

GPU NUCLEAR CORPORATION  
OYSTER CREEK NUCLEAR GENERATING STATION  
EFFLUENT RELEASE REPORT  
1981-2

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## OYSTER CREEK EFFLUENT RELEASE REPORT

### EXECUTIVE SUMMARY

This 1981-2 semi-annual report is submitted to the Nuclear Regulatory Commission in accordance with section 6.9.3 of the Technical Specifications - Appendix A of the Oyster Creek Unit No. 1 Provisional Operating License, DPR-16. It is divided into three separate sections. The first section summarizes the plant's operational status during the period June 1, 1981-December 31, 1981. The second section summarizes all gaseous effluents, liquid effluents, meteorological data, and solid waste offsite shipments for the third and fourth quarters of 1981. The last section summarizes the Radiological Environmental Monitoring Program (REMP) for the period December through May, 1981.

The format of the report adheres very closely to all previously submitted Oyster Creek Effluent Release Reports. The presentation of REMP data reflects changes in formatting of tables due to the new computerization of data. The formatting follows approved and accepted NRC requirements.

A complete discussion of the Radiological Environmental Monitoring Program (REMP) is presented. Data comparisons were conducted to determine if correlations existed between facility operations and certain elevated radioactivity levels encountered in the environment. On the basis of these comparisons it was concluded that such elevated results were not related to 1981-2 plant operations. It is suggested that the higher levels of radioactivity of certain parameters in the environment may be related to weapon testing fallout, natural occurrences, or past facility releases.

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## **I. INTRODUCTION**

## I. INTRODUCTION

This report is submitted in accordance with Section 6.9.3 of the Technical Specifications - Appendix A of the Oyster Creek Unit No. 1 Provisional Operating License, DPR-16.

Section I provides a brief summary of the plant status from June 1, 1981 through December 31, 1981. Included during this seven month summary are dates of reactor scrams, controlled reactor shutdowns, reactor startups, and selected dates showing reactor power levels.

Section II follows the format of Regulatory Guide 1.21 and provides a summary of gaseous effluents, liquid effluents, solid waste offsite shipments, and meteorological data from the third and fourth quarters of 1981. The third quarter begins on July 1, 1981 and extends through September 30, 1981. The fourth quarter starts on October 1, 1981 and ends on December 31, 1981.

Section III provides a summary of the Oyster Creek Radiological Environmental Monitoring Program and its associated sampling data for the period of June 1, 1981 through November 30, 1981 per stipulations outlined in section 6.9.3.3 of the Technical Specifications - Appendix A. This section displays the data in tabular form and includes a correlation of plant effluent releases to the radiological environmental data.



### Plant Operations Summary

June 1, 1981	Operating at approximately 65% rated power
June 15, 1981	Operating at approximately 100% rated power
June 26, 1981	Reactor Scram
July 1, 1981	Reactor Startup
July 15, 1981	Operating at approximately 67% rated power
August 1, 1981	Operating at approximately 55% rated power
August 15, 1981	Reactor Shutdown
September 1, 1981	Reactor Shutdown - Continued
September 15, 1981	Reactor Shutdown - Continued
October 1, 1981	Reactor Shutdown - Continued
October 15, 1981	Reactor Shutdown - Continued
October 17, 1981	Reactor Startup
October 19, 1981	Reactor Scram
October 20, 1981	Reactor Startup
October 21, 1981	Reactor Shutdown
October 22, 1981	Reactor Startup
October 30, 1981	Reactor Shutdown
November 1, 1981	Reactor Startup
November 15, 1981	Operating at approximately 100% rated power
December 1, 1981	Operating at approximately 95% rated power
December 10, 1981	Reactor Shutdown
December 15, 1981	Reactor Shutdown - Continued
December 31, 1981	Reactor Shutdown - Continued

## **II. EFFLUENT AND WASTE DISPOSAL SUMMARY**

## Effluent and Waste Disposal Summary

### A. Gaseous Effluents

During the reporting period, July 1, 1981 through December 31, 1981, a total of  $2.54 \text{ E4}$  curies of fission and activation gases,  $3.79 \text{ E-1}$  curies of non-particulate halogens (iodine) with half-lives greater than eight days,  $1.05$  curies of particulates with half-lives greater than eight days, and  $2.60$  curies of tritium were released. Totals included effluents released from both an elevated stack and a ground-level radwaste vent. The maximum hourly release rate of gross activity from the stack was  $7.98 \text{ E3}$  microcuries per second which occurred at approximately 1200 hours on November 15, 1981.

The Airborne Releases are summarized in Tables 1, 2, 3, and 4.

### B. Liquid Effluents

A total of  $1.74 \text{ E7}$  liters of water was processed through the radwaste system. Of this,  $2.15 \text{ E6}$  liters containing  $6.88$  curies of activity were released to the environment. The maximum concentration of gross radioactivity (beta-gamma) released to the unrestricted area (average over the period of release) was  $6.77 \text{ E-8}$  microcuries per milliliter on December 24, 1981.

The Liquid Release Data are summarized in Tables 5 and 6.

### C. Solid

During the reporting period, a total volume of  $8.47 \text{ E2}$  cubic meters of solid waste containing  $1.64 \text{ E2}$  curies of activity was shipped off site in 69 shipments. No irradiated material was shipped.

The Solid Waste Shipment Data are summarized in Table 7.

### D. Meteorological Data

During the reporting period, onsite meteorological conditions were monitored and recorded. Joint frequency distribution of wind speed and direction per atmospheric stability class per quarter is summarized. Included is 116 meter and 10 meter data.

The Meteorological Data are summarized in Tables 8, 9, 10, 11, and 12.

# EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT

## SUPPLEMENTAL INFORMATION

FACILITY - Oyster Creek Nuclear Generating Station

LICENSEE - Jersey Central Power & Light Company

### 1. Regulatory Limits

- a. Fission and Activation Gases:  
Technical Specification 3.6.A.1

$$Q = \frac{0.21}{E} \text{ Ci/sec}$$

- b. Iodines and particulates, half-lives  $> 8$  days:  
Technical Specification 3.6.A.2

$$4 \text{ uCi/sec}$$

- c. Liquid Effluents:  
Technical Specification 3.6.B.1  
Maximum permissible concentrations,  
Appendix B, Table II, Column 2  
of 10 CFR 20.

### 2. Maximum Permissible Concentrations (MPC)

- a. Fission and Activation Gases:

1. Third Quarter -  $2.88 \text{ E-3 uCi/cc}$
2. Fourth Quarter -  $2.77 \text{ E-3 uCi/cc}$

- b. Iodines and Particulates:

1. Third Quarter -  $4.21 \text{ E-8 uCi/cc}$
2. Fourth Quarter -  $4.21 \text{ E-8 uCi/cc}$

- c. Liquid Effluents:

From Appendix B, Table II, Column 2, of  
10 CFR 20.

(NOTE: MPC's for isotopes detected listed below)  
Unit - uCi/ml

H-3	3 E-3	I-133	1 E-6
Cr-51	2 E-3	Xe-133	3 E-6
Mn-54	1 E-4	Cs-134	9 E-6
Co-60	5 E-5	Xe-135	3 E-6
Sr-89	3 E-6	Cs-137	2 E-5
Sr-90	3 E-7	Ba-140	3 E-5
Mo-99	2 E-4	La-140	2 E-5
Tc-99m	6 E-3	Ce-141	9 E-5
Ru-103	8 E-5	Ce-144	1 E-5
Sb-124	2 E-5	Np-239	1 E-6
I-131	3 E-7		

3. Average Energy

- a. Third Quarter - 7.71 E-1 mev
- b. Fourth Quarter - 8.01 E-1 mev

4. Measurements and Approximation of Total Radioactivity

- a. Fission and Activation Gases:  
The incorporation of a weekly grab sample analysis using gamma ray spectrometry with a GeLi Detector, a conversion factor and the continuous recording of the stack effluent on a continuous activity monitor.
- b. Iodines:  
Semi-weekly sample analysis - gamma ray spectrometry with a GeLi Detector, low background beta counter, internal proportional beta counter, and a single channel gamma counter.
- c. Particulates:  
Semi-weekly sample analysis - gamma ray spectrometry with a GeLi Detector, low background beta counter, internal proportional beta counter, and single channel gamma counter.
- d. Liquid Effluents:  
Analysis per batch release - gamma ray spectrometry with a GeLi Detector, a low background beta counter, and a liquid scintillation counter.

Analysis of Error Associated with the Measurement of Radioactive Materials in Effluents and Solid Wastes

Effluents

All stages of the production of effluent estimates have been assigned an upwardly conservative error potential. Stages include sample collection, radiochemical analysis, and compilation of the effluent estimation process. The use of these error factors assures that facility effluents will not be underestimated.

Solid Waste

The process by which the levels of radioactive materials in solid wastes are estimated is one which requires conservatism throughout. Representative sample analyses and/or surface contamination surveys are combined with estimates of waste volume to provide the level of radioactive materials in solid wastes. Upwardly conservative techniques are used in all phases of this process to assure that the amount of radioactive material in solid wastes are not underestimated.

5. Batch Releases

a. Liquid

1. Number of batch releases:

- a. Third Quarter - 17 releases
- b. Fourth Quarter - 14 releases

2. Total time period for batch releases:

- a. Third Quarter - 3.56 E3 minutes
- b. Fourth Quarter - 2.70 E3 minutes

3. Maximum time period for a batch release:

- a. Third Quarter - 4.42 E2 minutes
- b. Fourth Quarter - 3.05 E2 minutes

4. Average time period for a batch release:

- a. Third Quarter - 2.09 E2 minutes
- b. Fourth Quarter - 1.93 E2 minutes

5. Minimum time period for a batch release:

- a. Third Quarter - 1.00 E1 minutes
- b. Fourth Quarter - 1.32 E2 minutes

6. Average stream flow during periods of release of effluent in a flowing stream:

- a. Third Quarter - 2.56 E6 liters/minute
- b. Fourth Quarter - 2.80 E6 liters/minute

6. Abnormal Releases

a. Liquid

1. Number of releases:

One

2. Total activity released:

6.42 E-1 curies as documented in RO 50-219/81-39/3L,  
dated September 18, 1981.

b. Gaseous

1. Number of releases:

One

2. Total Activity released:

Did not exceed 6.0 E-5 curies as documented in  
RO 50-219/81-28/3L, dated August 3, 1981.

TABLE 1  
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT 1981-2  
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	Unit	Third Quarter	Fourth Quarter	Est. Total Error %
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A. Fission & activation gases

1. Total release	Ci	1.05 E4	1.49 E4	3.0 E1
2. Average release rate for period	μCi/sec	2.68 E3	3.34 E3	
3. Percent of Tech Spec Limit	%	9.82 E-1	1.27	

B. Iodines

1. Total iodine-131	Ci	1.85 E-1	1.94 E-1	2.5 E1
2. Average release rate for period	μCi/sec	2.33 E-2	2.44 E-2	
3. Percent of Tech Spec Limit	%	1.28 *	3.24 *	

C. Particulates

1. Particulates with half-lives >8 days	Ci	2.21 E-1	8.32 E-1	2.5 E1
2. Average release rate for period	μCi/sec	2.78 E-2	1.05 E-1	
3. Percent of Tech Spec Limit	%	1.28 *	3.24 *	
4. Gross alpha radioactivity	Ci	1.85 E-5	9.94 E-6	

D. Tritium

1. Total release	Ci	1.59	1.01	4.0 E1
2. Average release rate for period	μCi/sec	2.00 E-1	1.27 E-1	

\*PERCENT OF TECH SPEC LIMIT FOR IODINES AND PARTICULATES  
AS REQUIRED BY TECHNICAL SPECIFICATION 3.6.A.2



TABLE 2  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981-2  
GASEOUS EFFLUENTS-ELEVATED RELEASE

CONTINUOUS MODE

Nuclides Released	Unit	Third Quarter	Fourth Quarter		MDL
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1. Fission gases

krypton-85m	Ci	4.49 E2	5.63 E2		2.10 E-9
krypton-87	Ci	1.72 E3	1.90 E3		7.80 E-9
krypton-88	Ci	1.68 E3	1.56 E3		6.23 E-9
xenon-133	Ci	2.52 E2	2.73 E2		1.62 E-9
xenon-135	Ci	3.12 E3	3.28 E3		1.71 E-9
xenon-135m	Ci	7.26 E2	1.14 E3		9.11 E-9
xenon-138	Ci	2.60 E3	3.91 E3		1.18 E-8
others					
krypton-89	Ci	< MDL	< MDL		3.99 E-7
xenon-133m	Ci	< MDL	< MDL		1.47 E-8
xenon-137	Ci	< MDL	2.25 E3		3.12 E-7
Total for period	Ci	1.05 E4	1.49 E4		

2. Iodines

Iodine-131	Ci	1.84 E-1	1.94 E-1		7.44 E-11
Iodine-133	Ci	5.74 E-1	8.83 E-1		1.36 E-10
Iodine-135	Ci	9.97 E-1	1.23		9.60 E-9
Total for period	Ci	1.76	2.31		

TABLE 3  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981-2  
GASEOUS EFFLUENTS - ELEVATED RELEASE

CONTINUOUS MODE

Nuclides Released	Unit	Third Quarter	Fourth Quarter		MDL
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3. Particulates

Strontium-89	Ci	1.78 E-1	2.18 E-1		1.35 E-10
Strontium-90	Ci	9.15 E-4	1.32 E-3		7.87 E-11
Cesium-137	Ci	1.32 E-3	3.74 E-2		7.80 E-11
Barium-140	Ci	2.84 E-2	4.67 E-1		3.67 E-10
Lanthanum-140	Ci	2.10 E-2	3.28 E-1		1.40 E-10
Others					
Manganese-54	Ci	4.70 E-3	3.19 E-3		1.64 E-10
Cobalt-58	Ci	4.14 E-4	6.26 E-5		1.54 E-10
Cobalt-60	Ci	1.36 E-3	5.56 E-4		1.46 E-10
Strontium-91	Ci	1.82 E-1	1.72		3.49 E-10
Niobium-95	Ci	< MDL	1.46 E-4		2.07 E-10
Zirconium-95	Ci	< MDL	2.12 E-4		1.88 E-10
Technetium-99m	Ci	3.68 E-3	1.67 E-2		6.38 E-11
Iodine-131	Ci	5.73 E-3	7.21 E-2		5.74 E-11
Iodine-133	Ci	2.66 E-2	2.64 E-2		8.49 E-11
Iodine-135	Ci	2.78 E-2	4.58 E-3		4.15 E-10
Cerium-141	Ci	1.81 E-4	< MDL		1.29 E-10
Cerium-144	Ci	1.44 E-4	3.24 E-2		8.04 E-10
TOTAL	Ci	4.42 E-1	2.93		

TABLE 4  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981-2  
GASEOUS EFFLUENTS - GROUND LEVEL RELEASES

Nuclides Released	Unit	Third Quarter	Fourth Quarter		MDL
1. Fission Gases					
Total For Period	Ci	< MDL	1.13 E1		
2. Iodines					
Iodine-131	Ci	7.21 E-4	2.73 E-5		9.16 E-11
Iodine-133	Ci	2.21 E-3	1.29 E-5		1.94 E-10
Iodine-133	Ci	1.96 E-3	< MDL		1.06 E-9
TOTAL	Ci	4.89 E-3	4.02 E-5		
3. Particulates					
Chromium-51	Ci	< MDL	4.20 E-7		6.01 E-10
Manganese-54	Ci	9.34 E-7	1.43 E-7		2.19 E-10
Cobalt-60	Ci	4.26 E-6	1.79 E-6		1.98 E-10
Strontium-89	Ci	1.68 E-6	< MDL		1.17 E-11
Strontium-90	Ci	6.14 E-8	6.14 E-8		5.30 E-12
Technetium-99m	Ci	2.27 E-7	< MDL		1.56 E-10
Cesium-137	Ci	2.08 E-6	1.24 E-7		1.02 E-10
Cerium-141	Ci	< MDL	2.31 E-7		1.20 E-9
Neptunium-239	Ci	7.69 E-7	< MDL		1.67 E-10
TOTAL	Ci	1.00 E-5	2.77 E-6		

TABLE 5  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981-2  
LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Unit	Third Quarter	Fourth Quarter	Est. Total Error %
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A. Fission and activation products

1. Total releases (not including tritium, gases, alpha)	Ci	3.44 E-2	1.18 E-2	3.0 E1
2. Average diluted concentration during period	μCi/ml	3.91 E-10	1.16 E-10	
3. Percent of applicable limit	%	1.63 E-3	5.19 E-4	

B. Tritium

1. Total release	Ci	3.76	3.01	3.0 E1
2. Average diluted concentration during period	μCi/ml	4.28 E-8	2.95 E-8	
3. Percent of applicable limit	%	1.43 E-3	9.83 E-4	

C. Dissolved and entrained gases

1. Total release	Ci	3.59 E-2	3.12 E-2	3.0 E1
2. Average diluted concentration during period	μCi/ml	4.09 E-10	3.06 E-10	
3. Percent of applicable limit	%	1.37 E-2	1.02 E-2	

D. Gross alpha radioactivity

1. Total release	Ci	2.49 E-5	5.20 E-5	3.0 E1
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E. Volume of waste released (prior to dilution)	liters	1.05 E6	1.10 E6	1.0 E1
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F. Volume of dilution water used during period	liters	3.30 E11	3.83 E11	1.0 E1
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TABLE 6  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981-2  
LIQUID EFFLUENTS

Nuclides Released	Unit	Third Quarter	Fourth Quarter		MDL
Strontium-89	Ci	2.54 E-5	4.12 E-6		2.89 E-12
Strontium-90	Ci	6.88 E-6	<MDL		1.49 E-12
Iodine-131	Ci	<MDL	8.47 E-5		3.96 E-10
Cesium-134	Ci	2.62 E-3	<MDL		4.98 E-10
Cesium-137	Ci	1.12 E-2	6.61 E-5		5.27 E-10
Chromium-51	Ci	<MDL	1.77 E-3		3.97 E-9
Manganese-54	Ci	2.41 E-3	3.38 E-4		5.06 E-10
Cobalt-60	Ci	1.35 E-2	6.89 E-3		7.56 E-10
Molybdenum-99	Ci	9.08 E-5	<MDL		3.74 E-9
Technetium-99m	Ci	1.33 E-6	1.74 E-4		6.94 E-10
Ruthenium-103	Ci	1.31 E-5	<MDL		5.62 E-10
Antimony-124	Ci	1.65 E-3	<MDL		4.96 E-10
Iodine-133	Ci	<MDL	1.34 E-4		5.60 E-10
Barium-140	Ci	4.28 E-4	1.27 E-3		2.44 E-9
Lanthanum-140	Ci	4.69 E-4	1.04 E-3		8.79 E-10
Cerium-141	Ci	6.14 E-5	<MDL		1.35 E-9
Cerium-144	Ci	1.92 E-3	<MDL		5.74 E-9
Neptunium-239	Ci	4.94 E-5	<MDL		7.79 E-10
Total	Ci	3.44 E-2	1.18 E-2		
Xenon-133	Ci	4.43 E-3	1.36 E-2		6.29 E-10
Xenon-135	Ci	3.15 E-2	1.76 E-2		4.74 E-10
Total	Ci	3.59 E-2	3.12 E-2		

TABLE 7  
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1981-2  
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

A. Solid waste shipped offsite for burial or disposal (not irradiated fuel)

1. Type of waste	Unit	6-month period	Est. Total Error, %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m <sup>3</sup>	2.21 E2	
	Ci	1.29 E2	5.0 E1
b. Drycompressible waste contaminated equip., etc.	m <sup>3</sup>	6.26 E2	
	Ci	3.51 E1	5.0 E1
c. Irradiated components, control rods, etc.	m <sup>3</sup>		
	Ci	NONE	
d. Other (describe)	m <sup>3</sup>		
	Ci	NONE	

2. Estimate of major nuclide composition (by type of waste)	Percentage	Activity (Ci)	MDL (Ci)
a. Cobalt-60	3.2 E1	4.13 E1	1.69 E-10
Strontium-89	2.9 E1	3.74 E1	5.00 E-11
Manganese-54	8.4	1.08 E1	1.34 E-10
Barium-140	4.0	5.16	4.06 E-10
Iodine-133	3.6	4.64	9.78 E-11
b. Cobalt-60	6.3 E1	2.21 E1	
Manganese-54	1.5 E1	5.27	
Strontium-89	4.5	1.58	
Cesium-137	3.7	1.30	
Iodine-133	2.1	7.37 E-1	
c.			
d.			

3. Solid Waste Disposition Number of Shipments	Mode of Transportation	Destination
61	MOTOR VEHICLE	BARNWELL, SOUTH CAROLINA
8	MOTOR VEHICLE	RICHLAND, WASHINGTON

B. Irradiated Fuel Shipments (Disposition)

Number of Shipments	Mode of Transportation	Destination
NONE		

TABLE 8

## CLASSIFICATION OF ATMOSPHERIC STABILITY

Stability Classification	Pasquill Categories	$\sigma_{\theta}^2$ (degrees)	Temperature change with height ( $^{\circ}\text{C}/100\text{m}$ )
Extremely unstable	A	25.0	$<-1.9$
Moderately unstable	B	20.0	-1.9 to -1.7
Slightly unstable	C	15.0	-1.7 to -1.5
Neutral	D	10.0	-1.5 to -0.5
Slightly stable	E	5.0	-0.5 to 1.5
Moderately stable	F	2.5	1.5 to 4.0
Extremely stable	G	1.7	$>4.0$

<sup>a</sup> Standard deviation of horizontal wind direction fluctuation over a period of 15 minutes to 1 hour. The values shown are average for each stability classification.

