

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



Dominion™

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U.S. Nuclear Regulatory Commission
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Serial No.	06-332
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
2005 ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

This letter transmits the Annual Radiological Environmental Operating Report for the Millstone Power Station, for the period January 2005 through December 2005. 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,


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JEDS

Attachments: 1

Commitments made in this letter: None.

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Serial No. 06-332
Docket Nos. 50-245
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DPR-65
NPF-49

Attachment 1

2005 Annual Radiological Environmental Operating Report

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

Millstone Power Station

2005

Radiological Environmental Operating Report

January 1, 2005 – December 31, 2005



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

2005

**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 2005, 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 88.2% based on Design Electrical Rating (DER). Unit 2 was shutdown in the second quarter for 2R16 refueling and maintenance. The annual capacity factor for Unit 3 was 86.3%. In April, Unit 3 was temporarily shutdown due to safety injection caused by a tin wisker. Unit 3 was shutdown in the third quarter for 3R08 refueling and maintenance. In December, Unit 3 was also temporarily shutdown. The radioactive releases of gaseous effluents in 2005 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, far below permitted discharge levels and also well below levels identified as "health concerns."

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, Iodine -131 and Tritium. Doses from the 2005 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 measured in goat milk. Cesium-137 was also detected 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 0.14 millirem. This dose is 0.6 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	2.7 Mi, NE	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
69-X	Pleasure Beach	0.8 Mi, E	Bottom Sediment
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
76-X	Onsite Well - ISFSI Control	Up-gradient of ISFSI	Well Water
77-X	Onsite Well - ISFSI Indicator	Down-gradient of ISFSI	Well Water
78-X	Onsite Well - ISFSI Indicator	Down-gradient of ISFSI	Well Water

*Key: I - Indicator C - Control X or Z - Extra - sample not required

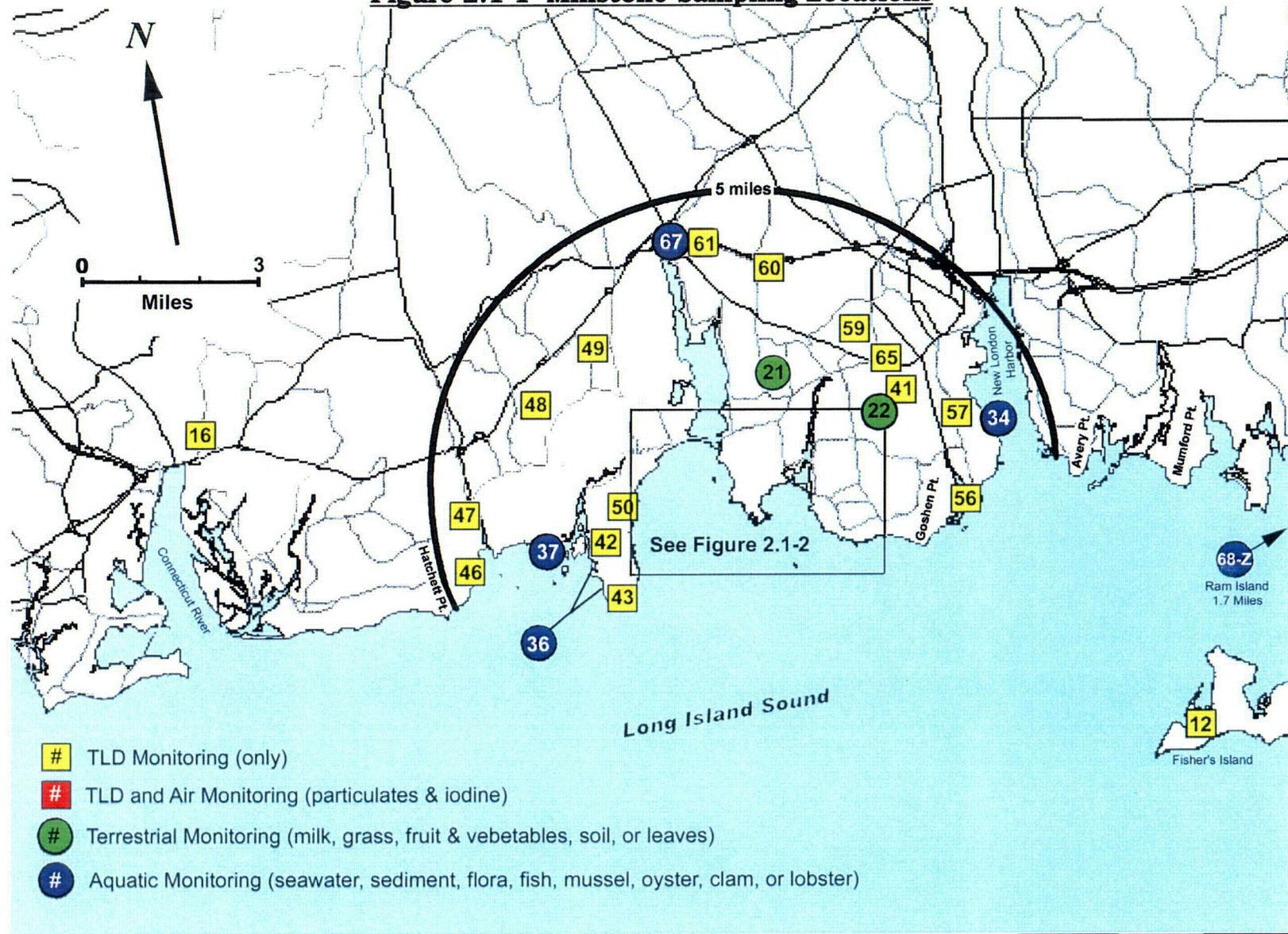
**The release points are the MP1 stack for terrestrial locations and the quarry cut for aquatic locations.

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	2	Semiannual	Gamma Isotopic and Tritium on each sample
7.	Bottom Sediment	5	Semiannual	Gamma Isotopic on each sample
7a.	Soil	3	Annually	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

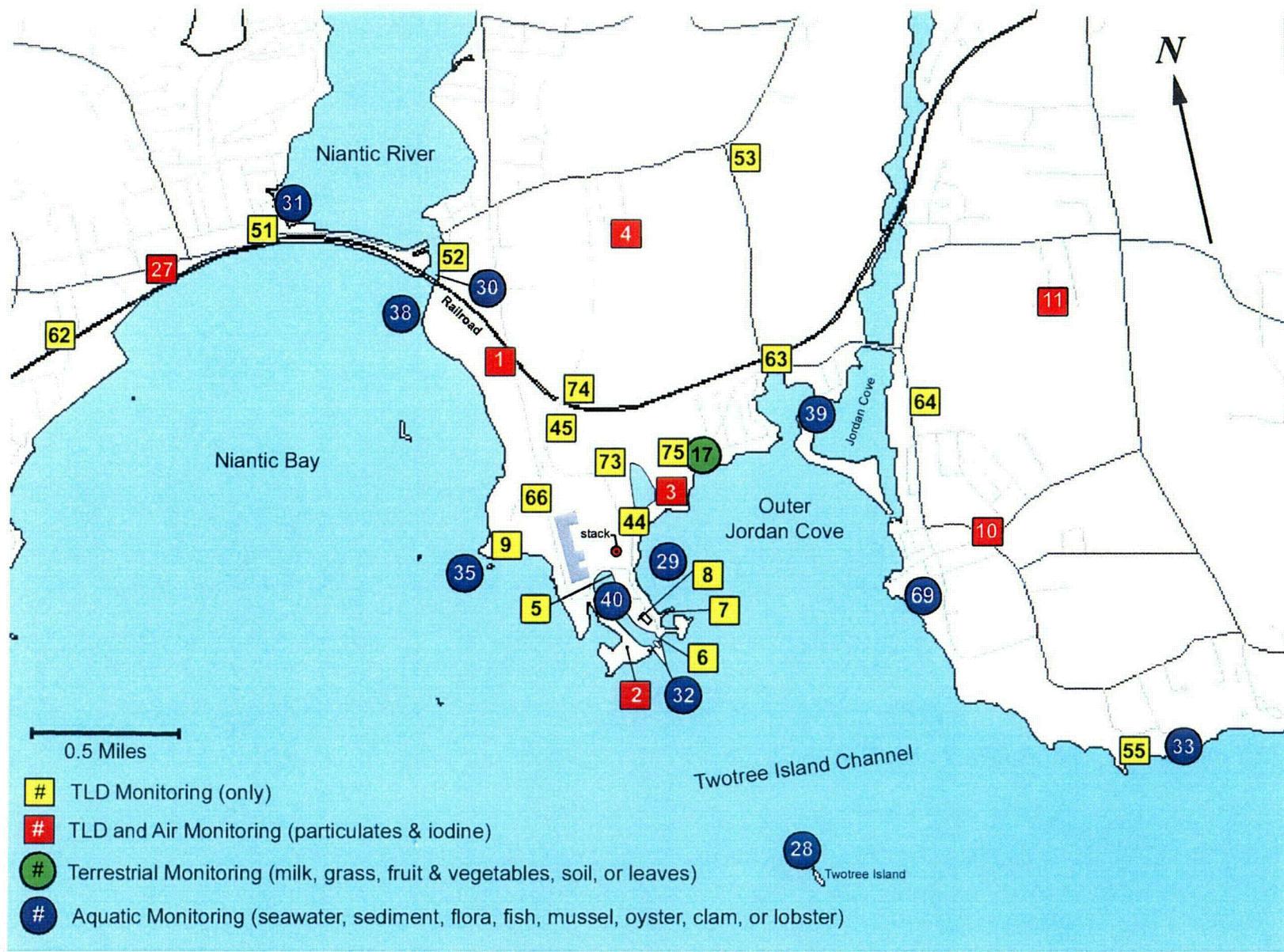
(a) Two or more TLDs or TLD with two or more elements per location.

Figure 2.1-1 Millstone Sampling Locations



COI

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 2005:

<u>Sample Type</u>	<u>Number of Technical Specification Required Samples</u>	<u>Number of Technical Specification Required Samples Analyzed</u>	<u>Number of Extra Samples Analyzed</u>
Gamma Exposure (Environmental TLD)	160	160	16
Air Particulates	416	416	0
Air Iodine	416	416	0
Soil	3	3	0
Goat Milk	54	14 ¹	0
Pasture Grass	Variable ²	40	0
Fruit and Vegetables	8	8	0
Broad Leaf Vegetation	6	6	12
Sea Water	16	16	0
Well Water	5	5	9
Bottom Sediment	10	10	10
Aquatic Flora	0	0	24
Fish	16	13 ³	6
Mussels	8	7 ⁴	0
Oysters	16	16	8
Clams	8	8	8
Lobster	8	8	4
Total All Types	1,150	1,146	97

¹ Pasture grass sampled as necessary to substitute for unavailable milk. Hay or grain was substituted when grass was not available.

² Depends upon availability of goat milk samples

³ Due to sample unavailability, not all required fish samples could be obtained

⁴ Due to sample unavailability, not all required mussel 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 parentheses indicate the fraction of the measurements that are considered above the detection limit for each individual analysis.

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 collected throughout the year. These samples are taken 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	176	-	8.2 (156/156) (4.34-12.4)	08	0.3 mi SE	11.9 (4/4) (11.3-12.4)	8.3 (20/20) (5.96-11.3)	
AP Gross Beta (1e-3 pCi/m3)	Gross Beta	416	10	18.2 (360/364) (5.1-41.5)	11	1.6 mi ENE	18.8 (52/52) (6.3-39.4)	18.2 (52/52) (5.8-39.3)	
Air Iodine (1e-3 pCi/m3)	I-131	416	70	(0/364)	-	-	< LLD	(0/52)	
AP Gamma (1e-3 pCi/m3)	Ba-140	32	-	(0/28)	-	-	< LLD	(0/4)	
	Be-7	32	-	97 (27/28) (55-127)	11	1.6 mi ENE	110 (4/4) (105-112)	103 (4/4) (89-127)	
	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	3	-	(0/2)	-	-	< LLD	(0/1)	
	Ce-141	3	-	(0/2)	-	-	< LLD	(0/1)	
	Ce-144	3	-	(0/2)	-	-	< LLD	(0/1)	
	Co-58	3	-	(0/2)	-	-	< LLD	(0/1)	
	Co-60	3	-	(0/2)	-	-	< LLD	(0/1)	
	Cr-51	3	-	(0/2)	-	-	< LLD	(0/1)	
	Cs-134	3	0.15	(0/2)	-	-	< LLD	(0/1)	
	Cs-137	3	0.18	0.573 (2/2) (0.425-0.72)	14-C	12.0 mi NE	1.1 (1/1) (1.1-1.1)	1.1 (1/1) (1.1-1.1)	
	Fe-59	3	-	(0/2)	-	-	< LLD	(0/1)	
	K-40	3	-	11.2 (2/2) (8.7-13.6)	04	1.0 mi N	13.6 (1/1) (13.6-13.6)	13.2 (1/1) (13.2-13.2)	
	Mn-54	3	-	(0/2)	-	-	< LLD	(0/1)	
	Nb-95	3	-	(0/2)	-	-	< LLD	(0/1)	
	Ru-103	3	-	(0/2)	-	-	< LLD	(0/1)	
	Ru-106	3	-	(0/2)	-	-	< LLD	(0/1)	
	Sb-125	3	-	(0/2)	-	-	< LLD	(0/1)	
	Th-228	3	-	0.815 (2/2) (0.55-1.08)	14-C	12.0 mi NE	1.23 (1/1) (1.23-1.23)	1.23 (1/1) (1.23-1.23)	
	Zn-65	3	-	(0/2)	-	-	< LLD	(0/1)	
	Zr-95	3	-	(0/2)	-	-	< LLD	(0/1)	

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	
Goat Milk (pCi/L)	Ba-140	14	70	(0/11)	-	-	< LLD	(0/3)	
	Cs-134	14	15	(0/11)	-	-	< LLD	(0/3)	
	Cs-137	14	18	7.6 (2/11) (4.3-10.9)	24-C	29.0 mi NNW	11 (1/3) (11-11)	11 (1/3) (11-11)	
	I-131	14	1	(0/11)	-	-	< LLD	(0/3)	
	K-40	14	-	1406 (11/11) (890-1880)	24-C	29.0 mi NNW	1710 (3/3) (1630-1840)	1710 (3/3) (1630-1840)	
	La-140	14	25	(0/11)	-	-	< LLD	(0/3)	
	Sr-89	4	-	(0/2)	-	-	< LLD	(0/2)	
	Sr-90	4	-	2.64 (1/2) (2.64-2.64)	21	2.0 mi N	2.64 (1/2) (2.64-2.64)	2.45 (2/2) (2.17-2.73)	
Pasture Grass (Hay) (pCi/g wet)	Ba-140	40	-	(0/24)	-	-	< LLD	(0/16)	
	Be-7	40	-	1.7 (16/24) (0.41-4.05)	22	2.7 mi NE	1.78 (9/16) (0.41-4.05)	1.42 (13/16) (0.63-4.41)	
	Ce-141	40	-	(0/24)	-	-	< LLD	(0/16)	
	Ce-144	40	-	(0/24)	-	-	< LLD	(0/16)	
	Co-58	40	-	(0/24)	-	-	< LLD	(0/16)	
	Co-60	40	-	(0/24)	-	-	< LLD	(0/16)	
	Cr-51	40	-	(0/24)	-	-	< LLD	(0/16)	
	Cs-134	40	0.06	(0/24)	-	-	< LLD	(0/16)	
	Cs-137	40	0.08	0.098 (2/24) (0.058-0.138)	22	2.7 mi NE	0.098 (2/16) (0.058-0.138)	0.09 (2/16) (0.089-0.09)	
	Fe-59	40	-	(0/24)	-	-	< LLD	(0/16)	

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		
Pasture Grass (Hay) (pCi/g wet)	I-131	40	0.06	(0/24)	-	-	< LLD	(0/16)	
	K-40	40	-	7.98 (24/24) (2.76-24.8)	21	2.0 mi N	12.1 (8/8) (2.96-24.8)	6.33 (16/16) (2.91-10)	
	La-140	40	-	(0/24)	-	-	< LLD	(0/16)	
	Mn-54	40	-	(0/24)	-	-	< LLD	(0/16)	
	Nb-95	40	-	(0/24)	-	-	< LLD	(0/16)	
	Ru-103	40	-	(0/24)	-	-	< LLD	(0/16)	
	Ru-106	40	-	(0/24)	-	-	< LLD	(0/16)	
	Sb-125	40	-	(0/24)	-	-	< LLD	(0/16)	
	Th-228	40	-	(0/24)	-	-	< LLD	(0/16)	
	Zn-65	40	-	(0/24)	-	-	< LLD	(0/16)	
	Zr-95	40	-	(0/24)	-	-	< LLD	(0/16)	
Well Water (pCi/L)	Ba-140	14	60	(0/13)	-	-	< LLD	(0/1)	
	Be-7	14	-	(0/13)	-	-	< LLD	(0/1)	
	Co-58	14	15	(0/13)	-	-	< LLD	(0/1)	
	Co-60	14	15	(0/13)	-	-	< LLD	(0/1)	
	Cr-51	14	-	(0/13)	-	-	< LLD	(0/1)	
	Cs-134	14	15	(0/13)	-	-	< LLD	(0/1)	
	Cs-137	14	18	(0/13)	-	-	< LLD	(0/1)	

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY
DOCKETS 50-245, 50-336 & 50-339

Medium or Pathway Sampled (Units)	Analysis		* LLD	Indicator Locations Mean Range	Location with Highest Mean			Control Locations Mean Range	Non-Routine Reported Measurements
	Type	Total No			Name	Distance Direction	Mean Range		
Well Water (pCi/L)	Fe-59	14	30	(0/13)	-	-	< LLD	(0/1)	
	H-3	14	2000	(0/13)	-	-	< LLD	(0/1)	
	I-131	14	15	(0/13)	-	-	< LLD	(0/1)	
	K-40	14	-	(0/13)	-	-	< LLD	(0/1)	
	La-140	14	15	(0/13)	-	-	< LLD	(0/1)	
	Mn-54	14	15	(0/13)	-	-	< LLD	(0/1)	
	Nb-95	14	15	(0/13)	-	-	< LLD	(0/1)	
	Ru-103	14	-	(0/13)	-	-	< LLD	(0/1)	
	Ru-106	14	-	(0/13)	-	-	< LLD	(0/1)	
	Sb-125	14	-	(0/13)	-	-	< LLD	(0/1)	
	Th-228	14	-	(0/13)	-	-	< LLD	(0/1)	
	Zn-65	14	30	(0/13)	-	-	< LLD	(0/1)	
	Zr-95	14	30	(0/13)	-	-	< LLD	(0/1)	
Fruits & Vegetables (pCi/g wet)	Ba-140	8	-	(0/4)	-	-	< LLD	(0/4)	
	Be-7	8	-	(0/4)	-	-	< LLD	(0/4)	
	Ce-141	8	-	(0/4)	-	-	< LLD	(0/4)	
	Ce-144	8	-	(0/4)	-	-	< LLD	(0/4)	
	Co-58	8	-	(0/4)	-	-	< 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-60	8	-	(0/4)	-	-	< LLD	(0/4)	
	Cr-51	8	-	(0/4)	-	-	< LLD	(0/4)	
	Cs-134	8	0.06	(0/4)	-	-	< LLD	(0/4)	
	Cs-137	8	0.08	(0/4)	-	-	< LLD	(0/4)	
	Fe-59	8	-	(0/4)	-	-	< LLD	(0/4)	
	I-131	8	0.06	(0/4)	-	-	< LLD	(0/4)	
	K-40	8	-	1.79 (4/4) (0.92-2.81)	26-C	10+ mi	2.23 (4/4) (0.88-4.45)	2.23 (4/4) (0.88-4.45)	
	La-140	8	-	(0/4)	-	-	< LLD	(0/4)	
	Mn-54	8	-	(0/4)	-	-	< LLD	(0/4)	
	Nb-95	8	-	(0/4)	-	-	< LLD	(0/4)	
	Ru-103	8	-	(0/4)	-	-	< LLD	(0/4)	
	Ru-106	8	-	(0/4)	-	-	< LLD	(0/4)	
	Sb-125	8	-	(0/4)	-	-	< LLD	(0/4)	
	Th-228	8	-	(0/4)	-	-	< LLD	(0/4)	
	Zn-65	8	-	(0/4)	-	-	< LLD	(0/4)	
Zr-95	8	-	(0/4)	-	-	< 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	
Broadleaf Vegetation (pCi/g wet)	Ba-140	18	-	(0/18)	-	-	< LLD	(0/0)	
	Be-7	18	-	1.18 (11/18) (0.45-3.61)	17	0.5 mi NE	1.45 (3/6) (0.57-3.09)	(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	0.06	(0/18)	-	-	< LLD	(0/0)	
	Cs-137	18	0.08	(0/18)	-	-	< LLD	(0/0)	
	Fe-59	18	-	(0/18)	-	-	< LLD	(0/0)	
	I-131	18	0.06	(0/18)	-	-	< LLD	(0/0)	
	K-40	18	-	3.44 (18/18) (1.93-5.23)	01	0.6 mi NNW	3.61 (6/6) (2.99-5.23)	(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		* LLD	Indicator Locations	Location with Highest Mean			Control Locations: Mean Range	Non-Routine Reported Measurements
	Type	Total No			Mean Range	Name	Distance Direction		
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	1071 (11/12) (340-3010)	32		1071 (11/12) (340-3010)	(0/4)	
	I-131	16	15	(0/12)	-	-	< LLD	(0/4)	
	K-40	16	-	273 (12/12) (151-318)	32		273 (12/12) (151-318)	256 (4/4) (225-288)	
	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		
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	20	-	(0/18)	-	-	< LLD	(0/2)	
	Be-7	20	-	(0/18)	-	-	< LLD	(0/2)	
	Co-58	20	-	(0/18)	-	-	< LLD	(0/2)	
	Co-60	20	-	0.062 (2/18) (0.051-0.073)	39-X	0.8 mi NE	0.062 (2/2) (0.051-0.073)	(0/2)	
	Cr-51	20	-	(0/18)	-	-	< LLD	(0/2)	
	Cs-134	20	0.15	(0/18)	-	-	< LLD	(0/2)	
	Cs-137	20	0.18	0.13 (4/18) (0.107-0.144)	39-X	0.8 mi NE	0.14 (2/2) (0.135-0.144)	(0/2)	
	Fe-59	20	-	(0/18)	-	-	< LLD	(0/2)	
	I-131	20	-	(0/18)	-	-	< LLD	(0/2)	
	K-40	20	-	14.4 (18/18) (11.9-18.2)	39-X	0.8 mi NE	17.4 (2/2) (16.5-18.2)	16.8 (2/2) (15.9-17.6)	
	Mn-54	20	-	(0/18)	-	-	< LLD	(0/2)	
	Nb-95	20	-	(0/18)	-	-	< LLD	(0/2)	
	Ru-103	20	-	(0/18)	-	-	< LLD	(0/2)	
	Ru-106	20	-	(0/18)	-	-	< 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		
Bottom Sediment (pCi/g dry)	Sb-125	20	-	(0/18)	-	-	< LLD	(0/2)	
	Th-228	20	-	1.26 (15/18) (0.267-5.42)	31	1.8 mi NW	4.05 (2/2) (2.68-5.42)	0.285 (2/2) (0.25-0.32)	
	Zn-65	20	-	(0/18)	-	-	< LLD	(0/2)	
	Zr-95	20	-	(0/18)	-	-	< LLD	(0/2)	
Aquatic Flora (pCi/g wet)	Ag-110m	24	-	(0/24)	-	-	< LLD	(0/0)	
	Be-7	24	-	0.085 (1/24) (0.085-0.085)	32-X		0.085 (1/6) (0.085-0.085)	(0/0)	
	Co-58	24	-	(0/24)	-	-	< LLD	(0/0)	
	Co-60	24	-	(0/24)	-	-	< LLD	(0/0)	
	Cr-51	24	-	(0/24)	-	-	< LLD	(0/0)	
	Cs-134	24	-	(0/24)	-	-	< LLD	(0/0)	
	Cs-137	24	-	(0/24)	-	-	< LLD	(0/0)	
	Fe-59	24	-	(0/24)	-	-	< LLD	(0/0)	
	I-131	24	-	0.024 (3/24) (0.021-0.027)	29	0.4 mi NNE	0.024 (2/6) (0.021-0.027)	(0/0)	
	K-40	24	-	5.32 (24/24) (3.15-6.97)	32-X		5.71 (6/6) (3.77-6.94)	(0/0)	
	Mn-54	24	-	(0/24)	-	-	< LLD	(0/0)	
	Nb-95	24	-	(0/24)	-	-	< LLD	(0/0)	
	Ru-103	24	-	(0/24)	-	-	< LLD	(0/0)	
	Ru-106	24	-	(0/24)	-	-	< LLD	(0/0)	
Sb-125	24	-	(0/24)	-	-	< 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		
Aquatic Flora (pCi/g wet)	Th-228	24	-	0.063 (6/24) (0.041-0.084)	33-X	1.8 mi ESE	0.084 (1/4) (0.084-0.084)	(0/0)	
	Zn-65	24	-	(0/24)	-	-	< LLD	(0/0)	
	Zr-95	24	-	(0/24)	-	-	< LLD	(0/0)	
Fish-Flounder (pCi/g wet)	Ag-110m	7	-	(0/7)	-	-	< LLD	(0/0)	
	Be-7	7	-	(0/7)	-	-	< LLD	(0/0)	
	Co-58	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Co-60	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Cr-51	7	-	(0/7)	-	-	< LLD	(0/0)	
	Cs-134	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Cs-137	7	0.15	(0/7)	-	-	< LLD	(0/0)	
	Fe-59	7	0.26	(0/7)	-	-	< LLD	(0/0)	
	I-131	7	-	(0/7)	-	-	< LLD	(0/0)	
	K-40	7	-	3.81 (7/7) (3.6-4.16)	32	-	3.89 (4/4) (3.6-4.16)	(0/0)	
	Mn-54	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Nb-95	7	-	(0/7)	-	-	< LLD	(0/0)	
	Ru-103	7	-	(0/7)	-	-	< LLD	(0/0)	
	Ru-106	7	-	(0/7)	-	-	< LLD	(0/0)	
	Sb-125	7	-	(0/7)	-	-	< LLD	(0/0)	
Th-228	7	-	(0/7)	-	-	< 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		
Fish-Flounder (pCi/g wet)	Zn-65	7	0.26	(0/7)	-	-	< LLD	(0/0)	
	Zr-95	7	-	(0/7)	-	-	< 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	-	3.57 (12/12) (3.31-4.14)	35	0.3 mi WNW	3.75 (3/3) (3.58-3.84)	(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		
Fish-Other (pCi/g wet)	Zr-95	12	-	(0/12)	-	-	< LLD	(0/0)	
Mussels (pCi/g wet)	Ag-110m	7	-	(0/7)	-	-	< LLD	(0/0)	
	Be-7	7	-	(0/7)	-	-	< LLD	(0/0)	
	Co-58	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Co-60	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Cr-51	7	-	(0/7)	-	-	< LLD	(0/0)	
	Cs-134	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Cs-137	7	0.15	(0/7)	-	-	< LLD	(0/0)	
	Fe-59	7	0.26	(0/7)	-	-	< LLD	(0/0)	
	I-131	7	-	(0/7)	-	-	< LLD	(0/0)	
	K-40	7	-	1.67 (7/7) (1.27-1.98)	28	0.8 mi SSE	1.76 (3/3) (1.56-1.98)	(0/0)	
	Mn-54	7	0.13	(0/7)	-	-	< LLD	(0/0)	
	Nb-95	7	-	(0/7)	-	-	< LLD	(0/0)	
	Ru-103	7	-	(0/7)	-	-	< LLD	(0/0)	
	Ru-106	7	-	(0/7)	-	-	< LLD	(0/0)	
	Sb-125	7	-	(0/7)	-	-	< LLD	(0/0)	
	Th-228	7	-	0.056 (1/7) (0.056-0.056)	28	0.8 mi SSE	0.056 (1/3) (0.056-0.056)	(0/0)	
	Zn-65	7	0.26	(0/7)	-	-	< LLD	(0/0)	
Zr-95	7	-	(0/7)	-	-	< 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		
Oysters (pCi/g wet)	Ag-110m	24	-	0.081 (6/20) (0.052-0.123)	40-X		0.086 (4/4) (0.052-0.123)	(0/4)	
	Be-7	24	-	(0/20)	-	-	< LLD	(0/4)	
	Co-58	24	0.13	(0/20)	-	-	< LLD	(0/4)	
	Co-60	24	0.13	(0/20)	-	-	< LLD	(0/4)	
	Cr-51	24	-	(0/20)	-	-	< LLD	(0/4)	
	Cs-134	24	0.13	(0/20)	-	-	< LLD	(0/4)	
	Cs-137	24	0.15	(0/20)	-	-	< LLD	(0/4)	
	Fe-59	24	0.26	(0/20)	-	-	< LLD	(0/4)	
	I-131	24	-	(0/20)	-	-	< LLD	(0/4)	
	K-40	24	-	1.61 (20/20) (1.19-2.31)	37-C	3.5 mi WSW	1.78 (4/4) (1.49-1.96)	1.78 (4/4) (1.49-1.96)	
	Mn-54	24	0.13	(0/20)	-	-	< LLD	(0/4)	
	Nb-95	24	-	(0/20)	-	-	< LLD	(0/4)	
	Ru-103	24	-	(0/20)	-	-	< LLD	(0/4)	
	Ru-106	24	-	(0/20)	-	-	< LLD	(0/4)	
	Sb-125	24	-	(0/20)	-	-	< LLD	(0/4)	
	Th-228	24	-	(0/20)	-	-	< LLD	(0/4)	
	Zn-65	24	0.26	(0/20)	-	-	< LLD	(0/4)	
	Zr-95	24	-	(0/20)	-	-	< 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	-	1.99 (16/16) (1.39-2.39)	35-X	0.3 mi WNW	2.09 (4/4) (1.72-2.39)	(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		* LLD	Indicator Locations	Location with Highest Mean			Control Locations	Non-Routine Reported Measurements
	Type	Total No			Mean Range	Name	Distance Direction		
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	-	2.29 (12/12) (1.35-3.13)	37-X	3.5 mi WSW	2.38 (4/4) (1.91-3.13)	(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) is the Lower Limit of Detection (LLD) / 2.33. For all others, MDL = 2 s (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 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 defined as *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, the LLD is decayed to the end of the sample period.

