	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.4050E-01	0.660E-01

E of Arid Land Ecol. Lab			
6278	Depth 0-1 in.	Am-241	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.2830E-01	0.660E-01

TABLE A.6. (contd)

Other Onsite Locations

Rattlesnake Springs
6003 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/06/85		0.1720E-01	0.111E-01
05/24/84		<0.1490E-02	0.254E-02
08/11/83		0.4280E-02	0.389E-02
09/02/82		<- .4660E-01	0.330E-01

Yakima Barricade
6004 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.2350E-01	0.660E-01

TABLE A.7. Uranium Concentrations in Soil at Onsite Locations

100 Areas

NE Corner of 100 N Area
6275 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.2420E+00	0.000E+00

1 Mile NE of 100 N Area
0590 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/30/86		0.1910E+00	0.000E+00
06/24/85		0.4870E+00	0.162E+00
05/17/84		0.4160E+00	0.113E+00
08/05/83		0.3900E+00	0.109E+00
08/24/82		0.2300E+00	0.804E-01

1 Mile E of 100 N Area
0578 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.3440E+00	0.000E+00
04/30/86		0.4500E+00	0.000E+00
06/24/85		0.3980E+00	0.131E+00
05/17/84		0.3170E+00	0.878E-01
08/11/83		0.2750E+00	0.766E-01
08/24/82		0.2200E+00	0.770E-01

1 Mile SE of 100 N Trench
6320 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.2760E+00	0.000E+00
08/11/76		0.1550E+00	0.000E+00

Wahluke Slope Opposite 100-N
6006 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.2360E+00	0.000E+00
10/25/73		0.6970E+00	0.000E+00

100 Area Fire Station
0580 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.3500E+00	0.000E+00
04/30/86		0.5290E+00	0.000E+00
05/30/85		0.4370E+00	0.145E+00
05/17/84		0.4460E+00	0.122E+00
08/05/83		0.2150E+00	0.606E-01
08/24/82		0.3220E+00	0.113E+00

100 F Area Control Plot 58
6018 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.8930E+00	0.000E+00
08/18/75		0.2590E+00	0.000E+00
09/24/74		0.2860E+00	0.000E+00
10/25/73		0.2250E+00	0.000E+00

200 East Area

200 E Control Plot 59
6019 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.2990E+00	0.000E+00
09/24/74		0.1310E+00	0.000E+00
10/25/73		0.5120E+00	0.000E+00

200 E Control Plot 59
6042 Depth 1-2 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1500E+00	0.000E+00

TABLE A.7. (contd)

200 East Area

200 E Control Plot 59
6188 Depth 2-4 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.4100E+00	0.000E+00

200 E Control Plot 59
6189 Depth 4-8 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.1990E+00	0.000E+00

200 E Control Plot 59
6190 Depth 8-12 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2820E+00	0.000E+00

200 ENC (East North Central)
6362 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2320E+00	0.000E+00
04/30/86		0.2830E+00	0.000E+00
05/31/85		0.3850E+00	0.126E+00
05/17/84		0.3620E+00	0.982E-01
08/12/83		0.2530E+00	0.710E-01
08/30/82		0.4480E+00	0.157E+00
08/10/81	1	0.3990E+00	0.140E+00
08/10/81		0.6560E+00	0.230E+00
08/05/80		0.2740E+00	0.960E-01
09/11/79		0.3680E+00	0.130E+00
08/10/78		0.5460E+00	0.150E+00
06/14/77		0.2640E+00	0.680E-01

1.25 Miles East of PUREX
0581 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.3120E+00	0.000E+00
04/30/86		0.4720E+00	0.000E+00
05/31/85		0.4640E+00	0.151E+00
05/15/84		0.3200E+00	0.820E-01
08/05/83		0.2590E+00	0.724E-01
08/24/82		0.3190E+00	0.112E+00

200 ESE (East South East)
6022 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2450E+00	0.000E+00
04/29/86		0.2830E+00	0.000E+00
06/12/85		0.3940E+00	0.129E+00
05/15/84		0.3700E+00	0.700E-01
08/12/83		0.2020E+00	0.570E-01
08/30/82		0.3690E+00	0.129E+00
08/10/81		0.4180E+00	0.150E+00
08/05/80		0.2890E+00	0.100E+00
09/11/79		0.3560E+00	0.120E+00
08/10/78		0.3080E+00	0.150E+00
06/14/77		0.3150E+00	0.680E-01
08/11/76		0.1330E+00	0.000E+00
08/18/75	5	0.1640E+00	0.000E+00
08/18/75	4	0.2590E+00	0.000E+00
08/18/75	1	0.1800E+00	0.000E+00
08/18/75	2	0.1750E+00	0.000E+00
08/18/75	3	0.1960E+00	0.000E+00
09/24/74		0.8720E-01	0.000E+00
10/25/73		0.5350E+00	0.000E+00

200 ESE (East South East)
6045 Depth 1-2 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2060E+00	0.000E+00

200 ESE (East South East)
6194 Depth 2-4 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2880E+00	0.000E+00

TABLE A.7. (contd)

200 East Area

200 ESE (East South East)
6195 Depth 4-8 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2400E+00	0.000E+00

200 ESE (East South East)
6196 Depth 8-12 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.2690E+00	0.000E+00

2 Miles South of PUREX
0582 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2170E+00	0.000E+00
04/30/86		0.3230E+00	0.000E+00
06/24/85		0.3350E+00	0.113E+00
05/15/84		0.4600E+00	0.220E+00
08/05/83		0.1770E+00	0.500E-01
08/24/82		0.3040E+00	0.107E+00

3 Miles SSW of PUREX
0583 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.1890E+00	0.000E+00
04/30/86		0.3240E+00	0.000E+00
06/24/85		0.3270E+00	0.112E+00
05/15/84		0.1030E+01	0.148E+00
08/05/83		0.2790E+00	0.776E-01
08/24/82		0.2700E+00	0.943E-01

E Side of US Ecology
6281 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/03/84		0.4540E+00	0.000E+00
08/11/76		0.1870E+00	0.000E+00
08/18/75		0.2070E+00	0.000E+00

200 West Area

E of 200 West Gate
6276 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.3890E+00	0.000E+00
05/01/86		0.4780E+00	0.000E+00
05/31/85		0.4280E+00	0.140E+00
05/15/84		0.5300E+00	0.292E+00
08/12/83		0.5300E+00	0.145E+00
08/30/82		0.7310E+00	0.256E+00
08/10/81		0.7180E+00	0.250E+00
08/04/80		0.6190E+00	0.220E+00
09/11/79		0.6050E+00	0.210E+00
08/09/78		0.7030E+00	0.150E+00
06/14/77		0.3310E+00	0.680E-01
08/11/76		0.2390E+00	0.000E+00
08/18/75		0.2070E+00	0.000E+00

2 Miles S of 200 West
0584 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/01/86		0.4850E+00	0.000E+00
05/31/85		0.4720E+00	0.158E+00
05/17/84		0.3350E+00	0.920E-01
08/05/83		0.2610E+00	0.736E-01
08/24/82		0.3880E+00	0.136E+00

200 West Control Plot 60
6020 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/75		0.2780E+00	0.000E+00
09/24/74		0.2780E+00	0.000E+00
10/25/73		0.7150E+00	0.000E+00

200 West Control Plot 60
6043 Depth 1-2 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.3470E+00	0.000E+00

TABLE A.7. (contd)

200 West Area

200 West Control Plot 60			
6191	Depth 2-4 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.3910E+00	0.000E+00

200 West Control Plot 60			
6192	Depth 4-8 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.3460E+00	0.000E+00

200 West Control Plot 60			
6193	Depth 8-12 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.4050E+00	0.000E+00

Other 200 Area Locations

200 Area Fire Station			
6021	Depth 0-1 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/73		0.5550E+00	0.000E+00

Gable Pond Control Plot 43			
6321	Depth 0-1 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/11/76		0.2330E+00	0.000E+00

Inter. 4S and Army Loop Rd.			
6223	Depth 0-1 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.2000E+00	0.000E+00
08/18/75		0.3980E+00	0.000E+00
09/24/74		0.3520E+00	0.000E+00

Army Loop Rd. Contl. Plot 40			
6226	Depth 0-1 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.2450E+00	0.000E+00

Highway 240 Control Plot 54			
6002	Depth 0-1 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/23/74		0.1820E+00	0.000E+00
10/25/73		0.3710E+00	0.000E+00

300 Area

North of 300 Area			
6322	Depth 0-1 in.		Uranium
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.3830E+01	0.000E+00
11/25/86		0.6580E+00	0.000E+00
10/09/85	1	0.2040E+01	0.580E+00
05/31/85		0.5440E+01	0.165E+01
05/16/84		0.7560E+00	0.204E+00
08/11/83		0.4990E+00	0.136E+00
09/03/82		0.9890E+00	0.346E+00
08/10/76		0.2590E+00	0.000E+00

TABLE A.7. (contd)

300 Area

North Center 300 Area Fence

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.1270E+01	0.000E+00

300 Area South Gate

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.6580E+00	0.000E+00

South of 300 Area

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.5570E+00	0.000E+00
05/31/85		0.6630E+00	0.206E+00
05/16/84		0.1040E+01	0.294E+00
08/11/83		0.3100E+00	0.844E-01
09/03/82		0.5060E+00	0.177E+00
08/10/76		0.2810E+00	0.000E+00

331 Bldg. Control Plot 50

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/20/75		0.1740E+00	0.000E+00
10/25/73		0.2690E+00	0.000E+00

400 Area and Vicinity

Wye Barricade

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.1900E+00	0.000E+00
07/03/85		0.2860E+00	0.972E-01
05/15/84		0.6500E+00	0.102E+00
08/11/83		0.1870E+00	0.526E-01
08/16/82		0.3800E+00	0.133E+00
08/10/81		0.3740E+00	0.130E+00
08/05/80		0.2620E+00	0.920E-01
09/11/79		0.2220E+00	0.780E-01
08/08/78		0.1980E+00	0.150E+00
06/14/77		0.1810E+00	0.680E-01
10/25/73		0.1160E+00	0.000E+00

Wye Barricade (QC Dupl. A)

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.2140E+00	0.000E+00
04/29/86		0.2280E+00	0.000E+00
07/03/85		0.1770E+00	0.652E-01
06/06/84		0.3080E+00	0.820E-01
08/11/83		0.1350E+00	0.384E-01
08/16/82		0.4030E+00	0.141E+00

Wye Barricade (QC Dupl. B)

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.2420E+00	0.000E+00
04/29/86		0.2310E+00	0.000E+00
07/03/85		0.3180E+00	0.106E+00
06/06/84		0.2650E+00	0.710E-01
08/11/83		0.2200E+00	0.610E-01
08/16/82		0.2740E+00	0.958E-01

1 Mile N of WPPSS No. 2

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.1530E+00	0.000E+00

TABLE A.7. (contd)

400 Area and Vicinity

1 Mile S of WPPSS No. 2
6325 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/10/76		0.1570E+00	0.000E+00

FFTF Control Plot 62
6015 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.8510E+00	0.000E+00
10/25/73		0.3540E+00	0.000E+00

0.5 Mile NE of FFTF
6282 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.2390E+00	0.000E+00
06/05/85		0.3900E+00	0.129E+00
05/17/84		0.2990E+00	0.822E-01
08/12/83		0.2480E+00	0.684E-01
08/30/82		0.2960E+00	0.104E+00
08/10/81		0.4890E+00	0.170E+00
08/05/80		0.2170E+00	0.760E-01
09/11/79		0.2310E+00	0.810E-01
08/08/78		0.2640E+00	0.150E+00
06/14/77		0.2530E+00	0.680E-01
08/10/76		0.1910E+00	0.000E+00
08/20/75		0.1690E+00	0.000E+00