TABLE 9  
Oyster Creek Meteorological Tower Joint Frequency Tables of Wind Speed and  
Wind Direction 380ft versus Delta Temperature 380-33ft for the Period 7/1/81-9/30/81  
(Third Quarter)

1 of 4

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD= 81 7 1 1-81 83824							
STABILITY CLASS: A							
ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380							
	WIND SPEED(MPH)						
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	2	4	2	0	0	8
NNE	1	1	3	0	0	0	5
NE	0	1	3	4	0	5	13
ENE	0	3	6	6	0	0	15
E	0	6	6	4	0	0	16
ESE	0	6	9	2	0	0	17
SE	0	0	15	7	0	0	22
SSE	0	1	5	5	0	0	11
S	0	1	3	6	0	0	10
SSW	0	3	1	0	0	0	4
SU	0	0	1	0	3	0	10
WSW	0	0	3	6	1	0	10
W	0	1	3	10	4	0	18
WNW	1	2	3	4	3	2	15
NW	1	0	3	2	0	2	8
NNW	0	1	4	2	0	0	7
VARIABLE	0	0	0	0	0	0	0
TOTAL 169							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 168							

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD= 81 7 1 1-81 83824							
STABILITY CLASS: B							
ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380							
	WIND SPEED(MPH)						
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	1	1	0	0	0	2
NNE	0	2	2	0	0	0	4
NE	1	0	3	2	0	1	7
ENE	0	0	2	2	0	0	4
E	0	3	3	2	0	0	8
ESE	1	0	5	2	1	0	9
SE	0	4	10	2	0	0	16
SSE	0	0	3	4	0	0	7
S	0	0	2	6	0	0	8
SSW	0	0	1	0	1	0	2
SU	0	0	4	1	3	0	8
WSW	0	1	0	2	2	0	5
W	0	0	3	6	3	0	12
WNW	0	2	2	9	1	2	16
NW	0	2	1	2	0	2	7
NNW	0	0	1	3	0	1	5
VARIABLE	0	0	0	0	0	0	0
TOTAL 120							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 168							



TABLE 9

2 of 4

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 81 7 1 1-81 93384

STABILITY CLASS: C

ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	1	1	1	0	0	3
NNE	0	1	0	0	0	0	1
NE	1	2	3	2	1	2	11
ENE	0	1	3	1	0	1	6
E	1	2	5	2	0	0	10
ESE	0	1	5	2	0	0	8
SE	0	0	8	4	0	0	12
SSE	0	0	7	2	0	0	9
S	2	0	4	6	2	0	14
SSW	0	0	2	3	5	0	10
SW	0	1	2	1	2	0	6
WSW	0	0	1	1	3	0	5
W	0	1	3	8	3	1	16
WNW	0	0	8	4	4	4	16
NW	0	0	5	8	4	0	15
NNW	0	1	4	1	0	0	6
VARIABLE	1	0	0	0	0	0	1

TOTAL 159  
PERIODS OF CALM(HOURS): 0  
HOURS OF MISSING DATA: 158

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 81 7 1 1-81 93924

STABILITY CLASS: D

ELEVATION: SPEED:SPD360 DIRECTION:DIR380 LAPSE:DT380

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	3	2	2	0	0	8
NNE	1	0	8	5	0	0	20
NE	1	8	9	32	3	3	56
ENE	1	4	11	17	4	0	37
E	1	3	10	16	3	1	34
ESE	0	2	19	19	5	0	45
SE	0	1	21	7	2	1	32
SSE	1	2	15	9	5	0	32
S	2	3	9	18	8	1	41
SSW	0	3	7	17	11	5	43
SW	0	2	10	13	4	0	29
WSW	0	1	7	20	4	0	32
W	0	2	13	18	10	2	45
WNW	0	4	8	23	22	10	67
NW	0	8	13	16	18	7	56
NNW	2	2	8	11	3	0	26
VARIABLE	5	0	0	0	0	0	5

TOTAL 683  
PERIODS OF CALM(HOURS): 0  
HOURS OF MISSING DATA: 158

TABLE 9

3 of 4

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 81 7 1 1-81 93024  
 STABILITY CLASS: E  
 ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	1	4	10	3	0	19
NNE	0	0	12	8	1	0	21
NE	0	4	8	9	7	0	28
ENE	0	1	7	5	6	3	22
E	1	8	6	11	8	0	32
ESE	2	3	9	5	1	0	20
SE	0	4	5	5	4	0	18
SSE	0	2	13	3	7	0	25
S	0	6	10	12	4	0	32
SSW	1	0	7	17	13	4	42
SW	0	3	3	22	32	5	65
WSW	0	4	13	16	14	2	49
W	1	0	9	17	12	1	40
WNW	1	2	13	11	10	3	40
NW	0	0	2	22	19	2	45
NNW	0	3	4	13	11	2	33
VARIABLE	0	0	0	0	1	0	1

TOTAL 531  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 158

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 81 7 1 1-81 93024  
 STABILITY CLASS: F  
 ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	2	5	5	0	12
NNE	0	0	5	0	0	0	5
NE	1	0	7	2	0	0	10
ENE	0	0	0	1	0	0	1
E	0	2	1	0	0	0	3
ESE	1	4	4	0	0	0	9
SE	0	3	8	1	0	0	10
SSE	2	0	5	3	0	0	10
S	1	0	5	5	2	0	13
SSW	0	0	7	13	7	0	27
SW	0	0	2	8	17	10	37
WSW	0	1	1	11	17	5	35
W	0	0	2	10	12	4	28
WNW	0	1	2	5	12	0	20
NW	0	0	3	5	15	0	23
NNW	0	1	2	5	13	3	24
VARIABLE	1	0	0	0	0	0	1

TOTAL 275  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 158

TABLE 9

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 81 7 1 1-81 83084  
 STABILITY CLASS: Q  
 ELEVATION: SPEED:SPD389 DIRECTION:DIR380 LAPSE:DT380  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	1	2	9	4	0	16
NNE	0	1	2	4	2	0	9
NE	0	2	4	3	0	0	9
ENE	0	0	1	4	0	0	5
E	0	0	1	2	0	0	3
ESE	0	2	5	0	0	0	7
SE	0	1	4	0	0	0	5
SSE	0	6	2	1	0	0	9
S	2	1	3	0	0	0	6
SSW	1	0	5	3	3	0	12
SW	2	2	6	5	0	1	16
WSW	1	5	2	1	3	5	17
W	1	0	1	1	3	2	8
WNW	1	2	4	9	2	0	18
NW	0	2	2	4	2	0	10
NNW	1	2	2	12	9	0	26
VARIABLE	0	0	0	0	0	0	0

TOTAL 182  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 158

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 81 7 1 1-81 83084  
 STABILITY CLASS: ALL  
 ELEVATION: SPEED:SPD389 DIRECTION:DIR380 LAPSE:DT380  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	9	16	29	12	0	68
NNE	2	11	32	17	3	0	65
NE	4	17	37	54	11	11	134
ENE	1	9	30	38	10	4	89
E	3	24	32	37	9	1	106
ESE	4	18	56	39	7	0	115
SE	0	13	69	26	6	1	115
SSE	3	11	50	27	12	0	103
S	7	11	36	53	16	1	124
SSW	2	6	30	53	40	9	140
SW	2	8	28	56	61	18	171
WSW	1	12	27	57	44	12	153
W	2	4	34	70	47	10	167
WNW	3	13	38	65	54	29	202
NW	1	6	29	57	64	13	170
NNW	3	10	25	47	38	6	127
VARIABLE	7	0	0	0	1	0	8

TOTAL 2050  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 158

**TABLE 10**  
**Oyster Creek Meteorological Tower Joint Frequency Tables of Wind Speed and**  
**Wind Direction 380ft versus Delta Temperature 380-33ft for the Period 10/1/81-12/31/81 1 of 4**  
**(Fourth Quarter)**

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD- 8110 1 1-81183184							
STABILITY CLASS: A							
ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380							
WIND SPEED(MPH)							
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	1	2	8	4	0	13
NNE	0	0	4	1	0	0	5
NE	1	0	8	2	0	0	17
ENE	1	0	17	3	0	0	21
E	0	4	1	8	0	0	11
ESE	0	2	1	0	0	0	3
SE	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	0	0	0
SSW	0	1	0	0	0	0	1
SU	0	0	2	0	0	0	2
USW	0	1	2	2	0	0	5
U	0	2	1	6	0	0	9
UNW	0	1	1	6	1	1	10
NW	0	1	0	5	1	0	7
NNW	0	1	2	0	4	0	7
VARIABLE	0	0	0	0	0	0	0
TOTAL 111							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 118							

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD- 8110 1 1-81123184							
STABILITY CLASS: B							
ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380							
WIND SPEED(MPH)							
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	4	2	0	0	6
NNE	0	0	0	1	0	0	1
NE	0	1	2	5	0	0	8
ENE	0	0	3	0	0	0	3
E	0	1	0	0	0	0	1
ESE	0	0	0	0	0	0	0
SE	0	1	1	0	0	0	2
SSE	0	0	1	0	0	0	1
S	0	0	0	1	0	0	1
SSW	0	0	1	0	0	0	1
SU	0	0	2	0	0	0	2
USW	0	0	1	1	0	0	2
U	0	0	2	3	0	1	6
UNW	0	0	1	2	5	1	9
NW	0	0	0	4	4	0	8
NNW	0	1	0	2	4	0	7
VARIABLE	0	0	0	0	0	0	0
TOTAL 58							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 118							

TABLE 10

2 of 4

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: C  
 ELEVATION: SPEED:SPD330 DIRECTION:DIR380 LAPSE:DT380

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	2	0	1	0	0	3
NNE	0	0	1	2	0	0	3
NE	0	1	2	1	0	0	4
ENE	0	0	3	0	0	0	3
E	0	1	1	1	0	0	3
ESE	0	1	0	0	0	0	1
SE	1	0	0	0	0	0	1
SSE	0	0	0	0	0	0	0
S	0	0	0	1	1	1	3
SSU	0	1	1	2	1	0	5
SU	0	0	0	2	0	0	2
USU	0	1	1	0	2	0	4
U	0	0	1	3	2	5	11
UNU	0	1	2	7	5	2	23
NU	0	1	2	3	2	12	20
NNU	0	2	1	4	7	0	14
VARIABLE	0	0	0	0	0	0	0

TOTAL 100  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 110

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: D  
 ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	0	3	2	9	1	16
NNE	0	3	9	14	18	4	48
NE	0	5	6	10	18	0	48
ENE	1	2	3	0	11	2	19
E	2	4	2	4	3	2	17
ESE	0	2	0	1	2	0	5
SE	0	1	5	5	0	0	11
SSE	0	2	4	3	0	0	9
S	0	0	6	12	6	6	30
SSU	0	0	8	12	11	4	35
SU	0	0	1	2	1	1	11
USU	0	0	2	3	4	3	12
U	0	1	10	25	31	22	89
UNU	0	2	11	16	48	34	111
NU	0	1	5	21	36	36	99
NNU	0	4	9	5	17	1	36
VARIABLE	1	0	0	6	2	1	10

TOTAL 598  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 110

TABLE 10

3 of 4

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: E  
 ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380  
 -----  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	1	14	11	1	27
NNE	0	1	4	9	7	1	22
NE	0	2	6	9	9	3	29
ENE	0	0	9	11	8	0	28
E	0	2	2	4	7	3	18
ESE	0	1	4	4	4	6	19
SE	0	1	1	4	4	4	14
SSE	0	2	1	10	7	0	20
S	0	2	11	18	25	4	60
SSW	0	1	5	19	25	12	62
SW	0	2	4	5	7	3	21
WSW	0	2	6	15	13	5	41
W	1	0	5	30	51	21	108
WNW	0	0	5	21	51	30	107
WV	0	0	4	26	48	15	87
WNW	0	5	1	19	25	0	50
VARIABLE	0	0	0	2	0	0	4

TOTAL 713  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 116

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: F  
 ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380  
 -----  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	3	2	5	5	2	17
NNE	2	0	0	2	2	0	6
NE	0	0	0	0	0	0	0
ENE	1	3	3	0	0	0	7
E	0	1	6	0	0	0	7
ESE	1	0	0	0	0	0	1
SE	0	0	2	3	0	1	6
SSE	0	2	3	7	2	1	15
S	0	0	5	8	9	4	26
SSW	0	2	2	8	5	1	18
SW	1	3	1	2	5	0	12
WSW	1	1	1	7	1	3	14
W	0	0	3	15	23	10	51
WNW	0	1	1	9	28	12	51
WV	0	3	3	6	28	6	44
WNW	0	0	2	11	17	2	38
VARIABLE	1	0	0	2	0	0	8

TOTAL 387  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 116

TABLE 10

4 of 4

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81183124  
 STABILITY CLASS: Q  
 ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380  
 -----  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	3	4	5	2	0	15
NNE	0	3	2	4	1	0	10
NE	2	5	5	2	0	0	14
ENE	1	2	6	1	0	0	10
E	1	1	5	3	0	0	10
ESE	0	0	1	2	0	0	3
SE	0	0	0	1	0	0	1
SSE	0	1	1	0	0	0	2
S	0	0	1	6	2	0	9
SSW	0	2	2	3	3	0	10
SW	0	0	2	1	0	1	4
WSW	0	1	3	5	2	5	16
W	0	0	3	9	11	7	30
WNW	0	1	5	11	5	1	23
NW	0	7	12	2	5	0	26
NNW	1	8	8	1	3	3	24
VARIABLE	3	0	0	0	0	0	3

TOTAL 287  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 110

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81183124  
 STABILITY CLASS: ALL  
 ELEVATION: SPEED:SPD380 DIRECTION:DIR380 LAPSE:DT380  
 -----  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	9	16	35	31	4	97
NNE	2	7	20	33	28	5	95
NE	3	14	29	44	27	3	120
ENE	4	7	44	15	19	2	91
E	3	14	17	18	10	5	67
ESE	1	6	8	7	6	8	32
SE	1	3	9	13	4	5	35
SSE	0	7	10	20	9	1	47
S	0	2	23	46	43	15	129
SSW	0	7	19	44	45	17	132
SW	1	5	12	18	13	5	54
WSW	1	6	16	33	22	16	94
W	1	3	25	91	118	66	304
WNW	0	6	26	72	143	87	334
NW	0	13	26	67	116	69	291
NNW	1	21	23	42	77	8	170
VARIABLE	5	0	0	10	2	1	18

TOTAL 2822  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 110

TABLE 11  
Oyster Creek Meteorological Tower Joint Frequency Tables of Wind Speed and  
Wind Direction 33ft versus Delta Temperature 150-33ft for the Period 7/1/81-9/30/81  
(Third Quarter)

1 of 4

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 81 7 1 1-81 93084  
STABILITY CLASS: A  
ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

---

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	7	4	0	0	0	12
NNE	2	7	2	0	0	0	11
NE	3	4	15	10	0	0	32
ENE	1	8	28	0	0	0	37
E	0	10	18	1	0	0	29
ESE	0	19	21	0	0	0	40
SE	1	6	36	0	0	0	43
SSE	1	4	20	3	0	0	28
S	0	3	17	12	0	0	32
SSW	0	5	7	1	0	0	13
SW	0	4	14	0	0	0	18
USW	1	8	29	0	0	0	38
W	0	15	38	2	0	0	55
WNW	4	22	22	18	0	0	66
W	2	20	21	12	0	0	55
WNW	1	15	10	1	0	0	27
VARIABLE	9	0	0	0	0	0	9

TOTAL 536  
PERIODS OF CALM(HOURS): 0  
HOURS OF MISSING DATA: 716

HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD= 81 7 1 1-81 93084  
STABILITY CLASS: B  
ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

---

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	0	0	0	0	0	1
NNE	0	1	0	0	0	0	1
NE	0	1	2	0	0	0	3
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	0	2	0	0	0	2
SSE	0	0	1	1	0	0	2
S	0	1	1	0	0	0	2
SSW	0	0	2	0	0	0	2
SW	0	0	2	0	0	0	2
USW	0	2	0	0	0	0	2
W	0	0	3	1	0	0	4
WNW	0	0	3	0	0	0	3
W	0	2	1	0	0	0	3
WNW	0	0	2	0	0	0	2
VARIABLE	0	0	0	0	0	0	0

TOTAL 29  
PERIODS OF CALM(HOURS): 0  
HOURS OF MISSING DATA: 716



TABLE 11

2 of 4

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD- 81 7 1 1-81 93084							
STABILITY CLASS: C							
ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150							
WIND SPEED(MPH)							
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	0	4	0	0	0	4
NNE	0	1	2	0	0	0	3
NE	0	0	8	0	0	0	8
ENE	0	1	2	0	0	0	3
E	0	0	0	0	0	0	0
ESE	0	1	1	0	0	0	2
SE	0	0	0	1	0	0	1
SSE	0	2	0	0	0	0	2
S	0	0	1	0	0	0	1
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	1	0	0	0	1
W	0	1	2	0	0	0	3
WNW	0	1	0	0	0	0	1
NW	1	0	2	0	0	0	3
NNW	1	0	1	0	0	0	2
VARIABLE	2	0	0	0	0	0	2
TOTAL 32							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 715							

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD- 81 7 1 1-81 93024							
STABILITY CLASS: D							
ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150							
WIND SPEED(MPH)							
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	3	1	0	0	0	5
NNE	1	7	0	0	0	0	8
NE	2	13	11	1	0	0	27
ENE	2	10	14	0	0	0	26
E	0	4	3	1	0	0	8
ESE	0	9	3	0	0	0	12
SE	0	6	3	0	0	0	9
SSE	0	2	3	1	0	0	6
S	2	7	8	8	0	0	23
SSW	1	6	10	4	0	0	21
SW	3	9	2	0	0	0	14
WSW	0	17	5	0	0	0	22
W	3	23	4	0	0	0	27
WNW	1	15	5	0	0	0	21
NW	1	10	6	1	0	0	18
NNW	2	4	1	0	0	0	7
VARIABLE	7	0	0	0	0	0	7
TOTAL 254							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 715							

TABLE 11

3 of 4

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 81 7 1 1-81 93284

STABILITY CLASS: E

ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

## WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	3	8	0	0	0	0	11
NNE	1	5	2	0	0	0	8
NE	3	8	9	0	0	0	20
ENE	0	14	11	1	0	0	26
E	0	18	10	0	0	0	28
ESE	0	3	2	0	0	0	5
SE	0	3	5	0	0	0	8
SSE	3	3	0	0	0	0	6
S	2	8	5	0	0	0	13
SSW	6	15	6	1	0	0	28
SW	0	51	10	0	0	0	61
WSW	1	34	2	0	0	0	37
W	6	11	4	0	0	0	21
WNW	0	11	2	0	0	0	17
NW	3	14	3	0	0	0	20
NNW	1	12	2	0	0	0	15
VARIABLE	6	0	0	0	0	0	6

TOTAL 318  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 715

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 81 7 1 1-81 93284

STABILITY CLASS: F

ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

## WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	1	0	0	0	0	3
NNE	1	0	0	0	0	0	1
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	1	0	0	0	0	0	1
SE	0	1	0	0	0	0	1
SSE	4	3	0	0	0	0	7
S	2	5	0	0	0	0	7
SSW	2	5	1	0	0	0	8
SW	4	11	0	0	0	0	15
WSW	4	19	0	0	0	0	23
W	10	12	0	0	0	0	22
WNW	4	2	1	0	0	0	13
NW	5	16	0	0	0	0	21
NNW	5	2	0	0	0	0	7
VARIABLE	5	0	0	0	0	0	5

TOTAL 129  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 715

TABLE 11

4 of 4

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 81 7 1 1-81 93024

STABILITY CLASS: 0

ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

## WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	1	0	0	0	0	2
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	1	0	0	0	0	0	1
SSE	1	0	0	0	0	0	1
S	3	1	0	0	0	0	4
SSW	4	8	5	0	0	0	15
SW	11	5	1	0	0	0	17
USW	10	31	1	0	0	0	42
W	32	16	0	0	0	0	47
WNW	16	11	0	0	0	0	27
NW	11	18	0	0	0	0	29
NNW	3	7	0	0	0	0	10
VARIABLE	1	0	0	0	0	0	1

TOTAL 195  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 715

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 81 7 1 1-81 93024

STABILITY CLASS: ALL

ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

## WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	9	20	9	0	0	0	38
NNE	5	21	6	0	0	0	32
NE	8	26	43	11	0	0	88
ENE	3	33	55	1	0	0	92
E	0	28	31	2	0	0	59
ESE	1	32	27	0	0	0	60
SE	2	16	46	1	0	0	65
SSE	9	14	24	5	0	0	52
S	9	23	32	18	0	0	82
SSW	13	37	31	6	0	0	87
SW	18	80	29	0	0	0	127
USW	16	111	38	0	0	0	165
W	51	74	51	3	0	0	179
WNW	25	68	37	18	0	0	148
NW	23	80	33	13	0	0	149
NNW	13	40	18	1	0	0	78
VARIABLE	30	0	0	0	0	0	30

TOTAL 1493  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 715

TABLE 12  
Oyster Creek Meteorological Tower Joint Frequency Tables of Wind Speed and  
Wind Direction 33ft versus Delta Temperature 150-33ft for the Period 10/1/81-12/31/81  
(Fourth Quarter)

1 of 4

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD= 8110 1 1-81123184							
STABILITY CLASS: A							
ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150							
	WIND SPEED(MPH)						
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	9	10	1	0	0	21
NNE	2	13	15	2	0	0	32
NE	0	14	18	0	0	0	32
ENE	2	11	16	1	0	0	30
E	0	11	7	0	0	0	18
ESE	0	8	4	0	0	0	12
SE	0	4	1	0	0	0	5
SSE	0	1	4	0	0	0	5
S	0	10	12	4	1	0	27
SSW	2	9	16	3	0	0	30
SW	1	12	10	2	0	0	25
WSW	2	18	14	5	1	0	40
W	3	12	63	22	0	0	100
WNW	0	18	40	29	5	0	92
NW	2	15	25	13	0	0	55
NNW	1	12	11	1	0	0	25
VARIABLE	3	0	0	1	0	0	4
TOTAL 549							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 128							

HOURS AT EACH WIND SPEED AND DIRECTION							
PERIOD OF RECORD= 8110 1 1-81123184							
STABILITY CLASS: B							
ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150							
	WIND SPEED(MPH)						
WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	0	2	0	1	0	0	3
NNE	0	0	0	0	0	0	0
NE	0	1	2	0	0	0	3
ENE	0	0	2	0	0	0	2
E	0	1	1	0	0	0	2
ESE	0	1	0	0	0	0	1
SE	0	1	1	0	0	0	2
SSE	0	1	0	0	0	0	1
S	0	0	1	2	0	0	3
SSW	0	1	1	0	0	0	2
SW	0	1	0	0	0	0	1
WSW	0	2	1	0	0	0	3
W	1	6	3	0	0	0	10
WNW	0	0	4	3	0	0	7
NW	0	4	1	1	0	0	6
NNW	0	1	1	0	0	0	2
VARIABLE	0	0	1	0	0	0	1
TOTAL 48							
PERIODS OF CALM(HOURS): 0							
HOURS OF MISSING DATA: 128							

TABLE 12

2 of 4

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: C  
 ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	≥24	TOTAL
N	0	0	0	0	0	0	0
NNE	1	2	1	0	0	0	4
NE	0	1	3	0	0	0	4
ENE	0	1	1	2	0	0	4
E	0	0	1	0	0	0	1
ESE	0	1	0	0	0	0	1
SE	1	1	0	0	0	0	2
SSE	0	1	1	0	0	0	2
S	0	1	0	0	1	0	2
SSW	0	2	1	0	0	0	3
SW	0	0	0	0	0	0	0
WSW	0	2	0	1	0	0	3
W	0	3	4	1	0	0	8
WNW	1	3	7	3	1	0	15
NW	0	1	3	0	0	0	4
NNW	0	0	2	0	0	0	2
VARIABLE	0	0	2	1	0	0	3

