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BNWL-316 APP

AEC
RESEARCH
AND
DEVELOPMENT
REPORT

EVALUATION OF RADIOLOGICAL CONDITIONS IN THE VICINITY OF HANFORD FOR 1965

APPENDICES

SEPTEMBER, 1966

BATTELLE-NORTHWEST
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Appendices

By

The Environmental Studies Section Staff

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Environmental Health and Engineering Department

September, 1966

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Preface

This supplemental report is a compilation of results obtained from both radiochemical analyses of environmental samples and from radiological measurements made in the Hanford environs during 1965. The radiological significance of these data is discussed in the parent report (BNWL-316).

September, 1966

T. H. Essig
Environmental Studies Section

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APPENDIX A

RADIONUCLIDES IN COLUMBIA RIVER WATER

APPENDIX A
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER AT VERNITA BRIDGE (Grab Samples) - 1965
Units of pCi/l of water

Date	Total Alpha	H^3	Sr^{90}
4-13	< 1.0		0.67
4-27	< 1.0	<1000	0.76
5-11	< 1.0	<1000	0.78
5-25	< 1.0	<1000	0.77
6-8	1.1	<1000	0.82
6-22	< 1.0	<1000	0.53
7-13	1.7	<1000	0.91
7-27	0.72	<1000	0.74
8-10	0.34	1800	0.74
8-24	0.86	<1000	1.2
9-14	0.74	1800	0.96
9-28	< 1.0	<1000	1.2
10-12	< 1.0	<1000	1.4
10-26	< 1.0	1500	1.5
11-9	< 1.0	<1000	1.4
11-23	< 1.0	<1000	1.3
12-14	0.60	<1000	1.1
12-28	0.53	<1000	1.1
		<1000	1.0

No entry indicates no analysis made.

APPENDIX A
TABLE 2

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER AT HANFORD FAR SHORE (Grab Samples) - 1965
Units of pCi/l of water

Date	RE+Y	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{69m}	As^{76}	Ga^{72}	Mn^{56}	Np^{239}
3-30	830	2300	130	2800	2300	220	410	150	2500	1500
4-27	720	2000	140	2000	1700	190	320	160	1500	610
5-25	310	750	42	790	790	< 70	190	< 70	1300	320
6-23	430	1000	49	1100	1400	< 70	150	120	1600	320
7-27	410	1600	78	2300	1800	< 70	460	290	3000	630
8-24	170	1800	62	2400	1800	< 70	430	280	980	620
9-28	79	1600	71	1800	1200	< 70	220	210	740	330
10-26	190	2200	160	2900	2300	< 70	910	460	710	980
11-23	98	1700	70	1100	1100	< 70	330	220	580	360

APPENDIX A
TABLE 3

CONCENTRATIONS OF RADIONUCLIDES
IN COLUMBIA RIVER WATER AT RINGOLD FAR SHORE (Grab Samples - 1965)
Units of pCi/l of water

Date	RE+Y	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{69m}	As^{76}	Ga^{72}	Mn^{56}	Np^{239}
3-3	1300	3700	230	4000	2700	250	650	190	1300	2200
4-27	86	260	22	470	200	79	65	< 70	69	68
5-25	< 5.5	< 35	< 6.0	< 70	< 32	< 70	4.9	< 70	< 50	< 15
6-23	21	110	8.3	140	110	70	36	< 70	150	42
7-27	360	1600	78	2400	2000	< 70	490	290	1300	700
8-24	140	1700	69	2200	1600	< 70	480	270	540	650
9-28	88	1600	80	1900	1500	< 70	230	240	< 50	460
10-26	180	2300	170	3300	2400	< 70	1100	250	510	1000
11-23	130	1800	83	1400	1100	< 70	310	140	400	450

APPENDIX A
TABLE 4

CONCENTRATIONS OF RADIONUCLIDES IN COLUMBIA
RIVER WATER AT RICHLAND (Grab Samples) - 1965
Units of pCi/l of Water

Date	RE+Y	H^3	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{65}	As^{76}	Sr^{90}	I^{131}	Np^{239}
1-11					16,000		330	1,000			2,500
2-8					7,900		390	840			
4-12	1,300	<1,000	4,700	560	10,000	3,500	180	1,200	1.0	17	2,700
5-10	2,400	<1,000	2,000	220	2,100	1,900	170	410	1.4	5.8	1,000
6-14	850	<1,000	2,000	150	3,000	2,100	140	450	1.5	3.4	1,100
7-12	200	<1,000	860	43	1,300	840	66	170	1.7	2.3	320
8-9	270	<1,000	2,100	140	4,000	2,100	79	580	0.82	6.4	930
9-13	220	<1,000	3,000	220	5,200	2,100	100	1,400	1.4	9.1	1,500
10-11	530	1,490	4,000	520	7,800	3,300	160	2,900	1.4	16	2,500
11-8	380	<1,000	3,800	460	9,600	2,800	170	1,300	1.5	12	2,000
12-13	400	<1,000	5,100	430	9,900	3,700	180	1,200	1.1	14	2,000

No entry indicates no analysis made.

APPENDIX A
TABLE 5

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT RICHLAND (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/28/64-1/4	160	10,000	340	< 7.0
1/4-1/11	140	8,900	290	9.0
1/11-1/18	lost	8,800	310	12
1/18-1/25	80	9,700	280	10
1/25-2/1	140	11,000	650	10
2/1-2/8	93	7,700	370	8.0
2/8-2/15	43	6,400	380	6.1
2/15-2/23	89	7,900	430	7.8
2/23-3/1	31	6,900	480	7.6
3/1-3/8	77	5,800	400	< 7.1
3/8-3/15	< 4.4	6,500	370	10
3/15-3/22	< 4.4	8,800	500	14
3/22-3/29	420	8,400	520	11
3/29-4/5	350	7,600	440	19
4/5-4/12	160	8,100	410	13
4/12-4/19	300	6,300	370	8.0
4/19-4/26	300	5,700	400	8.3
4/26-5/3	120	3,600	210	6.5
5/3-5/10	140	2,800	280	4.8
5/10-5/17	100	2,700	230	4.1
5/17-5/24	74	1,800	140	8.2
5/24-6/1	110	2,200	150	4.8
6/1-6/7	76	2,600	170	5.6
6/7-6/14	84	2,600	170	3.6
6/14-6/21	62	2,000	130	3.4
6/21-6/28	40	1,500	120	6.6
6/28-7/6	26	1,400	120	< 2.3
7/6-7/12	18	1,100	100	5.6
7/12-7/19	34	2,100	70	< 2.3
7/19-7/26	41	2,300	80	3.3
7/26-8/2	68	3,100	140	5.4
8/2-8/9	71	3,000	160	6.7
8/9-8/16	62	3,500	110	4.9
8/16-8/23	50	4,100	120	3.7
8/23-8/30	57	4,600	100	4.2
8/30-9/7	97	6,900	110	5.8
9/7-9/13	100	6,200	170	8.4
9/13-9/20	71	5,100	160	7.6
9/20-9/27	140	5,700	170	7.8
9/27-10/4	130	6,200	140	19
10/4-10/11	230	7,900	190	12
10/11-10/18	130	4,100	130	8.2
10/18-10/25	170	4,500	150	6.2
10/25-11/1	210	5,500	140	14

No entry indicates no analysis made.

APPENDIX A
TABLE 5 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT RICHLAND (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
11/1-11/8	160	6,100	160	7.8
11/8-11/15	190	6,200	160	21
11/15-11/22	180	5,400	130	12
11/22-11/29	150	4,100	120	9.3
11/29-12/6	240	5,300	130	11
12/6-12/13	220	5,400	130	12
12/13-12/20	210	4,400	130	6.8
12/20-12/27	200	4,800		11

No entry indicates no analysis made.

APPENDIX A
TABLE 6

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT PASCO (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/28/64-1/4		9100	270	
1/4-1/11	70	6400	200	9.0
1/11-1/18	80	6400	230	10
1/18-1/25	140	6900	110	10
1/25-2/1	70	7800	270	7.0
2/1-2/8	76	6000	250	< 7.5
2/8-2/15	65	4200	260	4.4
2/15-2/23	44	7000	320	6.1
2/23-3/1	5.0	4400	170	< 7.2
3/1-3/8	60	4300	280	< 5.9
3/8-3/15	40	4900	270	< 6.8
3/15-3/22	9.0	6100	340	9.0
3/22-3/29	130	6400	380	7.0
3/29-4/5	150	6900	440	14
4/5-4/12	200	6500	320	15
4/12-4/19	130	4600	300	5.8
4/19-4/26	140	4000	260	3.6
4/26-5/3	120	2900	220	3.5
5/3-5/10	76	2100	200	3.2
5/10-5/17	65	1500	150	3.3
5/17-5/24	36	1200	140	3.3
5/24-6/1	30	1100	91	3.7
6/1-6/7	34	1400	110	2.2
6/7-6/14	37	1600	110	< 2.3
6/14-6/21	29	1200	81	2.6
6/21-6/28	21	920	71	4.0
6/28-7/5	24	790	67	< 2.0
7/6-7/13	16	900	66	3.3
7/13-7/19	30	1800	79	2.5
7/19-7/26	25	1600	65	3.0
7/26-8/2	46	2100	86	3.5
8/2-8/9	49	2100	75	5.3
8/9-8/16	34	2500	63	3.6
8/16-8/23	38	2700	64	3.4
8/23-8/30	45	3600	81	3.7
8/30-9/7	66	4600	89	4.2
9/7-9/13	140	6100	120	10
9/13-9/20	120	4000	86	4.6
9/20-9/27	30	5200	89	6.2
9/27-10/4	100	5400	89	14
10/4-10/11	160	7300	110	10
10/11-10/18	130	3800	110	6.5
10/18-10/25	76	3600	100	5.1
10/25-11/1	130	4700	92	13

No entry indicates no analysis made.

APPENDIX A
TABLE 6 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT PASCO (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
11/1-11/8	100	5100	130	5.1
11/8-11/15	160	5500	120	15
11/15-11/22	170	5400	140	11
11/22-11/29	140	3600	97	11
11/29-12/6	200	4200	98	8.0
12/6-12/13	190	4800	120	12
12/13-12/20	180	3900	140	6.0
12/20-12/27	150	4200	140	10

APPENDIX A
TABLE 7

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER AT MCNARY DAM (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/31/64-1/8	89	3400	90	
1/8-1/13	17	2700	< 35	< 4.6
1/15-1/22	37	3300	130	
1/22-1/29		3400	90	
1/29-2/5	8.4	2600	50	< 4.6
2/5-2/12	15	1700	98	2.0
2/12-2/19	67	2100	110	2.6
2/19-2/26	22	2600	120	< 5.4
2/26-3/5	40	2100	120	< 7.1
3/5-3/12	31	1800	68	3.8
3/12-3/19	19	2400	90	< 6.7
3/19-3/26	120	4000	180	< 6.6
3/26-4/2	110	3300	200	< 6.9
4/2-4/9	110	3200	150	2.8
4/9-4/16	91	3100	150	3.7
4/16-4/23	71	1800	100	2.9
4/23-4/30	11	1000	90	3.1
4/30-5/7	44	1100	65	< 3.0
5/7-5/14	32	900	63	< 3.5
5/14-5/21	37	800	64	< 3.0
5/21-5/28	12	360	42	< 2.9
5/28-6/4	18	610	28	< 1.8
6/4-6/11	8.1	280	< 20	< 2.8
6/11-6/18	12	410	23	< 2.9
6/18-6/25	9.8	380	26	< 3.5
6/25-7/2	16	720	36	< 3.0
7/2-7/9	11	460	29	< 3.0
7/9-7/16	14	790	44	< 2.9
7/16-7/23	No Sample			
7/23-7/30	22	1600	31	2.9
7/30-8/6	No Sample			
8/6-8/13	25	1700	32	2.5
8/13-8/20	18	1900	20	1.5
8/20-8/27	31	2200	23	0.64
8/27-9/3	36	2700	30	3.8
9/3-9/10	35	3600	34	6.6
9/10-9/17	41	3600	30	2.8

No entry indicates no analysis made.

APPENDIX A
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER AT MCNARY DAM (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
9/17-9/24	45	2800	46	3.9
9/24-10/1	47	3000	21	2.0
10/1-10/5	26	3700	37	4.9
10/5-10/8	42	3100	37	4.4
10/8-10/15	60	3900	41	4.9
10/15-10/22	67	2300	40	2.7
10/22-10/29	61	2000	27	5.4
10/29/11/5	63	2700	37	5.8
11/5-11/12	59	3200	37	5.1
11/12-11/24	95	3300	45	8.2
11/24-12/3	77	2300	52	5.0
12/3-12/10	100	2800	73	4.9
12/10-12/17	130	4200	170	3.7
12/17-12/22	100	2400	88	2.7
12/22-12/30	73	2900	120	5.6
Avg	47.5	3264	67.6	3.9

APPENDIX A
TABLE 8

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER AT THE DALLES DAM (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
1/5-1/12	39	3300	59	< 7.8
1/12-1/19	13	3000	65	< 6.3
1/19-1/26	14	2600	82	< 8.9
1/26-2/2	58	2400	45	< 4.5
2/2-2/9	5.6	1800	50	< 6.3
2/9-2/18	17	1900	86	2.6
2/18-2/25	17	2300	98	< 6.0
2/25-3/4	28	2400	82	< 6.0
3/4-3/11	< 4.9	1800	100	< 6.6
3/11-3/18	20	2900	90	< 5.8
3/18-3/25	50	2800	130	< 7.2
3/25-4/1	64	3700	170	< 6.4
4/1-4/8	85			4.5
4/8-4/15	22			6.0
4/15-4/22	61			< 3.8
4/22-4/29	7.8			< 3.3
4/29-5/6	6.3	1800	110	< 3.3
5/6-5/13	13			3.7
5/13-5/20	47			< 3.5
5/20-5/27	< 6.0	730	66	< 3.5
5/27-6/3	14	960	100	< 3.0
6/3-6/10	19			< 3.3
6/10-6/17	12	1100	100	< 3.3
6/17-6/24	13	690	45	< 3.5
6/24-7/1	17	740	43	< 3.1
7/1-7/8	18	750	51	< 2.5
7/8-7/15	11	690	34	5.6
7/15-7/22	13	1200	30	1.3
7/22-7/29	11	1300	34	1.4
7/29-8/5	25	1600	30	3.3
8/5-8/12	25	1500	31	4.0
8/12-8/19	13	1600	< 20	1.7
8/19-8/26	12	1900	28	2.8
8/26-9/2	17	2100	20	3.3
9/2-9/9	26	2400	20	1.1
9/9-9/16	23	3100	21	2.6
9/16-9/23	88	2300	36	3.6
9/23-9/30	34	2600	33	1.3

No entry indicates no analysis made.

APPENDIX A
TABLE 8 Continued

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER AT THE DALLES DAM (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
9/30-10/7	24	2200	27	3.1
10/7-10/14	27	2700	< 20	4.1
10/14-10/21	42	2700	21	3.6
10/21-10/28	45	1500	< 20	3.9
10/28-11/4	33	1500	22	2.3
11/4-11/18	28	2500	50	2.9
11/18-11/24	83	2600	27	6.1
11/24-12/1	22	2300	26	2.9
12/1-12/9	68	1900	32	4.0
12/9-12/15	69	2300	55	2.0
12/15-12/23	85	2700	58	4.2
12/23-12/30	49	2000	40	2.7

APPENDIX A
TABLE 9

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT BONNEVILLE DAM (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/29/64-1/5	30	790	24	Lost
1/5-1/12	3.0	1700	31	< 6.5
1/12-1/19	21	2200	75	< 8.9
1/19-1/26	10	2200	60	< 5.4
1/26-2/2	11	2100	100	< 4.5
2/2-2/9	5.0	1700	90	Lost
2/9-2/16	7.8	1500	98	< 2.1
2/16-2/23	5.5	1700	66	< 2.1
2/23-3/2	6.2	2000	74	< 5.8
3/2-3/9	6.1	1800	60	< 5.6
3/9-3/16	14	1400	90	< 5.7
3/16-3/23	41	2000	80	Lost
3/23-3/29	20	2600	90	< 6.0
3/30-4/6	50	2500	87	4.1
4/6-4/13	37	2500	120	< 2.1
4/13-4/20	49	2400	150	3.3
4/20-4/27	32	1600	230	< 2.5
4/27-5/4	38	1300	160	< 2.2
5/4-5/11	39			< 2.3
5/11-5/18				15
5/18-5/25				< 2.6
5/25-6/1				2.5
6/1-6/8		1000	120	< 2.2
6/8-6/15				< 2.0
6/15-6/22				< 2.2
6/22-6/29				2.5
6/29-7/6		760	76	< 2.2
7/6-7/13		720	72	2.0
7/13-7/20		860	70	< 2.5
7/20-7/27		1300	59	1.8
7/27-8/3	15	1300	35	2.1
8/3-8/10	19	1200	37	1.3
8/10-8/17	19	1500	53	3.4
8/17-8/24	9.2	1600	42	1.4
8/24-8/31	14	1700	35	2.8
8/31-9/7	18	1900	26	2.2
9/7-9/14	16	2300	20	2.0
9/14-9/21	11	2500	25	2.0
9/21-9/28	26	1900	< 20	2.0
9/28-10/5	20	2100	< 20	1.7

No entry indicates no analysis made.

APPENDIX A
TABLE 9 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT BONNEVILLE DAM (Cumulative Samples) - 1965
Units of pCi/l of water

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
10/5-10/12	9.1	1900	31	1.8
10/12-10/19	16	2600	25	2.7
10/19-10/26	20	1700	26	2.0
10/26-11/2	26	1600	36	2.2
11/2-11/9	21	1400	< 20	2.1
11/9-11/16	16	2100	30	2.0
11/16-11/23	28	2100	14	1.5
11/23-11/30	29	2200	23	2.5
11/30-12/7	34	1400	< 20	1.9
12/7-12/14	35	2000	20	1.8
12/14-12/21	33	2000	20	1.9
12/21-12/28	29	1900	30	1.9

APPENDIX A
TABLE 10

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT HANFORD FAR SHORE (Grab Samples) - 1965
Units of curies/day

Date	RE+Y	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{69m}	As^{76}	Ga^{72}	Mn^{56}	Np^{239}
3-30	170	470	27	570	460	45	83	31	510	300
4-27	300	840	58	830	700	79	130	66	620	250
5-25	180	440	25	470	470	< 41	110	< 41	770	190
6-23	350	850	40	900	1100	< 57	120	99	1300	260
7-27	170	680	34	970	750	< 30	200	120	1300	270
8-24	44	460	16	600	450	< 18	110	71	250	160
9-28	15	300	14	350	220	< 13	42	41	140	63
10-26	34	390	29	510	420	< 12	160	81	130	170
11-23	22	380	16	240	250	< 16	74	49	130	80

APPENDIX A
TABLE 11

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER WATER AT RINGOLD FAR SHORE (Grab Samples) - 1965
Units of curies/day

Date	RE+Y	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{69m}	As^{76}	Ga^{72}	Mn^{56}	Np^{239}
3-23	300	850	54	930	640	58	150	44	300	520
4-27	36	110	9.1	190	83	33	27	< 29	28	28
5-25	< 3.0	< 21	< 4.0	< 41	< 19	< 41	2.9	< 41	< 29	8.8
6-23	17	90	6.8	110	90	57	30	< 57	130	34
7-27	160	670	34	1100	850	< 30	210	120	570	300
8-24	36	430	18	570	410	< 18	120	68	140	170
9-28	17	310	15	350	280	< 13	44	46	< 10	89
10-26	32	410	30	590	420	< 12	190	80	91	180
11-23	29	390	19	310	240	< 16	70	32	90	100

APPENDIX A
TABLE 12

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER WATER AT RICHLAND (Grab Samples) - 1965
Units of Curies/Day

Date	RE+Y	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{65}	As^{76}	Sr^{90}	I^{131}	Np^{239}
1-11				3700		76	240			570
2-8				2400		120	260			
4-12	290	1000	120	2200	770	40	260	0.22	3.8	600
5-10	1300	1100	120	1100	1000	92	220	0.73	3.1	540
6-14	610	1400	110	2200	1500	100	330	1.1	2.4	760
7-12	100	520	26	720	510	40	100	1.0	1.4	190
8-9	95	720	49	1400	720	27	200	0.29	2.2	320
9-13	44	610	45	1100	430	20	280	0.28	1.9	320
10-11	110	800	100	1600	660	33	580	0.27	3.2	490
11-8	64	640	78	1600	480	30	220	0.26	2.1	340
12-13	98	1300	110	2500	900	43	290	0.28	3.5	480

No entry indicates no analysis made.

APPENDIX A
TABLE 13

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT RICHLAND (Cumulative Samples) 1965
Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/28/64-1/4/65	29	1800	62	<1.3
1/4-1/11	29	1900	61	1.9
1/11-1/18		1700	61	2.3
1/18-1/25	15	1800	53	1.9
1/25-2/1	22	1700	100	1.6
2/1-2/8	20	1700	80	1.7
2/8-2/15	11	1700	100	1.6
2/15-2/23	22	2000	110	2.0
2/23-3/1	7.4	1700	120	1.8
3/1-3/8	17	1300	86	<1.5
3/8-3/15		1400	81	2.2
3/15-3/22		1900	110	3.0
3/22-3/29	90	1800	110	2.4
3/29-4/5	65	1400	82	3.5
4/5-4/12	32	1600	83	2.6
4/12-4/19	71	1500	87	1.9
4/19-4/26	100	2100	140	3.0
4/26-5/3	48	1500	85	2.7
5/3-5/10	76	1500	150	2.6
5/10-5/17	57	1500	130	2.3
5/17-5/24	44	1100	83	4.8
5/24-6/1	70	1400	97	3.1
6/1-6/7	57	1900	130	4.2
6/7-6/14	63	2000	130	2.7
6/14-6/21	48	1600	100	2.6
6/21-6/28	32	1200	98	5.3
6/28-7/6	17	940	78	<1.5
7/6-7/12	11	700	61	3.5
7/12-7/19	20	1200	41	<1.3
7/19-7/26	20	1100	37	1.6
7/26-8/2	24	1100	48	1.9
8/2-8/9	24	1000	53	2.3
8/9-8/16	21	1200	36	1.6
8/16-8/23	15	1300	36	1.1
8/23-8/30	16	1300	28	1.2
8/30-9/7	23	1600	25	1.4
9/7-9/13	20	1200	32	1.6
9/13-9/20	12	890	27	1.3
9/20-9/27	25	990	30	1.4

No entry indicates no analysis made.

APPENDIX A
TABLE 13 (Continued)

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT RICHLAND (Cumulative Samples) - 1965
Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
9/27-10/4	25	1200	27	3.6
10/4-10/11	37	1300	31	2.0
10/11-10/18	21	690	22	1.4
10/18-10/25	26	700	24	0.96
10/25-11/1	32	840	21	2.1
11/1-11/8	27	1000	26	1.3
11/8-11/15	33	1100	27	3.7
11/15-11/22	28	840	20	1.9
11/22-11/29	26	700	21	1.6
11/29-12/6	30	850	21	1.8
12/6-12/13	38	940	23	2.2
12/13-12/20	41	870	25	1.3
12/20-12/27	36	880		2.1

No entry indicates no analysis made.

APPENDIX A
TABLE 14

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT PASCO (Cumulative Samples) - 1965
Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/28/64-1/4/65		1800	53	
1/4-1/11	15	1400	44	2.0
1/11-1/18	17	1300	48	2.1
1/18-1/25	28	1400	22	2.0
1/25-2/1	12	1400	48	1.2
2/1-2/8	19	1500	63	<1.9
2/8-2/15	19	1200	74	1.3
2/15-2/23	12	1900	86	1.6
2/23-3/1	1.0	1100	44	<1.9
3/1-3/8	14	1000	66	<1.4
3/8-3/15	9.5	1200	64	<1.6
3/15-3/22	2.1	1400	79	2.1
3/22-3/29	30	1500	87	1.6
3/29-4/5	30	1400	88	1.8
4/5-4/12	42	1400	66	3.1
4/12-4/19	32	1100	74	1.4
4/19-4/26	53	1500	97	1.4
4/26-5/3	50	1300	93	1.5
5/3-5/10	42	1200	110	1.8
5/10-5/17	37	840	87	1.9
5/17-5/24	22	710	84	2.0
5/24-6/1	19	710	59	2.4
6/1-6/7	26	1100	83	1.7
6/7-6/14	28	1200	84	<1.7
6/14-6/21	23	950	64	2.0
6/21-6/28	17	740	57	3.2
6/28-7/5	16	530	45	<1.3
7/6-7/13	10	560	41	2.1
7/13-7/19	17	1000	46	1.4
7/19-7/26	12	790	32	1.4
7/26-8/2	17	740	31	1.3
8/2-8/9	17	720	26	1.8
8/9-8/16	12	870	21	1.2
8/16-8/23	12	850	20	1.1
8/23-8/30	13	1100	23	1.1
8/30-9/7	16	1100	21	1.0
9/7-9/13	27	1200	23	2.0
9/13-9/20	21	730	16	0.83
9/20-9/27	5.4	930	16	1.1

No entry indicates no analysis made.

APPENDIX A
TABLE 14 (Continued)

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT PASCO (Cumulative Samples) - 1965
Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
9/27-10/4	18	950	16	2.5
10/4-10/11	26	1200	19	1.7
10/11-10/18	23	660	19	1.1
10/18-10/25	12	590	16	0.82
10/25-11/1	21	750	15	2.0
11/1-11/8	17	870	22	0.87
11/8-11/15	29	990	21	2.6
11/15-11/22	31	880	22	1.7
11/22-11/29	26	640	17	2.0
11/29-12/6	33	700	16	1.3
12/6-12/13	35	860	22	2.2
12/13-12/20	37	770	28	1.2
12/20-12/27	27	780	26	1.9

No entry indicates no analysis made.

APPENDIX A
TABLE 15

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT McNARY DAM (Cumulative Samples) - 1965
Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/31/64-1/8/65	33	1300	33	
1/8-1/13	6.4	1000	<13	<1.7
1/15-1/22	12	1100	44	
1/22-1/29		1200	32	
1/29-2/5	4.5	1400	27	<2.5
2/5-2/12	8.0	910	53	1.1
2/12-2/19	33	1000	54	1.3
2/19-2/26	11	1300	60	<2.7
2/26-3/5	18	970	55	<3.3
3/5-3/12	14	860	32	1.8
3/12-3/19	8.7	1100	41	<3.1
3/19-3/26	47	1600	71	<2.6
3/26-4/2	38	1200	70	<2.4
4/2-4/9	36	1000	49	0.91
4/9-4/16	37	1300	61	1.5
4/16-4/23	46	1200	65	1.9
4/23-4/30	9.3	850	76	2.6
4/30-5/7	41	1000	61	<2.8
5/7-5/14	28	780	55	<3.0
5/14-5/21	36	790	63	<3.0
5/21-5/28	11	340	40	<2.7
5/28-6/4	19	660	30	<1.9
6/4-6/11	9.5	330	<24	<3.3
6/11-6/18	14	480	27	<3.4
6/18-6/25	11	440	30	<4.0
6/25-7/2	17	760	38	<3.1
7/2-7/9	9.3	390	24	<2.5
7/9-7/16	11	630	35	<2.3
7/23-7/30	12	890	17	1.6
8/6-8/13	11	760	14	1.1
8/13-8/20	7.5	810	8.3	0.62
8/20-8/27	12	860	9.0	0.25
8/27-9/3	13	950	10	1.3
9/3-9/10	11	1100	10	2.0
9/10-9/17	11	920	7.7	0.70
9/17-9/24	12	770	12	1.1
9/24-10/1	12	740	5.2	0.50
10/1-10/5	6.3	900	8.9	1.2
10/5-10/8	10	750	8.9	1.1

No entry indicates no analysis made.

