ENVIRONMENTAL SURVEILLANCE
MASTER SAMPLING SCHEDULE

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MASTER

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SUMMARY

Environmental surveillance of the Hanford Site and surrounding areas is conducted by the Pacific Northwest Laboratory (PNL)^(a) for the U.S. Department of Energy (DOE). Samples are routinely collected and analyzed to determine the quality of air, surface water, ground water, soil, sediment, wildlife, vegetation, foodstuffs, and farm products at Hanford Site and surrounding communities. This document contains the planned schedule for routine sample collection for the Surface Environmental Surveillance Project (SESP) and Drinking Water Project, and Ground-Water Surveillance Project.

The responsibility for monitoring the onsite drinking water falls outside the scope of the SESP. The Hanford Environmental Health Foundation is responsible for monitoring the nonradiological parameters defined in the National Drinking Water Standards while PNL conducts the radiological monitoring of the onsite drinking water. PNL has conducted the drinking water monitoring project concurrent with the SESP to promote efficiency and consistency, utilize the expertise developed over the years, and reduce costs associated with management, procedure development, data management, quality control and reporting. As such, the 1993 drinking water sampling schedule is included in this document.

The ground-water sampling schedule is for 1993. This schedule identifies ground-water sampling events used by PNL for environmental surveillance of the Hanford Site. Some of these samples are collected and analyzed by other ground-water monitoring programs at Hanford (e.g. RCRA or CERCLA). They are indicated by a zero in the analysis column of the ground-water tables. Additional detail on the rationale for ground-water sampling is presented in Ground-Water Sample Collection and Analysis Plan for the Hanford Site Ground-Water Surveillance Project, R. W. Bryce, J. C. Evans, and K. C. Olsen, 1991, PNL-7872, Pacific Northwest Laboratory, Richland, Washington.

This schedule is subject to modification during the year in response to changes in Site operations, program requirements, and the nature of the observed results. Operational limitations such as weather, mechanical failures, sample availability, etc., may also require schedule modifications.

(a) Pacific Northwest Laboratory is operated by Battelle Memorial Institute for the U.S. Department of Energy under Contract DE-AC06-76RLO 1830.

Changes will be documented in the respective project files, but this schedule will not be reissued.

The purpose of these monitoring projects is to evaluate levels of radioactive and nonradioactive pollutants in the Hanford environs, as required in DOE Order 5400.1, "General Environmental Protection Program," DOE Order 5400.5, "Radiation Protection of the Public and the Environment." The sampling methods will be the same as those described in the Environmental Monitoring Plan, United States Department of Energy, Richland Field Office, DOE/RL 91-50, U.S. Department of Energy, Richland, Washington.

Environmental and ground-water samples that are split with the Washington State Department of Health are indicated in the schedule as well as environmental samples that are split with the U.S. Food and Drug Administration.

Questions can be directed to Rodger Woodruff, Manager, Surface Environmental Surveillance Project, Roger Dirkes, Manager, Drinking Water Monitoring Project, and Robert Bryce, Manager, Ground-Water Environmental Surveillance Project.

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ABBREVIATIONS

FREQUENCY SYMBOLS USED

A	annually
BA	biannually
BM	bimonthly (every 2 months)
BW	biweekly (every 2 weeks)
M	monthly
M Comp	monthly composite
Q	quarterly
Q Comp	quarterly composite
SA	semiannually
W	weekly

ANALYSIS SYMBOLS USED

Generally, standard elements, chemical, and isotope designations are used to indicate the analyses performed. Other analysis designations used are:

Alpha	total alpha activity of sample
Beta	total beta activity of sample
Gamma Scan	analysis of photon energy spectrum for individual photon-emitting radionuclides, including ⁶⁰ Co, ⁶⁵ Zn, ¹⁰⁶ Ru, and ¹³⁷ Cs
U	natural uranium
Isotopic uranium	²³⁴ U, ²³⁵ U, ²³⁸ U
Isotopic plutonium	²³⁸ Pu, ²³⁹⁻²⁴⁰ Pu
Lo ³ H	analytical procedure includes electrolytic enrichment
WQ	water quality - nonradiological
LEP	samples analyzed by Low Energy Photon System
NRA	not routinely analyzed
Comp. Only	sample analyzed as part of composite only

COMMENT ABBREVIATIONS USED

The abbreviations in the comment field for the Ground-Water Surveillance section are as designated:

ABBREVIATIONS (contd)

Source	well being sampled to monitor a contaminant source area
Plume	well used to track and define known contaminant plumes
CAS	well sampled as part of a confined aquifer study
Water Supply	water supply wells and wells near water supplies
DOH	wells co-sampled with the Washington State Department of Health
Boundary	wells at the Hanford Site boundary used to monitor the quality of water as it enters or leaves the Site
Background	wells in uncontaminated areas of the Site used to identify concentrations of constituents in areas unaffected by Hanford operations
3D-Char	wells being screened to support an effort to characterize contaminant distribution in three dimensions

PORTABLE INSTRUMENT SYMBOLS USED

BICRON	Micro rem meter
GM	Geiger-Müller counter
PIC	Pressurized Ionization Chamber

PART I. HANFORD SURFACE ENVIRONMENTAL SURVEILLANCE

1.0 AIR SURVEILLANCE

1.1 AIR - PARTICULATE FILTER

Location	Location Number(a)	Individual Samples			Composite Group	Composited Sample		
		Sample Number	Frequency	Analyses		Sample Number	Frequency	Analyses
Onsite								
100-K	1	0058	BW	Beta, Alpha	100 Areas	1753	Q A	Gamma Scan 90Sr, Pu(b)
100-N (WPPSS)	2	1529	BW	Beta, Alpha				
100-D	3	1074	BW	Beta, Alpha				
N of 200-E	4	0051	BW	NRA	200 East	1749	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
N of 200-E #2	4	0283	BW	NRA				
E of 200-E	5	0030	BW	Beta, Alpha				
200-ESE	6	0043	BW	Beta, Alpha	B Pond	1738	Q A	Gamma Scan 90Sr, Pu(b), U(c)
S of 200-E	7	0031	BW	Beta, Alpha				
B Pond	8	0038	BW	Beta, Alpha				
B Pond No. 2	8	0039	BW	Comp. Only	200-W South and East	0614	Q A	Gamma Scan 90Sr, Pu(b), U(c)
Army Loop Camp	9	0248	BW	Beta, Alpha				
200 Tel. Exchange	10	0052	BW	Beta, Alpha				
200-W SE	11	0026	BW	Beta, Alpha	200 West	1739	Q A	Gamma Scan 90Sr, Pu(b), U(c)
200-W SE No. 2	11	0027	BW	Comp. Only				
300 Water Intake	12	1793	BW	Beta	300 Area	1741	Q A	Gamma Scan 90Sr, Pu(b), U(c)
300 South Gate	13	6150	BW	Beta, Alpha				
300 Trench	14	1542	BW	Beta, Alpha	300 NE	0298	Q A	Gamma Scan 90Sr, Pu(b), U(c)
300 NE	15	0022	BW	Beta, Alpha				
400-E	16	6308	BW	Beta, Alpha	400 Area	6465	Q A	Gamma Scan 90Sr, Pu(b)
400-W	17	6455	BW	Beta, Alpha				
400-S	18	6456	BW	Beta, Alpha				
400-N	19	6457	BW	Beta, Alpha				
Wye Barricade	20	0924	BW	Beta, Alpha	Wye Barricade	0601	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
Wye Barricade No. 2	20	0036	BW	Comp. Only				
Perimeter								
Berg Ranch	21	1405	BW	NRA	Ringold Met Tower	0286	Q A	Gamma Scan 90Sr, Pu(b)
Ringold Met Tower	22	0048	BW	Beta, Alpha				
Ringold Met Tower No. 2	22	0285	BW	Comp. Only				
W End of Fir Rd	23	6391	BW	Beta, Alpha	W. End of Fir Road	0291	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
W End of Fir Rd No. 2	23	0290	BW	Comp. Only				
Dogwood Met Tower	24	0255	BW	Beta, Alpha	Dogwood Met. Tower	0295	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
Dogwood Met Tower No. 2	24	0284	BW	Comp. Only				

1.1 AIR - PARTICULATE FILTER (contd)

Location	Location Number(a)	Individual Samples			Composite Group	Composited Sample		
		Sample Number	Frequency	Analyses		Sample Number	Frequency	Analyses
Perimeter								
Byers Landing	25	0247	BW	Beta, Alpha	Byers Landing	0297	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
Byers Landing No. 2	25	0288	BW	Comp. Only				
Battelle Complex	26	6182	BW	NRA	Prosser Barricade	0606	Q A	Gamma Scan 90Sr, Pu(b), U(c)
Horn Rapids Substation	27	0050	BW	Beta, Alpha				
Prosser Barricade	28	0055	BW	Beta, Alpha				
Yakima Barricade	29	1650	BW	Beta, Alpha	Yakima Barricade	1658	Q A	Gamma Scan 90Sr, Pu(b)
Yakima Barricade No. 2	29	1657	BW	Comp. Only				
Wahluke Slope	30	1551	BW	Beta, Alpha	Wahluke Slope	1553	Q A	Gamma Scan 90Sr, Pu(b)
Wahluke Slope #2	30	1552	BW	Comp. Only				
Community								
Basin City(d)	31	1930	BW	Beta, Alpha	Basin City	1932	Q A	Gamma Scan 90Sr, Pu(b), U(c)
Basin City No. 2(d)	31	1931	BW	Comp. Only				
Leslie Groves-Richland(d)	32	1900	BW	Beta, Alpha	Richland	1902	Q A	Gamma Scan 90Sr, Pu(b), U(c)
Leslie Groves-Rich. No. 2(d)	32	1901	BW	Comp. Only				
Pasco	33	1654	BW	Beta	Tri-Cities	0610	Q A	Gamma Scan 90Sr, Pu(b)
Kennewick	34	1655	BW	Beta, Alpha				
Benton City	35	0029	BW	NRA	Edwin Markham	1917	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
Benton City No. 2	35	0021	BW	NRA				
Edwin Markham(d)	36	1915	BW	Beta, Alpha	Edwin Markham	1917	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
Edwin Markham No. 2(d)	36	1916	BW	Comp. Only				
Mattawa	37	0626	BW	NRA	Mattawa	0034	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
Mattawa No. 2	37	0034	BW	NRA				
Distant								
Sunnyside	38	0964	BW	Beta, Alpha	Sunnyside	1748	Q A	Gamma Scan 90Sr, Pu(b), U(c)
Sunnyside No. 2	38	0032	BW	Comp. Only				
Yakima	39	0624	BW	Beta, Alpha	Yakima	0623	Q A	Gamma Scan 90Sr, Pu(b), U(c), 241Am
Yakima No. 2	39	0040	BW	Comp. Only				

(a) Refer to Figure 1.1, Air Sampling Locations.

(b) Isotopic plutonium.

(c) Isotopic uranium.

(d) Community-Operated Environmental Surveillance Station.

1.2 AIR - GASES AND VAPOR

Location	Location Number(a)	131 I		129 I		3 H (as HTO)	
		Sample Number	Frequency	Sample Number	Frequency (b)	Sample Number	Frequency
<u>Onsite</u>							
100-K	1					0278	M
200-ESE	6			0008	Q Comp	6201	M
200 Tel. Exchange	10					0275	M
300 South Gate	13					0279	M
300 Trench	14					0900	M
300-NE	15					6202	M
400-E	16					6428	M
<u>Perimeter</u>							
Ringold Met. Tower	22	0258	BW	0004	Q Comp	0906	M
Dogwood Rd. Met. Tower	24					0282	M
Byers Landing	25	0246	BW	0005	Q Comp	0273	M
Prosser Barricade	28					0908	M
Wahluke Slope	30					0266	M
<u>Community</u>							
Basin City(c)	31					1935	M
Leslie Groves-Richland(c)	32					1905	M
Edwin Markham(c)	36	1919	BW			1920	M
<u>Distant</u>							
Sunnyside	38					0910	M
Yakima	39	0630	BW	0001	Q Comp	0631	M

(a) Refer to Figure 1.1, Air Sampling locations.

