Dominion Nuclear Connecticut, Inc.
Millstone Power Station
Rope Ferry Road
Waterford, CT 06385

Dominion

APR 2 9 2005

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Serial No.	05-208
MPS Lic/GJC	R0
Docket Nos.	50-245
	50-336
	50-423
License Nos.	DPR-21
	DPR-65
	NPF-49

DOMINION NUCLEAR CONNECTICUT, INC.
MILLSTONE POWER STATION UNITS 1, 2, AND 3
2004 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

This letter transmits the Annual Radiological Environmental Operating Report for the Millstone Power Station, for the period January 2004 through December 2004. This satisfies the provisions of Section 5.7.2 of Unit 1 Permanently Defueled Technical Specifications (PDTS), and Sections 6.9.1.6a and 6.9.1.3 of the Millstone Units 2 and 3 Technical Specifications, respectively.

If you have any questions or require additional information, please contact Mr. David W. Dodson at (860) 447-1791, extension 2346.

Very truly yours,

J. Alan Price
Site Vice President - Millstone

IE25

Attachments: 1

Commitments made in this letter: None.

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Serial No. 05-208
Docket Nos. 50-245
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NPF-49

Attachment 1

2004 Annual Radiological Environmental Operating Report

Millstone Power Station Units 1, 2, and 3
Dominion Nuclear Connecticut, Inc. (DNC)

Millstone Power Station

2004
Radiological Environmental Operating Report

January 1, 2004 – December 31, 2004

Dominion Nuclear Connecticut, Inc.

Unit	License	Docket
1	DPR-21	50-245
2	DPR-65	50-336
3	NPF-49	50-423

Dominion

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

MILLSTONE POWER STATION

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM

2004

MILLSTONE UNIT 1, DOCKET NO. 50-245
MILLSTONE UNIT 2, DOCKET NO. 50-336
MILLSTONE UNIT 3, DOCKET NO. 50-423

By the

Dominion Nuclear Connecticut, Inc.
Waterford, Connecticut

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Executive Summary

1. EXECUTIVE SUMMARY

The radiological environmental monitoring program for the Millstone Power Station was continued for the period January through December 2004, in compliance with the Technical Specifications and the Radiological Effluent Monitoring and Offsite Dose Calculation Manual. The Radiological Protection and Chemistry Department of Dominion Nuclear Connecticut, Inc. (DNC) prepared this annual report. Radiological Protection and Environmental Services staff performed sample collection and preparation. Framatome ANP DE&S Environmental Laboratory performed gamma exposure rate measurements and laboratory analyses.

Thermoluminescent dosimeters (TLDs) were used to measure direct gamma exposure in the vicinity of the station and as far away as 14 miles. Radiochemical and radiological counting analyses of samples were performed to detect the presence of any station related radioactivity. Samples included: air particulate and charcoal filters, soil, goat milk, pasture grass, hay, well water, broad leaf vegetation, fruits, vegetables, sea water, bottom sediment, aquatic flora, fish, mussels, oysters, clams, and lobsters. In evaluating the results of these analyses it is necessary to consider the variability of natural and man-made sources of radioactivity, radionuclide distribution in the environment and radionuclide uptake in environmental media. This variability is dependent on many factors including station release rates, past spatial variability of radioactive fallout from nuclear weapons tests and on-going redistribution of the fallout, contribution from cosmically produced radioactivity, soil characteristics, farming practices, and feed type. Significant variations in measured levels of radioactivity could be caused by any one of these factors. Therefore, these factors need to be considered in order to properly explain any variations in radiation detected and to distinguish between natural and nuclear station related radioactivity.

Millstone Unit 1 is permanently shutdown. The annual capacity factor for Millstone Unit 2 was 97.6% based on Design Electrical Rating (DER). The annual capacity factor for Unit 3 was 88.2%. Unit 3 was shutdown in the second quarter for 3R09 refueling and maintenance. The radioactive releases of gaseous effluents in 2004 were comparable to years when one or more units operated for the majority of the year. Radioactive releases in liquid effluents continue to be low.

No station effects were detected in terrestrial media. The predominant radioactivity, except for a few aquatic sample results, was that from outside sources, such as fallout from nuclear weapons tests and naturally occurring radionuclides. Monitoring of the aquatic environment in the area of the discharge indicated the presence of the following station related radionuclides: Cobalt-60, Silver-110m, Cesium-137 and Tritium. Due to the decreasing trend in liquid effluent releases, a corresponding decrease is observed in measured levels of radionuclides in the environment. Doses from the 2004 measured levels are well below those required by each Unit's Safety Technical Specifications (10CFR50 Appendix I, Design Guidelines).

Cesium-137 and Strontium-90 were detected in goat milk. Cesium-137 was also found in several pasture grass and hay samples and all soil samples. These levels are the result of nuclear weapons testing in the 1960's and not the result of station operation. This can be concluded because insufficient quantities of these isotopes have been released by the station to account for the measured concentrations and the presence of these isotopes have been consistently declining since the early 1960's after signing of the Nuclear Test Ban Treaty.

The radiation dose (dose equivalent commitment) to the general public from the station's discharges has been evaluated by two methods. One method utilizes the measured station's discharges and conservative transport models and the other utilizes the measured concentrations of radioactivity in the environmental media. The maximum whole body dose (station boundary) that could occur to a member of the general public as a result of station operation was 0.17 millirem. This dose is 0.7 percent of the standard (i.e., 25 millirem to the whole body at the station site boundary) as set by the Environmental Protection Agency on the maximum allowable dose to an individual of the general public. Historically, the average whole body dose for a member of the public residing within 50 miles of the station is generally three orders of magnitude less than the maximum individual whole body dose. The standards of the Environmental Protection Agency are a small fraction (less than 10 percent) of the 284 mrem per year normal Connecticut resident background radiation (NCRP94) and are designed to be inconsequential in regard to public health and safety. Station related doses are even a smaller fraction of the natural background. Therefore, the station related doses have insignificant public health consequences.

2. PROGRAM DESCRIPTION

2.1. Sampling Schedule and Locations

The sample locations and the sample types and frequency of analysis are given in Tables 2-1 and 2-2 and Figures 2.1-1 and 2.1-2. The program as described on Table 2-2 only lists the required samples as specified in the Radiological Effluent Monitoring and Offsite Dose Calculation Manual. However, in order to identify the locations of the extra samples, all locations (both required and extra) are listed in Table 2-1 and shown on the figures.

Table 2-1 Environmental Monitoring Program Sampling Types and Locations

Location Number*	Location Name	Direction & Distance From Release Point**	Sample Types
1-I	On-site - Old Millstone Rd.	0.6 Mi, NNW	TLD, Air Particulate, Iodine, Vegetation
2-I	On-site - Weather Shack	0.3 Mi, S	TLD, Air Particulate, Iodine
3-I	On-site - Bird Sanctuary	0.3 Mi, NE	TLD, Air Particulate, Iodine, Soil
4-I	On-site - Albacore Drive	1.0 Mi, N	TLD, Air Particulate, Iodine, Soil
5-I	MP3 Discharge	0.1 Mi, SSE	TLD
6-I	Quarry Discharge	0.3 Mi, SSE	TLD
7-I	Environmental Lab Dock	0.3 Mi, SE	TLD
8-I	Environmental Lab	0.3 Mi, SE	TLD
9-I	Bay Point Beach	0.4 Mi, W	TLD
10-I	Pleasure Beach	1.2 Mi, E	TLD, Air Particulate, Iodine, Vegetation
11-I	New London Country Club	1.6 Mi, ENE	TLD, Air Particulate, Iodine
12-C	Fisher's Island, NY	8.0 Mi, ESE	TLD
13-C	Mystic, CT	11.5 Mi, ENE	TLD
14-C	Ledyard, CT	12.0 Mi, NE	TLD, Soil
15-C	Norwich, CT	14.0 Mi, N	TLD, Air Particulate, Iodine
16-C	Old Lyme, CT	8.8 Mi, W	TLD
17-I	Site Boundary	0.5 Mi, NE	Vegetation
21-I	Goat Location #1	2.0 Mi, N	Milk
22-I	Goat Location #2	5.2 Mi, NNE	Milk
24-C	Goat Location #4	29.0 Mi, NNW	Milk
25-I	Within 10 Miles	Within 10 Miles	Fruits & Vegetables
26-C	Beyond 10 Miles	Beyond 10 Miles	Fruits & Vegetables
27-I	Niantic	1.7 Mi, WNW	TLD, Air Particulate, Iodine
28-I	Two Tree Island	0.8 Mi, SSE	Mussels
29-I	West Jordan Cove	0.4 Mi, NNE	Clams
30-I	Niantic Shoals	1.5 Mi, NNW	Mussels
31-I	Niantic Shoals	1.8 Mi, NW	Bottom Sediment, Oysters
31-X	Niantic Shoals	1.8 Mi, NW	Scallops
32-I	Vicinity of Discharge	-------------	Bottom Sediment, Oysters, Lobster, Fish, Seawater
32-X	Vicinity of Discharge	-------------	Fucus
33-I	Seaside Point	1.8 Mi, ESE	Bottom Sediment
33-X	Seaside Point	1.8 Mi, ESE	Fucus
34-I	Thames River Yacht Club	4.0 Mi, ENE	Bottom Sediment
34-X	Thames River Yacht club	4.0 Mi, ENE	Oysters
35-I	Niantic Bay	0.3 Mi, WNW	Lobster, Fish
35-X	Niantic Bay	0.3 Mi, WNW	Bottom Sediment, Seawater, Clams, Fucus

*Key: I - Indicator C - Control X - Extra - sample not required by REMODCM
**The release points are the MP1 stack for terrestrial locations and the quarry cut for aquatic locations.

Location Number*	Location Name	Direction & Distance From Release Point**	Sample Types
36-I	Black Point	3.0 Mi, WSW	Oysters
36-X	Black Point	3.0 Mi, WSW	Bottom Sediment, Fucus
37-C	Giant's Neck	3.5 Mi, WSW	Bottom Sediment, Oysters, Seawater
37-X	Giant's Neck	3.5 Mi, WSW	Lobster
38-I	Waterford Shellfish Bed #1	1.0 Mi, NW	Clams
39-X	Jordon Cove Bar	0.8 Mi, NE	Bottom Sediment, Clams, Seawater, Fucus
40-X	Quarry	------------	Fish, Oysters
41-I	Myrock Avenue	3.2 Mi, ENE	TLD
42-I	Billow Road	2.4 Mi, WSW	TLD
43-I	Black Point	2.6 Mi, SW	TLD
44-I	Onsite - Schoolhouse	0.1 Mi, NNE	TLD
45-I	Onsite Access Road	0.5 Mi, NNW	TLD
46-I	Old Lyme - Hillcrest Ave.	4.6 Mi, WSW	TLD
47-I	East Lyme - W. Main St.	4.5 Mi, W	TLD
48-I	East Lyme - Corey Rd.	3.4 Mi, WNW	TLD
49-I	East Lyme - Society Rd.	3.6 Mi, NW	TLD
50-I	East Lyme - Manwaring Rd.	2.1 Mi, W	TLD
51-I	East Lyme - Smith Ave.	1.5 Mi, NW	TLD
52-I	Waterford - River Rd.	1.1 Mi, NNW	TLD
53-I	Waterford - Gardiners Wood Rd.	1.4 Mi, NNE	TLD
55-I	Waterford - Magonk Point	1.8 Mi, ESE	TLD
56-I	New London - Mott Ave.	3.7 Mi, E	TLD
57-I	New London - Ocean Ave.	3.6 Mi, ENE	TLD
59-I	Waterford -Miner Ave.	3.4 Mi, NNE	TLD
60-I	Waterford - Parkway South	4.0 Mi, N	TLD
61-I	Waterford - Boston Post Rd.	4.3 Mi, NNW	TLD
62-I	East Lyme - Columbus Ave.	1.9 Mi, WNW	TLD
63-I	Waterford - Jordon Cove Rd.	0.8 Mi, NE	TLD
64-I	Waterford - Shore Rd.	1.1 Mi, ENE	TLD
65-I	Waterford - Bank St.	3.2 Mi, NE	TLD
66-X	NAP Parking Lot - Fitness Center	0.4 Mi, NW	TLD
67-X	Golden Spur	4.7 Mi, NNW	Bottom Sediment
68-Z	Ram Island	9.6 Mi., ESE	Oysters
70-C	Background Well	NA	Well Water
71-I	Onsite Well	Onsite	Well Water
72-I	Onsite Well	Onsite	Well Water
73-X	Site Switchyard Fence	0.3 Mi, N	TLD
74-X	Ball Field Foul Pole	0.6 Mi, N	TLD
75-X	Waterford – Windward Way & Shotgun	0.5 Mi, NE	TLD

*Key: I - Indicator C - Control X or Z - Extra - sample not required
**The release points are the MP1 stack for terrestrial locations and the quarry cut for aquatic locations.

Table 2-2 Required Sampling Frequency & Type of Analysis

	Exposure Pathway and/or Sample	No. of Locations	Sampling & Collection Frequency	Type of Analysis
1.	Gamma Dose - Environmental TLD	40[a]	Quarterly	Gamma Dose - Quarterly
2.	Airborne Particulate	8	Continuous sampler - weekly filter change	Gross Beta - Weekly Gamma Spectrum - Quarterly on composite (by location), and on individual sample if gross beta is greater than 10 times the mean of the weekly control station's gross beta results
3.	Airborne Iodine	8	Continuous sampler - weekly canister change	I-131 - Weekly
4.	Vegetation	5	One sample near middle and one near end of growing season	Gamma Isotopic on each sample
5.	Milk	3	Semimonthly when animals are on pasture; monthly at other times.	Gamma Isotopic and I-131 on each sample; Sr-89 and Sr-90 on quarterly composite
5a.	Pasture Grass	3	Sample as necessary to substitute for unavailable milk	Gamma Isotopic and I-131 on each sample
6.	Sea Water	2	Continuous sampler with a monthly collection at indicator location. Quarterly at control location - Composite of 6 weekly grab samples.	Gamma Isotopic and Tritium on each sample.
6a.	Well Water	3	Quarterly	Gamma Isotopic and Tritium on each sample
7.	Bottom Sediment	5	Semiannual	Gamma Isotopic on each sample
7a.	Soil	3	Quarterly	Gamma Isotopic on each sample
8.	Fin Fish-Flounder and one other type of edible fin fish	2	Quarterly	Gamma Isotopic on each sample
9.	Mussels (edible portion)	2	Quarterly	Gamma Isotopic on each sample
10.	Oysters (edible portion)	4	Quarterly	Gamma Isotopic on each sample
11.	Clams (edible portion)	2	Quarterly	Gamma Isotopic on each sample
12.	Lobster (edible portion)	2	Quarterly	Gamma Isotopic on each sample

(a) Two or more TLDs or TLD with two or more elements per location

Figure 2.1-1 Millstone Sampling Locations

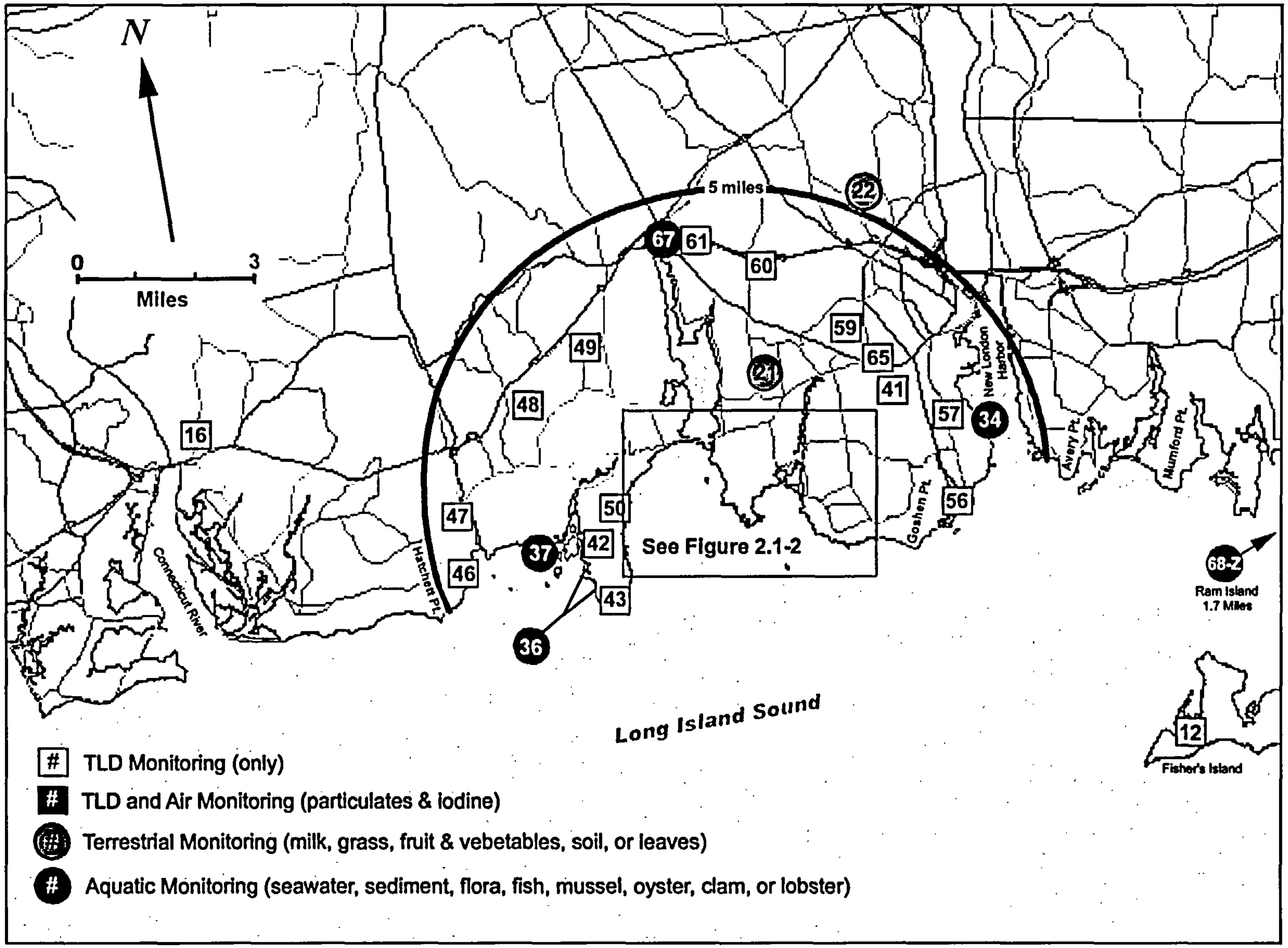
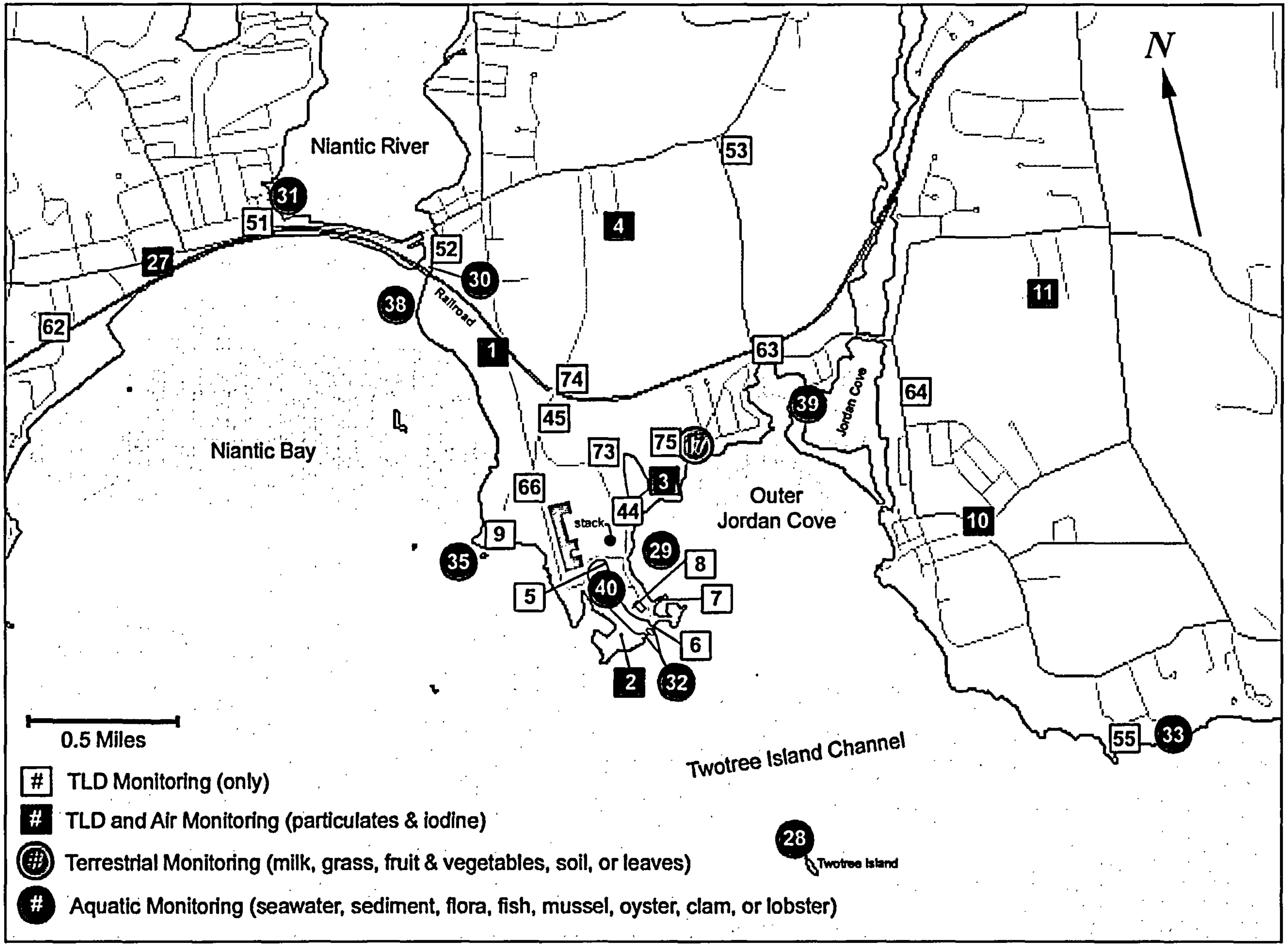


Figure 2.1-2 Millstone Sampling Locations (Within 2 miles)



2.2. *Samples Collected During Report Period*

The following table summarizes the number of samples of each type collected and analyzed during 2004:

Sample Type	Number of Required Samples	Number of Required Samples Analyzed	Number of Extra Samples Analyzed
Gamma Exposure (Environmental TLD)	160	120[1]	12
Air Particulates	416	416	0
Air Iodine	416	416	0
Soil	12	12	0
Goat Milk	57	25[2]	0
Pasture Grass	Variable[3]	31	0
Fruit and Vegetables	8	8	1
Broad Leaf Vegetation	6	6	12
Sea Water	16	16	0
Well Water	12	12	3
Bottom Sediment	10	10	15
Aquatic Flora	0	0	18
Fish	16	14[4]	4
Mussels	8	8	0
Oysters	16	15[4]	8
Clams	8	8	8
Lobster	8	8	4
Total All Types	**1,169**	**1,125**	**85**

[1] 2nd Quarter TLDs were lost (see CR-04-07177).. TLDs were collected at the end of the second quarter as scheduled and delivered along with the routine weekly air samples to site warehouse for shipment to vendor. The air samples and TLDs were placed in separate bags and placed together in the shipment preparation area. The assignment report for the TLDs was placed in the bag with the TLDs while the air sample transmittal form was left outside the bag. Air samples were sent and received by the vendor, however the TLDs were lost. Subsequent efforts to locate the TLDs were unsuccessful. Several corrective actions have been implemented to prevent recurrence. Deviations from the sampling schedule are permitted for legitimate reasons.
[2] Pasture grass (or hay) sampled as necessary to substitute for unavailable milk.
[3] Depends upon availability of goat milk samples.
[4] Due to sample unavailability, not all required fish and oyster samples could be obtained.

3. RADIOCHEMICAL RESULTS

3.1. Summary Table

In accordance with the Radiological Effluent Monitoring Manual (REMM), Section I.F.1, a summary table of the radiochemical results has been prepared and is presented in Table 3-1.

The mean and range recorded are based only upon detectable measurements. The fraction in parentheses (next to the mean for the results) indicates the ratio of measurements that are considered above the detection limit for each individual analysis. The range of values above the detection limit is listed in parentheses below the mean of the detectable measurements.

A more detailed analysis of the data is given in Section 4.0 where a discussion of the variations in the data explains many aspects that are not evident in the Summary Table because of the basic limitation of data summaries. The data summaries include the extra 'X' samples (those taken in addition to the required locations or frequency) collected throughout the year. These samples are taken in an effort to enhance the monitoring program or are the results of special studies.

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
TLD (uR/hr)	Gamma Dose	132	-	8.14 (117/117) (4.41-12.7)	08	0.3 mi SE	12 (3/3) (11.3-12.7)	8.22 (15/15) (5.52-10.4)	
AP Gross Beta (pCi/m3 x 1000)	Gross Beta	416	10	18.7 (362/364) (6.8-37.1)	15-C	14 mi N	19.2 (52/52) (7.1-35)	19.2 (52/52) (7.1-35)	
Air Iodine (pCi/m3 x 1000)	I-131	416	70	(0/364)	-	-	< LLD	(0/52)	
AP Gamma (pCi/m3 x 1000)	Ba-140	32	-	(0/28)	-	-	< LLD	(0/4)	
	Be-7	32	-	91.1 (25/28) (57-119)	15-C	14 mi N	114 (4/4) (93-132)	114 (4/4) (93-132)	
	Ce-141	32	-	(0/28)	-	-	< LLD	(0/4)	
	Ce-144	32	-	(0/28)	-	-	< LLD	(0/4)	
	Co-58	32	-	(0/28)	-	-	< LLD	(0/4)	
	Co-60	32	-	(0/28)	-	-	< LLD	(0/4)	
	Cr-51	32	-	(0/28)	-	-	< LLD	(0/4)	
	Cs-134	32	50	(0/28)	-	-	< LLD	(0/4)	
	Cs-137	32	60	(0/28)	-	-	< LLD	(0/4)	
	Mn-54	32	-	(0/28)	-	-	< LLD	(0/4)	
	Nb-95	32	-	(0/28)	-	-	< LLD	(0/4)	
	Ru-103	32	-	(0/28)	-	-	< LLD	(0/4)	
	Ru-106	32	-	(0/28)	-	-	< LLD	(0/4)	
	Zr-95	32	-	(0/28)	-	-	< LLD	(0/4)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Soil (pCi/g dry)	Be-7	12	-	(0/8)	14-C	12 mi NE	0.36 (1/4) (0.36-0.36)	0.36 (1/4) (0.36-0.36)	
	Ce-141	12	-	(0/8)	-	-	< LLD	(0/4)	
	Ce-144	12	-	(0/8)	-	-	< LLD	(0/4)	
	Co-58	12	-	(0/8)	-	-	< LLD	(0/4)	
	Co-60	12	-	(0/8)	-	-	< LLD	(0/4)	
	Cr-51	12	-	(0/8)	-	-	< LLD	(0/4)	
	Cs-134	12	0.15	(0/8)	-	-	< LLD	(0/4)	
	Cs-137	12	0.18	0.745 (8/8) (0.44-1.23)	14-C	12 mi NE	1.52 (4/4) (1.37-1.66)	1.52 (4/4) (1.37-1.66)	
	Fe-59	12	-	(0/8)	-	-	< LLD	(0/4)	
	K-40	12	-	9.91 (8/8) (6.3-12.5)	04	1 mi N	11.9 (4/4) (10.7-12.5)	11.8 (4/4) (10.2-13)	
	Mn-54	12	-	(0/8)	-	-	< LLD	(0/4)	
	Nb-95	12	-	(0/8)	-	-	< LLD	(0/4)	
	Ru-103	12	-	(0/8)	-	-	< LLD	(0/4)	
	Ru-106	12	-	(0/8)	-	-	< LLD	(0/4)	
	Sb-125	12	-	(0/8)	-	-	< LLD	(0/4)	
	Th-228	12	-	0.84 (8/8) (0.48-1.21)	14-C	12 mi NE	1.34 (4/4) (1.18-1.55)	1.34 (4/4) (1.18-1.55)	
	Zn-65	12	-	(0/8)	-	-	< LLD	(0/4)	
	Zr-95	12	-	(0/8)	-	-	< LLD	(0/4)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Goat Milk (pCi/L)	Ba-140	25	70	(0/15)	-	-	< LLD	(0/10)	
	Cs-134	25	15	(0/15)	-	-	< LLD	(0/10)	
	Cs-137	25	18	9.58 (4/15) (5.3-11.7)	22	5.2 mi NNE	11.7 (1/5) (11.7-11.7)	(0/10)	
	I-131	25	1	(0/15)	-	-	< LLD	(0/10)	
	K-40	25	-	1616 (15/15) (1220-1920)	22	5.2 mi NNE	1725 (5/5) (1630-1773)	1672 (10/10) (1550-1880)	
	La-140	25	25	(0/15)	-	-	< LLD	(0/10)	
	Sr-89	6	-	(0/4)	-	-	< LLD	(0/2)	
	Sr-90	6	-	5.18 (3/4) (1.24-8.1)	22	5.2 mi NNE	7.15 (2/2) (6.2-8.1)	1.7 (2/2) (1.62-1.78)	
Pasture Grass (Hay) (pCi/g wet)	Ba-140	31	-	(0/22)	-	-	< LLD	(0/9)	
	Be-7	31	-	1.99 (18/22) (0.4-4.36)	21	2 mi N	2.13 (6/9) (0.46-3.86)	2.04 (6/9) (0.7-4.32)	
	Ce-141	31	-	(0/22)	-	-	< LLD	(0/9)	
	Ce-144	31	-	(0/22)	-	-	< LLD	(0/9)	
	Co-58	31	-	(0/22)	-	-	< LLD	(0/9)	
	Co-60	31	-	(0/22)	-	-	< LLD	(0/9)	
	Cr-51	31	-	(0/22)	-	-	< LLD	(0/9)	
	Cs-134	31	0.06	(0/22)	-	-	< LLD	(0/9)	
	Cs-137	31	0.08	0.125 (2/22) (0.088-0.162)	21	2 mi N	0.125 (2/9) (0.088-0.162)	0.064 (4/9) (0.043-0.079)	
	Fe-59	31	-	(0/22)	-	-	< LLD	(0/9)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Pasture Grass (Hay) (pCi/g wet)	I-131	31	0.06	(0/22)	-	-	< LLD	(0/9)	
	K-40	31	-	6.96 (22/22) (2.66-14.6)	24-C	29 mi NNW	10.4 (9/9) (3.46-19.6)	10.4 (9/9) (3.46-19.6)	
	La-140	31	-	(0/22)	-	-	< LLD	(0/9)	
	Mn-54	31	-	(0/22)	-	-	< LLD	(0/9)	
	Nb-95	31	-	(0/22)	-	-	< LLD	(0/9)	
	Ru-103	31	-	(0/22)	-	-	< LLD	(0/9)	
	Ru-106	31	-	(0/22)	-	-	< LLD	(0/9)	
	Sb-125	31	-	(0/22)	-	-	< LLD	(0/9)	
	Th-228	31	-	(0/22)	-	-	< LLD	(0/9)	
	Zn-65	31	-	(0/22)	-	-	< LLD	(0/9)	
	Zr-95	31	-	(0/22)	-	-	< LLD	(0/9)	
Well Water (pCi/l)	Ba-140	15	60	(0/10)	-	-	< LLD	(0/5)	
	Be-7	15	-	(0/10)	-	-	< LLD	(0/5)	
	Co-58	15	15	(0/10)	-	-	< LLD	(0/5)	
	Co-60	15	15	(0/10)	-	-	< LLD	(0/5)	
	Cr-51	15	-	(0/10)	-	-	< LLD	(0/5)	
	Cs-134	15	15	(0/10)	-	-	< LLD	(0/5)	
	Cs-137	15	18	(0/10)	-	-	< LLD	(0/5)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Well Water (pCi/l)	Fe-59	15	30	(0/10)	-	-	< LLD	(0/5)	
	H-3	12	2000	(0/8)	-	-	< LLD	(0/4)	
	I-131	15	15	(0/10)	-	-	< LLD	(0/5)	
	K-40	15	-	(0/10)	-	-	< LLD	(0/5)	
	La-140	15	15	(0/10)	-	-	< LLD	(0/5)	
	Mn-54	15	15	(0/10)	-	-	< LLD	(0/5)	
	Nb-95	15	15	(0/10)	-	-	< LLD	(0/5)	
	Ru-103	15	-	(0/10)	-	-	< LLD	(0/5)	
	Ru-106	15	-	(0/10)	-	-	< LLD	(0/5)	
	Sb-125	15	-	(0/10)	-	-	< LLD	(0/5)	
	Sr-90	15	-	(0/10)	70-C		2.2 (1/5) (2.2-2.2)	2.2 (1/5) (2.2-2.2)	
	Th-228	15	-	(0/10)	-	-	< LLD	(0/5)	
	Zn-65	15	30	(0/10)	-	-	< LLD	(0/5)	
	Zr-95	15	30	(0/10)	-	-	< LLD	(0/5)	
Fruits & Vegetables (pCi/g wet)	Ba-140	9	-	(0/5)	-	-	< LLD	(0/4)	
	Be-7	9	-	0.188 (2/5) (0.17-0.206)	25	10- mi	0.188 (2/5) (0.17-0.206)	(0/4)	
	Ce-141	9	-	(0/5)	-	-	< LLD	(0/4)	
	Ce-144	9	-	(0/5)	-	-	< LLD	(0/4)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Fruits & Vegetables (pCi/g wet)	Co-58	9	-	(0/5)	-	-	< LLD	(0/4)	
	Co-60	9	-	(0/5)	-	-	< LLD	(0/4)	
	Cr-51	9	-	(0/5)	-	-	< LLD	(0/4)	
	Cs-134	9	0.06	(0/5)	-	-	< LLD	(0/4)	
	Cs-137	9	0.08	(0/5)	-	-	< LLD	(0/4)	
	Fe-59	9	-	(0/5)	-	-	< LLD	(0/4)	
	I-131	9	0.06	(0/5)	-	-	< LLD	(0/4)	
	K-40	9	-	1.98 (5/5) (0.49-3.91)	25	10- mi	1.98 (5/5) (0.49-3.91)	1.7 (4/4) (0.8-3.06)	
	La-140	9	-	(0/5)	-	-	< LLD	(0/4)	
	Mn-54	9	-	(0/5)	-	-	< LLD	(0/4)	
	Nb-95	9	-	(0/5)	-	-	< LLD	(0/4)	
	Ru-103	9	-	(0/5)	-	-	< LLD	(0/4)	
	Ru-106	9	-	(0/5)	-	-	< LLD	(0/4)	
	Sb-125	9	-	(0/5)	-	-	< LLD	(0/4)	
	Th-228	9	-	(0/5)	-	-	< LLD	(0/4)	
	Zn-65	9	-	(0/5)	-	-	< LLD	(0/4)	
	Zr-95	9	-	(0/5)	-	-	< LLD	(0/4)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Broadleaf Vegetation (pCi/g wet)	Ba-140	18	-	(0/18)	-	-	< LLD	(0/0)	
	Be-7	18	-	0.807 (11/18) (0.34-2.23)	01	0.6 mi NNW	0.94 (3/6) (0.84-1.01)	(0/0)	
	Ce-141	18	-	(0/18)	-	-	< LLD	(0/0)	
	Ce-144	18	-	(0/18)	-	-	< LLD	(0/0)	
	Co-58	18	-	(0/18)	-	-	< LLD	(0/0)	
	Co-60	18	-	(0/18)	-	-	< LLD	(0/0)	
	Cr-51	18	-	(0/18)	-	-	< LLD	(0/0)	
	Cs-134	18	60	(0/18)	-	-	< LLD	(0/0)	
	Cs-137	18	80	0.05 (2/18) (0.048-0.051)	17	0.5 mi NE	0.05 (2/6) (0.048-0.051)	(0/0)	
	Fe-59	18	-	(0/18)	-	-	< LLD	(0/0)	
	I-131	18	60	(0/18)	-	-	< LLD	(0/0)	
	K-40	18	-	2.76 (18/18) (1.36-3.74)	01	0.6 mi NNW	3.07 (6/6) (1.63-3.74)	(0/0)	
	La-140	18	-	(0/18)	-	-	< LLD	(0/0)	
	Mn-54	18	-	(0/18)	-	-	< LLD	(0/0)	
	Nb-95	18	-	(0/18)	-	-	< LLD	(0/0)	
	Ru-103	18	-	(0/18)	-	-	< LLD	(0/0)	
	Ru-106	18	-	(0/18)	-	-	< LLD	(0/0)	
	Sb-125	18	-	(0/18)	-	-	< LLD	(0/0)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis Type	Analysis Total No	* LLD	Indicator Locations Mean Range	Location with Highest Mean Name	Location with Highest Mean Distance Direction	Location with Highest Mean Mean Range	Control Locations Mean Range	Non-Routine Reported Measurements
Broadleaf Vegetation (pCi/g wet)	Th-228	18	-	(0/18)	-	-	< LLD	(0/0)	
	Zn-65	18	-	(0/18)	-	-	< LLD	(0/0)	
	Zr-95	18	-	(0/18)	-	-	< LLD	(0/0)	
Sea Water (pCi/L)	Ba-140	16	60	(0/12)	-	-	< LLD	(0/4)	
	Be-7	16	-	(0/12)	-	-	< LLD	(0/4)	
	Co-58	16	15	(0/12)	-	-	< LLD	(0/4)	
	Co-60	16	15	(0/12)	-	-	< LLD	(0/4)	
	Cr-51	16	-	(0/12)	-	-	< LLD	(0/4)	
	Cs-134	16	15	(0/12)	-	-	< LLD	(0/4)	
	Cs-137	16	18	(0/12)	-	-	< LLD	(0/4)	
	Fe-59	16	30	(0/12)	-	-	< LLD	(0/4)	
	H-3	16	2000	828 (7/12) (243-1660)	32		828 (7/12) (243-1660)	(0/4)	
	I-131	16	15	(0/12)	-	-	< LLD	(0/4)	
	K-40	16	-	288 (11/12) (255-320)	32		288 (11/12) (255-320)	281 (3/4) (241-337)	
	La-140	16	15	(0/12)	-	-	< LLD	(0/4)	
	Mn-54	16	15	(0/12)	-	-	< LLD	(0/4)	
	Nb-95	16	15	(0/12)	-	-	< LLD	(0/4)	
	Ru-103	16	-	(0/12)	-	-	< LLD	(0/4)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Sea Water (pCi/L)	Ru-106	16	-	(0/12)	-	-	< LLD	(0/4)	
	Sb-125	16	-	(0/12)	-	-	< LLD	(0/4)	
	Th-228	16	-	(0/12)	-	-	< LLD	(0/4)	
	Zn-65	16	30	(0/12)	-	-	< LLD	(0/4)	
	Zr-95	16	30	(0/12)	-	-	< LLD	(0/4)	
Bottom Sediment (pCi/g dry)	Ag-110m	25	-	(0/23)	-	-	< LLD	(0/2)	
	Be-7	25	-	(0/23)	-	-	< LLD	(0/2)	
	Co-58	25	-	(0/23)	-	-	< LLD	(0/2)	
	Co-60	25	-	0.089 (2/23) (0.083-0.094)	39-X	0.8 mi NE	0.089 (2/4) (0.083-0.094)	(0/2)	
	Cr-51	25	-	(0/23)	-	-	< LLD	(0/2)	
	Cs-134	25	0.15	(0/23)	-	-	< LLD	(0/2)	
	Cs-137	25	0.18	0.105 (5/23) (0.028-0.195)	67-X	4.5 mi NNW	0.147 (2/2) (0.098-0.195)	(0/2)	
	Fe-59	25	-	(0/23)	-	-	< LLD	(0/2)	
	I-131	25	-	(0/23)	-	-	< LLD	(0/2)	
	K-40	25	-	13.8 (23/23) (7.83-17)	36-X	3 mi WSW	16.4 (1/1) (16.4-16.4)	15.6 (2/2) (14.8-16.3)	
	Mn-54	25	-	(0/23)	-	-	< LLD	(0/2)	
	Nb-95	25	-	(0/23)	-	-	< LLD	(0/2)	
	Ru-103	25	-	(0/23)	-	-	< LLD	(0/2)	
	Ru-106	25	-	(0/23)	-	-	< LLD	(0/2)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Bottom Sediment (pCi/g dry)	Sb-125	25	-	(0/23)	-	-	< LLD	(0/2)	
	Th-228	25	-	0.959 (22/23) (0.204-4.21)	31	1.8 mi NW	3.47 (2/2) (2.72-4.21)	0.477 (2/2) (0.263-0.69)	
	Zn-65	25	-	(0/23)	-	-	< LLD	(0/2)	
	Zr-95	25	-	(0/23)	-	-	< LLD	(0/2)	
Aquatic Flora (pCi/g wet)	Ag-110m	18	-	(0/18)	-	-	< LLD	(0/0)	
	Be-7	18	-	0.189 (2/18) (0.138-0.24)	36-X	3 mi WSW	0.24 (1/3) (0.24-0.24)	(0/0)	
	Co-58	18	-	(0/18)	-	-	< LLD	(0/0)	
	Co-60	18	-	(0/18)	-	-	< LLD	(0/0)	
	Cr-51	18	-	(0/18)	-	-	< LLD	(0/0)	
	Cs-134	18	-	(0/18)	-	-	< LLD	(0/0)	
	Cs-137	18	-	(0/18)	-	-	< LLD	(0/0)	
	Fe-59	18	-	(0/18)	-	-	< LLD	(0/0)	
	I-131	18	-	0.021 (1/18) (0.021-0.021)	36-X	3 mi WSW	0.021 (1/3) (0.021-0.021)	(0/0)	
	K-40	18	-	6.55 (18/18) (4.83-9.01)	32-X		7.28 (4/4) (5.51-9.01)	(0/0)	
	Mn-54	18	-	(0/18)	-	-	< LLD	(0/0)	
	Nb-95	18	-	(0/18)	-	-	< LLD	(0/0)	
	Ru-103	18	-	(0/18)	-	-	< LLD	(0/0)	
	Ru-106	18	-	(0/18)	-	-	< LLD	(0/0)	
	Sb-125	18	-	(0/18)	-	-	< LLD	(0/0)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Aquatic Flora (pCi/g wet)	Th-228	18	-	0.044 (1/18) (0.044-0.044)	36-X	3 mi WSW	0.044 (1/3) (0.044-0.044)	(0/0)	
	Zn-65	18	-	(0/18)	-	-	< LLD	(0/0)	
	Zr-95	18	-	(0/18)	-	-	< LLD	(0/0)	
Fish-Flounder (pCi/g wet)	Ag-110m	6	-	(0/6)	-	-	< LLD	(0/0)	
	Be-7	6	-	(0/6)	-	-	< LLD	(0/0)	
	Co-58	6	0.13	(0/6)	-	-	< LLD	(0/0)	
	Co-60	6	0.13	(0/6)	-	-	< LLD	(0/0)	
	Cr-51	6	-	(0/6)	-	-	< LLD	(0/0)	
	Cs-134	6	0.13	(0/6)	-	-	< LLD	(0/0)	
	Cs-137	6	0.15	(0/6)	-	-	< LLD	(0/0)	
	Fe-59	6	0.26	(0/6)	-	-	< LLD	(0/0)	
	I-131	6	-	(0/6)	-	-	< LLD	(0/0)	
	K-40	6	-	3.46 (6/6) (2.89-4.09)	35	0.3 mi WNW	3.79 (3/3) (3.57-4.09)	(0/0)	
	Mn-54	6	0.13	(0/6)	-	-	< LLD	(0/0)	
	Nb-95	6	-	(0/6)	-	-	< LLD	(0/0)	
	Ru-103	6	-	(0/6)	-	-	< LLD	(0/0)	
	Ru-106	6	-	(0/6)	-	-	< LLD	(0/0)	
	Sb-125	6	-	(0/6)	-	-	< LLD	(0/0)	
	Th-228	6	-	(0/6)	-	-	< LLD	(0/0)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Fish-Flounder (pCi/g wet)	Zn-65	6	0.26	(0/6)	-	-	< LLD	(0/0)	
	Zr-95	6	-	(0/6)	-	-	< LLD	(0/0)	
Fish-Other (pCi/g wet)	Ag-110m	12	-	(0/12)	-	-	< LLD	(0/0)	
	Be-7	12	-	(0/12)	-	-	< LLD	(0/0)	
	Co-58	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Co-60	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Cr-51	12	-	(0/12)	-	-	< LLD	(0/0)	
	Cs-134	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Cs-137	12	0.15	(0/12)	-	-	< LLD	(0/0)	
	Fe-59	12	0.26	(0/12)	-	-	< LLD	(0/0)	
	I-131	12	-	(0/12)	-	-	< LLD	(0/0)	
	K-40	12	-	3.18 (12/12) (1.48-4.22)	40-X		3.52 (4/4) (2.9-4.03)	(0/0)	
	Mn-54	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Nb-95	12	-	(0/12)	-	-	< LLD	(0/0)	
	Ru-103	12	-	(0/12)	-	-	< LLD	(0/0)	
	Ru-106	12	-	(0/12)	-	-	< LLD	(0/0)	
	Sb-125	12	-	(0/12)	-	-	< LLD	(0/0)	
	Th-228	12	-	(0/12)	-	-	< LLD	(0/0)	
	Zn-65	12	0.26	(0/12)	-	-	< LLD	(0/0)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Fish-Other (pCi/g wet)	Zr-95	12	-	(0/12)	-	-	< LLD	(0/0)	
Mussels (pCi/g wet)	Ag-110m	8	-	(0/8)	-	-	< LLD	(0/0)	
	Be-7	8	-	(0/8)	-	-	< LLD	(0/0)	
	Co-58	8	0.13	(0/8)	-	-	< LLD	(0/0)	
	Co-60	8	0.13	(0/8)	-	-	< LLD	(0/0)	
	Cr-51	8	-	(0/8)	-	-	< LLD	(0/0)	
	Cs-134	8	0.13	(0/8)	-	-	< LLD	(0/0)	
	Cs-137	8	0.15	(0/8)	-	-	< LLD	(0/0)	
	Fe-59	8	0.26	(0/8)	-	-	< LLD	(0/0)	
	I-131	8	-	(0/8)	-	-	< LLD	(0/0)	
	K-40	8	-	1.76 (8/8) (1.39-2.03)	30	1.5 mi NNW	1.79 (4/4) (1.51-2.03)	(0/0)	
	Mn-54	8	0.13	(0/8)	-	-	< LLD	(0/0)	
	Nb-95	8	-	(0/8)	-	-	< LLD	(0/0)	
	Ru-103	8	-	(0/8)	-	-	< LLD	(0/0)	
	Ru-106	8	-	(0/8)	-	-	< LLD	(0/0)	
	Sb-125	8	-	(0/8)	-	-	< LLD	(0/0)	
	Th-228	8	-	(0/8)	-	-	< LLD	(0/0)	
	Zn-65	8	0.26	(0/8)	-	-	< LLD	(0/0)	
	Zr-95	8	-	(0/8)	-	-	< LLD	(0/0)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measure-ments
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Oysters (pCi/g wet)	Ag-110m	23	-	0.082 (6/19) (0.042-0.136)	40-X		0.091 (4/4) (0.057-0.136)	(0/4)	
	Be-7	23	-	(0/19)	-	-	< LLD	(0/4)	
	Co-58	23	0.13	(0/19)	-	-	< LLD	(0/4)	
	Co-60	23	0.13	(0/19)	-	-	< LLD	(0/4)	
	Cr-51	23	-	(0/19)	-	-	< LLD	(0/4)	
	Cs-134	23	0.13	(0/19)	-	-	< LLD	(0/4)	
	Cs-137	23	0.15	(0/19)	-	-	< LLD	(0/4)	
	Fe-59	23	0.26	(0/19)	-	-	< LLD	(0/4)	
	I-131	23	-	(0/19)	-	-	< LLD	(0/4)	
	K-40	23	-	1.71 (19/19) (1.29-2.94)	32		2.01 (4/4) (1.37-2.94)	1.73 (4/4) (1.63-1.87)	
	Mn-54	23	0.13	(0/19)	-	-	< LLD	(0/4)	
	Nb-95	23	-	(0/19)	-	-	< LLD	(0/4)	
	Ru-103	23	-	(0/19)	-	-	< LLD	(0/4)	
	Ru-106	23	-	(0/19)	-	-	< LLD	(0/4)	
	Sb-125	23	-	(0/19)	-	-	< LLD	(0/4)	
	Th-228	23	-	(0/19)	-	-	< LLD	(0/4)	
	Zn-65	23	0.26	(0/19)	-	-	< LLD	(0/4)	
	Zr-95	23	-	(0/19)	-	-	< LLD	(0/4)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No		Mean Range	Name	Distance Direction	Mean Range	Mean Range	
Clams (pCi/g wet)	Ag-110m	16	-	(0/16)	-	-	< LLD	(0/0)	
	Be-7	16	-	(0/16)	-	-	< LLD	(0/0)	
	Co-58	16	0.13	(0/16)	-	-	< LLD	(0/0)	
	Co-60	16	0.13	(0/16)	-	-	< LLD	(0/0)	
	Cr-51	16	-	(0/16)	-	-	< LLD	(0/0)	
	Cs-134	16	0.13	(0/16)	-	-	< LLD	(0/0)	
	Cs-137	16	0.15	(0/16)	-	-	< LLD	(0/0)	
	Fe-59	16	0.26	(0/16)	-	-	< LLD	(0/0)	
	I-131	16	-	(0/16)	-	-	< LLD	(0/0)	
	K-40	16	-	1.76 (16/16) (1.28-2.22)	29	0.4 mi NNE	1.89 (4/4) (1.52-2.22)	(0/0)	
	Mn-54	16	0.13	(0/16)	-	-	< LLD	(0/0)	
	Nb-95	16	-	(0/16)	-	-	< LLD	(0/0)	
	Ru-103	16	-	(0/16)	-	-	< LLD	(0/0)	
	Ru-106	16	-	(0/16)	-	-	< LLD	(0/0)	
	Sb-125	16	-	(0/16)	-	-	< LLD	(0/0)	
	Th-228	16	-	(0/16)	-	-	< LLD	(0/0)	
	Zn-65	16	0.26	(0/16)	-	-	< LLD	(0/0)	
	Zr-95	16	-	(0/16)	-	-	< LLD	(0/0)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis Type	Analysis Total No	* LLD	Indicator Locations Mean Range	Location with Highest Mean Name	Location with Highest Mean Distance Direction	Location with Highest Mean Mean Range	Control Locations Mean Range	Non-Routine Reported Measurements
Lobsters (Crabs) (pCi/g wet)	Ag-110m	12	-	(0/12)	-	-	< LLD	(0/0)	
	Be-7	12	-	(0/12)	-	-	< LLD	(0/0)	
	Co-58	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Co-60	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Cr-51	12	-	(0/12)	-	-	< LLD	(0/0)	
	Cs-134	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Cs-137	12	0.15	(0/12)	-	-	< LLD	(0/0)	
	Fe-59	12	0.26	(0/12)	-	-	< LLD	(0/0)	
	I-131	12	-	(0/12)	-	-	< LLD	(0/0)	
	K-40	12	-	2.05 (12/12) (1.42-2.45)	37-X	3.5 mi WSW	2.17 (4/4) (2-2.31)	(0/0)	
	Mn-54	12	0.13	(0/12)	-	-	< LLD	(0/0)	
	Nb-95	12	-	(0/12)	-	-	< LLD	(0/0)	
	Ru-103	12	-	(0/12)	-	-	< LLD	(0/0)	
	Ru-106	12	-	(0/12)	-	-	< LLD	(0/0)	
	Sb-125	12	-	(0/12)	-	-	< LLD	(0/0)	
	Th-228	12	-	(0/12)	-	-	< LLD	(0/0)	
	Zn-65	12	0.26	(0/12)	-	-	< LLD	(0/0)	
	Zr-95	12	-	(0/12)	-	-	< LLD	(0/0)	