APPENDIX A
TABLE 15 (Continued)

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT McNARY DAM (Cumulative Samples) - 1965
Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
10/8-10/15	15	1000	11	1.3
10/15-10/22	18	610	11	0.72
10/22-10/29	15	490	6.8	1.6
10/29-11/5	15	620	8.5	1.3
11/5-11/12	15	790	9.2	1.3
11/12-11/24	24	820	11	2.1
11/24-12/3	6.4	610	14	1.3
12/3-12/10	24	650	17	1.1
12/10-12/17	36	1200	47	1.0
12/17-12/22	30	690	25	0.80
12/22-12/30	19	750	30	1.4

APPENDIX A
TABLE 16

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES IN COLUMBIA RIVER WATER AT THE DALLES DAM (Cumulative Samples) - 1965

Units of curies/day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/31/64-1/5	Lost		< 12	Lost
1/5-1/12	16	1300	24	< 3.2
1/12-1/19	4.9	1100	24	< 2.4
1/19-1/26	5.2	960	30	< 3.3
1/26-2/2	35	1500	27	< 2.7
2/2-2/9	3.4	1100	30	< 3.8
2/9-2/18	9.3	1000	47	1.4
2/18-2/25	9.2	1200	53	< 3.3
2/25-3/4	14	1200	41	< 3.0
3/4-3/11	2.2	830	46	< 3.0
3/11-3/18	10	1400	45	< 2.9
3/18-3/25	21	1200	55	< 3.0
3/25-4/1	24	1400	64	< 2.4
4/1-4/8	29			1.5
4/8-4/15	9.3			2.5
4/15-4/22	35			< 2.2
4/22-4/29	7.3			< 3.1
4/29-5/6	6.1	1700	110	< 3.2
5/6-5/13	12			3.4
5/13-5/20	47			< 3.5
5/20-5/27	< 6.0	710	65	< 3.4
5/27-6/3	15	1000	110	< 3.1
6/3-6/10	23			< 4.0
6/10-6/17	14	1300	130	< 4.0
6/17-6/24	15	800	52	< 4.0
6/24-7/1	19	820	48	< 3.4
7/1-7/8	16	660	45	< 2.2
7/8-7/15	9.1	570	28	4.6
7/15-7/22	8.8	840	20	0.95
7/22-7/29	6.6	790	20	0.83
7/29-8/5	11	690	13	1.4
8/5-8/12	11	660	14	1.8
8/12-8/19	5.6	700	< 8.7	0.74
8/19-8/26	4.8	770	11	1.1
8/26-9/2	6.6	830	7.7	1.3
9/2-9/9	8.2	750	6.3	0.35
9/9-9/16	6.5	870	5.9	0.73
9/16-9/23	25	660	10	0.37
9/23-9/30	8.9	690	8.7	0.34

No entry indicates no analysis made.

APPENDIX A
TABLE 16 (Continued)

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT THE DALLES DAM (Cumulative Samples) - 1965
Units of curies/day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
9/30-10/7	6.2	580	7.0	0.81
10/7-10/14	6.9	690	< 5.1	1.0
10/14-10/21	12	770	6.0	1.0
10/21-10/28	12	390	< 5.3	1.0
10/28-11/4	8.2	370	5.4	0.57
11/4-11/18	7.9	660	13	0.77
11/18-11/24	22	670	7.1	1.6
11/24-12/1	6.1	630	7.2	0.79
12/1-12/9	18	500	8.5	1.1
12/9-12/15	19	640	15	0.55
12/15-12/23	26	840	18	1.3
12/23-12/30	13	540	11	0.73

APPENDIX A
TABLE 17

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES IN COLUMBIA RIVER AT BONNEVILLE DAM (Cumulative Samples) - 1965

Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
12/29/64-1/5/65	12	330	9.9	
1/5-1/12	1.2	700	<13	<2.7
1/12-1/19	8.2	860	29	<3.5
1/19-1/26	3.7	820	22	<2.0
1/26-2/2	6.5	1200	59	<2.7
2/2-2/9	3.1	1100	55	
2/9-2/16	4.5	870	57	<1.2
2/16-2/23	2.9	890	35	<1.1
2/23-3/2	3.3	1100	39	<3.1
3/2-3/9	2.9	850	28	<2.7
3/9-3/16	7.1	710	46	<2.9
3/16-3/23	18	880	35	
3/23-3/29	8.2	1100	37	<2.5
3/30-4/6	18	890	31	1.4
4/6-4/13	15	1000	48	<0.85
4/13-4/20	25	1200	76	1.7
4/20-4/27	29	1400	210	<2.2
4/27-5/4	36	1200	150	<2.1
5/4-5/11	37			<2.2
5/11-5/18				14
5/18-5/25				<2.6
5/25-6/1				2.5
6/1-6/8		1200	140	<2.6
6/8-6/15				<2.5
6/15-6/22				<2.5
6/22-6/29				2.9
6/29-7/6		710	71	<2.1
7/6-7/13		600	60	1.7
7/13-7/20		640	52	<1.8
7/20-7/27		800	36	1.1
7/27-8/3	7.0	610	16	0.99
8/3-8/10	8.3	530	16	0.57
8/10-8/17	8.4	670	23	1.5
8/17-8/24	3.8	660	18	0.59
8/24-8/31	5.4	660	14	1.1
8/31-9/7	6.2	660	8.9	0.75
9/7-9/14	4.7	680	5.8	0.58
9/14-9/21	3.1	700	7.0	0.56

No entry indicates no analysis made.

APPENDIX A
TABLE 17 (Continued)

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES IN COLUMBIA RIVER AT BONNEVILLE DAM (Cumulative Samples) - 1965
Units of Curies/Day

Date	P^{32}	Cr^{51}	Zn^{65}	I^{131}
9/21-9/28	7.1	520	<5.4	0.54
9/28-10/5	5.2	550	<5.2	0.44
10/5-10/12	2.3	480	7.8	0.45
10/12-10/19	4.6	740	7.1	0.77
10/19-10/26	5.5	480	7.2	0.55
10/26-11/2	6.6	390	9.1	0.56
11/2-11/9	5.2	340	<5.0	0.52
11/9-11/16	4.4	580	8.2	0.55
11/16-11/23	8.1	560	3.8	0.40
11/23-11/30	8.0	590	6.3	0.69
11/30-12/7	9.3	390	<5.4	0.52
12/7-12/14	9.3	520	5.3	0.48
12/14-12/21	10	610	6.3	0.59
12/21-12/28	8.1	530	8.3	0.53

APPENDIX B

RADIONUCLIDES IN SANITARY WATER

APPENDIX B
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN
RICHLAND SANITARY WATER (Grab Samples) - 1965
Units of pCi/l of Water

Date	RE+Y	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{65}	As^{76}	Np^{239}
1/4		2700		9,900	1100	150	160	1500
2/1		3000		18,000	1800	280	400	2200
3/1	70	2900	36	6,700	1200		180	1900
4/5	130	2700	94	10,000	1200		370	4300
5/3	130	2900	47	2,900	1200		220	1100
6/7	99	1600		3,200	700		85	670
7/6	38	1400	15	2,100	540		84	470
8/2	28	750	14	1,600	220		58	310
9/7	29	3300	56	10,000	1700		590	1700
10/4	83	2000	160	7,600	980		1100	1500
11/1	130	3100	290	8,600	1100		1100	1900
12/6	61	1600	220	5,100	740		640	1100

No entry indicates no analysis made.

APPENDIX B
TABLE 2

CONCENTRATIONS OF RADIONUCLIDES IN RICHLAND SANITARY WATER (Cumulative Samples) - 1965
Units of pCi/l of Water

Date	P^{32}	Cr^{51}	Zn^{65}	Sr^{90}	I^{131}
1/4-1/11	9.0	8,400	150	1.9	14
1/11-1/16	11	8,500	180	2.2	10
1/18-1/25	24	8,900	180	1.7	12
1/25-2/1	24	11,000	200		8.0
2/1-2/8	18	7,200	250	1.1	6.8
2/8-2/15	3.7	5,800	220	1.1	4.4
2/15-2/23	6.7	6,700	250	1.1	6.5
5/23-3/1	6.4	5,900	220	1.9	6.8
3/1-3/8	17	5,200	210	1.2	<8.6
3/8-3/15	<4.8	6,100	220	1.2	<7.3
3/15-3/22	<4.1	7,800	270	1.1	10
3/22-3/29	38	8,200	290	1.0	10
3/29-4/5	40		210		15
4/5-4/12	30		220	0.98	23
4/12-4/19	21		180	0.95	9.2
4/19-4/26	34		170	0.85	8.3
4/26-5/3	53		110	0.77	6.3
5/3-5/10	23		100	0.96	4.0
5/10-5/17	27		96	0.75	5.9
5/17-5/24	14		77	0.71	5.3
5/24-6/1	10		62	0.93	3.6
6/1-6/7	9.1		67	0.79	2.7
6/7-6/14	8.2		40	0.67	3.9
6/14-6/21	13		52	0.80	3.6
6/21-6/28	6.4		34	0.72	4.2
6/28-7/6	<6.0		24	1.1	<2.2
7/6-7/12	<6.0		20	0.93	3.5
7/12-7/19	<6.0		20	0.99	4.3
7/19-7/26	9.1		25	0.81	3.3
7/26-8/2	16		25	1.0	5.6
8/2-8/9	23		<20	1.2	7.6
8/9-8/16	10		<20	1.1	4.3
8/16-8/23	15		<20	1.3	4.2
8/23-8/30	9.8		20	1.2	4.6
8/30-9/7	26		20		5.3
9/7-9/13	40		20	1.3	7.1
9/13-9/20	56		19	1.3	4.6
9/20-9/27	61		39	0.97	7.2

No entry indicates no analysis made.

APPENDIX B
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN RICHLAND SANITARY WATER (Cumulative Samples) - 1965
Units of pCi/l of Water

Date	P^{32}	Cr^{51}	Zn^{65}	Sr^{90}	I^{131}
9/27-10/4	120		35		27
10/4-10/11	87		<20	1.7	10
10/11-10/18	100		23	1.7	8.4
10/18-10/25	110		35	1.5	6.5
10/25-11/1	100		33	1.5	13
11/1-11/8	120		46	1.4	6.5
11/8-11/15	120		49	1.4	19
11/15-11/22	130		63	1.5	11
11/22-11/29	130		55	1.2	9.2
11/29-12/6	140		70	1.5	11
12/6-12/13	140		72	1.1	12
12/13-12/20	180		97	1.3	6.5
12/20-12/27	150		110	1.1	11

No entry indicates no analysis made.

APPENDIX B
TABLE 3

CONCENTRATIONS OF RADIONUCLIDES
IN PASCO SANITARY WATER (Grab Samples) - 1965
Units of pCi/l of Water

Date	RE+Y	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	As^{76}	Np^{239}
3/8	27	720	32	4000	160	160	1000
4/5	23	410	27	5900	86	68	1400
5/3	98	1300	17	2200	270	58	1000
6/7	23	720	<6.0	1700	190	19	580
7/5	15	860	<6.0	1500	240	24	370
8/2	12	420	11	1400	130	26	250
9/7	13	1400	23	6100	510	100	1100
10/4	37	600	81	5300	170	330	830
11/1	15	410	36	4000	74	130	660
12/6	8.7	160	38	4000	40	76	450

APPENDIX B
TABLE 4

CONCENTRATIONS OF RADIONUCLIDES IN
PASCO SANITARY WATER (Cumulative Samples) - 1965
Units of pCi/l of Water

Date	P^{32}	Cr^{51}	Zn^{65}	Sr^{90}	I^{131}
1/4-1/11	20	5,300	100	1.4	8.0
1/11-1/18	30	5,300	110	1.3	6.4
1/18-1/25	70	5,500	130	1.7	8.0
1/25-2/1	20	7,100	130	1.3	6.0
2/1-2/8	24	6,200	140	1.0	<6.4
2/8-2/15	14	4,000	150	0.90	3.9
2/15-2/23	12	4,600	160	<1.3	4.6
2/23-3/1	31	4,900	250	1.1	<5.1
3/1-3/8	4.4	3,300	150	0.99	<5.8
3/8-3/15	4.4	4,400	150	1.1	<6.9
3/15-3/22	<4.8	5,400	180	1.3	11
3/22-3/29	30	6,400	210	1.2	7.0
3/29-4/5	24		130		11
4/5-4/12	20		140	0.77	12
4/12-4/19	9.9		120	0.82	5.9
4/19-4/26	12		110	0.68	5.7
4/26-5/3	6.1		87	0.85	2.9
5/3-5/10	7.1		69	0.85	2.3
5/10-5/17	11		55	0.77	3.0
5/17-5/24	13		54	1.0	<2.5
5/24-6/1	<6.0		28	0.77	4.9
6/1-6/7	6.5		44	0.97	2.5
6/7-6/14	6.0		29	0.86	<2.5
6/14-6/21	<6.0		27	0.40	<2.3
6/21-6/28	<6.0		30	0.93	3.9
6/28-7/5	<6.0		21	1.0	<2.3
7/5-7/12	<6.0		<20	0.80	<2.0
7/12-7/19	<6.0		<20	1.1	<2.4
7/19-7/26	<6.0		<20	0.79	2.4
7/26-8/2	3.4		<20	0.91	5.5
8/2-8/9	5.2		<20	0.86	4.4
8/9-8/16	4.3		<20	0.88	3.7
8/16-8/23	8.0		<20	1.4	3.0
8/23-8/30	5.6		20	1.0	4.3
8/30-9/7	8.1		20	0.89	6.2
9/7-9/13	9.5		20	1.1	6.1
9/13-9/20	14		20	1.1	5.2
9/20-9/27	37		21	1.2	8.5

No entry indicates no analysis made.

APPENDIX B
TABLE 4 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
PASCO SANITARY WATER (Cumulative Samples) - 1965
Units of pCi/l of Water

Date	P^{32}	Cr^{51}	Zn^{65}	Sr^{90}	I^{131}
9/27-10/4	21		29	1.3	17
10/4-10/11	43		<20	1.4	11
10/11-10/18	17		<19	1.3	6.7
10/18-10/25	14		<20	1.3	6.0
10/25-11/1	15		24	1.7	15
11/1-11/8	23		28	1.4	7.2
11/8-11/15	23		28	1.5	7.9
11/15-11/22	45		30	1.0	11
11/22-11/29	20		23	1.0	6.1
11/29-12/6	22		40	1.5	8.5
12/6-12/13	63		45	1.2	9.4
12/13-12/20	44		50	1.0	6.7
12/20-12/27	48		53	0.99	6.6

No entry indicates no analysis made.

APPENDIX B
TABLE 5

CONCENTRATIONS OF RADIONUCLIDES IN
KENNEWICK SANITARY WATER (Grab Samples) - 1965
Units of pCi/l of Water

Date	Na^{24}	P^{32}	Cr^{51}	Cu^{64}	Zn^{65}	As^{76}	I^{131}	Np^{239}
3/15	66	<5.9	1500	31	<20	13	<2.3	53
4/19	120	17	2100	57	<20	18	<1.9	94
5/17	200	23	1100	140	<20	30	<1.6	130
6/21	33	<6.0	530	24	20	5.8	<2.0	23
7/19	<35	<6.0	580	<20	<20	5.3	<2.0	16
8/16	100	8.5	1500	79	<20	17	<1.0	50
9/20	24	5.8	1400	32	6.3	15	2.0	38
10/18	50	11	1500	34	<6.4	24	<1.0	57
11/15	53	14	1900	<32	<6.4	20	2.0	64
12/20	79	11	1800	50	<6.3	16	<1.0	48

APPENDIX B
TABLE 6

BETA ACTIVITY IN RICHLAND SANITARY WATER - 1965
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
1-4	8.9	3-5	3.5	5-5	3.6
1-5	10	3-8	8.5	5-6	5.4
1-6	9.6	3-9	5.5	5-7	7.8
1-7	9.6	3-10	9.3	5-10	5.4
1-8	8.1	3-11	11	5-11	4.3
1-11	8.1	3-12	8.5	5-12	5.6
1-12	10	3-15	11	5-13	5.5
1-13	8.9	3-16	10	5-14	5.8
1-14	8.9	3-17	15	5-17	5.1
1-15	7.4	3-18	12	5-18	6.6
1-18	8.1	3-19	12	5-19	4.9
1-19	10	3-22	18	5-20	3.2
1-20	10	3-23	14	5-21	3.2
1-21	7.4	3-24	12	5-24	3.7
1-22	8.9	3-25	12	5-25	3.7
1-25	8.1	3-26	12	5-26	4.2
1-26	9.6	3-29	16	5-27	3.9
1-27	10	3-30	9.7	5-28	3.8
1-28	9.6	3-31	9.2	6-1	4.0
1-29	11	4-1	10	6-2	3.5
2-1	10	4-2	12	6-3	3.6
2-2	13	4-5	13	6-4	4.3
2-3	12	4-6	10	6-7	4.1
2-4	8.9	4-7	12	6-8	4.1
2-5	8.9	4-8	13	6-9	3.9
2-8	8.1	4-9	13	6-10	4.5
2-9	6.2	4-12	12	6-11	3.6
2-10	8.1	4-13	11	6-14	4.2
2-11	7.4	4-14	8.6	6-15	4.5
2-12	7.4	4-15	8.2	6-16	4.7
2-15	5.2	4-16	8.1	6-17	4.1
2-16	8.9	4-19	13	6-18	3.1
2-17	8.1	4-20	9.5	6-21	2.5
2-18	11	4-21	10	6-22	2.8
2-19	8.1	4-22	8.3	6-23	2.5
2-23	9.6	4-23	6.5	6-24	2.6
2-24	6.4	4-26	11	6-25	2.3
2-25	5.6	4-27	7.9	6-28	1.5
2-26	6.2	4-28	7.4	6-29	2.[illegible]
3-1	8.3	4-29	6.9	6-30	2.7
3-2	7.8	4-30	8.0	7-1	2.4
3-3	6.6	5-3	8.5	7-2	1.7
3-4	4.6	5-4	5.3	7-6	4.2

APPENDIX B
TABLE 6 (Continued)

BETA ACTIVITY IN RICHLAND SANITARY WATER - 1965
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
7-7	1.8	9-2	6.4	10-29	8.2
7-8	1.8	9-3	6.4	11-1	9.5
7-9	1.8	9-7	8.2	11-2	12
7-12	2.1	9-8	7.0	11-3	8.6
7-13	2.0	9-9	6.8	11-4	10
7-14	2.4	9-10	6.2	11-5	4.8
7-15	2.4	9-13	3.8	11-8	7.2
7-16	3.2	9-14	6.2	11-9	10
7-19	2.8	9-15	4.8	11-10	8.8
7-20	3.3	9-16	5.5	11-11	6.8
7-21	2.6	9-17	5.4	11-12	7.2
7-22	2.6	9-20	6.6	11-15	6.2
7-23	2.8	9-21	9.6	11-16	7.2
7-26	4.3	9-22	4.4	11-17	7.0
7-27	5.2	9-23	5.8	11-18	5.8
7-28	5.7	9-24	3.6	11-19	5.6
7-29	3.8	9-27	4.7	11-22	1.9
7-30	2.6	9-28	4.9	11-23	3.9
8-2	2.0	9-29	4.4	11-24	4.5
8-3	4.0	9-30	4.8	11-29	2.5
8-4	4.7	10-1	8.8	11-30	11
8-5	4.8	10-4	8.0	12-1	9.0
8-6	4.6	10-5	11	12-2	9.4
8-9	3.7	10-6	9.0	12-3	7.6
8-10	2.0	10-7	6.4	12-6	5.5
8-11	2.3	10-8	9.0	12-7	5.0
8-12	2.1	10-11	8.6	12-8	5.6
8-13	2.0	10-12	7.0	12-9	6.0
8-16	4.6	10-13	6.6	12-10	6.1
8-17	2.6	10-14	5.0	12-13	7.8
8-18	4.2	10-15	5.2	12-14	9.6
8-19	3.7	10-18	6.6	12-15	9.6
8-23	3.9	10-19	9.0	12-16	5.6
8-24	4.2	10-20	6.0	12-17	4.4
8-25	5.7	10-21	4.0	12-20	6.6
8-26	3.9	10-22	4.0	12-21	7.2
8-27	5.4	10-25	5.2	12-22	4.9
8-30	4.5	10-26	4.2	12-27	7.4
8-31	4.8	10-27	6.6	12-28	11
9-1	5.4	10-28	8.0	12-29	9.4
				12-30	7.0

APPENDIX B
TABLE 7

BETA ACTIVITY IN PASCO SANITARY WATER - 1965
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
1-4	2.1	3-5	1.6	5-5	2.1
1-5	1.9	3-8	3.3	5-6	1.9
1-6	2.4	3-9	2.5	5-7	2.2
1-7	1.8	3-10	1.6	5-10	2.2
1-8	2.1	3-11	2.8	5-11	1.6
1-11	1.5	3-12	3.2	5-12	2.3
1-12	1.2	3-15	3.7	5-13	3.2
1-13	2.3	3-16	3.1	5-14	3.1
1-14	2.4	3-17	4.4	5-17	2.8
1-15	1.9	3-18	2.9	5-18	2.5
1-18	1.8	3-19	3.6	5-19	2.7
1-19	1.8	3-22	4.1	5-20	1.8
1-20	2.1	3-23	5.7	5-21	1.6
1-21	2.4	3-24	4.6	5-24	1.8
1-22	2.8	3-25	4.1	5-25	1.8
1-25	2.4	3-26	4.1	5-26	1.6
1-26	2.6	3-29	3.5	5-27	2.0
1-27	2.3	3-30	7.1	5-28	1.7
1-28	2.6	3-31	3.6	6-1	2.8
1-29	2.4	4-1	4.4	6-2	1.6
2-1	3.2	4-2	4.3	6-3	1.8
2-2	2.1	4-5	2.5	6-4	1.6
2-3	1.3	4-6	4.0	6-7	1.8
2-4	2.8	4-7	3.1	6-8	2.2
2-5	2.4	4-8	4.2	6-9	2.3
2-8	2.1	4-9	4.8	6-10	1.6
2-9	2.1	4-12	2.9	6-11	1.9
2-10	1.8	4-13	5.7	6-14	2.1
2-11	1.7	4-14	3.3	6-15	2.2
2-12	2.3	4-15	3.2	6-16	2.1
2-15	2.1	4-16	3.1	6-17	2.1
2-16	1.9	4-19	2.8	6-18	1.2
2-17	2.6	4-20	4.4	6-21	1.4
2-18	2.4	4-21	3.5	6-22	1.6
2-19	2.2	4-22	4.7	6-23	1.2
2-23	2.4	4-23	2.7	6-24	1.8
2-24	2.4	4-26	9.2	6-25	1.1
2-25	2.1	4-27	4.7	6-28	0.87
2-26	1.8	4-28	4.5	6-29	0.95
3-1	1.4	4-29	3.8	6-30	1.6
3-2	1.6	4-30	5.2	7-1	1.4
3-3	2.0	5-3	3.9	7-2	1.3
3-4	1.6	5-4	2.5	7-6	2.1

APPENDIX B
TABLE 7 (Continued)

BETA ACTIVITY IN PASCO SANITARY WATER - 1965
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
7-7	1.3	9-3	2.9	11-1	1.8
7-8	1.2	9-7	4.0	11-2	2.9
7-9	0.93	9-8	4.8	11-3	3.3
7-12	1.3	9-9	2.5	11-4	2.6
7-13	1.2	9-10	2.5	11-5	2.2
7-14	1.4	9-13	2.5	11-8	1.2
7-15	1.6	9-14	3.4	11-9	1.6
7-16	1.6	9-15	2.4	11-10	2.4
7-19	2.0	9-16	2.0	11-12	1.6
7-20	2.1	9-17	1.7	11-15	1.7
7-21	1.8	9-20	3.0	11-16	2.7
7-22	1.4	9-21	3.7	11-17	2.4
7-23	1.7	9-22	3.8	11-18	1.9
7-26	2.4	9-23	3.2	11-19	1.4
7-27	2.5	9-24	2.1	11-22	1.0
7-28	3.1	9-27	2.3	11-23	0.92
7-29	2.5	9-28	2.8	11-24	1.0
7-30	2.7	9-29	1.9	11-29	1.4
8-3	2.0	9-30	2.6	11-30	1.1
8-4	3.5	10-1	3.5	12-1	1.1
8-5	3.1	10-4	3.2	12-2	1.2
8-6	2.6	10-5	3.2	12-3	1.9
8-9	2.4	10-6	4.4	12-6	1.1
8-10	1.2	10-7	3.6	12-7	0.88
8-11	1.3	10-8	4.0	12-8	1.0
8-12	1.2	10-11	3.0	12-9	1.4
8-13	1.6	10-12	3.1	12-10	1.5
8-16	2.3	10-13	2.8	12-13	1.4
8-17	1.7	10-14	2.5	12-14	1.6
8-18	2.2	10-15	1.9	12-15	1.8
8-19	2.3	10-18	2.2	12-16	1.5
8-23	2.6	10-19	2.1	12-17	1.4
8-24	1.6	10-20	3.1	12-20	1.3
8-25	1.9	10-21	1.7	12-21	1.3
8-26	2.1	10-22	1.4	12-22	1.6
8-27	2.5	10-25	1.3	12-27	0.98
8-30	2.7	10-26	2.1	12-28	1.6
8-31	2.7	10-27	2.0	12-29	2.2
9-1	2.6	10-28	2.2	12-30	2.1
9-2	3.6	10-29	2.6		

APPENDIX B
TABLE 8

BETA ACTIVITY IN KENNEWICK SANITARY WATER - 1965
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
1-4	0.42	3-9	0.32	5-10	0.66
1-5	0.54	3-10	0.36	5-11	0.76
1-6	0.53	3-11	0.34	5-12	0.52
1-7	0.46	3-12	0.36	5-13	0.71
1-8	0.46	3-15	0.34	5-14	0.69
1-11	0.32	3-16	0.40	5-17	0.71
1-12	0.58	3-17	1.1	5-18	0.61
1-13	0.56	3-18	0.98	5-19	0.60
1-14	0.50	3-19	0.84	5-20	0.21
1-15	0.42	3-22	0.75	5-21	0.31
1-19	0.49	3-23	0.72	5-24	0.35
1-20	0.50	3-24	0.71	5-25	0.49
1-21	0.43	3-25	0.49	5-26	0.62
1-22	0.39	3-26	0.47	5-27	0.62
1-25	0.41	3-29	0.41	5-28	0.15
1-26	0.55	3-30	0.50	6-1	0.21
1-27	0.49	3-31	0.37	6-2	0.16
1-28	0.81	4-1	0.33	6-3	0.29
2-1	0.51	4-2	1.0	6-4	0.21
2-2	0.59	4-5	0.58	6-7	0.17
2-3	0.50	4-6	0.82	6-8	0.15
2-4	0.39	4-7	0.72	6-9	0.21
2-5	0.41	4-8	1.3	6-10	0.23
2-8	0.37	4-9	0.76	6-11	0.29
2-9	0.49	4-12	0.97	6-14	0.21
2-10	0.43	4-13	1.8	6-15	0.23
2-11	0.43	4-14	1.3	6-16	0.19
2-12	0.32	4-15	1.3	6-17	0.17
2-15	0.23	4-16	0.51	6-18	0.19
2-16	0.41	4-19	0.44	6-21	0.16
2-17	0.39	4-20	0.45	6-22	0.20
2-18	0.45	4-21	1.0	6-23	0.14
2-19	0.41	4-22	0.60	6-24	0.14
2-23	0.37	4-23	1.1	6-25	0.17
2-24	0.33	4-26	0.90	6-28	0.14
2-25	0.25	4-27	1.3	6-29	0.13
2-26	0.29	4-28	1.3	6-30	0.17
3-1	0.32	4-29	1.0	7-1	0.17
3-2	0.35	4-30	1.0	7-2	0.18
3-3	0.27	5-3	1.1	7-6	0.12
3-4	0.20	5-5	0.20	7-7	0.10
3-5	0.21	5-6	0.75	7-8	0.13
3-8	0.40	5-7	0.72	7-9	0.15

APPENDIX B
TABLE 8 (Continued)