(b) Samples are collected monthly and composited for quarterly analyses.

(c) Community-Operated Environmental Surveillance Station.

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Figure 1.1. Air Sampling Locations

2.0 SURFACE-WATER SURVEILLANCE

2.1 WATER - COLUMBIA RIVER

<u>Location^(a)</u>	<u>Sample Type</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Analyses</u>
Priest Rapids Dam	Cumulative	1265	M Comp ^(b)	Alpha, Beta, Lo ³ H, Gamma Scan, ⁹⁰ Sr, ⁹⁹ Tc, U ^(c) , DOH ^(d)
	Particulate (filter)	5395	M Comp ^(e) Q Comp	Gamma Scan Pu ^(f)
	Soluble (resin)	6394	M Comp ^(e) Q Comp	Gamma Scan ¹²⁹ I, Pu ^(f)
Vernita	Grab	-- ^(g)	Q	WQ-NASQAN, Temp, DO, Turbidity, pH, Fecal Coliform, SS, DS, Cond, Hardness as CaCO ₃ , P, Cr, N-Kjeldahl, TOC, Fe, NH ₃ -N
	Grab (Transect)	0171 - 0174 ^(h)	Q	Lo ³ H, ⁹⁰ Sr, U ^(c) , Volatile Organics, ICP Metals, Anions
100-N	Grab (Transect)	0140 - 0149 ⁽ⁱ⁾	A	Lo ³ H, ⁹⁰ Sr, U ^(c) , Volatile Organics, ICP Metals, Anions
100-F	Grab (Transect)	0191 - 0200 ⁽ⁱ⁾	A	Lo ³ H, ⁹⁰ Sr, U ^(c) , Volatile Organics, ICP Metals, Anions
Hanford Townsite	Grab (Transect)	0410 - 0419 ⁽ⁱ⁾	A	Lo ³ H, ⁹⁰ Sr, U ^(c) , Volatile Organics, ICP Metals, Anions
300 Area	Grab (Transect)	0420 - 0429 ⁽ⁱ⁾	A	Lo ³ H, ⁹⁰ Sr, U ^(c) , Volatile Organics, ICP Metals, Anions
Richland Pump House	Cumulative	1001	W	Alpha, Beta
	Cumulative	1000	M Comp ^(b)	Alpha, Beta, Lo ³ H, Gamma Scan, ⁹⁰ Sr, ⁹⁹ Tc, U ^(c)
	Particulate (filter)	6463	M Comp ^(e) Q Comp	Gamma Scan Pu ^(f)
	Soluble (resin)	6464	M Comp ^(e) Q Comp	Gamma Scan ¹²⁹ I, Pu ^(f)
	Grab (Transect)	0181 - 0190 ⁽ⁱ⁾	Q	Lo ³ H, ⁹⁰ Sr, U ^(c) , Volatile Organics, ICP Metals, Anions
	Grab	-- ^(g)	Q	WQ-NASQAN, Temp, DO, Turbidity, pH, Fecal Coliform, SS, DS, Cond, Hardness as CaCO ₃ , P, Cr, N-Kjeldahl, TOC, Fe, NH ₃ -N

(a) Refer to Figure 2.1, Surface Water and Drinking Water Locations.

(b) Composite of weekly samples.

(c) Isotopic uranium.

(d) Duplicate samples with the Washington State Department of Health (January and June only).

(e) Composite of biweekly sample.

(f) Isotopic plutonium.

(g) Numerous water quality (WQ) analyses are performed by the United States Geological Survey (USGS) in conjunction with the National Stream Quality Accounting Network (NASQAN) Program.

(h) 4 samples collected along cross-section.

(i) 10 samples collected along cross-section.

2.2 RIVERBANK SPRINGS

<u>Location^(a)</u>	<u>Sample Type</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Analyses</u>
100-B Spring	Grab	0134	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , Gamma Scan, Volatile Organics, ICP Metals, Anions
100-K Spring	Grab	0135	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , Gamma Scan, Volatile Organics, ICP Metals, Anions
100-N Spring 8-13	Grab	0115	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , Gamma Scan, Volatile Organics, ICP Metals, Anions
100-D Spring	Grab	0136	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , Gamma Scan, Volatile Organics, ICP Metals, Anions
100-H Spring	Grab	0137	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , Gamma Scan, Volatile Organics, ICP Metals, Anions
100-F Spring	Grab	0138	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , Gamma Scan, Volatile Organics, ICP Metals, Anions
Hanford Spring 28-2	Grab	0116	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , ^{129}I , Gamma Scan, Volatile Organics, ICP Metals, Anions
300 Area Spring 42-2	Grab	0117	A ^(b)	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(c) , ^{129}I , Gamma Scan, Volatile Organics, ICP Metals, Anions

(a) Refer to Figure 2.1, Surface Water and Drinking Water Locations.

(b) Collected twice a year during low river flow season.

(c) Isotopic uranium.

2.3 ONSITE PONDS

<u>Location^(a)</u>	<u>Sample Type</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Analyses</u>
West Lake	Grab	6133	Q	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , U ^(b) , Gamma Scan
B Pond	Grab	0015	Q	Alpha, Beta, ^3H , ^{90}Sr , ^{99}Tc , Gamma Scan
FFTF Pond	Grab	6467	Q	Alpha, Beta, ^3H , Gamma Scan

(a) Refer to Figure 2.1, Surface Water and Drinking Water Locations.

(b) isotopic uranium.

2.4 OFFSITE WATER SYSTEMS

Location ^(a)	Sample Type	Sample Number	Frequency	Analyses
Ringold Hatchery	Grab	0995	A	Alpha, Beta, ^3H , $\text{U}^{(b)}$, Gamma Scan
Mathews Corner	Grab	0997	A	Alpha, Beta, ^3H , $\text{U}^{(b)}$, Gamma Scan
White Bluffs Shallow	Grab	0993	A	Alpha, Beta, ^3H , $\text{U}^{(b)}$, Gamma Scan
White Bluffs Deep	Grab	0994	A	Alpha, Beta, ^3H , $\text{U}^{(b)}$, Gamma Scan
Alexander Farm	Grab	0999	A	Alpha, Beta, ^3H , $\text{U}^{(b)}$, Gamma Scan
Riverview Canal	Grab	0098	3 (May-Sept)	Alpha, Beta, ^3H , ^{90}Sr , $\text{U}^{(b)}$, Gamma Scan

(a) Refer to Figure 2.1, Surface Water and Drinking Water Locations.
(b) Isotopic uranium.

2.5 ONSITE DRINKING WATER

Location ^(a)	Sample Type	Sample Number	Frequency	Analyses
100-B River	Grab	6518	Q	Alpha, Beta, Lo ^3H , ^{90}Sr , Gamma Scan
100-D River	Grab	1219	Q	Alpha, Beta, ^3H , ^{90}Sr , Gamma Scan
Yakima Barricade	Grab	6543	Q	Alpha, Beta, ^3H , ^{90}Sr , Gamma Scan
Observatory	Grab	6381	Q	Alpha, Beta, ^3H , ^{90}Sr , Gamma Scan
FFTF	Grab	1220	M Q A	^3H Alpha, Beta, ^{90}Sr , Gamma Scan ^{129}I
300 Water Intake	Cumulative	6243	Q Comp ^(b)	Alpha, Beta, Lo ^3H , ^{90}Sr , ^{99}Tc , $\text{U}^{(c)}$, Gamma Scan
Firing Range	Grab	0099	Q	Alpha, Beta, ^3H , ^{90}Sr , Gamma Scan
ALE Headquarters	Grab	6299	Q	Alpha, Beta, ^3H , ^{90}Sr , Gamma Scan

(a) Refer to Figure 2.1, Surface Water and Drinking Water Locations.
(b) Composite of monthly cumulative samples.
(c) Isotopic uranium.

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Figure 2.1. Surface Water and Drinking Water Locations

3.0 FOODSTUFFS AND FARM PRODUCTS

3.1 WHOLE MILK

<u>Location^(a)</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Analyses</u>
East Wahluke Area Composite ^(b)	0305	Q SA	^3H , ^{90}Sr , Gamma Scan ^{129}I
Sagemoor Area Composite ^(b)	0306	M Q SA	^3H , Gamma Scan ^{90}Sr ^{129}I
Sunnyside Area	6355	Q SA	^3H , ^{90}Sr , Gamma Scan ^{129}I

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.
(b) Sample composited from three sources in each area.

3.2 POULTRY AND EGGS

<u>Location^(a)</u>	<u>Sample Type</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Analyses</u>
Sagemoor Area	Chicken	6386	SA	^{90}Sr , Gamma Scan
	Eggs	6387	SA	^{90}Sr , Gamma Scan
Sunnyside Area	Chicken	6371	SA	^{90}Sr , Gamma Scan
	Eggs	6370	SA	^{90}Sr , Gamma Scan

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.

3.3 BEEF

<u>Location^(a)</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Analyses</u>
Sagemoor Area	6418	A	^{90}Sr , Gamma Scan
Riverview Area	1292	A	^{90}Sr , Gamma Scan, DOH ^(b)
Sunnyside Area	0322	A	^{90}Sr , Gamma Scan, DOH ^(b)

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.
(b) Duplicate samples with the Washington State Department of Health.

3.4 LEAFY VEGETABLES

Location ^(a)	Sample Number	Frequency ^(b)	Analyses
East Wahluke Area	0308	BA	⁹⁰ Sr, Gamma Scan
Sagemoor Area	6419	A	⁹⁰ Sr, Gamma Scan, ¹²⁹ I-LEP
Riverview Area	1609	A	⁹⁰ Sr, ⁹⁹ Tc, Gamma Scan, FDA ^(c)
Sunnyside Area	6372	A	⁹⁰ Sr, Gamma Scan, FDA ^(c)

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.

(b) Three samples collected within each area. Biannual samples will next be collected in 1994.

(c) Duplicate samples sent to U.S. Food and Drug Administration.

3.5 VEGETABLES

Location ^(a)	Sample Type	Sample Number	Frequency ^(b)	Analyses
Riverview Area	Potatoes	0009	A	⁹⁰ Sr, Gamma Scan, FDA ^(c)
	Tomatoes	0011	A	³ H, ⁹⁰ Sr, Gamma Scan, DOH ^(d)
	Carrots	0013	A	⁹⁰ Sr, Gamma Scan
Horn Rapids	Potatoes	0536	A	⁹⁰ Sr, ⁹⁹ Tc, Pu ^(e) , U ^(f) , Gamma Scan, DOH ^(d)
Sagemoor Area	Potatoes	0538	A	⁹⁰ Sr, Pu ^(e) , Gamma Scan, FDA ^(c)
Sunnyside Area	Potatoes	0537	A	⁹⁰ Sr, Pu ^(e) , U ^(f) , ⁹⁹ Tc, Gamma Scan, FDA ^(c)
Harrah/Wapato Area	Potatoes	0534	A	⁹⁰ Sr, Gamma Scan, DOH ^(g)
	Tomatoes	0535	A	³ H, ⁹⁰ Sr, Gamma Scan, DOH ^(g)
East Wahluke Area	Potatoes	0539	BA	⁹⁰ Sr, Gamma Scan

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.

(b) Three samples of each type collected within each area. Biannual samples will next be collected in 1994.

(c) Duplicate samples sent to U.S. Food and Drug Administration.

(d) Duplicate samples with the Washington State Department of Health.

(e) Isotopic plutonium.

(f) Isotopic uranium.

(g) Samples provided to PNL by Washington State Department of Health.

