Hanford

BNWL-439 APP

EVALUATION OF RADIOLOGICAL CONDITIONS IN THE VICINITY OF HANFORD FOR 1966 APPENDICES

MAY, 1967

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EVALUATION OF RADIOLOGICAL CONDITIONS IN THE VICINITY OF HANFORD FOR 1966 APPENDICES

By

The Environmental Studies Section Staff

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Environmental Health Department

May, 1967

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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 1966. The radiological significance of these data is discussed in the parent report (BNWL-439).

May, 1967

T. H. Essig
Environmental Studies Section

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RADIONUCLIDES IN COLUMBIA RIVER WATER

APPENDIX A
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN COLUMBIA RIVER WATER AT VERNITA BRIDGE (GRAB SAMPLES) /PRIEST RAPIDS DAM (CUMULATIVE SAMPLES) 1966

Units of pCi/l of water

	Date		Total Alpha	^{3}H	^{90}Sr
VERNITA					
	1-11		0.43	3000	0.98
	1-25		0.20	3500	1.05
	2-8		0.33	4200	1.11
	2-22		0.09	4100	0.89
	3-8		0.61	4000	0.82
	3-22		0.55	LOST	LOST
	4-12		<1.00	2600	0.83
	4-26		<1.00	<1000	0.81
	5-10		1.12	2400	0.76
	5-24		<1.00	2200	0.67
	6-17		<1.00	<1000	0.78
	6-28		0.43	1600	0.86
				2691	0.87
PRIESTS RAPIDS					
	6-28	7-5	<1.0	1400	0.65
	7-5	7-12	<1.0	<1000	0.86
	7-12	7-19	<1.0	<1000	0.55
	7-19	7-26	<1.0	<1000	0.54
	7-26	8-2	<1.0	<1000	<0.50
	8-2	8-10	<1.0	<1000	0.54
	8-10	8-16	<1.0	<1000	0.60
	8-16	8-23	<1.0	1000	0.68
	8-23	8-30	<1.0	1100	0.87
	8-30	9-7	<1.0	1900	0.74
	9-7	9-13	<1.0	1700	0.72
	9-13	9-20	1.1	1800	0.54
	9-20	9-27	<1.0	<1000	0.79
	9-27	10-4	<1.0	2000	0.85
	10-4	10-11	<1.0	1400	0.74
	10-11	10-18	<1.0	2100	0.63
	10-18	10-25	<1.0	1900	0.64
	10-25	11-1	<1.0	1900	0.63
	11-1	11-8	<1.0	1900	0.90
	11-8	11-15	<1.0	2300	1.19
	11-15	11-22	<1.0	<1000	0.85
	11-22	11-29	<1.0	<1000	1.03
	11-29	12-6	<1.0	<1000	0.92
	12-6	12-13	<1.0	<1000	0.53
	12-13	12-20	<1.0	1700	0.80
	12-20	12-28	1.26	<1000	0.91
				1388	0.74

No entry indicates no analysis made.

APPENDIX A
TABLE 2

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT RINGOLD FAR SHORE (Grab Samples) - 1966
Units of pCi/l of water

Date	RE+Y	^{24}Na	^{32}P	^{51}Cr	^{56}Mn	^{64}Cu	^{69m}Zn	^{72}Ga	^{76}As	^{239}Np
1-25	350	4100	180	3900	940	1700	<70	320	610	290
2-22	320	4900	86	3800	1600	2600	0	510	520	650
3-22	670	4100	190	3300	2700	2500	140	260	450	540
4-26	380	3200	140	2900	8900	2000	<70	370	340	580
5-24	330	1700	91	1500	2000	1400	<70	160	250	420
6-28	230	830	34	900	820	760	<70	<75	89	280
7-27	<5	<35	<6	<70	<50	<20	<70	<70	<5	<10
8-23	<5	<35	<6	<70	<50	<70	<70	87	<5	<10
9-27	68	3000	280	2500	720	2100	73	350	370	590
10-26	110	4000	200	2900	880	2500	210	620	420	690
11-22	180	2700	48	1600	540	1700	79	210	270	410
12-27	400	4200	220	4900	810	4000	290	540	540	1100

No entry indicates no analysis made.

APPENDIX A

TABLE 3

CONCENTRATIONS OF RADIONUCLIDES IN

COLUMBIA RIVER WATER AT RICHLAND (Grab Samples) - 1966

Units of pCi/l of water

Date	RE+Y	^{3}H	^{24}Na	^{32}P	^{51}Cr	^{64}Cu	^{65}Zn	^{76}As	^{90}Sr	^{131}I	^{239}Np
1-10	230	2900	2700	280	8300	820	69	440	1.6	11	480
2-7	380	4700	4500	370	8600	1900	120	730	1.2	20	830
3-7	730	4100	5500	340	7100	3000	280	870	1.2	12	1700
4-11	430	1800	3700	290	4400	2100	170	490	0.98	7.6	1000
5-9	450	1700	3300	170	2800	2700	180	411	1.1	3.6	680
6-13	260	<1000	1100	49	1000	750	67	140	0.76	3.2	310
7-11	30	1500	<35	<6	<70	<48	35	<5	0.93	LOST	<10
8-8	<5	<1000	<35	<6	<70	<20	<20	<5	0.72		<10
9-12	120	2500	1200	210	5200	1000	59	240	0.88	3.8	730
10-11	310	1400	1900	160	4100	1400	110	900	1.0	5.6	780
11-7	240	2300	2800	240	8300	1500	340	420	1.3	9.7	1400
12-13	110	<1000	4000	230	8000	1800	170	410	0.80	5.9	1300
									1.04		

No entry indicates no analysis made.

APPENDIX A
TABLE 4

CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT RICHLAND (Cumulative Samples) - 1966
Units of pCi/l of water

Date		^{32}P	^{51}Cr	^{65}Zn	^{131}I
12-27-65--1-3		180	4700	160	7.2
1-3	1-10	86	6200	170	6.6
1-10	1-17	190	4500	150	6.3
1-17	1-24	200	5200	420	5.6
1-24	1-31	270	6500	180	8.7
1-31	2-7	250	5800	200	11
2-7	2-14	100	3400	200	590
2-14	2-21	130	3800	140	34
2-21	2-28	170	4600	180	12
2-28	3-7	180	3700	190	5.9
3-7	3-14	220	4900	290	6.9
3-14	3-21	220	5200	260	6.5
3-21	3-28	250	5400	230	6.9
3-28	4-4	260	5800	450	6.4
4-4	4-11	260	5000	340	5.1
4-11	4-18	190	4800	530	5.3
4-18	4-25	180	5000	330	4.3
4-25	5-2	160	3800	420	3.4
5-2	5-9				
5-9	5-16	180	2500	680	2.8
5-16	5-23	130	2600	310	3.3
5-23	5-31	150	2000	360	4.0
5-31	6-6	58	1300	220	2.5
6-6	6-13	28	760	350	2.1
6-13	6-20	68	1400	180	2.0
6-20	6-27	35	1800	120	2.1
6-27	7-5	64	1700	97	3.2
7-5	7-11	40	850	140	<2.0
7-11	7-18	<6.0	<70	34	<2.0
7-18	7-25	<6.0	<70	36	<2.0
7-25	8-1	<6.0	<70	<20	<2.0
8-1	8-8	<6.0	<70	21	<2.0
8-8	8-15	<6.0	<70	32	<2.0
8-15	8-22	<6.0	<70	<20	<2.0
8-22	8-29	26	1400	50	4.5
8-29	9-6	99	4400	120	6.3
9-6	9-12	85	4300	110	6.4
9-12	9-19	150	5000	110	7.6
9-19	9-26	150	4400	110	6.3
9-26	10-3	160	3400	160	4.9

No entry indicates no analysis made.

APPENDIX A
TABLE 4 (Continued)
CONCENTRATIONS OF RADIONUCLIDES IN
COLUMBIA RIVER WATER AT RICHLAND (Cumulative Samples) - 1966
Units of pCi/l of water

Date		^{32}P	^{51}Cr	^{65}Zn	^{131}I
10-3	10-10	160	3900	140	8.2
10-10	10-17	130	4300	160	6.4
10-17	10-24	130	4500	120	5.8
10-24	10-31	180	4800	170	5.4
10-31	11-7	150	5400	160	3.4
11-7	11-14	160	4400	120	7.3
11-14	11-21	140	4600	130	5.3
11-21	11-28	300	3200	180	4.2
11-28	12-5	120	4100	170	2.7
12-5	12-12	160	4600	190	5.3
12-12	12-19	200	5500	190	6.9
12-19	12-27	200	5500	170	13.5

No entry indicates no analysis made.

APPENDIX A
TABLE 5

CONCENTRATIONS OF RADIONUCLIDES IN COLUMBIA RIVER WATER AT MCNARY DAM (Cumulative Samples) - 1966

Units of pCi/l of water

Date		32 P	51 Cr	65 Zn	131 I
12-30-65--1-7		240	2500	84	3.3
1-7	1-14	100	3300	99	5.7
1-14	1-21	96	3000	91	
1-21	1-28	91	2800	92	3.6
1-28	2-4	710	3200	93	3.5
2-4	2-10	240	3400	120	3.8
2-10	2-18	100	2200	120	170
2-18	2-25	55	1800	79	43
2-25	3-4	66	2700	120	7.2
3-4	3-11	97	2100	110	3.6
3-11	3-25	93	2400	93	2.3
3-25	4-1	110	2900	100	13.0
4-1	4-8	100	2200	83	<2.2
4-8	4-15	100	2100	74	2.1
4-15	4-22	67	1800	53	
4-22	4-29	62	1800	83	<2.0
4-29	5-6	130	1900	67	2.2
5-6	5-13	65	1400	61	<2.0
5-13	5-20	51	1200	73	<2.0
5-20	5-27	45	1300	67	<2.0
5-27	6-3	52	1000	74	<2.0
6-3	6-10	34	730	73	<2.0
6-10	6-17	33	540	92	<2.0
6-17	6-24	32	1200	72	<2.0
6-24	7-1	41	1100	47	<2.0
7-1	7-8	41	1100	46	<2.0
7-8	7-15	23	300	34	<2.0
7-15	7-22	<6.0	<70	28	<2.0
7-22	7-29	<6.0	<70	<20	<2.0
7-29	8-5	<6.0	<70	<20	<2.0
8-5	8-12	<6.0	<70	<20	<2.0
8-12	8-19	<6.0	<70	<20	<2.0
8-19	8-26	<6.0	82	21	<2.0
8-26	9-2	<6.0	<110	21	2.5
9-2	9-9	31	2600	<20	2.4
9-9	9-16	33	2500	23	<2.0
9-16	9-23	50	2700	20	3.1
9-23	9-30	48	2500	20	2.2
9-30	10-7	63	1900	<20	2.1
10-7	10-14	47	1900	32	2.6

No entry indicates no analysis made.

APPENDIX A
TABLE 5 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN COLUMBIA RIVER WATER AT MCNARY DAM (Cumulative Samples) - 1966

Units of pCi/l of water

Date		32 P	51 Cr	65 Zn	131 I
10-14	10-21	47	2800	36	2.7
10-21	10-28	98	2600	44	3.2
10-28	11-4	62	2300	40	<2.0
11-4	11-11	61	2800	54	2.1
11-11	11-18	55	2400	47	4.4
11-18	11-23	52	3000	49	2.4
11-23	12-2	67	1800	60	2.9
12-2	12-9	41	1800	44	<2.0
12-9	12-16	61	2200	69	<2.0
12-16	12-22	80	3000	89	2.7
12-22	12-30	72	3000	92	6.4
	Avg.	76.2	1349	61.0	7.1

No entry indicates no analysis made.

APPENDIX A
TABLE 6

CONCENTRATIONS OF RADIONUCLIDES IN COLUMBIA RIVER WATER AT BONNEVILLE DAM (Cumulative Samples) - 1966

Units of pCi/l of water

Date		^{32}P	^{51}Cr	^{65}Zn	^{131}I
12-28-65	1-4	36	2000	30	2.3
1-4	1-11	33	2000	57	1.7
1-11	1-25	33	1600	29	1.5
1-25	2-8	39	2000	34	3.8
2-8	2-22	23	1900	61	8.2
2-22	3-8	40	1500	26	24
3-8	3-22	34	1600	66	2.3
3-22	4-5	45	1700	70	< 2.0
4-5	4-19	44	1600	64	2.0
4-19	5-3	36	1400	54	< 2.0
5-3	5-17	39	1300	120	< 2.0
5-17	5-31	37	1100	100	< 2.0
5-31	6-14	28	800	160	< 2.0
6-14	6-28	25	1200	83	< 2.0
6-28	7-12	27	920	73	< 2.0
7-12	7-19		280	69	< 2.0
7-19	7-26	< 6.0	< 70	34	< 2.0
7-26	8-2	< 6.0	< 70	< 20	< 2.0
8-2	8-16	< 6.0	< 70	33	< 2.0
8-16	8-23	< 6.0	< 70	24	< 2.0
8-23	8-30	< 6.0	< 70	30	< 2.0
8-30	9-6	< 6.0	< 70	< 20	< 2.0
9-6	9-13	< 6.3	890	< 20	2.7
9-13	9-20	11	1700	< 20	5.0
9-20	9-27	14	1700	< 20	< 2.0
9-27	10-4	15	1800	< 20	2.0
10-4	10-18	20	1300	< 20	2.0
10-18	10-25	18	1500	< 20	< 2.0
10-25	11-1	26	2000	< 20	< 2.0
11-1	11-8	18	1800	< 20	< 2.0
11-8	11-15	21	1700	< 20	< 2.0
11-15	11-22	38	1700	< 20	< 2.0
11-22	11-29	25	1900	< 20	6.4
11-29	12-6	23	1300	< 20	< 2.0
12-6	12-13	11	1200	< 20	< 2.0
12-13	12-20	22	1200	< 20	3.2
12-20	12-27	23	1800	28	< 2.0

No entry indicates no analysis made.

APPENDIX A
TABLE 7

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER WATER AT RINGOLD FAR SHORE (Grab Samples) - 1966

Units of curies/day

Date	RE+Y	24 Na	32 P	51 Cr	56 Mn	64 Cu	69m Zn	72 Ga	76 As	239 Np
1-25	69	810	36	700	190	330	< 14	65	120	57
2-22	63	960	17	760	320	520	0	100	100	130
3-22	130	790	36	640	520	470	27	50	86	100
4-26	100	830	38	750	2300	530	< 18	97	89	150
5-24	170	870	46	870	950	730	< 35	79	120	210
6-28	140	510	21	550	500	460	< 42	46	54	170
7-27	< 3	< 18	< 3	< 36	< 25	< 10	< 36	< 36	< 3	< 5
8-23	< 1	< 8	< 1	< 15	< 11	< 15	< 15	< 19	< 1	< 2
9-27	14	610	57	520	150	430	15	73	77	120
10-26	20	710	36	510	160	440	37	110	75	120
11-22	40	620	11	360	120	380	18	48	61	93
12-27	100	1100	56	1300	210	1000	74	140	140	290

No entry indicates no analysis made.

APPENDIX A
TABLE 8

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER WATER AT RICHLAND (Grab Samples) - 1966

Units of Curies/Day

Date	RE+Y	24 Na	32 P	51 Cr	56 Mn	64 Cu	69m Zn	72 Ga	76 As	239 Np
1-10	43	510	53	1600	150	13	83	0.31	2.0	90
2-7	82	990	81	1900	410	25	160	0.26	4.4	180
3-7	170	1300	80	1700	680	65	200	0.28	2.8	410
4-11	100	870	68	1000	500	41	120	0.23	1.8	240
5-9	220	1600	85	1400	1300	88	200	0.52	1.8	330
6-13	200	860	37	790	570	51	110	0.58	2.4	230
7-11	< 18	< 21	< 4	< 42	< 29	21	< 3	0.56	LOST	< 6
8-8	< 2	< 12	< 2	< 23	< 7	< 7	< 2	0.24		< 3
9-12	22	230	38	970	180	11	44	0.16	0.70	140
10-11	62	390	33	830	21	21	180	0.21	1.1	160
11-7	45	530	44	1500	290	63	77	0.25	1.8	270
12-13	22	820	46	1600	360	35	82	0.16	1.2	260

No entry indicates no analysis made.

APPENDIX A
TABLE 9

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT RICHLAND (Cumulative Samples) - 1966

Units of Curies/Day

Date		32 P	51 Cr	65 Zn	131 I
12-27-65/1-3-66		32	860	30	1.3
1-3	1-10	15	1000	29	1.1
1-10	1-17	30	700	23	0.99
1-17	1-24	33	880	71	0.94
1-24	1-31	48	1200	32	1.6
1-31	2-7	48	1100	37	2.0
2-7	2-14	21	680	40	118.
2-14	2-21	25	740	28	6.5
2-21	2-28	35	930	37	2.4
2-28	3-7	35	730	38	1.2
3-7	3-14	41	930	54	1.3
3-14	3-21	42	980	50	1.2
3-21	3-28	44	940	40	1.2
3-28	4-4	43	970	75	1.1
4-4	4-11	44	820	57	0.85
4-11	4-18	39	980	110	1.1
4-18	4-25	38	1100	69	0.91
4-25	5-2	35	850	94	0.76
5-2	5-9				
5-9	5-16	97	1300	360	1.5
5-16	5-23	63	1300	150	1.6
5-23	5-31	75	970	180	1.95
5-31	6-6	36	790	140	1.5
6-6	6-13	21	580	260	1.6
6-13	6-20	47	1000	120	<1.4
6-20	6-27	23	1200	80	1.4
6-27	7-5	38	990	57	1.9
7-5	7-11	25	530	87	<1.2
7-11	7-18	<3.7	<43	21	<1.2
7-18	7-25	<3.2	<38	19	<1.1
7-25	8-1	<2.8	<33	<9.3	<0.93
8-1	8-8	<2.0	<23	6.8	<0.65
8-8	8-15	<1.8	<21	9.7	<0.61
8-15	8-22	<1.5	<17	<4.9	<0.49
8-22	8-29	5.4	290	10	0.94
8-29	9-6	18	790	22	1.1
9-6	9-12	16	810	20	1.2
9-12	9-19	27	900	20	1.4
9-19	9-26	26	750	18	1.1
9-26	10-3	28	610	28	0.86

No entry indicates no analysis made.

APPENDIX A
TABLE 9 (Continued)

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER AT RICHLAND (Cumulative Samples) - 1966

Units of Curies/Day

Date		^{32}P	^{51}Cr	^{65}Zn	^{131}I
10-3	10-10	26	670	23	1.4
10-10	10-17	23	730	26	1.1
10-17	10-24	22	740	19	0.95
10-24	10-31	30	780	28	0.88
10-31	11-7	24	830	24	0153
11-7	11-14	25	660	18	1.1
11-14	11-21	23	740	21	0.86
11-21	11-28	50	520	30	0.69
11-28	12-5	20	700	29	0.46
12-5	12-12	28	800	34	0.94
12-12	12-19	33	900	31	1.1
12-19	12-27	36	1000	32	2.5

No entry indicates no analysis made.

APPENDIX A
TABLE 10

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER WATER AT MCNARY DAM (Cumulative Samples) - 1966

Units of Curies/Day

Date		^{32}P	^{51}Cr	^{65}Zn	^{131}I
12-30-65/1-7-66		64	680	22	0.88
1-7	1-14	27	880	26	1.5
1-14	1-21	25	790	24	
1-21	1-28	25	750	25	0.98
1-28	2-4	210	940	27	1.0
2-4	2-10	68	940	34	1.1
2-10	2-18	29	640	33	48
2-18	2-25	15	470	21	11
2-25	3-4	21	880	38	2.3
3-4	3-11	27	570	31	0.99
3-11	3-25	28	740	28	0.70
3-25	4-1	34	930	32	4.1
4-1	4-8	37	800	30	0.79
4-8	4-15	38	760	27	0.77
4-15	4-22	21	580	17	
4-22	4-29	21	610	28	0.68
4-29	5-6	47	590	21	0.78
5-6	5-13	46	1000	44	1.4
5-13	5-20	36	820	51	1.4
5-20	5-27	29	820	43	1.3
5-27	6-3	39	780	55	2.0
6-3	6-10	29	630	63	1.7
6-10	6-17	30	500	84	1.8
6-17	6-24	25	960	56	1.6
6-24	7-1	29	790	34	1.4
7-1	7-8	28	710	31	1.3
7-8	7-15	16	210	23	1.4
7-15	7-22	3.8	44	18	1.3
7-22	7-29	<3.4	39	11	1.1
7-29	8-5	<2.8	<32	9.3	0.93
8-5	8-12	2.2	26	7.4	0.74
8-12	8-19	2.0	<23	6.6	0.66
8-19	8-26	1.7	23	5.8	0.55
8-26	9-2	1.4	<27	5.0	0.60
9-2	9-9	7.7	590	<4.5	0.65
9-9	9-16	7.9	610	5.5	<0.48
9-16	9-23	11	590	4.5	0.69
9-23	9-30	11	580	4.7	0.51
9-30	10-7	14	432	<4.5	0.47
10-7	10-14	11	470	7.8	0.63

No entry indicates no analysis made.

APPENDIX A
TABLE 10 (Continued)

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES
IN COLUMBIA RIVER WATER AT MCNARY DAM (Cumulative Samples) - 1966

Units of Curies/Day

Date		^{32}P	^{51}Cr	^{65}Zn	^{131}I
10-14	10-21	11	620	8.1	0.61
10-21	10-28	21	580	9.6	0.70
10-28	11-4	14	520	8.9	0.44
11-4	11-11	14	630	12	0.47
11-11	11-18	12	520	10	0.95
11-18	11-23	13	730	12	0.58
11-23	12-2	16	450	14	0.69
12-2	12-9	11	480	12	0.53
12-9	12-16	16	550	18	0.51
12-16	12-22	22	790	24	0.73
12-22	12-30	20	810	25	1.8

No entry indicates no analysis made.

APPENDIX A
TABLE 11

ESTIMATED RATE OF TRANSPORT OF RADIONUCLIDES IN COLUMBIA RIVER AT BONNEVILLE DAM (Cumulative Samples) - 1966

Units of Curies/Day

Date		^{32}P	^{51}Cr	^{65}Zn	^{131}I
12-28-65/1-4-66		10	570	8.7	0.67
1-4	1-11	10	600	17	0.51
1-11	1-25	9.5	480	8.4	0.43
1-25	2-8	12	600	10	1.2
2-8	2-22	6.9	560	18	2.4
2-22	3-8	13	480	8.4	7.8
3-8	3-22	11	520	22	0.76
3-22	4-5	16	620	25	< 0.72
4-5	4-19	17	600	24	0.76
4-19	5-3	13	500	20	< 0.74
5-3	5-17	26	890	81	< 1.3
5-17	5-31	25	750	70	< 1.3
5-31	6-14	25	720	150	< 1.8
6-14	6-28	20	1000	67	< 1.6
6-28	7-12	19	640	51	< 1.4
7-12	7-19		200	47	< 1.4
7-19	7-26	< 3.7	< 43	21	< 1.2
7-26	8-2	< 3.2	< 38	< 11	< 1.1
8-2	8-16	< 2.3	< 27	13	< 0.77
8-16	8-23	< 1.9	< 22	7.4	< 0.62
8-23	8-30	< 1.6	< 19	8.0	
8-30	9-6	< 1.5	< 17	< 5.0	< 0.50
9-6	9-13	1.6	220	< 4.9	0.67
9-13	9-20	2.6	410	< 4.7	1.2
9-20	9-27	3.4	410	< 4.9	< 0.49
9-27	10-4	3.7	460	< 5.0	0.50
10-4	10-18	5.0	310	< 5.0	0.50
10-18	10-25	4.2	350	< 4.7	< 0.47
10-25	11-1	5.9	450	< 4.5	< 0.45
11-1	11-8	4.4	450	< 4.9	< 0.49
11-8	11-15	4.8	390	< 4.6	
11-15	11-22	9.7	430	< 5.1	< 0.51
11-22	11-29	6.1	470	< 4.9	1.57
11-29	12-6	5.9	320	< 5.2	< 0.52
12-6	12-13	3.3	340	< 5.9	< 0.59
12-13	12-20	6.5	370	< 5.9	0.94
12-20	12-27	7.1	560	8.6	< 0.62

No entry indicates no analysis made.