SE Side of FFTF
6277 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.3740E+00	0.000E+00
06/05/85		0.4040E+00	0.132E+00
05/17/84		0.2700E+00	0.726E-01
08/12/83		0.1620E+00	0.464E-01
08/30/82		0.2790E+00	0.978E-01
08/10/81		0.4650E+00	0.160E+00
08/05/80		0.2300E+00	0.810E-01
09/11/79		0.3830E+00	0.130E+00
08/08/78		0.2480E+00	0.150E+00
06/14/77		0.2990E+00	0.680E-01
08/20/75		0.1700E+00	0.000E+00

Other Onsite Locations

N End of Vernita Bridge
6005 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/02/86		0.3440E+00	0.000E+00
06/11/85		0.7260E+00	0.222E+00
05/31/84		0.9240E+00	0.260E+00
08/11/83		0.3700E+00	0.102E+00
08/24/82		0.3780E+00	0.132E+00
09/23/74		0.1320E+00	0.000E+00
10/25/73		0.2790E+00	0.000E+00

Hanford Townsite
6017 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/87		0.4200E+00	0.000E+00
06/12/85		0.3510E+00	0.117E+00
05/17/84		0.3430E+00	0.934E-01
08/12/83		0.2390E+00	0.670E-01
08/30/82		0.3240E+00	0.113E+00
08/10/81		0.4010E+00	0.140E+00
08/05/80		0.2800E+00	0.980E-01
09/11/79		0.3650E+00	0.130E+00
08/08/78		0.3500E+00	0.150E+00
06/14/77		0.1880E+00	0.680E-01
08/11/76		0.3280E+00	0.000E+00
08/18/75		0.2410E+00	0.000E+00
10/25/73		0.3020E+00	0.000E+00

Prosser Barricade
6225 Depth 0-1 in. Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
04/29/86		0.2540E+00	0.000E+00
06/06/85		0.7980E+00	0.242E+00
05/15/84		0.3600E+00	0.640E-01
08/23/83		0.2490E+00	0.686E-01
08/16/82		0.2010E+00	0.703E-01
08/11/81		0.3500E+00	0.120E+00
08/04/80		0.1620E+00	0.570E-01
09/12/79		0.3010E+00	0.110E+00
08/08/78		0.6790E+00	0.150E+00
06/14/77		0.3180E+00	0.680E-01
08/19/75		0.2060E+00	0.000E+00
09/24/74		0.1320E+00	0.000E+00

TABLE A.7. (contd)

Other Onsite Locations

ERC (Emer. Reloc. Center)
6001 Depth 0-1 in.

Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.7030E+00	0.000E+00
10/25/73		0.3910E+00	0.000E+00

Yakima Barricade

6004 Depth 0-1 in.

Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2710E+00	0.000E+00
06/06/85		0.3460E+00	0.115E+00
05/24/84		0.2060E+00	0.562E-01
08/11/83		0.2550E+00	0.706E-01
08/17/82		0.2270E+00	0.794E-01
08/11/81		0.5000E+00	0.170E+00
08/04/80		0.2910E+00	0.100E+00
09/11/79		0.3890E+00	0.140E+00
08/08/78		0.2140E+00	0.150E+00
06/14/77		0.1230E+00	0.680E-01
08/10/76		0.2440E+00	0.000E+00
08/19/75		0.2530E+00	0.000E+00
09/23/74		0.1010E+00	0.000E+00
10/25/73		0.3040E+00	0.000E+00

E of Arid Land Ecol. Lab
6278 Depth 0-1 in.

Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.4530E+00	0.000E+00
06/12/85		0.4560E+00	0.146E+00
05/24/84		0.2460E+00	0.670E-01
08/23/83		0.2830E+00	0.780E-01
08/16/82		0.3480E+00	0.122E+00
08/13/81		0.3130E+00	0.110E+00
08/05/80		0.3630E+00	0.130E+00
09/12/79		0.3300E+00	0.120E+00
08/10/78		0.3820E+00	0.150E+00
06/14/77		<0.4570E-01	0.680E-01
08/10/76		0.2850E+00	0.000E+00
08/20/75		0.1520E+00	0.000E+00

Rattlesnake Springs
6003 Depth 0-1 in.

Uranium

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/07/87		0.2780E+00	0.000E+00
05/23/86		0.2610E+00	0.000E+00
06/06/85		0.4410E+00	0.143E+00
05/24/84		0.2580E+00	0.692E-01
08/11/83		0.2510E+00	0.702E-01
09/02/82		0.3000E+00	0.105E+00
09/23/74		0.3210E+00	0.000E+00
10/25/73		0.5170E+00	0.000E+00

APPENDIX B

OFFSITE ROUTINE SOIL SAMPLING LOCATIONS AND RESULTS

TABLE B.1. Offsite Routine Soil Sampling Locations, 1971 through 1987

Location	Map Number	Sample Number	Sample Layer (in.)	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Wahlake Slope No. 2	1	6007	0-1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Wahlake Slope No. 2	1	6030	1-2	X	X															
Berg Ranch	2	6008	0-1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Berg Ranch	2	6031	1-2	X	X															
Cook Bros. Dairy Farm	3	6219	0-1				X													
Ringold	4	6009	0-1	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Ringold	4	6032	1-2	X	X															
W End of Fir Road	5	6360	0-1							X	X	X	X	X	X	X	X	X	X	X
Baxter Substation	6	6220	0-1				X			X										
Pettlett Dairy Farm	7	6359	0-1							X										
Taylor Flats No. 1	8	6420	0-1								X	X	X	X	X					
Taylor Flats No. 2	9	6421	0-1								X	X	X	X	X	X	X	X	X	X
Sagehen Farms	10	6358	0-1							X	X	X	X	X	X	X	X	X	X	X
Sagehen Farms (QC Dupl. A)	10	0818	0-1												X	X	X	X	X	X
Sagehen Farms (QC Dupl. B)	10	0819	0-1												X	X	X	X	X	X
Byers Landing Pump House	11	6010	0-1	X	X	X	X													
Byers Landing Pump House	11	6033	1-2	X	X															
Byers Landing	12	6011	0-1	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Byers Landing	12	6034	1-2	X	X															
Riverview (Harris Farm)	13	6361	0-1							X	X	X	X	X	X	X	X	X	X	X
Riverview Control Plot 55	14	6012	0-1	X	X	X	X													
Riverview Control Plot 55	14	6035	1-2	X	X															
N Richland Control Plot 55	15	6013	0-1	X	X	X	X													
N Richland Control Plot 55	15	6036	1-2	X	X															
NE Corner of Exxon Site	16	6280	0-1					X	X											
Benton City	17	6000	0-1	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X
Benton City	17	6023	1-2	X	X															
Benton City (QC Dupl. A)	17	0820	0-1												X					
Benton City (QC Dupl. B)	17	0821	0-1												X					

TABLE B.1. (contd)

Location	Map Number	Sample Number	Sample Layer (in.)	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Sunnyside	18	0507	0-1							X	X	X	X	X	X	X	X	X	X	X
Yakima	19	0512	0-1																X	X
Moses Lake	20	0500	0-1																X	X
Othello	21	0505	0-1																X	X
Connell	22	0503	0-1																X	X
Washburn	23	0501	0-1																X	X
Walla Walla	24	0502	0-1															X	X	X
McNary Dam	25	0504	0-1															X	X	X

FIGURE B.1. Offsite Routine Soil Sampling Locations, 1971 to 1987

TABLE B.2. Strontium-90 Concentrations in Soil at Offsite Locations

Wahluke Slope No. 2			
6007	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.7470E-01	0.101E-01
05/02/86		0.9830E-01	0.656E-02
06/12/85		0.2070E+00	0.227E-01
05/31/84		0.1610E+00	0.170E-01
08/26/83		0.6460E+00	0.232E-01
08/30/82		0.9920E-01	0.349E-01
08/11/81		0.8890E-01	0.220E-02
08/06/80		0.3090E+00	0.140E-01
09/13/79		0.9580E-01	0.670E-02
08/09/78		0.1140E-01	0.340E-02
06/14/77		0.1670E-01	0.340E-02
08/09/76		0.3090E-01	0.000E+00
08/19/75		0.1000E+00	0.000E+00
09/23/74		0.1540E-01	0.000E+00
10/25/73		0.3740E+00	0.540E-02
10/25/72		0.2950E+00	0.000E+00
09/29/71		0.1830E+00	0.000E+00

Wahluke Slope No. 2			
6030	Depth 1-2 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1310E+00	0.000E+00
09/29/71		0.9200E-01	0.000E+00

Berg Ranch			
6008	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.1960E+00	0.136E-01
05/02/86		0.2040E+00	0.926E-02
06/26/85		0.1490E+00	0.168E-01
05/30/84		0.1970E+00	0.189E-01
08/26/83		0.9230E+00	0.226E-01
08/20/82		0.2030E+00	0.910E-01
08/11/81	1	0.1080E+00	0.450E-02
08/11/81		0.1070E+00	0.560E-02
08/06/80		0.1410E+00	0.680E-02
09/13/79		0.3010E+00	0.990E-02
08/09/78		0.9720E-02	0.330E-02
06/14/77		<0.0000E+00	0.340E-02
08/09/76		0.2850E-01	0.000E+00
08/19/75		0.1750E+00	0.000E+00
09/23/74		0.4780E-01	0.000E+00
10/25/73		0.3220E+00	0.520E-02
10/25/72		0.2020E+00	0.000E+00
09/30/71		0.3400E+00	0.000E+00

Berg Ranch			
6031	Depth 1-2 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.7000E-01	0.000E+00
09/29/71		0.3400E+00	0.000E+00

Cook Bros. Dairy Farm			
6219	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.5910E-01	0.000E+00

Ringold			
6009	Depth 0-1 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.2080E+00	0.140E-01
05/22/86		0.2620E+00	0.244E-01
07/08/85		0.1980E+00	0.179E-01
05/30/84		0.2410E+00	0.143E-01
08/18/83		0.1750E+01	0.321E-01
08/20/82		0.8480E-01	0.390E-01
08/12/81		0.2000E+00	0.220E-02
08/06/80		0.6960E-01	0.680E-02
09/13/79		0.1770E+00	0.120E-01
08/09/78		0.2560E-01	0.360E-02
06/14/77		<0.3320E-02	0.340E-02
08/09/76		0.1720E-01	0.000E+00
08/19/75		0.7290E-01	0.000E+00
10/25/73		0.3810E-01	0.230E-02
10/25/72		0.1170E+00	0.000E+00
10/01/71		0.1180E+00	0.000E+00

Ringold			
6032	Depth 1-2 in.	Sr-90	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.7970E-01	0.000E+00
10/01/71		0.9950E+00	0.000E+00

TABLE B.2. (contd)

W End of Fir Road 6360 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.5360E-01	0.780E-02
05/22/86		0.1200E+00	0.178E-01
07/03/85		0.9110E-01	0.121E-01
05/31/84		0.1430E+00	0.151E-01
08/18/83		0.1180E+01	0.311E-01
08/20/82		0.7010E-01	0.675E-02
08/12/81		0.5060E-01	0.310E-02
08/06/80		0.1710E+00	0.680E-02
09/13/79		0.1210E+00	0.890E-02
08/09/78		0.1070E-01	0.320E-02
06/14/77		0.1500E+00	0.770E-02

Baxter Substation 6220 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.3040E-01	0.360E-02
09/25/74		0.6150E-01	0.000E+00

Pettatt Dairy Farm 6359 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.2650E-02	0.340E-02

Taylor Flats No. 1 6420 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/82		0.6910E-01	0.196E-01
08/14/81		0.1110E+00	0.110E-01
01/22/81		<0.6640E-02	0.680E-02
08/06/80		0.7430E-02	0.680E-02
09/13/79		0.5520E-01	0.660E-02
08/10/78		0.7790E-02	0.320E-02