BETA ACTIVITY IN KENNEWICK SANITARY WATER - 1965
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
7-12	0.10	9-14	0.26	11-12	0.33
7-13	0.11	9-15	0.22	11-15	0.35
7-14	0.11	9-16	0.17	11-16	0.42
7-15	0.38	9-17	0.23	11-17	0.28
7-16	0.13	9-20	0.30	11-18	0.28
7-19	0.11	9-21	0.31	11-19	0.31
7-20	0.12	9-22	0.31	11-22	0.21
7-21	0.15	9-23	0.26	11-23	0.43
7-22	0.32	9-24	0.26	11-24	0.27
7-23	0.11	9-27	0.24	11-29	0.25
7-26	0.11	9-28	0.33	11-30	0.39
7-27	0.11	9-29	0.23	12-1	0.25
7-28	0.19	9-30	0.26	12-2	0.31
7-29	0.15	10-4	0.49	12-3	0.29
7-30	0.19	10-5	0.28	12-6	0.23
8-3	0.10	10-6	0.48	12-7	0.31
8-4	0.16	10-7	0.36	12-8	0.27
8-5	0.17	10-8	0.37	12-9	0.33
8-6	0.15	10-11	0.56	12-10	0.25
8-9	0.16	10-12	0.75	12-13	0.32
8-10	0.15	10-13	0.37	12-14	0.42
8-11	0.16	10-14	0.33	12-15	0.39
8-12	0.21	10-15	0.25	12-16	0.30
8-16	0.37	10-18	0.29	12-17	0.25
8-17	0.17	10-19	0.43	12-20	0.32
8-18	0.12	10-20	0.30	12-21	0.44
8-19	0.13	10-21	0.25	12-22	0.27
8-23	0.16	10-22	0.22	12-27	0.35
8-24	0.17	10-25	0.22	12-28	0.55
8-25	0.38	10-26	0.31	12-29	0.33
8-26	0.14	10-27	0.28	12-30	0.35
8-27	0.15	10-28	0.31		
8-30	0.20	10-29	0.30		
8-31	0.21	11-1	0.35		
9-1	0.23	11-2	0.50		
9-2	0.21	11-3	0.35		
9-3	0.20	11-4	0.44		
9-7	0.27	11-5	0.26		
9-8	0.32	11-8	0.33		
9-9	0.26	11-9	0.41		
9-10	0.22	11-10	0.35		
9-13	0.28	11-11	0.33		

APPENDIX C

RADIONUCLIDES IN FISH AND WATERFOWL

APPENDIX C
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT PRIEST RAPIDS - 1965

Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
1-30	-	-	2	0.7	-	0.3
1-30	13	1.0	2	17	0.6	0.7
1-30	-	-	1	0.5	-	0.3
1-30	-	-	3	10	0.5	0.4
1-30	-	-	2	6.0	-	0.3
1-30	21	0.6	1	25	0.7	0.4
1-30	12	0.9	2	24	1.1	0.9
1-30	-	-	1	1.2	-	0.4
1-30	-	0.2	2	7.4	-	0.5
1-30	7	-	2	2.0	-	0.2
1-30	5		3	0.7	-	0.2
4-27	< 2	-	4	0.5	-	0.3
4-27	< 3	-	4	0.3	-	0.4
6-7	< 4	-	4	0.8	-	0.2
6-7	42	0.5	5	23	-	0.4
6-7	<46	-	1	-	-	0.2
6-23	-	-	3	-	-	0.4
6-23	-	-	5	-	-	0.4
6-23	3	-	4	-	-	-
7-15	1	-	4	-	-	0.4
7-15	1	-	3	-	-	0.4
7-15	1	-	3	-	-	0.4
7-15	3	-	2	-	-	0.3
7-15	-	-	3	-	-	0.2
7-15	1	-	4	-	-	0.1
9-3	3	0.4	4	-	0.4	0.3
10-21	180	0.7	3	23	0.6	0.3
10-21	-	-	4	-	-	0.2
11-19	370	0.7	3	38	0.6	0.4
11-19	9	0.2	4	4.4	-	0.2
11-19	150	0.7	4	22	0.4	0.6
12-16	200	1.7	4	36	1.0	0.2
12-16	110	1.4	3	66	0.8	0.4
12-16	160	1.1	4	33	0.9	0.6

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 2

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT HANFORD - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
1-11	28	2.9	4	27	3.3	0.5
1-11	47	-	-	-	-	-
1-11	28	2.9	4	27	3.3	0.5
1-11	53	1.6	5	19	2.2	0.4
1-11	58	1.9	5	21	2.5	0.6
1-11	87	0.4	7	20		0.2
1-12	64	2.4	5	27	4.1	0.6
1-18	44	1.2	3	15	1.6	0.6
1-18	280	2.7	3	35	2.6	1.0
1-18	47	1.6	3	21	1.9	0.7
1-18	40	2.0	3	26	2.7	0.8
1-18	120	1.3	2	25	1.7	0.7
1-18	42	1.2	3		2.4	0.5
1-18	120	0.9	3	21	2.3	0.9
2-8	17	2.8	5	21	2.7	0.2
2-9	-	7.7	3	43	9.6	1.0
2-9	34	3.0	3	31	3.3	0.9
2-9	16	3.5	3	35	4.1	0.5
2-9	26	2.2	3	28	2.9	1.1
2-9	90	0.7	3	15	0.4	0.4
2-9	45	1.4	3	29	1.7	0 3
2-9	88	1.5	5	29	1.7	0.8
2-9	79	0.6	4	8.8	0.5	0.4
2-9	17	1.1	3	26	1.2	0.6
2-9	63	0.9	4	29	0.8	-
3-8	23	1.1	4	4.2	0.6	0.3
3-8	16	2.5	6	24	2.6	0.8
3-8	77	1.0	4	21	1.1	0.9
3-9	95	2.5	10	17	2.6	1.0
3-9	74	3.4	10	16	2.2	1.0
3-9	130	4.2	20	41	3.8	1.9
3-9	150	1.8	20	15	2.1	1.4
4-1	14	1.3	-	13	0.6	-
4-1	14	3.1	-	17	0.7	-
4-1	28	1.6	-	13	-	-
4-1	11	1.6	-	12	0.6	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT HANFORD - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
4-1	27	3.5	-	28	2.0	-
4-1	15	1.6	-	17	0.7	-
4-1	37	2.4	-	19	1.1	-
4-1	37	2.8	-	19	1.7	-
4-12	20	1.7	5	16	1.1	0.[illegible]
4-12	24	1.4	6	14	1.0	0.6
4-12	4	1.1	3	14	1.0	0.7
4-12	39	1.2	4	14	0.9	0.6
4-12	4	1.4	3	20	1.0	0.4
4-13	34	0.9	5	15	0.9	0.7
4-13	110	0.8	4	33	0.7	0.6
5-25	21	1.4	1	8.5	3.4	0.6
5-25	< 4	-	3	1.2	-	-
5-25	13	1.9	4	14	1.2	1.1
5-25	24	2.6	4	14	3.0	0.9
5-25	72	3.1	8	19	-	1.0
6-11	23	0.7	3	4.8	0.6	0.5
6-15	34	4.5	3	19	1.6	1.0
6-15	20	-	4	3.1	-	0.1
6-15	76	3.3	5	17	-	1.1
6-15	65	2.3	2	17	1.3	1.0
6-15	140	2.1	4	25	0.8	0.9
6-15	120	3.2	3	20	2.0	1.1
6-15	31	1.3	4	14	0.8	0.7
6-15	120	1.9	3	19	1.0	1.0
6-15	170	3.0	4	25	1.7	0.9
7-12	5	2.2	3	11	0.7	0.7
7-12	13	2.6	3	17	1.0	1.2
7-12	5	1.4	3	10	0.6	0.6
7-12	4	0.4	3	8.0	0.2	0.2
7-12	9	5.7	3	21	1.3	1.3
7-12	55	2.4	4	18	1.3	0.8
7-12	12	0.2	3	2.0	0.2	0.1
7-12	53	0.2	3	5.0	0.2	0.1
7-12	15	1.9	3	18	1.0	0.5
7-12	15	1.5	4	12	0.7	0.3
7-12	18	0.3	4	4.0	0.2	0.2
7-12	31	4.9	2	19	2.1	0.9
7-12	38	2.3	4	20	0.9	0.7

Results less than analytical limits are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT HANFORD - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
7-12	72	2.4	4	17	1.5	0.8
7-12	16	1.7	4	12	0.8	0.7
8-17	42	1.7	5	9.0	1.3	0.4
8-17	18	-	3	3.4	-	-
9-14	300	2.8	3	28	1.6	0.8
9-14	55	1.5	4	14	0.5	0.4
9-14	60	1.0	3	12	0.5	0.8
10-4	340	1.9	5	25	0.9	0.8
10-4	340	2.0	3	25	0.9	0.6
10-4	190	2.6	5	22	0.9	0.8
10-4	320	1.8	5	21	0.6	0.8
10-4	270	0.8	4	22	0.4	0.6
10-4	150	0.8	4	23	0.4	0.7
10-4	720	2.4	6	54	1.5	0.6
10-18	370	1.9	-	25	0.5	0.3
10-18	220	1.2	-	20	0.3	0.4
10-18	220	2.3	3	26	1.2	0.8
10-18	320	1.3	5	31	0.7	0.7
10-18	230	1.0	4	25	0.5	0.5
10-19	280	2.4	-	37	0.9	0.3
10-19	190	4.4	-	28	0.2	0.7
11-16	220	2.3	5	38	1.4	0.7
11-16	450	1.1	3	32	0.7	0.3
11-16	320	1.8	3	36	0.9	0.5
11-16	170	1.4	6	30	0.9	0.7
11-16	250	2.0	6	40	1.1	0.8
11-16	280	1.8	6	42	1.0	0.9
11-16	270	0.6	5	35	0.6	0.4
12-14	140	1.8	4	41	1.1	0.5
12-14	210	0.3	7	42	1.3	0.6
12-14	150	0.2	4	32	1.1	0.4
12-14	22	0.2	4	16	-	-
12-14	120	1.1	5	36	0.4	0.5
12-14	93	1.1	5	17	0.8	0.5
12-14	84	1.8	5	27	0.8	1.1
12-14	22	0.2	6	26	1.3	0.5
12-14	190	1.5	3	50	1.1	0.8
12-14	180	2.0	5	34	1.0	0.5

Results less than analytical limit are indicated by a (-).
No entry indicated no analysis made.

APPENDIX C
TABLE 3

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT RINGOLD - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
1-21	220	2.8	5	62	3.1	0.5
1-21	290	2.0	4	45	1.5	1.1
1-25	260	2.5	7	37	2.2	1.3
1-25	430	1.0	10	37	1.8	0.8
1-25	320	1.7	7	40	1.6	0.9
2-11	160	0.8	4	14	0.8	0.6
2-11	240	1.1	4	43	1.8	0.9
2-11	120	3.9	3	33	3.0	0.8
2-25	340	1.0	5	46	1.1	0.8
3-4	4	3.8	4	32	3.2	0.2
3-4	25	3.0	4	22	3.0	0.9
3-4	200	2.3	5	62	2.3	1.2
3-4	180	1.1	3	26	0.7	0.6
3-10	39	3.5	6	28	2.4	1.1
3-10	40	3.3	6	25	2.2	0.9
3-10	9	3.1	4	20	3.1	0.7
3-10	23	2.8	1	20	2.2	0.4
3-10	110	2.0	5	40	1.7	1.2
3-10	40	3.2	5	30	2.3	0.9
3-10	6	1.1	3	23	0.8	0.4
3-10	44	2.2	5	28	1.9	0.9
3-10	68	2.3	6	27	1.2	0.7
3-10	43	2.6	4	46	3.2	0.9
3-10	120	2.3	6	29	1.6	1.0
3-10	140	0.7	5	37	0.7	0.6
3-10	170	1.4	6	33	1.4	0.8
3-10	35	2.6	4	25	1.6	0.8
3-10	97	0.8	5	44	0.7	0.5
3-10	37	2.2	4	43	2.6	0.8
3-10	170	1.9	7	49	1.2	0.6
3-10	74	3.9	7	45	2.3	1.0
3-10	130	1.0	7	47	0.5	0.6
4-29	30	0.6	4	11	0.2	0.5
4-29	160	1.2	4	19	0.9	0.5
4-29	9	0.5	5	4.9	0.2	0.3
4-29	10	2.1	4	11	0.5	0.5
4-29	19	0.5	4	11	0.2	0.5
4-29	45	0.6	2	6.9	-	0.2

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 3 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT RINGOLD - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
4-29	130	1.5	4	20	0.8	1.0
4-29	150	3.3	5	25	1.6	1.2
4-29	270	1.2	4	19	0.9	0.5
4-29	30	0.5	5	4.9	0.2	0.3
5-17	120	2.3	4	23	1.7	1.1
5-17	190	0.9	4	9.0	0.6	0.4
5-17	60	1.8	10	10	0.8	0.3
6-3	[illegible]	0.7	5	34	0.7	0.5
6-3	110	1.5	3	8.7	0.6	0.5
6-9	44	2.5	4	15	-	0.6
6-9	330	0.5	3	29	0.5	0.4
6-9	1100	0.3	6	29	0.3	0.3
6-10	< 3	-	3	1.4	-	-
6-10	30	1.7	4	12	1.1	0.8
6-28	37	-	3	10	-	0.2
7-21	51	0.5	5	6	0.4	0.2
7-21	90	1.3	6	17	1.2	0.5
7-21	25	0.4	5	5.0	0.3	0.2
7-21	15	0.9	5	6.0	0.5	0.4
7-21	71	0.6	4	6.0	0.7	0.4
7-21	34	1.1	3	11	0.6	0.7
7-21	250	0.4	7	12	0.6	0.2
7-21	870	0.5	8	28	0.6	0.5
7-21	260	1.3	6	24	1.1	0.5
7-21	920	0.2	6	23	0.8	0.3
8-31	100	3.3	6	23	1.0	0.9
8-31	110	0.6	5	20	0.5	0.4
9-22	320	2.6	4	25	1.1	1.0
9-22	200	1.4	4	31	0.7	1.0
9-22	460	1.6	4	26	1.0	[illegible]
9-22	400	1.9	4	20	0.9	0.6
9-22	510	1.0	4	26	0.6	1.0
9-22	470	1.2	4	29	0.6	1.0
9-22	420	1.4	3	21	0.7	0.6
9-22	470	1.0	4	29	0.8	0.7
9-22	880	0.9	5	37	0.5	0.4
9-22	710	0.9	6	33	0.7	0.5
9-22	760	2.1	6	44	2.1	0.7
9-22	790	1.4	5	42	1.3	0.6
9-22	870	0.8	3	36	0.7	0.7

Results less than analytical limits are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 3 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT RINGOLD - 1965

Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
9-28	770	1.9	4	36	1.0	0.9
9-28	490	1.1	3	33	0.8	0.8
10-7	930	0.6	7	47	0.3	0.2
10-7	670	1.3	4	52	1.0	0.8
10-25	670	1.4	5	41	1.0	0.6
10-25	830	1.1	3	48	1.2	0.7
10-25	830	0.7	5	50	0.7	0.6
10-25	1100	0.8	6	64	0.4	0.5
10-25	490	0.8	5	41	0.6	0.8
10-25	430	1.8	3	36	0.7	1.0
10-25	1200	0.7	5	58	0.5	0.6
10-25	1000	1.1	6	60	0.9	0.7
11-23	320	2.1	3	33	0.8	0.8
11-23	260	1.2	4	30	0.6	0.8
11-23	640	1.8	5	67	1.7	0.3
11-23	630	1.3	6	70	1.3	0.5
11-23	650	1.8	5	50	1.5	0.8
11-23	520	0.8	5	65	0.8	0.4
11-23	570	1.1	4	50	1.0	0.4
12-13	340	1.8	5	46	1.3	0.7
12-13	510	1.2	6	65	0.8	0.2
12-13	490	2.2	4	62	1.9	0.7
12-13	690	0.7	4	74	0.6	0.4
12-13	530	1.3	5	71	1.0	0.5

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C

TABLE 4

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT RICHLAND - 1965

Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
1-25	21	2.7	6	30	1.6	1.0
2-24	23	3.2	3	31	3.0	0.8
2-24	9	2.3	3	29	2.3	0.7
2-24	56	1.7	3	29	1.4	1.1
2-24	56	2.1	4	33	2.8	0.9
2-24	13	1.3	4	29	0.6	1.0
2-24	43	3.2	4	37	4.9	0.9
2-24	28	1.8	3	31	1.2	0.9
2-24	150	0.8	2	37	0.8	0.6
2-24	40	4.6	2	34	5.6	0.9
2-24	39	1.3	4	34	2.0	0.6
2-24	230	0.6	3	48	0.9	0.3
2-25	5	-	3	-	-	0.1
2-25	43	2.6	2	34	2.5	0.7
3-3	30	1.8	5	37	2.9	0.9
3-3	120	2.1	7	34	1.6	0.8
3-3	13	0.4	3	13	0.2	0.9
3-3	49	2.6	4	32	2.8	0.3
3-3	34	0.6	5	26	0.6	0.9
3-3	40	2.9	4	35	3.9	0.4
3-3	57	1.8	4	26	1.4	1.0
3-4	3	1.8	5	25	1.6	1.0
3-4	64	1.8	5	38	2.7	0.6
3-4	170	0.7	5	46	1.9	0.8
3-4	36	0.7	8	34	0.8	0.6
3-4	100	0.9	3	36	0.9	0.6
3-4	39	4.1	2	31	3.8	0.9
3-19	14	3.6	4	28	4.2	0.9
3-19	23	3.5	4	26	3.4	1.0
3-19	33	2.0	5	28	1.8	0.8
3-19	58	2.0	5	28	2.0	0.8
3-19	42	2.3	3	36	2.4	0.9
3-19	33	2.2	6	31	2.7	0.8
4-1	61	3.2	-	23	1.5	-
4-1	45	2.3	-	20	1.1	-
4-1	34	1.6	-	24	0.2	-
4-1	63	2.2	-	29	0.7	-
4-1	63	1.6	-	31	0.7	-
4-1	170	2.9	-	37	1.5	-

Results less than analytical limit are indicated by a (-).
No entry indicated no analysis made.

APPENDIX C
TABLE 4 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT RICHLAND - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
4-1	< 8	1.8	-	31	1.1	-
4-1	54	3.2	-	27	2.6	-
4-1	280	2.3	-	51	1.5	-
5-3	61	2.8	4	31	2.0	0.7
5-3	8	0.4	4	4.8	0.2	0.1
5-3	14	0.2	4	19	0.2	0.4
5-3	79	1.9	5	13	1.4	0.8
5-3	42	0.6	3	18	0.6	0.3
5-3	27	2.8	4	31	2.0	0.7
5-3	110	2.9	3	29	2.0	0.8
5-3	180	0.2	4	19	0.2	0.4
5-3	14	1.4	3	32	0.8	0.6
5-3	230	0.8	4	27	0.5	0.6
6-1	440	2.5	3	19	1.4	0.7
6-1	< 5	-	3	1.1	-	-
6-1	110	2.5	6	21	-	0.9
6-1	83	2.8	5	18	0.9	0.8
6-1	85	1.9	2	18	1.4	0.4
6-1	190	0.7	4	19	0.6	0.4
6-1	67	0.8	3	7.7	0.7	0.3
6-1	70	2.7	5	25	-	0.7
6-1	88	2.2	6	24	-	0.8
6-1	120	1.6	7	22	-	0.5
6-19	1100	-	7	24	0.6	0.5
6-19	550	-	2	27	1.3	0.6
6-19	600	-	3	27	0.8	0.4
7-2	18	0.2	3	2.0	0.3	-
7-2	29	0.7	3	5.0	0.5	0.2
7-2	31	1.0	5	6.0	1.6	0.4
8-31	50	2.9	4	16	0.9	0.7
8-31	38	0.2	6	8.0	0.3	0.2
8-31	210	1.7	5	19	1.2	0.9
9-17	160	0.4	4	20	0.3	-
9-23	130	0.7	3	18	0.4	0.5
9-23	360	0.6	5	27	0.4	0.5
9-23	230	1.7	3	25	0.7	0.7
9-23	280	0.9	4	24	0.6	0.6
10-25	420	0.8	3	27	0.6	0.4
12-3	10	-	3	0.4	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 5

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER AT MISCELLANEOUS LOCATIONS - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank						
2-18	-	-	5	5.2	-	0.1
2-18	-	1.9	5	40	1.3	0.1
4-8	< 3	0.3	2	2.7	-	-
9-16	120	-	1	13	-	-
10-14	64	-	3	18	-	0.4
10-14	76	0.2	4	19	-	0.2
10-14	170	0.2	3	20	-	0.3
10-14	170	-	4	23	-	-
10-14	260	1.1	3	28	0.6	0.6
11-12	62	0.3	3	12	-	0.2
11-12	230	0.3	4	22	0.2	0.2
12-7	31	0.9	5	16	0.2	0.7
12-7	120	0.3	4	18	-	0.1
McNary						
1-8	100					
1-8	5	-	4	13	-	
1-8	110	-	6	38	0.2	0.1
1-8	55	0.2	6	26	0.3	0.1
2-19	1	0.2	4	26		-
3-17	-	0.5	4	22	-	-
3-18	58	0.5	8	16	0.7	0.7
3-18	53	1.1	9	15	1.1	0.7
3-18	85	0.8	13	20	1.1	0.9
3-18	130	1.0	17	24	1.4	1.1
3-18	140	1.0	15	11	1.3	1.1
5-12	< 5	-	2	0.3	-	-
6-17	64	0.3	3	16	0.2	0.1
6-17	17	-	3	13	-	0.2

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 6
CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF BASS TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford						
4-12	4	-	1	4.9	-	0.1
4-13	< 3	0.2	3	16	-	1.8
4-13	< 4	0.2	4	21	-	1.1
4-13	< 2	-	3	12	-	1.4
5-25	25	-	3	12	-	1.6
6-15	10	-	3	11	-	1.6
6-15	23	-	5	11	-	0.7
6-15	14	-	1	6.7	-	0.6
8-17	370	-	5	20	-	0.8
12-14	80	-	4	85	-	0.2
Ringold						
4-29	6	-	3	16	-	1.5
4-29	-	-	3	13	-	1.2
4-29	19	-	3	14	0.2	1.4
4-29	19	-	4	11	-	1.1
4-29	20	-	4	20	0.2	1.3
4-29	29	-	6	17	0.2	1.4
4-30	-	-	4	11	-	1.1
4-30	15	-	4	9.3	-	0.9
4-30	12	-	4	14	-	1.2
4-30	12	-	4	12	-	1.3
4-30	11	-	4	12	-	1.3
4-30	43	-	5	20	-	0.9
5-17	9	-	4	15	-	0.9
5-17	6	-	3	8.6	-	1.4
5-17	12	-	3	13	-	1.5
5-17	9	-	3	14	-	1.1
6-2	150	0.2	6	20	-	1.1
6-24	390	-	-	16	-	-
Richland						
1-14	5	0.2	5	18		1.4
2-25	-	-	3	10	-	0.4
6-29	13	-	-	9.9	-	1.2
6-29	140	-	-	16	-	-
6-29	120	-	-	13	-	-
8-31	220	-	5	19	-	1.2
8-31	500	-	4	22	-	0.5

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 6 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF BASS TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Richland (Continued)						
9-17	260	-	5	18	-	1.4
9-17	200	-	4	17	-	0.9
9-17	390	-	3	15	-	0.9
9-17	390	-	3	15	-	0.5
9-17	380	-	4	24	-	0.8
10-8	230	-	4	18	-	1.2
Burbank						
3-16	-	-	4	7.7	-	0.4
4-18	< 5	0.5	1	7.4	-	0.4
4-18	< 4	0.5	2	8.7	-	0.3
6-22	< 2	-	3	7.2	-	0.7
6-22	67	-	-	11	-	-
7-1	45	-	-	13	-	-
10-14	120	-	3	13	-	0.5
McNary						
5-12	< 5	-	3	6.2	-	0.3
Priest Rapids						
1-30	-	-	3	0.5	-	0.5

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 7

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF CATFISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford						
4-13	12	-	3	17	0.3	0.4
4-13	< 8	-	4	16	-	0.9
5-25	-	-	-	4.8	-	0.4
Richland						
1-14	5	-	5	6.0	-	0.1
9-17	35	-	4	7.3	-	0.3
Burbank						
2-18	-		4	5.1	-	0.1
3-15	-		3	4.3	-	0.1
3-15	-	-	2	7.2	-	0.3
3-15	5	-	3	7.9	-	0.1
3-15	1	-	3	6.7	-	0.3
3-15	-		3	4.7	-	0.1
3-15	-		3	7.4	-	0.1
3-15	2	-	2	8.6	-	0.1
3-15	6		3	10	-	-
3-15	-	-	2	10	-	0.1
3-15	-		3	7.9	-	-
3-15	-	-	2	5.7	-	-
3-15	4	-	3	7.3	-	0.1
3-15	-		3	8.5	-	0.1
3-15	-	-	3	13	-	0.1
3-15	120	0.8	15	11	1.1	1.1
3-16	-	-	2	10	-	0.1
4-8	30	-	3	6.3	-	0.2
4-8	< 8	-	2	12	-	0.2
4-8	8	-	3	5.7	-	0.1
4-8	< 4	-	2	11	-	0.1
4-8	< 4	-	3	5.1	-	0.1
4-8	< 4	-	3	8.3	-	0.1
4-8	< 6	-	2	14	-	0.1
4-8	< 6	-	2	9.0	-	0.1
4-8	< 7	-	5	5.8	-	-
4-8	< 6	-	4	12	-	-
5-28	-	-	3	7.7	-	0.1
5-28	-	-	3	8.5	-	0.1
5-28	-	-	1	12	-	-
5-28	2	-	2	8.3	-	0.2
5-28	3	-	5	7.5	-	0.2
5-28	1	0.2	2	14	-	-
6-22	< 3	-	-	7.6	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF CATFISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank (Continued)						
6-22	< 3	-	-	9.6	-	-
6-22	4	-	-	9.7	-	-
6-22	5	-	-	5.3	-	-
6-22	< 2	-	-	8.5	-	-
6-22	22	-	-	9.6	-	-
6-22	-	-	-	11	-	-
6-22	2	-	-	6.1	-	-
6-22	-	-	-	9.1	-	-
6-22	< 3	-	-	8.7	-	-
6-22	< 3	-	-	4.7	-	-
6-22	< 2	-	-	9.6	-	-
6-22	< 3	-	-	12	-	-
7-1	-	-	-	4.8	-	-
7-1	-	-	-	9.6	-	-
7-1	2	-	-	14	-	-
7-1	4	-	-	10	-	-
7-1	3	-	-	7.8	-	-
7-8	5	-	-	8.0	-	-
7-23	1	-	-	9.8	-	-
7-23	7	-	-	4.7	-	-
7-23	10	-	-	10	-	-
8-19	48	-	-	9.9	-	-
8-19	11	-	-	9.6	-	-
8-19	63	-	-	16	-	-
8-19	24	-	-	10	-	-
8-19	11	-	-	8.8	-	-
9-16	56	-	3	9.6	-	-
10-14	16	-	4	7.2	-	0.2
10-14	36	-	2	3.2	-	-
10-14	84	-	3	14	-	-
10-14	77	-	3	12	-	-
10-14	100	-	3	13	-	0.3
10-14	79	-	3	9.8	-	-
10-14	30	-	3	7.6	-	-
11-12	48	-	4	10	-	0.2
11-12	95	-	3	12	-	-
11-12	89	-	4	16	-	0.2
11-12	61	-	4	15	-	0.1
11-12	84	-	3	12	-	0.2
12-7	9	-	4	5.6	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 8
CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF CRAPPIE TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank						
2-18	-		4	18	-	-
3-15	4		2	12	-	-
4-8	<13	1.3	-	8.6	-	0.1
4-8	<18	2.0	-	1.1	0.3	-
4-8	< 9	1.1	-	10	-	-
4-8	< 8	1.4	-	15	-	-
4-8	< 6	0.9	-	11	-	-
4-8	<10	1.5	-	1.4	-	-
4-8	< 9	1.3	-	14	-	-
4-8	13	-	2	14	-	0.2
5-26	9	-	2	6.5	-	-
6-22	< 2	-	-	9.0	-	-
6-22	< 2	-	-	6.4	-	-
6-22	-	-	-	2.5	-	-
7-1	2	-	-	6.1	-	-
7-1	-	-	-	9.8	-	-
8-19	48	-	-	8.5	-	-
8-19	16	-	-	7.7	-	-
8-19	94	-	-	9.9	-	-
9-16	120	-	2	9.0	-	0.1
9-16	120	-	3	11	-	-
9-16	86	-	4	11	-	-
9-16	72	-	4	10	-	-
9-16	120	-	2	14	-	-
9-16	210	0.5	4	23	0.3	0.4
9-16	280	-	3	26	-	-
9-16	180	-	5	21	-	-
9-16	210	-	3	18	-	-
10-14	76	-	3	14	-	0.2
10-14	83	-	2	14	-	-
10-14	260	-	4	23	-	0.2
10-14	130	-	2	20	-	0.4
10-14	130	-	4	22	-	0.2
11-12	53	-	4	18	-	-
11-12	52	-	4	17	-	-
11-12	82	-	4	19	-	0.3
11-12	75	-	3	14	-	0.2
11-12	73	-	5	14	-	0.2
11-12	82	-	5	22	-	0.3
12-7	14	-	3	15	-	-
12-7	27	-	5	23	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 9