APPENDIX B
RADIONUCLIDES IN DRINKING WATER

APPENDIX B
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN
RICHLAND DRINKING WATER (Grab Samples) - 1966
Units of pCi/l of Water

Date	RE+Y	24 Na	32 P	51 Cr	64 Cu	76 As	90 Sr	239 Np
1-3	170	2300	260	7300	1200	640		1290
1-31	200	2300	290	5800	420	510	1.2	600
2-28	170	2400	120	5600	410	270	1.1	500
4-4	160	3000	82	8100	280	220	0.68	450
5-2	33	1900	25	2900	450	82	0.68	710
6-6	16	1200	12	1100	410	40	0.70	260
7-5	74	1000	43	1400	440	83	0.79	320
7-20	<5.0	<35		<70	<20	<5	0.66	<10
8-1	<5.0	<35	<6.0	<70	<46	<5	<0.50	<10
9-6	35	1800	94	6600	430	250	0.90	1080
	12	1800	38	4000	380	130	0.81	650
	53	1700	47	5700	490	160	1.4	700
	35	1400	86	2300	340	100	0.95	350

No entry indicates no analysis made.

APPENDIX B
TABLE 2

CONCENTRATIONS OF RADIONUCLIDES IN
RICHLAND DRINKING WATER (Cumulative Samples) - 1966
Units of pCi/l of Water

Date		^{32}P	^{65}Zn	^{131}I
12-27-65/1-3-66		160	100	6.2
1-3	1-10	140	130	5.2
1-10	1-17	190	110	5.6
1-17	1-24	200	130	5.9
1-24	1-31	230	140	8.2
1-31	2-7	220	180	11.2
2-7	2-14	180	160	420
2-14	2-21	97	140	45.7
2-21	2-28	130	110	10.5
2-28	3-7	110	140	7.0
3-7	3-14	110	150	6.8
3-14	3-21	70	140	6.6
3-21	3-28	58	120	6.5
3-28	4-4	54	110	7.4
4-4	4-11	40	92	7.0
4-11	4-18	32	72	4.9
4-18	4-25	26	56	5.4
4-25	5-2	19	55	4.8
5-2	5-9	12	66	3.7
5-9	5-16	14	71	<2.0
5-16	5-23	16	67	4.4
5-23	5-31	14	55	2.8
5-31	6-6	16	44	2.1
6-6	6-13	7.2	31	<2.0
6-13	6-20	9.5	25	<2.0
6-20	6-27	<6.0	< 20	<2.0
6-27	7-5	19	23	2.9
7-5	7-11	16	24	<2.0
7-11	7-18	< 6.0	< 20	<2.0
7-18	7-25	< 6.0	< 20	<2.0
7-25	8-1	< 6.0	< 20	<2.0
8-1	8-8	< 6.0	< 20	<2.0
8-8	8-15	< 6.0	< 20	<2.0
8-15	8-22	< 6.0	< 20	<2.0
8-22	8-29	14	< 20	3.5
8-29	9-6	47	20	<2.0
9-6	9-12	65	<20	5.7
9-12	9-19	57	27	5.7
9-19	9-26	20	20	6.1

No entry indicates no analysis made.

APPENDIX B
TABLE 2 (continued)

CONCENTRATION OF RADIONUCLIDES IN RICHLAND DRINKING WATER (Cumulative Samples) - 1966

Units of pCi/l of Water

Date		^{32}P	^{65}Zn	^{131}I
9-26	10-3	10	20	4.5
10-3	10-10	36	21	6.8
10-10	10-17	38	32	4.9
10-17	10-24	40	31	2.4
10-24	10-31	53	27	3.6
10-31	11-7	64	49	5.0
11-7	11-14	62	50	3.9
11-14	11-21	52	51	4.9
11-21	11-28	76	56	6.5
11-28	12-5	59	64	3.2
12-5	12-12	110	95	7.2
12-12	12-19	120	95	6.3
12-19	12-27	160	130	12.5

No entry indicates no analysis made.

APPENDIX B
TABLE 3

CONCENTRATIONS OF RADIONUCLIDES IN
PASCO DRINKING WATER (Grab Samples) - 1966

Units of pCi/l of Water

Date	RE+Y	24 Na	32 P	51 Cr	64 Cu	76 As	90 Sr	239 Np
1-3	26	200	83	3300	84	98		420
1-31	20	230	62	5000	<36	57	1.2	440
2-28	50	260	81	4700	<30	53	1.0	150
4-4	94	1100	39	5800	130	130	0.73	850
5-2	28	990	24	2600	140	55	0.82	580
6-6	44	570	7.3	780	110	14	0.53	190
7-5	11	600	7.4	1200	100	16	0.86	220
7-21	<5.0	<35		<70	<20	<5.0	0.83	<10
8-1	<5.0	<35	<6.0	<70	<42	<5.0	0.88	<10
9-6	<5.0	84	17	4700	120	36	1.03	690
10-3	10	290	18	1600	<20	27	0.80	240
10-31	34	1200	66	5400	34	50	1.0	620
12-5	12	1200	27	2300	<20	22	0.94	190

No entry indicates no analysis made.

APPENDIX B
TABLE 4

CONCENTRATIONS OF RADIONUCLIDES IN
PASCO DRINKING WATER (Cumulative Samples) - 1966
Units of pCi/l of Water

Date		^{32}P	^{65}Zn	^{131}I
1-3		41	60	5.6
1-10		180	69	5.8
1-10-	1-17	45	75	4.1
1-17	1-24	46	89	5.5
1-24	1-31	38	78	8.9
1-31	2-7	53	84	8.6
2-7	2-14	45	110	50.8
2-14	2-21	40	87	170.
2-21	2-28	18	160	12.1
2-28	3-7	37	120	6.8
3-7	3-14	34	110	5.3
3-14	3-21	38	120	5.8
3-21	3-28	39	94	4.6
3-28	4-4	38	100	4.9
4-4	4-11	47	98	6.1
4-11	4-18	23	70	4.6
4-18	4-25	21	37	3.7
4-25	5-2	14	57	5.7
5-2	5-9	9.2	49	3.3
5-9	5-16	7.0	50	2.8
5-16	5-23	6.1	52	3.9
5-23	5-31	<6.0	52	2.7
5-31	6-6	7.3	42	<2.0
6-6	6-13	<6.0	30	<2.0
6-13	6-20	<6.0	22	<2.0
6-20	6-27	<6.0	<20	<2.0
6-27	7-5	7.5	<20	2.1
7-5	7-11	<6.0	<20	<2.0
7-11	7-18	<6.0	<20	<2.0
7-18	7-25	<6.0	<20	<2.0
7-25	8-1	<6.0	<20	<2.0
8-1	8-8	<6.0	<20	<2.0
8-8	8-15	<6.0	<20	<2.0
8-15	8-22	<6.0	<20	<2.0
8-22	8-29	6.1	<20	2.0
8-29	9-6	7.5	<20	5.5
9-6	9-12	6.1	<20	6.0
9-12	9-19	7.8	22	5.3
9-19	9-26	13	<20	5.9

No entry indicates no analysis made.

APPENDIX B
TABLE 4 - (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN PASCO DRINKING WATER (Cumulative Samples) - 1966

Date		Units of pCi/l of Water ^{32}P	^{65}Zn	^{131}I
9-26	10-3	9.9	<20	3.6
10-3	10-10	25	23	3.9
10-10	10-17	17	28	5.3
10-17	10-24	24	21	5.3
10-24	10-31	29	31	4.6
10-31	11-7	30	43	4.6
11-7	11-14	32	33	3.7
11-14	11-21	43	47	4.1
11-21	11-28	57	45	10.3
11-28	12-5	32	56	6.6
12-5	12-12	37	57	4.3
12-12	12-19	64	64	4.5
12-19	12-27	38		9.8

No entry indicates no analysis made.

APPENDIX B
TABLE 5

CONCENTRATIONS OF RADIONUCLIDES IN
KENNEWICK DRINKING WATER (Grab Samples) - 1966
Units of pCi/l of Water

Date	24 Na	32 P	51 Cr	64 Cu	76 As	239 Np
1-17	58	15.9	2100	<38	17	55
2-14	44	13.7	2200	<20	12	250
3-14	50	7.4	1500	<20	10	25
4-18	39	8.5	1400	<20	7.3	23
5-16	94	12.4	780	55	14.8	52
6-20	66	<6.0	620	46	9.0	29
7-18	<35	<6.0	75	<20	<5.0	<10
8-15	<35	<6.0	<70	<38	<6.0	<10
9-19	78	8.1	1800	48	9.9	47
10-17	47	9.9	1600	<20	10	40
11-14	120	19.2	2100	65	18	78
12-19	110	19.1	1900	81	24	66
avg	61.9	10.3	1312	32	11	56

No entry indicates no analysis made.

APPENDIX B
TABLE 6

BETA ACTIVITY IN RICHLAND DRINKING WATER - 1966
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
1-3	8.6	6-20	2.40	9-20	3.7
1-4	8.8	6-21	2.44	9-28	4.6
1-5	7.0	6-22	1.84	9-29	6.5
1-6	6.4	6-23	2.44	10-3	4.6
1-7	5.7	6-24	0.90	10-4	4.6
1-10	4.9	6-27	3.20	10-11	4.76
1-11	7.0	6-28	2.60	10-18	8.82
1-12	4.0	6-29	1.50	10-25	4.04
1-13	2.0	6-30	1.74	10-31	1.70
1-19	9.60	7-1	2.30	11-2	4.40
1-26	8.20	7.5	2.50	11-14	5.40
1-31	6.82	7-6	1.00	11-22	4.90
2-9	7.20	7-7	1.82	11-28	2.46
2-16	2.64	7-8	1.20	12-5	2.30
2-23	6.84	7-11	0.20	12-6	6.50
2-28	6.00	7-12	0.20	12-7	6.08
3-9	7.96	7-13	0.20	12-8	5.90
3-16	9.92	7-14	0.20	12-9	8.00
3-23	7.64	7-15	0.20	12-13	13.6
3-30	7.92	7-18	0.02	12-19	5.06
4-4	7.90	7-20	0.02	12-20	9.64
4-13	9.24	7-25	0.02	12-21	10.2
4-20	6.40	8-1	0.02	12-22	10.4
4-27	3.72	8-5	0.02	12-27	8.4
5-2	4.20	8-10	0.02		
5-11	5.96	8-15	0.005		
5-18	5.76	8-19	0.005		
5-25	3.14	8-22	0.005		
5-31	1.22	8-23	0.02		
6-1	3.16	8-24	0.02		
6-2	3.16	8-25	0.53		
6-3	3.24	8-26	0.93		
6-6	2.88	8-27	4.2		
6-8	1.40	8-28	4.8		
6-9	0.90	8-29	3.2		
6-10	1.30	8-30	5.2		
6-13	2.12	8-31	3.2		
6-15	2.08	9-6	6.0		
6-16	2.34	9-8	4.6		
6-17	0.72	9-13	5.9		

APPENDIX B
TABLE 7

BETA ACTIVITY IN PASCO DRINKING WATER - 1966
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
1-3	1.34	3-2	1.82	4-28	2.46
1-4	2.30	3-3	1.68	4-29	2.40
1-5	1.64	3-7	1.17	5-2	2.94
1-6	1.86	3-8	2.00	5-3	2.76
1-7	1.42	3-9	2.28	5-4	2.06
1-10	1.64	3-10	1.85	5-5	2.54
1-11	1.02	3-11	2.56	5-6	2.38
1-12	1.04	3-14	1.52	5-9	3.06
1-13	2.0	3-15	1.70	5-10	2.92
1-17	1.16	3-16	1.80	5-11	3.78
1-18	1.60	3-17	2.12	5-12	2.46
1-19	1.02	3-18	3.12	5-13	2.92
1-20	1.60	3-21	1.32	5-16	1.74
1-21	1.30	3-22	1.02	5-17	0.77
1-24	1.18	3-23	2.36	5-18	2.50
1-25	0.52	3-24	1.72	5-19	3.50
1-26	0.52	3-25	2.22	5-20	2.54
1-27	0.48	3-28	3.54	5-23	3.10
1-28	1.14	3-29	2.96	5-24	2.14
1-31	1.52	3-3-	3.54	5-25	2.44
2-1	1.07	3-31	3.00	5-26	1.70
2-2	1.26	4-1	2.24	5-27	1.48
2-3	1.84	4-4	3.90	5-31	2.20
2-4	2.00	4-5	5.14	6-1	1.76
2-7	1.62	4-6	5.80	6-2	1.88
2-8	0.96	4-7	4.72	6-3	1.38
2-9	7.20	4-8	4.64	6-6	1.31
2-10	2.50	4-11	4.30	6-7	1.00
2-14	2.14	4-12	3.16	6-8	0.83
2-15	1.44	4-13	2.74	6-9	0.40
2-16	1.46	4-14	2.70	6-10	0.88
2-17	0.82	4-15	2.15	6-13	0.98
2-18	0.60	4-18	1.70	6-14	1.56
2-21	0.76	4-19	2.48	6-15	1.00
2-22	0.98	4.20	2.82	6-16	1.47
2-23	2.80	4-21	2.66	6-17	1.33
2-24	1.77	4.22	1.98	6-20	1.33
2-25	1.32	4-25	2.90	6-21	1.51
2-28	1.37	4-26	3.74	6-22	0.90
3-1	1.59	4-27	2.80	6-23	1.04

APPENDIX B
TABLE 7 (Continued)

BETA ACTIVITY IN PASCO DRINKING WATER - 1966
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
6-24	0.46	9-15	1.5	11-11	1.3
6-27	1.66	9-16	2.7	11-14	1.5
6-28	1.48	9-19	2.5	11-15	1.4
6-29	1.02	9-20	2.2	11-16	2.0
6-30	0.78	9-21	2.6	11-17	1.9
7-1	1.18	9-22	2.0	11-18	1.7
7-5	1.12	9-23	2.6	11-21	1.3
7-6	1.32	9-26	2.4	11-22	1.0
7-7	1.26	9-28	2.8	11-23	1.1
7-8	1.12	9-29	2.3	11-28	1.82
7-11	< 0.2	9-20	2.1	11-29	1.10
7-12	< 0.2	10-3	1.0	11-30	1.33
7-13	< 0.2	10-4	1.6	12-1	1.50
7-14	< 0.2	10-5	1.9	12-2	0.97
7-15	< 0.2	10-6	2.1	12-5	0.76
7-18	0.02	10-7	2.0	12-6	0.45
7-21	0.02	10-10	1.7	12-7	1.82
7-25	< 0.02	10-11	2.5	12-8	2.60
8-1	< 0.02	10-12	2.4	12-9	3.10
8-5	< 0.02	10-13	2.7	12-12	1.26
8-12	0.004	10-14	1.8	12-13	0.32
8-15	0.004	10-17	2.0	12-14	1.95
8-19	0.004	10-18	2.6	12-15	1.86
8-22	0.005	10-19	3.0	12-16	0.38
8-23	< 0.001	10-20	1.6	12-19	1.75
8-24	< 0.01	10-21	1.9	12-2-	1.14
8-25	1.14	10-24	1.1	12-21	1.21
8-26	0.62	10-25	1.43	12-22	1.60
8-29	2.5	10-26	1.90	12-27	1.60
8-20	3.22	10-27	1.68	12-28	1.30
8-31	1.14	10-28	1.37	12-29	2.16
9-1	2.14	10-31	1.66	12-30	1.94
9-2	2.7	11-1	1.61		
9-6	2.0	11-2	1.14		
9-7	3.3	11-3	1.12		
9-8	2.8	11-4	0.94		
9-9	2.0	11-7	1.31		
9-12	1.3	11-8	1.5		
9-13	1.1	11-9	0.97		
9-14	1.8	11-10	1.9		

APPENDIX B
TABLE 8

BETA ACTIVITY IN KENNEWICK DRINKING WATER - 1966
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
1-3	0.29	3-3	0.28	4-28	0.63
1-4	0.33	3-4	<0.10	4-29	0.55
1-5	0.31	3-7	0.35	5-2	0.48
1-6	0.27	3-8	0.37	5-3	0.59
1-7	0.28	3-9	0.35	5-4	0.47
1-10	0.29	3-10	0.35	5-5	0.71
1-11	0.25	3-11	0.23	5-6	0.51
1-12	0.29	3-14	0.24	5-9	0.60
1-13	0.35	3-15	0.29	5-10	0.58
1-17	0.34	3-16	0.24	5-11	0.29
1-19	0.73	3-17	0.26	5-12	0.75
1-20	0.61	3-18	0.33	5-13	0.43
1-21	1.25	3-21	0.28	5-16	0.36
1-24	0.36	3-22	0.32	5-17	0.37
1-25	0.72	3-23	0.29	5-18	0.44
1-26	1.15	3-24	0.26	5-19	0.38
1-27	0.37	3-25	0.22	5-20	0.38
1-28	0.62	3-28	0.20	5-23	0.46
1-31	0.38	3-29	0.21	5-24	0.42
2-1	0.46	3-30	0.26	5-25	0.32
2-2	0.40	3-31	0.25	5-26	0.36
2-3	0.38	4-1	0.29	5-27	0.38
2-4	0.45	4-4	0.22	5-31	0.27
2-7	0.50	4-5	0.31	6-1	0.34
2-8	0.56	4-6	0.26	6-2	0.18
2-9	0.50	4-7	0.24	6-3	0.15
2-10	0.39	4-8	0.23	6-6	0.24
2-14	-.24	4-11	0.27	6-7	0.24
2-15	0.26	4-12	0.49	6-8	0.16
2-16	0.28	4-13	0.62	6-9	0.13
2-17	0.24	4-14	0.70	6-10	0.11
2-18	0.18	4-15	0.28	6-13	0.28
2-21	0.30	4-18	0.23	6-14	0.18
2-22	0.47	4-19	0.29	6-15	0.14
2-23	0.39	4-20	0.29	6-16	0.19
2-24	0.41	4-21	0.23	6-17	0.10
2-25	0.30	4-22	0.62	6-20	0.35
2-28	0.24	4-25	0.43	6-21	0.25
3-1	0.49	4-26	0.39	6-22	0.20
3-2	0.30	4-27	0.56	6-23	0.13

APPENDIX B
TABLE 8 (Continued)

BETA ACTIVITY IN KENNEWICK DRINKING WATER - 1966
Units of c/m/ml

Date	c/m/ml	Date	c/m/ml	Date	c/m/ml
6-24	0.12	9-15	0.21	11-11	0.21
6-27	0.23	9-16	0.18	11-14	0.37
6-28	0.24	9-19	0.30	11-15	0.55
6-29	0.21	9-20	0.16	11-16	0.60
6-30	0.17	9-21	0.23	11-17	0.40
7-1	0.20	9-22	0.36	11-18	0.49
7-5	0.18	9-23	0.37	11-21	0.49
7-6	0.22	9-26	0.36	11-22	0.39
7-7	0.13	9-28	0.34	11-23	0.45
7-8	<0.05	9-29	0.49	11-28	0.33
7-11	0.05	9-30	0.41	11-29	0.55
7-12	<0.05	10-3	0.31	11-30	0.41
7-13	0.05	10-4	0.40	12-1	0.29
7-14	0.15	10-5	0.19	12-2	0.27
7-15	0.11	10-6	0.14	12-5	0.27
7-18	<0.05	10-7	0.30	12-6	0.56
7-21	<0.02	10-10	0.42	12-7	0.50
7-25	<0.02	10-11	0.37	12-8	0.55
8-1	<0.02	10-12	0.41	12-9	0.55
8-5	<0.02	10-13	0.39	12-12	0.41
8-12	0.004	10-14	0.39	12-13	0.69
8-15	0.004	10-17	0.26	12-14	0.54
8-19	0.003	10-18	0.60	12-15	0.35
8-22	0.003	10-19	0.36	12-16	0.32
8-23	<0.01	10-20	0.21	12-19	0.41
8-24	0.01	10-21	0.26	12-20	0.76
8-25	0.003	10-24	0.30	12-21	0.66
8-26	0.004	10-25	0.46	12-22	0.62
8-29	0.33	10-26	0.40	12-27	0.76
8-30	0.41	10-27	0.36	12-28	0.97
8-31	0.43	10-28	0.37	12-29	0.60
9-1	0.26	10-31	0.37	12-30	0.35
9-2	0.29	11-1	0.33		
9-6	0.42	11-2	0.36		
9-7	0.47	11-3	0.29		
9-8	0.41	11-4	0.29		
9-9	0.44	11-7	0.39		
9-12	0.16	11-8	0.28		
9-13	0.20	11-9	0.31		
9-14	0.21	11-10	0.26		

APPENDIX C
RADIONUCLIDES IN FISH AND WATERFOWL

APPENDIX C
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE
OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Priest Rapids						
1-8	4	0.2	6	6.0	-	-
10-5	5		4	0.3		0.2
11-22	2		5	1.3		0.2
11-22	29		4	0.4		0.2
11-22	43	0.9	4	14	0.4	0.4
11-22	3		4	0.5		0.1
11-22	19	0.3	4	12	0.2	0.3
11-22	5	0.4	5	5.2	-	0.2
11-22	73	1.1	3	17	0.5	0.5
11-22	4	0.6	5	5.5	0.2	0.5
11-22	120	1.1	5	24	0.3	0.7
11-22	66	0.5	4	12	0.2	0.4
11-22	63	0.5	4	17	0.3	0.3
11-22	220	0.7	5	17	0.4	0.3
11-22	160	0.7	6	26	0.3	0.4
11-22	-		4	0.7		0.3
Hanford						
1-7	44	4.2	5	32	1.3	0.8
1-7	1	-	2	-	-	0.4
1-7	100	2.7	5	41	2.0	0.6
1-7	53	2.9	5	48	1.8	0.6
1-7	51	2.3	4	31	1.1	0.7
1-7	69	1.8	4	36	0.9	0.7
1-7	86	1.7	5	37	0.8	0.7
1-7	110	2.8	5	36	1.6	0.9
1-7	9	0.3	5	4.2	0.2	0.1
1-7	59	2.3	4	29	1.1	0.6
1-7	70	2.4	5	33	1.1	0.5
1-7	70	0.9	3	28	0.7	0.5
1-7	70	1.9	4	27	1.0	0.9
1-7	120	1.7	5	33	1.3	0.8
1-7	39	1.7	4	36	0.8	0.7
1-7	62	1.6	4	38	0.6	0.8
1-7	370	0.5	6	63	0.5	0.4