Taylor Flats No. 2 6421 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.9740E-01	0.101E-01
05/22/86		0.3550E+00	0.191E-01
07/08/85		0.4550E-01	0.874E-02
05/30/84		0.4190E-01	0.821E-02
08/26/83		0.2310E+01	0.387E-01
08/20/82		0.2340E+00	0.591E-01
11/03/81		0.1250E+00	0.260E-02
11/03/81	2	0.8450E-01	0.310E-02
11/03/81	1	0.1100E+00	0.110E-01
08/14/81		0.2530E+00	0.890E-02
01/22/81		0.1900E+00	0.200E-01
08/06/80		0.2530E+00	0.110E-01
09/13/79		0.3380E+00	0.990E-02
08/10/78		0.6530E-02	0.340E-02

Sagemore Farms 6358 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.4100E-01	0.759E-02
05/22/86		0.1070E+00	0.170E-01
07/08/85		0.8060E-01	0.114E-01
05/30/84		0.2510E+00	0.463E-01
08/25/83		0.2770E+00	0.170E-01
08/18/82		0.6280E-01	0.198E-01
11/02/81		0.6140E-02	0.290E-02
08/12/81		0.1770E-01	0.210E-02
08/06/80		0.1550E-01	0.680E-02
09/13/79		0.2920E-01	0.670E-02
08/09/78		0.8000E-02	0.330E-02
06/14/77		0.1130E-01	0.340E-02

Sagemore Farms (QC Dupl. A) 0818 Depth 0-1 in. Sr-90			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.8940E-01	0.116E-01
05/22/86		0.1320E+00	0.110E-01
07/08/85		0.6110E-01	0.100E-01
05/30/84		0.1580E+00	0.169E-01
08/25/83		0.4470E+00	0.301E-01
08/18/82		0.5680E-01	0.637E-02

TABLE B.2. (contd)

Sagemoor Farms (QC Dupl. B)

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
0819	Depth 0-1 in.	Sr-90	
05/15/87		0.6440E-01	0.106E-01
05/22/86		0.1300E+00	0.990E-02
07/08/85		0.6340E-01	0.122E-01
05/30/84		0.1750E+00	0.273E-01
08/25/83		0.4100E+00	0.248E-01
08/18/82		0.5300E-01	0.129E-01

Byers Landing Pump House

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
6010	Depth 0-1 in.	Sr-90	
09/25/74		0.3800E+00	0.000E+00
10/25/73		0.1100E-01	0.230E-02
10/25/72		0.7740E-01	0.000E+00
10/01/71		0.1410E+00	0.000E+00

Byers Landing Pump House

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
6033	Depth 1-2 in.	Sr-90	
10/25/72		0.8730E-01	0.000E+00
10/01/71		0.1260E+00	0.000E+00

Byers Landing

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
6011	Depth 0-1 in.	Sr-90	
05/15/87		0.8220E-01	0.105E-01
05/22/86		0.1650E+00	0.101E-01
06/19/85		0.1780E+00	0.164E-01
05/30/84		0.6420E-01	0.761E-02
08/25/83		0.3040E+00	0.195E-01
08/18/82		0.2340E-01	0.985E-02
08/12/81		0.5590E-01	0.320E-02
08/06/80		0.2930E-02	0.680E-02
09/13/79		0.1760E+00	0.760E-02
08/09/78		0.5430E-01	0.470E-02
06/14/77		0.1670E+00	0.770E-02
08/09/76		0.2160E-01	0.000E+00
09/25/74		0.2470E+00	0.000E+00
10/25/73		0.1940E+00	0.410E-02
10/25/72		0.1300E+00	0.000E+00
10/01/71		0.9800E-01	0.000E+00

Byers Landing

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
6034	Depth 1-2 in.	Sr-90	
10/25/72		0.1770E+00	0.000E+00
10/01/71		0.9800E-01	0.000E+00

Riverview (Harris Farm)

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
6361	Depth 0-1 in.	Sr-90	
05/15/87		0.1870E+00	0.135E-01
05/22/86		0.6110E-01	0.116E-01
06/19/85		0.7410E-01	0.118E-01
05/30/84		0.3910E-01	0.115E-01
08/18/83		0.8970E+00	0.437E-01
08/18/82		0.1150E+00	0.409E-01
08/12/81		0.2090E+00	0.900E-02
08/06/80		0.1350E-02	0.680E-02
09/13/79		0.3740E+00	0.110E-01
08/09/78		0.3540E-01	0.380E-02
06/14/77		0.1740E-01	0.340E-02

Riverview Control Plot 55

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
6012	Depth 0-1 in.	Sr-90	
09/25/74		0.3950E-01	0.000E+00
10/25/73		0.6420E-01	0.290E-02
10/25/72		0.2280E+00	0.000E+00
10/01/71		0.3300E+00	0.000E+00

Riverview Control Plot 55

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
6035	Depth 1-2 in.	Sr-90	
10/25/72		0.1700E+00	0.000E+00
10/01/71		0.1960E+00	0.000E+00

TABLE B.2. (contd)

N Richland Control Plot 56
6013 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.2610E+00	0.000E+00
10/25/73		0.1180E+00	0.290E-02
10/25/72		0.3180E+00	0.000E+00
09/30/71		0.2400E+00	0.000E+00

N Richland Control Plot 56
6036 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1800E+00	0.000E+00
09/30/71		0.2400E+00	0.000E+00

NE Corner of Exxon Site
6280 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/09/76		0.2530E+00	0.000E+00
08/19/75		0.5550E+00	0.000E+00

Benton City
6000 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.2400E+00	0.139E-01
05/23/86		0.2450E+00	0.101E-01
07/03/85		0.1180E+00	0.144E-01
06/06/84		0.3590E+00	0.306E-01
08/23/83		0.4180E+00	0.181E-01
08/16/82		0.2120E+00	0.298E-01
08/13/81		0.2950E+00	0.320E-02
08/04/80		0.2880E+00	0.510E-02
09/12/79		0.3360E+00	0.990E-02
08/08/78		0.3200E-01	0.360E-02
06/14/77		0.2500E-01	0.360E-02
09/25/74		0.7770E+00	0.000E+00
10/25/73		0.1230E+00	0.340E-02
10/25/72		0.3790E+00	0.000E+00
09/30/71		0.4500E+00	0.000E+00

Benton City
6023 Depth 1-2 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.2700E+00	0.000E+00
09/30/71		0.2170E+00	0.000E+00

Benton City (QC Dupl. A)
0820 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.2170E+00	0.108E+00

Benton City (QC Dupl. B)
0821 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.6970E-02	0.177E-02

Sunnyside
6357 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.2540E+00	0.221E-01
06/03/86		0.5220E-01	0.776E-02
06/17/85		0.2620E+00	0.197E-01
05/22/84		0.3100E+00	0.294E-01
08/23/83		0.1610E+01	0.397E-01
08/17/82		0.1200E+00	0.315E-01
08/13/81		0.1570E+00	0.160E-01
08/04/80		0.1900E+00	0.210E-01
09/12/79		0.2450E+00	0.990E-02
08/08/78		0.1370E-01	0.310E-02
06/14/77		0.3330E-01	0.430E-02

Yakima
0512 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.4610E-01	0.772E-02
05/21/87		0.6790E-01	0.878E-02
06/03/86		0.3890E-01	0.661E-02

TABLE B.2. (contd)

Moses Lake
0500 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.6950E-01	0.103E-01
05/08/87		0.5700E-01	0.100E-01
05/23/86		0.7570E-01	0.600E-02

McNary Dam
0504 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		0.9100E-01	0.958E-02
05/29/87	1	0.5440E-01	0.738E-02
05/02/86		0.1750E+00	0.822E-02
11/15/85		0.2870E+00	0.188E-01

Othello
0505 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.1310E+00	0.105E-01
05/26/87		0.1730E+00	0.123E-01
05/02/86		0.2720E+00	0.236E-01

Connell
0503 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.8950E-01	0.921E-02
05/26/87		0.1520E+00	0.113E-01
05/02/86		0.3170E+00	0.163E-01

Washtucna
0501 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.1490E+00	0.129E-01
05/08/87		0.8040E-01	0.106E-01
05/23/86		0.4010E+00	0.185E-01

Walla Walla
0502 Depth 0-1 in. Sr-90

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		0.1840E-01	0.533E-02
05/29/87	1	0.2190E-01	0.605E-02
05/02/86		0.1380E+00	0.789E-02
11/15/85		0.3110E+00	0.147E-01

TABLE B.3. Cesium-137 Concentrations in Soil at Offsite Locations

Wahlake Slope No. 2			
6007	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.1590E+00	0.316E-01
05/02/86		0.3030E+00	0.330E-01
06/12/85		0.4740E+00	0.472E-01
05/31/84		0.2880E+00	0.284E-01
08/26/83		0.2520E+00	0.291E-01
08/30/82		0.3420E+00	0.687E-01
08/11/81		0.1010E+00	0.180E-01
08/06/80		0.3490E+00	0.520E-01
09/13/79		0.4630E+00	0.640E-01
08/09/78		0.3270E+00	0.550E-01
06/14/77		0.1770E+00	0.430E-01
08/09/76		0.2880E+00	0.000E+00
08/19/75		0.3130E+00	0.000E+00
09/23/74		0.2290E+00	0.000E+00
10/25/73		0.1010E+01	0.000E+00
10/25/72		0.7240E+00	0.000E+00
09/29/71		0.4680E+00	0.000E+00

Wahlake Slope No. 2			
6030	Depth 1-2 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1580E+00	0.000E+00
09/29/71		0.2560E+00	0.000E+00

Berg Ranch			
6008	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.3100E+00	0.354E-01
05/02/86		0.6020E+00	0.454E-01
06/26/85		0.5790E+00	0.521E-01
05/30/84		0.4940E+00	0.457E-01
08/26/83		0.6080E+00	0.453E-01
08/20/82		0.8340E+00	0.512E-01
08/11/81	1	0.4850E+00	0.380E-01
08/11/81		0.3960E+00	0.240E-01
08/06/80		0.5820E+00	0.640E-01
09/13/79		0.8630E+00	0.850E-01
08/09/78		0.5480E+00	0.680E-01
06/14/77		0.1380E+01	0.110E+00
08/09/76		0.2950E+00	0.000E+00
08/19/75		0.3220E+00	0.000E+00
09/23/74		0.4510E+00	0.000E+00
10/25/73		0.8220E+00	0.000E+00
10/25/72		0.2260E+00	0.000E+00
09/30/71		0.5690E+00	0.000E+00

Berg Ranch			
6031	Depth 1-2 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1200E-01	0.000E+00
09/29/71		<0.0000E+00	0.000E+00

Cook Bros. Dairy Farm			
6219	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.7400E-01	0.000E+00

Ringold			
6009	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.1020E+01	0.613E-01
05/22/86		0.3980E+00	0.428E-01
07/08/85		0.1120E+01	0.458E-01
05/30/84		0.4440E+00	0.436E-01
08/18/83		0.1560E+01	0.805E-01
08/20/82		0.8260E+00	0.551E-01
08/12/81		0.9380E+00	0.480E-01
08/06/80		0.6780E+00	0.690E-01
09/13/79		0.6920E+00	0.760E-01
08/09/78		0.9670E+00	0.870E-01
06/14/77		0.2070E+00	0.460E-01
08/09/76		0.4340E+00	0.000E+00
08/19/75		0.1710E+00	0.000E+00
10/25/73		<0.0000E+00	0.000E+00
10/25/72		0.4000E+00	0.000E+00
10/01/71		0.4080E+00	0.000E+00

Ringold			
6032	Depth 1-2 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4800E-01	0.000E+00
10/01/71		0.3230E-01	0.000E+00

TABLE B.3. (contd)