3.6 FRUIT

Location ^(a)	Sample Type	Sample Number	Frequency ^(b)	Collection Period	Analyses
Sagemoor Area	Apples	0565	A	September	^3H , ^{90}Sr , $\text{Pu}^{(c)}$, Gamma Scan, FDA ^(d)
	Cherries	0543	A	June	^3H , ^{90}Sr , Gamma Scan
	Concord Grapes ^(e)	6417	A	September	^3H , ^{90}Sr , Gamma Scan, ^{129}I -LEP
Cold Creek Area	Apples	0304	BA	September	^3H , ^{90}Sr , Gamma Scan
	Concord Grapes ^(e)	0303	BA	September	^3H , ^{90}Sr , Gamma Scan
Sunnyside Area	Apples	6440	A	September	^3H , ^{90}Sr , $\text{Pu}^{(c)}$, Gamma Scan
	Cherries	6453	A	June	^3H , ^{90}Sr , Gamma Scan
	Concord Grapes ^(e)	6454	A	September	^3H , ^{90}Sr , Gamma Scan, ^{129}I -LEP
Riverview Area	Apples	0541	A	September	^3H , ^{90}Sr , Gamma Scan, FDA ^(d)
	Concord Grapes ^(e)	0542	A	September	^3H , ^{90}Sr , Gamma Scan
	Melons	0012	A	August	^3H , ^{90}Sr , Gamma Scan, DOH ^(f)
Ringold Area	Apples	0550	A	September	^3H , ^{90}Sr , $\text{Pu}^{(c)}$, Gamma Scan
	Cherries	0551	A	June	^3H , ^{90}Sr , Gamma Scan
Harrah/Wapato Area	Melons	0533	A	August	^3H , ^{90}Sr , Gamma Scan, DOH ^(g)
Mattawa Area	Apples	0563	BA	September	^3H , ^{90}Sr , Gamma Scan
	Concord Grapes ^(e)	0564	BA	September	^3H , ^{90}Sr , Gamma Scan
East Wahluke Area	Apples	0540	BA	September	^3H , ^{90}Sr , Gamma Scan, FDA ^(d)

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.

(b) Three samples of each type collected within each area. Biannual samples will next be collected in 1994.

(c) Isotopic plutonium.

(d) Duplicate samples sent to the U.S. Food and Drug Administration.

(e) Concord grapes preferred; table grapes acceptable if concord grapes are unavailable.

(f) Duplicate samples with the Washington State Department of Health.

(g) Samples provided to PNL by Washington State Department of Health.

3.7 WINE

Location ^(a)	Sample Type	Sample Number	Frequency ^(b)	Collection Period	Analyses
Columbia Basin	White	0544	A	December	^3H , Gamma Scan, DOH ^(c)
	Red	0546	A	December	^3H , Gamma Scan, DOH ^(c)
Yakima Valley	White	0545	A	December	^3H , Gamma Scan, DOH ^(c)
	Red	0547	A	December	^3H , Gamma Scan, DOH ^(c)

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.

(b) Three samples of each type collected within each area.

(c) Duplicate samples with the Washington State Department of Health.

3.8 WHEAT AND ALFALFA

<u>Location^(a)</u>	<u>Sample Type</u>	<u>Sample Number</u>	<u>Fre- quency^(b)</u>	<u>Collection Period</u>	<u>Analyses</u>
East Wahluke Area	Wheat	0320	BA	July	⁹⁰ Sr, Gamma Scan
	Alfalfa	0311	BA	May	⁹⁰ Sr, Gamma Scan
Sagemoor Area	Wheat	0319	A	July	⁹⁰ Sr, Pu ^(c) , Gamma Scan, FDA ^(d) , DOH ^(e)
	Alfalfa	0312	A	May	⁹⁰ Sr, Gamma Scan
Riverview Area	Wheat	0318	A	July	⁹⁰ Sr, Gamma Scan
	Alfalfa	0313	A	May	⁹⁰ Sr, Gamma Scan, DOH ^(e)
Benton City Area	Wheat	0317	A	July	⁹⁰ Sr, Gamma Scan
	Alfalfa	0314	A	May	⁹⁰ Sr, Gamma Scan
Sunnyside Area	Wheat	0316	A	July	⁹⁰ Sr, Pu ^(c) , Gamma Scan, DOH ^(e)
	Alfalfa	0315	A	May	⁹⁰ Sr, Gamma Scan, DOH ^(e)
Battelle Field	Alfalfa	0301	A	May	⁹⁰ Sr, Gamma Scan, DOH ^(e)
Horn Rapids	Alfalfa	0339	A	May	⁹⁰ Sr, Gamma Scan, DOH ^(e)

(a) Refer to Figure 3.1, Food and Farm Product Sampling Locations.

(b) Three samples of each type collected within each area. Biannual samples will next be collected in 1992.

(c) Isotopic plutonium.

(d) Duplicate samples sent to the U.S. Food and Drug Administration.

(e) Duplicate samples with the Washington State Department of Health.

Figure 3.1. Food and Farm Product Sampling Locations

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4.0 WILDLIFE

4.1 AQUATIC BIOTA

<u>Location (a)</u>	<u>Species/ Sample</u>	<u>Sample Number</u>	<u>Number of Samples</u>	<u>Collection Period</u>	<u>Analyses</u>
100-N to 100-D	Whitefish				
	Fillet	0340	10	January	⁹⁰ Sr, Gamma Scan
	Carcass	0341	10	January	⁹⁰ Sr
	Carp				
	Fillet	0345	5	June	⁹⁰ Sr, Gamma Scan, DOH(b)
	Carcass	0346	5	June	⁹⁰ Sr, DOH(b)
100-F Slough	Bass				
	Fillet	6369	5	BA(c)	⁹⁰ Sr, Gamma Scan
	Carcass	0338	5	BA(c)	⁹⁰ Sr
300 Area	Whitefish				
	Fillet	6488	10	November	⁹⁰ Sr, U(d), ⁹⁹ Tc, Gamma Scan
	Carcass	6489	10	November	⁹⁰ Sr
	Carp				
	Fillet	0347	5	June	⁹⁰ Sr, Gamma Scan
	Carcass	0348	5	June	⁹⁰ Sr
Vantage(e)	Carp				
	Fillet	0702	10	June	⁹⁰ Sr, U(d), Gamma Scan
	Carcass	0703	10	June	⁹⁰ Sr
Kettle River(e)	Whitefish				
	Fillet	0700	10	November	⁹⁰ Sr, U(d), ⁹⁹ Tc, Gamma Scan
	Carcass	0701	10	November	⁹⁰ Sr
Sunnyside(e)	Bass				
	Fillet	0711	10	June	⁹⁰ Sr, U(d), Gamma Scan
	Carcass	0712	10	June	⁹⁰ Sr

(a) Refer to Figure 4.1, Wildlife Sampling Areas.

(b) Duplicate samples with the Washington State Department of Health.

(c) Biannual samples will next be collected in 1994.

(d) Isotopic uranium.

(e) Background samples to be collected at least once every 5 years and will next be collected in 1995.

4.2 DUCKS

Location ^(a)	Species/ Sample ^(b)	Sample Number	Number of Samples	Collection Period	Analyses
100-N Area	Mallard				
	Muscle	0456	4	August	⁹⁰ Sr, Gamma Scan
	Liver	0457	4	August	NRA ^(c)
	Bone	0458	4	August	⁹⁰ Sr
B Pond	Mallard				
	Muscle	0444	10	August	⁹⁰ Sr, ⁹⁹ Tc, Gamma Scan, DOH ^(d)
	Liver	0445	10	August	NRA ^(c)
	Bone	0446	10	August	NRA ^(c)
West Lake	Mallard				
	Muscle	6186	4	August	⁹⁰ Sr, Gamma Scan
	Liver	6198	4	August	NRA ^(c)
	Bone	6199	4	August	NRA ^(c)
Vantage ^(e)	Mallard				
	Muscle	0713	20	August	⁹⁰ Sr, U ^(f) , ⁹⁹ Tc, Gamma Scan
	Liver	0714	20	August	Pu ^(g)
	Bone	0715	20	August	⁹⁰ Sr

(a) Refer to Figure 4.1, Wildlife Sampling Areas.

(b) Mallard preferred; other puddle ducks acceptable if mallard is unavailable.

(c) Not Routinely Analyzed (NRA) - Retain liver and bone to be analyzed for isotopic plutonium and ⁹⁰Sr, respectively, if ¹³⁷Cs exceeds 100 pCi/g (wet weight) in the muscle.

(d) Duplicate samples with the Washington State Department of Health.

(e) Background samples to be collected at least every 5 years and will next be collected in 1994.

(f) Isotopic uranium.

(g) Isotopic plutonium.

4.3 GAME BIRDS

Location ^(a)	Species/ Sample ^(b)	Sample Number	Number of Samples	Collection Period	Analyses
Near 100-N	Pheasant				
	Muscle	0479	3	January	⁹⁰ Sr, Gamma Scan
	Liver	0480	3	January	NRA ^(c)
	Bone	0481	3	January	⁹⁰ Sr
100-D to 100-H	Pheasant				
	Muscle	0490	4	January	Gamma Scan
	Liver	0491	4	January	NRA ^(c)
	Bone	0492	4	January	⁹⁰ Sr
100-H to 100-F	Pheasant				
	Muscle	0493	6	January	Gamma Scan, DOH ^(d)
	Liver	0494	6	January	NRA ^(c)
	Bone	0495	6	January	⁹⁰ Sr
Yakima County ^(f)	Pheasant				
	Muscle	0716	20	September	⁹⁰ Sr, U ^(e) , Gamma Scan
	Liver	0717	20	September	Pu ^(g)
	Bone	0718	20	September	⁹⁰ Sr

(a) Refer to Figure 4.1, Wildlife Sampling Areas.

(b) Pheasant preferred; chukar or quail acceptable if pheasant is unavailable.

(c) Not Routinely Analyzed (NRA) - Retain liver and bone to be analyzed for isotopic plutonium and ⁹⁰Sr, respectively, if ¹³⁷Cs exceeds 100 pCi/g (wet weight) in muscle.

(d) Duplicate samples with the Washington State Department of Health.

(e) Isotopic uranium.

(f) Background samples to be collected at least every 5 years and will next be collected in 1994.

(g) Isotopic plutonium.

4.4 DEER

<u>Location^(a)</u>	<u>Species/ Sample</u>	<u>Sample Number</u>	<u>Number of Samples</u>	<u>Collection Period</u>	<u>Analyses</u>
100-N Area	Mule				
	Muscle	6250	2	December	Gamma Scan
	Liver	6251	2	December	Pu ^(b)
	Bone	6303	2	December	⁹⁰ Sr
200 Ponds	Mule				
	Muscle	0369	2	December	Gamma Scan
	Liver	0370	2	December	Pu ^(b)
	Bone	0371	2	December	⁹⁰ Sr
Road Kill at Onsite Locations ^(c)	Mule				
	Muscle	ATL ^(d)	6	Annual	Gamma Scan
	Liver	ATL	6	Annual	Pu ^(b)
Background ^(e)	Mule				
	Muscle	0719	2	October	Gamma Scan
	Liver	0720	2	October	Pu ^(b)
	Bone	0721	2	October	⁹⁰ Sr

(a) Refer to Figure 4.1, Wildlife Sampling Areas.

(b) Isotopic plutonium.

(c) As available.

(d) ATL - according to location.

(e) Background samples to be collected at least every 5 years and will next be collected in 1995.