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford (Continued)						
2-9	92	9.0	10	85	4.3	1.7
2-9	25	2.1	3	28	1.2	0.6
2-9	-	3.1	3	19	0.9	0.6
2-9	13	0.5	3	18	0.2	0.2
2-9	34	1.7	3	31	1.0	0.7
2-9	18	1.2	3	22	0.7	0.3
2-9	26	1.1	3	25	0.6	0.5
2-9	10	1.0	4	5.1	0.6	0.9
2-9	31	2.3	3	32	1.3	0.6
2-9	40	1.6	5	36	1.0	0.9
2-9	43	2.1	3	39	0.9	0.5
2-9	32	1.8	4	32	0.6	0.4
2-9	30	1.4	4	31	0.3	0.5
2-9	27	1.6	4	36	0.4	0.4
2-9	38	1.1	5	28	0.2	0.3
3-9	20	2.8	5	30	1.[illegible]	0.9
3-9	26	1.9	4	22	0.9	0.4
3-9	22	2.2	5	28	1.2	0.8
3-9	7	2.3	3	28	1.1	0.9
3-9	28	2.1	4	27	1.1	0.8
3-9	34	2.4	4	38	1.2	1.0
3-9	61	1.8	4	40	0.5	0.5
3-9	14	1.1	4	20	0.4	0.5
3-9	53	0.4	6	19	0.6	0.2
3-9	7	0.5	4	20	0.3	0.6
3-9	17	2.2	5	40	1.1	0.9
3-9	57	2.6	4	38	0.5	1.0
3-9	68	0.5	4	26	-	0.3
3-9	25	2.4	5	21	1.2	0.9
3-9	46	1.3	5	26	0.3	0.5
4-13	67	2.9	5	25	1.5	0.9
4-13	130	0.6	5	20	0.4	0.7
4-13	81	1.7	5	30	0.5	0.6
4-13	220	1.6	5	24	0.5	0.7
4-13	310	0.8	5	26	0.2	0.7
4-13	130	1.4	5	26	0. 4	0.7

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford (Continued)						
5-13	42	4.7	2	31	1.7	1.3
5-13	15	0.2	2	3.6	-	0.1
5-13	110	3.4	3	26	1.4	1.1
6-3	22	2.2	6	20	0.5	0.5
6-3	55	2.8	3	26	1.1	0.9
6-3	42	2.4	3	28	0.9	1.1
6-3	10	3.8	3	25	0.9	1.1
6-29	10	1.5	3	16	0.7	0.5
6-29	13	0.2	4	3.7	0.2	0.1
6-29	17	1.1	3	14	0.4	0.6
6-29	8	1.8	3	18	0.6	0.5
6-29	34	1.3	5	24	0.6	1.0
6-29	31	1.7	3	24	0.7	0.7
6-29	26	4.0	1	22	1.2	1.3
6-29	15	1.6	5	12	0.8	0.4
6-29	24	1.6	4	16	0.8	0.5
6-29	27	2.1	3	23	1.0	0.5
6-29	25	1.5	5	15	0.6	0.6
6-29	26	1.3	3	16	0.5	0.7
6-29	49	1.4	5	20	0.6	0.7
6-29	76	1.2	5	10	0.7	0.3
6-29	44	1.7	5	16	0.7	0.5
7-21	22	1.9	3	11	0.6	0.9
7-21	21	0.3	4	7.0	0.3	0.1
7-21	34	1.7	3	16	0.6	0.8
8-31	9	1.5	5	14	0.4	0.8
8-31	12	1.7	4	15	0.4	0.9
8-31	26	2.4	2	13	0.6	1.2
8-31	18	1.6	5	15	0.4	0.9
8-31	8	1.7	5	13	0.3	0.9
8-31	5	1.8	3	7.8	0.6	0.9
9-28	150	1.0	7	23	0.3	0.5
9-28	260	0.8	10	24	0.4	0.7
9-28	110	1.4	9	21	0.4	0.5
9-28	130	0.9	6	15	0.3	0.5
9-28	56	0.3	4	14	-	0.3

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford (Continued)						
10-13	120	0.4	4	19	0.7	1.4
10-13	180	2.0	4	18	0.6	0.9
10-13	150	0.6	5	25	0.4	0.7
10-13	180	0.8	4	21	0.6	0.7
10-13	210	0.5	4	16	0.7	0.4
11-15	150	1.9	4	28	0.9	1.2
11-15	83	1.6	4	22	0.7	0.7
11-15	110	1.0	4	24	0.7	0.5
11-15	340	1.6	4	31	1.1	0.6
11-15	44	0.8	5	13	0.2	0.4
12-6	170	1.3	5	27	1.0	1.0
12-6	240	2.3	4	22	0.8	0.9
12-6	57	1.4	4	15	1.0	0.7
12-6	80	1.2	4	17	1.1	1.0
12-6	160	2.3	7	25	1.3	0.4
12-6	110	1.5	4	19	0.8	0.8
12-6	70	0.8	3	13	0.4	0.8
12-6	90	0.2	5	11	0.4	0.3
12-6	160	1.9	9	26	0.8	0.5
Ringold						
1-27	63	2.6	3	34	1.1	0.5
1-27	51	2.2	5	32	1.9	0.7
1-27	59	2.4	5	28	1.6	0.6
1-27	42	3.2	4	36	1.4	0.7
1-27	57	2.0	4	34	0.8	0.4
1-27	75	2.0	4	39	0.8	0.6
1-27	69	1.6	4	38	0.7	0.7
1-27	53	2.0	5	46	0.8	0.7
2-16	32	2.2	3	30	1.2	0.9
2-16	71	1.0	4	27	0.3	0.7
2-16	40	2.6	4	31	0.7	1.0
2-16	31	1.7	4	33	0.6	0.5
2-16	61	1.8	4	28	0.6	0.9
2-16	77	2.0	3	46	0.8	0.6
2-16	300	1.2	4	49	0.2	0.7

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

APPENDIX C

TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{50}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Ringold (Continued)						
2-28	35	1.9	7	27	0.8	1.1
2-28	280	-	10	29	-	0.2
2-28	320	0.4	7	40	0.2	0.6
2-28	340		11	52		0.6
3-18	420	1.5	7	49	0.2	0.9
3-18	580	0.9	6	70	-	0.3
3-22	64	1.8	6	22	0.3	1.1
3-22	270	1.3	8	41	0.4	0.6
3-22	250	1.3	8	37	0.4	1.1
4-7	100	2.2	7	46	1.0	0.5
4-7	320	1.5	13	47	-	0.4
4-7	53	-	-	8.4	-	-
4-7	17	1.0	5	37	-	-
4-7	200	1.3	6	18	-	0.4
4-7	33	0.9	5	29	-	0.3
4-7	110	1.8	4	26	0.7	0.8
4-7	71	2.2	5	45	1.1	0.6
4-7	29	7.2	5	23	1.6	1.0
4-7	47	2.9	3	32	1.1	0.6
4-27	230	0.7	4	14	0.3	0.1
4-27	240	2.7	5	34	0.9	1.0
4-27	210	2.1	5	26	1.5	1.2
4-27	570	0.8	5	32	0.2	0.6
-	190	0.8	7	10	0.2	0.3
-	300	0.6	4	13	0.4	0.3
-	210	2.1	4	29	0.7	1.1
-	500	0.7	3	41	-	0.5
-	290	1.4	5	30	0.5	0.8
-	720	-	5	35	0.2	0.4
-	170	2.2	5	24	0.9	1.0
-	280	0.5	4	11	0.2	0.2
-	350	1.0	5	32	0.5	0.8
-	490	-	6	17	-	-
5-23	86	4.0	3	21	1.5	1.1
5-23	67	4.2	2	22	1.7	0.8

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Ringold (Continued)						
5-23	51	1.1	4	16	0.4	0.4
5-23	46	0.7	5	8.9	0.4	0.2
5-23	10	0.2	3	6.8	-	0.1
5-23	150	1.3	3	24	0.2	0.7
5-23	130	1.4	5	23	0.2	0.9
5-23	28	1.3	3	7.4	0.3	0.2
5-23	140	3.4	2	29	1.0	1.1
5-23	58	1.6	5	22	0.5	1.3
5-23	9	0.2	3	3.3	-	-
5-23	74	2.1	4	11	0.8	0.4
5-23	96	1.3	5	20	0.4	1.2
5-23	190	1.1	3	18	0.4	0.3
5-23	130	2.8	4	26	1.0	1.0
5-23	74	1.5	3	15	0.4	1.0
6-15	8	0.7	4	4.2	0.2	0.3
6-15	-	0.2	4	1.7	-	-
6-15	60	1.9	4	27	0.7	0.9
6-15	120	1.4	3	29	0.3	0.9
6-15	24	1.6	4	20	0.6	1.0
6-15	81	0.2	4	4.9	-	0.1
6-27	33	2.7	4	18	0.9	1.1
6-27	22	3.0	5	22	0.8	1.3
6-27	35	3.2	4	20	1.1	1.1
6-27	16	0.5	4	8.0	0.2	-
6-27	23	2.6	4	23	0.9	1.2
6-27	38	2.6	5	23	1.3	1.0
6-27	24	2.2	4	27	0.7	0.9
6-27	25	0.4	6	8.6	0.5	0.3
6-27	120	0.8	9	26	0.3	0.8
6-27	150	2.0	7	23	1.0	0.8
6-27	67	1.6	6	24	0.6	1.0
6-27	42	1.3	5	25	0.2	1.2
6-27	41	1.7	7	22	0.6	1.2
6-27	150	1.5	6	19	0.7	0.1
7-14	130		3	27	0.3	0.7
7-14	8	0.3	4	3.0	0.3	0.2

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Ringold (Continued)						
7-14	37	2.1	3	21	1.3	0.9
7-14	10	0.3	3	4.7	0.2	0.2
7-14	14	2.2	4	23	0.6	1.1
7-14	17	0.5	4	6.4	0.5	-
7-14	11	0.5	2	4.2	0.6	0.1
7-14	28	0.4	4	6.6	0.7	-
7-14	12	2.6	3	17	0.6	1.3
7-14	180	0.4	3	11	0.3	0.3
7-14	37	2.2	3	21	0.9	1.0
7-14	17	1.9	3	19	1.2	0.4
7-14	28	2.3	4	25	0.4	1.2
7-14	34	3.6	3	28	1.0	1.4
7-15	20	1.2	5	30	0.2	0.8
7-15	18	2.5	3	26	0.9	0.9
7-15	85	0.9	4	42	0.7	0.8
7-15	32	2.0	4	27	0.5	1.5
7-15	85	0.9	4	28	-	1.1
7-15	13	0.2	3	19	0.6	0.9
7-15	21	0.4	3	4.6	0.3	1.2
7-15	93	2.1	4	37	0.8	0.9
7-15	28	0.7	4	6.4	0.7	0.3
7-15	10	3.7	4	18	0.8	1.2
7-15	27	1.4	5	28	0.7	1.4
7-15	140	1.0	4	37	0.6	1.1
7-15	830	0.4	3	52	-	0.3
7-15	250	0.5	3	19	0.3	0.4
7-15	80	0.7	3	16	0.4	0.3
7-15	31	1.7	6	20	0.7	0.6
7-15	33	1.2	5	21	0.5	0.9
7-19	4	4.2	3	22	1.1	1.1
7-19	13	1.8	4	22	0.6	1.1
7-19	9	4.2	3	25	1.6	1.3
7-19	17	1.8	2	20	0.8	1.4
7-19	62	0.5	5	16	0.6	0.5
7-19	15	0.9	4	12	0.5	0.4
7-19	20	0.4	3	7.0	0.5	0.1

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Ringold (Continued)						
7-19	21	0.3	4	5.4	0.3	-
7-19	5	3.3	2	25	1.2	1.4
7-19	10	0.4	4	4.2	0.3	-
7-19	48	0.5	3	6.8	0.4	0.3
7-19	15	0.9	4	8.3	0.6	0.1
7-19	29	1.6	4	12	0.7	0.6
7-19	140	0.7	4	24	0.3	0.5
7-19	20	1.0	4	8.2	0.9	0.3
7-19	17	1.1	2	7.5	0.7	0.4
7-19	17	0.4	3	5.7	0.6	-
7-19	77	1.7	4	32	1.3	0.9
7-19	-	1.1	3	14	0.6	0.4
7-19	15	0.8	4	8.0	0.6	0.2
7-19	37	1.0	4	22	0.5	1.0
7-19	22	1.3	3	19	0.6	1.1
7-19	120	1.1	5	21	0.3	0.6
7-19	160	0.2	4	14	0.2	0.2
7-19	28	1.4	4	17	0.4	0.7
7-19	23	2.7	4	23	0.7	1.0
7-19	7	0.8	3	16	0.2	0.3
7-19	29	0.4	4	7.6	0.4	0.1
7-19	19	1.1	3	13	0.6	0.5
7-19	140	0.8	3	19	0.2	0.3
7-19	9	1.2	5	13	0.6	1.0
7-19	6	0.2	3	2.6	0.2	0.1
7-29	9	0.3	3	3.1	0.2	-
7-29	12	0.7	3	8.7	0.4	0.2
7-29	16	1.1	3	9.0	0.6	0.3
7-29	22	0.9	2	9.1	0.4	0.2
7-29	46	0.7	4	13	0.3	0.4
7-29	24	0.4	3	6.7	0.2	0.2
7-29	24	2.0	3	26	0.8	1.0
7-29	28	1.7	3	25	0.7	0.9
7-29	58	1.9	3	29	0.6	1.0
7-29	11	0.4	2	4.8	0.5	0.1
7-29	35	1.1	3	9.3	0.7	0.2

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Ringold (Continued)						
7-29	34	1.4	4	18	0.8	0.5
7-29	28	1.7	5	22	0.5	1.0
7-29	51	1.6	4	18	0.9	0.7
7-29	87	1.0	3	24	0.4	0.6
7-29	91	0.4	5	11	-	0.2
8-4	9	1.5	5	20	0.6	1.0
8-4	3		3	3.2	-	-
8-4	8	0.2	3	4.8	-	0.1
8-4	53	0.5	4	14	0.3	0.4
8-4	89	0.8	4	40	0.4	0.7
8-4	10	0.8	4	9.8	0.4	0.3
8-4	12	2.7	4	21	0.7	1.3
8-4	10	1.5	4	19	0.3	1.3
8-4	88	0.6	3	38	0.2	0.3
8-4	17	0.8	3	13	0.5	0.4
8-12	8	2.2	4	20	0.6	0.8
8-12	100	0.5	5	32	0.2	0.6
8-12	34	0.4	5	13	-	0.2
8-12	21	1.1	3	15	0.5	0.4
8-12	24	1.1	4	21	0.2	0.6
8-12	15	1.9	4	19	0.3	0.9
8-12	10	0.5	4	4.1	0.4	0.2
8-12	16	2.1	5	20	0.5	0.8
8-12	5	1.3	4	20	0.3	2.0
8-12	20	0.4	3	9.8	0.5	0.2
8-19	7	1.0	4	12	0.3	0.6
8-19	2	1.3	3	15	0.4	0.7
8-19	9	0.3	3	5.8	0.2	0.2
8-19	5	1.0	4	18	0.2	1.1
8-19	3	2.9	4	22	0.6	1.4
8-19	13	3.1	4	19	0.9	1.1
8-19	17	1.5	3	18	0.3	0.8
8-19	10	0.9	3	18	0.2	0.2
8-26	6	0.4	4	5.8	0.2	0.3
8-26	3	1.8	5	14	0.6	1.1

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Ringold (Continued)						
8-26	15	1.5	5	17	0.5	0.6
8-26	4	0.7	3	5.8	0.4	0.3
8-26	32	0.3	4	7.2	0.6	0.2
8-26	10	1.3	3	9.8	0.4	0.5
8-26	12	0.5	4	8.8	0.2	0.3
8-26	72	1.0	6	29	0.3	0.3
8-26	15	0.4	3	6.7	0.2	0.1
8-26	14	1.9	5	19	0.5	0.7
9-1	19	0.4	3	8.5	0.2	0.3
9-1	17	1.7	5	18	0.4	0.7
9-1	23	1.8	4	14	0.7	0.6
9-1	8	1.2	4	8.7	0.6	0.3
9-1	14	0.6	4	13	0.3	0.3
9-1	11	1.5	4	11	0.4	0.2
9-1	14	1.7	4	17	0.2	0.7
9-1	20	2.5	1	19	0.5	0.8
9-1	27	0.6	5	16	0.4	0.4
9-1	14	1.0	2	19	-	0.4
9-1	16	0.6	2	9.3	0.4	0.2
9-6	21	2.1	5	15	0.6	0.9
9-6	21	0.6	8	12	0.3	0.3
9-6	34	0.6	5	8.2	0.4	0.3
9-6	14	0.7	6	8.3	0.3	0.3
9-6	48	0.6	10	5.6	0.2	0.4
9-6	23	1.5	6	14	0.4	0.8
9-6	33	1.0	6	12	0.3	1.0
9-6	15	0.6	6	6.6	0.3	0.4
9-14	37	1.5	3	8.3	0.3	0.7
9-14	60	0.6	5	6.5	0.4	0.2
9-14	14	0.9	4	13	-	0.7
9-14	66	0.8	5	8.8	0.4	0.4
9-14	63	0.8	5	11	0.2	0.9
9-14	44	1.9	5	14	0.4	1.1
9-14	29	0.8	5	7.7	0.5	0.5
9-14	79	1.2	4	11	0.3	1.1
9-14	150	1.5	4	17	0.3	1.0
9-14	68	0.6	5	14	-	0.8

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Ringold (Continued)						
9-20	120	1.5	5	20	0.2	0.9
9-20	290	0.9	5	17	0.4	0.4
9-20	88	0.9	5	13	0.4	0.5
9-20	160	0.6	6	20	-	1.1
9-20	170	1.0	4	12	0.4	0.6
9-20	77	0.7	8	17	0.2	0.7
9-20	75	1.3	4	17	0.4	0.9
9-20	66	0.4	4	11	0.2	0.4
9-20	48	0.4	4	5.6	0.2	0.2
9-20	170	2.1	5	17	0.7	0.7
9-20	52	0.7	5	13	0.3	0.7
9-20	100	0.9	5	19	0.2	0.7
9-20	99	2.4	5	18	0.6	1.1
10-3	280	2.4	5	18	0.7	1.1
10-3	520	1.0	5	24	0.5	0.8
10-3	170	0.8	5	22	0.8	0.5
10-3	340	1.3	3	39	0.7	0.8
10-3	410	1.7	5	25	0.8	0.6
10-3	390	1.6	4	18	0.6	0.6
10-3	420	0.7	4	17	0.3	0.6
10-3	270	1.1	2	22	0.9	0.5
10-3	180	1.3	4	23	0.6	0.7
10-3	380	1.1	5	21	0.8	0.6
10-3	500	1.1	5	29	0.9	0.6
10-31	140	1.7	5	18	0.4	0.9
10-31	230	1.2	5	20	0.4	1.1
10-31	150	0.8	5	22	0.7	0.6
10-31	49	0.3	5	14	-	0.2
10-31	480	1.1	5	28	0.8	0.5
10-31	93	0.4	8	15	-	0.2
10-31	380	0.7	7	32	0.4	0.6
10-31	300	1.6	5	25	1.0	0.9
12-8	400	1.8	5	46	1.0	0.4
12-8	310	1.5	4	29	0.8	0.5
12-8	330	0.5	6	41	-	0.1
12-8	170	4.2	6	22	1.2	1.2
12-8	360	1.5	9	34	0.4	0.4
12-8	25	1.0	4	20	-	0.9
12-8	180	2.8	5	42	1.5	0.6

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Richland						
1-25	25	2.2	4	34	1.3	0.7
1-25	55	2.5	4	48	1.3	0.6
1-25	110	2.9	3	63	1.6	0.1
1-25	48	2.4	5	48	1.4	0.5
1-25	55	3.3	5	31	1.7	0.4
1-25	81	3.1	5	51	1.5	0.3
1-25	90	2.2	6	55	1.4	0.3
1-25	44	2.7	3	39	1.3	0.6
4-22	100	2.7	4	35	1.7	0.8
4-22	5	0.2	3	16	-	-
4-22	300	2.0	4	36	0.8	0.8
4-26	56	3.8	2	30	1.8	1.0
4-26	460	1.0	4	33	0.5	0.4
4-26	180	4.3	3	30	2.1	1.1
5-23	17	0.5	3	6.3	0.2	0.1
5-23	1	0.2	3	0.8	-	0.1
5-23	33	0.6	3	17	0.2	1.3
5-23	21	0.2	4	5.5	-	0.1
5-23	110	3.1	4	31	1.4	0.8
5-31	52	2.7	3	30	1.0	0.8
5-31	52	1.9	4	25	0.8	0.8
5-31	42	1.5	4	19	0.5	0.5
5031	59	2.1	4	31	0.6	1.0
5-31	120	2.2	3	32	1.1	0.5
6-27	14	1.4	5	22	0.6	1.1
6-27	18	0.4	2	4.5	0.3	-
6-27	32	0.5	4	7.3	0.2	0.1
6-27	28	3.7	4	19	1.3	0.8
6-27	15	0.2	5	4.4	0.2	-
6-27	34	3.0	3	22	1.6	0.6
6-27	29	0.3	5	7.6	0.2	0.1
6-28	14	3.3	4	22	1.0	1.0
6-28	13	2.1	4	18	0.7	0.8
6-28	83	1.2	3	20	0.9	0.4
6-30	17	0.2	3	3.6	0.2	-
6-30	18	0.3	3	6.1	0.2	-
6-30	34	2.0	5	24	0.8	0.8

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Richland (Continued)						
6-30	66	1.1	5	26	0.3	0.7
6-30	44	2.0	5	27	0.9	0.7
6-30	59	1.5	7	31	0.9	0.7
12-20	79	1.7	7	24	0.8	0.7
Island View						
9-22	46	0.3	3	5.5	-	0.2
9-22	12	0.3	4	11	-	0.1
9-22	22	0.2	3	5.9	-	-
9-22	190	0.5	4	10	-	0.3
9-22	100	0.9	4	9.8	0.3	0.4
9-22	92	-	4	7.2	0.2	0.2
9-22	96	0.5	3	8.2	0.3	0.1
9-22	61	0.6	4	6.0	-	0.3
9-22	100	0.5	3	8.4	0.3	0.1
9-22	52	0.7	3	11	0.4	0.3
9-22	210	1.0	4	13	0.5	0.3
9-22	350	1.0	3	14	0.5	0.3
9-22	90	0.9	4	10	0.4	0.3
9-22	150	0.5	5	9.9	-	0.5
11-1	11	0.5	5	10	0.2	0.3
11-1	290	1.2	4	38	0.7	0.1
12-20	6		4	15		0.3
Burbank						
1-4	31	1.3	4	34	0.5	0.6
1-4	33	2.1	4	34	0.8	0.7
1-4	23	0.2	4	17	-	0.2
1-4	17	0.5	4	15	-	0.6
1-4	43	0.3	4	18	-	0.2
1-4	11	0.3	4	14	0.5	0.3
2-3	12	-	4	9.2	-	0.1
3-15	48	1.3	4	28	-	0.3
11-3	130	0.4	4	12	-	0.2
11-3	200	0.3	4	15	-	0.1
11-3	92	0.3	4	14	-	-

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

APPENDIX C
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF WHITEFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank (Continued)						
11-3	6		5	12	-	0.2
11-3	160		7	21	-	0.2
11-3	88	1.0	6	18	0.7	0.3
11-3	40		5	12	-	0.2
12-13	33		3	8.2		-
12-13	18		3	8.3		0.1
12-13	5		4	10		0.1
12-13	18		3	14		-
12-13	26	0.9	3	29	-	0.5
12-13	4	1.1	1	12	-	0.5
12-13	31		3	20		-
12-13	12		3	11		-
12-13	38		3	20		-
12-13	40		5	22		-
12-13	18		4	9.8		0.1
12-13	6		3	11		0.4
McNary Dam						
10-18	110	0.3	3	10	-	0.2