TOTAL 56  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 128

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: D  
 ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	≥24	TOTAL
N	2	6	11	11	0	0	30
NNE	3	7	18	2	0	0	30
NE	0	7	23	0	0	0	30
ENE	2	4	12	1	0	0	19
E	0	2	5	1	0	0	8
ESE	0	2	4	3	0	0	9
SE	0	2	2	1	0	0	5
SSE	0	10	5	2	1	0	18
S	4	17	6	5	1	0	33
SSW	1	9	9	4	0	0	23
SW	1	7	2	0	0	0	10
WSW	2	11	12	2	0	0	27
W	0	9	31	14	2	0	56
WNW	1	21	55	22	1	0	100
NW	1	11	14	2	0	0	28
NNW	0	8	14	1	0	0	23
VARIABLE	2	1	7	0	0	0	10

TOTAL 447  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 128

TABLE 12

3 of 4

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 8110 1 1-81183124

STABILITY CLASS: E

ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	1	10	1	0	0	0	12
NNE	1	1	3	0	0	0	5
NE	5	4	1	0	0	0	10
ENE	2	7	1	0	0	0	10
E	3	2	4	0	0	0	9
ESE	3	7	3	0	0	0	13
SE	0	2	1	0	0	0	10
SSE	2	12	11	0	0	0	25
S	7	24	11	1	0	0	43
SSW	0	13	2	1	0	0	22
SW	5	19	5	0	0	0	29
WSW	4	45	21	0	0	0	70
W	5	33	32	5	1	0	76
WNW	2	21	29	4	0	0	56
NW	2	13	12	1	0	0	28
NNW	0	22	1	0	0	0	23
VARIABLE	3	5	0	0	0	0	8

TOTAL 441  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 128

## HOURS AT EACH WIND SPEED AND DIRECTION

PERIOD OF RECORD- 8110 1 1-81183124

STABILITY CLASS: F

ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150

WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	3	0	0	0	0	0	3
NNE	1	0	0	0	0	0	1
NE	4	1	0	0	0	0	5
ENE	2	2	0	0	0	0	4
E	0	3	0	0	0	0	3
ESE	0	0	0	0	0	0	0
SE	0	2	0	0	0	0	2
SSE	0	2	0	0	0	0	2
S	3	5	0	0	0	0	8
SSW	1	5	0	0	0	0	6
SW	5	15	0	0	0	0	20
WSW	4	43	2	0	0	0	58
W	6	17	2	1	0	0	32
WNW	1	22	0	1	0	0	24
NW	0	15	0	0	0	0	15
NNW	0	13	0	0	0	0	13
VARIABLE	5	0	0	0	0	0	5

TOTAL 124  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 128

TABLE 12

4 of 4

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: 0  
 ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	2	0	0	0	0	0	2
NNE	2	0	0	0	0	0	2
NE	4	1	0	0	0	0	5
ENE	2	0	0	0	0	0	2
E	1	2	1	0	0	0	4
ESE	0	2	0	0	0	0	2
SE	0	2	0	0	0	0	2
SSE	0	4	1	0	0	0	11
S	2	2	0	0	0	0	4
SSW	5	5	2	1	0	0	13
SU	11	44	0	0	0	0	55
USU	21	50	1	0	0	0	72
U	25	30	0	0	0	0	55
UNW	22	17	0	0	0	0	39
NW	33	27	0	0	0	0	60
NNW	9	9	0	0	0	0	18
VARIABLE	14	1	0	0	0	0	15

TOTAL 348  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 128

HOURS AT EACH WIND SPEED AND DIRECTION  
 PERIOD OF RECORD- 8110 1 1-81123124  
 STABILITY CLASS: ALL  
 ELEVATION: SPEED:SPD33 DIRECTION:DIR33 LAPSE:DT150  
 WIND SPEED(MPH)

WIND DIRECTION	1-3	4-7	8-12	13-18	19-24	>24	TOTAL
N	9	27	22	13	0	0	71
NNE	10	23	37	4	0	0	74
NE	13	29	47	0	0	0	89
ENE	10	25	32	4	0	0	71
E	4	21	19	1	0	0	45
ESE	3	21	11	3	0	0	38
SE	1	21	5	1	0	0	28
SSE	8	31	22	2	1	0	64
S	16	59	30	12	3	0	120
SSW	9	44	37	9	0	0	99
SU	23	98	17	2	0	0	140
USU	33	171	58	2	1	0	271
U	40	110	141	43	3	0	337
UNW	27	102	135	62	7	0	333
NW	38	88	55	17	0	0	198
NNW	10	63	29	2	0	0	104
VARIABLE	27	7	10	2	0	0	46

TOTAL 2980  
 PERIODS OF CALM(HOURS): 0  
 HOURS OF MISSING DATA: 188

### III. ENVIRONMENTAL SUMMARY



## Radiological Environmental Monitoring Program

The Radiological Environmental Monitoring Program was conducted during the reporting period in accordance with Technical Specification 4.6.B.3.

The program included five general types of monitoring. These were (1) atmospheric radiation (2) fallout (3) domestic water (4) surface water and (5) marine life. This monitoring was accomplished by analyzing film badges for exposure and particulate filters, precipitation, vegetation, soil, crops, well water, surface water, aquatic sediment and clams for radioactivity. The results from these analyses are found in Tables 17 through 19. The scheduled collection period covered by this monitoring extended from June 1, 1981 through November 30, 1981. The sampling locations are listed in Table 13 and are depicted in Figure 1.

TABLE 13  
OYSTER CREEK STATION  
ENVIRONMENTAL MONITORING STATIONS  
LOCATION AND SAMPLE TYPE COLLECTED

<u>STATION NUMBER</u>		<u>SAMPLE COLLECTED</u>
1	Forked River, N.J. - Oyster Creek Meteorological Tower	APT, AIO, RG, RWA, VGTN, SOIL
T1	Forked River, N.J. - Oyster Creek Meteorological Tower	RG
2	Pinewald, N.J. - Route #9 at JCP&L Company Pinewald Substation north of Forked River, N.J.	APT, AIO, RG, RWA, VGTN, SOIL
3	Island Beach State Park, N.J. - Near old Coast Guard Station	APT, AIO, RG, RWA, VGTN, SOIL
4	Barnegat, N.J. - Route #534, Windward at Barnegat, first road West of Parkway Exit	APT, AIO, RG, RWA, VGTN, SOIL
5	Forked River, N.J. - Garden State Parkway Northbound Entrance to Holiday House	APT, AIO, RG, RWA, VGTN, SOIL
6	Forked River, N.J. - Lane Place behind St. Pius X Catholic Church	RG
7	Waretown, N.J. - Compass Road, second pole North of Bay Parkway	RG
8	Waretown, N.J. - Route #9 at the Waretown Substation	RG
9	Waretown, N.J. - Route #532, North side of road at Parkway	RG
10	Toms River, N.J. - Route #37 East, adjacent to "Eastern Off Road Supply"	RG
11	Harvey Cedars, N.J. - Long Beach Blvd. and East 70th Street, Long Beach Island	RG
12	Cedar Run, N.J. - Route #9, East of Assembly of God Church	RG
13	South Toms River, N.J. - Dover Road, next to last pole traveling West on North side	RG
14	Lakewood, N.J. - Larrabee Substation, just off Route #547 on Randolph Road	RG

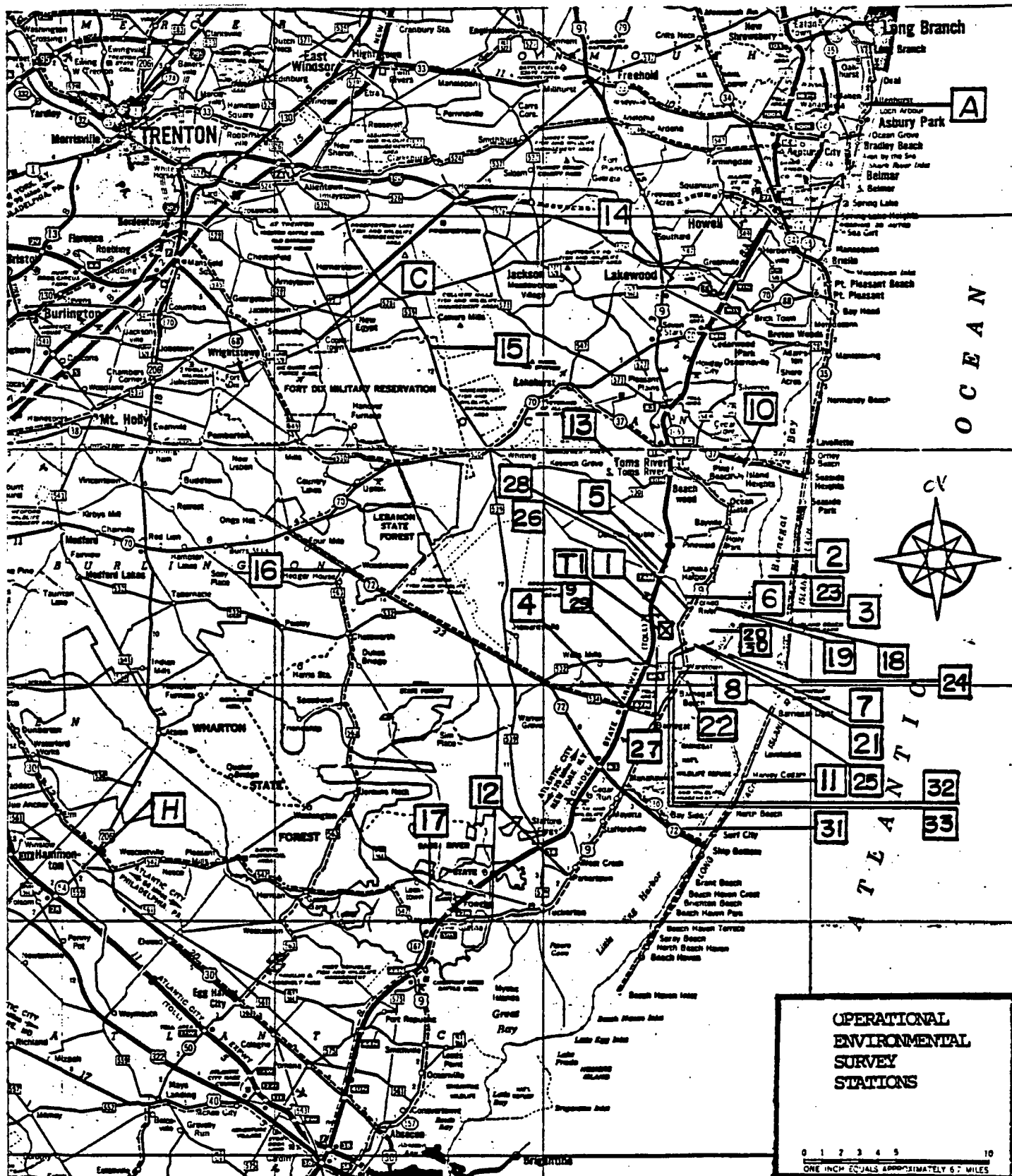
TABLE 13 (Con't)  
OYSTER CREEK STATION  
ENVIRONMENTAL MONITORING STATIONS  
LOCATION AND SAMPLE TYPE COLLECTED

<u>STATION NUMBER</u>		<u>SAMPLE COLLECTED</u>
15	New Egypt, N.J. - Route #539, last pole on South side, adjacent to "Bomarc" Site	RG
16	Intersection of Route #563 and Route #72, two poles South	RG
17	New Gretna, N.J. - Route #563, 2 miles North, next to High Voltage Line	RG
18	Forked River, N.J. - Lacey Road, Captain Richie's Marina	WWA
19	Forked River, N.J. - 1015 Inland Road, Forked River Beach	WWA
20	Forked River, N.J. - Finninger Farm at Environmental Lab	WWA
21	Waretown, N.J. - 215 Dock Avenue, Sands Point Harbor	WWA
22	Waretown, N.J. - 1014 Long John Silver Way, Skippers Cove	WWA
23	Barnegat Bay - Off Stouts Creek, approximately 400 yards SE (150°) of FL "1" (Heading on BWN "D")	SWA, AQS, CLAM
24	Barnegat Bay - Approximately 250 yards SE (180°) of FL "3" (Heading on N "66")	SWA, AQS, CLAM
25	Barnegat Bay - Off Holiday Harbor; approximately 200 yards SE (140°) of the Lagoon Mouth	SWA, AQS, CLAM
26	Forked River, N.J. - South Branch of Forked River, North of Bridge to Visitor Center	SWA, AQS
27	Forked River, N.J. - Downstream of Oyster Creek Fire Pond, approximately 10 yards	SWA, AQS
28	Forked River, N.J. - Lacey Road and the Garden State Parkway	CROP

TABLE 13 (Con't)  
OYSTER CREEK STATION  
ENVIRONMENTAL MONITORING STATIONS  
LOCATION AND SAMPLE TYPE COLLECTED

<u>STATION NUMBER</u>		<u>SAMPLE COLLECTED</u>
29	Barnegat, N.J. - Route #534 and the Garden State Parkway	CROP
30	Forked River, N.J. - Finninger Farm along Fence	CROP
31	Manahawkin Bay - Approximately 25 yards SE (140°) of C "23" and N "24"	SWA, AQS, CLAM
32	Oyster Creek - Mouth of Creek midway between Bulkhead on North Shore and South Shore of Creek	SWA, AQS
33	Oyster Creek - Approximately 1200 yards East of Route #9 Bridge, in middle of channel, directly South of Bulkhead running perpendicular to North Shore	SWA, AQS
A	Allenhurst, N.J. - JCP&L Company District Headquarters, on roof	APT, AIO, RG, RWA
C	Cookstown, N.J. - Route #528 Spur, at JCP&L Company District Dispatcher	APT, AIO, RG, RWA
H	Hammonton, N.J. - Egg Harbor Road, at the Atlantic City Electric District Dispatcher	APT, AIO, RG, RWA

APT = Air Particulate  
AIO = Air Iodine  
RG = Radiogas/Direct Radiation  
RWA = Precipitation  
WWA = Well Water  
SWA = Surface Water  
AQS = Aquatic Sediment  
CLAM = Clams  
CROP = Pasture/Crops  
VGTN = Vegetation  
SOIL = Soil



OYSTER CREEK NUCLEAR GENERATING STATION

FIGURE 1

**Table 14**  
**Radiogas Film Badges\***  
**Scheduled Collection Period**

June 1, 1981 through November 30, 1981

see analysis

\*These data not representative of environmental levels because of accidental exposure during security search-of data section

Collection Date		6/22/81	7/20/81	8/17/81		Three Month Total	9/14/81	10/13/81	11/9/81		Three Month Total	Six Month Total
Station	Unit											
1	Millirem	4	8	23		35	1	0	6		7	42
T1	Millirem	0	8	12		20	1	0	9		10	30
2	Millirem	0	8	31		39	1	3	6		10	49
3	Millirem	0	8	12		20	1	0	0		1	21
4	Millirem	0	0	23		23	1	0	0		1	24
5	Millirem	0	4	19		23	1	0	12		13	36
6	Millirem	0	0	5		5	1	0	12		13	18
7	Millirem	0	LOST	23		-	0	3	12		15	-
8	Millirem	0	4	5		9	1	0	9		10	19
9	Millirem	0	8	12		20	2	5	9		16	36
10	Millirem	0	12	12		24	0	0	12		12	36
11	Millirem	0	4	16		20	2	0	6		8	28
12	Millirem	0	4	12		16	2	3	6		11	27
13	Millirem	0	4	19		23	0	5	9		14	37
14	Millirem	0	4	12		16	1	0	9		10	26
15	Millirem	0	4	8		12	1	3	9		13	25
16	Millirem	0	4	12		16	1	0	9		10	26
17	Millirem	0	4	16		20	1	0	LOST		-	-
A	Millirem	0	4	8		12	2	0	0		2	14
C	Millirem	0	4	12		16	0	0	0		0	16
H	Millirem	0	0	8		8	1	0	0		1	9

Table 15  
 -----DIRECT RADIATION (MR)-----  
 AS MEASURED BY  
 -----THERMOLUMINESCENT DOSIMETER-----  
 FOR  
 JUNE 1981 THRU NOVEMBER 1981

(MONTHLY TLD READINGS)

ANALYSIS DATE:		01JUL81		29JUL81		26AUG81		23SEP81		22OCT81		23NOV81			
STATION	COLLECT DATE	DOSE	COLLECT DATE	DOSE	COLLECT DATE	DOSE	3-MO TOTAL	COLLECT DATE	DOSE	COLLECT DATE	DOSE	COLLECT DATE	DOSE	3-MO TOTAL	6-MO TOTAL
A	25JUN81	5.29	23JUL81	5.52	19AUG81	5.53	16.34	17SEP81	5.23	13OCT81	6.01	10NOV81	5.77	17.01	33.35
C	24JUN81	4.39	20JUL81	4.41	18AUG81	4.98	13.78	15SEP81	4.65	20OCT81	5.09	11NOV81	5.08	14.82	28.60
H	24JUN81	4.10	20JUL81	4.55	18AUG81	3.62	12.27	15SEP81	4.18	20OCT81	4.55	13NOV81	4.61	13.34	25.61
1	26JUN81	6.05	23JUL81	5.86	*	.	11.91	18SEP81	5.61	16OCT81	5.40	16NOV81	8.00	19.01	30.92
2	26JUN81	4.24	23JUL81	3.94	21AUG81	4.08	12.26	17SEP81	4.32	14OCT81	4.53	16NOV81	4.46	13.31	25.57
3	25JUN81	5.72	21JUL81	4.27	19AUG81	3.86	13.85	17SEP81	4.11	13OCT81	4.41	10NOV81	4.61	13.13	26.98
4	24JUN81	4.75	20JUL81	4.08	17AUG81	4.25	13.08	15SEP81	4.01	14OCT81	4.38	12NOV81	4.60	12.99	26.07
5	25JUN81	4.16	23JUL81	4.47	19AUG81	3.94	12.57	17SEP81	3.99	15OCT81	4.64	10NOV81	4.97	13.60	26.17
6	26JUN81	4.22	23JUL81	4.38	18AUG81	4.61	13.21	16SEP81	4.11	15OCT81	4.42	12NOV81	5.22	13.75	26.96
7	24JUN81	4.33	22JUL81	3.78	20AUG81	3.89	12.00	16SEP81	3.82	16OCT81	4.03	13NOV81	5.07	12.92	24.92
8	24JUN81	4.39	22JUL81	4.00	17AUG81	3.39	11.78	16SEP81	3.53	14OCT81	4.57	12NOV81	4.52	12.62	24.40
9	26JUN81	5.01	22JUL81	4.51	20AUG81	4.30	13.82	16SEP81	4.25	14OCT81	4.29	12NOV81	5.15	13.69	27.51
T1	26JUN81	7.08	23JUL81	5.75	20AUG81	5.80	18.63	18SEP81	4.75	16OCT81	5.78	16NOV81	8.04	18.57	37.20
10	25JUN81	4.41	21JUL81	4.01	19AUG81	4.01	12.43	16SEP81	4.11	13OCT81	4.54	10NOV81	4.54	13.19	25.62
11	26JUN81	4.30	22JUL81	3.74	17AUG81	4.44	12.48	15SEP81	3.52	14OCT81	3.80	11NOV81	4.55	11.87	24.35
12	24JUN81	4.44	20JUL81	3.78	18AUG81	3.91	12.13	15SEP81	3.54	14OCT81	4.47	11NOV81	4.23	12.24	24.37
13	25JUN81	4.38	21JUL81	4.27	19AUG81	3.96	12.61	16SEP81	4.06	13OCT81	4.43	12NOV81	4.21	12.70	25.31
14	25JUN81	5.49	21JUL81	5.06	19AUG81	4.79	15.34	17SEP81	5.48	13OCT81	5.21	10NOV81	5.93	16.62	31.96
15	24JUN81	4.16	20JUL81	4.32	18AUG81	3.79	12.27	15SEP81	3.76	20OCT81	4.47	11NOV81	4.63	12.86	25.13
16	26JUN81	3.77	22JUL81	4.20	17AUG81	3.94	11.91	16SEP81	3.72	14OCT81	4.44	12NOV81	4.36	12.52	24.43
17	24JUN81	3.95	20JUL81	3.90	18AUG81	3.94	11.79	15SEP81	4.05	20OCT81	4.70	11NOV81	4.94	13.69	25.48

\*TLD LOST

TABLE 16

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

The following pages are a summary of REMP data for the scheduled collection period June, 1981 thru November, 1981. Data is summarized on a semi-annual and quarterly basis, where

- 1.)  $XXX-MEAN(N/TOTAL)$  : MEAN AND RANGE BASED ON RANGE  
DETECTABLE ACTIVITIES OF ALL XXX STATIONS
- 2.)  $XXX=BACKGROUND$  OR INDICATOR STATIONS
- 3.)  $(N/TOTAL)=FRACTION$  OF DETECTABLE ACTIVITIES/  
TOTAL NUMBER OF ANALYSES PERFORMED
- 4.)  $STATION=STATION$  WITH HIGHEST SEMI-ANNUAL MEAN
- 5.) BACKGROUND STATIONS USED ARE:

STATION	A,C,H	31
SAMPLE TYPE	AIR PARTICULATE	AQUATIC SEDIMENT
	AIR IODINE	CLAMS
	PRECIPITATION	SURFACE WATER

- 6.) IN ADDITION, THE FOLLOWING FOOD PRODUCTS WERE SAMPLED FOR GAMMA ISOTOPIC CONTENT DURING THE SUMMER MONTHS:

CORN  
CABBAGE  
TOMATOES  
SPINACH  
BLUEBERRIES

SAMPLE LOCATION CODES FOR BLUEBERRIES ARE GIVEN BELOW:

STATION	SYMBOL
BARNEGAT	BARN
BAYWOOD	BAYW
LOWEBANK	LOWE



Table 17  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH NOVEMBER, 1981**  
**SEMI-ANNUAL SUMMARY**

1

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	STATION	BACKGROUND-MEAN(N/TOTAL) RANGE	STATION-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
VEGETATION (PCI/GM(WET))	GROSS BETA		30	7.48E-02	3.54E+00 (30 /30 ) ( 1.70E+00 - 6.75E+00)		( . . - . / . )		1 2 3 4 5
						3	5.22E+00(6 /6 ) ( 2.75E+00 - 6.75E+00)		
AIR PARTICULATE (PCI/M3 )	GROSS ALPHA		16	5.42E-04	1.38E-03 (10 /10 ) ( 1.02E-03 - 1.94E-03)		1.30E-03(6 /6 ) ( 1.06E-03 - 1.45E-03)		1 2 3 4 5
						5	1.53E-03(2 /2 ) ( 1.12E-03 - 1.94E-03)		
AIR PARTICULATE (PCI/M3 )	GROSS BETA		104	1.09E-02	5.05E-02 (65 /65 ) ( 1.39E-02 - 1.47E-01)		4.22E-02(39 /39 ) ( 7.79E-03 - 1.28E-01)		1 2 3 4 5
						4	5.41E-02(13 /13 ) ( 2.09E-02 - 1.14E-01)		
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CE-144	104	4.00E-01	< LLD (0 /65 )		< LLD (0 /39 )		1 2 3 4 5
						5	< LLD (0 /13 )		
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	AG-110M	104	3.40E-02	< LLD (0 /65 )		< LLD (0 /39 )		1 2 3 4 5
						5	< LLD (0 /13 )		
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	TE-129M	104	1.50E+00	< LLD (0 /65 )		< LLD (0 /39 )		1 2 3 4 5
						5	< LLD (0 /13 )		
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	MO-99	102	1.30E+00	< LLD (0 /63 )		< LLD (0 /39 )		1 2 3 4 5
						5	< LLD (0 /13 )		