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF PERCH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford						
1-4	28	-	5	9.3	-	0.1
1-4	77	0.2	6	40	0.3	0.9
6-15	110	-	5	25	-	0.7
Richland						
7-1	24	-	-	11	-	-
Burbank						
2-18	-		5	9.2	-	-
2-18	-		4	11	-	-
3-16	-	-	3	14	-	0.3
4-8	< 19	-	9	14	-	0.5
4-8	< 7	-	5	8.5	-	1.0
4-8	< 7	-	3	8.7	-	0.1
4-8	< 6	-	2	10	-	-
4-8	< 7	-	25	9.3	-	0.1
4-8	6	-	1	14	-	-
4-8	12	-	4	11	-	0.3
4-8	18	-	4	12	-	-
4-8	20	-	4	15	0.2	0.6
4-8	< 17	-	4	16	-	0.2
5-28	< 6	-	3	11	-	-
5-28	24	0.2	3	6.8	-	-
6-22	< 3	-	-	12	-	-
6-22	< 2	-	-	10	-	-
6-22	< 3	-	-	12	-	-
7-1	-	-	-	5.6	-	-
7-1	-	-	-	10	-	-
7-8	-	-	4	8.4	-	-
7-8	2	-	5	6.1	-	-
7-8	-	-	6	10	-	-
7-8	-	-	6	11	-	-
7-8	-	-	2	8.9	-	-
7-8	-	-	-	1.3	-	-
7-8	-	-	-	7.3	-	-
7-8	-	-	-	6.0	-	-
7-23	2	-	-	11	-	-
7-23	6	-	-	11	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 9 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF PERCH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank (Continued)						
7-23	7	-	-	10	-	-
8-19	75	-	-	7.5	-	-
8-19	79	-	-	9.6	-	-
8-19	55	-	-	7.6	-	-
9-16	60	-	4	7.2	-	-
9-16	51	-	3	10	-	-
10-14	45	-	4	13	-	-
10-14	74	0.2	4	12	-	0.2
10-14	23	-	3	7.0	-	0.2
10-14	40	-	1	8.3	-	-
11-12	37	-	4	14	-	0.1
11-12	74	-	6	17	-	0.2
11-12	97	0.2	5	17	-	0.2
12-7	30	-	4	22	-	-
12-7	43	-	5	21	-	0.3
12-7	28	-	3	15	-	0.3
12-7	14	-	4	10	-	0.1
12-7	40	-	3	12	-	-
12-7	32	-	5	27	-	0.3
12-7	35	-	2	19	-	0.1
12-7	34		3	14	-	0.1
12-7	26		4	21	-	0.3

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Priest Rapids							
1-30	Steelhead	6	-	2	4.4	-	0.2
1-30	Steelhead	-	-	1	9.7	-	0.2
1-30	Salmon	-	-	1	-	-	0.3
4-27	Carp	18	-	4	39	-	0.1
4-27	Trout	23	0.7	5	43	0.9	0.5
4-27	Sucker	< 2	0.2	4	17	-	0.9
4-27	Sucker	< 4	-	2	-	-	0.4
4-27	Sucker	< 2	-	4	10	0.3	1.1
4-27	Sucker	< 2	-	4	0.3	-	0.6
4-27	Sucker	< 3	0.3	4	26	0.4	1.0
6-7	Trout	8	0.4	3	11	-	0.1
6-8	Sucker	4	0.2	4	15	-	0.9
6-8	Sucker	560	0.2	4	23	0.2	0.9
6-8	Sucker	6	-	3	-	-	0.8
6-8	Sucker	< 3	-	3	-	-	0.6
6-8	Sucker	6	-	4	-	-	0.4
6-8	Sucker	< 4	0.2	2	16	0.3	1.4
6-8	Sucker	< 5	0.5	2	-	-	0.4
7-15	Trout	4	-	3	0.5	-	-
7-15	Sucker	68	-	4	-	-	0.4
7-15	Sucker	9	-	4	1.2	-	0.6
7-15	Sucker	-	-	2	-	-	0.6
7-15	Sturgeon	-	-	2	-	-	0.4
7-15	Sturgeon	6	-	3	22	-	0.7
8-13	Sturgeon	8	-	-	8.6	-	-
8-13	Sturgeon	-	-	-	2.4	-	-
8-13	Steelhead	-	-	-	-	-	-
8-13	Steelhead	1	-	-	-	-	-
8-13	Sucker	-	-	-	-	-	-
8-13	Sucker	-	-	-	1.2	-	0.6
8-13	Sucker	1300	-	3	28	0.3	1.1
8-13	Sucker	2	-	-	-	-	-
8-13	Sucker	8	-	-	12	-	0.9
8-13	Sucker	9	-	-	-	-	-
8-13	Sucker	1	-	-	3.4	-	-
8-13	Sucker	670	-	-	8.8	-	0.6
8-13	Sucker	110	-	-	2.3	-	-
8-13	Sucker	3	-	-	-	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Priest Rapids (Continued)							
9-3	Sucker	8	-	2	3.0		0.4
9-3	Sucker	1	-	3	-		0.4
9-3	Sucker	100	-	3	5.0		0.5
9-3	Sucker	2	-	3	1.0	-	0.6
9-3	Sucker	1	0.3	4	-	0.2	0.5
9-3	Carp	10	0.2	3	16	-	0.2
10-21	Sucker	-	-	4	-	-	0.3
10-21	Sucker	6	-	3	2.3	-	0.3
10-21	Sucker	9	-	4	3.0	-	0.4
10-21	Sucker	-	-	4	0.6	-	0.4
10-21	Sucker	-	-	3	-	-	0.4
10-21	Sucker	40	-	4	7.2	-	0.3
11-19	Salmon	2		3	-		0.1
11-19	Sucker	25		4	3.2		0.6
11-19	Sucker	15		4	4.9		0.4
11-19	Sucker	-		3	-		0.4
11-19	Sucker	-	0.2	4	15	-	0.8
11-19	Sucker	3		3	1.8		0.5
11-19	Sucker	3		4	-		0.4
11-19	Sucker	-		2	-		0.4
11-19	Sucker	2		4	-		0.4
11-19	Sucker	3	-	4	4.7	-	0.2
12-10	Steelhead	1	-	4	1.8	-	0.2
12-10	Sucker	3	-	4	1.3	-	0.3
12-10	Sucker	2	-	3	0.7	-	0.4
Coyote Rapids							
1-6	Steelhead		-	4	-		-
9-27	Steelhead	-	-	4	1.2	-	0.6
9-27	Steelhead	4	-	4	4.0	-	0.4
10-5	Steelhead	32	-	3	0.3	-	0.1
Hanford							
1-4	Sturgeon	8	-	4	8.5	-	0.1
3-9	Sturgeon	5	-	5	24	0.4	0.6
4-13	Sucker	91	0.4	5	19	0.3	0.8
4-13	Sucker	110	0.3	4	17	0.3	0.9
4-13	Sucker	530	0.4	5	28	0.3	[illegible]

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Hanford (Continued)							
4-13	Sucker	110	0.2	3	14	0.2	0.6
4-13	Sucker	89	0.4	4	18	0.4	1.1
4-13	Sturgeon	58	0.5	3	28	0.3	1.1
5-25	Sucker	1600	0.2	-	32	3.8	1.0
5-25	Sucker	1100	0.4	3	52	0.4	1.2
5-25	Sucker	140	0.4	3	20	0.3	1.4
5-25	Sucker	170	0.3	4	20	0.2	1.2
5-25	Sucker	190	-	6	37	-	3.6
5-25	Carp	17	-	3	13	-	0.1
6-15	Sucker	240	0.4	9	20	-	1.4
6-15	Sucker	510	0.3	5	22	-	1.1
6-15	Sucker	85	0.3	4	16	0.2	1.0
6-15	Sucker	380	0.5	6	31	0.4	1.5
6-15	Sucker	55	0.2	10	20	-	1.2
7-13	Sturgeon	2	0.7	3	17	0.5	1.6
7-13	Carp	75	-	4	38	-	0.6
7-13	Carp	8	-	4	32	-	0.1
7-13	Carp	160	-	4	42	-	0.5
7-13	Carp	160	-	3	36	-	0.4
7-13	Sucker	93	-	3	16	-	0.6
7-13	Sucker	14	-	5	14	-	1.1
7-13	Sucker	380	-	4	20	-	1.2
7-13	Sucker	170	-	4	26	-	1.9
7-13	Sucker	170	-	3	16	-	1.2
8-17	Carp	35	-	-	4.6	-	-
8-17	Carp	22	-	-	20	-	0.3
8-17	Carp	280	-	4	2.7	-	0.4
8-17	Carp	60	-	3	28	-	-
8-17	Carp	110	-	-	17	-	-
8-17	Sturgeon	26	-	-	5.8	-	-
8-17	Sucker	44	-	3	21	-	0.6
8-17	Sucker	240	-	4	17	-	1.1
8-17	Sucker	290	4.4	-	23	-	1.3
8-17	Sucker	280	-	4	35	0.3	0.9
8-17	Sucker	220	-	-	19	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Hanford (Continued)							
9-14	Sucker	190	-	4	7.3	-	0.4
9-14	Sucker	200	0.2	4	12	0.3	1.0
9-14	Sucker	440	0.4	4	24	0.4	1.6
9-14	Sucker	250	0.2	4	7.6	-	0.6
9-14	Sucker	240	-	5	20	-	0.8
9-14	Sucker	930	0.3	5	20	0.3	0.9
9-14	Sucker	1300	0.5	2	38	0.5	0.9
9-14	Sucker	280	-	4	15	-	0.9
9-14	Sucker	400	0.4	8	21	0.3	1.0
9-14	Sucker	220	0.2	5	18	0.3	0.9
9-14	Carp	150	-	3	24	-	0.4
9-14	Sturgeon	18	-	3	7.4	-	0.2
9-14	Sturgeon	80	0.3	4	7.1	-	0.3
9-14	Sturgeon	65	-	4	12	-	0.4
10-4	Sucker	300	0.6	5	20	0.4	0.6
10-4	Sucker	1000	0.3	4	36	0.3	0.4
10-19	Sucker	480	0.6	-	28	-	1.0
10-19	Sucker	620	0.4	-	24	-	0.8
10-19	Sucker	640	0.4	-	25	-	1.1
10-19	Sucker	540	0.5	-	26	0.5	1.3
10-19	Sucker	590	0.4	-	28	0.3	1.2
10-19	Sucker	2600	-	4	56	0.6	0.9
10-19	Sucker	730	-	-	20	-	0.8
10-19	Sucker	440	0.4	-	9.4	-	0.5
10-19	Sucker	2300	-	-	61	-	0.3
10-19	Sucker	2800	-	-	55	-	0.2
10-19	Sturgeon	21	-	-	9.5	-	0.6
10-19	Sturgeon	68	0.4	2	12	-	-
10-19	Sturgeon	44	-	1	8.5	-	0.2
10-19	Salmon	130			13	0.5	0.6
10-19	Salmon	2	-	7	0.4	-	-
11-16	Sucker	400	0.7	4	36	0.6	1.7
11-16	Sucker	410	0.4	5	27	0.6	1.4
11-16	Sucker	680	0.4	5	44	0.6	1.1
11-16	Sucker	650	0.2	4	39	0.5	0.7
11-16	Sucker	1800	0.3	5	82	0.5	0.3
11-16	Carp	180	-	4	81	-	0.8
11-16	Sturgeon	50	-	4	4.8	-	0.5
11-16	Sturgeon	53	0.5	4	16	-	0.5

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Hanford	(Continued)						
11-16	Sucker	780	0.4	5	42	0.4	1.0
11-16	Sucker	220	0.2	4	24	0.3	1.3
11-16	Sucker	380	0.2	4	26	0.6	0.9
11-16	Sucker	250	-	4	17	0.5	1.0
11-16	Sucker	270	0.3	4	26	0.3	0.9
11-16	Sucker	220	0.3	3	29	-	1.0
11-16	Sucker	380	-	6	28	0.2	0.9
11-16	Sucker	510	0.3	6	35	0.8	1.1
11-16	Sucker	530	0.4	5	54	0.3	1.1
12-14	Carp	17	-	4	13	-	1.8
12-14	Sucker	170	0.5	4	29	0.7	1.1
12-14	Sucker	280	0.4	4	40	0.6	1.3
12-14	Sucker	99	0.4	3	24	0.2	0.9
12-14	Sucker	100	0.6	4	25	0.7	1.2
12-14	Sucker	130	0.3	6	18	-	1.2
12-14	Sucker	230	0.8	3	27	0.5	1.5
12-14	Sucker	170	0.5	3	37	0.4	1.5
12-14	Sucker	410	0.2	5	53	0.2	0.6
12-14	Sucker	220	0.4	4	46	0.5	0.7
12-14	Sucker	450	0.3	3	50	0.4	0.9
12-14	Sucker	660	0.4	5	90	0.4	0.9
12-14	Sucker	670	0.4	6	84	0.8	1.1
12-14	Sucker	390	0.9	5	42	0.5	1.5
Ringold							
5-17	Sucker	63	0.2	5	13	0.3	1.0
6-3	Sucker	270	0.4	3	35	0.5	1.2
8-31	Steelhead	110	-	4	42	0.2	0.4
8-31	Sturgeon	14	-	4	3.5	0.3	0.3
8-31	Sucker	160	0.2	3	13	0.2	1.0
8-31	Carp	55	-	3	9.0	-	-
8-31	Carp	68	-	3	10	-	-
8-31	Carp	10	-	4	0.8	-	-
8-31	Carp	21	-	3	5.0	-	-
8-31	Carp	36	-	3	4.0	-	-
8-31	Steelhead	11	-	4	-	-	-
10-7	Sucker	1000	-	4	34	0.3	0.6
10-7	Trout	740	0.3	3	55	0.2	-

Results less than the analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Ringold (Continued)							
10-7	Trout	820	0.2	5	54	-	0.3
11-1	Sucker	380	0.4	4	29	0.2	1.4
11-1	Carp	120	-	3	41	-	0.3
11-23	Trout	210	0.4	4	55	0.3	0.4
11-23	Trout	660	0.8	6	81	-	0.3
12-3	Trout	390	1.4	5	87	1.1	0.3
Richland							
1-14	Sucker	420	0.8	12	47	1.9	2.0
1-14	Sucker	350	1.1	14	70	2.0	3.2
1-14	Sucker	330	0.8	10	35	1.1	1.7
1-25	Sucker	74	0.9	7	22	1.1	1.2
2-25	Sucker	27	0.5	3	23	0.5	0.8
2-25	Sucker	28	0.5	4	28	0.2	0.8
3-3	Steelhead	57	0.4	4	48	0.4	0.5
5-3	Trout	56	0.2	5	26	-	0.2
6-29	Sucker	17	-	5	7.8	-	0.3
6-29	Sucker	130	-	4	23	-	1.4
6-29	Blue Gill	91	-	6	18	-	-
7-1	Carp	10	-	3	19	-	0.2
7-1	Carp	23	-	3	18	-	0.1
7-1	Carp	15	-	3	33	-	0.2
7-1	Sucker	27	-	4	10	-	-
7-1	Sucker	180	-	4	17	-	2.0
7-1	Sucker	190	-	2	14	-	0.6
7-2	Sucker	91	0.5	3	20	-	1.3
7-27	Carp	34	-	3	31	-	0.4
7-27	Carp	7	-	3	8.2	-	0.2
7-27	Sucker	140	-	3	13	-	0.8
7-27	Sucker	54	-	4	12	-	0.9
7-27	Sucker	220	-	2	15	-	0.5
7-27	Sucker	67	-	4	9.7	-	0.7
7-27	Sucker	230	-	3	20	-	1.0
7-27	Trout	87	-	6	12	-	-
8-31	Sturgeon	17	-	4	9.0	0.3	0.9
8-31	Sucker	230	-	9	17	0.2	1.4
8-31	Sucker	160	-	5	17	-	0.5
8-31	Sucker	290	0.2	8	18	0.3	1.3
8-31	Sucker	170	-	7	18	0.2	1.2

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Richland (Continued)							
8-31	Sucker	270	-	8	16	0.2	1.0
8-31	Carp	140	-	4	35	0.2	0.8
9-17	Sucker	300	-	3	16	-	0.7
9-17	Sucker	360	0.2	4	10	0.2	0.7
9-17	Sucker	260	0.2	3	16	0.3	0.7
9-17	Sucker	190	0.2	4	21	-	1.2
9-17	Sucker	150	-	4	15	-	0.6
9-17	Sucker	150	0.2	3	27	-	0.9
9-17	Sucker	380	0.2	4	32	0.2	0.9
9-17	Sucker	1400	0.2	4	39	0.5	0.9
9-28	Sucker	440	0.3	4	28	0.4	0.6
10-8	Sucker	430	0.3	5	24	0.2	1.1
10-8	Sucker	1100	-	8	39	0.3	0.7
10-8	Sucker	430	-	6	26	-	1.1
10-8	Sucker	590	0.2	7	36	0.5	1.1
10-8	Sucker	460	-	5	38	0.2	0.8
10-8	Sucker	1100	-	12	42	0.4	1.1
10-8	Sucker	600	-	6	30	0.3	0.6
10-8	Sucker	890	0.2	9	54	0.6	0.9
10-8	Sucker	530	-	4	30	0.3	0.7
10-8	Sucker	910	-	6	40	0.2	0.7
10-8	Sucker	710	-	7	33	0.2	0.4
10-8	Sucker	1300	0.2	6	48	0.4	0.6
10-8	Sucker	1600	0.3	11	80	1.6	1.0
10-8	Sucker	1800	-	11	39	0.7	0.6
10-8	Sucker	1300	-	8	28	0.3	0.5
10-8	Carp	42	-	6	37	-	-
11-4	Sucker	280	0.2	4	23	0.3	1.0
11-4	Sucker	490	0.4	4	26	0.3	1.1
11-4	Sucker	200	0.2	5	19	0.2	0.7
11-4	Sucker	220	0.2	4	21	0.2	0.7
11-4	Sucker	330	0.2	4	24	0.4	1.1
11-4	Sucker	330	0.2	4	22	0.3	0.9
11-4	Sucker	930	0.3	5	42	0.3	0.9
11-4	Sucker	1400	0.3	5	64	0.4	0.8
11-4	Sucker	1800	0.3	5	74	0.4	0.5
11-4	Sucker	1800	0.2	5	75	0.3	0.7
11-4	Sucker	1800	-	8	66	-	0.6
11-4	Sucker	1100	-	7	45	0.2	0.6

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Richland (Continued)							
11-4	Sucker	1700	0.3	2	78	0.8	1.0
11-4	Sucker	1600	0.2	5	80	0.9	0.8
11-4	Sucker	460	-	8	11	0.3	0.2
11-4	Carp	510	-	4	200	0.3	0.5
12-3	Sucker	11	-	3	4.3	-	-
12-3	Sucker	570	0.4	3	57	0.5	0.8
12-3	Sucker	680	0.4	4	70	0.4	0.8
12-3	Sucker	580	0.4	5	60	1.1	0.7
12-3	Sucker	640	0.3	4	53	0.6	0.9
12-3	Sucker	26	-	4	0.6	-	-
12-3	Sucker	150	0.4	5	29	0.4	1.1
12-3	Sucker	94	0.2	3	22	0.4	0.4
12-3	Sucker	94	0.4	4	25	0.3	1.1
12-3	Sucker	110	0.3	4	20	0.2	0.5
12-3	Sucker	170	0.3	4	30	0.3	0.4
12-3	Sucker	270	0.3	3	32	0.5	0.8
12-3	Sucker	330	0.3	3	43	0.5	0.6
12-3	Sucker	260	0.4	4	37	0.5	0.9
12-3	Sucker	330	0.5	4	54	0.7	0.5
12-3	Sucker	290	0.2	4	47	0.3	0.4
Burbank							
1-27	Sucker	76	0.4	2	62	0.9	1.1
1-27	Sucker	100	0.9	4	5.7	1.2	1.4
1-28	Carp	7	0.2	2	23	-	0.1
1-28	Carp	2	-	3	14	-	0.1
1-28	Sucker	-	-	4	8.0	-	0.2
1-28	Sucker	8	-	3	9.0	-	0.4
1-28	Sucker	40	1.1	3	33	0.9	1.0
1-28	Sucker	7	-	3	9.0	-	0.2
1-28	Sucker	30	-	3	16	0.3	0.5
1-28	Sucker	8	-	4	8.0	-	0.2
2-18	Sucker	230	0.5	4	62	0.6	1.3
2-18	Sucker	-	-	4	7.0	-	0.1
2-18	Sucker	25	-	17	59	-	0.3
2-18	Carp	-	-	4	37	-	-
2-18	Carp	-	-	3	3.4	-	-
2-18	Carp	-	-	4	30	-	-
2-18	Carp	-	-	4	31	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Burbank (Continued)							
2-18	Carp	-	-	3	27	-	-
2-18	Sucker	300	0.7	4	64	0.9	2.0
3-15	Carp	-	-	3	23	-	-
3-15	Sucker	20	-	3	9.5	-	0.1
3-15	Trout	-	-	10	24	-	0.6
3-16	Sturgeon	-	-	3	8.7	-	-
3-16	Sturgeon	-	-	2	10	-	0.1
3-16	Sturgeon	-	-	3	10	-	-
3-16	Sturgeon	-	-	4	13	-	0.1
3-16	Sturgeon	-	-	4	17	-	-
3-16	Sturgeon						
4-8	Carp	< 5	-	5	40	-	-
4-8	Carp	< 3	-	3	31	-	0.2
4-8	Carp	< 3	-	3	17	-	0.2
4-8	Carp	4	-	3	26	-	-
4-8	Carp	4	-	2	28	-	0.1
4-8	Sucker	3	-	4	7.9	-	-
4-8	Sucker	4	-	3	11	-	0.2
4-8	Sucker	3	-	3	10	-	0.1
4-8	Sucker	19	0.3	4	35	0.5	0.1
4-8	Sucker						
5-28	Carp	< 5	-	3	20	-	-
5-28	Carp	< 3	-	3	25	-	-
5-28	Carp	< 3	-	3	50	-	-
5-28	Carp	< 3	-	4	22	-	-
5-28	Carp	< 3	-	3	26	-	-
5-28	Sturgeon	< 4	-	4	17	-	-
5-28	Sturgeon	< 4	-	3	16	-	-
5-28	Sturgeon	< 5	-	4	20	-	-
5-28	Sucker	24	-	3	23	-	0.2
5-28	Sucker	-	-	3	16	-	0.5
5-28	Sucker	330	0.2	3	32	-	1.1
5-28	Sucker	300	0.4	5	51	-	0.9
5-28	Sucker	< 7	0.5	4	35	-	2.5
6-22	Sucker	44	-	3	7.9	-	0.3
6-22	Sucker	19	-	3	18	-	0.5
6-22	Sucker	< 2	-	3	6.9	-	-
6-22	Sucker	120	-	3	13	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Burbank (Continued)							
6-22	Carp	< 2	-	3	25	-	-
6-22	Carp	< 2	-	4	15	-	-
6-22	Carp	< 2	-	2	30	-	-
6-22	Carp	< 2	-	3	14	-	-
6-22	Carp	31	-	3	54	-	-
6-22	Sturgeon	5	-	3	12	-	-
6-22	Sturgeon	15	-	3	14	-	-
6-22	Sturgeon	< 2	-	3	9.1	-	-
6-22	Sturgeon	66	-	-	20	-	-
7-1	Carp	4	-	4	21	-	-
7-1	Carp	32	-	4	58	-	-
7-1	Carp	7	-	4	20	-	-
7-1	Carp	-	-	3	18	-	-
7-1	Carp	16	-	3	19	-	-
7-1	Sucker	-	-	3	15	-	0.9
7-1	Sucker	-	-	3	16	-	-
7-1	Sucker	62	-	4	18	-	-
7-1	Sucker	-	-	3	15	-	-
8-19	Carp	36	-	3	12	-	-
8-19	Carp	32	-	-	42	-	-
8-19	Carp	110	-	-	46	-	-
8-19	Carp	22	-	-	31	-	-
8-19	Carp	140	-	4	42	-	-
8-19	Sucker	22	-	-	9.6	-	-
8-19	Sucker	36	-	-	6.2	-	-
8-19	Sucker	23	-	-	11	-	-
8-19	Sucker	67	-	-	9.7	-	-
8-19	Sucker	250	-	-	15	-	0.3
8-19	Sturgeon	25	-	-	14	-	-
8-19	Sturgeon	11	-	-	9.0	-	-
8-19	Sturgeon	46	-	-	10	-	-
8-19	Sturgeon	67	-	-	13	-	-
8-19	Sturgeon	64	-	-	14	-	-
8-19	Shad	68	-	3	5.2	-	-
8-19	Shad	43	-	3	3.2	-	-
9-16	Sucker	240	-	4	12	-	0.4
9-16	Sucker	57	-	4	14	-	0.4
9-16	Sucker	8	-	4	3.0	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Burbank (Continued)							
9-16	Sucker	150	-	3	13	-	0.2
9-16	Carp	28	-	3	47	-	-
9-16	Carp	30	-	3	28	-	-
9-16	Carp	31	-	2	30	-	-
9-16	Carp	18	-	4	12	-	-
9-16	Carp	58	-	3	52	-	-
9-16	Carp	72	-	3	18	0.2	-
9-16	Sturgeon	140	-	3	11	-	0.3
10-14	Sucker	71	-	3	12	-	0.2
10-14	Sucker	50	-	3	8.7	-	0.2
10-14	Sucker	98	-	3	17	-	0.2
10-14	Sucker	73	-	4	9.1	-	0.2
10-14	Sucker	230	0.2	3	21	-	0.5
10-14	Carp	10	-	2	11	-	-
10-14	Carp	16	-	2	22	-	-
10-14	Carp	24	-	3	19	-	0.10
10-14	Carp	53	-	3	29	-	-
10-14	Carp	42	-	3	51	-	0.10
11-12	Carp	30	-	4	31	-	0.10
11-12	Carp	65	-	3	62	-	-
11-12	Carp	23	-	4	56	-	0.10
11-12	Carp	45	-	3	30	-	-
11-12	Carp	86	0.2	5	21	0.2	0.2
11-12	Carp	79	-	3	30	-	0.2
11-12	Carp	110	0.2	3	33	-	0.2
11-12	Carp	57	-	4	26	-	[illegible]
11-12	Sucker	63	-	4	11	-	[illegible]
11-12	Sucker	67	-	3	16	-	0.3
11-12	Sucker	140	-	4	10	-	0.1
11-12	Sucker	81	-	4	15	-	0.6
11-12	Sucker	120	-	4	21	-	0.3
11-12	Sucker	110		4	21	-	0.3
12-7	Sucker	99	0.2	4	23	-	0.6
12-7	Sucker	33	-	3	10	-	0.2
12-7	Sucker	18	-	3	11	-	0.2
12-7	Sucker	41	-	4	14	-	0.5
21-7	Sucker	73	-	4	28	-	-
12-7	Sucker	79	-	4	32	-	0.2
12-7	Carp		-	3	100	-	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 10 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1965
Units of picocuries per gram