W End of Fir Road 6360 Depth 0-1 in. Cs-137				Taylor Flats No. 2 6421 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.	Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.2270E+00	0.333E-01	05/15/87		0.6040E+00	0.548E-01
05/22/86		0.2540E+00	0.302E-01	05/22/86		0.1190E+01	0.132E+00
07/03/85		0.1410E+00	0.246E-01	07/08/85		0.8540E-01	0.281E-01
05/31/84		0.1160E+00	0.308E-01	05/30/84		0.8420E-01	0.310E-01
08/18/83		0.2500E+00	0.345E-01	08/26/83		0.2180E+01	0.702E-01
08/20/82		0.3470E+00	0.546E-01	08/20/82		0.6050E+00	0.488E-01
08/12/81		0.1470E+00	0.200E-01	11/03/81		0.3720E+00	0.180E-01
08/06/80		0.1850E+00	0.400E-01	11/03/81 2		0.4050E+00	0.320E-01
09/13/79		0.5710E+00	0.690E-01	11/03/81 1		0.3160E+00	0.290E-01
08/09/78		0.3920E+00	0.590E-01	08/14/81		0.1070E+01	0.510E-01
06/14/77		0.3990E+00	0.600E-01	01/22/81		0.2700E+00	0.210E-01
				08/06/80		0.1400E+01	0.110E+00
				09/13/79		0.1600E+01	0.110E+00
				08/10/78		0.9120E-01	0.340E-01
Baxter Substation 6220 Depth 0-1 in. Cs-137				Sagemore Farms 6358 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.	Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.1930E+00	0.450E-01	05/15/87		0.1170E+00	0.241E-01
09/25/74		0.2570E+00	0.000E+00	05/22/86		0.3210E+00	0.393E-01
				07/08/85		0.1030E+00	0.225E-01
Pettett Dairy Farm 6359 Depth 0-1 in. Cs-137				05/30/84		0.1020E+01	0.642E-01
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.	08/25/83		0.1410E+00	0.264E-01
06/14/77		0.2920E+00	0.530E-01	08/18/82		0.5860E-01	0.372E-01
				08/12/81 1		0.4490E-01	0.160E-01
				08/12/81		0.5890E-01	0.150E-01
				08/06/80		0.5510E+00	0.630E-01
				09/13/79		0.8950E-01	0.300E-01
				08/09/78		0.1180E+00	0.360E-01
				06/14/77		0.7060E-01	0.320E-01
Taylor Flats No. 1 6420 Depth 0-1 in. Cs-137				Sagemore Farms (QC Dupl. A) 0818 Depth 0-1 in. Cs-137			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.	Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/82		<0.2530E-01	0.540E-01	05/15/87		0.2810E+00	0.315E-01
08/14/81		0.7870E+00	0.420E-01	05/22/86		0.2440E+00	0.348E-01
01/22/81		0.9890E-01	0.190E-01	07/08/85		<0.3310E-02	0.360E-01
08/06/80		0.8610E-01	0.360E-01	05/30/84		0.1040E+01	0.662E-01
09/13/79		0.1270E+00	0.370E-01	08/25/83		0.9150E-01	0.243E-01
08/10/78		0.2340E+00	0.480E-01	08/18/82		0.4040E+00	0.640E-01

TABLE B.3. (contd)

Sagemore Farms (QC Dupl. B)
0819 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.3290E+00	0.364E-01
05/22/86		0.2940E+00	0.346E-01
07/08/85		0.7160E-01	0.207E-01
05/30/84		0.1110E+01	0.559E-01
08/25/83		0.1340E+00	0.265E-01
08/18/82		0.1880E+00	0.274E-01

Byers Landing Pump House
6010 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.1850E+01	0.000E+00
10/25/73		0.1420E+00	0.000E+00
10/25/72		0.4240E+00	0.000E+00
10/01/71		0.6030E+00	0.000E+00

Byers Landing Pump House
6033 Depth 1-2 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.5860E+00	0.000E+00
10/01/71		0.1750E+00	0.000E+00

Byers Landing
6011 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.2270E+00	0.304E-01
05/22/86		0.5040E+00	0.368E-01
06/19/85		0.1930E+00	0.347E-01
05/30/84		0.2020E+00	0.305E-01
08/25/83		0.5870E+00	0.480E-01
08/18/82		0.2790E+00	0.745E-01
08/12/81		0.2280E+00	0.240E-01
08/06/80		0.3410E+00	0.490E-01
09/13/79		0.9370E+00	0.850E-01
08/09/78		0.1100E+01	0.950E-01
06/14/77		0.4240E+00	0.620E-01
08/09/76		0.2010E+00	0.000E+00
09/25/74		0.6940E+00	0.000E+00
10/25/73		0.7650E+00	0.000E+00
10/25/72		0.8360E+00	0.000E+00
10/01/71		0.1270E+01	0.000E+00

Byers Landing
6034 Depth 1-2 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.8810E+00	0.000E+00
10/01/71		0.2740E+00	0.000E+00

Riverview (Harris Farm)
6361 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.8600E+00	0.503E-01
05/22/86		0.1680E+00	0.358E-01
06/19/85		0.2080E+00	0.260E-01
05/30/84		0.7710E-01	0.205E-01
08/18/83		0.1160E+01	0.653E-01
08/18/82		0.4890E+00	0.698E-01
08/12/81		0.4630E+00	0.330E-01
08/06/80		0.1090E+01	0.850E-01
09/13/79		0.3520E+00	0.570E-01
08/09/78		0.5010E+00	0.660E-01
06/14/77		0.1650E+00	0.420E-01

Riverview Control Plot 55
6012 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.5820E-01	0.000E+00
10/25/73		0.8380E+00	0.000E+00
10/25/72		0.5460E+00	0.000E+00
10/01/71		0.7430E+00	0.000E+00

Riverview Control Plot 55
6035 Depth 1-2 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.4540E+00	0.000E+00
10/01/71		0.2990E+00	0.000E+00

TABLE B.3. (contd)

N Richland Control Plot 56
6013 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.4780E+00	0.000E+00
10/25/73		0.8380E+00	0.000E+00
10/25/72		0.7530E+00	0.000E+00
09/30/71		0.4180E+00	0.000E+00

N Richland Control Plot 56
6036 Depth 1-2 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3590E+00	0.000E+00
09/30/71		0.2590E+00	0.000E+00

NE Corner of Exxon Site
6280 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/09/76		0.9210E+00	0.000E+00
08/19/75		0.6700E+00	0.000E+00

Benton City
6000 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.6540E+00	0.421E-01
05/23/86		0.7890E+00	0.454E-01
07/03/85		0.8700E+00	0.371E-01
06/06/84		0.5300E+00	0.430E-01
08/23/83		0.5390E+00	0.451E-01
08/16/82		0.7510E+00	0.472E-01
08/13/81		0.8870E+00	0.440E-01
08/04/80		0.1000E+01	0.850E-01
09/12/79		0.7520E+00	0.800E-01
08/08/78		0.5020E+00	0.660E-01
06/14/77		0.4550E+00	0.640E-01
09/25/74		0.1720E+01	0.000E+00
10/25/73		0.8070E+00	0.000E+00
10/25/72		0.1100E+01	0.000E+00
09/30/71		0.9660E+00	0.000E+00

Benton City
6023 Depth 1-2 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.8430E+00	0.000E+00
09/30/71		0.6010E-02	0.000E+00

Benton City (QC Dupl. A)
0820 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.8090E+00	0.934E-01

Benton City (QC Dupl. B)
0821 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.4830E+00	0.768E-01

Sunnyside
6357 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.2870E+00	0.364E-01
06/03/86		0.9710E-01	0.263E-01
06/17/85		0.2910E+00	0.357E-01
05/22/84		0.1520E+01	0.711E-01
08/23/83		0.1130E+01	0.634E-01
08/17/82		0.4090E+00	0.583E-01
08/13/81		0.6320E+00	0.390E-01
08/04/80		0.6530E+00	0.840E-01
09/12/79		0.7350E+00	0.720E-01
08/08/78		0.5600E+00	0.690E-01
06/14/77		0.1430E+00	0.400E-01

Yakima
0512 Depth 0-1 in. Cs-137

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.1740E+00	0.339E-01
05/21/87		0.1480E+00	0.267E-01
06/03/86		0.1140E+00	0.249E-01

TABLE B.3. (contd)

Moses Lake			
0500	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.1300E+00	0.282E-01
05/08/87		0.1790E+00	0.276E-01
05/23/86		0.2410E+00	0.285E-01

McNary Dam			
0504	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87	1	0.1650E+00	0.306E-01
05/29/87		0.4270E+00	0.397E-01
05/02/86		0.2810E+00	0.279E-01
11/15/85		0.5150E+00	0.396E-01

Othello			
0505	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.6470E+00	0.717E-01
05/26/87		0.8790E+00	0.560E-01
05/02/86		0.2600E+00	0.235E-01

Connell			
0503	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.1780E+00	0.292E-01
05/26/87		0.5220E+00	0.399E-01
05/02/86		0.1740E+01	0.559E-01

Washtucna			
0501	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.4230E+00	0.360E-01
05/08/87		0.3280E+00	0.349E-01
05/23/86		0.1200E+01	0.548E-01

Walla Walla			
0502	Depth 0-1 in.		Cs-137
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87	1	0.6770E-01	0.197E-01
05/29/87		0.7130E-01	0.213E-01
05/02/86		0.2480E+00	0.289E-01
11/15/85		0.2870E+00	0.240E-01

TABLE B.4. Plutonium-238 Concentrations in Soil at Offsite Locations

Wahluke Slope No. 2 6007 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		<0.4730E-04	0.141E-03
05/02/86		<0.0000E+00	0.222E-03
06/12/85		<0.3170E-03	0.368E-03
05/31/84		<0.3380E-03	0.676E-03
08/26/83		0.1220E-02	0.835E-03
08/30/82		<- .3560E-03	0.826E-03
08/11/81		<- .6160E-03	0.270E-03
08/06/80		<0.6790E-03	0.840E-03
09/13/79		<0.1120E-03	0.970E-03
08/09/78		<- .4990E-03	0.180E-02
06/14/77		<0.1090E-02	0.110E-02
08/09/76		0.6360E-02	0.000E+00
08/19/75		0.5470E-03	0.000E+00
09/23/74		0.3840E-03	0.000E+00
10/25/73		<0.1210E-02	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
09/29/71		0.4000E-02	0.000E+00

Wahluke Slope No. 2 6030 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.6270E-02	0.000E+00
09/29/71		0.3000E-02	0.000E+00

Berg Ranch 6008 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		<0.1420E-03	0.174E-03
05/02/86		0.5740E-03	0.406E-03
06/26/85		<0.1040E-03	0.104E-03
05/30/84		0.3910E-03	0.334E-03
08/26/83		0.1160E-02	0.848E-03
08/20/82		<- .4990E-03	0.504E-03
08/11/81	1	<0.4310E-03	0.610E-03
08/11/81		<- .1890E-03	0.340E-03
08/06/80		0.1420E-02	0.890E-03
09/13/79		<0.1490E-03	0.760E-03
08/09/78		<- .4040E-03	0.160E-02
06/14/77		0.3940E-02	0.320E-02
08/09/76		0.4440E-02	0.000E+00
08/19/75		<- .2800E-03	0.000E+00
09/23/74		0.3120E-03	0.000E+00
10/25/73		<0.1330E-02	0.300E-02
10/25/72		0.6010E-03	0.000E+00
09/29/71		0.6700E-02	0.000E+00

Berg Ranch 6031 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1600E-01	0.000E+00
09/29/71		0.3000E-02	0.000E+00

Cook Bros. Dairy Farm 6219 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		<0.0000E+00	0.000E+00

Ringold 6009 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.7300E-03	0.359E-03
05/22/86		<0.8910E-04	0.103E-03
07/08/85		<0.2670E-03	0.275E-03
05/30/84		0.5320E-03	0.362E-03
08/18/83		<0.0000E+00	0.000E+00
08/20/82		<- .3730E-03	0.632E-03
08/12/81		<0.5250E-03	0.640E-03
08/06/80		0.1520E-02	0.950E-03
09/13/79		0.2220E-02	0.120E-02
08/09/78		<0.1070E-02	0.150E-02
06/14/77		0.3220E-02	0.260E-02
08/09/76		0.8970E-03	0.000E+00
08/19/75		0.1220E-02	0.000E+00
10/25/73		<0.1340E-03	0.300E-02
10/25/72		0.5360E-02	0.000E+00
10/01/71		0.1900E-02	0.000E+00