4.5 RABBITS

<u>Location^(a)</u>	<u>Type/ Sample</u>	<u>Sample Number</u>	<u>Number of Samples</u>	<u>Collection Period</u>	<u>Analyses</u>
100-N Area	Cottontail				
	Muscle	6145	4	April	Gamma Scan
	Liver	6146	4	April	Pu ^(b)
	Bone	6452	4	April	⁹⁰ Sr
200-E Area	Jack Rabbit				
	Muscle	1769	4	April	Gamma Scan
	Liver	1770	4	April	Pu ^(b)
	Bone	6432	4	April	⁹⁰ Sr
200-W Area	Jack Rabbit				
	Muscle	1789	4	April	Gamma Scan
	Liver	1790	4	April	Pu ^(b)
	Bone	6413	4	April	⁹⁰ Sr
N of 300 Area	Cottontail				
	Muscle	6203	4	April	Gamma Scan
	Liver	6204	4	April	Pu ^(b)
	Bone	6205	4	April	⁹⁰ Sr
Boardman, OR ^(c)	Jack Rabbit				
	Muscle	0705	10	April	Gamma Scan
	Liver	0706	10	April	Pu ^(b)
	Bone	0707	10	April	⁹⁰ Sr

4.5 RABBITS (contd)

<u>Location^(a)</u>	<u>Type/ Sample</u>	<u>Sample Number</u>	<u>Number of Samples</u>	<u>Collection Period</u>	<u>Analyses</u>
Boardman, OR ^(c)	Cottontail				
	Muscle	0708	10	April	Gamma Scan
	Liver	0709	10	April	pu ^(b)
	Bone	0710	10	April	⁹⁰ Sr

(a) Refer to Figure 4.1, Wildlife Sampling Areas.

(b) Isotopic plutonium.

(c) Background samples to be collected at least every 5 years and will next be collected in 1995.

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Figure 4.1 Wildlife Sampling Areas

5.0 SOIL AND VEGETATION

5.1 SOIL

Location ^(a)	Sample Number	Frequency ^(b)	Collection Period	Analyses			
100-K Area	0569	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), DOH(e)		
NE of 100-N Area	0590	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
E of 100-N Area	0578	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
100-N Shoreline Above Boundary	0570	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
100-N Springs Shoreline	0571	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
100-N Shoreline Below Boundary	0572	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
100 Area Fire Station	0580	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
200-ENC	6362	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), DOH(e)		
E of 200-E	0581	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
200-ESE	6022	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
S of 200-E	0582	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), ²⁴¹ Am		
SW of B/C Cribs	0583	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), ²⁴¹ Am		
E of 200-W Gate	6276	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), ²⁴¹ Am, DOH(e)		
S of 200-W	0584	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Rattlesnake Springs	6003	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), DOH(e)		
Yakima Barricade	6004	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
400-E	6282	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
SE Side of FFTF	6277	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
N of 300 Area	6322	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
S of 300 Area	6323	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), DOH(e)		
Hanford Townsite	6017	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Wye Barricade	6016	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Prosser Barricade	6225	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
ALE Field Lab	6278	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
N End Vernita Bridge	6005	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Wahluke Slope	6007	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Berg Ranch	6008	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Ringold	6009	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), DOH(e)		
W End of Fir Road	6360	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Taylor Flats No. 2	6421	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Sagemoor Farm	6358	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), ²⁴¹ Am		
Byers Landing	6011	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), DOH(e)		
Riverview - Harris	6361	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Benton City	6000	1/3 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Sunnyside	6357	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), ²⁴¹ Am		
McNary Dam	0504	1/5 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Walla Walla	0502	1/5 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Washtucna	0501	1/5 yr	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d)		
Yakima	0512	A	July	Gamma Scan,	⁹⁰ Sr, U(c), Pu(d), DOH(e)		

(a) Refer to Figure 5.1, Soil and Vegetation Sampling Locations.

(b) Specified samples are collected once every 3 or 5 years, respectively. The next samples for 1/3-year and 1/5-year locations will be 1993 and 1995, respectively.

(c) ²³⁵U-LEP, ²³⁸U-LEP.

(d) Isotopic plutonium.

(e) Duplicate samples with the Washington State Department of Health.

5.2 VEGETATION

Location ^(a)	Sample Number	Frequency ^(b)	Collection Period	Analyses
100 K Area	0568	A	July	Gamma Scan, ⁹⁰ Sr, U ^(c) , Pu ^(d) , DOH ^(e)
NE of 100-N Area	0591	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
E of 100-N Area	0579	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
100 N (Shoreline)	0573	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
E of 200-W Gate	6283	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d) , DOH ^(e)
300 Area (Shoreline)	0574	A	July	Gamma Scan, ⁹⁰ Sr, U ^(c) , Pu ^(d)
Hanford Townsite	6063	1/3 yr	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
Hanford Townsite (shoreline)	0575	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d) , ⁹⁹ Tc
Ringold	6055	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
Sage Moor Farm	6364	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
Byers Landing	6057	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d) , DOH ^(e)
Riverview - Harris	6367	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
Sunnyside	6363	A	July	Gamma Scan, ⁹⁰ Sr, U, Pu ^(d)
Yakima	0513	A	July	Gamma Scan, ⁹⁰ Sr, U ^(c) , Pu ^(d) , DOH ^(e)

(a) Refer to Figure 5.1, Soil and Vegetation Sampling Locations.

(b) Specified samples are collected once every 3 years (1/3 yr). The next sampling will be 1993.

(c) Isotopic uranium.

(d) Isotopic plutonium.

(e) Duplicate samples with the Washington State Department of Health.

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Figure 5.1. Soil and Vegetation Sampling Locations

6.0 SEDIMENT

<u>Location^(a)</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Analyses</u>
<u>River</u>			
McNary Dam			
Oregon Shore	0595	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
1/3 from Oregon Shore	0514	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
2/3 from Oregon Shore	0515	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
Washington Shore	0516	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
Priest Rapids Dam			
Grant County Shore	0596	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
1/3 from Grant County Shore	0517	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
2/3 from Grant County Shore	0518	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
Yakima County Shore	0519	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
White Bluffs Slough	0592	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
100-F Slough	0593	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
Hanford Slough	0594	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
Richland	0597	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , Pu ^(c) , ICP Metals
<u>Springs</u>			
100-N Spring 8-13	0520	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , ICP Metals
100-D Spring	0521	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , ICP Metals
100-H Spring	0522	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , ICP Metals
Hanford Spring 28-2	0523	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , ICP Metals
300 Area Spring 42-2	0524	A	Gamma Scan, ⁹⁰ Sr, U ^(b) , ICP Metals

(a) Refer to Figure 6.1, Sediment Sampling Locations.

(b) ²³⁵U-LEP, ²³⁸U-LEP.

(c) Isotopic plutonium.

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Figure 6.1. Sediment Sampling Locations

7.0 EXTERNAL RADIATION

7.1 THERMOLUMINESCENT DOSIMETERS (TLDs)

7.1.1 Terrestrial Locations

<u>Location</u>	<u>Location Number</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Measurement</u>	<u>Instrument</u>
<u>Onsite^(a)</u>					
100-K ^(b)	1	1138	Q	Ambient Dose	
100-N (WPPSS)	2	1136	Q	Ambient Dose	
100-D ^(b)	3	1398	Q	Ambient Dose	
N of 200-E ^(b)	4	1141	Q	Ambient Dose, DOH ^(c)	
200 Tel. Exchange ^(b)	5	1142	Q	Ambient Dose, DOH ^(c)	
200 W SE ^(b)	6	1143	Q	Ambient Dose	
S of 200-E ^(b)	7	1145	Q	Ambient Dose, DOH ^(c)	
B Pond ^(b)	8	1146	Q	Ambient Dose	
E of 200-E ^(b)	9	1148	Q	Ambient Dose, DOH ^(c)	
200-ESE ^(b)	10	1399	Q	Ambient Dose, DOH ^(c)	
3705 Building	11	1149	Q	Ambient Dose	
300 Water Intake ^(b)	12	1150	Q	Ambient Dose	
300 Southwest Gate	13	1151	Q	Ambient Dose	
300 South Gate ^(b)	14	1152	Q	Ambient Dose	
300 Trench ^(b)	15	1153	Q	Ambient Dose	
300 NE ^(b)	16	1154	Q	Ambient Dose	
400-E ^(b)	17	1400	Q	Ambient Dose	
400-W ^(b)	18	1155	Q	Ambient Dose	
400-S ^(b)	19	1156	Q	Ambient Dose	
400-N ^(b)	20	1158	Q	Ambient Dose	
Wye Barricade ^(b)	21	1395	Q	Ambient Dose, DOH ^(c)	
US Ecology NE Corner	22	0118	Q	Ambient Dose, DOH ^(c)	
US Ecology SE Corner	23	0119	Q	Ambient Dose, DOH ^(c)	
US Ecology NW Corner	24	0120	Q	Ambient Dose, DOH ^(c)	
US Ecology SW Corner	25	0121	Q	Ambient Dose, DOH ^(c)	
WPPSS 1 S of WNP 2	26	0122	Q	Ambient Dose, DOH ^(c)	
<u>Perimeter^(d)</u>					
Ringold Met. Tower ^(b)	1	0930	Q	Ambient Dose	
Byers Landing ^(b)	2	1166	Q	Ambient Dose	
Battelle Complex ^(b)	3	1167	Q	Ambient Dose	
WPPSS 4 WPPSS Warehouse	4	0123	Q	Ambient Dose, DOH ^(c)	
WPPSS 8 Fir Road	5	0124	Q	Ambient Dose, DOH ^(c)	
<u>Community^(d)</u>					
Basin City ^{(b)(e)}	6	1936	Q	Ambient Dose	PIC ^(f)
Pasco ^(b)	7	1378	Q	Ambient Dose	
Kennewick ^(b)	8	1379	Q	Ambient Dose	
Benton City ^(b)	9	1381	Q	Ambient Dose	
Mattawa ^(b)	10	1384	Q	Ambient Dose	
Edwin Markham ^{(b)(e)}	11	1921	Q	Ambient Dose	PIC ^(f)
Richland (LGP) ^{(b)(e)}	12	1906	Q	Ambient Dose	PIC ^(f)

7.1.1 Terrestrial Locations (contd)

<u>Location</u>	<u>Location Number</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Measurement</u>	<u>Instrument</u>
<u>Distant</u> (d)					
Sunnyside(b)	13	1388	Q	Ambient Dose, DOH(c)	
Yakima(b)	14	1389	Q	Ambient Dose, DOH(c)	

- (a) Refer to Figure 7.1, Thermoluminescent Dosimeter (TLD) Locations on the Hanford Site.
 (b) Located at air sampling station.
 (c) Washington State Department of Health TLDs also at these locations.
 (d) Refer to Figure 7.2, Thermoluminescent Dosimeter (TLD) Locations for Perimeter and Community Sites.
 (e) Community-Operated Environmental Surveillance Station.
 (f) PIC data (in mR/H) collected monthly.

S9212076.3

Figure 7.1. Thermoluminescent Dosimeter (TLD) Locations on the Hanford Site

S9212076.1

Figure 7.2. Thermoluminescent Dosimeter (TLD) Locations for Perimeter and Community Sites

7.1.2 Columbia River Shoreline Locations

<u>Location^(a)</u>	<u>Location Number</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Measurement</u>
Above 100-B Area	1	1178	Q	Ambient Dose
Below 100-B Retention Basin	2	1179	Q	Ambient Dose
Above 100-K Boat Ramp	3	1180	Q	Ambient Dose
Below 100-N Outfall	4	1181	M	Ambient Dose
Below 100-N Stack	5	1182	M	Ambient Dose
Above Tip 100-N Berm	6	1183	M	Ambient Dose
100-N Trench Spring	7	1397	M	Ambient Dose
Below 100-D Area	8	1184	Q	Ambient Dose
Below Opposite 100-D	9	1185	Q	Ambient Dose
Lower End Locke Island	10	1186	Q	Ambient Dose
White Bluffs Ferry Landing	11	1187	Q	Ambient Dose
White Bluffs Slough	12	1188	Q	Ambient Dose
100-F Floodplain	13	1205	Q	Ambient Dose
Below 100-F	14	1206	Q	Ambient Dose
Hanford Slough	15	1207	Q	Ambient Dose
Hanford Powerline Crossing	16	1208	Q	Ambient Dose
Hanford Ferry Landing	17	1209	Q	Ambient Dose
Hanford RR Track	18	1210	Q	Ambient Dose
Savage Island Slough	19	1211	Q	Ambient Dose
Ringold Island	20	1212	Q	Ambient Dose
Powerline Crossing	21	1213	Q	Ambient Dose
N End Wooded Island	22	1214	Q	Ambient Dose
S End Wooded Island	23	1215	Q	Ambient Dose
Island Near 300 Area	24	1216	Q	Ambient Dose
Island DS Bateman Island	25	1217	Q	Ambient Dose
Port of Benton	26	1222	Q	Ambient Dose
100-D Island	27	1223	Q	Ambient Dose
Island Above 300 Area	28	1224	Q	Ambient Dose

(a) Refer to Figure 7.3, Thermoluminescent Dosimeter (TLD) Locations on the Hanford Reach of the Columbia River.