** LLD for leafy vegetables.

*** LLD from the end of the sample period.

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 was recommended by Health and Safety Laboratory (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 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	8.19 ± 0.20	8.78 ± 0.56	8.34 ± 0.45	8.80 ± 0.42	8.53 ± 0.54
02	10.34 ± 0.41	11.01 ± 0.46	9.79 ± 0.31	10.72 ± 0.51	10.47 ± 0.91
03	6.85 ± 0.24	7.51 ± 0.20	6.74 ± 0.26	7.03 ± 0.38	7.03 ± 0.59
04	8.36 ± 0.29	8.87 ± 0.23	8.51 ± 0.24	8.99 ± 0.41	8.68 ± 0.51
05	9.22 ± 0.34	10.09 ± 0.41	10.26 ± 0.61	10.27 ± 0.72	9.96 ± 0.87
06	8.45 ± 0.27	8.43 ± 0.46	8.12 ± 0.30	8.66 ± 0.45	8.42 ± 0.39
07	5.17 ± 0.15	5.08 ± 0.18	4.34 ± 0.16	5.42 ± 0.31	5.00 ± 0.80
08	11.30 ± 0.35	12.08 ± 0.75	11.74 ± 0.40	12.37 ± 0.55	11.87 ± 0.80
09	9.17 ± 0.32	10.24 ± 0.78	9.33 ± 0.35	9.41 ± 0.45	9.54 ± 0.83
10	8.35 ± 0.33	9.04 ± 0.32	8.27 ± 0.34	9.95 ± 0.71	8.90 ± 1.35
11	6.91 ± 0.18	7.25 ± 0.33	6.81 ± 0.45	8.91 ± 0.41	7.47 ± 1.69
12-C	7.74 ± 0.37	7.90 ± 0.32	7.42 ± 0.22	8.06 ± 0.46	7.78 ± 0.47
13-C	8.69 ± 0.23	9.06 ± 0.41	9.24 ± 0.25	11.26 ± 0.55	9.56 ± 2.00
14-C	9.14 ± 0.32	10.03 ± 0.34	9.60 ± 0.35	10.26 ± 0.48	9.76 ± 0.86
15-C	7.55 ± 0.36	8.19 ± 0.22	7.90 ± 0.45	8.46 ± 0.42	8.03 ± 0.68
16-C	6.50 ± 0.18	6.28 ± 0.31	5.96 ± 0.24	6.71 ± 0.43	6.36 ± 0.56
27	9.12 ± 0.23	9.04 ± 0.42	8.36 ± 0.31	9.36 ± 0.53	8.97 ± 0.74
41	7.10 ± 0.33	6.94 ± 0.36	6.74 ± 0.37	7.57 ± 0.37	7.09 ± 0.61
42	8.15 ± 0.25	7.94 ± 0.20	7.76 ± 0.33	8.81 ± 0.44	8.17 ± 0.79
43	6.83 ± 0.35	7.18 ± 0.24	6.57 ± 0.25	7.47 ± 0.42	7.01 ± 0.68
44	8.25 ± 0.26	8.88 ± 0.24	8.71 ± 0.29	8.98 ± 0.50	8.71 ± 0.56
45	7.12 ± 0.25	7.68 ± 0.34	7.16 ± 0.34	8.02 ± 0.38	7.50 ± 0.75
46	8.10 ± 0.23	8.48 ± 0.25	7.31 ± 0.30	8.86 ± 0.40	8.19 ± 1.15
47	8.08 ± 0.31	8.25 ± 0.37	7.45 ± 0.25	8.72 ± 0.66	8.13 ± 0.91
48	9.70 ± 0.24	10.35 ± 0.39	9.61 ± 0.29	10.41 ± 0.66	10.02 ± 0.73
49	7.19 ± 0.21	7.49 ± 0.43	7.13 ± 0.25	8.47 ± 0.70	7.57 ± 1.07
50	7.87 ± 0.50	8.60 ± 0.42	7.42 ± 0.25	8.94 ± 0.42	8.21 ± 1.19
51	6.50 ± 0.20	7.13 ± 0.34	6.26 ± 0.25	7.13 ± 0.45	6.76 ± 0.77
52	7.45 ± 0.32	7.76 ± 0.32	6.88 ± 0.28	8.08 ± 0.39	7.54 ± 0.89
53	7.78 ± 0.27	8.00 ± 0.51	7.60 ± 0.23	8.62 ± 0.37	8.00 ± 0.77
55	7.79 ± 0.31	8.17 ± 0.31	7.34 ± 0.24	8.44 ± 0.39	7.94 ± 0.83
56	7.16 ± 0.35	7.05 ± 0.26	6.52 ± 0.39	7.17 ± 0.32	6.98 ± 0.53
57	7.36 ± 0.27	7.57 ± 0.41	6.79 ± 0.21	8.13 ± 0.35	7.46 ± 0.96
59	7.88 ± 0.27	8.25 ± 0.22	8.01 ± 0.41	8.72 ± 0.36	8.22 ± 0.64
60	7.32 ± 0.19	7.48 ± 0.60	6.76 ± 0.37	7.92 ± 0.36	7.37 ± 0.83
61	7.45 ± 0.35	7.54 ± 0.31	6.75 ± 0.25	8.47 ± 0.50	7.55 ± 1.22
62	8.39 ± 0.35	8.81 ± 0.47	7.70 ± 0.38	9.02 ± 0.47	8.48 ± 1.01
63	9.97 ± 1.03	9.59 ± 0.35	8.78 ± 0.34	10.15 ± 0.59	9.62 ± 1.05
64	7.71 ± 0.27	8.08 ± 0.29	7.04 ± 0.30	8.62 ± 0.44	7.86 ± 1.15
65	8.20 ± 0.40	8.68 ± 0.36	7.63 ± 0.21	8.69 ± 0.78	8.30 ± 0.87
66-X	7.26 ± 0.41	7.51 ± 0.36	6.98 ± 0.24	7.61 ± 0.40	7.34 ± 0.49
73-X	9.73 ± 0.47	9.85 ± 0.26	9.47 ± 0.41	10.05 ± 0.72	9.78 ± 0.42

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

Location Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Average \pm 2 s.d.
74-X	7.56 \pm 0.41	7.71 \pm 0.46	7.41 \pm 0.37	8.46 \pm 0.35	7.79 \pm 0.81
75-X	7.43 \pm 0.32	7.66 \pm 0.27	6.99 \pm 0.27	7.72 \pm 0.40	7.45 \pm 0.57

Table 2, Air Particulate Gross Beta Radioactivity (1e-3 pCi/m3)

Collection Date	Locations					
<u>JANUARY</u>						
	01	02	03	04	10	11
12/27 - 01/02	30.1 ± 4.5 #	35.7 ± 5.0	25.7 ± 4.3	31.5 ± 4.4	31.8 ± 4.3	31.1 ± 4.7
01/03 - 01/09	18.1 ± 3.7	16.4 ± 3.8	17.7 ± 3.8	17.2 ± 3.6	19.3 ± 3.5	17.0 ± 3.8
01/10 - 01/16	25.0 ± 4.2	19.2 ± 4.0	23.7 ± 4.3	20.7 ± 3.8	25.1 ± 4.0	20.0 ± 4.1
01/17 - 01/23	23.1 ± 4.2	23.3 ± 4.3	25.4 ± 4.4	22.8 ± 4.0	27.1 ± 4.1	20.7 ± 4.2
01/24 - 01/30	19.0 ± 3.9	20.1 ± 4.1	19.4 ± 4.1	19.9 ± 3.9	17.8 ± 3.7	21.4 ± 4.2
<u>FEBRUARY</u>						
	01	02	03	04	10	11
01/31 - 02/06	21.8 ± 4.0	19.2 ± 4.0	20.0 ± 4.1	20.9 ± 3.8	21.0 ± 3.8	18.5 ± 3.9
02/07 - 02/13	19.0 ± 4.1	22.0 ± 4.4	17.5 ± 4.2	23.1 ± 4.2	22.7 ± 4.1	15.8 ± 4.1
02/14 - 02/20	13.0 ± 4.0	14.6 ± 4.2	14.5 ± 4.2	15.7 ± 4.0	16.2 ± 3.9	14.9 ± 4.2
02/21 - 02/27	15.1 ± 3.9	18.7 ± 4.2	15.8 ± 4.1	15.0 ± 3.8	16.4 ± 3.7	15.8 ± 4.0
<u>MARCH</u>						
	01	02	03	04	10	11
02/28 - 03/06	19.7 ± 4.2	18.6 ± 4.2	22.5 ± 4.5	22.1 ± 4.2	21.5 ± 4.1	21.7 ± 4.3
03/07 - 03/13	14.1 ± 4.1	16.6 ± 4.5	12.5 ± 4.3	17.6 ± 4.3	12.0 ± 3.9	16.1 ± 4.3
03/14 - 03/20	20.4 ± 3.9	16.9 ± 3.9	21.2 ± 4.1	18.8 ± 3.8	20.1 ± 3.7	22.0 ± 4.1
03/21 - 03/27	13.3 ± 3.9	13.0 ± 4.0	15.3 ± 4.3	12.3 ± 4.0	14.1 ± 3.8	13.4 ± 4.0
Qtr Avg ± 2 sd	19.4 ± 9.5	19.6 ± 10.8	19.3 ± 8.1	19.8 ± 9.2	20.4 ± 10.5	19.1 ± 8.8
<u>JANUARY</u>						
	15-C	27				
12/27 - 01/02	32.0 ± 5.2	26.2 ± 5.0				
01/03 - 01/09	19.6 ± 4.3	18.8 ± 4.2				
01/10 - 01/16	16.5 ± 4.4	24.1 ± 4.7				
01/17 - 01/23	27.7 ± 4.9	23.9 ± 4.8				
01/24 - 01/30	17.1 ± 4.4	18.6 ± 4.5				
<u>FEBRUARY</u>						
	15-C	27				
01/31 - 02/06	22.8 ± 3.9	16.9 ± 3.6				
02/07 - 02/13	18.3 ± 4.1	20.4 ± 4.0				
02/14 - 02/20	12.6 ± 4.1	14.2 ± 3.9				
02/21 - 02/27	16.6 ± 4.1	16.0 ± 3.8				
<u>MARCH</u>						
	15-C	27				
02/28 - 03/06	21.1 ± 4.4	18.6 ± 3.9				
03/07 - 03/13	12.3 ± 4.4	14.9 ± 4.0				
03/14 - 03/20	17.8 ± 4.1	18.0 ± 3.7				
03/21 - 03/27	14.7 ± 3.8	13.3 ± 3.8				
Qtr Avg ± 2 sd	19.2 ± 10.9	18.8 ± 7.6				

Table 2, Air Particulate Gross Beta Radioactivity (1e-3 pCi/m3)

Collection Date	Locations					
<u>APRIL</u>						
	01	02	03	04	10	11
03/28 - 04/03	9.8 ± 3.4	12.0 ± 3.8	6.9 ± 3.5	10.8 ± 3.5	8.9 ± 3.2	11.7 ± 3.6
04/04 - 04/10	20.6 ± 4.2	17.3 ± 4.3	17.8 ± 4.4	18.8 ± 4.2	16.9 ± 3.9	18.6 ± 4.2
04/11 - 04/17	16.5 ± 4.0	13.3 ± 4.1	13.7 ± 4.2	13.2 ± 4.0	13.2 ± 3.7	14.3 ± 4.1
04/18 - 04/24	13.5 ± 3.9	17.0 ± 4.3	18.0 ± 4.4	17.8 ± 4.2	17.8 ± 4.0	19.4 ± 4.3
<u>MAY</u>						
	01	02	03	04	10	11
04/25 - 05/01	17.0 ± 3.9	13.7 ± 4.0	14.8 ± 4.1	13.1 ± 3.9	12.8 ± 3.6	14.4 ± 3.9
05/02 - 05/08	8.5 ± 3.3	8.6 ± 3.1	9.6 ± 3.3	5.6 ± 3.1	7.8 ± 3.1	8.3 ± 3.1
05/09 - 05/15	11.2 ± 3.7	9.5 ± 3.4	11.3 ± 3.7	10.1 ± 3.7	9.1 ± 3.5	10.2 ± 3.4
05/16 - 05/22	7.6 ± 3.5	9.3 ± 3.3	8.6 ± 3.5	9.3 ± 3.5	9.0 ± 3.4	7.1 ± 3.2
05/23 - 05/29	5.0 ± 4.8 A	8.5 ± 2.7	10.0 ± 2.9	6.6 ± 2.8	8.3 ± 2.8	7.8 ± 2.6
<u>JUNE</u>						
	01	02	03	04	10	11
05/30 - 06/05	15.2 ± 3.9	12.9 ± 3.6	16.0 ± 4.0	13.3 ± 3.9	13.5 ± 3.7	12.4 ± 3.5
06/06 - 06/12	20.4 ± 3.4	16.2 ± 3.1	17.2 ± 3.2	19.5 ± 3.4	19.9 ± 3.3	19.9 ± 3.2
06/13 - 06/19	6.1 ± 3.6	6.4 ± 3.3	5.1 ± 3.3	6.2 ± 3.5	6.5 ± 3.4	6.3 ± 3.3
06/20 - 06/26	18.7 ± 4.0	13.9 ± 3.6	19.3 ± 3.9	18.9 ± 4.1	15.9 ± 3.7	18.4 ± 3.8
Qtr Avg ± 2 sd	13.8 ± 9.7	12.2 ± 6.7	12.9 ± 9.0	12.6 ± 9.6	12.3 ± 8.4	13.0 ± 9.5
<u>APRIL</u>						
	15-C	27				
03/28 - 04/03	9.9 ± 3.3	9.5 ± 3.3				
04/04 - 04/10	16.5 ± 3.9	17.2 ± 3.9				
04/11 - 04/17	15.0 ± 3.9	11.7 ± 3.6				
04/18 - 04/24	19.6 ± 4.1	19.5 ± 4.0				
<u>MAY</u>						
	15-C	27				
04/25 - 05/01	11.2 ± 3.6	12.5 ± 3.7				
05/02 - 05/08	10.9 ± 3.4	8.9 ± 3.2				
05/09 - 05/15	13.2 ± 3.8	10.6 ± 3.6				
05/16 - 05/22	6.7 ± 3.5	7.0 ± 3.3				
05/23 - 05/29	5.8 ± 2.8	7.3 ± 2.8				
<u>JUNE</u>						
	15-C	27				
05/30 - 06/05	11.4 ± 4.1	13.7 ± 3.8				
06/06 - 06/12	23.2 ± 3.9	18.6 ± 3.3				
06/13 - 06/19	7.6 ± 4.2	5.0 ± 3.4				
06/20 - 06/26	20.5 ± 4.0	23.0 ± 4.2				
Qtr Avg ± 2 sd	13.2 ± 10.5	13.3 ± 9.9				

Table 2, Air Particulate Gross Beta Radioactivity (1e-3 pCi/m3)

Collection Date	Locations					
<u>JULY</u>						
	01	02	03	04	10	11
06/27 - 07/03	8.7 ± 3.5	7.3 ± 3.2	10.5 ± 3.5	10.7 ± 3.6	10.7 ± 3.5	10.6 ± 3.4
07/04 - 07/10	16.4 ± 4.0	13.3 ± 3.6	15.0 ± 3.8	14.7 ± 3.9	16.0 ± 3.8	16.2 ± 3.7
07/11 - 07/17	14.3 ± 3.8	13.2 ± 3.6	11.4 ± 3.6	11.3 ± 3.8	14.3 ± 3.7	13.8 ± 3.6
07/18 - 07/24	19.4 ± 3.3	17.5 ± 3.0	20.3 ± 3.3	22.7 ± 3.5	20.1 ± 3.2	19.7 ± 6.0
07/25 - 07/31	23.8 ± 4.3	14.8 ± 3.7	20.7 ± 4.2	20.6 ± 4.3	21.5 ± 4.0	20.2 ± 3.8
<u>AUGUST</u>						
	01	02	03	04	10	11
08/01 - 08/07	31.4 ± 4.6	29.7 ± 4.4	31.8 ± 4.7	35.4 ± 4.9	33.4 ± 4.5	34.1 ± 4.4
08/08 - 08/14	25.7 ± 4.3	22.2 ± 3.9	27.6 ± 4.4	23.9 ± 4.3	25.7 ± 4.1	27.4 ± 4.1
08/15 - 08/21	15.6 ± 3.9	14.7 ± 3.7	17.5 ± 4.0	15.6 ± 5.7	18.8 ± 3.9	18.9 ± 3.9
08/22 - 08/28	10.8 ± 3.6	13.6 ± 3.5	12.4 ± 3.7	11.4 ± 3.7	11.9 ± 3.5	14.6 ± 3.6
<u>SEPTEMBER</u>						
	01	02	03	04	10	11
08/29 - 09/04	18.1 ± 5.6	13.1 ± 5.0	18.4 ± 5.7	13.7 ± 5.5	15.1 ± 5.2	18.3 ± 5.4
09/05 - 09/11	26.2 ± 5.9	21.1 ± 5.4	24.4 ± 5.9	34.5 ± 6.6	24.2 ± 5.7	28.5 ± 5.8
09/12 - 09/18	18.0 ± 3.4	19.2 ± 3.2	17.8 ± 3.4	20.1 ± 3.6	19.3 ± 3.3	39.4 ± 4.8
09/19 - 09/25	22.1 ± 4.5	20.9 ± 4.1	20.0 ± 4.3	20.8 ± 4.4	22.7 ± 4.4	25.8 ± 4.6
Qtr Avg ± 2 sd	19.3 ± 12.4	17.0 ± 10.9	19.1 ± 12.0	19.6 ± 15.6	19.5 ± 11.9	22.1 ± 16.2
<u>JULY</u>						
	15-C	27				
06/27 - 07/03	12.2 ± 3.5	12.0 ± 3.6				
07/04 - 07/10	15.8 ± 3.9	16.6 ± 3.9				
07/11 - 07/17	17.9 ± 4.0	14.5 ± 3.7				
07/18 - 07/24	20.9 ± 3.4	20.9 ± 3.3				
07/25 - 07/31	24.6 ± 4.4	21.0 ± 4.2				
<u>AUGUST</u>						
	15-C	27				
08/01 - 08/07	27.3 ± 4.6	35.2 ± 4.8				
08/08 - 08/14	30.7 ± 4.6	29.1 ± 4.5				
08/15 - 08/21	15.7 ± 4.0	17.9 ± 4.1				
08/22 - 08/28	15.3 ± 3.9	13.9 ± 3.7				
<u>SEPTEMBER</u>						
	15-C	27				
08/29 - 09/04	19.4 ± 5.8	14.2 ± 5.4				
09/05 - 09/11	24.6 ± 5.9	30.5 ± 6.2				
09/12 - 09/18	19.6 ± 3.5	20.0 ± 3.4				
09/19 - 09/25	26.6 ± 4.8	18.9 ± 4.3				
Qtr Avg ± 2 sd	20.8 ± 10.7	20.4 ± 13.7				

B

C

Table 2, Air Particulate Gross Beta Radioactivity (1e-3 pCi/m3)

Collection Date	Locations					
<u>OCTOBER</u>						
	01	02	03	04	10	11
09/26 - 10/02	20.3 ± 4.2	16.4 ± 3.7	19.1 ± 4.0	22.3 ± 4.3	19.1 ± 4.0	18.8 ± 4.0
10/03 - 10/09	12.2 ± 3.8	12.8 ± 3.6	12.0 ± 3.6	13.3 ± 3.8	12.7 ± 3.7	21.1 ± 6.9 D
10/10 - 10/16	5.1 ± 3.6	6.2 ± 3.4	6.6 ± 3.7	3.4 ± 3.6	6.9 ± 3.6	6.3 ± 3.3
10/17 - 10/23	15.2 ± 4.0	14.1 ± 3.6	13.5 ± 3.8	14.2 ± 4.0	14.7 ± 3.8	13.7 ± 3.6
10/24 - 10/30	20.7 ± 4.3	15.5 ± 3.8	17.6 ± 4.1	16.1 ± 3.5	20.0 ± 4.2	18.3 ± 3.9
<u>NOVEMBER</u>						
	01	02	03	04	10	11
10/31 - 11/06	26.9 ± 4.2	26.0 ± 4.2	24.5 ± 4.1	26.6 ± 3.9	30.1 ± 4.7	26.9 ± 4.4
11/07 - 11/13	21.5 ± 5.5	26.3 ± 5.9	18.9 ± 5.2	21.9 ± 4.8	25.9 ± 6.3	25.2 ± 5.9
11/14 - 11/20	20.5 ± 4.0	21.0 ± 4.2	20.3 ± 3.9	16.7 ± 3.6	20.8 ± 4.4	19.8 ± 4.1
11/21 - 11/27	12.2 ± 3.6	11.2 ± 3.6	12.0 ± 3.4	13.3 ± 3.5	11.7 ± 3.9	13.3 ± 3.9
<u>DECEMBER</u>						
	01	02	03	04	10	11
11/28 - 12/04	20.2 ± 4.0	20.9 ± 4.1	17.8 ± 3.8	19.5 ± 3.9	16.8 ± 4.1	16.2 ± 3.9
12/05 - 12/11	29.6 ± 3.7	31.9 ± 3.8	28.3 ± 3.5	30.3 ± 3.5	30.1 ± 4.0	27.9 ± 3.7
12/12 - 12/18	23.1 ± 4.0	26.9 ± 4.3	27.1 ± 3.9	25.6 ± 3.9	26.3 ± 4.5	25.8 ± 4.3
12/19 - 12/25	41.5 ± 5.1	40.4 ± 5.1	40.7 ± 4.8	36.3 ± 4.6	39.7 ± 4.9	38.6 ± 5.2
Qtr Avg ± 2 sd	22.0 ± 15.4	20.7 ± 18.1	19.9 ± 16.9	21.3 ± 13.9	21.1 ± 17.4	20.9 ± 15.7
Ann Avg ± 2 sd	18.6 ± 13.3	17.4 ± 14.0	17.8 ± 13.3	18.3 ± 14.1	18.3 ± 14.4	18.8 ± 14.8
<u>OCTOBER</u>						
	15-C	27				
09/26 - 10/02	16.8 ± 4.1	20.5 ± 4.1				
10/03 - 10/09	11.3 ± 3.8	19.9 ± 4.0				
10/10 - 10/16	7.1 ± 3.9	7.5 ± 3.7				
10/17 - 10/23	13.7 ± 4.3	9.2 ± 3.6				
10/24 - 10/30	19.2 ± 4.6	15.0 ± 3.9				
<u>NOVEMBER</u>						
	15-C	27				
10/31 - 11/06	28.0 ± 4.0	25.4 ± 4.5				
11/07 - 11/13	22.1 ± 5.2	19.9 ± 5.8				
11/14 - 11/20	18.0 ± 3.7	23.2 ± 4.3				
11/21 - 11/27	15.2 ± 3.5	16.5 ± 4.1				
<u>DECEMBER</u>						
	15-C	27				
11/28 - 12/04	15.8 ± 3.5	15.9 ± 4.0				
12/05 - 12/11	28.2 ± 3.4	26.1 ± 4.8 E				
12/12 - 12/18	21.6 ± 3.7	22.8 ± 4.2				
12/19 - 12/25	39.3 ± 4.8	40.9 ± 5.3				
Qtr Avg ± 2 sd	19.7 ± 16.1	20.2 ± 16.2				
Ann Avg ± 2 sd	18.2 ± 13.6	18.3 ± 13.6				

Table 3, Airborne Iodine I-131 (1e-3 pCi/m3)

Collection Date	Locations					
<u>JANUARY</u>						
	01	02	03	04	10	11
12/27 - 01/02	5 ± 17 #	-4 ± 18	-9 ± 18	3 ± 20	15 ± 17	6 ± 21
01/03 - 01/09	9 ± 23	11 ± 25	5 ± 23	-4 ± 27	4 ± 22	16 ± 24
01/10 - 01/16	7 ± 14	5 ± 17	7 ± 15	2 ± 12	8 ± 15	9 ± 21
01/17 - 01/23	-5 ± 16	-12 ± 20	-13 ± 19	-4 ± 14	-6 ± 17	-21 ± 21
01/24 - 01/30	1 ± 17	-9 ± 19	-12 ± 21	8 ± 17	1 ± 17	9 ± 24
<u>FEBRUARY</u>						
	01	02	03	04	10	11
01/31 - 02/06	11 ± 19	2 ± 23	-5 ± 21	2 ± 23	12 ± 21	7 ± 20
02/07 - 02/13	-1 ± 20	1 ± 25	4 ± 22	-1 ± 19	-7 ± 22	-9 ± 19
02/14 - 02/20	4 ± 14	-7 ± 20	19 ± 17	5 ± 19	2 ± 17	0 ± 18
02/21 - 02/27	-3 ± 18	4 ± 14	-15 ± 20	10 ± 15	3 ± 17	2 ± 20
<u>MARCH</u>						
	01	02	03	04	10	11
02/28 - 03/06	-10 ± 19	0 ± 21	-4 ± 20	-11 ± 23	0 ± 17	4 ± 18
03/07 - 03/13	1 ± 21	-16 ± 24	-8 ± 19	-3 ± 21	19 ± 19	10 ± 21
03/14 - 03/20	-13 ± 20	-2 ± 16	7 ± 26	0 ± 24	6 ± 20	-16 ± 24
03/21 - 03/27	5 ± 19	-5 ± 17	6 ± 16	-18 ± 16	22 ± 18	-15 ± 18
<u>JANUARY</u>						
	15-C	27				
12/27 - 01/02	7 ± 25	-26 ± 28				
01/03 - 01/09	-13 ± 29	5 ± 28				
01/10 - 01/16	4 ± 22	0 ± 17				
01/17 - 01/23	-15 ± 21	9 ± 18				
01/24 - 01/30	9 ± 24	10 ± 22				
<u>FEBRUARY</u>						
	15-C	27				
01/31 - 02/06	-4 ± 22	-8 ± 25				
02/07 - 02/13	-9 ± 20	-6 ± 20				
02/14 - 02/20	5 ± 15	13 ± 14				
02/21 - 02/27	13 ± 23	-8 ± 17				
<u>MARCH</u>						
	15-C	27				
02/28 - 03/06	-8 ± 23	24 ± 22				
03/07 - 03/13	-1 ± 28	6 ± 22				
03/14 - 03/20	10 ± 27	6 ± 25				
03/21 - 03/27	2 ± 15	0 ± 14				

Table 3, Airborne Iodine I-131 (1e-3 pCi/m3)

Collection Date	Locations					
<u>APRIL</u>						
	01	02	03	04	10	11
03/28 - 04/03	-3 ± 19	-3 ± 23	-17 ± 23	6 ± 22	21 ± 20	8 ± 21
04/04 - 04/10	-2 ± 18	-2 ± 16	18 ± 18	0 ± 19	-2 ± 17	19 ± 23
04/11 - 04/17	3 ± 16	-9 ± 16	-11 ± 15	14 ± 18	-16 ± 15	2 ± 15
04/18 - 04/24	6 ± 21	-2 ± 20	11 ± 23	15 ± 24	3 ± 20	-4 ± 20
<u>MAY</u>						
	01	02	03	04	10	11
04/25 - 05/01	-7 ± 18	-9 ± 20	-9 ± 22	22 ± 21	7 ± 21	-12 ± 21
05/02 - 05/08	-11 ± 16	12 ± 17	-2 ± 15	7 ± 14	5 ± 17	5 ± 16
05/09 - 05/15	16 ± 22	14 ± 26	-21 ± 28	8 ± 28	11 ± 22	22 ± 27
05/16 - 05/22	2 ± 17	17 ± 17	-4 ± 18	-14 ± 18	-5 ± 16	2 ± 14
05/23 - 05/29	-8 ± 18 A	-4 ± 15	4 ± 20	8 ± 16	6 ± 16	-5 ± 18
<u>JUNE</u>						
	01	02	03	04	10	11
05/30 - 06/05	0 ± 16	2 ± 18	-4 ± 15	-11 ± 17	-4 ± 18	2 ± 17
06/06 - 06/12	4 ± 26	7 ± 19	-10 ± 28	6 ± 31	26 ± 24	-7 ± 26
06/13 - 06/19	3 ± 19	3 ± 17	-4 ± 15	6 ± 22	-23 ± 25	6 ± 23
06/20 - 06/26	-8 ± 25	3 ± 19	-6 ± 21	0 ± 16	-7 ± 20	-3 ± 19
<u>APRIL</u>						
	15-C	27				
03/28 - 04/03	-16 ± 16	-2 ± 23				
04/04 - 04/10	5 ± 18	5 ± 16				
04/11 - 04/17	-15 ± 19	11 ± 13				
04/18 - 04/24	8 ± 23	11 ± 18				
<u>MAY</u>						
	15-C	27				
04/25 - 05/01	-3 ± 19	-4 ± 20				
05/02 - 05/08	-5 ± 16	-11 ± 19				
05/09 - 05/15	3 ± 30	-6 ± 25				
05/16 - 05/22	7 ± 15	-7 ± 12				
05/23 - 05/29	0 ± 17	2 ± 23				
<u>JUNE</u>						
	15-C	27				
05/30 - 06/05	8 ± 17	-4 ± 16				
06/06 - 06/12	15 ± 25	19 ± 24				
06/13 - 06/19	21 ± 22	-20 ± 24				
06/20 - 06/26	-3 ± 19	-22 ± 19				

Table 3, Airborne Iodine I-131 (1e-3 pCi/m3)

Collection Date	Locations					
<u>JULY</u>						
	01	02	03	04	10	11
06/27 - 07/03	-1 ± 20	2 ± 20	2 ± 22	-10 ± 20	-7 ± 21	23 ± 21
07/04 - 07/10	-1 ± 19	-13 ± 16	-9 ± 18	-5 ± 19	-3 ± 20	-2 ± 19
07/11 - 07/17	-5 ± 17	-2 ± 15	23 ± 15	6 ± 18	9 ± 17	-5 ± 12
07/18 - 07/24	-30 ± 28	4 ± 25	13 ± 28	5 ± 29	18 ± 27	-31 ± 35 B
07/25 - 07/31	-19 ± 20	11 ± 13	11 ± 18	1 ± 21	10 ± 17	-5 ± 17
<u>AUGUST</u>						
	01	02	03	04	10	11
08/01 - 08/07	-10 ± 23	13 ± 22	34 ± 28	26 ± 33	-6 ± 27	-14 ± 20
08/08 - 08/14	5 ± 17	8 ± 17	20 ± 19	-2 ± 20	7 ± 12	-2 ± 17
08/15 - 08/21	0 ± 17	7 ± 18	-4 ± 21	-4 ± 20	-7 ± 15	-7 ± 15
08/22 - 08/28	7 ± 20	10 ± 18	-7 ± 17	-13 ± 20	3 ± 14	2 ± 15
<u>SEPTEMBER</u>						
	01	02	03	04	10	11
08/29 - 09/04	4 ± 19	-5 ± 20	2 ± 20	2 ± 19	9 ± 18	-4 ± 15
09/05 - 09/11	-6 ± 16	-3 ± 15	7 ± 20	13 ± 17	-5 ± 16	1 ± 20
09/12 - 09/18	15 ± 25	7 ± 14	-1 ± 19	8 ± 21	-3 ± 20	-2 ± 21 C
09/19 - 09/25	1 ± 21	4 ± 21	4 ± 23	15 ± 18	10 ± 22	-2 ± 23
<u>JULY</u>						
	15-C	27				
06/27 - 07/03	2 ± 17	-8 ± 19				
07/04 - 07/10	-7 ± 17	-20 ± 21				
07/11 - 07/17	-2 ± 18	-11 ± 17				
07/18 - 07/24	-8 ± 24	-2 ± 26				
07/25 - 07/31	-8 ± 17	3 ± 19				
<u>AUGUST</u>						
	15-C	27				
08/01 - 08/07	0 ± 29	-3 ± 20				
08/08 - 08/14	-11 ± 18	-4 ± 15				
08/15 - 08/21	-4 ± 18	7 ± 17				
08/22 - 08/28	-7 ± 18	0 ± 23				
<u>SEPTEMBER</u>						
	15-C	27				
08/29 - 09/04	16 ± 18	-4 ± 19				
09/05 - 09/11	-5 ± 20	0 ± 18				
09/12 - 09/18	-21 ± 22	-3 ± 19				
09/19 - 09/25	13 ± 23	-12 ± 19				

Table 3, Airborne Iodine I-131 (1e-3 pCi/m3)

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

Table 4-A, Air Particulates Gamma Spectra - Quarter 1 (1e-3 pCi/m3)

Location	Isotope						
	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
01	5.0 ± 11.0	110.0 ± 38.0	-4.1 ± 4.5	-0.4 ± 5.6	-0.1 ± 1.8	-0.8 ± 0.9	13.0 ± 30.0
02	5.0 ± 24.0	95.0 ± 38.0	1.0 ± 4.5	3.8 ± 5.4	0.5 ± 1.9	-0.8 ± 1.2	-18.0 ± 46.0
03	-11.0 ± 16.0	127.0 ± 41.0	-1.7 ± 4.3	6.3 ± 6.4	-0.4 ± 1.8	-0.8 ± 1.2	18.0 ± 41.0
04	0.0 ± 21.0	95.0 ± 35.0	-0.9 ± 5.0	2.4 ± 5.1	0.6 ± 1.3	0.0 ± 0.7	-13.0 ± 26.0
10	-10.0 ± 20.0	121.0 ± 35.0	-1.8 ± 4.6	4.1 ± 5.1	-0.8 ± 1.7	-0.3 ± 1.0	0.0 ± 28.0
11	-5.0 ± 24.0	112.0 ± 39.0	0.0 ± 4.5	0.0 ± 4.8	1.3 ± 1.6	1.1 ± 1.6	-7.0 ± 43.0
15-C	17.0 ± 26.0	127.0 ± 41.0	-0.4 ± 5.0	-0.4 ± 5.7	0.2 ± 1.6	-0.9 ± 1.4	11.0 ± 32.0
27	-16.0 ± 29.0	126.0 ± 37.0	-3.0 ± 4.7	1.2 ± 4.3	1.5 ± 1.7	-0.5 ± 0.7	0.0 ± 35.0
	Cs-134	Cs-137	Mn-54	Nb-95	Ru-103	Ru-106	Zr-95
01	0.6 ± 1.0	1.2 ± 1.0	-0.2 ± 1.3	1.8 ± 3.4	2.1 ± 2.9	-4.0 ± 11.0	-1.2 ± 2.9
02	1.1 ± 1.1	-0.1 ± 0.9	0.2 ± 1.2	0.0 ± 4.0	-1.4 ± 2.5	6.0 ± 11.0	-0.3 ± 2.7
03	-0.4 ± 0.9	-0.4 ± 0.9	-0.7 ± 1.1	0.0 ± 4.3	-1.8 ± 2.6	-4.2 ± 9.8	0.8 ± 3.1
04	0.2 ± 1.2	0.7 ± 0.9	-0.5 ± 0.8	1.2 ± 2.9	1.7 ± 3.0	7.0 ± 13.0	-1.1 ± 3.1
10	0.1 ± 1.0	0.3 ± 1.0	0.2 ± 1.1	0.8 ± 3.4	0.0 ± 2.8	-10.0 ± 10.0	-1.6 ± 2.5
11	0.0 ± 1.1	-0.5 ± 1.2	-0.5 ± 1.2	0.6 ± 4.4	-0.4 ± 3.0	7.0 ± 12.0	0.7 ± 2.3
15-C	0.1 ± 1.1	-0.4 ± 1.0	0.2 ± 0.8	4.7 ± 4.5	-0.4 ± 3.1	-11.0 ± 12.0	0.8 ± 3.2
27	-0.4 ± 1.1	0.2 ± 1.1	0.5 ± 1.2	1.5 ± 4.2	0.4 ± 2.2	-3.0 ± 12.0	1.3 ± 2.9

Table 4-B, Air Particulates Gamma Spectra - Quarter 2 (1e-3 pCi/m3)

Location	Isotope						
	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
01	-13.0 ± 37.0	55.0 ± 35.0	-0.1 ± 4.4	-0.4 ± 5.3	-1.5 ± 2.2	0.1 ± 1.6	4.0 ± 49.0
02	-18.0 ± 32.0	64.0 ± 35.0	3.6 ± 5.4	-3.2 ± 4.7	0.7 ± 1.4	0.1 ± 1.3	-29.0 ± 37.0
03	13.0 ± 18.0	74.0 ± 37.0	2.7 ± 4.9	0.8 ± 5.2	0.1 ± 1.2	-0.6 ± 1.3	4.0 ± 36.0
04	25.0 ± 25.0	75.0 ± 34.0	2.0 ± 5.0	-4.2 ± 5.2	-0.2 ± 1.5	-0.1 ± 1.0	-15.0 ± 40.0
10	-12.0 ± 17.0	90.0 ± 34.0	-2.4 ± 4.7	-0.6 ± 4.4	0.5 ± 1.8	-0.1 ± 1.5	-14.0 ± 36.0
11	-12.0 ± 17.0	105.0 ± 35.0	-1.1 ± 4.5	0.3 ± 4.8	-0.7 ± 1.2	0.2 ± 1.0	-18.0 ± 39.0
15-C	-25.0 ± 25.0	103.0 ± 41.0	2.0 ± 5.2	-0.4 ± 4.5	-1.0 ± 1.8	-0.4 ± 1.3	8.0 ± 46.0
27	6.0 ± 21.0	92.0 ± 37.0	-0.8 ± 4.8	3.3 ± 4.8	-1.4 ± 1.9	-0.1 ± 1.0	4.0 ± 36.0
	Cs-134	Cs-137	Mn-54	Nb-95	Ru-103	Ru-106	Zr-95
01	-0.4 ± 1.2	-0.5 ± 1.3	-0.4 ± 1.2	-4.2 ± 4.6	-0.4 ± 2.9	-7.0 ± 14.0	-0.1 ± 3.6
02	0.6 ± 0.9	-0.3 ± 1.0	-0.6 ± 0.8	-1.9 ± 4.1	0.0 ± 3.3	1.0 ± 11.0	-1.6 ± 3.4
03	0.1 ± 1.0	0.8 ± 1.1	-0.7 ± 1.1	1.6 ± 3.7	-1.1 ± 2.3	2.0 ± 10.0	-1.3 ± 2.7
04	0.0 ± 1.2	-0.1 ± 1.0	-0.4 ± 1.2	-1.5 ± 3.8	-0.4 ± 2.3	7.0 ± 14.0	1.3 ± 3.0
10	0.1 ± 1.1	0.4 ± 1.1	0.4 ± 0.9	2.1 ± 4.1	0.7 ± 2.9	4.4 ± 9.7	2.5 ± 4.0
11	-0.7 ± 1.1	-0.7 ± 0.9	-0.5 ± 1.2	-0.5 ± 3.4	0.7 ± 2.5	3.0 ± 10.0	0.9 ± 3.6
15-C	0.8 ± 1.0	0.9 ± 0.7	-0.4 ± 0.9	-1.2 ± 3.1	-0.8 ± 3.2	0.0 ± 11.0	2.6 ± 4.0
27	-0.4 ± 1.2	0.3 ± 1.2	0.2 ± 0.7	-2.5 ± 3.6	-1.5 ± 2.9	0.0 ± 12.0	0.3 ± 2.8