Table 17  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH NOVEMBER, 1981**  
**SEMI-ANNUAL SUMMARY**

2

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN					
					STATION		STATION-MEAN(N/TOTAL) RANGE							
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	ZRNB-95	32	4.00E-02	< LLD	( 0 /20 )		< LLD	( 0 /12 )	1	2	3	4	5
						5		< LLD	( 0 /4 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CS-134	104	3.50E-02	< LLD	( 0 /65 )		< LLD	( 0 /39 )	1	2	3	4	5
						5		< LLD	( 0 /13 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CO-58	104	4.00E-02	< LLD	( 0 /65 )		< LLD	( 0 /39 )	1	2	3	4	5
						5		< LLD	( 0 /13 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	MN-54	104	3.90E-02	< LLD	( 0 /65 )		< LLD	( 0 /39 )	1	2	3	4	5
						5		< LLD	( 0 /13 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	TH-232	104	1.20E-01	< LLD	( 0 /65 )		< LLD	( 0 /39 )	1	2	3	4	5
						5		< LLD	( 0 /13 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	FE-59	103	8.60E-02	< LLD	( 0 /65 )		< LLD	( 0 /38 )	1	2	3	4	5
						5		< LLD	( 0 /13 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CS-136	104	9.20E-02	< LLD	( 0 /65 )		< LLD	( 0 /39 )	1	2	3	4	5
						5		< LLD	( 0 /13 )					

Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

3

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	ZN-65	104	6.00E-02	< LLD	( 0 /65 )	< LLD	( 0 /39 )	1	2	3	4	5
							5	< LLD ( 0 /13 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CO-60	103	3.90E-02	< LLD	( 0 /64 )	< LLD	( 0 /39 )	1	2	3	4	5
							5	< LLD ( 0 /12 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	K-40	103	6.50E-01	8.70E-02 ( 1 /64 ) ( 8.70E-02 - 8.70E-02)		< LLD	( 0 /39 )	1	2	3	4	5
							3	8.70E-02( 1 /12 ) ( 8.70E-02 - 8.70E-02)					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	BALA-140	56	1.00E-01	< LLD	( 0 /35 )	< LLD	( 0 /21 )	1	2	3	4	5
							5	< LLD ( 0 /7 )					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	BE-7	104	4.10E-01	1.52E-01 ( 13 /65 ) ( 1.00E-01 - 3.10E-01)		1.11E-01( 6 /39 ) ( 5.40E-02 - 1.60E-01)		1	2	3	4	5
							4	2.20E-01( 2 /13 ) ( 1.30E-01 - 3.10E-01)					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	ZR-95	72	5.90E-02	3.00E-02 ( 2 /45 ) ( 2.90E-02 - 3.10E-02)		< LLD	( 0 /27 )	1	2	3	4	5
							4	3.10E-02( 1 /9 ) ( 3.10E-02 - 3.10E-02)					
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	NB-95	72	5.00E-02	2.91E-02 ( 21 /45 ) ( 9.50E-03 - 6.00E-02)		2.64E-02( 10 /27 ) ( 1.80E-02 - 4.20E-02)		1	2	3	4	5
							5	3.70E-02( 4 /9 ) ( 2.10E-02 - 5.90E-02)					

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Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

4

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	SB-125	104	1.00E-01	< LLD	(0 /65 )	< LLD	(0 /39 )	1	2	3	4	5
						5	< LLD (0 /13 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CE-141	104	1.20E-01	< LLD	(0 /65 )	< LLD	(0 /39 )	1	2	3	4	5
						5	< LLD (0 /13 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	RU-103	104	5.00E-02	< LLD	(0 /65 )	< LLD	(0 /39 )	1	2	3	4	5
						5	< LLD (0 /13 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CR-51	104	5.60E-01	< LLD	(0 /65 )	< LLD	(0 /39 )	1	2	3	4	5
						5	< LLD (0 /13 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	BA-140	48	1.80E-01	< LLD	(0 /30 )	< LLD	(0 /18 )	1	2	3	4	5
						5	< LLD (0 /6 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	LA-140	47	5.20E-02	< LLD	(0 /30 )	< LLD	(0 /17 )	1	2	3	4	5
						5	< LLD (0 /6 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	RA-226	104	8.30E-02	< LLD	(0 /65 )	< LLD	(0 /39 )	1	2	3	4	5
						5	< LLD (0 /13 )						

Table 17  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH NOVEMBER, 1981  
 SEMI-ANNUAL SUMMARY

5

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	I-131	104	2.80E-01	< LLD	( 0 /65 )	< LLD	( 0 /39 )	1	2	3	4	5
						5	< LLD ( 0 /13 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	HP-239	98	9.20E+00	< LLD	( 0 /61 )	< LLD	( 0 /37 )	1	2	3	4	5
						5	< LLD ( 0 /12 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	RU-106	104	3.90E-01	< LLD	( 0 /65 )	< LLD	( 0 /39 )	1	2	3	4	5
						5	< LLD ( 0 /13 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CO-57	104	4.80E-02	< LLD	( 0 /65 )	< LLD	( 0 /39 )	1	2	3	4	5
						5	< LLD ( 0 /13 )						
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CS-137	104	3.60E-02	< LLD	( 0 /65 )	< LLD	( 0 /39 )	1	2	3	4	5
						5	< LLD ( 0 /13 )						
PRECIPITATION (NCI/M2 )	GROSS BETA-SS		48	1.81E-01	1.81E-01 ( 4 /30 ) ( 1.79E-03 - 3.02E-01)		5.48E-02(2 /18 ) ( 2.53E-03 - 1.07E-01)		1	2	3	4	5
							4	2.56E-01(2 /6 ) ( 2.11E-01 - 3.02E-01)					
PRECIPITATION (NCI/M2 )	GROSS BETA-DS		48	1.94E-01	4.72E-01 (29 /30 ) ( 4.31E-02 - 2.04E+00)		4.59E-01(18 /18 ) ( 1.03E-01 - 1.21E+00)		1	2	3	4	5
							5	5.89E-01(6 /6 ) ( 9.75E-02 - 1.83E+00)					

Table 17  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH NOVEMBER, 1981  
 SEMI-ANNUAL SUMMARY

6

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
						STATION	STATION-MEAN(N/TOTAL) RANGE						
AIR IODINE (PCI/M3 )	IODINE-131		104	7.97E-02	< LLD	(0 /65 )	< LLD (0 /39 )		1	2	3	4	5
						5	< LLD (0 /13 )						
CABBAGE (PCI/GM(WET))	GELI GAMMA	CE-144	5	1.30E-01	< LLD	(0 /3 )	< LLD (0 /2 )		2	3	5		
						5	< LLD (0 /1 )						
CABBAGE (PCI/GM(WET))	GELI GAMMA	AG-110M	5	2.20E-02	< LLD	(0 /3 )	< LLD (0 /2 )		2	3	5		
						5	< LLD (0 /1 )						
CABBAGE (PCI/GM(WET))	GELI GAMMA	TE-129M	5	8.80E-01	< LLD	(0 /3 )	< LLD (0 /2 )		2	3	5		
						5	< LLD (0 /1 )						
CABBAGE (PCI/GM(WET))	GELI GAMMA	MO-99	3	1.10E+00	< LLD	(0 /3 )	( . / . )		2	3	5		
						5	< LLD (0 /1 )						
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-134	5	1.80E-02	< LLD	(0 /3 )	< LLD (0 /2 )		2	3	5		
						5	< LLD (0 /1 )						
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-58	5	2.20E-02	< LLD	(0 /3 )	< LLD (0 /2 )		2	3	5		
						5	< LLD (0 /1 )						

Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

7

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN		
					STATION		STATION-MEAN(N/TOTAL) RANGE				
CABBAGE (PCI/GM(WET))	GELI GAMMA	MH-54	5	2.00E-02	< LLD	(0 /3 )	< LLD	(0 /2 )	2	3	5
CABBAGE (PCI/GM(WET))	GELI GAMMA	TH-232	5	6.90E-02	< LLD	(0 /3 )	< LLD	(0 /2 )	2	3	5
CABBAGE (PCI/GM(WET))	GELI GAMMA	FE-59	5	5.10E-02	< LLD	(0 /3 )	< LLD	(0 /2 )	2	3	5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-136	5	5.30E-02	< LLD	(0 /3 )	< LLD	(0 /2 )	2	3	5
CABBAGE (PCI/GM(WET))	GELI GAMMA	ZN-65	5	4.50E-02	< LLD	(0 /3 )	< LLD	(0 /2 )	2	3	5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-60	5	3.20E-02	< LLD	(0 /3 )	< LLD	(0 /2 )	2	3	5
CABBAGE (PCI/GM(WET))	GELI GAMMA	K-40	5	2.90E-01	3.00E+00 (3 /3 ) ( 1.60E+00 - 3.80E+00)		2.20E+00(2 /2 ) ( 2.00E+00 - 2.40E+00)		2	3	5

Table 17  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH NOVEMBER, 1981**  
**SEMI-ANNUAL SUMMARY**

8

SAMPLE TYPE	ANALYSIS	ISOTOPE NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE		
CABBAGE (PCI/GM(WET))	GELI GAMMA	BALA-140	5	5.00E-02	< LLD (0 /3 )	< LLD (0 /2 )	2 3 5	
								5 < LLD (0 /1 )
CABBAGE (PCI/GM(WET))	GELI GAMMA	BE-7	5	2.00E-01	< LLD (0 /3 )	< LLD (0 /2 )	2 3 5	
								5 < LLD (0 /1 )
CABBAGE (PCI/GM(WET))	GELI GAMMA	ZR-95	5	4.10E-02	< LLD (0 /3 )	< LLD (0 /2 )	2 3 5	
								5 < LLD (0 /1 )
CABBAGE (PCI/GM(WET))	GELI GAMMA	HB-95	5	2.70E-02	< LLD (0 /3 )	< LLD (0 /2 )	2 3 5	
								5 < LLD (0 /1 )
CABBAGE (PCI/GM(WET))	GELI GAMMA	SB-125	5	5.50E-02	< LLD (0 /3 )	< LLD (0 /2 )	2 3 5	
								5 < LLD (0 /1 )
CABBAGE (PCI/GM(WET))	GELI GAMMA	CE-141	5	3.90E-02	< LLD (0 /3 )	< LLD (0 /2 )	2 3 5	
								5 < LLD (0 /1 )
CABBAGE (PCI/GM(WET))	GELI GAMMA	RU-103	5	2.50E-02	< LLD (0 /3 )	< LLD (0 /2 )	2 3 5	
								5 < LLD (0 /1 )



Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	STATION	BACKGROUND-MEAN(N/TOTAL) RANGE	STATION-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CABBAGE (PCI/GM(WET))	GELI GAMMA	CR-51	5	2.50E-01	< LLD (0 /3 )	5	< LLD (0 /2 )	< LLD (0 /1 )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	RA-226	5	3.80E-02	< LLD (0 /3 )	5	< LLD (0 /2 )	< LLD (0 /1 )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	I-131	5	1.20E-01	< LLD (0 /3 )	5	< LLD (0 /2 )	< LLD (0 /1 )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	NP-239	3	8.60E+00	< LLD (0 /3 )	5	( . . . ) < LLD (0 /1 )	< LLD (0 /1 )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	RU-106	5	1.90E-01	< LLD (0 /3 )	5	< LLD (0 /2 )	< LLD (0 /1 )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-57	5	1.60E-02	< LLD (0 /3 )	5	< LLD (0 /2 )	< LLD (0 /1 )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-137	5	2.10E-02	4.10E-02 (2 /3 ) ( 3.20E-02 - 5.00E-02 )	5	< LLD (0 /2 )	< LLD (0 /1 ) ( 5.00E-02 - 5.00E-02 )	2 3 5

Table 17  
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 JUNE, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE			
CORN (PCI/GM(WET))	GELI GAMMA	CE-144	5	2.30E-01	< LLD	( 0 / 2 )	< LLD	( 0 / 3 )	3 4
							4	< LLD ( 0 / 1 )	
CORN (PCI/GM(WET))	GELI GAMMA	AG-110M	5	3.50E-02	< LLD	( 0 / 2 )	< LLD	( 0 / 3 )	3 4
							4	< LLD ( 0 / 1 )	
CORN (PCI/GM(WET))	GELI GAMMA	TE-129M	5	1.80E+00	< LLD	( 0 / 2 )	< LLD	( 0 / 3 )	3 4
							4	< LLD ( 0 / 1 )	
CORN (PCI/GM(WET))	GELI GAMMA	MO-99	1	3.10E+00	< LLD	( 0 / 1 )	( . . . )	( . . . )	3
							3	< LLD ( 0 / 1 )	
CORN (PCI/GM(WET))	GELI GAMMA	CS-134	5	3.30E-02	< LLD	( 0 / 2 )	< LLD	( 0 / 3 )	3 4
							4	< LLD ( 0 / 1 )	
CORN (PCI/GM(WET))	GELI GAMMA	CO-58	5	3.80E-02	< LLD	( 0 / 2 )	< LLD	( 0 / 3 )	3 4
							4	< LLD ( 0 / 1 )	
CORN (PCI/GM(WET))	GELI GAMMA	MN-54	5	3.40E-02	< LLD	( 0 / 2 )	< LLD	( 0 / 3 )	3 4
							4	< LLD ( 0 / 1 )	

Table 17  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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 JUNE, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE			
CORN (PCI/GM(WET))	GELI GAMMA	TH-232	5	1.30E-01	< LLD	(0 /2 )	< LLD	(0 /3 )	3 4
							4	< LLD (0 /1 )	
CORN (PCI/GM(WET))	GELI GAMMA	FE-59	5	8.50E-02	< LLD	(0 /2 )	< LLD	(0 /3 )	3 4
							4	< LLD (0 /1 )	
CORN (PCI/GM(WET))	GELI GAMMA	CS-136	5	1.10E-01	< LLD	(0 /2 )	< LLD	(0 /3 )	3 4
							4	< LLD (0 /1 )	
CORN (PCI/GM(WET))	GELI GAMMA	ZN-65	5	7.30E-02	< LLD	(0 /2 )	< LLD	(0 /3 )	3 4
							4	< LLD (0 /1 )	
CORN (PCI/GM(WET))	GELI GAMMA	CO-60	5	4.10E-02	< LLD	(0 /2 )	< LLD	(0 /3 )	3 4
							4	< LLD (0 /1 )	
CORN (PCI/GM(WET))	GELI GAMMA	K-40	5	7.30E-01	2.15E+00 (2 /2 ) ( 1.90E+00 - 2.40E+00 )		2.40E+00(3 /3 ) ( 2.30E+00 - 2.50E+00 )		3 4
							4	2.40E+00(1 /1 ) ( 2.40E+00 - 2.40E+00 )	
CORN (PCI/GM(WET))	GELI GAMMA	BALA-140	5	1.30E-01	< LLD	(0 /2 )	< LLD	(0 /3 )	3 4
							4	< LLD (0 /1 )	

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE			
CORN (PCI/GM(WET))	GELI GAMMA	BE-7	5	4.20E-01	< LLD	(0 / 2 )	< LLD	(0 / 3 )	3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	ZR-95	5	8.30E-02	< LLD	(0 / 2 )	< LLD	(0 / 3 )	3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	NB-95	5	5.60E-02	< LLD	(0 / 2 )	< LLD	(0 / 3 )	3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	SB-125	5	1.00E-01	< LLD	(0 / 2 )	< LLD	(0 / 3 )	3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	CE-141	5	7.70E-02	< LLD	(0 / 2 )	< LLD	(0 / 3 )	3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	RU-103	5	5.00E-02	< LLD	(0 / 2 )	< LLD	(0 / 3 )	3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	CR-51	5	4.50E-01	< LLD	(0 / 2 )	< LLD	(0 / 3 )	3 4
						4	< LLD (0 / 1 )		

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 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	STATION	BACKGROUND-MEAN(N/TOTAL) RANGE	STATION-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CORN (PCI/GM(WET))	GELI GAMMA	RA-226	5	7.30E-02	< LLD (0 / 2 )	4	< LLD (0 / 3 )		3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	I-131	5	2.60E-01	< LLD (0 / 2 )	4	< LLD (0 / 3 )		3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	RU-106	5	3.40E-01	< LLD (0 / 2 )	4	< LLD (0 / 3 )		3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	CO-57	5	2.80E-02	< LLD (0 / 2 )	4	< LLD (0 / 3 )		3 4
						4	< LLD (0 / 1 )		
CORN (PCI/GM(WET))	GELI GAMMA	CS-137	5	3.60E-02	< LLD (0 / 2 )	4	< LLD (0 / 3 )		3 4
						4	< LLD (0 / 1 )		
SURFACE WATER (PCI/L)	GROSS ALPHA-SS		48	5.61E-01	2.84E-01 (3 / 42 ) ( 1.82E-01 - 4.76E-01)	23	< LLD (0 / 6 ) 4.76E-01(1 / 6 ) ( 4.76E-01 - 4.76E-01)		23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	GROSS BETA-SS		48	4.47E-01	5.70E-01 (19 / 42 ) ( 2.75E-01 - 1.35E+00)	25	5.34E-01(2 / 6 ) ( 4.92E-01 - 5.76E-01) 7.53E-01(1 / 6 ) ( 7.53E-01 - 7.53E-01)		23 24 25 26 27 32 33

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 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY •  
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 JUNE, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
							STATION	STATION-MEAN(N/TOTAL) RANGE					
SURFACE WATER (PCI/L)	GROSS BETA-DS		48	1.30E+01	1.56E+02 (38 /42 ) ( 2.34E+00 - 3.09E+02)			2.38E+02(6 /6 ) ( 1.61E+02 - 3.06E+02)	23	24	25	26	27
							25	2.12E+02(6 /6 ) ( 1.32E+02 - 3.09E+02)	32	33			
SURFACE WATER (MG/L)	CALCIUM BY AA		16	8.00E-02	8.47E+01 (14 /14 ) ( 1.40E+00 - 2.21E+02)			1.15E+02(2 /2 ) ( 5.70E+00 - 2.24E+02)	23	24	25	26	27
							23	1.26E+02(2 /2 ) ( 3.20E+01 - 2.21E+02)	32	33			
SURFACE WATER (PCI/L)	TRITIUM		48	2.07E+02	2.55E+02 (9 /42 ) ( 1.44E+02 - 4.60E+02)			1.24E+02(1 /6 ) ( 1.24E+02 - 1.24E+02)	23	24	25	26	27
							33	3.31E+02(1 /6 ) ( 3.31E+02 - 3.31E+02)	32	33			
SURFACE WATER (PCI/L)	TOTAL URANIUM		48	2.31E+00	1.47E+00 (8 /42 ) ( 5.67E-01 - 1.92E+00)			1.62E+00(3 /6 ) ( 1.21E+00 - 2.30E+00)	23	24	25	26	27
							23	1.92E+00(1 /6 ) ( 1.92E+00 - 1.92E+00)	32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	CE-144	48	9.60E+01	< LLD	(0 /42 )		< LLD (0 /6 )	23	24	25	26	27
							33	< LLD (0 /6 )	32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	AG-110M	48	9.60E+00	< LLD	(0 /42 )		< LLD (0 /6 )	23	24	25	26	27
							33	< LLD (0 /6 )	32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	TE-129M	48	1.80E+02	< LLD	(0 /42 )		< LLD (0 /6 )	23	24	25	26	27
							33	< LLD (0 /6 )	32	33			

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**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
SURFACE WATER (PCI/L )	NAI GAMMA	MO-99	48	1.50E+03	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	ZRNB-95	48	9.30E+00	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	CS-134	48	9.40E+00	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	CO-58	48	1.00E+01	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	MN-54	48	9.60E+00	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	TH-232	48	3.10E+01	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	FE-59	48	1.90E+01	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						

Table 17  
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 JUNE, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE						
SURFACE WATER (PCI/L)	NAI GAMMA	CS-136	48	2.10E+01	< LLD (0 /42 )	< LLD (0 /6 )	< LLD (0 /6 )	23 32	24 33	25	26	27
					33	< LLD (0 /6 )						
SURFACE WATER (PCI/L)	NAI GAMMA	TE-132	48	1.80E+02	< LLD (0 /42 )	< LLD (0 /6 )	< LLD (0 /6 )	23 32	24 33	25	26	27
					33	< LLD (0 /6 )						
SURFACE WATER (PCI/L)	NAI GAMMA	ZN-65	48	1.60E+01	< LLD (0 /42 )	< LLD (0 /6 )	< LLD (0 /6 )	23 32	24 33	25	26	27
					33	< LLD (0 /6 )						
SURFACE WATER (PCI/L)	NAI GAMMA	CO-60	48	9.40E+00	< LLD (0 /42 )	< LLD (0 /6 )	< LLD (0 /6 )	23 32	24 33	25	26	27
					33	< LLD (0 /6 )						
SURFACE WATER (PCI/L)	NAI GAMMA	K-40	48	1.20E+02	2.79E+02 (30 /42 ) ( 1.50E+02 - 4.90E+02 )	2.85E+02 (6 /6 ) ( 1.70E+02 - 3.70E+02 )	2.85E+02 (6 /6 ) ( 1.70E+02 - 3.70E+02 )	23 32	24 33	25	26	27
					33	3.65E+02 (6 /6 ) ( 2.70E+02 - 4.90E+02 )						
SURFACE WATER (PCI/L)	NAI GAMMA	BALA-140	48	1.80E+01	< LLD (0 /42 )	< LLD (0 /6 )	< LLD (0 /6 )	23 32	24 33	25	26	27
					33	< LLD (0 /6 )						
SURFACE WATER (PCI/L)	NAI GAMMA	BE-7	48	9.20E+01	< LLD (0 /42 )	< LLD (0 /6 )	< LLD (0 /6 )	23 32	24 33	25	26	27
					33	< LLD (0 /6 )						



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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
SURFACE WATER (PCI/L )	NAI GAMMA	CR-51	48	1.30E+02	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	RA-226	48	1.60E+01	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	I-131	48	3.10E+01	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	NA-22	48	9.40E+00	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	RU-106	48	9.50E+01	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	I-133	48	5.30E+03	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						
SURFACE WATER (PCI/L )	NAI GAMMA	CS-137	48	9.30E+00	< LLD	( 0 /42 )	< LLD	( 0 /6 )	23 32	24 33	25	26	27
						33	< LLD ( 0 /6 )						