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

APPENDIX C
TABLE 2

CONCENTRATIONS OF RADIOCUCLIDES IN MUSCLE OF BASS TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford						
4-13	13	-	3	15	-	1.4
4-13	10	-	4	19	-	1.4
5-13	22	-	3	13	-	0.8
6-3	79	-	5	20	-	1.0
6-3	22	0.3	2	17	-	1.7
7-21	13	-	4	11	-	1.8
10-14	86	-	3	13	-	1.0
Ringold						
3-25	4	0.2	4	11		1.2
3-25	-		4	11		1.2
3-25	-		3	13		1.3
3-25	-		4	11		1.0
3-25	-		5	14		1.1
3-25	-		4	16		1.3
3-25	4		3	14		1.1
3-25	3		4	15	-	1.5
4-27	13	0.2	4	12	-	1.1
4-27	40	-	4	15	-	1.0
4-27	27	-	5	20	-	0.9
Richland						
11-2	93	-	5	15	-	0.3
11-2	26	-	4	7.9	-	0.4
Island View						
11-1	17	-	4	2.4	-	-
Burbank						
3-15	1	-	4	9.0	-	0.2
3-15	3	-	5	13	-	0.3
8-10	5	-	4	9.7	-	0.7
12-13	4	-	3	9.0	-	-

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

APPENDIX C
TABLE 3

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF CATFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford						
5-13	310	0.3	3	10	-	0.3
5-13	LOST		2	-		-
8-24	8		2	5.4		0.4
Richland						
11-2	25	-	5	6.9	-	0.3
Island View						
7-6	3		6	2.8		-
7-6	7		3	2.0		-
7-6	-		3	0.9		0.3
7-6	5		3	1.9		-
7-6	4		4	2.1		-
9-22	5		4	4.1	-	-
9-22	-	0.2	4	1.5		-
9-22	-		4	2.3	-	-
9-22	4		-	4.3	0.3	0.2
9-22	2		3	3.6		-
11-1	66		3	1.6		-
11-1	1		4	1.5	-	-
11-1	-		4	1.9		-
12-20	1		4	1.4		-
Burbank						
1-4	4	-	3	7.7	-	-
1-4	7		3	4.4	-	-
2-3	-	-	3	5.3	-	-
2-3	-	-	4	7.9	-	0.1
3-15	-	-	3	15	-	-
3-15	2	-	4	15	-	-
3-15	2	-	3	17	-	-
3-15	2	0.2	3	11	-	0.1
3-15	-	-	3	11	-	0.1
3-15	-	-	3	14	-	-
3-15	2	-	3	12	-	-
3-15	-	-	4	11	-	-

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 CATFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank (Continued)						
3-51	2	-	3	13	-	-
3-15	2	-	3	3.1	-	-
4-20	2		3	7.3	-	0.1
4-20	2		2	12	-	0.4
4-20	3		3	8.7	-	-
4-20	3		2	16	-	-
4-20	3		3	9.8	-	-
4-20	2		3	14	-	0.1
4-20	3		2	12	-	0.1
4-20	-		3	9.0	-	0.1
4-20	-		3	7.6	-	0.1
4-20	-	-	3	6.7	-	0.2
5-6	-		2	1.3	-	0.1
5-6	-		3	8.6	-	0.1
5-20	8		4	13	-	0.2
5-20	12		4	12	-	0.1
5-20	-		3	11	-	-
5-20	12		2	9.2	-	0.1
5-20	2		3	2.2	-	0.1
5-20	9		3	8.4	-	0.1
5-20	6		3	12	-	-
5-20	6		3	0.4	-	-
6-9	3	-	3	6.6	-	0.1
-	3	-	3	9.1	-	0.3
-	3	-	3	11	-	0.2
-	4	-	2	8.7	-	0.2
-	3	-	3	12	-	0.1
-	4	-	3	14	-	0.1
-	4	-	3	13	-	-
-	3	-	3	8.9	-	0.1
-	4	-	3	13	-	-
-	5	-	3	15	-	-
8-2	8		3	10	-	0.1
8-2	9		3	8.6	-	-
8-2	7		3	8.5	-	-
8-2	2		3	5.4	-	-
8-2	3		3	10	-	0.2

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

APPENDIX C

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF CATFISH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank (Continued)						
8-10	4		3	4.2	-	-
8-10	1	0.2	3	8.6	-	0.2
8-10	4		3	6.5	-	0.2
8-10	4		4	10	-	0.2
8-16	3	-	3	8.3	-	0.1
8-16	7		3	6.9	-	-
8-16	3		3	9.2	-	-
8-16	8		4	14	-	0.3
8-16	-		3	10	-	0.2
8-30	1		3	6.0		0.1
8-30	4		4	7.8		0.1
8-30	4		3	7.4		-
8-30	3		3	6.7		0.1
9-15	44		3	6.6	-	0.2
10-10	41		3	10	-	-
10-10	14		3	6.0	-	0.1
10-10	95	-	3	12	-	-
10-10	21	-	2	6.2	-	0.1
10-10	45		3	8.1	-	0.1
11-3	5		4	6.0	-	0.1
12-13	12		18	49		-

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 CRAPPIE TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Island View						
9-22	54	-	4	3.0	-	-
9-22	86	-	3	9.4	-	-
Burbank						
1-4	13	0.2	5	17		0.1
2-3	2	-	3	15	-	0.1
3-15	-	-	3	14	-	0.1
3-15	-	-	4	12	-	-
4-20	3	-	4	21	-	0.1
-	1	-	4	14	-	-
-	1	-	3	13	-	0.2
-	1	-	3	13	-	-
-	3	-	3	11	-	0.1
-	2	-	3	13	-	0.2
-	1	-	3	12	-	0.2
5-6	2		2	89	-	0.3
8-2	31		4	0.4		0.2
8-2	11		5	9.1		0.1
8-2	10		4	15		-
8-10	14		3	16	-	0.2
8-16	9		6	11	-	0.3
8-16	6		4	9.6	-	-
9-15	38		2	10	0.2	-
10-10	12		3	7.1	-	0.1
10-10	6		5	5.4	0.2	0.1
10-10	190		2	10	-	0.1
11-13	110		7	19	-	0.1
12-13	9			10		-

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 PERCH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Hanford						
4-13	6	-	8	0.7	-	-
5-13	LOST		2	0.2		-
8-24	15	-	5	17	-	0.9
8-24	39	-	5	10	-	-
8-24	39	-	4	10	-	0.6
9-10	48	-	5	19	-	0.9
12-6	100	-	5	11	-	0.6
Richland						
11-2	320	-	8	28	-	1.1
12-20	16	-	4	21		1.1
Island View						
7-6	9		5	3.5		-
Burbank						
1-4	5		4	14		0.3
1-4	8		4	14		-
1-4	26		-	23	0.2	-
2-3	6	-	3	8.8	-	-
2-3	7	-	5	9.0	-	0.1
3-15	3	-	6	21	-	0.6
3-15	-	-	6	26	-	0.2
3-15	3	-	3	14	-	-
3-15	5	-	3	1.0	0.3	0.5
3-15	2	-	5	13	-	0.2
3-15	11	-	3	16	-	-
3-15	-	-	3	21	-	-
3-15	4	-	4	21	-	-
4-20	1	-	4	7.6	-	
4-20	2	-	3	9.9	-	
4-20	-	-	3	12	0.2	
4-20	1	-	3	13	0.6	
5-6	5		5	11	-	0.2
5-6	5		5	8.5	-	-
5-6	5		2	11	-	0.1

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

APPENDIX C
TABLE 5 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF PERCH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank (Continued)						
5-6	-		3	8.5	-	0.4
5-6	4		4	8.7	-	-
5-6	72		4	9.8	-	0.2
5-6	1		3	7.8	-	-
5-6	-		3	13	-	0.3
5-20	-		2	12	-	0.2
5-20	4		2	14	-	0.1
5-20	2		3	15	-	-
5-20	6		3	17	-	0.1
5-20	-		4	14	-	-
6-9	9	-	3	15	-	0.1
6-9	4	-	3	11	-	-
6-9	7	-	5	13	-	0.1
6-9	2	-	1	8.0	-	-
6-9	-	-	3	14	-	0.5
6-9	12	0.2	3	12	-	0.1
6-9	3	0.2	3	11	-	-
7-27	20	-	3	11	-	0.2
7-27	11		5	8.9	-	-
7-27	40		5	11		0.2
7-27	6		2	8.9	-	0.1
7-27	28		5	13	-	0.1
7-27	14		-	8.6	-	0.2
7-27	5		3	7.4	-	-
7-27	17		4	7.9	-	-
7-27	22		3	8.6		-
7-27	22		4	13	-	0.2
7-27	67		4	9.2	-	0.1
7-27	3	-	3	10	-	0.1
7-27	14		3	11	-	0.2
7-27	32		2	12	-	0.1
7-27	21		3	9.2	-	-
8-2	3		4	1.3		-
8-2	14		6	9.9		0.1
8-2	13		3	7.5		-
8-2	34		2	13		0.1
8-2	15		4	11		-

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

APPENDIX C
TABLE 5 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF PERCH TAKEN FROM THE COLUMBIA RIVER - 1966

Units of picocuries per gram

Date	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit	1	0.2	1	0.2	0.2	0.1
Burbank (Continued)						
8-10	7		3	8.5		-
8-10	9	0.2	3	8.8	-	-
8-30	9		3	7.2		-
8-30	3		5	7.9		-
9-15	29		4	9.5	-	-
9-15	66		3	8.8	-	0.1
9-15	-		6	13	-	-
10-10	7		6	7.2	-	0.4
10-10	33		4	6.8	-	-
10-10	31		4	9.0	-	0.2
10-10	80		4	6.8		-
10-10	35		4	6.9	-	0.2
10-10	34		4	11	-	0.1
10-10	17		6	7.6	-	-
11-3	14		5	9.4		-
11-3	21		3	10		0.3
12-13	-		3	12		0.7
12-13	3		3	12		-
12-13	3		6	7.1		-
12-13	3		4	12		-
12-13	6		-	12		-
12-13	5		-	9.0		-
12-13	9		1	10		-

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
MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	Specie	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Priest Rapids							
1-18	Trout	-	-	3	1.3	-	-
5-2	Sturgeon	8		3	5.6	-	0.2
6-13	Carp	14	-	3	26	-	0.1
10-5	Trout	-		4	1.3	-	-
10-5	Trout	-		4	1.1	-	-
Coyate Rapids							
1-13	Steelhead	3	-	3	-	-	-
1-14	Steelhead	3	-	3	-	-	-
3-1	Steelhead	5	-	4	0.3	-	-
3-4	Steelhead	-	-	3	0.9	-	-
3-4	Steelhead	-	1.4	4	11	0.6	0.2
9-28	Steelhead	-		3			0.1
9-28	Steelhead	-		5			-
9-28	Steelhead	-		5			1.0
9-28	Steelhead	-		3			-
10-14	Steelhead	-		4	-		-
10-14	Steelhead	-		3	-		-
Hanford							
4-13	Carp	120	-	4	33	-	-
4-13	Sturgeon	16	-	3	9.2	0.2	0.6
4-13	Sturgeon	7	-	3	20	0.3	0.7
4-13	Sturgeon	37	0.3	4	9.2	0.2	0.6
4-13	Sturgeon	7	0.2	3	15	0.4	0.5
5-13	Sturgeon	17	-	2	12	0.2	0.5
5-13	Sturgeon	31	-	3	16	0.2	0.7
5-13	Sturgeon	19	0.3	2	16	-	0.8
6-3	Sturgeon	18	0.4	3	13	0.2	1.2
6-3	Sturgeon	20	-	4	14	-	0.7
6-3	Sturgeon	10	-	3	14	0.2	0.8
7-21	Steelhead	-	-	3	-	-	-
8-24	Carp	15	-	4	37	-	0.2
8-24	Carp	5	-	5	4.1	-	-
8-24	Sturgeon	14	0.2	5	11	-	0.7

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
MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	Specie	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Ringold							
1-12	Trout	96	0.6	5	64	-	-
1-12	Trout	130	1.2	7	92	0.3	-
1-12	Trout	130	0.6	4	90	-	-
1-27	Trout	69	0.9	5	47	0.3	0.2
2-16	Trout	76	0.9	6	73	-	-
2-16	Trout	86	-	4	57	-	-
2-16	Trout	120	-	5	54	-	0.2
3-18	Trout	110	0.9	5	69	-	0.3
3-22	Trout	150	0.4	11	41	-	0.3
10-3	Trout	120	0.3	5	21	-	0.2
10-3	Trout	270	0.4	5	28	-	0.3
12-8	Trout	250	0.3	6	35	-	0.1
12-8	Trout	350	0.2	5	42	-	-
Richland							
4-22	Trout	84	-	4	4.9	-	0.1
11-2	Carp	320	0.2	4	59	-	-
11-2	Carp	170	0.2	7	82	-	-
11-2	Carp	300	-	7	58	-	-
11-2	Carp	450	-	6	60	-	-
11-2	Carp	400	-	5	64	-	-
12-20	Carp	21	0.4	4	37	-	0.7
Island View							
7-6	Carp	12		3	9.2	-	-
7-6	Carp	2		4	10	-	0.1
7-6	Carp	3		5	66	-	-
7-6	Carp	4		4	35	-	0.2
9-22	Bluegill	3		4	1.2	-	-
9-22	Carp	32		4	5.8	-	-
9-22	Carp	26		5	7.9	-	-
9-22	Carp	2	-	3	4.1	-	-
9-22	Carp	-		3	1.1	-	-
9-22	Carp	-		4	2.4	-	-
9-22	Sturgeon	3		4	3.4	-	-
11-1	Carp	2		2	3.8	-	0.1
11-1	Carp	-		3	2.6	-	-

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
MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	Specie	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Island View (Continued)							
11-1	Carp	2		3	5.8	-	-
11-1	Carp	44		3	9.8	-	-
12-20	Carp	-		3	1.1		-
12-20	Carp	32	0.8	3	68	-	-
12-20	Carp	2		3	6.4		-
12-20	Carp	38		2	72		-
Burbank							
1-4	Sucker	72	0.5	3	29	0.4	0.9
2-3	Carp	-	-	3	31	-	0.2
3-15	Carp	1	-	3	49	-	-
3-15	Carp	-	-	3	25	-	-
3-15	Carp	1	-	3	57	-	-
4-20	Carp	6		4	56	-	-
4-20	Carp	9		4			
4-20	Carp	4		3	32	-	-
4-20	Carp	46	-	3	42		0.1
4-20	Carp	21		3	60		-
4-20	Carp	4		3	42		0.1
5-20	Sturgeon	5		3	15	-	0.2
5-20	Carp	9		4	39	-	-
5-20	Carp	3		4	77	-	-
5-20	Carp	62		3	74	-	-
5-20	Carp	22		4	25	-	0.1
6-9	Carp	33	0.2	3	110	-	0.2
6-9	Carp	51	-	4	37	-	-
6-9	Carp	31	-	3	3.4	-	-
6-9	Carp	17	-	3	46	-	-
6-9	Carp	28	-	3	49	-	0.1
6-9	Carp	41	0.2	4	46	-	0.3
6-9	Carp	12	-	3	29	-	-
6-9	Carp	22	-	3	63	-	-
6-9	Carp	8.7	-	3	1.4	-	-
6-9	Sturgeon	24	-	3	16	-	0.1
6-9	Sturgeon	39	-	3	15	-	0.2
6-9	Bluegill	23	-	4	7.0	-	-
6-9	Bluegill	11	-	4	7.1	-	0.2

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

APPENDIX C
TABLE 6 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER - 1966
Units of picocuries per gram

Date	Specie	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Burbank							
7-27	Sturgeon	8		3	7.7	-	0.2
7-27	Sturgeon	3		3	5.3	-	-
7-27	Sturgeon	2		3	11	-	0.1
7-27	Sturgeon	14		3	6.9	-	-
7-27	Sturgeon	37		2	15	-	-
7-27	Shad	9		4	2.6	-	-
7-27	Shad	3		5	4.4	-	0.1
7-27	Shad	16		4	3.0	-	-
8-2	Sturgeon	15		2	11	-	0.1
8-2	Carp	19		4	33	-	-
8-2	Shad	25		3	38	-	-
8-2	Shad	17		3	15	-	-
8-2	Shad	6		4	12		0.2
8-2	Carp	7		2	2.1		-
8-2	Carp	1		4	1.0		-
8-10	Carp	8	-	3	31	-	-
8-10	Carp	14	-	3	20	-	0.2
8-10	Carp	16		4	22	-	-
8-10	Carp	9	-	3	15	-	-
8-10	Carp	7		4	24	-	-
8-16	Carp	23	0.2	3	34	-	0.3
8-16	Carp	5		3	46	-	-
8-16	Carp	13	-	3	10	-	0.1
8-16	Carp	LOST		3	17	-	-
8-16	Carp	9		3	38	-	-
8-30	Carp	4		3	29		-
8-30	Carp	5		3	29		-
8-30	Carp	12		3	20		-
8-30	Carp	3		4	28		-
8-30	Carp	6		4	23		-
8-30	Sturgeon	7		4	7.9		0.1
9-15	Steelhead	-		3	-	-	0.1
9-15	Carp	43		4	25	-	-
9-15	Carp	42		3	18	-	-
9-15	Shad	130		4	5.2	-	-
10-10	Carp	24	-	3	26	-	-
10-10	Carp	33		4	10	-	

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

APPENDIX C
TABLE 6 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MUSCLE OF
MISCELLANEOUS FISH TAKEN FROM THE COLUMBIA RIVER -1966
Units of picocuries per gram

Date	Specie	^{32}P	^{60}Co	^{40}K	^{65}Zn	^{58}Co	^{137}Cs
Analytical Limit		1	0.2	1	0.2	0.2	0.1
Burbank (Continued)							
11-3	Carp	55		5	22	-	0.1
11-3	Carp	88		5	36	-	0.2
12-13	Carp	5		4	8.2		-
12-13	Carp	-		3	21		-
12-13	Carp	-		3	20		-
12-13	Carp	21		4	19		0.2
12-13	Carp	4		4	20		-
McNary							
10-18	Sturgeon	7		4	4.8	-	0.1
10-18	Sturgeon	18		3	4.1	-	0.1
10-18	Sturgeon	10		4	4.0	-	0.2
10-18	Sturgeon	14		3	3.0	-	0.2
10-18	Sturgeon	8		3	4.6	-	0.2
10-18	Steelhead	-		3	-	-	-
11-7	Sturgeon	3		4	4.4		0.1
11-17	Sturgeon	38		4	5.9		0.1
11-17	Sturgeon	52		3	8.7		0.1
11-17	Sturgeon	18		2	8.1		0.1

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

APPENDIX C
TABLE 7

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

picocuries/gram

Date	Specie	Head ^{32}P	Head ^{40}K	Head ^{65}Zn	Head ^{137}Cs	Muscle ^{32}P	Muscle ^{40}K	Muscle ^{65}Zn	Muscle ^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
Upper River									
1-6	Mallard	56	2.5	18	0	58	4	9.2	0
1-6	Mallard	21	4.4	7.4	.12	18	4	4.2	.03
1-6	Mallard	19	3.4	3.6	0	7	4	1.1	.11
1-13	Golden Eye	58	3.1	9.0		51	4	6.4	.20
1-13	Golden Eye	3	4.5	7.9	.18	32	4	5.4	.05
2-16	Mallard	89	4.3	37	0	170	4	20	.19
2-16	Mallard	23	5.4	3.4	0	0	3	1.3	0
2-16	Mallard	74	1.0	23	0	100	4	11	.14
2-16	Mallard	1	1.7	20	0	1.4	4	11	.06
2-16	Mallard	66	4.0	38	0	69	3	26	.09
2-16	Mallard	65	2.4	23	0	100	4	9.6	.10
3-8	Mallard	140	4.0	15	0	77	3	8.2	.02
3-8	Merganser	160	3.3	59	0	78	5	39	.20
3-17	Merganser	0	1.2	25	0				
10-14	Mallard	60	2.4	7.0	0	100	4	3.1	.05
10-14	Mallard	27	0.4	3.5	0	350	3	21	0
10-14	Mallard	59	1.9	15	0	77	3	6.8	.10
10-14	Mallard	210	1.0	43	.16	44	3	4.0	.04
10-14	Canadian Goose	0	2	2.2	.03	7.9	5	1.4	.07
10-16	Widgeon	8.8	3.4	0.55	0				
10-27	Lesser C. Goose	0	0	1.7	.01	1.5	3	.37	.17

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

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

picocuries/gram

Date	Specie	Head ^{32}P	Head ^{40}K	Head ^{65}Zn	Head ^{137}Cs	Muscle ^{32}P	Muscle ^{40}K	Muscle ^{65}Zn	Muscle ^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
Upper River									
10-27	Lesser C. Goose	4.2	1.3	2.2	0	0	3	.21	0
10-27	Lesser C. Goose	0	1.0	1.5	.87	0	4	.02	2.2
10-27	Lesser C. Goose	0	2.5	2.6	.62	2.0	4	0	2.4
10-27	Lesser C. Goose	6.1	.09	2.7	.77	<1.0	3	.04	2.5
10-27	Lesser C. Goose	3.9	4.8	5.9	.70	1.6	3	.02	2.1
10-27	Gadwall	120	0	5.8	.29	2.5	2	.25	.87
10-27	Gadwall	5.5	4	2.9	.21	6.1	3	.34	.56
10-27	G. W. Teal	960	0	151	0	240	6	50	0
10-27	G. W. Teal	290	9	82	0	190	6	28	1.2
10-27	G. W. Teal	440	5	30	0	340	5	5.7	.09
10-27	G. W. Teal	340	8	46	0	330	8	26	.01
11-15	C. Honker	61	3.1	24	0	49	3	14	.09
11-23	G. W. Teal	860	5.0	38	.07	1400	7	22	.31
11-23	Golden Eye	600	2.6	46	.05	560	5	23	.89
11-23	Golden Eye	0	4.7	0.38	.27	1.5	3	.13	.21
11-23	Golden Eye	4.6	3.2	0.49	.10	1.0	4	.13	.15
12-15	G. W. Teal	27	1.1	3.5	.19	<1.0	3	0	0
12-15	G. W. Teal	1.3	1.8	.99	.52	1.6	4	0.23	.01
12-14	Golden Eye	2900	5	310	0	1600	4	91	0
12-14	Golden Eye	2600	5	260	0	900	7	3.3	.67
12-14	Golden Eye	1400	1	150	0	1400	5	81	.11
12-14	Golden Eye	1000	2	130	0	1800	4	130	0

