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U.S. Nuclear Regulatory Commission  
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Washington, D.C. 20555

Attention: Document Control Desk

Enclosed is the Byron Station Annual Radiological Environmental Operating Report, Docket Numbers STN 50-454 and STN 50-455. This report contains the results of the Radiological Environmental and Meteorological Monitoring Programs for the 1995 calendar year. The Radioactive Effluent Release Report was submitted under separate cover.

Two copies of the report are provided for your use. Two copies will be forwarded to Region III and one copy to the Senior Resident Inspector.

Sincerely yours,

K.L. Kofron  
Station Manager  
Byron Nuclear Power Station

KLK/DD/kh

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ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

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BYRON STATION  
ANNUAL RADIOLOGICAL  
ENVIRONMENTAL OPERATING  
REPORT

1995

APRIL 1996

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## INTRODUCTION

Byron Station, a two-unit PWR station, is located about two miles east of the Rock River and approximately three miles southwest of Byron in Ogle County, north central Illinois. Each reactor is designed to have a capacity of 1120 MW net. Unit No. 1 loaded fuel in November 1984 and went on line February 2, 1985. Unit No. 2 went on line January 9, 1987. The station has been designed to keep releases to the environment at levels below those specified in the regulations.

Liquid effluents from Byron Station are released to the Rock River in controlled batches after radioassay of each batch. Gaseous effluents are released to the atmosphere and are calculated on the basis of analyses of daily grab samples of noble gases as well as continuously collected composite samples of iodine and particulate radioactivity sampled during the course of the year. The results of effluent analyses are summarized on a monthly basis. Airborne concentrations of noble gases, I-131, and particulate radioactivity in offsite areas are calculated using isotopic composition of effluents and meteorological data.

Environmental monitoring is conducted by sampling at indicator and control (background) locations in the vicinity of Byron Station to measure changes in radiation or radioactivity levels that may be attributable to station operation. If significant changes attributable to Byron Station are measured, these changes are correlated with effluent releases. External gamma radiation exposure from noble gases and internal dose from I-131 in milk are the critical pathways at this site; however, an environmental monitoring program is conducted which also includes other pathways.

ComEd is in the process of implementing a Uniform Radiological Environmental Monitoring Program, referred to as UREMP, among the ComEd nuclear stations. This program includes generic requirements pertaining to environmental sampling and analysis, an annual land use census, an interlaboratory comparison program and environmental reports.

## SUMMARY

Gaseous and liquid effluents for the period contributed to only a small fraction of the Byron Station Technical Specification limits. Calculations of environmental concentrations based on effluent, Rock River flow, and meteorological data for the period indicate that consumption by the public of radionuclides attributable to Byron Station does not exceed the regulatory limits. Radiation exposure from radionuclides released to the atmosphere represented the critical pathway for the period with a maximum adult dose estimated to be  $2.98E-04$  mrem for the year, where a shielding and occupancy factor of 0.7 is assumed. The assessment of radiation doses is performed in accordance with the ComEd Offsite Dose Calculation Manual (ODCM). The results of analysis confirm that the station is operating in compliance with 10CFR50 Appendix I, 10CFR20 and 40CFR190.

There were no additional operational controls implemented which affected the areas of radiological effluents in 1995.

There were no measurements which exceeded the reporting levels, including any which would not have been attributable to station effluents.

The results of the current radiological environmental monitoring program are approximately the same as those found during the preoperational studies conducted at Byron Station.

## 1.0 EFFLUENTS

### 1.1 Gaseous Effluents to the Atmosphere

Measured concentrations and isotopic composition of noble gases, radioiodine, and particulate radioactivity released to the atmosphere during the year are listed in Table 1.1-1. A total of  $1.15\text{E}+02$  curies of fission and activation gases was released with a maximum quarterly release rate of  $1.06\text{E}+03$   $\mu\text{Ci}/\text{sec}$ , for both units.

A total of  $6.41\text{E}-04$  curies of I-131 or I-133 was released during the year.

A total of  $2.34\text{E}-05$  curies of beta emitters was released as airborne particulate matter with no alpha emitters being detected.