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
						STATION	STATION-MEAN(N/TOTAL) RANGE					
SURFACE WATER (PCI/L)	RADIUM-226		48	2.02E-01	3.45E-01 (36 /42 ) ( 9.79E-02 - 9.82E-01)		2.59E-01(4 /6 ) ( 1.73E-01 - 3.76E-01)	23	24	25	26	27
						26	6.87E-01(5 /6 ) ( 4.44E-01 - 9.82E-01)	32	33			
SURFACE WATER (PCI/L)	RADIUM-228		48	1.18E+00	5.54E-01 (8 /42 ) ( 3.76E-01 - 8.17E-01)		< LLD (0 /6 )	23	24	25	26	27
						26	7.91E-01(2 /6 ) ( 7.65E-01 - 8.17E-01)	32	33			
SURFACE WATER (PCI/L)	STRONTIUM-90		48	3.09E+01	7.62E-01 (2 /42 ) ( 7.15E-01 - 8.10E-01)		4.43E+01(1 /6 ) ( 4.43E+01 - 4.43E+01)	23	24	25	26	27
						33	8.10E-01(1 /6 ) ( 8.10E-01 - 8.10E-01)	32	33			
SURFACE WATER (PCI/L)	GROSS ALPHA-DS		48	2.56E+00	2.55E+00 (9 /42 ) ( 8.59E-01 - 5.06E+00)		2.31E+00(3 /6 ) ( 1.71E+00 - 2.82E+00)	23	24	25	26	27
						23	4.27E+00(2 /6 ) ( 3.49E+00 - 5.06E+00)	32	33			
TOMATOES (PCI/GM(WET))	GELI GAMMA	CE-144	8	1.20E-01	< LLD (0 /5 )		< LLD (0 /3 )	1	2	3	4	5
						5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	AG-110M	8	2.10E-02	< LLD (0 /5 )		< LLD (0 /3 )	1	2	3	4	5
						5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	TE-129M	8	9.40E-01	< LLD (0 /5 )		< LLD (0 /3 )	1	2	3	4	5
						5	< LLD (0 /1 )					

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
TOMATOES (PCI/GM(WET))	GELI GAMMA	MO-99	5	3.20E+00	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5	
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-134	8	1.60E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-58	8	2.40E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	MN-54	8	1.80E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	TH-232	8	6.20E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	FE-59	8	6.10E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-136	8	6.20E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					

Table 17  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
						STATION	STATION-MEAN(N/TOTAL) RANGE						
TOMATOES (PCI/GM(WET))	GELI GAMMA	ZN-65	8	4.90E-02	< LLD	(0 / 5 )	< LLD (0 / 3 )		1	2	3	4	5
						5	< LLD (0 / 1 )						
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-60	8	2.20E-02	< LLD	(0 / 5 )	< LLD (0 / 3 )		1	2	3	4	5
						5	< LLD (0 / 1 )						
TOMATOES (PCI/GM(WET))	GELI GAMMA	K-40	8	2.80E-01	2.32E+00 (5 / 5 ) ( 1.90E+00 - 2.80E+00)		2.47E+00(3 / 3 ) ( 1.70E+00 - 3.20E+00)		1	2	3	4	5
						4	2.80E+00(1 / 1 ) ( 2.80E+00 - 2.80E+00)						
TOMATOES (PCI/GM(WET))	GELI GAMMA	BALA-140	8	5.20E-02	< LLD	(0 / 5 )	< LLD (0 / 3 )		1	2	3	4	5
						5	< LLD (0 / 1 )						
TOMATOES (PCI/GM(WET))	GELI GAMMA	BE-7	8	1.80E-01	< LLD	(0 / 5 )	< LLD (0 / 3 )		1	2	3	4	5
						5	< LLD (0 / 1 )						
TOMATOES (PCI/GM(WET))	GELI GAMMA	ZR-95	8	4.30E-02	< LLD	(0 / 5 )	< LLD (0 / 3 )		1	2	3	4	5
						5	< LLD (0 / 1 )						
TOMATOES (PCI/GM(WET))	GELI GAMMA	NB-95	8	2.90E-02	< LLD	(0 / 5 )	< LLD (0 / 3 )		1	2	3	4	5
						5	< LLD (0 / 1 )						

Table 17  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
TOMATOES (PCI/GM(WET))	GELI GAMMA	SB-125	8	5.30E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	CE-141	8	4.00E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	RU-103	8	2.40E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	CR-51	8	2.10E-01	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	RA-226	8	3.70E-02	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	I-131	8	1.10E-01	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					
TOMATOES (PCI/GM(WET))	GELI GAMMA	RU-106	8	1.60E-01	< LLD	(0 /5 )	< LLD	(0 /3 )	1	2	3	4	5
							5	< LLD (0 /1 )					

Table 17  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN					
						STATION	STATION-MEAN(N/TOTAL) RANGE							
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-57	8	1.50E-02	< LLD	(0 / 5 )		< LLD	(0 / 3 )	1	2	3	4	5
							5	< LLD (0 / 1 )						
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-137	8	2.00E-02	< LLD	(0 / 5 )		< LLD	(0 / 3 )	1	2	3	4	5
							5	< LLD (0 / 1 )						
WELL WATER (PCI/L )	GROSS ALPHA-SS		36	1.81E+00	2.36E-01 (2 / 36 ) ( 2.28E-01 - 2.45E-01 )			( . / . ) ( . - . )		1	18	19	20	21
						1	2.45E-01(1 / 6 ) ( 2.45E-01 - 2.45E-01 )							
WELL WATER (PCI/L )	GROSS ALPHA-DS		36	5.13E+00	3.67E+00 (8 / 36 ) ( 2.00E+00 - 6.08E+00 )			( . / . ) ( . - . )		1	18	19	20	21
						21	4.30E+00(2 / 6 ) ( 2.53E+00 - 6.08E+00 )							
WELL WATER (PCI/L )	GROSS BETA-SS		36	5.95E-01	1.43E+00 (2 / 36 ) ( 1.13E+00 - 1.74E+00 )			( . / . ) ( . - . )		1	18	19	20	21
						19	1.74E+00(1 / 6 ) ( 1.74E+00 - 1.74E+00 )							
WELL WATER (PCI/L )	GROSS BETA-DS		36	9.09E-01	2.72E+00 (34 / 36 ) ( 8.40E-01 - 1.63E+01 )			( . / . ) ( . - . )		1	18	19	20	21
						18	4.43E+00(6 / 6 ) ( 1.41E+00 - 1.63E+01 )							
WELL WATER (PCI/L )	POTASSIUM-40		12	8.60E-01	1.57E+00 (12 / 12 ) ( 9.50E-01 - 2.39E+00 )			( . / . ) ( . - . )		1	18	19	20	21
						20	1.89E+00(2 / 2 )							

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SAMPLE TYPE	ANALYSIS	ISOTOPE NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
				STATION	STATION-MEAN(N/TOTAL) RANGE	
					( 1.62E+00 - 2.17E+00 )	
WELL WATER (PCI/L)	TRITIUM	12	2.35E+02	< LLD ( 0 /12 )	( . . - . / . )	1 18 19 20 21
				22	< LLD ( 0 /2 )	22
WELL WATER (PCI/L)	TOTAL URANIUM	12	6.30E-01	4.93E-01 ( 2 /12 ) ( 3.00E-01 - 6.87E-01 )	( . . - . / . )	1 18 19 20 21
				1	6.87E-01(1 /2 ) ( 6.87E-01 - 6.87E-01 )	22
WELL WATER (PCI/L)	RADIUM-226	12	2.23E-01	4.80E-01 (10 /12 ) ( 1.05E-01 - 1.36E+00 )	( . . - . / . )	1 18 19 20 21
				21	1.36E+00(1 /2 ) ( 1.36E+00 - 1.36E+00 )	22
WELL WATER (PCI/L)	RADIUM-228	12	2.48E+00	< LLD ( 0 /12 )	( . . - . / . )	1 18 19 20 21
				22	< LLD ( 0 /2 )	22
CLAMS (PCI/GM(WET))	GROSS ALPHA	24	1.28E-01	2.23E-01 (16 /18 ) ( 5.60E-02 - 5.13E-01 )	1.83E-01(5 /6 ) ( 6.46E-02 - 3.00E-01 )	23 24 25
				23	2.94E-01(5 /6 ) ( 1.14E-01 - 5.13E-01 )	
CLAMS (PCI/GM(WET))	GROSS BETA	24	4.28E-02	1.35E+00 (18 /18 ) ( 9.38E-01 - 1.77E+00 )	1.23E+00(6 /6 ) ( 3.30E-01 - 1.75E+00 )	23 24 25
				24	1.35E+00(6 /6 ) ( 1.14E+00 - 1.77E+00 )	
CLAMS (MG/GM(WET))	CALCIUM BY AA	8	1.03E+00	4.23E+02 ( 6 /6 ) ( 3.46E+01 - 1.02E+03 )	4.09E+02(2 /2 ) ( 1.48E+02 - 6.71E+02 )	23 24 25
				24	5.32E+02(2 /2 )	

Table 17  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN			
						STATION		STATION-MEAN(N/TOTAL) RANGE				
										( 4.34E+01 - 1.02E+03 )		
CLAMS (PCI/GM(WET))	NAI GAMMA	CE-144	8	1.40E-01	< LLD	( 0 / 6 )	< LLD	( 0 / 2 )	23	24	25	
							25	< LLD ( 0 / 2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	AG-110M	8	3.20E-02	< LLD	( 0 / 6 )	< LLD	( 0 / 2 )	23	24	25	
							25	< LLD ( 0 / 2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	TE-129M	8	6.30E-01	< LLD	( 0 / 6 )	< LLD	( 0 / 2 )	23	24	25	
							25	< LLD ( 0 / 2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	MO-99	8	6.30E+00	< LLD	( 0 / 6 )	< LLD	( 0 / 2 )	23	24	25	
							25	< LLD ( 0 / 2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	ZRN8-95	8	3.10E-02	< LLD	( 0 / 6 )	< LLD	( 0 / 2 )	23	24	25	
							25	< LLD ( 0 / 2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-134	8	3.10E-02	< LLD	( 0 / 6 )	< LLD	( 0 / 2 )	23	24	25	
							25	< LLD ( 0 / 2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	CO-58	8	3.60E-02	< LLD	( 0 / 6 )	< LLD	( 0 / 2 )	23	24	25	
							25	< LLD ( 0 / 2 )				



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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN		
					STATION	STATION-MEAN(N/TOTAL) RANGE					
CLAMS (PCI/GM(WET))	NAI GAMMA	MN-54	8	3.20E-02	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	TH-232	8	1.10E-01	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	FE-59	8	7.80E-02	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-136	8	1.00E-01	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	TE-132	8	3.70E-01	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	ZN-65	8	6.50E-02	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	CO-60	8	3.10E-02	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN		
					STATION		STATION-MEAN(N/TOTAL) RANGE				
CLAMS (PCI/GM(WET))	NAI GAMMA	K-40	8	6.20E-01	1.57E+00 (6 /6 ) ( 1.30E+00 - 1.90E+00 )		1.70E+00(2 /2 ) ( 1.50E+00 - 1.90E+00 )		23	24	25
					25 /		1.70E+00(2 /2 ) ( 1.50E+00 - 1.90E+00 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	BALA-140	8	6.90E-02	< LLD (0 /6 )		< LLD (0 /2 )		23	24	25
					25		< LLD (0 /2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	BE-7	8	1.90E-01	< LLD (0 /6 )		< LLD (0 /2 )		23	24	25
					25		< LLD (0 /2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	CR-51	8	2.20E-01	< LLD (0 /6 )		< LLD (0 /2 )		23	24	25
					25		< LLD (0 /2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	RA-226	8	4.70E-02	< LLD (0 /6 )		< LLD (0 /2 )		23	24	25
					25		< LLD (0 /2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	I-131	8	1.10E-01	< LLD (0 /6 )		< LLD (0 /2 )		23	24	25
					25		< LLD (0 /2 )				
CLAMS (PCI/GM(WET))	NAI GAMMA	NA-22	8	3.10E-02	< LLD (0 /6 )		< LLD (0 /2 )		23	24	25
					25		< LLD (0 /2 )				

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN		
					STATION		STATION-MEAN(N/TOTAL) RANGE				
CLAMS (PCI/GM(WET))	NAI GAMMA	RU-106	8	3.20E-01	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	I-133	8	3.10E-02	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-137	8	3.10E-02	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
CLAMS (PCI/GM(WET))	STRONTIUM-90		8	2.66E-01	< LLD	(0 /6 )	< LLD	(0 /2 )	23	24	25
							25	< LLD (0 /2 )			
SPINACH (PCI/GM(WET))	GELI GAMMA	CE-144	2	8.20E-02	< LLD	(0 /2 )	( . . - ( . / . ) )	( . . - ( . / . ) )	1	4	
							4	< LLD (0 /1 )			
SPINACH (PCI/GM(WET))	GELI GAMMA	AG-110M	2	1.80E-02	< LLD	(0 /2 )	( . . - ( . / . ) )	( . . - ( . / . ) )	1	4	
							4	< LLD (0 /1 )			
SPINACH (PCI/GM(WET))	GELI GAMMA	TE-129M	2	5.50E-01	< LLD	(0 /2 )	( . . - ( . / . ) )	( . . - ( . / . ) )	1	4	
							4	< LLD (0 /1 )			

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE	STATION	STATION-MEAN(N/TOTAL) RANGE	
SPINACH (PCI/GM(WET))	GELI GAMMA	MO-99	2	6.30E-01	< LLD	(0 / 2 )		( . . - ( . / . ) )	1 4
							4	< LLD (0 / 1 )	
SPINACH (PCI/GM(WET))	GELI GAMMA	CS-134	2	1.20E-02	< LLD	(0 / 2 )		( . . - ( . / . ) )	1 4
							4	< LLD (0 / 1 )	
SPINACH (PCI/GM(WET))	GELI GAMMA	CO-58	2	1.40E-02	< LLD	(0 / 2 )		( . . - ( . / . ) )	1 4
							4	< LLD (0 / 1 )	
SPINACH (PCI/GM(WET))	GELI GAMMA	MN-54	2	1.30E-02	< LLD	(0 / 2 )		( . . - ( . / . ) )	1 4
							4	< LLD (0 / 1 )	
SPINACH (PCI/GM(WET))	GELI GAMMA	TH-232	2	4.00E-02	< LLD	(0 / 2 )		( . . - ( . / . ) )	1 4
							4	< LLD (0 / 1 )	
SPINACH (PCI/GM(WET))	GELI GAMMA	FE-59	2	3.60E-02	< LLD	(0 / 2 )		( . . - ( . / . ) )	1 4
							4	< LLD (0 / 1 )	
SPINACH (PCI/GM(WET))	GELI GAMMA	CS-136	2	3.20E-02	< LLD	(0 / 2 )		( . . - ( . / . ) )	1 4
							4	< LLD (0 / 1 )	

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE	
SPINACH (PCI/GM(WET))	GELI GAMMA	ZN-65	2	4.20E-02	< LLD (0 / 2 )	( . . - . / . ) < LLD (0 / 1 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	CD-60	2	1.80E-02	< LLD (0 / 2 )	( . . - . / . ) < LLD (0 / 1 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	K-40	2	1.70E-01	3.60E+00 (2 / 2 ) ( 1.40E+00 - 5.80E+00 )	( . . - . / . ) 5.80E+00(1 / 1 ) ( 5.80E+00 - 5.80E+00 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	BALA-140	2	3.80E-02	< LLD (0 / 2 )	( . . - . / . ) < LLD (0 / 1 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	BE-7	2	1.20E-01	1.70E-01 (2 / 2 ) ( 1.50E-01 - 1.90E-01 )	( . . - . / . ) 1.90E-01(1 / 1 ) ( 1.90E-01 - 1.90E-01 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	ZR-95	2	2.80E-02	< LLD (0 / 2 )	( . . - . / . ) < LLD (0 / 1 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	NB-95	2	2.00E-02	< LLD (0 / 2 )	( . . - . / . ) < LLD (0 / 1 )	1 4

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE			
SPINACH (PCI/GM(WET))	GELI GAMMA	SB-125	2	3.30E-02	< LLD	(0 /2 )	( . . - . / . )	1 4	
							4		< LLD (0 /1 )
SPINACH (PCI/GM(WET))	GELI GAMMA	CE-141	2	2.60E-02	< LLD	(0 /2 )	( . . - . / . )	1 4	
							4		< LLD (0 /1 )
SPINACH (PCI/GM(WET))	GELI GAMMA	RU-103	2	1.50E-02	< LLD	(0 /2 )	( . . - . / . )	1 4	
							4		< LLD (0 /1 )
SPINACH (PCI/GM(WET))	GELI GAMMA	CR-51	2	1.40E-01	< LLD	(0 /2 )	( . . - . / . )	1 4	
							4		< LLD (0 /1 )
SPINACH (PCI/GM(WET))	GELI GAMMA	RA-226	2	2.70E-02	< LLD	(0 /2 )	( . . - . / . )	1 4	
							4		< LLD (0 /1 )
SPINACH (PCI/GM(WET))	GELI GAMMA	I-131	2	5.10E-02	< LLD	(0 /2 )	( . . - . / . )	1 4	
							4		< LLD (0 /1 )
SPINACH (PCI/GM(WET))	GELI GAMMA	NP-239	2	5.50E+00	< LLD	(0 /2 )	( . . - . / . )	1 4	
							4		< LLD (0 /1 )

Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE	
SPINACH (PCI/GM(WET))	GELI GAMMA	RU-106	2	1.10E-01	< LLD (0 /2 )	( . . - . / . ) < LLD (0 /1 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	CO-57	2	1.00E-02	< LLD (0 /2 )	( . . - . / . ) < LLD (0 /1 )	1 4
SPINACH (PCI/GM(WET))	GELI GAMMA	CS-137	2	1.20E-02	5.10E-02 (2 /2 ) ( 1.80E-02 - 8.40E-02 )	( . . - . / . ) 8.40E-02(1 /1 ) ( 8.40E-02 - 8.40E-02 )	1 4
SOIL (PCI/GM(DRY))	GROSS BETA		30	1.26E+00	4.76E+00 (29 /30 ) ( 2.04E+00 - 1.19E+01 )	( . . - . / . ) 8.16E+00(6 /6 ) ( 3.52E+00 - 1.19E+01 )	1 2 3 4 5
PASTURE (PCI/GM(WET))	GROSS BETA		6	9.12E-02	5.46E+00 (6 /6 ) ( 3.38E+00 - 7.49E+00 )	( . . - . / . ) 5.83E+00(2 /2 ) ( 4.19E+00 - 7.47E+00 )	28 29 30
PASTURE (MG/GM(WET) )	CALCIUM BY AA		6	1.58E+00	4.99E+02 (6 /6 ) ( 1.14E+02 - 1.00E+03 )	( . . - . / . ) 5.77E+02(2 /2 ) ( 1.54E+02 - 1.00E+03 )	28 29 30
PASTURE (PCI/GM(WET))	STRONTIUM-90		6	4.40E-02	4.70E-01 (6 /6 ) ( 1.11E-01 - 1.33E+00 )	( . . - . / . ) 7.42E-01(2 /2 )	28 29 30

Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE	
						( 1.54E-01 - 1.33E+00 )	
SILT (PCI/GM(DRY))	GROSS ALPHA		16	9.92E+00	5.43E+00 ( 1 /14 ) ( 5.43E+00 - 5.43E+00 )	6.67E+00(1 /2 ) ( 6.67E+00 - 6.67E+00 )	23 24 25 26 27 32 33
					27	5.43E+00(1 /2 ) ( 5.43E+00 - 5.43E+00 )	
SILT (PCI/GM(DRY))	GROSS BETA		16	1.23E+00	6.60E+00 (13 /14 ) ( 1.91E+00 - 2.07E+01 )	9.69E+00(2 /2 ) ( 9.18E+00 - 1.02E+01 )	23 24 25 26 27 32 33
					33	1.37E+01(2 /2 ) ( 6.77E+00 - 2.07E+01 )	
SILT (PCI/GM(DRY))	GELI GAMMA	CE-144	36	5.30E-01	7.40E-01 (3 /30 ) ( 2.50E-01 - 9.90E-01 )	< LLD (0 /6 )	23 24 25 32 33
					33	9.85E-01(2 /6 ) ( 9.80E-01 - 9.90E-01 )	
SILT (PCI/GM(DRY))	GELI GAMMA	AG-110M	36	1.20E-01	< LLD (0 /30 )	< LLD (0 /6 )	23 24 25 32 33
					33	< LLD (0 /6 )	
SILT (PCI/GM(DRY))	GELI GAMMA	TE-129M	36	3.90E+00	< LLD (0 /30 )	< LLD (0 /6 )	23 24 25 32 33
					33	< LLD (0 /6 )	
SILT (PCI/GM(DRY))	GELI GAMMA	MD-99	24	9.70E+00	< LLD (0 /20 )	< LLD (0 /4 )	23 24 25 32 33
					33	< LLD (0 /4 )	
SILT (PCI/GM(DRY))	GELI GAMMA	ZRNB-95	12	3.70E-02	3.20E-01 (1 /10 ) ( 3.20E-01 - 3.20E-01 )	< LLD (0 /2 )	23 24 25 32 33
					33	3.20E-01(1 /2 ) ( 3.20E-01 - 3.20E-01 )	



Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION		STATION-MEAN(N/TOTAL) RANGE						
SILT (PCI/GM(DRY))	GELI GAMMA	CS-134	36	1.10E-01	< LLD	(0 /30 )		< LLD (0 /6 )	23	24	25	32	33
							33	< LLD (0 /6 )					
SILT (PCI/GM(DRY))	GELI GAMMA	CO-58	36	1.10E-01	< LLD	(0 /30 )		< LLD (0 /6 )	23	24	25	32	33
							33	< LLD (0 /6 )					
SILT (PCI/GM(DRY))	GELI GAMMA	MN-54	36	1.20E-01	8.90E-02 (2 /30 ) ( 5.80E-02 - 1.20E-01)		< LLD (0 /6 )	23	24	25	32	33	
						33	8.90E-02(2 /6 ) ( 5.80E-02 - 1.20E-01)						
SILT (PCI/GM(DRY))	GELI GAMMA	TH-232	36	3.80E-01	4.41E-01 (28 /30 ) ( 1.70E-01 - 9.40E-01)		4.32E-01(4 /6 ) ( 4.00E-01 - 4.80E-01)	23	24	25	32	33	
						32	6.23E-01(6 /6 ) ( 2.40E-01 - 9.40E-01)						
SILT (PCI/GM(DRY))	GELI GAMMA	FE-59	36	2.70E-01	< LLD	(0 /30 )		< LLD (0 /6 )	23	24	25	32	33
							33	< LLD (0 /6 )					
SILT (PCI/GM(DRY))	GELI GAMMA	CS-136	36	4.20E-01	< LLD	(0 /30 )		< LLD (0 /6 )	23	24	25	32	33
							33	< LLD (0 /6 )					
SILT (PCI/GM(DRY))	GELI GAMMA	ZN-65	36	2.70E-01	< LLD	(0 /30 )		< LLD (0 /6 )	23	24	25	32	33
							33	< LLD (0 /6 )					