NOTES FOR TABLE 3-1

* For gamma measurements the (Minimum Detectable Level) MDL $\simeq$ LLD / 2.33. For all others, MDL = 2 x (the standard deviation of the background). These MDL's are based on the absence of large amounts of interfering activity (excluding naturally occurring radionuclides). Deviations by about factors of 3 to 4 can occur.

The LLD at a confidence level of 95% is the smallest concentration of radioactive material in a sample that will be detected with a 5% probability of falsely concluding that a blank observation represents a "real" signal.

For a particular measurement system (which may include radiochemical separation):

$$LLD = \frac{4.66\ S_b}{E * V * 2.22 * Y * \exp(-\lambda \Delta t)}$$

where,

LLD	is the lower limit of detection as defined above (as pCi per unit mass or volume)
S_b	is the standard deviation of the background counting rate or of the counting rate of a blank sample as appropriate (as counts per minute)
E	is the counting efficiency (as counts per transformation)
V	is the sample size (in units of mass or volume)
2.22	is the number of transformation per minute per picoCurie
Y	is the fractional radiochemical yield (when applicable)
λ	is the radioactive decay constant for the particular radionuclide
Δt	is the elapsed time between sample collection (or end of the sample collection period) and time of counting

The LLD is a defined *a priori* (before the fact) limit representing the capability of a measurement system and not an *a posteriori* (after the fact) limit for a particular measurement.

Analyses shall be performed in such a manner that the stated LLDs will be achieved under routine conditions. Occasionally background fluctuations, unavoidably small sample sizes, the presence of interfering nuclides, or other uncontrollable circumstances may render these *a priori* LLDs unachievable. In such cases, the contributing factors will be identified and described in the *Annual Radiological Environmental Operating Report.* As shown in the equation above, for composite samples taken over a period of time (e.g., seawater), the LLD is decayed to the end of the sample period (especially important for I-131, Ba-140 and La-140).

The listed value for I-131 in Fruits and Vegetables is only applicable for leafy vegetables.

3.2. *Data Tables*

The data reported in this section are strictly counting statistics. The reported error is two times the standard deviation (2σ) of the net activity. Unless otherwise noted, the overall error (counting, sample size, chemistry, errors, etc.) is estimated to be 2 to 5 times that listed. Results are considered positive when the measured value exceeds 1.5 times the listed 2σ error (i.e., the measured value exceeds 3σ).

Because of counting statistics, negative values, zeros and numbers below the Minimum Detectable Level (MDL) are statistically valid pieces of data. For the purposes of this report, in order to indicate any background biases, all the valid data are presented. This practice is recommended by HASL (*"Reporting of Analytical Results from HASL,"* letter by Leo B. Higginbotham) and NUREG/CR-4007 (Sept. 1984). In instances where zeros are listed after significant digits, this is an artifact of the computer data-handling program.

Data are given according to sample type (numbers listed below correspond to Table number) as indicated below.

1. Gamma Exposure Rate
2. Air Particulates, Gross Beta Radioactivity
3. Air Particulates, Weekly I-131
4. Air Particulates, Quantitative Gamma Spectra
5. Air Particulates, Quarterly Strontium*
6. Soil
7. Milk - Dairy Farms*
8. Milk - Goat Farms
9. Pasture Grass
10. Well Water
11. Reservoir Water*
12. Fruits & Vegetables
13. Broad Leaf Vegetation
14. Seawater
15. Bottom Sediment
16. Aquatic Flora
17. Fin Fish
18. Mussels
19. Oysters
20. Clams
21. Scallops*
22. Lobster (and Crabs)

* This type of sampling or analysis was not performed; therefore there is no table.

Table 1, Quarterly TLD Gamma Exposure Rate (uR/hr)

Location Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Average ± 2 s.d.
01	8.74 ± 0.33	*	8.90 ± 0.23	8.34 ± 0.24	8.66 ± 0.47
02	10.33 ± 0.27		10.83 ± 0.30	9.81 ± 0.25	10.32 ± 0.83
03	7.55 ± 0.49		6.91 ± 0.24	6.33 ± 0.23	6.93 ± 1.00
04	8.79 ± 0.32		8.94 ± 0.28	7.71 ± 0.21	8.48 ± 1.10
05	9.49 ± 0.40		10.22 ± 0.31	9.03 ± 0.26	9.58 ± 0.98
06	8.87 ± 0.28		8.98 ± 0.40	8.18 ± 0.35	8.68 ± 0.71
07	5.88 ± 0.20		5.39 ± 0.15	4.41 ± 0.30	5.23 ± 1.22
08	11.96 ± 0.48		12.72 ± 0.34	11.30 ± 0.54	11.99 ± 1.16
09	9.62 ± 0.22		10.14 ± 0.47	9.12 ± 0.22	9.63 ± 0.83
10	8.62 ± 0.19		8.98 ± 0.39	8.34 ± 0.38	8.65 ± 0.52
11	7.39 ± 0.18		7.65 ± 0.27	7.18 ± 0.24	7.41 ± 0.38
12-C	7.73 ± 0.33		8.17 ± 0.39	7.67 ± 0.44	7.86 ± 0.45
13-C	8.93 ± 0.39		9.09 ± 0.27	8.14 ± 0.40	8.72 ± 0.83
14-C	9.60 ± 0.31		10.38 ± 0.37	9.55 ± 0.37	9.84 ± 0.76
15-C	7.99 ± 0.19		8.74 ± 0.44	7.69 ± 0.51	8.14 ± 0.88
16-C	6.84 ± 0.91		7.25 ± 0.33	5.52 ± 0.23	6.54 ± 1.48
27	9.40 ± 0.22		9.78 ± 0.35	8.67 ± 0.35	9.28 ± 0.92
41	7.10 ± 0.43		7.69 ± 0.46	6.41 ± 0.19	7.07 ± 1.05
42	8.18 ± 0.24		8.75 ± 0.22	7.46 ± 0.37	8.13 ± 1.06
43	6.80 ± 0.26		7.50 ± 0.21	6.38 ± 0.23	6.89 ± 0.92
44	9.09 ± 0.60		10.32 ± 0.44	8.29 ± 0.28	9.23 ± 1.67
45	7.40 ± 0.25		8.03 ± 0.20	6.82 ± 0.19	7.42 ± 0.99
46	8.02 ± 0.42		8.40 ± 0.23	7.62 ± 0.38	8.01 ± 0.64
47	7.62 ± 0.21		8.64 ± 0.30	7.46 ± 0.26	7.91 ± 1.05
48	9.90 ± 0.32		10.43 ± 0.63	9.37 ± 0.37	9.90 ± 0.87
49	7.33 ± 0.24		8.20 ± 0.20	6.75 ± 0.34	7.43 ± 1.19
50	7.72 ± 0.18		8.61 ± 0.31	7.10 ± 0.18	7.81 ± 1.24
51	6.46 ± 0.39		7.16 ± 0.43	5.50 ± 0.17	6.37 ± 1.36
52	7.24 ± 0.36		7.82 ± 0.22	6.86 ± 0.40	7.31 ± 0.79
53	8.11 ± 0.27		8.67 ± 0.29	7.42 ± 0.28	8.07 ± 1.02
55	7.99 ± 0.27		7.98 ± 0.23	7.15 ± 0.17	7.71 ± 0.79
56	7.30 ± 0.42		7.13 ± 0.23	6.39 ± 0.48	6.94 ± 0.79
57	7.62 ± 0.31		8.06 ± 0.31	6.90 ± 0.24	7.53 ± 0.96
59	7.83 ± 0.27		9.10 ± 0.24	7.83 ± 0.39	8.25 ± 1.20
60	8.16 ± 0.49		8.09 ± 0.22	7.13 ± 0.34	7.79 ± 0.94
61	7.82 ± 0.18		8.27 ± 0.32	7.42 ± 0.34	7.84 ± 0.69
62	8.12 ± 0.23		8.92 ± 0.30	7.98 ± 0.43	8.34 ± 0.83
63	9.43 ± 0.38		9.65 ± 0.35	9.13 ± 0.30	9.40 ± 0.43
64	7.91 ± 0.26		7.99 ± 0.26	7.41 ± 0.23	7.77 ± 0.51
65	7.74 ± 0.48		8.20 ± 0.23	7.27 ± 0.26	7.74 ± 0.76
66-X	7.56 ± 0.24		7.42 ± 0.23	6.47 ± 0.20	7.15 ± 0.97
73-X	10.10 ± 0.46		9.88 ± 0.23	9.26 ± 0.34	9.75 ± 0.71

Table 1, Quarterly TLD Gamma Exposure Rate (uR/hr)

Location Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Average ± 2 s.d.
74-X	7.42 ± 0.25		8.24 ± 0.24	7.54 ± 0.19	7.73 ± 0.72
75-X	7.03 ± 0.30		7.37 ± 0.35	6.83 ± 0.29	7.08 ± 0.45

Table 2, Air Particulate Gross Beta Radioactivity (pCi/m3 x 1000)

Collection Date	Locations					
JANUARY	01	02	03	04	10	11
12/29 - 01/04	31.9 ± 4.0 #	33.3 ± 4.2	33.4 ± 4.3	33.9 ± 3.7	35.3 ± 4.1	37.1 ± 4.1
01/05 - 01/11	25.3 ± 3.6	24.1 ± 3.7	26.4 ± 3.9	21.4 ± 3.1	22.7 ± 3.4	23.9 ± 3.6
01/12 - 01/18	20.2 ± 4.0	19.3 ± 4.2	16.6 ± 4.2	16.1 ± 3.4	16.7 ± 3.7	18.0 ± 3.9
01/19 - 01/25	22.3 ± 3.6	17.0 ± 3.6	20.0 ± 3.9	21.6 ± 3.4	20.7 ± 3.6	17.7 ± 3.7
FEBRUARY	01	02	03	04	10	11
01/26 - 02/01	16.1 ± 3.4	16.1 ± 3.6	19.9 ± 3.9	18.4 ± 3.2	19.0 ± 3.5	20.8 ± 3.7
02/02 - 02/08	11.9 ± 4.3	16.8 ± 7.7	15.0 ± 4.8	13.9 ± 3.9	13.4 ± 4.2	14.4 ± 4.4
02/09 - 02/15	31.8 ± 4.4	27.6 ± 4.5	34.6 ± 4.8	26.8 ± 3.8	31.5 ± 4.5	34.2 ± 4.5
02/16 - 02/22	28.9 ± 3.7	26.9 ± 3.9	29.7 ± 4.0	31.8 ± 3.5	31.9 ± 4.0	32.1 ± 3.9
02/23 - 02/29	24.4 ± 4.3	25.5 ± 4.6	25.8 ± 4.7	25.4 ± 3.8	25.2 ± 4.5	21.8 ± 4.3
MARCH	01	02	03	04	10	11
03/01 - 03/07	16.9 ± 3.5	16.1 ± 3.7	16.7 ± 3.7	16.7 ± 3.1	17.8 ± 3.7	15.6 ± 3.5
03/08 - 03/14	18.9 ± 3.4	16.0 ± 3.5	17.2 ± 3.5	15.5 ± 2.8	19.0 ± 3.4	16.7 ± 3.3
03/15 - 03/21	20.7 ± 3.9	14.4 ± 3.6	17.1 ± 3.7	17.0 ± 3.0	16.5 ± 3.5	19.0 ± 3.6
03/22 - 03/28	18.0 ± 4.1	18.8 ± 4.3	21.0 ± 4.4	23.3 ± 3.7	23.4 ± 4.2	24.9 ± 4.3
Qtr Avg ± 2 sd	22.1 ± 11.8	20.9 ± 11.3	22.6 ± 12.9	21.7 ± 12.2	22.5 ± 12.9	22.8 ± 14.2

JANUARY	15-C	27
12/29 - 01/04	35.0 ± 4.4	33.9 ± 4.3
01/05 - 01/11	25.6 ± 3.9	23.1 ± 3.8
01/12 - 01/18	16.3 ± 4.3	18.4 ± 4.2
01/19 - 01/25	21.7 ± 4.1	20.8 ± 4.1
FEBRUARY	15-C	27
01/26 - 02/01	19.4 ± 3.9	19.6 ± 3.9
02/02 - 02/08	17.2 ± 4.9	14.1 ± 4.8
02/09 - 02/15	34.0 ± 5.0	33.5 ± 4.8
02/16 - 02/22	27.0 ± 4.0	32.2 ± 4.2
02/23 - 02/29	21.0 ± 4.6	25.7 ± 4.9
MARCH	15-C	27
03/01 - 03/07	18.3 ± 4.0	19.0 ± 4.1
03/08 - 03/14	17.5 ± 3.7	19.4 ± 3.8
03/15 - 03/21	18.0 ± 3.9	19.2 ± 4.1
03/22 - 03/28	22.5 ± 4.6	25.3 ± 4.8
Qtr Avg ± 2 sd	22.6 ± 11.9	23.4 ± 12.2

Table 2, Air Particulate Gross Beta Radioactivity (pCi/m3 x 1000)

Collection Date	Locations						
APRIL	**01**	**02**	**03**	**04**	**10**	**11**	
03/29 - 04/04	8.4 ± 3.0	7.6 ± 3.1	8.5 ± 3.1	8.9 ± 2.6	7.7 ± 3.0	6.8 ± 2.8	
04/05 - 04/11	16.3 ± 3.6	17.5 ± 4.0	14.3 ± 3.8	17.6 ± 3.3	13.9 ± 3.6	16.2 ± 3.7	
04/12 - 04/18	17.9 ± 3.5	19.1 ± 3.4	20.3 ± 3.4	21.1 ± 3.1	19.3 ± 3.3	27.2 ± 5.9	A
04/19 - 04/25	17.0 ± 3.6	14.3 ± 2.9	17.5 ± 3.1	15.8 ± 3.0	17.4 ± 3.0	15.4 ± 2.9	
MAY	**01**	**02**	**03**	**04**	**10**	**11**	
04/26 - 05/02	17.1 ± 4.3	17.7 ± 3.5	17.4 ± 3.6	16.9 ± 3.6	15.4 ± 3.4	17.7 ± 3.6	
05/03 - 05/09	19.3 ± 4.0	20.8 ± 3.3	21.3 ± 4.3	23.2 ± 3.5	21.4 ± 3.3	22.9 ± 3.4	
05/10 - 05/16	22.4 ± 4.1	18.2 ± 3.2	22.0 ± 3.4	23.8 ± 3.5	25.1 ± 3.4	27.2 ± 3.5	
05/17 - 05/23	21.1 ± 4.2	17.2 ± 3.2	19.6 ± 4.1	19.9 ± 3.4	20.3 ± 3.3	19.6 ± 4.1	
05/24 - 05/30	12.8 ± 4.9	12.1 ± 3.8	11.6 ± 3.9	15.0 ± 4.0	12.9 ± 3.8	12.0 ± 3.8	
JUNE	**01**	**02**	**03**	**04**	**10**	**11**	
05/31 - 06/06	9.1 ± 3.9	9.6 ± 3.1	12.3 ± 3.4	11.2 ± 3.3	10.4 ± 3.1	10.2 ± 3.1	
06/07 - 06/13	19.1 ± 4.0	14.3 ± 3.1	16.4 ± 3.3	15.2 ± 3.2	14.7 ± 3.1	16.7 ± 3.2	
06/14 - 06/20	15.4 ± 4.5	14.1 ± 3.6	17.3 ± 3.9	14.3 ± 3.7	16.0 ± 3.6	15.2 ± 3.6	
06/21 - 06/27	23.8 ± 4.0	17.6 ± 3.1	20.8 ± 3.3	18.2 ± 3.2	22.1 ± 3.3	23.2 ± 3.3	
Qtr Avg ± 2 sd	16.9 ± 8.9	15.4 ± 7.4	16.9 ± 8.0	17.0 ± 8.4	16.7 ± 9.5	17.7 ± 11.9	

APRIL	**15-C**	**27**
03/29 - 04/04	8.8 ± 3.3	8.1 ± 3.4
04/05 - 04/11	19.5 ± 4.3	19.6 ± 4.4
04/12 - 04/18	21.6 ± 3.4	20.7 ± 3.4
04/19 - 04/25	14.6 ± 2.8	15.7 ± 2.9
MAY	**15-C**	**27**
04/26 - 05/02	17.1 ± 3.4	18.7 ± 3.7
05/03 - 05/09	21.7 ± 3.3	24.1 ± 3.6
05/10 - 05/16	24.5 ± 3.4	24.5 ± 3.6
05/17 - 05/23	18.8 ± 3.2	16.3 ± 3.3
05/24 - 05/30	13.8 ± 3.8	15.4 ± 4.1
JUNE	**15-C**	**27**
05/31 - 06/06	11.1 ± 3.1	11.2 ± 3.3
06/07 - 06/13	16.8 ± 3.1	16.0 ± 3.3
06/14 - 06/20	19.0 ± 3.8	15.7 ± 3.9
06/21 - 06/27	22.6 ± 3.1	18.4 ± 3.3
Qtr Avg ± 2 sd	17.7 ± 8.9	17.3 ± 8.8

Table 2, Air Particulate Gross Beta Radioactivity (pCi/m3 x 1000)

Collection Date	Locations						
JULY	**01**	**02**	**03**	**04**	**10**	**11**	
06/28 - 07/04	17.1 ± 3.7	16.4 ± 3.0	15.5 ± 3.1	18.2 ± 3.1	19.5 ± 3.1	23.1 ± 6.0	B
07/05 - 07/11	9.9 ± 4.1	9.9 ± 3.2	10.0 ± 3.4	8.7 ± 3.3	7.4 ± 3.3	11.8 ± 3.4	
07/12 - 07/18	10.9 ± 3.5	11.0 ± 2.8	-8.0 ± 78.0 C	10.2 ± 2.8	12.1 ± 2.8	13.2 ± 2.9	
07/19 - 07/25	21.5 ± 3.2	16.6 ± 3.1	21.0 ± 3.7	19.4 ± 3.2	18.5 ± 3.1	20.9 ± 3.3	
AUGUST	**01**	**02**	**03**	**04**	**10**	**11**	
07/26 - 08/01	8.0 ± 3.2	12.2 ± 3.6	10.3 ± 3.6	10.4 ± 3.4	10.2 ± 3.4	8.7 ± 3.4	
08/02 - 08/08	16.3 ± 3.6	14.6 ± 3.6	15.8 ± 3.8	17.8 ± 3.8	13.9 ± 3.6	15.0 ± 3.8	
08/09 - 08/15	12.1 ± 3.2	14.3 ± 3.3	15.8 ± 3.5	12.0 ± 3.4	15.0 ± 3.5	13.1 ± 3.5	
08/16 - 08/22	23.7 ± 3.5	22.4 ± 3.7	23.3 ± 3.7	21.9 ± 3.5	24.5 ± 3.6	25.0 ± 3.7	
08/23 - 08/29	14.9 ± 3.7	16.2 ± 3.9	19.5 ± 4.2	17.5 ± 4.0	15.8 ± 3.9	19.4 ± 4.2	
SEPTEMBER	**01**	**02**	**03**	**04**	**10**	**11**	
08/30 - 09/05	16.2 ± 3.9	14.1 ± 3.9	16.8 ± 4.1	15.1 ± 4.0	13.7 ± 4.0	16.1 ± 4.1	
09/06 - 09/12	14.9 ± 4.0	15.5 ± 3.9	14.6 ± 4.2	11.2 ± 4.0	13.7 ± 4.1	16.7 ± 4.4	
09/13 - 09/19	9.9 ± 3.2	11.2 ± 3.4	8.3 ± 3.4	10.1 ± 3.3	10.4 ± 3.5	10.0 ± 3.4	
09/20 - 09/26	30.6 ± 4.0	29.6 ± 4.1	31.1 ± 4.3	27.9 ± 4.1	32.4 ± 4.4	32.4 ± 4.3	
Qtr Avg ± 2 sd	15.8 ± 12.2	15.7 ± 10.1	16.8 ± 12.1	15.4 ± 10.9	15.9 ± 12.8	17.3 ± 12.9	

Collection Date	Locations	
JULY	**15-C**	**27**
06/28 - 07/04	21.0 ± 3.2	18.3 ± 3.2
07/05 - 07/11	9.8 ± 3.3	10.2 ± 3.5
07/12 - 07/18	10.5 ± 2.7	13.8 ± 3.0
07/19 - 07/25	18.6 ± 3.2	20.5 ± 3.3
AUGUST	**15-C**	**27**
07/26 - 08/01	11.7 ± 3.7	12.5 ± 4.4
08/02 - 08/08	14.7 ± 3.8	13.6 ± 3.4
08/09 - 08/15	16.7 ± 3.7	15.1 ± 3.9
08/16 - 08/22	25.8 ± 3.9	24.2 ± 3.9
08/23 - 08/29	20.7 ± 4.5	17.0 ± 4.3
SEPTEMBER	**15-C**	**27**
08/30 - 09/05	19.5 ± 4.3	17.4 ± 4.4
09/06 - 09/12	15.3 ± 4.3	13.1 ± 4.5
09/13 - 09/19	11.6 ± 3.8	10.6 ± 3.7
09/20 - 09/26	34.5 ± 4.6	33.3 ± 4.6
Qtr Avg ± 2 sd	17.7 ± 13.3	16.9 ± 12.1

Table 2, Air Particulate Gross Beta Radioactivity (pCi/m3 x 1000)

Collection Date	Locations						
OCTOBER	**01**	**02**	**03**	**04**		**10**	**11**
09/27 - 10/03	17.3 ± 3.7	16.3 ± 3.7	20.9 ± 4.0	19.2 ± 3.9		17.7 ± 3.9	18.6 ± 4.0
10/04 - 10/10	23.0 ± 3.4	25.1 ± 3.4	22.1 ± 3.5	23.6 ± 3.4		25.2 ± 3.6	28.8 ± 3.7
10/11 - 10/17	17.7 ± 3.7	16.5 ± 3.7	14.8 ± 3.9	13.9 ± 3.8		14.0 ± 4.0	14.0 ± 3.9
10/18 - 10/24	10.6 ± 2.5	11.6 ± 2.6	9.9 ± 2.7	10.9 ± 2.6		11.6 ± 2.7	12.4 ± 2.8
10/25 - 10/31	17.8 ± 3.6	17.1 ± 3.6	20.8 ± 4.0	20.1 ± 3.7		19.0 ± 4.0	16.0 ± 3.8
NOVEMBER	**01**	**02**	**03**	**04**		**10**	**11**
11/01 - 11/07	17.1 ± 3.3	16.0 ± 3.3	15.5 ± 3.2	15.8 ± 3.7		11.5 ± 3.1	16.3 ± 3.3
11/08 - 11/14	20.8 ± 3.8	17.9 ± 3.8	19.5 ± 3.8	22.8 ± 3.8		19.7 ± 3.9	21.6 ± 4.0
11/15 - 11/21	35.8 ± 6.3	31.8 ± 6.2	30.4 ± 6.0	34.4 ± 5.9		33.5 ± 6.4	34.6 ± 6.3
11/22 - 11/28	13.3 ± 3.7	15.0 ± 4.0	16.3 ± 3.9	17.9 ± 3.7		18.4 ± 4.2	16.2 ± 4.0
DECEMBER	**01**	**02**	**03**	**04**		**10**	**11**
11/29 - 12/05	20.8 ± 4.0	20.2 ± 4.2	20.0 ± 4.1	22.3 ± 4.0		22.2 ± 4.4	19.9 ± 4.2
12/06 - 12/12	10.2 ± 3.0	11.2 ± 3.2	12.1 ± 3.1	10.8 ± 8.5	D	11.3 ± 3.2	10.3 ± 3.1
12/13 - 12/19	23.7 ± 3.9	24.1 ± 4.0	24.8 ± 4.1	27.6 ± 4.0		22.9 ± 4.1	19.8 ± 3.9
12/20 - 12/26	22.3 ± 4.0	23.6 ± 4.2	21.7 ± 4.2	16.8 ± 3.5		22.5 ± 3.7	17.6 ± 3.9
Qtr Avg ± 2 sd	19.3 ± 12.7	19.0 ± 11.2	19.1 ± 10.5	20.4 ± 12.1		19.2 ± 12.2	18.9 ± 12.6
Ann Avg ± 2 sd	18.5 ± 12.5	17.7 ± 11.1	18.9 ± 12.0	18.6 ± 12.1		18.6 ± 13.0	19.2 ± 13.6

OCTOBER	**15-C**	**27**
09/27 - 10/03	16.6 ± 4.0	16.8 ± 4.1
10/04 - 10/10	24.1 ± 3.7	26.6 ± 3.9
10/11 - 10/17	15.5 ± 4.3	17.9 ± 4.5
10/18 - 10/24	11.1 ± 2.9	11.3 ± 3.0
10/25 - 10/31	19.0 ± 4.2	15.9 ± 4.2
NOVEMBER	**15-C**	**27**
11/01 - 11/07	12.9 ± 3.4	13.8 ± 3.5
11/08 - 11/14	20.6 ± 4.2	18.8 ± 4.2
11/15 - 11/21	32.4 ± 6.6	32.1 ± 6.6
11/22 - 11/28	17.6 ± 4.4	17.6 ± 4.4
DECEMBER	**15-C**	**27**
11/29 - 12/05	24.7 ± 4.8	22.9 ± 4.7
12/06 - 12/12	7.1 ± 3.3	12.9 ± 3.6
12/13 - 12/19	24.2 ± 4.4	24.1 ± 4.5
12/20 - 12/26	19.3 ± 4.2	19.2 ± 4.3
Qtr Avg ± 2 sd	18.9 ± 12.8	19.2 ± 11.2
Ann Avg ± 2 sd	19.2 ± 12.5	19.2 ± 12.3

Table 3, Airborne Iodine I-131 (pCi/m3 x 1000)

Collection Date — Locations

JANUARY

	01	02	03	04	10	11
12/29 - 01/04	3 ± 20 #	4 ± 23	-1 ± 23	20 ± 20	-17 ± 20	9 ± 24
01/05 - 01/11	-1 ± 26	-12 ± 29	-8 ± 25	-30 ± 22	2 ± 24	-7 ± 24
01/12 - 01/18	1 ± 16	-1 ± 17	-15 ± 16	-4 ± 13	3 ± 16	-11 ± 14
01/19 - 01/25	-14 ± 16	3 ± 31	17 ± 30	-18 ± 25	-25 ± 27	20 ± 30

FEBRUARY

	01	02	03	04	10	11
01/26 - 02/01	3 ± 20	8 ± 22	14 ± 22	20 ± 21	-5 ± 18	-12 ± 22
02/02 - 02/08	-3 ± 18	14 ± 38	1 ± 25	-9 ± 17	-16 ± 16	-1 ± 18
02/09 - 02/15	8 ± 26	-5 ± 27	-3 ± 30	6 ± 23	-13 ± 23	2 ± 24
02/16 - 02/22	-6 ± 26	2 ± 25	-23 ± 25	-2 ± 16	-9 ± 23	-15 ± 22
02/23 - 02/29	-6 ± 18	14 ± 20	-11 ± 16	3 ± 14	-2 ± 13	-2 ± 20

MARCH

	01	02	03	04	10	11
03/01 - 03/07	-11 ± 21	-12 ± 22	-6 ± 17	8 ± 14	6 ± 19	-4 ± 18
03/08 - 03/14	-14 ± 23	-15 ± 24	3 ± 27	-6 ± 20	-10 ± 17	22 ± 17
03/15 - 03/21	13 ± 22	3 ± 22	22 ± 23	-15 ± 18	4 ± 22	6 ± 21
03/22 - 03/28	6 ± 20	1 ± 28	26 ± 37	27 ± 27	3 ± 31	-32 ± 30

JANUARY

	15-C	27
12/29 - 01/04	-12 ± 29	5 ± 26
01/05 - 01/11	6 ± 31	18 ± 28
01/12 - 01/18	8 ± 12	-7 ± 11
01/19 - 01/25	27 ± 30	-10 ± 34

FEBRUARY

	15-C	27
01/26 - 02/01	16 ± 24	-11 ± 19
02/02 - 02/08	8 ± 23	8 ± 22
02/09 - 02/15	25 ± 29	-2 ± 31
02/16 - 02/22	9 ± 21	-3 ± 28
02/23 - 02/29	2 ± 20	16 ± 21

MARCH

	15-C	27
03/01 - 03/07	-6 ± 23	-16 ± 27
03/08 - 03/14	-16 ± 17	-12 ± 21
03/15 - 03/21	-4 ± 21	-4 ± 23
03/22 - 03/28	41 ± 33	3 ± 20

Table 3, Airborne Iodine I-131 (pCi/m3 x 1000)