Table 4-C, Air Particulates Gamma Spectra - Quarter 3 (1e-3 pCi/m3)

Location	Isotope						
	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
01	4.0 ± 19.0	96.0 ± 35.0	-3.3 ± 4.6	-0.4 ± 5.4	-0.5 ± 2.0	0.4 ± 1.0	-3.0 ± 34.0
02	4.0 ± 13.0	75.0 ± 32.0	-0.3 ± 4.0	-0.8 ± 4.8	-1.3 ± 1.7	0.8 ± 1.1	0.0 ± 26.0
03	4.0 ± 19.0	88.0 ± 32.0	2.9 ± 3.9	-0.4 ± 5.2	-0.1 ± 1.6	0.4 ± 1.2	-3.0 ± 35.0
04	-4.0 ± 15.0	126.0 ± 39.0	1.1 ± 4.2	5.1 ± 6.1	1.0 ± 1.8	-0.8 ± 0.9	6.0 ± 35.0
10	0.0 ± 16.0	96.0 ± 36.0	-2.0 ± 4.0	0.0 ± 5.0	0.9 ± 1.7	0.2 ± 0.8	3.0 ± 27.0
11	-4.4 ± 8.8	112.0 ± 37.0	-2.6 ± 4.6	4.7 ± 5.6	0.4 ± 1.7	1.0 ± 1.0	3.0 ± 36.0
15-C	4.0 ± 25.0	89.0 ± 36.0	-0.4 ± 4.2	2.1 ± 5.6	0.2 ± 1.9	-0.1 ± 1.2	6.0 ± 33.0
27	8.0 ± 12.0	104.0 ± 32.0	-0.7 ± 4.7	-3.2 ± 5.9	0.7 ± 1.5	-0.5 ± 0.7	-9.0 ± 33.0
	Cs-134	Cs-137	Mn-54	Nb-95	Ru-103	Ru-106	Zr-95
01	0.0 ± 1.2	-0.4 ± 1.3	0.4 ± 1.2	-0.4 ± 3.6	1.0 ± 2.7	-7.0 ± 11.0	-0.2 ± 2.8
02	0.1 ± 1.0	1.2 ± 1.2	-0.7 ± 0.9	0.7 ± 2.8	-0.3 ± 2.4	4.0 ± 12.0	-1.5 ± 2.7
03	-0.4 ± 1.0	-0.2 ± 1.0	-0.5 ± 1.3	-1.8 ± 3.1	-1.0 ± 2.4	3.0 ± 11.0	-1.3 ± 1.5
04	1.6 ± 1.4	0.9 ± 1.1	-0.7 ± 1.1	0.7 ± 2.8	0.7 ± 2.9	4.0 ± 11.0	0.3 ± 2.8
10	0.3 ± 1.2	-0.8 ± 1.0	0.5 ± 1.1	-0.1 ± 3.1	0.6 ± 2.5	-12.4 ± 9.5	-1.6 ± 2.5
11	0.9 ± 1.5	-0.2 ± 1.1	0.0 ± 1.2	0.3 ± 3.0	1.0 ± 2.3	-8.0 ± 16.0	0.4 ± 3.5
15-C	-0.1 ± 0.9	-0.3 ± 1.3	-1.2 ± 1.3	-1.1 ± 2.7	3.0 ± 2.7	2.0 ± 13.0	0.2 ± 2.4
27	0.3 ± 0.9	-0.6 ± 1.1	-0.9 ± 1.3	2.1 ± 2.9	-0.3 ± 2.7	0.2 ± 9.7	-0.6 ± 3.0

Table 4-D, Air Particulates Gamma Spectra - Quarter 4 (1e-3 pCi/m3)

Location	Isotope						
	Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
01	24.0 ± 42.0	96.0 ± 39.0	5.0 ± 5.9	-4.8 ± 6.1	-0.4 ± 1.9	-0.6 ± 1.5	-50.0 ± 46.0
02	0.0 ± 44.0	58.0 ± 38.0	1.1 ± 5.9	-0.4 ± 6.4	0.5 ± 2.0	-1.1 ± 1.1	29.0 ± 44.0
03	-8.0 ± 26.0	97.0 ± 38.0	1.1 ± 5.9	2.1 ± 5.9	-1.5 ± 2.1	0.6 ± 1.3	28.0 ± 44.0
04	0.0 ± 30.0	123.0 ± 41.0	1.7 ± 5.5	3.7 ± 5.8	0.0 ± 2.0	-0.1 ± 1.0	12.0 ± 39.0
10	25.0 ± 29.0	98.0 ± 38.0	-1.3 ± 6.3	2.3 ± 6.1	1.2 ± 2.3	-0.1 ± 1.1	-4.0 ± 44.0
11	0.0 ± 23.0	109.0 ± 40.0	3.6 ± 5.7	-4.1 ± 6.5	1.4 ± 1.8	-0.1 ± 1.5	13.0 ± 49.0
15-C	-31.0 ± 38.0	91.0 ± 36.0	-0.8 ± 5.7	-1.3 ± 6.2	-0.4 ± 1.9	-0.1 ± 1.2	-12.0 ± 43.0
27	51.0 ± 48.0	54.0 ± 41.0	-0.5 ± 6.8	-1.4 ± 6.2	-1.1 ± 2.0	-0.6 ± 1.1	-9.0 ± 47.0
	Cs-134	Cs-137	Mn-54	Nb-95	Ru-103	Ru-106	Zr-95
01	0.5 ± 1.1	-0.5 ± 1.1	-1.1 ± 1.1	-3.5 ± 5.0	-3.2 ± 3.7	-6.0 ± 11.0	2.7 ± 3.9
02	0.5 ± 1.2	-0.3 ± 0.9	-0.2 ± 1.3	-2.0 ± 3.9	2.2 ± 4.3	5.2 ± 8.3	2.1 ± 4.0
03	0.0 ± 1.2	-0.7 ± 1.2	-0.4 ± 1.2	-0.5 ± 3.0	0.1 ± 4.2	-11.0 ± 12.0	2.1 ± 3.9
04	0.5 ± 1.2	0.1 ± 0.9	-0.5 ± 1.2	-4.0 ± 3.9	3.7 ± 3.2	2.2 ± 7.0	0.6 ± 4.2
10	-0.2 ± 1.3	-0.3 ± 1.2	0.4 ± 1.4	-3.3 ± 4.1	1.8 ± 3.5	-2.0 ± 14.0	-2.5 ± 3.7
11	0.6 ± 1.0	-0.3 ± 1.0	-0.2 ± 1.6	-1.4 ± 4.7	-0.7 ± 4.2	0.0 ± 13.0	1.6 ± 4.1
15-C	0.1 ± 0.9	-0.3 ± 1.0	0.7 ± 1.4	-1.9 ± 4.2	-0.1 ± 3.4	4.9 ± 9.3	-0.1 ± 3.6
27	-0.8 ± 1.3	-1.0 ± 1.2	-0.4 ± 1.5	-2.2 ± 3.9	-1.2 ± 4.2	-5.0 ± 11.0	-0.6 ± 4.4

Table 6, Soil (pCi/g dry)

Location	Collection Date	Isotope					
03		Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
	03/29/05	0.08 ± 0.45	-0.01 ± 0.08	0.04 ± 0.26	-0.03 ± 0.05	0.00 ± 0.04	0.41 ± 0.51
		Cs-134	Cs-137	Fe-59	K-40	Mn-54	Nb-95
	03/29/05	0.01 ± 0.06	0.72 ± 0.11	0.03 ± 0.07	8.70 ± 1.40	-0.01 ± 0.04	0.01 ± 0.05
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/29/05	0.01 ± 0.05	-0.06 ± 0.32	0.06 ± 0.10	0.55 ± 0.20	-0.03 ± 0.12	-0.04 ± 0.06
04		Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
	03/29/05	0.16 ± 0.18	0.01 ± 0.04	0.06 ± 0.12	-0.02 ± 0.02	0.01 ± 0.02	0.15 ± 0.22
		Cs-134	Cs-137	Fe-59	K-40	Mn-54	Nb-95
	03/29/05	0.01 ± 0.07	0.43 ± 0.05	-0.02 ± 0.05	13.60 ± 0.81	0.00 ± 0.02	0.04 ± 0.04
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/29/05	0.00 ± 0.02	0.07 ± 0.17	0.01 ± 0.05	1.08 ± 0.08	0.04 ± 0.09	0.04 ± 0.04
14-C		Be-7	Ce-141	Ce-144	Co-58	Co-60	Cr-51
	03/29/05	-0.04 ± 0.47	0.02 ± 0.10	-0.29 ± 0.30	0.01 ± 0.04	0.00 ± 0.04	-0.12 ± 0.59
		Cs-134	Cs-137	Fe-59	K-40	Mn-54	Nb-95
	03/29/05	0.00 ± 0.04	1.10 ± 0.12	0.00 ± 0.10	13.20 ± 1.30	-0.01 ± 0.04	-0.04 ± 0.06
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/29/05	-0.04 ± 0.05	0.12 ± 0.35	-0.03 ± 0.13	1.23 ± 0.19	-0.06 ± 0.17	0.02 ± 0.08

Table 8, Goat Milk (pCi/L)

Location	Collection Date	Isotope					
21		Ba-140	Cs-134	Cs-137	I-131	K-40	La-140
	04/27/05	2.40 ± 7.00	1.00 ± 5.30	2.20 ± 4.60	0.13 ± 0.22	1880.00 ± 200.00	2.70 ± 8.00
	05/11/05	-3.90 ± 5.00	-1.50 ± 3.70	2.90 ± 3.90	0.07 ± 0.20	1790.00 ± 150.00	-4.50 ± 5.80
	05/25/05	-3.10 ± 5.10	-2.90 ± 3.20	3.50 ± 4.00	0.21 ± 0.28	1680.00 ± 110.00	-3.50 ± 5.90
	06/08/05	3.00 ± 3.90	-0.50 ± 3.40	2.50 ± 3.10	0.35 ± 0.48	1250.00 ± 110.00	3.50 ± 4.40
	06/22/05	3.60 ± 6.00	-0.30 ± 5.30	1.50 ± 5.10	-0.06 ± 0.02	1600.00 ± 190.00	4.10 ± 6.90
	07/06/05	-1.40 ± 4.90	0.00 ± 3.80	10.90 ± 5.10	0.06 ± 0.24	1390.00 ± 140.00	-1.60 ± 5.70
	07/20/05	-2.90 ± 4.10	-1.30 ± 2.40	4.30 ± 2.20	-0.07 ± 0.02	1276.00 ± 85.00	-3.30 ± 4.70
	08/03/05	0.10 ± 5.50	-1.70 ± 3.40	5.10 ± 3.80	-0.05 ± 0.02	1170.00 ± 120.00	0.10 ± 6.40
	08/17/05	-6.50 ± 6.10	2.00 ± 3.30	0.10 ± 3.20	-0.08 ± 0.02	1350.00 ± 110.00	-7.50 ± 7.00
	09/07/05	2.40 ± 5.80	4.90 ± 4.00	2.80 ± 4.10	0.09 ± 0.19	890.00 ± 110.00	2.70 ± 6.60
	09/28/05	-1.50 ± 6.40	0.00 ± 4.10	2.00 ± 3.90	-0.06 ± 0.02	1190.00 ± 140.00	-1.70 ± 7.30
			Sr-89	Sr-90			
	06/22/05	4.50 ± 3.40	2.64 ± 0.80				
09/28/05	3.90 ± 4.30	-0.30 ± 1.00					
24-C		Ba-140	Cs-134	Cs-137	I-131	K-40	La-140
	05/25/05	3.90 ± 6.70	2.20 ± 5.00	2.50 ± 4.90	0.01 ± 0.18	1630.00 ± 180.00	4.40 ± 7.70
	06/08/05	-2.10 ± 4.60	3.00 ± 3.10	11.00 ± 4.20	0.07 ± 0.26	1840.00 ± 120.00	-2.40 ± 5.30
	07/06/05	1.30 ± 4.90	1.80 ± 4.10	5.30 ± 4.20	0.08 ± 0.29	1660.00 ± 140.00	1.50 ± 5.60
			Sr-89	Sr-90			
06/08/05	4.60 ± 4.70	2.73 ± 0.92					
07/06/05	-2.70 ± 6.20	2.17 ± 0.95					

Table 9, Pasture Grass (pCi/g wet)

Location	Collection Date	Isotope						
21		Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	
	01/26/05	0.000 ± 0.044 F	1.680 ± 0.330	0.027 ± 0.044	-0.120 ± 0.110	0.005 ± 0.027	0.005 ± 0.029	
	02/23/05	-0.034 ± 0.066 F	1.260 ± 0.330	-0.004 ± 0.033	-0.020 ± 0.089	-0.011 ± 0.031	0.047 ± 0.037	
	03/16/05	0.017 ± 0.035 F	0.590 ± 0.230	0.016 ± 0.024	-0.022 ± 0.075	-0.014 ± 0.023	0.009 ± 0.030	
	04/13/05	-0.048 ± 0.059 F	0.450 ± 0.260	-0.024 ± 0.052	0.080 ± 0.120	0.001 ± 0.031	-0.016 ± 0.030	
	10/12/05	0.013 ± 0.032	1.560 ± 0.360	0.001 ± 0.021	0.017 ± 0.068	-0.019 ± 0.026	-0.018 ± 0.029	
	10/26/05	-0.022 ± 0.031	2.390 ± 0.410	0.011 ± 0.023	-0.058 ± 0.077	-0.008 ± 0.017	0.008 ± 0.019	
	11/16/05	0.016 ± 0.039	3.220 ± 0.410	0.000 ± 0.018	0.023 ± 0.058	-0.007 ± 0.019	0.028 ± 0.023	
	12/14/05	0.025 ± 0.093 F	-0.060 ± 0.240	-0.013 ± 0.036	-0.055 ± 0.097	-0.015 ± 0.031	0.020 ± 0.036	
			Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
	01/26/05	0.150 ± 0.240	0.020 ± 0.032	0.029 ± 0.027	-0.007 ± 0.077	0.040 ± 0.067	24,800 ± 0.970	
	02/23/05	-0.030 ± 0.230	0.011 ± 0.030	-0.005 ± 0.029	0.010 ± 0.110	0.006 ± 0.067	16,600 ± 1.100	
	03/16/05	-0.080 ± 0.160	0.028 ± 0.034	0.037 ± 0.034	-0.040 ± 0.080	0.005 ± 0.027	17,100 ± 1.100	
	04/13/05	-0.050 ± 0.280	0.028 ± 0.031	0.013 ± 0.028	-0.008 ± 0.099	0.053 ± 0.084	19,700 ± 1.100	
	10/12/05	-0.160 ± 0.140	0.000 ± 0.024	0.007 ± 0.024	-0.026 ± 0.049	-0.002 ± 0.001	2,960 ± 0.780	
	10/26/05	-0.090 ± 0.160	0.000 ± 0.016	0.010 ± 0.018	-0.021 ± 0.044	0.041 ± 0.045	3,200 ± 0.620	
	11/16/05	0.030 ± 0.150	-0.008 ± 0.020	-0.006 ± 0.018	0.049 ± 0.046	-0.001 ± 0.010	3,940 ± 0.680	
	12/14/05	0.070 ± 0.270	0.009 ± 0.031	0.009 ± 0.028	0.030 ± 0.091	0.040 ± 0.120	8,600 ± 1.200	
			La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
	01/26/05	0.000 ± 0.050	-0.006 ± 0.026	0.035 ± 0.033	0.000 ± 0.028	-0.100 ± 0.240	-0.007 ± 0.060	
	02/23/05	-0.039 ± 0.076	0.015 ± 0.029	-0.009 ± 0.037	-0.016 ± 0.029	0.090 ± 0.240	-0.032 ± 0.062	
	03/16/05	0.020 ± 0.041	0.012 ± 0.025	0.021 ± 0.027	-0.014 ± 0.019	-0.100 ± 0.190	0.023 ± 0.053	
	04/13/05	-0.056 ± 0.068	-0.020 ± 0.029	-0.025 ± 0.041	0.011 ± 0.032	0.100 ± 0.280	-0.028 ± 0.068	
	10/12/05	0.015 ± 0.037	0.014 ± 0.020	-0.009 ± 0.021	-0.010 ± 0.021	-0.020 ± 0.200	0.014 ± 0.047	
	10/26/05	-0.025 ± 0.036	0.010 ± 0.018	-0.011 ± 0.017	-0.010 ± 0.016	-0.090 ± 0.150	0.030 ± 0.042	
	11/16/05	0.019 ± 0.045	0.012 ± 0.019	-0.021 ± 0.023	-0.007 ± 0.018	-0.060 ± 0.140	0.028 ± 0.044	
	12/14/05	0.030 ± 0.110	0.005 ± 0.022	-0.011 ± 0.047	-0.022 ± 0.035	-0.080 ± 0.240	0.023 ± 0.067	
			Th-228	Zn-65	Zr-95			
	01/26/05	0.040 ± 0.120	-0.031 ± 0.098	0.041 ± 0.049				
	02/23/05	0.088 ± 0.070	-0.040 ± 0.072	-0.004 ± 0.057				
	03/16/05	0.150 ± 0.140	0.010 ± 0.066	0.017 ± 0.044				
	04/13/05	0.000 ± 0.120	-0.035 ± 0.077	-0.039 ± 0.053				
10/12/05	0.074 ± 0.087	0.007 ± 0.052	0.014 ± 0.036					
10/26/05	0.046 ± 0.076	-0.032 ± 0.047	0.011 ± 0.031					
11/16/05	-0.006 ± 0.053	0.029 ± 0.040	0.003 ± 0.033					
12/14/05	0.060 ± 0.099	0.090 ± 0.160	0.018 ± 0.063					
22		Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	
	04/13/05	-0.026 ± 0.058 F	0.210 ± 0.210	0.017 ± 0.030	0.027 ± 0.081	-0.024 ± 0.029	0.012 ± 0.033	
	04/27/05	0.013 ± 0.035 F	0.170 ± 0.160	0.009 ± 0.035	0.026 ± 0.091	-0.002 ± 0.021	0.020 ± 0.021	
	05/11/05	0.003 ± 0.018	1.100 ± 0.300	-0.036 ± 0.021	0.059 ± 0.085	0.000 ± 0.018	-0.013 ± 0.020	
	05/23/05	-0.007 ± 0.045	0.320 ± 0.300	0.015 ± 0.033	0.030 ± 0.110	0.007 ± 0.022	0.003 ± 0.022	
	06/08/05	0.035 ± 0.090	-0.030 ± 0.320	0.039 ± 0.047	0.040 ± 0.120	-0.025 ± 0.029	0.005 ± 0.031	
	06/22/05	0.016 ± 0.038	0.120 ± 0.210	-0.007 ± 0.030	-0.061 ± 0.099	-0.012 ± 0.021	0.000 ± 0.026	
	07/06/05	0.005 ± 0.026	1.010 ± 0.250	0.011 ± 0.024	0.055 ± 0.083	-0.006 ± 0.020	0.007 ± 0.019	
	07/20/05	0.044 ± 0.066	0.540 ± 0.430	-0.033 ± 0.037	0.008 ± 0.086	0.016 ± 0.025	-0.022 ± 0.034	
	08/03/05	0.022 ± 0.029	0.490 ± 0.220	-0.017 ± 0.023	-0.077 ± 0.074	-0.012 ± 0.017	-0.012 ± 0.025	
	08/17/05	0.050 ± 0.120	1.700 ± 0.470	0.079 ± 0.053	0.000 ± 0.130	-0.025 ± 0.035	0.008 ± 0.031	
	09/07/05	0.007 ± 0.036 F	0.410 ± 0.240	-0.059 ± 0.046	-0.012 ± 0.092	0.000 ± 0.022	0.017 ± 0.026	
	09/29/05	-0.026 ± 0.078	2.590 ± 0.510	0.018 ± 0.042	0.010 ± 0.110	0.013 ± 0.029	-0.006 ± 0.031	

Table 9, Pasture Grass (pCi/g wet)

Location	Collection Date	Isotope						
22		Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	
	10/12/05	-0.003 ± 0.019	1.520 ± 0.260	-0.003 ± 0.017	-0.014 ± 0.052	-0.007 ± 0.012	-0.001 ± 0.015	
	10/26/05	0.007 ± 0.038	4.050 ± 0.530	-0.021 ± 0.022	-0.004 ± 0.072	0.016 ± 0.023	-0.006 ± 0.024	
	11/16/05	-0.005 ± 0.043	3.180 ± 0.460	0.016 ± 0.027	0.074 ± 0.080	-0.012 ± 0.023	-0.016 ± 0.032	
	12/14/05	-0.036 ± 0.099 F	0.030 ± 0.280	0.015 ± 0.032	-0.030 ± 0.089	0.000 ± 0.031	0.028 ± 0.033	
			Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
	04/13/05	-0.010 ± 0.220	-0.007 ± 0.030	0.027 ± 0.025	-0.034 ± 0.090	0.060 ± 0.058	8.550 ± 0.860	
	04/27/05	-0.090 ± 0.190	-0.006 ± 0.022	0.009 ± 0.019	-0.021 ± 0.067	0.005 ± 0.018	8.350 ± 0.590	
	05/11/05	-0.010 ± 0.150	0.017 ± 0.022	0.001 ± 0.020	0.035 ± 0.063	-0.002 ± 0.001	4.120 ± 0.640	
	05/23/05	0.170 ± 0.230	0.010 ± 0.026	0.021 ± 0.020	-0.018 ± 0.063	-0.005 ± 0.002	4.610 ± 0.830	
	06/08/05	0.250 ± 0.370	0.000 ± 0.032	-0.001 ± 0.026	0.030 ± 0.100	-0.007 ± 0.002	4.430 ± 0.770	
	06/22/05	0.030 ± 0.170	-0.018 ± 0.027	0.138 ± 0.046	-0.016 ± 0.067	0.016 ± 0.028	4.300 ± 0.830	
	07/06/05	0.120 ± 0.150	0.001 ± 0.021	0.058 ± 0.026	0.010 ± 0.052	-0.002 ± 0.006	5.990 ± 0.640	
	07/20/05	0.030 ± 0.240	0.010 ± 0.032	0.020 ± 0.029	0.057 ± 0.074	0.001 ± 0.013	3.790 ± 0.960	
	08/03/05	-0.050 ± 0.160	0.006 ± 0.020	0.017 ± 0.020	0.011 ± 0.054	-0.003 ± 0.001	5.620 ± 0.630	
	08/17/05	-0.220 ± 0.380	0.017 ± 0.033	0.031 ± 0.028	0.020 ± 0.110	-0.003 ± 0.001	8.020 ± 0.900	
09/07/05	0.050 ± 0.190	0.001 ± 0.024	0.005 ± 0.019	-0.017 ± 0.062	-0.007 ± 0.003	13.070 ± 0.710		
09/29/05	0.000 ± 0.280	0.008 ± 0.027	0.030 ± 0.030	0.034 ± 0.069	-0.002 ± 0.001	5.850 ± 0.870		
10/12/05	-0.010 ± 0.110	-0.004 ± 0.014	-0.009 ± 0.013	-0.016 ± 0.029	-0.002 ± 0.001	2.760 ± 0.440		
10/26/05	-0.030 ± 0.160	0.024 ± 0.025	0.026 ± 0.022	0.006 ± 0.055	0.003 ± 0.012	3.550 ± 0.780		
11/16/05	-0.010 ± 0.180	0.012 ± 0.023	0.002 ± 0.023	-0.018 ± 0.046	-0.006 ± 0.002	3.690 ± 0.670		
12/14/05	-0.020 ± 0.270	-0.007 ± 0.031	-0.009 ± 0.028	-0.014 ± 0.083	-0.110 ± 0.120	7.820 ± 0.880		
		La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	
04/13/05	-0.030 ± 0.067	0.012 ± 0.027	0.025 ± 0.032	0.003 ± 0.025	-0.060 ± 0.220	0.042 ± 0.061		
04/27/05	0.015 ± 0.041	0.001 ± 0.019	-0.009 ± 0.030	0.009 ± 0.023	-0.060 ± 0.190	0.033 ± 0.048		
05/11/05	0.004 ± 0.020	-0.006 ± 0.022	-0.017 ± 0.021	0.003 ± 0.020	0.050 ± 0.170	0.003 ± 0.046		
05/23/05	-0.008 ± 0.052	-0.020 ± 0.025	-0.017 ± 0.031	0.009 ± 0.022	0.060 ± 0.230	-0.026 ± 0.057		
06/08/05	0.040 ± 0.100	-0.026 ± 0.028	-0.020 ± 0.043	-0.008 ± 0.039	0.090 ± 0.260	0.061 ± 0.060		
06/22/05	0.018 ± 0.043	0.002 ± 0.022	-0.009 ± 0.023	-0.040 ± 0.027	0.030 ± 0.210	-0.004 ± 0.059		
07/06/05	0.006 ± 0.030	0.006 ± 0.019	-0.024 ± 0.023	-0.001 ± 0.019	0.060 ± 0.150	-0.010 ± 0.047		
07/20/05	0.051 ± 0.076	-0.021 ± 0.026	-0.003 ± 0.041	-0.009 ± 0.026	-0.020 ± 0.250	0.006 ± 0.057		
08/03/05	0.026 ± 0.033	-0.004 ± 0.017	-0.020 ± 0.022	-0.017 ± 0.018	0.120 ± 0.170	-0.027 ± 0.039		
08/17/05	0.050 ± 0.140	-0.007 ± 0.028	-0.028 ± 0.047	-0.001 ± 0.042	0.060 ± 0.270	0.048 ± 0.067		
09/07/05	0.008 ± 0.042	-0.010 ± 0.021	0.013 ± 0.026	0.002 ± 0.023	-0.050 ± 0.200	-0.008 ± 0.050		
09/29/05	-0.029 ± 0.090	0.006 ± 0.026	0.012 ± 0.036	0.010 ± 0.033	-0.290 ± 0.240	-0.011 ± 0.063		
10/12/05	-0.004 ± 0.022	-0.004 ± 0.015	0.002 ± 0.016	0.006 ± 0.013	0.050 ± 0.110	-0.031 ± 0.032		
10/26/05	0.008 ± 0.043	-0.020 ± 0.026	-0.010 ± 0.026	-0.007 ± 0.019	-0.140 ± 0.160	-0.016 ± 0.045		
11/16/05	-0.006 ± 0.049	0.011 ± 0.022	-0.016 ± 0.028	-0.010 ± 0.022	-0.010 ± 0.170	-0.021 ± 0.047		
12/14/05	-0.040 ± 0.110	-0.014 ± 0.028	-0.002 ± 0.043	-0.031 ± 0.033	-0.070 ± 0.250	0.052 ± 0.063		
		Th-228	Zn-65	Zr-95				
04/13/05	0.020 ± 0.120	-0.007 ± 0.065	0.009 ± 0.048					
04/27/05	0.041 ± 0.094	0.000 ± 0.046	-0.009 ± 0.038					
05/11/05	0.033 ± 0.074	-0.059 ± 0.055	-0.005 ± 0.036					
05/23/05	0.030 ± 0.110	-0.019 ± 0.055	0.012 ± 0.045					
06/08/05	0.100 ± 0.100	0.040 ± 0.070	-0.028 ± 0.055					
06/22/05	-0.040 ± 0.100	-0.093 ± 0.065	-0.004 ± 0.035					
07/06/05	0.120 ± 0.091	-0.017 ± 0.040	-0.007 ± 0.034					
07/20/05	0.090 ± 0.100	0.034 ± 0.073	-0.020 ± 0.068					
08/03/05	0.035 ± 0.077	-0.016 ± 0.049	0.022 ± 0.035					
08/17/05	0.030 ± 0.120	-0.034 ± 0.076	-0.034 ± 0.064					
09/07/05	0.090 ± 0.077	-0.004 ± 0.072	0.005 ± 0.039					
09/29/05	0.010 ± 0.100	0.068 ± 0.063	0.053 ± 0.049					

Table 9, Pasture Grass (pCi/g wet)

Location	Collection Date	Isotope						
22		Th-228	Zn-65	Zr-95				
	10/12/05	0.032 ± 0.051	-0.021 ± 0.028	-0.004 ± 0.021				
	10/26/05	0.026 ± 0.078	-0.035 ± 0.052	0.020 ± 0.039				
	11/16/05	0.043 ± 0.086	-0.050 ± 0.110	0.015 ± 0.033				
	12/14/05	-0.040 ± 0.100	-0.067 ± 0.069	0.011 ± 0.058				
24-C		Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	
	01/26/05	0.011 ± 0.038 F	0.800 ± 0.240	-0.014 ± 0.024	0.024 ± 0.075	0.003 ± 0.024	0.007 ± 0.029	
	02/23/05	0.053 ± 0.067 F	1.050 ± 0.400	0.034 ± 0.055	-0.090 ± 0.150	0.018 ± 0.033	-0.017 ± 0.034	
	03/16/05	-0.002 ± 0.032 F	0.800 ± 0.260	0.014 ± 0.036	-0.100 ± 0.100	-0.012 ± 0.025	0.004 ± 0.029	
	04/13/05	0.012 ± 0.062 F	0.110 ± 0.260	-0.036 ± 0.049	-0.080 ± 0.150	0.012 ± 0.035	-0.032 ± 0.039	
	04/27/05	0.021 ± 0.030	0.980 ± 0.390	0.007 ± 0.026	-0.015 ± 0.072	-0.012 ± 0.030	-0.021 ± 0.040	
	05/11/05	-0.020 ± 0.025	0.290 ± 0.200	-0.006 ± 0.031	0.011 ± 0.054	-0.019 ± 0.020	0.011 ± 0.025	
	06/22/05	0.005 ± 0.048	0.100 ± 0.220	0.027 ± 0.032	0.080 ± 0.110	0.000 ± 0.026	0.002 ± 0.028	
	07/20/05	0.056 ± 0.049	1.000 ± 0.310	-0.030 ± 0.030	-0.030 ± 0.094	0.004 ± 0.021	-0.018 ± 0.025	
	08/03/05	0.010 ± 0.050	1.130 ± 0.270	0.001 ± 0.024	0.005 ± 0.066	-0.010 ± 0.021	0.006 ± 0.034	
	08/17/05	0.040 ± 0.120	1.080 ± 0.510	-0.008 ± 0.055	0.060 ± 0.140	-0.022 ± 0.037	-0.039 ± 0.045	
	09/07/05	-0.025 ± 0.044	0.930 ± 0.330	-0.024 ± 0.026	0.019 ± 0.077	0.004 ± 0.026	-0.020 ± 0.027	
	09/28/05	-0.130 ± 0.100	0.630 ± 0.350	0.021 ± 0.030	-0.004 ± 0.091	-0.015 ± 0.030	-0.004 ± 0.029	
	10/12/05	-0.011 ± 0.025	1.080 ± 0.200	-0.001 ± 0.011	-0.008 ± 0.033	0.004 ± 0.011	-0.003 ± 0.017	
	10/26/05	-0.003 ± 0.033	3.130 ± 0.440	0.005 ± 0.021	-0.078 ± 0.080	0.015 ± 0.014	-0.009 ± 0.017	
	11/16/05	-0.017 ± 0.038	4.410 ± 0.470	0.002 ± 0.024	0.085 ± 0.076	-0.006 ± 0.021	-0.012 ± 0.024	
	12/14/05	-0.048 ± 0.077 F	1.380 ± 0.320	0.031 ± 0.033	0.056 ± 0.091	0.000 ± 0.022	0.000 ± 0.031	
			Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
	01/26/05	0.130 ± 0.160	0.028 ± 0.027	0.090 ± 0.032	-0.037 ± 0.075	-0.006 ± 0.032	10.000 ± 0.850	
	02/23/05	0.010 ± 0.340	0.010 ± 0.034	0.056 ± 0.039	-0.003 ± 0.094	-0.006 ± 0.099	9.630 ± 0.960	
	03/16/05	-0.010 ± 0.180	0.013 ± 0.023	0.089 ± 0.036	-0.007 ± 0.063	-0.013 ± 0.034	8.330 ± 0.750	
	04/13/05	-0.130 ± 0.320	0.033 ± 0.033	0.022 ± 0.040	0.029 ± 0.093	0.013 ± 0.099	6.920 ± 0.830	
	04/27/05	0.000 ± 0.160	-0.011 ± 0.023	0.000 ± 0.019	-0.009 ± 0.094	0.002 ± 0.009	6.900 ± 1.200	
	05/11/05	0.000 ± 0.110	0.002 ± 0.021	0.008 ± 0.022	-0.017 ± 0.070	-0.002 ± 0.001	6.000 ± 0.920	
06/22/05	0.020 ± 0.240	0.015 ± 0.028	0.014 ± 0.025	-0.001 ± 0.072	0.008 ± 0.020	4.290 ± 0.700		
07/20/05	-0.010 ± 0.220	-0.004 ± 0.023	-0.001 ± 0.019	-0.009 ± 0.076	-0.001 ± 0.013	4.890 ± 0.760		
08/03/05	0.070 ± 0.150	-0.004 ± 0.020	0.003 ± 0.022	-0.029 ± 0.084	-0.003 ± 0.001	6.610 ± 0.860		
08/17/05	0.340 ± 0.380	0.027 ± 0.033	-0.007 ± 0.030	0.040 ± 0.110	0.003 ± 0.011	9.900 ± 1.400		
09/07/05	-0.090 ± 0.180	0.000 ± 0.031	0.000 ± 0.024	0.021 ± 0.095	0.027 ± 0.035	5.220 ± 0.940		
09/28/05	-0.030 ± 0.220	0.004 ± 0.028	0.005 ± 0.027	-0.016 ± 0.089	0.003 ± 0.010	5.500 ± 1.000		
10/12/05	-0.050 ± 0.081	-0.006 ± 0.015	0.007 ± 0.011	0.010 ± 0.030	0.002 ± 0.006	3.870 ± 0.550		
10/26/05	0.000 ± 0.160	0.000 ± 0.014	-0.009 ± 0.012	-0.012 ± 0.028	-0.003 ± 0.001	2.910 ± 0.570		
11/16/05	0.100 ± 0.150	-0.006 ± 0.019	0.017 ± 0.016	0.022 ± 0.044	0.001 ± 0.011	4.530 ± 0.710		
12/14/05	-0.050 ± 0.250	0.007 ± 0.023	0.024 ± 0.025	0.085 ± 0.059	0.070 ± 0.110	5.830 ± 0.680		
		La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	
01/26/05	0.013 ± 0.044	0.011 ± 0.023	0.008 ± 0.027	-0.001 ± 0.020	-0.020 ± 0.190	0.024 ± 0.060		
02/23/05	0.061 ± 0.077	-0.006 ± 0.032	0.016 ± 0.045	-0.026 ± 0.040	0.100 ± 0.320	0.044 ± 0.074		
03/16/05	-0.002 ± 0.037	-0.010 ± 0.025	-0.004 ± 0.028	-0.009 ± 0.024	-0.030 ± 0.250	-0.034 ± 0.057		
04/13/05	0.014 ± 0.072	-0.005 ± 0.034	-0.011 ± 0.042	-0.016 ± 0.039	-0.190 ± 0.320	0.015 ± 0.074		
04/27/05	0.025 ± 0.035	0.001 ± 0.034	0.013 ± 0.026	-0.008 ± 0.024	-0.050 ± 0.190	0.006 ± 0.052		
05/11/05	-0.023 ± 0.028	0.013 ± 0.022	-0.005 ± 0.024	-0.014 ± 0.015	0.080 ± 0.160	0.033 ± 0.041		
06/22/05	0.006 ± 0.056	0.002 ± 0.022	-0.016 ± 0.033	0.018 ± 0.026	-0.130 ± 0.210	0.023 ± 0.054		
07/20/05	0.065 ± 0.056	-0.005 ± 0.020	-0.014 ± 0.029	-0.009 ± 0.026	-0.170 ± 0.180	-0.014 ± 0.049		
08/03/05	0.012 ± 0.057	-0.027 ± 0.025	0.005 ± 0.027	-0.004 ± 0.018	0.060 ± 0.170	0.014 ± 0.046		
08/17/05	0.040 ± 0.140	-0.015 ± 0.035	-0.017 ± 0.056	-0.013 ± 0.042	0.270 ± 0.300	0.029 ± 0.082		