Table 17  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH NOVEMBER, 1981  
 SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL)	BACKGROUND-MEAN(N/TOTAL)	STATIONS USED				
					RANGE	RANGE	FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL)					
						RANGE					
SILT (PCI/GM(DRY))	GELI GAMMA	CO-60	36	1.70E-01	5.87E-01 (13 /30 )	< LLD (0 /6 )	23	24	25	32	33
					( 2.80E-02 - 1.80E+00)						
					33	1.02E+00(5 /6 )					
						( 4.80E-01 - 1.80E+00)					
SILT (PCI/GM(DRY))	GELI GAMMA	K-40	36	1.30E+00	5.26E+00 (29 /30 )	1.08E+01(6 /6 )	23	24	25	32	33
					( 4.80E-01 - 1.30E+01)	( 9.40E+00 - 1.30E+01)					
					32	1.03E+01(6 /6 )					
						( 1.70E+00 - 1.30E+01)					
SILT (PCI/GM(DRY))	GELI GAMMA	BALA-140	18	6.00E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
					33	< LLD (0 /3 )					
SILT (PCI/GM(DRY))	GELI GAMMA	BE-7	36	8.90E-01	1.13E+00 (2 /30 )	< LLD (0 /6 )	23	24	25	32	33
					( 9.60E-01 - 1.30E+00)						
					33	1.13E+00(2 /6 )					
						( 9.60E-01 - 1.30E+00)					
SILT (PCI/GM(DRY))	GELI GAMMA	ZR-95	24	2.20E-01	4.30E-01 (1 /20 )	< LLD (0 /4 )	23	24	25	32	33
					( 4.30E-01 - 4.30E-01)						
					33	4.30E-01(1 /4 )					
						( 4.30E-01 - 4.30E-01)					
SILT (PCI/GM(DRY))	GELI GAMMA	NB-95	24	1.30E-01	2.26E-01 (17 /20 )	1.60E-01(1 /4 )	23	24	25	32	33
					( 8.80E-02 - 8.50E-01)	( 1.60E-01 - 1.60E-01)					
					33	4.37E-01(4 /4 )					
						( 2.20E-01 - 8.50E-01)					

Table 17  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH NOVEMBER, 1981**  
**SEMI-ANNUAL SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE	
SILT (PCI/GM(DRY))	GELI GAMMA	SB-125	36	2.60E-01	< LLD (0 /30 )	< LLD (0 /6 )	23 24 25 32 33
					33	< LLD (0 /6 )	
SILT (PCI/GM(DRY))	GELI GAMMA	CE-141	36	1.70E-01	< LLD (0 /30 )	< LLD (0 /6 )	23 24 25 32 33
					33	< LLD (0 /6 )	
SILT (PCI/GM(DRY))	GELI GAMMA	RU-103	36	1.10E-01	< LLD (0 /30 )	< LLD (0 /6 )	23 24 25 32 33
					33	< LLD (0 /6 )	
SILT (PCI/GM(DRY))	GELI GAMMA	CR-51	36	1.00E+00	< LLD (0 /30 )	< LLD (0 /6 )	23 24 25 32 33
					33	< LLD (0 /6 )	
SILT (PCI/GM(DRY))	GELI GAMMA	BA-140	18	9.00E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
					33	< LLD (0 /3 )	
SILT (PCI/GM(DRY))	GELI GAMMA	LA-140	18	2.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
					33	< LLD (0 /3 )	
SILT (PCI/GM(DRY))	GELI GAMMA	RA-226	36	2.40E-01	3.59E-01 (30 /30 ) ( 1.30E-01 - 6.60E-01)	3.22E-01(6 /6 ) ( 2.90E-01 - 3.60E-01)	23 24 25 32 33
					25	4.32E-01(6 /6 ) ( 2.10E-01 - 6.10E-01)	

Table 17  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH NOVEMBER, 1981**  
**SEMI-ANNUAL SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
					STATION	STATION-MEAN(N/TOTAL) RANGE							
SILT (PCI/GM(DRY))	GELI GAMMA	I-131	36	2.10E+00	< LLD	(0 /30 )	< LLD	(0 /6 )	23	24	25	32	33
							33	< LLD (0 /6 )					
SILT (PCI/GM(DRY))	GELI GAMMA	HP-239	18	5.60E+01	< LLD	(0 /15 )	< LLD	(0 /3 )	23	24	25	32	33
							33	< LLD (0 /3 )					
SILT (PCI/GM(DRY))	GELI GAMMA	RU-106	36	9.00E-01	5.50E-01 (1 /30 ) ( 5.50E-01 - 5.50E-01)		< LLD	(0 /6 )	23	24	25	32	33
							33	5.50E-01(1 /6 ) ( 5.50E-01 - 5.50E-01)					
SILT (PCI/GM(DRY))	GELI GAMMA	CO-57	36	6.30E-02	< LLD	(0 /30 )	< LLD	(0 /6 )	23	24	25	32	33
							33	< LLD (0 /6 )					
SILT (PCI/GM(DRY))	GELI GAMMA	CS-137	36	1.40E-01	1.71E-01 (11 /30 ) ( 1.90E-02 - 2.70E-01)		6.55E-02(2 /6 ) ( 5.90E-02 - 7.20E-02)		23	24	25	32	33
							33						
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CE-144	3	9.00E-02	< LLD	(0 /3 )		(. /. )	BARN	BAYW	LOWE		
								(. - . )					
							LOWE	< LLD (0 /1 )					
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	AG-110M	3	3.50E-02	< LLD	(0 /3 )		(. /. )	BARN	BAYW	LOWE		
								(. - . )					
							LOWE	< LLD (0 /1 )					

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Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN		
					STATION	STATION-MEAN(N/TOTAL) RANGE					
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	TE-129M	3	7.50E-01	< LLD	(0 /3 )	.	(. /. )	BARN	BAYW	LOWE
							(. - . )				
							LOWE < LLD (0 /1 )				
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CS-134	3	1.40E-02	< LLD	(0 /3 )	.	(. /. )	BARN	BAYW	LOWE
							(. - . )				
							LOWE < LLD (0 /1 )				
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CO-58	3	1.60E-02	< LLD	(0 /3 )	.	(. /. )	BARN	BAYW	LOWE
							(. - . )				
							LOWE < LLD (0 /1 )				
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	MN-54	3	1.50E-02	< LLD	(0 /3 )	.	(. /. )	BARN	BAYW	LOWE
							(. - . )				
							LOWE < LLD (0 /1 )				
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	TH-232	3	4.50E-02	< LLD	(0 /3 )	.	(. /. )	BARN	BAYW	LOWE
							(. - . )				
							LOWE < LLD (0 /1 )				
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	FE-59	3	4.20E-02	< LLD	(0 /3 )	.	(. /. )	BARN	BAYW	LOWE
							(. - . )				
							LOWE < LLD (0 /1 )				

Table 17  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH NOVEMBER, 1981**  
**SEMI-ANNUAL SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
						STATION	STATION-MEAN(N/TOTAL) RANGE	
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CS-136	3	5.80E-02	< LLD (0 /3 )		(. /. )	BARN BAYW LOWE
						LOWE	< LLD (0 /1 )	
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	ZN-65	3	3.00E-02	< LLD (0 /3 )		(. /. )	BARN BAYW LOWE
						LOWE	< LLD (0 /1 )	
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CO-60	3	1.90E-02	< LLD (0 /3 )		(. /. )	BARN BAYW LOWE
						LOWE	< LLD (0 /1 )	
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	K-40	3	2.20E-01	7.83E-01 (3 /3 ) ( 5.10E-01 - 1.10E+00)		(. /. )	BARN BAYW LOWE
						BAYW	1.10E+00(1 /1 ) ( 1.10E+00 - 1.10E+00)	
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	BE-7	3	1.90E-01	< LLD (0 /3 )		(. /. )	BARN BAYW LOWE
						LOWE	< LLD (0 /1 )	
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	ZR-95	3	3.30E-02	< LLD (0 /3 )		(. /. )	BARN BAYW LOWE
						LOWE	< LLD (0 /1 )	

Table 17  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH NOVEMBER, 1981  
SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
					STATION	STATION-MEAN(N/TOTAL) RANGE	
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	NB-95	3	2.70E-02	3.35E-02 (2 / 3 ) ( 2.10E-02 - 4.60E-02 )	. ( . / . ) ( . - . ) BAYW 4.60E-02(1 / 1 ) ( 4.60E-02 - 4.60E-02 )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	SB-125	3	3.90E-02	< LLD (0 / 3 )	. ( . / . ) ( . - . ) LOWE < LLD (0 / 1 )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CE-141	3	3.30E-02	< LLD (0 / 3 )	. ( . / . ) ( . - . ) LOWE < LLD (0 / 1 )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	RU-103	3	2.20E-02	< LLD (0 / 3 )	. ( . / . ) ( . - . ) LOWE < LLD (0 / 1 )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CR-51	3	2.10E-01	< LLD (0 / 3 )	. ( . / . ) ( . - . ) LOWE < LLD (0 / 1 )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	BA-140	3	2.50E-01	< LLD (0 / 3 )	. ( . / . ) ( . - . ) LOWE < LLD (0 / 1 )	BARN BAYW LOWE

Table 17  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH NOVEMBER, 1981  
 SEMI-ANNUAL SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN		
					STATION		STATION-MEAN(N/TOTAL) RANGE				
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	LA-140	3	5.60E-02	< LLD	(0 /3 )		(. /. )	BARN	BAYW	LOWE
							( . - . )				
							LOWE	< LLD (0 /1 )			
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	RA-226	3	3.30E-02	< LLD	(0 /3 )		(. /. )	BARN	BAYW	LOWE
							( . - . )				
							LOWE	< LLD (0 /1 )			
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	I-131	3	1.50E-01	< LLD	(0 /3 )		(. /. )	BARN	BAYW	LOWE
							( . - . )				
							LOWE	< LLD (0 /1 )			
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	RU-106	3	1.30E-01	< LLD	(0 /3 )		(. /. )	BARN	BAYW	LOWE
							( . - . )				
							LOWE	< LLD (0 /1 )			
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CO-57	3	1.10E-02	< LLD	(0 /3 )		(. /. )	BARN	BAYW	LOWE
							( . - . )				
							LOWE	< LLD (0 /1 )			
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CS-137	3	1.70E-02	1.73E-01 (3 /3 )			(. /. )	BARN	BAYW	LOWE
					( 1.10E-01 - 2.70E-01)		( . - . )				
							LOWE	2.70E-01(1 /1 ) ( 2.70E-01 - 2.70E-01)			



Table 18  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH AUGUST, 1981  
 FIRST QUARTER SUMMARY

1

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
VEGETATION (PCI/GM(WET))	GROSS BETA		15	1.97E-02	3.48E+00 (15 /15 ) ( 2.28E+00 - 5.32E+00)	( . . - . / . )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GROSS ALPHA		8	2.79E-04	1.45E-03 (5 /5 ) ( 1.05E-03 - 1.94E-03)	1.29E-03(3 /3 ) ( 1.06E-03 - 1.45E-03)	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GROSS BETA		51	6.03E-03	7.77E-02 (31 /31 ) ( 3.45E-02 - 1.47E-01)	6.32E-02(20 /20 ) ( 2.48E-02 - 1.28E-01)	1 2 3 4 5
AIR PARTICULATE (PCI/M3 . )	GELI GAMMA	CE-144	51	1.20E-01	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	AG-110M	51	2.00E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	TE-129M	51	9.70E-01	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	MO-99	51	9.10E-01	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CS-134	51	2.00E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CO-58	51	2.40E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	MN-54	51	2.30E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	TH-232	51	7.50E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	FE-59	50	4.30E-02	< LLD (0 /31 )	< LLD (0 /19 )	1 2 3 4 5

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
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FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CS-136	51	3.70E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	ZN-65	51	4.80E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CO-60	50	3.10E-02	< LLD (0 /30 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	K-40	50	4.00E-01	< LLD (0 /30 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	BALA-140	3	3.60E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
AIR PARTICULATE (PCI/M3)	GELI GAMMA	BE-7	51	2.30E-01	1.17E-01 (3 /31 ) ( 1.10E-01 - 1.30E-01)	1.10E-01(1 /20 ) ( 1.10E-01 - 1.10E-01)	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	ZR-95	51	4.90E-02	3.00E-02 (2 /31 ) ( 2.90E-02 - 3.10E-02)	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	NB-95	51	5.00E-02	2.91E-02 (21 /31 ) ( 9.50E-03 - 6.00E-02)	2.73E-02(9 /20 ) ( 1.90E-02 - 4.20E-02)	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	SB-125	51	5.90E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CE-141	51	3.40E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	RU-103	51	2.70E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CR-51	51	2.40E-01	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
AIR PARTICULATE (PCI/M3)	GELI GAMMA	BA-140	48	1.80E-01	< LLD (0 /30 )	< LLD (0 /18 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	LA-140	47	5.20E-02	< LLD (0 /30 )	< LLD (0 /17 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	RA-226	51	4.70E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	I-131	51	6.10E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	NP-239	50	7.50E+00	< LLD (0 /31 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	RU-106	51	2.20E-01	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CO-57	51	1.40E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CS-137	51	2.10E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
PRECIPITATION (NCI/M2)	GROSS BETA-SS		24	1.81E-01	2.41E-01 (3 /15 ) ( 2.09E-01 - 3.02E-01)	1.07E-01(1 /9 ) ( 1.07E-01 - 1.07E-01)	1 2 3 4 5
PRECIPITATION (NCI/M2)	GROSS BETA-DS		24	1.94E-01	7.40E-01 (15 /15 ) ( 9.14E-02 - 2.04E+00)	6.89E-01(9 /9 ) ( 3.41E-01 - 1.21E+00)	1 2 3 4 5
AIR IODINE (PCI/M3)	IODINE-131		51	7.97E-02	< LLD (0 /31 )	< LLD (0 /20 )	1 2 3 4 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CE-144	2	1.10E-01	( . . . )	< LLD (0 /2 )	

Table 18  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CABBAGE (PCI/GM(WET))	GELI GAMMA	AG-110M	2	1.80E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	TE-129M	2	8.80E-01	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-134	2	1.60E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-58	2	2.00E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	MN-54	2	1.80E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	TH-232	2	6.30E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	FE-59	2	4.70E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-136	2	5.30E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	ZN-65	2	4.10E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-60	2	1.60E-02	( . . - . / . )	< LLD (0 / 2)	
CABBAGE (PCI/GM(WET))	GELI GAMMA	K-40	2	2.30E-01	( . . - . / . )	2.20E+00(2 / 2) ( 2.00E+00 - 2.40E+00 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	BALA-140	2	4.60E-02	( . . - . / . )	< LLD (0 / 2)	

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CABBAGE (PCI/GM(WET))	GELI GAMMA	BE-7	2	1.80E-01	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	ZR-95	2	3.90E-02	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	NB-95	2	2.70E-02	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	SB-125	2	5.00E-02	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CE-141	2	3.80E-02	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	RU-103	2	2.40E-02	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CR-51	2	2.20E-01	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	RA-226	2	3.50E-02	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	I-131	2	1.20E-01	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	RU-106	2	1.60E-01	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-57	2	1.30E-02	( . . . )	< LLD (0 / 2 )	
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-137	2	1.80E-02	( . . . )	< LLD (0 / 2 )	

Table 18  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH AUGUST, 1981  
 FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CORN (PCI/GM(WET))	GELI GAMMA	CE-144	3	2.30E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	AG-110M	3	3.50E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	TE-129M	3	1.80E+00	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	CS-134	3	3.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	CO-58	3	3.80E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	MN-54	3	3.40E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	TH-232	3	1.30E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	FE-59	3	8.50E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	CS-136	3	1.10E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	ZN-65	3	7.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	CO-60	3	4.10E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	K-40	3	7.30E-01	2.40E+00 (1 /1 ) ( 2.40E+00 - 2.40E+00)	2.35E+00 (2 /2 ) ( 2.30E+00 - 2.40E+00)	4

Table 18  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH AUGUST, 1981**  
**FIRST QUARTER SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CORN (PCI/GM(WET))	GELI GAMMA	BALA-140	3	1.30E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	BE-7	3	4.20E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	ZR-95	3	8.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	NB-95	3	5.60E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	SB-125	3	1.00E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	CE-141	3	7.70E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	RU-103	3	5.00E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	CR-51	3	4.50E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	RA-226	3	7.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	I-131	3	2.50E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	RU-106	3	3.40E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
CORN (PCI/GM(WET))	GELI GAMMA	CO-57	3	2.80E-02	< LLD (0 /1 )	< LLD (0 /2 )	4

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
CORN (PCI/GM(WET))	GELI GAMMA	CS-137	3	3.60E-02	< LLD (0 /1 )	< LLD (0 /2 )	4				
SURFACE WATER (PCI/L)	GROSS ALPHA-SS		24	5.18E-01	1.88E-01 (2 /21 ) ( 1.82E-01 - 1.94E-01)	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	GROSS BETA-SS		24	4.47E-01	5.62E-01 (6 /21 ) ( 3.01E-01 - 1.35E+00)	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	GROSS BETA-DS		24	7.18E+00	1.46E+02 (17 /21 ) ( 2.77E+00 - 2.50E+02)	1.91E+02(3 /3 ) ( 1.61E+02 - 2.38E+02)	23 32	24 33	25	26	27
SURFACE WATER (MG/L)	CALCIUM BY AA		8	8.00E-02	1.43E+02 (7 /7 ) ( 1.40E+00 - 2.21E+02)	2.24E+02(1 /1 ) ( 2.24E+02 - 2.24E+02)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	TRITIUM		24	2.07E+02	2.84E+02 (6 /21 ) ( 1.44E+02 - 4.60E+02)	1.24E+02(1 /3 ) ( 1.24E+02 - 1.24E+02)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	TOTAL URANIUM		24	2.31E+00	< LLD (0 /21 )	2.30E+00(1 /3 ) ( 2.30E+00 - 2.30E+00)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CE-144	24	9.60E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	AG-110M	24	9.60E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	TE-129M	24	1.80E+02	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	MO-99	24	1.50E+03	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	ZRNB-95	24	9.30E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27



Table 18  
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 JUNE, 1981 THROUGH AUGUST, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SURFACE WATER (PCI/L)	NAI GAMMA	CS-134	24	9.40E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CO-58	24	1.00E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	MN-54	24	9.60E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	TH-232	24	3.10E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	FE-59	24	1.90E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CS-136	24	2.10E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	TE-132	24	1.80E+02	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	ZH-65	24	1.60E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CO-60	24	9.40E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	K-40	24	1.20E+02	2.63E+02 (15 /21 ) ( 1.60E+02 - 4.10E+02)	2.73E+02(3 /3 ) ( 2.40E+02 - 3.10E+02)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	BALA-140	24	1.80E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	BE-7	24	9.10E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SURFACE WATER (PCI/L)	NAI GAMMA	CR-51	24	1.30E+02	< LLD (0 /21 )	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	RA-226	24	1.60E+01	< LLD (0 /21 )	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	I-131	24	3.10E+01	< LLD (0 /21 )	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	NA-22	24	9.40E+00	< LLD (0 /21 )	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	RU-106	24	9.50E+01	< LLD (0 /21 )	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	I-133	24	5.30E+03	< LLD (0 /21 )	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	NAI GAMMA	CS-137	24	9.30E+00	< LLD (0 /21 )	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	RADIUM-226		24	2.02E-01	3.28E-01 (17 /21 ) ( 9.79E-02 - 6.36E-01)	3.76E-01 (1 /3 ) ( 3.76E-01 - 3.76E-01)	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	RADIUM-228		24	1.02E+00	4.29E-01 (3 /21 ) ( 3.91E-01 - 4.58E-01)	< LLD (0 /3 )	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	STRONTIUM-90		24	3.09E+01	7.62E-01 (2 /21 ) ( 7.15E-01 - 8.10E-01)	4.43E+01 (1 /3 ) ( 4.43E+01 - 4.43E+01)	23	24	25	26	27
							32	33			
SURFACE WATER (PCI/L)	GROSS ALPHA-DS		24	2.56E+00	< LLD (0 /21 )	2.82E+00 (1 /3 ) ( 2.82E+00 - 2.82E+00)	23	24	25	26	27
							32	33			
TOMATOES (PCI/GM(WET))	GELI GAMMA	CE-144	3	9.80E-02	< LLD (0 /1 )	< LLD (0 /2 )	4				

Table 18  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH AUGUST, 1981  
 FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
TOMATOES (PCI/GM(WET))	GELI GAMMA	AG-110M	3	1.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	TE-129M	3	7.20E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-134	3	1.40E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-58	3	1.80E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	MN-54	3	1.50E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	TH-232	3	4.90E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	FE-59	3	4.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-136	3	4.70E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	ZN-65	3	4.20E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-60	3	2.00E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	K-40	3	2.10E-01	2.80E+00 (1 /1 ) ( 2.80E+00 - 2.80E+00 )	2.10E+00(2 /2 ) ( 1.70E+00 - 2.50E+00 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	BALA-140	3	5.20E-02	< LLD (0 /1 )	< LLD (0 /2 )	4

Table 18  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH AUGUST, 1981  
 FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
TOMATOES (PCI/GM(WET))	GELI GAMMA	BE-7	3	1.30E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	ZR-95	3	2.90E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	NB-95	3	2.20E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	SB-125	3	3.90E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CE-141	3	3.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	RU-103	3	1.90E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CR-51	3	1.90E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	RA-226	3	2.80E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	I-131	3	8.50E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	RU-106	3	1.40E-01	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-57	3	1.20E-02	< LLD (0 /1 )	< LLD (0 /2 )	4
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-137	3	1.30E-02	< LLD (0 /1 )	< LLD (0 /2 )	4

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
FIRST QUARTER SUMMARY.