A total of 4.26 curies of tritium was released.

### 1.2 Liquids Released to Rock River

A total of  $2.61\text{E}+07$  liters of radioactive liquid waste (prior to dilution) containing 1.80 curies (excluding tritium, noble gases and alpha) were discharged from the station. These wastes were released at a maximum quarterly average concentration of  $2.41\text{E}-07$   $\mu\text{Ci}/\text{ml}$ . A total of  $1.35\text{E}+03$  curies of tritium was released. Quarterly release totals of principal radionuclides in liquid effluents are given in Table 1.2-1.

## 2.0 SOLID RADIOACTIVE WASTE

Solid radioactive wastes were shipped to Barnwell, South Carolina and Oakridge, Tennessee. The record of waste shipments is summarized in Table 2.0-1.

## 3.0 DOSE TO MAN

### 3.1 Gaseous Effluent Pathways

Table 3.1-1 summarizes the doses resulting from releases of airborne radioactivity via the different exposure pathways.

#### 3.1.1 Noble Gases

##### 3.1.1.1 Gamma Dose Rates

Offsite Gamma air and whole body dose rates are shown in Table 3.1-1 and were calculated based on measured release rates, isotopic composition of the noble gases, and average meteorological data for the period. Isodose contours based on concurrent meteorological data for gamma dose are shown in Figure 3.1-1 for the year. Based on measured effluents and average meteorological data, the maximum dose to an individual would be  $2.98\text{E}-05$  mrem for the year, with an occupancy or shielding factor of 0.7 included, and based on measured effluents and concurrent meteorological data would be  $1.59\text{E}-05$  mrem. The maximum gamma air dose was  $4.24\text{E}-04$  mrad, and  $3.31\text{E}-05$  mrad based on concurrent meteorological data.



### 3.1.1.2 Beta Air and Skin Dose Rates

The range of beta particles in air is relatively small (on the order of a few meters or less); consequently, plumes of gaseous effluents may be considered "infinite" for the purpose of calculating the dose from beta radiation incident on the skin. However, the actual dose to sensitive skin tissues is difficult to calculate due to the effect of the beta particle energies, thickness of inert skin and clothing covering sensitive tissues. For purposes of this report the skin is taken to have a thickness of  $7.0 \text{ mg/cm}^2$  and an occupancy factor of 1.0 is used. The skin dose from beta and gamma radiation for the year was  $8.70\text{E-}04$  mrem.

The air concentrations of radioactive noble gases at the offsite receptor locations are given in Figure 3.1-2. The maximum offsite beta air dose for the year was  $1.76\text{E-}03$  mrad.

### 3.1.2 Radioactive Iodine

The human thyroid exhibits a significant capacity to concentrate ingested or inhaled iodine. The minimal levels of radioiodine, I-131, released during routine operation of the station may be made available to man resulting in a dose to the thyroid. The principal pathway of interest for this radionuclide is ingestion of radioiodine in milk by an infant. Calculations made for 1993 and previous years indicate that contributions to doses from inhalation of I-131 and I-133 and I-131 in milk are negligible.

#### 3.1.2.1 Iodine Concentrations in Air

The calculated concentration contours for iodine in air are shown in Figure 3.1-3. Included in these calculations is an iodine cloud depletion factor which accounts for the phenomenon of elemental iodine deposition on the ground. The maximum offsite concentration is estimated to be  $4.06\text{E-}05 \text{ pCi/m}^3$  for the year.

#### 3.1.2.2 Dose to Infant's Thyroid

The hypothetical thyroid dose to an infant living near the station via ingestion of milk was calculated. The radionuclide considered was I-131 and the source of milk was taken to be the nearest dairy farm with the cows pastured from May through October. The maximum infant's thyroid dose was  $4.19\text{E-}03$  mrem during the year (Table 3.1-1).

### 3.1.3 Concentrations of Particulates in Air

Concentration contours of radioactive airborne particulates are shown in Figure 3.1-4. The maximum annual offsite concentration is estimated to be  $1.20\text{E-}06 \text{ pCi/m}^3$ .