Table 9, Pasture Grass (pCi/g wet)

Location	Collection Date	Isotope					
24-C		La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
	09/07/05	-0.028 ± 0.050	0.014 ± 0.024	-0.010 ± 0.034	0.002 ± 0.023	0.000 ± 0.180	0.000 ± 0.049
	09/28/05	-0.150 ± 0.120	-0.015 ± 0.025	-0.007 ± 0.038	0.013 ± 0.027	-0.120 ± 0.200	0.037 ± 0.058
	10/12/05	-0.013 ± 0.029	0.001 ± 0.012	0.000 ± 0.011	-0.005 ± 0.010	-0.009 ± 0.080	-0.015 ± 0.029
	10/26/05	-0.003 ± 0.038	0.000 ± 0.014	-0.006 ± 0.021	0.003 ± 0.017	-0.070 ± 0.140	0.020 ± 0.036
	11/16/05	-0.019 ± 0.044	0.013 ± 0.020	-0.011 ± 0.024	-0.006 ± 0.018	-0.140 ± 0.170	-0.023 ± 0.040
	12/14/05	-0.055 ± 0.089	0.004 ± 0.021	-0.022 ± 0.033	-0.005 ± 0.025	-0.050 ± 0.210	0.007 ± 0.050
			Th-228	Zn-65	Zr-95		
	01/26/05	0.080 ± 0.098	0.037 ± 0.052	-0.015 ± 0.042			
	02/23/05	-0.010 ± 0.160	-0.089 ± 0.082	0.045 ± 0.063			
	03/16/05	0.040 ± 0.100	-0.032 ± 0.060	0.005 ± 0.041			
	04/13/05	0.030 ± 0.150	-0.035 ± 0.081	0.024 ± 0.061			
	04/27/05	0.020 ± 0.100	0.027 ± 0.053	-0.026 ± 0.045			
	05/11/05	0.008 ± 0.072	-0.016 ± 0.049	0.001 ± 0.038			
	06/22/05	0.056 ± 0.096	-0.015 ± 0.057	-0.025 ± 0.043			
	07/20/05	0.009 ± 0.066	0.012 ± 0.049	-0.010 ± 0.039			
	08/03/05	0.016 ± 0.087	-0.029 ± 0.046	0.037 ± 0.039			
	08/17/05	0.050 ± 0.130	-0.017 ± 0.097	-0.019 ± 0.061			
	09/07/05	0.019 ± 0.098	0.032 ± 0.081	-0.029 ± 0.036			
	09/28/05	0.040 ± 0.110	0.028 ± 0.065	0.026 ± 0.047			
10/12/05	0.026 ± 0.034	0.003 ± 0.023	0.009 ± 0.018				
10/26/05	0.010 ± 0.051	0.005 ± 0.037	-0.003 ± 0.029				
11/16/05	0.054 ± 0.095	0.013 ± 0.053	0.019 ± 0.032				
12/14/05	0.100 ± 0.110	0.020 ± 0.076	0.030 ± 0.043				

Table 10, Well Water (pCi/L)

Location	Collection Date	Isotope						
70-C		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	03/17/05	3.3 ± 4.1	3.0 ± 13.0	-0.4 ± 1.6	0.2 ± 1.5	19.0 ± 17.0	0.7 ± 1.6	
		Cs-137	Fe-59	H-3	I-131	K-40	La-140	
	03/17/05	-0.2 ± 1.4	2.9 ± 4.2	140.0 ± 640.0	-0.8 ± 6.5	7.0 ± 25.0	3.9 ± 4.7	
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228	
	03/17/05	-0.7 ± 1.4	0.4 ± 2.6	-1.0 ± 2.0	0.0 ± 14.0	1.1 ± 3.6	1.5 ± 6.6	
		Zn-65	Zr-95					
	03/17/05	-4.3 ± 3.3	1.7 ± 2.8					
	71		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
		03/15/05	1.8 ± 4.9	-8.0 ± 29.0	-1.5 ± 3.1	3.7 ± 2.6	11.0 ± 31.0	-1.1 ± 3.0
		06/16/05	-2.8 ± 6.1	-5.0 ± 22.0	0.3 ± 2.4	0.7 ± 2.4	-17.0 ± 25.0	-0.2 ± 2.7
		09/15/05	3.3 ± 4.9	-3.0 ± 22.0	2.1 ± 3.0	1.2 ± 2.8	-10.0 ± 26.0	2.1 ± 2.7
12/19/05		1.2 ± 3.4	-16.0 ± 16.0	-0.7 ± 1.8	-0.4 ± 1.8	0.0 ± 19.0	-1.6 ± 2.0	
		Cs-137	Fe-59	H-3	I-131	K-40	La-140	
03/15/05		-2.2 ± 4.5	-2.6 ± 7.5	480.0 ± 650.0	-2.9 ± 5.6	-27.0 ± 30.0	2.1 ± 5.6	
06/16/05		-0.8 ± 2.6	-4.0 ± 8.2	280.0 ± 360.0	-5.4 ± 6.9	-1.0 ± 38.0	-3.2 ± 7.0	
09/15/05		-0.5 ± 2.8	3.2 ± 6.5	390.0 ± 940.0	2.9 ± 7.5	-22.0 ± 45.0	3.8 ± 5.7	
12/19/05		1.3 ± 1.6	1.7 ± 3.9	550.0 ± 990.0	2.5 ± 5.5	-4.0 ± 28.0	1.4 ± 3.9	
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228	
03/15/05		-2.0 ± 2.8	-2.7 ± 5.4	0.7 ± 3.2	4.0 ± 24.0	1.5 ± 8.2	-9.0 ± 10.0	
06/16/05		-0.6 ± 2.5	-2.2 ± 3.1	-0.7 ± 2.6	-4.0 ± 24.0	-5.1 ± 6.3	3.0 ± 10.0	
09/15/05		0.6 ± 2.8	-3.1 ± 3.4	-0.8 ± 3.5	-19.0 ± 25.0	0.9 ± 6.8	-2.0 ± 11.0	
12/19/05		-0.1 ± 1.7	1.9 ± 2.1	-0.2 ± 2.2	-4.0 ± 18.0	-2.0 ± 4.2	6.3 ± 7.6	
		Zn-65	Zr-95					
03/15/05		5.0 ± 15.0	1.8 ± 4.6					
06/16/05		5.0 ± 12.0	-1.0 ± 4.4					
09/15/05		-1.1 ± 6.2	-2.7 ± 4.9					
12/19/05		-4.7 ± 4.0	-1.7 ± 3.3					
72			Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
		03/21/05	-3.1 ± 3.8	-2.0 ± 15.0	0.2 ± 1.7	0.9 ± 1.7	-3.0 ± 18.0	-1.0 ± 1.8
		06/16/05	2.7 ± 7.2	15.0 ± 23.0	2.2 ± 3.1	-3.9 ± 3.7	9.0 ± 27.0	-0.7 ± 3.6
		09/15/05	-1.7 ± 5.6	7.0 ± 27.0	1.8 ± 3.0	0.2 ± 2.7	14.0 ± 30.0	-0.2 ± 2.9
	12/19/05	-0.3 ± 3.5	0.0 ± 14.0	0.4 ± 1.7	-0.8 ± 1.5	-9.0 ± 17.0	0.7 ± 1.8	
		Cs-137	Fe-59	H-3	I-131	K-40	La-140	
	03/21/05	-1.2 ± 1.7	-0.6 ± 5.3	90.0 ± 630.0	-1.0 ± 5.4	2.0 ± 28.0	-3.6 ± 4.4	
	06/16/05	0.4 ± 3.2	-3.0 ± 11.0	80.0 ± 360.0	-0.1 ± 7.4	9.0 ± 49.0	3.1 ± 8.3	
	09/15/05	0.4 ± 3.2	3.2 ± 7.6	-230.0 ± 920.0	-3.0 ± 7.4	26.0 ± 42.0	-2.0 ± 6.4	
	12/19/05	0.7 ± 1.6	1.3 ± 3.8	-690.0 ± 940.0	1.9 ± 4.9	-4.0 ± 27.0	-0.4 ± 4.0	

Table 10, Well Water (pCi/L)

Location	Collection Date	Isotope						
72		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228	
	03/21/05	0.3 ± 1.5	0.6 ± 1.9	-2.1 ± 1.9	-6.0 ± 16.0	0.3 ± 4.4	2.5 ± 5.9	
	06/16/05	-3.6 ± 3.3	1.6 ± 4.2	0.0 ± 3.4	-3.0 ± 26.0	-5.0 ± 7.7	-6.0 ± 12.0	
	09/15/05	-1.1 ± 2.9	3.2 ± 3.6	-2.1 ± 2.9	-10.0 ± 27.0	5.9 ± 7.4	-10.0 ± 11.0	
	12/19/05	-0.3 ± 1.5	1.2 ± 2.7	-1.6 ± 2.1	-4.0 ± 15.0	1.9 ± 4.0	-2.4 ± 7.4	
		Zn-65	Zr-95					
	03/21/05	-3.4 ± 3.7	-0.9 ± 3.0					
	06/16/05	-3.2 ± 7.2	0.5 ± 6.0					
	09/15/05	6.0 ± 13.0	1.8 ± 5.2					
	12/19/05	8.7 ± 6.7	0.2 ± 2.9					
	76-X		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
		02/17/05	-1.0 ± 5.8	3.0 ± 24.0	-1.4 ± 2.4	0.9 ± 2.7	10.0 ± 27.0	0.7 ± 2.4
09/22/05		0.0 ± 5.9	-2.0 ± 29.0	-1.9 ± 3.5	-0.8 ± 3.3	36.0 ± 34.0	0.5 ± 3.6	
		Cs-137	Fe-59	H-3	I-131	K-40	La-140	
02/17/05		0.1 ± 2.1	-1.1 ± 7.2	-130.0 ± 640.0	2.0 ± 6.7	11.0 ± 28.0	-1.2 ± 6.7	
09/22/05		1.2 ± 3.5	-0.6 ± 7.9	-230.0 ± 920.0	1.5 ± 8.3	-7.0 ± 52.0	0.0 ± 6.7	
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228	
02/17/05		0.0 ± 2.3	-0.9 ± 2.7	-2.5 ± 2.9	6.0 ± 21.0	4.8 ± 6.7	0.5 ± 9.3	
09/22/05		-2.7 ± 3.2	0.0 ± 4.2	-0.4 ± 3.9	12.0 ± 29.0	-4.1 ± 8.7	-1.0 ± 14.0	
		Zn-65	Zr-95					
02/17/05		-9.9 ± 5.4	3.2 ± 3.8					
09/22/05		-8.0 ± 9.3	-0.4 ± 6.1					
77-X		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	02/17/05	-5.1 ± 5.9	3.0 ± 21.0	-0.5 ± 2.4	-0.8 ± 2.3	7.0 ± 22.0	0.1 ± 2.5	
	09/22/05	K						
		Cs-137	Fe-59	H-3	I-131	K-40	La-140	
	02/17/05	-1.7 ± 2.2	-0.2 ± 7.1	-80.0 ± 640.0	-7.1 ± 5.5	-19.0 ± 35.0	-5.9 ± 6.8	
	09/22/05							
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228	
	02/17/05	-1.4 ± 2.4	0.9 ± 3.4	-2.8 ± 2.7	13.0 ± 21.0	2.5 ± 6.6	-3.5 ± 8.2	
	09/22/05							
		Zn-65	Zr-95					
	02/17/05	-6.5 ± 5.9	0.4 ± 4.6					
	09/22/05							

Table 10, Well Water (pCi/L)

Location	Collect on Date	Isotope					
78-X		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/17/05	4.8 ± 3.8	-1.0 ± 20.0	0.2 ± 2.0	1.2 ± 2.1	2.0 ± 21.0	-0.6 ± 2.1
	09/22/05	-0.1 ± 6.6	-17.0 ± 30.0	-3.5 ± 3.0	-0.8 ± 3.6	-18.0 ± 36.0	1.6 ± 3.1
		Cs-137	Fe-59	H-3	I-131	K-40	La-140
	02/17/05	-0.3 ± 1.9	-1.9 ± 5.0	-80.0 ± 640.0	2.1 ± 6.6	-1.0 ± 25.0	5.5 ± 4.3
	09/22/05	-2.1 ± 3.6	5.0 ± 10.0	-50.0 ± 940.0	8.1 ± 9.0	-12.0 ± 42.0	-0.1 ± 7.5
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228
	02/17/05	-1.3 ± 1.9	0.7 ± 2.4	-0.4 ± 2.6	0.0 ± 18.0	5.4 ± 5.3	-0.8 ± 7.2
	09/22/05	1.4 ± 3.4	1.9 ± 3.9	-1.1 ± 3.6	6.0 ± 31.0	3.8 ± 9.5	8.0 ± 16.0
		Zn-65	Zr-95				
	02/17/05	-1.5 ± 4.4	0.3 ± 3.9				
	09/22/05	-5.8 ± 7.8	1.7 ± 6.7				

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

Location	Collection Date	Sample Type	Isotope					
25			Ba-140	Be-7	Ce-141	Ce-144	Co-58	
	07/06/05	RASPBERRIES	0.021 ± 0.037	0.100 ± 0.150	0.012 ± 0.027	-0.020 ± 0.110	-0.007 ± 0.021	
	07/20/05	CABBAGE	0.000 ± 0.014	0.069 ± 0.072	-0.016 ± 0.015	0.025 ± 0.028	-0.003 ± 0.006	
	09/14/05	APPLES	-0.012 ± 0.015	0.024 ± 0.046	0.000 ± 0.013	-0.013 ± 0.024	-0.002 ± 0.005	
	09/14/05	COLLARDS	0.003 ± 0.011	0.028 ± 0.026	-0.021 ± 0.009	-0.007 ± 0.013	-0.001 ± 0.003	
			Co-60	Cr-51	Cs-134	Cs-137	Fe-59	
	07/06/05	RASPBERRIES	-0.013 ± 0.031	-0.050 ± 0.180	0.017 ± 0.027	0.004 ± 0.021	0.009 ± 0.057	
	07/20/05	CABBAGE	0.004 ± 0.007	0.051 ± 0.067	0.003 ± 0.006	0.002 ± 0.007	-0.004 ± 0.021	
	09/14/05	APPLES	0.005 ± 0.006	-0.028 ± 0.062	-0.001 ± 0.005	0.002 ± 0.005	0.010 ± 0.013	
	09/14/05	COLLARDS	0.003 ± 0.003	-0.021 ± 0.039	0.001 ± 0.003	0.003 ± 0.003	-0.003 ± 0.008	
			I-131	K-40	La-140	Mn-54	Nb-95	
	07/06/05	RASPBERRIES	0.018 ± 0.032	0.920 ± 0.590	0.024 ± 0.042	0.013 ± 0.025	-0.003 ± 0.023	
	07/20/05	CABBAGE	-0.015 ± 0.026	2.810 ± 0.190	0.000 ± 0.017	0.001 ± 0.006	-0.001 ± 0.008	
	09/14/05	APPLES	0.026 ± 0.031	1.070 ± 0.120	-0.014 ± 0.018	-0.001 ± 0.005	0.004 ± 0.007	
	09/14/05	COLLARDS	-0.004 ± 0.031	2.367 ± 0.078	0.003 ± 0.013	-0.001 ± 0.003	-0.005 ± 0.008	
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	
	07/06/05	RASPBERRIES	0.000 ± 0.016	-0.010 ± 0.230	-0.006 ± 0.052	0.081 ± 0.087	0.043 ± 0.051	
	07/20/05	CABBAGE	-0.001 ± 0.007	0.015 ± 0.055	0.001 ± 0.014	0.032 ± 0.030	0.000 ± 0.014	
	09/14/05	APPLES	-0.007 ± 0.006	-0.022 ± 0.048	0.008 ± 0.012	0.008 ± 0.024	-0.005 ± 0.011	
	09/14/05	COLLARDS	0.001 ± 0.006	0.012 ± 0.024	-0.003 ± 0.006	0.007 ± 0.015	0.009 ± 0.010	
			Zr-95					
	07/06/05	RASPBERRIES	0.004 ± 0.034					
	07/20/05	CABBAGE	-0.004 ± 0.011					
	09/14/05	APPLES	-0.003 ± 0.009					
	09/14/05	COLLARDS	0.000 ± 0.006					
	26-C			Ba-140	Be-7	Ce-141	Ce-144	Co-58
		07/12/05	RASPBERRIES	-0.010 ± 0.013	0.042 ± 0.088	-0.002 ± 0.013	-0.005 ± 0.053	0.000 ± 0.010
		07/27/05	COLLARDS	-0.005 ± 0.012	0.024 ± 0.059	0.005 ± 0.009	-0.012 ± 0.033	0.002 ± 0.007
09/14/05		APPLES	0.002 ± 0.015	0.025 ± 0.046	0.001 ± 0.009	0.009 ± 0.025	0.000 ± 0.005	
09/14/05		CABBAGE	0.001 ± 0.014	0.002 ± 0.029	-0.009 ± 0.009	-0.006 ± 0.020	-0.003 ± 0.003	
			Co-60	Cr-51	Cs-134	Cs-137	Fe-59	
07/12/05		RASPBERRIES	-0.007 ± 0.011	-0.097 ± 0.084	0.004 ± 0.010	0.004 ± 0.012	0.012 ± 0.027	
07/27/05		COLLARDS	-0.001 ± 0.010	0.030 ± 0.066	0.000 ± 0.007	-0.001 ± 0.007	0.012 ± 0.025	
09/14/05		APPLES	0.001 ± 0.005	0.016 ± 0.062	0.002 ± 0.005	0.000 ± 0.005	-0.003 ± 0.016	
09/14/05		CABBAGE	0.000 ± 0.003	0.033 ± 0.043	0.004 ± 0.003	0.001 ± 0.003	0.006 ± 0.008	
			I-131	K-40	La-140	Mn-54	Nb-95	
07/12/05		RASPBERRIES	-0.006 ± 0.013	1.630 ± 0.270	-0.012 ± 0.015	-0.001 ± 0.010	0.001 ± 0.010	
07/27/05		COLLARDS	0.003 ± 0.017	4.450 ± 0.280	-0.005 ± 0.014	-0.003 ± 0.007	0.006 ± 0.008	
09/14/05		APPLES	-0.020 ± 0.030	0.880 ± 0.100	0.003 ± 0.017	0.001 ± 0.004	-0.007 ± 0.007	
09/14/05		CABBAGE	-0.029 ± 0.035	1.946 ± 0.086	0.001 ± 0.016	-0.004 ± 0.003	-0.001 ± 0.008	
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	
07/12/05		RASPBERRIES	0.000 ± 0.009	-0.048 ± 0.099	0.021 ± 0.028	0.023 ± 0.036	-0.017 ± 0.025	
07/27/05		COLLARDS	0.000 ± 0.007	-0.007 ± 0.069	-0.002 ± 0.016	0.004 ± 0.041	0.001 ± 0.017	
09/14/05		APPLES	0.000 ± 0.006	0.014 ± 0.045	-0.002 ± 0.013	-0.010 ± 0.024	-0.002 ± 0.010	
09/14/05		CABBAGE	0.000 ± 0.004	-0.006 ± 0.027	0.005 ± 0.007	0.002 ± 0.018	-0.002 ± 0.009	

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

Location	Collection Date	Sample Type	Isotope
26-C			Zr-95
	07/12/05	RASPBERRIES	-0.016 ± 0.019
	07/27/05	COLLARDS	0.006 ± 0.013
	09/14/05	APPLES	0.000 ± 0.009
	09/14/05	CABBAGE	0.002 ± 0.006

Table 13, Broadleaf Vegetation (pCi/g wet)

Location	Collection Date	Isotope						
01		Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	
	04/28/05	G						
	05/23/05	0.000 ± 0.035	0.170 ± 0.160	0.011 ± 0.021	0.081 ± 0.067	-0.015 ± 0.024	0.009 ± 0.028	
	06/20/05	0.012 ± 0.024	0.100 ± 0.170	-0.022 ± 0.030	-0.009 ± 0.095	0.005 ± 0.025	-0.003 ± 0.022	
	07/20/05	0.020 ± 0.043	0.660 ± 0.230	-0.027 ± 0.027	-0.006 ± 0.075	0.011 ± 0.022	-0.012 ± 0.020	
	08/17/05	-0.026 ± 0.068	0.490 ± 0.170	0.007 ± 0.024	0.037 ± 0.043	-0.006 ± 0.016	0.012 ± 0.018	
	09/09/05	-0.009 ± 0.024	0.510 ± 0.260	-0.029 ± 0.028	-0.057 ± 0.089	0.003 ± 0.022	0.010 ± 0.020	
	10/19/05	0.016 ± 0.044	3.610 ± 0.540	-0.025 ± 0.035	0.080 ± 0.110	-0.019 ± 0.026	0.018 ± 0.029	
			Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
	05/23/05	-0.030 ± 0.130	0.011 ± 0.020	0.000 ± 0.021	0.044 ± 0.073	-0.020 ± 0.031	3.780 ± 0.790	
	06/20/05	0.120 ± 0.180	-0.011 ± 0.025	-0.008 ± 0.017	0.000 ± 0.073	0.021 ± 0.045	5.230 ± 0.900	
	07/20/05	-0.030 ± 0.190	0.000 ± 0.019	0.002 ± 0.017	0.021 ± 0.046	-0.020 ± 0.072	3.090 ± 0.530	
	08/17/05	0.060 ± 0.160	0.000 ± 0.015	0.009 ± 0.013	0.013 ± 0.061	0.030 ± 0.110	3.330 ± 0.430	
	09/09/05	-0.020 ± 0.190	-0.015 ± 0.024	0.016 ± 0.021	-0.015 ± 0.061	-0.036 ± 0.047	3.230 ± 0.620	
	10/19/05	-0.070 ± 0.250	0.021 ± 0.023	-0.015 ± 0.022	0.026 ± 0.055	-0.012 ± 0.091	2.990 ± 0.650	
			La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125
	05/23/05	0.000 ± 0.041	-0.003 ± 0.019	-0.001 ± 0.025	0.015 ± 0.017	-0.130 ± 0.150	-0.034 ± 0.049	
	06/20/05	0.014 ± 0.028	0.002 ± 0.018	-0.019 ± 0.022	-0.013 ± 0.022	0.010 ± 0.230	0.005 ± 0.053	
	07/20/05	0.023 ± 0.050	-0.004 ± 0.018	-0.008 ± 0.025	-0.004 ± 0.025	0.020 ± 0.160	0.010 ± 0.042	
	08/17/05	-0.030 ± 0.078	0.000 ± 0.014	-0.011 ± 0.024	-0.014 ± 0.017	-0.040 ± 0.110	-0.007 ± 0.031	
	09/09/05	-0.010 ± 0.028	0.002 ± 0.019	0.013 ± 0.024	0.002 ± 0.021	-0.160 ± 0.200	0.016 ± 0.047	
	10/19/05	0.018 ± 0.051	-0.013 ± 0.022	-0.021 ± 0.031	-0.005 ± 0.030	-0.070 ± 0.210	-0.026 ± 0.054	
			Th-228	Zn-65	Zr-95			
	05/23/05	0.122 ± 0.096	-0.019 ± 0.048	0.008 ± 0.038				
	06/20/05	0.018 ± 0.081	0.040 ± 0.066	0.004 ± 0.045				
	07/20/05	-0.014 ± 0.068	-0.006 ± 0.045	-0.012 ± 0.039				
	08/17/05	0.060 ± 0.079	-0.031 ± 0.037	0.008 ± 0.026				
09/09/05	0.068 ± 0.076	0.007 ± 0.054	0.006 ± 0.037					
10/19/05	0.086 ± 0.096	0.010 ± 0.060	0.022 ± 0.051					
10		Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60	
	05/23/05	-0.007 ± 0.041	0.130 ± 0.160	-0.003 ± 0.018	0.023 ± 0.054	-0.013 ± 0.021	0.008 ± 0.016	
	06/20/05	0.000 ± 0.000	0.080 ± 0.180	0.006 ± 0.026	0.006 ± 0.075	-0.015 ± 0.027	0.003 ± 0.027	
	07/20/05	0.035 ± 0.057	0.560 ± 0.240	-0.009 ± 0.023	0.005 ± 0.057	0.004 ± 0.020	-0.004 ± 0.024	
	08/17/05	0.140 ± 0.150	0.940 ± 0.550	-0.006 ± 0.065	0.070 ± 0.120	-0.003 ± 0.048	0.021 ± 0.037	
	09/09/05	0.022 ± 0.043	0.450 ± 0.280	-0.021 ± 0.028	0.020 ± 0.074	-0.009 ± 0.024	0.020 ± 0.026	
	10/19/05	-0.011 ± 0.096	1.450 ± 0.410	-0.010 ± 0.040	-0.040 ± 0.120	0.001 ± 0.025	-0.034 ± 0.038	
			Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40
	05/23/05	-0.120 ± 0.089	0.015 ± 0.020	-0.012 ± 0.015	-0.026 ± 0.071	0.014 ± 0.034	4.120 ± 0.730	
	06/20/05	-0.040 ± 0.160	0.021 ± 0.032	0.037 ± 0.027	-0.020 ± 0.076	-0.009 ± 0.056	4.440 ± 0.960	
	07/20/05	-0.100 ± 0.150	0.000 ± 0.021	0.001 ± 0.017	-0.015 ± 0.062	-0.033 ± 0.068	2.510 ± 0.560	
	08/17/05	0.460 ± 0.440	0.040 ± 0.038	0.025 ± 0.037	-0.100 ± 0.160	0.050 ± 0.290	3.400 ± 1.100	
	09/09/05	0.120 ± 0.170	-0.007 ± 0.026	-0.004 ± 0.022	-0.031 ± 0.084	0.018 ± 0.041	3.810 ± 0.810	
	10/19/05	-0.050 ± 0.300	-0.008 ± 0.024	0.020 ± 0.027	0.000 ± 0.063	-0.020 ± 0.100	3.050 ± 0.780	

Table 13, Broadleaf Vegetation (pCi/g wet)

Location	Collection Date	Isotope						
10		La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	
	05/23/05	-0.008 ± 0.047	-0.004 ± 0.014	-0.013 ± 0.020	0.008 ± 0.016	0.010 ± 0.120	-0.007 ± 0.041	
	06/20/05	0.000 ± 0.000	-0.009 ± 0.020	0.037 ± 0.026	0.019 ± 0.022	-0.020 ± 0.170	-0.022 ± 0.042	
	07/20/05	0.040 ± 0.066	-0.004 ± 0.018	-0.010 ± 0.026	-0.012 ± 0.020	-0.060 ± 0.140	-0.023 ± 0.042	
	08/17/05	0.160 ± 0.170	-0.010 ± 0.036	-0.028 ± 0.056	0.008 ± 0.053	-0.030 ± 0.280	-0.021 ± 0.080	
	09/09/05	0.025 ± 0.050	-0.015 ± 0.025	-0.031 ± 0.030	0.006 ± 0.019	0.020 ± 0.200	0.013 ± 0.059	
	10/19/05	-0.010 ± 0.110	0.003 ± 0.025	-0.002 ± 0.036	0.007 ± 0.024	0.060 ± 0.230	0.019 ± 0.059	
		Th-228	Zn-65	Zr-95				
	05/23/05	-0.013 ± 0.063	0.020 ± 0.046	-0.031 ± 0.027				
	06/20/05	0.025 ± 0.091	-0.016 ± 0.066	-0.019 ± 0.048				
	07/20/05	0.104 ± 0.086	0.019 ± 0.045	-0.048 ± 0.038				
	08/17/05	0.140 ± 0.190	-0.064 ± 0.095	-0.083 ± 0.099				
	09/09/05	-0.041 ± 0.094	-0.019 ± 0.068	0.010 ± 0.046				
	10/19/05	0.030 ± 0.120	0.020 ± 0.060	-0.044 ± 0.044				
	17		Ba-140	Be-7	Ce-141	Ce-144	Co-58	Co-60
		05/23/05	0.013 ± 0.042	0.060 ± 0.160	0.005 ± 0.019	-0.021 ± 0.048	0.001 ± 0.021	0.030 ± 0.026
		06/20/05	0.000 ± 0.038	0.210 ± 0.200	0.005 ± 0.022	-0.013 ± 0.064	-0.003 ± 0.024	0.014 ± 0.024
		07/20/05	-0.016 ± 0.050	0.700 ± 0.260	-0.012 ± 0.023	-0.060 ± 0.054	-0.013 ± 0.022	-0.005 ± 0.023
		08/17/05	0.056 ± 0.087	0.320 ± 0.330	0.003 ± 0.045	0.040 ± 0.110	-0.005 ± 0.029	0.016 ± 0.026
		09/09/05	0.000 ± 0.042	0.570 ± 0.370	-0.007 ± 0.037	-0.030 ± 0.130	-0.014 ± 0.028	-0.014 ± 0.030
10/19/05		0.022 ± 0.060	3.090 ± 0.530	0.031 ± 0.043	-0.020 ± 0.130	0.017 ± 0.025	0.012 ± 0.029	
		Cr-51	Cs-134	Cs-137	Fe-59	I-131	K-40	
05/23/05		-0.080 ± 0.140	-0.015 ± 0.021	0.022 ± 0.019	0.011 ± 0.058	0.002 ± 0.043	2.750 ± 0.640	
06/20/05		-0.190 ± 0.150	0.005 ± 0.025	0.000 ± 0.023	0.010 ± 0.062	-0.004 ± 0.037	3.260 ± 0.850	
07/20/05		0.060 ± 0.160	0.021 ± 0.018	0.005 ± 0.016	0.049 ± 0.071	-0.023 ± 0.062	1.930 ± 0.530	
08/17/05		-0.220 ± 0.310	0.014 ± 0.028	0.004 ± 0.021	-0.016 ± 0.077	0.050 ± 0.190	4.360 ± 0.740	
09/09/05		0.260 ± 0.250	-0.003 ± 0.031	0.028 ± 0.032	0.034 ± 0.077	-0.011 ± 0.065	3.530 ± 0.760	
10/19/05		0.080 ± 0.320	0.009 ± 0.032	0.057 ± 0.039	-0.046 ± 0.061	-0.050 ± 0.120	3.140 ± 0.680	
		La-140	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	
05/23/05		0.015 ± 0.048	0.005 ± 0.019	0.010 ± 0.024	0.002 ± 0.017	-0.070 ± 0.130	0.007 ± 0.047	
06/20/05		0.000 ± 0.044	-0.026 ± 0.031	0.013 ± 0.021	-0.005 ± 0.015	0.000 ± 0.140	0.023 ± 0.050	
07/20/05		-0.018 ± 0.058	-0.009 ± 0.018	0.017 ± 0.024	-0.003 ± 0.018	0.070 ± 0.140	0.015 ± 0.045	
08/17/05		0.060 ± 0.100	0.023 ± 0.028	-0.034 ± 0.039	-0.005 ± 0.030	0.080 ± 0.210	-0.004 ± 0.056	
09/09/05		0.000 ± 0.048	0.020 ± 0.026	-0.008 ± 0.038	0.010 ± 0.027	-0.120 ± 0.280	0.013 ± 0.063	
10/19/05	0.026 ± 0.068	0.019 ± 0.026	0.017 ± 0.039	-0.009 ± 0.028	-0.020 ± 0.220	0.024 ± 0.062		
	Th-228	Zn-65	Zr-95					
05/23/05	-0.018 ± 0.072	-0.035 ± 0.043	-0.002 ± 0.033					
06/20/05	0.007 ± 0.090	0.026 ± 0.062	0.039 ± 0.040					
07/20/05	0.008 ± 0.073	-0.027 ± 0.041	0.020 ± 0.040					
08/17/05	0.035 ± 0.091	-0.100 ± 0.069	0.016 ± 0.051					
09/09/05	0.040 ± 0.110	-0.040 ± 0.081	0.025 ± 0.051					
10/19/05	0.130 ± 0.100	-0.079 ± 0.067	0.000 ± 0.050					