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SAMPLE TYPE	ANALYSIS	ISOTOPE NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
WELL WATER (PCI/L)	GROSS ALPHA-SS	18	1.81E+00	< LLD (0 /18 )	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	GROSS ALPHA-DS	18	5.13E+00	2.83E+00 (3 /18 ) ( 2.00E+00 - 4.04E+00)	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	GROSS BETA-SS	18	4.81E-01	1.43E+00 (2 /18 ) ( 1.13E+00 - 1.74E+00)	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	GROSS BETA-DS	18	9.09E-01	3.07E+00 (17 /18 ) ( 1.01E+00 - 1.63E+01)	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	POTASSIUM-40	6	8.60E-01	1.58E+00 (6 /6 ) ( 9.90E-01 - 2.39E+00)	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	TRITIUM	6	2.35E+02	< LLD (0 /6 )	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	TOTAL URANIUM	6	6.30E-01	< LLD (0 /6 )	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	RADIUM-226	6	2.23E-01	3.12E-01 (4 /6 ) ( 2.75E-01 - 3.50E-01)	( . . - ( . / . ) )	1 18 19 20 21 22
WELL WATER (PCI/L)	RADIUM-228	6	6.49E-01	< LLD (0 /6 )	( . . - ( . / . ) )	1 18 19 20 21 22
CLAMS (PCI/GM(WET))	GROSS ALPHA	12	8.06E-02	2.10E-01 (7 /9 ) ( 5.60E-02 - 5.01E-01)	1.59E-01(3 /3 ) ( 6.46E-02 - 3.00E-01)	23 24 25
CLAMS (PCI/GM(WET))	GROSS BETA	12	2.83E-02	1.42E+00 (9 /9 ) ( 9.38E-01 - 1.77E+00)	1.54E+00(3 /3 ) ( 1.42E+00 - 1.75E+00)	23 24 25
CLAMS (MG/GM(WET))	CALCIUM BY AA	4	9.85E-01	8.01E+02 (3 /3 ) ( 6.11E+02 - 1.02E+03)	6.71E+02(1 /1 ) ( 6.71E+02 - 6.71E+02)	23 24 25

Table 18  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH AUGUST, 1981**  
**FIRST QUARTER SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN		
CLAMS (PCI/GM(WET))	NAI GAMMA	CE-144	4	3.20E-02	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	AG-110M	4	9.70E-03	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	TE-129M	4	1.90E-01	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	MO-99	4	3.40E+00	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	ZRNB-95	4	9.30E-03	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-134	4	9.50E-03	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	CO-58	4	1.10E-02	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	MN-54	4	9.70E-03	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	TH-232	4	3.10E-02	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	FE-59	4	2.00E-02	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-136	4	3.30E-02	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25
CLAMS (PCI/GM(WET))	NAI GAMMA	TE-132	4	1.90E-01	< LLD	(0 /3 )	< LLD	(0 /1 )	23	24	25

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CLAMS (PCI/GM(WET))	NAI GAMMA	ZN-65	4	1.60E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CO-60	4	1.20E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	K-40	4	1.60E-01	1.40E+00 (3 /3 ) ( 1.30E+00 - 1.50E+00)	1.90E+00(1 /1 ) ( 1.90E+00 - 1.90E+00)	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	BALA-140	4	2.60E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	BE-7	4	9.60E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CR-51	4	9.30E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	RA-226	4	1.60E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	I-131	4	3.10E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	HA-22	4	1.10E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	RU-106	4	9.60E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	I-133	4	9.30E-03	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-137	4	9.30E-03	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
FIRST QUARTER SUMMARY

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SAMPLE TYPE ANALYSIS ISOTOPE NUMBER OF ANALYSES PERFORMED  
INDICATOR-MEAN(N/TOTAL) RANGE  
BACKGROUND-MEAN(N/TOTAL) RANGE  
STATIONS USED FOR INDICATOR MEAN

CLAMS STRONTIUM-90 4 2.66E-01 < LLD (0 / 3 ) < LLD (0 / 1 ) 23 24 25

SPINACH GELI GAMMA CE-144 1 5.50E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA AG-110M 1 1.30E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA TE-129M 1 5.50E-01 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA MO-99 1 6.30E-01 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA CS-134 1 1.20E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA CO-58 1 1.40E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA MN-54 1 1.30E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA TH-232 1 4.00E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA FE-59 1 3.60E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA CS-136 1 3.20E-02 < LLD (0 / 1 ) ( . / . ) 4

SPINACH GELI GAMMA ZN-65 1 4.20E-02 < LLD (0 / 1 ) ( . / . ) 4



Table 18  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH AUGUST, 1981  
 FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SPINACH (PCI/GM(WET))	GELI GAMMA	CO-60	1	1.80E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	K-40	1	1.70E-01	5.80E+00 (1 /1 ) ( 5.80E+00 - 5.80E+00)	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	BALA-140	1	3.80E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	BE-7	1	1.00E-01	1.50E-01 (1 /1 ) ( 1.50E-01 - 1.50E-01)	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	ZR-95	1	2.80E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	NB-95	1	2.00E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	SB-125	1	3.20E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	CE-141	1	1.80E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	RU-103	1	1.50E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	CR-51	1	1.30E-01	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	RA-226	1	2.70E-02	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	I-131	1	5.10E-02	< LLD (0 /1 )	( . . - . / . )	4

Table 18  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 JUNE, 1981 THROUGH AUGUST, 1981  
 FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SPINACH (PCI/GM(WET))	GELI GAMMA	NP-239	1	5.50E+00	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	RU-106	1	1.10E-01	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	CO-57	1	6.40E-03	< LLD (0 /1 )	( . . - . / . )	4
SPINACH (PCI/GM(WET))	GELI GAMMA	CS-137	1	1.10E-02	1.80E-02 (1 /1 ) ( 1.80E-02 - 1.80E-02 )	( . . - . / . )	4
SOIL (PCI/GM(DRY))	GROSS BETA		15	1.26E+00	4.47E+00 (14 /15 ) ( 2.04E+00 - 1.19E+01 )	( . . - . / . )	1 2 3 4 5
PASTURE (PCI/GM(WET))	GROSS BETA		3	3.12E-02	5.75E+00 (3 /3 ) ( 4.19E+00 - 7.49E+00 )	( . . - . / . )	28 29 30
PASTURE (MG/GM(WET))	CALCIUM BY AA		3	1.05E+00	8.67E+02 (3 /3 ) ( 7.17E+02 - 1.00E+03 )	( . . - . / . )	28 29 30
PASTURE (PCI/GM(WET))	STRONTIUM-90		3	2.19E-02	1.33E-01 (3 /3 ) ( 1.11E-01 - 1.54E-01 )	( . . - . / . )	28 29 30
SILT (PCI/GM(DRY))	GROSS ALPHA		8	4.94E+00	5.43E+00 (1 /7 ) ( 5.43E+00 - 5.43E+00 )	6.67E+00(1 /1 ) ( 6.67E+00 - 6.67E+00 )	23 24 25 26 27 32 33
SILT (PCI/GM(DRY))	GROSS BETA		8	1.23E+00	4.51E+00 (7 /7 ) ( 1.91E+00 - 7.33E+00 )	9.18E+00(1 /1 ) ( 9.18E+00 - 9.18E+00 )	23 24 25 26 27 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CE-144	18	5.30E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	AG-110M	18	1.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SILT (PCI/GM(DRY))	GELI GAMMA	TE-129M	18	3.90E+00	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	MO-99	18	9.70E+00	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CS-134	18	1.10E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CO-58	18	1.10E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	MN-54	18	1.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	TH-232	18	3.80E-01	4.18E-01 (14 /15 ) ( 1.70E-01 - 6.80E-01)	4.00E-01(1 /3 ) ( 4.00E-01 - 4.00E-01)	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	FE-59	18	2.70E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CS-136	18	2.10E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	ZH-65	18	2.50E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CO-60	18	1.20E-01	9.40E-01 (5 /15 ) ( 1.40E-01 - 1.80E+00)	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	K-40	18	9.70E-01	4.58E+00 (15 /15 ) ( 1.40E+00 - 1.30E+01)	1.00E+01(3 /3 ) ( 9.40E+00 - 1.10E+01)	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	BE-7	18	8.90E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SILT (PCI/GM(DRY))	GELI GAMMA	ZR-95	18	2.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	NB-95	18	1.30E-01	1.96E-01 (14 /15 ) ( 8.80E-02 - 4.30E-01)	1.60E-01(1 /3 ) ( 1.60E-01 - 1.60E-01)	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	SB-125	18	2.60E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	CE-141	18	1.70E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	RU-103	18	1.10E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	CR-51	18	1.00E+00	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	BA-140	18	9.00E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	LA-140	18	2.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	RA-226	18	2.40E-01	3.78E-01 (15 /15 ) ( 1.30E-01 - 6.60E-01)	3.07E-01(3 /3 ) ( 2.90E-01 - 3.20E-01)	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	I-131	18	4.10E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	HP-239	12	5.60E+01	< LLD (0 /10 )	< LLD (0 /2 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	RU-106	18	9.00E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
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FIRST QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SILT (PCI/GM(DRY))	GELI GAMMA	CO-57	18	6.30E-02	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CS-137	18	1.20E-01	1.57E-01 (5 /15 ) ( 9.50E-02 - 2.70E-01)	< LLD (0 /3 )	23 24 25 32 33
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CE-144	3	9.00E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	AG-110M	3	3.50E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	TE-129M	3	7.50E-01	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CS-134	3	1.40E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CO-58	3	1.60E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	MN-54	3	1.50E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	TH-232	3	4.50E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	FE-59	3	4.20E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE

Table 18  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
JUNE, 1981 THROUGH AUGUST, 1981  
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22

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED, FOR INDICATOR MEAN
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CS-136	3	5.80E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	ZN-65	3	3.00E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CO-60	3	1.90E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	K-40	3	2.20E-01	7.83E-01 (3 /3 ) ( 5.10E-01 - 1.10E+00)	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	BE-7	3	1.90E-01	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	ZR-95	3	3.30E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	NB-95	3	2.70E-02	3.35E-02 (2 /3 ) ( 2.10E-02 - 4.60E-02)	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	SB-125	3	3.90E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CE-141	3	3.30E-02	< LLD (0 /3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE

Table 18  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**JUNE, 1981 THROUGH AUGUST, 1981**  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	RU-103	3	2.20E-02	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CR-51	3	2.10E-01	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	BA-140	3	2.50E-01	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	LA-140	3	5.60E-02	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	RA-226	3	3.30E-02	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	I-131	3	1.50E-01	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	RU-106	3	1.30E-01	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CO-57	3	1.10E-02	< LLD (0 / 3 )	. ( . / . ) ( . - . )	BARN BAYW LOWE
BLUEBERRIES (PCI/GM(WET))	GELI GAMMA	CS-137	3	1.70E-02	1.73E-01 (3 / 3 ) ( 1.10E-01 - 2.70E-01 )	. ( . / . ) ( . - . )	BARN BAYW LOWE

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

1

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
VEGETATION (PCI/GM(WET))	GROSS BETA		15	7.48E-02	3.61E+00 (15 /15 ) ( 1.70E+00 - 6.75E+00)	( . / . ) ( . - . )	1	2	3	4	5
AIR PARTICULATE (PCI/M3 )	GROSS ALPHA		8	5.42E-04	1.31E-03 (5 /5 ) ( 1.02E-03 - 1.53E-03)	1.30E-03(3 /3 ) ( 1.09E-03 - 1.45E-03)	1	2	3	4	5
AIR PARTICULATE (PCI/M3 )	GROSS BETA		53	1.09E-02	2.58E-02 (34 /34 ) ( 1.39E-02 - 5.57E-02)	2.00E-02(19 /19 ) ( 7.79E-03 - 4.07E-02)	1	2	3	4	5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CE-144	53	4.00E-01	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	AG-110M	53	3.40E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	TE-129M	53	1.50E+00	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	MO-99	51	1.30E+00	< LLD (0 /32 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	ZRNB-95	32	4.00E-02	< LLD (0 /20 )	< LLD (0 /12 )	1	2	3	4	5



Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CS-134	53	3.50E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CO-58	53	4.00E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	MN-54	53	3.90E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	TH-232	53	1.20E-01	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	FE-59	53	8.60E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CS-136	53	9.20E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	ZN-65	53	6.00E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5
AIR PARTICULATE (PCI/M3)	GELI GAMMA	CO-60	53	3.90E-02	< LLD (0 /34 )	< LLD (0 /19 )	1	2	3	4	5

Table 19  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**SEPTEMBER, 1981 THROUGH NOVEMBER, 1981**  
**SECOND QUARTER SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	K-40	53	6.50E-01	8.70E-02 (1 /34 ) ( 8.70E-02 - 8.70E-02)	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	BALA-140	53	1.00E-01	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	BE-7	53	4.10E-01	1.63E-01 (10 /34 ) ( 1.00E-01 - 3.10E-01)	1.11E-01(5 /19 ) ( 5.40E-02 - 1.60E-01)	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	ZR-95	21	5.90E-02	< LLD (0 /14 )	< LLD (0 /7 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	NB-95	21	3.70E-02	< LLD (0 /14 )	1.80E-02(1 /7 ) ( 1.80E-02 - 1.80E-02)	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	SB-125	53	1.00E-01	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CE-141	53	1.20E-01	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	RU-103	53	5.00E-02	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5

Table 19  
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**OYSTER CREEK NUCLEAR GENERATING STATION**  
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**SECOND QUARTER SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CR-51	53	5.60E-01	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	RA-226	53	8.30E-02	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	I-131	53	2.80E-01	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	NP-239	48	9.20E+00	< LLD (0 /30 )	< LLD (0 /18 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	RU-106	53	3.90E-01	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CO-57	53	4.80E-02	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
AIR PARTICULATE (PCI/M3 )	GELI GAMMA	CS-137	53	3.60E-02	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
PRECIPITATION (NCI/M2 )	GROSS BETA-SS		24	1.34E-01	1.79E-03 (1 /15 ) ( 1.79E-03 - 1.79E-03)	2.53E-03(1 /9 ) ( 2.53E-03 - 2.53E-03)	1 2 3 4 5

Table 19  
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**OYSTER CREEK NUCLEAR GENERATING STATION**  
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**SECOND QUARTER SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
PRECIPITATION (NCI/M2)	GROSS BETA-DS		24	1.12E-01	1.85E-01 (14 /15 ) ( 4.31E-02 - 5.93E-01)	2.29E-01(9 /9 ) ( 1.03E-01 - 4.10E-01)	1 2 3 4 5
AIR IODINE (MR/STD. MO.)	IODINE-131		53	2.77E-02	< LLD (0 /34 )	< LLD (0 /19 )	1 2 3 4 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CE-144	3	1.30E-01	< LLD (0 /3 )	( . / . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	AG-110M	3	2.20E-02	< LLD (0 /3 )	( . / . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	TE-129M	3	8.50E-01	< LLD (0 /3 )	( . / . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	MO-99	3	1.10E+00	< LLD (0 /3 )	( . / . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-134	3	1.80E-02	< LLD (0 /3 )	( . / . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-58	3	2.20E-02	< LLD (0 /3 )	( . / . )	2 3 5

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CABBAGE (PCI/GM(WET))	GELI GAMMA	MN-54	3	2.00E-02	< LLD (0 / 3 )	( . . . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	TH-232	3	6.90E-02	< LLD (0 / 3 )	( . . . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	FE-59	3	5.10E-02	< LLD (0 / 3 )	( . . . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-136	3	4.50E-02	< LLD (0 / 3 )	( . . . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	ZN-65	3	4.50E-02	< LLD (0 / 3 )	( . . . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-60	3	3.20E-02	< LLD (0 / 3 )	( . . . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	K-40	3	2.90E-01	3.00E+00 (3 / 3 ) ( 1.60E+00 - 3.80E+00 )	( . . . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	BALA-140	3	5.00E-02	< LLD (0 / 3 )	( . . . )	2 3 5

Table 19  
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 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CABBAGE (PCI/GM(WET))	GELI GAMMA	BE-7	3	2.00E-01	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	ZR-95	3	4.10E-02	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	HB-95	3	2.70E-02	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	SB-125	3	5.50E-02	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CE-141	3	3.90E-02	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	RU-103	3	2.50E-02	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CR-51	3	2.50E-01	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	RA-226	3	3.80E-02	< LLD (0 /3 )	(. . ) (. /.) (. - . )	2 3 5

Table 19  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CABBAGE (PCI/GM(WET))	GELI GAMMA	I-131	3	8.80E-02	< LLD (0 /3 )	( . ( . / . ) )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	NP-239	3	8.60E+00	< LLD (0 /3 )	( . ( . / . ) )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	RU-106	3	1.90E-01	< LLD (0 /3 )	( . ( . / . ) )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CO-57	3	1.60E-02	< LLD (0 /3 )	( . ( . / . ) )	2 3 5
CABBAGE (PCI/GM(WET))	GELI GAMMA	CS-137	3	2.10E-02	4.10E-02 (2 /3 ) ( 3.20E-02 - 5.00E-02 )	( . ( . / . ) )	2 3 5
CORN (PCI/GM(WET))	GELI GAMMA	CE-144	2	1.40E-01	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	AG-110M	2	2.50E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	TE-129M	2	1.40E+00	< LLD (0 /1 )	< LLD (0 /1 )	3

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CORN (PCI/GM(WET))	GELI GAMMA	MO-99	1	3.10E+00	< LLD (0 /1 )	( . / . )	3
CORN (PCI/GM(WET))	GELI GAMMA	CS-134	2	1.90E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	CO-58	2	3.20E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	MN-54	2	2.50E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	TH-232	2	7.70E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	FE-59	2	7.10E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	CS-136	2	9.30E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	ZN-65	2	6.20E-02	< LLD (0 /1 )	< LLD (0 /1 )	3



Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CORN (PCI/GM(WET))	GELI GAMMA	CO-60	2	3.60E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	K-40	2	7.90E-02	1.90E+00 (1 /1 ) ( 1.90E+00 - 1.90E+00)	2.50E+00(1 /1 ) ( 2.50E+00 - 2.50E+00)	3
CORN (PCI/GM(WET))	GELI GAMMA	BALA-140	2	1.10E-01	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	BE-7	2	2.30E-01	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	ZR-95	2	5.40E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	NB-95	2	3.50E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	SB-125	2	5.90E-02	< LLD (0 /1 )	< LLD (0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	CE-141	2	6.20E-02	< LLD (0 /1 )	< LLD (0 /1 )	3

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN
CORN (PCI/GM(WET))	GELI GAMMA	RU-103	2	3.20E-02	< LLD	(0 /1 )	< LLD	(0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	CR-51	2	3.30E-01	< LLD	(0 /1 )	< LLD	(0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	RA-226	2	4.20E-02	< LLD	(0 /1 )	< LLD	(0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	I-131	2	2.60E-01	< LLD	(0 /1 )	< LLD	(0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	RU-106	2	2.40E-01	< LLD	(0 /1 )	< LLD	(0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	CO-57	2	1.70E-02	< LLD	(0 /1 )	< LLD	(0 /1 )	3
CORN (PCI/GM(WET))	GELI GAMMA	CS-137	2	2.40E-02	< LLD	(0 /1 )	< LLD	(0 /1 )	3
SURFACE WATER (PCI/L )	GROSS ALPHA-SS		24	5.61E-01	4.76E-01 (1 /21 ) ( 4.76E-01 - 4.76E-01)		< LLD	(0 /3 )	23 24 25 26 27 32 33

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SURFACE WATER (PCI/L)	GROSS BETA-SS		24	4.38E-01	5.73E-01 (13 /21 ) ( 2.75E-01 - 8.18E-01)	5.34E-01(2 /3 ) ( 4.92E-01 - 5.76E-01)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	GROSS BETA-DS		24	1.30E+01	1.64E+02 (21 /21 ) ( 2.34E+00 - 3.09E+02)	2.84E+02(3 /3 ) ( 2.51E+02 - 3.06E+02)	23 32	24 33	25	26	27
SURFACE WATER (MG/L)	CALCIUM BY AA		8	8.00E-02	2.61E+01 (7 /7 ) ( 1.00E+01 - 3.27E+01)	5.70E+00(1 /1 ) ( 5.70E+00 - 5.70E+00)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	TRITIUM		24	2.00E+02	1.98E+02 (3 /21 ) ( 1.78E+02 - 2.22E+02)	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	TOTAL URANIUM		24	1.57E+00	1.47E+00 (8 /21 ) ( 5.67E-01 - 1.92E+00)	1.28E+00(2 /3 ) ( 1.21E+00 - 1.35E+00)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CE-144	24	8.00E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	AG-110M	24	8.00E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	TE-129M	24	1.60E+02	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27

Table 19  
**RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY**  
**OYSTER CREEK NUCLEAR GENERATING STATION**  
**SEPTEMBER, 1981 THROUGH NOVEMBER, 1981**  
**SECOND QUARTER SUMMARY**

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN				
SURFACE WATER (PCI/L)	NAI GAMMA	MO-99	24	1.50E+03	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	ZRNB-95	24	7.80E+00	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CS-134	24	7.90E+00	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CO-58	24	8.90E+00	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	MN-54	24	8.00E+00	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	TH-232	24	3.10E+01	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	FE-59	24	1.90E+01	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CS-136	24	2.00E+01	< LLD	(0 /21 )	< LLD	(0 /3 )	23 32	24 33	25	26	27

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SURFACE WATER (PCI/L)	NAI GAMMA	TE-132	24	1.80E+02	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	ZH-65	24	1.60E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CO-60	24	7.80E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	K-40	24	1.20E+02	2.95E+02 (15 /21 ) ( 1.50E+02 - 4.90E+02)	2.97E+02(3 /3 ) ( 1.70E+02 - 3.70E+02)	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	BALA-140	24	1.70E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	BE-7	24	9.20E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	CR-51	24	1.10E+02	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27
SURFACE WATER (PCI/L)	NAI GAMMA	RA-226	24	1.60E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 32	24 33	25	26	27

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SURFACE WATER (PCI/L)	NAI GAMMA	I-131	24	2.80E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	NAI GAMMA	HA-22	24	7.80E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	NAI GAMMA	RU-106	24	8.00E+01	< LLD (0 /21 )	< LLD (0 /3 )	23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	NAI GAMMA	I-133	24	4.00E+03	< LLD (0 /21 )	< LLD (0 /3 )	23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	NAI GAMMA	CS-137	24	9.30E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	RADIUM-226		24	1.98E-01	3.61E-01 (19 /21 ) ( 1.48E-01 - 9.82E-01)	2.20E-01(3 /3 ) ( 1.73E-01 - 3.09E-01)	23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	RADIUM-228		24	1.18E+00	6.29E-01 (5 /21 ) ( 3.76E-01 - 8.17E-01)	< LLD (0 /3 )	23 24 25 26 27 32 33
SURFACE WATER (PCI/L)	STRONTIUM-90		24	1.03E+00	< LLD (0 /21 )	< LLD (0 /3 )	23 24 25 26 27 32 33

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SURFACE WATER (PCI/L)	GROSS ALPHA-DS		24	1.62E+00	2.55E+00 (9 /21 ) ( 8.59E-01 - 5.06E+00)	2.06E+00(2 /3 ) ( 1.71E+00 - 2.41E+00)	23	24	25	26	27
							32	33			
TOMATOES (PCI/GM(WET))	GELI GAMMA	CE-144	5	1.20E-01	< LLD (0 /4 )	< LLD (0 /1 )	1	2	3	5	
TOMATOES (PCI/GM(WET))	GELI GAMMA	AG-110M	5	2.10E-02	< LLD (0 /4 )	< LLD (0 /1 )	1	2	3	5	
TOMATOES (PCI/GM(WET))	GELI GAMMA	TE-129M	5	9.40E-01	< LLD (0 /4 )	< LLD (0 /1 )	1	2	3	5	
TOMATOES (PCI/GM(WET))	GELI GAMMA	MO-99	5	3.20E+00	< LLD (0 /4 )	< LLD (0 /1 )	1	2	3	5	
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-134	5	1.60E-02	< LLD (0 /4 )	< LLD (0 /1 )	1	2	3	5	
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-58	5	2.40E-02	< LLD (0 /4 )	< LLD (0 /1 )	1	2	3	5	
TOMATOES (PCI/GM(WET))	GELI GAMMA	MN-54	5	1.80E-02	< LLD (0 /4 )	< LLD (0 /1 )	1	2	3	5	