## 3.2 Liquid Effluent Pathways

The three principal pathways through the aquatic environment for potential doses to man from liquid waste are ingestion of potable water, eating aquatic foods, and exposure while walking on the shoreline. Not all of these pathways are significant or

applicable at a given time or station but a reasonable approximation of the dose can be made by adjusting the dose formula for season of the year or type and degree of use of the aquatic environment. NRC developed equations\* were used to calculate the doses to the whole body, lower GI tracts, thyroid, bone, skin; specific parameters for use in the equations are given in the ComEd Offsite Dose Calculation Manual. The maximum whole body dose for the year was  $8.90E-03$  mrem and no organ dose exceeded  $2.86E-02$  mrem (Table 3.2-1).

### 3.3 Assessment of Dose to Member of Public

During the period January to December, 1995, Byron Station did not exceed these limits as shown in Table 3.1-1 and Table 3.2-1 (based on yearly average meteorological data), and as shown in Figure 3.1-1 (based on concurrent meteorological data), and as shown in Table 3.3-1:

- The RETS limits on dose or dose commitment to a member of the public due to radioactive materials in liquid effluents from each reactor unit (3 mrem to the whole body or 10 mrem to any organ during any calendar quarter; 6 mrem to the whole body or 20 mrem to any organ during any calendar year).
- The RETS limits on air dose in noble gases released in gaseous effluents to a member of the public from each reactor unit (5 mrad for gamma radiation or 10 mrad for beta radiation during any calendar quarter; 10 mrad for gamma radiation or 20 mrad for beta radiation during any calendar year).
- The RETS limits on dose to a member of the public due to iodine-131, iodine-133, tritium, and radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each reactor unit (7.5 mrem to any organ during any calendar quarter; 15 mrem to any organ during any calendar year).
- The 10CFR20 limit on Total Effective Dose Equivalent to individual members of the public (100 mrem).

### 4.0 SITE METEOROLOGY

A summary of the site meteorological measurements taken during each calendar quarter of the year is given in Appendix II. The data are presented as cumulative joint frequency distributions of the wind direction for the 250' level and wind speed class by atmospheric stability class determined from the temperature difference between the 250' and 30' levels. Data recovery for all measurements on the tower was 99.9% during 1995.

### 5.0 ENVIRONMENTAL MONITORING

Table 5.0-1 provides an outline of the Radiological Environmental Monitoring Program (REMP) as required in the Technical Standards. Table 5.0-2 outlines the sampling locations, sample collection frequency and analysis for the samples. Sampling locations are shown in Figures 5.0-1 through 5.0-4. Concentrations of radioactivity in various media are summarized in Tables 5.0-3 through 5.0-6. A detailed listing of all data is presented in Appendix III.

\* Nuclear Regulatory Commission, Regulatory Guide 1.109 (Rev. 1).

Specific findings for various environmental media are discussed below.

### 5.1 Gamma Radiation

External radiation dose was measured using  $\text{CaSO}_4:\text{Tm}$  thermoluminescent dosimeters (TLDs). Each location consists of 2 TLD sets. The quarterly average external radiation dose for the year was 16.6 mR at the indicator locations and 14.4 mR at the control locations. TLD results are listed in Section 4.0 of Appendix III and locations are shown in Figure 5.0-1.

Quarterly external radiation dose at twelve air sampling locations averaged 14.9 mR and was similar to that measured in 1985 (14.4 mR), 1986 (14.9 mR), 1987 (15.3 mR), 1988 (15.2 mR), 1989 (14.6 mR), 1990 (14.5 mR), 1991 (14.3 mR), 1992 (13.6 mR), 1993 (14.2 mR) and 1994 (14.9 mR). These differences are not statistically significant.

### 5.2 Airborne I-131 and Particulate Radioactivity

Locations of the samplers are shown in Figure 5.0-2. Airborne I-131 remained below the LLD of  $0.07 \text{ pCi/m}^3$  throughout the year in all samples.