Table 14, Sea Water (pCi/L)

Location	Collection Date	Isotope					
32		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/01/05	0.2 ± 3.1	-12.0 ± 18.0	0.6 ± 2.4	-0.8 ± 2.4	-15.0 ± 24.0	-1.3 ± 2.6
	03/01/05	-1.6 ± 4.9	9.0 ± 21.0	0.4 ± 2.5	0.5 ± 2.1	-20.0 ± 27.0	0.7 ± 2.0
	03/29/05	-4.4 ± 5.5	3.0 ± 23.0	1.2 ± 2.8	0.0 ± 3.4	-7.0 ± 22.0	-0.5 ± 2.7
	04/26/05	-3.0 ± 5.2	-5.0 ± 24.0	0.7 ± 2.7	1.6 ± 3.1	19.0 ± 23.0	-1.7 ± 2.8
	05/31/05	0.4 ± 5.5	6.0 ± 21.0	0.1 ± 2.6	1.7 ± 3.5	-3.0 ± 20.0	0.1 ± 3.2
	06/28/05	-0.9 ± 4.1	-7.0 ± 21.0	0.0 ± 2.4	0.0 ± 2.9	-1.0 ± 22.0	1.5 ± 2.5
	07/26/05	-2.2 ± 3.8	-14.0 ± 18.0	1.0 ± 2.1	0.1 ± 2.5	-14.0 ± 18.0	0.0 ± 2.6
	08/30/05	5.3 ± 6.3	12.0 ± 34.0	-3.4 ± 3.9	0.4 ± 4.2	26.0 ± 36.0	-2.4 ± 4.0
	09/27/05	-1.2 ± 5.3	7.0 ± 26.0	2.2 ± 2.7	-1.0 ± 2.6	-18.0 ± 30.0	1.0 ± 2.8
	10/25/05	0.2 ± 5.0	20.0 ± 29.0	0.5 ± 3.9	2.1 ± 3.7	-10.0 ± 35.0	-2.3 ± 4.2
	11/29/05	0.0 ± 6.6	-26.0 ± 36.0	-2.5 ± 3.8	1.3 ± 4.5	-22.0 ± 37.0	-0.3 ± 3.6
	12/27/05	2.2 ± 5.8	10.0 ± 25.0	2.4 ± 3.0	-0.4 ± 3.3	4.0 ± 27.0	0.1 ± 3.1
		Cs-137	Fe-59	H-3	I-131	K-40	La-140
02/01/05	-1.5 ± 2.6	0.0 ± 5.8	870.0 ± 150.0	-1.4 ± 4.9	265.0 ± 63.0	0.2 ± 3.5	
03/01/05	0.7 ± 2.3	1.9 ± 6.5	400.0 ± 83.0	-5.9 ± 7.6	274.0 ± 59.0	-1.8 ± 5.6	
03/29/05	-0.7 ± 2.5	-7.2 ± 9.2	590.0 ± 130.0	-3.1 ± 4.7	233.0 ± 73.0	-5.1 ± 6.3	
04/26/05	1.4 ± 2.7	2.7 ± 9.2	1350.0 ± 140.0	-3.4 ± 4.4	151.0 ± 57.0	-3.4 ± 6.0	
05/31/05	-3.2 ± 2.4	3.5 ± 8.5	3010.0 ± 240.0	3.0 ± 4.5	302.0 ± 64.0	0.4 ± 6.3	
06/28/05	0.5 ± 2.3	7.0 ± 7.6	440.0 ± 240.0	0.3 ± 4.7	285.0 ± 56.0	-1.0 ± 4.8	
07/26/05	1.7 ± 2.0	-1.4 ± 7.2	130.0 ± 190.0	-1.6 ± 3.4	246.0 ± 51.0	-2.5 ± 4.4	
08/30/05	1.3 ± 3.8	-1.0 ± 8.5	2190.0 ± 210.0	-2.5 ± 7.9	290.0 ± 85.0	5.1 ± 7.3	
09/27/05	1.8 ± 2.9	1.7 ± 6.0	450.0 ± 200.0	3.8 ± 8.0	298.0 ± 66.0	-1.4 ± 6.1	
10/25/05	0.2 ± 4.1	7.6 ± 8.7	1630.0 ± 240.0	2.1 ± 7.7	296.0 ± 82.0	0.2 ± 5.7	
11/29/05	-1.2 ± 3.4	1.8 ± 8.8	340.0 ± 190.0	-3.1 ± 7.8	318.0 ± 84.0	0.0 ± 7.6	
12/27/05	-2.1 ± 2.9	5.9 ± 7.3	510.0 ± 210.0	2.5 ± 6.6	312.0 ± 82.0	2.5 ± 6.7	
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228
02/01/05	-1.1 ± 2.2	0.0 ± 2.6	0.7 ± 2.3	12.0 ± 25.0	2.6 ± 6.0	-2.7 ± 8.1	
03/01/05	-1.5 ± 1.9	0.6 ± 2.7	-1.6 ± 2.5	1.0 ± 21.0	4.8 ± 5.8	-6.6 ± 9.1	
03/29/05	-1.1 ± 2.7	0.0 ± 2.9	-1.1 ± 2.5	18.0 ± 23.0	-4.0 ± 7.0	2.5 ± 9.6	
04/26/05	1.0 ± 2.2	-0.6 ± 3.1	0.6 ± 2.8	-2.0 ± 23.0	-3.5 ± 7.2	-5.5 ± 9.6	
05/31/05	0.6 ± 2.7	-0.1 ± 2.9	-0.2 ± 2.6	-17.0 ± 21.0	2.6 ± 6.6	3.0 ± 11.0	
06/28/05	-0.6 ± 2.5	1.3 ± 2.6	-3.8 ± 2.5	-9.0 ± 23.0	0.6 ± 6.1	3.8 ± 9.3	
07/26/05	-0.8 ± 2.3	-2.4 ± 2.5	-0.9 ± 2.2	12.0 ± 19.0	-0.2 ± 5.6	3.8 ± 8.1	
08/30/05	-1.3 ± 3.7	-1.8 ± 4.8	-0.3 ± 3.9	-2.0 ± 35.0	0.7 ± 9.2	8.0 ± 15.0	
09/27/05	0.6 ± 2.8	-4.0 ± 3.4	0.2 ± 3.0	9.0 ± 28.0	-1.5 ± 7.8	1.0 ± 11.0	
10/25/05	-0.3 ± 3.8	0.6 ± 4.0	-2.4 ± 3.4	21.0 ± 34.0	-6.0 ± 9.7	15.0 ± 14.0	
11/29/05	0.3 ± 3.8	-2.4 ± 4.3	-1.4 ± 4.3	22.0 ± 34.0	-3.0 ± 10.0	11.0 ± 15.0	
12/27/05	-1.3 ± 3.3	-1.0 ± 3.4	-1.0 ± 3.2	11.0 ± 23.0	2.1 ± 7.8	3.0 ± 12.0	
		Zn-65	Zr-95				
02/01/05	-0.3 ± 5.0	0.0 ± 3.8					
03/01/05	-2.6 ± 5.1	-2.5 ± 4.1					
03/29/05	5.7 ± 6.1	-1.5 ± 5.2					
04/26/05	5.1 ± 6.0	0.4 ± 5.3					
05/31/05	-0.7 ± 6.2	-2.0 ± 5.3					
06/28/05	1.1 ± 5.5	1.6 ± 4.1					
07/26/05	0.8 ± 5.4	1.4 ± 4.0					
08/30/05	5.0 ± 14.0	-1.4 ± 7.0					
09/27/05	0.8 ± 5.8	-3.2 ± 5.4					
10/25/05	-1.7 ± 8.7	0.9 ± 6.7					
11/29/05	-0.7 ± 8.2	1.0 ± 6.5					
12/27/05	-2.1 ± 6.5	-3.1 ± 5.1					

Table 14, Sea Water (pCi/L)

Location	Collection Date	Isotope					
37-C		Ba-140	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/15/05	-4.0 ± 5.2	8.0 ± 22.0	0.1 ± 2.5	1.4 ± 2.4	6.0 ± 25.0	-1.7 ± 2.8
	05/24/05	-3.2 ± 6.2	-17.0 ± 27.0	0.2 ± 2.7	-0.9 ± 3.6	15.0 ± 30.0	-2.8 ± 3.4
	08/23/05	3.1 ± 4.1	10.0 ± 13.0	1.4 ± 1.5	2.5 ± 1.8	-9.0 ± 17.0	-0.8 ± 1.7
	11/08/05	2.0 ± 5.9	11.0 ± 32.0	-0.9 ± 3.8	-3.8 ± 4.5	8.0 ± 29.0	1.7 ± 4.2
		Cs-137	Fe-59	H-3	I-131	K-40	La-140
	02/15/05	-0.4 ± 2.4	5.8 ± 8.0	-190.0 ± 630.0	-4.1 ± 6.6	225.0 ± 60.0	-4.6 ± 6.0
	05/24/05	0.8 ± 3.4	0.0 ± 9.5	-30.0 ± 610.0	4.6 ± 6.5	242.0 ± 70.0	-3.7 ± 7.1
	08/23/05	0.4 ± 1.6	2.9 ± 5.1	-630.0 ± 720.0	-2.7 ± 5.4	288.0 ± 39.0	3.6 ± 4.7
	11/08/05	2.2 ± 3.5	-0.6 ± 8.3	-70.0 ± 770.0	2.6 ± 6.2	267.0 ± 99.0	2.3 ± 6.8
		Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	Th-228
	02/15/05	-0.6 ± 2.5	-1.6 ± 2.6	0.2 ± 3.1	1.0 ± 22.0	-2.7 ± 6.5	-7.0 ± 10.0
	05/24/05	-1.6 ± 3.4	0.5 ± 3.7	-0.8 ± 3.5	-18.0 ± 30.0	3.1 ± 7.4	5.0 ± 12.0
	08/23/05	1.5 ± 1.7	-0.5 ± 1.9	-1.9 ± 1.8	8.0 ± 15.0	0.0 ± 3.9	-2.8 ± 8.4
	11/08/05	0.3 ± 3.9	2.8 ± 4.5	-1.6 ± 3.9	6.0 ± 33.0	9.1 ± 9.2	6.0 ± 16.0
		Zn-65	Zr-95				
02/15/05	-6.7 ± 6.2	2.1 ± 4.7					
05/24/05	2.0 ± 7.2	-3.3 ± 5.5					
08/23/05	-1.4 ± 3.4	0.4 ± 2.9					
11/08/05	-3.3 ± 9.0	-0.2 ± 7.4					

Table 15, Bottom Sediment (pCi/g dry)

Location	Collection Date	Isotope						
29		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	04/19/05	-0.041 ± 0.043	0.220 ± 0.310	-0.009 ± 0.031	0.020 ± 0.044	-0.280 ± 0.340	-0.008 ± 0.032	
	10/06/05	0.002 ± 0.023	-0.010 ± 0.170	-0.003 ± 0.018	0.010 ± 0.017	0.000 ± 0.230	-0.006 ± 0.017	
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
	04/19/05	0.018 ± 0.044	-0.041 ± 0.083	0.048 ± 0.073	15.200 ± 1.500	-0.002 ± 0.030	-0.015 ± 0.048	
	10/06/05	0.031 ± 0.021	0.036 ± 0.044	0.037 ± 0.078	15.940 ± 0.700	-0.010 ± 0.019	0.011 ± 0.025	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	04/19/05	0.012 ± 0.035	0.010 ± 0.350	0.019 ± 0.095	0.960 ± 0.180	0.070 ± 0.150	0.027 ± 0.058	
	10/06/05	0.021 ± 0.023	-0.040 ± 0.160	0.015 ± 0.047	1.190 ± 0.077	0.050 ± 0.081	0.046 ± 0.036	
	31		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		04/20/05	0.009 ± 0.031	0.190 ± 0.230	0.009 ± 0.024	-0.024 ± 0.022	-0.090 ± 0.270	-0.008 ± 0.026
		11/03/05	-0.005 ± 0.031	0.170 ± 0.280	-0.031 ± 0.026	-0.003 ± 0.022	0.160 ± 0.420	-0.020 ± 0.087
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
		04/20/05	-0.004 ± 0.028	-0.025 ± 0.053	0.004 ± 0.051	13.100 ± 0.840	0.014 ± 0.028	0.017 ± 0.031
11/03/05		-0.013 ± 0.030	0.055 ± 0.097	-0.080 ± 0.160	12.170 ± 0.630	-0.020 ± 0.024	0.008 ± 0.048	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
04/20/05		0.016 ± 0.029	0.100 ± 0.240	-0.014 ± 0.073	2.680 ± 0.130	0.083 ± 0.098	0.069 ± 0.051	
11/03/05		0.020 ± 0.035	0.180 ± 0.260	-0.018 ± 0.080	5.420 ± 0.140	-0.070 ± 0.100	-0.013 ± 0.070	
32			Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		04/19/05	0.045 ± 0.038	-0.200 ± 0.260	-0.006 ± 0.027	0.026 ± 0.031	-0.080 ± 0.300	0.006 ± 0.031
		10/06/05	-0.007 ± 0.036	0.060 ± 0.270	0.017 ± 0.029	0.008 ± 0.028	-0.090 ± 0.330	0.002 ± 0.026
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
		04/19/05	0.017 ± 0.033	0.009 ± 0.064	-0.013 ± 0.056	12.800 ± 1.200	0.027 ± 0.032	0.001 ± 0.034
	10/06/05	0.000 ± 0.035	-0.017 ± 0.068	0.060 ± 0.120	12.800 ± 1.100	0.011 ± 0.028	-0.002 ± 0.039	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	04/19/05	-0.008 ± 0.031	0.050 ± 0.260	0.008 ± 0.077	0.810 ± 0.130	-0.030 ± 0.150	0.015 ± 0.047	
	10/06/05	-0.008 ± 0.030	0.160 ± 0.250	0.021 ± 0.070	0.980 ± 0.130	0.030 ± 0.140	0.008 ± 0.050	
	33		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		04/19/05	-0.008 ± 0.029	0.090 ± 0.180	-0.003 ± 0.023	0.003 ± 0.022	0.000 ± 0.180	-0.004 ± 0.020
		11/03/05	0.009 ± 0.033	0.220 ± 0.190	0.023 ± 0.028	0.007 ± 0.024	0.070 ± 0.210	0.015 ± 0.019
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
		04/19/05	0.004 ± 0.023	0.012 ± 0.048	0.014 ± 0.040	11.900 ± 0.930	-0.011 ± 0.024	0.011 ± 0.028
11/03/05		0.008 ± 0.023	-0.020 ± 0.062	0.037 ± 0.085	14.600 ± 1.100	-0.030 ± 0.026	0.004 ± 0.035	

Table 15, Bottom Sediment (pCi/g dry)

Location	Collection Date	Isotope						
33		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	04/19/05	0.007 ± 0.022	-0.050 ± 0.190	0.025 ± 0.056	0.900 ± 0.099	-0.080 ± 0.110	0.002 ± 0.043	
	11/03/05	0.020 ± 0.023	0.060 ± 0.180	-0.011 ± 0.049	0.267 ± 0.093	0.036 ± 0.057	0.001 ± 0.043	
34		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	04/20/05	0.023 ± 0.040	-0.090 ± 0.190	0.036 ± 0.029	-0.001 ± 0.030	-0.230 ± 0.240	-0.002 ± 0.025	
	11/03/05	0.009 ± 0.032	0.090 ± 0.200	-0.010 ± 0.021	0.001 ± 0.023	0.050 ± 0.240	-0.003 ± 0.021	
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
	04/20/05	0.033 ± 0.030	0.029 ± 0.068	0.017 ± 0.046	18.000 ± 1.500	0.003 ± 0.025	-0.010 ± 0.031	
	11/03/05	-0.008 ± 0.023	0.017 ± 0.058	0.067 ± 0.092	12.800 ± 1.100	0.009 ± 0.020	-0.022 ± 0.029	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	04/20/05	-0.013 ± 0.022	0.140 ± 0.240	0.012 ± 0.061	0.120 ± 0.160	0.030 ± 0.077	-0.009 ± 0.037	
	11/03/05	-0.015 ± 0.024	-0.010 ± 0.200	0.009 ± 0.051	0.170 ± 0.120	-0.004 ± 0.066	0.013 ± 0.031	
	35-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		04/19/05	-0.024 ± 0.048	-0.220 ± 0.260	0.002 ± 0.031	0.034 ± 0.033	0.360 ± 0.350	-0.021 ± 0.033
		10/06/05	-0.015 ± 0.039	0.190 ± 0.270	-0.021 ± 0.035	-0.002 ± 0.026	-0.010 ± 0.340	0.007 ± 0.028
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
04/19/05		0.014 ± 0.040	0.025 ± 0.073	-0.015 ± 0.063	12.900 ± 1.300	0.027 ± 0.034	-0.039 ± 0.038	
10/06/05		0.038 ± 0.038	-0.007 ± 0.075	-0.080 ± 0.120	13.300 ± 1.100	-0.003 ± 0.029	0.027 ± 0.047	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
04/19/05		0.024 ± 0.031	-0.020 ± 0.300	0.030 ± 0.086	0.770 ± 0.140	-0.040 ± 0.073	-0.029 ± 0.050	
10/06/05		-0.022 ± 0.036	-0.080 ± 0.300	0.022 ± 0.080	0.830 ± 0.140	0.080 ± 0.140	0.009 ± 0.054	
37-C			Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		04/19/05	0.003 ± 0.035	-0.050 ± 0.200	0.000 ± 0.023	-0.002 ± 0.031	-0.200 ± 0.190	-0.001 ± 0.029
		11/03/05	-0.007 ± 0.031	0.200 ± 0.200	0.002 ± 0.026	-0.008 ± 0.025	-0.330 ± 0.250	0.009 ± 0.022
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
	04/19/05	-0.005 ± 0.026	0.014 ± 0.066	0.025 ± 0.040	17.600 ± 1.400	-0.002 ± 0.029	-0.017 ± 0.031	
	11/03/05	-0.008 ± 0.021	-0.040 ± 0.065	0.014 ± 0.095	15.900 ± 1.200	-0.009 ± 0.024	-0.030 ± 0.054	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	04/19/05	-0.003 ± 0.024	-0.080 ± 0.230	0.004 ± 0.066	0.320 ± 0.110	-0.032 ± 0.071	-0.017 ± 0.045	
	11/03/05	-0.007 ± 0.027	0.000 ± 0.200	-0.051 ± 0.061	0.250 ± 0.110	0.010 ± 0.130	0.000 ± 0.041	

Table 15, Bottom Sediment (pCi/g dry)

Location	Collection Date	Isotope						
39-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	04/19/05	-0.006 ± 0.023	0.200 ± 0.180	0.001 ± 0.019	0.051 ± 0.019	0.060 ± 0.200	0.031 ± 0.068	
	10/06/05	0.026 ± 0.045	0.020 ± 0.290	-0.010 ± 0.032	0.073 ± 0.035	-0.260 ± 0.370	-0.009 ± 0.030	
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
	04/19/05	0.144 ± 0.030	0.023 ± 0.042	-0.035 ± 0.043	16.500 ± 0.780	-0.003 ± 0.018	-0.007 ± 0.024	
	10/06/05	0.135 ± 0.053	-0.013 ± 0.082	-0.030 ± 0.140	18.200 ± 1.300	0.024 ± 0.031	-0.031 ± 0.045	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	04/19/05	0.004 ± 0.019	-0.020 ± 0.180	0.014 ± 0.052	0.745 ± 0.087	-0.009 ± 0.090	0.023 ± 0.036	
	10/06/05	-0.030 ± 0.036	0.030 ± 0.260	0.053 ± 0.077	0.820 ± 0.140	0.010 ± 0.150	-0.014 ± 0.056	
	67-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		05/11/05	-0.004 ± 0.018	0.000 ± 0.110	-0.008 ± 0.014	0.003 ± 0.014	0.050 ± 0.130	-0.007 ± 0.013
		11/01/05	0.045 ± 0.049	0.030 ± 0.300	0.001 ± 0.030	-0.013 ± 0.037	0.020 ± 0.390	-0.001 ± 0.034
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
05/11/05		0.133 ± 0.023	-0.026 ± 0.033	0.010 ± 0.024	14.700 ± 0.610	0.005 ± 0.014	0.006 ± 0.016	
11/01/05		0.107 ± 0.056	0.032 ± 0.075	-0.060 ± 0.100	14.100 ± 1.500	0.005 ± 0.035	-0.032 ± 0.044	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
05/11/05		0.002 ± 0.015	0.070 ± 0.130	-0.007 ± 0.036	1.020 ± 0.061	0.022 ± 0.063	0.014 ± 0.024	
11/01/05		-0.002 ± 0.039	0.000 ± 0.290	0.028 ± 0.092	1.300 ± 0.160	-0.030 ± 0.170	0.023 ± 0.062	
69-X			Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		06/28/05	-0.050 ± 0.050	0.120 ± 0.280	0.001 ± 0.027	0.004 ± 0.036	0.370 ± 0.300	-0.004 ± 0.046
		11/03/05	0.000 ± 0.035	0.020 ± 0.170	0.006 ± 0.028	-0.006 ± 0.030	0.100 ± 0.250	-0.008 ± 0.020
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
	06/28/05	0.032 ± 0.037	0.022 ± 0.083	-0.027 ± 0.080	15.800 ± 1.600	0.014 ± 0.037	0.026 ± 0.035	
	11/03/05	0.010 ± 0.021	0.012 ± 0.053	-0.048 ± 0.091	14.600 ± 1.100	0.004 ± 0.020	0.013 ± 0.032	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	06/28/05	-0.029 ± 0.033	-0.150 ± 0.310	0.045 ± 0.076	0.220 ± 0.160	0.000 ± 0.090	-0.034 ± 0.042	
	11/03/05	-0.006 ± 0.026	-0.120 ± 0.200	0.016 ± 0.048	0.270 ± 0.130	-0.028 ± 0.062	-0.003 ± 0.037	

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

Location	Collection Date	Isotope						
29		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	02/15/05	-0.002 ± 0.009	0.043 ± 0.055	0.003 ± 0.006	0.003 ± 0.007	-0.017 ± 0.046	0.002 ± 0.007	
	04/19/05	0.000 ± 0.012	0.076 ± 0.053	0.005 ± 0.006	-0.004 ± 0.011	0.001 ± 0.049	0.005 ± 0.009	
	09/14/05	0.006 ± 0.006	0.013 ± 0.032	0.002 ± 0.005	-0.001 ± 0.007	-0.019 ± 0.033	0.006 ± 0.005	
	09/28/05	0.001 ± 0.009	0.046 ± 0.051	0.001 ± 0.007	0.009 ± 0.010	0.040 ± 0.047	0.000 ± 0.008	
	11/07/05	-0.001 ± 0.005	0.029 ± 0.036	0.001 ± 0.004	0.002 ± 0.006	0.011 ± 0.028	0.004 ± 0.004	
	11/08/05	0.006 ± 0.011	0.067 ± 0.079	-0.001 ± 0.008	0.010 ± 0.012	-0.030 ± 0.061	-0.006 ± 0.010	
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/15/05	-0.003 ± 0.006	0.014 ± 0.018	0.009 ± 0.009	3.890 ± 0.290	-0.005 ± 0.007	-0.001 ± 0.006	
	04/19/05	0.006 ± 0.007	0.003 ± 0.031	0.009 ± 0.010	4.300 ± 0.480	-0.004 ± 0.009	-0.009 ± 0.009	
	09/14/05	0.000 ± 0.004	-0.001 ± 0.015	0.027 ± 0.010	5.970 ± 0.250	0.003 ± 0.004	0.002 ± 0.005	
	09/28/05	-0.001 ± 0.006	0.002 ± 0.020	0.006 ± 0.007	6.850 ± 0.400	0.005 ± 0.007	-0.006 ± 0.007	
	11/07/05	0.001 ± 0.004	-0.006 ± 0.011	0.010 ± 0.007	3.640 ± 0.230	0.003 ± 0.004	0.003 ± 0.004	
	11/08/05	0.004 ± 0.008	0.001 ± 0.023	0.021 ± 0.013	6.190 ± 0.470	0.004 ± 0.008	-0.005 ± 0.008	
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/15/05	-0.002 ± 0.006	-0.003 ± 0.058	0.009 ± 0.015	0.062 ± 0.032	-0.016 ± 0.020	-0.004 ± 0.012	
	04/19/05	-0.001 ± 0.007	-0.034 ± 0.055	0.006 ± 0.017	0.024 ± 0.030	-0.001 ± 0.024	0.002 ± 0.011	
	09/14/05	-0.001 ± 0.004	-0.005 ± 0.039	0.006 ± 0.009	0.049 ± 0.020	-0.010 ± 0.012	-0.006 ± 0.008	
	09/28/05	0.000 ± 0.006	-0.013 ± 0.055	-0.001 ± 0.015	0.036 ± 0.029	-0.007 ± 0.020	-0.002 ± 0.012	
	11/07/05	0.000 ± 0.003	-0.007 ± 0.035	-0.001 ± 0.008	0.024 ± 0.021	-0.009 ± 0.011	-0.004 ± 0.006	
	11/08/05	0.002 ± 0.008	-0.012 ± 0.080	0.004 ± 0.021	0.045 ± 0.036	0.013 ± 0.022	0.007 ± 0.015	
32-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	02/15/05	0.009 ± 0.008	0.060 ± 0.045	0.000 ± 0.006	0.005 ± 0.006	-0.014 ± 0.047	0.003 ± 0.006	
	04/19/05	0.000 ± 0.018	0.044 ± 0.095	0.000 ± 0.009	0.012 ± 0.013	-0.006 ± 0.080	-0.002 ± 0.009	
	08/24/05	0.000 ± 0.018	-0.030 ± 0.110	0.001 ± 0.012	-0.007 ± 0.020	0.110 ± 0.120	0.002 ± 0.011	
	09/28/05	-0.008 ± 0.017	0.000 ± 0.072	0.010 ± 0.011	-0.003 ± 0.017	0.029 ± 0.086	0.003 ± 0.016	
	11/07/05	-0.001 ± 0.010	0.068 ± 0.061	-0.001 ± 0.008	0.013 ± 0.011	0.012 ± 0.053	0.004 ± 0.008	
	11/08/05	0.004 ± 0.004	0.085 ± 0.050	0.006 ± 0.005	-0.005 ± 0.008	0.013 ± 0.034	0.002 ± 0.003	
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/15/05	-0.002 ± 0.006	-0.016 ± 0.019	-0.003 ± 0.008	3.770 ± 0.270	-0.002 ± 0.006	-0.008 ± 0.006	
	04/19/05	-0.002 ± 0.010	0.018 ± 0.046	0.000 ± 0.017	5.050 ± 0.580	0.001 ± 0.010	-0.002 ± 0.012	
	08/24/05	-0.007 ± 0.014	0.024 ± 0.050	0.021 ± 0.051	6.940 ± 0.680	-0.003 ± 0.011	0.014 ± 0.016	
	09/28/05	-0.004 ± 0.011	-0.006 ± 0.034	0.007 ± 0.013	6.770 ± 0.660	0.007 ± 0.010	0.010 ± 0.012	
	11/07/05	-0.004 ± 0.007	-0.004 ± 0.019	0.010 ± 0.011	5.380 ± 0.390	-0.004 ± 0.007	0.002 ± 0.008	
	11/08/05	0.000 ± 0.005	0.005 ± 0.013	0.023 ± 0.009	6.340 ± 0.280	0.002 ± 0.005	0.000 ± 0.005	
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/15/05	-0.005 ± 0.005	0.035 ± 0.049	-0.011 ± 0.014	0.041 ± 0.025	-0.011 ± 0.015	-0.004 ± 0.009	
	04/19/05	-0.003 ± 0.010	0.000 ± 0.097	0.015 ± 0.022	0.034 ± 0.048	-0.025 ± 0.027	-0.008 ± 0.019	
	08/24/05	0.007 ± 0.011	-0.050 ± 0.100	0.004 ± 0.026	0.036 ± 0.051	0.009 ± 0.031	0.017 ± 0.025	
	09/28/05	0.000 ± 0.010	-0.009 ± 0.097	0.005 ± 0.026	0.014 ± 0.050	-0.052 ± 0.036	-0.013 ± 0.020	
	11/07/05	0.001 ± 0.007	-0.014 ± 0.057	-0.020 ± 0.018	0.036 ± 0.034	-0.011 ± 0.020	-0.008 ± 0.010	
	11/08/05	-0.001 ± 0.004	0.000 ± 0.041	-0.001 ± 0.011	0.055 ± 0.018	0.000 ± 0.013	-0.001 ± 0.008	

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

Location	Collection Date	Isotope					
33-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/18/05	0.003 ± 0.008	0.045 ± 0.061	-0.001 ± 0.006	0.001 ± 0.006	0.020 ± 0.066	0.003 ± 0.006
	04/19/05	0.005 ± 0.013	0.056 ± 0.069	-0.001 ± 0.009	-0.001 ± 0.010	-0.024 ± 0.072	0.006 ± 0.010
	08/24/05	-0.010 ± 0.012	-0.065 ± 0.094	0.002 ± 0.010	-0.004 ± 0.013	-0.080 ± 0.100	0.007 ± 0.011
	11/08/05	-0.012 ± 0.010	0.037 ± 0.063	0.004 ± 0.009	0.009 ± 0.013	0.003 ± 0.055	0.004 ± 0.010
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/18/05	0.001 ± 0.006	0.006 ± 0.024	0.001 ± 0.030	5.840 ± 0.320	-0.003 ± 0.006	-0.004 ± 0.008
	04/19/05	-0.003 ± 0.010	-0.020 ± 0.030	0.018 ± 0.014	4.270 ± 0.460	0.004 ± 0.009	-0.001 ± 0.010
	08/24/05	0.006 ± 0.010	-0.007 ± 0.035	0.032 ± 0.038	6.970 ± 0.560	-0.002 ± 0.010	0.002 ± 0.014
	11/08/05	0.003 ± 0.008	0.024 ± 0.022	0.020 ± 0.017	5.750 ± 0.520	0.000 ± 0.009	-0.004 ± 0.010
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/18/05	0.000 ± 0.007	-0.007 ± 0.050	-0.001 ± 0.013	0.035 ± 0.029	0.025 ± 0.030	0.007 ± 0.010
	04/19/05	-0.004 ± 0.008	-0.030 ± 0.078	-0.007 ± 0.020	0.084 ± 0.043	-0.027 ± 0.028	0.004 ± 0.016
	08/24/05	-0.002 ± 0.009	-0.019 ± 0.095	0.006 ± 0.021	0.013 ± 0.039	-0.021 ± 0.026	-0.014 ± 0.021
	11/08/05	0.002 ± 0.007	0.023 ± 0.070	0.006 ± 0.018	0.050 ± 0.046	-0.006 ± 0.027	0.007 ± 0.015
	35-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51
02/15/05		-0.003 ± 0.008	0.055 ± 0.058	0.001 ± 0.007	-0.004 ± 0.007	-0.011 ± 0.053	0.000 ± 0.007
04/19/05		-0.003 ± 0.015	0.015 ± 0.066	-0.003 ± 0.010	0.010 ± 0.013	-0.003 ± 0.069	0.007 ± 0.012
08/16/05		0.002 ± 0.019	0.000 ± 0.120	0.009 ± 0.015	-0.003 ± 0.020	-0.030 ± 0.110	-0.001 ± 0.013
11/08/05		-0.007 ± 0.014	0.092 ± 0.075	-0.002 ± 0.008	0.012 ± 0.016	-0.008 ± 0.059	0.001 ± 0.011
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
02/15/05		-0.002 ± 0.007	-0.006 ± 0.021	0.004 ± 0.011	3.150 ± 0.280	-0.003 ± 0.006	0.000 ± 0.007
04/19/05		-0.005 ± 0.008	0.001 ± 0.038	0.019 ± 0.015	4.780 ± 0.600	0.000 ± 0.011	0.000 ± 0.008
08/16/05		-0.001 ± 0.011	-0.007 ± 0.054	0.052 ± 0.057	5.940 ± 0.660	-0.005 ± 0.013	-0.003 ± 0.020
11/08/05		0.002 ± 0.011	0.018 ± 0.026	0.018 ± 0.017	6.270 ± 0.570	-0.003 ± 0.010	-0.008 ± 0.009
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
02/15/05		-0.003 ± 0.005	-0.013 ± 0.059	-0.003 ± 0.017	0.035 ± 0.031	-0.017 ± 0.018	0.015 ± 0.012
04/19/05		0.001 ± 0.008	0.029 ± 0.083	0.002 ± 0.020	0.049 ± 0.042	-0.017 ± 0.029	0.006 ± 0.018
08/16/05		-0.002 ± 0.013	-0.085 ± 0.078	0.009 ± 0.027	0.035 ± 0.051	-0.038 ± 0.036	0.016 ± 0.026
11/08/05		-0.003 ± 0.007	0.003 ± 0.093	0.012 ± 0.022	0.042 ± 0.056	0.010 ± 0.031	0.011 ± 0.019
36-X			Ag-110m	Be-7	Co-58	Co-60	Cr-51
	03/07/05	-0.004 ± 0.006	0.031 ± 0.043	0.006 ± 0.006	0.001 ± 0.006	-0.036 ± 0.036	0.003 ± 0.006
	04/19/05	0.005 ± 0.015	0.078 ± 0.085	0.000 ± 0.009	-0.014 ± 0.012	0.026 ± 0.082	0.004 ± 0.010
	08/16/05	-0.007 ± 0.012	0.054 ± 0.077	-0.002 ± 0.010	0.002 ± 0.013	0.012 ± 0.088	0.004 ± 0.010
	11/08/05	-0.002 ± 0.013	0.073 ± 0.086	-0.002 ± 0.009	-0.011 ± 0.013	0.082 ± 0.072	0.009 ± 0.011
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/07/05	0.001 ± 0.005	0.011 ± 0.018	0.016 ± 0.013	3.630 ± 0.280	-0.003 ± 0.005	-0.002 ± 0.007
	04/19/05	0.011 ± 0.012	0.006 ± 0.036	0.021 ± 0.016	4.530 ± 0.590	-0.002 ± 0.010	0.009 ± 0.011
	08/16/05	0.001 ± 0.008	-0.006 ± 0.040	0.003 ± 0.046	4.500 ± 0.470	-0.001 ± 0.009	-0.006 ± 0.011
	11/08/05	-0.010 ± 0.010	0.007 ± 0.025	0.014 ± 0.015	6.970 ± 0.520	0.005 ± 0.009	-0.004 ± 0.011