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE		BACKGROUND-MEAN(N/TOTAL) RANGE		STATIONS USED FOR INDICATOR MEAN			
TOMATOES (PCI/GM(WET))	GELI GAMMA	TH-232	5	6.20E-02	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5
TOMATOES (PCI/GM(WET))	GELI GAMMA	FE-59	5	6.10E-02	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-136	5	6.20E-02	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5
TOMATOES (PCI/GM(WET))	GELI GAMMA	ZH-65	5	4.90E-02	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-60	5	2.20E-02	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5
TOMATOES (PCI/GM(WET))	GELI GAMMA	K-40	5	2.80E-01	2.20E+00 (4 /4 ) ( 1.90E+00 - 2.40E+00)		3.20E+00(1 /1 ) ( 3.20E+00 - 3.20E+00)		1	2	3	5
TOMATOES (PCI/GM(WET))	GELI GAMMA	BALA-140	5	4.70E-02	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5
TOMATOES (PCI/GM(WET))	GELI GAMMA	BE-7	5	1.80E-01	< LLD	(0 /4 )	< LLD	(0 /1 )	1	2	3	5



Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
TOMATOES (PCI/GM(WET))	GELI GAMMA	ZR-95	5	4.30E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	NB-95	5	2.90E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	SB-125	5	5.30E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	CE-141	5	4.00E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	RU-103	5	2.40E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	CR-51	5	2.10E-01	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	RA-226	5	3.70E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	I-131	5	1.10E-01	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
TOMATOES (PCI/GM(WET))	GELI GAMMA	RU-106	5	1.60E-01	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	CO-57	5	1.50E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
TOMATOES (PCI/GM(WET))	GELI GAMMA	CS-137	5	2.00E-02	< LLD (0 /4 )	< LLD (0 /1 )	1 2 3 5
WELL WATER (PCI/L )	GROSS ALPHA-SS		18	4.14E-01	2.36E-01 (2 /18 ) ( 2.28E-01 - 2.45E-01)	( . / . ) ( . - . )	1 18 19 20 21 22
WELL WATER (PCI/L )	GROSS ALPHA-DS		18	3.94E+00	4.18E+00 (5 /18 ) ( 2.53E+00 - 6.08E+00)	( . / . ) ( . - . )	1 18 19 20 21 22
WELL WATER (PCI/L )	GROSS BETA-SS		18	5.95E-01	< LLD (0 /18 )	( . / . ) ( . - . )	1 18 19 20 21 22
WELL WATER (PCI/L )	GROSS BETA-DS		18	8.67E-01	2.37E+00 (17 /18 ) ( 8.40E-01 - 4.67E+00)	( . / . ) ( . - . )	1 18 19 20 21 22
WELL WATER (PCI/L )	POTASSIUM-40		6	8.60E-02	1.55E+00 (6 /6 ) ( 9.50E-01 - 2.04E+00)	( . / . ) ( . - . )	1 18 19 20 21 22

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
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SAMPLE TYPE	ANALYSIS	ISOTOPE NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
WELL WATER (PCI/L)	TRITIUM	6	1.81E+02	< LLD (0 /6 )	(. /.) (. /.)	1 18 19 20 21 22
WELL WATER (PCI/L)	TOTAL URANIUM	6	2.83E-01	4.93E-01 (2 /6 ) ( 3.00E-01 - 6.87E-01)	(. /.) (. /.)	1 18 19 20 21 22
WELL WATER (PCI/L)	RADIUM-226	6	7.65E-02	5.92E-01 (6 /6 ) ( 1.05E-01 - 1.36E+00)	(. /.) (. /.)	1 18 19 20 21 22
WELL WATER (PCI/L)	RADIUM-228	6	2.48E+00	< LLD (0 /6 )	(. /.) (. /.)	1 18 19 20 21 22
CLAMS (PCI/GM(WET))	GROSS ALPHA	12	1.28E-01	2.33E-01 (9 /9 ) ( 9.17E-02 - 5.13E-01)	2.19E-01(2 /3 ) ( 2.16E-01 - 2.22E-01)	23 24 25
CLAMS (PCI/GM(WET))	GROSS BETA	12	4.28E-02	1.28E+00 (9 /9 ) ( 1.09E+00 - 1.50E+00)	9.27E-01(3 /3 ) ( 3.30E-01 - 1.38E+00)	23 24 25
CLAMS (MG/GM(WET))	CALCIUM BY AA	4	1.03E+00	4.55E+01 (3 /3 ) ( 3.46E+01 - 5.84E+01)	1.48E+02(1 /1 ) ( 1.48E+02 - 1.48E+02)	23 24 25
CLAMS (PCI/GM(WET))	HAI GAMMA	CE-144	4	1.40E-01	< LLD (0 /3 )	23 24 25

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 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
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SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CLAMS (PCI/GM(WET))	NAI GAMMA	AG-110M	5	3.20E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	TE-129M	4	6.30E-01	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	MO-99	4	6.30E+00	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	ZRNB-95	4	3.10E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-134	4	3.10E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CO-58	4	3.60E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	MN-54	4	3.20E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	TH-232	4	1.10E-01	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

22

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CLAMS (PCI/GM(WET))	NAI GAMMA	FE-59	4	7.80E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-136	4	1.00E-01	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	TE-132	4	3.70E-01	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	ZN-65	4	6.50E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CO-60	4	3.10E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	K-40	4	6.20E-01	1.73E+00 (3 /3 ) ( 1.60E+00 - 1.90E+00)	1.50E+00(1 /1 ) ( 1.50E+00 - 1.50E+00)	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	BALA-140	4	6.90E-02	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	BE-7	4	1.90E-01	< LLD (0 /3 )	< LLD (0 /1 )	23 24 25

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

23

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
CLAMS (PCI/GM(WET))	NAI GAMMA	CR-51	4	2.20E-01	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	RA-226	4	4.70E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	I-131	4	1.10E-01	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	NA-22	4	3.10E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	RU-106	4	3.20E-01	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	I-133	4	3.10E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	NAI GAMMA	CS-137	4	3.10E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25
CLAMS (PCI/GM(WET))	STRONTIUM-90		4	2.35E-02	< LLD (0 / 3 )	< LLD (0 / 1 )	23 24 25

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

24

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SPINACH (PCI/GM(WET))	GELI GAMMA	CE-144	1	8.20E-02	< LLD (0 /1 )	( . . ) ( . / . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	AG-110M	1	1.80E-02	< LLD (0 /1 )	( . . ) ( . / . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	TE-129M	1	5.30E-01	< LLD (0 /1 )	( . . ) ( . / . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	MO-99	1	5.90E-01	< LLD (0 /1 )	( . . ) ( . / . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CS-134	1	1.20E-02	< LLD (0 /1 )	( . . ) ( . / . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CO-58	1	1.40E-02	< LLD (0 /1 )	( . . ) ( . / . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	MN-54	1	1.20E-02	< LLD (0 /1 )	( . . ) ( . / . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	TH-232	1	4.00E-02	< LLD (0 /1 )	( . . ) ( . / . )	1

Table 19  
 RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
 OYSTER CREEK NUCLEAR GENERATING STATION  
 SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
 SECOND QUARTER SUMMARY

25

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SPINACH (PCI/GM(WET))	GELI GAMMA	FE-59	1	2.80E-02	< LLD (0 /1 )	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CS-136	1	2.80E-02	< LLD (0 /1 )	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	ZN-65	1	2.70E-02	< LLD (0 /1 )	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CO-60	1	1.20E-02	< LLD (0 /1 )	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	K-40	1	1.20E-01	1.40E+00 (1 /1 ) ( 1.40E+00 - 1.40E+00)	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	BALA-140	1	2.80E-02	< LLD (0 /1 )	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	BE-7	1	1.20E-01	1.90E-01 (1 /1 ) ( 1.90E-01 - 1.90E-01)	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	ZR-95	1	2.50E-02	< LLD (0 /1 )	( . ( . / . ) - . )	1



Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

26

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SPINACH (PCI/GM(WET))	GELI GAMMA	NB-95	1	1.50E-02	< LLD (0 / 1 )	(. . . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	SB-125	1	3.30E-02	< LLD (0 / 1 )	(. . . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CE-141	1	2.60E-02	< LLD (0 / 1 )	(. . . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	RU-103	1	1.50E-02	< LLD (0 / 1 )	(. . . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CR-51	1	1.40E-01	< LLD (0 / 1 )	(. . . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	RA-226	1	2.50E-02	< LLD (0 / 1 )	(. . . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	I-131	1	4.90E-02	< LLD (0 / 1 )	(. . . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	HP-239	1	4.60E+00	< LLD (0 / 1 )	(. . . )	1

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

27

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SPINACH (PCI/GM(WET))	GELI GAMMA	RU-106	1	1.10E-01	< LLD (0 /1 )	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CO-57	1	1.00E-02	< LLD (0 /1 )	( . ( . / . ) - . )	1
SPINACH (PCI/GM(WET))	GELI GAMMA	CS-137	1	1.20E-02	8.40E-02 (1 /1 ) ( 8.40E-02 - 8.40E-02 )	( . ( . / . ) - . )	1
SOIL (PCI/GM(DRY))	GROSS BETA		15	9.88E-01	5.03E+00 (15 /15 ) ( 2.15E+00 - 8.89E+00 )	( . ( . / . ) - . )	1 2 3 4 5
PASTURE (PCI/GM(WET))	GROSS BETA		3	9.12E-02	5.17E+00 (3 /3 ) ( 3.38E+00 - 7.47E+00 )	( . ( . / . ) - . )	28 29 30
PASTURE (MG/GM(WET) )	CALCIUM BY AA		3	1.58E+00	1.31E+02 (3 /3 ) ( 1.14E+02 - 1.54E+02 )	( . ( . / . ) - . )	28 29 30
PASTURE (PCI/GM(WET))	STRONTIUM-90		3	4.40E-02	8.08E-01 (3 /3 ) ( 5.23E-01 - 1.33E+00 )	( . ( . / . ) - . )	28 29 30
SILT (PCI/GM(DRY))	GROSS ALPHA		8	9.92E+00	< LLD (0 /7 )	< LLD (0 /1 )	23 24 25 26 27 32 33

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

28

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SILT (PCI/GM(DRY))	GROSS BETA		8	1.22E+00	9.03E+00 (6 /7 ) ( 2.11E+00 - 2.07E+01)	1.02E+01(1 /1 ) ( 1.02E+01 - 1.02E+01)	23 32	24 33	25	26	27
SILT (PCI/GM(DRY))	GELI GAMMA	CE-144	18	4.90E-01	7.40E-01 (3 /15 ) ( 2.50E-01 - 9.90E-01)	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	AG-110M	18	1.10E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	TE-129M	18	3.40E+00	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	MO-99	6	2.10E+00	< LLD (0 /5 )	< LLD (0 /1 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	ZRNB-95	12	3.70E-02	3.20E-01 (1 /10 ) ( 3.20E-01 - 3.20E-01)	< LLD (0 /2 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	CS-134	18	9.40E-02	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	CO-58	18	9.80E-02	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

29

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN				
SILT (PCI/GM(DRY))	GELI GAMMA	MN-54	18	9.50E-02	8.90E-02 (2 /15 ) ( 5.80E-02 - 1.20E-01)	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	TH-232	18	3.00E-01	4.64E-01 (14 /15 ) ( 1.80E-01 - 9.40E-01)	4.43E-01(3 /3 ) ( 4.10E-01 - 4.80E-01)	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	FE-59	18	2.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	CS-136	18	4.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	ZN-65	18	2.70E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	CO-60	18	1.70E-01	3.67E-01 (8 /15 ) ( 2.80E-02 - 1.30E+00)	< LLD (0 /3 )	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	K-40	18	1.30E+00	5.99E+00 (14 /15 ) ( 4.80E-01 - 1.30E+01)	1.17E+01(3 /3 ) ( 1.00E+01 - 1.30E+01)	23	24	25	32	33
SILT (PCI/GM(DRY))	GELI GAMMA	BALA-140	18	6.00E-01	< LLD (0 /15 )	< LLD (0 /3 )	23	24	25	32	33

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

30

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SILT (PCI/GM(DRY))	GELI GAMMA	BE-7	18	8.30E-01	1.13E+00 (2 /15 ) ( 9.60E-01 - 1.30E+00)	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	ZR-95	6	1.70E-01	4.30E-01 (1 /5 ) ( 4.30E-01 - 4.30E-01)	< LLD (0 /1 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	NB-95	6	1.30E-01	3.67E-01 (3 /5 ) ( 1.00E-01 - 8.50E-01)	< LLD (0 /1 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	SB-125	18	2.20E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CE-141	18	1.30E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	RU-103	18	1.10E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CR-51	18	8.40E-01	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	RA-226	18	1.70E-01	3.40E-01 (15 /15 ) ( 2.00E-01 - 5.10E-01)	3.37E-01(3 /3 ) ( 3.20E-01 - 3.60E-01)	23 24 25 32 33

Table 19  
RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY  
OYSTER CREEK NUCLEAR GENERATING STATION  
SEPTEMBER, 1981 THROUGH NOVEMBER, 1981  
SECOND QUARTER SUMMARY

31

SAMPLE TYPE	ANALYSIS	ISOTOPE	NUMBER OF ANALYSES PERFORMED	LLD	INDICATOR-MEAN(N/TOTAL) RANGE	BACKGROUND-MEAN(N/TOTAL) RANGE	STATIONS USED FOR INDICATOR MEAN
SILT (PCI/GM(DRY))	GELI GAMMA	I-131	18	2.10E+00	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	NP-239	6	1.60E+01	< LLD (0 /5 )	< LLD (0 /1 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	RU-106	18	7.90E-01	5.50E-01 (1 /15 ) ( 5.50E-01 - 5.50E-01)	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CO-57	18	5.10E-02	< LLD (0 /15 )	< LLD (0 /3 )	23 24 25 32 33
SILT (PCI/GM(DRY))	GELI GAMMA	CS-137	18	1.40E-01	1.82E-01 (6 /15 ) ( 1.90E-02 - 2.70E-01)	6.55E-02(2 /3 ) ( 5.90E-02 - 7.20E-02)	23 24 25 32 33

### Analysis of Data

A statistical analysis incorporating both historical and current REMP data was performed. Values which fell outside of the mean plus two standard deviations were noted. These outlying values, although termed "slightly above normal" environmental levels, are in no way considered to be abnormal. Data and environmental pathway comparisons were performed to determine if correlations existed between facility releases and the elevated environmental levels of radioactivity. A discussion of the findings by month follows:

<u>June, 1981</u>	<u>Media</u>	<u>Station</u>	<u>Parameter</u>
	Surface Water	24	Tritium
	Aquatic Sediment	32	Cobalt-60

A higher than normal concentration of tritium was detected in surface water from station 24. The total tritium released during the collection period was summed and a site boundary concentration calculated. This off-site concentration added to an average background concentration was less than the elevated result. This elevated result is not considered facility related.

Also during June, 1981 an aquatic sediment isotopic analysis showed a higher than normally expected concentration of Cobalt-60 at station 32. The presence of slightly higher than background radioactivity in the marine sediments of the Oyster Creek discharge canal has been documented and attributed to past facility discharges (Olsen, C. R. et. al., 1980).

<u>July, 1981</u>	<u>Media</u>	<u>Station</u>	<u>Parameter</u>
	Well Water	19	Gross Beta (Insoluble)
	Surface Water	25	Tritium
	Aquatic Sediment	24	Ra-226

During July, 1981 a well water sample from station 19 displayed a gross beta (insoluble) concentration that was higher than expected. An off-site gross beta concentration at the site boundary from facility releases was calculated and added to a background value. The resulting concentration was less than the analysis result in question.

A tritium concentration in a surface water sample from station 25 was found to be slightly elevated. A calculated off-site concentration added to a background value could not account for this elevated result. Neither of the above anomalous values are considered to be plant related.

Also during July, an isotopic analysis of aquatic sediment from station 24 indicated Radium-226 activity that was slightly above background. Radium-226 is a naturally occurring isotope found in abundance in marine ecosystems. This result is not considered facility related.

<u>August, 1981</u>	<u>Media</u>	<u>Station</u>	<u>Parameter</u>
	Well Water	18	Gross Beta (Soluble)
	Clams	23	Gross Alpha
	Surface Water	31	Radium-226
	Surface Water	32	Radium-226
	Surface Water	33	Tritium
	Aquatic Sediment	25	Potassium-40

During August 1981, one clam gross alpha analysis, two surface water Radium-226 analyses, and one surface water Tritium analysis exhibited results that were slightly above normal. Shellfish such as clams are known to concentrate elements, both stable and radioactive, over a given period of time. Elevated alpha activity in clams during this month, though slightly above normal, is not considered unusual and is therefore not readily attributed to facility discharges. There were no facility liquid discharges during the sample collection period; hence, elevated results in surface water are not considered to be plant related.

A well water sample analysis displayed a higher than expected gross beta (soluble) concentration. Although slightly higher than normally expected, this concentration is less than 1/3 of the maximum level of gross beta activity permitted by the USEPA (American Public Health Association, 1980). Considering the transport pathway concerned (groundwater) and the complete absence historically of plant-specific radionuclides in regional groundwaters, this anomalous gross radioactivity measurement is not considered to be plant related.

An isotopic analysis of aquatic sediment from station 25, displayed a higher than expected value for Potassium-40. Potassium-40 is a naturally occurring isotope present in substantial concentrations in various marine sediments and the higher than expected analysis concentration is not considered to be related to plant effluents.

<u>September, 1981</u>	<u>Media</u>	<u>Station</u>	<u>Parameter</u>
	Surface Water	31	Gross Beta (Soluble)
	Aquatic Sediment	33	Niobium-95
	Aquatic Sediment	33	Zirconium-95
	Aquatic Sediment	33	Cerium-144
	Aquatic Sediment	33	Thorium-232

During September, 1981, an elevated gross beta (soluble) concentration was found in a surface water sample from station 31. This station is a background station and is considered to be outside of any possible plant influence.

An isotopic analysis on aquatic sediment from station 33 displayed higher than background isotopic concentrations. The presence of



higher than background concentrations of Zirconium-95, Niobium-95, Cerium-144 and Thorium-232 has been documented (Olsen, C. R., et. al., 1980) and is attributed to past facility discharges, natural sources and nuclear weapons testing fallout.

<u>October, 1981</u>	<u>Media</u>	<u>Station</u>	<u>Parameter</u>
	Aquatic Sediment	32	Thorium 232

In October, an aquatic sediment sample from station 32 displayed a slightly higher than normal Thorium-232 concentration. Thorium-232 is a naturally occurring isotope and this concentration is not considered facility related.

<u>November, 1981</u>	<u>Media</u>	<u>Station</u>	<u>Parameter</u>
	Aquatic Sediment	33	Zirconium-Niobium-95
	Aquatic Sediment	33	Ruthenium-106
	Aquatic Sediment	33	Cerium-144

An isotopic analysis performed on an aquatic sediment sample from station 33 exhibited higher than background concentrations of Zirconium-Niobium-95, Ruthenium-106, and Cerium-144. The presence of higher than background radioactivity in marine sediments in the discharge canal has been documented (Olsen, C. R., et. al., 1980) and attributed to past facility discharges and nuclear weapons testing fallout.

#### Film Badges

All film badges used during this reporting period were inadvertently exposed during security searches with an X-ray machine. Comparisons of film badge data with TLD data prove that the film badge data are not representative of environmental exposures. Corrective action has been taken to assure that film badges will not be inadvertently exposed during security searches in the future.

## RADIOLOGICAL IMPACT ON MAN

Environmental monitoring results for the period June 1, 1981 through November 30, 1981 indicate that intakes of Oyster Creek effluent isotopes did not exceed 1% of the intakes equivalent to exposure to concentrations in 10CFR20, Appendix B, Table II.

During growing season months, inhalation and terrestrial food pathways are available to gaseous effluent isotopes. The pathways available to liquid effluent isotopes are fish and shellfish consumption. Concentrations exceeded minimum detectable levels for only a few isotopes in only a few samples. Although man-made isotopes detected in the environment are almost always the results of weapons fallout, it was conservatively assumed for this analysis that environmental levels were due to Oyster Creek operations. Intakes from inhalation, fish ingestion, and shellfish ingestion were estimated from air and clam sample results. Fish concentrations were estimated from clam measurements. During this period minimum levels of detection were inordinately high for Sr-90 in clams and were too high to show that intake limits were met. However, effluent releases of Sr-90 were lower than in previous periods during which more sensitive analyses indicated clam concentrations less than 5 pCi/kg. On that basis, the concentrations of Sr-90 in clams were assumed to be 5 pCi/kg for purposes of this report. The results indicate that intakes were less than 1% of intakes equivalent to exposure to concentrations in 10CFR20, Appendix B, Table II.

Intakes via terrestrial food pathways are estimated from analyses of fresh produce samples collected during the harvest season. No isotopes attributable to plant operations were detected in these samples. Concentrations of Cs-137 are estimated by assuming isotopes are present in concentrations equivalent to the lower limit of detection. The lower limit of detection for I-131 was not low enough during this period to be useful for this purpose. Therefore, the concentration of I-131 was estimated using the quantity of I-131 released, a deposition parameter value, and the model in Regulatory Guide 1.109, (Revision 1). Using this method, intakes from the terrestrial food pathway did not exceed 1% of the intakes equivalent to exposure to concentrations in 10CFR20, Appendix B, Table II.

The U.S. EPA regulation 40CFR190 requires that doses to any real person from certain uranium fuel cycle activities will not exceed in one year 25 mrem for the whole body and other organs except that 75 mrem is the limit for the thyroid. The regulation applies to nuclear power plants. Since there is no other uranium fuel cycle activity likely to contribute doses that are a significant fraction of the EPA limit to people in the vicinity of Oyster Creek, it may be assumed for purposes of this assessment that the full limits apply to Oyster Creek.

The doses equivalent to intakes equivalent to that from 1% of 10CFR20, Appendix B, Table II limits are 5 mrem/yr for the whole body and 15 mrem/yr for other internal organs except for 30 mrem/yr for the bone and the thyroid as recommended in ICRP2. (Concentration limits for

I-131 and Sr-89 and Sr-90 reflect Federal Radiation Council Guidance and equivalent doses are lower than ICRP recommendations.) The analyses herein show that the doses from food pathways fall below 40CFR190 limits by a wide margin. Measurements from the thermoluminescent dosimeters show no clear contribution of plant effluents to direct radiation dose and indicate that any contribution does not exceed five mrem. Therefore, it is clear that 40CFR190 dose limits were met in the period under consideration.

#### IV REFERENCES

#### REFERENCES

- American Public Health Organization. 1980, Standard Methods for the Examination of Water and Waste Water. 15th Edition, page 574.
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