7.2 COLUMBIA RIVER SHORELINE RADIATION SURVEYS

<u>Location^(a)</u>	<u>Location Number</u>	<u>Sample Number</u>	<u>Frequency</u>	<u>Measurement</u>	<u>Instrument</u>
Above 100-K Boat Ramp	3	6132	Q	Exposure, Surface contamination	BICRON, GM
Below 100-N Outfall	4	6483	M	Exposure, Surface contamination	BICRON, GM
Below 100-N Stack	5	6484	M	Exposure, Surface contamination	BICRON, GM
Above Tip 100-N Berm	6	6485	M	Exposure, Surface contamination	BICRON, GM
100-N Trench Springs	7	6129	M	Exposure, Surface contamination	BICRON, GM
Below Opposite 100-D	9	6241	Q	Exposure, Surface contamination	BICRON, GM
Lower End Locke Island	10	6123	Q	Exposure, Surface contamination	BICRON, GM
White Bluffs Ferry Landing	11	6121	Q	Exposure, Surface contamination	BICRON, GM
Below 100-F	14	6120	Q	Exposure, Surface contamination	BICRON, GM
Hanford Powerline Crossing	16	6118	Q	Exposure, Surface contamination	BICRON, GM
Hanford Ferry Landing	17	6117	Q	Exposure, Surface contamination	BICRON, GM
Hanford RR Track	18	6242	Q	Exposure, Surface contamination	BICRON, GM
Ringold Island	20	6114	Q	Exposure, Surface contamination	BICRON, GM
Powerline Crossing	21	6113	Q	Exposure, Surface contamination	BICRON, GM
100-D Island	27	6438	Q	Exposure, Surface contamination	BICRON, GM
Island Above 300 Area	28	6439	Q	Exposure, Surface contamination	BICRON, GM

(a) Refer to Figure 7.3, Thermoluminescent Dosimeter (TLD) Locations on the Hanford Reach of the Columbia River.

S9212076.2

Figure 7.3. Thermoluminescent Dosimeter (TLD) Locations on the Hanford Reach of the Columbia River

7.3 ONSITE ROADWAY RADIATION SURVEYS

Description (a)	Sample Number	Trip Number	Frequency	Instrument (b)
1100 Area to FFTF 4-S at 1100 Area; 4-S at No. 2 RR Track; 4-S at FFTF Access; FFTF; FFTF Access at 4-S; 4-S at No. 2 RR Track; 4-S at 300 Area	1800	1	M	Road Monitor
FFTF to US Ecology 4-S at FFTF; 4-S at Wye Barricade; 4-S at Army Loop; 4-S at US Ecology	1801	2	M	Road Monitor
100-N to 100-K to 200-W Rt. 1 at Rt. 4-N Junction; Rt. 4N at 100-N Access; 100-N; 100-N Access at Rt. 4-N; Rt. 4-N at Rt. 1 Junction; Rt. 1 at 100-K Access; 100-K; 100-K Access at Rt. 1; Rt. 1 at Rt. 4-N Junction; Rt. 4 at 11A Junction; 11A at 200-W N Access; N Access Gate 609; 200-W	1802	3	Q	Road Monitor
Yakima Barricade to US Ecology Yakima Barricade; Army Loop Road; 4-S; US Ecology; 4-S Rt. 3; 200-W; 11A; 200-W; 4-S; 11A	1803	4	Q	Road Monitor
Army Loop Road 4-S Army Loop; Old Powerline Crossing; S 200-W Area; 11A Army Loop	1804	5	A	Road Monitor
US Ecology to FFTF 4-S US Ecology; 4-S Army Loop; Wye Barricade; Rt. 10 FFTF Access Road; Prosser Barricade; Rt. 10 FFTF Access; FFTF; Rt. 10 FFTF Access; Rt. 10 and 4-S; 4-S and FFTF Access Road; FFTF	1805	6	A	Road Monitor
300-Area through 1100 Area 300 Area; Garage; Stores; Gas Station; Parking Lot; 1st Street; Kaiser's Shop Area; 1st Street; IT; George Washington Way - Stevens; IT	1806	7	A	Road Monitor
Yakima Barricade to 100-B/C and 200-N Yakima Barricade; 11A and Rt. 6; Rt. 6 and Rt. 1; Rt. 1 and 100-B Cut-off; Rt. 1 100-B Access; Rt. 1 100-K Access; Rt. 1 100-B Access; Rt. 1 100-B Cut-off; 4-N and 100-B Cut-off; Rt. 1 100-B Cut-off; Rt. 1 and Rt. 6; 11A and Rt. 6; 11A and 200-N Access Road; 200-N; 4-N and 200-N Access; 4-N and 11A; 11A and 200-N Access	1807	8	A	Road Monitor
Wye Barricade to 100-N Wye Barricade; 2-N and 11A; 2-N and 100-F; 2-N and 100-H; 2-N and 100-D; 2-N and 4-N; 4-N and 100-N Access; 4-N and 2-N; 2-N and 100-D; 2-N and 100-H; 2-N and 100-F; 2-N and 11A; Wye Barricade	1808	9	A	Road Monitor
Rt. 2-S and Rt. 11A to White Bluffs 2-N and 11A; 11A and 4-N; 4-N and Rt. 1; Rt. 1 and 2-N; Rt. 1 and White Bluffs Cut-off; White Bluffs Ferry Landing; White Bluffs Cut-off and Rt. 1; Rt. 1 and 4-N; 4-S and 11A; 11A and 2-S	1809	10	A	Road Monitor
300 Area Outside 300 Area Perimeter Fence; NW Corner of Pond Area; 4-S 300 Railroad Crossing; 3-N Gate Parking Lot; 4-S Cypress Street; Cypress Gate and 4-S; 3701 Badge House; N of 331 Bldg.; 3614-A Bldg.; Inside 300 Area Perimeter Fence	1810	11	Q	Road Monitor
400 Area Visitor Center Access Road; Main Gate; NW Corner Parking Lot; NE Corner Parking Lot; Visitor Center; Old 4-E Monitoring Station; NE Corner Perimeter Fence; NW Corner Perimeter Fence; SW Corner Perimeter Fence; SE Corner Perimeter Fence; Main Gate	1811	12	Q	Road Monitor

(a) Refer to Figure 7.4, Road Survey Routes.

(b) The instrument used for road monitoring consists of sodium iodide detectors with associated electronics which function as gross-gamma counters.

7.4 ONSITE RAILWAY RADIATION SURVEYS

<u>Description^(a)</u>	<u>Sample Number</u>	<u>Trip Number</u>	<u>Frequency</u>	<u>Instrument^(b)</u>
1100 Area; Ruby Junction; 300 Area Gate; Geneva Junction; FFF; May Junction; Willa Junction; Pearl Junction; Ethel Junction; 200-E Gate; Susie Junction; 200-W Gate	1821	2	Q	Railway Monitor
May Junction; Ruth Junction; Ginger Junction; Betty Junction; Nancy Junction; 100-N Gate; Helen Junction; Audrey Junction; 100-K Gate; Susie Junction ^(c)	1822	3	Q	Railway Monitor
1100 Area; Van Giesen; Yakima River Bridge; Columbia Center ^(c)	1819	5	Q	Railway Monitor

(a) Refer to Figure 7.5, Railroad Survey Routes.

(b) The instrument used for railway monitoring consists of sodium iodide detectors with associated electronics which function as gross-gamma counters.

(c) These surveys will be performed quarterly only if deemed necessary by the External Radiation Task Leader; at a minimum these will be performed annually.

7.5 ONSITE AERIAL RADIATION SURVEYS

<u>Description^(a)</u>	<u>Sample Number</u>	<u>Trip Number</u>	<u>Frequency</u>	<u>Instrument^(b)</u>
Project Perimeter	1820	3	A	Aerial Monitor

(a) Survey is performed either annually or at an appropriate frequency determined for maintaining emergency preparedness support or post-accident characterization (currently the only purposes for it).

(b) The instrument used for aerial monitoring consists of sodium iodide detectors with associated electronics which function as gross-gamma counters.

S9108076.1

Figure 7.4. Road Survey Routes

S9108076.2

Figure 7.5. Railroad Survey Routes

PART II. HANFORD GROUND-WATER SURVEILLANCE

1.0 100 AREA WELLS

1.1 100-B AREA WELLS^(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-B2-12	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B2-13	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B3-1				0	0	A	0			A							Source
1-B3-46	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B3-47	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B4-1				0	0	A	0			A							Source
1-B4-2				A	A	A	A			A	A	A		A			Source
1-B4-3				A	A	A	A			A							Source
1-B4-4				0	0	A	0			A							Source
1-B4-5				0	0	A	0			A							Source
1-B4-6				A	A	A	A			A							Source
1-B4-7				0	0	A	0			A							Source
1-B4-8	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B4-9	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B5-2	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B8-6	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B9-1				0	0	A	0			A							Source
1-B9-2	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B9-3	100-BC-5			0	0	A	0			A	A	A		A			Source
1-B2-12	100-BC-5			0	0	A	0			A	A	A		A			Source

1.2 100-D AREA WELLS^(b)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-D2-5				0	0		0			A	A	A					Source
1-D2-6	100-HR-3			0	0	A	0			A				A			Source
1-D5-12	100-HR-3			0	0	A	0			A							Source
1-D5-13	100-HR-3	100D		0	0	A	A			A	A	A		A			Source
1-D5-14	100-HR-3			0	0	A	0			A	A	A		A			Source
1-D5-15	100-HR-3			0	0	A	0			A	A	A		A			Source
1-D5-16	100-HR-3			0	0	A	0			A	A	A		A			Source
1-D5-17	100-HR-3			0	0	A	0			A	A	A		A			Source
1-D5-18	100-HR-3			0	0	A	0			A	A	A		A			Source

1.0 100 AREA WELLS

1.2 100-D AREA WELLS(b) (contd)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ⁻³)	Anions (NO ⁻³)	³ H	GC-VDA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-D5-19	100-HR-3		0	0	0	A	0			A	A	A	A		A			Source
1-D5-20	100-HR-3		0	0	0	A	0			A	A	A	A		A			Source
1-D8-3	100-HR-3		0	0	0	A				A								Source
1-D8-4	100-HR-3	100-D	0	0	0	A	A			A	A	A	A		A			Source
1-D8-5	100-HR-3	100-D	0	0	0	A	A			A	A	A	A		A			Source
1-D8-53	100-HR-3		0	0	0	A	0			A	A	A	A		A			Source
1-D8-54A	100-HR-3		0	0	0	A	0			A	A	A	A		A			Source
1-D8-54B	100-HR-3		0	0	0	A	0			A	A	A	A		A			Source
1-D8-55	100-HR-3		0	0	0	A	0			A	A	A	A		A			Source
1-D8-6	100-HR-3	100-D	0	0	0	A	0			A	A	A	A		A			Source