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

Location	Collection Date	Isotope					
36-X		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/07/05	0.002 ± 0.005	0.041 ± 0.039	-0.001 ± 0.011	0.035 ± 0.030	-0.007 ± 0.014	0.036 ± 0.011
	04/19/05	0.009 ± 0.009	0.025 ± 0.091	-0.016 ± 0.023	0.077 ± 0.067	0.000 ± 0.030	-0.013 ± 0.020
	08/16/05	-0.009 ± 0.009	0.069 ± 0.081	0.007 ± 0.020	0.052 ± 0.036	0.004 ± 0.027	-0.012 ± 0.020
	11/08/05	0.004 ± 0.009	0.003 ± 0.087	0.001 ± 0.021	0.084 ± 0.046	-0.011 ± 0.027	0.037 ± 0.016

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

Location	Collection Date	Isotope						
32		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	03/31/05	H						
	05/03/05	0.025 ± 0.031	-0.110 ± 0.200	0.004 ± 0.018	0.006 ± 0.015	-0.020 ± 0.190	-0.007 ± 0.022	
	06/01/05	0.020 ± 0.031	0.040 ± 0.170	0.001 ± 0.019	-0.014 ± 0.028	-0.090 ± 0.150	0.016 ± 0.024	
	07/28/05	-0.011 ± 0.010	0.043 ± 0.064	-0.003 ± 0.007	0.000 ± 0.008	-0.035 ± 0.074	-0.010 ± 0.008	
	10/04/05	0.001 ± 0.019	0.040 ± 0.130	0.010 ± 0.015	-0.005 ± 0.015	0.030 ± 0.160	0.004 ± 0.015	
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
	05/03/05	0.008 ± 0.022	0.030 ± 0.052	0.009 ± 0.028	3.600 ± 0.700	-0.013 ± 0.018	-0.011 ± 0.024	
	06/01/05	0.023 ± 0.023	-0.086 ± 0.070	-0.002 ± 0.026	4.030 ± 0.770	-0.005 ± 0.015	0.006 ± 0.019	
	07/28/05	-0.002 ± 0.008	0.004 ± 0.022	-0.004 ± 0.021	3.770 ± 0.260	-0.003 ± 0.007	0.000 ± 0.009	
	10/04/05	0.012 ± 0.014	-0.040 ± 0.038	-0.005 ± 0.050	4.160 ± 0.510	0.000 ± 0.013	0.013 ± 0.018	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	05/03/05	0.000 ± 0.015	0.020 ± 0.180	-0.013 ± 0.045	0.026 ± 0.076	-0.030 ± 0.054	0.004 ± 0.035	
	06/01/05	-0.002 ± 0.016	0.150 ± 0.210	-0.034 ± 0.055	0.016 ± 0.083	0.000 ± 0.046	-0.014 ± 0.036	
	07/28/05	0.002 ± 0.008	-0.037 ± 0.067	-0.005 ± 0.020	-0.025 ± 0.028	-0.009 ± 0.017	-0.018 ± 0.013	
	10/04/05	-0.003 ± 0.017	-0.090 ± 0.140	0.008 ± 0.037	-0.016 ± 0.051	-0.011 ± 0.033	-0.006 ± 0.026	
	35		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		05/03/05	0.013 ± 0.028	0.040 ± 0.150	0.023 ± 0.022	-0.006 ± 0.026	0.100 ± 0.160	0.003 ± 0.019
		07/28/05	0.001 ± 0.011	0.021 ± 0.062	-0.001 ± 0.008	-0.003 ± 0.009	-0.037 ± 0.078	0.003 ± 0.008
10/04/05		0.015 ± 0.024	0.030 ± 0.190	-0.006 ± 0.026	-0.013 ± 0.027	-0.050 ± 0.280	-0.006 ± 0.026	
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
05/03/05		0.000 ± 0.023	0.021 ± 0.058	-0.011 ± 0.028	3.820 ± 0.770	0.005 ± 0.020	0.000 ± 0.018	
07/28/05		0.005 ± 0.007	-0.004 ± 0.022	0.003 ± 0.021	3.670 ± 0.270	-0.007 ± 0.008	0.001 ± 0.010	
10/04/05		0.008 ± 0.023	0.011 ± 0.048	0.029 ± 0.078	3.620 ± 0.770	0.011 ± 0.018	-0.023 ± 0.031	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
05/03/05		0.018 ± 0.019	-0.060 ± 0.190	-0.026 ± 0.047	0.037 ± 0.081	0.046 ± 0.046	-0.013 ± 0.030	
07/28/05		-0.007 ± 0.009	0.056 ± 0.069	-0.002 ± 0.017	-0.013 ± 0.031	-0.012 ± 0.019	-0.005 ± 0.014	
10/04/05		-0.010 ± 0.025	-0.060 ± 0.200	-0.052 ± 0.060	-0.019 ± 0.057	-0.071 ± 0.066	-0.072 ± 0.046	

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

Location	Collection Date	Sample Type	Isotope					
29-X	09/28/05	STRIPED BASS	Ag-110m	Be-7	Co-58	Co-60	Cr-51	
			-0.001 ± 0.033	-0.110 ± 0.170	-0.013 ± 0.020	-0.029 ± 0.032	-0.030 ± 0.120	
			Cs-134	Cs-137	Fe-59	I-131	K-40	
			-0.010 ± 0.025	0.018 ± 0.018	0.013 ± 0.056	0.003 ± 0.018	3.410 ± 0.760	
09/28/05	STRIPED BASS	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125		
		0.009 ± 0.023	0.012 ± 0.020	-0.012 ± 0.018	0.110 ± 0.180	-0.013 ± 0.050		
		Th-228	Zn-65	Zr-95				
		0.071 ± 0.078	-0.043 ± 0.047	0.003 ± 0.037				
32	01/13/05 05/03/05 08/03/05 10/31/05	BLUEFISH TAUTOG TAUTOG TAUTOG	Ag-110m	Be-7	Co-58	Co-60	Cr-51	
			0.015 ± 0.021	0.040 ± 0.190	-0.003 ± 0.021	0.009 ± 0.025	0.110 ± 0.240	
			-0.006 ± 0.028	0.010 ± 0.130	-0.008 ± 0.015	0.010 ± 0.023	-0.080 ± 0.170	
			0.013 ± 0.015	-0.055 ± 0.074	0.005 ± 0.009	-0.004 ± 0.014	-0.023 ± 0.082	
	01/13/05 05/03/05 08/03/05 10/31/05	BLUEFISH TAUTOG TAUTOG TAUTOG	Cs-134	Cs-137	Fe-59	I-131	K-40	
			0.003 ± 0.019	0.020 ± 0.020	0.068 ± 0.092	-0.063 ± 0.080	3.310 ± 0.790	
			0.017 ± 0.019	0.005 ± 0.020	-0.005 ± 0.053	-0.019 ± 0.030	3.310 ± 0.680	
			0.000 ± 0.011	0.002 ± 0.010	0.020 ± 0.029	0.013 ± 0.016	3.800 ± 0.380	
	01/13/05 05/03/05 08/03/05 10/31/05	BLUEFISH TAUTOG TAUTOG TAUTOG	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	
			0.000 ± 0.020	0.002 ± 0.030	-0.015 ± 0.030	-0.100 ± 0.200	-0.005 ± 0.049	
			-0.004 ± 0.021	0.011 ± 0.021	-0.008 ± 0.017	-0.050 ± 0.160	0.012 ± 0.057	
			0.001 ± 0.010	0.002 ± 0.010	0.002 ± 0.010	-0.069 ± 0.094	-0.013 ± 0.022	
	01/13/05 05/03/05 08/03/05 10/31/05	BLUEFISH TAUTOG TAUTOG TAUTOG	Th-228	Zn-65	Zr-95			
			0.054 ± 0.097	0.026 ± 0.044	-0.026 ± 0.042			
			0.024 ± 0.078	0.000 ± 0.049	0.013 ± 0.035			
			-0.032 ± 0.042	-0.014 ± 0.024	-0.012 ± 0.017			
	35	03/31/05 06/01/05 08/03/05 10/24/05	FISH-OTHER STRIPED BASS STRIPED BASS TAUTOG	Ag-110m	Be-7	Co-58	Co-60	Cr-51
				I				
				0.001 ± 0.026	-0.010 ± 0.140	-0.001 ± 0.025	0.005 ± 0.018	-0.020 ± 0.130
				0.003 ± 0.012	-0.020 ± 0.069	-0.005 ± 0.009	0.006 ± 0.013	0.047 ± 0.072
06/01/05 08/03/05 10/24/05		STRIPED BASS STRIPED BASS TAUTOG	Cs-134	Cs-137	Fe-59	I-131	K-40	
			0.011 ± 0.023	0.004 ± 0.020	-0.031 ± 0.063	0.000 ± 0.022	3.820 ± 0.730	
			0.000 ± 0.011	0.008 ± 0.009	0.021 ± 0.032	-0.008 ± 0.013	3.580 ± 0.370	
			-0.010 ± 0.018	-0.005 ± 0.014	0.016 ± 0.041	0.003 ± 0.052	3.840 ± 0.540	
06/01/05 08/03/05 10/24/05		STRIPED BASS STRIPED BASS TAUTOG	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125	
			0.010 ± 0.018	-0.013 ± 0.023	0.005 ± 0.015	0.020 ± 0.170	-0.015 ± 0.045	
			-0.001 ± 0.010	0.003 ± 0.011	0.006 ± 0.009	-0.058 ± 0.086	0.020 ± 0.022	
			-0.009 ± 0.015	0.011 ± 0.023	-0.013 ± 0.019	0.010 ± 0.150	-0.010 ± 0.042	
06/01/05 08/03/05		STRIPED BASS STRIPED BASS	Th-228	Zn-65	Zr-95			
			-0.019 ± 0.059	0.005 ± 0.041	-0.006 ± 0.034			
08/03/05		STRIPED BASS	0.002 ± 0.035	0.005 ± 0.023	0.016 ± 0.017			

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

Location	Collection Date	Sample Type	Isotope						
35	10/24/05	TAUTOG	Th-228	Zn-65	Zr-95				
			0.009 ± 0.051	-0.014 ± 0.041	0.000 ± 0.024				
40-X	01/13/05	STRIPED BASS	Ag-110m	Be-7	Co-58	Co-60	Cr-51		
			-0.017 ± 0.025	0.140 ± 0.190	-0.007 ± 0.025	-0.002 ± 0.025	-0.100 ± 0.170		
			04/14/05	STRIPED BASS	0.012 ± 0.031	-0.190 ± 0.200	0.014 ± 0.024	0.011 ± 0.022	-0.100 ± 0.240
			07/29/05	STRIPED BASS	-0.007 ± 0.014	-0.014 ± 0.080	0.000 ± 0.010	-0.002 ± 0.013	0.030 ± 0.100
	11/28/05	STRIPED BASS	0.010 ± 0.023	0.120 ± 0.180	-0.003 ± 0.020	-0.003 ± 0.021	0.140 ± 0.200		
	01/13/05	STRIPED BASS	Cs-134	Cs-137	Fe-59	I-131	K-40		
			0.004 ± 0.023	0.003 ± 0.021	-0.040 ± 0.110	0.057 ± 0.082	3.380 ± 0.840		
			04/14/05	STRIPED BASS	-0.002 ± 0.024	0.003 ± 0.028	0.004 ± 0.073	0.004 ± 0.052	3.340 ± 0.800
			07/29/05	STRIPED BASS	-0.001 ± 0.011	0.005 ± 0.011	0.014 ± 0.029	0.002 ± 0.027	3.330 ± 0.340
	11/28/05	STRIPED BASS	0.005 ± 0.015	0.000 ± 0.020	0.005 ± 0.040	-0.016 ± 0.058	3.530 ± 0.570		
	01/13/05	STRIPED BASS	Mn-54	Nb-95	Ru-103	Ru-106	Sb-125		
			0.003 ± 0.023	-0.004 ± 0.028	-0.003 ± 0.022	0.070 ± 0.210	-0.014 ± 0.058		
			04/14/05	STRIPED BASS	-0.008 ± 0.025	-0.011 ± 0.031	-0.027 ± 0.025	0.020 ± 0.250	-0.043 ± 0.048
			07/29/05	STRIPED BASS	0.000 ± 0.011	-0.009 ± 0.012	-0.003 ± 0.011	-0.055 ± 0.097	0.008 ± 0.025
	11/28/05	STRIPED BASS	0.026 ± 0.020	-0.012 ± 0.027	-0.009 ± 0.021	0.140 ± 0.190	0.033 ± 0.054		
	01/13/05	STRIPED BASS	Th-228	Zn-65	Zr-95				
			-0.010 ± 0.089	0.007 ± 0.049	0.014 ± 0.035				
			04/14/05	STRIPED BASS	0.020 ± 0.110	-0.027 ± 0.064	-0.003 ± 0.042		
			07/29/05	STRIPED BASS	0.025 ± 0.043	-0.004 ± 0.025	-0.011 ± 0.017		
	11/28/05	STRIPED BASS	-0.019 ± 0.070	0.024 ± 0.093	-0.026 ± 0.037				

Table 18, Mussels (pCi/g wet)

Location	Collection Date	Isotope						
28		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	03/31/05	J						
	06/29/05	0.001 ± 0.011	0.081 ± 0.074	0.007 ± 0.009	-0.001 ± 0.009	-0.018 ± 0.087	0.001 ± 0.010	
	08/17/05	0.000 ± 0.007	0.003 ± 0.049	0.001 ± 0.006	-0.002 ± 0.006	-0.007 ± 0.052	0.004 ± 0.006	
	12/12/05	0.004 ± 0.034	0.180 ± 0.200	-0.019 ± 0.024	-0.002 ± 0.030	-0.010 ± 0.210	0.018 ± 0.026	
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
	06/29/05	0.006 ± 0.008	0.010 ± 0.026	0.025 ± 0.025	1.560 ± 0.210	-0.008 ± 0.008	-0.006 ± 0.011	
	08/17/05	-0.001 ± 0.005	0.018 ± 0.021	0.003 ± 0.023	1.750 ± 0.160	-0.004 ± 0.006	0.001 ± 0.009	
	12/12/05	-0.002 ± 0.018	-0.039 ± 0.055	0.000 ± 0.042	1.980 ± 0.640	-0.004 ± 0.023	0.016 ± 0.024	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	06/29/05	-0.005 ± 0.009	-0.032 ± 0.080	0.007 ± 0.021	0.023 ± 0.032	-0.018 ± 0.021	0.012 ± 0.015	
	08/17/05	0.002 ± 0.007	-0.020 ± 0.043	0.005 ± 0.012	0.056 ± 0.028	0.004 ± 0.016	0.002 ± 0.011	
	12/12/05	-0.021 ± 0.022	0.130 ± 0.230	-0.010 ± 0.064	0.080 ± 0.110	-0.013 ± 0.049	-0.001 ± 0.031	
	30		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
		02/23/05	0.004 ± 0.039	0.000 ± 0.270	-0.003 ± 0.025	0.004 ± 0.025	0.240 ± 0.280	0.010 ± 0.024
		05/24/05	-0.013 ± 0.024	0.050 ± 0.170	0.011 ± 0.020	-0.002 ± 0.019	0.010 ± 0.180	0.012 ± 0.020
08/16/05		-0.010 ± 0.008	0.006 ± 0.055	-0.006 ± 0.006	0.001 ± 0.007	0.003 ± 0.067	0.001 ± 0.007	
12/19/05		-0.019 ± 0.027	0.020 ± 0.170	-0.010 ± 0.022	0.030 ± 0.030	-0.050 ± 0.250	0.011 ± 0.022	
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95	
02/23/05		-0.003 ± 0.026	-0.046 ± 0.065	-0.014 ± 0.089	1.270 ± 0.600	-0.003 ± 0.022	0.007 ± 0.030	
05/24/05		-0.033 ± 0.020	-0.033 ± 0.048	0.016 ± 0.052	1.760 ± 0.480	0.007 ± 0.016	-0.006 ± 0.021	
08/16/05		0.001 ± 0.006	0.013 ± 0.022	-0.015 ± 0.031	1.540 ± 0.170	-0.001 ± 0.006	0.004 ± 0.009	
12/19/05		-0.004 ± 0.024	0.072 ± 0.061	-0.018 ± 0.078	1.840 ± 0.610	0.009 ± 0.026	-0.029 ± 0.028	
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
02/23/05		0.001 ± 0.023	-0.150 ± 0.230	0.012 ± 0.069	0.052 ± 0.081	-0.008 ± 0.066	-0.017 ± 0.047	
05/24/05		-0.021 ± 0.021	0.000 ± 0.190	0.001 ± 0.046	0.046 ± 0.067	-0.045 ± 0.052	0.003 ± 0.024	
08/16/05		-0.004 ± 0.007	-0.013 ± 0.056	0.002 ± 0.013	0.005 ± 0.027	-0.004 ± 0.014	0.006 ± 0.011	
12/19/05		-0.012 ± 0.023	-0.100 ± 0.190	-0.034 ± 0.050	-0.028 ± 0.086	-0.053 ± 0.050	-0.004 ± 0.037	

Table 19, Oysters (pCi/g wet)

Location	Collection Date	Isotope					
31		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	03/11/05	-0.006 ± 0.023	-0.020 ± 0.130	0.015 ± 0.018	-0.002 ± 0.018	-0.050 ± 0.140	-0.005 ± 0.018
	06/07/05	0.002 ± 0.026	-0.080 ± 0.210	-0.026 ± 0.028	0.021 ± 0.033	0.100 ± 0.230	0.011 ± 0.027
	09/21/05	-0.011 ± 0.028	0.110 ± 0.190	-0.007 ± 0.019	-0.015 ± 0.018	0.080 ± 0.210	-0.017 ± 0.017
	12/19/05	-0.026 ± 0.042	-0.050 ± 0.260	-0.004 ± 0.031	0.022 ± 0.030	0.050 ± 0.240	0.001 ± 0.024
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/11/05	-0.003 ± 0.018	-0.036 ± 0.057	0.009 ± 0.031	1.440 ± 0.440	0.002 ± 0.012	0.010 ± 0.017
	06/07/05	0.000 ± 0.025	0.014 ± 0.056	0.020 ± 0.048	2.310 ± 0.770	0.002 ± 0.022	-0.009 ± 0.032
	09/21/05	-0.007 ± 0.018	-0.006 ± 0.058	-0.039 ± 0.059	1.940 ± 0.560	0.006 ± 0.019	0.013 ± 0.024
	12/19/05	0.013 ± 0.031	0.010 ± 0.057	-0.019 ± 0.069	1.320 ± 0.620	-0.007 ± 0.025	0.012 ± 0.038
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/11/05	-0.022 ± 0.018	-0.110 ± 0.140	0.007 ± 0.037	-0.016 ± 0.065	0.014 ± 0.038	0.023 ± 0.030
	06/07/05	0.007 ± 0.016	-0.120 ± 0.220	-0.007 ± 0.062	-0.048 ± 0.094	0.000 ± 0.048	0.012 ± 0.037
	09/21/05	0.009 ± 0.018	-0.050 ± 0.180	0.000 ± 0.052	-0.001 ± 0.081	-0.034 ± 0.045	0.008 ± 0.032
	12/19/05	-0.003 ± 0.028	0.190 ± 0.200	-0.056 ± 0.076	0.130 ± 0.110	-0.061 ± 0.068	-0.019 ± 0.045
	32		Ag-110m	Be-7	Co-58	Co-60	Cr-51
03/15/05		0.037 ± 0.031	0.030 ± 0.120	-0.015 ± 0.018	-0.011 ± 0.013	0.040 ± 0.150	-0.014 ± 0.018
06/09/05		0.085 ± 0.025	-0.020 ± 0.160	0.001 ± 0.020	0.005 ± 0.022	-0.160 ± 0.210	-0.003 ± 0.016
09/26/05		0.057 ± 0.024	0.190 ± 0.190	-0.011 ± 0.025	-0.012 ± 0.026	0.060 ± 0.210	0.024 ± 0.030
12/19/05		0.022 ± 0.019	0.090 ± 0.170	0.007 ± 0.021	0.022 ± 0.021	-0.160 ± 0.200	-0.009 ± 0.019
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
03/15/05		-0.018 ± 0.022	0.038 ± 0.049	-0.004 ± 0.030	1.310 ± 0.450	0.014 ± 0.018	0.016 ± 0.018
06/09/05		0.039 ± 0.059	0.002 ± 0.051	-0.042 ± 0.062	1.670 ± 0.450	-0.005 ± 0.019	0.024 ± 0.028
09/26/05		-0.004 ± 0.042	0.005 ± 0.057	0.002 ± 0.033	2.020 ± 0.510	0.000 ± 0.024	0.025 ± 0.031
12/19/05		-0.025 ± 0.034	0.033 ± 0.043	0.000 ± 0.068	1.600 ± 0.400	0.009 ± 0.019	0.002 ± 0.025
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
03/15/05		-0.003 ± 0.015	0.040 ± 0.170	0.014 ± 0.038	0.025 ± 0.087	0.000 ± 0.044	-0.004 ± 0.026
06/09/05		0.020 ± 0.021	0.000 ± 0.200	-0.013 ± 0.044	0.007 ± 0.062	0.000 ± 0.047	-0.010 ± 0.028
09/26/05		0.017 ± 0.025	0.130 ± 0.230	-0.054 ± 0.062	-0.011 ± 0.098	-0.052 ± 0.064	0.015 ± 0.041
12/19/05		0.017 ± 0.021	0.030 ± 0.200	0.008 ± 0.044	0.097 ± 0.078	-0.016 ± 0.040	-0.031 ± 0.032
34-X			Ag-110m	Be-7	Co-58	Co-60	Cr-51
	03/11/05	-0.003 ± 0.018	0.030 ± 0.130	0.012 ± 0.017	0.003 ± 0.016	-0.060 ± 0.140	0.013 ± 0.015
	06/07/05	0.015 ± 0.031	0.070 ± 0.160	-0.008 ± 0.018	-0.010 ± 0.027	-0.140 ± 0.210	0.000 ± 0.024
	09/19/05	-0.014 ± 0.025	-0.100 ± 0.150	0.006 ± 0.013	-0.011 ± 0.019	-0.020 ± 0.140	-0.003 ± 0.011
	12/19/05	-0.026 ± 0.045	0.150 ± 0.200	-0.018 ± 0.029	-0.005 ± 0.029	0.230 ± 0.270	0.017 ± 0.024
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/11/05	0.008 ± 0.014	0.030 ± 0.040	0.035 ± 0.035	1.620 ± 0.380	0.008 ± 0.013	0.003 ± 0.019
	06/07/05	-0.007 ± 0.024	-0.058 ± 0.058	0.000 ± 0.050	1.830 ± 0.570	-0.005 ± 0.024	0.006 ± 0.025
	09/19/05	0.000 ± 0.017	0.015 ± 0.054	-0.041 ± 0.057	1.650 ± 0.530	-0.001 ± 0.019	0.002 ± 0.024
	12/19/05	0.010 ± 0.026	0.010 ± 0.077	-0.024 ± 0.082	1.420 ± 0.630	0.000 ± 0.026	0.008 ± 0.032

Table 19, Oysters (pCi/g wet)

Location	Collection Date	Isotope						
34-X		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95	
	03/11/05	-0.005 ± 0.018	-0.050 ± 0.160	0.017 ± 0.037	0.032 ± 0.062	-0.016 ± 0.036	-0.002 ± 0.026	
	06/07/05	0.001 ± 0.024	0.040 ± 0.220	-0.046 ± 0.045	0.028 ± 0.078	-0.009 ± 0.064	-0.019 ± 0.044	
	09/19/05	-0.012 ± 0.018	-0.050 ± 0.140	-0.031 ± 0.046	-0.009 ± 0.068	0.011 ± 0.046	0.000 ± 0.031	
	12/19/05	-0.016 ± 0.033	-0.130 ± 0.240	-0.046 ± 0.063	-0.051 ± 0.098	-0.018 ± 0.058	0.020 ± 0.055	
36		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	03/14/05	-0.006 ± 0.018	0.060 ± 0.120	0.008 ± 0.013	0.004 ± 0.014	-0.030 ± 0.130	-0.009 ± 0.013	
	06/14/05	0.005 ± 0.017	-0.120 ± 0.140	-0.005 ± 0.019	0.020 ± 0.017	0.000 ± 0.120	-0.001 ± 0.019	
	09/19/05	0.007 ± 0.031	-0.020 ± 0.190	0.009 ± 0.024	0.016 ± 0.023	0.180 ± 0.210	0.001 ± 0.022	
		12/19/05	-0.010 ± 0.030	0.070 ± 0.190	-0.009 ± 0.031	0.000 ± 0.028	0.030 ± 0.200	-0.027 ± 0.026
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/14/05	0.004 ± 0.014	-0.011 ± 0.039	-0.012 ± 0.025	1.610 ± 0.360	0.004 ± 0.013	0.010 ± 0.014	
	06/14/05	0.007 ± 0.017	0.009 ± 0.058	-0.002 ± 0.026	1.400 ± 0.440	-0.001 ± 0.018	0.000 ± 0.016	
	09/19/05	0.011 ± 0.024	-0.069 ± 0.078	0.023 ± 0.084	1.240 ± 0.520	0.004 ± 0.017	0.009 ± 0.026	
		12/19/05	0.015 ± 0.024	0.037 ± 0.064	-0.012 ± 0.066	1.660 ± 0.670	0.013 ± 0.029	0.017 ± 0.033
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/14/05	0.016 ± 0.013	-0.110 ± 0.130	-0.001 ± 0.036	-0.016 ± 0.049	-0.019 ± 0.032	0.013 ± 0.025	
06/14/05	0.008 ± 0.013	-0.070 ± 0.120	0.021 ± 0.032	0.014 ± 0.068	-0.020 ± 0.044	0.010 ± 0.029		
09/19/05	-0.006 ± 0.020	-0.040 ± 0.210	-0.029 ± 0.050	0.045 ± 0.096	0.006 ± 0.042	0.025 ± 0.036		
	12/19/05	0.000 ± 0.017	-0.030 ± 0.200	0.048 ± 0.048	-0.046 ± 0.067	-0.051 ± 0.072	0.022 ± 0.042	
37-C		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	03/14/05	0.003 ± 0.027	0.110 ± 0.150	-0.009 ± 0.014	-0.016 ± 0.027	-0.070 ± 0.150	0.008 ± 0.023	
	06/14/05	0.021 ± 0.024	-0.120 ± 0.120	-0.007 ± 0.018	-0.009 ± 0.022	-0.020 ± 0.150	0.000 ± 0.016	
	09/19/05	-0.013 ± 0.024	-0.100 ± 0.140	0.013 ± 0.021	0.002 ± 0.017	-0.070 ± 0.200	0.003 ± 0.019	
		12/19/05	-0.005 ± 0.027	-0.100 ± 0.240	0.003 ± 0.027	-0.010 ± 0.033	-0.220 ± 0.280	0.007 ± 0.026
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/14/05	0.002 ± 0.024	-0.005 ± 0.057	0.027 ± 0.036	1.490 ± 0.500	-0.004 ± 0.017	-0.003 ± 0.021	
	06/14/05	0.003 ± 0.018	0.002 ± 0.059	0.015 ± 0.035	1.880 ± 0.520	0.010 ± 0.015	-0.006 ± 0.019	
	09/19/05	0.001 ± 0.017	-0.027 ± 0.055	-0.021 ± 0.063	1.960 ± 0.480	0.005 ± 0.020	-0.004 ± 0.021	
		12/19/05	-0.015 ± 0.029	0.019 ± 0.062	0.000 ± 0.082	1.780 ± 0.750	0.000 ± 0.024	-0.044 ± 0.030
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/14/05	-0.005 ± 0.019	-0.100 ± 0.160	0.025 ± 0.047	0.085 ± 0.091	0.023 ± 0.051	0.016 ± 0.035	
06/14/05	0.000 ± 0.016	0.060 ± 0.160	-0.011 ± 0.042	0.014 ± 0.077	-0.026 ± 0.050	0.038 ± 0.031		
09/19/05	0.010 ± 0.024	-0.040 ± 0.160	-0.007 ± 0.045	-0.052 ± 0.065	-0.020 ± 0.034	0.018 ± 0.030		
	12/19/05	0.006 ± 0.030	-0.140 ± 0.280	0.013 ± 0.041	0.150 ± 0.120	-0.027 ± 0.065	-0.017 ± 0.052	
40-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	03/30/05	0.052 ± 0.029	0.130 ± 0.210	-0.022 ± 0.034	0.016 ± 0.019	-0.040 ± 0.250	0.002 ± 0.023	
	06/16/05	0.089 ± 0.033	0.020 ± 0.210	0.002 ± 0.031	-0.017 ± 0.037	-0.030 ± 0.170	-0.019 ± 0.033	
	09/07/05	0.123 ± 0.028	0.100 ± 0.190	0.002 ± 0.028	0.013 ± 0.025	-0.030 ± 0.240	-0.002 ± 0.026	
		12/13/05	0.081 ± 0.031	-0.120 ± 0.190	-0.002 ± 0.019	-0.006 ± 0.028	-0.100 ± 0.180	0.000 ± 0.021

Table 19, Oysters (pCi/g wet)

Location	Collection Date	Isotope					
40-X		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/30/05	0.003 ± 0.037	0.040 ± 0.120	-0.018 ± 0.064	1.290 ± 0.620	0.006 ± 0.022	0.034 ± 0.035
	06/16/05	0.028 ± 0.082	-0.040 ± 0.078	-0.037 ± 0.031	1.190 ± 0.580	0.015 ± 0.026	0.011 ± 0.037
	09/07/05	-0.055 ± 0.068	0.023 ± 0.071	-0.010 ± 0.083	2.030 ± 0.530	0.007 ± 0.023	0.052 ± 0.038
	12/13/05	-0.015 ± 0.077	0.018 ± 0.044	-0.016 ± 0.037	1.730 ± 0.570	-0.002 ± 0.020	0.016 ± 0.027
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/30/05	-0.010 ± 0.022	0.030 ± 0.220	0.007 ± 0.065	0.078 ± 0.091	0.005 ± 0.043	-0.013 ± 0.046
	06/16/05	-0.004 ± 0.025	0.020 ± 0.190	-0.013 ± 0.069	-0.030 ± 0.110	-0.007 ± 0.064	0.007 ± 0.042
	09/07/05	0.005 ± 0.027	0.140 ± 0.220	-0.022 ± 0.055	0.019 ± 0.083	-0.043 ± 0.056	-0.004 ± 0.047
	12/13/05	-0.008 ± 0.026	0.090 ± 0.240	0.005 ± 0.056	0.018 ± 0.097	-0.025 ± 0.056	-0.002 ± 0.039

Table 20, Clams (pCi/g wet)

Location	Collection Date	Isotope						
29		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134	
	02/17/05	-0.009 ± 0.019	0.010 ± 0.120	0.003 ± 0.016	0.007 ± 0.018	0.040 ± 0.120	0.011 ± 0.013	
	06/01/05	-0.004 ± 0.030	-0.080 ± 0.160	0.000 ± 0.021	-0.012 ± 0.022	-0.020 ± 0.200	0.033 ± 0.024	
	09/07/05	0.000 ± 0.024	0.240 ± 0.190	-0.006 ± 0.023	0.016 ± 0.030	-0.070 ± 0.270	-0.015 ± 0.021	
	10/31/05	0.004 ± 0.021	0.070 ± 0.130	-0.007 ± 0.017	0.004 ± 0.016	0.070 ± 0.110	0.004 ± 0.017	
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/17/05	0.004 ± 0.015	-0.012 ± 0.050	-0.017 ± 0.058	1.990 ± 0.410	-0.004 ± 0.015	-0.005 ± 0.022	
	06/01/05	-0.010 ± 0.022	-0.011 ± 0.076	0.000 ± 0.029	1.390 ± 0.660	-0.009 ± 0.023	-0.012 ± 0.024	
	09/07/05	-0.010 ± 0.026	-0.009 ± 0.089	-0.013 ± 0.078	1.980 ± 0.620	0.003 ± 0.021	-0.019 ± 0.027	
	10/31/05	-0.004 ± 0.014	0.000 ± 0.033	-0.016 ± 0.022	1.990 ± 0.480	0.001 ± 0.014	0.008 ± 0.015	
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/17/05	-0.003 ± 0.017	-0.050 ± 0.110	-0.004 ± 0.032	-0.045 ± 0.052	-0.011 ± 0.035	0.002 ± 0.029	
	06/01/05	0.002 ± 0.021	-0.120 ± 0.240	-0.037 ± 0.054	0.059 ± 0.075	0.000 ± 0.063	0.015 ± 0.047	
	09/07/05	0.008 ± 0.030	0.010 ± 0.230	-0.016 ± 0.057	0.044 ± 0.084	-0.051 ± 0.060	-0.026 ± 0.037	
	10/31/05	0.002 ± 0.015	0.000 ± 0.140	-0.005 ± 0.035	0.000 ± 0.063	0.000 ± 0.037	-0.010 ± 0.026	
	35-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
03/30/05		-0.009 ± 0.043	0.310 ± 0.230	0.004 ± 0.026	-0.003 ± 0.038	-0.030 ± 0.260	0.038 ± 0.033	
06/07/05		0.007 ± 0.026	0.050 ± 0.170	-0.012 ± 0.027	-0.003 ± 0.032	0.050 ± 0.210	0.037 ± 0.020	
09/07/05		0.005 ± 0.026	-0.010 ± 0.170	-0.006 ± 0.018	0.003 ± 0.024	-0.080 ± 0.180	0.030 ± 0.019	
10/31/05		-0.005 ± 0.023	0.010 ± 0.150	0.004 ± 0.016	0.006 ± 0.023	-0.010 ± 0.140	0.019 ± 0.020	
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
03/30/05		-0.014 ± 0.033	-0.010 ± 0.110	-0.047 ± 0.080	2.390 ± 0.940	0.007 ± 0.030	0.034 ± 0.029	
06/07/05		-0.010 ± 0.024	-0.049 ± 0.057	-0.013 ± 0.051	1.720 ± 0.650	-0.012 ± 0.031	-0.003 ± 0.041	
09/07/05		0.003 ± 0.017	0.013 ± 0.057	-0.005 ± 0.070	2.200 ± 0.500	0.007 ± 0.019	0.036 ± 0.029	
10/31/05		0.003 ± 0.017	-0.008 ± 0.041	0.012 ± 0.032	2.060 ± 0.500	0.006 ± 0.018	-0.003 ± 0.015	
			Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
03/30/05		-0.014 ± 0.027	-0.040 ± 0.260	-0.027 ± 0.075	-0.022 ± 0.052	-0.005 ± 0.037	0.021 ± 0.073	
06/07/05		0.022 ± 0.024	-0.140 ± 0.180	0.007 ± 0.054	0.004 ± 0.082	-0.055 ± 0.058	-0.027 ± 0.048	
09/07/05		-0.010 ± 0.025	-0.030 ± 0.160	-0.028 ± 0.046	-0.009 ± 0.077	-0.002 ± 0.045	0.030 ± 0.038	
10/31/05		-0.005 ± 0.016	-0.040 ± 0.200	0.009 ± 0.041	-0.012 ± 0.072	0.017 ± 0.040	-0.003 ± 0.030	
38			Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	03/30/05	0.005 ± 0.039	0.050 ± 0.260	-0.011 ± 0.027	-0.003 ± 0.033	0.020 ± 0.270	-0.004 ± 0.027	
	06/07/05	0.006 ± 0.022	-0.020 ± 0.130	0.001 ± 0.018	-0.008 ± 0.021	-0.070 ± 0.130	0.032 ± 0.016	
	09/07/05	-0.019 ± 0.024	-0.050 ± 0.200	-0.020 ± 0.021	0.002 ± 0.019	-0.050 ± 0.210	0.034 ± 0.019	
	10/31/05	-0.025 ± 0.033	0.150 ± 0.180	-0.014 ± 0.022	-0.004 ± 0.034	0.020 ± 0.180	0.012 ± 0.023	
			Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/30/05	0.012 ± 0.032	0.011 ± 0.067	-0.017 ± 0.077	1.670 ± 0.700	-0.017 ± 0.025	0.017 ± 0.029	
	06/07/05	-0.005 ± 0.018	-0.001 ± 0.066	0.018 ± 0.035	1.780 ± 0.480	0.014 ± 0.018	-0.001 ± 0.024	
	09/07/05	0.014 ± 0.021	0.007 ± 0.055	0.044 ± 0.064	2.180 ± 0.520	-0.008 ± 0.018	-0.001 ± 0.025	
	10/31/05	0.011 ± 0.023	0.007 ± 0.038	-0.054 ± 0.046	2.360 ± 0.740	-0.013 ± 0.021	-0.011 ± 0.023	