Collection Date	Locations						
APRIL							
	01	**02**	**03**	**04**	**10**	**11**	
03/29 - 04/04	5 ± 23	18 ± 25	10 ± 23	-3 ± 20	14 ± 25	4 ± 23	
04/05 - 04/11	10 ± 28	13 ± 22	-1 ± 21	13 ± 19	20 ± 23	20 ± 23	
04/12 - 04/18	-14 ± 21	-7 ± 20	9 ± 17	15 ± 16	8 ± 17	25 ± 25	A
04/19 - 04/25	-4 ± 19	5 ± 15	3 ± 14	-3 ± 14	2 ± 17	-2 ± 15	
MAY							
	01	**02**	**03**	**04**	**10**	**11**	
04/26 - 05/02	14 ± 21	0 ± 19	-4 ± 17	3 ± 18	-9 ± 16	-6 ± 17	
05/03 - 05/09	14 ± 31	6 ± 23	0 ± 18	-2 ± 21	16 ± 25	4 ± 22	
05/10 - 05/16	8 ± 15	6 ± 15	0 ± 17	-10 ± 16	0 ± 15	0 ± 12	
05/17 - 05/23	12 ± 23	-6 ± 21	2 ± 22	-15 ± 17	-2 ± 4 E	2 ± 20	
05/24 - 05/30	-5 ± 28	6 ± 21	-3 ± 19	16 ± 22	-18 ± 20	17 ± 19	
JUNE							
	01	**02**	**03**	**04**	**10**	**11**	
05/31 - 06/06	-12 ± 23	12 ± 17	-10 ± 16	11 ± 14	3 ± 11	-8 ± 17	
06/07 - 06/13	3 ± 28	-2 ± 25	1 ± 20	-4 ± 22	-6 ± 21	1 ± 24	
06/14 - 06/20	-10 ± 23	2 ± 19	0 ± 17	-3 ± 19	6 ± 16	-6 ± 16	
06/21 - 06/27	-11 ± 24	-6 ± 21	-12 ± 20	-1 ± 16	-3 ± 16	-21 ± 17	
APRIL							
	15-C	**27**					
03/29 - 04/04	29 ± 28	0 ± 26					
04/05 - 04/11	-10 ± 19	3 ± 22					
04/12 - 04/18	-18 ± 17	3 ± 20					
04/19 - 04/25	5 ± 14	7 ± 17					
MAY							
	15-C	**27**					
04/26 - 05/02	1 ± 16	-9 ± 18					
05/03 - 05/09	-8 ± 21	19 ± 26					
05/10 - 05/16	3 ± 16	2 ± 17					
05/17 - 05/23	0 ± 19	-11 ± 16					
05/24 - 05/30	1 ± 18	21 ± 28					
JUNE							
	15-C	**27**					
05/31 - 06/06	10 ± 14	6 ± 19					
06/07 - 06/13	9 ± 20	-7 ± 20					
06/14 - 06/20	13 ± 15	14 ± 20					
06/21 - 06/27	11 ± 20	-3 ± 17					

Table 3, Airborne Iodine I-131 (pCi/m3 x 1000)

Collection Date	Locations					
JULY						
	01	**02**	**03**	**04**	**10**	**11**
06/28 - 07/04	19 ± 34	-15 ± 21	-17 ± 25	-14 ± 21	17 ± 27	10 ± 26 B
07/05 - 07/11	-6 ± 17	5 ± 14	10 ± 13	8 ± 19	0 ± 15	3 ± 15
07/12 - 07/18	-7 ± 28	-14 ± 18	10 ± 740 C	-3 ± 18	-10 ± 25	0 ± 27
07/19 - 07/25	3 ± 17	5 ± 14	0 ± 18	3 ± 17	-20 ± 14	3 ± 16
AUGUST						
	01	**02**	**03**	**04**	**10**	**11**
07/26 - 08/01	0 ± 14	8 ± 15	-2 ± 13	-6 ± 14	-6 ± 13	9 ± 15
08/02 - 08/08	4 ± 16	7 ± 18	15 ± 19	7 ± 16	-3 ± 14	23 ± 19
08/09 - 08/15	-16 ± 15	-2 ± 17	-6 ± 18	11 ± 21	-9 ± 18	-13 ± 19
08/16 - 08/22	-10 ± 15	-7 ± 19	-18 ± 20	-7 ± 22	11 ± 17	-12 ± 17
08/23 - 08/29	19 ± 22	-6 ± 20	12 ± 17	15 ± 20	-8 ± 18	-9 ± 22
SEPTEMBER						
	01	**02**	**03**	**04**	**10**	**11**
08/30 - 09/05	-17 ± 16	3 ± 16	0 ± 14	5 ± 15	5 ± 16	11 ± 18
09/06 - 09/12	-12 ± 19	-6 ± 19	27 ± 23	-11 ± 18	12 ± 18	-8 ± 18
09/13 - 09/19	3 ± 15	-7 ± 18	-4 ± 16	-21 ± 19	-7 ± 18	-16 ± 16
09/20 - 09/26	1 ± 13	8 ± 17	-5 ± 18	-2 ± 15	0 ± 17	-10 ± 17

JULY		
	15-C	**27**
06/28 - 07/04	-8 ± 21	-1 ± 24
07/05 - 07/11	-9 ± 15	7 ± 18
07/12 - 07/18	-7 ± 23	5 ± 27
07/19 - 07/25	-7 ± 15	2 ± 16
AUGUST		
	15-C	**27**
07/26 - 08/01	6 ± 14	-22 ± 20
08/02 - 08/08	-5 ± 20	1 ± 17
08/09 - 08/15	-4 ± 19	-2 ± 15
08/16 - 08/22	6 ± 21	-6 ± 19
08/23 - 08/29	10 ± 21	-14 ± 19
SEPTEMBER		
	15-C	**27**
08/30 - 09/05	10 ± 14	-10 ± 20
09/06 - 09/12	2 ± 20	9 ± 24
09/13 - 09/19	-13 ± 22	1 ± 21
09/20 - 09/26	2 ± 17	-15 ± 17

Table 3, Airborne Iodine I-131 (pCi/m3 x 1000)

Collection Date — Locations

OCTOBER

	01	02	03	04	10	11
09/27 - 10/03	-3 ± 19	-4 ± 21	20 ± 23	9 ± 22	-22 ± 17	5 ± 26
10/04 - 10/10	-9 ± 26	-9 ± 21	0 ± 27	-27 ± 24	-11 ± 25	-4 ± 24
10/11 - 10/17	-35 ± 29	-9 ± 33	12 ± 26	6 ± 26	14 ± 27	-7 ± 26
10/18 - 10/24	9 ± 21	13 ± 21	7 ± 18	2 ± 21	23 ± 20	-1 ± 18
10/25 - 10/31	-2 ± 19	-9 ± 21	21 ± 21	-2 ± 18	-10 ± 22	6 ± 22

NOVEMBER

	01	02	03	04	10	11
11/01 - 11/07	12 ± 21	13 ± 20	-3 ± 20	13 ± 24	5 ± 18	4 ± 23
11/08 - 11/14	0 ± 21	0 ± 21	-5 ± 23	-8 ± 22	17 ± 25	16 ± 22
11/15 - 11/21	-3 ± 17	-2 ± 18	8 ± 17	2 ± 17	-14 ± 18	0 ± 19
11/22 - 11/28	-1 ± 24	-19 ± 22	8 ± 23	-4 ± 19	-3 ± 19	-16 ± 24

DECEMBER

	01	02	03	04	10	11
11/29 - 12/05	6 ± 15	-9 ± 18	7 ± 17	-16 ± 17	-7 ± 20	12 ± 18
12/06 - 12/12	-7 ± 25	2 ± 26	-9 ± 24	3 ± 38 D	0 ± 22	5 ± 30
12/13 - 12/19	18 ± 19	-17 ± 15	7 ± 12	6 ± 16	-6 ± 17	-9 ± 15
12/20 - 12/26	-4 ± 18	-1 ± 21	4 ± 20	-3 ± 15	9 ± 17	2 ± 20

OCTOBER

	15-C	27
09/27 - 10/03	-2 ± 23	-5 ± 25
10/04 - 10/10	3 ± 31	-11 ± 22
10/11 - 10/17	24 ± 28	12 ± 22
10/18 - 10/24	-8 ± 24	1 ± 21
10/25 - 10/31	-12 ± 24	2 ± 23

NOVEMBER

	15-C	27
11/01 - 11/07	12 ± 22	10 ± 20
11/08 - 11/14	1 ± 26	-8 ± 26
11/15 - 11/21	-1 ± 17	0 ± 19
11/22 - 11/28	5 ± 21	0 ± 23

DECEMBER

	15-C	27
11/29 - 12/05	0 ± 18	-20 ± 23
12/06 - 12/12	-11 ± 28	-15 ± 27
12/13 - 12/19	20 ± 22	-6 ± 24
12/20 - 12/26	3 ± 20	3 ± 21

Table 4-A, Air Particulates Gamma Spectra - Quarter 1 (pCi/m3 x 1000)

Location	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
01	12.0 ± 52.0	91.0 ± 42.0	-2.3 ± 6.8	2.2 ± 6.0	0.0 ± 2.5	0.5 ± 1.0	0.0 ± 54.0
02	0.0 ± 63.0	62.0 ± 35.0	2.0 ± 7.0	2.9 ± 6.9	0.6 ± 2.2	-0.9 ± 1.3	61.0 ± 51.0
03	51.0 ± 51.0	104.0 ± 48.0	5.9 ± 7.1	-5.3 ± 7.0	0.1 ± 3.1	-0.4 ± 1.3	39.0 ± 59.0
04	10.0 ± 35.0	45.0 ± 36.0	3.1 ± 6.1	-6.1 ± 4.8	-0.7 ± 1.7	0.4 ± 1.1	13.0 ± 52.0
10	-23.0 ± 57.0	63.0 ± 35.0	-0.9 ± 6.7	1.8 ± 5.9	-0.3 ± 2.6	-1.1 ± 1.3	-10.0 ± 53.0
11	-35.0 ± 41.0	103.0 ± 42.0	-2.8 ± 7.7	4.0 ± 6.2	-1.0 ± 2.4	0.1 ± 1.7	71.0 ± 59.0
15-C	-53.0 ± 65.0	118.0 ± 43.0	2.0 ± 7.2	-10.0 ± 7.3	0.3 ± 2.6	1.9 ± 1.6	17.0 ± 63.0
27	0.0 ± 53.0	108.0 ± 48.0	-1.6 ± 8.0	-2.5 ± 6.8	-1.6 ± 2.1	1.6 ± 1.6	-40.0 ± 57.0

Location	Cs-134	Cs-137	Mn-54	Nb-95	Ru-103	Ru-106	Zr-95
01	0.8 ± 1.2	-1.3 ± 1.4	-1.1 ± 1.3	0.5 ± 6.3	-0.5 ± 3.9	-5.0 ± 13.0	-1.1 ± 4.9
02	0.8 ± 1.4	-1.1 ± 1.4	0.3 ± 1.2	-0.2 ± 6.8	0.5 ± 5.0	15.0 ± 13.0	-2.1 ± 4.5
03	-0.6 ± 1.4	-0.1 ± 1.2	-0.2 ± 1.4	-2.0 ± 5.2	-1.0 ± 4.4	-3.0 ± 13.0	-0.2 ± 4.3
04	0.4 ± 1.0	-1.7 ± 1.2	-0.2 ± 1.0	2.6 ± 4.7	2.0 ± 2.9	-1.0 ± 10.0	0.4 ± 3.6
10	-0.9 ± 1.2	-1.2 ± 1.5	-0.1 ± 1.2	-2.9 ± 5.8	-1.9 ± 3.5	-2.0 ± 13.0	1.0 ± 4.0
11	0.9 ± 1.3	-0.9 ± 1.0	0.1 ± 1.3	-0.6 ± 4.5	1.4 ± 3.9	-5.0 ± 14.0	-0.2 ± 4.0
15-C	-0.7 ± 0.9	0.6 ± 1.2	-1.8 ± 1.5	-5.6 ± 6.2	-0.5 ± 3.5	2.0 ± 12.0	-2.4 ± 3.2
27	-0.1 ± 1.3	0.4 ± 1.2	0.7 ± 1.4	2.2 ± 4.6	-3.2 ± 4.2	-1.0 ± 16.0	2.9 ± 2.9

Table 4-B, Air Particulates Gamma Spectra - Quarter 2 (pCi/m3 x 1000)

Location	Isotope						
	Ba-140	**Be-7**	**Ce-141**	**Ce-144**	**Co-58**	**Co-60**	**Cr-51**
01	30.0 ± 43.0	106.0 ± 49.0	5.7 ± 5.6	1.2 ± 6.9	-0.3 ± 3.0	0.5 ± 1.9	24.0 ± 54.0
02	0.0 ± 25.0	83.0 ± 38.0	0.6 ± 4.0	1.3 ± 6.9	-0.9 ± 2.3	-1.4 ± 1.6	-17.0 ± 40.0
03	0.0 ± 38.0	104.0 ± 47.0	4.6 ± 5.1	1.4 ± 6.4	-0.1 ± 3.7	1.6 ± 1.9	31.0 ± 43.0
04	-6.0 ± 21.0	117.0 ± 42.0	2.6 ± 5.0	-1.2 ± 6.3	1.2 ± 2.2	-0.4 ± 1.2	7.0 ± 39.0
10	6.0 ± 33.0	89.0 ± 39.0	-2.1 ± 4.4	0.9 ± 5.7	-0.8 ± 1.8	0.6 ± 1.5	-3.0 ± 39.0
11	0.0 ± 32.0	119.0 ± 50.0	-0.2 ± 5.2	0.7 ± 5.5	1.3 ± 2.1	0.1 ± 1.3	-37.0 ± 39.0
15-C	-12.0 ± 30.0	132.0 ± 50.0	-1.3 ± 5.0	-1.8 ± 6.5	1.2 ± 1.9	-0.9 ± 1.6	-11.0 ± 37.0
27	13.0 ± 26.0	95.0 ± 47.0	0.6 ± 4.5	4.6 ± 5.5	0.5 ± 2.4	-1.2 ± 1.8	2.0 ± 36.0
	Cs-134	**Cs-137**	**Mn-54**	**Nb-95**	**Ru-103**	**Ru-106**	**Zr-95**
01	0.1 ± 1.9	2.4 ± 3.5	0.1 ± 1.6	-1.4 ± 5.6	0.5 ± 4.2	-8.0 ± 13.0	-1.4 ± 5.7
02	1.1 ± 1.6	-1.0 ± 2.4	0.2 ± 1.6	0.8 ± 4.4	-0.4 ± 4.1	-9.4 ± 9.9	1.6 ± 3.8
03	0.1 ± 1.7	0.4 ± 2.6	0.5 ± 1.2	1.1 ± 6.5	0.4 ± 4.4	-5.0 ± 15.0	-0.5 ± 4.8
04	-0.8 ± 1.5	0.5 ± 2.2	-1.4 ± 1.5	0.1 ± 4.5	1.2 ± 3.2	-6.0 ± 14.0	-0.9 ± 3.4
10	-0.8 ± 1.5	-0.4 ± 2.5	-0.8 ± 1.6	-0.2 ± 6.0	1.6 ± 3.8	4.6 ± 9.2	-4.3 ± 4.6
11	1.2 ± 1.6	0.1 ± 2.8	0.2 ± 1.7	0.6 ± 5.6	1.7 ± 3.7	3.0 ± 13.0	0.7 ± 5.4
15-C	0.3 ± 1.2	-0.1 ± 2.2	1.3 ± 1.6	-0.4 ± 4.3	-2.0 ± 3.4	3.0 ± 13.0	-2.2 ± 3.9
27	0.6 ± 1.4	-0.1 ± 2.6	-0.7 ± 1.3	0.7 ± 5.3	2.1 ± 4.0	16.0 ± 11.0	-1.0 ± 4.1

Table 4-C, Air Particulates Gamma Spectra - Quarter 3 (pCi/m3 x 1000)

Location	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
01	-15.0 ± 36.0	73.0 ± 37.0	2.5 ± 4.6	-2.5 ± 6.3	0.5 ± 2.5	0.9 ± 2.0	-12.0 ± 39.0
02	14.0 ± 40.0	89.0 ± 39.0	0.1 ± 4.5	-1.7 ± 5.4	1.9 ± 2.6	-0.5 ± 1.5	-10.0 ± 31.0
03	-8.0 ± 43.0	94.0 ± 42.0	3.6 ± 6.0	0.2 ± 6.2	-0.6 ± 2.5	-0.9 ± 1.1	-10.0 ± 41.0
04	0.0 ± 41.0	103.0 ± 42.0	-3.4 ± 4.8	0.7 ± 5.2	1.7 ± 1.9	0.5 ± 1.4	-42.0 ± 40.0
10	15.0 ± 29.0	57.0 ± 36.0	1.3 ± 4.6	-2.2 ± 5.6	-1.3 ± 2.5	-0.5 ± 1.3	-17.0 ± 36.0
11	-8.0 ± 15.0	90.0 ± 44.0	-3.1 ± 5.7	0.8 ± 6.4	-0.6 ± 2.6	0.5 ± 1.4	-23.0 ± 46.0
15-C	0.0 ± 37.0	114.0 ± 43.0	1.2 ± 5.1	-1.7 ± 5.6	-0.2 ± 2.2	-1.4 ± 1.5	34.0 ± 39.0
27	16.0 ± 32.0	74.0 ± 43.0	-0.6 ± 4.9	-1.3 ± 6.9	0.6 ± 2.5	-0.8 ± 1.9	1.0 ± 36.0

Location	Cs-134	Cs-137	Mn-54	Nb-95	Ru-103	Ru-106	Zr-95
01	-0.6 ± 1.3	-0.4 ± 2.5	-0.1 ± 1.2	2.4 ± 3.7	-1.3 ± 3.7	-3.0 ± 15.0	3.7 ± 3.6
02	-0.1 ± 1.4	0.9 ± 2.4	-0.8 ± 1.3	1.6 ± 3.9	0.0 ± 3.1	5.0 ± 13.0	-1.1 ± 4.7
03	0.1 ± 1.6	-0.5 ± 2.7	0.6 ± 1.6	1.1 ± 4.2	0.0 ± 4.0	-4.0 ± 11.0	-3.5 ± 5.3
04	0.1 ± 1.3	-0.4 ± 2.2	0.6 ± 0.9	-2.3 ± 3.6	-0.4 ± 3.0	-9.0 ± 14.0	-2.4 ± 4.1
10	-0.9 ± 1.7	-1.7 ± 2.4	-0.4 ± 1.4	-1.1 ± 4.5	-4.2 ± 3.7	-16.0 ± 12.0	-0.3 ± 3.8
11	1.6 ± 1.9	0.4 ± 2.5	0.1 ± 1.2	0.3 ± 4.7	-2.2 ± 3.7	2.0 ± 14.0	0.2 ± 5.1
15-C	0.3 ± 1.4	-1.1 ± 2.7	0.3 ± 1.2	-2.5 ± 4.7	-0.4 ± 3.1	2.0 ± 12.0	-1.7 ± 4.0
27	-0.2 ± 1.7	0.7 ± 2.7	-1.1 ± 1.5	-1.0 ± 3.9	-1.8 ± 2.6	5.0 ± 14.0	-0.4 ± 4.6

Table 4-D, Air Particulates Gamma Spectra - Quarter 4 (pCi/m3 x 1000)

Location	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
01	-31.0 ± 47.0	77.0 ± 38.0	1.4 ± 5.3	0.6 ± 5.6	-1.0 ± 2.2	1.2 ± 1.8	-1.0 ± 57.0
02	-11.0 ± 48.0	101.0 ± 40.0	7.4 ± 5.6	-1.7 ± 6.6	0.6 ± 2.5	-0.7 ± 1.8	15.0 ± 42.0
03	-11.0 ± 58.0	93.0 ± 36.0	0.1 ± 6.6	2.0 ± 5.9	-0.3 ± 2.8	1.2 ± 1.9	-39.0 ± 45.0
04	-11.0 ± 38.0	105.0 ± 46.0	-5.9 ± 6.5	-1.2 ± 6.6	-1.0 ± 2.0	-0.5 ± 1.1	-24.0 ± 50.0
10	22.0 ± 31.0	28.0 ± 29.0	2.8 ± 5.8	3.4 ± 5.2	-1.0 ± 2.4	1.0 ± 1.9	-34.0 ± 48.0
11	33.0 ± 74.0	77.0 ± 43.0	4.6 ± 7.0	4.5 ± 6.0	-1.0 ± 2.4	0.7 ± 1.6	8.0 ± 48.0
15-C	0.0 ± 48.0	93.0 ± 43.0	1.3 ± 5.8	-5.9 ± 6.9	-1.0 ± 2.2	-0.8 ± 1.8	-12.0 ± 52.0
27	-20.0 ± 110.0	46.0 ± 52.0	-6.4 ± 7.3	2.1 ± 7.1	0.2 ± 3.2	-0.5 ± 1.3	20.0 ± 72.0

Location	Cs-134	Cs-137	Mn-54	Nb-95	Ru-103	Ru-106	Zr-95
01	2.2 ± 1.6	-0.1 ± 2.5	0.3 ± 1.3	0.4 ± 4.0	1.4 ± 4.0	3.0 ± 12.0	2.6 ± 3.3
02	-1.3 ± 1.7	-1.7 ± 2.3	-0.2 ± 1.7	-1.9 ± 4.5	-1.4 ± 3.2	3.0 ± 13.0	-0.3 ± 4.1
03	-1.1 ± 1.9	1.4 ± 2.5	0.0 ± 1.9	-3.7 ± 5.2	0.5 ± 4.5	-2.0 ± 14.0	1.1 ± 4.7
04	-0.8 ± 1.4	-1.4 ± 2.5	-0.3 ± 1.4	-2.4 ± 6.8	0.0 ± 4.2	-21.0 ± 14.0	0.3 ± 4.9
10	1.5 ± 1.6	-1.7 ± 2.4	-0.9 ± 1.2	-0.7 ± 6.0	-2.5 ± 4.7	7.0 ± 11.0	2.6 ± 4.6
11	0.2 ± 1.0	-0.3 ± 2.5	1.4 ± 1.8	1.2 ± 4.5	-3.0 ± 5.0	0.0 ± 15.0	0.2 ± 5.4
15-C	0.8 ± 1.7	0.8 ± 2.5	0.1 ± 1.3	-4.0 ± 5.6	-1.1 ± 4.0	-7.0 ± 14.0	-4.5 ± 5.0
27	-0.9 ± 1.4	0.6 ± 2.8	0.6 ± 1.6	0.2 ± 7.2	1.8 ± 5.8	7.0 ± 14.0	2.1 ± 5.8

Table 6, Soil (pCi/g dry)

Location	Collection Date	Isotope					
03		**Be-7**	**Ce-141**	**Ce-144**	**Co-58**	**Co-60**	**Cr-51**
	03/30/04	0.15 ± 0.48	-0.05 ± 0.09	0.19 ± 0.21	-0.05 ± 0.03	0.02 ± 0.04	0.02 ± 0.57
	06/29/04	-0.17 ± 0.46	0.05 ± 0.07	-0.24 ± 0.24	-0.01 ± 0.04	0.00 ± 0.05	0.10 ± 0.48
	09/20/04	0.14 ± 0.45	-0.04 ± 0.07	-0.14 ± 0.27	-0.01 ± 0.04	0.01 ± 0.05	-0.08 ± 0.46
	11/16/04	0.51 ± 0.61	-0.04 ± 0.12	-0.20 ± 0.28	-0.05 ± 0.05	-0.02 ± 0.05	0.52 ± 0.72
		Cs-134	**Cs-137**	**Fe-59**	**K-40**	**Mn-54**	**Nb-95**
	03/30/04	-0.01 ± 0.04	0.97 ± 0.11	0.03 ± 0.10	8.10 ± 1.10	-0.03 ± 0.04	0.01 ± 0.06
	06/29/04	0.01 ± 0.03	1.02 ± 0.12	-0.01 ± 0.11	9.40 ± 1.30	0.02 ± 0.05	-0.04 ± 0.05
	09/20/04	0.01 ± 0.05	1.23 ± 0.14	0.06 ± 0.08	7.90 ± 1.40	0.00 ± 0.04	-0.02 ± 0.06
	11/16/04	-0.01 ± 0.05	0.81 ± 0.13	-0.03 ± 0.13	6.30 ± 1.20	-0.03 ± 0.04	-0.02 ± 0.07
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/30/04	0.01 ± 0.05	-0.09 ± 0.35	0.08 ± 0.10	0.63 ± 0.16	0.01 ± 0.09	-0.01 ± 0.06
	06/29/04	0.03 ± 0.05	-0.07 ± 0.39	0.04 ± 0.11	0.64 ± 0.19	-0.09 ± 0.10	0.00 ± 0.08
	09/20/04	-0.02 ± 0.05	0.12 ± 0.41	-0.01 ± 0.13	0.62 ± 0.21	0.04 ± 0.20	-0.20 ± 0.11
	11/16/04	-0.06 ± 0.08	-0.41 ± 0.38	-0.01 ± 0.13	0.48 ± 0.19	-0.02 ± 0.12	-0.08 ± 0.13
04		**Be-7**	**Ce-141**	**Ce-144**	**Co-58**	**Co-60**	**Cr-51**
	03/30/04	0.34 ± 0.36	-0.03 ± 0.08	-0.20 ± 0.20	0.02 ± 0.03	0.02 ± 0.03	-0.07 ± 0.46
	06/29/04	0.44 ± 0.34	0.03 ± 0.06	0.09 ± 0.16	-0.02 ± 0.04	0.05 ± 0.04	0.06 ± 0.31
	09/21/04	0.40 ± 0.34	-0.01 ± 0.06	0.00 ± 0.20	-0.04 ± 0.03	0.01 ± 0.03	-0.06 ± 0.30
	11/16/04	0.59 ± 0.49	0.06 ± 0.08	0.07 ± 0.22	0.02 ± 0.04	0.02 ± 0.03	-0.29 ± 0.51
		Cs-134	**Cs-137**	**Fe-59**	**K-40**	**Mn-54**	**Nb-95**
	03/30/04	0.01 ± 0.03	0.44 ± 0.06	0.02 ± 0.09	12.53 ± 0.98	0.03 ± 0.03	-0.01 ± 0.05
	06/29/04	0.02 ± 0.03	0.51 ± 0.07	-0.06 ± 0.08	12.50 ± 1.20	0.03 ± 0.04	0.04 ± 0.05
	09/21/04	0.01 ± 0.03	0.50 ± 0.06	-0.03 ± 0.07	11.86 ± 0.95	-0.01 ± 0.03	-0.01 ± 0.06
	11/16/04	-0.01 ± 0.03	0.48 ± 0.07	0.02 ± 0.09	10.70 ± 1.10	0.00 ± 0.03	-0.04 ± 0.06
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/30/04	0.03 ± 0.04	-0.14 ± 0.26	0.00 ± 0.07	1.21 ± 0.12	0.07 ± 0.11	-0.01 ± 0.06
	06/29/04	0.01 ± 0.04	0.15 ± 0.30	-0.03 ± 0.09	1.04 ± 0.15	0.01 ± 0.17	-7.30 ± 7.40
	09/21/04	0.03 ± 0.04	0.03 ± 0.28	0.04 ± 0.09	1.10 ± 0.14	0.10 ± 0.15	-0.04 ± 0.10
	11/16/04	-0.02 ± 0.05	-0.16 ± 0.29	-0.03 ± 0.08	1.00 ± 0.15	-0.06 ± 0.14	-12.30 ± 8.60
14-C		**Be-7**	**Ce-141**	**Ce-144**	**Co-58**	**Co-60**	**Cr-51**
	03/30/04	0.60 ± 0.51	0.09 ± 0.12	0.02 ± 0.22	0.01 ± 0.04	-0.03 ± 0.03	0.26 ± 0.49
	06/29/04	0.36 ± 0.16	0.03 ± 0.05	-0.07 ± 0.15	-0.01 ± 0.02	-0.01 ± 0.02	0.07 ± 0.27
	09/20/04	0.63 ± 0.54	0.09 ± 0.08	-0.15 ± 0.27	-0.07 ± 0.04	0.00 ± 0.03	0.10 ± 0.40
	11/16/04	0.65 ± 0.88	-0.09 ± 0.10	-0.18 ± 0.27	-0.06 ± 0.04	0.01 ± 0.03	-0.07 ± 0.61
		Cs-134	**Cs-137**	**Fe-59**	**K-40**	**Mn-54**	**Nb-95**
	03/30/04	0.01 ± 0.03	1.46 ± 0.09	0.02 ± 0.08	12.40 ± 1.00	0.01 ± 0.04	-0.02 ± 0.08
	06/29/04	0.05 ± 0.08	1.66 ± 0.07	-0.02 ± 0.05	11.70 ± 0.65	0.01 ± 0.02	-0.01 ± 0.03
	09/20/04	-0.02 ± 0.04	1.60 ± 0.12	-0.04 ± 0.08	13.00 ± 1.30	0.00 ± 0.04	-0.06 ± 0.07
	11/16/04	-0.05 ± 0.13	1.37 ± 0.10	-0.04 ± 0.09	10.20 ± 1.00	0.01 ± 0.03	0.08 ± 0.06

Table 6, Soil (pCi/g dry)

Location	Collection Date	Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
14-C							
	03/30/04	0.03 ± 0.05	0.05 ± 0.31	-0.05 ± 0.09	1.32 ± 0.14	-0.07 ± 0.14	0.01 ± 0.07
	06/29/04	-0.02 ± 0.03	0.06 ± 0.20	-0.01 ± 0.07	1.32 ± 0.09	-0.01 ± 0.09	-10.20 ± 4.30
	09/20/04	-0.01 ± 0.05	-0.44 ± 0.38	0.07 ± 0.11	1.55 ± 0.17	0.12 ± 0.16	-15.00 ± 11.00
	11/16/04	-0.01 ± 0.05	-0.01 ± 0.31	-0.02 ± 0.11	1.18 ± 0.16	0.07 ± 0.14	-0.12 ± 0.14

Table 8, Goat Milk (pCi/L)

Location	Collection Date	Ba-140	Cs-134	Cs-137	I-131	K-40	La-140
21	04/15/04	1.10 ± 5.40	0.00 ± 3.40	2.30 ± 3.20	0.03 ± 0.25	1630.00 ± 120.00	1.30 ± 6.20
	04/28/04	7.80 ± 7.90	0.30 ± 4.10	2.60 ± 4.60	0.08 ± 0.27	1460.00 ± 150.00	9.00 ± 9.10
	05/11/04	1.80 ± 5.00	0.10 ± 3.00	0.50 ± 3.50	0.03 ± 0.23	1220.00 ± 110.00	2.10 ± 5.70
	05/20/04	-0.60 ± 6.50	0.50 ± 4.50	3.30 ± 4.50	-0.04 ± 0.02	1520.00 ± 150.00	-0.70 ± 7.50
	06/02/04	10.70 ± 8.00	-3.70 ± 4.80	-4.30 ± 4.60	0.04 ± 0.21	1610.00 ± 130.00	12.30 ± 9.10
	06/15/04	-0.40 ± 5.40	3.10 ± 4.00	1.30 ± 3.40	-0.05 ± 0.02	1620.00 ± 130.00	-0.50 ± 6.20
	07/13/04	1.90 ± 4.30	-1.00 ± 2.50	10.00 ± 3.40	0.24 ± 0.46	1920.00 ± 99.00	2.20 ± 4.90
	07/27/04	0.00 ± 5.90	-0.60 ± 4.50	11.30 ± 5.60	-0.06 ± 0.02	1410.00 ± 150.00	0.00 ± 6.80
	08/10/04	0.00 ± 3.00	-0.10 ± 2.40	5.30 ± 2.80	0.10 ± 0.32	1730.00 ± 85.00	0.00 ± 3.50
	08/30/04	5.10 ± 5.50	1.30 ± 3.70	2.20 ± 4.10	-0.05 ± 0.05	1500.00 ± 120.00	5.80 ± 6.30

Location	Collection Date	Sr-89	Sr-90
21	06/15/04	6.30 ± 4.70	1.24 ± 0.73
	08/30/04	0.00 ± 6.10	0.93 ± 0.95

Location	Collection Date	Ba-140	Cs-134	Cs-137	I-131	K-40	La-140
22	03/23/04	-3.50 ± 6.10	-2.30 ± 3.30	4.60 ± 3.90	0.27 ± 0.38	1710.00 ± 120.00	-4.10 ± 7.00
	04/14/04	-0.80 ± 3.20	-0.10 ± 2.10	1.10 ± 2.00	0.13 ± 0.33	1754.00 ± 77.00	-0.90 ± 3.60
	04/28/04	0.20 ± 4.50	-0.40 ± 2.50	2.20 ± 2.30	0.10 ± 0.33	1760.00 ± 96.00	0.30 ± 5.10
	05/11/04	-0.60 ± 4.90	0.00 ± 3.50	6.40 ± 4.60	0.05 ± 0.26	1630.00 ± 120.00	-0.70 ± 5.70
	05/19/04	1.80 ± 3.20	-0.80 ± 2.20	11.70 ± 2.80	0.08 ± 0.26	1773.00 ± 80.00	2.10 ± 3.70

Location	Collection Date	Sr-89	Sr-90
22	03/23/04	-3.90 ± 6.60	6.20 ± 1.10
	05/19/04	-16.00 ± 16.00	8.10 ± 1.30

Location	Collection Date	Ba-140	Cs-134	Cs-137	I-131	K-40	La-140
24-C	04/28/04	6.50 ± 7.20	-4.50 ± 5.50	5.50 ± 5.00	0.08 ± 0.28	1670.00 ± 170.00	7.40 ± 8.30
	05/12/04	2.50 ± 3.80	-0.40 ± 3.20	2.50 ± 3.30	-0.01 ± 0.06	1550.00 ± 120.00	2.90 ± 4.40
	05/20/04	0.50 ± 6.40	0.90 ± 4.30	4.00 ± 3.90	-0.05 ± 0.02	1730.00 ± 150.00	0.50 ± 7.30
	06/02/04	2.70 ± 6.40	5.10 ± 3.50	3.70 ± 3.70	-0.06 ± 0.03	1560.00 ± 130.00	3.10 ± 7.30
	06/15/04	0.00 ± 6.00	1.10 ± 4.20	0.50 ± 4.00	-0.05 ± 0.02	1690.00 ± 140.00	0.00 ± 6.90
	07/13/04	0.00 ± 5.30	1.40 ± 4.60	3.00 ± 4.10	0.05 ± 0.33	1620.00 ± 160.00	0.00 ± 6.10
	07/27/04	-0.70 ± 5.80	0.20 ± 4.60	1.20 ± 4.60	-0.09 ± 0.03	1610.00 ± 150.00	-0.80 ± 6.70
	08/10/04	-0.60 ± 6.10	1.40 ± 4.50	2.40 ± 4.50	0.10 ± 0.33	1630.00 ± 160.00	-0.70 ± 7.00
	08/30/04	-3.60 ± 3.80	2.10 ± 3.50	3.80 ± 4.40	-0.05 ± 0.07	1780.00 ± 140.00	-4.10 ± 4.30
	09/22/04	-1.90 ± 6.30	1.50 ± 4.90	9.00 ± 6.20	-0.06 ± 0.02	1880.00 ± 180.00	-2.20 ± 7.20

Location	Collection Date	Sr-89	Sr-90
24-C	06/15/04	5.30 ± 5.90	1.78 ± 0.93
	09/22/04	-0.40 ± 4.40	1.62 ± 0.95

Table 9, Pasture Grass (pCi/g wet)

Location	Collection Date	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
21	01/27/04	-0.091 ± 0.072 F	0.460 ± 0.280	-0.012 ± 0.034	0.060 ± 0.088	0.027 ± 0.031	-0.015 ± 0.035
	02/18/04	-0.024 ± 0.040 F	0.290 ± 0.220	-0.004 ± 0.024	0.023 ± 0.077	0.001 ± 0.025	0.002 ± 0.031
	03/24/04	-0.080 ± 0.120 F	0.180 ± 0.360	0.018 ± 0.057	0.030 ± 0.150	-0.013 ± 0.040	-0.033 ± 0.035
	09/22/04	0.011 ± 0.048	0.910 ± 0.430	0.019 ± 0.031	-0.010 ± 0.079	-0.013 ± 0.032	0.013 ± 0.036
	09/29/04	0.030 ± 0.045	1.770 ± 0.380	0.002 ± 0.023	-0.004 ± 0.056	0.007 ± 0.021	0.000 ± 0.028
	10/11/04	0.007 ± 0.038	3.580 ± 0.420	0.026 ± 0.028	0.006 ± 0.092	-0.005 ± 0.021	0.002 ± 0.022
	10/27/04	0.021 ± 0.036	2.220 ± 0.400	0.005 ± 0.028	-0.020 ± 0.077	0.004 ± 0.023	0.008 ± 0.023
	11/10/04	-0.049 ± 0.061	3.860 ± 0.450	-0.031 ± 0.037	-0.090 ± 0.100	-0.020 ± 0.028	-0.016 ± 0.025
	12/15/04	-0.030 ± 0.140 F	-0.260 ± 0.260	0.027 ± 0.041	-0.036 ± 0.087	0.018 ± 0.033	0.014 ± 0.032

Location	Collection Date	Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
21	01/27/04	-0.130 ± 0.210	-0.002 ± 0.031	0.035 ± 0.027	0.027 ± 0.095	0.042 ± 0.073	12.100 ± 1.000
	02/18/04	-0.130 ± 0.160	-0.004 ± 0.028	0.088 ± 0.033	0.043 ± 0.080	-0.004 ± 0.035	12.000 ± 0.900
	03/24/04	-0.190 ± 0.430	0.025 ± 0.035	0.029 ± 0.032	-0.040 ± 0.140	0.200 ± 0.280	14.600 ± 1.200
	09/22/04	0.040 ± 0.230	-0.001 ± 0.029	0.026 ± 0.029	-0.037 ± 0.091	0.006 ± 0.012	5.100 ± 1.000
	09/29/04	-0.030 ± 0.140	0.004 ± 0.018	0.010 ± 0.022	0.057 ± 0.063	-0.002 ± 0.014	3.620 ± 0.850
	10/11/04	0.140 ± 0.190	-0.008 ± 0.022	0.015 ± 0.019	-0.013 ± 0.055	-0.001 ± 0.009	5.930 ± 0.700
	10/27/04	0.070 ± 0.180	-0.014 ± 0.029	0.010 ± 0.024	0.049 ± 0.075	0.005 ± 0.028	5.410 ± 0.940
	11/10/04	-0.030 ± 0.270	0.007 ± 0.024	0.015 ± 0.024	0.030 ± 0.076	0.020 ± 0.029	6.860 ± 0.770
	12/15/04	0.000 ± 0.290	0.005 ± 0.030	0.162 ± 0.041	0.050 ± 0.110	0.060 ± 0.200	12.050 ± 0.960

Location	Collection Date	La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
21	01/27/04	-0.105 ± 0.083	-0.020 ± 0.027	0.002 ± 0.036	-0.005 ± 0.028	-0.170 ± 0.210	0.008 ± 0.061
	02/18/04	-0.027 ± 0.046	-0.009 ± 0.025	-0.019 ± 0.027	-0.003 ± 0.022	-0.030 ± 0.210	0.032 ± 0.061
	03/24/04	-0.090 ± 0.140	0.017 ± 0.035	-0.001 ± 0.055	0.051 ± 0.048	0.040 ± 0.340	-0.029 ± 0.077
	09/22/04	0.012 ± 0.055	0.005 ± 0.030	0.020 ± 0.029	0.011 ± 0.024	0.220 ± 0.250	0.006 ± 0.052
	09/29/04	0.035 ± 0.052	-0.011 ± 0.018	-0.010 ± 0.023	-0.002 ± 0.017	0.040 ± 0.130	0.029 ± 0.043
	10/11/04	0.009 ± 0.044	0.005 ± 0.019	0.008 ± 0.028	0.004 ± 0.021	-0.130 ± 0.200	0.016 ± 0.050
	10/27/04	0.024 ± 0.042	-0.007 ± 0.024	-0.019 ± 0.035	-0.013 ± 0.023	-0.100 ± 0.180	-0.031 ± 0.060
	11/10/04	-0.056 ± 0.070	-0.026 ± 0.025	0.004 ± 0.035	0.015 ± 0.033	-0.070 ± 0.230	-0.023 ± 0.058
	12/15/04	-0.030 ± 0.160	0.025 ± 0.029	0.015 ± 0.045	-0.016 ± 0.035	-0.020 ± 0.210	0.076 ± 0.069

Location	Collection Date	Th-228	Zn-65	Zr-95
21	01/27/04	0.110 ± 0.120	0.018 ± 0.066	0.023 ± 0.054
	02/18/04	-0.090 ± 0.130	0.021 ± 0.058	-0.043 ± 0.046
	03/24/04	0.020 ± 0.140	0.020 ± 0.083	-0.074 ± 0.069
	09/22/04	-0.020 ± 0.110	0.000 ± 0.075	0.023 ± 0.055
	09/29/04	0.113 ± 0.085	0.000 ± 0.054	-0.008 ± 0.025
	10/11/04	0.010 ± 0.083	0.002 ± 0.053	0.011 ± 0.038
	10/27/04	0.060 ± 0.130	-0.063 ± 0.062	0.015 ± 0.037
	11/10/04	0.020 ± 0.110	-0.074 ± 0.062	-0.033 ± 0.039
	12/15/04	-0.040 ± 0.120	-0.037 ± 0.076	-0.008 ± 0.056