Ringold 6032 Depth 1-2 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1590E-01	0.000E+00
10/01/71		0.2900E-02	0.000E+00

TABLE B.4. (contd)

W End of Fir Road 6360 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		<0.5700E-04	0.126E-03
05/22/86		0.4120E-03	0.220E-03
07/03/85		0.2000E-03	0.179E-03
05/31/84		<0.4970E-03	0.702E-03
08/18/83		<0.3420E-03	0.395E-03
08/20/82		<0.8440E-04	0.562E-03
08/12/81		0.9090E-03	0.660E-03
08/06/80		<0.1220E-03	0.650E-03
09/13/79		<0.1830E-03	0.770E-03
08/09/78		<0.9380E-03	0.170E-02
06/14/77		<0.3080E-03	0.720E-03

Baxter Substation 6220 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.2510E-03	0.760E-03
09/25/74		0.1060E-01	0.000E+00

Pettett Dairy Farm 6359 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.2690E-02	0.140E-02

Taylor Flats No. 1 6420 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/82		<0.4290E-04	0.588E-03
08/14/81		0.1980E-02	0.690E-03
01/22/81		0.7160E-03	0.550E-03
08/06/80		0.7280E-02	0.150E-02
09/13/79		<0.3690E-03	0.940E-03
08/10/78		0.3170E-02	0.120E-02

Taylor Flats No. 2 6421 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.4620E-03	0.257E-03
05/22/86		<0.5290E-03	0.529E-03
07/08/85		0.2240E-03	0.177E-03
05/30/84		<0.8470E-04	0.140E-03
08/26/83		0.1120E-02	0.100E-02
08/20/82		<0.9650E-03	0.124E-02
11/03/81		<0.4710E-03	0.260E-03
11/03/81	2	<0.5710E-03	0.260E-03
11/03/81	1	<0.1520E-04	0.350E-03
08/14/81		0.1650E-02	0.620E-03
01/22/81		0.2190E-02	0.800E-03
08/06/80		0.4870E-02	0.170E-02
09/13/79		0.9910E-03	0.740E-03
08/10/78		<0.1040E-03	0.300E-02

Sagemore Farms 6358 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		<0.2760E-05	0.779E-04
05/22/86		0.4280E-03	0.214E-03
07/08/85		<0.8870E-04	0.159E-03
05/30/84		0.6040E-03	0.382E-03
08/25/83		0.1130E-02	0.563E-03
08/18/82		<0.7300E-03	0.296E-03
11/02/81		<0.4360E-03	0.350E-03
08/12/81		0.1920E-02	0.670E-03
08/06/80		0.6880E-02	0.150E-02
09/13/79		<0.5940E-03	0.140E-02
08/09/78		<0.6800E-03	0.130E-02
06/14/77		<0.9530E-03	0.130E-02

Sagemore Farms (QC Dupl. A) 0818 Depth 0-1 in. Pu-238			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.2590E-03	0.235E-03
05/22/86		0.2090E-03	0.187E-03
07/08/85		<0.9210E-04	0.153E-03
05/30/84		0.9280E-03	0.560E-03
08/25/83		<0.2650E-03	0.318E-03
08/18/82		<0.4620E-03	0.679E-03

TABLE B.4. (contd)

Sagemore Farms (QC Dupl. B)
0819 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		<0.8240E-04	0.135E-03
05/22/86		0.6350E-03	0.276E-03
07/08/85		0.2620E-03	0.220E-03
05/30/84		0.8190E-03	0.579E-03
08/25/83		0.1320E-02	0.118E-02
08/18/82		0.1140E-02	0.890E-03

Byers Landing Pump House
6010 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.1320E-02	0.000E+00
10/25/73		<0.1520E-02	0.300E-02
10/25/72		<0.0000E+00	0.000E+00
10/01/71		0.2800E-02	0.000E+00

Byers Landing Pump House
6033 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
10/01/71		0.1100E-02	0.000E+00

Byers Landing
6011 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		<0.6590E-04	0.106E-03
05/22/86		0.3810E-03	0.211E-03
06/19/85		0.1190E-02	0.451E-03
05/30/84		0.3600E-02	0.294E-02
08/25/83		<0.3620E-03	0.362E-03
08/18/82		<0.6040E-03	0.871E-03
08/12/81		<- .5060E-03	0.380E-03
08/06/80			
09/13/79		<0.3290E-03	0.720E-03
08/09/78		<0.3460E-02	0.500E-02
06/14/77		<0.2760E-03	0.890E-03
08/09/76		0.1360E-02	0.000E+00
09/25/74		0.2650E-03	0.000E+00
10/25/73		<0.6750E-03	0.300E-02
10/25/72		0.9110E-03	0.000E+00
10/01/71		0.1600E-02	0.000E+00

Byers Landing
6034 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.2880E-02	0.000E+00
10/01/71		0.2440E-02	0.000E+00

Riverview (Harris Farm)
6361 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.3240E-03	0.194E-03
05/22/86		0.2670E-03	0.197E-03
06/19/85		<0.2290E-03	0.242E-03
05/30/84		0.2260E-02	0.202E-02
08/18/83		<0.8230E-03	0.106E-02
08/18/82		<- .2710E-03	0.633E-03
08/12/81		<- .3580E-03	0.300E-03
08/06/80		<0.5170E-03	0.560E-03
09/13/79		<0.5890E-04	0.750E-03
08/09/78		<0.9790E-03	0.130E-02
06/14/77		0.3170E-02	0.280E-02

Riverview Control Plot 55
6012 Depth 0-1 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		<0.0000E+00	0.000E+00
10/25/73		0.6270E-02	0.300E-02
10/25/72		0.2200E-02	0.000E+00
10/01/71		0.5000E-02	0.000E+00

Riverview Control Plot 55
6035 Depth 1-2 in. Pu-238

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
10/01/71		<0.0000E+00	0.000E+00

TABLE B.4. (contd)

N Richland Control Plot 56			
6013	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.4510E-03	0.000E+00
10/25/73		<0.7480E-03	0.300E-02
10/25/72		0.1160E-01	0.000E+00
09/30/71		0.3700E-02	0.000E+00

N Richland Control Plot 56			
6036	Depth 1-2 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.9740E-02	0.000E+00
09/30/71		0.2680E-02	0.000E+00

NE Corner of Exxon Site			
6280	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/09/76		0.6610E-03	0.000E+00
08/19/75		0.2870E-03	0.000E+00

Benton City			
6000	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.2780E-03	0.206E-03
05/23/86		0.6280E-03	0.312E-03
07/03/85		0.5620E-03	0.371E-03
06/06/84		<0.3580E-03	0.368E-03
08/23/83		0.6640E-03	0.379E-03
08/16/82		<0.4640E-03	0.820E-03
08/13/81		<-0.4310E-03	0.410E-03
08/04/80		0.1940E-02	0.110E-02
09/12/79		<0.2940E-03	0.390E-03
08/08/78		<0.8510E-04	0.770E-03
06/14/77		<-0.1930E-04	0.730E-03
09/25/74		0.1770E-02	0.000E+00
10/25/73		<0.0000E+00	0.300E-02
10/25/72		0.1670E-02	0.000E+00
09/30/71		0.1890E-02	0.000E+00

Benton City			
6023	Depth 1-2 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		<0.0000E+00	0.000E+00
09/30/71		0.1200E-02	0.000E+00

Benton City (QC Dupl. A)			
0820	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.7880E-03	0.764E-03

Benton City (QC Dupl. B)			
0821	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		<0.1730E-03	0.652E-03

Sunnyside			
6357	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.2380E-03	0.220E-03
06/03/86		<0.0000E+00	0.182E-03
06/17/85		<0.1990E-03	0.211E-03
05/22/84		0.1070E-02	0.536E-03
08/23/83		<0.2000E-03	0.401E-03
08/17/82		<0.5260E-03	0.785E-03
08/13/81		<-0.1160E-03	0.380E-03
08/04/80		0.2210E-02	0.120E-02
09/12/79		<0.9400E-04	0.720E-03
08/08/78		<-0.2210E-03	0.130E-02
06/14/77		0.1280E-02	0.110E-02

Yakima			
0512	Depth 0-1 in.	Pu-238	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	<0.9420E-04	0.147E-03
05/21/87		<0.1420E-03	0.194E-03
06/03/86		0.4520E-03	0.369E-03

TABLE B.4. (contd)

Moses Lake			
0500	Depth 0-1 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	<0.9800E-04	0.174E-03
05/08/87		<-0.1810E-04	0.119E-03
05/23/86		0.3070E-03	0.171E-03

McNary Dam			
0504	Depth 0-1 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		<0.1690E-03	0.181E-03
05/29/87	1	<0.3220E-04	0.976E-04
05/02/86		0.2920E-03	0.215E-03
11/15/85		0.1430E-02	0.759E-03

Othello			
0505	Depth 0-1 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.2940E-03	0.245E-03
05/26/87		0.4790E-03	0.332E-03
05/02/86		<0.8410E-04	0.971E-04

Connell			
0503	Depth 0-1 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.2750E-03	0.197E-03
05/26/87		0.3370E-03	0.189E-03
05/02/86		0.1040E-02	0.486E-03

Washtucna			
0501	Depth 0-1 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	<0.1460E-03	0.199E-03
05/08/87		<0.1220E-03	0.156E-03
05/23/86		0.1080E-02	0.364E-03

Walla Walla			
0502	Depth 0-1 in.		Pu-238
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		<-0.1600E-04	0.726E-04
05/29/87	1	<0.1070E-03	0.225E-03
05/02/86		0.3510E-03	0.234E-03
11/15/85		0.8080E-03	0.330E-03

TABLE B.5. Plutonium-239,240 Concentrations in Soil at Offsite Locations

Wahluke Slope No. 2 6007 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.2860E-02	0.758E-03
05/02/86		0.5520E-02	0.949E-03
06/12/85		0.8720E-02	0.146E-02
05/31/84		0.6080E-02	0.287E-02
08/26/83		0.9560E-02	0.222E-02
08/30/82		0.6030E-02	0.230E-02
08/11/81		0.3670E-02	0.760E-03
08/06/80		0.6320E-02	0.160E-02
09/13/79		0.5960E-02	0.220E-02
08/09/78		0.4580E-02	0.300E-02
06/14/77		0.3350E-02	0.150E-02
08/09/76		0.1000E-01	0.000E+00
08/19/75		0.4140E-02	0.000E+00
09/23/74		0.1340E-01	0.000E+00
10/25/73		0.2310E-01	0.000E+00
10/25/72		0.1000E-01	0.000E+00
09/29/71		0.4000E-02	0.000E+00

Wahluke Slope No. 2 6030 Depth 1-2 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3000E-02	0.000E+00
09/29/71		0.4000E-02	0.000E+00

Berg Ranch 6008 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.6120E-02	0.977E-03
05/02/86		0.1200E-01	0.151E-02
06/26/85		0.1060E-01	0.105E-02
05/30/84		0.9700E-02	0.150E-02
08/26/83		0.1350E-01	0.284E-02
08/20/82		0.1180E-01	0.233E-02
08/11/81	1	0.8680E-02	0.150E-02
08/11/81		0.9680E-02	0.110E-02
08/06/80		0.8870E-02	0.180E-02
09/13/79		0.1300E-01	0.260E-02
08/09/78		0.4260E-02	0.270E-02
06/14/77		0.2680E-01	0.670E-02
08/09/76		0.5610E-02	0.000E+00
08/19/75		0.8180E-02	0.000E+00
09/23/74		0.7150E-02	0.000E+00
10/25/73		0.1580E-01	0.000E+00
10/25/72		0.7000E-02	0.000E+00
09/30/71		0.1200E-01	0.000E+00