1.3 100-F AREA WELLS(c)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ⁻³)	Anions (NO ⁻³)	³ H	GC-VDA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-F1-2	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F5-1	100-FR-3		0	0	0	A	0								A			Source
1-F5-3	100-FR-3		0	0	0	A	0								A			Source
1-F5-4	100-FR-3		0	0	0	A	0								A			Source
1-F5-42	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F5-45	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F5-46	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F5-47	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F5-48	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F5-6	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F6-1	100-FR-3		0	0	0	A	0								A			Source
1-F7-1	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F7-3	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F8-1	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F8-2	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F8-3	100-FR-3		0	0	0	A	0			A	A	A			A			Source
1-F8-4	100-FR-3		0	0	0	A	0			A	A	A			A			Source

1.0 100 AREA WELLS

1.4 100-H AREA WELLS(d)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ³ -)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-H3-1		183-H		0	A		0				0				0			Source
1-H3-2A		183-H		0	A		0				0				0			Source
1-H3-2B		183-H		0	A		0				0				0			Source
1-H4-10		183-H		0	A		0				0				0			Source
1-H4-11		183-H		0	0		0				0				0			Source
1-H4-12A		183-H		0	A		0				0				0			Source
1-H4-12B		183-H		0	A		0				0				0			Source
1-H4-12C		183-H		0	A		0				0				0			Source
1-H4-13		183-H		0	A		0				0				0			Source
1-H4-14		183-H		0	0		0				0				0			Source
1-H4-15A		183-H		0	0		0				0				0			Source
1-H4-15B		183-H		0	A		0				0				0			Source
1-H4-16		183-H		0	A		0				0				0			Source
1-H4-17		183-H		0	A		0				0				0			Source
1-H4-18		183-H		0	A		0				0				0			Source
1-H4-2			A	0	A	A	0				0				0			Source
1-H4-3		183-H		0	0		0				0				0			CAS
1-H4-4		183-H	A	0	0		0				0				0			Source
1-H4-45	100-HR-3			Q	Q		0				0				Q	Q		DOH
1-H4-46	100-HR-3			0	0	A	0			0	A				A			Source
1-H4-47	100-HR-3			0	0	A	0			A	A				A			Source
1-H4-48	100-HR-3			0	0	A	0			A	A				A			Source
1-H4-49	100-HR-3			0	0	A	0			A	A				A			Source
1-H4-5		183-H		0	0		0				0				0			Source
1-H4-6		183-H		0	0		0				0				0			Source
1-H4-7		183-H		0	A		0				0				0			Source
1-H4-8		183-H		0	A		0				0				0			Source
1-H4-9		183-H		0	A		0				0				0			Source
1-H5-1	100-HR-3			0	0		0			A	A				0			Source
1-H6-1	100-HR-3			0	0	A	0			0	0				0			Source

1.0 100 AREA WELLS

1.5 100-K AREA WELLS(e)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-K-11	100-KR-4	100-K	0	0		0			A								Source
1-K-19		100-K	0	0		0			A								Source
1-K-20		100-K	0	0		0			A								Source
1-K-22		100-K	0	0		0			A								Source
1-K-27		100-K	Q	Q		0			Q					Q	Q	Q	DOH
1-K-28		100-K	0	0		0			A								Source
1-K-29		100-K	0	0	A	0	A		A								Source
1-K-30		100-K	0	0		0			A								Source
1-K-32A	100-KR-4		0	0	A	0			A		A			A			Source
1-K-32B	100-KR-4		0	0	A	0			A		A			A			Source
1-K-33	100-KR-4		0	0	A	0			A		A			A			Source
1-K-34	100-KR-4		0	0	A	0			A		A			A			Source
1-K-35	100-KR-4		0	0	A	0			A		A			A			Source
1-K-36	100-KR-4		0	0	A	0			A		A			A			Source
1-K-37	100-KR-4		0	0	A	0			A		A			A			Source

1.6 100-N AREA WELLS(f)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-N-14		1301-N	A	Q		0			Q		Q			Q	Q	Q	DOH
1-N-16	100-NR-2	1301-N	0	0		0			0								Source
1-N-17		1301-N	0	0		0			0								Source
1-N-18			0	0		0			0								Source
1-N-2	100-NR-2	1301-N	0	0		0			0		0						Source
1-N-20	100-NR-2		0	0		0			0								Source
1-N-21		1301-N	0	0		0			0								Source
1-N-22			A	A		A			A								Source
1-N-24	100-NR-2		0	0					0								Source
1-N-25	100-NR-2		0	0					0								Source
1-N-26	100-NR-2		0	0					0								Source
1-N-27			0	0					0								Source
1-N-28	100-NR-2	1325-N	0	0					0								Source
1-N-29		1325-N	0	0					0								Source
1-N-3		1301-N	A	SA		0			SA		SA				SA	SA	DOH

1.0 100 AREA WELLS

1.6 100-N AREA WELLS^(f) (contd)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
1-N-31		1325-N		0	0				0								Source
1-N-32		1325-N		0	0				0								Source
1-N-33		1325-N		0	0				0								Source
1-N-36				A	A				A								Source
1-N-37				0	0				0								Source
1-N-39	100-NR-2			A	A				A								Source
1-N-4				A	A				A								Source
1-N-41		1325-N		0	0				0								Source
1-N-42				0	0				0								Source
1-N-5				A	A				A								Source
1-N-50	100-NR-2			A	A				A								Source
1-N-51	100-NR-2			A	A				A								Source
1-N-52	100-NR-2			A	A				A								Source
1-N-54		1301-N		0	0		0		0								Source
1-N-55		1301-N		0	0		0		0								Source
1-N-56		1301-N		0	0		0		0								Source
1-N-57	100-NR-2	1301-N		0	0		0		0								Source
1-N-58				A	A				A								Source
1-N-59				A	A				A								Source
1-N-6				A	A				A								Source
1-N-60				A	A				A								Source
1-N-61				A	A				A								Source
1-N-66		1301-N		0	0				0								Source
1-N-67		1301-N		0	0				0								Source
1-N-69		1301-N		0	0				0								Source
1-N-70		1325-N		0	0				0								Source
1-N-71		1324-N		0	0				0								Source
1-N-72		1324-N		0	0				0								Source
1-N-73		1324-N		0	0				0								Source
1-N-74		1325-N		0	0				0								Source
1-N-75	100-NR-2	1301-N		0	0				0								Source
1-N-76	100-NR-2		A	SA	SA	A	A		SA		0				SA	SA	DOH
1-N-80	100-NR-2			0	0	A	0		0		A			A			Source

- (a) Refer to Figure 1.1, 100-B Area Well Locations.
 (b) Refer to Figure 1.2, 100-D Area Well Locations.
 (c) Refer to Figure 1.3, 100-F Area Well Locations.
 (d) Refer to Figure 1.4, 100-H Area Well Locations.
 (e) Refer to Figure 1.5, 100-K Area Well Locations.
 (f) Refer to Figure 1.6, 100-N Area Well Locations.

S9203022.7

Well Location Map for the 100-B Area

Figure 1.1. 100-B Area Well Locations

S9203022.12

Figure 1.2. 100-D Area Well Locations

S9203022.8

Well Location Map for the 100-F Area

Figure 1.3. 100-F Area Well Locations

Well Location Map for the 100-H Area

Figure 1.4. 100-H Area Well Locations

S9203022.10

S9203022.11

Well Location Map for the 100-K Area

Figure 1.5. 100-K Area Well Locations

2.0 200 AREA WELLS

2.1 200-EAST AREA WELLS^(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	SEM VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
2-E13-14				A	A				A	A			A	A			Source
2-E13-5				A	A				A	A			A	A			Source
2-E17-1		A-10		0	0				0				0				Source
2-E17-12		PUREX		0	0					A			A				Source
2-E17-13		PUREX		0	0					A			A				Source
2-E17-14		A-36B		0	0				0	A			A				Source
2-E17-15		A-29		0	0				0	A			A				Source
2-E17-16		A-36B		0	0				0	A			A				Source
2-E17-17		A-36B		0	0				0	A			A				Source
2-E17-18		A-36B		0	0				0	A			A				Source
2-E17-19		A-10		0	0				0	A			0				Source
2-E17-2				A	A				A	A			A				Source
2-E17-20		A-10		0	0				0	A			0				Source
2-E17-5		A-36B		0	0				0	A			A				Source
2-E17-6				A	A				A	A			A	A			Source
2-E17-8				A	A				A	A			A				Source
2-E17-9		A-36B		0	0				A	A			A				Source
2-E18-1		2101M		0	0				0	A			A				Source
2-E18-2		2101M		0	0				0	A			A				Source
2-E18-3		2101M		0	0				0	A			A				Source
2-E18-4		2101M		0	0				0	A			A				Source
2-E23-1				A	A				A	A			A				Source
2-E24-1				A	A				A	A			1				Source
2-E24-11				A	A				A	A			A				Source
2-E24-12				A	A				A	A			A				Source
2-E24-13				0	0				A	A			A				Source
2-E24-16		B-PLANT		0	0				A	A			0				Source
2-E24-17		A-10		0	0				A	A			0				Source
2-E24-18		A-10		0	0				A	A			0				Source
2-E24-19		SST		0	0				A	A			0				Source
2-E24-2		A-10		0	0				A	A			0				Source
2-E24-4				A	A				A	A			A				Source
2-E24-7				A	A				A	A			A				Source
2-E24-8				A	A				A	A			A				Source
2-E25-11		A-29		0	0				A	A			A				Source
2-E25-13				A	A				A	A			A				Source
2-E25-17				A	A				A	A			A				Source
2-E25-18		A-29		0	0				0	A			A				Source

2.0 200 AREA WELLS

2.1 200-EAST AREA WELLS^(a) (contd)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
2-E25-19		A-29		0	0									A				Source
2-E25-20		A-29		0	0									A				Source
2-E25-21		A-29		0	0									A				Source
2-E25-22		PUREX		0	0									A				Source
2-E25-23				A	A									A				Source
2-E25-26		A-29		0	0									A				Source
2-E25-28				A	A									A				Source
2-E25-29		GROUT		0	A									A				Source
2-E25-3				A	A									A				Source
2-E25-30		GROUT		0	A									A				Source
2-E25-31		GROUT		0	0									A				Source
2-E25-33		GROUT		0	0									A				Source
2-E25-36		A-10		0	0									0				Source
2-E25-37		GROUT		0	A									A				Source
2-E25-38		GROUT		0	A									A				Source
2-E25-42		A-29		0	0									A				Source
2-E25-43		A-29		0	0									A				Source
2-E25-47		A-29		0	0									A				Source
2-E25-48		A-29		0	0									A				Source
2-E25-6		PUREX		0	0									A				Source
2-E25-9		PUREX		0	0									A				Source
2-E26-10		LERF		0	0									A				Source
2-E26-11		LERF		0	0									A				Source
2-E26-4				A	A									A				Source
2-E26-8				A	A									A				CAS
2-E26-9		LERF		0	0									A				Source
2-E26-12				0	0									A				Source
2-E26-13		A-29		0	0									A				Source
2-E27-10		LLBG		0	0									A				Source
2-E27-11		LLBG		0	0									A				Source
2-E27-16		B-63		0	0									A				Source
2-E27-18		B-63		0	0									A				Source
2-E27-19		B-63		0	0									A				Source
2-E27-9		LLBG		0	0									A				Source
2-E28-1				A	A									A				Source