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

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

picocuries/gram

Date	Specie	Head ^{32}P	Head ^{40}K	Head ^{65}Zn	Head ^{137}Cs	Muscle ^{32}P	Muscle ^{40}K	Muscle ^{65}Zn	Muscle ^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
Upper River (Continued)									
12-14	Canadian Goose	10	2	28	0	12	3	20	.13
12-14	Canadian Goose	1.3	2	.98	0	<1	3	.12	.03
12-14	Canadian Goose	0	2	1.4	.05	2.5	3	.26	.03
12-14	Canadian Goose								
12-14	Lesser Goose	45	4	7.3	0	1.0	3	3.2	.07
Lower River									
1-4	Mallard		4	3.7	.15				
1-4	Mallard	8	5	16	0				
1-4	Mallard	7	3	29	0				
1-4	Mallard	15	4	18	.04				
1-4	Mallard	6	1	0.9	.11				
1-4	Mallard	15	4	18	0				
1-14	Mallard	3	5	4.2	.04	15	4	.93	.02
1-14	Mallard	100	5	18	0	3	3	6.3	.03
1-14	Mallard	13	4	3.7	.14	0	8	3.0	.10
1-14	Mallard	47	3	22	0	40	4	13	0
1-14	Mallard	10	3	4.7	.12	7	3	2.1	.17
1-14	Mallard	20	5	17	0	40	4	11	0
2-16	Mallard	.89	4	37	0	170	4	20	.19
2-16	Mallard	23	5	3.4	0	0	3	1.3	0
2-16	Mallard	74	<1	23	0	100	4	11	.14
2-16	Mallard	1.4	2	19	0	100	4	11	.06
2-16	Mallard	66	4	38	0	69	3	26	.09
2-16	Mallard	65	2	23	0	100	4	9.6	.10
3-17	Merganser	0	1	25	0				
3-17	Canadian Honker	<1		38	0	11		11	.09

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

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

picocuries/gram

Date	Specie	Head ^{32}P	Head ^{40}K	Head ^{65}Zn	Head ^{137}Cs	Muscle ^{32}P	Muscle ^{40}K	Muscle ^{65}Zn	Muscle ^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
Lower River (Continued)									
10-6	Mallard	210	1	17	0	310	4	8.0	0
10-6	Mallard	260	3	21	.04	290	3	9.5	0
10-6	Mallard	60	3	18	.05	100	3	6.4	.03
10-6	Mallard	47	0	0.58	0	33	3	3.5	.04
10-6	Mallard	3.1	2	1.6	.03	29	3	.23	0
10-24	Mallard	6.3	3	3.7	0	3.4	4	1.5	.01
10-24	Mallard	8.6	3	6.7	0	6.9	4	2.9	.05
10-24	Mallard	110	1	25	0	210	4	6.2	.22
10-24	Mallard	7.2	2	3.5	.08	6.3	3	.63	.15
10-24	Mallard	150	1	13	0	130	4	6.7	.23
10-24	Mallard	200	1	18	0	1.5	3	.08	.02
10-24	Mallard	220	0	0	.07	200	4	2.9	.03
10-24	Mallard	5.1	2	.77	.04	280	3	3.9	.04
10-24	Mallard	7.4	3	1.8	0	1.1	3	.18	0
10-31	Mallard	62	3	7.6	.13	31	4	4.0	0
10-31	Mallard	63	3	8.5	0	30	3	3.3	.12
10-31	Mallard	80	4	8.5	.20	24	4	3.3	.04
10-31	Mallard	39	5	3.1	.09	19	4	1.0	.02
10-31	Mallard	100	2	6.0	0	90	3	2.1	.02
10-31	Mallard	6.4	3	2.5	.10	1.4	3	.62	.09
10-31	Mallard	13	3	8.7	0	16	4	3.9	0
10-31	Mallard	150	0	7.4	.25	6.1	4	1.1	1.3
10-31	Lesser C. Goose	0	1	5.4	.01	0	3	.14	.09
12-1	Mallard	0	2	2.9	0	1.0	4	.76	.07
12-1	Mallard	3.0	2	3.9	.22	8.6	3	2.2	.11

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

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

		picocuries/gram							
		Head				Muscle			
Date	Specie	^{32}P	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{40}K	^{65}Zn	^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
Lower River (Continued									
12-1	Mallard	9.1	2	5.0	0	14	3	2.2	0
12-1	Mallard	8.4	4	3.2	.09	9.4	3	1.2	0
12-1	Mallard	31	5	13	.15	18	4	6.4	.04
12-1	Mallard	36	3	23	.05	79	4	13	0
12-8	Mallard	30	2	20	0	26	2	10	.07
12-8	Mallard	190	0	48	.17	100	3	19	0
12-8	Mallard	550	4	160	0	11	3	4.2	.03
12-8	Mallard	160	0	31	0	920	4	12	.01
12-15	Mallard	8.4	3	1.0	.06	0	3	.09	.04
12-15	Mallard	3.7	4	5.7	.23	5.4	3	.53	.81
12-15	Mallard	9.2	3	10	.03	4.4	3	4.8	.08
12-15	Mallard	9.6	2	8.9	0	9.1	3	5.0	.06
12-15	Mallard	6.1	1	5.6	0	<.1	3	2.1	.07
12-15	Mallard	10	4	7.8	0	7.4	3	2.4	.07
12-15	Mallard	7.0	2	10	.11	5.5	3	4.7	0
12-15	Mallard	0	1	11	0	12	3	6.2	.05
12-15	Merganser	28	7	31	0	63	4	12	.02
12-15	Mallard	83	3	17	0	28	3	9.7	.02
12-15	Golden Eye	890	1	160	0	1500	3	150	0
12-20	Mallard	15	2	14	0	5.2	3	8.9	0
12-20	Mallard	12	1	4.4	.08	18	2	1.8	.04
12-20	Mallard	15	2	6.6	0	15	3	2.7	.05
12-20	Mallard	32	2	3.4	0	7.1	3	.96	.02
12-20	Mallard	13	2	3.3	.02	4.9	3	1.2	0
12-20	Mallard	8.7	3	5.5	.01	12	3	2.3	.06
12-24	Mallard	0	2	10	0		3		
12-24	Mallard	1.5	2	7.5	.03		3		

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

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

		picocuries/gram							
		Head				Muscle			
Date	Specie	^{32}P	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{40}K	^{65}Zn	^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
Lower River (Continued)									
12-24	Mallard	44	2	14	0		3		
12-24	Mallard	8.6	2	7.5	0		3		
12-24	Mallard	28	3	13	0		3		
Burbank									
1-4	Coat	390	5	260	0				
1-4	Coat	330	5	49	0				
1-4	Coat	220	3	45	0				
1-4	Mallard	28	19	.05	0				
McNary									
1-10	Lesser C. Honker	0	2.3	1.8					
1-10	Mallard	16	4.1	.22					
1-10	Mallard	26	3.0	16					
1-10	Mallard	8	3.2	.41	.03				
1-10	Merganser	410	3.1	91	0				
3-11	Mallard	110	2.6	12	0				
3-11	Gadwall	280	3.8	85	0				
3-11	Gadwall	590	4.8	120	0				
10-18	Canadian Goose	<1	1.9	1.8	.03	<1	3.4	.70	.08
10-18	Canadian Goose	<1	2.2	5.5	.07	4.1	3.6	2.0	.34
10-18	Canadian Goose	6.6	2.7	4.7	.03	7.2	3.6	1.4	.11
10-18	Lesser C. Goose	<1	2.8	.12	.12	1	1.3	.58	0
11-16	Mallard	480	2.2	87	0	560	3.6	40	.09
11-16	Mallard	280	1.1	87		460	4.0	43	
11-16	Mallard	350	4.0	81		400	2.5	35	
11-17	Mallard	270	2.1	38		330	2.9	24	.06
11-16	Honker	11	2.4	.32	0	<1	3.8	.02	0

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

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

picocuries/gram

Date	Specie	Head ^{32}P	Head ^{40}K	Head ^{65}Zn	Head ^{137}Cs	Muscle ^{32}P	Muscle ^{40}K	Muscle ^{65}Zn	Muscle ^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
McNary (Continued)									
11-16	Golden Eye	450	3.5	23		280	3.2	9.4	0
11-17	Honker	13	3.4	.96	0		3.3	.24	0
11-17	Honker	38	3.4	.52	0	8.6	3.1	.41	.05
Mesa									
10-16	Mallard	6.7	2.1	23	0				
10-16	Mallard	0	5.2	.69	0				
10-16	Mallard	0	2.3	4.83	.04				
10-16	Mallard	2	3.0	1.27	.02				
12-18	Mallard	3.5	1.8	1.3	.07				
12-18	Mallard	<1	1.1	6.5	0				
12-18	Mallard	6.2	1.7	1.8	.03				
12-18	Mallard	5.7	1.4	10.0	0				
Othello									
12-18	Mallard	0	1.1	.05	0				
12-18	Mallard	2.7	2.0	6.2	.03				
12-18	Mallard	0	1.0	0.30	0				
12018	Mallard	2.6	1.8	8.2	0				
12-18	Mallard	1.1	2.5	4.5	0				
12-18	Mallard	21	1.6	12.3	0				
12-23	Mallard	3.7	1.8	0.28	0				
12-23	Mallard	14	1.4	0.17	0				
12-23	Mallard	8.8	1.0	2.4	0				
12-23	Mallard	8.2	1.0	3.1	0				
12-23	Mallard	8.3	2.5	1.3	0				

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

APPENDIX C
TABLE 7 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN WATERFOUL SAMPLES IN THE HANFORD ENVIRONS - 1966

picocuries/gram

Date	Specie	Head ^{32}P	Head ^{40}K	Head ^{65}Zn	Head ^{137}Cs	Muscle ^{32}P	Muscle ^{40}K	Muscle ^{65}Zn	Muscle ^{137}Cs
Analytical Limit		1	1	0.2	0.1	1	1	0.2	0.1
Othello									
12-26	Mallard	3.8	2.1	1.3	0				
12-26	Mallard	5.6	1.0	16	0				
12-26	Mallard	1.2	1.0	0.17	0				
12-26	Mallard	11	1.0	0.06	0				
12-26	Mallard	3.9	1.0	.20	0.1				
Eltopia									
12-14	Mallard	5.5	2.6	6.4	0				
12-14	Mallard	2.4	1.1	1.5	.06				
12-14	Mallard	20	1	13	0				
12-14	Mallard	4.4	1.8	7.6	0				
12-14	Mallard	11	1.9	7.0	.01				
12-14	Mallard	1.1	1.2	2.2	0				
12-14	Mallard	5.1	1.8	3.2	.04				
Wallula									
1-20	Mallard	5	3	11	.06				
1-20	Mallard	1	2	3.3	.13				
1-20	Mallard	12	8	15	0				
Island View									
2-4	Mallard	1	1.82	12	0				
2-4	Mallard	2	4.18	27	0				
2-4	Mallard	200	3.33	72	0				
2-4	Mallard	160	.84	54	0				
2-4	Mallard		2.23	2.9	0				
Patterson									
2-18	Golden Eye	110	4.6	110	0				
2-18	Golden Eye	67	4.2	82	0				

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 - 1966

picocuries/gram

Date	^{40}K	^{65}Zn	^{137}Cs	^{32}P
Analytical Limit	1.0	0.2	0.1	1.0
1-3	2.1	21	-	5.8
1-17	2.1	21	0.11	7.5
2-1	1.9	28	-	-
2-14	2.2	28	-	1.9
2-28	2.4	31	0.13	3.3
3-15	2.3	32	0.14	2.0
3-28	1.8	34	-	4.8
4-11	2.2	37	-	3.6
4-25	2.0	41	-	5.0
5-10	1.7	33	0.11	3.3
5-23	1.0	11	-	2.6
6-6	2.8	27	-	1.0
6-20	2.0	29	-	2.6
7-5	2.4	27	-	4.7
7-18	1.8	29	-	4.1
8-3	2.5	39	-	2.3
8-22	2.6	28	-	1.9
8-28	2.1	21	-	1.7
9-8	2.0	16	-	-
9-27	2.3	27	-	-
10-.2	1.6	33	-	3.3
10-25	2.2	26	-	1.0
11-14	2.2	32	-	7.6
12-8	1.9	31	-	
12-12	1.8	24	-	1.3
12-27	1.8	26	-	1.7

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

APPENDIX E
RADIONUCLIDES IN THE ATMOSPHERE

APPENDIX E
TABLE 1

CONCENTRATIONS OF ^{131}I IN AIR OF THE HANFORD ENVIRONS - 1966
picocuries/cubic meter

Date	200 West	Tri-Cities*	Wahluke	Mesa	Eltopia	Benton City	McNary Dam
1-3	0.06	-	0.02	0.08	0.11	0.02	0.02
1-10	0.02	-	0.02	0.06	-	0.03	-
1-17	0.05	-	-	-	-	-	
1-24	-	-	0.03	0.02	-	0.03	-
1-31	-	0.03	-	-	0.03	-	-
2-7	-	-	0.03	0.07	0.02	-	0.02
2-14	-	0.02	-	0.03	0.02	-	-
2-21	-	0.04	0.03	-	-	-	0.02
2-28	0.02	-	0.03	-	-	-	
3-7	0.03	-	-	0.02	-	-	-
3-14	-	-	0.02	0.03	0.02	-	-
3-21	-	-	0.03	0.05	0.04	0.05	0.02
3-28	0.02	-	0.02	-	0.02	0.03	-
4-4	0.02	-	-	-	-	0.09	-
4-11	0.02	-	0.02	0.04	-	0.02	-
4-18	0.03	0.02	-	-	-	0.09	-
4-25	0.02	-	-	0.02	-	-	0.03
5-2	-	-	-	-	-	-	0.05
5-10	-	-	0.02	-	-	-	-
5-17	-	0.03	-	0.02	-	-	
5-23	-	-	0.04	-	0.56	-	0.03
5-31	0.03	-	-	0.02	-	-	-
6-7	0.02	-	0.03	-	0.02	-	-
6-14	-	-	0.02	-	-	-	-
6-21	0.13	-	0.02	-	-	-	-
6-28	0.11	0.04	0.04	0.05	-		0.02
7-5	0.10	0.02	-	-	-	-	0.02
7-11	0.17	0.03	0.03	-	0.02	0.02	-
7-18	-	-	-	-	0.02	-	-
7-25	0.06	0.02	0.02	-	-	-	0.02

Results less than analytical limit of 0.02pCi/m^3 are indicated by a (-).
No entry indicates no analysis made.
* Richland, Kennewick, and Pasco, Washington.

APPENDIX E
TABLE 1 (Continued)

CONCENTRATIONS OF ^{131}I IN AIR OF THE HANFORD ENVIRONS - 1966
picocuries/cubic meter

Date	200 West	Tri-Cities*	Wahluke	Mesa	Eltopia	Benton City	McNary Dam
8-1	-	-	-	-		0.03	-
8-8	0.03		-	-	-	0.02	0.02
8-15	-	0.02	0.02	-	-		0.02
8-22	0.02	-	-	-	-	0.02	0.02
8-29	-		-	-	-		0.03
9-5	-	-	0.02	0.02		-	-
9-12	0.02	-	0.02	-	0.04	0.02	
9-19	-	-	-	-		0.02	0.02
9-26	-	-	-	0.02	-	-	-
10-3	-	-	-	0.02	-	-	-
10-10	0.03	-	0.05	-	-	-	-
10-17	0.03	-	-	0.02	0.02	-	-
10-24	0.02	-	-	0.02	-	-	-
10-31	0.03	-	0.03	-	-	-	0.02
11-7	-	0.03	-	0.04	-	0.02	-
11-14	-	-	0.02	0.02	-	-	-
11-21	0.02	-	0.03	0.03	-	-	-
11-28	-	-	0.03	0.02	0.04	-	0.05
12-5	-	-	-	-	0.02	-	0.02
12-12	0.02	-	0.02	-	0.12	-	0.02
12-19	0.04	-	-	-	0.03	-	-
12-26	-	-	-	-	-	0.02	0.03

Results less than analytical limit of 0.02pCi/m^3 are indicated by a (-).
No entry indicates no analysis made.
* Richland, Kennewick, Pasco, Washington.

APPENDIX E
TABLE 2

CONCENTRATIONS OF RADIOACTIVE PARTICULATES
IN THE AIR OF THE PACIFIC NORTHWEST - 1966
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
1-3	0.36	0.05		0.05	0.05	0.08	0.09	0.08	0.06	0.07	0.05	0.08
1-10	0.19	0.07	0.08	0.08		0.07	0.05	0.05		0.08	0.05	0.07
1-17	0.40	0.09	0.05	0.09	0.04	0.09	0.11	0.10	0.03	0.10	0.12	0.07
1-24	0.22	0.12	0.14	0.16	0.09	0.10	0.13	0.10	0.08	0.17	0.09	
1-31	0.24	0.17	0.08	0.09	0.09	0.12	0.08	0.18	0.08		0.09	0.08
2-7	0.17	0.14	0.04	0.05	0.07	0.09		0.07	0.05	0.07	0.07	
2-14	0.76	0.07	0.06	0.10			0.05	0.08	0.05	0.11	0.06	
2-21	0.31	0.09	0.08	0.09	0.07		0.09	0.10	0.07	0.09	0.11	
2-28	0.23	0.11		0.07				0.07		0.08		0.07
3-7	0.08	0.16	0.12		0.07	0.07	0.08	0.15		0.12	0.04	0.11
3-14	0.25	0.10	0.12	0.06		0.12	0.07	0.11	0.05	0.11	0.05	0.24
3-21	0.13	0.07	0.08	0.10	0.06	0.13	0.08	0.06	0.07		0.06	0.16
3-28	0.32	0.21	0.30	0.10	0.29	0.13	0.10	0.23	0.07	0.15	0.09	0.26
4-4	0.41	0.22	0.24	0.22	0.14	0.24	0.22	0.18	0.14	0.22	0.18	0.17
4-11	0.37	0.18	0.29	0.16	0.09	0.17	0.19	0.17	0.10	0.11	0.17	0.16
4-18	0.33	0.15	0.20	0.11		0.14	0.13	0.14	0.12	0.27	0.10	0.20
4-25	0.18	0.14	0.16	0.18		0.15	.	0.14		0.32	0.10	0.13
5-2	0.18	0.21	0.24	0.16		0.17	0.15	0.16	0.13	0.24	0.12	0.22
5-10	0.22	0.26	0.17	0.23		0.22	0.20	0.20	0.08	0.22	0.13	0.22
5-17	0.11	0.12	0.12	0.16		0.19	0.15	0.10	0.12	0.14	0.13	0.08
5-23	1.6	0.29	0.21	0.15	0.55	0.32	0.36	0.14	0.31	0.60	0.67	0.50
5-31	0.78	0.51	0.45	1.9		0.47	0.25	0.44	0.14	0.73	0.27	0.33
6-7	0.23	0.26	0.22	0.26	0.33	0.54	0.40	0.21	0.14	0.29	0.68	0.92
6-14	0.57	0.41	0.65	0.35	0.23	0.54	0.74	0.27	0.22	0.27	0.25	0.35
6-21	0.29	0.33	0.31	0.20		0.36	0.24	0.24	0.15	0.18	0.33	0.34
6-28	0.34	0.21	0.21	0.39		0.19	0.18	0.22	0.12	0.20	0.18	0.17
7-5	0.24	0.18	0.14	0.19	0.16	0.26	0.21	0.13		0.28	0.17	0.34
7-11	0.32	0.28	0.32	0.27		0.31	0.21	0.22	0.16		0.23	
7-18	0.29	0.22	0.37	0.25	0.29	0.26	0.25	0.24			0.16	0.22
7-25	0.31	0.15		0.23		0.25	0.12	0.28	0.13	0.23		0.16
8-1	0.24	0.20	0.39	0.14	0.14		0.13	0.15		0.19	0.15	0.17
8-8	0.20	0.21	0.15	0.17	0.12		0.18	0.15	0.23	0.18	0.11	0.14
8-15	0.18	0.12	0.15	0.12		0.12	0.15	0.10	0.13	0.18	0.14	0.15
8-22	0.22	0.22	0.10	0.14		0.29	0.14	0.06	0.07	0.12	0.13	0.09
8-29	0.33	0.18	0.12	0.11			0.09		0.10	0.06	0.10	0.07
9-5	0.05	0.37	0.05	0.07		0.08	0.07	0.05	0.05	0.07	0.08	0.09
9-12	0.07	0.13	0.09	0.07		0.08	0.09	0.06		0.10	0.04	0.06
9-19	0.07	0.13	0.10	0.08			0.08	0.05		0.08	0.09	0.13
9-26	0.39	0.14	0.10	0.12	0.03		0.09	0.04	0.04	0.20	0.05	0.06
10-3	0.38	0.10	0.06	0.04			0.08	0.09	0.04	0.11	0.08	0.07
10-10	1.1	0.19	0.09	0.08		0.07	0.07	0.05	0.04	0.09	0.11	0.09
10-17	0.90	0.13		0.09		0.07	0.08	0.08	0.06	0.11	0.05	0.06
10-24	0.88	0.11	0.04	0.04	0.05	0.11	0.05	0.03	0.03	0.05	0.05	
10-31	0.32	0.19	0.04	0.15	0.04	0.05	0.04	0.05	0.05	0.25		0.05
11-7	1.2	0.54	0.42		0.53		0.65	0.08	0.34		0.11	0.83
11-14	0.33	0.24		0.68	0.40		0.13	0.29	0.28	0.17	0.56	0.22
11-21	0.15	0.13		0.23	0.12		0.10		0.09	0.26	0.16	0.13
11-28	0.55	0.14	0.19	0.16	0.14						0.11	
12-5	0.15	0.19	0.11	0.20	0.24		0.10	0.05	0.14		0.10	0.15
12-12	0.12	0.06	0.03	0.09	0.11	0.12	0.10	0.08		0.34	0.08	0.06
12-19	0.20	0.07	0.04	0.13	0.05		0.10			0.07	0.06	0.05
12-26	0.15	0.09		0.07	0.05		0.05		0.03	0.07	0.08	0.08

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

APPENDIX F

RADIONUCLIDES IN FARM PRODUCE AND COMMERCIAL FOODSTUFFS

APPENDIX F
TABLE 1

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Riverview Irrigation District						
1-4	-	1500	180	-		5.8
1-11	-	1300	150	-		
1-18	-	1600	150	-		
1-25	-	1500	140	35		
2-1	4	1500	160	36		
2-8	-	1400	150	-		
2-15	3	1500	140	-		
2-22	-	1300	150	-		
3-1	-	1400	120	-		
3-8	-				-	
3-15	-	1100	120	-		
3-22	-	910	-	-		
3-29	-	1200	-	-		
4-5	-	1300	100	-		
4-12	-	1200	-	30	-	
4-19	-	1200	-	-		
4-26	-	1300	120	-		
5-3	-	1400	100	31		
5-10	-	1300	290	-	1200	
5-17	-	1300	500	-		
5-24	-	1200	570	-		
5-31	10	1400	670	-		
6-7	6	1300	610	42	950	
6-14	5	1500	630	34		
6-21	-	1500	590	-		
6-28	3	1300	520	-		
7-5	4	1500	550	-		4.8
7-12	6	1400	580	-	870	
7-19	4	1400	590	-		
7-26	3	1500	600	-		
8-4	-	1400	490	-		
8-9	-	1300	550	-	980	
8-16	-	1300	480	-		
8-23		1500	520	-		
8-30	-	1400	380	-		

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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Riverview Irrigation District						
9-6	-	1400	440	-		
9-13	3	1400	490	-	570	
9-20	3	1400	450	-		
9-27	-	1200	400	-		
10-4	-	1400	370	-		
10-11	-	1200	360	-	1200	
10-18	-	1400	570	-		
10-25	-	1300	640	-		
11-1	-	1500	540	-		
11-8	4	1400	500	-	620	
11-15	-	1300	300	-		
11-22	-	1200		-		
11-29	3	1600	240	-		
12-6	-	1400	180	-		
12-13	-	1400	130	-	-	
12-20	-	1200	110	-	-	
12-27	-	1300	130	-		
Ringold Farm No. 1						
3-15	-	1200	320	-		
3-22	-	1100	270	-		
3-29	-	1300	320	-		
4-5	-	1300	240	-		
4-12	4	1300	180	-	-	
4-19	-	1400	250	-		
4026	-	1600	260	-		
5-3	-	1400	270	-		
5-10	-	1400	240	-	500	
5-17	-	1400	370	-		
5-24	-	1600	490	-		
5-31	3	1400	490	-		
6-7	4	1300	290	-	-	
6-14	5	1800	430	40		
6-21	-	1500	620	-		
6-28	6	1400	380	-		