Berg Ranch 6031 Depth 1-2 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.2000E-02	0.000E+00
09/29/71		0.3000E-02	0.000E+00

Cook Bros. Dairy Farm 6219 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.3110E-02	0.000E+00

Ringold 6009 Depth 0-1 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.1680E-01	0.166E-02
05/22/86		0.6190E-02	0.857E-03
07/08/85		0.1700E-01	0.162E-02
05/30/84		0.7450E-02	0.123E-02
08/18/83		0.2770E-01	0.518E-02
08/20/82		0.1290E-01	0.243E-02
08/12/81		0.2140E-01	0.220E-02
08/06/80		0.1790E-01	0.260E-02
09/13/79		0.1830E-01	0.290E-02
08/09/78		0.1740E-01	0.370E-02
06/14/77		0.4640E-02	0.280E-02
08/09/76		0.3440E-02	0.000E+00
08/19/75		0.4430E-02	0.000E+00
10/25/73		<0.2900E-04	0.000E+00
10/25/72		0.8000E-02	0.000E+00
10/01/71		0.6000E-02	0.000E+00

Ringold 6032 Depth 1-2 in. Pu-239,240			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.2200E-01	0.000E+00
10/01/71		0.8000E-02	0.000E+00

TABLE B.5. (contd)

W End of Fir Road
6360 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.2890E-02	0.651E-03
05/22/86		0.4050E-02	0.690E-03
07/03/85		0.1720E-02	0.525E-03
05/31/84		0.2230E-02	0.149E-02
08/18/83		0.5930E-02	0.166E-02
08/20/82		0.4760E-02	0.134E-02
08/12/81		0.3880E-02	0.950E-03
08/06/80		0.8240E-02	0.170E-02
09/13/79		0.9780E-02	0.270E-02
08/09/78		0.4370E-02	0.240E-02
06/14/77		0.5640E-02	0.180E-02

Baxter Substation
6220 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.3350E-02	0.120E-02
09/25/74		0.3900E-02	0.000E+00

Pettett Dairy Farm
6359 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.2000E-01	0.330E-02

Taylor Flats No. 1
6420 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/82		0.2370E-02	0.883E-03
08/14/81		0.1960E-01	0.170E-02
01/22/81		0.3230E-02	0.760E-03
08/06/80		0.2840E-02	0.950E-03
09/13/79		0.1750E-02	0.150E-02
08/10/78		0.3570E-02	0.110E-02

Taylor Flats No. 2
6421 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.1090E-01	0.118E-02
05/22/86		0.2050E-01	0.331E-02
07/08/85		0.7530E-03	0.300E-03
05/30/84		0.1350E-02	0.455E-03
08/26/83		0.3110E-01	0.528E-02
08/20/82		0.1570E-01	0.316E-02
11/03/81		0.5820E-02	0.880E-03
11/03/81	2	0.4940E-02	0.770E-03
11/03/81	1	0.3780E-02	0.710E-03
08/14/81		0.4250E-01	0.240E-02
01/22/81		0.1600E-01	0.170E-02
08/06/80		0.2610E-01	0.350E-02
09/13/79		0.2520E-01	0.260E-02
08/10/78		<0.1800E-03	0.250E-02

Sagemore Farms
6358 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.1820E-02	0.450E-03
05/22/86		0.6120E-02	0.812E-03
07/08/85		0.1820E-02	0.524E-03
05/30/84		0.1890E-01	0.214E-02
08/25/83		0.7910E-02	0.145E-02
08/18/82		0.2620E-02	0.868E-03
11/02/81		0.1200E-02	0.570E-03
08/12/81		0.2770E-02	0.670E-03
08/06/80		0.7870E-02	0.150E-02
09/13/79		<0.1230E-02	0.140E-02
08/09/78		0.3080E-02	0.220E-02
06/14/77		0.2100E-02	0.140E-02

Sagemore Farms (QC Dupl. A)
0818 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.3520E-02	0.793E-03
05/22/86		0.3170E-02	0.727E-03
07/08/85		0.1550E-02	0.509E-03
05/30/84		0.2120E-01	0.268E-02
08/25/83		0.4590E-02	0.101E-02
08/18/82		0.2900E-02	0.148E-02

TABLE B.5. (contd)

Sagemore Farms (QC Dupl. B)
0819 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.3100E-02	0.648E-03
05/22/86		0.4770E-02	0.725E-03
07/08/85		0.1640E-02	0.487E-03
05/30/84		0.1020E-01	0.205E-02
08/25/83		0.1580E-02	0.129E-02
08/18/82		0.2490E-02	0.101E-02

Byers Landing Pump House
6010 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.2280E-01	0.000E+00
10/25/73		0.2750E-02	0.000E+00
10/25/72		0.3000E-02	0.000E+00
10/01/71		0.1200E-01	0.000E+00

Byers Landing Pump House
6033 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.3000E-02	0.000E+00
10/01/71		0.6000E-03	0.000E+00

Byers Landing
6011 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.3450E-02	0.573E-03
05/22/86		0.7900E-02	0.961E-03
06/19/85		0.2740E-02	0.629E-03
05/30/84		0.6590E-02	0.398E-02
08/25/83		0.1160E-01	0.205E-02
08/18/82		0.1510E-02	0.900E-03
08/12/81		0.4920E-02	0.970E-03
08/06/80			
09/13/79		0.1820E-01	0.270E-02
08/09/78		<0.4370E-03	0.370E-02
06/14/77		0.5540E-02	0.170E-02
08/09/76		0.2870E-02	0.000E+00
09/25/74		0.5620E-02	0.000E+00
10/25/73		0.5240E-02	0.000E+00
10/25/72		0.6000E-02	0.000E+00
10/01/71		0.1200E-01	0.000E+00

Byers Landing
6034 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1300E-01	0.000E+00
10/01/71		0.8000E-02	0.000E+00

Riverview (Harris Farm)
6361 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.1500E-01	0.123E-02
05/22/86		0.3410E-02	0.636E-03
06/19/85		0.5200E-02	0.983E-03
05/30/84		<0.1800E-02	0.180E-02
08/18/83		0.2080E-01	0.505E-02
08/18/82		0.6440E-02	0.186E-02
08/12/81		0.1090E-01	0.120E-02
08/06/80		0.1570E-01	0.180E-02
09/13/79		0.1670E-01	0.280E-02
08/09/78		0.1660E-01	0.340E-02
06/14/77		0.4010E-02	0.290E-02

Riverview Control Plot 55
6012 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.1680E-02	0.000E+00
10/25/73		0.2180E-01	0.000E+00
10/25/72		0.8000E-02	0.000E+00
10/01/71		0.1100E-01	0.000E+00

Riverview Control Plot 55
6035 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.9000E-02	0.000E+00
10/01/71		0.9000E-02	0.000E+00

TABLE B.5. (contd)

N Richland Control Plot 56
6013 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/25/74		0.6980E-02	0.000E+00
10/25/73		0.1570E-01	0.100E-02
10/25/72		0.9000E-02	0.000E+00
09/30/71		0.1400E-01	0.000E+00

N Richland Control Plot 56
6036 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.6000E-02	0.000E+00
09/30/71		0.2000E-02	0.000E+00

NE Corner of Exxon Site
6280 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/09/76		0.1410E-01	0.000E+00
08/19/75		0.1460E-01	0.000E+00

Benton City
6000 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.1430E-01	0.126E-02
05/23/86		0.1550E-01	0.147E-02
07/03/85		0.1870E-01	0.203E-02
06/06/84		0.9910E-02	0.152E-02
08/23/83		0.1490E-01	0.168E-02
08/16/82		0.2370E-01	0.324E-02
08/13/81		0.2090E-01	0.220E-02
08/04/80		0.2010E-01	0.300E-02
09/12/79		0.1630E-01	0.140E-02
08/08/78		0.9900E-02	0.200E-02
06/14/77		0.8060E-02	0.206E-02
09/25/74		0.3670E-01	0.000E+00
10/25/73		0.1230E-01	0.000E+00
10/25/72		0.2300E-01	0.000E+00
09/30/71		0.1800E-01	0.000E+00

Benton City
6023 Depth 1-2 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
10/25/72		0.1100E-01	0.000E+00
09/30/71		0.8000E-03	0.000E+00

Benton City (QC Dupl. A)
0820 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.1290E-01	0.203E-02

Benton City (QC Dupl. B)
0821 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.5030E-02	0.126E-02

Sunnyside
6357 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.6060E-02	0.100E-02
06/03/86		0.2120E-02	0.739E-03
06/17/85		0.1540E-01	0.160E-02
05/22/84		0.2510E-01	0.259E-02
08/23/83		0.2560E-01	0.452E-02
08/17/82		0.9160E-02	0.192E-02
08/13/81		0.1260E-01	0.140E-02
08/04/80		0.1420E-01	0.250E-02
09/12/79		0.2520E-01	0.350E-02
08/08/78		0.8020E-02	0.290E-02
06/14/77		0.3830E-02	0.150E-02

Yakima
0512 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.2100E-02	0.557E-03
05/21/87		0.3410E-02	0.816E-03
06/03/86		0.2480E-02	0.865E-03

TABLE B.5. (contd)

Moses Lake
0500 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.2630E-02	0.728E-03
05/08/87		0.2340E-02	0.576E-03
05/23/86		0.1630E-01	0.124E-02

McNary Dam
0504 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		0.7940E-02	0.109E-02
05/29/87	1	0.3580E-02	0.636E-03
05/02/86		0.6510E-02	0.923E-03
11/15/85		0.1530E-01	0.235E-02

Othello
0505 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.9540E-02	0.129E-02
05/26/87		0.1550E-01	0.166E-02
05/02/86		0.4000E-02	0.669E-03

Connell
0503 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.3750E-02	0.670E-03
05/26/87		0.9750E-02	0.946E-03
05/02/86		0.2710E-01	0.237E-02

Washtucna
0501 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.6330E-02	0.112E-02
05/08/87		0.4910E-02	0.828E-03
05/23/86		0.2370E-01	0.166E-02

Walla Walla
0502 Depth 0-1 in. Pu-239,240

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		0.7020E-03	0.324E-03
05/29/87	1	0.1880E-02	0.777E-03
05/02/86		0.4710E-02	0.856E-03
11/15/85		0.1130E-01	0.122E-02

TABLE B.6. Americium-241 Concentrations in Soil at Offsite Locations

Wahlake Slope No. 2
6007 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.8690E-01	0.670E-01

Berg Ranch
6008 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.5180E-01	0.670E-01

Ringold
6009 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.3180E-01	0.670E-01

W End of Fir Road
6360 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.4250E-01	0.660E-01

Baxter Substation
6220 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.8090E-02	0.660E-01

Pettett Dairy Farm
6359 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.2230E-01	0.660E-01

Sagemore Farms
6358 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		<0.7890E-02	0.169E-01
05/22/86		<0.1750E-02	0.683E-02
07/08/85		<-5.480E+01	0.306E-01
05/30/84		<0.4190E-02	0.915E-02
08/18/82		0.4210E-01	0.292E-01
06/14/77		<0.1010E-01	0.680E-01

Sagemore Farms (QC Dupl. A)
0818 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		<0.5320E-02	0.730E-02
05/22/86		<0.1110E-02	0.711E-02
07/08/85		<-4.780E-01	0.302E-01
05/30/84		<-1.690E-02	0.372E-02
08/25/83		<0.1310E-02	0.526E-02
08/18/82		<0.9710E-03	0.291E-01

Sagemore Farms (QC Dupl. B)
0819 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		<-8.450E-02	0.980E-03
05/22/86		0.1060E-01	0.943E-02
07/08/85		<0.1010E-01	0.138E-01
05/30/84		<0.3220E-02	0.910E-02
08/25/83		<0.7380E-03	0.651E-02
08/18/82		<0.2580E-01	0.311E-01