Location	Collection Date	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
22	01/27/04	-0.018 ± 0.047 F	0.400 ± 0.250	-0.021 ± 0.028	-0.030 ± 0.100	0.002 ± 0.025	-0.019 ± 0.028
	02/18/04	0.008 ± 0.041 F	0.080 ± 0.190	-0.003 ± 0.026	-0.003 ± 0.074	0.011 ± 0.025	0.012 ± 0.027
	06/03/04	0.019 ± 0.026	0.860 ± 0.240	-0.012 ± 0.021	-0.022 ± 0.068	0.006 ± 0.016	0.002 ± 0.016
	06/16/04	-0.042 ± 0.048	0.620 ± 0.330	-0.010 ± 0.029	-0.014 ± 0.072	-0.007 ± 0.026	-0.011 ± 0.028
	07/14/04	-0.029 ± 0.038	1.700 ± 0.410	-0.025 ± 0.036	0.010 ± 0.120	0.000 ± 0.026	0.032 ± 0.026
	07/28/04	0.000 ± 0.024	1.190 ± 0.310	-0.016 ± 0.021	0.003 ± 0.063	0.011 ± 0.024	0.019 ± 0.027
	08/11/04	0.010 ± 0.038	1.140 ± 0.340	-0.012 ± 0.030	-0.066 ± 0.094	0.025 ± 0.022	-0.003 ± 0.028
	08/30/04	0.020 ± 0.120	0.950 ± 0.330	-0.002 ± 0.031	-0.035 ± 0.066	-0.006 ± 0.023	0.013 ± 0.024

Table 9, Pasture Grass (pCi/g wet)

Location	Collection Date	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
22	09/22/04	0.012 ± 0.037	1.960 ± 0.430	0.034 ± 0.032	0.000 ± 0.110	-0.002 ± 0.022	0.031 ± 0.030
	09/29/04	0.000 ± 0.063	3.210 ± 0.600	-0.028 ± 0.032	-0.011 ± 0.086	-0.042 ± 0.030	0.016 ± 0.018
	10/11/04	0.013 ± 0.053	2.450 ± 0.460	0.017 ± 0.036	-0.010 ± 0.120	-0.009 ± 0.024	0.015 ± 0.027
	10/27/04	-0.014 ± 0.054	4.090 ± 0.580	-0.025 ± 0.037	-0.010 ± 0.130	0.003 ± 0.024	-0.003 ± 0.035
	11/10/04	-0.028 ± 0.084	4.360 ± 0.550	0.010 ± 0.035	0.023 ± 0.093	-0.015 ± 0.036	0.010 ± 0.034
	12/15/04	G					

Location	Collection Date	Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
22	01/27/04	-0.180 ± 0.240	-0.004 ± 0.025	-0.008 ± 0.021	0.003 ± 0.070	-0.023 ± 0.077	11.910 ± 0.770
	02/18/04	0.020 ± 0.170	0.009 ± 0.025	0.003 ± 0.023	-0.022 ± 0.082	-0.016 ± 0.039	14.200 ± 0.890
	06/03/04	0.040 ± 0.140	-0.003 ± 0.015	0.020 ± 0.016	0.035 ± 0.047	-0.013 ± 0.004	4.250 ± 0.600
	06/16/04	0.090 ± 0.200	0.026 ± 0.023	0.000 ± 0.019	0.033 ± 0.079	-0.001 ± 0.022	3.880 ± 0.890
	07/14/04	0.080 ± 0.230	0.014 ± 0.025	0.007 ± 0.027	0.038 ± 0.070	0.015 ± 0.027	3.290 ± 0.710
	07/28/04	-0.040 ± 0.160	0.001 ± 0.026	0.015 ± 0.024	0.071 ± 0.065	-0.004 ± 0.011	2.660 ± 0.710
	08/11/04	0.060 ± 0.190	0.002 ± 0.022	0.007 ± 0.022	0.045 ± 0.063	-0.004 ± 0.004	5.190 ± 0.770
	08/30/04	0.190 ± 0.230	-0.001 ± 0.023	0.026 ± 0.025	-0.075 ± 0.097	-0.011 ± 0.004	4.370 ± 0.850
	09/22/04	0.100 ± 0.210	-0.012 ± 0.025	0.017 ± 0.023	0.000 ± 0.062	0.004 ± 0.010	4.520 ± 0.780
	09/29/04	0.010 ± 0.200	0.004 ± 0.028	0.013 ± 0.023	0.045 ± 0.072	-0.005 ± 0.002	3.380 ± 0.920
	10/11/04	0.110 ± 0.240	-0.005 ± 0.028	0.002 ± 0.029	-0.089 ± 0.089	0.002 ± 0.013	5.870 ± 0.890
	10/27/04	-0.260 ± 0.290	0.016 ± 0.033	0.047 ± 0.034	-0.006 ± 0.085	-0.009 ± 0.021	4.340 ± 0.880
	11/10/04	0.190 ± 0.250	-0.003 ± 0.031	0.036 ± 0.039	0.063 ± 0.086	-0.002 ± 0.018	7.600 ± 1.000
	12/15/04						

Location	Collection Date	La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
22	01/27/04	-0.021 ± 0.054	-0.015 ± 0.022	0.034 ± 0.030	-0.019 ± 0.027	0.110 ± 0.220	-0.007 ± 0.053
	02/18/04	0.009 ± 0.048	-0.003 ± 0.025	0.001 ± 0.028	-0.008 ± 0.022	0.080 ± 0.180	0.034 ± 0.060
	06/03/04	0.022 ± 0.029	0.000 ± 0.011	-0.007 ± 0.021	-0.004 ± 0.016	-0.100 ± 0.130	-0.024 ± 0.035
	06/16/04	-0.048 ± 0.056	-0.005 ± 0.026	0.012 ± 0.029	-0.003 ± 0.024	-0.040 ± 0.170	0.024 ± 0.047
	07/14/04	-0.033 ± 0.044	-0.014 ± 0.025	-0.029 ± 0.030	0.020 ± 0.025	0.160 ± 0.230	0.016 ± 0.060
	07/28/04	0.000 ± 0.028	-0.023 ± 0.020	0.002 ± 0.020	-0.002 ± 0.019	0.090 ± 0.140	-0.021 ± 0.043
	08/11/04	0.011 ± 0.044	-0.012 ± 0.022	-0.014 ± 0.027	-0.013 ± 0.024	-0.260 ± 0.200	-0.003 ± 0.050
	08/30/04	0.020 ± 0.130	-0.019 ± 0.022	-0.001 ± 0.030	-0.008 ± 0.024	0.040 ± 0.170	0.017 ± 0.039
	09/22/04	0.013 ± 0.042	0.010 ± 0.022	0.004 ± 0.022	-0.020 ± 0.021	0.150 ± 0.170	0.015 ± 0.048
	09/29/04	0.000 ± 0.072	-0.014 ± 0.026	0.012 ± 0.025	0.006 ± 0.024	0.000 ± 0.240	-0.018 ± 0.063
	10/11/04	0.015 ± 0.061	0.015 ± 0.027	0.019 ± 0.034	0.007 ± 0.030	0.050 ± 0.250	0.029 ± 0.061
	10/27/04	-0.016 ± 0.062	0.007 ± 0.027	-0.001 ± 0.031	-0.010 ± 0.030	0.150 ± 0.250	-0.038 ± 0.068
	11/10/04	-0.032 ± 0.097	-0.013 ± 0.023	-0.051 ± 0.039	0.009 ± 0.031	-0.100 ± 0.230	-0.057 ± 0.062
	12/15/04						

Location	Collection Date	Th-228	Zn-65	Zr-95
22	01/27/04	-0.006 ± 0.097	0.001 ± 0.084	-0.024 ± 0.045
	02/18/04	-0.120 ± 0.140	-0.023 ± 0.058	-0.010 ± 0.045
	06/03/04	0.013 ± 0.053	-0.048 ± 0.047	-0.010 ± 0.030
	06/16/04	0.060 ± 0.100	-0.064 ± 0.059	0.000 ± 0.042
	07/14/04	0.050 ± 0.120	-0.066 ± 0.069	-0.023 ± 0.044
	07/28/04	0.008 ± 0.090	0.000 ± 0.039	0.014 ± 0.042
	08/11/04	0.092 ± 0.084	-0.041 ± 0.056	-0.019 ± 0.038
	08/30/04	0.026 ± 0.093	0.000 ± 0.060	-0.019 ± 0.049
	09/22/04	-0.031 ± 0.094	-0.004 ± 0.057	0.018 ± 0.038
	09/29/04	-0.010 ± 0.100	-0.055 ± 0.058	0.012 ± 0.028
	10/11/04	0.100 ± 0.120	-0.014 ± 0.073	-0.004 ± 0.046
	10/27/04	0.160 ± 0.130	-0.001 ± 0.058	-0.004 ± 0.054
	11/10/04	0.170 ± 0.130	-0.076 ± 0.074	0.045 ± 0.057
	12/15/04			

Table 9, Pasture Grass (pCi/g wet)

Location: **24-C**

Collection Date	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
01/27/04	0.007 ± 0.058 F	0.750 ± 0.290	-0.008 ± 0.037	-0.040 ± 0.110	-0.007 ± 0.028	-0.012 ± 0.028
02/18/04	0.008 ± 0.046 F	0.700 ± 0.230	0.007 ± 0.025	-0.030 ± 0.068	-0.015 ± 0.025	0.005 ± 0.026
03/24/04	0.130 ± 0.140 F	0.220 ± 0.230	-0.001 ± 0.042	0.003 ± 0.073	0.015 ± 0.030	0.006 ± 0.027
04/15/04	0.021 ± 0.037 F	-0.110 ± 0.170	-0.001 ± 0.035	0.000 ± 0.093	0.000 ± 0.021	0.011 ± 0.023
09/29/04	0.025 ± 0.072	2.280 ± 0.470	-0.010 ± 0.026	-0.035 ± 0.065	-0.003 ± 0.024	0.002 ± 0.027
10/11/04	0.000 ± 0.051	1.550 ± 0.390	-0.009 ± 0.030	0.009 ± 0.081	-0.004 ± 0.029	0.011 ± 0.028
10/27/04	-0.024 ± 0.048	2.620 ± 0.450	-0.008 ± 0.030	0.080 ± 0.084	-0.002 ± 0.028	0.041 ± 0.032
11/10/04	-0.015 ± 0.053	4.320 ± 0.350	-0.055 ± 0.053	-0.058 ± 0.090	0.005 ± 0.024	-0.004 ± 0.022
12/15/04	-0.030 ± 0.120 F	0.530 ± 0.380	-0.026 ± 0.066	0.040 ± 0.130	-0.015 ± 0.034	0.028 ± 0.029

Collection Date	Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
01/27/04	-0.350 ± 0.270	-0.014 ± 0.027	0.056 ± 0.034	-0.026 ± 0.082	0.000 ± 0.090	9.490 ± 0.820
02/18/04	0.100 ± 0.170	0.019 ± 0.025	0.078 ± 0.031	0.019 ± 0.078	-0.052 ± 0.050	12.480 ± 0.840
03/24/04	-0.050 ± 0.340	-0.006 ± 0.026	0.079 ± 0.032	-0.040 ± 0.120	-0.030 ± 0.280	19.560 ± 0.960
04/15/04	-0.040 ± 0.200	0.015 ± 0.023	0.043 ± 0.027	0.018 ± 0.068	-0.007 ± 0.003	14.190 ± 0.720
09/29/04	0.050 ± 0.160	0.001 ± 0.020	0.018 ± 0.018	0.011 ± 0.046	0.006 ± 0.011	3.460 ± 0.830
10/11/04	0.020 ± 0.180	-0.007 ± 0.030	0.016 ± 0.026	0.048 ± 0.088	0.023 ± 0.029	7.600 ± 1.100
10/27/04	0.090 ± 0.210	-0.014 ± 0.029	0.014 ± 0.024	0.010 ± 0.100	-0.017 ± 0.019	6.100 ± 1.000
11/10/04	0.070 ± 0.220	-0.011 ± 0.022	-0.006 ± 0.019	-0.006 ± 0.062	0.000 ± 0.017	7.760 ± 0.610
12/15/04	-0.110 ± 0.370	0.012 ± 0.032	0.031 ± 0.033	-0.090 ± 0.110	0.130 ± 0.280	13.290 ± 0.980

Collection Date	La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
01/27/04	0.008 ± 0.066	0.021 ± 0.028	0.009 ± 0.033	0.004 ± 0.031	0.310 ± 0.230	-0.014 ± 0.061
02/18/04	0.009 ± 0.053	0.024 ± 0.023	-0.002 ± 0.027	-0.005 ± 0.022	-0.050 ± 0.180	0.023 ± 0.054
03/24/04	0.150 ± 0.160	-0.004 ± 0.024	-0.019 ± 0.043	-0.011 ± 0.032	-0.040 ± 0.180	0.062 ± 0.054
04/15/04	0.024 ± 0.043	-0.002 ± 0.021	-0.003 ± 0.029	0.003 ± 0.024	-0.090 ± 0.200	0.034 ± 0.049
09/29/04	0.029 ± 0.083	0.012 ± 0.023	-0.002 ± 0.022	-0.005 ± 0.022	-0.040 ± 0.200	-0.015 ± 0.040
10/11/04	0.000 ± 0.059	-0.016 ± 0.023	-0.004 ± 0.033	-0.002 ± 0.024	0.030 ± 0.180	0.038 ± 0.052
10/27/04	-0.028 ± 0.055	0.004 ± 0.025	-0.037 ± 0.032	-0.006 ± 0.026	-0.060 ± 0.200	-0.009 ± 0.061
11/10/04	-0.017 ± 0.061	0.012 ± 0.021	0.007 ± 0.041	-0.023 ± 0.025	-0.010 ± 0.180	0.033 ± 0.047
12/15/04	-0.030 ± 0.140	0.000 ± 0.029	0.007 ± 0.052	-0.038 ± 0.043	-0.010 ± 0.270	0.046 ± 0.069

Collection Date	Th-228	Zn-65	Zr-95
01/27/04	0.020 ± 0.110	-0.117 ± 0.068	0.000 ± 0.049
02/18/04	0.079 ± 0.082	0.004 ± 0.057	0.040 ± 0.041
03/24/04	0.106 ± 0.089	0.020 ± 0.110	0.060 ± 0.052
04/15/04	0.030 ± 0.100	-0.039 ± 0.054	0.028 ± 0.038
09/29/04	-0.013 ± 0.077	0.007 ± 0.067	0.000 ± 0.042
10/11/04	-0.069 ± 0.093	-0.092 ± 0.063	0.042 ± 0.050
10/27/04	0.090 ± 0.120	0.039 ± 0.072	0.023 ± 0.054
11/10/04	0.087 ± 0.084	0.115 ± 0.081	-0.025 ± 0.041
12/15/04	0.020 ± 0.120	-0.037 ± 0.071	-0.028 ± 0.062

Table 10, Well Water (pCi/l)

Location	Collection Date	Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
70-C	03/22/04	0.0 ± 3.6	-8.0 ± 17.0	1.0 ± 2.2	-0.8 ± 2.3	0.0 ± 19.0	1.0 ± 2.2
	06/02/04	1.6 ± 6.0	-13.0 ± 21.0	0.6 ± 2.8	0.7 ± 3.0	-4.0 ± 28.0	-0.3 ± 2.8
	06/17/04	1.5 ± 4.4	26.0 ± 20.0	-2.4 ± 2.6	0.4 ± 3.0	-8.0 ± 19.0	0.5 ± 2.5
	10/14/04	-0.6 ± 5.0	-24.0 ± 23.0	0.5 ± 2.9	0.0 ± 2.8	2.0 ± 32.0	1.6 ± 2.9
	12/09/04	0.9 ± 3.7	7.4 ± 8.5	0.0 ± 0.9	0.1 ± 1.1	-5.0 ± 12.0	0.3 ± 0.8

Location	Collection Date	Cs-137	Fe-59	H-3	I-131	K-40	La-140
70-C	03/22/04	0.7 ± 2.1	-3.3 ± 5.3	H	0.5 ± 4.2	16.0 ± 32.0	0.0 ± 4.2
	06/02/04	-1.2 ± 2.8	7.7 ± 8.3	280.0 ± 740.0	1.1 ± 7.9	7.0 ± 34.0	1.9 ± 6.9
	06/17/04	1.1 ± 2.3	2.2 ± 6.7	470.0 ± 930.0	-5.2 ± 4.8	43.0 ± 32.0	1.7 ± 5.1
	10/14/04	-0.9 ± 2.7	3.2 ± 7.5	-730.0 ± 680.0	2.9 ± 8.5	-25.0 ± 32.0	-0.7 ± 5.8
	12/09/04	0.3 ± 0.8	-1.2 ± 2.9	-110.0 ± 850.0	1.2 ± 8.3	15.0 ± 15.0	1.0 ± 4.3

Location	Collection Date	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Sr-90
70-C	03/22/04	0.0 ± 1.9	-2.2 ± 2.6	-1.2 ± 2.4	-7.0 ± 19.0	-2.6 ± 5.3	2.2 ± 1.1
	06/02/04	-0.8 ± 2.7	5.0 ± 5.3	-2.0 ± 3.2	28.0 ± 25.0	2.2 ± 7.0	0.8 ± 1.1
	06/17/04	-0.3 ± 2.4	-2.4 ± 3.3	-1.8 ± 2.5	11.0 ± 18.0	-1.5 ± 6.1	-0.2 ± 1.0
	10/14/04	-1.9 ± 2.4	-3.2 ± 3.7	-0.4 ± 3.5	1.0 ± 25.0	-3.5 ± 7.5	0.9 ± 0.8
	12/09/04	-0.3 ± 0.8	0.7 ± 1.2	-1.2 ± 1.7	-10.3 ± 7.6	0.1 ± 2.1	-0.9 ± 1.1

Location	Collection Date	Th-228	Zn-65	Zr-95
70-C	03/22/04	7.5 ± 7.3	6.7 ± 8.8	0.6 ± 3.8
	06/02/04	-2.4 ± 9.8	5.0 ± 11.0	5.1 ± 5.4
	06/17/04	2.0 ± 11.0	3.0 ± 11.0	0.6 ± 4.5
	10/14/04	-2.2 ± 8.7	2.0 ± 11.0	-0.8 ± 4.8
	12/09/04	0.6 ± 4.9	0.9 ± 2.5	0.4 ± 1.7

Location	Collection Date	Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
71	03/23/04	2.4 ± 4.3	-8.0 ± 19.0	0.0 ± 2.3	1.3 ± 2.6	-22.0 ± 23.0	0.0 ± 2.4
	06/07/04	3.9 ± 6.3	11.0 ± 35.0	-1.4 ± 3.8	2.4 ± 4.2	-22.0 ± 36.0	-3.7 ± 3.9
	06/17/04	-4.1 ± 4.6	11.0 ± 22.0	-1.9 ± 2.6	1.7 ± 2.4	15.0 ± 24.0	-0.2 ± 2.5
	09/09/04	5.3 ± 5.0	-25.0 ± 25.0	-0.9 ± 2.8	1.0 ± 2.5	5.0 ± 26.0	-0.7 ± 2.8
	12/13/04	-4.9 ± 4.4	4.0 ± 12.0	-1.0 ± 1.4	0.1 ± 1.3	-1.0 ± 17.0	-1.1 ± 1.3

Location	Collection Date	Cs-137	Fe-59	H-3	I-131	K-40	La-140
71	03/23/04	-1.4 ± 2.7	0.1 ± 7.9	H	-3.4 ± 4.4	-8.0 ± 41.0	2.8 ± 4.9
	06/07/04	1.4 ± 3.7	2.0 ± 10.0	540.0 ± 740.0	1.9 ± 7.2	37.0 ± 63.0	4.4 ± 7.2
	06/17/04	-2.9 ± 2.3	1.3 ± 5.9	480.0 ± 930.0	1.1 ± 5.5	39.0 ± 28.0	-4.7 ± 5.3
	09/09/04	1.1 ± 2.3	5.5 ± 6.8	-50.0 ± 940.0	-1.5 ± 5.5	-7.0 ± 32.0	6.1 ± 5.7
	12/13/04	-0.8 ± 1.2	-1.0 ± 4.0	600.0 ± 870.0	0.8 ± 8.5	-7.0 ± 20.0	-5.7 ± 5.0

Location	Collection Date	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Sr-90
71	03/23/04	-0.6 ± 2.3	-2.2 ± 2.9	-0.7 ± 2.5	2.0 ± 22.0	-3.0 ± 6.3	1.3 ± 1.1
	06/07/04	-4.4 ± 3.7	-1.5 ± 4.7	-2.7 ± 4.3	4.0 ± 32.0	5.5 ± 9.8	-0.3 ± 1.0
	06/17/04	1.3 ± 2.3	1.8 ± 2.9	-2.0 ± 2.8	1.0 ± 22.0	2.5 ± 6.1	1.0 ± 1.1
	09/09/04	-0.4 ± 2.7	2.4 ± 5.1	-0.1 ± 3.0	-20.0 ± 21.0	3.5 ± 7.6	-0.1 ± 0.9
	12/13/04	0.0 ± 1.3	1.0 ± 2.3	-1.5 ± 2.7	8.0 ± 12.0	-1.6 ± 3.1	-0.2 ± 0.9

Table 10, Well Water (pCi/l)

Location	Collection Date	Th-228	Zn-65	Zr-95			
71	03/23/04	5.0 ± 12.0	7.4 ± 9.1	0.2 ± 4.3			
	06/07/04	0.0 ± 16.0	12.0 ± 14.0	1.0 ± 5.9			
	06/17/04	6.0 ± 11.0	6.0 ± 11.0	2.3 ± 4.1			
	09/09/04	6.0 ± 10.0	11.0 ± 14.0	2.4 ± 4.6			
	12/13/04	-1.6 ± 6.1	-1.3 ± 2.9	1.2 ± 2.7			
72		**Ba-140**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/23/04	2.3 ± 3.3	6.0 ± 19.0	0.5 ± 2.2	-0.4 ± 2.0	9.0 ± 20.0	1.7 ± 2.4
	06/07/04	-2.9 ± 4.3	-23.0 ± 22.0	-2.8 ± 2.3	1.8 ± 2.5	13.0 ± 26.0	0.6 ± 2.8
	06/17/04	0.0 ± 4.1	-1.0 ± 21.0	-1.7 ± 2.6	1.2 ± 2.5	32.0 ± 23.0	0.0 ± 2.7
	09/08/04	0.0 ± 3.6	-15.0 ± 18.0	-0.5 ± 2.4	0.2 ± 2.7	8.0 ± 23.0	-0.7 ± 2.6
	12/16/04	-2.7 ± 3.9	3.0 ± 13.0	-1.6 ± 1.5	0.5 ± 1.3	16.0 ± 15.0	-0.8 ± 1.4
		Cs-137	**Fe-59**	**H-3**	**I-131**	**K-40**	**La-140**
	03/23/04	0.6 ± 2.1	-2.7 ± 5.3	H	-0.2 ± 4.0	16.0 ± 37.0	2.6 ± 3.8
	06/07/04	-1.8 ± 2.8	1.4 ± 6.6	70.0 ± 720.0	-0.5 ± 5.3	-17.0 ± 35.0	-3.4 ± 5.0
	06/17/04	1.1 ± 2.3	0.5 ± 5.8	760.0 ± 800.0	-3.1 ± 5.6	-28.0 ± 35.0	0.0 ± 4.7
	09/08/04	-0.1 ± 2.1	6.0 ± 6.4	-20.0 ± 930.0	2.3 ± 5.8	-5.0 ± 29.0	0.0 ± 4.1
	12/16/04	-0.6 ± 1.2	-1.8 ± 3.7	350.0 ± 870.0	-1.7 ± 6.5	9.0 ± 22.0	-3.1 ± 4.5
		Mn-54	**Nb-95**	**Ru-103**	**Ru-106**	**Sb-125**	**Sr-90**
	03/23/04	-0.4 ± 2.2	0.5 ± 2.5	-2.7 ± 2.4	14.0 ± 19.0	-0.8 ± 5.6	1.2 ± 0.9
	06/07/04	0.8 ± 2.5	1.0 ± 2.7	0.6 ± 2.6	24.0 ± 23.0	-0.9 ± 6.8	0.3 ± 1.0
	06/17/04	0.4 ± 2.5	3.2 ± 4.5	2.4 ± 2.8	-10.0 ± 22.0	0.8 ± 6.1	1.5 ± 1.1
	09/08/04	0.6 ± 2.1	-0.9 ± 3.8	-1.3 ± 2.5	0.0 ± 19.0	1.0 ± 5.8	-0.3 ± 0.9
	12/16/04	1.0 ± 1.3	0.8 ± 1.8	-1.7 ± 2.8	3.0 ± 12.0	0.5 ± 3.3	-0.6 ± 0.9
		Th-228	**Zn-65**	**Zr-95**			
	03/23/04	-2.7 ± 7.8	-2.9 ± 9.2	1.6 ± 3.8			
	06/07/04	-0.3 ± 9.8	-2.0 ± 11.0	-0.2 ± 4.6			
	06/17/04	-9.9 ± 9.3	8.3 ± 9.9	1.1 ± 4.5			
	09/08/04	-1.4 ± 9.3	7.0 ± 10.0	0.2 ± 4.0			
	12/16/04	1.3 ± 5.8	-1.3 ± 4.4	1.8 ± 2.6			

Table 12, Fruits & Vegetables (pCi/g wet)

Location	Collection Date	Sample Type	Isotope				
25			**Ba-140**	**Be-7**	**Ce-141**	**Ce-144**	**Co-58**
	06/15/04	LETTUCE	-0.004 ± 0.013	0.170 ± 0.078	-0.008 ± 0.008	0.012 ± 0.026	0.000 ± 0.006
	06/15/04	STRAWBERRIES	-0.005 ± 0.010	-0.008 ± 0.041	0.001 ± 0.009	-0.023 ± 0.023	0.001 ± 0.005
	09/13/04	SWISS CHARD	-0.004 ± 0.011	0.206 ± 0.073	-0.006 ± 0.008	0.010 ± 0.028	-0.004 ± 0.007
	09/21/04	CABBAGE	0.013 ± 0.019	-0.094 ± 0.085	-0.009 ± 0.015	-0.023 ± 0.048	-0.005 ± 0.010
	09/22/04	APPLES	-0.024 ± 0.020	-0.005 ± 0.084	-0.023 ± 0.016	0.006 ± 0.050	0.001 ± 0.010
			Co-60	**Cr-51**	**Cs-134**	**Cs-137**	**Fe-59**
	06/15/04	LETTUCE	0.000 ± 0.007	-0.015 ± 0.058	0.001 ± 0.006	0.000 ± 0.006	-0.011 ± 0.019
	06/15/04	STRAWBERRIES	0.002 ± 0.005	-0.007 ± 0.051	0.003 ± 0.005	-0.002 ± 0.004	0.005 ± 0.013
	09/13/04	SWISS CHARD	0.005 ± 0.008	0.002 ± 0.058	0.002 ± 0.007	-0.004 ± 0.006	-0.006 ± 0.020
	09/21/04	CABBAGE	-0.001 ± 0.009	0.045 ± 0.098	0.000 ± 0.010	0.010 ± 0.008	0.000 ± 0.027
	09/22/04	APPLES	-0.003 ± 0.012	0.050 ± 0.110	-0.003 ± 0.010	0.000 ± 0.010	-0.003 ± 0.033
			I-131	**K-40**	**La-140**	**Mn-54**	**Nb-95**
	06/15/04	LETTUCE	0.000 ± 0.020	3.310 ± 0.190	-0.005 ± 0.015	0.000 ± 0.006	0.005 ± 0.007
	06/15/04	STRAWBERRIES	-0.001 ± 0.018	0.950 ± 0.100	-0.006 ± 0.011	-0.003 ± 0.005	0.002 ± 0.008
	09/13/04	SWISS CHARD	0.018 ± 0.028	3.910 ± 0.270	-0.005 ± 0.012	-0.006 ± 0.006	0.004 ± 0.011
	09/21/04	CABBAGE	-0.015 ± 0.031	1.230 ± 0.220	0.015 ± 0.022	-0.001 ± 0.008	-0.004 ± 0.013
	09/22/04	APPLES	0.001 ± 0.032	0.490 ± 0.200	-0.027 ± 0.023	-0.002 ± 0.010	0.004 ± 0.013
			Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**
	06/15/04	LETTUCE	-0.003 ± 0.006	0.013 ± 0.048	0.010 ± 0.013	-0.001 ± 0.030	0.004 ± 0.013
	06/15/04	STRAWBERRIES	-0.008 ± 0.006	-0.040 ± 0.043	0.000 ± 0.011	0.001 ± 0.022	0.000 ± 0.016
	09/13/04	SWISS CHARD	-0.005 ± 0.006	-0.019 ± 0.051	0.005 ± 0.015	0.015 ± 0.023	-0.001 ± 0.030
	09/21/04	CABBAGE	0.003 ± 0.011	-0.041 ± 0.090	-0.002 ± 0.021	0.012 ± 0.039	-0.022 ± 0.020
	09/22/04	APPLES	0.000 ± 0.011	-0.043 ± 0.087	0.030 ± 0.027	0.024 ± 0.039	0.000 ± 0.026
			Zr-95				
	06/15/04	LETTUCE	0.003 ± 0.010				
	06/15/04	STRAWBERRIES	0.007 ± 0.009				
	09/13/04	SWISS CHARD	0.000 ± 0.011				
	09/21/04	CABBAGE	0.003 ± 0.018				
	09/22/04	APPLES	0.012 ± 0.018				
26-C			**Ba-140**	**Be-7**	**Ce-141**	**Ce-144**	**Co-58**
	06/14/04	LETTUCE	0.004 ± 0.012	0.062 ± 0.046	0.001 ± 0.009	-0.001 ± 0.019	-0.003 ± 0.006
	06/14/04	STRAWBERRIES	0.006 ± 0.011	0.026 ± 0.041	0.008 ± 0.008	-0.022 ± 0.023	0.000 ± 0.005
	09/15/04	APPLES	-0.008 ± 0.021	-0.040 ± 0.140	-0.010 ± 0.022	-0.051 ± 0.077	-0.004 ± 0.015
	09/15/04	CABBAGE	0.007 ± 0.021	0.050 ± 0.100	-0.025 ± 0.016	-0.024 ± 0.054	-0.003 ± 0.015
			Co-60	**Cr-51**	**Cs-134**	**Cs-137**	**Fe-59**
	06/14/04	LETTUCE	-0.001 ± 0.007	-0.027 ± 0.047	0.000 ± 0.006	0.001 ± 0.005	0.000 ± 0.020
	06/14/04	STRAWBERRIES	0.000 ± 0.004	-0.038 ± 0.052	-0.001 ± 0.005	0.004 ± 0.005	-0.007 ± 0.014
	09/15/04	APPLES	-0.003 ± 0.018	0.040 ± 0.150	0.009 ± 0.016	-0.006 ± 0.017	-0.026 ± 0.047
	09/15/04	CABBAGE	0.006 ± 0.019	-0.100 ± 0.120	-0.006 ± 0.016	-0.003 ± 0.013	0.005 ± 0.047
			I-131	**K-40**	**La-140**	**Mn-54**	**Nb-95**
	06/14/04	LETTUCE	-0.005 ± 0.018	3.060 ± 0.190	0.004 ± 0.014	-0.003 ± 0.005	0.001 ± 0.007
	06/14/04	STRAWBERRIES	-0.014 ± 0.020	1.150 ± 0.110	0.007 ± 0.013	0.003 ± 0.004	-0.002 ± 0.006
	09/15/04	APPLES	0.016 ± 0.027	0.800 ± 0.320	-0.010 ± 0.025	0.002 ± 0.014	0.000 ± 0.020
	09/15/04	CABBAGE	-0.017 ± 0.016	1.800 ± 0.480	0.008 ± 0.024	0.006 ± 0.012	0.008 ± 0.016
			Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**
	06/14/04	LETTUCE	-0.003 ± 0.006	-0.014 ± 0.044	0.004 ± 0.011	0.002 ± 0.026	0.007 ± 0.013
	06/14/04	STRAWBERRIES	-0.006 ± 0.005	-0.022 ± 0.041	-0.004 ± 0.012	-0.012 ± 0.022	-0.004 ± 0.010

Table 12, Fruits & Vegetables (pCi/g wet)

Location	Collection Date	Sample Type	Ru-103	Ru-106	Sb-125	Th-228	Zn-65
26-C							
	09/15/04	APPLES	-0.017 ± 0.016	0.100 ± 0.150	-0.002 ± 0.043	-0.020 ± 0.067	0.019 ± 0.077
	09/15/04	CABBAGE	-0.008 ± 0.013	0.020 ± 0.120	-0.008 ± 0.039	-0.046 ± 0.059	-0.014 ± 0.039

Location	Collection Date	Sample Type	Zr-95
26-C	06/14/04	LETTUCE	-0.001 ± 0.010
	06/14/04	STRAWBERRIES	-0.009 ± 0.008
	09/15/04	APPLES	0.002 ± 0.028
	09/15/04	CABBAGE	0.017 ± 0.023

Table 13, Broadleaf Vegetation (pCi/g wet)

Location	Collection Date	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
01	05/19/04	0.000 ± 0.038	0.970 ± 0.320	-0.024 ± 0.027	0.003 ± 0.092	-0.002 ± 0.022	-0.010 ± 0.023
	06/09/04	0.000 ± 0.038	0.280 ± 0.320	-0.022 ± 0.034	-0.020 ± 0.110	0.003 ± 0.027	0.011 ± 0.024
	07/27/04	-0.005 ± 0.022	0.320 ± 0.230	-0.007 ± 0.021	-0.010 ± 0.062	0.008 ± 0.021	-0.005 ± 0.024
	08/25/04	-0.008 ± 0.035	0.230 ± 0.180	0.009 ± 0.034	-0.078 ± 0.076	0.017 ± 0.018	0.009 ± 0.022
	09/15/04	0.038 ± 0.045	1.010 ± 0.400	-0.029 ± 0.033	0.020 ± 0.110	0.000 ± 0.026	0.011 ± 0.027
	10/06/04	0.013 ± 0.054	0.840 ± 0.300	0.003 ± 0.039	-0.034 ± 0.089	-0.014 ± 0.022	-0.002 ± 0.021

Location	Collection Date	Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
01	05/19/04	-0.060 ± 0.200	0.018 ± 0.023	0.003 ± 0.018	0.047 ± 0.061	-0.021 ± 0.052	3.630 ± 0.750
	06/09/04	0.110 ± 0.280	-0.008 ± 0.030	0.003 ± 0.025	-0.035 ± 0.087	0.016 ± 0.069	2.810 ± 0.760
	07/27/04	0.000 ± 0.130	0.005 ± 0.024	0.018 ± 0.019	-0.040 ± 0.070	-0.028 ± 0.029	3.520 ± 0.710
	08/25/04	-0.110 ± 0.160	-0.002 ± 0.021	0.012 ± 0.018	-0.015 ± 0.049	0.013 ± 0.053	3.740 ± 0.540
	09/15/04	-0.020 ± 0.220	0.000 ± 0.024	0.007 ± 0.025	-0.034 ± 0.060	0.024 ± 0.065	1.630 ± 0.670
	10/06/04	0.100 ± 0.260	-0.002 ± 0.021	0.021 ± 0.023	0.061 ± 0.059	-0.056 ± 0.095	3.100 ± 0.600

Location	Collection Date	La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
01	05/19/04	0.000 ± 0.043	0.000 ± 0.023	-0.010 ± 0.028	0.010 ± 0.021	-0.120 ± 0.200	-0.031 ± 0.050
	06/09/04	0.000 ± 0.044	0.032 ± 0.028	0.021 ± 0.032	-0.004 ± 0.028	-0.190 ± 0.260	0.039 ± 0.049
	07/27/04	-0.006 ± 0.026	0.006 ± 0.020	0.013 ± 0.021	0.000 ± 0.019	-0.130 ± 0.150	0.032 ± 0.048
	08/25/04	-0.009 ± 0.040	-0.005 ± 0.018	-0.004 ± 0.023	0.005 ± 0.018	0.020 ± 0.150	0.005 ± 0.045
	09/15/04	0.044 ± 0.052	-0.003 ± 0.024	0.002 ± 0.032	0.002 ± 0.027	-0.110 ± 0.230	-0.037 ± 0.064
	10/06/04	0.015 ± 0.062	-0.015 ± 0.019	0.007 ± 0.029	0.004 ± 0.024	-0.280 ± 0.190	0.012 ± 0.047

Location	Collection Date	Th-228	Zn-65	Zr-95
01	05/19/04	-0.012 ± 0.098	-0.036 ± 0.050	-0.004 ± 0.037
	06/09/04	0.074 ± 0.096	-0.125 ± 0.081	0.032 ± 0.050
	07/27/04	0.011 ± 0.071	-0.014 ± 0.053	-0.009 ± 0.032
	08/25/04	0.088 ± 0.078	0.055 ± 0.083	0.029 ± 0.032
	09/15/04	0.028 ± 0.093	-0.039 ± 0.072	0.000 ± 0.054
	10/06/04	0.024 ± 0.087	-0.026 ± 0.053	-0.012 ± 0.042

Location	Collection Date	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
10	05/19/04	0.023 ± 0.023	0.360 ± 0.150	-0.007 ± 0.012	0.010 ± 0.041	-0.006 ± 0.014	0.002 ± 0.012
	06/09/04	0.007 ± 0.025	0.340 ± 0.210	-0.009 ± 0.018	0.025 ± 0.051	0.003 ± 0.013	0.011 ± 0.023
	07/27/04	0.000 ± 0.023	0.130 ± 0.200	-0.004 ± 0.018	-0.044 ± 0.071	0.009 ± 0.018	0.008 ± 0.024
	08/25/04	0.028 ± 0.034	0.120 ± 0.160	0.011 ± 0.019	-0.062 ± 0.053	-0.007 ± 0.017	0.004 ± 0.020
	09/21/04	0.013 ± 0.029	0.750 ± 0.240	-0.025 ± 0.025	0.031 ± 0.085	0.012 ± 0.017	0.002 ± 0.022
	10/06/04	0.000 ± 0.050	0.310 ± 0.260	0.017 ± 0.027	0.023 ± 0.072	-0.021 ± 0.027	-0.007 ± 0.027

Location	Collection Date	Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
10	05/19/04	0.040 ± 0.110	-0.010 ± 0.013	0.014 ± 0.015	-0.035 ± 0.050	-0.001 ± 0.027	2.590 ± 0.570
	06/09/04	0.050 ± 0.110	0.001 ± 0.017	0.015 ± 0.020	-0.043 ± 0.065	-0.020 ± 0.039	1.360 ± 0.480
	07/27/04	-0.010 ± 0.180	-0.003 ± 0.028	-0.006 ± 0.021	-0.086 ± 0.092	0.002 ± 0.035	3.060 ± 0.850
	08/25/04	0.040 ± 0.140	-0.019 ± 0.021	-0.001 ± 0.018	-0.065 ± 0.069	-0.016 ± 0.041	3.690 ± 0.620
	09/21/04	0.050 ± 0.150	-0.004 ± 0.019	0.005 ± 0.016	0.002 ± 0.052	0.012 ± 0.050	3.490 ± 0.590
	10/06/04	0.020 ± 0.160	0.003 ± 0.022	0.007 ± 0.026	-0.022 ± 0.088	0.008 ± 0.066	2.100 ± 0.690

Table 13, Broadleaf Vegetation (pCi/g wet)

Location	Collection Date	La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
10	05/19/04	0.026 ± 0.026	0.002 ± 0.012	0.000 ± 0.016	-0.001 ± 0.013	0.000 ± 0.092	-0.021 ± 0.024
	06/09/04	0.008 ± 0.028	-0.003 ± 0.020	-0.008 ± 0.021	-0.007 ± 0.015	-0.050 ± 0.160	-0.018 ± 0.043
	07/27/04	0.000 ± 0.027	-0.027 ± 0.027	0.005 ± 0.032	-0.019 ± 0.021	-0.210 ± 0.180	-0.049 ± 0.054
	08/25/04	0.032 ± 0.039	-0.008 ± 0.017	-0.012 ± 0.025	0.006 ± 0.018	-0.010 ± 0.130	-0.040 ± 0.036
	09/21/04	0.015 ± 0.034	-0.015 ± 0.017	-0.005 ± 0.024	0.006 ± 0.019	-0.060 ± 0.180	0.025 ± 0.045
	10/06/04	0.000 ± 0.057	-0.010 ± 0.025	0.011 ± 0.030	0.010 ± 0.026	0.040 ± 0.160	-0.024 ± 0.048

Location	Collection Date	Th-228	Zn-65	Zr-95
10	05/19/04	0.021 ± 0.054	0.000 ± 0.031	0.001 ± 0.021
	06/09/04	0.018 ± 0.046	-0.011 ± 0.045	0.004 ± 0.030
	07/27/04	0.024 ± 0.085	0.000 ± 0.055	0.019 ± 0.036
	08/25/04	-0.010 ± 0.067	0.043 ± 0.082	-0.007 ± 0.033
	09/21/04	0.071 ± 0.080	0.012 ± 0.050	0.008 ± 0.034
	10/06/04	0.024 ± 0.087	-0.014 ± 0.050	-0.031 ± 0.050