Gross beta concentrations ranged from  $0.010$  to  $0.045 \text{ pCi/m}^3$  and averaged  $0.022 \text{ pCi/m}^3$ , which is slightly lower than the average concentrations in 1985 ( $0.026 \text{ pCi/m}^3$ ), 1986 ( $0.026 \text{ pCi/m}^3$ , except for the period from May 12 through June 9 when it was influenced by the nuclear reactor accident at Chernobyl), 1987 ( $0.027 \text{ pCi/m}^3$ ), 1988 ( $0.031 \text{ pCi/m}^3$ ), 1989 ( $0.026 \text{ pCi/m}^3$ ), and about the same as in 1990 ( $0.021 \text{ pCi/m}^3$ ), 1991 ( $0.020 \text{ pCi/m}^3$ ), 1992 ( $0.022 \text{ pCi/m}^3$ ), 1993 ( $0.021 \text{ pCi/m}^3$ ), and 1994 ( $0.021 \text{ pCi/m}^3$ ).

All gamma-emitting nuclide activities were below their respective LLD levels. No radioactivity attributable to station operation was detected in any samples.

### 5.3 Terrestrial Radioactivity

Vegetables were collected in August and analyzed for gamma-emitting nuclides. In addition, green leafy vegetables were analyzed for Iodine-131. All nuclides were below the limits of detection, indicating that there was no measurable amount of radioactivity attributable to the station releases. Identical results were obtained during the period 1985 through 1994.

### 5.4 Aquatic Radioactivity

Well water was collected monthly from two offsite wells, shown in Figure 5.0-3, and analyzed for gross beta, tritium, and gamma-emitting nuclides. All other results were below the lower limits of detection. The results were similar to those obtained in 1985 through 1994.

Surface water samples were collected weekly from four locations shown in Figure 5.0-3. Weekly samples were composited monthly and analyzed for gamma emitters. Quarterly composites were analyzed for tritium. Cs-134 and Cs-137 concentrations were below the LLD level of  $15 \text{ pCi/L}$  and  $18 \text{ pCi/L}$ , respectively, in all samples. Tritium concentration was below the LLD of  $200 \text{ pCi/L}$  in all samples collected from

the Woodland Creek (BY-09), Upstream (BY-13), and Upstream (BY-29). These levels were similar to those obtained in 1985 through 1994.

Downstream from discharge (BY-12), tritium averaged 820 pCi/L, ranging from 469 to 1,417 pCi/L. Cs-134 and Cs-137 levels were below the LLD level of 15 pCi/L and 18 pCi/L, respectively, in all samples. All other gamma-emitters were below their respective LLDs. Elevated levels of tritium downstream from discharge pipe are attributable to the station operation. These levels were similar to those obtained in 1985 through 1994.

Sediment samples were collected twice, from two control and one indicator locations, and analyzed for gamma-emitters. Cs-134 was below the LLD level of 0.15 pCi/g dry weight in all samples. Cs-137 was below the LLD level of 0.18 pCi/g dry weight in all samples. Cs-137 was detected in two samples (one control location) and averaged 0.15 pCi/g dry weight, similar to that observed in 1991 (0.27 pCi/g dry weight), 1992 (0.16 pCi/g dry weight), 1993 (0.25 pCi/g dry weight) and 1994 (0.18 pCi/g dry weight). All other gamma-emitting nuclides, except naturally occurring gamma-emitters, were below detection limits.

Levels of gamma radioactivity in fish were measured and found in all cases to be below the lower limits of detection for the program. The results were identical to those obtained in 1985 through 1994.

#### 5.5 Milk

Milk samples were collected monthly from November through April and semimonthly from May through October and analyzed for Iodine-131 and gamma-emitting nuclides. Locations shown in Figure 5.0-4. Iodine-131 level was below the LLD level of 1.0 pCi/L in all samples.

Cs-134 and Cs-137 were below the LLD levels of 15 pCi/L and 18 pCi/L, respectively. All other gamma-emitting nuclides, except naturally-occurring K-40, were below their respective LLDs. The results for I-131, Cs-134 and Cs-137 were identical to those obtained during the period 1985 through 1994, except during several months following the accident at Chernobyl, which occurred on April 26, 1986. During those months I-131 ranged from 0.9 to 58.6 pCi/L, Cs-134 ranged from 5.8 to 10.7 pCi/L and Cs-137 ranged from 5.3 to 17.8 pCi/L.