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

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Ringold Farm No. 1 (Continued)						
7-5	6	1400	490	-		
7-12	6	1200	460	-		
7-19	-	1600	510	-	-	
7-26	-	1500	520	-		
8-3	-	1500	520	-		
8-9		1400	410	-	230	
8-16		1300	480	-		6.3
8-23	-	1400	570	-		
8-30	-	1600	490	-		
9-6	-	1200	420	-		
9-13	-	1500	570	-	210	
9-20	-	1600	660	-		
9-27	-	1300	580	-		
10-4	-	1400	510	-		
10-11	-	1500	460	-	820	
10-18	-	1600	550	-		
Ringold Farm No. 2						
9-13		1300	300	-	1100	
10-25	5	1200	230	-		
10-27	5					
11-1	6					
11-3	5					
11-8	13					
11-10	10					
11-15	7					
11-22	5	1400	100	-		
11-29	4					
12-6	4					
12-13	-					
12-20	-	1300	-	-	-	
12-27	-	940	-	-		

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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Pasco Farm No. 1						
1-5	4	1300	-	-		
1-11	-	1300	-	-		
1-18	-					
1-25	5					
2-1	-					
2-8	-					
2-15	4					
5-10	-				-	
5-12	-	1300	270	-		
5-16	-					
5-17	-	1500	160	-		
5-18	-					
5-19	-					
5-24	-					
5-31	6	1100	-	-		
6-7	4	1100	-	37		2.6
6-14	4	1400	-	-		
6-21	-	1200	-	-		
6-28	3	1200	-	-		
7-5	-	1400	-	-		
7-13	3	1500	-	-	-	
7-19	4					
7-27	-	1200	-	-		
8-3	-	1400	-	-		
8-9	-	1200	-	-	-	
8-16	3	1200	-	-		
8-23		1200	-	-		
8-30	-	1200	-	-		
9-6	-	1300	-	-		
9-13	-	1200	-	-	-	
9-20	-	980	-	-		
9-27	-	1200	-	-		
10-4	-	1300	-	-		
10-11	-	1100	-	32	-	
10-18	-	1200	-	-		
10-24	-	1200	-	-		
10-25	3	1200	-	-		

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

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Pasco Farm No. 1 (Continued)						
10-27	3					
10-31	-					
11-1	-	1100	-	-		
11-3	3					
11-7	-					
11-8	-	1200	-	-	4000	
11-10	5					
11-15	-	1400	-	-		
11-22	-	970	-	-		
11-29	3	1200	-	-		
12-6	-	1100	-	-		2.0
12-13	-	1000	-	-	-	
12-20	-	510	-	-	2600	
12-27	-	900	-	-		
Pasco Farm No. 2						
1-4	-	1700	-	33		
1-11	-	1600	-	-		
1-18	-					
1-26	-					
2-1	-					
2-8	-					
2-15	4					
2-22	-					
3-1	-					
3-8	-					
3-15	-					
3-22	-					
3-29	-					
4-5	-					
4-12	-					
4-19	-	1500	-	-		
4-26	-					
5-3	-					
5-10	-					
5-17	-					

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

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Pasco Farm No. 2 (Continued)						
5-24	-					
5-31	7					
6-7	6					
6-14	3					
6-21	-					
6-28	-					
7-5	-					
7-12	11					
7-19	5					
7-27	-	1300	-	-		
8-3		1500	-	-		
8-9	-					
8-16	-					
8-23		990	-	-		
8-30	-					
9-6	-					
9-13	-					
9-20	-					
9-27	-					
10-4	-					
10-11	-					
10-18	-					
10-25	-					
11-1	-					
11-8	5					
11-15	4					
11-22	-					
11-29	-					
12-6	-					
12-13	-					
12-20	-					
12-27	-					
Eltopia						
1-4	-	1700	-	31		
1-12	3	1400	-	-		
1-18	-					

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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Eltopia (Continued)						
1-26	-					
2-1	3					
2-9	3					
2-15	3					
2-23	3					
3-1	-					
3-9	-					
3-15	-					
3-23	-					
3-29	-					
4-6	-					
4-12	3					
4-20	-					
4-26	-					8.6
5-4	-					4.2
5-10	-					
5-18	-					
5-24	-					
6-1	-					
6-7	-					
6-14	-					
6-21	-					
6-28	3					
7-5	4					
7-12	4					
7-19	3					
7-26	-					
8-4	-					
8-9	-					
8-16	-					
8-23	-					
8-30	-					
9-6	-					
9-13	-					
9-20	-					
9-27	-					

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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Eltopia (Continued)						
10-4	-					
10-11	-					
10-18	-					
10-25	7					
11-1	-	1300	-	-		2.9
11-8	13					
11-17	10					
11-22	8					
11-29	3					
12-6	-					
12-13	-					
12-20	-					
12-27	-					
West Richland Farm No. 1						
1-6	-	1400	-	-		
1-13	-	1500	-	-		
1-20	-	1200	-	-		
1-27	4	1300	-	-		
2-3	-	1500	-	-		
2-17	-	1700	-	33		
3-3	-	1400	-	-		
3-10	-	1100	-	-		
3-17	-	1300	-	-		
3-25	-	1600	-	-		
3-31	-	1300	-	-		
6-23	3	1300	-	-		
6-30	3	1500	-	30		
7-7	-	1500	-	42		
7-14	4	1500	-	37		
7-28	-	1500	-	32		
8-4	-	1200	-	-		
8-11	-	1300	-	-		
8-18	-	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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
West Richland Farm No. 2						
10-27	-					
11-3	3					
11-10	- .8					
11-17	-	1700	-	-		
11-23	-	1500	-	-		
12-1	-					
12-8	-					
12-15	3 .6					
12-22	-					
12-29	- .7	1200	-	-		
Benton City						
1-6	-	1500	-	33		
1-13	- 1.5	1600	-	-		
1-20	6					
1-27	-					
2-3	3 1.5					
2-10	3					
2-17	-					
2-24	-					
3-3	-					
3-10	-					4.4
3-17	-					
3-25	-					
3-31	-					
4-7	-					
4-14	-					
4-22	-					
4-28	-					
5-5	-					
5-12	-					
5-19	-					
5-26	-					
6-2	15					
6-9	6					
6-16	7					

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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Benton City (Continued)						
6-23	4					
6-30	-					
7-7	-					
7-22	3					
7-28	-					
8-5	-					
8-11	-					
8-18	-					
8-25	-					
9-1	-					
9-8	-					4.5
9-15	-					
9-22	-					
9-29	-					
10-6	-					
10-13	-					
10-20	-					
10-27	-					
11-3	-					
11-10	8					
11-17	4					
11-23	-					
12-1	-					
12-8	-					
12-15	3					
12-22	-					
12-29	-					
Milk Shed Samples						
Columbia Basin						
1-13	7	1300	110	-		
1-27	-	1500	-	-		
2-10	-	1400	-	-		
2-23	-	1200	-	31		

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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Columbia Basin (Continued)						
3-9	-	1400	-	37		
3-23	-	950	-	33		
4-14	-	1200	-	-		8.7
4-27	-	1300	-	-		
5-11	-	1400	-	-		
5-25	-	1500	-	-		
6-8	4	1300	-	33		
6-22	-	1500	-	-		
7-14	4	1400	-	-		
7-28	-	1400	-	-		
8-11	-	1100	-	-		
8-25	-	1300	-	-		
9-16	-	1300	-	-		
9-29	-	1300	-	-		
10-13	-	1400	-	-		-
10-26	-	1200	-	-		
11-10	4	1600	-	-		
11-22	-	1400	200	-		
12-15	4	1100	-	-		
12-30	-	1200	-	-		
Benton City - Prosser						
1-13	3	1200	-	-		
1-27	3	1400	-	-		
2-10	-	1300	-	-		
2-24	-	1600	-	33		
3-9	-	1600	-	30		
3-23	-	1100	-	-		
4-14	-	1400	-	-		
4-27	-	1300	-	36		
5-11	-	1400	-	-		
5-25	-	1200	-	36		
6-8	-	1100	-	30		2.4
6-22	3	1300	-	-		
7-14	3	1500	-	-		
7-28	-	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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Benton City - Prosser (Continued)						
8-11	-	1100	-	-		
8-25	-	1200	-	-		
9-16	-	1400	-	-		
9-29	-	1300	-	-		
10-13	-	1300	-	-		
10-26	-	1300	-	-		
11-10	4	1300	-	-		
11-22	-					
12-15	-	1200	110	-		
12-30	-	1300	-	-		
Local Purchase - Commercial Milk						
Brand A						
1-5	-	1600	110 } 55	31		
1-21	-					
2-3	-					
2-17	-					
3-16	-					
4-22	-					
5-5	3 } 15					
5-19	-					
6-15	-					
7-7	- } 15					
7-21	3					
8-3	-					
8-18	-					
9-8	-					
9-22	-					
10-11	-					
10-20	-					
11-3	-					
11-17	-					
12-7	-					
12-20	-					

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 - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Local Purchase - Commercial Milk						
Brand F						
1-5	-	1600	-	54		
1-21	-					
2-3	-					
2-17	-					
3-16	-					4.3
4-7	-					
4-22	-					
5-5	-					
5-19	-					
6-15	-					
7-7	- } 1.5					
7-21	3 } 1.5					
8-3	-					
8-18	-					
9-8	-					
9-22	-					
10-11	-					
10-20	-					
11-3	-					
11-17	-					
12-7	-					
12-20	-					
Brand H						
1-5	-	1500	-	55		16
1-21	-	1500	-	53		
2-3	3 } 1.5	1600	-	50		
2-17	- } 1.5	1300	-	48		
3-16	-	1100	-	31		
4-7	-	1400	-	40		
4-22	-	1400	-	47		
5-5	-	1400	-	88		
5-19	-	1400	-	61		

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

APPENDIX F
TABLE 1 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN MILK - 1966
picocuries/liter

Date	^{131}I	^{40}K	^{65}Zn	^{137}Cs	^{32}P	^{90}Sr
Analytical Limit	3	400	100	30	200	2
Local Purchase - Commercial Milk						
Brand H						
6-15	-	1600	-	79		
7-7	-	1400	-	66		17
7-21	-	1300	-	79		
8-3	-	1400	-	56		
8-18	-	1400	-	49		
9-8	-	1300	-	40		
9-22	-	1500	-	42		
10-11	3	1300	-	67		
10-20	-	1400	-	42		
11-3	-	1500	-	-		
11-17	5	1600	-	-		
12-7	-	1300	-	33		
12-20	-	1200	-	-		

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

APPENDIX F
TABLE 2

CONCENTRATIONS OF RADIONUCLIDES IN
HAY AND PASTURE GRASS - 1966
picocuries/gram

Date	^{32}P	^{40}K	^{65}Zn	^{95}Zr-^{95}Nb	^{137}Cs	^{131}I	^{144}Ce-Pr	^{106}Ru	^{90}Sr
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.05	1	0.06	0.002
Riverview Irrigation District									
1-4		8.8	-	0.49	0.25	-	2	2.2	0.131
4-26		21		0.18	0.50	-	2	-	
5-3		23		0.29	0.37	-	-	1.2	
5-10		24		0.53	0.44	-	4	-	
5-17		5.8	1.1	-	-	-	-	-	
5-24		6.4	0.51	-	0.07	-	-	-	
5-31		5.2	0.21	1.1	0.05	0.27	6	2.5	
6-7		6.0	0.28	0.28	0.12	0.05	1	-	
6-14		5.6	0.30	0.62	0.05	-	2	0.96	
6-21		23	-	1.9	0.25	-	1	0.60	
6-28		5.0	0.48	0.18	0.05	-	-	-	
7-5		7.5	-	1.2	0.19	-	3	2.0	
7-12	1.1	11	-	0.08	0.04	0.13	-		
7-19		21	-	0.45	0.05	-	-	-	
7-26		24	0.30	0.42	0.12	-	-	-	
8-4		7.7	0.25	0.48	0.31	0.08	1	1.5	
8-9	-	10	3.3	6.8	0.80	0	7	1.9	
8-23		13	0.82	0.76	0.24	-	-	-	
8-30		11	2.2	0.94	0.33	-	4	-	
9-6		7.9	5.4	0.19	0.11	-	2	-	
9-13	-	16	0.51	0.40	0.19	-	-	-	
9-20		23	0.40	0.26	0.13	0.23	-	-	
9-27		25	-	0.99	0.09	-	-	-	
10-4		29	0.72	0.05	0.09	-	-	-	
10-11	1.1	29	0.96	0.10	0.13	-	-	-	
10-18		28	0.38	0.03	0.11	-	-	-	
10-25		26	0.53	0.10	0.04	0.07	-	0.81	
11-1		24	0.56	0.09	0.11	-	-	0.60	
11-8	-	24	0.24	0.03	-	-	3	-	
11-15		3.6	0.12	0.08	-	0.58	-	-	
11-22		20	-	0.04	-	-	-	1.6	
11-29		6.6	0.18	0.07	0.07	-	-	0.81	
12-6		23	0.30	0.08	0.04	-	-	-	
12-13		22	-	-	0.03	-	-	1.3	
12-20		17	0.16	0.04	-	-	-	-	
12-27		21	0.12	-	-	-	-	-	

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

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
HAY AND PASTURE GRASS - 1966
picocuries/gram

Date	^{32}P	^{40}K	^{65}Zn	^{95}Zr-Nb	^{137}Cs	^{131}I	^{144}Ce-Pr	^{106}Ru	^{90}Sr
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.05	1	0.06	0.002
Ringold Farm No. 1									
4-26		5.3	0.27	-	-	-	-	-	
5-3		5.3	-	-	-	-	-	-	
5-10		5.3	0.27	-	-	-	-	-	
5-17		5.1	0.24	-	0.03	-	-	-	
5-24		5.0	0.13	0.36	0.03	-	3	-	
5-31		6.6	0.29	1.7	-	0.16	6	-	
6-7		6.4	0.22	0.89	0.06	0.06	4	1.2	
6-14		6.4	0.88	0.73	0.04	-	2	1.1	
6-21		7.7	0.22	1.3	-	-	2	1.2	
6-28		5.4	0.26	0.55	-	-	1	0.83	
7-5		5.6	0.10	0.09	-	-	-	-	
7-12	-	5.5	0.71	0.14	0.17	-	-	-	
7-19		13	0.44	0.56	0.20	-	-	-	
7-26		10	2.4	2.2	0.22	-	2	-	
8-3		10	1.0	0.45	0.12	-	-	1.3	
8-9	-	9.7	0.96	0.14	0.09	-	-	-	
8-16		9.1	1.2	0.26	0.07	-	1	-	0.066
8-23		9.1	-	-	-	-	-	11	
8-30		15	0.93	-	0.10	-	3	1.3	
9-6		13	1.3	0.44	0.19	-	-	-	
9-13	50	11	1.6	0.11	0.06	-	-	1	
9-20		5.2	0.99	-	-	-	3	1	
9-27		5.0	0.31	-	0.03	0.07	1	1	
10-4		5.1	0.67	0.03	-	-	-	-	
10-11	-	5.3	1.5	-	0.04	0.05	-	-	
10-18		4.7	0.21	0.05	-	0.15	-	-	
Ringold Farm No. 2									
9-13		29	0		0.20	0.21	-	1.5	
10-25		17	0.30	0.12	0.16	-	-	-	
10-27		15	0.27	0.09	0.05	-	-	-	
11-1		26	0.71	0.03	0.08	-	-	-	
11-3		28	0.54	0.06	0.06	-	-	-	
11-8		30	0.35	-	-	-	-	0.60	
11-10		37	0.45	0.14	0.07	-	-	-	
11-15		22	0.22	0.10	-.	0.07	-	0.67	
11-22		14	0.56	0.16	0.09	0.12	-	-	

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

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
HAY AND PASTURE GRASS - 1966
picocuries/gram

Date	^{32}P	^{40}K	^{65}Zn	^{95}Zr-Nb	^{137}Cs	^{131}I	^{144}Ce-Pr	^{106}Ru	^{90}Sr
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.05	1	0.06	0.002
Ringold Farm No. 2 (Continued)									
11-29		22	0.52	0.10	0.11	-	-	-	
12-6		29	-	-	0.03	-	-	1.8	
12-13		25	0.12	-	-	-	-	-	
12-20		25	0.50	0.07	0.05	-	-	-	
12-27		30	1.1	-	-	-	-	-	
Pasco Farm No. 1									
1-5		26		-	0.17	-	-	-	
5-10	9.0	6.7		-	-	-	-	-	
5-16		5.8		-	-	-	-	-	
5-17		6.3		-	-	-	-	-	
5-24		4.8	-	0.10	0.03	-	-	-	
5-31		5.8		1.7	0.15	0.24	14	-	
6-7	-	5.8		2.1	0.38	0.26	-	-	
6-14		6.7		0.30	-	-	1	1.1	
6-21		5.1		0.44	-	0.21	1	1.0	
6-28		4.9		0.11	0.08	0.24	1	-	
7-5		5.5		0.20	-	0.1[illegible]	1	1.4	
7-13	-	4.7		0.21	0.03	-	1	0.99	
7-27		7.8		0.34	-	-	-	1.8	
8-3		4.6		0.10	0.03	0.07	-	-	
8-9	-	4.2		0.04	0.04	-	1	-	
8-16		5.3		0.03	-	0.12	1	-	
8-23		6.7		0.25	-	0.07	1	-	
8-30		6.1		0.05	0.03	-	1	-	
9-6		6.9		-	-	-	2	-	
9-13	2.3	5.6		0.03	-	-	-	-	
9-20		6.0	-	0.03	-	-	-	-	
9-27		6.3		0.04	-	0.12	-	-	
10-4		5.4	0.28	0.03	0.04	-	-	1.4	
10-11	-	3.2	0.68	0.03	0.03	-	1	-	
10-18		6.3		0.04	0.10	-	-	0.60	
10-24		21		-	-	-	-	-	
10-25		16		0.05	-	-	-	-	
10-27		27		0.04	0.06	-	-	-	
10-31		24		-	0.07	-	-	-	
11-1		23		0.70	0.18	-	-	-	
11-3		24		-	0.05	-	-	-	
11-7		24		0.03	0.03	-	-	-	
11-8	-	28		-	-	0.11	-	-	

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

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
HAY AND PASTURE GRASS - 1966
picocuries/gram

Date	^{32}P	^{40}K	^{65}Zn	^{95}Zr-Nb	^{137}Cs	^{131}I	^{95}Ce-Pr	^{106}Ru	^{90}Sr
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.05	1	0.06	0.002
Pasco Farm No. 1 (Continued)									
11-10		21		-	-	-	-	-	
11-15		19		-	-	-	-	-	
11-22		21		0.04	0.05	-	-	1.0	
11-29		26		0.09	0.09	-	-	-	
12-6		23		0.03	-	-	-	-	-
12-13	-	28		-	-	-	-	-	
12-20		24		-	-	-	-	-	
12-27		22		-	0.11	-	-	-	
Pasco Farm No. 2 (Continued)									
1-4		20		-	0.13	-	-	-	
4-26		25		0.06	0.36	-	-	-	
5-3		25		0.28	0.40	-	1	-	
5-10		25		0.03	0.37	-	-	-	
5-17		25		10	1.1	-	58	5.0	
5-24		6.7		0.53	0.06	-	1	-	
5-31		4.5		1.6	0.07	0.16	9	2.6	
6-14		18		8.7	0.45		10	0.65	
6-21		13		0.35	0.04	-	-	1.5	
6-28		22		0.21	0.16	-	-	-	
7-5		23		0.76	0.11	-	-	0.60	
7-12		27		0.48	0.11	0.07	-	1.9	
7-19		24		0.50	0.16	-	-	-	
7-26		23		0.17	0.24	-	-	-	
8-3		22		0.38	0.11	-	-	1.9	
8-9		7.3		0.12	0.06	-	-	-	
8-16		6.3		-	-	0.13	1	-	
8-23		5.8		-	-	-	-	-	
8-30		8.8		-	0.03	0.16	-	-	
9-6		10		0.05	0.04	-	-	-	
9-13		6.3		0.04	0.04	-	-	-	
9-20		19		0.43	0.14	-	-	0.92	
9-27		18		0.91	0.18	-	-	-	
10-4		20		3.8	0.24	-	-	-	
10-11		21		0.46	0.16	-	-	-	
10-18		22		0.53	0.17	-	-	-	
10-25		5.9		0.03	0.03	-	-	-	
11-1		32		0.44	0.11	-	-	-	

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

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
HAY AND PASTURE GRASS - 1966
picocuries/gram

Date	^{32}P	^{40}K	^{65}Zn	^{95}Zr-Nb	^{137}Cs	^{131}I	^{144}Ce-Pr	^{106}Ru	^{90}Sr
Analytical Limit	1.0	0.4	o.1	0.03	0.03	0.05	1	0.06	0.002
Pasco Farm No. 2 (Continued)									
11-8		31		0.15	0.04	-	-	-	
11-15		18		0.21	0.10	-	-	-	
11-22		26		0.16	0.12	-	-	0.60	
11-29		21		0.09	0.09	-	-	-	
12-6		26		0.04	0.15	-	-	-	
12-13		14		-	0.07	-	-	-	
12-20		22		0.18	0.18	-	-	-	
12-27		12		-	0.05	-	-	-	
Eltopia									
1-4		8.5		0.39	0.29	-	1	-	
4-26		5.0		-	-	-	-	-	
5-4		6.0		-	-	-	-	-	
5-10		5.4		-	0.03	-	-	-	
5-18		18		-	0.12	-	-	-	
5-24		24		-	0.09	-	-	-	
6-1		23		0.03	0.08	-	-	-	
6-14		25		0.87	0.13	-	1	1.7	
6-21		20		1.4	0.15	-	-	1.4	
6-28		19		2.9	0.30	-	3	2.5	
7-5		24		0.44	0.07	0.06	-	1.5	
7-12		6.8		0.11	-	-	-	0.60	
7-19		24		0.76	0.20	-	-	-	
7-26		25		0.70	0.27	-	-	-	
8-4		31		0.22	0.15	-	-	1.9	
8-9		24		0.16	0.08	-	-	-	
8-16		25		-	0.05	-	-	-	
8-23		24		-	-	-	-	-	
8-30		26		0.04	0.04	-	2	-	
9-6		20		-	-	-	8	-	
9-13		30		-	0.05	0.08	-	-	
9-20		33	0.35	-	0.13	0.06	-	-	
9-27		28		0.03	0.04	0.31	-	-	
10-4		24		0.48	0.11	-	-	-	
10-18		28		-	0.06	-	-	-	
10-25		18		-	0.04	-	-	-	
11-1		25	0.33	0.03	0.04	-	-	-	-
11-8		28		-	0.07	0.11	-	0.78	

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

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN
HAY AND PASTURE GRASS - 1966
picocuries/gram