TABLE B.6. (contd)

Byers Landing
6011 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.9700E-01	0.670E-01

Riverview (Harris Farm)
6361 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.4680E-01	0.670E-01

Benton City
6000 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		<0.3340E-01	0.920E-01

Benton City (QC Dupl. A)
0820 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		<0.9070E-02	0.312E-01

Benton City (QC Dupl. B)
0821 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		<-.3400E-02	0.250E-01

Sunnyside
6357 Depth 0-1 in. Am-241

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	<-.8230E-02	0.102E-01
06/03/86		<0.3830E-02	0.853E-02
06/17/85		<0.2900E-02	0.309E-02
05/22/84		0.1770E-01	0.166E-01
08/23/83		<0.4510E-02	0.718E-02
08/17/82		<0.2270E-01	0.322E-01
06/14/77		<0.3440E-01	0.860E-01

TABLE B.7. Uranium Concentrations in Soil at Offsite Locations

Wahluke Slope No. 2 6007 Depth 0-1 in. Uranium				Ringold 6009 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.	Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.1670E+00	0.000E+00	05/15/87		0.6650E+00	0.000E+00
05/02/86		0.2060E+00	0.000E+00	05/22/86		0.1140E+01	0.000E+00
06/12/85		0.3510E+00	0.115E+00	07/08/85		0.8420E+00	0.256E+00
05/31/84		0.4340E+00	0.117E+00	05/30/84		0.7800E+00	0.206E+00
08/26/83		0.3500E+00	0.982E-01	08/18/83		0.3720E+00	0.101E+00
08/30/82		0.3590E+00	0.128E+00	08/20/82		0.4330E+00	0.152E+00
08/11/81		0.4550E+00	0.160E+00	08/12/81		0.8210E+00	0.290E+00
08/06/80		0.3350E+00	0.120E+00	08/06/80		0.3360E+00	0.120E+00
09/13/79		0.3060E+00	0.110E+00	09/13/79		0.1200E+01	0.420E+00
08/09/78		0.4610E+00	0.150E+00	08/09/78		0.6630E+00	0.150E+00
06/14/77		0.1650E+00	0.680E-01	06/14/77		0.2060E+00	0.680E-01
08/09/76		0.2760E+00	0.000E+00	08/09/76		0.2970E+00	0.000E+00
08/19/75		0.1920E+00	0.000E+00	08/19/75		0.2080E+00	0.000E+00
09/23/74		0.1060E+00	0.000E+00	10/25/73		0.5040E+00	0.000E+00
10/25/73		0.5340E+00	0.000E+00				

Berg Ranch 6008 Depth 0-1 in. Uranium				W End of Fir Road 6360 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.	Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87		0.3810E+00	0.000E+00	05/15/87		0.5530E+00	0.000E+00
05/02/86		0.2780E+00	0.000E+00	05/22/86		0.3240E+00	0.000E+00
06/26/85		0.4280E+00	0.142E+00	07/03/85		0.7250E+00	0.222E+00
05/30/84		0.4090E+00	0.110E+00	05/31/84		0.5360E+00	0.140E+00
08/26/83		0.2360E+00	0.662E-01	08/18/83		0.4710E+00	0.128E+00
08/20/82		0.2610E+00	0.913E-01	08/20/82		0.2750E+00	0.962E-01
08/11/81	1	0.3200E+00	0.110E+00	08/12/81		0.8830E+00	0.310E+00
08/11/81		0.2730E+00	0.950E-01	08/06/80		0.4590E+00	0.160E+00
08/06/80		0.2280E+00	0.800E-01	09/13/79		0.5660E+00	0.200E+00
09/13/79		0.2410E+00	0.840E-01	08/09/78		0.3500E+00	0.150E+00
08/09/78		0.3500E+00	0.150E+00	06/14/77		0.3250E+00	0.680E-01
06/14/77		0.3210E+00	0.680E-01				
08/09/76		0.3420E+00	0.000E+00				
08/19/75		0.2550E+00	0.000E+00				
09/23/74		0.7360E-01	0.000E+00				
10/25/73		0.3580E+00	0.000E+00				

Cook Bros. Dairy Farm 6219 Depth 0-1 in. Uranium				Baxter Substation 6220 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.	Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.3910E+00	0.000E+00	06/14/77		0.3180E+00	0.680E-01
				09/24/74		0.3610E+00	0.000E+00

Pettett Dairy Farm 6359 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
06/14/77		0.4700E+00	0.680E-01

TABLE B.7. (contd)

Taylor Flats No. 1 6420 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/18/82		0.7410E+00	0.249E+00
08/14/81		0.1140E+01	0.400E+00
01/22/81		0.2720E+00	0.950E-01
08/06/80		0.1420E+01	0.500E+00
09/13/79		0.1130E+01	0.400E+00
08/10/78		0.1150E+01	0.150E+00

Sagemore Farms (QC Dupl. A) 0818 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.4130E+00	0.000E+00
05/22/86		0.4140E+00	0.000E+00
07/08/85		0.3370E+00	0.111E+00
05/30/84		0.4270E+00	0.114E+00
08/25/83		0.4410E+00	0.123E+00
08/18/82		0.3290E+00	0.115E+00

Taylor Flats No. 2 6421 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.9660E+00	0.000E+00
05/22/86		0.4400E+00	0.000E+00
07/08/85		0.1250E+01	0.364E+00
05/30/84		0.1020E+01	0.264E+00
08/26/83		0.4660E+00	0.131E+00
08/20/82		0.5910E+00	0.207E+00
11/03/81		0.4790E+00	0.170E+00
11/03/81	2	0.9200E+00	0.320E+00
11/03/81	1	0.5720E+00	0.200E+00
08/14/81		0.7330E+00	0.260E+00
01/22/81		0.1600E+00	0.560E-01
08/06/80		0.6120E+00	0.210E+00
09/13/79		0.5510E+00	0.190E+00
08/10/78		0.5950E+00	0.150E+00

Sagemore Farms (QC Dupl. B) 0819 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.3630E+00	0.000E+00
05/22/86		0.3920E+00	0.000E+00
07/08/85		0.6030E+00	0.189E+00
05/30/84		0.8120E+00	0.224E+00
08/25/83		0.3500E+00	0.974E-01
08/18/82		0.2490E+00	0.870E-01

Sagemore Farms 6358 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.2370E+00	0.000E+00
05/22/86		0.3100E+00	0.000E+00
07/08/85		0.5760E+00	0.180E+00
05/30/84		0.5030E+00	0.132E+00
08/25/83		0.3760E+00	0.105E+00
08/18/82		0.3090E+00	0.108E+00
11/02/81		0.5940E+00	0.210E+00
08/12/81		0.6330E+00	0.220E+00
08/06/80		0.3680E+00	0.130E+00
09/13/79		0.4130E+00	0.140E+00
08/09/78		0.3000E+00	0.150E+00
06/14/77		0.2400E+00	0.680E-01

Byers Landing Pump House 6010 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.6090E+00	0.000E+00
10/25/73		0.2790E+00	0.000E+00

Byers Landing 6011 Depth 0-1 in. Uranium			
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.9680E-01	0.000E+00
05/22/86		0.2590E+00	0.000E+00
06/19/85		0.3940E+00	0.129E+00
05/30/84		0.4270E+00	0.113E+00
08/25/83		0.3220E+00	0.904E-01
08/18/82		0.5460E+00	0.191E+00
08/12/81		0.4710E+00	0.170E+00
08/06/80		0.3410E+00	0.120E+00
09/13/79		0.4510E-01	0.230E-01
08/09/78		0.3540E+00	0.150E+00
06/14/77		0.2780E+00	0.680E-01
08/09/76		0.4050E+00	0.000E+00
09/24/74		0.3900E+00	0.000E+00
10/25/73		0.1770E+00	0.000E+00

TABLE B.7. (contd)

Riverview (Harris Farm)
6361 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/15/87		0.2960E+00	0.000E+00
05/22/86		0.2560E+00	0.000E+00
06/19/85		0.4400E+00	0.142E+00
05/30/84		0.3210E+00	0.850E-01
08/18/83		0.3730E+00	0.102E+00
08/18/82		0.1400E+00	0.492E-01
08/12/81		0.6390E+00	0.230E+00
08/06/80		0.3250E+00	0.110E+00
09/13/79		0.4370E+00	0.150E+00
08/09/78		0.2730E+00	0.150E+00
06/14/77		0.2890E+00	0.680E-01

Riverview Control Plot 55
6012 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.4220E+00	0.000E+00
10/25/73		0.1410E+00	0.000E+00

N Richland Control Plot 56
6013 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
09/24/74		0.2550E+00	0.000E+00
10/25/73		0.3460E+00	0.000E+00

NE Corner of Exxon Site
6280 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/09/76		0.2510E+00	0.000E+00
08/19/75		0.1400E+00	0.000E+00

Benton City
6000 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/20/87		0.3930E+00	0.000E+00
05/23/86		0.4490E+00	0.000E+00
07/03/85		0.6390E+00	0.200E+00
06/06/84		0.9140E+00	0.244E+00
08/23/83		0.4390E+00	0.122E+00
08/16/82		0.5550E+00	0.194E+00
08/13/81		0.6260E+00	0.220E+00
08/04/80		0.6970E+00	0.240E+00
09/12/79		0.4430E+00	0.160E+00
08/08/78		0.5000E+00	0.150E+00
06/14/77		0.3260E+00	0.680E-01
09/24/74		0.2920E+00	0.000E+00
10/25/73		0.6700E+00	0.000E+00

Benton City (QC Dupl. A)
0820 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.2360E+00	0.826E-01

Benton City (QC Dupl. B)
0821 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
08/17/82		0.1970E+00	0.690E-01

Sunnyside
6357 Depth 0-1 in.

Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.2860E+00	0.000E+00
06/03/86		0.3070E+00	0.000E+00
06/17/85		0.2580E+00	0.898E-01
05/22/84		0.2580E+00	0.706E-01
08/23/83		0.1960E+00	0.548E-01
08/17/82		0.1720E+00	0.602E-01
08/13/81		0.3360E+00	0.120E+00
08/04/80		0.4090E+00	0.140E+00
09/13/79		0.2230E+00	0.780E-01
08/08/78		0.3840E+00	0.150E+00
06/14/77		0.4710E+00	0.680E-01

TABLE B.7. (contd)

Yakima 0512			
Depth 0-1 in.		Uranium	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/21/87	1	0.4190E+00	0.000E+00
05/21/87		0.3970E+00	0.000E+00
06/03/86		0.4780E+00	0.000E+00

Walla Walla 0502			
Depth 0-1 in.		Uranium	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		0.5160E+00	0.000E+00
05/29/87	1	0.7220E+00	0.000E+00
05/02/86		0.3480E+00	0.000E+00
11/15/85		0.1980E+00	0.714E-01

Moses Lake 0500			
Depth 0-1 in.		Uranium	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.2940E+00	0.000E+00
05/08/87		0.8160E-01	0.000E+00
05/23/86		0.1120E+00	0.000E+00

McNary Dam 0504			
Depth 0-1 in.		Uranium	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/29/87		0.3690E+00	0.000E+00
05/29/87	1	0.2610E+00	0.000E+00
05/02/86		0.4130E+00	0.000E+00
11/15/85		0.1470E+00	0.550E-01

Othello 0505			
Depth 0-1 in.		Uranium	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.2220E+00	0.000E+00
05/26/87		0.2510E+00	0.000E+00
05/02/86		0.2080E+00	0.000E+00

Connell 0503			
Depth 0-1 in.		Uranium	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/26/87	1	0.3010E+00	0.000E+00
05/26/87		0.3440E+00	0.000E+00
05/02/86		0.2490E+00	0.000E+00