Date	Specie	P^{32}	Co^{60}	K^{40}	Zn^{65}	Co^{58}	Cs^{137}
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Burbank (Continued)							
12-7	Carp			4	25	-	-
McNary							
1-8	Carp	1		4	52		
1-20	Carp	18	-	2	38	0.2	0.3
1-20	Sturgeon	5	0.2	1	9.0	-	0.3
1-20	Sucker	34	-	3	17	-	0.6
1-20	Sucker	10	-	3	16	-	0.4
1-20	Sucker	8	-	3	15	0.2	0.3
1-20	Sucker	8	-	3	14	0.2	0.3
1-20	Sucker	12	-	3	12	0.2	0.3
2-19	Carp	3	-	3	12	-	0.1
2-19	Sturgeon	4	-	3	6.8	-	0.2
2-19	Squawfish	4		2	5.7	-	0.2
2-19	Squawfish	6		4	20	-	0.3
2-19	Squawfish	1		3	8.7	-	0.3
2-19	Squawfish	7	-	4	18	-	0.2
2-19	Chiselmouth						
3-18	Sturgeon	-					
3-18	Carp	-					
3-18	Sucker	13					
3-18	Sucker	4					
5-12	Sturgeon	7	0.2	3	6.1	-	0.3
5-12	Carp	< 5	0.2	2	18	-	-
6-17	Sturgeon	10	-	3	3.8	-	-
6-17	Sturgeon	< 3	-	2	4.5	-	0.2
6-17	Sturgeon	8	-	3	2.1	-	-
6-17	Sturgeon	25	-	-	5.7	-	-
6-17	Sturgeon	31	-	1	8.3	-	0.1
6-17	Sucker	18	-	3	8.6	-	0.4
6-17	Sucker	30	-	3	12	-	0.4
6-17	Sucker	66	-	3	12	-	0.3
6-17	Sucker	18	-	3	13	-	0.4
6-17	Sucker	91	-	3	14	-	0.3
6-17	Sucker	47	-	3	18	-	0.3

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 11

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOWL
SAMPLED IN THE HANFORD ENVIRONS - 1965
picocuries/gram

		Muscle				Head			
Date	Specie	P^{32}	Zn^{65}	K^{40}	Cs^{137}	P^{32}	Zn^{65}	K^{40}	Cs^{137}
Analytical Limit		1	0.2	1	0.1	1	0.2	1	0.1
Upper River *									
1-4	Mallard		5	2	-	64	23	3	
1-4	Mallard	19	5	4		93	15	3	
1-4	Mallard	27	8	5	-				
1-4	Mallard	7	3	4	-				
1-4	Mallard	6	11	5	0.4				
1-4	Mallard	39	18	4	-	39	18	4	
10-27	Canadian Honker	43	16	3	0.3	82	30	2	0.1
10-27	Lesser Goose	-	0.4	3	-	-	6	4	
10-27	Ruddy Duck	1	-	3	0.1	5	-	3	-
10-27	Coot	7	0.5	4	-	13	1	2	
11-19	Golden Eye	700	34	3	0.4	960	70	2	-
12-13	Mallard	9	-	2	-	46	2	4	-
12-13	Mallard	14	2	3	-	78	4	2	0.1
12-13	Mallard	24	6	3	-	35	10	4	0.1
12-13	Mallard	2	0.2	3	0.1	68	2	2	0.1
12-13	Mallard	140	9	3	-	160	17	-	-
12-13	Mallard	3	1	3	-	64	5	1	-
12-13	Mallard		3	3	-	37	7	2	0.1
12-13	Mallard	110	11	3	0.1	190	21	4	-
12-13	Mallard	18	1	4	0.1	68	3	2	-
12-13	Mallard					46	16	2	-
12-13	Canadian Honker	2	3	2		76	8	1	0.1

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.
* Area within the plant boundary from Vernita Bridge to Hanford.

APPENDIX C
TABLE 11 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOWL
SAMPLED IN THE HANFORD ENVIRONS - 1965
picocuries/gram

Date	Specie	Muscle P^{32}	Muscle Zn^{65}	Muscle K^{40}	Muscle Cs^{137}	Head P^{32}	Head Zn^{65}	Head K^{40}	Head Cs^{137}
Analytical Limit		1	0.2	1	0.1	1	0.2	1	0.1
Lower River *									
1-5	Mallard	-	9	2	-				
1-5	Mallard	120	30	2	0.1				
1-5	Mallard	17	11	3	-				
1-5	Mallard	1	0.2	1	-				
1-5	Mallard	7	2	2	-				
1-5	Mallard	17	12	2					
1-5	Mallard	8	5	2	0.1				
1-5	Mallard	-	0.3	4	-				
1-5	Mallard	34	13	2					
1-5	Mallard		2	1					
1-5	Mallard	1	0.2	1	-				
1-5	Coot	-	0.2	4	0.2				
10-8	Ruddy Duck	-	-	2	0.1	48	2	1	-
10-8	Ruddy Duck	-	-	3	0.2	78	1	1	0.3
10-8	Ruddy Duck	2	-	2	0.2	2	1	3	0.1
10-8	Ruddy Duck	3	-	2	0.2	1	1	4	0.2
10-8	Ruddy Duck	-	-	2	-	59	1	5	-
10-8	Mallard	-	0.5	3	0.1	-	2	3	-
10-8	Mallard	35	7	3	-	58	19	1	-
10-8	Coot	-	0.3	4	0.1	5	2	-	0.5
10-8	Coot	230	12	4	-	420	2	1	0.5

Results less than analytical limit are indicated by a (-).
A blank entry indicates no analysis made.
* Area within the plant boundary from Hanford to 300 Area.

APPENDIX C
TABLE 11 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOWL
SAMPLED IN THE HANFORD ENVIRONS - 1965
picocuries/gram

Date	Specie	Muscle P^{32}	Muscle Zn^{65}	Muscle K^{40}	Muscle Cs^{137}	Head P^{32}	Head Zn^{65}	Head K^{40}	Head Cs^{137}
Analytical Limit		1	0.2	1	0.1	1	0.2	1	0.1
Lower River * (Continued)									
10-8	Coot	20	0.6	1	0.3	14	3	1	0.4
10-18	Mallard	20	1	3	0.2	180	12	3	-
10-18	Mallard	110	3	4	-	110	8	3	0.4
10-18	Mallard	93	3	3	-	140	9	3	-
10-19	Mallard	67	4	3	-	68	14	4	-
10-25	Mallard	29	3	4	0.9	240	21	2	-
10-25	Mallard	260	10	4	-	220	14	1	-
10-25	Mallard	310	6	3	-	16	6	4	0.2
10-25	Merganser	480	48	4	0.1	470	68	3	-
10-25	Coot	950	22	4	0.2	670	38	3	-
10-25	Canadian Honker	29	2	3	0.1	8	5	2	0.1
10-25	Canadian Honker	1	2	3	0.2	35	7	2	-
11-1	Mallard	42	6	3	-	37	5	3	-
11-1	Mallard	160	6	3	-	33	14	4	-
11-1	Mallard	310	11	3	-	180	14	1	-
11-1	Mallard	15	2	3	-	300	25	3	-
11-1	Mallard	12	1	3	-	55	7	3	-
11-3	Mallard	120	6	4	-	160	14	-	-
11-3	Mallard	-	-	2	-	24	1	2	-
11-3	Mallard	1	0.4	3	0.1	52	2	2	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.
* Area within the plant boundary from Hanford to 300 Area.

APPENDIX C
TABLE 11 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOWL
SAMPLED IN THE HANFORD ENVIRONS - 1965
picocuries/gram

Date	Specie	Muscle P^{32}	Muscle Zn^{65}	Muscle K^{40}	Muscle Cs^{137}	Head P^{32}	Head Zn^{65}	Head K^{40}	Head Cs^{137}
Analytical Limit		1	0.2	1	0.1	1	0.2	1	0.1
Lower River * (Continued)									
11-3	Coot	42	0.4	2	-	88	3	4	-
11-3	Coot	22	1	4	-	100	5	7	-
11-3	Coot	86	0.4	3	-	110	5	7	
11-30	Mallard	24	2	3	-	50	7	3	0.1
11-30	Mallard	170	13	4	0.1	150	22	3	-
11-30	Mallard	35	4	4	0.1	45	9	2	-
11-30	Mallard	12	4	3	0.1	20	8	2	-
11-30	Mallard	24	3	3	-	23	6	2	-
11-30	Golden Eye	910	60	15	0.3	1,600	100	-	-
12-2	Mallard	9	0.5	3	-	38	17	4	-
12-2	Mallard	14	4	3	-	6	8	3	-
12-2	Mallard	18				23			
12-2	Mallard	10				26			
12-2	Canadian Honker	-	1	3	-	-	3	3	-
Ringold									
12-30	Mallard					23	16	4	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.
* Area within the plant boundary from Hanford to 300 Area.

APPENDIX C
TABLE 12

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOWL
SAMPLED WITHIN THE HANFORD PROJECT - 1965
picocuries/gram

		Muscle				Head			
Date	Specie	P^{32}	Zn^{65}	K^{40}	Cs^{137}	P^{32}	Zn^{65}	K^{40}	Cs^{137}
Analytical Limit		1	0.2	1	0.1	1	0.2	1	0.1
Redox Swamp									
2-9	Golden Eye	55	5	-	0.1				
2-9	Coot	4	-	-	200				
2-9	Coot	-	0.2	-	200				
2-9	Coot	-	-	-	200				
2-9	Ruddy Duck	-	0.5	-	120				
9-29	Ruddy Duck	-		5	0.1	1	-	4	-
9-29	Ruddy Duck	-		4	0.6	11		11	-
9-29	Ruddy Duck	2		5	0.5	26		6	-
9-29	Ruddy Duck	-		4	0.9	24		11	-
11-5	Bufflehead	8		14	29	16		14	14
11-5	Bufflehead	11		11	19	16		11	9
11-5	Bufflehead	6		8	78	63		9	27
U Swamp									
2-9	Coot	-	-	-	160				
2-9	Coot	7	3	-	140				
2-9	Coot			5	200				
2-9	Ruddy Duck	300	2	5	72				
11-2	Mallard	2		5	100	-		1	36
11-2	Mallard	26		9	110	15		3	85
11-2	Mallard	20	0.8	5	290	9	3	3	130

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX C
TABLE 12 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOWL
SAMPLED WITHIN THE HANFORD PROJECT - 1965
picocuries/gram

		Muscle				Head			
Date	Specie	P^{32}	Zn^{65}	K^{40}	Cs^{137}	P^{32}	Zn^{65}	K^{40}	Cs^{137}
Analytical Limit		1	0.2	1	0.1	1	0.2	1	0.1
B Swamp									
2-12	Coot	-	2						
Gable Swamp									
2-12	Mallard					1000	65	-	72
3-2	Golden Eye		12	4	3				
3-2	Golden Eye	4	2	6	8				
3-2	Coot		5	120	310				
3-2	Coot		3	29	66				
3-2	Coot	1	0.3	-	0.6				
11-5	Green Wing Teal	16	3	9	9	17	10	5	4

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX D

RADIONUCLIDES IN MARINE ORGANISMS

APPENDIX D
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN
OYSTERS FROM WILLAPA BAY, WASHINGTON - 1965
picocuries/gram

Date	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Co^{58}	Co^{60}
Analytical Limit	1.0	0.2	0.1	1.0	0.2	0.2
1-6	1.5	34	-	6.0		
1-27	1.7	110	0.65	8.0		
2-4	1.6	26	-	-		
2-18	1.6	30	-	-		
3-4		34		1.8		
3-18		36		2.5		
4-1	1.7	47	-	5.4		
4-12	2.3	42	0.11	2.3	-	
4-26	2.9	48	-	3.8		-
5-11	2.4	40	-	9.2	-	-
5-24	1.6	39	-	9.0	-	-
6-8	1.3	39	-	4.4	-	
6-28	2.0	42	-	6.5	-	-
7-7	1.9	41	-	6.2		-
7-19	1.8	33	-	3.5		
8-2	1.8	36	-	2.6	-	
8-17	2.7	46	-	5.2		
8-30	2.6	30	0.13	1.5		
9-14	2.4	35	-	-		
9-27	2.3	45	-	-	-	-
10-11	2.4	34	-	-		
10-25	-	11	-	2.8		
11-8	2.7	31	0.11	1.2		
11-24	2.0	35	-	1.3		
12-6	1.8	40	-	2.7	-	-
12-22	3.1	30	0.10	5.7		
	2.0	39	0.13	3.7		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX E

RADIONUCLIDES IN THE ATOMSPHERE

APPENDIX E
TABLE 1

CONCENTRATIONS OF I^{131} IN AIR
OF THE HANFORD ENVIRONS - 1965
picocuries per cubic meter

Date	200 West	Richland	Kennewick	Pasco	Wahluke	Mesa	Eltopia	Benton City
1-6	0.02	-		-				0.02
1-13		-		-				-
1-20	-	-		-				-
1-27	-	-		-				0.03
2-3	-			0.02				-
2-10	-	-		0.07				-
2-17	0.02	-		-				0.02
2-24	0.07	0.03	-	-				-
3-3	-	-	-	-	-	-	-	-
3-10	-	-	-	-	-	-	-	-
3-17	-	-	-	-	-	-	-	-
3-24	0.09	0.03	0.09	0.07	0.02	-	-	-
3-31	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
4-7	-	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.03
4-14	-	<0.04	<0.04	<0.04	<0.03	<0.04	<0.03	<0.03
4-21	0.07	<0.04	<0.11	<0.04	<0.03	<0.06	<0.05	<0.03
4-28	0.05	<0.04	<0.07	<0.06	<0.04	<0.08	<0.05	-
5-5	-	<0.03	<0.05	<0.04	-	-	<0.06	<0.05
5-12	0.06	-	-	<0.04	<0.03	<0.04	<0.05	<0.07
5-19	0.02	<0.03	<0.04	<0.07	<0.03	<0.05	<0.03	
5-26	0.04	0.03	<0.03	<0.03	-	<0.03	-	-
6-2	0.05	<0.03	<0.03	0.04	0.10	-	0.22	0.21
6-9	-	<0.03	<0.07	<0.04		-	<0.03	0.05
6-16	0.03	0.03	0.03	0.04	0.03	0.02	0.02	0.03
6-23	0.04	0.07	<0.05	<0.05	<0.03	-	<0.03	<0.03
6-30	<0.03	<0.05	-	<0.03		<0.03	<0.03	<0.03
7-7	<0.13	<0.04	<0.05	<0.04		<0.06	<0.05	<0.05
7-14	<0.10	<0.04	<0.04	<0.04	<0.03	<0.03	<0.05	<0.06
7-21	<0.03	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
7-28	0.02	0.03	0.03	0.03	-	-	-	-
8-4	-	-	0.02	-	0.03	-	0.02	-
8-11	0.09	0.02	-	-	0.02	-	-	-
8-18	0.05	0.02	0.02	-	-	-	-	0.26
8-25	-	-	-	-	-	-	-	-
9-1	-	-	0.02	-	-	-	-	-
9-8	0.02	-	0.02	-	0.02	0.03	0.08	-
9-15	0.02	-	0.02	-	-	0.02	0.02	-
9-22	0.03	-	0.05	-	-	0.02	0.02	
9-29	-	0.06	0.07	-	-	0.03	0.03	0.03
10-6	-	0.02	0.02	-	-	-	-	-
10-13	0.02	-	-	0.02	0.02	0.02	0.03	0.04

Results less than analytical limit of 0.02 are indicated by a (-).
No entry indicates no analysis made.

APPENDIX E
TABLE 1 (Continued)

CONCENTRATIONS OF I^{131} IN AIR
OF THE HANFORD ENVIRONS - 1965
picocuries per cubic meter

Date	200 West	Richland	Kennewick	Pasco	Wahluke	Mesa	Eltopia	Benton City
10-20	0.02	0.02	-	-	0.02	-	-	-
10-27	-	0.07	-	0.04	-	-	0.02	0.04
11-3	0.14	0.06	0.04	0.06	-	0.04	0.04	-
11-11	-	-	-	-	-	-	0.02	-
11-17	-	0.02	0.02	-	-	-	-	-
11-24	-	0.03	0.02	0.03	-		-	0.02
12-1	-	-	-	0.02	0.02	0.20	0.02	-
12-8	0.02	0.03	0.02	-	-		-	-
12-15	0.02	-	-	-	-		0.03	-
12-21	0.02	0.02	-	-	-			-
12-29	-	-	0.02	-	-	-		0.02

Results less than analytical limit of 0.02 are indicated by a (-).
No entry indicates no analysis made.

APPENDIX E
TABLE 2

CONCENTRATIONS OF RADIOACTIVE PARTICULATES
IN THE AIR OF THE PACIFIC NORTHWEST - 1965
picocuries/cubic meter

Week Ending Date	Project (200 W)	Tri-Cities*	Perimeter Communities									
			Spokane, Washington	Walla Walla, Washington	Yakima, Washington	Washtucna, Washington	Wenatchee, Washington	Sunnyside, Washington	Ellensburg, Washington	Moses Lake, Washington	McNary Dam, Oregon	Pendleton, Oregon
1-1	0.5	0.3	0.1	0.2	0.1	0.3	0.1	0.3	0.1	0.2	0.1	0.2
1-8	0.4	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.2
1-15	0.5	0.3	0.4	0.1	0.1	0.2	0.1	0.1	0.2	0.3	0.1	0.4
1-22	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
1-29	0.4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
2-5	0.5	0.1	0.1	0.2	0.1	0.2	0.1	0.3	0.3	0.3	0.2	0.1
2-12	0.3	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.3	0.3	0.2
2-19	0.3	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2
2-26	0.4	0.4	0.2	0.2	0.2	0.3	0.4	0.1	0.1	0.5	0.3	0.3
3-5	0.4	0.3	0.3	0.1	0.2	0.7	0.4	0.2	0.3	0.5	0.5	0.5
3-12	0.8	0.4	0.3	0.7	0.4	0.4	0.7	0.2	0.4	0.8	0.6	0.7
3-19	0.7	0.5	0.3	0.4	0.4	0.5	0.7	0.3	0.4	0.6	0.6	0.4
3-26	0.6	0.5	0.4	0.4	0.3	0.4	0.5	0.3	0.5	0.7	0.5	0.5
4-2	0.6	0.4	0.4	0.4	0.3		0.6	0.4	0.5	0.6	0.4	0.5
4-9	0.7	0.4	0.3	0.4		0.4	0.5	0.4	0.4	0.5	0.4	0.4
4-16	0.5	0.3	0.3	0.5		0.4	0.3	0.3	0.2	0.4	0.3	0.3
4-23	0.6	0.4	0.2	0.3		0.3	0.3	0.3	0.2	0.5	0.3	0.3
4-30	0.7	0.3	0.3	0.4	0.3	0.5	0.5	0.4	0.4	0.6	0.4	0.3
5-7	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.3
5-14	0.4	0.3	0.3	0.3	0.3	0.5	0.6	0.2	0.3	0.5	0.4	0.5
5-21	0.4	0.5	0.5	0.2		0.5	0.5	0.4	0.4	0.5	0.2	0.6
5-28	1.0	0.4	0.5	0.4	0.3	0.7	0.6	0.3	0.3	0.4	0.4	0.3
6-4	1.1	0.6	0.4	0.6	0.4	0.6	0.6	0.4	0.3	0.6	0.4	0.3
6-11	1.0	0.9	1.1	1.2	0.8	1.2	1.2	0.5	0.6	1.3	1.0	1.1
6-18	0.5	0.6		0.3		0.4	0.6	0.7	0.2	0.4	0.5	0.5
6-25	0.9	0.7	0.5	0.6		0.7	1.1	0.4	0.4	0.8	1.6	0.5
7-2	0.8	0.7	0.6	0.6	0.3	0.6	0.9	0.5	0.3	0.7	0.5	0.6
7-9	0.6	0.6		0.3	0.4	0.5	0.5	0.5	0.2	0.6	0.3	0.4
7-16	0.3	0.2	0.5	0.5		0.4	0.3	0.2	0.2	0.3	0.2	0.3
7-23	0.4	0.3	0.5	0.3		0.3	0.5	0.4	0.2	0.3	0.2	0.3
7-30	0.3	0.3	0.1	0.2	0.1	0.3	0.3	0.4	0.2	0.3	0.2	0.2
8-6	0.4	0.2	0.3	0.2	0.1	0.3	0.3	0.2	0.2	0.2		0.3
8-13	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8-20	0.3	0.2	0.2	0.2	0.1	0.3	0.3	0.2	0.2	0.2	0.2	0.3
8-27	0.2	0.1	0.1	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9-3	0.3	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
9-10	0.2	0.1	0.1	0.1		0.1	0.2	0.2	0.1	0.1	0.1	0.1
9-17	0.1	0.2	0.2	0.1		0.1	0.2	0.1	0.1	0.1	0.1	0.2
9-24	4.2	0.2	0.4	0.2	0.2	1.2	0.2	0.8	0.4	0.9	0.2	0.2
10-1	0.7	0.2	0.1	0.1				0.1	0.1	0.1	0.3	0.1
10-8	0.3	0.2	0.1	0.1		0.2		0.1	0.1	0.1	0.2	0 1
10-15	0.4	0.3	0.2	0.1		0.2		0.1	0.1	0.1	0.1	0.1
10-22	0.4	0.1	0.1	0.1		0.1	0.1	0.2		0.1	0.1	0.1
10-29	0.3	0.5	0.1	0.2	0.1		0.2	0.1	0.1		0.1	0.2
11-5	0.5	0.3	0.1	0.1		0.1	0.2	0.2	0.2	0.1	0.1	0.1
11-12	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
11-19	0.6	0.1		0.1			0.1	0.1	0.1	0.1	0.1	0.1
11-26	0.2	0.1		0.1		0.1	0.1	0.1		0.1	0.1	0.1
12-3	0.2	0.1	0.1	0.1	0.1		0.1	0.1	0.1	0.1	0.1	0.1
12-10	0.4	0.2	0.1	0.1		0.1	0.1	0.1	0.1	0.1	0.1	0.1
12-17	0.6	0.2	0.1	0.1		0.1	0.1	0.1	0.1	0.1	0.1	0.2
12-24	0.5	0.2		0.1		0.1	0.2	0.1		0.2	0.1	0.2
12-31	0.2	0.1	0.1	0.1	0.1		0.1	0.1	0.1	0.1	0.1	0.1

*Tri-Cities (Richland, Pasco and Kennewick, Washington)
No entry indicates no analysis made.

APPENDIX F

RADIONUCLIDES IN FARM PRODUCE AND COMMERCIAL FOODSTUFFS

APPENDIX F

TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965

picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Riverview Irrigation District						
1-27		1300	160	47		
2-2		-	-	-		
2-23	-	1100	-	48		
3-2	-	1200	-	95		
3-9	-	1000	-	49	-	
3-16	-	1300	-	40		
3-23	-	1400	-	83		
3-30	-	1300	-	85		
4-6	-	1300	-	73	-	
4-13	-	900	100	42		
4-20	-	1200	130	59		
4-27	-	1200	-	49		
5-4	-	1300	160	30		
5-11	-	1100	540	33		
5-17	3	1300	57-	-		
5-25	10	1300	620	30		
6-8	9	1000	540	-	463	
6-15	6	1200	560	33		
6-22	5	1200	560	45		
6-29	4					
7-6	5	1400	700	41		
7-13	7	1400	740	-		
7-20	4	1200	690	30		
7-27	5	1500	810	-		
8-3	4	1300	700	-		
8-10	3	1400	800	-		
8-17	4	1300	800	-		
9-24	-	1300	200	-		
8-31	4	1500	750	41	1010	
9-7	3	1400	780	31		
9-14	-	1200	780	-		
9-21	4	1200	800	-		
9-29	-	1300	810	-		
10-5	-	1400	610	-		
10-12	-	1400	350	-		
10-19	-	1800	310	-		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Riverview Irrigation District (Continued)						
10-26	-	1400	210	-		
10-28	-	1300	190	-		
11-2	-	1500	200	-		
11-9	-	1500	170	-	-	
11-16	-	1400	230	-		
11-23	-	1500	250	-		
11-30	-	1400	210	-		
12-7	-	1300	160	-	-	
12-14	3	1300	190	-		
12-21	-	1500	220	38		
12-28	-	1500	170	36		
Ringold						
3-23	6	1200	370	40		
3-30	-	1300	220	75		
4-6	-	1200	180	44		
4-13	-	1300	250	-		
4-20	-	1300	260	-		
4-27	-	800	310	-		
5-4	4	1400	380	-		
5-11	-	980	380	-		
5-18	3	1300	430	-		
5-25	6	1400	590	-		
6-8	13	1400	420	-	458	
6-15	5	1400	540	-		
6-22	9	1500	570	31		
6-29	13	1800	360	51		
7-6	5	1400	520	-		
7-13	-	1500	800	-		
7-20	-	1400	550	-		
7-27	5	1600	680	-		
8-3	3	1500	690	33		
8-10	3	1600	650	44	657	
8-17	3	1700	660	-		
8-24	-	1200	420	-		
8-31	12	1500	730	-		
9-7	8	1500	820	-	750	
9-14	6	1500	790	-		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Ringold (Continued)						
9-21	11	1300	830	-		
9-28	-	1500		-		
9-30	14	1500	810	-		
10-1	6		630	-		
10-2	4					
10-3	-					
10-4	-					
10-5	-	1200	560	-		
10-6	5	1100	610	31		
10-7	4					
10-8	7					
10-12	4	1400	770	30		
10-19	-	1600	760	-		
10-26	11	1400	740	-		
10-28	21	1300	770	-		
11-2	21	1400	620	32		
11-9	26	1200	790	43	645	
Pasco Farm No. 1						
4-13	-	1300	-	54		
4-20	-	1300	-	46		
4-27	-	1300	-	71	-	
5-4	-	1200	-	48		
5-11	-	1300	-	32		
5-17	-	1100	-	-		
5-18	-	1200	-	-		
5-19	-	1500	-	-		
5-20	-	1300	-	-		
5-21	6	1200	-	-		
5-24	8	1400	-	51		
5-25	8	1300	-	38		
5-26	9	1300	-	36		
5-27	7	1200	-	52		
5-28	7	1400	-	-		
6-2	11	1400	-	-		
6-3	11	1200	-	-		5.7
6-4	7	1300	-	-		
6-7	10	1200	-	34		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Pasco Farm No. 1 (Continued)						
6-8	7	1200	-	-	-	
6-9	5	1300	-	32		
6-10	3	1200	-	33		
6-11	4	1300	-	-		
6-14	6	1400	-	-		
6-15	5	1100	-	-		
6-16	6	1100	-	35		
6-17	8					
6-18	8					
6-21	8					
6-22	6	1100	-	-		
6-23	8					
6-24	6					
6-25	3					
6-28	4					
6-29	4					
6-30	5	1300	-	44		
7-1	4	1100	-	-		
7-2	3					
7-6	3	1200	-	34		
7-7	6	1300	-	45		
7-8	3	1100	-	52		
7-9	4	1200	-	-		
7-12	3	1400	-	33		
7-13	4	1100	-	-		
7-14	-	1600	-	47		
7-15	-	1300	-	-		
7-16	-	1400	-	35		
7-19	4	1400	-	-		
7-20	3	1200	-	-		
7-21	-	1100	-	-		
7-22	4	1200	-	-		
7-23	-	1400	-	-		
7-26	-	1300	-	35		
7-27	5	1300	-	38		
7-28	-	1100	-	-		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Pasco Farm No. 1 (Continued)						
7-29	-	1200	-	-		
7-30	-	1200	-	32		
8-3	-	1400	-	32		
8-10	3	1300	-	-		
8-17	-	1300	-	44		
8-31	-	1100	-	30		
9-7	4	1300	-	40		
9-14	4	900	-	-		
9-21	4	1100	-	43		
9-28	4	1500	-	65		
9-30	4	1200	-	42		
10-1	4	1400	-			
10-2	3					
10-3	6					
10-4	-					
10-5	-	1200	-	42		
10-6	4	1300	-	45		
10-7	3					
10-8	3					
10-12	-	1300	400	51		
10-19	-	1500	230	56		
10-26	8	1200	180	46		
10-29	11	1200	330	-		
11-2	17	1200	320	-		
11-9	6	1400	200	51	-	
11-16	8	1300	160	-		
11-23	4	1300		-		
11-30	-	1200	-	-		14.1
12-7	-	1200	110	43	-	
12-14	5					
12-21	9	460	100	-		
12-28	4	1300	160	42		
Pasco Farm No. 2						
6-18	3					
6-21	3					
6-22	4	1400	-	35		
6-23	4					
6-24	8					