Table 20, Clams (pCi/g wet)

Location	Collection Date	Isotope					
38		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/30/05	0.003 ± 0.024	-0.220 ± 0.260	-0.027 ± 0.072	-0.060 ± 0.100	-0.018 ± 0.055	0.033 ± 0.057
	06/07/05	0.003 ± 0.018	0.030 ± 0.130	0.007 ± 0.035	0.040 ± 0.059	-0.045 ± 0.046	0.003 ± 0.028
	09/07/05	-0.001 ± 0.021	0.010 ± 0.160	-0.004 ± 0.047	0.032 ± 0.076	-0.046 ± 0.045	0.003 ± 0.031
	10/31/05	-0.032 ± 0.024	0.040 ± 0.180	-0.005 ± 0.057	0.040 ± 0.100	-0.022 ± 0.048	-0.022 ± 0.041
39-X		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/17/05	-0.008 ± 0.019	-0.100 ± 0.120	-0.001 ± 0.014	0.006 ± 0.017	-0.050 ± 0.150	-0.001 ± 0.014
	06/28/05	0.003 ± 0.011	-0.031 ± 0.072	-0.006 ± 0.008	-0.001 ± 0.008	0.007 ± 0.086	-0.005 ± 0.008
	09/27/05	0.000 ± 0.027	-0.060 ± 0.150	-0.002 ± 0.020	0.010 ± 0.030	-0.060 ± 0.160	0.009 ± 0.023
	11/28/05	-0.039 ± 0.030	-0.160 ± 0.210	-0.023 ± 0.023	0.028 ± 0.025	-0.080 ± 0.250	0.015 ± 0.024
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/17/05	-0.005 ± 0.016	0.004 ± 0.049	0.051 ± 0.068	1.750 ± 0.410	0.005 ± 0.015	0.002 ± 0.019
	06/28/05	0.000 ± 0.008	-0.001 ± 0.024	0.008 ± 0.027	2.110 ± 0.230	-0.002 ± 0.007	-0.005 ± 0.010
	09/27/05	-0.005 ± 0.025	0.003 ± 0.062	0.006 ± 0.024	2.290 ± 0.680	-0.020 ± 0.022	-0.011 ± 0.024
	11/28/05	-0.020 ± 0.028	0.017 ± 0.055	-0.021 ± 0.073	2.040 ± 0.570	0.023 ± 0.025	0.016 ± 0.032
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/17/05	-0.005 ± 0.016	-0.200 ± 0.140	0.020 ± 0.032	-0.015 ± 0.055	-0.014 ± 0.030	-0.030 ± 0.033
	06/28/05	0.005 ± 0.009	-0.041 ± 0.076	-0.015 ± 0.021	-0.005 ± 0.030	-0.015 ± 0.019	-0.007 ± 0.014
	09/27/05	0.004 ± 0.017	-0.010 ± 0.190	0.038 ± 0.052	-0.021 ± 0.085	-0.019 ± 0.052	-0.058 ± 0.035
11/28/05	-0.031 ± 0.026	-0.110 ± 0.200	0.024 ± 0.062	-0.020 ± 0.092	0.050 ± 0.110	0.003 ± 0.038	

Table 22, Lobsters (pCi/g wet)

Location	Collection Date	Isotope					
32		Ag-110m	Be-7	Co-58	Co-60	Cr-51	Cs-134
	02/22/05	-0.007 ± 0.023	-0.110 ± 0.220	-0.015 ± 0.024	-0.017 ± 0.022	-0.110 ± 0.210	0.013 ± 0.025
	05/04/05	-0.017 ± 0.028	-0.040 ± 0.140	0.006 ± 0.018	0.009 ± 0.022	-0.070 ± 0.160	0.022 ± 0.022
	09/06/05	0.040 ± 0.035	0.040 ± 0.190	-0.010 ± 0.022	0.010 ± 0.027	0.260 ± 0.240	-0.009 ± 0.024
	10/24/05	-0.010 ± 0.021	-0.060 ± 0.130	-0.008 ± 0.015	-0.006 ± 0.020	0.060 ± 0.210	0.004 ± 0.017
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	02/22/05	-0.004 ± 0.022	0.013 ± 0.083	-0.007 ± 0.075	1.350 ± 0.550	0.000 ± 0.026	0.004 ± 0.032
	05/04/05	0.008 ± 0.020	-0.035 ± 0.055	0.004 ± 0.026	2.160 ± 0.550	-0.018 ± 0.021	-0.009 ± 0.016
	09/06/05	-0.012 ± 0.025	0.046 ± 0.077	0.034 ± 0.092	2.510 ± 0.710	-0.017 ± 0.023	0.001 ± 0.026
	10/24/05	-0.004 ± 0.021	-0.011 ± 0.047	-0.020 ± 0.059	2.620 ± 0.550	0.009 ± 0.020	-0.018 ± 0.022
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	02/22/05	0.022 ± 0.027	-0.070 ± 0.230	-0.015 ± 0.057	0.060 ± 0.090	-0.026 ± 0.048	-0.022 ± 0.052
	05/04/05	0.014 ± 0.017	-0.130 ± 0.230	0.008 ± 0.049	0.030 ± 0.085	-0.005 ± 0.040	-0.007 ± 0.032
	09/06/05	0.000 ± 0.025	-0.100 ± 0.250	0.024 ± 0.061	-0.020 ± 0.110	-0.063 ± 0.050	-0.017 ± 0.039
	10/24/05	0.017 ± 0.021	-0.070 ± 0.180	-0.040 ± 0.053	0.026 ± 0.077	-0.006 ± 0.042	0.007 ± 0.036
	35		Ag-110m	Be-7	Co-58	Co-60	Cr-51
03/04/05		0.000 ± 0.024	-0.060 ± 0.140	-0.005 ± 0.017	0.007 ± 0.018	0.040 ± 0.170	-0.002 ± 0.016
05/04/05		-0.012 ± 0.023	-0.140 ± 0.110	0.022 ± 0.018	0.009 ± 0.021	-0.030 ± 0.120	0.005 ± 0.017
09/06/05		-0.010 ± 0.034	0.000 ± 0.210	-0.021 ± 0.028	-0.022 ± 0.029	-0.160 ± 0.210	-0.017 ± 0.027
10/24/05		-0.007 ± 0.025	-0.010 ± 0.170	-0.002 ± 0.016	-0.010 ± 0.022	0.020 ± 0.190	0.011 ± 0.023
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
03/04/05		0.001 ± 0.017	-0.040 ± 0.054	0.017 ± 0.043	1.750 ± 0.470	0.010 ± 0.015	0.015 ± 0.019
05/04/05		0.004 ± 0.023	0.005 ± 0.045	0.004 ± 0.019	2.230 ± 0.620	0.002 ± 0.018	0.009 ± 0.020
09/06/05		-0.008 ± 0.023	-0.010 ± 0.100	0.037 ± 0.072	2.630 ± 0.740	0.020 ± 0.025	-0.007 ± 0.039
10/24/05		-0.001 ± 0.019	-0.009 ± 0.031	0.070 ± 0.056	2.680 ± 0.570	-0.008 ± 0.021	-0.019 ± 0.021
		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
03/04/05		-0.001 ± 0.017	-0.040 ± 0.170	0.021 ± 0.039	0.096 ± 0.073	0.004 ± 0.032	0.017 ± 0.030
05/04/05		0.000 ± 0.018	-0.120 ± 0.150	0.013 ± 0.042	-0.027 ± 0.062	0.006 ± 0.048	0.017 ± 0.028
09/06/05		-0.008 ± 0.023	-0.040 ± 0.160	-0.050 ± 0.061	0.076 ± 0.097	-0.064 ± 0.055	-0.021 ± 0.054
10/24/05		0.005 ± 0.018	-0.050 ± 0.190	-0.016 ± 0.040	-0.007 ± 0.071	0.025 ± 0.042	-0.003 ± 0.032
37-X			Ag-110m	Be-7	Co-58	Co-60	Cr-51
	03/18/05	0.001 ± 0.013	0.090 ± 0.110	-0.010 ± 0.013	-0.006 ± 0.012	0.060 ± 0.160	0.001 ± 0.011
	05/24/05	-0.035 ± 0.035	-0.060 ± 0.200	-0.009 ± 0.025	0.011 ± 0.031	0.230 ± 0.230	-0.009 ± 0.026
	09/14/05	0.007 ± 0.024	0.140 ± 0.160	0.000 ± 0.018	0.008 ± 0.020	-0.060 ± 0.160	-0.013 ± 0.020
	11/08/05	0.011 ± 0.021	0.030 ± 0.140	0.001 ± 0.011	-0.007 ± 0.020	-0.150 ± 0.150	0.002 ± 0.019
		Cs-137	Fe-59	I-131	K-40	Mn-54	Nb-95
	03/18/05	-0.001 ± 0.010	-0.037 ± 0.036	-0.070 ± 0.110	1.910 ± 0.310	0.003 ± 0.010	0.006 ± 0.020
	05/24/05	-0.013 ± 0.024	0.021 ± 0.062	0.005 ± 0.063	3.130 ± 0.830	-0.010 ± 0.025	0.009 ± 0.024
	09/14/05	0.012 ± 0.017	0.024 ± 0.044	0.014 ± 0.056	2.270 ± 0.500	-0.003 ± 0.016	-0.007 ± 0.020
	11/08/05	-0.008 ± 0.020	-0.024 ± 0.033	-0.006 ± 0.029	2.220 ± 0.510	-0.002 ± 0.016	0.004 ± 0.019

Table 22, Lobsters (pCi/g wet)

Location	Collection Date	Isotope					
37-X		Ru-103	Ru-106	Sb-125	Th-228	Zn-65	Zr-95
	03/18/05	-0.005 ± 0.015	-0.001 ± 0.094	-0.014 ± 0.025	-0.005 ± 0.041	-0.019 ± 0.025	-0.008 ± 0.025
	05/24/05	-0.003 ± 0.024	-0.140 ± 0.220	0.050 ± 0.058	0.066 ± 0.095	-0.023 ± 0.051	0.012 ± 0.043
	09/14/05	-0.004 ± 0.020	-0.090 ± 0.170	0.003 ± 0.044	0.018 ± 0.066	-0.004 ± 0.044	0.009 ± 0.032
	11/08/05	0.008 ± 0.018	0.070 ± 0.150	0.003 ± 0.044	-0.013 ± 0.069	-0.048 ± 0.034	0.004 ± 0.024

NOTES FOR DATA TABLES

#	Collection Dates for Air Particulates and Iodines are listed as Monday –Sunday, however the typical change-out days are on Tuesdays
A	Low volume – only 41 hours of sample collection caused by GFI failure (see CR-05-06122)
B	Low volume – only 11 hours of sample collection caused by GFI failure (see CR-05-08203)
C	Low volume (5941 cubic feet) caused by GFI trip (CR-05-10386)
D	Low volume (6634 cubic feet) caused by GFI trip (CR-05-11192)
E	Low volume (9216 cubic feet) caused power outage (CR-05-14088)
F	Non pasture grass sample (e.g., hay or other feed)
G	Not collected in April (locations 1, 10 & 17) since no sample available during that time
H	First Quarter flounder samples (locations 32 & 35) were not available (18 trawls made without any fish six inches or larger being obtained)
I	First Quarter fish-other sample (location 35) was not available (18 trawls made without any fish six inches or larger being obtained)
J	First Quarter mussel sample (location 28) was not available (inter-tidal and sub-tidal SCUBA surveys on two separate occasions found no live mussels for this location)
K	Unable to obtain water at location 77X (decrease in rainfall lowered water table)

4. DISCUSSION OF RESULTS

This section summarizes the results of the analyses on the REMP (Radiological Environmental Monitoring Program) samples. 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. Subsections 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 calendar quarter using $\text{CaSO}_4(\text{Tm})$ Panasonic model UD-804 ASx thermoluminescent dosimeters (TLDs). In 2000, the TLDs (Victoreen glass bulb $\text{CaF}_2(\text{Mn})$), 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 REMP requirements listed in the REMODCM (Radiological Effluent Monitoring and Offsite Dose Calculation Manual). 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). Two Dry Cask Containers were loaded in the first quarter 2005. The exposure rate measurements at these three locations remains unchanged from the background measurements listed in the last two annual reports (9.5 uR/hour at location 93X, 7.6 uR/hour at location 74X and 6.9 uR/hour 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), Jordan Cove Road (location 63) and Site Switchyard Fence (location 73) 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.

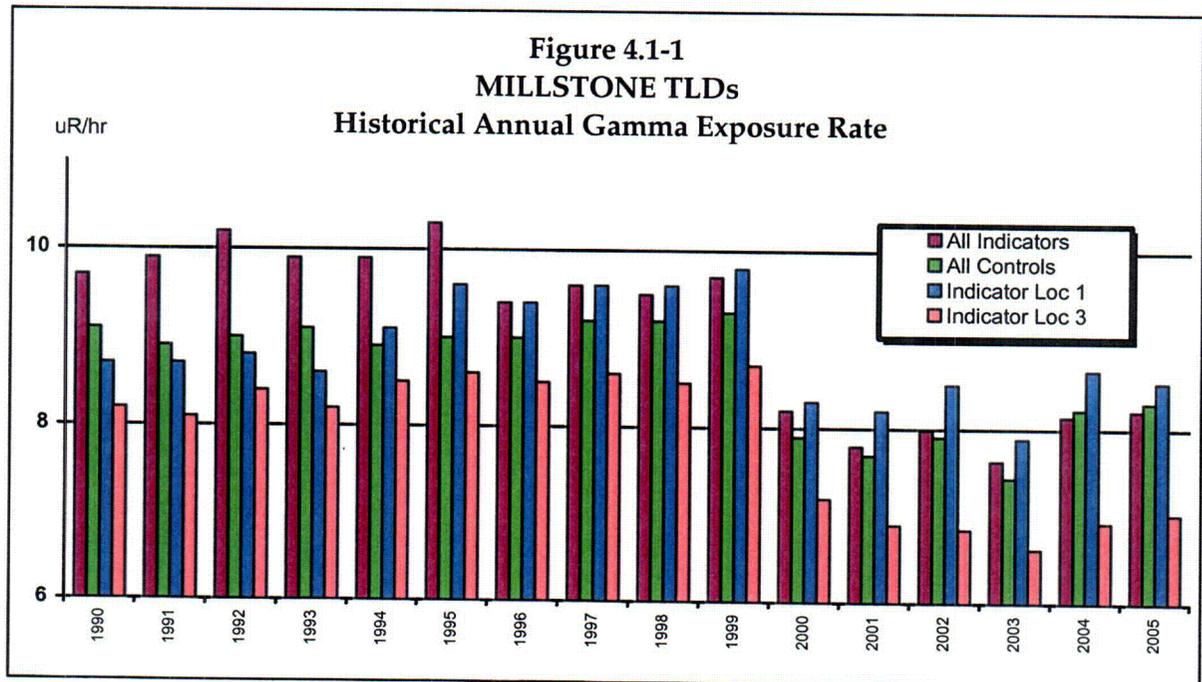
Figure 4.1-1 shows a historical trend of TLD exposure rate measurements, comparing an annual average of all indicator TLDs, an annual average of all control TLDs, and the annual average of the two most critical indicator locations which are used to represent the two closest site boundary residences in 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 uR/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 at indicator locations 1 and 3 are slightly higher in gamma exposure rate than the average control gamma exposure rate. This difference is the result of the nearby granite. Review of Table 1 data also indicates that the annual average at location 4 (near the site boundary) is also higher than the controls. If the difference at location 4 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 3.3 mrem.

Review of the individual quarterly data for all locations indicates that at locations 5 and 8, there seems to be an effect caused by storage of the Unit 2 replaced reactor head. Beginning in the second quarter, the dose rate in these areas increased by more than the typical variability for this type of measurement. This increase was consistent for the three quarters after the head was placed in a nearby area. The largest increase was at location 5, which is closer to the replaced reactor head storage area than location 8. Based upon the data, the increase in dose rate is approximately 1 uR/hour. This would equate to a dose of 6.6 mrem (for these three quarters). These locations are onsite; dose rates at the site boundary would be significantly less. Although the dose rate should decrease with time, the exposure next year should be approximately the same since it will be for a full year. These resulting site boundary doses are bounded by dose rates from other radwaste storage areas and are discussed in Section 5.

The fourth quarter result for location 13C (one of the control locations) shows an unusual increase. Preliminary investigation indicates that the location of this TLD was not moved. The field technician noted that there were workers in the area during the fourth quarter change-out. The first quarter 2006 data for this location is less than the fourth quarter 2005 data, but it is also higher than normal. It appears the workers may have somehow caused the higher than normal reading for these quarters (e.g., a pile of stone was noted near the area). Depending on the second quarter 2006 results, there may be further investigation.



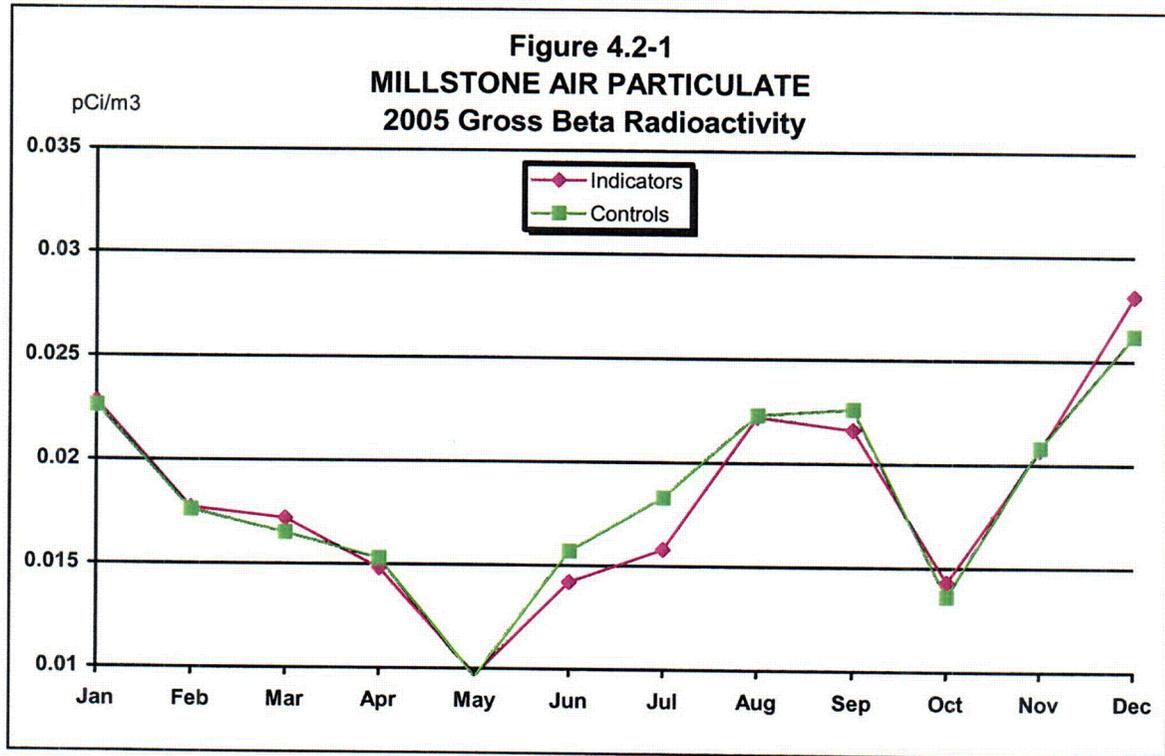
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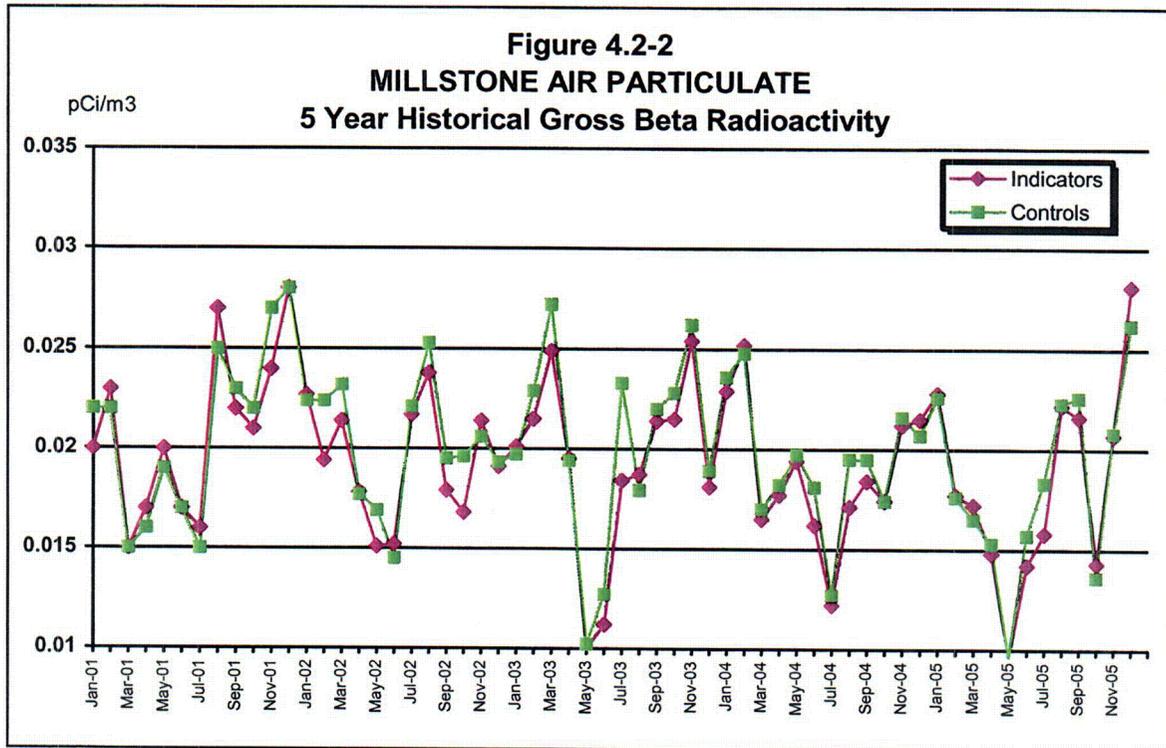
4.2. Air Particulate Gross Beta Radioactivity (Table 2)

Air is continuously sampled at seven inner ring (0 to 2 miles) locations and one control location (14 miles) and by passing it through glass fiber particulate filters. These samples 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 control 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 2005 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 radiation. No other positive results are seen. These analyses indicate the lack of station effects.

4.5. Air Particulate Strontium (Table 5)

Prior to 1989 Table 5 was used for listing the data for measurements of Sr-89 and Sr-90 in quarterly composite air particulate filters. Because this previous data indicated the lack of any detectable station related activity, the requirement for these measurements was removed from the REMP. Analyses have been discontinued. Since milk samples are a much more sensitive indicator of fission product existence in the environment, these analyses have been discontinued. In the event of widespread station related contamination or other unusual events (such as the 1986 Chernobyl incident), these measurements could be made. Historically, when world events created conditions that caused detectable measurements of these nuclides, there was no difference noted between indicator and control locations. This further confirms that any of the detectable levels for these nuclides 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. These samples were discontinued due to the fact that, previous sample results never indicated any station related detectable activity. Similarly, since 2001, no station detectable activity has been seen in these samples. The results of these samples, 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 should be useful in the future, when site characterization and decommissioning of the station become the focus during preparations for License termination. This media is collected annually from one control and two indicator locations.

4.7. Cow Milk (Table 7)

Typically, the most sensitive indicator of fission product existence in the terrestrial environment is radiological analysis of milk samples. Since milk is a widely consumed food, it is usually one of the most critical exposure pathways. Since 1996 all dairy (cow) farms close enough to Millstone to be considered an indicator location (i.e. within 10 miles) have ceased operation. Therefore, the sampling of cow milk has been discontinued until such time dairy activities resume. Each year the 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 2005 census can be seen in Appendix A. If a new dairy farm is identified close enough to Millstone to be considered an indicator location, the collection of cow milk will resume.

4.8. Goat Milk (Table 8)

When available, these samples are collected twice per month during grazing season and once per month during the rest of the year. Each sample is analyzed for I-131 and gamma emitting nuclides. Although not required by the REMODCM, samples from each location are composited quarterly and analyzed for Strontium.

Goat milk samples are typically a more sensitive indicator of fission products in the terrestrial environment than cow milk samples. It should be noted that the uptake of radionuclides in milk is dependent on a number of parameters. These include: metabolism of these animals,

feeding habits, farming practices and feed type. Similar to previous years, Cs-137 and Sr-90 are 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, located at 5.2 Mi. NNE of Millstone (previous location 22, sampled from 1994 through 2004), exhibited a trend of showing higher Sr-90 and Cs-137 concentrations than at some of the other locations (including ones closer to Millstone). The station and regulatory authorities have carefully reviewed past and present data. The presence of the 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 facts 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 from Connecticut.

The 2005 results indicate no detectable I-131 in this media. In fact, for over 16 years, no plant related detectable levels of I-131 have been seen in goat milk samples. The only other occasions where I-131 was detected were fallout episodes from the Chinese Weapons Tests of the mid to late 1970's and 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 is not available (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 not available.

No station effects are noted in these samples. Cosmic produced Be-7 was observed in the majority of the pasture grass samples and many of the hay samples. Due to its relatively short half-life (52 days), it was not detected in the several of the "older" hay samples. Naturally occurring K-40 was a factor of two times higher in hay (compared to pasture grass). Similar to goat milk, the Cs-137 values at the indicator and control locations are comparable. This provides an indication that the levels observed are the result of residual weapons testing fallout.

4.10. Well Water (Table 10)

These samples were discontinued in 1985, because no detectable station activity was ever observed in these samples. However, based upon lessons learned at other nuclear plants, including several undergoing decommissioning, sampling was resumed at several locations starting in the fourth quarter 2003. Three additional locations were added in 2005 to monitor potential leakage from ISFSI. Consistent with the past data, there still has not been any station activity detected in any of these well water samples.

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. Naturally occurring K-40 was detected in all samples.

4.13. Broad Leaf Vegetation (Table 13)

Consistent with past years, this media did not show any station effects. Most samples had detectable levels of cosmic produced Be-7, at levels consistent with previous years. Positive indications of Cs-137 were observed in two samples. These levels are comparable to those observed in past years and is due to fallout.

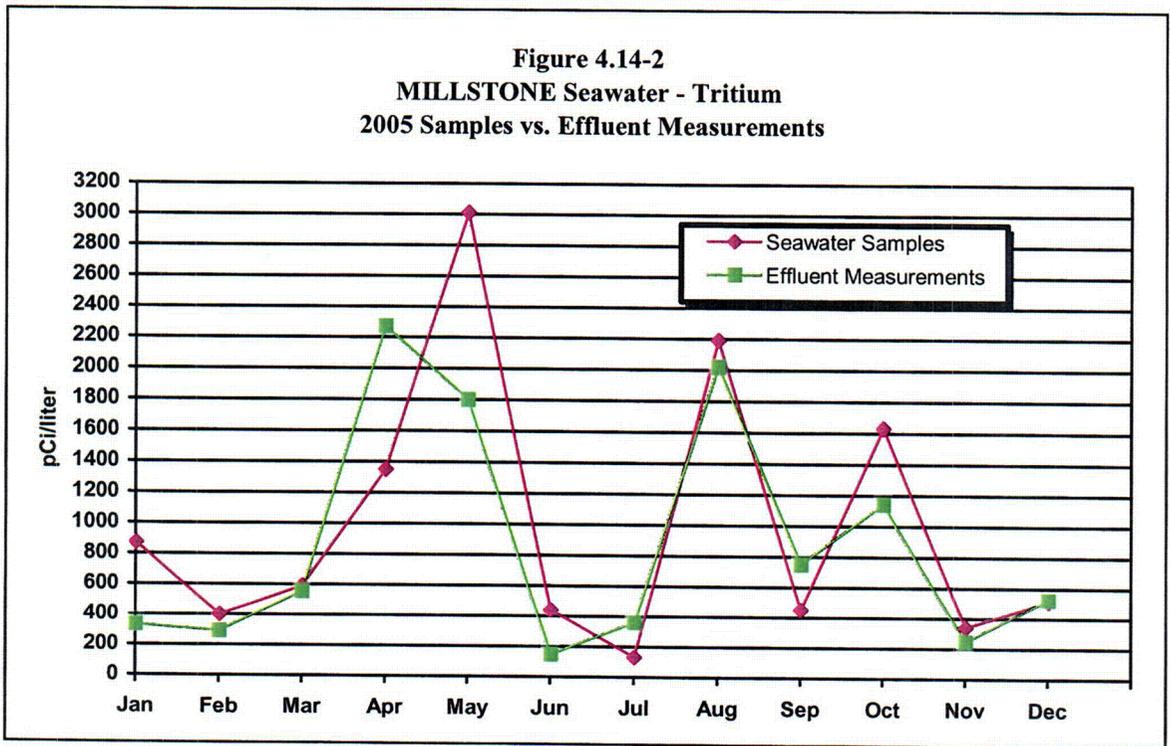
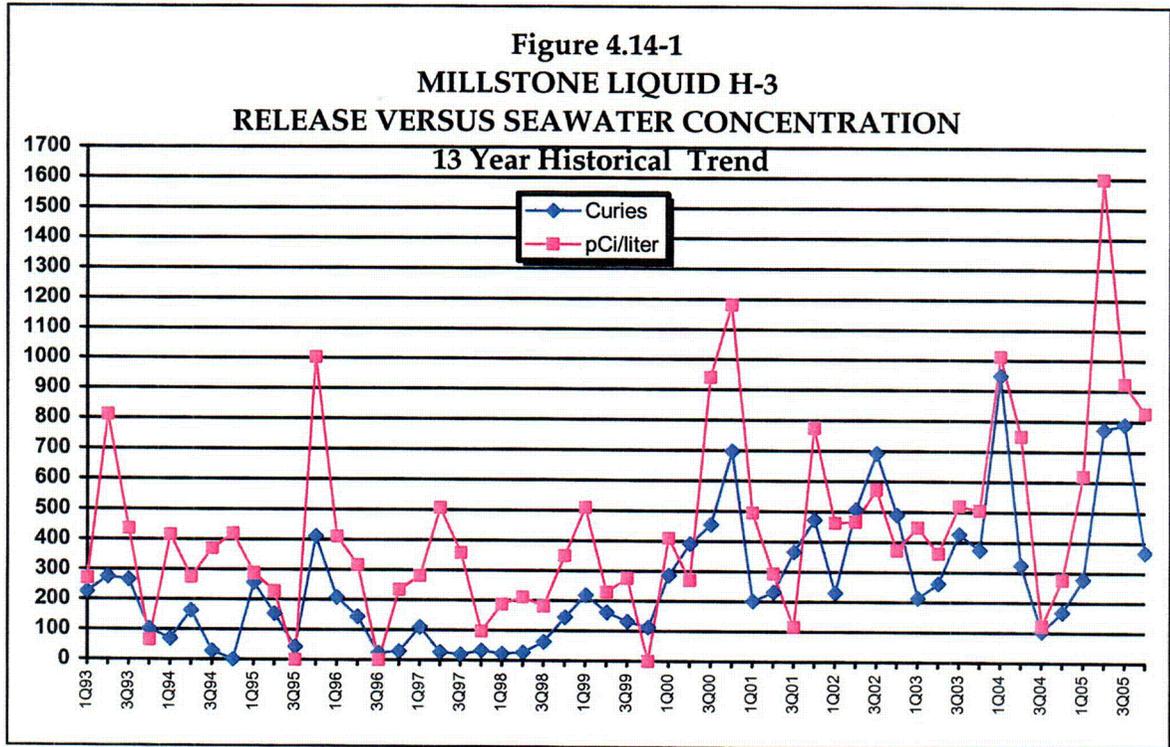
This media can be an early and sensitive indicator of releases from the station for both unplanned releases and normal operations. Therefore, to enhance program-monitoring effectiveness, samples of broadleaf vegetation are collected monthly during the growing season, April - October, even though requirements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

4.1.4. Seawater (Table 14)

In the vicinity of discharge (location 32), seawater is normally sampled by using a continuous sampler. A technician collects an amount from this sampler on a weekly frequency and composites it for monthly analyses. In September 1999, Millstone increased the required analysis frequency for composite samples from the vicinity of discharge to a monthly basis to increase monitoring effectiveness. For the Control Location, Giants Neck (location 37C), six weekly grab samples are obtained for quarterly compositing. In 2003, the LLD for H-3 (tritium) at the indicator location (32) was lowered by approximately a factor of four to further enhance monitoring effectiveness. This lower LLD was continued through 2006.