Washtucna 0501			
Depth 0-1 in.		Uranium	
Sample Date	Dup. No.	Result pCi/g	+/- 2 Std. Dev.
05/08/87	1	0.2300E+00	0.000E+00
05/08/87		0.2550E+00	0.000E+00
05/23/86		0.1980E+00	0.000E+00

APPENDIX C

UNPUBLISHED RESULTS FROM SPECIAL-PURPOSE STUDIES

1987 Special Duplicate Soil Samples - Downwind of the Hanford Site

Location	Map No.	Concentration, pCi/g				
		Sr-90	Cs-137	Pu-238	Pu-239/40	Uranium
N. Pasco	1	0.19 ± 0.05	0.76 ± 0.09	0.0003 ± 0.0002	0.014 ± 0.002	0.14 ± 0.05
		0.16 ± 0.04	0.32 ± 0.09	0.0005 ± 0.0003	0.017 ± 0.002	0.24 ± 0.08
Taylor Flats Rd	2	0.28 ± 0.07	1.07 ± 0.12	0.0007 ± 0.0003	0.021 ± 0.003	0.26 ± 0.08
		0.30 ± 0.08	0.92 ± 0.10	0.0006 ± 0.0003	0.016 ± 0.002	0.20 ± 0.07
Merrills Corner	3	0.16 ± 0.04	1.02 ± 0.12	0.0010 ± 0.0004	0.020 ± 0.003	0.31 ± 0.10
		0.19 ± 0.05	1.26 ± 0.14	0.0007 ± 0.0003	0.022 ± 0.003	0.35 ± 0.11
Eltopia	4	0.28 ± 0.07	0.90 ± 0.11	0.0005 ± 0.0003	0.016 ± 0.002	0.22 ± 0.07
		0.33 ± 0.08	0.78 ± 0.09	0.0006 ± 0.0003	0.019 ± 0.003	0.25 ± 0.08
Mesa	5	0.34 ± 0.09	1.35 ± 0.15	0.0013 ± 0.0005	0.025 ± 0.004	0.37 ± 0.12
		0.33 ± 0.08	1.14 ± 0.13	0.0005 ± 0.0003	0.020 ± 0.003	0.30 ± 0.10
Basin City	6	0.26 ± 0.07	0.85 ± 0.10	0.0006 ± 0.0003	0.017 ± 0.002	0.17 ± 0.05
		0.29 ± 0.07	0.94 ± 0.11	0.0008 ± 0.0003	0.020 ± 0.003	0.19 ± 0.06
Hollingsworth Rd	7	0.16 ± 0.04	0.53 ± 0.07	0.0005 ± 0.0002	0.011 ± 0.002	0.18 ± 0.06
		0.14 ± 0.04	0.53 ± 0.07	0.0004 ± 0.0002	0.009 ± 0.001	0.15 ± 0.05
Ringold	8	0.16 ± 0.04	0.60 ± 0.08	0.0005 ± 0.0003	0.012 ± 0.002	0.42 ± 0.13
		0.18 ± 0.04	0.77 ± 0.09	0.0008 ± 0.0003	0.016 ± 0.002	0.43 ± 0.13

FIGURE C.1. Unpublished Results from a Special Purpose Study Downwind of the Hanford Site, May 1987

1985 Special Soil Samples - Southern Perimeter of the Hanford Site

Sample	Concentration, pCi/g				
	Cs-137	Sr-90	Pu-238	Pu-239,240	Uranium
1	0.03 ± 0.02	0.14 ± 0.02	0.0001 ± 0.0001	0.001 ± 0.001	0.42 ± 0.14
2	0.60 ± 0.04	0.28 ± 0.02	0.0005 ± 0.0004	0.013 ± 0.002	0.22 ± 0.07
3	0.03 ± 0.02	0.06 ± 0.01	0.0002 ± 0.0003	0.003 ± 0.001	0.32 ± 0.12
4	1.6 ± 0.1	0.46 ± 0.02	0.0012 ± 0.0004	0.027 ± 0.002	0.24 ± 0.09
5	0.43 ± 0.04	0.19 ± 0.01	0.0003 ± 0.0003	0.008 ± 0.001	0.23 ± 0.09
6	0.14 ± 0.03	0.12 ± 0.01	0.0002 ± 0.0002	0.005 ± 0.001	0.18 ± 0.07
7	0.37 ± 0.03	0.21 ± 0.01	0.0004 ± 0.0003	0.007 ± 0.001	0.16 ± 0.07
8	0.07 ± 0.02	0.09 ± 0.01	0.0000 ^(a) ± 0.0002	0.004 ± 0.009	0.26 ± 0.10
9	0.03 ± 0.02	0.07 ± 0.01	0.0000 ^(a) ± 0.0003	0.002 ± 0.001	0.26 ± 0.09
10	0.85 ± 0.05	0.29 ± 0.02	0.0008 ± 0.0002	0.016 ± 0.002	0.24 ± 0.09
Prosser Barricade ^(b)	0.73 ± 0.05	0.45 ± 0.09	0.0004 ± 0.0003	0.019 ± 0.002	0.80 ± 0.24

(a) No net counts above background.

(b) 1985 results for closest routine sampling location.

FIGURE C.2. Unpublished Results from a Special-Purpose Study Along the Southern Perimeter of the Hanford Site, June 1985.

1985 Special Soil Samples - East of 200-West Area

Sample	Concentration, pCi/g					
	Sr-90	Cs-137	Pu-238	Pu-239,240	Am-241	Uranium
1	0.35 ± 0.02	1.6 ± 0.1	0.0009 ± 0.0005	0.072 ± 0.009	0.016 ± 0.016	0.28 ± 0.10
2	0.28 ± 0.02	0.55 ± 0.04	0.0029 ± 0.0006	0.039 ± 0.002	0.005 ± 0.007	0.18 ± 0.07
3	0.44 ± 0.03	1.5 ± 0.1	0.0014 ± 0.0004	0.11 ± 0.01	0.026 ± 0.013	0.43 ± 0.14
4	0.60 ± 0.03	1.4 ± 0.1	0.0014 ± 0.0007	0.12 ± 0.01	0.013 ± 0.013	0.49 ± 0.16
5	0.33 ± 0.02	0.64 ± 0.04	0.0002 ± 0.0002	0.027 ± 0.002	0.001 ± 0.015	0.54 ± 0.18
6	0.30 ± 0.02	1.1 ± 0.1	0.0007 ± 0.0004	0.040 ± 0.003	0.039 ± 0.017	0.54 ± 0.18
7	0.42 ± 0.02	2.2 ± 0.1	0.0011 ± 0.0006	0.073 ± 0.005	0.014 ± 0.017	0.31 ± 0.11
8	0.39 ± 0.02	1.2 ± 0.1	0.0008 ± 0.0004	0.041 ± 0.003	0.002 ± 0.018	0.63 ± 0.11
E of 200-W Gate (a)	0.61 ± 0.12	2.0 ± 0.1	0.0057 ± 0.0009	0.33 ± 0.03	0.023 ± 0.007	0.43 ± 0.14

(a) 1985 results for closest routine sampling location.

FIGURE C.3. Unpublished Results from a Special-Purpose Study East of the 200-West Area, August 1985

1985 Special Soil Samples - North of 200-East Area

Sample	Concentration, pCi/g				
	Cs-137	Sr-90	Pu-238	Pu-239,240	Uranium
1	0.51 ± 0.04	0.13 ± 0.02	0.0007 ± 0.0005	0.003 ± 0.001	0.24 ± 0.09
2	3.9 ± 0.1	0.57 ± 0.03	0.0010 ± 0.0007	0.023 ± 0.003	0.30 ± 0.11
3	9.3 ± 0.2	1.2 ± 0.1	0.0004 ± 0.0003	0.023 ± 0.002	0.24 ± 0.09
4	5.6 ± 0.1	0.42 ± 0.02	0.0002 ± 0.0002	0.027 ± 0.002	0.26 ± 0.09
200 ENC ^(a)	23 ± 1	1.2 ± 0.2	0.0012 ± 0.0004	0.030 ± 0.003	0.39 ± 0.13

(a) 1985 results for closest routine sampling location.

FIGURE C.4. Unpublished Results from a Special-Purpose Study North of the 200-East Area, August 1985

1985 Special Soil Samples - South of B-C Cribs Controlled Area

Sample	Concentration, pCi/g				
	Cs-137	Sr-90	Pu-238	Pu-239,240	Uranium
1	0.50 ± 0.04	0.64 ± 0.03	0.0002 ± 0.0003	0.0058 ± 0.0012	0.45 ± 0.16
S of 200 E ^(a)	0.56 ± 0.05	0.14 ± 0.03	0.0001 ± 0.0004	0.0041 ± 0.0016	0.34 ± 0.11
2	0.33 ± 0.04	0.29 ± 0.02	0.0000 ^(b) ± 0.0001	0.0069 ± 0.0009	0.49 ± 0.16
SW B-C Cribs ^(a)	0.14 ± 0.02	0.39 ± 0.08	0.0009 ± 0.0004	0.024 ± 0.003	0.33 ± 0.11

(a) 1985 results for closest routine sampling location.

(b) No net counts above background.

FIGURE C.5. Unpublished Results from a Special-Purpose Study South of the B-C Cribs Controlled Area, August 1985

1985 Special Soil Samples - Proposed PSP&L Site

Sample	Concentration, pCi/g				
	Cs-137	Sr-90	Pu-238	Pu-239,240	U
1	0.66 ± 0.04	0.26 ± 0.02	<0.0008 ± 0.0009	0.017 ± 0.003	0.29 ± 0.10
2	0.36 ± 0.03	0.20 ± 0.02	0.0026 ± 0.0015	0.013 ± 0.003	0.28 ± 0.10
3	0.55 ± 0.04	0.20 ± 0.010	0.0035 ± 0.0010	0.018 ± 0.002	0.20 ± 0.07
4	0.70 ± 0.04	0.27 ± 0.01	0.0015 ± 0.0009	0.019 ± 0.002	0.19 ± 0.07
5	0.31 ± 0.03	0.15 ± 0.01	0.0068 ± 0.0008	0.014 ± 0.001	0.28 ± 0.10
Wye Barricade (a)	1.3 ± 0.10	0.31 ± 0.06	0.0006 ± 0.0003	0.017 ± 0.002	0.29 ± 0.10

(a) 1985 results for closest routine sampling location.

FIGURE C.6. Unpublished Results from a Special-Purpose Study at the Proposed Puget Sound Power and Light Company Site, August 1985

February and March 1970 Special Soil Samples
(0.5 inch deep) - Hanford Environs

Location	Concentration Pu-239,240, pCi/g	Location	Concentration Pu-239,240, pCi/g
200E Hill	0.12 ± 0.01 0.13 ± 0.01(a)	Gate 118	0.017 ± 0.003
Yakima Barricade	0.028 ± 0.003 0.015 ± 0.002(a) 0.018 ± 0.002(a)	Gate 118	0.019 ± 0.005
Wahluke Slope No. 2	0.041 ± 0.003	Gate 118	0.014 ± 0.001
Gate 113	0.046 ± 0.004 0.042 ± 0.004(a)	Gate 118	0.010 ± 0.001
Jefferson School	0.009 ± 0.002	Gate 138	0.031 ± 0.004
Benton City	0.009 ± 0.001	Gate 138	0.023 ± 0.002
Byers Landing	0.004 ± 0.001	Ringold	0.027 ± 0.003
Byers Landing	0.083 ± 0.009	1 mi E Hanford	0.047 ± 0.041
320 Bldg.	0.012 ± 0.001 0.011 ± 0.001(a)	3 mi E 100F	0.018 ± 0.003
		3 mi E 100F	0.040 ± 0.004
		3 mi E 100F	0.017 ± 0.002
		3 mi E 100H	0.007 ± 0.001

(a) Separate aliquot from single sample.

FIGURE C.7. Unpublished Results from a Special-Purpose Study at Various Onsite and Offsite Locations, February and March 1970

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