Location	Collection Date	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
17	05/19/04	0.009 ± 0.045	0.450 ± 0.230	0.010 ± 0.019	0.020 ± 0.059	-0.001 ± 0.015	-0.001 ± 0.021
	06/09/04	0.026 ± 0.067	0.310 ± 0.290	-0.020 ± 0.034	-0.050 ± 0.110	0.006 ± 0.028	0.021 ± 0.033
	07/27/04	-0.005 ± 0.034	0.410 ± 0.220	0.002 ± 0.019	-0.004 ± 0.062	-0.011 ± 0.024	0.028 ± 0.027
	08/25/04	-0.018 ± 0.034	0.950 ± 0.280	-0.033 ± 0.028	0.009 ± 0.083	-0.009 ± 0.019	-0.013 ± 0.021
	09/15/04	0.008 ± 0.046	0.570 ± 0.270	-0.010 ± 0.024	0.009 ± 0.073	0.011 ± 0.019	-0.022 ± 0.027
	10/06/04	-0.016 ± 0.071	2.230 ± 0.390	-0.017 ± 0.028	0.037 ± 0.069	0.006 ± 0.023	0.004 ± 0.030

Location	Collection Date	Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
17	05/19/04	-0.050 ± 0.150	0.008 ± 0.013	0.019 ± 0.019	0.004 ± 0.076	-0.002 ± 0.040	3.390 ± 0.770
	06/09/04	-0.180 ± 0.250	0.027 ± 0.031	0.016 ± 0.024	0.026 ± 0.065	0.000 ± 0.080	1.860 ± 0.660
	07/27/04	0.100 ± 0.150	-0.011 ± 0.024	0.048 ± 0.029	0.015 ± 0.069	0.016 ± 0.031	2.080 ± 0.630
	08/25/04	-0.040 ± 0.210	0.000 ± 0.021	0.051 ± 0.028	-0.031 ± 0.063	-0.034 ± 0.061	2.060 ± 0.520
	09/15/04	-0.120 ± 0.140	0.012 ± 0.027	0.002 ± 0.020	-0.005 ± 0.059	0.003 ± 0.038	3.440 ± 0.750
	10/06/04	-0.030 ± 0.180	-0.003 ± 0.024	-0.009 ± 0.022	0.014 ± 0.079	-0.002 ± 0.075	2.050 ± 0.550

Location	Collection Date	La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
17	05/19/04	0.010 ± 0.052	0.006 ± 0.018	0.014 ± 0.019	0.003 ± 0.018	-0.160 ± 0.170	-0.014 ± 0.037
	06/09/04	0.030 ± 0.077	0.022 ± 0.028	0.020 ± 0.036	0.015 ± 0.031	-0.200 ± 0.210	-0.016 ± 0.052
	07/27/04	-0.006 ± 0.039	0.008 ± 0.020	-0.018 ± 0.025	-0.016 ± 0.021	-0.040 ± 0.130	0.017 ± 0.046
	08/25/04	-0.021 ± 0.039	0.003 ± 0.019	0.011 ± 0.026	0.002 ± 0.024	0.050 ± 0.190	0.038 ± 0.050
	09/15/04	0.009 ± 0.053	0.001 ± 0.024	-0.002 ± 0.027	0.004 ± 0.019	-0.040 ± 0.150	-0.025 ± 0.047
	10/06/04	-0.018 ± 0.082	-0.003 ± 0.021	0.012 ± 0.029	0.016 ± 0.023	-0.070 ± 0.160	-0.009 ± 0.049

Location	Collection Date	Th-228	Zn-65	Zr-95
17	05/19/04	0.049 ± 0.072	-0.007 ± 0.041	-0.025 ± 0.037
	06/09/04	0.049 ± 0.094	-0.105 ± 0.075	0.041 ± 0.044
	07/27/04	0.028 ± 0.082	-0.010 ± 0.044	-0.028 ± 0.036
	08/25/04	-0.045 ± 0.065	-0.039 ± 0.051	0.005 ± 0.036
	09/15/04	0.010 ± 0.094	-0.025 ± 0.056	0.027 ± 0.049
	10/06/04	-0.028 ± 0.089	-0.018 ± 0.050	0.004 ± 0.044

Table 14, Sea Water (pCi/L)

Location	Collection Date	Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
32	01/27/04	1.6 ± 2.9	-7.0 ± 17.0	-1.5 ± 2.0	-1.9 ± 2.6	6.0 ± 19.0	1.6 ± 2.1
	02/24/04	0.0 ± 3.0	0.0 ± 19.0	-2.1 ± 2.0	1.5 ± 1.8	-2.0 ± 19.0	1.4 ± 2.4
	03/30/04	1.8 ± 4.1	18.0 ± 21.0	0.2 ± 2.2	1.6 ± 2.8	18.0 ± 23.0	-1.8 ± 2.3
	04/27/04	0.5 ± 3.0	-19.0 ± 19.0	-1.2 ± 2.3	-1.9 ± 2.5	3.0 ± 24.0	0.0 ± 2.1
	05/25/04	-2.9 ± 4.1	0.0 ± 17.0	0.6 ± 1.7	-2.0 ± 1.9	18.0 ± 21.0	1.1 ± 1.7
	06/29/04	-1.5 ± 4.2	-1.0 ± 23.0	-1.2 ± 2.5	-1.2 ± 2.7	4.0 ± 28.0	0.2 ± 2.9
	07/27/04	0.0 ± 4.2	-4.0 ± 17.0	-1.1 ± 1.9	0.5 ± 2.3	20.0 ± 23.0	-0.7 ± 1.9
	08/31/04	0.0 ± 4.5	8.0 ± 14.0	-0.5 ± 1.8	-0.3 ± 2.1	-5.0 ± 19.0	-1.5 ± 2.2
	09/28/04	0.5 ± 2.6	-2.0 ± 14.0	-0.9 ± 1.5	0.4 ± 1.9	-5.0 ± 18.0	0.6 ± 2.0
	10/26/04	-2.4 ± 4.5	-12.0 ± 26.0	0.2 ± 2.5	-1.2 ± 1.8	3.0 ± 26.0	0.2 ± 2.3
	11/30/04	0.4 ± 2.6	7.0 ± 20.0	-0.4 ± 2.4	-1.5 ± 1.9	12.0 ± 23.0	0.0 ± 2.4
	12/28/04	-1.1 ± 5.8	-3.0 ± 18.0	0.1 ± 2.4	0.4 ± 2.6	-16.0 ± 24.0	-1.0 ± 2.5

Location	Collection Date	Cs-137	Fe-59	H-3	I-131	K-40	La-140
32	01/27/04	-0.2 ± 2.2	-3.1 ± 6.0	380.0 ± 180.0	1.8 ± 4.1	285.0 ± 55.0	1.8 ± 3.3
	02/24/04	-0.5 ± 1.8	-0.7 ± 4.9	1000.0 ± 190.0	3.1 ± 3.8	302.0 ± 55.0	0.0 ± 3.4
	03/30/04	-0.2 ± 2.8	-2.3 ± 6.7	1660.0 ± 180.0	0.0 ± 4.5	273.0 ± 67.0	2.1 ± 4.7
	04/27/04	-0.2 ± 2.4	5.0 ± 6.6	980.0 ± 230.0	-5.9 ± 5.0	255.0 ± 56.0	0.5 ± 3.4
	05/25/04	0.3 ± 1.9	1.3 ± 5.6	220.0 ± 190.0	-0.7 ± 5.5	315.0 ± 50.0	-3.4 ± 4.7
	06/29/04	-2.6 ± 2.9	7.7 ± 6.2	1050.0 ± 180.0	0.5 ± 5.4	290.0 ± 64.0	-1.7 ± 4.9
	07/27/04	-0.2 ± 2.4	-0.1 ± 6.8	180.0 ± 170.0	-0.8 ± 5.2	300.0 ± 58.0	0.0 ± 4.8
	08/31/04	-1.0 ± 1.9	3.2 ± 5.5	190.0 ± 180.0	4.7 ± 5.8	21.0 ± 33.0	0.0 ± 5.2
	09/28/04	-0.3 ± 1.7	-3.6 ± 5.2	-30.0 ± 130.0	1.4 ± 3.5	320.0 ± 46.0	0.6 ± 3.0
	10/26/04	0.1 ± 2.4	1.0 ± 7.5	108.0 ± 82.0	0.0 ± 7.3	264.0 ± 67.0	-2.8 ± 5.2
	11/30/04	0.0 ± 2.4	-2.8 ± 6.7	243.0 ± 86.0	3.2 ± 4.5	283.0 ± 59.0	0.4 ± 3.0
	12/28/04	-1.2 ± 2.9	2.4 ± 8.4	480.0 ± 210.0	2.3 ± 7.3	285.0 ± 62.0	-1.3 ± 6.7

Location	Collection Date	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228
32	01/27/04	0.3 ± 1.9	-0.4 ± 2.2	0.8 ± 2.2	10.0 ± 18.0	3.6 ± 5.5	-0.9 ± 9.7
	02/24/04	-1.0 ± 1.8	0.3 ± 2.4	1.1 ± 2.4	20.0 ± 20.0	1.5 ± 5.7	-3.5 ± 8.6
	03/30/04	1.1 ± 2.3	-0.6 ± 2.4	-1.1 ± 2.6	10.0 ± 19.0	1.9 ± 6.4	-3.7 ± 8.4
	04/27/04	-1.1 ± 2.1	0.6 ± 2.4	-1.4 ± 2.3	10.0 ± 21.0	2.8 ± 5.8	5.2 ± 7.7
	05/25/04	-0.7 ± 1.5	-0.9 ± 2.2	-1.9 ± 2.0	1.0 ± 16.0	-0.2 ± 5.1	6.7 ± 5.8
	06/29/04	-0.4 ± 2.5	-0.3 ± 2.9	0.3 ± 3.0	14.0 ± 22.0	-1.7 ± 7.6	-2.6 ± 8.7
	07/27/04	-0.4 ± 2.2	0.1 ± 2.6	-0.3 ± 2.5	3.0 ± 22.0	1.7 ± 5.0	3.0 ± 8.3
	08/31/04	0.1 ± 1.5	-0.1 ± 2.4	0.5 ± 2.0	-8.0 ± 17.0	-1.0 ± 4.1	-1.5 ± 9.9
	09/28/04	-0.7 ± 1.7	-0.4 ± 1.9	-1.1 ± 1.7	0.0 ± 14.0	4.0 ± 4.6	6.2 ± 6.0
	10/26/04	-0.2 ± 2.5	0.3 ± 3.1	-1.8 ± 3.3	-8.0 ± 25.0	2.8 ± 6.0	8.2 ± 9.2
	11/30/04	-0.3 ± 2.2	-0.5 ± 2.8	-1.2 ± 2.7	17.0 ± 21.0	-2.9 ± 5.5	4.2 ± 7.7
	12/28/04	1.1 ± 2.4	-0.7 ± 2.9	-1.0 ± 2.6	-4.0 ± 22.0	-4.7 ± 6.0	3.3 ± 7.9

Location	Collection Date	Zn-65	Zr-95
32	01/27/04	-6.8 ± 4.6	-1.1 ± 3.6
	02/24/04	1.4 ± 5.2	1.3 ± 3.6
	03/30/04	-3.8 ± 5.5	-1.0 ± 4.2
	04/27/04	-1.8 ± 5.1	-2.3 ± 3.8
	05/25/04	-3.6 ± 4.6	-3.2 ± 3.0
	06/29/04	-1.6 ± 6.3	-1.6 ± 4.9
	07/27/04	-5.1 ± 4.7	-0.9 ± 3.9
	08/31/04	1.9 ± 3.7	1.4 ± 3.3
	09/28/04	0.2 ± 3.5	0.3 ± 2.9
	10/26/04	3.6 ± 5.6	-2.9 ± 4.6
	11/30/04	9.3 ± 8.9	0.6 ± 4.1
	12/28/04	-2.3 ± 4.9	3.4 ± 4.8

Table 14, Sea Water (pCi/L)

Location	Collection Date	Isotope					
37-C		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
	03/09/04	1.8 ± 4.7	5.0 ± 20.0	-1.4 ± 2.2	0.3 ± 2.1	19.0 ± 23.0	0.3 ± 2.3
	06/08/04	2.0 ± 3.5	4.0 ± 16.0	-1.8 ± 1.9	0.2 ± 1.6	12.0 ± 21.0	-0.1 ± 1.6
	09/07/04	1.0 ± 3.4	0.0 ± 14.0	-1.3 ± 1.9	0.8 ± 2.5	3.0 ± 15.0	0.2 ± 2.1
	11/16/04	3.8 ± 5.9	16.0 ± 25.0	-1.3 ± 2.6	1.4 ± 3.0	-3.0 ± 28.0	0.2 ± 2.8
		Cs-137	Fe-59	H-3	I-131	K-40	La-140
	03/09/04	-1.8 ± 2.0	-2.6 ± 6.4	150.0 ± 840.0	-8.0 ± 7.6	265.0 ± 55.0	2.0 ± 5.4
	06/08/04	-2.8 ± 1.8	1.9 ± 4.8	240.0 ± 920.0	1.3 ± 6.5	241.0 ± 36.0	2.3 ± 4.0
	09/07/04	0.1 ± 1.8	2.4 ± 4.8	-40.0 ± 170.0	0.8 ± 3.0	-18.0 ± 34.0	1.2 ± 3.9
	11/16/04	-1.3 ± 3.1	-0.5 ± 8.9	-430.0 ± 670.0	-4.7 ± 7.5	337.0 ± 74.0	4.4 ± 6.8
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228
	03/09/04	-2.0 ± 1.9	-1.4 ± 2.5	-1.3 ± 2.5	18.0 ± 21.0	0.3 ± 5.0	0.2 ± 7.5
	06/08/04	0.5 ± 1.5	1.3 ± 3.3	0.0 ± 1.9	5.0 ± 14.0	-1.1 ± 5.1	1.6 ± 5.8
	09/07/04	-0.4 ± 2.0	0.2 ± 2.6	-1.6 ± 2.0	-1.0 ± 16.0	2.3 ± 5.0	3.2 ± 9.6
	11/16/04	-1.4 ± 2.5	-1.9 ± 3.3	1.5 ± 3.0	-15.0 ± 23.0	0.0 ± 6.3	-6.0 ± 11.0
		Zn-65	Zr-95				
	03/09/04	-0.4 ± 4.4	-5.5 ± 4.4				
	06/08/04	12.0 ± 8.0	-2.4 ± 3.0				
	09/07/04	0.0 ± 4.3	-0.3 ± 3.6				
	11/16/04	-7.2 ± 6.4	2.1 ± 4.6				

Table 15, Bottom Sediment (pCi/g dry)

Location	Collection Date	Isotope					
29		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	07/20/04	0.011 ± 0.031	0.280 ± 0.250	-0.022 ± 0.024	0.021 ± 0.025	0.210 ± 0.260	-0.005 ± 0.024
	12/09/04	0.006 ± 0.020	0.300 ± 0.260	-0.019 ± 0.020	0.004 ± 0.013	-0.230 ± 0.280	0.030 ± 0.054
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	07/20/04	0.030 ± 0.027	-0.044 ± 0.054	0.076 ± 0.075	13.040 ± 0.890	-0.003 ± 0.024	-0.018 ± 0.030
	12/09/04	0.028 ± 0.018	0.013 ± 0.049	0.040 ± 0.290	15.150 ± 0.580	-0.007 ± 0.012	-0.032 ± 0.042
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	07/20/04	-0.010 ± 0.024	0.030 ± 0.220	0.047 ± 0.059	0.950 ± 0.100	0.080 ± 0.110	-5.400 ± 5.400
	12/09/04	-0.008 ± 0.025	0.040 ± 0.140	-0.008 ± 0.040	1.138 ± 0.063	-0.057 ± 0.072	0.040 ± 0.170
31		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	05/04/04	0.006 ± 0.027	0.040 ± 0.220	-0.001 ± 0.023	0.012 ± 0.022	0.030 ± 0.280	0.048 ± 0.085
	11/09/04	0.020 ± 0.042	0.060 ± 0.360	0.006 ± 0.035	0.008 ± 0.025	-0.150 ± 0.420	-0.003 ± 0.032
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	05/04/04	-0.013 ± 0.028	-0.029 ± 0.067	-0.008 ± 0.053	12.970 ± 0.770	-0.013 ± 0.019	-0.014 ± 0.030
	11/09/04	-0.027 ± 0.037	-0.010 ± 0.069	-0.060 ± 0.110	12.820 ± 0.970	-0.014 ± 0.041	0.024 ± 0.047
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	05/04/04	0.001 ± 0.024	0.100 ± 0.230	0.000 ± 0.074	2.720 ± 0.120	0.000 ± 0.100	0.190 ± 0.210
	11/09/04	-0.009 ± 0.044	-0.330 ± 0.330	0.054 ± 0.096	4.210 ± 0.190	-0.060 ± 0.120	0.240 ± 0.450
32		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	02/24/04	-0.005 ± 0.025	0.020 ± 0.150	-0.012 ± 0.017	0.024 ± 0.021	0.030 ± 0.170	0.023 ± 0.072
	05/25/04	-0.003 ± 0.025	0.030 ± 0.150	-0.007 ± 0.019	0.019 ± 0.020	-0.030 ± 0.200	-0.045 ± 0.073
	07/20/04	-0.008 ± 0.034	-0.050 ± 0.230	0.022 ± 0.029	-0.003 ± 0.030	-0.150 ± 0.260	0.000 ± 0.023
	12/09/04	0.015 ± 0.029	0.120 ± 0.280	-0.002 ± 0.032	0.007 ± 0.028	-0.150 ± 0.360	-0.005 ± 0.019
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	02/24/04	-0.004 ± 0.022	0.012 ± 0.040	0.000 ± 0.035	12.910 ± 0.790	0.017 ± 0.019	-0.010 ± 0.020
	05/25/04	-0.009 ± 0.022	-0.049 ± 0.046	0.027 ± 0.056	7.830 ± 0.730	0.014 ± 0.018	0.022 ± 0.038
	07/20/04	0.020 ± 0.029	-0.028 ± 0.068	0.046 ± 0.072	15.700 ± 1.100	0.020 ± 0.030	-0.047 ± 0.042
	12/09/04	0.016 ± 0.026	-0.036 ± 0.081	-0.150 ± 0.350	12.300 ± 0.970	0.015 ± 0.025	-0.009 ± 0.059
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	02/24/04	-0.004 ± 0.018	-0.020 ± 0.180	0.033 ± 0.048	0.690 ± 0.077	0.087 ± 0.088	-0.051 ± 0.075
	05/25/04	-0.009 ± 0.020	-0.030 ± 0.160	-0.011 ± 0.049	0.478 ± 0.083	0.050 ± 0.090	-3.800 ± 4.900
	07/20/04	-0.017 ± 0.028	0.030 ± 0.220	0.056 ± 0.067	1.190 ± 0.110	0.050 ± 0.140	-7.300 ± 3.500
	12/09/04	-0.003 ± 0.035	0.310 ± 0.220	-0.011 ± 0.060	0.990 ± 0.100	0.010 ± 0.130	-6.200 ± 6.600

Table 15, Bottom Sediment (pCi/g dry)

Location	Collection Date	Isotope					
33		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	05/05/04	0.003 ± 0.028	0.180 ± 0.150	0.000 ± 0.023	0.012 ± 0.023	0.000 ± 0.140	-0.003 ± 0.017
	10/27/04	-0.006 ± 0.029	-0.070 ± 0.200	0.003 ± 0.022	0.001 ± 0.028	-0.080 ± 0.220	-0.008 ± 0.029
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	05/05/04	0.002 ± 0.020	0.009 ± 0.055	-0.019 ± 0.028	16.900 ± 1.100	-0.007 ± 0.020	0.000 ± 0.039
	10/27/04	-0.007 ± 0.022	0.044 ± 0.060	0.037 ± 0.051	13.800 ± 1.100	-0.003 ± 0.024	-0.003 ± 0.024
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	05/05/04	0.003 ± 0.018	-0.080 ± 0.180	-0.035 ± 0.052	0.207 ± 0.081	-0.019 ± 0.062	-0.056 ± 0.056
	10/27/04	-0.005 ± 0.023	0.120 ± 0.190	0.018 ± 0.048	0.204 ± 0.097	-0.035 ± 0.061	-0.048 ± 0.056
34		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	05/05/04	0.002 ± 0.021	0.060 ± 0.140	-0.009 ± 0.016	-0.001 ± 0.016	0.020 ± 0.150	0.008 ± 0.061
	10/27/04	-0.015 ± 0.034	0.170 ± 0.210	0.003 ± 0.022	0.036 ± 0.026	0.020 ± 0.200	0.012 ± 0.023
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	05/05/04	0.009 ± 0.017	-0.005 ± 0.038	0.012 ± 0.026	16.350 ± 0.850	-0.006 ± 0.016	-0.003 ± 0.018
	10/27/04	-0.004 ± 0.023	-0.027 ± 0.063	0.000 ± 0.055	13.200 ± 1.200	0.015 ± 0.023	-0.019 ± 0.026
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	05/05/04	0.003 ± 0.018	-0.100 ± 0.150	-0.027 ± 0.041	0.205 ± 0.065	-0.068 ± 0.050	-0.041 ± 0.035
	10/27/04	0.020 ± 0.021	-0.100 ± 0.190	-0.028 ± 0.053	0.110 ± 0.110	-0.070 ± 0.066	-0.049 ± 0.058
35-X		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	02/24/04	-0.008 ± 0.029	0.130 ± 0.190	0.000 ± 0.024	0.000 ± 0.026	-0.090 ± 0.180	0.001 ± 0.020
	05/25/04	-0.005 ± 0.030	0.100 ± 0.240	-0.019 ± 0.021	0.003 ± 0.026	-0.280 ± 0.280	0.019 ± 0.021
	07/20/04	0.014 ± 0.039	0.000 ± 0.240	-0.020 ± 0.025	0.022 ± 0.032	0.170 ± 0.300	0.014 ± 0.025
	12/09/04	0.034 ± 0.041	0.090 ± 0.310	-0.031 ± 0.033	0.011 ± 0.029	0.180 ± 0.450	-0.003 ± 0.025
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	02/24/04	0.040 ± 0.032	-0.044 ± 0.055	0.032 ± 0.038	14.300 ± 1.000	0.013 ± 0.026	-0.015 ± 0.031
	05/25/04	0.039 ± 0.028	0.017 ± 0.054	0.040 ± 0.068	9.540 ± 0.950	0.003 ± 0.024	-0.005 ± 0.030
	07/20/04	0.037 ± 0.035	0.019 ± 0.070	-0.064 ± 0.095	14.100 ± 1.100	0.022 ± 0.027	-0.016 ± 0.037
	12/09/04	0.006 ± 0.031	0.015 ± 0.088	0.100 ± 0.420	13.600 ± 1.100	-0.004 ± 0.026	-0.029 ± 0.051
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	02/24/04	0.012 ± 0.021	-0.050 ± 0.190	-0.002 ± 0.062	0.790 ± 0.092	0.036 ± 0.060	-4.700 ± 4.300
	05/25/04	-0.006 ± 0.028	-0.070 ± 0.240	0.000 ± 0.064	0.500 ± 0.100	0.010 ± 0.120	-0.084 ± 0.088
	07/20/04	0.026 ± 0.032	-0.040 ± 0.270	0.036 ± 0.067	0.870 ± 0.120	0.090 ± 0.140	-0.130 ± 0.100
	12/09/04	0.033 ± 0.039	0.080 ± 0.250	-0.003 ± 0.069	0.850 ± 0.110	-0.020 ± 0.140	-10.300 ± 8.200
36-X							

Table 15, Bottom Sediment (pCi/g dry)

Location	Collection Date	Isotope					
36-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	05/04/04	-0.026 ± 0.024	0.140 ± 0.160	-0.007 ± 0.020	-0.005 ± 0.019	0.240 ± 0.170	0.009 ± 0.017
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	05/04/04	0.004 ± 0.019	-0.024 ± 0.048	0.005 ± 0.032	16.400 ± 0.920	0.003 ± 0.018	-0.023 ± 0.022
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	05/04/04	0.006 ± 0.018	-0.100 ± 0.180	-0.032 ± 0.046	0.311 ± 0.078	-0.034 ± 0.094	-0.009 ± 0.045
37-C		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	05/04/04	0.010 ± 0.036	0.400 ± 0.320	0.008 ± 0.025	-0.008 ± 0.031	-0.360 ± 0.260	0.012 ± 0.028
	11/09/04	-0.015 ± 0.031	0.040 ± 0.170	0.010 ± 0.023	0.015 ± 0.025	-0.200 ± 0.210	0.006 ± 0.020
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	05/04/04	0.003 ± 0.032	-0.017 ± 0.067	-0.005 ± 0.051	16.300 ± 1.300	0.011 ± 0.035	0.003 ± 0.031
	11/09/04	0.002 ± 0.020	0.033 ± 0.060	-0.008 ± 0.056	14.800 ± 1.000	0.000 ± 0.022	0.007 ± 0.026
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	05/04/04	0.003 ± 0.028	-0.290 ± 0.260	0.030 ± 0.069	0.690 ± 0.130	-0.066 ± 0.073	-0.050 ± 0.100
	11/09/04	-0.003 ± 0.025	-0.060 ± 0.190	0.003 ± 0.053	0.263 ± 0.092	0.040 ± 0.110	0.002 ± 0.052
39-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/24/04	-0.005 ± 0.033	0.150 ± 0.200	-0.019 ± 0.023	-0.001 ± 0.028	0.150 ± 0.230	-0.003 ± 0.023
	05/25/04	-0.001 ± 0.037	0.050 ± 0.260	-0.002 ± 0.031	-0.002 ± 0.033	-0.030 ± 0.260	-0.020 ± 0.023
	07/20/04	0.006 ± 0.033	0.080 ± 0.200	-0.011 ± 0.024	0.094 ± 0.028	0.110 ± 0.250	0.002 ± 0.023
	12/09/04	0.036 ± 0.051	0.310 ± 0.380	-0.022 ± 0.039	0.083 ± 0.037	-0.210 ± 0.550	-0.016 ± 0.027
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/24/04	0.028 ± 0.029	-0.051 ± 0.056	0.012 ± 0.045	13.700 ± 0.980	0.010 ± 0.023	-0.011 ± 0.030
	05/25/04	0.026 ± 0.032	0.006 ± 0.075	0.012 ± 0.080	10.400 ± 1.200	0.020 ± 0.034	-0.026 ± 0.046
	07/20/04	0.106 ± 0.036	-0.014 ± 0.062	0.002 ± 0.068	16.440 ± 0.990	-0.001 ± 0.026	-0.035 ± 0.034
	12/09/04	0.096 ± 0.053	-0.030 ± 0.110	-0.580 ± 0.510	17.000 ± 1.400	-0.035 ± 0.037	-0.015 ± 0.059
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/24/04	-0.006 ± 0.024	0.140 ± 0.240	-0.020 ± 0.063	0.980 ± 0.110	0.130 ± 0.110	-0.035 ± 0.093
	05/25/04	-0.009 ± 0.028	0.050 ± 0.220	-0.004 ± 0.071	0.810 ± 0.150	-0.027 ± 0.068	-0.060 ± 0.110
	07/20/04	0.006 ± 0.026	-0.010 ± 0.210	-0.015 ± 0.062	0.694 ± 0.089	0.030 ± 0.120	-5.100 ± 5.100
	12/09/04	0.005 ± 0.048	0.020 ± 0.300	-0.025 ± 0.084	0.580 ± 0.150	-0.050 ± 0.160	-0.120 ± 0.140
67-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	05/05/04	0.008 ± 0.047	0.160 ± 0.320	0.024 ± 0.037	-0.034 ± 0.041	0.150 ± 0.340	0.007 ± 0.051
	10/27/04	0.025 ± 0.049	0.220 ± 0.300	0.032 ± 0.032	-0.035 ± 0.040	0.070 ± 0.360	-0.016 ± 0.045

Table 15, Bottom Sediment (pCi/g dry)

Location	Collection Date	Isotope					
67-X		**Cs-137**	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	05/05/04	0.195 ± 0.065	0.000 ± 0.085	0.036 ± 0.065	16.900 ± 1.700	0.042 ± 0.039	0.004 ± 0.043
	10/27/04	0.098 ± 0.042	-0.095 ± 0.081	0.029 ± 0.080	12.500 ± 1.500	0.020 ± 0.033	-0.016 ± 0.039
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	05/05/04	0.013 ± 0.034	-0.290 ± 0.390	0.052 ± 0.091	1.120 ± 0.180	-0.125 ± 0.088	-0.110 ± 0.170
	10/27/04	0.008 ± 0.036	-0.030 ± 0.320	-0.067 ± 0.084	0.600 ± 0.170	0.007 ± 0.097	-0.090 ± 0.100

Table 16, Aquatic Flora - Fucus (pCi/g wet)

Location	Collection Date	Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
29	02/24/04	0.002 ± 0.009	-0.086 ± 0.080	0.007 ± 0.007	0.002 ± 0.007	-0.017 ± 0.055	-0.004 ± 0.007
	05/25/04	0.002 ± 0.011	0.117 ± 0.093	-0.002 ± 0.007	0.002 ± 0.007	-0.067 ± 0.069	0.005 ± 0.009
	08/24/04	0.011 ± 0.016	-0.083 ± 0.087	0.000 ± 0.012	0.006 ± 0.017	0.030 ± 0.078	-0.005 ± 0.012
	11/10/04	-0.011 ± 0.024	0.060 ± 0.150	0.008 ± 0.017	0.001 ± 0.018	-0.070 ± 0.170	-0.001 ± 0.018

Location	Collection Date	Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
29	02/24/04	0.005 ± 0.006	-0.009 ± 0.026	-0.014 ± 0.014	4.830 ± 0.350	0.004 ± 0.007	-0.002 ± 0.007
	05/25/04	0.000 ± 0.007	0.010 ± 0.024	-0.001 ± 0.017	5.110 ± 0.400	-0.003 ± 0.007	0.005 ± 0.011
	08/24/04	0.012 ± 0.010	0.004 ± 0.049	-0.022 ± 0.038	8.060 ± 0.660	0.004 ± 0.011	-0.021 ± 0.016
	11/10/04	-0.002 ± 0.019	-0.019 ± 0.078	-0.022 ± 0.059	8.090 ± 0.970	-0.001 ± 0.015	-0.003 ± 0.022

Location	Collection Date	Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
29	02/24/04	-0.003 ± 0.006	-0.020 ± 0.055	0.002 ± 0.013	0.044 ± 0.034	0.012 ± 0.017	-0.003 ± 0.012
	05/25/04	-0.004 ± 0.007	0.033 ± 0.060	-0.002 ± 0.015	0.030 ± 0.032	0.007 ± 0.021	-0.005 ± 0.013
	08/24/04	0.001 ± 0.011	0.007 ± 0.086	0.010 ± 0.020	0.051 ± 0.045	-0.011 ± 0.029	0.000 ± 0.023
	11/10/04	-0.007 ± 0.017	0.030 ± 0.140	-0.035 ± 0.028	-0.013 ± 0.070	-0.020 ± 0.048	-0.022 ± 0.034

Location	Collection Date	Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
32-X	02/24/04	0.001 ± 0.010	0.026 ± 0.051	0.004 ± 0.007	0.000 ± 0.007	-0.005 ± 0.059	0.006 ± 0.007
	05/25/04	-0.003 ± 0.011	0.027 ± 0.070	-0.005 ± 0.008	0.003 ± 0.009	-0.040 ± 0.069	0.006 ± 0.008
	08/24/04	-0.008 ± 0.017	0.010 ± 0.110	-0.002 ± 0.011	0.003 ± 0.020	0.010 ± 0.110	0.010 ± 0.013
	11/10/04	0.009 ± 0.028	0.100 ± 0.130	0.001 ± 0.017	-0.005 ± 0.020	0.040 ± 0.160	-0.007 ± 0.016

Location	Collection Date	Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
32-X	02/24/04	-0.003 ± 0.006	0.004 ± 0.023	0.016 ± 0.016	5.510 ± 0.350	0.003 ± 0.007	-0.002 ± 0.007
	05/25/04	0.006 ± 0.008	-0.007 ± 0.025	-0.005 ± 0.019	5.830 ± 0.400	-0.004 ± 0.007	-0.002 ± 0.007
	08/24/04	-0.006 ± 0.013	0.020 ± 0.041	0.016 ± 0.049	8.780 ± 0.700	0.007 ± 0.012	0.011 ± 0.015
	11/10/04	-0.001 ± 0.018	0.001 ± 0.082	-0.005 ± 0.066	9.010 ± 0.920	-0.001 ± 0.014	-0.022 ± 0.018

Location	Collection Date	Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
32-X	02/24/04	-0.001 ± 0.007	-0.026 ± 0.058	0.009 ± 0.014	0.034 ± 0.032	0.007 ± 0.016	-0.003 ± 0.012
	05/25/04	0.007 ± 0.007	0.008 ± 0.062	0.006 ± 0.018	0.032 ± 0.029	-0.016 ± 0.021	0.001 ± 0.012
	08/24/04	-0.008 ± 0.014	0.020 ± 0.100	0.005 ± 0.026	0.070 ± 0.054	0.012 ± 0.034	0.009 ± 0.020
	11/10/04	0.010 ± 0.014	-0.060 ± 0.120	0.020 ± 0.037	0.063 ± 0.073	0.001 ± 0.089	0.008 ± 0.030

Location	Collection Date	Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
33-X	05/05/04	0.000 ± 0.006	0.138 ± 0.054	-0.001 ± 0.005	-0.001 ± 0.005	-0.007 ± 0.038	0.000 ± 0.005
	05/25/04	0.003 ± 0.012	0.057 ± 0.086	-0.002 ± 0.009	0.007 ± 0.011	-0.014 ± 0.066	-0.004 ± 0.010
	10/27/04	0.007 ± 0.015	0.083 ± 0.074	0.003 ± 0.010	0.009 ± 0.010	0.014 ± 0.084	0.001 ± 0.010

Location	Collection Date	Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
33-X	05/05/04	0.002 ± 0.004	0.003 ± 0.014	0.008 ± 0.007	5.360 ± 0.220	0.000 ± 0.005	-0.002 ± 0.005
	05/25/04	0.003 ± 0.009	0.019 ± 0.029	0.019 ± 0.020	5.210 ± 0.530	0.004 ± 0.010	0.003 ± 0.010
	10/27/04	-0.003 ± 0.010	0.003 ± 0.036	0.008 ± 0.020	7.240 ± 0.570	0.009 ± 0.010	-0.008 ± 0.010

Table 16, Aquatic Flora - Fucus (pCi/g wet)

Location	Collection Date	Isotope					
33-X		**Ru-103**	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	05/05/04	0.001 ± 0.005	-0.010 ± 0.044	0.001 ± 0.011	0.034 ± 0.024	-0.011 ± 0.013	0.002 ± 0.009
	05/25/04	0.000 ± 0.007	-0.027 ± 0.078	-0.002 ± 0.019	0.041 ± 0.039	-0.018 ± 0.027	-0.019 ± 0.021
	10/27/04	-0.005 ± 0.009	-0.053 ± 0.084	-0.009 ± 0.023	0.045 ± 0.049	0.002 ± 0.027	0.022 ± 0.016
35-X		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	02/24/04	0.004 ± 0.008	0.007 ± 0.046	0.001 ± 0.006	0.003 ± 0.007	-0.003 ± 0.035	-0.003 ± 0.006
	05/25/04	-0.014 ± 0.014	0.109 ± 0.089	0.008 ± 0.011	-0.007 ± 0.010	0.032 ± 0.080	0.005 ± 0.010
	08/24/04	0.009 ± 0.013	0.057 ± 0.095	0.004 ± 0.012	0.002 ± 0.018	-0.030 ± 0.100	0.001 ± 0.010
	11/10/04	0.002 ± 0.017	0.060 ± 0.099	-0.003 ± 0.013	-0.003 ± 0.014	0.040 ± 0.130	0.011 ± 0.013
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	02/24/04	-0.003 ± 0.005	0.009 ± 0.021	0.014 ± 0.012	4.870 ± 0.320	0.006 ± 0.005	0.000 ± 0.007
	05/25/04	0.000 ± 0.009	0.023 ± 0.033	0.014 ± 0.022	5.930 ± 0.570	-0.001 ± 0.010	0.005 ± 0.013
	08/24/04	0.007 ± 0.012	-0.029 ± 0.045	0.006 ± 0.043	6.610 ± 0.630	0.011 ± 0.011	-0.013 ± 0.015
	11/10/04	0.004 ± 0.013	0.026 ± 0.051	0.007 ± 0.043	7.530 ± 0.730	0.001 ± 0.011	-0.005 ± 0.018
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	02/24/04	-0.002 ± 0.005	-0.008 ± 0.040	-0.006 ± 0.011	0.028 ± 0.024	-0.009 ± 0.013	0.004 ± 0.010
	05/25/04	-0.005 ± 0.009	0.011 ± 0.088	-0.007 ± 0.021	0.037 ± 0.051	-0.007 ± 0.030	0.005 ± 0.018
	08/24/04	0.001 ± 0.011	-0.030 ± 0.110	0.005 ± 0.023	0.079 ± 0.062	0.023 ± 0.029	0.026 ± 0.022
	11/10/04	-0.001 ± 0.012	-0.040 ± 0.110	-0.013 ± 0.028	0.085 ± 0.058	0.021 ± 0.038	0.009 ± 0.026
36-X		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	05/05/04	0.004 ± 0.010	0.240 ± 0.091	0.005 ± 0.007	-0.001 ± 0.009	0.038 ± 0.072	0.010 ± 0.009
	05/25/04	0.008 ± 0.007	0.069 ± 0.057	0.003 ± 0.005	0.004 ± 0.005	-0.043 ± 0.048	0.003 ± 0.006
	11/09/04	-0.006 ± 0.024	0.160 ± 0.160	0.006 ± 0.016	-0.029 ± 0.029	0.060 ± 0.190	-0.009 ± 0.022
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	05/05/04	-0.007 ± 0.008	0.006 ± 0.029	0.021 ± 0.007	6.320 ± 0.450	0.003 ± 0.008	-0.001 ± 0.009
	05/25/04	-0.001 ± 0.005	0.003 ± 0.018	0.012 ± 0.013	5.070 ± 0.270	0.005 ± 0.005	0.004 ± 0.006
	11/09/04	-0.006 ± 0.016	0.009 ± 0.080	-0.019 ± 0.076	8.600 ± 1.000	0.002 ± 0.014	0.026 ± 0.030
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	05/05/04	0.004 ± 0.006	-0.046 ± 0.075	-0.006 ± 0.020	0.061 ± 0.045	-0.004 ± 0.021	-0.003 ± 0.013
	05/25/04	0.000 ± 0.005	0.019 ± 0.044	0.000 ± 0.012	0.044 ± 0.028	0.006 ± 0.014	0.010 ± 0.008
	11/09/04	-0.002 ± 0.017	0.010 ± 0.140	-0.030 ± 0.036	0.014 ± 0.067	-0.026 ± 0.060	-0.004 ± 0.038

Table 17-A, Fish - Flounder (pCi/g wet)

Location	Collection Date	Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
32	03/31/04	I					
	06/15/04	-0.004 ± 0.013	-0.026 ± 0.077	-0.003 ± 0.009	0.003 ± 0.010	0.070 ± 0.100	0.000 ± 0.009
	08/09/04	-0.014 ± 0.037	0.150 ± 0.250	-0.006 ± 0.026	0.000 ± 0.033	0.060 ± 0.320	-0.006 ± 0.025
	10/19/04	-0.015 ± 0.049	-0.090 ± 0.300	0.003 ± 0.037	-0.007 ± 0.041	-0.210 ± 0.340	0.034 ± 0.034
35	03/31/04	I					
	04/21/04	0.024 ± 0.028	-0.110 ± 0.210	0.000 ± 0.035	-0.008 ± 0.028	0.230 ± 0.240	0.010 ± 0.030
	08/09/04	-0.020 ± 0.042	0.180 ± 0.270	-0.007 ± 0.024	-0.010 ± 0.041	0.080 ± 0.270	-0.002 ± 0.018
	11/15/04	0.000 ± 0.010	0.045 ± 0.072	0.000 ± 0.008	-0.007 ± 0.008	-0.002 ± 0.096	0.001 ± 0.008

Location	Collection Date	Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
32	03/31/04						
	06/15/04	0.002 ± 0.009	0.004 ± 0.027	0.021 ± 0.043	2.930 ± 0.280	-0.002 ± 0.008	0.009 ± 0.012
	08/09/04	0.011 ± 0.029	-0.040 ± 0.110	0.006 ± 0.081	3.560 ± 0.870	-0.012 ± 0.029	-0.021 ± 0.037
	10/19/04	0.007 ± 0.038	-0.040 ± 0.110	0.010 ± 0.110	2.890 ± 0.830	-0.003 ± 0.036	0.065 ± 0.045
35	03/31/04						
	04/21/04	0.000 ± 0.018	0.031 ± 0.089	-0.027 ± 0.084	3.570 ± 0.980	-0.009 ± 0.033	-0.017 ± 0.042
	08/09/04	0.002 ± 0.030	0.081 ± 0.079	0.020 ± 0.090	4.090 ± 0.930	0.000 ± 0.023	-0.007 ± 0.031
	11/15/04	-0.002 ± 0.007	0.017 ± 0.027	0.043 ± 0.049	3.700 ± 0.240	-0.001 ± 0.007	0.007 ± 0.012