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 11 of the 12 samples. This sample is taken directly from liquid effluent flow prior to dilution into 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 during each fuel cycle. It is generated during plant operation from fission and neutron reactions. Between 1992 and 2002, H-3 was typically observed at levels below detectable. Since that time, because sensitivity has been enhanced, H-3 levels are now typically detectable. Figure 4.14-1 shows a thirteen-year trend of H-3 releases in the Millstone liquid effluents versus the 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 H-3 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 4.1-1 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, although there can be slight discrepancies due to the REMP sample not necessarily being on the last day of each month.



COG

4.15. Bottom Sediment (Table 15)

Cs-137 was detected in the samples from Golden Spur (67X). This is typical for this location, since it is a fresh water area. The levels of Cs-137 at this location are comparable to those observed in past river water sediments taken from other areas of the Connecticut River. Because of the relative distance and direction of the Golden Spur location from the station and comparable levels seen at even much farther locations, the Cs-137 detected at Golden Spur is from weapons testing fallout.

Cs-137 was also detected in the samples from West Jordan Cove (29) and in the extra samples from Jordan 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.

These levels are considered plant related activity. Similar levels were noted last year and somewhat lower levels in 2003. Prior to 2003, plant related activity has not been detected in bottom sediment for over a decade. The present levels are comparable to the levels observed in 1990. Bottom sediment is not a significant dose pathway to man, especially at areas not typically used by the public. Examinations of other aquatic media, including seafood, sampled from these locations (discussions that follow) do not show any detectable Co-60 or Cs-137. A new location was added near the closest public beach (location 69X). The data for this location did not indicate any plant related activity.

4.16. Aquatic Flora (Table 16)

Although sampling of this media is not required, it provides useful information since it is a very sensitive indicator of station discharges. Low levels of activity (e.g., Mn-54, Co-58, Co-60, Zn-65, I-131 and Ag-110m) have been detected in the past. However, since 2000 levels have decreased to undetectable for all nuclides except for I-131. One positive measurement was noted last year and several positive measurements are evident this year. There has typically been a decrease in liquid releases from the station, which has caused most of nuclides to become undetectable. However, seaweed has a significant bioaccumulation factor which makes it an extremely sensitive indicator of iodine in the environment. Investigation of the positive measurement from the September 14, 2005 sample (CR-05-10353) indicates that the I-131 activity was likely caused by low levels in recent releases. Follow-up additional sampling taken on November 7, 2005 prior to a Unit 2 liquid

discharge and on November 8, 2005 after a Unit 2 liquid discharge seems to confirm the effect from a liquid discharge. These levels are quite low and are often hidden within the counting statistics. There was no I-131 detected in any of the other aquatic samples. This confirms the dose consequence for these levels is insignificant. Section 5 provides a complete discussion of the potential dose consequences. No other station related radioactivity was detected in aquatic flora in 2005.

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 (location 40X), which is an extra location.

Station related Ag-110m was observed in only two of the four samples from within the station discharge area (locations 32) and all four samples from the Quarry (40X). Although location 32 is labeled as the vicinity of discharge, it has actually been located at the end of the quarry until this year where it is now in the middle of the quarry. Due to safety concerns, the location was moved to a more accessible area. No station related activity was observed in samples from beyond the station discharge area.

For several previous years, high levels of Zn-65 were observed in oysters. This was 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 existed 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 amount of Zn-65 in liquid effluents has decreased to being undetectable in the 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 to the liquid effluents discharged. Again, the correlation 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. **Section 5** shows a comparison of the two dose methods. (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 2005.

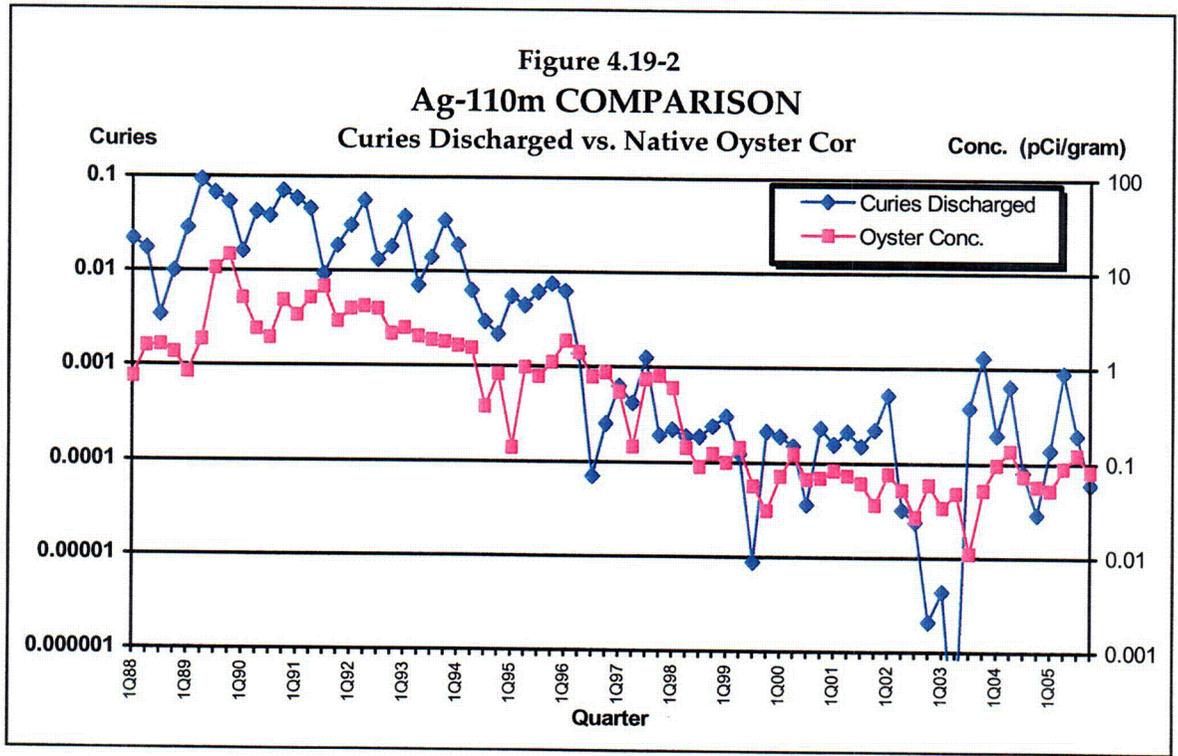
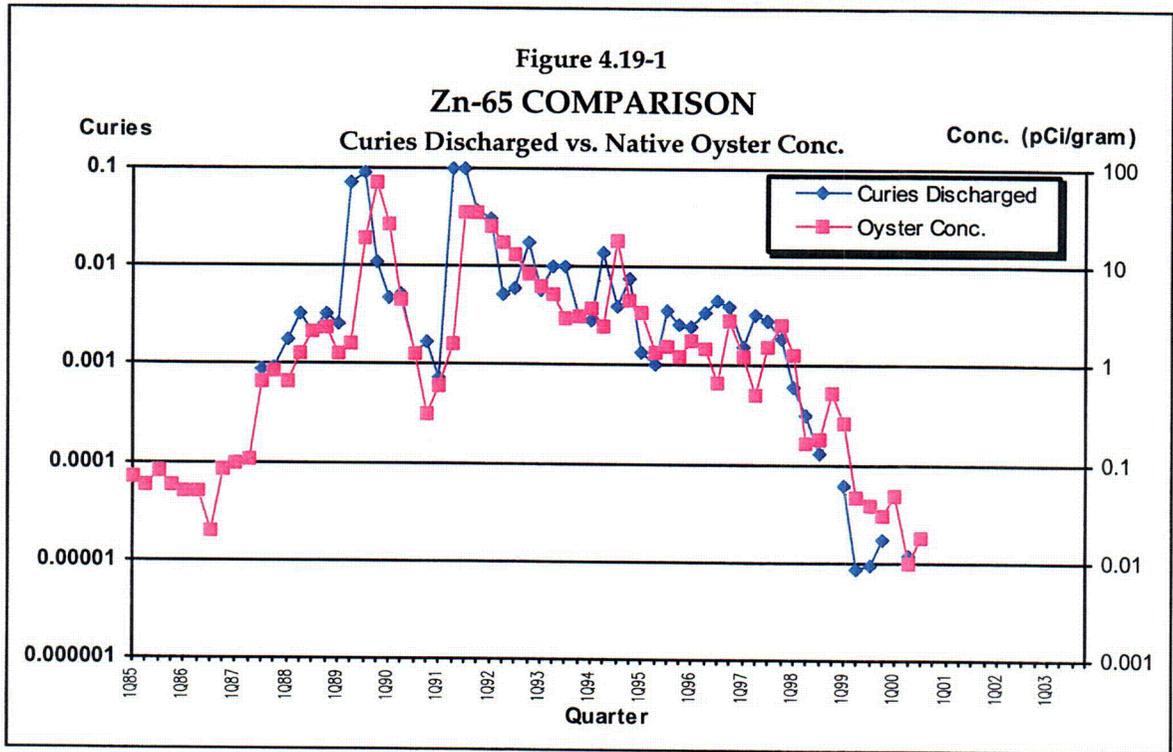
4.21. Scallops (Table 21)

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 have been available for several years.

4.22. Lobsters (Table 22)

Like the last several years, no station related radioactivity was detected in this sample media in 2005.



5. OFFSITE DOSE EQUIVALENT COMMITMENTS

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

The first method utilizes calculations of direct dose from sources onsite and the station's 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 = 0.14 mrem

GI(LLI) = 0.010 mrem

The organ GI(LLI) dose is essentially all attributable to the liquid pathway. The majority of the whole body dose is due to a conservative determination of dose (~0.12 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.

In order to provide perspective on the doses in Table 5.1, the standards 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
2005 Annual Dose (millirem)

Pathway	Individual	Organ	Method 1 ⁽¹⁾				Method 2 ⁽¹⁾
			Unit 1 (BWR)	Unit 2 (PWR)	Unit 3 (PWR)	Station Total	Station
<i>Airborne Effluents</i>							
1. External Gamma Dose (gamma air) ⁽⁶⁾	Max ⁽²⁾	Whole Body	0.0000	0.00157	0.00048	0.0021	ND ⁽³⁾
2. Whole Body Dose (internal and external)	Max ⁽²⁾	Whole Body	0.00073	0.0044	0.0149	0.020	ND
<i>Direct Dose</i>							
Nearest Residence	Max ⁽²⁾	Whole Body	N/A	N/A	N/A	~0.12 ⁽⁴⁾	<3.3 ⁽⁵⁾

TABLE 5.1 (Cont.)
COMPARISON OF DOSE CALCULATION METHODS
MILLSTONE POWER STATION
2005 Annual Dose (millirem)

Pathway	Max Individual	Organ	Method 1 ⁽¹⁾				Method 2 ⁽¹⁾
			Unit 1 (BWR)	Unit 2 (PWR)	Unit 3 (PWR)	Station Total	Station
<i>Liquid Effluents</i>							
1. Fish	* Adult	Whole Body	0.000000	0.000220	0.000780	0.00100	ND ⁽³⁾
	Teen	"	0.000000	0.000178	0.000693	0.00087	
	Child	"	0.000000	0.000161	0.000721	0.00088	
	* Adult	GI(LLI) ⁽⁶⁾	0.000000	0.001325	0.002833	0.0042	ND
	Teen	"	0.000000	0.000941	0.002094	0.0030	
	Child	"	0.000000	0.000383	0.000946	0.0013	
	Adult	Liver	0.000000	0.000342	0.001676	0.0020	ND
	* Teen	"	0.000000	0.000323	0.001655	0.0020	
	Child	"	0.000000	0.000292	0.001561	0.0019	
2. Shellfish	* Adult	Whole Body	0.000000	0.000135	0.000631	0.00077	0.000013 ⁽⁷⁾
	Teen	"	0.000000	0.000129	0.000636	0.00077	0.000013
	Child	"	0.000000	0.000149	0.000796	0.00095	0.000014
	* Adult	GI(LLI)	0.000000	0.003470	0.002466	0.0059	0.0087 ⁽⁷⁾
	Teen	"	0.000000	0.002401	0.001835	0.0042	0.0059
	Child	"	0.000000	0.000876	0.000765	0.0016	0.0021
	Adult	Liver	0.000000	0.000305	0.002011	0.0023	0.000021 ⁽⁷⁾
	* Teen	"	0.000000	0.000314	0.002117	0.0024	0.000021
	Child	"	0.000000	0.000308	0.002134	0.0024	0.000018

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 storage and movement of radioactive waste. Storage of radioactive waste is allowed in several areas onsite. Operation of the storage facilities is limited by design to ensure that the maximum direct dose at the site boundary from each area does not exceed one millirem. Actual exposure 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 sky-shine. These maximum estimated doses from each facility were summed for a cumulative site commitment of approximately 0.12 millirem. The whole body dose from airborne effluents was 0.020 and from liquid effluents was 0.0021. This results in a total estimated whole body dose to the maximum individual of 0.14 mrem ($0.12 + 0.020 + 0.0021$).
5. Measured dose was derived from monthly 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 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. 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.
8. Based upon the conservatively assuming no correction for building shielding and occupancy.

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 issue 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 can 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 will remain around for much longer periods of time. The even longer-lived fission products, Sr-90 and Cs-137, cause more of a concern. 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 of prime interest for a Radiological Environmental Monitoring Program.

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

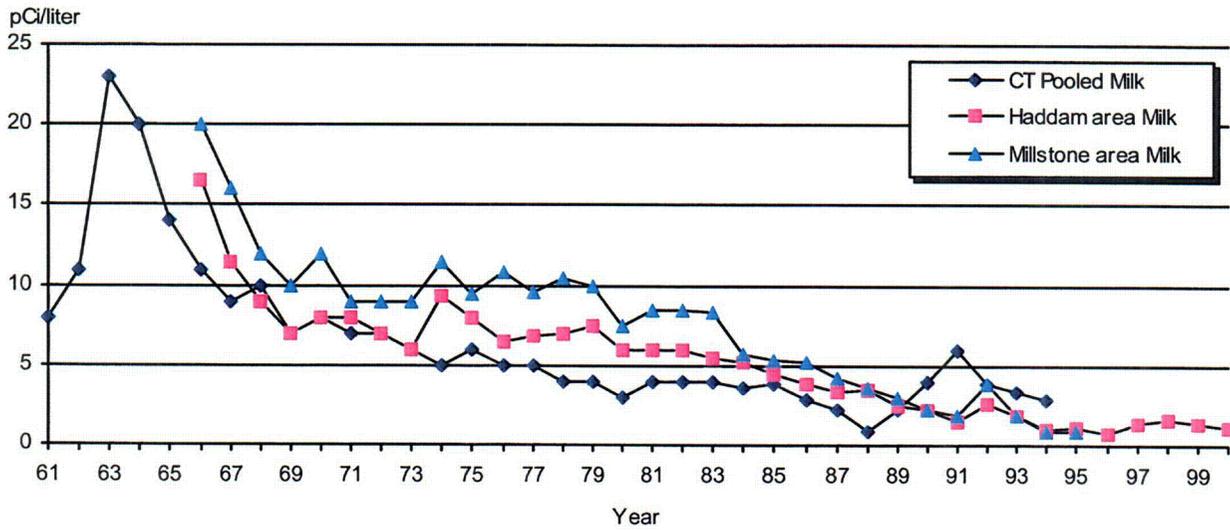
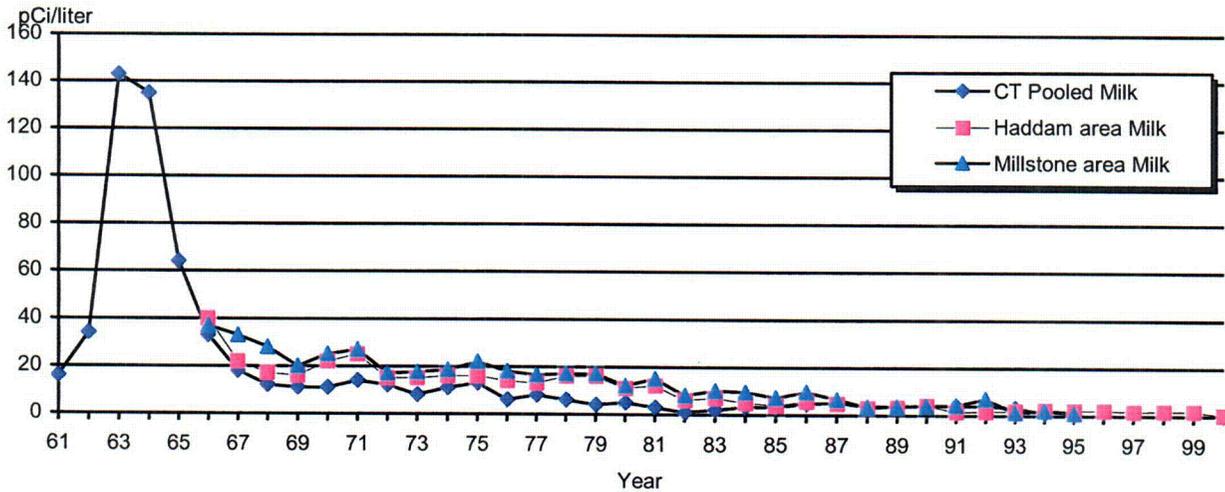


Figure 6-2 Cesium-137 in Milk



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
 MP1 Start-up occurred: October 26, 1970

MP2 Start-up occurred: December, 1975
 MP3 Start-up occurred: January 23, 1986

COB

APPENDIX A

LAND USE CENSUS FOR 2005

TABLE A-1

Dairy Cows Within 20 miles of Millstone Point- 2005

<u>Direction</u>	<u>Distance</u>	<u>Location</u>	<u># of Cows</u>
N	14 Miles	Preston	60
N	20 Miles	Norwich	220
NNE	16 Miles	Preston	65
NNE	16 Miles	Norwich	25
NNE	16.5 Miles	Preston	50
NNE	17 Miles	Preston	140
NNE	18 Miles	Preston	*
NNE	19 Miles	Preston	46
NE	13.5 Miles	Ledyard	50
NE	18 Miles	Preston	50
NE	18 Miles	North Stonington	65
NE	19 Miles	North Stonington	52
ENE	17.3 Miles	North Stonington	280
ENE	20 Miles	North Stonington	320
WNW	10.5 Miles	Lyme	80
NW	10.4 Miles	Lyme	9**

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

* unknown

** sheep

TABLE A-2

Dairy Goats Within 20 miles of Millstone Point- 2005

<u>Direction</u>	<u>Distance</u>	<u>Sample Location</u>	<u># of Goats</u>
N	2.4 Miles	Waterford (LOCATION 21)	7/5*
N	20 Miles	North Franklin	2/2
NE	2.7 Miles	Waterford (LOCATION 22)	4/0
ENE	2 Miles	Waterford	1/0
ENE	13 Miles	Stonington	5/2
ENE	16.2 Miles	North Stonington	15/12
WNW	5.1 Miles	Niantic	**
WNW	18 Miles	Haddam	7/3
NW	17.3 Miles	East Haddam	3/2
NNW	12.3 Miles	Salem	12/6
NNW	18 Miles	Colchester	37/20
NNW	20.8 Miles	Colchester	6/2
NNW	29 Miles	Hebron (LOCATION 24)	70/26

* Number of Goats/Number of Milkers

** Unable To Contact As Of This Time

TABLE A-3
2005 Resident/Garden Survey[⊖]

<u>Downwind Direction</u>	<u>Distance to Closest Resident (meters)</u>	<u>Distance to Closest Garden (meters)</u>
N	1500	1490
NNE	860	870
NE	790	800
ENE	1590	1580
E	1500	1500
ESE	1690	1990
SE	*	*
SSE	*	*
S	*	*
SSW	*	*
SW	3700	3840
WSW	3190	3180
W	2870	2950
WNW	2470	2780
NW	770	2180
NNW	740	1020

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

[⊖] 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 REMP 1.4, "Quality Control of Radiological Environmental 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 its own quality control samples. In total, at least five percent of the contractor's sample analyses include quality control samples.
2. Contractor lab's interlaboratory 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 2006. Results are shown on Table 2. All of the TLD spike tests satisfied procedural criteria. Of 91 individual nuclide analysis results on QA samples, 85 passed the acceptance criteria, a 93% success rate. Of the 6 failures, 5 were high by 20 - 33% and one was low by 25%. This is an improvement over last year when a problem was noted with the low range pipette used for the spiking the samples. Procedures were revised during the second half of 2005 to minimize the errors associated with pipette use. Since that time the results have improved to an acceptance rate similar to previous years.

TABLE 1
2005 QUALITY CONTROL SAMPLES

SAMPLE TYPE		QC SAMPLES (Note 1)	ROUTINE SAMPLES
TLD Spike		16 (Note 2)	160
Milk - Strontium		1	12
Milk - Iodine		5	~30
Milk - Gamma		(Note 3)	~30
Pasture Grass/Hay – Gamma (Milk Substitute)		0	~30
Water - Gamma		10	28
Water - Tritium		4	28
Fish/Invertebrate - Gamma		4	80
Vegetation/Aquatic Flora/Sediment/Soil - Gamma		0	81
Air Particulate	- Gross Beta	5	416
	- Iodine	4	416
	- Gamma	4	32

FOOTNOTE (Table 1):

1. All samples are spikes except fish/invertebrate which are duplicate oyster samples. Also includes January 2006 spikes since the December 2005 spikes were delayed.
2. A set of four TLDs are spike quarterly for readout during the routine quarterly readout.
3. Gamma in water QA spikes are treated as milk surrogates.

TABLE 2
RESULTS OF 2005 QUALITY CONTROL SAMPLE ANALYSES

SAMPLE TYPE		ANALYSES PASSED	ANALYSES FAILED
TLD Spike		12	0
Milk - Strontium		1	0
Milk - Iodine		5	0
Water - Gamma		46 (Note 1)	2 (Note 1, Note 2)
Water - Tritium		4	0
Oysters - Gamma		4	0
Air Particulate	- Gross Beta	5	0
	- Iodine	3	1
	- Gamma	17	3

TOTALS

TLDs: 12

TLDs: 0

Individual Nuclides: 85

Individual Nuclides: 6

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. Does not include 2 failures caused by plateout of the stock solution (Ag-110m) and 4 caused by the use of contaminated acid (CR-05-09630). These failures are QC spiking issues and not indicative of any laboratory performance issues.

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 intercomparison 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 2005. A total of 113 analysis results were obtained with 113 passing criteria, a 100% success rate.

**AREVA NP ENVIRONMENTAL LABORATORY
ANALYTICS RADIOLOGICAL ENVIRONMENTAL CROSS-CHECK
PERFORMANCE EVALUATION**

Sample Number	Quarter/ Year	Sample Media	Nuclide	Reported Value	Known Value	Ratio E-LAB/ Analytics	Evaluation
E4459-162	1st/2005	Water	Gross Alpha	39.9	40.8	0.98	Agreement
E4459-162	1st/2005	Water	Gross Beta	279	292	0.96	Agreement
E4460-162	1st/2005	Water	I-131LL	66.2	65.9	1.00	Agreement
E4460-162	1st/2005	Water	I-131	69.3	65.9	1.05	Agreement
E4460-162	1st/2005	Water	Ce-141	219	221	0.99	Agreement
E4460-162	1st/2005	Water	Cr-51	346	322	1.07	Agreement
E4460-162	1st/2005	Water	Cs-134	130	134	0.97	Agreement
E4460-162	1st/2005	Water	Cs-137	127	125	1.01	Agreement
E4460-162	1st/2005	Water	Co-58	108	111	0.97	Agreement
E4460-162	1st/2005	Water	Mn-54	160	154	1.04	Agreement
E4460-162	1st/2005	Water	Fe-59	114	107	1.07	Agreement
E4460-162	1st/2005	Water	Zn-65	192	191	1.01	Agreement
E4460-162	1st/2005	Water	Co-60	138	139	1.00	Agreement
E4461-162	1st/2005	Water	Sr-89	94.6	103	0.92	Agreement
E4461-162	1st/2005	Water	Sr-90	15.6	17.2	0.90	Agreement
E4462-162	1st/2005	Filter	Gross Alpha	20.8	21.9	0.95	Agreement
E4462-162	1st/2005	Filter	Gross Beta	162	157	1.04	Agreement
E4463-162	1st/2005	Milk	I-131LL	91.2	92.3	0.99	Agreement
E4463-162	1st/2005	Milk	I-131	95.9	92.3	1.04	Agreement
E4463-162	1st/2005	Milk	Ce-141	229	229	1.00	Agreement
E4463-162	1st/2005	Milk	Cr-51	334	334	1.00	Agreement
E4463-162	1st/2005	Milk	Cs-134	137	139	0.99	Agreement
E4463-162	1st/2005	Milk	Cs-137	133	130	1.03	Agreement
E4463-162	1st/2005	Milk	Co-58	118	115	1.02	Agreement
E4463-162	1st/2005	Milk	Mn-54	166	160	1.04	Agreement
E4463-162	1st/2005	Milk	Fe-59	117	111	1.05	Agreement
E4463-162	1st/2005	Milk	Zn-65	203	198	1.03	Agreement
E4463-162	1st/2005	Milk	Co-60	145	144	1.01	Agreement
E4464-162	1st/2005	Milk	Sr-89	93.8	107	0.88	Agreement
E4464-162	1st/2005	Milk	Sr-90	16.1	17.9	0.90	Agreement

**AREVA NP ENVIRONMENTAL LABORATORY
ANALYTICS ENVIRONMENTAL CROSS CHECK PROGRAM
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Sample Number	Quarter/Year	Sample Media	Nuclide	Reported Value	Known Value	Ratio E-LAB/Analytics	Evaluation
E4599-162	2nd/2005	Water	H-3	9060	9100	1.00	Agreement
E4600-162	2nd/2005	Filter	Gross Alpha	31.9	30.9	1.03	Agreement
E4600-162	2nd/2005	Filter	Gross Beta	125	127	0.99	Agreement
E4601-162	2nd/2005	Filter	Ce-141	59.3	58.9	1.01	Agreement
E4601-162	2nd/2005	Filter	Cr-51	207	193	1.07	Agreement
E4601-162	2nd/2005	Filter	Cs-134	59.1	60.6	0.98	Agreement
E4601-162	2nd/2005	Filter	Cs-137	131	120	1.09	Agreement
E4601-162	2nd/2005	Filter	Co-58	3.55	3.4	1.04	Agreement
E4601-162	2nd/2005	Filter	Mn-54	88.6	79.7	1.11	Agreement
E4601-162	2nd/2005	Filter	Fe-59	40.1	40.7	0.99	Agreement
E4601-162	2nd/2005	Filter	Zn-65	112	98.8	1.13	Agreement
E4601-162	2nd/2005	Filter	Co-60	89.4	92.3	0.97	Agreement
E4602-162	2nd/2005	Filter	Sr-89	90.5	97.5	0.93	Agreement
E4602-162	2nd/2005	Filter	Sr-90	13.0	12.6	1.03	Agreement
E4603-162	2nd/2005	Milk	I-131LL	85.7	86.9	0.99	Agreement
E4603-162	2nd/2005	Milk	I-131	86.8	86.9	1.00	Agreement
E4603-162	2nd/2005	Milk	Ce-141	96.3	92.4	1.04	Agreement
E4603-162	2nd/2005	Milk	Cr-51	295	303	0.98	Agreement
E4603-162	2nd/2005	Milk	Cs-134	87.7	95	0.92	Agreement
E4603-162	2nd/2005	Milk	Cs-137	186	189	0.98	Agreement
E4603-162	2nd/2005	Milk	Co-58	5.83	5.30	1.10	Agreement
E4603-162	2nd/2005	Milk	Mn-54	124	125	0.99	Agreement
E4603-162	2nd/2005	Milk	Fe-59	67	63.9	1.05	Agreement
E4603-162	2nd/2005	Milk	Zn-65	149	155	0.96	Agreement
E4603-162	2nd/2005	Milk	Co-60	138	145	0.96	Agreement

**AREVA NP ENVIRONMENTAL LABORATORY
ANALYTICS RADIOLOGICAL ENVIRONMENTAL CROSS-CHECK
PERFORMANCE EVALUATION**

Sample Number	Quarter/Year	Sample Media	Nuclide	Reported Value	Known Value	Ratio E-LAB/Analytics	Evaluation
E4686-162	3rd/2005	Water	Gross Alpha	42.3	41.6	1.02	Agreement
E4686-162	3rd/2005	Water	Gross Beta	128.5	123	1.05	Agreement
E4687-162	3rd/2005	Water	I-131LL	78.3	78.2	1.00	Agreement
E4687-162	3rd/2005	Water	I-131	77.2	78.2	0.99	Agreement
E4687-162	3rd/2005	Water	Ce-141	276.4	282	0.98	Agreement
E4687-162	3rd/2005	Water	Cr-51	353.7	408	0.87	Agreement
E4687-162	3rd/2005	Water	Cs-134	137.3	148	0.93	Agreement
E4687-162	3rd/2005	Water	Cs-137	231.1	235	0.98	Agreement
E4687-162	3rd/2005	Water	Co-58	72.5	77.0	0.94	Agreement
E4687-162	3rd/2005	Water	Mn-54	113.2	111	1.02	Agreement
E4687-162	3rd/2005	Water	Fe-59	74.7	74.0	1.01	Agreement
E4687-162	3rd/2005	Water	Zn-65	152.3	149	1.02	Agreement
E4687-162	3rd/2005	Water	Co-60	192.1	202	0.95	Agreement
E4688-162	3rd/2005	Charcoal	I-131	61.0	62.7	0.97	Agreement
E4689-162	3rd/2005	Filter	Gross Alpha	39.3	38.0	1.04	Agreement
E4689-162	3rd/2005	Filter	Gross Beta	120.8	112	1.08	Agreement
E4690-162	3rd/2005	Milk	I-131LL	99.0	94.3	1.05	Agreement
E4690-162	3rd/2005	Milk	I-131	90.0	94.3	0.95	Agreement
E4690-162	3rd/2005	Milk	Ce-141	228.5	233	0.98	Agreement
E4690-162	3rd/2005	Milk	Cr-51	306.3	338	0.91	Agreement
E4690-162	3rd/2005	Milk	Cs-134	118.3	122	0.97	Agreement
E4690-162	3rd/2005	Milk	Cs-137	196.5	195	1.01	Agreement
E4690-162	3rd/2005	Milk	Co-58	64.0	63.4	1.01	Agreement
E4690-162	3rd/2005	Milk	Mn-54	94.7	92.0	1.03	Agreement
E4690-162	3rd/2005	Milk	Fe-59	63.3	61.0	1.04	Agreement
E4690-162	3rd/2005	Milk	Zn-65	121.7	123	0.99	Agreement
E4690-162	3rd/2005	Milk	Co-60	165.2	167	0.99	Agreement
E4691-162	3rd/2005	Milk	Sr-89	139.6	146	0.96	Agreement
E4691-162	3rd/2005	Milk	Sr-90	10.8	11.5	0.94	Agreement

**AREVA NP ENVIRONMENTAL LABORATORY
ANALYTICS ENVIRONMENTAL CROSS CHECK PROGRAM
PERFORMANCE EVALUATION**

Sample Number	Quarter/ Year	Sample Media	Nuclide	Reported Value	Known Value	Ratio E-LAB/ Analytics	Evaluation
E4836-162	4th/2005	Water	H-3	13700	13200	1.04	Agreement
E4837-162	4th/2005	Water	Sr-89	80.3	91.4	0.88	Agreement
E4837-162	4th/2005	Water	Sr-90	7.18	7.40	0.97	Agreement
E4838-162	4th/2005	Filter	Gross Alpha	22.3	25.0	0.89	Agreement
E4838-162	4th/2005	Filter	Gross Beta	146	136	1.08	Agreement
E4839-162	4th/2005	Filter	Ce-141	122	131	0.93	Agreement
E4839-162	4th/2005	Filter	Cr-51	113	113	1.00	Agreement
E4839-162	4th/2005	Filter	Cs-134	48.0	51.0	0.94	Agreement
E4839-162	4th/2005	Filter	Cs-137	111	111	1.01	Agreement
E4839-162	4th/2005	Filter	Co-58	44.2	45.2	0.98	Agreement
E4839-162	4th/2005	Filter	Mn-54	93.5	88.9	1.05	Agreement
E4839-162	4th/2005	Filter	Fe-59	44.6	48.1	0.93	Agreement
E4839-162	4th/2005	Filter	Zn-65	95.8	89.9	1.07	Agreement
E4839-162	4th/2005	Filter	Co-60	59.1	64.6	0.91	Agreement
E4840-162	4th/2005	Filter	Sr-89	103	121	0.86	Agreement
E4840-162	4th/2005	Filter	Sr-90	9.05	9.70	0.93	Agreement
E4841-162	4th/2005	Milk	I-131LL	72.4	74.6	0.97	Agreement
E4841-162	4th/2005	Milk	I-131	74.1	74.6	0.99	Agreement
E4841-162	4th/2005	Milk	Ce-141	217	224	0.97	Agreement
E4841-162	4th/2005	Milk	Cr-51	190	193	0.99	Agreement
E4841-162	4th/2005	Milk	Cs-134	86.4	87.3	0.99	Agreement
E4841-162	4th/2005	Milk	Cs-137	187	189	0.99	Agreement
E4841-162	4th/2005	Milk	Co-58	78.7	77.5	1.02	Agreement
E4841-162	4th/2005	Milk	Mn-54	153	152	1.01	Agreement
E4841-162	4th/2005	Milk	Fe-59	87.8	82.4	1.07	Agreement
E4841-162	4th/2005	Milk	Zn-65	148	154	0.96	Agreement
E4841-162	4th/2005	Milk	Co-60	106	111	0.95	Agreement
E4879-162	4th/2005	Charcoal	I-131	68.4	72.0	0.95	Agreement