2.0 200 AREA WELLS

2.1 200-EAST AREA WELLS^(a) (contd)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
2-E28-17			A	A								A				Source
2-E28-18		B-PLANT	0	0								A	0			Source
2-E28-12			A	A								A				Source
2-E28-13			A	A								A				Source
2-E28-16			A	A								A				Source
2-E28-19			A	A					A			A				Source
2-E28-21		B-PLANT	0	0						0		A	0			Source
2-E28-23		B-PLANT	0	0					A		A	A				Source
2-E28-24			A	A				A	A	A	A	A				Source
2-E28-25			A	A				A	A	A	A	A				Source
2-E28-26		LLBG	0	0					A		A	A				Source
2-E28-27		LLBG	0	0					A		A	A				Source
2-E28-5			A	A								A				Source
2-E28-7			A	A								A				Source
2-E28-9			A	A								A				Source
2-E32-1	200-BP-1		0	0					A							Source
2-E32-2		LLBG	0	0												Source
2-E32-3		LLBG	0	0												Source
2-E32-4		LLBG	0	0												Source
2-E32-5		LLBG	0	0												Source
2-E33-1	200-BP-1		A	A								A				Source
2-E33-10			A	A								A				Source
2-E33-12	200-BP-1		A	A								A				Source
2-E33-24	200-BP-1		0	0								A				CAS
2-E33-26	200-BP-1		A	A					A							Source
2-E33-3	200-BP-1		A	A					A							Source
2-E33-36		B-63	0	0												Source
2-E33-37		B-63	0	0												Source
2-E33-5	200-BP-1		A	A												Source
2-E33-7	200-BP-1		A	A												Source
2-E34-2		LLBG	0	0												Source
2-E34-8		B-63	0	0												Source
2-E35-1		LLBG	0	0												Source

2.0 200 AREA WELLS

2.2 200-WEST AREA WELLS^(b)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
2-W10-13		LLBG		0	0	0	0	0									Source
2-W10-14		LLBG		0	0	0	0	0									Source
2-W10-15		SST		0	0	0	0	0		0	0			0			Source
2-W10-16		SST		0	0	0	0	0		0	0			0			Source
2-W10-9				A	A	A	A			A				A			Source
2-W11-14				A	A	A	A			A				A			Source
2-W11-18				A	A	A	A										Source
2-W11-23				A	A	A	A										Source
2-W11-31		LLBG		0	0	0	0			A				A			Source
2-W12-1				A	A	A											Source
2-W14-2				A	A	A				A				A			Source
2-W14-12		SST		0	0	0				A				0			Source
2-W15-10				A	A	A	A					A		A			Source
2-W15-15		LLBG		0	0	0	0										Source
2-W15-16		LLBG		0	0	0	0										Source
2-W15-17		LLBG		0	0	0	0										Source
2-W15-18		LLBG		0	0	0	0										Source
2-W15-19		LLBG		0	0	0	0										Source
2-W15-20		LLBG		0	0	0	0										Source
2-W15-24		LLBG		0	0	0	0										Source
2-W15-4				A	A	A	A			A				A			Source
2-W15-6				A	A	A	A			A				A			Source
2-W15-7				A	A	A	A			A				A			Source
2-W15-8		Z-PLANT		0	0	0	0			A				0			Source
2-W15-9				A	A	A	A										Source
2-W18-1				A	A	A	A										Source
2-W18-10				A	A	A	A										Source
2-W18-15				A	A	A	A										Source
2-W18-17		Z-PLANT		0	0	0	0			A				A			Source
2-W18-20		Z-PLANT		0	0	0	0							0			Source
2-W18-21		LLBG		0	0	0	0							0			Source
2-W18-23		LLBG		0	0	0	0							0			Source
2-W18-24		LLBG		0	0	0	0										Source
2-W18-26		LLBG		0	0	0	0										Source
2-W18-29		Z-PLANT		0	0	0	0										Source
2-W18-4				A	A	A	A										Source
2-W18-5				A	A	A	A										Source
2-W18-7				A	A	A	A										Source

2.0 200 AREA WELLS

2.2 200-WEST AREA WELLS^(b) (contd)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	SEM VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
2-W19-1		U-PLANT		0	0	0				A			A	0			Source
2-W19-11		U-PLANT		0	0	0				A			A	0			Source
2-W19-12				A	A	A				A			A	A			Source
2-W19-13				A	A	A				A			A	A			Source
2-W19-14				A	A	A				A			A	A			Source
2-W19-15		U-PLANT		0	0	0				A			A	0			Source
2-W19-16		U-PLANT		0	0	0				A			A	0			Source
2-W19-17		U-PLANT		0	0	0				A			A	0			Source
2-W19-18		U-PLANT		0	0	0				A			A	0			Source
2-W19-19		U-PLANT		0	0	0				A			A	0			Source
2-W19-2		U-PLANT		0	0	0				A			A	A			Source
2-W19-20		U-PLANT		0	0	0				A			A	0			Source
2-W19-21		U-PLANT		0	0	0				A			A	0			Source
2-W19-23		U-PLANT		0	0	0				A			A	0			Source
2-W19-24		U-PLANT		0	0	0				A			A	0			Source
2-W19-25		U-PLANT		0	0	0				A			A	0			Source
2-W19-26		U-PLANT		0	0	0				A			A	0			Source
2-W19-27		U-PLANT		0	0	0				A			A	0			Source
2-W19-28		U-PLANT		0	0	0				A			A	0			Source
2-W19-29		U-PLANT		0	0	0				A			A	0			Source
2-W19-3		U-PLANT		0	0	A				A			A	A			Source
2-W19-30				A	A	A				A			A	A			Source
2-W19-31	SST			0	0	A				0				0			Source
2-W19-32	SST			0	0	0				0				0			Source
2-W19-9	U-PLANT			0	0	0				A			A	A			Source
2-W21-1				A	A	A							A				Source
2-W22-10				A	A	A							A				Source
2-W22-12				A	A	A							A				Source
2-W22-2				A	A	A							A				Source
2-W22-20				Q	Q	A							A	Q	Q	Q	DOH
2-W22-21				A	A	A							A	A			Source
2-W22-22				A	A	A							A	A			Source
2-W22-39				A	A	A							A	A			Source
2-W22-40	U-12			0	0	0				0			A	0			Source
2-W22-41	U-12			0	0	0				0			A	0			Source
2-W22-42	U-12			0	0	0				0			A	0			Source
2-W22-43	U-12			0	0	0				0			A	0			Source

2.0 200 AREA WELLS

2.2 200-WEST AREA WELLS^(b) (contd)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ₃ ⁻)	³ H	GC-VQA	F-ICAP Metals	SEM VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
2-W22-9			A	A	A	A			A		A	A			Source
2-W23-10			A	A	A										Source
2-W23-13		SST	0	0	0				0			0			Source
2-W23-14		SST	0	0	A				0			0			Source
2-W23-2			A	A	A				A			A			Source
2-W23-3			A	A	A				A			A			Source
2-W23-4			A	A	A				A			A			Source
2-W23-7			A	A	A				A			A			Source
2-W23-9			A	A	A				A			A			Source
2-W26-10		S-10	0	A	0				A						Source
2-W26-12		S-10	0	A	0										Source
2-W26-8		S-10	0	A	0				A						Source
2-W26-9		S-10	0	A	0				A						Source
2-W27-1		222-S	0	A	0										Source
2-W27-2		222-S	0	A	0										Source
2-W6-10		LLBG	0	A	0				A		A	A			Source
2-W6-2		LLBG	0	0	0				0		A	A			Source
2-W7-4		LLBG	0	0	0				0		A				Source
2-W7-5		LLBG	0	0	0				A						Source
2-W7-6		LLBG	0	0	0				A						Source
2-W8-1		LLBG	0	0	0				A		A				Source
2-W9-1		LLBG	0	0	0				A						Source

(a) Refer to Figure 2.1, 200-East Area Well Locations.

(b) Refer to Figure 2.2, 200-West Area Well Locations.

Figure 2.1. 200-East Area Well Locations

S9212057.3

S9212057.2

Figure 2.2. 200-West Area Well Locations

3.0 1100 and 300 AREA WELLS

3.1 1100 AREA WELLS^(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
11-34-15a		Richland		A	A	A	A				A	A			A			Drinking Water Supply
11-39-15		Richland		A	A	A	A				A	A			A			Drinking Water Supply
11-39-16C		Richland		A	A	A	A				A	A			A			Drinking Water Supply
11-39-16E		Richland		A	A	A	A				A	A			A			Drinking Water Supply
11-40-15		Richland		A	A	A	A				A	A			A			Drinking Water Supply
11-40-168		Richland		A	A	A	A				A	A			A			Drinking Water Supply
11-41-13C		Richland		A	A	A	A											Drinking Water Supply

3.1 300 AREA WELLS^(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
3-1-10A	300FF5	300A		A	0	0									0			Source
3-1-10B	300FF5			A	A	A	A				A				A			Source
3-1-11	300FF5	300A		A	0	0									0			Source
3-1-12	300FF5	300A		A	0	0									0			Source
3-1-13B	300FF5			A	A	A	A				A				A			Source
3-1-14A	300FF5	300A		A	0	0									0			Source
3-1-14B	300FF5			A	A	A	A				A				A			Source
3-1-15	300FF5	300A		A	0	0									0			Source
3-1-16A	300FF5	300A		A	0	0									0			Source
3-1-16B	300FF5	300A		A	0	0									0			Source
3-1-17A	300FF5	300A		A	Q	Q									Q	Q		DOH
3-1-18A	300FF5	300A	A	A	0	0						Q			Q			Source
3-1-19	300FF5			A	A	A									0			Source
3-1-2	300FF5			A	A	A									A			Source
3-1-21A	300FF5			A	A	A									A			Source
3-1-21B	300FF5			A	A	A	A								A			Source
3-1-3	300FF5			A	A	A									A			Source
3-1-4	300FF5			A	A	A									A			Source
3-1-6	300FF5			A	A	A									A			Source
3-1-7	300FF5			A	A	A									0			Source
3-1-8	300FF5	300A		A	0	0									A			Source
3-1-9	300FF5			A	A	A									A			Source

3.0 1100 and 300 AREA WELLS

3.1 300 AREA WELLS^(a) (contd)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ⁻³)	Anions	³ H	GC-VOA	F-ICAP Metals	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
3-2-1	300FF5	300A		A	0	0								0			Source
3-2-2	300FF5		A	A	A	A								A			Source
3-2-3	300FF5		A	A	A	A								A			Source
3-3-1	300FF5		A	A	A	A								A			Source
3-3-10	300FF5	300A		A	0	0								0			Source
3-3-11	300FF5		A	A	A	A								A			Source
3-3-12	300FF5		A	A	A	A								A			Source
3-3-2	300FF5		A	A	A	A								A			Source
3-3-3	300FF5		A	A	A	A								A			Source
3-3-6	300FF5		A	A	A	A								A			Source
3-3-7	300FF5	300A		A	0	0								0			Source
3-3-9	300FF5	300A		A	0	0								0			Source
3-4-1	300FF5	300A		A	0	0								0			Source
3-4-10	300FF5		A	A	A	A								A			Source
3-4-7	300FF5	300A		A	0	0								0			Source
3-4-9	300FF5		A	A	A	A								A			Source
3-5-1	300FF5		A	A	A	A								A			Source
3-8-1	300FF5	300A		A	0	0								0			Source
3-8-5A	300FF5		A	A	A	A								A			Source
3-8-5B	300FF5		A	A	A	A								A			Source
3-8-5C	300FF5		A	A	A	A								A			Source
30-42-16		Richland		A	A	A								A			Drinking Water Supply

(a) Refer to Figure 3.1. 1100 and 300 Area Well Locations.

Figure 3.1. 1100 and 300 Area Well Locations

S9212067 4

4.0 400 AREA WELLS^(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Aniogs (NO ₃)	³ H	GC-VOA	F-ICAP Metals	CN ⁻	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
4-S0-7				A	M													Drinking Water Supply
4-S0-8				A	M													Drinking Water Supply
4-S1-8J				A	M													Drinking Water Supply

^(a) Refer to Figure 4.1. 400 Area Well Locations.