Location	Collection Date	Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
32	03/31/04						
	06/15/04	-0.001 ± 0.011	-0.018 ± 0.078	0.025 ± 0.020	0.013 ± 0.038	0.013 ± 0.020	0.008 ± 0.017
	08/09/04	0.031 ± 0.028	-0.100 ± 0.250	-0.018 ± 0.074	-0.030 ± 0.091	0.070 ± 0.150	0.012 ± 0.045
	10/19/04	-0.037 ± 0.031	-0.020 ± 0.310	0.014 ± 0.091	0.060 ± 0.130	-0.031 ± 0.091	0.064 ± 0.066
35	03/31/04						
	04/21/04	-0.002 ± 0.030	-0.210 ± 0.160	0.007 ± 0.059	-0.040 ± 0.100	-0.010 ± 0.054	-0.005 ± 0.047
	08/09/04	0.015 ± 0.031	0.040 ± 0.260	0.019 ± 0.063	0.020 ± 0.130	0.000 ± 0.065	-0.002 ± 0.039
	11/15/04	-0.016 ± 0.010	-0.008 ± 0.072	0.004 ± 0.018	-0.003 ± 0.035	-0.010 ± 0.019	-0.003 ± 0.019

Table 17-B, Fish - Other (pCi/g wet)

Location	Collection Date	Sample Type	Ag-110m	Be-7	Co-58	Co-60	Cr-51
32							
	01/12/04	SKATE	-0.006 ± 0.025	0.070 ± 0.190	-0.003 ± 0.023	0.008 ± 0.020	-0.040 ± 0.230
	06/11/04	BLUEFISH	0.001 ± 0.012	0.016 ± 0.076	-0.003 ± 0.010	0.004 ± 0.011	-0.060 ± 0.100
	08/04/04	TAUTOG	0.002 ± 0.021	-0.010 ± 0.120	0.015 ± 0.017	-0.004 ± 0.022	0.080 ± 0.130
	10/27/04	STRIPED BASS	-0.005 ± 0.042	0.190 ± 0.240	-0.023 ± 0.026	0.008 ± 0.028	-0.100 ± 0.270

Location	Collection Date	Sample Type	Cs-134	Cs-137	Fe-59	I-131	K-40
32	01/12/04	SKATE	0.002 ± 0.019	-0.004 ± 0.019	-0.079 ± 0.073	-0.040 ± 0.180	1.900 ± 0.570
	06/11/04	BLUEFISH	-0.009 ± 0.009	0.011 ± 0.009	-0.015 ± 0.035	0.017 ± 0.056	3.560 ± 0.310
	08/04/04	TAUTOG	-0.003 ± 0.018	0.012 ± 0.016	-0.022 ± 0.065	-0.003 ± 0.041	3.750 ± 0.600
	10/27/04	STRIPED BASS	0.000 ± 0.025	0.008 ± 0.032	0.008 ± 0.072	0.059 ± 0.065	4.220 ± 0.970

Location	Collection Date	Sample Type	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
32	01/12/04	SKATE	0.022 ± 0.023	0.008 ± 0.037	-0.010 ± 0.027	0.020 ± 0.170	0.040 ± 0.055
	06/11/04	BLUEFISH	-0.003 ± 0.008	0.005 ± 0.012	0.004 ± 0.010	0.012 ± 0.081	-0.019 ± 0.020
	08/04/04	TAUTOG	-0.002 ± 0.016	-0.012 ± 0.021	-0.004 ± 0.018	-0.040 ± 0.140	-0.032 ± 0.040
	10/27/04	STRIPED BASS	0.007 ± 0.019	0.001 ± 0.032	-0.006 ± 0.033	-0.210 ± 0.240	0.007 ± 0.077

Location	Collection Date	Sample Type	Th-228	Zn-65	Zr-95
32	01/12/04	SKATE	-0.007 ± 0.068	-0.052 ± 0.051	-0.025 ± 0.051
	06/11/04	BLUEFISH	-0.014 ± 0.037	0.003 ± 0.019	0.001 ± 0.016
	08/04/04	TAUTOG	0.051 ± 0.061	-0.004 ± 0.041	0.004 ± 0.035
	10/27/04	STRIPED BASS	0.000 ± 0.110	-0.050 ± 0.082	0.019 ± 0.052

Location	Collection Date	Sample Type	Ag-110m	Be-7	Co-58	Co-60	Cr-51
35							
	01/12/04	SKATE	0.003 ± 0.029	-0.020 ± 0.160	-0.002 ± 0.023	0.009 ± 0.018	0.000 ± 0.270
	05/18/04	SKATE	0.002 ± 0.018	-0.010 ± 0.110	0.014 ± 0.014	0.001 ± 0.023	-0.020 ± 0.120
	08/23/04	TAUTOG	0.004 ± 0.032	0.040 ± 0.200	-0.005 ± 0.025	-0.008 ± 0.028	-0.040 ± 0.240
	11/15/04	SKATE	-0.010 ± 0.010	-0.012 ± 0.070	0.006 ± 0.007	0.002 ± 0.007	0.057 ± 0.096

Location	Collection Date	Sample Type	Cs-134	Cs-137	Fe-59	I-131	K-40
35	01/12/04	SKATE	-0.003 ± 0.025	-0.006 ± 0.021	-0.008 ± 0.082	-0.120 ± 0.260 J	1.480 ± 0.520
	05/18/04	SKATE	-0.018 ± 0.018	-0.006 ± 0.013	0.023 ± 0.040	0.006 ± 0.024	2.530 ± 0.470
	08/23/04	TAUTOG	0.001 ± 0.026	-0.004 ± 0.022	-0.013 ± 0.059	-0.069 ± 0.080	4.100 ± 0.590
	11/15/04	SKATE	0.001 ± 0.007	0.003 ± 0.007	0.005 ± 0.025	0.012 ± 0.052	2.590 ± 0.200

Location	Collection Date	Sample Type	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
35	01/12/04	SKATE	0.005 ± 0.018	0.002 ± 0.035	0.000 ± 0.029	-0.090 ± 0.190	0.000 ± 0.055
	05/18/04	SKATE	0.011 ± 0.016	0.001 ± 0.018	0.005 ± 0.014	0.060 ± 0.120	-0.008 ± 0.034
	08/23/04	TAUTOG	-0.001 ± 0.025	0.038 ± 0.045	-0.013 ± 0.030	-0.150 ± 0.220	-0.024 ± 0.056
	11/15/04	SKATE	0.000 ± 0.007	-0.001 ± 0.010	0.006 ± 0.009	-0.006 ± 0.066	0.005 ± 0.020

Location	Collection Date	Sample Type	Th-228	Zn-65	Zr-95
35	01/12/04	SKATE	-0.014 ± 0.074	-0.043 ± 0.050	-0.027 ± 0.041
	05/18/04	SKATE	0.027 ± 0.053	-0.021 ± 0.038	-0.003 ± 0.029
	08/23/04	TAUTOG	-0.021 ± 0.088	-0.010 ± 0.100	0.043 ± 0.042
	11/15/04	SKATE	0.012 ± 0.032	0.038 ± 0.029	0.006 ± 0.014

Location	Collection Date	Sample Type	Ag-110m	Be-7	Co-58	Co-60	Cr-51
40-X							
	02/04/04	STRIPED BASS	0.026 ± 0.042	-0.110 ± 0.340	-0.037 ± 0.034	0.005 ± 0.029	0.080 ± 0.400
	05/19/04	STRIPED BASS	0.003 ± 0.022	-0.030 ± 0.120	-0.009 ± 0.016	-0.002 ± 0.017	-0.010 ± 0.120
	08/02/04	STRIPED BASS	-0.022 ± 0.029	0.020 ± 0.150	-0.008 ± 0.014	0.000 ± 0.027	-0.160 ± 0.170
	11/18/04	STRIPED BASS	0.010 ± 0.013	0.118 ± 0.085	-0.009 ± 0.009	0.005 ± 0.013	0.000 ± 0.100

Table 17-B, Fish - Other (pCi/g wet)

Location	Collection Date	Sample Type	Cs-134	Cs-137	Fe-59	I-131	K-40
40-X							
	02/04/04	STRIPED BASS	0.003 ± 0.029	0.018 ± 0.029	0.020 ± 0.100	-0.290 ± 0.300 J	2.900 ± 1.000
	05/19/04	STRIPED BASS	0.003 ± 0.018	0.020 ± 0.017	-0.018 ± 0.054	-0.007 ± 0.029	3.820 ± 0.540
	08/02/04	STRIPED BASS	-0.003 ± 0.021	0.001 ± 0.019	0.037 ± 0.057	0.000 ± 0.050	3.330 ± 0.620
	11/18/04	STRIPED BASS	-0.003 ± 0.009	0.001 ± 0.010	0.027 ± 0.037	-0.054 ± 0.048	4.030 ± 0.340

Location	Collection Date	Sample Type	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
40-X	02/04/04	STRIPED BASS	-0.018 ± 0.036	-0.003 ± 0.039	-0.005 ± 0.043	0.110 ± 0.280	0.017 ± 0.073
40-X	05/19/04	STRIPED BASS	-0.005 ± 0.014	-0.008 ± 0.016	-0.003 ± 0.014	0.020 ± 0.140	0.006 ± 0.035
40-X	08/02/04	STRIPED BASS	0.007 ± 0.018	0.010 ± 0.026	0.000 ± 0.018	-0.160 ± 0.190	0.024 ± 0.043
40-X	11/18/04	STRIPED BASS	-0.009 ± 0.009	-0.009 ± 0.012	0.016 ± 0.011	0.016 ± 0.088	0.009 ± 0.023

Location	Collection Date	Sample Type	Th-228	Zn-65	Zr-95
40-X	02/04/04	STRIPED BASS	0.100 ± 0.150	0.000 ± 0.072	0.014 ± 0.055
40-X	05/19/04	STRIPED BASS	0.009 ± 0.069	0.020 ± 0.039	0.004 ± 0.025
40-X	08/02/04	STRIPED BASS	0.029 ± 0.075	-0.034 ± 0.049	0.005 ± 0.029
40-X	11/18/04	STRIPED BASS	0.034 ± 0.036	0.000 ± 0.022	-0.017 ± 0.017

Table 18, Mussels (pCi/g wet)

Location	Collection Date	Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
28	03/26/04	-0.018 ± 0.016	0.170 ± 0.120	-0.007 ± 0.012	-0.001 ± 0.014	-0.040 ± 0.170	0.008 ± 0.013
	06/09/04	0.002 ± 0.019	0.170 ± 0.160	0.003 ± 0.017	0.016 ± 0.019	-0.100 ± 0.160	-0.016 ± 0.020
	07/22/04	0.013 ± 0.022	0.050 ± 0.130	0.002 ± 0.014	0.015 ± 0.021	-0.120 ± 0.140	-0.004 ± 0.014
	12/09/04	-0.008 ± 0.017	0.040 ± 0.120	-0.009 ± 0.014	0.012 ± 0.012	0.100 ± 0.140	-0.004 ± 0.014
30	03/12/04	-0.001 ± 0.007	0.092 ± 0.072	0.003 ± 0.006	0.001 ± 0.005	0.045 ± 0.088	0.005 ± 0.005
	06/09/04	-0.012 ± 0.025	0.190 ± 0.170	-0.009 ± 0.017	-0.011 ± 0.019	0.070 ± 0.160	-0.001 ± 0.017
	08/10/04	0.010 ± 0.032	0.110 ± 0.230	-0.026 ± 0.029	0.014 ± 0.029	0.030 ± 0.260	-0.020 ± 0.025
	12/15/04	0.010 ± 0.019	0.150 ± 0.130	-0.003 ± 0.013	-0.001 ± 0.015	0.080 ± 0.130	0.010 ± 0.014

Location	Collection Date	Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
28	03/26/04	-0.004 ± 0.010	0.002 ± 0.043	-0.020 ± 0.100	1.850 ± 0.310	0.001 ± 0.011	0.007 ± 0.019
	06/09/04	0.001 ± 0.014	-0.002 ± 0.040	0.011 ± 0.030	1.960 ± 0.490	0.003 ± 0.016	0.002 ± 0.021
	07/22/04	0.001 ± 0.016	0.002 ± 0.041	-0.010 ± 0.038	1.740 ± 0.440	0.000 ± 0.015	-0.004 ± 0.018
	12/09/04	0.003 ± 0.010	-0.023 ± 0.044	0.044 ± 0.074	1.390 ± 0.320	-0.007 ± 0.012	0.006 ± 0.016
30	03/12/04	-0.003 ± 0.004	0.001 ± 0.020	0.110 ± 0.120	1.860 ± 0.120	0.001 ± 0.005	0.006 ± 0.009
	06/09/04	0.002 ± 0.017	0.006 ± 0.042	-0.003 ± 0.035	2.030 ± 0.500	0.000 ± 0.017	-0.016 ± 0.019
	08/10/04	-0.020 ± 0.022	0.006 ± 0.060	0.036 ± 0.067	1.770 ± 0.580	0.002 ± 0.021	-0.022 ± 0.034
	12/15/04	-0.005 ± 0.013	-0.025 ± 0.040	-0.005 ± 0.057	1.510 ± 0.320	0.006 ± 0.013	0.025 ± 0.017

Location	Collection Date	Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
28	03/26/04	-0.004 ± 0.018	-0.010 ± 0.110	0.011 ± 0.029	0.022 ± 0.062	-0.011 ± 0.026	-0.012 ± 0.025
	06/09/04	0.004 ± 0.016	-0.110 ± 0.170	0.040 ± 0.048	0.045 ± 0.067	-0.063 ± 0.050	0.018 ± 0.031
	07/22/04	0.024 ± 0.017	0.060 ± 0.160	0.011 ± 0.034	0.032 ± 0.066	-0.026 ± 0.034	0.005 ± 0.028
	12/09/04	-0.010 ± 0.017	-0.010 ± 0.100	-0.017 ± 0.030	0.048 ± 0.054	-0.021 ± 0.026	-0.019 ± 0.025
30	03/12/04	-0.009 ± 0.009	-0.011 ± 0.046	0.005 ± 0.010	-0.009 ± 0.022	-0.004 ± 0.011	0.000 ± 0.011
	06/09/04	-0.011 ± 0.017	0.110 ± 0.180	-0.033 ± 0.047	-0.004 ± 0.055	0.033 ± 0.092	0.003 ± 0.034
	08/10/04	-0.006 ± 0.026	-0.080 ± 0.220	-0.027 ± 0.053	-0.030 ± 0.100	0.130 ± 0.110	0.017 ± 0.046
	12/15/04	-0.002 ± 0.014	-0.010 ± 0.110	-0.012 ± 0.031	-0.002 ± 0.051	-0.013 ± 0.033	0.003 ± 0.021

Table 19, Oysters (pCi/g wet)

Location	Collection Date	Isotope					
31		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/24/04	-0.001 ± 0.017	0.080 ± 0.120	-0.002 ± 0.012	-0.010 ± 0.013	0.050 ± 0.170	0.006 ± 0.013
	06/28/04	-0.003 ± 0.023	0.130 ± 0.190	0.001 ± 0.019	0.001 ± 0.018	0.090 ± 0.180	-0.007 ± 0.016
	09/22/04	0.016 ± 0.020	0.010 ± 0.120	-0.007 ± 0.014	-0.019 ± 0.022	0.030 ± 0.130	-0.021 ± 0.015
	12/14/04	-0.009 ± 0.011	0.078 ± 0.074	0.003 ± 0.010	0.004 ± 0.009	0.029 ± 0.092	0.005 ± 0.009
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/24/04	-0.002 ± 0.012	-0.013 ± 0.047	-0.010 ± 0.110	1.400 ± 0.290	-0.007 ± 0.011	-0.004 ± 0.017
	06/28/04	0.000 ± 0.023	0.001 ± 0.073	-0.013 ± 0.053	1.440 ± 0.510	-0.001 ± 0.021	-0.009 ± 0.022
	09/22/04	0.003 ± 0.015	-0.027 ± 0.051	-0.004 ± 0.023	1.480 ± 0.370	0.000 ± 0.014	-0.005 ± 0.014
	12/14/04	0.001 ± 0.008	0.003 ± 0.027	0.019 ± 0.039	1.290 ± 0.190	-0.004 ± 0.009	0.012 ± 0.012
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/24/04	0.002 ± 0.016	-0.020 ± 0.110	-0.014 ± 0.026	-0.022 ± 0.049	-0.023 ± 0.029	0.010 ± 0.022
	06/28/04	-0.004 ± 0.019	-0.110 ± 0.190	0.000 ± 0.051	0.071 ± 0.072	-0.017 ± 0.046	0.012 ± 0.032
	09/22/04	0.004 ± 0.016	0.010 ± 0.120	-0.027 ± 0.037	-0.008 ± 0.056	-0.006 ± 0.032	-0.013 ± 0.021
	12/14/04	0.001 ± 0.010	-0.035 ± 0.078	-0.005 ± 0.020	0.001 ± 0.033	-0.017 ± 0.020	-0.002 ± 0.016
32		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/18/04	0.042 ± 0.005	-0.004 ± 0.058	0.004 ± 0.007	-0.001 ± 0.005	0.049 ± 0.089	0.005 ± 0.005
	06/23/04	0.089 ± 0.010	0.036 ± 0.077	0.000 ± 0.008	0.007 ± 0.008	-0.022 ± 0.098	0.001 ± 0.008
	09/17/04	0.015 ± 0.064	-0.100 ± 0.460	-0.044 ± 0.047	0.042 ± 0.046	-0.290 ± 0.420	-0.001 ± 0.043
	12/14/04	0.014 ± 0.012	0.019 ± 0.077	-0.001 ± 0.009	0.005 ± 0.009	0.017 ± 0.098	0.004 ± 0.011
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/18/04	0.011 ± 0.012	-0.007 ± 0.019	-0.029 ± 0.096	2.130 ± 0.140	-0.001 ± 0.005	0.005 ± 0.014
	06/23/04	-0.018 ± 0.023	-0.009 ± 0.024	0.000 ± 0.038	1.590 ± 0.190	0.000 ± 0.008	0.014 ± 0.015
	09/17/04	0.028 ± 0.043	-0.073 ± 0.097	0.030 ± 0.110	2.940 ± 0.980	-0.017 ± 0.042	0.023 ± 0.056
	12/14/04	-0.007 ± 0.009	-0.008 ± 0.027	-0.020 ± 0.041	1.370 ± 0.210	-0.003 ± 0.008	0.012 ± 0.015
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/18/04	0.006 ± 0.009	0.018 ± 0.048	0.002 ± 0.012	0.008 ± 0.023	-0.004 ± 0.012	0.001 ± 0.012
	06/23/04	0.002 ± 0.009	0.035 ± 0.074	-0.001 ± 0.021	-0.006 ± 0.030	-0.025 ± 0.018	0.015 ± 0.015
	09/17/04	0.040 ± 0.058	-0.220 ± 0.500	0.030 ± 0.120	0.090 ± 0.160	-0.120 ± 0.110	0.006 ± 0.096
	12/14/04	-0.002 ± 0.011	0.033 ± 0.080	0.001 ± 0.021	-0.012 ± 0.045	-0.016 ± 0.021	0.008 ± 0.017
34-X		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/24/04	-0.005 ± 0.007	-0.018 ± 0.060	0.000 ± 0.006	-0.001 ± 0.006	-0.030 ± 0.084	0.003 ± 0.006
	06/28/04	0.005 ± 0.017	-0.010 ± 0.130	-0.003 ± 0.015	-0.006 ± 0.014	0.040 ± 0.150	-0.003 ± 0.015
	09/21/04	-0.009 ± 0.021	0.090 ± 0.150	0.019 ± 0.016	-0.002 ± 0.023	0.070 ± 0.140	-0.002 ± 0.021
	12/14/04	-0.020 ± 0.023	0.120 ± 0.180	-0.029 ± 0.023	-0.005 ± 0.017	-0.100 ± 0.220	-0.009 ± 0.019
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/24/04	0.001 ± 0.006	0.000 ± 0.021	0.044 ± 0.065	1.540 ± 0.140	0.000 ± 0.005	-0.003 ± 0.009
	06/28/04	-0.004 ± 0.014	-0.005 ± 0.040	0.000 ± 0.047	1.850 ± 0.400	-0.002 ± 0.015	-0.004 ± 0.017
	09/21/04	0.005 ± 0.017	0.036 ± 0.060	-0.009 ± 0.025	1.880 ± 0.540	-0.001 ± 0.022	-0.015 ± 0.018
	12/14/04	0.000 ± 0.018	-0.008 ± 0.053	-0.045 ± 0.092	1.430 ± 0.460	0.003 ± 0.017	-0.013 ± 0.026

Table 19, Oysters (pCi/g wet)

Location	Collection Date	Isotope					
34-X		**Ru-103**	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/24/04	-0.001 ± 0.007	-0.068 ± 0.054	-0.001 ± 0.014	0.001 ± 0.024	-0.008 ± 0.012	-0.009 ± 0.012
	06/28/04	-0.002 ± 0.015	0.030 ± 0.150	-0.016 ± 0.038	-0.034 ± 0.052	0.004 ± 0.036	-0.005 ± 0.029
	09/21/04	0.003 ± 0.016	-0.110 ± 0.160	0.023 ± 0.039	-0.029 ± 0.078	-0.014 ± 0.040	0.008 ± 0.030
	12/14/04	0.001 ± 0.022	0.080 ± 0.180	-0.018 ± 0.047	0.005 ± 0.060	-0.032 ± 0.040	-0.041 ± 0.040
36		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/25/04	-0.004 ± 0.016	0.010 ± 0.110	-0.002 ± 0.015	0.008 ± 0.016	-0.020 ± 0.140	0.002 ± 0.015
	06/16/04	0.010 ± 0.015	-0.110 ± 0.100	-0.002 ± 0.010	0.005 ± 0.013	-0.050 ± 0.120	0.000 ± 0.012
	09/21/04	0.015 ± 0.015	0.010 ± 0.100	0.001 ± 0.012	0.003 ± 0.010	-0.010 ± 0.110	0.002 ± 0.013
	12/15/04	K					
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/25/04	0.004 ± 0.012	-0.030 ± 0.058	0.008 ± 0.087	1.540 ± 0.370	0.006 ± 0.015	0.008 ± 0.022
	06/16/04	-0.001 ± 0.011	0.021 ± 0.033	-0.008 ± 0.045	1.840 ± 0.300	0.008 ± 0.011	-0.001 ± 0.013
	09/21/04	0.006 ± 0.012	-0.035 ± 0.036	-0.015 ± 0.022	1.580 ± 0.340	0.006 ± 0.012	-0.002 ± 0.014
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/25/04	-0.024 ± 0.016	0.030 ± 0.120	0.002 ± 0.031	-0.014 ± 0.044	-0.028 ± 0.035	0.003 ± 0.025
	06/16/04	0.008 ± 0.012	0.047 ± 0.097	-0.002 ± 0.023	0.005 ± 0.046	0.006 ± 0.022	-0.003 ± 0.018
	09/21/04	0.004 ± 0.011	0.000 ± 0.130	0.018 ± 0.034	0.037 ± 0.049	-0.021 ± 0.033	-0.003 ± 0.023
37-C		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/25/04	-0.007 ± 0.018	0.010 ± 0.110	0.001 ± 0.013	-0.002 ± 0.011	-0.230 ± 0.190	-0.003 ± 0.011
	06/16/04	0.005 ± 0.011	0.046 ± 0.076	0.005 ± 0.010	0.012 ± 0.011	0.024 ± 0.083	0.000 ± 0.010
	09/21/04	0.005 ± 0.015	0.029 ± 0.090	0.009 ± 0.012	0.003 ± 0.014	-0.030 ± 0.100	0.003 ± 0.012
	12/15/04	0.000 ± 0.021	-0.050 ± 0.160	-0.004 ± 0.016	-0.003 ± 0.015	-0.050 ± 0.220	0.005 ± 0.018
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/25/04	0.004 ± 0.013	-0.022 ± 0.044	0.000 ± 0.110	1.870 ± 0.330	0.001 ± 0.014	0.009 ± 0.019
	06/16/04	0.013 ± 0.009	0.018 ± 0.034	0.022 ± 0.032	1.630 ± 0.250	-0.002 ± 0.010	0.003 ± 0.013
	09/21/04	-0.001 ± 0.012	0.025 ± 0.032	-0.010 ± 0.020	1.630 ± 0.330	-0.004 ± 0.012	-0.004 ± 0.015
	12/15/04	-0.001 ± 0.016	0.036 ± 0.046	0.016 ± 0.078	1.790 ± 0.440	-0.013 ± 0.014	0.011 ± 0.027
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/25/04	0.000 ± 0.016	-0.050 ± 0.120	-0.008 ± 0.030	0.051 ± 0.049	0.019 ± 0.037	0.002 ± 0.025
	06/16/04	0.001 ± 0.010	-0.126 ± 0.079	-0.008 ± 0.020	0.023 ± 0.031	0.008 ± 0.021	-0.003 ± 0.018
	09/21/04	0.005 ± 0.013	-0.110 ± 0.120	-0.003 ± 0.025	-0.027 ± 0.038	-0.023 ± 0.028	0.000 ± 0.022
	12/15/04	0.001 ± 0.021	-0.050 ± 0.140	-0.013 ± 0.041	0.013 ± 0.061	-0.003 ± 0.045	-0.006 ± 0.031
40-X		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/30/04	0.097 ± 0.025	0.170 ± 0.160	0.004 ± 0.021	-0.001 ± 0.024	0.120 ± 0.200	0.008 ± 0.022
	06/10/04	0.136 ± 0.017	0.100 ± 0.120	-0.015 ± 0.015	-0.005 ± 0.013	-0.010 ± 0.180	0.003 ± 0.012
	09/22/04	0.073 ± 0.020	-0.020 ± 0.120	-0.006 ± 0.012	-0.001 ± 0.017	0.060 ± 0.120	-0.006 ± 0.015
	11/17/04	0.057 ± 0.011	0.019 ± 0.081	-0.003 ± 0.009	-0.003 ± 0.010	-0.059 ± 0.082	0.010 ± 0.010

Table 19, Oysters (pCi/g wet)

Location	Collection Date	Isotope					
40-X		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/30/04	-0.006 ± 0.059	0.040 ± 0.051	-0.030 ± 0.084	1.960 ± 0.500	0.001 ± 0.023	0.021 ± 0.032
	06/10/04	0.003 ± 0.038	0.018 ± 0.039	0.040 ± 0.110	1.340 ± 0.270	0.003 ± 0.011	-0.004 ± 0.029
	09/22/04	-0.002 ± 0.051	0.009 ± 0.036	-0.011 ± 0.025	1.790 ± 0.390	-0.003 ± 0.015	-0.007 ± 0.018
	11/17/04	0.012 ± 0.024	0.013 ± 0.031	-0.022 ± 0.041	2.190 ± 0.250	0.002 ± 0.008	-0.003 ± 0.014
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/30/04	0.017 ± 0.024	-0.040 ± 0.160	0.000 ± 0.045	0.051 ± 0.056	-0.028 ± 0.044	0.023 ± 0.036
	06/10/04	-0.011 ± 0.019	0.110 ± 0.110	0.000 ± 0.029	0.006 ± 0.043	-0.012 ± 0.028	0.017 ± 0.025
	09/22/04	-0.003 ± 0.014	0.010 ± 0.150	-0.020 ± 0.039	0.025 ± 0.064	-0.034 ± 0.038	0.003 ± 0.022
	11/17/04	-0.004 ± 0.010	-0.023 ± 0.072	-0.007 ± 0.020	0.000 ± 0.038	-0.004 ± 0.018	-0.001 ± 0.017

Table 20, Clams (pCi/g wet)

Location	Collection Date	Isotope					
29		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/03/04	-0.007 ± 0.030	-0.040 ± 0.200	0.003 ± 0.027	0.005 ± 0.025	-0.270 ± 0.320	-0.008 ± 0.024
	06/10/04	0.004 ± 0.010	0.024 ± 0.078	-0.005 ± 0.008	0.007 ± 0.007	-0.030 ± 0.110	-0.004 ± 0.008
	08/04/04	0.002 ± 0.024	-0.040 ± 0.130	-0.001 ± 0.015	-0.008 ± 0.017	-0.220 ± 0.170	-0.001 ± 0.018
	11/02/04	-0.008 ± 0.031	0.050 ± 0.160	0.001 ± 0.027	0.018 ± 0.028	-0.200 ± 0.210	0.011 ± 0.029
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/03/04	0.020 ± 0.024	0.045 ± 0.092	0.180 ± 0.310	2.220 ± 0.630	0.017 ± 0.021	0.018 ± 0.039
	06/10/04	-0.001 ± 0.008	-0.002 ± 0.029	0.010 ± 0.061	1.930 ± 0.210	-0.002 ± 0.007	-0.006 ± 0.011
	08/04/04	0.010 ± 0.015	0.011 ± 0.048	-0.022 ± 0.047	1.890 ± 0.410	-0.015 ± 0.015	0.008 ± 0.021
	11/02/04	-0.030 ± 0.026	-0.039 ± 0.092	0.023 ± 0.037	1.520 ± 0.800	-0.004 ± 0.030	-0.032 ± 0.035
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/03/04	-0.009 ± 0.026	0.050 ± 0.220	0.030 ± 0.049	-0.094 ± 0.081	0.006 ± 0.048	0.023 ± 0.050
	06/10/04	0.004 ± 0.009	-0.003 ± 0.073	0.002 ± 0.019	-0.017 ± 0.029	-0.016 ± 0.018	0.006 ± 0.016
	08/04/04	0.006 ± 0.018	-0.050 ± 0.140	-0.044 ± 0.042	0.019 ± 0.069	-0.040 ± 0.048	0.010 ± 0.032
	11/02/04	-0.006 ± 0.028	-0.030 ± 0.230	0.008 ± 0.065	-0.033 ± 0.073	0.000 ± 0.059	-0.006 ± 0.048
35-X		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/03/04	-0.010 ± 0.042	-0.240 ± 0.240	-0.027 ± 0.029	-0.003 ± 0.034	-0.100 ± 0.390	0.007 ± 0.026
	06/22/04	-0.006 ± 0.024	0.060 ± 0.170	0.004 ± 0.016	0.006 ± 0.022	-0.010 ± 0.210	-0.004 ± 0.017
	08/04/04	0.014 ± 0.021	0.050 ± 0.130	-0.001 ± 0.015	0.004 ± 0.016	-0.040 ± 0.170	0.000 ± 0.013
	11/02/04	-0.018 ± 0.039	0.000 ± 0.230	-0.017 ± 0.025	-0.015 ± 0.032	-0.040 ± 0.200	0.008 ± 0.033
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/03/04	-0.006 ± 0.023	-0.065 ± 0.092	-0.170 ± 0.340	1.810 ± 0.730	0.010 ± 0.027	-0.004 ± 0.043
	06/22/04	-0.009 ± 0.016	-0.024 ± 0.056	-0.087 ± 0.094	1.950 ± 0.560	0.014 ± 0.018	-0.003 ± 0.025
	08/04/04	-0.012 ± 0.014	-0.034 ± 0.043	0.016 ± 0.044	1.730 ± 0.370	-0.002 ± 0.013	0.001 ± 0.019
	11/02/04	0.006 ± 0.023	0.041 ± 0.082	-0.012 ± 0.036	1.550 ± 0.730	-0.013 ± 0.021	0.016 ± 0.031
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/03/04	-0.021 ± 0.040	0.050 ± 0.260	0.006 ± 0.061	-0.050 ± 0.100	0.028 ± 0.066	-0.040 ± 0.039
	06/22/04	0.014 ± 0.022	0.050 ± 0.180	-0.011 ± 0.049	0.012 ± 0.059	-0.021 ± 0.043	-0.003 ± 0.032
	08/04/04	0.003 ± 0.016	-0.110 ± 0.130	0.006 ± 0.038	-0.004 ± 0.058	0.036 ± 0.052	-0.006 ± 0.027
	11/02/04	0.003 ± 0.026	0.150 ± 0.300	-0.015 ± 0.071	-0.008 ± 0.089	0.010 ± 0.074	0.011 ± 0.044
38		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/03/04	0.021 ± 0.036	0.210 ± 0.250	-0.007 ± 0.026	0.003 ± 0.028	-0.170 ± 0.360	0.013 ± 0.022
	06/22/04	-0.016 ± 0.021	-0.070 ± 0.150	-0.005 ± 0.018	-0.008 ± 0.022	-0.050 ± 0.150	-0.013 ± 0.020
	08/04/04	-0.008 ± 0.025	0.070 ± 0.130	-0.011 ± 0.019	0.017 ± 0.020	0.070 ± 0.150	0.011 ± 0.016
	11/02/04	-0.006 ± 0.048	0.210 ± 0.220	-0.012 ± 0.026	0.004 ± 0.032	0.040 ± 0.210	-0.013 ± 0.028
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/03/04	0.019 ± 0.027	0.094 ± 0.084	0.070 ± 0.420	1.880 ± 0.710	-0.016 ± 0.026	-0.005 ± 0.037
	06/22/04	0.009 ± 0.017	0.003 ± 0.063	0.014 ± 0.071	1.580 ± 0.520	-0.010 ± 0.019	-0.007 ± 0.025
	08/04/04	0.008 ± 0.018	0.039 ± 0.050	-0.006 ± 0.048	2.190 ± 0.480	0.007 ± 0.018	0.005 ± 0.022
	11/02/04	0.028 ± 0.034	-0.021 ± 0.081	0.009 ± 0.036	1.360 ± 0.740	-0.004 ± 0.024	0.016 ± 0.031

Table 20, Clams (pCi/g wet)

Location	Collection Date	Isotope					
38		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/03/04	0.017 ± 0.039	0.060 ± 0.230	0.083 ± 0.064	0.050 ± 0.120	0.018 ± 0.058	0.013 ± 0.049
	06/22/04	-0.012 ± 0.020	-0.030 ± 0.150	0.000 ± 0.042	0.035 ± 0.059	0.041 ± 0.041	-0.037 ± 0.040
	08/04/04	0.001 ± 0.018	-0.110 ± 0.180	-0.021 ± 0.043	-0.043 ± 0.063	-0.014 ± 0.044	-0.004 ± 0.034
	11/02/04	0.023 ± 0.028	0.090 ± 0.290	0.008 ± 0.052	0.011 ± 0.098	0.050 ± 0.072	0.026 ± 0.052
39-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/02/04	-0.002 ± 0.017	0.040 ± 0.160	-0.002 ± 0.014	-0.005 ± 0.020	0.030 ± 0.180	-0.006 ± 0.021
	06/08/04	0.013 ± 0.026	0.030 ± 0.150	0.007 ± 0.019	0.005 ± 0.021	0.010 ± 0.200	0.007 ± 0.019
	09/08/04	0.013 ± 0.020	-0.020 ± 0.140	-0.019 ± 0.022	-0.008 ± 0.023	0.010 ± 0.120	-0.001 ± 0.013
	11/02/04	-0.021 ± 0.033	-0.140 ± 0.230	-0.029 ± 0.034	-0.009 ± 0.032	-0.060 ± 0.200	0.008 ± 0.026
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/02/04	0.002 ± 0.019	0.019 ± 0.046	0.032 ± 0.039	2.060 ± 0.490	-0.009 ± 0.018	-0.004 ± 0.021
	06/08/04	-0.006 ± 0.022	0.010 ± 0.065	-0.021 ± 0.043	1.710 ± 0.550	-0.002 ± 0.023	0.003 ± 0.026
	09/08/04	0.005 ± 0.018	-0.027 ± 0.042	-0.011 ± 0.018	1.280 ± 0.470	0.012 ± 0.018	0.005 ± 0.021
	11/02/04	0.012 ± 0.034	0.045 ± 0.090	-0.020 ± 0.036	1.460 ± 0.800	-0.007 ± 0.026	0.014 ± 0.039
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/02/04	0.007 ± 0.019	-0.170 ± 0.200	0.008 ± 0.046	-0.017 ± 0.067	0.004 ± 0.038	0.028 ± 0.037
	06/08/04	0.000 ± 0.023	0.090 ± 0.200	0.009 ± 0.055	-0.077 ± 0.083	0.017 ± 0.040	-0.006 ± 0.034
	09/08/04	-0.006 ± 0.018	-0.080 ± 0.170	-0.011 ± 0.048	-0.029 ± 0.058	-0.025 ± 0.044	0.010 ± 0.029
	11/02/04	0.007 ± 0.034	-0.170 ± 0.290	0.033 ± 0.081	0.060 ± 0.120	-0.057 ± 0.075	0.009 ± 0.057

Table 22, Lobsters (pCi/g wet)

Location	Collection Date	Isotope					
32		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/24/04	-0.004 ± 0.015	-0.010 ± 0.100	0.009 ± 0.013	0.002 ± 0.010	0.030 ± 0.150	0.003 ± 0.011
	06/01/04	0.010 ± 0.031	0.030 ± 0.200	-0.007 ± 0.018	0.005 ± 0.022	0.160 ± 0.220	-0.005 ± 0.018
	08/23/04	0.010 ± 0.026	0.070 ± 0.140	-0.002 ± 0.017	-0.007 ± 0.020	0.130 ± 0.170	-0.007 ± 0.016
	10/20/04	0.022 ± 0.046	-0.080 ± 0.260	-0.005 ± 0.025	0.010 ± 0.022	0.140 ± 0.360	0.006 ± 0.036
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/24/04	0.008 ± 0.011	-0.001 ± 0.036	0.110 ± 0.120	2.140 ± 0.290	-0.006 ± 0.011	0.023 ± 0.018
	06/01/04	0.022 ± 0.028	0.052 ± 0.073	0.017 ± 0.073	2.220 ± 0.620	-0.016 ± 0.021	-0.015 ± 0.025
	08/23/04	-0.008 ± 0.018	0.016 ± 0.053	-0.003 ± 0.051	1.860 ± 0.450	-0.001 ± 0.015	-0.016 ± 0.019
	10/20/04	-0.012 ± 0.030	-0.030 ± 0.110	0.040 ± 0.110	2.450 ± 0.830	-0.011 ± 0.025	-0.009 ± 0.037
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/24/04	-0.009 ± 0.017	0.010 ± 0.100	0.016 ± 0.026	0.042 ± 0.045	-0.014 ± 0.026	0.007 ± 0.023
	06/01/04	0.018 ± 0.023	-0.230 ± 0.240	-0.045 ± 0.057	-0.027 ± 0.078	0.006 ± 0.053	-0.003 ± 0.037
	08/23/04	-0.018 ± 0.018	0.010 ± 0.150	-0.011 ± 0.039	0.025 ± 0.058	0.000 ± 0.037	0.017 ± 0.033
	10/20/04	0.004 ± 0.031	-0.090 ± 0.210	-0.014 ± 0.071	0.007 ± 0.097	-0.094 ± 0.065	-0.013 ± 0.056
35		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/11/04	0.004 ± 0.005	0.019 ± 0.048	0.003 ± 0.005	-0.002 ± 0.004	-0.077 ± 0.082	0.002 ± 0.004
	06/01/04	0.007 ± 0.028	0.040 ± 0.180	-0.025 ± 0.024	-0.003 ± 0.031	-0.030 ± 0.190	-0.002 ± 0.020
	08/23/04	-0.003 ± 0.017	0.110 ± 0.120	-0.010 ± 0.013	0.012 ± 0.014	-0.050 ± 0.110	0.009 ± 0.014
	10/20/04	0.011 ± 0.038	0.000 ± 0.190	-0.030 ± 0.022	0.018 ± 0.022	0.120 ± 0.250	0.020 ± 0.023
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/11/04	0.005 ± 0.004	-0.015 ± 0.018	-0.040 ± 0.110	1.630 ± 0.150	0.000 ± 0.004	0.005 ± 0.008
	06/01/04	0.005 ± 0.018	0.030 ± 0.071	-0.008 ± 0.059	2.100 ± 0.630	-0.006 ± 0.021	0.005 ± 0.032
	08/23/04	0.004 ± 0.014	-0.012 ± 0.049	-0.013 ± 0.036	2.130 ± 0.450	-0.004 ± 0.013	-0.004 ± 0.020
	10/20/04	-0.002 ± 0.023	0.000 ± 0.072	-0.011 ± 0.097	1.420 ± 0.510	0.003 ± 0.019	-0.020 ± 0.032
		Ru-103	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/11/04	0.002 ± 0.007	-0.025 ± 0.038	0.003 ± 0.010	0.024 ± 0.040	-0.007 ± 0.010	0.003 ± 0.010
	06/01/04	0.001 ± 0.021	0.040 ± 0.190	-0.015 ± 0.042	0.026 ± 0.077	-0.055 ± 0.058	-0.001 ± 0.042
	08/23/04	-0.004 ± 0.014	0.030 ± 0.100	0.005 ± 0.037	-0.004 ± 0.047	0.000 ± 0.036	-0.006 ± 0.030
	10/20/04	0.007 ± 0.023	-0.090 ± 0.190	0.045 ± 0.056	0.080 ± 0.110	0.050 ± 0.110	-0.008 ± 0.043
37-X		**Ag-110m**	**Be-7**	**Co-58**	**Co-60**	**Cr-51**	**Cs-134**
	03/16/04	0.003 ± 0.008	0.044 ± 0.062	-0.003 ± 0.008	0.004 ± 0.007	-0.037 ± 0.099	0.001 ± 0.007
	06/04/04	0.016 ± 0.034	-0.040 ± 0.170	-0.005 ± 0.023	-0.010 ± 0.021	-0.030 ± 0.220	0.014 ± 0.020
	09/20/04	0.006 ± 0.026	-0.100 ± 0.180	0.006 ± 0.021	0.025 ± 0.029	-0.070 ± 0.200	0.008 ± 0.022
	11/09/04	-0.012 ± 0.021	-0.040 ± 0.130	0.002 ± 0.018	-0.004 ± 0.017	0.010 ± 0.190	-0.015 ± 0.017
		Cs-137	**Fe-59**	**I-131**	**K-40**	**Mn-54**	**Nb-95**
	03/16/04	0.007 ± 0.006	-0.023 ± 0.029	-0.024 ± 0.094	2.160 ± 0.180	0.004 ± 0.006	-0.011 ± 0.012
	06/04/04	-0.010 ± 0.025	0.004 ± 0.077	0.024 ± 0.049	2.220 ± 0.660	-0.003 ± 0.019	0.002 ± 0.029
	09/20/04	-0.007 ± 0.025	0.007 ± 0.075	-0.015 ± 0.046	2.000 ± 0.580	0.000 ± 0.018	-0.024 ± 0.030
	11/09/04	-0.002 ± 0.018	-0.025 ± 0.057	0.000 ± 0.075	2.310 ± 0.450	0.011 ± 0.018	0.007 ± 0.036

Table 22, Lobsters (pCi/g wet)

Location	Collection Date	Isotope					
37-X		**Ru-103**	**Ru-106**	**Sb-125**	**Th-228**	**Zn-65**	**Zr-95**
	03/16/04	-0.005 ± 0.009	0.013 ± 0.048	0.001 ± 0.014	0.002 ± 0.027	-0.002 ± 0.016	0.001 ± 0.014
	06/04/04	-0.014 ± 0.021	-0.030 ± 0.190	-0.066 ± 0.056	0.008 ± 0.076	0.000 ± 0.065	0.028 ± 0.038
	09/20/04	-0.013 ± 0.022	-0.090 ± 0.220	-0.029 ± 0.057	-0.010 ± 0.100	-0.069 ± 0.055	0.006 ± 0.046
	11/09/04	0.009 ± 0.018	0.010 ± 0.130	0.013 ± 0.039	0.052 ± 0.064	0.009 ± 0.080	-0.005 ± 0.028

NOTES FOR DATA TABLES

*	All Second Quarter TLD's were lost (CR-04-07177, also see Section 2.2 for more details)
#	Collection Dates for Air Particulates and Iodines are listed as Monday –Sunday, however the typical change-out days are on Tuesdays
A	Low volume (6337 cubic feet) caused by GFI failure (see CR-04-04034)
B	Low volume (6275 cubic feet) caused by power outage (see AFI #1, REMP Self Assessment Report MP-SA-04-09)
C	Low volume (392 cubic feet) caused by blown fuse (CR-04-07008)
D	Low volume (4020 cubic feet) due to GFI breaker trip (CR-04-1114)
E	Low error since sensitivity was increased due to overnight count
F	Hay samples
G	No samples of hay obtained in December since property and goats were sold
H	Only 1 liter of sample obtained in March. Insufficient size to perform all analyses, therefore vendor did not perform H-3 analyses. Onsite analysis of the water from these wells indicated H-3 was less than 1740 pCi/liter (LLD value, 4.66 σ)
I	First Quarter flounder samples were not available (18 trawls made without any fish six inches or larger being obtained)
J	High error due to inadequate sample analysis scheduling (Framatome CR)
K	During December the sample tray located at Black Point was missing. High winds and stormy sea conditions caused tray to be ripped from its chain bridle; tray found washed-up on shore and badly damaged. All oysters were lost.