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Pasco Farm No. 2 (Continued)						
6-25	6					
6-28	-					
6-29	23	1600	-	63		
6-30	4	1500	-	52		
7-1	-	1600	-	36		
7-2	3					
7-6	3	1500	-	37		
7-7	6	1500	-	49		
7-8	6	1300	-	-		
7-9	5	1400	-	34		
7-12	6	1400	-	-		
7-13	7	1400	-	31		
7-14	6	1500	-	34		
7-15	6	1500	-	33		
7-16	5	1400	-	31		
7-19	3	1300	-	32		
7-20	5	1500	-	-		
7-21	-	1500	-	-		
7-22	3	1300	-	-		
7-23	-	1400	-	-		
7-26	-	1300	-	-		
7-27	4	1500	-	-		
7-28	-	1300	-	-		
7-29	3	1500	-	-		
7-30	-	1300	-	-		
8-3	-	1500	-	39		
8-10	-	1400	-	-		
8-17	7	1500	-	32		
8-24	3	1300	-	-		
8-31	6	1400	-	37		
9-7	3	1300	-	37		
9-14	-	1300	-	-		
9-21	-	1300	-	-		
9-28	-	1600	-	32		
9-30	5	1400	-	-		
10-1	4	1700	-	48		
10-2	11					
10-3	3					

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Pasco Farm No. 2 (Continued)						
10-4	-					
10-5	-	1300	-	-		
10-6	-	1400	-	-		
10-7	-					
10-8	-					
10-12	3	1400	-	-		
10-20	-	1500	-	-		
10-26	-	1600	-	-		
10-28	-	1400	-	-		
11-2	3	1500	-	-		
11-9	3	1400	-	-		
11-16	4	1500	-	-		
11-23	-	1600	-	37		
11-30	-	1400	-	-		
12-7	-	1500	-	-		
12-14	-	1600	-	-		
12-21	5	1300	-	31		
12-28	-	1500	-	-		
Pasco Farm No. 3						
1-22	-	1200	-	94		
2-23	-	1100	-	-		
3-2	-	1100	-	-		
3-9	-	1100	-	-	-	
3-16	-	1200	-	-		
3-23	-	1300	-	-		
3-30	-	1300	-	74		
4-6	-	1100	-	64	-	
West Richland						
1-27		1200	-	68		
3-4						9.50
3-11	-	1100	-	36		
3-18	-	1100	-	40		
3-25	-	1300	-	80		
4-1	-	1300	-	66		
4-8	-	1600	-	-		3.97

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
West Richland (Continued)						
4-15	-	1600	-	31		
4-22	-	1400	-	51		
4-29	-	1400	-	36		
5-6	-	1500	-	31		
5-13	-	1400	-	-		
5-20	3	1100	-	-		
5-27	-	1700	-	44		
6-3	3	1400	-	42		
6-10	3	1600	-	35		
6-17	7	1300	-	35		
6-18	6					
6-21	5					
6-22	4	1400	-	53		
6-23	4					
6-24	-					
6-25	3					
6-29	19					
6-30	-					
7-1	7	1300	-	42		
7-2	6					
7-6	-	1600	-	44		
7-7	3	1600	-	54		
7-8	-	1500	-	-		
7-9	-	1500	-	31		
7-12	5	1500	-	-		
7-13	-	1500	-	-		
7-14	-	1500	-	33		
7-15	-	1400	-	37		
7-16	-	1500	-	-		
7-19	-	1400	-	36		
7-20	-	1600	-	40		
7-21	-	1400	-	31		
7-22	4	1300	-	-		
7-23	-	1400	-	34		
7-26	4	1400	-	30		
7-27	4	1500	-	-		
7-28	-	1500	-	-		
7-29	-	1400	-	-		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
West Richland (Continued)						
7-30	-	1500	-	41		
8-12	-	1500	-	-		
8-19	-	1500	-	-		
8-26	-	1400	-	39		
9-2	6	1400	-	-		
9-9	-	1400	-	33		
9-16	-	1300	-	33		
9-23	-	1400	-	35		
9-30	-	1500	-	-		
10-1	-	1500	-	-		
10-2	-					
10-3	-					
10-4	-	1400	-	-		
10-5	-					
10-6	-					
10-7	-	1500	-	33		
10-8	13					
10-14	-	1400	-	-		
10-21	-	1700	-	37		
10-28	9	1300	-	-		
11-4	4					
11-11	3	1500	-	-		
11-18	-	1300	-	33		
11-24	-	1500	-	33		
12-2	-	1300	-	-		
12-9	-	1400	-	-		
12-16	-					
12-22	-	1500	-	-		
12-30	-	1500	-	41		
Benton City						
1-27		1300	-	-		
2-24	-	1400	-	95		
3-4	-	1600	-	48		
3-11	-	1100	-	48		
3-18	-	1200	-	48		
3-25	-	1100	-	-		
4-1	-	1100	-	57		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Benton City (Continued)						
4-9	-	1500	-	40		
4-15	-	1300	-	-		
4-22	-	1300	-	-		
4-29	-	1400	-	45		
5-6	-	1500	-	-		
5-12	-	1400	-	-		
5-20	4	1200	-	-		
5-27	9	1300	-	33		
6-3	4	1400	-	-		
6-10	17	1200	-	-		
6-17	9	1300	-	56		
6-24	4	1400	-	54		
7-1	-	1400	-	-		
7-8	-	1200	-	35		
7-15	3	1500	-	-		
7-22	-	1600	-	36		
7-29	-	1200	-	-		
8-12	-	1400	-	-		
8-19	-		-			
8-26	-	1200	-	31		
9-2	-	1300	-	-		
9-9	3	1300	-	45		
9-16	-	1300	-	-		
9-23	-	1400	-	34		
9-30	-	1300	-	34		
10-1	-	1300	-	48		
10-2	4					
10-3	4					
10-4	-	1500	-	-		
10-5	3					
10-6	-					
10-7	3	1200	-	-		
10-8	9					
10-14	-	1300	-	47		
10-21	-	1600	-	39		
10-28	8	1300	-	-		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Benton City (Continued)						
11-4	6					
11-11	5	1500	-	-		
11-18	-	1300	-	-		
11-24	-	1400	-	-		
12-2	-	1300	-	-		
12-9	5	1300	-	32		
12-16	-	1500	-	40		
12-22	3	1700	-	50		
12-30	-	1500	-	43		
Eltopia						
1-27		1300	-	56		
3-2	-	1100	-	42		
3-10	-	1100	-	42		
3-16	-	1100	-	47		
3-24	-	1100	-	-		
3-30	-	1300	-	100		
4-7	-	1400	-	57		
4-13	3	1400	-	-		
4-20	-	1400	-	-		
4-27	-	1300	-	-		
5-5	-	1200	-	-		4.16
5-11	-	1300	-	-		
5-19	-	1400	-	-		
5-25	17	1400	-	-		
6-2	14	1300	-	38		
6-8	8	1400	-	-		
6-16	4	1200	-	33		
6-22	-	1400	-	46		
6-30	4	1300	-	43		
7-6	-	1600	-	46		
7-14	5	1400	-	34		
7-20	3	1300	-	-		
7-28	-	1400	-	37		
8-4	4	1400	-	30		
8-17	4	1300	-	-		
8-25	4	1200	-	-		

Results less than analytical limit are indicated by a (-).
No entry indiactes no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Eltopia (Continued)						
8-31	7	1300	-	-		
9-8	-	1300	-	32		
9-14	-	1100	-	-		
9-22	3	1200	-	-		
9-28	-	1200	-	-		
10-6	3	1500	-	-		
10-12	-	1500	-	-		
10-20	-	1500	-	-		
10-26	16	1500	-	-		
10-28	16	1300	-	-		
11-3	7	1600	-	-		-
11-9	8	1500	-	-		
11-17	4	1400	-	-		
11-23	-	1700	-	48		
12-1	-					
12-7	-	1500	-	-		
12-17	14	1400	-	-		
12-21	3	1700	-	-		
12-29	-	1500	-	39		
Milk Shed Samples						
Columbia Basin						
1-27		1500	-	66		
2-22	4	1100	-	-		
3-10	-	1100	-	32		
3-23	5	1300	-	40		
4-13	-	1100	-	49		5.04
4-28	-	1400	-	54		
5-10	-	1400	-	37		
5-26	4	1500	-	40		
6-10	-	1300	-	46		
6-25	-	1300	-	46		
7-14	5	1500	120	31		
7-28	-	1200	110	-		
8-11	-	1500	180	30		
8-26	-	1300	-	34		
9-9	-	1400	-	48		
9-23	-	1300	-	50		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Columbia Basin (Continued)						
10-13	-	1400	-	51		8.55
10-28	3	1400	-	-		
11-24						
12-11	3	1300	-	-		
12-16	-	1400	-	-		
Benton City - Prosser						
1-27		1400	240	-		
2-23	4	1100	-	95		
3-10	-	1400	-	41		
3-23	-	1300	-	97		
4-14	-	1000	-	66		
4-28	-	1100	-	58		
5-11	-	1000	-	47		
5-26	3	1300	-	32		
6-10	-	1200	-	46		6.02
6-25	-	1200	-	50		
7-15	-	600	-	-		
7-28	7	1400	-	-		
8-11	-	1100	-	34		
8-26	-	1100	-	-		
9-9	3	1400	-	-		
9-23	-	1400	-	-		
10-13	-	1500	-	34		
10-28	-	1300	-	-		
11-24						
12-1	-	1400	-	41		
12-16	-	1500	-	33		
Local Purchase - Commerical Milk						
Brand A						
1-27		1400	240			
3-3	8	1100	-	48		
3-16	-	1100	-	43		
4-7	-	1400	-	86		

Results less than analytical limit are indicated by a (-).
No entry indicates no anlysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Local Purchase - Commerical Milk						
Brand A (Continued)						
4-7		1100	-	-		
4-21	-	1200	-	53		
5-5	-	1200	-	42		4.14
5-19	-	1100	-	31		
6-1	5	1300	-	36		
6-16	3	1200	-	37		
7-9	-	1300	-	32		
7-21	-	1300	-	-		
8-4	-	1300	-	-		
8-18	-	1400	-	-		
9-14	-	1200	-	-		
10-7	-	1400	-	37		
10-20	-	1400	-	-		
11-3	3	1500	-	-		6.87
11-17	3	1400	-	43		
12-1	-	1100	-	-		
Brand F						
3-3	< 5	1600	-	40		5.20
3-16	-	1400	-	48		
4-7	-	1200	-	78		
4-21	-	1300	-	35		
5-5	-	1200	-	-		
5-19	-	1100	-	-		
6-1	-	1300	-	-		
6-16	-	1400	-	-		
7-9	-	1500	-	-		
7-21	-	1400	-	-		
8-4	-	1200	-	-		
8-18	-	1300	-	-		
9-14	-	1100	-	33		
10-7	-	1500	-	38		
10-20	-	1600	-	31		
11-3	-	1300	-	-		
11-17	-	1400	-	32		
12-1	-	1500	-	-		

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1965
picocuries/gram

Date	I^{131}	K^{40}	Zn^{65}	Cs^{137}	P^{32}	Sr^{90}
Analytical Limit	3	400	100	30	200	2
Local Purchase - Commerical Milk						
Brand H						
3-3	< 5	1800	-	120		
3-16	-	1100	-	95		
4-7	-	1300	-	170		
4-21	-	1300	-	79		
5-5	-	1400	-	110		
5-19	-	1100	-	79		
6-1	20	1200	-	140		
6-16	-	1300	-	110		
7-9	3	1300	-	81		32.2
7-21	-	1400	-	65		
8-4	-	1400	-	64		
8-18	-	1500	-	66		
9-14	-	1200	-	66		
10-7	-	1500	-	45		
10-20	-	1400	-	48		
11-3	-	1400	-	44		
11-17	-	1400	-	54		
12-1	-	1500	-	37		

Results less than analytical limit are indicated by a (-).
No entry indicates that no analysis made.

APPENDIX F
TABLE 2

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Riverview Irrigation District, Farm No. 1									
2-10		12		0.12	0.69	0.27	4	8.3	
2-23		12		-	1.1	0.27	8	10.	
3-2		9.9			0.18	-	2	3.7	
3-9		28		-	1.1	-	3	7.9	
3-16		29		-	0.80	-	2	6.0	
3-23		27		0.08	0.88	-	4	6.1	
3-30		32			0.70	-	5	2.4	
4-6		26	-	-	0.75	0.12	4	3.8	
4-13		24		-	0.83	-	-	1.9	
4-20		31	-	-	1.1	-	-	7.8	
4-27		29	-	-	0.86	-	-	7.8	
5-4		26	-	-	0.98	-	-	8.1	
5-11		25	-	-	1.2	-	1	7.4	
5-17		4.1	-	-	0.03	-	-	-	
5-25		6.2	0.71		0.67	0.53	19	1.0	
6-1		5.1	0.62	1.2	0.27	0.11	7	-	
6-8		6.3	1.2	2.3	0.11	0.18	7	-	
6-15		19	1.8	7.9	0.91	-	12	1.8	
6-22		9.0	0.22	1.3	0.33	-	2	-	
6-29		23	1.9	7.8	0.90	-	7	1.8	
7-6		19	0.13	0.84	0.26	0.54	6	3.7	
7-13		4.8	0.96	1.1	0.19	-	1	-	
7-20		26	2.1	8.6	0.83	-	6	1.7	
7-27		22	-	0.18	0.21	-	-	1.2	
8-3		5.6	3.0	-	0.07	-	2	-	
8-10		4.2	0.61	0.03	0.07	-	-	-	
8-17		20	2.8	0.44	0.23	-	-	2.7	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Riverview Irrigation District, Farm No. 1 (Continued)									
8-24		6.1	0.42	-	0.08	-	-	1.3	
8-31		5.0	1.2	0.10	-	1.3	-	-	
9-7	6.7	5.0	0.85	-	0.07	-	2	-	
9-14		9.0	-	0.55	0.16	-	-	1.9	
9-21		7.5	1.6	0.46	0.22	1.1	2	-	
9-28		26	0.50	0.05	0.16	-	2	-	
10-5		26	0.16	-	0.12	-	-	-	
10-12		18	-	-	0.12	-	2	3.8	
10-19		21	0.37	0.08	0.37	-	-	2.5	
10-26		19		-	0.15	-	-	0.6	
11-2		28	-	-	0.06	0.16	-	2.4	
11-9	-	21	-	0.03	0.12	-	-	-	
11-16		26	-	-	0.11	-	-	-	
11-23		23	-	-	0.15	-	-	-	
11-30		18	0.20	-	0.12	-	-	-	
12-7	1	21	-	-	0.12	-	-	-	
12-14		25		-	0.21	-	1	1.1	
12-21		19		0.43	0.41	-	2	1.2	
12-28		21	-	0.93	0.45	-	3	3.8	
Riverview Irrigation District, Farm No. 2									
3-2		18		-	0.15	-	1	3.2	
3-10		29		0.20	0.42	0.10	2	3.4	
3-16		30		0.08	0.54	0.15	3	3.8	
3-23		30		0.20	0.23	0.10	2	2.6	
3-30		30		0.21	0.59	0.17	4	4.5	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Riverview Irrigation District, Farm No. 2 (Continued)									
4-6		24	3.7	-	0.33	-	2	-	
4-13		28	3.1	0.05	0.20	-	-	-	
4-20		5.4	5.1	-	0.15	0.26	4	-	
4-27		6.2	2.2	-	-	-	-	-	
5-4		7.8	1.7	-	0.05	-	-	-	
5-11		7.2	3.2	-	-	-	3	-	
5-17		4.2	0.62	-	0.04	-	-	-	
5-25		6.7	1.6	0.96	0.11	-	1	-	
6-1		4.7	1.1	-	-	-	-	0.64	
6-8		6.3	1.2	2.3	0.11	0.18	7	-	
6-22		5.7	4.4	0.40	0.19	0.11	-	-	
7-14		6.7	2.8	0.32	0.08	0.14	1	-	
7-20		29	2.3	0.05	0.25	-	-	-	
7-27		5.6	0.45	-	-	0.23	-	1.9	
8-3		6.0	0.30	-	0.06	-	-	0.66	
8-10		6.3	1.2	0.22	0.21	-	-	-	
8-24		5.4	1.5	0.03	0.05	-	-	0.94	
8-31		4.9	0.21	0.03	0.11	-	1	-	
9-7		6.3	0.68	-	-	-	-	-	
9-14		7.3	1.4	-	0.05	-	1	1.2	
9-21		7.4	2.8	-	-	0.52	4	3.8	
9-28		6.4	3.5	-	-	0.30	14	-	
10-12		6.6	0.18	-	-	-	1	-	
10-19		7.1	1.4	0.06	-	0.17	3	-	
10-20		26	4.6	0.13	-	0.20	10	1.6	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Ringold									
1-8		0.7		-	0.09	-	-	-	
3-23		22		0.12	0.75	-	5	2.8	
3-30		32		0.05	0.57		4	2.1	
4-6	-	24	-	-	0.93	-	5	7.2	
4-13		25	-	-	0.98	-	-	9.6	
4-20		27	0.10	0.08	0.67	-	1	1.2	
4-27		20	0.46	-	0.82	-	-	-	
5-4		6.6	0.24	-	0.09	-	-	-	
5-11		21	-	-	1.3	-	3	12	
5-17		7.2	-	-	-	-	-	-	
5-25		7.3	0.64	4.3	0.28	0.30	11	-	
6-1		3.9		1.8	0.20	0.18	8	-	
6-8		5.0	-	0.04	-	-	-	1.0	
6-15		7.3	2.3		1.7	0.21	8	1.6	
6-22		6.8	0.49	0.98	0.25	-	2	-	
6-29		7.1	0.82	0.41	0.21	0.13	2	-	
7-6		6.1	0.27	0.23	0.11	0.15	1	2.2	
7-13		8.0	0.31	0.43	0.19	0.10	1	-	
7-20		4.9	0.77	0.05	-	-	1	-	
7-27		7.1	0.63	0.04	0.09	-	-	-	
8-3		8.6	0.65	0.04	0.18	-	1	1.5	
8-10		8.1	0.81	-	0.05	-	-	1.5	
8-17		7.8	0.28	0.04	0.05	-	1	1.5	
8-24		9.4	0.92	0.24	0.18	-	2	-	
8-31		9.9	1.2	0.18	0.23	-	2	-	
9-7	7.1	12	-	0.17	0.25	-	-	1.6	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Ringold (Continued)									
9-14		8.7	1.5	-	0.23	0.10	-	1.1	
9-21		11	0.64	0.14	0.21	0.10	1	-	
9-28		7.9	1.2	0.09	0.18	0.10	2	-	
9-30		10	0.26	0.04	0.17	0.10	2	1.4	
10-1		9.5	0.27	-	0.11	-	1	2.2	
10-2		11	1.1	0.18	0.13	0.10	2	0.62	
10-3		11	1.3	0.03	0.10	0.10	1	2.1	
10-4		8.3	2.6	0.07	0.12	-	1	-	
10-5		11	0.91	0.10	0.26	0.10	2	1.7	
10-6		10	1.8	0.54	0.19	0.10	4	-	
10-7	-								
10-8		9.6	0.59	0.05	0.17	-	1	-	
10-12		11	0.66	0.25	0.18	-	2	-	
10-19		12	0.35	-	0.12	0.26	1	2.5	
10-26		9.4	0.67	0.94	0.35	0.10	1	2.8	
11-2		11	0.83	0.32	0.30	0.23	2	1.3	
11-9	-	6.2	0.80	-	0.11	0.18	2	2.4	
Pasco Farm No. 1									
4-13		11		-	0.42	-	-	0.96	
4-20		5.4		-	0.20	-	-	-	
4-27		19		-	1.6	-	6	3.1	
5-4		22		-	1.4	2.7	6	2.7	
5-11		7.6		-	0.03	-	-	-	
5-18		5.5		-	-	-	-	0.63	
5-19		3.8		-	0.03	-	-	-	
5-20		5.7		1.0	0.14	-	1	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Pasco Farm No. 1 (Continued)									
5-21		7.7		0.92	0.06	-	-	-	
5-24		5.7		1.5	0.27	-	1	-	
5-25		5.8		0.62	0.15	-	1	-	
5-26		5.1		2.8	0.26	0.18	1	-	
5-27		15		1.7	0.39	-	1	0.80	
5-28		6.6		2.3	0.14	-	2	-	
6-1		5.2		1.1	0.11	-	1	-	
6-2		6.3		1.0	0.09	0.16	2	-	0.044
6-7	-	4.4		0.11	-	-	-	0.81	
6-8		5.5		1.1	-	-	3	-	
6-9		16		0.33	0.26	-	1	-	
6-10		22		0.06	0.48	-	-	0.73	
6-11		5.8		0.38	0.10	-	1		
6-14		22		-	0.67	-	4	2.8	
6-15		5.1		3.3	0.09	-	1	-	
6-16		5.7		1.4	1.3	3.5	2	2.5	
6-17		5.5		0.62	0.23	0.12	1	-	
6-18		5.3		0.87	0.28	-	2	0.70	
6-21		5.1		2.4	0.28	-	3		
6-22		5.5		0.54	0.20	-	-	0.60	
6-23		5.3		0.54	0.14	-	1	-	
6-24		5.4		0.58	0.13	-	-	-	
6-25		5.5		2.0	0.13	-	3	-	
6-28		6.0		0.48	0.13	0.11	-	-	
6-29		5.5		0.72	0.13	0.36	3	-	
6-30		4.8		0.71	0.11	-	1	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Pasco Farm No. 1 (Continued)									
7-1		6.7		1.3	0.11	-	-	-	
7-2		5.4		0.71	0.14	-	-	-	
7-6		6.0		0.70	0.17	0.26	2	0.74	
7-7		4.7		0.23	0.08	-	-	-	
7-8		7.2		0.37	0.16	1.2	3	1.7	
7-9		5.9		0.35	0.20	0.40	3	-	
7-12		5.8		0.74	0.13	0.53	4	0.87	
7-13		5.2		0.39	0.07	-	1	0.63	
7-14		4.8		0.12	0.03	-	-	1.0	
7-15		6.4		0.19	0.08	0.22	-	1.4	
7-16		4.9		0.31	0.07	-	-	-	
7-19		6.2		0.29	0.14	-	-	-	
7-20		5.2		0.22	0.12	-	-	-	
7-21		5.6		0.13	0.13	-	-	0.60	
7-22		5.5		0.45	0.19	0.18	-	0.66	
7-23		5.9		0.22	0.17	-	-	-	
7-26		6.2		0.12	0.04	-	-	-	
7-27		6.9		0.08	0.13	-	-	-	
7-28		5.7		0.14	0.10	-	-	0.77	
7-29		5.8		0.03	0.05	-	-	-	
7-30		4.7		0.10	0.06	-	-	-	
8-3		7.0		0.07	0.12	-	-	-	
8-10		6.2		-	0.07	-	-	-	
8-17		7.1		-	-	-	1	-	
8-24		6.3		-	0.14	-	-	-	
8-31		8.4		0.05	0.18	-	1	-	
9-7	6.9	7.3		0.04	0.12	0.12	2	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Pasco Farm No. 1 (Continued)									
9-14		7.4		0.06	0.18	-	2	-	
9-21		6.7	-	-	0.09	0.50	4	4.8	
9-28		5.4		-	0.13	-	-	-	
9-30		5.6		0.03	0.09	-	1	-	
10-1		3.4		0.04	0.10	-	1	-	
10-2		6.6		1.0	0.07	-	-	-	
10-3		5.3		0.03	0.11	-	1	-	
10-4		5.6		0.05	0.12	0.10	-	-	
10-5		5.8		0.05	0.11	-	-	-	
10-6		6.7		0.16	0.13	-	2	0.67	
10-7		5.7		-	0.13	-	2	-	
10-8		5.0		0.04	0.17	-	2	-	
10-12		6.2		0.06	0.10	-	1	-	
10-19		7.5		1.0	0.15	-	-	-	-
10-26		9.0		0.09	0.28	0.49	3	0.60	
10-29		5.9		-	0.24	0.12	-	-	
11-2		26	5.0	0.41	0.37	-	-	-	
11-9	-	4.4		-	0.06	0.10	1	-	
11-16		31	0.41	0.82	0.55	-	1	-	
11-23		25	0.15	0.33	0.35	-	-	-	
11-30		28	-	0.35	0.34	-	-	-	0.252
12-7	1	22	0.34	0.40	0.45	-	-	-	
12-14		29		0.57	0.48	-	-	1.4	
12-21		31	-	0.17	0.24	0.10	-	7.7	
12-28		19	-	0.12	0.23	0.18	3	4.6	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES OF PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Pasco Farm No. 2									
6-8		22		6.0	0.58	-	1	-	
6-21		77		61	0.44	-	19	0.81	
6-22		23		8.9	0.82	-	4	0.70	
6-23		24		6.0	0.56	-	2		
6-24		21		6.7	0.37	-	5		
6-25		20		-	0.77	-	1		
6-28		25		13	0.50	-	-	1.2	
6-29		25		12	0.58	-	-	0.82	
6-30		22		4.8	0.48	-	-	-	
7-1		22		6.1	0.41	-	3	-	
7-2		25		16	0.25	-	2	1.2	
7-6		25		1.5	0.44	0.31	-	1.2	
7-7		22		1.5	0.41	-	1	-	
7-8		26		1.3	0.44	-	-	-	
7-9		24		1.2	0.42	0.45	6	-	
7-12		25		3.8	0.44	-	3	-	
7-13		24		0.40	0.28	-	-	-	
7-14		25		0.70	0.43	-	-	0.67	
7-15		25		0.60	0.31	-	-	-	
7-16		26		0.80	0.37	0.10	-	0.88	
7-19		27		1.2	0.37	-	-	0.63	
7-20		26		0.73	0.37	-	-	-	
7-21		22		0.77	0.38	-	-	-	
7-22		23		0.88	0.40	-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Pasco Farm No. 2 (Continued)									
7-23		29		1.1	0.36	0.41	-	0.99	
7-26		24		0.83	0.54	-	-	0.60	
7-27		27		0.63	0.31	0.40	2	1.6	
7-28		27		1.1	0.49	-	-	0.65	
7-29		23		1.2	0.41	-	-	-	
7-30		25		1.6	0.48	-	-	0.89	
8-3		24		1.1	0.38	-	-	-	
8-10		24		1.5	0.21	-	-	-	
8-17		25		0.96	0.26	-	-	-	
8-24		23		-	0.18	-	-	-	
8-31		25		0.05	0.30	-	-	-	
9-7		28		0.69	0.16	-	-	1.2	
9-14		25		-	0.09	-	1	-	
9-21		24		-	0.11	-		-	
9-28		25		2.0	0.04	-	2	-	
9-30		6.4		-	0.04	-	-	-	
10-1		4.7		-	0.04	-	-	-	
10-2		23		-	0.11	-	4	-	
10-3		23		-	0.16	-	-	-	
10-4		26		0.09	0.23	-	-	-	
10-5		25		0.15	0.24	-	1	0.60	
10-6		24		0.04	0.21	-	-	-	
10-7		20		0.07	0.14	0.10	5	-	
10-8		5.0		0.03	0.03	-	-	-	
10-12		20		0.03	0.27	-	3	-	
10-20		22		-	0.11	0.10	-	2.2	
10-26		19		0.04	0.24	-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Pasco Farm No. 2 (Continued)									
11-2		23		-	0.16	-	-	-	
11-9		12		-	0.09	0.10	-	-	
11-16		18		-	0.23	-	-	-	
11-23		14		0.07	0.17	-	-	-	
11-30		14		0.03	0.39	-	-	-	
12-7		15		-	0.13	-	-	-	
12-14		22		-	0.19	-	-	0.84	
12-21		13		-	0.11	-	-	-	
12-28		12		-	0.10	-	-	0.68	
Pasco Farm No. 3									
1-8		0.60		0.03	-	-	-	-	
3-2		20			0.61	-	5	5.6	
3-9		24		-	0.68	-	2	3.8	
3-16		24		-	0.27	-	-	15.0	
3-23		20		-	0.65	0.21	5	8.9	
3-30		25			0.53	-	4	2.1	
4-6	-	26		-	0.43	-	4	-	
8-19		8.1		0.08	0.19	-	-	-	
8-24		6.7	3.3	0.20	0.25	-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Eltopia									
3-2		21		-	1.1	-	9	7.4	
3-10		20		-	1.7	-	7	14	
3-16		23		-	0.43	-	-	20	
3-24		24		-	1.6	-	7	5.7	
3-30		32		0.08	1.0	-	4	3.5	
4-7		25		-	0.99	-	5	2.9	
4-13		25		-	0.92	-	1	2.6	
4-20		22		-	1.4	-	2	2.9	
4-27		24		-	0.81	-	1	1.4	
5-5		25		-	0.28	-	-	0.86	0.037
5-11		25		-	0.28	-	-	-	
5-19		18		-	0.12	-	-	-	
5-25		16		1.6	0.34	0.12	2	-	
6-2		23		13	1.1	0.25	37	-	
6-8		7.7		0.19	0.04	-	-	-	
6-16		26		3.2	0.74	-		-	
6-22		17		2.3	0.35	0.12	1	-	
6-30		24		0.88	0.18	-	-	-	
7-6		23		8.8	0.79	-	6	1.5	
7-14		26		0.57	0.25	-	-	-	
7-20		22		0.60	0.29	0.22	-	0.68	
7-28		22		0.37	0.49	-	1	0.95	
8-4		15		0.17	0.28	-	1	-	
8-17		27		0.04	0.09	-	-	-	
8-25		9.1		0.08	0.14	-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Eltopia (Continued)									
8-31		24		0.04	0.08	-	-	-	
9-8		15		-	0.21	-	1	-	
9-14		22		0.08	0.23	-	-	-	
9-22		21		-	0.13	-	-	-	
9-28		22		-	0.10	-	-	-	
10-6		22		-	0.23	-	4	0.60	
10-12		22		0.28	0.46	0.19	2	0.60	
10-20		19		0.11	0.29	-	1	-	
10-26		20		0.31	0.28	-	-	-	
11-3		24		0.23	0.23	-	-	-	0.239
11-9		23		0.12	0.20	0.17	-	-	
11-17		18		0.39	0.39	-	-	0.60	
11-23		9.3		0.16	0.26	-	1	-	
12-1		13		0.30	0.41	-	3	0.68	
12-7		10		0.47	0.24	-	1	-	
12-17		15		0.15	0.35	-	1	-	
12-21		23		1.6	0.59	-	1	-	
12-29		27		1.3	0.63	-	1	-	
West Richland									
3-4		16		0.10	0.34	-	-	2.7	
3-11		27		0.04	0.36	-	2	2.9	
3-18		26		-	0.36		3	-	
3-25		23		-	0.29	-	1	0.9	