Date	^{32}P	^{40}K	^{65}Zn	^{95}Zr-Nb	^{137}Cs	^{131}I	^{144}Ce-Pr	^{106}Ru	^{90}Ru
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.05	1	0.06	0.002
Eltopia (Continued)									
11-17		37		0.08	0.14	0.10	-	3.7	
11-22		21		0.03	0.05	-	-	-	
11-29		25		0.32	0.31	-	-	-	
12-6		26		0.21	0.23	-	-	-	
12-13		18		0.46	0.12	-	-	-	
12-20		14		3.4	0.19	-	1	-	
12-27		20		0.09	0.21	-	-	-	
West Richland, Farm No. 1									
1-6		15		0.47	0.30	-	1	-	
6-23		4.4		0.20	0.03	-	-	-	
6-30		6.8		0.42	0.11	-	-	1.0	
7-7		6.2		0.53	0.07	-	1	0.74	
7-28		7.6		0.06	0.06	-	1	-	
8-4		9.7		5.2	0.33	-	-	-	
8-11		7.8		0.66	0.18	-	1	-	
8-18		7.2		0.44	0.17	0.10	2	-	
West Richland, Farm No. 2									
10-27		25		-	-	-	-	-	
11-3		21		0.23	0.19	-	-	-	
11-10									
11-17		11		0.26	0.19	-	-	0.60	
11-23		10		0.29	0.19	-	-	0.60	
12-1		22		0.23	0.30	-	-	-	
12-8		23		0.14	0.27	-	-	-	
12-15		20		0.04	0.05	-	-	-	
12-22									
12-29		24		0.05	0.09	-	-	-	
Benton City									
1-6		6.3		0.31	0.16	0.06	1	0.6	
4-28		30		-	0.29	-	-	-	
5-5		21		0.07	0.40	-	-	-	
5-12		15		-	0.74	-	-	-	
5-19		6.8		-	-	-	-	-	
5-26		7.6		0.04	-	-	-	-	

APPENDIX F
TABLE 2 (Continued)

CONCENTRATIONS OF RADIONUCLIDES IN HAY AND PASTURE GRASS - 1966

picocuries/gram

Date	32 P	40 K	65 Zn	95 Zr-Nb	137 Cs	131 I	144 Ce-Pr	106 Ru	90 Sr
Analytical Limit	1.0	0.4	0.1	0.03	0.03	0.05	1	0.06	0.002
Benton City (Continued)									
6-2		6.2		5.7	0.06	-	-	-	
6-9		6.0		0.38	0.06	-	2	0.91	
6-16		7.0		0.05	-	-	-	-	
6-23		6.5		0.30	0.04	-	1	0.60	
6-30		8.9		0.04	-	-	-	-	
7-7		8.0		0.37	0.04	-	-	-	
7-22		9.0		0.39	0.12	-	-	-	
7-28		8.0		0.10	0.07	-	-	-	
8-5		20		3.0	0.27	-	-	0.60	
8-11		19		0.68	0.31	-	-	-	
8-18		20		1.1	0.24	-	-	-	
8-25		22		4.5	0.18	-	-	-	
9-1		19		0.72	0.75	-	3	1.1	
9-8		18		0.91	0.24	-	-	-	
9-15		18		1.1	0.25	-	-	-	
9-22		20	0.61	1.8	0.28	-	-	-	
9-29		21		0.21	0.14	-	-	-	
10-6		21		2.3	0.19	-	-	-	
10-13		25		0.28	0.14	-	-	-	
10-20		18		0.48	0.26	-	-	-	
10-27		18		0.53	0.24	-	-	0.60	
11-3		22		0.53	0.21	-	-	-	
11-10		19		0.06	0.17	0.10	-	-	
11-17		9.8		0.93	0.18	-	-	0.60	
11-23		53		0.94	0.49	-	-	-	
12-1		16		0.90	0.18	-	-	-	
12-8		20		0.26	0.11	-	-	-	
12-15		21		0.47	0.30	-	-	-	
12-22		23		0.18	0.16	-	-	-	
12-29		17		0.20	0.29	-	-	-	

APPENDIX F
TABLE 3

CONCENTRATIONS OF RADIONUCLIDES IN MEATS
PURCHASED FROM LOCAL MARKETS - 1966

Date	Produce	picocuries/gram ^{32}P	^{40}K	^{65}Zn	^{131}I	^{137}Cs	^{90}Sr
Analytical Limit		1.0	0.4	0.1	0.05	0.03	0.002
1-20	Veal		3.0	-	-	0.44	0.007
1-20	Veal		1.8	-	-	0.17	0.005
2-15	Chicken		1.8	-	-	-	-
2-15	Chicken		1.6	-	-	-	0.004
2-15	Chicken		1.5	-	-	0.03	0.008
3-17	Pork Chops		1.6	-		-	
3-17	Pork Chops		1.9	-	-	0.05	0.004
3-17	Pork Chops		1.9	-	-	0.07	0.008
4-19	Calf Liver	-	2.4	-		0.05	0.002
4-19	Calf Liver		2.3	-		0.04	-
4-19	Calf Liver		1.9	-		0.09	0.004
6-14	Ground Round		2.2			0.07	-
6-14	Ground Round		2.8			0.04	-
6-14	Ground Round		2.5			0.11	-
6-14	Ground Round		2.3			0.10	-
7-21	Lamb Chops		1.8			0.09	0.012
7-21	Lamb Chops		1.9			0.19	-
7-21	Lamb Chops		2.1	0.10		0.09	0.006
8-18	Chicken		2.2	-		0.04	0.005
8-18	Chicken		2.2	-		-	0.003
8-18	Chicken		1.6	-	-	-	0.003
9-22	Pork Roast		2.9			0.06	-
9-22	Pork Roast		2.4			-	-
9-22	Pork Roast		2.2			-	-
9-22	Pork Roast		2.0	-		0.11	-
10-20	Round Steak	-	2.9	-		0.16	-
10-20	Round Steak		3.0	-		0.12	-
10-20	Round Steak		2.7	-		0.15	-
11-17	Turkey		1.7	-		0.03	0.006
11-17	Turkey		1.7	-		-	0.011
12-20	Ground Round		2.8			0.08	-
12-20	Ground Round		2.6			0.05	-
12-20	Ground Round		2.4			0.04	0.005

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 PRODUCTS - 1966
Picocuries/gram

Date	Produce	^{32}P	^{40}K	^{65}Zn	^{95}Zr-^{95}Nb	^{131}I	^{137}Cs	^{144}Ce-^{144}Pr	^{90}Sr
Analytical Limit		1.0	0.4	0.1	0.03	0.05	0.03	1.0	0.002
4-22	Asparagus		2.3	-			-		-
4-22	Asparagus		2.7				-		0.002
4-27	Asparagus		2.5				-		-
6-16	Cherries		1.8		0.04		-		0.006
6-17	Cherries		2.2						-
6-17	Cherries		3.0						0.002
6-17	Cherries	3.8	-	0.10			0.04		0.007
6-21	Eggs	4.5	1.1	3.8			-		0.004
6-21	Chicken	-	2.8	2.7		-	-		-
6-28	Chicken		1.9				0.07		0.003
6-28	Eggs	-	1.3				-		0.002
6-30	Rhubarb	3.4	4.5	-			-		0.030
6-30	Leaf Lettuce	1.7	4.3	0.39	0.07		-		0.032
6-30	Radishes	-	3.5	0.13			-		0.023
6-30	Peas	2.3	2.0	0.24			-		0.056
6-30	Carrots	1.3	3.1	-			-		0.016
6-30	Potatoes	-	3.8	-			-		-
6-30	Rhubarb		4.0				-		0.010
6-30	Potatoes		3.9				-		-
6-30	Apricots		2.7				-		-
7-1	Lettuce								
7-1	Lettuce		6.2		0.29		0.08	-	
7-1	Lettuce		3.2		0.12		-	-	
8-3	Cucumbers		1.8	0.10			-		0.010
8-3	Corn on Cob		2.8	0.11			-		-
8-3	Tomatoes		1.5	-			-		0.004
8-3	Green Apples		1.3	-			-		-
8-4	Cabbage		2.9	0.10			-		0.064
8-16	Cucumbers	-	1.5	-			-		-
8-16	Corn on Cob		2.6	-			-		0.008
8-16	Tomatoes	-	2.2	-			-		-

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 PRODUCTS - 1966
Picocuries/gram

Date	Produce	^{32}P	^{40}K	^{65}Zn	^{95}Zr ^{95}Nb	^{131}I	^{137}Cs	^{144}Ce ^{144}Pr	^{90}Sr
Analytical Limit		1.0	0.4	0.1	0.03	0.05	0.03	1.0	0.002
8-18	Peaches		2.3				-		0.003
8-18	Corn on Cob		2.9			-	-		-
8-18	Peaches		1.8				-		0.004
8-18	Peaches		1.9				-		-
8-18	Cucumbers		1.5				-		0.003
8-18	Peaches		2.0				-		-
8-18	Lettuce		4.3	-			-		0.002
8-18	Lettuce		2.8				-		0.008
8-23	Corn	-	1.8	-	-		-		-
8-23	Cucumbers	-	1.6	-			-		0.002
8-23	Tomatoes		1.9	-	-		-		
8-23	Peaches	-	1.8	-			-		0.003
8-23	Tomatoes	-	1.9	-	-		-		
9-5	Tomatoes		2.4	-	-		-		
9-5	Corn on Cob		2.6	-			-		
9-5	Cucumbers	-	2.0	-	-		-	-	0.004
9-5	Peaches	-	2.2	-			-		-
9-5	Apples	-	1.5	-			-		-
9-6	Tomatoes		2.6	-	-		-		

APPENDIX F
TABLE 5

CONCENTRATIONS OF RADIONUCLIDES IN FOOD
PURCHASED FROM LOCAL STORES - 1966

Picocuries/gram

Date	Produce	^{40}K	^{65}Zn	^{137}Cs	^{131}I	^{90}Sr
Analytical Limit		0.4	0.1	0.03	0.05	0.002
5-26	Ocean Fish	2.5	-	-		-
5-26	Ocean Fish	3.0	-	0.07		
6-30	Radishes	2.4		-		0.009
6-30	Potatoes	4.3	-	-		-
6-30	Lettuce	1.6	-	-		0.005
6-30	Carrots	3.6		-		0.015
7-21	Eggs	1.1	-	-		0.003
7-21	Eggs	1.1	-	-		0.004
9-6	Tomatoes	2.1		-		
9-6	Corn on cob	2.5	-	-		
9-6	Cucumbers	1.8	-	-		-

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

APPENDIX G
^{131}I IN CATTLE THYROIDS

APPENDIX G
TABLE 1

^{131}I IN BEEF THYROIDS FROM CATTLE
SLAUGHTERED AT SEVERAL LOCATIONS - 1966
Picocuries/gram

Date Sampled	Thyroid Wt (g.)	^{131}I Concentration	Grazing Area
Pasco, Washington			
1-3	20	2	Finley
1-3	18	< 1	Mesa
1-4	41	1	Prosser
1-10	26	6	Hermiston, Oregon
1-10	29	< 1	Moses Lake
1-10	22	10	Pasco
1-17	19	< 1	Pasco
1-18	22	< 1	Eltopia
1-18	25	7	Lexington, Oregon
1-24	29	< 1	Pasco
1-25	24	14	Prosser
1-26	26	< 1	Walla Walla
1-31	47	< 1	Eltopia
2-2	37	< 1	Prosser
2-2	15	2	Hermiston, Oregon
2-7	31	1	Pasco
2-8	41	< 1	Prosser
2-9	24	< 1	Walla Walla
2-14	53	3	Pasco
2-17	45	1	Moses Lake
2-19	35	7	Walla Walla
2-21	33	< 1	Pasco
2-23	27	21	Kennewick
2-24	40	< 1	Walla Walla
2-28	24	< 1	Pasco
2-28	17	< 1	Kennewick
2-28	24	3	Finley
3-10	30	< 1	Quincy
3-10	38	2	Moses Lake
3-10	27	6	Sunnyside
3-14	16	1	Pasco
3-15	39	< 1	Sunnyside
3-16	27	1	Warden
3-21	26	< 1	Eltopia
3-21	22	< 1	Grandview
3-23	24	2	Warden
3-30	24	2	Hermiston, Oregon
3-30	28	< 1	Connell
3-30	31	< 1	Pasco
4-3	20	< 1	Quincy
4-4	27	< 1	Warden
4-7	14	1	Kennewick

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Pasco, Washington (continued)			
4-8	19	< 1	Prosser
4-11	38	2	Hermiston, Oregon
4-12	18	< 1	Connell
4-18	17	<1	Moses Lake
4-19	16	< 1	Pasco
4-21	29	< 1	Prosser
4-25	17	< 1	Eltopia
4-26	15	< 1	Warden
4-27	20	< 1	Walla Walla
5-3	30	3	Pasco
5-5	14	< 1	Burbank
5-5	28	2	Hermiston, Oregon
5-9	33	< 1	Warden
5-9	15	13	Plymouth
5-9	30	< 1	Quincy
5-16	17	< 1	Warden
5-16	14	< 1	Kahlotus
5-18	32	4	Hermiston, Oregon
5-24	22	< 1	Prosser
5-24	33	< 1	Mesa
5-24	12	< 1	Burbank
6-3	22	< 1	Eltopia
6-3	24	< 1	Burbank
6-3	24	< 1	Kahlotus
6-8	17	75	Prosser
6-8	11	< 1	Pasco
6-8	24	< 1	Quincy
6-10	31	32	Walla Walla
6-13	31	33	Hermisto, Oregon
6-13	17	< 1	Warden
6-20	18	3	Pasco
6-21	35	10	Prosser
6-22	16	< 1	Eltopia
6-24	38	7	Prosser
6-27	20	2	West Richland
6-28	24	35	Hermiston, Oregon
7-5	26	< 1	Warden
7-7	34	9	Walla Walla
7-7	29	< 1	Burbank
7-11	21	44	Pasco
7-12	33	< 1	Moses Lake
7-14	33	31	Walla Walla
7-18	37	7	Hermiston, Oregon
7-20	17	< 1	Prosser
7-21	19	< 1	Eltopia
7-25	26	5	Walla Walla
7-25	25	3	Hermiston, Oregon
7-26	20	< 1	Warden
8-1	26	2	Prosser

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Pasco, Washington (continued)			
8-2	51	6	Pasco
8-2	15	20	Kennewick
8-8	11	<1	Hermiston, Oregon
8-12	21	<1	Quincy
8-12	25	<1	Warden
8-16	29	<1	Pasco
8-17	26	<1	Kahlotus
8-18	30	<1	Walla Walla
8-23	31	3	Warden
8-25	32	1	Prosser
8-25	22	<1	Moses Lake
8-31	18	<1	Mesa
8-31	18	<1	Pasco
8-31	58	2	Hermiston, Oregon
9-6	21	<1	Mesa
9-6	21	<1	Benton City
9-7	40	2	Quincy
9-12	24	3	Hermiston, Oregon
9-12	27	<1	West Richland
9-13	23	2	Moses Lake
9-26	26	3	Walla Walla
9-27	25	<1	Burbank
9-28	27	<1	Warden
10-3	17	<1	Moses Lake
10-3	54	4	Pasco
10-5	42	<1	Eltopia
10-10	46	2	Walla Walla
10-11	31	<1	Warden
10-12	22	1	Mesa
10-18	29	<1	Walla Walla
10-18	25	19	Prosser
10-18	18	1	Eltopia
10-24	51	<1	Pasco
10-26	30	<1	Kennewick
10-27	20	1	Prosser
11-1	30	<1	Burbank
11-2	28	<1	Mesa
11-3	25	<1	Patterson
11-3	27	<1	Kennewick
11-8	25	1	Connell
11-8	37	<1	Kennewick
11-9	30	19	Warden
11-15	29	1	Prosser
11-16	18	13	Hermiston, Oregon
11-16	19	150	Benton City
11-21	42	<1	Burbank
11-22	25	<1	Walla Walla
11-22	32	3	Mesa
11-28	29	<1	Walla Walla
11-29	26	3	Richland

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Pasco, Washington (Continued)			
12-1	26	<1	Kennewick
12-6	31	<1	Kahlotus
12-6	41	7	Walla Walla
12-6	28	6	Pasco
12-12	33	<1	Walla Walla
12-12	42	<1	Kennewick
12-13	41	10	Prosser
12-20	26	<1	Mesa
12-20	35	<1	Prosser
12-21	26	<1	Connell
12-27	48	<1	Walla Walla
12-29	37	<1	Kennewick
12-29	24	<1	Milton-Freewater, Ore.
Moses Lake, Washington			
1-15	32	<1	Marlin
1-15	23	2	Warden
1-15	52	<1	Ephrata
1-15	33	<1	Moses Lake
1-15	27	3	Moses Lake
1-29	57	<1	Warden
1-29	46	<1	Warden
1-29	20	18	Warden
1-29	48	<1	Moses Lake
1-29	63	<1	Moses Lake
2-12	32	<1	Hooper
1-12	59	<1	Moses Lake
2-12	34	<1	Warden
2-12	35	<1	Warden
2-12	38	1	Warden
2-24	52	<1	Moses Lake
2-24	44	<1	Moses Lake
2-24	39	<1	Connell
2-24	34	<1	Stratford
2-26	38	<1	Royal City
3-12	31	1	Ritzville
3-12	20	4	Ritzville
3-12	41	1	Odessa
3-15	25	<1	Moses Lake
3-15	49	<1	Moses Lake
4-2	33	<1	Grand Coulee
4-2	42	<1	Ephrata
4-2	33	<1	Moses Lake
4-2	28	<1	Moses Lake
4-2	21	<1	Othello
4-14	41	6	Othello
4-14	35	<1	Othello
4-14	27	<1	Quincy
4-14	30	4	Lind

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Moses Lake, Washington (continued)			
4-14	45	2	Lind
4-28	25	<1	Moses Lake
4-28	33	<1	Moses Lake
4-28	21	<1	Quincy
4-28	18	<1	Quincy
4-28	35	1	Odessa
5-14	28	4	Othello
5-14	34	2	Quincy
5-14	35	3	Mansfield
5-14	32	2	Hartline
5-14	27	3	Moses Lake
5-27	61	5	Kahlotus
5-27	25	<1	Kahlotus
5-27	48	<1	Odessa
5-27	41	19	Moses Lake
5-27	39	<1	Moses Lake
6-16	26	40	Othello
6-16	47	4	Othello
6-16	54	1	Moses Lake
6-16	60	36	Wheeler
6-16	38	74	Wheeler
6-25	42	6	Othello
6-25	23	11	Othello
6-25	27	24	Othello
6-25	32	<1	Eltopia
6-25	29	2	Moses Lake
7-6	52	3	Moses Lake
7-6	41	7	Moses Lake
7-6	45	1	Moses Lake
7-6	22	3	Othello
7-6	43	42	Othello
7-23	45	2	Ritzville
7-23	38	21	Ritzville
7-23	34	3	Moses Lake
7-23	34	25	Moses Lake
7-23	49	19	Moses Lake
8-6	35	4	Moses Lake
8-6	40	2	Moses Lake
8-6	32	2	Moses Lake
8-6	31	<1	Moses Lake
8-6	37	2	La Crosse
8-19	41	3	Loomis
8-19	58	4	Loomis
8-19	44	1	Loomis
8-19	41	4	Loomis
8-19	72	<1	LaCrosse
9-1	50	<1	Hermiston, Oregon
9-1	38	<1	Moses Lake
9-1	38	1	Moses Lake

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Moses Lake, Washington (continued)			
9-1	39	1	Moses Lake
9-1	24	<1	Mesa
9-17	48	1	Moses Lake
9-17	30	<1	Moses Lake
9-17	36	2	Moses Lake
9-17	35	<1	Moses Lake
9-17	29	<1	Moses Lake
10-1	25	<1	Moses Lake
10-1	48	<1	Warden
10-1	17	2	Othello
10-1	31	1	Odessa
10-1	32	<1	Odessa
10-15	26	<1	Moses Lake
10-15	43	<1	Ritzville
10-15	42	<1	Othello
10-15	38	<1	Ephrata
10-15	27	2	Prescott
11-3	53	<1	Warden
11-3	46	<1	Warden
11-3	37	9	Warden
11-3	62	<1	Warden
11-3	26	4	Warden
11-11	44	4	Hay
11-11	45	16	Hay
11-11	54	6	Hay
11-11	51	30	Hay
11-11	32	25	Odessa
11-26	54	5	Moses Lake
11-26	44	2	Quincy
11-26	50	3	Quincy
11-26	19	3	Prescott
11-26	27	66	Royal Slope
12-10	50	22	Walla Walla
12-10	39	<1	Warden
12-10	46	50	Ephrata
12-10	32	70	Okanogan County
12-20	32	17	Moses Lake
12-20	35	14	Moses Lake
12-20	48	1	Moses Lake
12-20	36	27	Moses Lake
12-20	24	7	Prescott
Toppenish, Washington			
1-7	24	1	Sunnyside
1-7	27	1	Sunnyside
1-7	49	<1	Toppenish
1-7	37	<1	Wapato
1-7	32	<1	Satus
1-21	22	<1	Yakima

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Toppenish, Washington (continued)			
1-21	74	<1	Yakima
1-21	29	<1	Yakima
1-21	43	<1	Moxee
1-21	29	<1	White Swan
2-4	25	<1	Yakima
2-4	38	<1	Yakima
2-4	19	<1	Yakima
2-4	70	<1	Yakima
2-4	76	<1	Toppenish
2-18	38	<1	Sunnuside
2-18	31	<1	Sunnyside
2-18	44	<1	Yakima
2-18	59	<1	Wapato
2-18	80	<1	Toppenish
3-4	47	<1	Yakima
3-4	48	<1	Ahtanum
3-4	44	<1	Harrah
3-4	69	<1	Wapato
3-4	51	<1	Selah
3-18	45	<1	Ahtanum
3-18	38	<1	Ahtanum
3-18	41	<1	Ahtanum
3-18	49	<1	Yakima
3-18	48	<1	Yakima
4-1	35	<1	Harrah
4-1	68	<1	Harrah
4-1	29	<1	Yakima
4-1	40	<1	Yakima
4-1	43	<1	Satus
4-15	11	<1	Wapato
4-15	46	<1	Wapato
4-15	41	<1	Wapato
4-15	29	<1	Yakima
4-15	49	<1	Yakima
4-29	39	<1	Wapato
4-29	34	<1	Toppenish
4-29	47	<1	Toppenish
4-29	66	<1	Toppenish
4-29	52	<1	Moxee
5-13	43	2	White Swan
5-13	37	<1	Toppenish
5-13	62	<1	Wapato
5-13	45	<1	Wapato
5-13	49	<1	Harrah
5-27	56	<1	Ahtanum
5-27	27	<1	Ahtanum
5-27	47	10	Moxee
5-27	26	16	Toppenish
5-27	64	<1	Harrah

APPENDIX G
TABLE 1 (Continued)