4. DISCUSSION OF RESULTS

This section summarizes the results of the analyses of environmental media sampled. DNC has carefully examined the data throughout the year and has presented in this section all cases where station related radioactivity could be detected. The results are compared with previous environmental surveillance data. Few impacts of the station operation on the environment were observed. Sub-sections contain a description of each particular media or potential exposure pathway.

Naturally occurring nuclides such as Be-7, K-40, and Th-228 were detected in numerous samples. Be-7, which is produced by cosmic processes, was observed predominantly in airborne and vegetation samples. Th-228 results were variable and are generally at levels higher than plant related radionuclides.

Cs-137 and Sr-90 were observed at levels similar to those of past years. The levels of Cs-137 and Sr-90 detected were the result of atmospheric nuclear weapons testing in the 1960's.

4.1. Gamma Exposure Rate (Table 1)

Gamma exposure rate is determined from the integrated exposure measured over a quarter using $CaSO_4$(Tm) Panasonic model UD-804 ASx thermoluminescent dosimeters (TLDs). In 2000, the TLDs (Victoreen glass bulb CaF_2(Mn)), which historically were used to measure radioactivity around Millstone for over 20 years, were replaced with the Panasonic TLDs.

The dosimeters are strategically placed at a number of on-site locations, as well as at inner and outer off-site locations. Starting in 2001, the collection of TLDs was changed from monthly to quarterly and additional measurement locations were incorporated into the REMODCM. Three more locations were added in mid-2003 to prepare for monitoring the potential effect of ISFSI (Independent Spent Fuel Storage Installation – Dry Cask Storage).

Three more locations (73X, 74X and 75X were added in mid-2003 to prepare for monitoring the potential effect of the Independent Spent Fuel Storage Installation – Dry Cask Storage (ISFSI). Two storage containers are scheduled to be loaded with spent fuel assemblies in the first quarter of 2005. The exposure backgrounds from these three locations will be used to determine the radiological effects in the vicinity of the ISFSI by comparing to future measurements. The average exposure rate measured over the one and a half years at these locations was: 9.5 uC/hr at location 73X; 7.6 μR/hr at location 74X; and 6.9 μR/hr at location 75X.

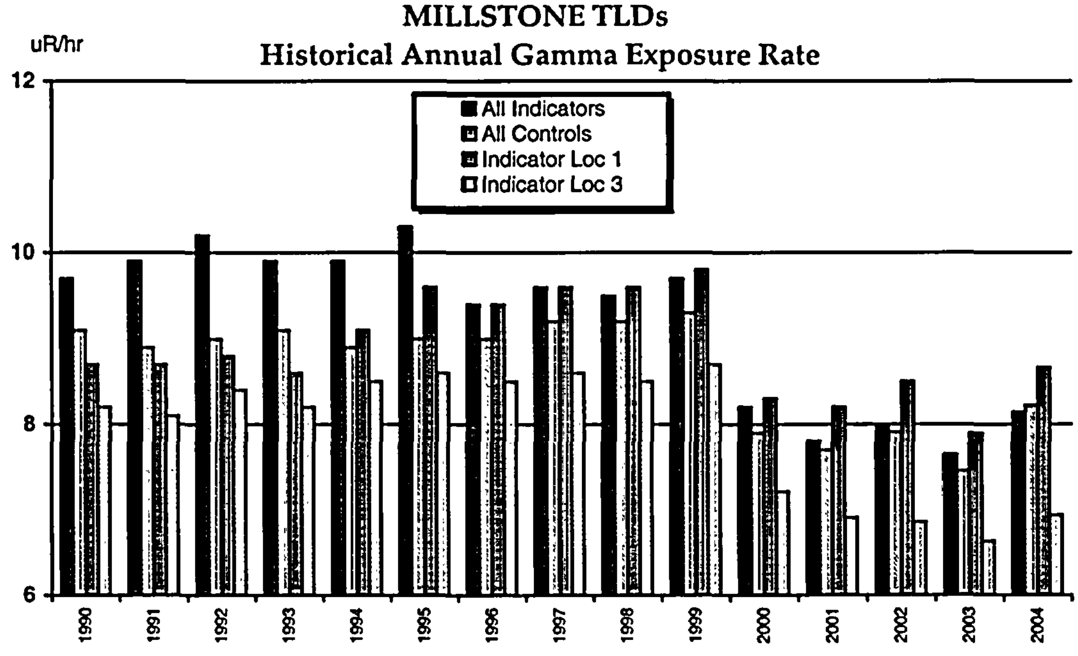
Table 1 lists the exposure rate measurements for all 44 monitored locations. Trends similar to those of past years are apparent. These measurements demonstrate the general variations in background radiation between the various on-site and off-site locations and include gamma exposure from all sources of radioactivity. For example, the Weather Shack (location 02), MP3 Discharge (location 05), Environmental Laboratory (location 08), Corey Road (location 48) and Site Switchyard Fence (location 73X) experience higher exposure rates due to their proximity to granite beds and stonewalls. In addition, the Ledyard control location (location 14C) experiences relatively higher background exposure rate than the other control locations at Mystic, Norwich, and Old Lyme (locations 13C, 15C, and 16C). The only appreciable effect seen in the TLD data is that attributable to the variation in the background radiation that is consistent with previous years.

Figure 4.1-1 shows a historical trend of TLD exposure rate measurements, comparing an annual average of all indicator TLDs, an annual average of all control TLDs, and the annual average of the two most critical indicator locations which are used to represent the two closest site boundary residences in the North-northwest and Northeast directions. Examination of the average measurements since 1990, shows interesting site changes and site characteristics. For example, the average of all indicator locations for the period when Unit 1 was still in operation (through 1995) display the effects of N-16 BWR turbine building sky-shine to immediate areas onsite. As discussed in previous annual reports, the effects of sky-shine at onsite monitoring stations were increases as high as 6 μR/hr at certain onsite locations. Sky-shine decreased rapidly with distance and was indistinguishable from normal background measurements at even the nearest offsite monitoring stations. Also apparent in Figure 4.1-1 is the replacement of the historical Victoreen TLD monitoring system with the Panasonic system in year 2000. The difference in response between the two systems is very apparent, with the new Panasonic TLDs reading 15% to 20% lower. This lower response is consistent for all locations, including both indicator and control locations.

The figure also relates the difference in critical indicator locations (1) and (3) and the annual average of all indicator TLDs to the annual average of the control TLDs collected and measured during coincident periods throughout the year. As discussed earlier, the exposure measurements of many indicator locations onsite are influenced by natural background exposure differences caused by the many granite out-croppings typical of the Millstone area. As shown in Figure 4.1-1, the annual average of the critical indicator location is slightly higher in gamma exposure rate than the average control gamma exposure rate. This difference is the result of the nearby granite. For conservatism, if the difference was the result of plant operation (e.g., storage of radioactive waste on-site, gaseous effluents, etc.) an assessment of the resulting dose consequence, assuming constant year-round residency, is shown in Section 5 as not exceeding 3.9 mrem.

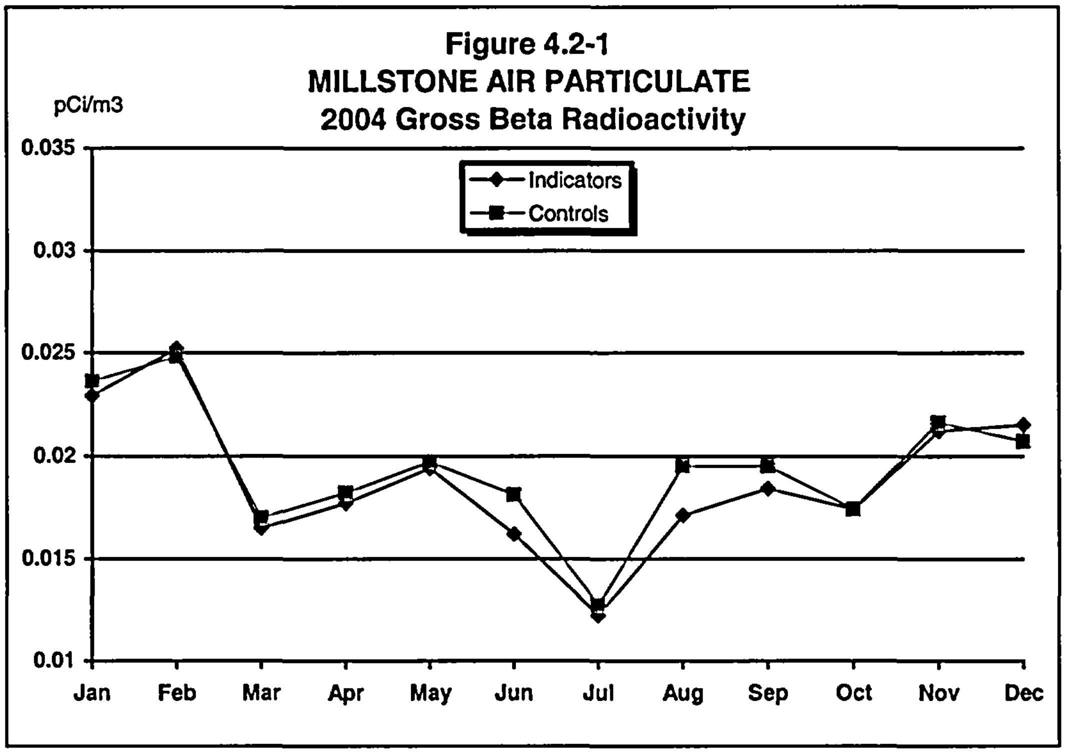
The Second Quarter TLDs were lost in transit to the vendor. Millstone also uses Area Monitoring TLDs around various areas of the RCA boundary as an indication of possible changes in site exposure. A review of the all four quarters of data from this independent program indicated a slight decrease in levels from 2003. Therefore, no effects of the plant were likely during the time frame when the environmental program TLDs were lost.

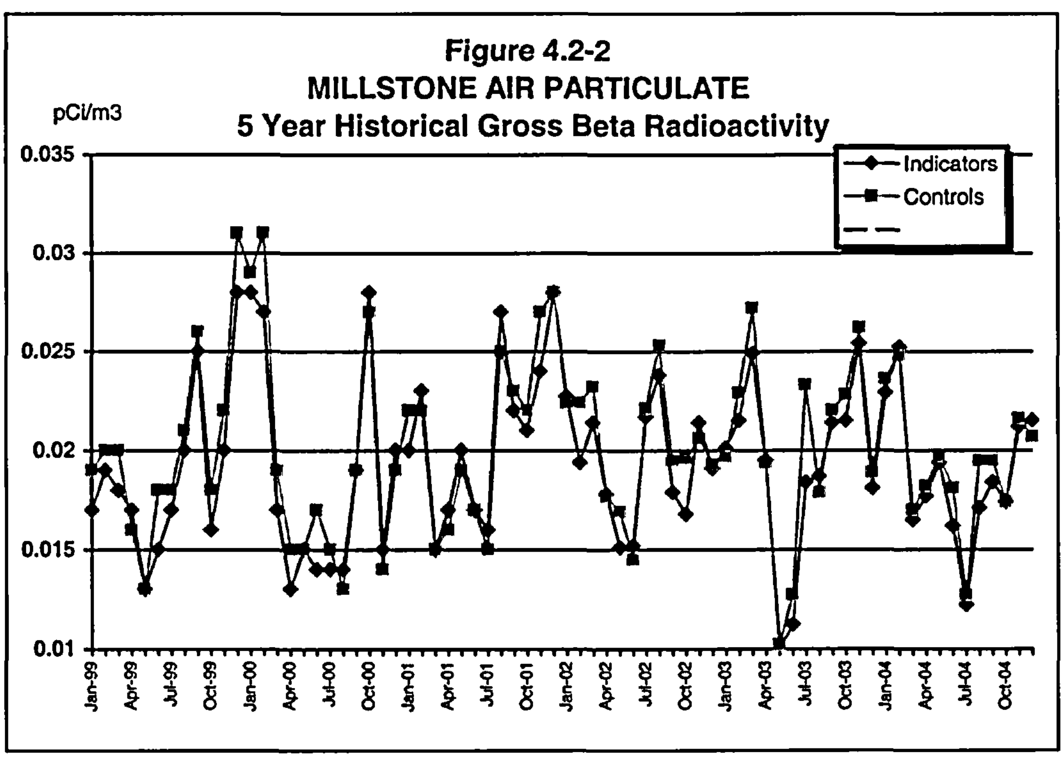
Figure 4.1-1
MILLSTONE TLDs
Historical Annual Gamma Exposure Rate



4.2. Air Particulate Gross Beta Radioactivity (Table 2)

Air is continuously sampled at one outer ring and seven inner ring locations by passing it through glass fiber particulate filters. These are collected weekly and analyzed for gross beta radioactivity. Results are shown on Figure 4.2-1 and Table 2. Gross beta activity remained at levels similar to that seen over the last decade. Inner and outer ring monitoring locations continue to show no significant variation in measured activities (see Figure 4.2-2). This indicates that any station contribution is not measurable.





4.3. *Airborne Iodine (Table 3)*

Charcoal cartridges are included at all of the air particulate monitoring stations for the collection of atmospheric iodine. These cartridges are analyzed on a weekly basis for I-131. No detectable levels of I-131 were seen in the 2004 charcoal samples.

4.4. *Air Particulate Gamma (Table 4A-D)*

The air particulate samples that are utilized for the weekly gross beta analyses are composited quarterly and analyzed for gamma emitting isotopes. The results, as shown in Tables 4A - 4D, indicate the presence of naturally occurring Be-7, which is produced by cosmic processes. No other positive results were seen. These analyses indicate the absence of station effects.

4.5. *Air Particulate Strontium (Table 5)*

Table 5 in past years was used to report the measurement of Sr-89 and Sr-90 in quarterly composite air particulate filters. Because previous data has shown the lack of detectable station activity in this media, the requirement for these measurements was removed from the Radiological Effluent Monitoring Manual (REMM) and analyses have been discontinued. The fact that milk samples are a much more sensitive indicator of fission product existence in the environment, prompted the decision for discontinuation. In the event of widespread station related contamination or special events such as the Chernobyl incident, these measurements may be made. Historically, when world events created conditions that caused detectable measurements of these nuclides, no difference was noted between indicator and control locations. This further confirms that these detectable levels were not plant related.

4.6. *Soil (Table 6)*

Millstone resumed collection of soil as a required media type in 2001. Prior to 2001, it had not been sampled for over fifteen years. The discontinuance of these samples was largely due to the fact that, previous sample results never indicated any detectable station activity. Similarly, no station detectable activity has been seen in soil samples taken since the resumption of these samples. The results of these samples, also allows for the determination of baseline activity levels in soil. This is particularly important for Cs-137, since significant levels from past weapons testing fallout remain in the soil. Baseline levels will prove useful years from now when site characterization and decommissioning of the station become the focus during preparations for License termination. This media is collected quarterly from one control and two indicator locations.

4.7. Cow Milk (Table 7)

The most sensitive indicator of fission product existence in the terrestrial environment is usually milk samples. This, in combination with the fact that milk is a widely consumed food, results in this pathway usually being one of the most critical pathways. Since 1996 all dairy (cow) farms close enough to Millstone to be considered an indicator location (i.e. within 10 miles) have been out of business. Therefore, the sampling of cow milk has been discontinued until such time that a new dairy farm starts business. Each year a Land Use Census is used to identify locations of milk animals that should be included in the monitoring program. It is performed annually and is maintained by observations, door-to-door surveys and consulting with local agriculture authorities. The 2004 census can be seen in Appendix A. If a new dairy farm is identified within a distance from Millstone to be considered an indicator location, the collection of cow milk will resume.

4.8. Goat Milk (Table 8)

These samples are collected when milk is available for consumption. The frequency is twice per month during grazing season (April through October) and once per month the remaining year. Each sample is analyzed for I-131 and gamma emitting nuclides. The samples collected within each quarter are composited for each sample location and analyzed for Strontium.

Goat milk samples are typically a more sensitive indicator of fission products in the terrestrial environment than cow milk samples. The uptake of radionuclides in milk is dependent on a number of parameters, including: metabolism of these animals, feeding habits, and feed type. Similar to previous years, Cs-137 and Sr-90 were observed in goat milk. During past weapons testing periods, samples taken at certain milk locations indicated higher uptake of fallout than others. This was especially apparent in past samples collected in the immediate area around Millstone (see previous Annual Operating Reports). One of these sites, location 22 (5.2 Mi. NNE, sampled only since1994), exhibits this trend showing higher

Sr-90 and Cs-137 concentrations than at some other locations, including ones closer to Millstone. The presence of Sr-90 and Cs-137 is the result of residual radioactivity deposited into the environment from the fallout of past nuclear weapons testing. The facts that lead to this conclusion are presented in Section 6.0. These include: effluent release totals for these isotopes show insufficient quantities to account for such measurements; Sr-89 and Cs-134 which are chemically similar and generally released in comparable quantities were not detected, and a trend since the early 1960's that shows a consistent declining presence of Cs-137 and Sr-90 in milk produced in Connecticut.

The results indicate no detectable I-131 in this media. No plant related detectable levels of I-131 have been seen in goat milk samples for approximately 20 years. The only other occasions where I-131 was detected were the Chinese Weapons Tests of the mid to late 1970's and the fallout from Chernobyl.

Goat milk was unavailable at all locations both early and late in the year. Per requirements, pasture grass or feed is collected as a substitute when milk cannot be collected (see ***4.9. Pasture Grass and Feed***).

4.9. Pasture Grass and Feed (Table 9)

When the routine milk samples are unavailable, samples of pasture grass are required as a replacement. These samples may also be taken to further investigate the levels of radioactivity in milk. During the winter months and early spring, insufficient growth often prohibits sampling of pasture grass. Feed (e.g., hay) is typically sampled whenever pasture grass is unavailable.

No station effects were seen in pasture grass and feed samples. Cosmic produced Be-7 was observed in the majority of the pasture grass samples and the fourth quarter hay samples. Due to its relatively short half-life (52 days), it was not detected in the hay samples. The K-40 (naturally occurring nuclide) was a factor of two times higher in hay (compared to pasture grass). Similar to goat milk, the Cs-137 values at indicator and control locations are comparable and would indicate that the levels observed are the result of residual weapons testing fallout.

4.10. Well Water (Table 10)

Millstone resumed collection of well water as a required media type in the fourth quarter of 2003. It was discontinued in 1986 since no detectable station activity was ever observed. However, to better assure prompt indication of any potential effects of plant operation, the analysis of these samples has resumed. No station detectable activity is seen in the well water samples taken in 2004.

4.11. Reservoir Water (Table 11)

Reservoir water samples are special samples not required by the REMM. Previous data has shown the lack of detectable station activity in this media. This fact, and the extremely unlikely possibility of observing routine station effluents in this media have resulted in discontinuing these samples. In the event of widespread station related contamination, these samples may be collected.

4.12. Fruits and Vegetables (Table 12)

Consistent with past years, this media did not show any station effects. Cosmic produced Be-7 was noted in the indicator lettuce and swiss chard samples. Naturally occurring K-40 was detected in all samples.

4.13. Broad Leaf Vegetation (Table 13)

This media can be an early and sensitive indicator of releases from the station from both unplanned releases and normal operations. Therefore, to enhance program-monitoring effectiveness, samples of broadleaf vegetation are collected monthly during the growing season, April - October, even though requirements are to collect twice a year.

Most samples had detectable levels of cosmic produced Be-7. Positive indications of Cs-137 were observed in two samples. The levels are due to fallout and are comparable to those observed in past years. This media did not show any station effects.

4.14 Seawater (Table 14)

Seawater samples from the Vicinity of Discharge (32) are obtained from a continuous sampler located at the end of the quarry (where the station discharge is undiluted). The samples from this location are collected weekly and composited for monthly analyses. Samples from Giants Neck (37C) are quarterly composites of weekly grab samples. Millstone increased the required sampling frequency for composite samples from the Vicinity of Discharge to a monthly basis to increase monitoring effectiveness. In 2003, the LLD for H-3 was lowered by approximately a factor of four to further enhance monitoring effectiveness. This lower LLD was continued in 2004.

Naturally occurring K-40 was seen all but two of the samples. Measured plant related levels of H-3 in seawater from the immediate vicinity of discharge (location 32) were observed in seven of the 12 samples (slightly less frequent then in 2003). As discussed above, this sample is taken directly from liquid effluent flow prior to dilution into the Long Island Sound. Dilution studies performed on this discharge have determined that a dilution factor of 3 is appropriate to estimate concentrations immediately outside the quarry within a near-field area.

Tritium builds up in the reactor coolant in each fuel cycle. It is generated during operation from fission and neutron reactions. For approximately the last 10 years, H-3 has typically been below detectable levels because of the change in analysis technique. Figure 4.14-1 shows a ten-year trend of tritium releases in Millstone liquid effluents versus measured environmental concentrations from the vicinity of discharge location. As can be noted from the figure, since the restart of Unit 3 in 1998 and Unit 2 in 1999, tritium releases in liquid effluents have risen to levels at, or above, those observed during the pre-shutdown period. A review of previous years' trends indicated that lowering the LLD for tritium for location 32 would make an enhancement to the monitoring program. The lower LLD enables a direct comparison of effluent monitoring to environmental monitoring for this exposure pathway. Figure 4.14-2 shows this comparison. This comparison is also more accurate than Figure 4.14-1 since it takes into account the dilution flow during each month. This flow can change substantially during plant outages. By plotting the data monthly, the resolution of the comparison is also enhanced.

Figure 4.14-1
MILLSTONE LIQUID H-3
RELEASE VERSUS SEAWATER CONCENTRATION
12 Year Historical Trend

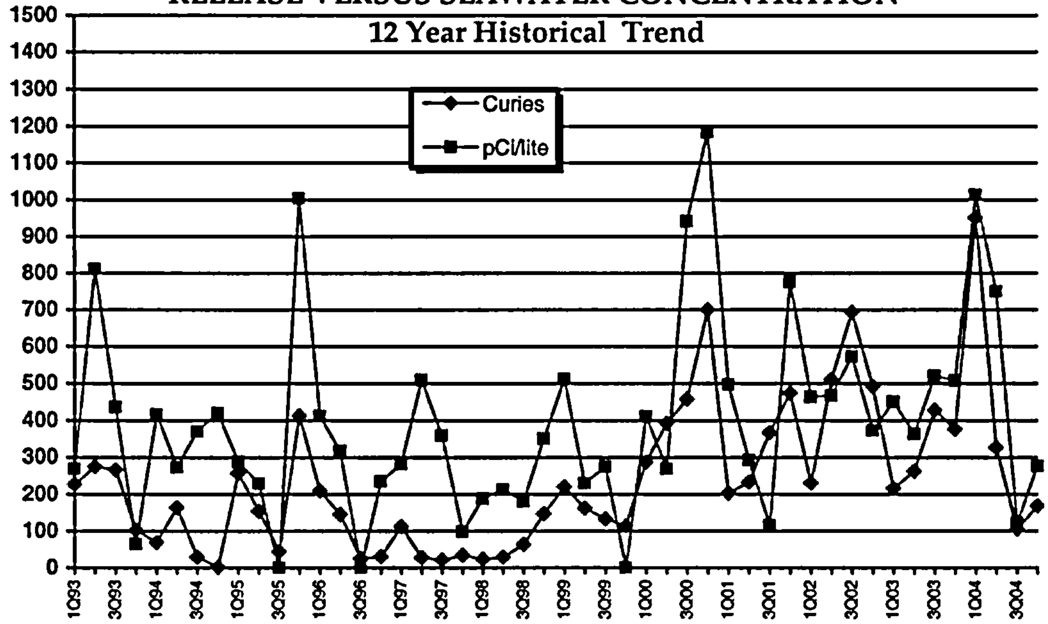
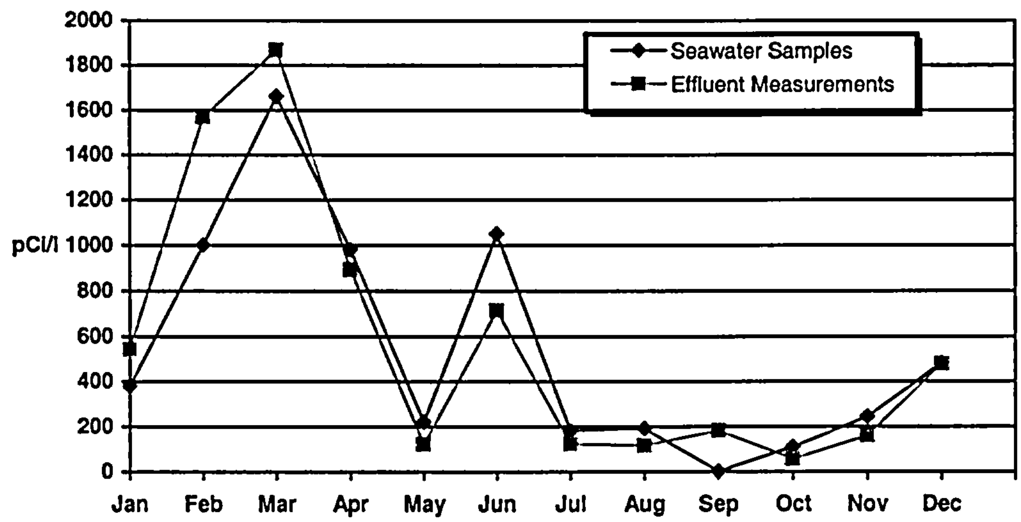


Figure 4.14-2
MILLSTONE Seawater - Tritium
2004 Samples vs. Effluent Measurements



4.15. Bottom Sediment (Table 15)

Similar to last year, Cs-137 was detected in the samples from Golden Spur (67X). This is an estuarine area at the mouth of a small brook where sediments are covered with freshwater during ebb tides nearly every day. The levels of Cs-137 at this location are comparable to those observed in past river water sediments taken from the Connecticut River. Because of the relative distance and direction of the Golden Spur location from the station and comparable levels are seen at even much farther locations, the Cs-137 detected at Golden Spur is from weapons testing fallout.

Cs-137 was also detected once (fourth quarter sample) in samples from West Jordan Cove (29) and twice (third and fourth quarter "extra" samples) in the samples from Jordon Cove Bar (39X). The levels at Jordan Cove Bar are similar to those at Golden Spur and likely exhibit the effect of the fresh water drainage from Jordan Brook. The levels at West Jordan Cove were significantly less. Although these levels may be the result of fallout, the samples from Jordan Cove Bar also indicated detectable quantities of Co-60.

Therefore, these levels are considered plant related activity. Excluding the even smaller levels that were detected last year, plant related activity has not been detected in bottom sediment for over a decade. The levels detected are comparable to the levels observed in 1990. Bottom sediment is not a dose pathway to man and therefore the presence of radioactivity in bottom sediment does not pose any dose consequences. Examinations of aquatic media sampled from the same sampling locations (discussions that follow) do not show any detectable Co-60 or Cs-137.

4.16. Aquatic Flora (Table 16)

Sampling of this media provides useful information since it is very sensitive to station discharges. However, similar to the last several years, no station related radioactivity was detected in aquatic flora in 2004. Although one sample from Black Point (36) had a positive indication of I-131, it was not detected at any of the locations closer to the station (locations 29,32 and 35) and not detected in follow-up samples taken three weeks later. The vendor noted that this sample had an unusual odor indicating that it may have been contaminated with some type of waste. Therefore, this unusual positive result is suspected to be the result of contamination with residual activity from the medical administration of this nuclide.

4.17. Fish (Tables 17A and 17B)

4.17.1. Flounder (Table 17A)

The activity in Flounder is the same as that seen for the past decade. No activity was observed except for the naturally occurring nuclides.

4.17.2. Fish - Other (Table 17B)

The activity in other fish is the same as that seen for the past decade. No activity was observed in this media except for naturally occurring nuclides, including samples taken from within the quarry.

4.18. Mussels (Table 18)

Similar to the last several years, this sampling media showed no station related radioactivity at all locations.

4.19. Oysters (Table 19)

All locations, except for the quarry, utilize oysters stocked in trays. These oysters have been obtained from location 68Z for the last several years. To enhance the program, the oysters from location 68Z have also been analyzed. Trays are kept at most sampling areas to guarantee samples and facilitate sample collection. Native oysters are sampled at the Quarry (40X), which is an extra location.

Station related Ag-110m was observed in only two of the four samples from within the Vicinity of Discharge (32) and all four samples from the Quarry (40X). Although location 32 is labeled as the Vicinity of Discharge, for this sample type the actual location is actually at the end of the quarry (where the discharge water is still undiluted). No station related activity was observed in samples from beyond the station discharge area.

In years past, high levels of Zn-65 were typically observed in oysters caused by their high capacity for accumulating zinc. Studies have shown that oysters can accumulate as much as 50 times or more the amount of zinc compared to most other seafood (Wolfe, 1979). A remarkable correlation exists between the Zn-65 concentration measured in the native quarry oysters and the amount of Zn-65 discharged into the environment. However, since the permanent shutdown of Millstone Unit 1 in 1996, the discharges of Zn-65 in liquid effluents have dropped to no detectable activity in station discharges. Starting in 2001, no Zn-65 has been released in liquid effluents and no Zn-65 has been detected in oysters. Figure 4.19-1, shows the historical trend that existed between Zn-65 releases and measured concentrations in quarry oysters. The decreasing trend in effluent radioactive releases is apparent in both the curies released and the measured concentrations in oysters.

Figure 4.19-2 shows a similar trend of Ag-110m concentration in quarry oysters compared with liquid effluent curies of Ag-110m discharged. Again, the dependency between Ag-110m discharged and the Ag-110m concentration measured in the native quarry oysters is apparent. The historical sensitivity between station measured effluent discharges of Zn-65 and Ag-110m when compared to environmental measured concentrations has provided a basis for Millstone to adjust the bioaccumulation factors for Zn-65 and Ag-110m used in the standard industry effluent dose consequence codes. See ***Section 5*** of this year's and previous years' Annual Radiological Environmental Operating Reports for a comparison of the two methods which has allowed for such adjustments in the past (i.e., dose from the station's measured radioactive discharges input into conservative models versus actual measurements of the concentrations of radioactivity in environmental media to calculate annual dose commitment from consumption).

Because no station activity was observed at locations beyond the station discharge area and since the two locations in the quarry are on-site and not available for public use, the actual concentration of the nuclides in oysters available for public consumption is much less. The near-field dilution factor for liquid discharges from the Millstone quarry discharge is a factor of 3. The dose consequence of the station related radioactivity via this pathway is discussed in ***Section 5.0.***

4.20. Clams (Table 20)

Occasionally this media indicates the presence of station related radioactivity. No station related radioactivity was observed in any of the clam samples taken in 2004.

4.21. Scallops (Table 21)

Scallops are not required by the REMM. However, attempts are made to sample this media to confirm station effects because scallops are available for public consumption. No scallop samples were available in 2004.

4.22. Lobsters (Table 22)

Like the last several years, no station related radioactivity was detected in this sample media in 2004.

Figure 4.19-1

Zn-65 COMPARISON

Curies Discharged vs. Native Oyster Conc.

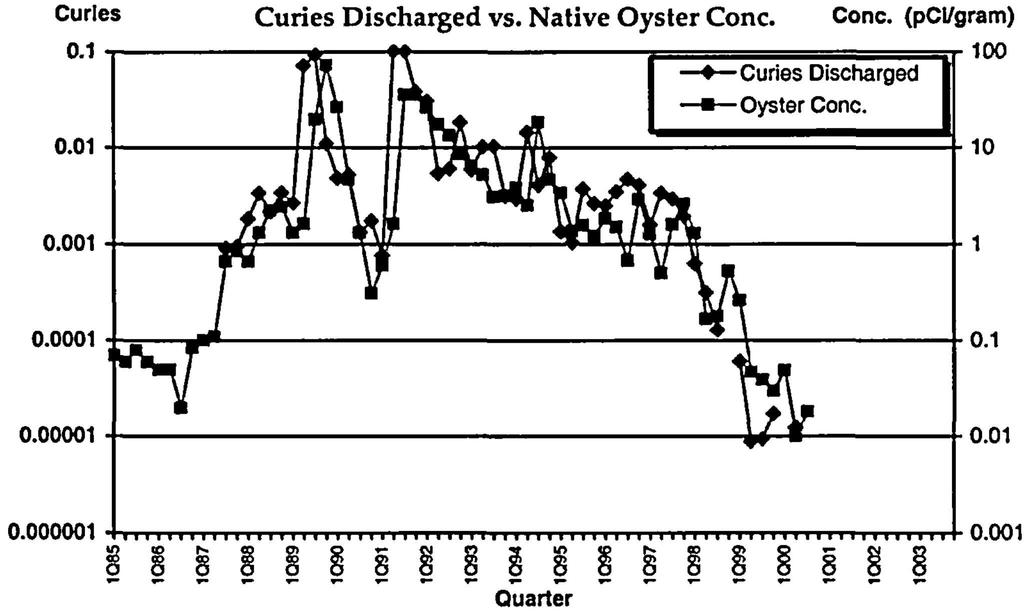
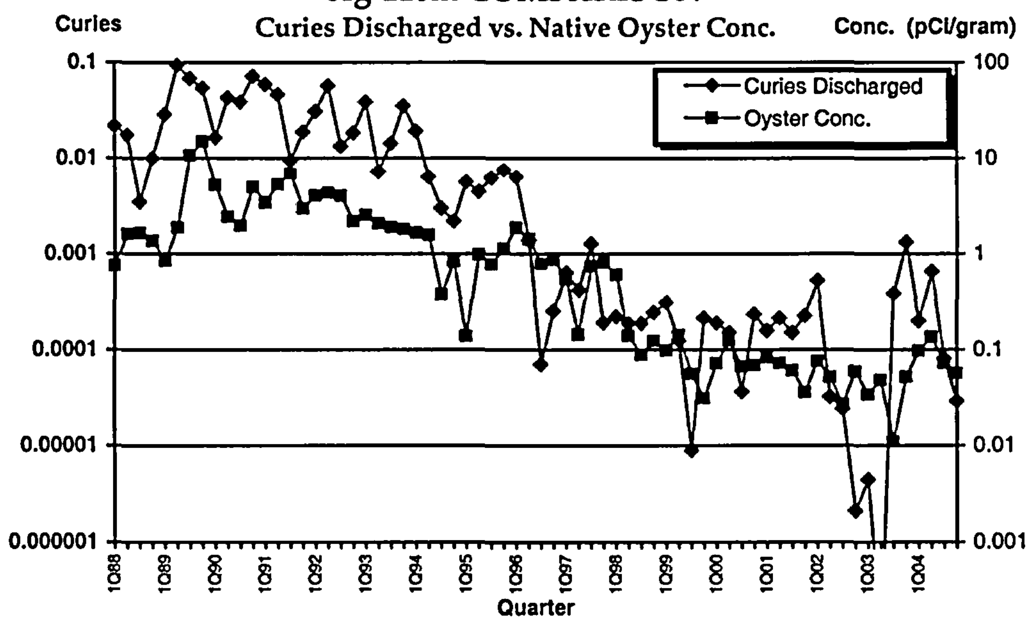


Figure 4.19-2

Ag-110m COMPARISON

Curies Discharged vs. Native Oyster Conc.



5. OFFSITE DOSE EQUIVALENT COMMITMENTS

The off-site dose consequences (dose equivalent commitments) of the stations' radioactive liquid and airborne effluents have been evaluated using two methods.

The first method utilizes calculations of direct dose from sources onsite and the stations' measured radioactive discharges as input parameters into conservative models to simulate the transport mechanism through the environment to man. This results in the calculation of the maximum dose consequences to individuals. The results of these computations have been submitted to the NRC in the Radioactive Effluent Release Report written in accordance with the Radiological Effluent Monitoring Manual, Section I.F.2. This method, which is usually conservative (i.e., computes higher doses than that which actually occur), has the advantage of approximating an upper bound to the dose consequences. This is important in those cases where the actual dose consequence cannot be measured because they are so small as to be well below the capabilities of conventional monitoring techniques.

The second method utilizes the actual measurements of the concentrations of radioactivity in various environmental media (e.g., fish, shellfish) and then computes the dose consequences resulting from the consumption of these foods.

The results of both methods are compared in Table 5.1 for those pathways where a potential dose consequence exists and a comparison is possible. The doses presented in this table are calculated at the location of maximum effect from the station effluents for that pathway and for the critical age group. For example, the external gamma dose from gaseous effluents is calculated for the site boundary location which is not only the nearest but also has the greatest directional wind frequency and fish and shellfish doses are calculated assuming they are from an area within 500 feet of the station discharge.

Summarizing the data in Table 5.1:

MAXIMUM TOTAL INDIVIDUAL DOSES :

WHOLE BODY = 0.17 mrem

GI(LLI) = 0.011 mrem

The organ GI(LLI) (Gastrointestinal Tract, Lower Large Intestine) dose is essentially all attributable to the liquid pathway. The majority of the whole body dose is due to a conservative determination of dose (~0.14 mrem) to the nearest resident as a result of direct radiation from on-site radioactive waste operation/storage facilities and continuous occupancy. The whole body and maximum organ dose attributable from station effluents includes conservative assessments using Method 2.

Since the maximum dose consequence to an individual is at the location of highest dose consequence, doses will be less for all other locations. The average whole body dose to an individual within 50 miles historically is on the order of 1000 times less than the maximum individual whole body dose.