Results less than analytical limit are indicated by a (-).
No entry indiactes no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
West Richland (Continued)									
4-1		20		-	0.49	-	-	-	
4-9		22		-	0.70	-	-	1.3	0.387
4-15		10		-	0.50	-	-	2.2	
4-22		34		-	1.0	-	1	2.3	
4-29		6.9		-	0.09	-	-	-	
5-6		19		-	0.24	-	-	0.80	
5-13		21		-	0.45	-	-	0.91	
5-20		11		4.8	0.53	0.24	15	0.63	
5-27		6.7		1.1	0.19	0.10	4	-	
6-10		16		-	0.78	-	-	1.3	
6-17		6.0		1.8	0.28	-	1	-	
6-18		11		1.9	0.33	-		-	
6-21		65		12	1.2	-	1	1.3	
6-22		7.1		1.1	0.30	-	2	-	
6-23		19		5.2	0.58	-	4	1.1	
6-24		16		1.1	0.36	-	-	-	
6-25		19		3.0	0.32	-	-	-	
6-28		22		7.4	0.35	-	1	-	
6-29		22		15	0.52	-	2	0.69	
6-30		16		3.9	0.09	-	-	-	
7-1		6.0		0.50	0.19	-	-	-	
7-2		23		4.5	0.31	0.97	5	1.1	
7-6		6.3		0.82	0.21	-	1	-	
7-7		24		2.3	0.21	-	-	-	
7-8		26		0.78	0.19	-	-	-	
7-9		8.5		2.7	0.52	-	3	1.2	

Results less than analytical limit indiacted by a (-).
No entry indiactes no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
West Richland (Continued)									
7-12		6.2		0.17	0.12	0.31	3	0.64	
7-13		23		1.6	0.22	0.14	2	-	
7-14		22		0.70	0.31	-	-	-	
7-15		5.3		0.08	0.09	-	-	-	
7-16		5.4		0.27	0.15	-	1	0.62	
7-19		8.2		0.18	0.17	0.20	-	0.76	
7-20		5.2		0.11	0.13	-	-	-	
7-21		4.8		0.07	0.09	-	-	-	
7-22		5.2		0.41	0.13	0.20	-	0.61	
7-23		8.0		0.96	0.38	0.10	5	1.3	
7-26		5.1		0.05	0.10	-	-	-	
7-27		5.6		0.09	0.17	0.21	3	0.66	
7-28		6.0		0.21	0.19	0.53	3	0.89	
7-29		8.6		0.20	0.17	-	1	-	
7-30		4.9		0.05	0.11	0.15	1	-	
8-2		6.8		0.25	0.15	-	-	-	
8-19		9.1		-	0.10	-	-	-	
8-26		5.2		0.06	0.24	-	-	-	
9-2		4.0		0.19	0.42	-	4	-	
9-9		5.1	-	-	0.09	-	-	1.4	
9-16	2.9	5.0		0.03	0.11	-	2	1.0	
9-23		6.0		-	0.12	0.10	1	0.79	
9-30		6.5		0.13	0.14	-	-	1.0	
10-1		6.3		0.15	0.16	-	4	0.67	
10-2		8.0		0.05	0.06	-	-	-	
10-3		6.8		0.17	0.11	-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
West Richland (Continued)									
10-4		9.2	-	0.08	0.20	-	1	1.1	
10-5		7.4	-	-	0.23	-	4	0.74	
10-6		8.4		0.06	0.19	-	1	-	
10-7		8.8	-	0.04	0.21	-	2	-	0.105
10-8		5.4	-	0.13	0.22	-	3	-	
10-14		7.1		0.03	0.12	0.31	2	0.84	
10-21		5.3	0.11	0.05	0.21	-	2	-	
10-28		17	-	0.96	0.19	-	-	-	
11-4		17		1.6	0.44	-	1	-	
11-11		12		0.17	0.14	-	-	-	
11-18		13		-	0.16	-	-	-	
11-24		10		0.11	0.14	-	1	-	
12-2		17		-	0.21	0.27	3	0.91	
12-9		14		-	0.16	-	-	-	
12-16		23		0.03	0.23	0.19	2	1.0	
12-22		16		0.07	0.16	-	-	0.80	
12-30		23		0.55	0.42	-	2	0.80	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F

TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965

picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Benton City									
3-4		28			0.17	-	2	4.0	-
3-11		20		-	0.60	-	3	6.2	
3-18		25			0.74	-	4	5.6	
3-25		23		-	0.77	-	4	6.6	
4-1		24		-	0.62	-	-	1.3	
4-9		21		-	0.58	-	1	0.93	
4-15		21		0.03	0.40	-	-	-	
4-22		26		-	0.55	-	-	-	
4-29		6.7		-	0.07	-	-	-	
5-6		25		-	0.47	-	-	-	
5-13		56		-	0.81	-	-	1.8	
5-20		18		1.6	0.25	0.14	4	-	
5-27		7.7		1.1	0.19	-	4	-	
6-10		28		3.4	0.33	-	6	-	
6-17		4.8		0.32	0.21	-	-	-	
6-24		7.6		0.50	0.19	-	1	-	
7-1		7.1		0.22	0.11	-	1	-	
7-8		7.9		0.04	0.09	0.30	1	-	
7-15		9.2		0.05	0.04	-	-	-	
7-22		6.9		0.27	0.14	-	-	-	
7-29		8.9		0.06	0.10	-	-	-	
8-12		8.5		0.16	0.09	-	-	-	
8-19		7.4		0.12	0.21	-	1	-	
8-26		6.3		-	0.08	-	-	-	
9-2		7.5		-	0.11	-	1	-	0.039
9-9		7.7		0.14	0.14	-	1	-	
9-16		9.2		-	0.09	-	1	-	
9-23		10		0.06	0.15	-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASTURE GRASS - 1965
picocuries/gram

Date	P^{32}	K^{40}	Zn^{65}	$Zr\text{-}Nb^{95}$	Cs^{137}	I^{131}	$Ce\text{-}Pr^{144}$	Ru^{106}	Sr^{90}
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.1	1	0.6	0.002
Benton City (Continued)									
9-30		8.3		0.04	0.10	-	-	-	
10-1		12		-	0.13	-	-	-	
10-2		6.9		0.04	0.23	-	-	-	
10-3		10		-	0.19	-	3	-	
10-4		14		0.04	0.20	0.16	4	0.70	
10-5		12		-	0.20	-	2	-	
10-6		26		0.34	0.30	-	6	0.70	
10-7		12		-	0.20	-	1	-	
10-8		8.2		-	0.10	-	-	-	
10-14		6.1		-	0.09	-	-	-	
10-21		5.6	-	-	-	0.11	-	0.90	
10-28		27		2.0	0.50	-	-	-	
11-4		37		0.23	0.27	0.51	5	1.3	
11-11		19		1.0	0.26	-	-	-	
11-18		19		2.8	0.29	-	-	-	
11-24		4.9		0.27	0.10	-	-	-	
12-2		23		0.51	0.37	-	1	0.60	
12-9		22		0.10	0.43	-	-	-	
12-16		19		1.2	0.45	-	4	1.1	
12-22		16		1.3	0.32	-	-	0.80	
12-30		21		0.84	0.27	-	-	-	

Results less than analytical limits are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 3

CONCENTRATIONS OF RADIONUCLIDES IN MEATS
PURCHASED FROM LOCAL MARKETS - 1965
picocuries/gram

Date	Produce	P^{32}	K^{40}	Zn^{65}	I^{131}	Cs^{137}	Sr^{90}
Analytical Limit		1.0	0.4	0.1	0.1	0.03	0.002
3-16	Pork Chops		2.8	< 0.17		0.16	0.003
3-16	Pork Chops		2.9	< 0.16		0.12	0.003
3-16	Pork Chops		2.3	< 0.17		0.21	0.002
3-16	Pork Chops		2.3	< 0.16		0.21	-
4-13	Calf Liver		2.4	-		0.08	-
4-13	Calf Liver		2.4	-		0.04	
4-13	Calf Liver						
4-13	Calf Liver		2.5	-		0.12	0.007
6-16	Ground Round		2.7	-	-	0.36	-
6-16	Ground Round		2.9	-	-	1.8	-
6-16	Ground Round		2.0	-	-	0.15	0.011
6-16	Ground Round		2.6	-	-	0.20	0.014
6-16	Chicken	< 1.2	2.6	-		0.14	0.010
7-13	Lamb Chops		2.5	-	-	0.11	0.007
7-13	Lamb Chops		2.4	-	-	0.22	0.003
7-13	Lamb Chops		2.5	0.1	0.1	0.34	0.009
7-13	Lamb Chops		2.6	0.1	0.1	0.21	0.006
8-17	Chicken		1.8	0.1	-	0.05	0.011
8-17	Chicken		1.9	-	-	0.04	
12-2	Turkey		1.1	-	-	0.03	0.002
12-2	Turkey		2.4	0.1	0.1	0.05	0.002
12-20	Ground Round		2.2	-	-	-	0.010
12-20	Ground Round		2.7		0.1	0.06	0.002
12-20	Ground Round		3.5		0.02	0.06	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 4

CONCENTRATIONS OF RADIONUCLIDES IN LOCALLY GROWN FARM PRODUCE - 1965
picocuries/gram

Date	Produce	P^{32}	K^{40}	Zn^{65}	Zr^{95} Nb^{95}	I^{131}	Cs^{137}	Ce^{144} Pr^{144}	Sr^{90}
Analytical Limit		1.0	0.4	0.1	0.03	0.1	0.03	1.0	0.002
4-20	Asparagus		2.4	0.1			-		
4-20	Asparagus		6.0				0.18		
6-16	Eggs	-	1.0	-		-	0.03		0.009
6-16	Eggs	4.7	1.0	1.2			-		0.076
7-8	Carrots		3.0		-	0.1	-	-	0.007
7-8	Leaf Lettuce		4.2		0.06	-	0.04		0.027
7-8	String Beans		2.6	-	-	0.1	-	-	0.017
7-8	Raspberries		2.1		-	0	-	-	0.008
7-8	Raspberries		2.5	-	-	0.1	-	-	0.005
7-8	Apples		1.4		-	0.1	-	1.0	0.002
7-8	Potatoes		3.9	0.1	-	0.1	0.03	1.0	0.011
7-12	Carrots		4.4		-	-	-	-	
7-12	Cabbage		2.4		-	-	-	-	
7-12	Lettuce		4.7		0.05	-	-	-	
7-12	Raspberries		1.9		-	-	-	-	
7-12	Apples		1.1		-	-	-	-	
7-22	New Potatoes		3.5		-	-	-	-	
7-22	Carrots		3.5		-	-	-	1.0	
7-22	Red Lettuce		4.8		0.03	-	0.05	-	
7-22	Green Lettuce		3.9		0.03	-	0.06	1.0	0.033
7-22	Cabbage		3.0		-	-	-	1.0	
7-22	Green Peppers		2.2		-	-	-	-	
7-22	Hot Peppers		4.2		-	-	-	3.4	
7-22	Cucumbers		1.7		-	-	-	-	
7-22	Parsnips		5.4		-	-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 4 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN LOCALLY GROWN FARM PRODUCE - 1965
picocuries/gram

Date	Produce	P^{32}	K^{40}	Zn^{65}	Zr^{95} Nb^{95}	I^{131}	Cs^{137}	Ce^{144} Pr^{144}	Sr^{90}
Analytical Limit		1.0	0.4	0.1	0.03	0.1	0.03	1.0	0.002
7-22	Okra		2.3		-	-	0.03	-	
7-22	Dill		5.6		-	-	0.06	1.2	
7-22	Romaine Lettuce		3.8		-	-	-	-	
7-22	Green Beans		2.0		-	-	-	-	
7-22	Wax Beans		2.6		-	-	-	-	
7-22	Zucchini		2.4		-	-	-	-	
7-22	Rhubarb		4.1		-	0.1	-	1.0	
7-22	Red Potatoes		3.8		-	0.1	-	-	
7-22	Strawberries		2.1		-	-	-	-	0.013
7-22	Beets		3.2		-	-	-	-	
7-22	String Beans		2.3		-	-	-	-	0.015
7-27	Corn	-	3.0	-	-	-	-	-	0.005
7-27	Potatoes	-	3.9	-	-	-	-	-	0.003
7-27	Cucumbers	-	1.8	-	-	-	-	-	
7-27	Tomatoes	-	2.1	0.11	-	-	-	-	0.005
7-27	Squash	-	2.1	-	-	-	-	-	
7-27	Cantaloupe	-	1.7	-	-	-	-	-	
7-27	Green Beans	-	1.8	-	-	-	-	-	
7-27	Green Beans	-	4.7		-	-	-	-	
7-27	Green Apples	-	1.1		-	-	-	-	
9-28	Cabbage		2.1			-	-	-	
9-28	Carrots		3.6			-	-	-	
9-28	Potatoes		3.7			-	-	1.7	
9-28	Radishes		2.5		-	-	-	1.3	
9-28	Lettuce		1.5			-	-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 4 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN LOCALLY GROWN FARM PRODUCE - 1965
picocuries/gram

Date	Produce	P^{32}	K^{40}	Zn^{65}	Zr^{95} Nb^{95}	I^{131}	Cs^{137}	Ce^{144} Pr^{144}	Sr^{90}
Analytical Limit		1.0	0.4	0.1	0.03	0.1	0.03	1.0	0.002
9-28	Romaine		3.5		-	-	0.03	-	
9-28	Peppers		2.6		-	-	-	1.0	
9-28	Onions		1.7		-	-	-	-	
9-28	Apples		1.4			-	-		
9-28	Corn		2.4		-	-	-	-	
10-13	Wheat		3.5		-	-	0.05	1.3	0.017
10-13	Wheat		3.4		-	-	0.04	-	< 0.015
10-13	Tomatoes		2.1			-	-	-	-
10-13	Potatoes		3.8			-	-	1.6	-

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX F
TABLE 5

CONCENTRATIONS OF RADIONUCLIDES IN FOOD PURCHASED FROM LOCAL STORES - 1965
picocuries/gram

Date	Produce	K^{40}	Zn^{65}	Cs^{137}	I^{131}	Sr^{90}
Analytical Limit		0.4	0.1	0.03	0.1	0.002
3-16	Eggs	< 1.0	< 0.17	< 0.09		0.004
3-16	Eggs	< 1.0	< 0.17	< 0.09		-
5-18	Halibut	4.4	-	0.09		0.004
5-18	Halibut	3.9	-	0.09		-
5-18	Halibut	3.5	-	-		0.002
7-13	Eggs	1.3	-	-	-	-
7-13	Eggs	1.3	-	-	-	-
9-28	Cabbage	2.1		-	-	
9-28	Carrots	2.9		-	-	
9-28	Potatoes	3.8		0.03	-	
9-28	Radishes	2.9		-	-	
9-28	Lettuce	1.4		-	0.10	
9-28	Romaine	2.9		-	0.18	
9-28	Peppers	2.0		-	-	
9-28	Onions	1.4		-	-	
9-28	Apples	1.2		-	-	
9-28	Corn	2.2		-	-	
9-28	Cabbage	2.0		-	-	
9-28	Carrots	3.2		-	0.10	
9-28	Potatoes	3.7		-	-	
9-28	Radishes	2.2		-	-	
9-28	Lettuce	1.7		-	-	
9-28	Romaine	3.3		-		
9-28	Peppers	2.1		-	-	
9-28	Onions	0.98		-	-	
9-28	Apples	1.2		-	-	
9-28	Corn	2.5		-	-	

Results less than analytical limit are indicated by a (-).
No entry indicates no analysis made.

APPENDIX G

I^{131} IN CATTLE THYROIDS

APPENDIX G
TABLE 1

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Pasco, Washington			
1-4	34	< 5	Pasco
1-5	27	< 5	Pasco
1-7	52	< 2	Pasco
1-12	34	< 4	Mesa
1-13	53	< 2	Pasco
1-14	23	< 4	Burbank
1-18	45	3	Mesa
1-21	58	3	Pasco
1-21	28	< 3	Eltopia
1-25	27	< 7	Mesa
1-27	43	< 4	Eltopia
1-28	36	< 4	Mesa
2-3	33	< 3	Kahlotus
2-3	35	< 3	Eltopia
2-5	37	< 3	Mesa
2-8	17	< 7	Pasco
2-9	39	< 3	Mesa
2-11	13	< 9	Kennewick
2-15	53	< 2	Pasco
2-16	18	< 6	Kennewick
2-17	27	< 4	Eltopia
2-23	37	< 3	Eltopia
2-25	24	< 4	Pasco
2-25	16	< 7	Pasco
3-2	20	< 6	Eltopia
3-4	70	< 1	Pasco
3-5	47	< 2	Walla Walla
3-17	24	< 4	Pasco
3-17	22	< 4	Kennewick
3-22	38	< 3	Pasco
3-25	43	< 2	Mesa
3-25	48	73	Walla Walla
3-30	25	2	Mesa
3-31	31	4	Pasco
4-1	19	< 3	Pasco
4-5	20	6	Pasco
4-8	14	< 6	Kennewick
4-8	16	< 6	Eltopia

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thryoid Wt (g)	I^{131} Concentration	Grazing Area
Pasco, Washington (Continued)			
4-12	11	< 8	Mesa
4-13	17	27	Pasco
4-13	8	<10	Pasco
4-19	28	< 3	Moses Lake
4-20	11	< 6	Pasco
4-21	33	< 2	Walla Walla
4-26	22	< 3	Eltopia
4-26	19	11	Kahlotus
4-29	20	3	Eltopia
5-3	12	23	Pasco
5-4	24	< 4	Kennewick
5-4	14	< 7	Finley
5-10	40	2	Pasco
5-12	16	< 4	Walla Walla
5-13	26	< 2	Burbank
5-17	29	< 3	Milton-Freewater, Oregon
5-18	24	< 3	Pasco
5-20	17	9	Pasco
5-21	17	14	Walla Walla
5-24	22	13	Walla Walla
5-24	15	62	Pasco
6-1	20	8	Pasco
6-1	15	19	Pasco
6-3	18	110	Lexington, Oregon
6-7	37	150	Walla Walla
6-8	31	< 2	Pasco
6-9	20	< 3	Hermiston, Oregon
6-14	32	66	Hermiston, Oregon
6-15	20	< 1	Pasco
6-17	18	8	Pasco
6-21	15	57	Pasco
6-21	35	52	Hermiston, Oregon
6-24	19	< 1	Grandview
6-28	11	41	Connell
6-28	19	4	Kennewick
6-29	39	< 1	Pasco
7-6	9	7	Eltopia
7-6	14	< 1	Pasco

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Pasco, Washington (Continued)			
7-6	9	68	Pasco
7-12	21	< 1	Pasco
7-12	15	2	Pasco
7-12	13	27	Kahlotus
7-20	32	17	Pasco
7-22	20	< 1	Warden
7-22	20	2	Benton City
7-23	16	8	Walla Walla
7-26	22	5	Pasco
7-29	40	< 1	Warden
7-30	15	4	Walla Walla
8-2	16	14	Moses Lake
8-3	21	18	Pasco
8-5	30	5	Lexington, Oregon
8-10	23	3	Prosser
8-11	25	2	Othello
8-23	15	4	Walla Walla
8-24	17	< 1	Prosser
8-27	25	4	Prosser
8-30	14	1	Pasco
9-1	16	1	Warden
9-2	16	3	Kennewick
9-6	17	2	Pasco
9-9	26	3	Pasco
9-9	22	8	Hermiston, Oregon
9-13	21	25	Pasco
9-14	18	1	Prosser
9-15	12	13	Kennewick
9-20	20	12	Prosser
9-22	21	< 1	Walla Walla
9-27	24	8	Hermiston, Oregon
9-27	41	12	Walla Walla
9-29	40	2	Pasco
10-5	20	4	Pasco
10-5	18	3	Kennewick
10-6	17	5	Walla Walla
10-10	31	11	Walla Walla
10-12	19	36	Pasco

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Pasco, Washington (Continued)			
10-13	36	< 1	Warden
10-18	19	1	Pasco
10-19	30	22	Mesa
10-20	19	2	Connell
10-26	14	1	Pasco
10-27	25	< 1	Walla Walla
10-28	19	1	Kennewick
11-1	18	< 1	Mesa
11-2	24	2	Moses Lake
11-4	17	2	Mesa
11-8	25	3	Pasco
11-9	28	1	Hermiston, Oregon
11-10	31	6	Prosser
11-12	19	1	Walla Walla
11-14	22	< 1	Moses Lake
11-17	24	< 1	Kennewick
11-22	27	42	Kennewick
11-23	23	1	Mesa
11-24	16	1	Pasco
11-29	35	1	Burbank
11-30	18	< 1	Pasco
11-31	19	3	Pasco
12-2	26	< 1	Walla Walla
12-4	26	3	Warden
12-6	19	2	Prosser
12-8	30	1	Basin City
12-9	34	5	Prosser
12-10	22	< 1	Burbank
12-20	33	< 1	Moses Lake
12-21	22	2	Pasco
12-22	28	2	Pasco
12-27	23	< 1	Pasco
12-30	20	< 1	Prosser
12-30	53	6	Kennewick

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Moses Lake, Washington			
1-9	34	< 4	Wilson Creek
1-9	21	< 6	Warden
1-9	24	< 6	Moses Lake
1-9	46	< 3	Moses Lake
1-9	41	< 3	Moses Lake
1-21	52	< 3	Moses Lake
1-21	41	< 3	Moses Lake
1-21	71	< 2	Othello
1-21	19	< 7	Odessa
1-21	53	< 3	Othello
2-4	37	< 3	Warden
2-4	62	< 2	Warden
2-4	27	< 4	Warden
2-4	10	<10	Warden
2-4	27	< 4	Ellensburg
2-18	26	< 4	Moses Lake
2-18	29	< 3	Warden
2-18	27	< 4	Warden
2-18	28	< 3	Othello
2-18	34	< 3	Othello
3-4	98	< 1	Othello
3-4	35	< 3	Moses Lake
3-4	28	< 4	Odessa
3-4	44	< 3	Othello
3-4	44	< 3	Othello
3-20	39	< 3	Lind
3-20	23	< 4	Warden
3-20	29	< 4	Warden
3-20	39	< 3	Wilson Creek
3-20	38	< 3	Hooper
4-3	72	< 1	Moses Lake
4-3	47	< 1	Moses Lake
4-3	50	< 1	Moses Lake
4-3	55	< 1	Moses Lake
4-3	60	< 1	Warden
4-17	31	< 3	Washtucna
4-17	43	< 2	Moses Lake
4-17	36	< 2	Moses Lake

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Moses Lake, Washington (Continued)			
4-17	42	< 2	Moses Lake
4-17	49	< 1	Moses Lake
5-1	33	11	Benton City
5-1	50	< 1	Warden
5-1	43	18	Moses Lake
5-1	40	3	Stratford
5-1	45	< 1	Warden
5-15	41	26	Othello
5-15	30	7	Moses Lake
5-15	45	< 2	Moses Lake
5-15	25	< 4	Moses Lake
5-15	89	< 1	Moses Lake
5-29	41	9	Odessa
5-29	21	5	Connell
5-29	42	17	Ephrata
5-29	57	< 2	Quincy
5-29	33	140	Grand Coulee
6-12	45	67	Ephrata
6-12	34	3	Warden
6-12	38	4	Othello
6-12	28	45	Wilson Creek
6-12	48	< 1	Cunningham
6-26	47	< 1	Moses Lake
6-26	46	< 1	Moses Lake
6-26	43	2	Moses Lake
6-26	38	30	Ritzville
6-26	30	34	Mortline
7-7	49	29	Ritzville
7-7	38	23	Ritzville
7-7	31	6	Moses Lake
7-7	34	28	Moses Lake
7-7	43	6	Othello
7-24	40	7	Moses Lake
7-24	52	7	Moses Lake
7-24	47	5	Moses Lake
7-24	15	10	Moses Lake
7-24	51	< 1	Connell
8-7	40	< 1	Warden
8-7	26	10	Warden