All Well Numbers Prefixed by 499

S9207031.16

Figure 4.1. 400 Area Well Locations

5.0 600 AREA WELLS(a)

Well Number	CERCLA COSAMPLE	RCRA/DPS COSAMPLE	Alk	Anions (NO ⁻³)	³ H	GC-VOA	F-ICAP Metals	CH-VOL	SEMI	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
6-11-18		400A		0	0													Plume
6-10-54				A	A													Background Boundary
6-10-E12				A	A													Background Boundary
6-13-1C			A	A	A	A	A											CAS
6-14-38				A	A	A	A											Background
6-15-E3A			A	A	A	A	A											3D-CHAR
6-17-5			A	SA	SA							SA				SA	SA	DOH
6-17-70				A	A													Boundary
6-19-43			A	A	A	A	A											Background Boundary
6-19-88				A	A													Background Boundary
6-2-3				0	0													Plume
6-2-7		400A		0	0													Plume
6-20-20		400A		Q	Q											Q	Q	DOH
6-20-E12				A	A	A	A											Boundary
6-20-E12				A	A	A	A											Boundary
6-20-E5A				A	A													Plume
6-20-E5Q			A	A	A	A	A											Plume
6-21-6			SA	A	A	A	A							A				CAS
6-22-23			A	A	A	A	A							A				3D-CHAR
6-22-70			SA	A	A	A	A							A				3D-CHAR
6-23-34A				0	0	0	0											CAS
6-24-1		SWLF	A	A	A	A	A							A				Plume
6-24-33		SWLF		0	0	0	0							A				CAS
6-24-34A		SWLF		0	0	0	0											Plume
6-24-34B		SWLF		0	0	0	0											Plume
6-24-34C		SWLF		0	0	0	0											Plume
6-24-35		SWLF		0	0	0	0											Plume
6-25-34A		NRDW		0	0	0	0											Plume
6-25-34B		NRDW		0	0	0	0											Plume
6-26-15A				0	0	0	0							A				Plume
6-26-29				A	SA													Plume
6-26-33		NRDW		0	0	0	0											Plume
6-26-34A		NRDW		0	0	0	0											Plume
6-26-35A		NRDW		0	0	0	0											Plume
6-27-8				A	SA													Plume
6-28-40				A	A													Plume
6-29-4				A	SA													Plume
6-29-78				A	A													Plume
6-3-45				A	A													Plume
6-31-31			A	A	A									A		A	A	DOH
6-31-31				A	A													Plume
6-32-43			A	Q	Q											Q	Q	DOH
6-32-70B				A	SA									SA				Plume

5.0 600 AREA WELLS(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
6-32-72			A	A	A									A			Plume
6-32-77			A	A	A										A	A	DOH
6-33-14			A	A	A		A										3D-CHAR
6-33-42				A	SA								A				Plume
6-33-6			A	A	A		A										3D-CHAR
6-34-41B				A	A												Plume
6-34-42				A	A												Plume
6-35-66				A	SA								A				Plume
6-35-70				A	Q					A	Q		A				DOH
6-35-78A			A	A	SA					A				SA			Plume
6-35-9				A	SA												Plume
6-36-46Q				A	A												Plume
6-36-61A				A	SA												Plume
6-36-61B				A	A												Plume
6-36-93				A	A												Boundary
6-37-43				A	A												Plume
6-37-82A				A	SA												Plume
6-37-E4				A	A		A			A							Boundary
6-38-15				A	SA												Plume
6-38-65				Q	Q						Q			Q	Q	Q	DOH
6-38-70				A	SA					A				SA			Plume
6-39-0				A	SA		A										Boundary
6-39-39				A	SA												Plume
6-39-79				A	A												Plume
6-40-1				A	A												Plume
6-40-20			A	A	A		A										3D-CHAR
6-40-33A			A	Q	Q						Q				Q	Q	DOH
6-40-62				SA	SA												Plume
6-41-1			A	Q	Q				Q	Q	Q				Q	Q	DOH
6-41-23				A	SA								A				Plume
6-42-12A				A	SA												Boundary
6-42-2				A	A		A										CAS
6-42-40C			A	A	SA		A										DOH
6-42-E9B			A	SA	SA		A			SA	SA			SA	SA	SA	Boundary
6-43-3				A	A		A										3D-CHAR
6-43-9			A	A	A		A										Plume
6-44-4				A	A		A										Boundary
6-44-64				A	A		A										Plume
6-45-2				A	SA												Boundary
6-45-42				A	A		A										Plume
6-45-69A				A	A												Plume
6-46-21B				A	A												Boundary
6-46-4				A	A		A										Boundary

5.0 600 AREA WELLS(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	CN- VOL	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
6-47-35A				A	A													Plume
6-47-46A				A	A													Plume
6-47-5				A	A													Boundary
6-47-50	200-BP-1			A	A	A	A				A							CAS
6-47-60	200-BP-1		A	A	A	A	A											Plume
6-48-18				0	0													Boundary
6-48-7				A	A	A	A				A							Plume
6-48-71				A	A	A	A				A							Boundary
6-49-100C				A	SA													Plume
6-49-28			A	A	SA							SA	SA	SA	SA	SA	SA	DOH
6-49-55A	200-BP-1			A	A													Plume
6-49-55B	200-BP-1		A	SA	SA			SA				SA						Plume
6-49-57A				A	A	A	A				A							CAS
6-49-57B			A	SA	SA			SA				SA						Plume
6-49-79				A	A													CAS
6-49-13E				SA	SA													Plume
6-50-53A			A	A	SA						A							Plume
6-50-53B				SA	SA			SA			SA	SA	SA	SA	SA	SA	SA	DOH
6-50-85				A	A			A										Plume
6-51-63				SA	SA													CAS
6-51-75				A	A													Plume
6-52-19				A	SA						A							Plume
6-53-47A				A	A													Background
6-53-47B	GM-POND			A	A													Plume
6-53-48A				0	0			A										Source
6-53-48B	GM-POND			A	A			A										Source
6-53-50				0	0			A										Source
6-54-34				A	A									A				Plume
6-54-48				A	A													Plume
6-54-49				A	A													Plume
6-54-57	200-BP-1			0	0			A										Plume
6-55-40				A	A													CAS
6-55-50C				A	A													Plume
6-55-57	200-BP-1			0	0			A										Plume
6-55-76				A	A			A			A							Plume
6-55-89				A	A			A										Plume
6-57-29A				0	0													Background
6-58-24				A	A													Background
6-59-58				A	A						A							Plume
6-60-57				A	A													Plume
6-61-37				SA	SA													Plume
6-61-41				A	A													Plume
6-61-62				A	SA													Plume

5.0 600 AREA WELLS(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
6-61-66				A	A												Plume
6-62-31				A	SA												Plume
6-62-43F				A	SA	A	A										Plume
6-63-25A				A	A												Boundary
6-63-55				A	SA												Plume
6-63-58				A	SA												Plume
6-63-90	100-BC-5			0	0												Boundary
6-64-27				A	SA												Plume
6-64-62				A	SA												Plume
6-65-59A				A	SA												Plume
6-65-72	100-BC-5			0	0		A				A						Boundary
6-66-23				A	SA	A											Plume
6-66-38				A	A												Plume
6-66-39				A	A												Plume
6-66-58				A	SA												Plume
6-66-84				A	SA												Plume
6-67-51				A	A												Plume
6-67-86				0	0	A											Background
6-71-30				A	A	A											Boundary
6-71-77				0	0	A											Plume
6-72-73	100-BC-5			0	0	A											Boundary
6-72-88				A	SA	A											Boundary
6-73-61	100-KR-4			0	0												Plume
6-74-44				A	A												Plume
6-77-36				A	SA	A											Plume
6-77-54				A	A												Plume
6-78-62	100-KR-4			0	0		0										Plume
6-8-17				A	SA												Plume
6-8-25				A	SA												Plume
6-81-58				0	0												Plume
6-83-47	1324-N			A	A												Plume
6-84-35A				A	A	A				A							Boundary
6-87-55				A	SA	A				A							Plume
6-89-35				A	A	A				A							Boundary
6-90-45				A	SA												Plume
6-91-46	100-HR-3			A	A	A				A				A			Plume
6-93-48	100-HR-3			A	A	A				A				A			Plume
6-96-43	100-HR-3			A	A	A				A				A			Plume
6-96-49				A	SA												Plume
6-97-43				A	SA	A											Boundary
6-97-51A				A	SA	A											Boundary
6-ATH		Richland		A	A	A								A			Source
6-S11-E12A				A	SA	A											Boundary

5.0 600 AREA WELLS(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk (NO ⁻³)	Anions	³ H	GC-VDA	F-ICAP Metals	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
6-S12-29			A	A	A												Boundary Plume
6-S12-3			A	A	A												D0H
6-S19-11			Q	Q	Q												D0H
6-S19-E13			Q	Q	Q												Boundary
6-S19-E14	300FF5		A	A	A												Source
6-S22-E9A	300FF5		A	A	A												Source
6-S22-E9B	300FF5		A	A	A												Source
6-S22-E9C	300FF5		A	A	A												Boundary
6-S27-E14			Q	Q	Q												Source
6-S27-E9A	300FF5		A	A	A												Source
6-S27-E9B	300FF5		A	A	A												Source
6-S27-E9C	300FF5		A	A	A												Source
6-S28-E0			A	A	A												Drinking Water Supply
6-S28-E12	300FF5		A	A	A												Source
6-S29-E12			A	A	A												Boundary
6-S29-E16A	300FF5		Q	Q	Q												Boundary
6-S29-E16B	300FF		A	A	A												Source
6-S29-E16C	300FF5		A	A	A												Source
6-S3-25			A	A	A												Plume
6-S3-E12			A	A	SA												Boundary
6-S30-E10A	1100 EM-1		A	A	A												Source
6-S30-E10B	1100 EM-1		A	A	A												Source
6-S30-E15A			A	Q	Q												D0H
6-S31-1			A	A	A												Boundary
6-S31-E10A	1100 EM-1		A	A	A												Source
6-S31-E10B			A	A	SA												Source
6-S31-E10C	1100 EM-1		A	A	A												Source
6-S31-E10D	1100 EM-1		A	A	A												Source
6-S31-E10E			A	A	SA												Source
6-S31-E13			A	A	SA												Boundary
6-S31-E8	1100 EM-1		A	A	A												Source
6-S32-E13A			A	A	SA												Source
6-S32-E13B			A	A	SA												Boundary
6-S32-E8			A	A	SA												Boundary
6-S34-E10	1100 EM-1		A	A	A												Source
6-S36-E12B			A	A	SA												Source
6-S36-E13A			A	A	SA												Boundary
6-S36-E13B			A	A	SA												Boundary
6-S37-E11			A	A	SA												Boundary
6-S37-E14			Q	Q	Q												D0H
6-S38-E11			A	A	SA												Source
6-S38-E12A			A	A	SA												Source
6-S38-E12B			A	A	SA												Source

5.0 600 AREA WELLS^(a)

Well Number	CERCLA COSAMPLE	RCRA/OPS COSAMPLE	Alk	Anions (NO ₃ ⁻)	³ H	GC-VOA	F-ICAP Metals	CN-	SEMI VOL	⁹⁰ Sr	⁹⁹ Tc	Gamma Scan	Pu Am	¹²⁹ I	U-CHEM	Alpha	Beta	COMMENTS
6-S40-E14				A	SA	SA	SA											Boundary Source
6-S41-E11				A	SA	SA	SA											Source
6-S41-E12	1100 EM-1			A	A	A	A				A				A			Source
6-S41-E13A				A	SA	SA	SA				A				SA			Source
6-S41-E13B				A	SA	SA	SA				A				SA			Source
6-S41-E13C				A	SA	SA	SA				A				SA			Source
6-S43-E12				A	SA	SA	SA											Boundary
6-S6-E14A				A	SA	SA												Boundary
6-S6-E4B				A	SA													Plume
6-S6-E4D				Q	Q							Q			Q	Q	Q	DOH
6-S8-19				A	A	A	A											Plume

(a) Refer to Figure 5.1. 600 Area Well Locations.

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