Picocuries/gram

Date Sampled	Thyroid Wt (g)	^{131}I Concentration	Grazing Area
Toppenish,	Washington	(continued)	
6-10	40	2	Yakima
6-10	23	1	Yakima
6-10	29	< 1	Toppenish
6-10	49	12	Toppenish
6-10	43	16	Moxee
6-24	38	<1	White Swan
6-24	45	3	Ahtanum
6-24	34	2	Ahtanum
6-24	32	<1	Moxee
6-24	45	13	Moxee
7-8	51	5	Yakima
7-8	37	1	Yakima
7-8	82	6	Yakima
7-8	42	< 1	Yakima
7-8	98	7	Yakima
7-22	55	6	Toppenish
7-22	42	2	Ahtanum
7-22	65	4	Ahtanum
7-22	29	1	White Swan
8-12	47	< 1	Yakima
8-12	59	1	Toppenish
8-12	47	< 1	Toppenish
8-12	57	2	Wapato
8-12	48	<1	Moxee
9-9	36	<1	White Swan
9-9	53	<1	Toppenish
9-9	24	<1	Brownstown
9-9	39	<1	Wiley City
9-9	75	<1	Yakima
9-23	54	7	Toppenish
9-23	44	<1	Yakima
9-23	35	<1	Brownstown
9-23	43	<1	Bickleton
9-23	53	<1	Bickleton
10-7	42	<1	Toppenish
10-7	56	<1	Wapato
10-7	37	<1	Moxee
10-21	35	<1	Yakima
10-21	39	<1	White Swan
10-21	71	<1	Wapato
10-21	52	<1	Granger
10-21	50	<1	Zillah
11-4	44	<1	Satus
11-4	33	<1	White Swan
11-4	37	<1	Wapato
11-4	53	<1	Moxee
11-4	43	<1	Ahtanum
11-18	48	62	Zillah
11-18	69	10	Wapato
11-18	38	18	Toppenish

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Toppenish, Washington (continued)			
11-18	51	<1	Harrah
11-18	44	98	Naches
12-2	38	<1	Wapato
12-2	46	2	Wapato
12-2	78	<1	Yakima
12-2	56	<1	Yakima
12-2	108	<1	Yakima
12-16	52	<1	Yakima
12-16	55	<1	Ahtanum
12-16	45	<1	Ahtanum
12-16	68	<1	Toppenish
12-16	48	<1	Selah
12-23	32	<1	Toppenish
12-23	38	<1	Toppenish
12-23	59	2	Toppenish
12-23	53	<1	Ahtanum
12-23	43	3	Ahtanum
Walla Walla, Washington			
1-13	30	<1	Walla Walla
1-13	37	<1	Walla Walla
1-13	80	<1	Walla Walla
1-13	41	<1	Walla Walla
1-13	19	<1	Walla Walla
1-25	43	<1	Prescott
1-25	36	<1	Prescott
1-25	36	<1	Umapine, Oregon
1-25	20	<1	Lowden
1-25	45	<1	Lowden
2-8	31	<1	Lowden
2-8	42	<1	Pasco
2-8	32	<1	Pasco
2-8	21	1	Milton Freewater, Ore.
2-9	13	4	Lowden
2-17	40	<1	Walla Walla
2-17	29	4	Walla Walla
2-17	30	<1	Walla Walla
2-17	47	<1	Walla Walla
2-17	40	<1	Starbuck
2-25	40	<1	Touchet
2-25	32	<1	Touchet
2-25	17	<1	Walla Walla
2-25	23	<1	Walla Walla
2-25	32	1	Walla Walla
3-15	34	<1	Touchet
3-15	50	<1	Touchet
3-15	57	<1	Lowden
3-15	18	<1	Lowden
3-15	29	<1	College Place

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Walla Walla, Washington (continued)			
3-24	40	<1	Touchet
3-24	31	<1	Touchet
3-24	26	<1	Touchet
3-24	29	<1	Touchet
3-24	36	<1	Blue Mountains, Ore.
3-29	30	<1	Walla Walla
3-29	22	<1	Walla Walla
3-29	47	<1	Walla Walla
3-29	23	<1	Walla Walla
3-29	32	<1	Walla Walla
4-15	35	<1	Lowden
4-15	48	<1	Lowden
4-15	37	<1	Walla Walla
4-15	34	<1	Walla Walla
4-15	36	<1	Walla Walla
5-5	24	<1	Lowden
5-5	30	<1	Waitsburg
5-5	24	<1	Waitsburg
5-5	76	<1	Walla Walla
5-5	15	<1	Walla Walla
5-13	70	<1	Lowden
5-13	34	<1	Walla Walla
5-13	45	<1	Walla Walla
5-13	33	<1	Walla Walla
5-13	39	2	Walla Walla
6-1	27	2	Walla Walla
6-1	41	130	College Place
6-1	20	23	College Place
6-1	43	79	Touchet
6-1	41	<1	Walla Walla
6-7	51	4	Walla Walla
6-7	44	<1	Walla Walla
6-7	34	<1	Walla Walla
6-7	36	<1	Walla Walla
6-7	33	110	Dixie
7-21	41	<1	Walla Walla
7-21	51	<1	Walla Walla
7-21	31	2	Walla Walla
7-21	37	9	Lowden
7-21	29	<1	Lowden
8-18	13	2	Walla Walla
8-18	16	<1	Walla Walla
1-18	16	<1	Walla Walla
8-18	32	<1	Touchet
8-19	60	<1	Touchet
9-6	27	<1	Walla Walla
9-8	14	<1	Lowden
9-9	24	<1	Walla Walla
9-9	21	<1	Walla Walla
9-9	21	<1	Lowden

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I concentration	Grazing Area
Walla Walla, Washington (continued)			
9-21	18	<1	Milton-Freewater, Ore.
9-21	28	<1	Milton-Freewater, Ore.
9-21	46	<1	Touchet
9-21	21	<1	Lowden
9-21	17	<1	Lowden
10-14	24	<1	Prescott
10-14	33	<1	Lowden
10-14	25	<1	Lowden
10-14	19	2	Milton-Freewater, Ore.
10-14	42	<1	Touchet
11-10	29	5	College Place
11-10	32	2	College Place
11-10	34	3	Lowden
11-10	23	4	Walla Walla
11-10	50	25	Walla Walla
11-22	71	< 1	Touchet
11-22	52	<1	Lowden
11-22	58	88	Blue Mountains, Ore.
11-22	58	94	Blue Mountains, Ore.
11-22	22	150	Walla Walla
12-2	89	<1	Walla Walla
12-2	16	35	Walla Walla
12-2	32	6	Walla Walla
12-2	34	<1	Walla Walla
12-2	36	6	Walla Walla
12-15	53	<1	Milton-Freewater, Ore.
12-15	33	6	Walla Walla
12-15	39	<1	Walla Walla
12-15	17	<1	Walla Walla
12-15	26	5	Walla Walla
Wenatchee, Washington			
1-19	71	<1	Douglas County
1-19	49	<1	Douglas County
1-19	52	<1	Douglas County
1-19	46	<1	Douglas County
1-19	48	<1	Douglas County
2-2	38	<1	Douglas County
2-2	43	<1	Douglas County
2-2	26	<1	Douglas County
2-2	34	<1	Douglas County
2-2	49	<1	Douglas County
2-22	40	<1	Chelan County
2-22	54	<1	Walla Walla County
2-22	51	<1	Walla Walla County
2-22	98	<1	Spokane
2-22	34	<1	Grant County
3-7	37	<1	Grant County
3-7	41	2	Grant County

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Wenatchee, Washington (continued)			
3-7	47	<1	Grant County
3-7	41	<1	Grant County
3-7	36	<1	Grant County
3-28	48	<1	Chelan County
3-28	47	<1	Chelan County
3-28	38	<1	Chelan County
3-28	54	<1	Chelan County
3-28	36	<1	Chelan County
4-11	50	<1	Chelan County
4-11	44	<1	Chelan County
4-11	33	<1	Chelan County
4-11	36	<1	Chelan County
4-11	56	<1	Chelan County
4-20	31	<1	Chelan County
4-20	46	<1	Chelan County
4-20	34	<1	Chelan County
4-20	46	<1	Chelan County
4-20	34	<1	Chelan County
5-23	33	<1	Douglas County
5-23	44	<1	Douglas County
5-23	57	3	Douglas County
5-31	71	2	Chelan County
5-31	57	14	Chelan County
5-31	36	2	Chelan County
5-31	38	71	Chelan County
5-31	45	83	Chelan County
6-27	26	19	Douglas County
6-27	65	8	Chelan County
6-27	30	<1	Chelan County
6-27	44	21	Chelan County
6-27	37	11	Spokane County
7-26	34	2	Douglas County
7-26	66	2	Douglas County
7-26	42	2	Douglas County
7-26	53	<1	Douglas County
7-26	37	<1	Grant County
8-15	46	<1	Douglas County
8-15	36	<1	Douglas County
8-15	32	<1	Douglas County
8-15	69	1	Douglas County
8-15	36	<1	Douglas County
9-21	28	<1	Grant County
9-21	27	<1	Grant County
9-21	42	<1	Douglas County
9-21	27	<1	Douglas County
9-21	24	<1	Chelan County
9-27	30	1	Chelan County
9-27	51	<1	Chelan County

APPENDIX G
TABLE 1 (Continued)

Date Sampled	Thyroid Wt (g)	Picocuries/gram ^{131}I Concentration	Grazing Area
Wenatchee, Washington (continued)			
9-27	26	1	Chelan County
9-27	30	< 1	Chelan County
9-27	40	< 1	Chelan County
10-10	31	< 1	Chelan County
10-10	40	< 1	Chelan County
10-10	30	<1	Chelan County
10-10	35	<1	Chelan County
10-10	24	<1	Douglas County

APPENDIX H
MEASUREMENTS OF EXTERNAL RADIATION EXPOSURE

APPENDIX H
TABLE 1

IONIZATION CHAMBER MEASUREMENTS FOR THE HANFORD RESERVATION AND RICHLAND - 1966

Measurement Period	Exposure Rate mR/Day		Measurement Period	Exposure Rate mR/Day	
	Hanford	Richland		Hanford	Richland
12/29/65-1/3/66	Lost	0.38	3/30 - 4/1	0.27	0.23
1/3 - 1/5	0.41	0.33	4/1 - 4/4	0.36	0.26
1/5 - 1/7	0.34	0.29	4/4 - 4/6	0.34	0.22
1/7 - 1/10	0.46	0.26	4/6 - 4/8	0.35	0.29
1/10 - 1/12	0.32	0.28	4/8 - 4/11	0.31	0.19
1/12 - 1/17	0.42	0.32	4/11 - 4/15	0.35	0.28
1/17 - 1/19	0.45	0.31	4/15 - 4/18	0.30	0.18
1/19 - 1/21	0.36	0.33	4/18 - 4/20	0.34	0.27
1/21 - 1/24	0.53	0.38	4/20 - 4/22	0.29	0.21
1/24 - 1/26	0.40	0.24	4/22 - 4/25	0.31	0.27
1/26 - 1/28	0.43	0.31	4/25 - 4/27	0.30	0.26
1/28 - 1/31	0.52	0.31	4/27 - 4/29	0.28	0.23
1/31 - 2/2	0.34	0.28	4/29 - 5/2	0.20	0.19
2/2 - 2/4	0.44	0.25	5/2 - 5/4	0.32	0.26
2/4 - 2/7	0.55	0.38	5/4 - 5/6	0.22	0.17
2/7 - 2/9	Lost	Lost	5/6 - 5/9	0.28	0.20
2/9 -2/10	0.25	0.21	5/9 - 5/11	Lost	Lost
2/10 - 2/14	0.48	0.31	5/11 - 5/13	0.38	0.29
2/14 - 2/16	0.43	0.29	5/13 - 5/16	0.37	0.32
2/16 - 2/18	0.33	0.19	5/16 - 5/18	0.38	0.31
2/18 - 2/21	0.47	0.31	5/18 - 5/20	0.32	0.22
2/21 - 2/23	0.41	0.27	5/20 - 5/23	0.31	0.21
2/23 - 2/25	0.44	0.33	5/23 - 5/25	0.23	0.23
2/25 - 2/28	0.37	0.28	5/25 - 5/27	0.33	0.29
2/28 - 3/2	0.36	0.29	5/27 - 5/31	0.33	0.37
3/2 - 3/4	0.39	0.26	5/31 - 6/3	0.43	0.32
3/4 - 3/7	0.45	0.32	6/3 - 6/6	0.33	0.22
3/7 - 3/9	0.33	0.20	6/6 - 6/8	0.30	0.28
3/9 - 3/11	0.32	0.26	6/8 - 6/10	0.33	0.24
3/11 - 3/14	0.39	0.30	6/10 - 6/13	0.44	0.28
3/14 - 3/16	0.42	0.35	6/13 - 6/15	0.30	0.20
3/16 - 3/18	0.37	0.28	6/15 - 6/17	0.32	0.23
3/18 - 3/21	0.31	0.30	6/17 - 6/20	0.32	0.27
3/21 - 3/23	0.30	0.19	6/20 - 6/22	0.33	Lost
3/23 - 3/25	0.33	0.27	6/22 - 6/24	Lost	0.31
3/25 - 3/28	0.37	0.31	6/24 - 6/27	0.34	0.29
3/28 - 3/30	0.37	0.27	6/27 - 6/29	0.31	0.24

APPENDIX H
Table 1 (continued)

Measurement Period	Exposure Rate mR/Day Hanford	Exposure Rate mR/Day Richland	Measurement Period	Exposure Rate mR/Day Hanford	Exposure Rate mR/Day Richland
6/29 - 7/1	0.32	0.23	10/3 - 10/5	0.30	0.23
7/1 - 7/5	Lost	Lost	10/5 - 10/7	0.39	0.37
7/5 - 7/15	Lost	0.16	10/7 - 10/11	0.41	0.31
7/15 - 7/18	0.32	0.18	10/11 - 10/13	0.57	0.50
7/18 - 7/20	0.28	0.21	10/13 - 10/17	0.30	0.20
7/20 - 7/22	0.26	0.29	10/17 - 10/19	0.40	0.32
7/22 - 7/25	0.39	0.21	10/19 - 10/21	0.34	0.20
7/25 - 7/27	0.23	0.20	10/21 - 10/24	0.35	0.33
7/27 - 7/29	0.25	0.18	10/24 - 10/28	0.41	0.28
7/29 - 8/1	0.21	0.18	10/28 - 10/31	0.49	0.43
8/1 - 8/3	0.29	0.22	10/31 - 11/2	0.42	0.26
8/3 - 8/5	0.15	0.16	11/2 - 11/4	0.49	0.39
8/5 - 8/10	0.34	0.27	11/4 - 11/7	0.42	0.28
8/10 - 8/12	Lost	Lost	11/7 - 11/9	0.30	0.41
8/12 - 8/15	0.31	0.20	11/9 - 11/11	0.36	0.30
8/15 - 8/17	0.25	0.39	11/11 - 11/14	0.40	0.33
8/17 - 8/19	0.21	Lost	11/14 - 11/16	0.37	0.27
8/19 - 8/22	0.34	0.31	11/16 - 11/18	0.33	0.32
8/22 - 8/24	0.29	0.23	11/18 - 11/21	0.45	0.31
8/24 - 8/26	0.30	0.27	11/21 - 11/23	0.33	0.24
8/26 - 8/29	0.37	0.25	11/23 - 11/28	0.37	0.28
8/29 - 9/1	0.32	0.30	11/28 - 11/30	0.39	0.34
9/1 - 9/2	0.16	0.15	11/30 - 12/2	0.48	0.33
9/2 - 9/6	0.35	0.29	12/2 - 12/5	0.46	0.33
9/6 - 9/9	0.28	0.24	12/5 - 12/7	0.35	0.23
9/9 - 9/12	0.36	0.42	12/7 - 12/9	0.37	0.33
9/12 - 9/14	0.34	0.24	12/9 - 12/12	0.39	0.32
9/14 - 9/16	Lost	Lost	12/12 - 12/14	0.36	0.26
9/16 - 9/19	0.36	0.23	12/14 - 12/16	0.40	0.24
9/19 - 9/21	0.29	0.41	12/16 - 12/19	0.44	0.33
9/21 - 9/26	0.36	0.37	12/19 - 12/21	0.35	0.26
9/26 - 9/28	0.31	0.28	12/21 - 12/27	Lost	0.33
9/28 - 9/30	0.30	0.21	12/27 - 12/30	0.40	0.28
9/30 - 10/3	0.39	0.42			

APPENDIX H
Table 2

IONIZATION CHAMBER MEASUREMENTS IN THE COLUMBIA RIVER - 1966

Measurement Period	Exposure Rate mR/Day	Measurement Period	Exposure Rate mR/Day	Measurement Period	Exposure Rate mR/Day
Vernita Bridge					
1/4 - 1/11	0.31	3/29 - 4/5	0.43	6/14 - 6/21	1.28
1/11 - 1/18	0.44	4/5 - 4/12	0.53	6/21 - 6/28	0.35
1/18 - 1/25	0.83	4/12 - 4/19	0.47	6/28 - 7/5	0.09
1/25 - 2/1	1.00	4/19 - 4/26	0.91	7/5 - 7/19	0.60
2/1 - 2/22	Lost	4/26 - 5/5	0.16	7/19 - 8/29	Lost
2/22 - 3/1	0.96	5/5 - 5/17	Lost	8/29 - 9/6	0.61
3/1 - 3/8	0.28	5/17 - 5/24	0.10	9/6 - 9/12	0.87
3/8 - 3/15	0.72	5/24 - 5/31	0.86	9/19 - 9/27	1.72
3/15 - 3/22	0.32	5/31 - 6/7	0.29	9/27 - 10/4	0.31
3/22 - 3/29	0.48	6/7 - 6/14	0.41	10/18 - 10/25	2.34
Old Hanford Ferry					
12/28/65-1/4/66	4.95	4/12 - 4/19	6.06	9/6 - 9/12	2.70
1/4 - 1/11	3.95	4/19 - 5/3	Off scale	9/12 - 9/19	4.20
1/11 - 1/18	7.37	5/3 - 5/5	5.73	9/19 - 9/27	4.33
1/18 - 1/25	4.67	5/5 - 5/17	Lost	9/27 - 10/4	2.62
1/25 - 2/1	5.84	5/17 - 5/24	3.83	10/4 - 10/11	2.31
2/1 - 2/10	6.45	5/24 - 5/31	2.19	10/11 - 10/18	1.94
2/10 - 2/17	4.93	5/31 - 6/7	2.68	10/18 - 10/25	2.06
2/17 - 2/22	2.11	6/7 - 6/14	1.51	10/25 - 11/8	2.52
2/22 - 3/1	4.50	6/14 - 6/21	2.00	11/8 - 11/15	6.53
3/1 - 3/8	5.28	6/21 - 6/28	3.42	11/15 - 11/22	2.91
3/8 - 3/15	4.86	6/28 - 7/5	5.62	11/22 - 11/29	5.50
3/17 - 3/22	4.56	7/5 - 7/15	1.68	11/29 - 12/6	1.49
3/22 - 3/29	5.81	7/15 - 7/19	0.41	12/6 - 12/13	2.38
3/29 - 4/5	6.19	8/22 - 8/29	4.39	12/13 - 12/20	2.53
4/5 - 4/12	7.30	8/29 - 9/6	5.22	12/20 - 12/28	3.40
Ringold					
12/28/65-1/4/66	3.97	3/1 - 3/8	4.29	9/27 - 10/4	2.26
1/4 - 1/11	2.88	3/8 - 3/15	3.98	10/4 - 10/11	2.09
1/11 - 1/18	2.25	3/15 - 3/22	3.88	10/11 - 10/18	1.90
1/18 - 1/25	3.36	3/22 - 3/29	4.63	10/18 - 10/25	1.67
1/25 - 2/1	Lost	3/29 - 4/5	4.81	10/25 - 11/1	2.55
2/1 - 2/8	3.89	4/5 - 4/12	4.51	11/8 - 11/22	2.16
2/8 - 2/15	4.05	9/6 - 9/13	1.17	11/22 - 12/13	2.02
2/15 - 2/22	2.74	9/13 - 9/20	1.65	12/13 - 12/20	1.68
2/22 - 3/1	4.30	9/20 - 9/27	2.77		

APPENDIX H
Table 2 (continued)

Measurement Period	Exposure Rate mR/Day	Measurement Period	Exposure Rate mR/Day	Measurement Period	Exposure Rate mR/Day
300 Area					
12/28/65-1/4/66	3.42	4/26 - 5/3	3.29	8/29 - 9/6	0.16
1/4 - 1/11	3.95	5/3 - 5/10	Off Scale	9/6 - 9/12	1.59
1/11 - 1/18	6.71	5/10 - 5/17	3.92	9/12 - 9/19	1.93
1/18 - 1/25	2.68	5/17 - 5/24	Off Scale	9/19 - 9/27	2.66
1/25 - 2/1	2.96	5/24 - 5/31	3.16	9/27 - 10/4	1.88
2/1 - 2/10	3.73	5/31 - 6/7	1.61	10/4 - 10/11	2.26
2/10 - 2/17	3.17	6/7 - 6/14	1.12	10/11 - 10/18	2.21
2/17 - 2/22	1.81	6/14 - 6/21	1.55	10/18 - 10/25	1.87
2/22 - 3/2	3.22	6/21 - 6/28	1.91	10/25 - 11/8	3.09
3/2 - 3/8	3.93	6/28 - 7/5	1.67	11/8 - 11/15	2.61
3/8 - 3/15	2.29	7/5 - 7/15	1.18	11/15 - 11/22	3.01
3/17 - 3/22	1.30	7/15 - 7/19	0.78	11/22 - 11/29	2.83
3/22 - 3/29	2.09	7/19 - 7/26	0.49	11/29 - 12/6	2.20
3/29 - 4/5	2.58	7/26 - 8/1	0.61	12/6 - 12/13	2.95
4/5 - 4/12	2.45	8/1 - 8/10	3.21	12/13 - 12/20	2.79
4/12 - 4/19	Lost	8/10 - 8/16	0.53	12/20 - 12/28	3.85
4/19 - 4/26	2.97				
Richland Marina					
12/28/65-1/4/66	6.97	4/5 - 4/12	2.99	9/16 - 9/23	1.23
1/4 - 1/11	1.96	4/12 - 4/19	2.09	9/23 - 9/27	1.61
1/11 - 1/18	5.20	4/19 - 4/26	1.68	9/27 - 10/4	0.86
1/18 - 1/25	2.12	4/26 - 5/3	1.16	10/4 - 10/10	1.60
1/25 - 2/1	2.33	5/3 - 5/10	6.31	10/10 - 10/18	1.58
2/1 - 2/10	3.39	5/10 - 5/17	2.58	10/18 - 10/25	2.76
2/10 - 2/17	2.23	5/17 - 5/24	2.36	10/25 - 11/8	2.23
2/17 - 2/22	1.31	5/24 - 5/31	2.08	11/8 - 11/15	1.72
2/22 - 3/1	1.39	5/31 - 6/7	1.34	11/15 - 11/22	1.99
3/1 - 3/8	1.81	6/7 - 6/14	0.55	11/22 - 11/29	1.16
3/8 - 3/15	2.40	6/14 - 6/21	1.12	11/29 - 12/6	1.58
3/17 - 3/22	2.23	6/21 - 6/28	1.61	12/6 - 12/13	2.38
3/22 - 3/29	2.27	6/28 - 7/5	1.09	12/13 - 12/20	1.92
3/29 - 4/5	2.80	9/6 - 9/16	0.96	12/20 - 12/28	2.32
McNary Dam					
7/22 - 7/29	0.81	9/16 - 9/23	3.19	10/28 - 11/11	0.37
7/29 - 8/5	0.85	9/23 - 9/30	0.94	11/11 - 11/18	0.42
8/5 - 8/12	0.69	9/30 - 10/7	2.05	11/18 - 11/23	0.52
8/12 - 8/19	2.26	10/7 - 10/14	1.32	11/23 - 12/16	0.62
9/2 - 9/9	0.71	10/14 - 10/21	0.44	12/16 - 12/22	0.81
9/9 - 9/16	5.48	10/21 - 10/28	0.57	12/22 - 12/31	0.62

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