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Moses Lake, Washington (Continued)			
8-7	29	14	Warden
8-7	35	4	Moses Lake
8-7	43	6	Wilson Creek
8-20	47	2	Marlin
8-20	30	3	Marlin
8-20	36	3	Marlin
8-21	36	2	Moses Lake
8-21	66	4	Moses Lake
9-3	24	< 1	Othello
9-3	27	< 1	Othello
9-3	16	4	Othello
9-3	57	< 1	Moses Lake
9-3	47	1	Moses Lake
9-17	33	5	Ritzville
9-17	63	3	Sprague
9-17	38	< 1	Sprague
9-17	43	1	Odessa
9-17	37	1	Moses Lake
10-2	36	< 1	Warden
10-2	70	< 1	Cashmere
10-2	27	< 1	Coulee City
10-2	58	1	Marlin
10-2	28	1	Marlin
10-16	56	< 1	Hartline
10-16	38	< 1	Ellensburg
10-16	63	< 1	Othello
10-16	65	< 1	Moses Lake
10-16	38	< 1	Washtucna
10-30	51	< 1	Ritzville
10-30	34	< 1	Hartline
10-30	27	< 1	Quincy
10-30	27	1	Moses Lake
10-30	36	1	Connell
11-13	38	< 1	Odessa
11-13	54	< 1	Wenatchee
11-13	52	2	Moses Lake
11-13	40	1	Moses Lake
11-13	29	< 1	Warden

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Moses Lake, Washington (Continued)			
11-27	48	< 1	Ritzville
11-27	22	< 1	Ritzville
11-27	56	< 1	Odessa
11-27	53	3	Prescott
12-11	45	< 1	Moses Lake
12-11	41	1	Ellensburg
12-11	39	< 1	Ellensburg
12-11	40	< 1	Ellensburg
12-11	39	1	Othello
12-30	49	< 1	Warden
12-30	38	< 1	Warden
12-30	37	< 1	Warden
12-30	39	< 1	Warden
12-30	34	< 1	Quincy
Walla Walla, Washington			
1-7	35	< 4	Walla Walla County
1-7	24	< 5	Walla Walla County
1-7	24	< 5	Walla Walla County
1-7	37	< 3	Walla Walla County
1-7	36	< 3	Walla Walla County
1-21	31	< 4	Walla Walla County
1-21	30	4	Walla Walla County
1-21	35	< 3	Walla Walla County
1-21	31	< 3	Walla Walla County
1-21	29		Walla Walla County
2-11	49	< 3	Walla Walla County
2-11	48	< 3	Walla Walla County
2-11	22	< 6	Walla Walla County
2-11	27	< 5	Walla Walla County
2-11	39	< 3	Walla Walla County
2-25	40	< 3	Walla Walla County
2-25	31	< 4	Walla Walla County
2-25	45	< 2	Walla Walla County
2-25	30	< 4	Walla Walla County
2-25	18	< 6	Walla Walla County
3-12	47	< 2	Lowden
3-12	58	< 2	Lowden

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Walla Walla, Washington (Continued)			
3-14	24	< 4	Milton-Freewater, Oregon
3-14	49	< 2	Milton-Freewater, Oregon
3-14	31	< 3	Milton-Freewater, Oregon
3-24	32	< 3	Walla Walla
3-24	39	< 2	Walla Walla
3-24	33	< 3	Walla Walla
3-24	30	< 3	Walla Walla
3-24	27	< 3	Walla Walla
4-1	28	< 2	Walla Walla
4-1	28	< 2	Walla Walla
4-1	28	< 2	Walla Walla
4-1	45	< 1	Walla Walla
4-1	32	< 2	Walla Walla
4-23	43	< 2	Umapine
4-23	31	< 2	Blue Mountains, Oregon
4-23	37	3	Blue Mountains, Oregon
4-23	29	< 2	Blue Mountains, Oregon
4-23	25	5	Blue Mountains, Oregon
5-11	38	< 1	Milton-Freewater, Oregon
5-11	43	< 1	Milton-Freewater, Oregon
5-11	38	5	Milton-Freewater, Oregon
5-11	31	5	College Place
5-11	35	3	College Place
6-10	39	65	Walla Walla
6-10	33	96	Walla Walla
6-10	28	22	Walla Walla
6-10	35	40	Walla Walla
6-10	45	27	Walla Walla
6-22	28	6	Lowden
6-22	39	28	Walla Walla
6-22	34	36	Walla Walla
6-22	24	16	Walla Walla
6-22	39	24	Walla Walla
7-1	37	32	Prescott
7-1	39	11	Walla Walla
7-1	38	22	Walla Walla
7-1	45	68	Walla Walla
7-1	49	39	Walla Walla

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Walla Walla, Washington (Continued)			
7-23	38	< 1	Lewiston, Idaho
7-23	33	16	Walla Walla
7-23	29	2	College Place
7-23	33	8	Prescott
7-23	44	11	Prescott
8-5	37	4	Walla Walla
8-5	74	3	Lowden
8-5	24	2	Walla Walla
8-5	22	2	Walla Walla
8-5	38	< 1	Lowden
8-13	21	3	Walla Walla
8-13	25	2	Walla Walla
8-13	22	3	Walla Walla
8-13	29	1	Walla Walla
8-13	32	4	Walla Walla
9-17	54	4	Lowden
9-17	29	2	Walla Walla
9-17	41	2	Walla Walla
9-17	32	2	Walla Walla
9-17	29	2	Walla Walla
9-24	36	< 1	Walla Walla
9-24	35	1	Walla Walla
9-24	31	4	Walla Walla
9-24	48	< 1	Walla Walla
9-24	27	6	Walla Walla
10-8	48	< 1	Waitsburg
10-8	29	< 1	Walla Walla
10-8	36	2	Walla Walla
10-8	31	3	Walla Walla
10-8	28	1	Walla Walla
10-28	39	< 1	College Place
10-28	21	12	College Place
10-28	40	6	Starbuck
10-28	30	< 1	Starbuck
10-28	24	< 1	Milton-Freewater, Oregon
11-22	15	< 1	Ritzville
11-22	26	< 1	Walla Walla
11-22	36	< 1	Walla Walla

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Walla Walla, Washington (Continued)			
11-22	18	< 1	Walla Walla
11-22	61	1	Walla Walla
11-30	34	1	Walla Walla
11-30	33	1	Walla Walla
11-30	27	1	Walla Walla
11-30	60	< 1	Walla Walla
11-30	43	< 2	Lowden
12-17	31	17	Lowden
12-17	26	3	Walla Walla
12-17	30	< 1	Walla Walla
12-17	42	10	Walla Walla
12-17	36	3	Blue Mountains, Oregon
Wenatchee, Washington			
1-12	42	< 3	Leavenworth
1-12	50	< 2	Wenatchee
1-12	35	< 3	Mesa
1-12	32	< 3	Mesa
1-12	55	< 2	Quincy
1-26	26	< 4	Douglas County
1-26	34	< 3	Chelan County
1-26	33	< 3	Chelan County
1-26	63	< 2	Chelan County
1-26	50	< 2	Chelan County
2-9	67	< 2	Grant County
2-9	33	< 3	Douglas County
2-9	73	< 1	Chelan County
2-9	34	< 3	Chelan County
2-9	53	< 2	Douglas County
3-10	39	< 2	Douglas County
3-10	47	< 2	Douglas County
3-10	59	< 1	Douglas County
3-10	47	< 2	Chelan County
3-10	43	< 2	Chelan County
4-13	45	< 2	Chelan County
4-13	46	< 2	Grant County
4-13	39	< 2	Chelan County
4-13	29	< 2	Grant County
4-13	71	< 1	Chelan County

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Wenatchee, Washington (Continued)			
4-28	53	< 1	Chelan County
4-28	25	< 3	
4-28	42	< 2	Othello
4-28	32	< 2	Othello
4-28	24	< 3	Othello
5-10	56	< 1	Grant County
5-10	79	< 1	Grant County
5-10	59	< 1	Grant County
5-10	46	< 1	Grant County
5-10	41	< 1	Chelan County
6-2	52	15	Chelan County
6-2	46	24	Chelan County
6-2	27	< 2	Chelan County
6-2	42	4	Chelan County
6-2	27	8	Grant County
6-15	44	1	Grant County
6-15	50	1	Franklin County
6-15	47	4	Franklin County
6-15	50	< 1	Franklin County
6-15	47	18	Franklin County
7-20	59	3	Chelan County
7-20	47	24	Douglas County
7-20	29	1	Douglas County
7-20	29	< 1	Douglas County
7-20	37	< 1	Douglas County
7-26	62	4	Chelan County
7-26	48	4	Chelan County
7-26	56	2	Chelan County
7-26	66	3	Chelan County
7-26	82	7	Douglas County
8-18	40	1	Chelan County
8-18	51	2	Chelan County
8-18	39	1	Douglas County
8-18	29	2	Douglas County
8-18	60	2	Douglas County
8-30	73	< 1	Chelan County
8-30	47	< 1	Chelan County
8-30	65	< 1	Chelan County

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Wenatchee, Washington (Continued)			
8-30	30	1	Chelan County
8-30	30	< 1	Chelan County
9-22	43	< 1	Chelan County
9-22	45	< 1	Chelan County
9-22	39	< 1	Chelan County
9-22	43	2	Chelan County
9-22	34	2	Chelan County
9-28	49	< 1	Chelan County
9-28	40	< 1	Chelan County
9-28	76	< 1	Chelan County
9-28	51	< 1	Chelan County
9-28	27	< 1	Grant County
10-12	47	< 1	Douglas County
10-12	40	< 1	Grant County
10-12	45	< 1	Grant County
10-12	37	< 1	Grant County
10-12	34	< 1	Grant County
10-26	40	< 1	Chelan County
10-26	58	< 1	Grant County
10-26	33	< 1	Kittitas County
10-26	32	< 1	Kittitas County
10-26	33	< 1	Grant County
11-9	25	< 1	Chelan County
11-9	40	< 1	Grant County
11-9	51	< 1	Grant County
11-9	45	< 1	Grant County
11-9	49	1	Whitman County
11-22	28	2	Chelan County
11-22	25	< 1	Chelan County
11-22	22	< 1	Chelan County
11-22	40	< 1	Chelan County
11-22	40	< 1	Chelan County
12-8	39	4	Douglas County
12-8	53	2	Douglas County
12-8	31	4	Douglas County
12-8	34	6	Douglas County
12-8	39	1	Douglas County

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Yakima, Washington			
1-6	115	< 1	Wiley City
1-6	31	< 3	Selah
1-6	35	< 4	Selah
1-6	31	< 4	Selah
1-6	39	< 3	Moxee
1-19	77	< 1	Moxee
1-19	55	2	Satus
1-6	44	2	Wiley City
1-19	53	2	Wahkiakus
1-19	45	3	Selah
2-9	38	< 3	Selah
2-9	37	< 3	Zillah
2-9	41	< 3	Selah
2-9	12	< 9	Cowiche
2-9	56	< 2	Wiley City
2-17	30	< 4	Sunnyside
2-17	31	< 3	White Swan
2-17	38	< 3	Selah
2-17	56	< 2	Selah
2-18	35	< 3	Selah
3-11	55	< 2	Yakima
3-11	39	< 3	Selah Valley
3-11	54	< 2	Selah Valley
3-11	31	< 3	Sunnyside
3-11	39	< 3	Sunnyside
3-24	45	< 2	Yakima
3-24	44	< 2	Wenas Valley
3-24	63	< 1	Wenas Valley
3-24	43	< 2	Moxee
3-24	30	< 3	Wenas Valley
4-12	33	< 2	Sunnyside
4-12	37	< 2	Sunnyside
4-12	42	< 1	Outlook
4-13	76	< 1	Wiley City
4-13	61	< 1	Selah
4-21	39	< 2	Yakima
4-21	23	< 3	Yakima
4-21	33	< 2	Yakima

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Yakima, Washington (Continued)			
4-22	33	< 2	Yakima
4-22	47	< 1	Yakima
5-11	33	< 2	Sunnyside
5-11	50	< 1	Sunnyside
5-11	46	< 1	Gleed
5-11	46	< 1	Moxee
5-11	52	2	Selah
5-19	42	< 2	Selah
5-19	56	2	Cowiche
5-19	27	3	Cowiche
5-19	27	< 3	Harwood
5-19	42	< 2	Sunnyside
6-8	22	< 2	Gromore
6-8	29	31	Ahtanum
6-8	47	17	Selah
6-8	37	< 1	Gromore
6-8	35	3	Gromore
6-17	38	9	Yakima
6-17	62	13	Cowiche
6-17	19	< 1	Sunnyside
6-17	44	6	Sunnyside
6-17	51	23	Selah
7-8	38	7	Harrah
7-9	40	1	Wapato
7-9	58	< 1	Wapato
7-9	51	12	Yakima
7-9	59	6	White Swan
7-16	35	< 1	Yakima
7-16	43	< 1	Yakima
7-16	28	3	Toppenish
7-23	37	6	Wapato
7-30	105	3	Toppenish
7-30	43	2	Toppenish
7-30	40	< 1	Moxee
7-30	53	1	Toppenish

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Yakima, Washington (Continued)			
8-6	33	1	Wapato
8-13	39	1	Ahtanum
8-13	40	< 1	Ahtanum
8-13	92	< 1	Toppenish
8-13	38	5	Wapato
8-13	61	< 1	Satus Creek
9-3	33	< 1	Toppenish
9-3	46	< 1	Wapato
9-3	56	< 1	White Swan
9-3	29	< 1	Granger
9-3	48	< 1	Selah
9-17	34	< 1	Wapato
9-17	61	< 1	Zillah
9-17	66	< 1	White Swan
9-17	41	< 1	Yakima
9-17	38	< 1	Yakima
10-1	69	< 1	Wapato
10-1	27	< 1	Brownstown
10-1	37	2	Yakima
10-1	33	< 1	Yakima
10-1	29	< 1	Yakima
10-13	47	< 1	Wapato
10-15	33	< 1	Wapato
10-15	40	< 1	Wapato
10-15	43	< 1	Selah
10-15	38	< 1	Yakima
10-28	76	< 1	Yakima
10-29	41	< 1	Yakima
10-29	43	< 1	Toppenish
10-29	58	< 1	Toppenish
10-29	52	< 1	Wapato
11-12	43	< 1	Wapato
11-12	57	1	Wiley City
11-12	68	1	Wiley City
11-12	49	< 1	Wiley City
11-12	29	2	Toppenish
11-26	61	1	Grandview
11-26	83	< 1	Moxee

APPENDIX G
TABLE 1 (Continued)

I^{131} IN BEEF THYROIDS FROM
CATTLE SLAUGHTERED AT SEVERAL LOCATIONS - 1965
picocuries per gram

Date Sampled	Thyroid Wt (g)	I^{131} Concentration	Grazing Area
Yakima, Washington (Continued)			
11-26	47	< 1	Moxee
11-26	36	< 1	Moxee
11-26	36	< 1	Granger
12-10	41	< 1	Toppenish
12-10	41	< 1	Toppenish
12-10	47	< 1	Buena
12-10	50	< 1	Yakima
12-10	43	< 1	Wapato
12-24	32	< 1	Yakima
12-24	28	1	Yakima
12-24	42	< 1	Toppenish
12-24	52	< 1	Satus
12-24	26	< 1	Satus

APPENDIX H

MEASUREMENTS OF EXTERNAL RADIATION EXPOSURE

APPENDIX H
TABLE 1

IONIZATION CHAMBER MEASUREMENTS
FOR THE HANFORD RESERVATION AND RICHLAND - 1965

Measurement Period	Exposure Rate, mR/day		Measurement Period	Exposure Rate, mR/day	
	Hanford	Richland		Hanford	Richland
12/31/64-1/4/65	0.31	0.32	4/12-4/14	0.25	0.24
1/4-1/6	0.31	0.34	4/14-4/16	0.32	0.29
1/6-1/8	0.28	0.30	4/16-4/19	0.32	0.34
1/8-1/11	0.30	0.39	4/19-4/21	0.33	0.26
1/11-1/15	0.28	0.35	4/21-4/23	0.28	0.28
1/15-1/18	0.33	0.40	4/23-4/26	0.35	0.27
1/18-1/20	0.30	0.35	4/26-4/28	0.31	0.24
1/20-1/22	0.35	0.36	4/28-4/30	0.35	0.33
1/22-1/25	0.31	0.34	4/30-5/3	0.35	0.35
1/25-1/27	0.28	0.34	5/3-5/5	0.37	0.31
1/27-1/29	0.38	0.36	5/5-5/7	Lost	0.24
1/29-2/1	0.36	0.34	5/7-5/10	0.35	0.30
2/1-2/3	0.40	0.37	5/10-5/12	0.25	0.29
2/3-2/5	0.42	0.37	5/12-5/14	0.31	0.26
2/5-2/8	0.37	0.45	5/14-5/17	0.28	0.29
2/8-2/10	0.35	0.36	5/17-5/19	0.36	0.25
2/10-2/12	0.37	0.34	5/19-5/21	0.28	0.31
2/12-2/15	0.36	0.32	5/21-5/24	0.33	0.28
2/15-2/17	0.29	0.28	5/24-5/26	0.24	0.30
2/17-2/19	0.39	0.34	5/26-5/28	0.33	0.26
2/19-2/23	0.29	0.33	5/28-6/1	0.28	0.31
2/23-2/24	0.28	0.26	6/1-6/2	0.22	0.14
2/24-2/26	0.36	0.33	6/2-6/4	0.23	0.25
2/26-3/1	0.34	0.37	6/4-6/7	0.34	0.27
3/1-3/3	0.31	0.29	6/7-6/9	0.31	0.24
3/3-3/5	0.37	0.33	6/9-6/11	0.31	0.25
3/5-3/8	0.37	0.37	6/11-6/15	0.31	0.30
3/8-3/10	0.37	0.35	6/15-6/18	0.37	0.26
3/10-3/12	0.38	0.42	6/18-6/22	0.33	0.35
3/12-3/15	0.41	0.36	6/22-6/25	Lost	0.23
3/15-3/17	0.26	0.23	6/25-6/28	0.30	0.30
3/17-3/19	0.35	0.28	6/28-6/30	Lost	0.25
3/19-3/22	0.31	0.28	6/30-7/6	0.29	0.29
3/22-3/24	0.32	0.27	7/6-7/9	0.29	0.28
3/24-3/26	0.30	0.26	7/9-7/12	0.32	0.28
3/26-3/29	0.35	0.28	7/12-7/14	0.33	0.25
3/29-3/31	0.29	0.26	7/14-7/16	0.31	0.26
3/31-4/2	0.35	0.34	7/16-7/19	0.27	0.28
4/2-4/5	0.33	0.27	7/19-7/21	0.31	0.24
4/5-4/7	0.30	0.27	7/21-7/23	0.30	0.25
4/7-4/9	0.27	0.27	7/23-7/26	0.31	0.22
4/9/4/12	0.35	0.30	7/26-7/28	0.23	0.24

APPENDIX H
TABLE 1 (Continued)

IONIZATION CHAMBER MEASUREMENTS
FOR THE HANFORD RESERVATION AND RICHLAND - 1965

Measurement Period	Exposure Rate, mR/day Hanford	Exposure Rate, mR/day Richland	Measurement Period	Exposure Rate, mR/day Hanford	Exposure Rate, mR/day Richland
7/28-7/30	0.26	0.27	10/15-10/18	0.30	0.26
7/30-8/2	0.26	0.25	10/18-10/20	0.29	0.28
8/2-8/4	Lost	0.28	10/20-10/22	0.34	0.30
8/4-8/6	0.30	0.26	10/22-10/25	0.46	0.37
8/6-8/9	0.30	0.25	10/25-10/27	0.46	0.35
8/9-8/11	0.23	0.21	10/27-10/29	0.39	0.28
8/11-8/13	0.25	0.31	10/29-11/1	0.39	0.33
8/13-8/16	0.28	0.26	11/1-11/3	0.35	0.33
8/16-8/18	0.30	0.26	11/3-11/5	0.29	0.21
8/18-8/20	0.31	0.26	11/5-11/8	0.43	0.36
8/20-8/23	0.29	0.28	11/8-11/10	0.43	0.38
8/23-8/25	0.29	0.26	11/10-11/12	0.39	0.34
8/25-8/27	0.26	0.24	11/12-11/15	0.35	0.37
8/27-8/30	0.33	0.32	11/15-11/17	0.36	0.31
8/30-9/1	0.36	0.25	11/17-11/19	0.38	0.32
9/1-9/3	0.27	0.28	11/19-11/22	0.30	0.27
9/3-9/7	0.35	0.32	11/22-11/24	0.37	0.27
9/7-9/10	0.30	0.27	11/24-11/29	0.34	0.34
9/10-9/13	0.33	0.27	11/29-12/1	0.36	0.28
9/13-9/15	0.28	0.35	12/1-12/3	0.36	0.34
9/15-9/17	0.36	0.28	12/3-12/6	0.34	0.28
9/17-9/20	0.32	0.30	12/6-12/8	0.39	0.33
9/20-9/24	0.32	0.25	12/8-12/10	0.36	0.22
9/24-9/27	0.28	0.24	12/10-12/13	0.37	0.33
9/27-9/29	0.32	0.25	12/13-12/15	0.39	0.31
9/29/10-1	0.28	0.25	12/15-12/17	0.35	0.34
10/1-10/5	0.36	0.28	12/17-12/20	0.35	0.29
10/5-10/8	0.27	0.39	12/20-12/22	0.37	0.25
10/8-10/11	0.23	0.19	12/27-12/29	0.46	0.33
10/11-10/13	0.32	0.29			
10/13-10/15	0.33	0.34			

APPENDIX H
TABLE 2

IONIZATION CHAMBER MEASUREMENTS
OF IMMERSION DOSE IN THE COLUMBIA RIVER - 1965

Measurement Period	Exposure Rate mR/Day	Measurement Period	Exposure Rate mR/Day	Measurement Period	Exposure Rate mR/Day
Vernita Bridge					
1/5-1/12	0.38	4/27-5/4	Lost	8/24-8/31	0.44
1/12-1/19	0.15	5/4-5/11	0.37	8/31-9/8	0.11
1/19-1/25	0.79	5/11-5/25	Lost	9/8-9/14	1.63
1/25-2/2	0.08	5/25-6/1	0.18	9/14-9/21	0.49
2/2-2/9	0.27	6/1-6/8	0.36	9/21-9/28	1.35
2/9-2/24	0.44	6/8-6/15	0.21	9/28-10/5	0.76
2/24-3/2	0.47	6/15-6/22	0.41	10/5-10/12	0.34
3/2-3/9	0.23	6/22-6/29	0.16	10/12-10/19	0.51
3/9-3/16	0.37	6/29-7/8	Lost	10/19-10/26	0.21
3/16-3/23	0.28	7/8-7/13	<0.04	10/26-11/10	Lost
3/23-3/31	0.25	7/13-7/20	0.15	11/10-11/16	0.41
3/31-4/6	0.40	7/20-7/27	0.32	11/17-11/24	0.82
4/6-4/13	0.31	7/27-8/3	0.41	11/24-11/30	0.97
4/13-4/20	0.29	8/3-8/10	0.77	11/30-12/28	Lost
4/20-4/27	0.22	8/10-8/24	0.97		
Old Hanford Ferry					
1/5-1/12	5.72	5/4-5/11	2.34	8/31-9/8	4.01
1/12-1/19	6.35	5/11-5/18	3.94	9/8-9/14	2.98
1/19-1/26	6.48	5/18-5/25	3.79	9/14-9/21	2.63
1/26-2/2	6.19	5/25-6/1	4.45	9/21-9/28	1.68
2/2-2/9	3.89	6/1-6/8	2.78	9/28-10/5	2.40
2/9-2/17	5.41	6/8-6/15	3.52	10/5-10/12	2.21
2/17-2/24	5.35	6/15-6/22	4.48	10/12-10/19	2.51
2/24-3/2	5.38	6/22-6/29	2.29	10/19-10/26	3.21
3/2-3/9	4.29	6/29-7/8	3.52	10/26-11/2	3.57
3/9-3/16	5.45	7/8-7/13	Lost	11/2-11/9	3.58
3/16-3/23	6.34	7/13-7/20	2.04	11/9-11/16	3.96
3/23-3/31	6.35	7/20-7/28	Lost	11/16-11/23	3.13
3/31-4/6	6.02	7/28-8/3	3.58	11/23-11/30	3.48
4/6-4/13	6.35	8/3-8/10	2.34	11/30-12/7	Lost
4/13-4/20	6.46	8/10-8/17	Lost	12/7-12/14	3.85
4/20-4/27	6.26	8/17-8/24	2.86	12/14-12/28	Lost
4/27-5/4	Lost	8/24-8/31	6.14		
Ringold					
9/14-9/21	1.71	10/26-11/2	3.80	11/23-11/30	2.40
10/6-10/12	0.92	11/2-11/9	2.60	11/30-12/7	2.19
10/12-10/19	2.01	11/9-11/16	3.33	12/7-12/14	2.94
10/19-10/26	2.03	11/16-11/23	Lost	12/14-12/28	Lost

APPENDIX H
TABLE 2 (Continued)

IONIZATION CHAMBER MEASUREMENTS
OF IMMERSION DOSE IN THE COLUMBIA RIVER - 1965

Measurement Period	Exposure Dose mR/Day	Measurement Period	Exposure Dose mR/Day	Measurement Period	Exposure Dose mR/Day
300 Area					
12/31/64-1/8/65	2.24	4/27-5/4	4.31	8/24-8/31	2.12
1/8-1/15	3.14	5/4-5/11	2.15	8/31-9/8	2.24
1/15-1/22	2.86	5/11-5/18	2.67	9/8-9/14	3.07
1/22-1/29	3.20	5/18-5/25	2.76	9/14-9/21	2.21
1/29-2/5	1.98	5/25-6/1	2.41	9/21-9/28	1.97
2/5-2/9	4.85	6/1-6/8	1.58	9/28-10/5	2.11
2/9-2/17	2.67	6/8-6/15	1.74	10/5-10/12	1.82
2/17-2/24	2.77	6/15-6/22	1.47	10/12-10/19	2.02
2/24-3/2	2.22	6/22-6/29	0.65	10/19-10/26	1.71
3/2-3/9	2.68	6/29-7/8	0.86	10/26-11/2	2.24
3/9-3/16	2.64	7/8-7/13	2.95	11/2-11/9	1.84
3/16-3/23	3.17	7/13-7/20	1.70	11/9-11/16	2.51
3/23-3/31	3.21	7/20-7/28	1.60	11/16-11/23	2.11
3/31-4/6	3.37	7/28-8/3	1.53	11/23-11/30	1.90
4/6-4/13	3.74	8/3-8/10	2.11	11/30-12/7	2.06
4/13-4/21	3.71	8/10-8/17	1.19	12/7-12/14	2.18
4/21-4/27	3.74	8/17-8/24	1.67	12/14-12/28	Lost
Richland Marina					
12/31/64-1/8/65	2.06	4/27-5/4	3.04	8/24-8/31	1.71
1/8-1/15	2.25	5/4-5/11	1.57	8/31-9/8	2.26
1/15-1/22	2.45	5/11-5/18	2.08	9/8-9/14	2.03
1/22-1/29	2.75	5/18-5/25	2.27	9/14-9/21	1.91
1/29-2/9	1.19	5/25-6/1	1.81	9/21-10/5	1.84
2/9-2/17	2.31	6/1-6/8	1.36	10/5-10/12	1.66
2/17-2/24	2.25	6/8-6/15	1.65	10/12-10/19	1.90
2/24-3/2	2.00	6/15-6/22	Lost	10/19-10/26	2.08
3/2-3/9	2.07	6/22-6/29	Lost	10/26-11/2	1.99
3/9-3/17	2.83	6/29-7/8	0.84	11/2-11/9	1.95
3/17-3/23	3.62	7/8-7/13	2.23	11/9-11/16	2.40
3/23-3/31	3.51	7/13-7/20	0.59	11/16-11/23	1.46
3/31-4/6	3.01	7/20-7/27	1.12	11/23-11/30	1.85
4/6-4/13	3.02	7/27-8/3	1.13	11/30-12/7	1.61
4/13-4/21	3.16	8/3-8/10	1.78	12/7-12/14	1.99
4/21-4/27	2.90	8/10-8/24	1.23	12/14-12/28	Lost