To provide perspective on the doses in Table 5.1, the standards for 2004 on the allowable maximum dose to an individual of the general public are given in 40CFR190 as 25 mrem whole body, 75 mrem thyroid, and 25 mrem to any other organ. These standards are a fraction of the normal background radiation dose of approximately 284 mrem per year and are designed to be inconsequential in regard to public health and safety. Since station related doses are even a smaller fraction of natural background, they have insignificant public health consequences. In fact, the station related doses to the maximum individual are less than 10% of the variation in natural background in Connecticut.

TABLE 5.1

COMPARISON OF DOSE CALCULATION METHODS

MILLSTONE POWER STATION

2004 Annual Dose (millirem)

Pathway	Individual	Organ	Method 1 [1]				Method 2 [1]
			Unit 1 (BWR)	Unit 2 (PWR)	Unit 3 (PWR)	Station Total	Station
Airborne Effluents							
1. External Gamma Dose	Max[2]	Whole Body	0.0024	0.0019	0.022	0.026	ND[7]
Direct Dose							
Nearest Residence	Max[2]	Whole Body	N/A	N/A	N/A	~0.14[4]	<3.9[5]

TABLE 5.1 (Cont.)

COMPARISON OF DOSE CALCULATION METHODS

MILLSTONE POWER STATION

2004 Annual Dose (millirem)

Pathway	Max Individual	Organ	Method 1 [1] Unit 1 (BWR)	Method 1 [1] Unit 2 (PWR)	Method 1 [1] Unit 3 (PWR)	Method 1 [1] Station Total	Method 2 [1] Station
Liquid Effluents							
1. Fish	* Adult	Whole Body	0.000004	0.00012	0.00063	0.00076	ND[3]
	Teen	"	0.000002	0.00010	0.00057	0.00067	
	Child	"	0.000001	0.00010	0.00059	0.00069	
	* Adult	GI(LLI)[6]	0.000001	0.00076	0.0047	0.0055	ND
	Teen	"	0.000001	0.00055	0.0034	0.0040	
	Child	"	0.000001	0.000023	0.0014	0.0016	
	Adult	Liver	0.000005	0.00022	0.0013	0.0015	ND
	* Teen	"	0.000005	0.00021	0.0013	0.0015	
	Child	"	0.000004	0.00019	0.0012	0.0014	
2. Shellfish	* Adult	Whole Body	0.000001	0.000080	0.00056	0.00064	0.000013[8]
	Teen	"	0.000000	0.000076	0.00056	0.00064	0.000014
	Child	"	0.000000	0.000094	0.00068	0.00078	0.000015
	* Adult	GI(LLI)	-	0.0010	0.0041	0.0051	0.0091[8]
	Teen	"	-	0.0007	0.0029	0.0036	0.0063
	Child	"	-	0.0003	0.0011	0.0014	0.0022
	Adult	Liver	0.000001	0.00023	0.0016	0.0018	0.000022[8]
	* Teen	"	0.000001	0.00023	0.0017	0.0019	0.000022
	Child	"	0.000001	0.00024	0.0016	0.0019	0.000019

Notes:

1. Except for direct dose, method 1 uses measured station discharges and meteorological data as input parameters to transport-to-man models that conservatively calculate dose to people; method 2 uses actual measured concentrations in environmental media to estimate the dose.

2. Maximum individual - The maximum individual dose is the dose to the most critical age group at the location of maximum concentration of station related activity. The dose to the average individual is much less than the maximum individual dose.

3. ND - Not Detectable - No station related activity could be detected above natural background or above the minimum detectable level (MDL).

4. The dominant source of direct dose from the station is from operation/storage of radioactive waste facilities. Storage of radioactive waste in areas designated onsite is limited by design and operation to ensure that the maximum direct dose from each area at the site boundary does not exceed one millirem. Actual exposure from each facility throughout the year was maintained much less than this operational limit. Each facility is monitored onsite by the Radiation Protection Department using TLDs. The exposure measured for each facility TLD was corrected for distance to the nearest site boundary residence. The resultant exposure was conservatively multiplied by 1.5 to account for skyshine. These maximum estimated doses from each facility were summed for a cumulative site commitment of approximately 0.14 millirem. The whole body dose from liquid effluents was 0.00175, which results in a total estimated whole body dose to the maximum individual of 0.168 mrem (0.14+.0261+.00175).

5. Measured dose was derived from quarterly TLD readings. There are two residences that qualify as the closest residence; each has a TLD near enough to use as an estimate to each residence. The one with the highest average dose rate was used to estimate the direct dose to the closest residence. A background dose rate was subtracted. This background was derived from the average of the five control TLD locations. This method is very conservative assuming natural exposure influences, such as granite, are actually plant related exposure. This method provides a bounding high value. The exposure measurements of the select indicator locations are influenced by natural background exposure differences caused by the many granite out-croppings typical of the Millstone area. Historical data evaluation has shown that TLD sample locations in the vicinity of granite can be dramatically influenced by natural radioactivity contained within the granite.

6. GI (LLI) - Gastrointestinal Tract - Lower Large Intestine.

7. ND - Not Detectable - measurements for 2004 show no detectable station related activity. TLD's cannot detect levels that are such a small fraction of natural background.

8. Based on measured levels in quarry oysters. A measured near field dilution factor of 3 was used to adjust for the fact that these oysters are on-site and inaccessible to the public. This factor adjusts the measured on-site concentration to that which could occur to a public accessible off-site location after dilution of the effluent by the Long Island Sound.

6. DISCUSSION

The evaluation of the effects of station operation on the environment requires the careful consideration of many factors. Those factors depend upon the media being affected. They include station release rates, effluent dispersion, occurrence of nuclear weapons tests, seasonal variability of fallout, local environment, and locational variability of fallout. Additional factors affecting the uptake of radionuclides in milk include soil conditions (mineral content, pH, etc.), quality of fertilization, quality of land management (e.g., irrigation), pasturing habits of animals, and type of pasturage. Any of these factors could cause significant variations in the measured radioactivity. A failure to consider these factors could cause erroneous conclusions.

Consider, for example, the problem of deciphering the effect of station releases on the radioactivity measured in milk samples. This is an important problem because this product is widely consumed and several fission products readily concentrate in this media. Some of these fission products, such as I-131 and Sr-89 are relatively short-lived. Therefore they result from either station effluents, nuclear weapons tests or nuclear incidents (e.g. Chernobyl). Sr-89's lifetime is longer than I-131's, therefore it must be remembered that it will remain around for much longer periods of time. The even longer-lived fission products, Sr-90 and Cs-137, cause more of a problem. These isotopes are still remaining from the weapons testing era of the 1960's. This results in measurable amounts of Sr-90 and Cs-137 appearing in some milk samples. Distinguishing between this "background" of fallout activity and station effects is a difficult problem.

In reviewing the historical and present Sr-90 and Cs-137 measured in cow and goat milk in the areas around Millstone station, a casual observer could notice that in some cases the levels of these isotopes are higher at farms closer to the station than at those further away from the station. The station's effluents might at first appear to be responsible. However, the investigation of the following facts proves this conclusion wrong.

(1) The stations accurately measure many fission products, including Sr-90 and Cs-137 in their releases. Based on these measurements and proven models developed by the Nuclear Regulatory Commission, concentrations in the environment can be calculated. These calculations (generally conservative, see Section 5.0) show that insufficient quantities of Sr-90 and Cs-137 have been released from the plants to yield the measured concentrations in milk.

(2) Over the many years of station operation, Sr-89 has often been released in comparable quantity to Sr-90. Since they are chemically similar, comparable levels should have been detected in milk if the Sr-90 was station related. No station related Sr-89 has ever been detected in milk samples.

(3) Similar to Sr-89, Cs-134 can be used as an indication of station related Cs-137. Although not as conclusive as Sr-89, the lack of any measurable Cs-134 in any of the milk samples suggests that the Cs-137 is not station related. This is further confirmed by the evaluation of the air particulate data. The only occurrences of detectable Cs-134 in milk resulted from the Chernobyl incident.

(4) Dairy milk sampling in Connecticut began in the 1960's, several years prior to nuclear station operation. The highest levels of weapons fallout related Sr-90 and Cs-137 (see Figures 6-1 and 6-2), were measured in the years prior to station operation. Samples taken in the immediate station areas have always shown higher levels of weapons related fallout than samples taken from the Central Connecticut Region (CT Pooled Milk). Radioactivity levels of fallout related Sr-90 and Cs-137 have decreased significantly since the 1964 Nuclear Test Ban Treaty due to decay.

(5) Local variability of Sr-90 and Cs-137 in milk is common throughout the United States. Due to the variability in soil conditions, pasturing methods, rainfall, etc., it is the rule rather than the exception. Therefore, it is not surprising that certain farms have higher levels of radioactivity than other farms. In fact, in the past there are some cases where the farms further from the station have higher Sr-90 and Cs-137 values than the farms that are closer to the station.

(6) In the past when a goat farm operated near Millstone (2.0 Mi - ENE), the highest levels of Sr-90 and Cs-137 were typically indicated. This same farm also experienced the highest levels of short-lived activity from the 1976 and 1977 Chinese Tests and the 1986 Chernobyl accident. This indicates that for some unknown reason this farm had the ability for higher reconcentration. Special studies performed at this and other farms failed to find any link to the station.

Based on these facts, the observation that the station effluents are responsible is obviously false. The cause must be one or more of the other variables.

Dominion has carefully examined the data throughout the years and has presented in this report all cases where station related radioactivity could be detected. An analysis of the potential exposure to the maximum individual from any station related activity has been performed and shows that in all cases the exposure is insignificant.

The Connecticut Department of Environmental Protection performs an independent check on certain environmental program analyses. The results of their analyses are comparable to the results from this program's analyses. These comparisons can be used as a cross-reference to verify measured station activity.

Figure 6-1 Strontium-90 in Milk

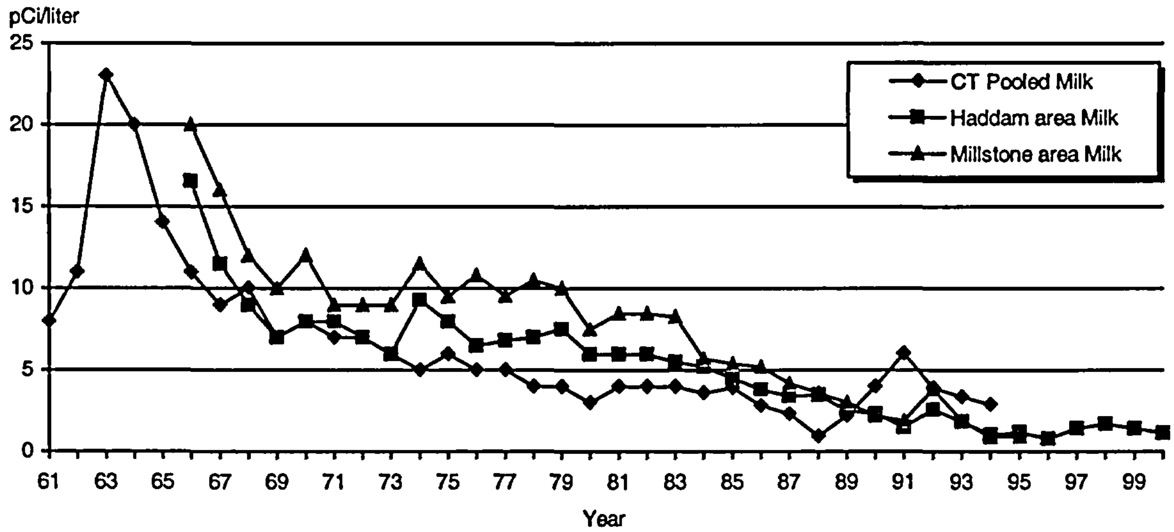
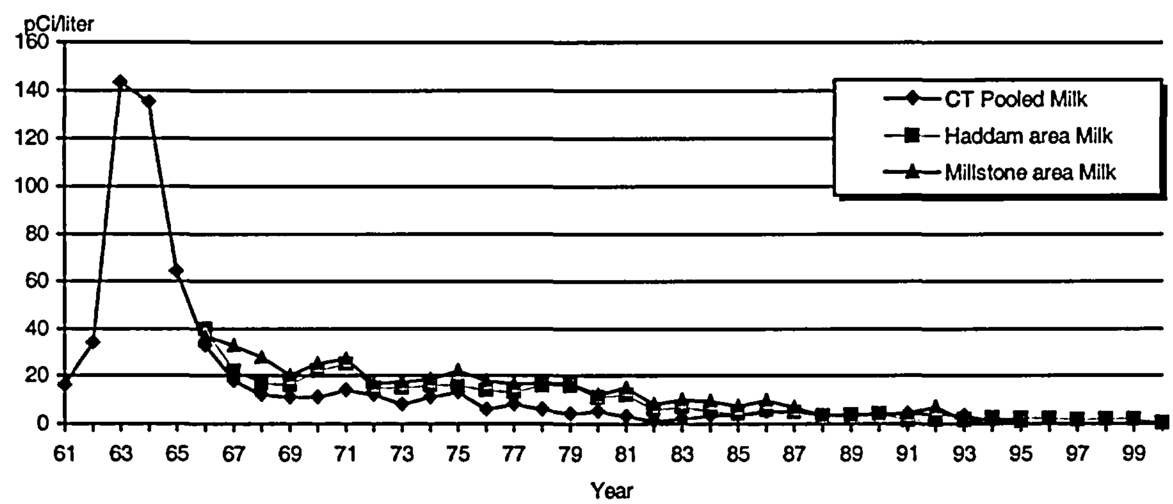


Figure 6-2 Cesium-137 in Milk



Dairy milk is no longer available in the Millstone area, Haddam Neck no longer collects milk, and CT Pooled milk has not been collected by the State of CT since 1994. Graphs provided to show historical trends.

CY Start-up occurred:	July 24, 1967	MP2 Start-up occurred:	December, 1975
MP1 Start-up occurred:	October 26, 1970	MP3 Start-up occurred:	January 23, 1986

APPENDIX A

LAND USE CENSUS FOR 2004

TABLE A-1

Dairy Cows Within 15 miles of Millstone Point- 2004

Direction	Distance	# of Cows
N	14 Mi	55
NE	13.5 Mi	50
WNW	11 Mi	80
NNW	13 Mi	230*
NW	10.3 Mi	9

Note: No cow farms on this list are used for sampling, all farms are greater than ten miles from plant.

* Last year's numbers, unable to contact

TABLE A-2

Dairy Goats Within 20 miles of Millstone Point- 2004

Direction	Distance	Sample Location	# of Goats
N	2 Mi	LOCATION 21	6/5*
N	20 Mi		2/2
NNE	5.2 Mi	LOCATION 22	8/4
NE	2.7 Mi		4/0
ENE	2 Mi		1/0
ENE	13 Mi		2/0
ENE	13.1 Mi		5/1
ENE	16.4 Mi		16/10
WNW	18.1 Mi		6/2
NW	14.1 Mi		3/3
NW	17.3		6/3
NNW	18.5 Mi		28/8
NNW	20.7 Mi		6/2
NNW	29 Mi	LOCATION 24	68/22

* *Number of Goats/Number of Milkers*
** *Unable To Contact As Of This Time*

TABLE A-3

2004 Resident/Garden Survey[θ]

Downwind Direction	Distance to Closest Resident (meters)	Distance to Closest Garden (meters)
N	1500	1490
NNE	860	870
NE	790	740
ENE	1580	1580
E	1500	1650
ESE	1690	1990
SE	*	*
SSE	*	*
S	*	*
SSW	*	*
SW	3700	3840
WSW	3190	3210
W	2870	2950
WNW	2470	2470
NW	770	2180
NNW	740	1020

** N/A - not applicable (over water sector)*

[θ] *Distances were measured in 2003 using GPS.*

APPENDIX B

DNC QA PROGRAM

INTRODUCTION
Dominion Nuclear Connecticut (DNC) maintains an independent non-required quality assurance (QA) program as part of the radiological environmental monitoring program (REMP). The QA program consists of contractor appraisals and quality control samples. This independent program is applicable to all Dominion nuclear facilities because they share a joint contract with Framatome ANP DE&S Environmental Laboratory.

DNC QA PROGRAM
The DNC independent QA Program includes spikes of various sample media and duplicate samples. Sample spikes are a check on the accuracy of results of the contractor's radioanalyses. Duplicate samples tests the contractor's precision, or reproducibility of results, by comparing analytical results of split samples. The number and type of DNC QA Program quality control samples are defined in Millstone Nuclear Power Station Health Physics Operations Procedure RPM 2.9.13, "Quality Control of Radiological Environmental Monitoring Program Sample Analyses" and RPM 2.9.12, "Quality Control of the Environmental TLD Monitoring Program." An investigation is conducted on any result or trend that does not satisfy acceptance criteria.

OTHER QA PROGRAMS
The DNC Independent QA Program is not the only QA Program which monitors REMP radioanalysis performance. Other programs include:

1. Contractor lab's internal QA program. In addition to the Millstone quality control samples, the radioanalysis contractor has it's own quality control samples. In total, at least five percent of the contractor's sample analyses include quality control samples.

2. Contractor lab's interlaboratary comparison program with an independent third party, Analytics, Inc. Results of the Analytics intercomparison are contained in Appendix C. Primary contractor participation in an interlaboratory comparison program is required by station Technical Specifications. The Analytics comparison satisfies this requirement.

3. Contractor lab's participation in the National Institute of Standards and Technology (NIST) Measurement Assurance Program (MAP), the Environmental Resource Associates (ERA) Proficiency Test (PT) Program, the Department of Energy (DOE) Quality Assessment Program (QAP), and the Mixed Analyte performance Evaluation Program (MAPEP). The lab participates in these interlaboratory QA programs because of other clients' needs, not because of nuclear power station environmental sample analyses. However, some of these intercomparison samples are also applicable to nuclear power environmental samples.

RESULTS OF MILLSTONE QA PROGRAM FOR CONTRACTOR RADIOANALYSES

Criteria for passing QA sample analysis is that the result be within 20% of the known spike except in the case of Sr-89 or Sr-90 spikes in milk which have to be within 30% of the known spike. To allow more tolerance for lower activity spikes an alternate criterion may be used. If the two sigma error range of the analyzed result includes the known spike value the result passes.

The Millstone QA Program indicated that the contractor lab's environmental radiological analysis program was adequate in 2004. Results are shown on Table 2. All of the TLD spike tests satisfied procedural criteria. Of 104 individual nuclide analysis results on QA samples, 79 passed the acceptance criteria, a 76% success rate. Since this is an unusually low success rate, the program was investigated. Two of the failures were for tritium analyses; one was just outside the two sigma acceptance criteria (difference was 2.09 sigma) and the other was a factor of two too low (seems to indicate half the spike was missed, since the routine results for seawater samples track remarkable well with the measured effluents, see Figure 4.14-2). Eighteen of the twenty-three other failures were noted for the gamma in water spikes. Self Assessment MP-SA-04-09noted this deficiency (AFI#7 in self assessment report). Follow-up review of the spiking process and sample preparation indicated a low bias (consistent with the low results) for the low range (adjustable) micropipette. The results for the December spikes significantly improved. Procedures have been revised to minimize the errors associated with pipette use.

TABLE 1
2004 QUALITY CONTROL SAMPLES

SAMPLE TYPE		QC SAMPLES (Note 1)	ROUTINE SAMPLES
TLD Spike		16 (Note 2)	160
Milk - Strontium		2 (Note 3)	12
Milk - Iodine		2	~30
Milk - Gamma		(Note 4)	~30
Pasture Grass/Hay – Gamma (Milk Substitute)		0	~30
Water - Gamma		12	28
Water - Tritium		4	28
Fish/Invertebrate - Gamma		4	80
Vegetation/Aquatic Flora/Sediment/Soil - Gamma		0	81
Air Particulate	- Gross Beta	6	416
	- Iodine	2	416
	- Gamma	4	32

FOOTNOTE (Table 1):
1. All samples are spikes except fish/invertebrate which are duplicate oyster samples.
2. A set of four TLDs are spike quarterly for readout during the routine quarterly readout.
3. One sample with Sr-89 and Sr-90 and one sample with Sr-90 only.
4. Gamma in water QA spikes are treated as milk surrogates.

TABLE 2
RESULTS OF 2004 QUALITY CONTROL SAMPLE ANALYSES

SAMPLE TYPE		ANALYSES PASSED	ANALYSES FAILED
TLD Spike		12	0
Milk - Strontium		3 (Note 1)	0
Milk - Iodine		2	0
Water - Gamma		46 (Note 1)	18 (Note 1)
Water - Tritium		2	2
Oysters - Gamma		3	1
Air Particulate	- Gross Beta	6	0
	- Iodine	2	0
	- Gamma	15	4
	TOTALS	TLDs: 12 Individual Nuclides: 79	TLDs: 0 Individual Nuclides: 25 (Note 2)

FOOTNOTE (Table 2):
1. To provide a more detailed comparison of pass versus failure, each nuclide was considered for the gamma and strontium analyses.
2. Self Assessment MP-SA-04-09 noted a significant failure rate for water spikes. The investigation noted a problem with the low range micropipette. Follow-up spikes resulted in a significant reduction in the failure rate.

APPENDIX C

SUMMARY OF INTERLABORATORY COMPARISONS

INTRODUCTION

This appendix covers the Intercomparison Program of the Framatome ANP Environmental Laboratory as required by technical specifications for each Millstone unit. Framatome uses QA/QC samples provided by Analytics, Inc to monitor the quality of analytical processing associated with the Radiological Environmental Monitoring Program (REMP). The suite of Analytics QA/QC samples are designed to be comparable with the pre-1996 US EPA Interlaboratory Cross-Check Program in terms of sample number, matrices, and nuclides. It was modified to more closely match the media mix presently being processed by Framatome and includes:

- milk for gamma (10 nuclides) and low-level (LL) Iodine-131 analyses once per quarter,
- milk for Sr-89 and Sr-90 analyses during the 1st and 3rd quarters,
- water for gamma (10 nuclides) and low-level (LL) Iodine-131 analyses during the 1st and 3rd quarters,
- water for Sr-89 and Sr-90 analyses during the 4th quarter,
- water tritium analysis during the 2nd and 4th quarters,
- air filter for gamma (9 nuclides) analyses during the 2nd quarter, and
- air filter for gross beta analysis during the 1st and 3rd quarters.

In addition to the Analytics Intercomparison Program, Framatome also participates in other intercomparsion programs which include radionuclides and media similar to those required by the Millstone program. These programs are the National Institute of Standards and Technology (NIST) Measurement Assurance Program (MAP), the Environmental Resource Associates (ERA) Proficiency Test (PT) Program, the Department of Energy (DOE) Quality Assessment Program (QAP), and the Mixed Analyte Performance Evaluation Program (MAPEP).

RESULTS

Intercomparison program results are evaluated using FRAMATOME's internal bias acceptance criterion. The criterion is defined as within 25% of the known strontium value for samples containing both Sr-89 and Sr-90 and within 15% of the known value for other radionuclides, or within two sigma of the known value. Any sample analysis result which does not pass the criteria is investigated by FRAMATOME.

Analytics Intercomparison Program results are included on pages C-3 through C-6 for 2004. A total of 111 analysis results were obtained with 111 passing criteria, a 100% success rate.

FRAMATOME ANP ENVIRONMENTAL LABORATORY ANALYTICS RADIOLOGICAL ENVIRONMENTAL CROSS-CHECK PERFORMANCE EVALUATION

Sample Number	Quarter/ Year	Sample Media	Nuclide	Units	Reported Value	Known Value	Ratio E-LAB/ Analytics	Evaluation
E4057-162	1st/04	Water	Gross Alpha	pCi/L	72.3	74.5	0.97	Acceptable
E4057-162	1st/04	Water	Gross Beta	pCi/L	285.7	301	0.95	Acceptable
E4058-162	1st/04	Water	I-131	pCi/L	94	90.2	1.04	Acceptable
E4058-162	1st/04	Water	I-131LL	pCi/L	88.7	90.2	0.98	Acceptable
E4058-162	1st/04	Water	Ce-141	pCi/L	87.5	85	1.03	Acceptable
E4058-162	1st/04	Water	Cr-51	pCi/L	335	326	1.03	Acceptable
E4058-162	1st/04	Water	Cs-134	pCi/L	86	89.7	0.96	Acceptable
E4058-162	1st/04	Water	Cs-137	pCi/L	185.6	185	1.00	Acceptable
E4058-162	1st/04	Water	Co-58	pCi/L	113.2	112	1.01	Acceptable
E4058-162	1st/04	Water	Mn-54	pCi/L	112.3	114	0.99	Acceptable
E4058-162	1st/04	Water	Fe-59	pCi/L	60.8	56.7	1.07	Acceptable
E4058-162	1st/04	Water	Zn-65	pCi/L	149.1	143	1.04	Acceptable
E4058-162	1st/04	Water	Co-60	pCi/L	151.4	153	0.99	Acceptable
E4059-162	1st/04	Water	Sr-89	pCi	107.7	123	0.88	Acceptable
E4059-162	1st/04	Water	Sr-90	pCi	14.85	14.5	1.02	Acceptable
E4060-162	1st/04	Filter	Gross Alpha	pCi/L	48.09	58.9	0.82	Acceptable
E4060-162	1st/04	Filter	Gross Beta	pCi/L	231.1	218	1.06	Acceptable
E4061-162	1st/04	Milk	I-131	pCi/L	77.73	77.7	1.00	Acceptable
E4061-162	1st/04	Milk	I-131LL	pCi/L	83.6	77.7	1.08	Acceptable
E4061-162	1st/04	Milk	Ce-141	pCi/L	92	85.2	1.08	Acceptable
E4061-162	1st/04	Milk	Cr-51	pCi/L	314	327	0.96	Acceptable
E4061-162	1st/04	Milk	Cs-134	pCi/L	88.7	90	0.99	Acceptable
E4061-162	1st/04	Milk	Cs-137	pCi/L	188.6	185	1.02	Acceptable
E4061-162	1st/04	Milk	Co-58	pCi/L	115	112	1.03	Acceptable
E4061-162	1st/04	Milk	Mn-54	pCi/L	114.7	114	1.01	Acceptable
E4061-162	1st/04	Milk	Fe-59	pCi/L	59.7	56.8	1.05	Acceptable
E4061-162	1st/04	Milk	Zn-65	pCi/L	145.5	143	1.02	Acceptable
E4061-162	1st/04	Milk	Co-60	pCi/L	154.8	153	1.01	Acceptable
E4062-162	1st/04	Milk	Sr-89	pCi	86.2	103	0.84	Acceptable
E4062-162	1st/04	Milk	Sr-90	pCi	12.7	12.1	1.05	Acceptable

FRAMATOME ANP ENVIRONMENTAL LABORATORY
ANALYTICS ENVIRONMENTAL CROSS CHECK PROGRAM
PERFORMANCE EVALUATION

Sample Number	Quarter/ Year	Sample Media	Nuclide	Units	Reported Value	Known Value	Ratio E-LAB/ Analytics	Evaluation
E4182-162	2nd/04	Water	H-3	pCi/L	11680	11900	0.98	Agreement
E4183-162	2nd/04	Filter	Gross Alpha	pCi	46.8	48.8	0.96	Agreement
E4183-162	2nd/04	Filter	Gross Beta	pCi	156	160	0.98	Agreement
E4184A-162	2nd/04	Filter	Ce-141	pCi	86	88.3	0.97	Agreement
E4184A-162	2nd/04	Filter	Cr-51	pCi	127	128	0.99	Agreement
E4184A-162	2nd/04	Filter	Cs-134	pCi	54	56.9	0.94	Agreement
E4184A-162	2nd/04	Filter	Cs-137	pCi	90	87.8	1.03	Agreement
E4184A-162	2nd/04	Filter	Co-58	pCi	27	26	1.03	Agreement
E4184A-162	2nd/04	Filter	Mn-54	pCi	42	39.7	1.06	Agreement
E4184A-162	2nd/04	Filter	Fe-59	pCi	27	25.1	1.09	Agreement
E4184A-162	2nd/04	Filter	Zn-65	pCi	62	56	1.11	Agreement
E4184A-162	2nd/04	Filter	Co-60	pCi	92	96.8	0.95	Agreement
E4185-162	2nd/04	Filter	Sr-89	pCi				(1)
E4185-162	2nd/04	Filter	Sr-90	pCi				(1)
E4186-162	2nd/04	Milk	I-131	pCi/L	55	58.2	0.95	Agreement
E4186-162	2nd/04	Milk	I-131LL	pCi/L	59	58.2	1.01	Agreement
E4186-162	2nd/04	Milk	Ce-141	pCi/L	165	157	1.06	Agreement
E4186-162	2nd/04	Milk	Cr-51	pCi/L	241	228	1.06	Agreement
E4186-162	2nd/04	Milk	Cs-134	pCi/L	99	101	0.98	Agreement
E4186-162	2nd/04	Milk	Cs-137	pCi/L	157	156	1.01	Agreement
E4186-162	2nd/04	Milk	Co-58	pCi/L	46	46.2	1.00	Agreement
E4186-162	2nd/04	Milk	Mn-54	pCi/L	73	70.5	1.04	Agreement
E4186-162	2nd/04	Milk	Fe-59	pCi/L	48	44.5	1.08	Agreement
E4186-162	2nd/04	Milk	Zn-65	pCi/L	100	99.3	1.01	Agreement
E4186-162	2nd/04	Milk	Co-60	pCi/L	175	172	1.02	Agreement
MAPEP-04-RdF12	May-04	Filter	Sr-90	pCi	20.3	22.4	0.91	Agreement (2)

(1) - Problems encountered in filter dissolution, filter re-ordered.
(2) - Replacement filter for first half 2004 from DOE MAPEP

FRAMATOME ANP ENVIRONMENTAL LABORATORY ANALYTICS RADIOLOGICAL ENVIRONMENTAL CROSS-CHECK PERFORMANCE EVALUATION

Sample Number	Quarter/ Year	Sample Media	Nuclide	Units	Reported Value	Known Value	Ratio E-LAB/ Analytics	Evaluation
E4269-162	3rd/2004	Water	Gross Alpha	pCi/L	41.3	42.7	0.97	Agreement
E4269-162	3rd/2004	Water	Gross Beta	pCi/L	214	225	0.95	Agreement
E4270-162	3rd/2004	Water	I-131LL	pCi/L	67.8	70.8	0.96	Agreement
E4270-162	3rd/2004	Water	I-131	pCi/L	70.5	70.8	1.00	Agreement
E4270-162	3rd/2004	Water	Ce-141	pCi/L	258	250	1.03	Agreement
E4270-162	3rd/2004	Water	Cr-51	pCi/L	230	223	1.03	Agreement
E4270-162	3rd/2004	Water	Cs-134	pCi/L	93.4	96.4	0.97	Agreement
E4270-162	3rd/2004	Water	Cs-137	pCi/L	217	215	1.01	Agreement
E4270-162	3rd/2004	Water	Co-58	pCi/L	93.4	94.6	0.99	Agreement
E4270-162	3rd/2004	Water	Mn-54	pCi/L	181	181	1.00	Agreement
E4270-162	3rd/2004	Water	Fe-59	pCi/L	95.2	91.6	1.04	Agreement
E4270-162	3rd/2004	Water	Zn-65	pCi/L	180	178	1.01	Agreement
E4270-162	3rd/2004	Water	Co-60	pCi/L	126	125	1.01	Agreement
E4271-162	3rd/2004	Filter	Gross Alpha	pCi	38.3	36.8	1.04	Agreement
E4271-162	3rd/2004	Filter	Gross Beta	pCi	191	194	0.98	Agreement
E4272-162	3rd/2004	Milk	I-131LL	pCi/L	79.4	83.5	0.95	Agreement
E4272-162	3rd/2004	Milk	I-131	pCi/L	81.1	83.5	0.97	Agreement
E4272-162	3rd/2004	Milk	Ce-141	pCi/L	240	235	1.02	Agreement
E4272-162	3rd/2004	Milk	Cr-51	pCi/L	214	210	1.02	Agreement
E4272-162	3rd/2004	Milk	Cs-134	pCi/L	89.5	90.6	0.99	Agreement
E4272-162	3rd/2004	Milk	Cs-137	pCi/L	204	202	1.01	Agreement
E4272-162	3rd/2004	Milk	Co-58	pCi/L	90.9	89	1.02	Agreement
E4272-162	3rd/2004	Milk	Mn-54	pCi/L	173	171	1.01	Agreement
E4272-162	3rd/2004	Milk	Fe-59	pCi/L	91.3	86.1	1.06	Agreement
E4272-162	3rd/2004	Milk	Zn-65	pCi/L	169	167	1.01	Agreement
E4272-162	3rd/2004	Milk	Co-60	pCi/L	116	118	0.98	Agreement
E4273-162	3rd/2004	Milk	Sr-89	pCi/L	99.2	102	0.97	Agreement
E4273-162	3rd/2004	Milk	Sr-90	pCi/L	23.4	24.5	0.96	Agreement
E4340-162	3rd/2004*	Filter	Sr-89	pCi/L	151	152	1.00	Agreement
E4340-162	3rd/2004*	Filter	Sr-90	pCi/L	53.5	58.8	0.91	Agreement

* - Replacement filter for lost 2nd quarter filter.

FRAMATOME ANP ENVIRONMENTAL LABORATORY ANALYTICS RADIOLOGICAL ENVIRONMENTAL CROSS-CHECK PERFORMANCE EVALUATION

Sample Number	Quarter/ Year	Sample Media	Nuclide	Units	Reported Value	Known Value	Ratio E-LAB/ Analytics	Evaluation
E4380-162	4th/2004	Water	H-3	pCi/L	8327	8060	1.03	Agreement
E4381-162	4th/2004	Filter	Sr-89	pCi	87.7	92.3	0.95	Agreement
E4381-162	4th/2004	Filter	Sr-90	pCi	8.78	10.6	0.83	Agreement
E4382-162	4th/2004	Filter	Gross Alpha	pCi	24.9	29.5	0.84	Agreement
E4382-162	4th/2004	Filter	Gross Beta	pCi	233	204	1.09	Agreement
E4383-162	4th/2004	Filter	Ce-141	pCi	75.6	80.3	0.94	Agreement
E4383-162	4th/2004	Filter	Cr-51	pCi	201	189	1.06	Agreement
E4383-162	4th/2004	Filter	Cs-134	pCi	82.4	84.7	0.97	Agreement
E4383-162	4th/2004	Filter	Cs-137	pCi	68.8	62.9	1.09	Agreement
E4383-162	4th/2004	Filter	Co-58	pCi	75.3	72.9	1.03	Agreement
E4383-162	4th/2004	Filter	Mn-54	pCi	76.3	67.7	1.13	Agreement
E4383-162	4th/2004	Filter	Fe-59	pCi	69.8	60.5	1.15	Agreement
E4383-162	4th/2004	Filter	Zn-65	pCi	109	97.7	1.12	Agreement
E4383-162	4th/2004	Filter	Co-60	pCi	85.1	87.1	0.98	Agreement
E4384-162	4th/2004	Milk	I-131LL	pCi/L	64.2	66.7	0.96	Agreement
E4384-162	4th/2004	Milk	I-131	pCi/L	69.0	66.7	1.03	Agreement
E4384-162	4th/2004	Milk	Ce-141	pCi/L	154	155	0.99	Agreement
E4384-162	4th/2004	Milk	Cr-51	pCi/L	385	379	1.02	Agreement
E4384-162	4th/2004	Milk	Cs-134	pCi/L	167	170	0.98	Agreement
E4384-162	4th/2004	Milk	Cs-137	pCi/L	132	126	1.05	Agreement
E4384-162	4th/2004	Milk	Co-58	pCi/L	147	146	1.01	Agreement
E4384-162	4th/2004	Milk	Mn-54	pCi/L	144	136	1.06	Agreement
E4384-162	4th/2004	Milk	Fe-59	pCi/L	129	121	1.07	Agreement
E4384-162	4th/2004	Milk	Zn-65	pCi/L	197	196	1.01	Agreement
E4383-162	4th/2004	Milk	Co-60	pCi/L	177	175	1.01	Agreement
E4412-162	4th/2004	Water	Sr-89	pCi/L	90.9	98.1	0.93	Agreement
E4412-162	4th/2004	Water	Sr-90	pCi/L	9.33	11.3	0.83	Agreement

APPENDIX D

ERRATA FOR 2003

TABLE 8
GOAT MILK
(PCI/L)

LOCATION	COLLECTION DATE	K-40	(+/-)	SR-89	(+/-)	SR-90	(+/-)	I-131	(+/-)	CS-134	(+/-)	CS-137	(+/-)	BA-140	(+/-)	LA-140	(+/-)
21	05/06/03	1685	94					-0.01	0.21	1.6	2.5	7.0	3.4	0.0	3.0	0.0	3.5
	05/21/03	1650	120					0.17	0.34	-0.7	3.2	5.7	4.0	4.0	4.6	4.5	5.3
	06/10/03	1930	100					0.03	0.21	-0.5	2.6	1.5	2.3	-3.9	3.1	-4.5	3.6
	06/24/03	1610	180	3.1	5.7	0.00	0.98	-0.02	0.22	2.7	5.3	2.1	4.9	2.3	6.9	2.6	7.9
	07/08/03	1690	120					-0.10	0.04	0.5	3.3	3.7	3.2	-1.7	4.0	-1.9	4.6
	07/22/03	1321	86					0.46	0.50	1.3	2.5	2.7	2.4	-0.4	3.1	-0.5	3.6
	08/06/03	1420	110					0.45	0.48	2.7	3.2	3.4	4.0	-2.6	3.5	-3.0	4.1
	08/19/03	1730	65					0.45	0.55	1.7	1.8	3.9	2.0	-0.1	3.5	-0.2	4.0
	09/10/03	2070	140					0.00	0.11	-1.2	3.8	4.6	4.4	-0.4	5.7	-0.4	6.5
	09/23/03	1470	150	3.4	5.5	0.6	1.1	-0.10	0.04	3.3	4.0	11.4	5.8	-2.8	5.6	-3.2	6.4
22	04/23/03	1700	140					-0.04	0.16	-1.6	3.2	0.9	3.8	-0.5	4.8	-0.6	5.5
	05/06/03	1536	88					0.22	0.30	0.3	2.3	5.1	3.6	-4.3	3.4	-5.0	3.9
	05/21/03	1540	150					0.11	0.33	1.7	3.9	8.5	5.0	2.4	6.0	2.7	6.9
	06/10/03	1351	87					-0.08	0.03	-1.2	2.5	14.0	3.5	0.4	3.3	0.4	3.8
	06/24/03	1390	160	-8.2	5.7	9.2	1.2	0.14	0.35	0.0	3.7	17.3	6.4	0.0	6.2	0.0	7.1
	07/08/03	1770	110					0.07	0.15	0.1	2.8	21.7	4.4	1.0	3.7	1.1	4.2
	07/22/03	1530	110					0.09	0.28	-0.2	3.3	24.8	5.1	-0.6	4.5	-0.7	5.2
	08/07/03	1128	89					0.03	0.18	1.3	2.8	20.3	4.4	3.8	4.2	4.3	4.9
	08/19/03	1213	86	6	12	14.5	1.8	0.09	0.04	1.8	2.5	19.8	3.8	0.5	4.9	0.6	5.6
24C	05/22/03	1710	150					-0.08	0.03	1.5	3.6	5.5	3.9	-3.6	6.2	-4.1	7.1
	06/11/03	1790	120					0.03	0.20	-1.7	3.3	7.3	4.1	-4.4	4.4	-5.1	5.1
	06/25/03	1700	190	-7.9	5.0	-1.5	1.1	0.12	0.25	1.1	4.9	-2.5	4.7	2.2	6.8	2.5	7.8
	07/08/03	1660	100					0.05	0.23	1.1	2.6	3.2	3.1	-2.6	3.5	-3.0	4.1
	07/22/03	1752	96					-0.04	0.02	1.7	2.5	3.6	2.8	2.6	3.4	2.9	3.9
	08/05/03	1840	120					0.36	0.45	1.0	3.0	2.7	3.3	-3.7	4.7	-4.3	5.4
	08/19/03	1966	67					0.03	0.28	-0.1	1.7	3.9	1.9	-0.2	3.3	-0.2	3.8
	09/09/03	2060	120					0.08	0.17	0.6	3.0	5.2	3.9	0.3	5.6	0.4	6.4
	09/23/03	1900	180	2.2	5.3	1.4	1.1	0.03	0.24	-0.3	4.6	-2.6	4.4	-3.3	5.2	-3.8	5.9
	10/09/03	2060	110	-11.0	11.0	2.8	1.0	-0.20	0.07	0.6	2.9	2.2	2.6	-1.2	5.2	-1.4	6.0

PASTURE GRASS, HAY OR FEED WAS SAMPLED AS A SUBSTITUTE FOR UNAVAILABLE GOAT MILK
STRONTIUM ANALYSES ARE COMPOSITES OF ALL MILK SAMPLED FROM A GIVEN LOCATION DURING THE QUARTER