#### 5.6 Sample Collections

All samples were collected as scheduled except those listed in Listing of Missed Samples, Section 2.0 of Appendix III.

#### 5.7 Program Modifications

None.

### 6.0 ANALYTICAL PROCEDURES

Procedures used during the period covered in this report remained essentially unchanged. A summary of the procedures used for analyzing radioactivity in environmental samples is given in Appendix VI of the report for the period January - December 1993.

## 7.0 MILCH ANIMALS AND NEAREST CATTLE CENSUS

Census of milch animals and nearest cattle were conducted within a five mile radius of the Station. The survey was conducted by "door-to-door" canvas and by information from Illinois agricultural agents. The census was conducted by W. Mueller on August 21, 1995.

Results of the milch animal and nearest cattle census are presented in Table 9 of Appendix III.

## 8.0 NEAREST RESIDENCES CENSUS

The census of nearest residences within a five mile radius was conducted by W. Mueller on August 21, 1995.

Results of the nearest residence census are presented in Table 9 of Appendix III.

## 9.0 INTERLABORATORY COMPARISON PROGRAM RESULTS

Teledyne's Interlaboratory Comparison Program Results are presented in Appendix IV.

Commonwealth Edison's Thermoluminescent Dosimeter (TLD) Program is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) which requires biennial review and evaluation. In addition to the biennial ANSI tested requirement, Commonwealth Edison also tests to the ANSI standard during the non-NVLAP visitation year. Commonwealth Edison additionally has an internal irradiation program that tests each of the six nuclear station TLD processors once per quarter. The results of all TLD performance tests are retained by Commonwealth Edison's Corporate Health Physics Support Department.

## 10.0 ERRATA DATA

In January, 1996, while turnover was being conducted between two computer programmers on the ODCM computer program, 5 of the 6 pathways used in the calculation of organ dose to verify compliance with 10CFR50 dose limits were found to be turned "off". It was determined that these pathways were "off" since January 1, 1994, when the computer program was updated to comply with the revision to 10CFR20. The pathway switches were immediately turned on and the organ doses for 1994 and 1995 were recalculated. Appendix VI contains the corrected organ dose data for 1994.

APPENDIX I

DATA TABLES AND FIGURES

TABLE 1.1-1

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
 UNIT 1 DOCKET NUMBER STN-50-454  
 RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY, 1995 THROUGH DECEMBER, 1995

## GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR
<b>A. FISSION AND ACTIVATION GAS RELEASES</b>					
1. Total Release Activity	Ci	2.13E+1	2.10E+1	1.37E+1	2.10E+1
2. Maximum Release Rate for Quarter	uCi/sec	2.88E+2	2.11E+2	1.19E+2	1.06E+3
3. % of Tech Spec Limits*					
a. Whole Body (500 mrem/yr)	%	0.01	0.00	0.00	0.02
b. Skin (3000 mrem/yr)	%	0.00	0.00	0.00	0.01
4. % of 10CFR50 Limits					
a. Gamma Quarterly (5 mrad)	%	0.00	0.00	0.00	0.00
b. Beta Quarterly (10 mrad)	%	0.00	0.00	0.00	0.00
c. Gamma Annual (10 mrad)	%	0.00	0.00	0.00	0.00
d. Beta Annual (20 mrad)	%	0.00	0.00	0.00	0.00
<b>B. IODINE RELEASES**</b>					
1. Total I-131/I-133 Activity	Ci	<LLD	<LLD	<LLD	4.84E-4
<b>C. PARTICULATE (&gt;8 day half-life) RELEASES**</b>					
1. Gross Activity	Ci	1.69E-5	<LLD	<LLD	<LLD
2. Gross Alpha Activity for Quarter	Ci	<LLD	<LLD	<LLD	<LLD
<b>D. TRITIUM RELEASES**</b>					
1. Total Release Activity	Ci	5.79E-1	6.21E-1	4.56E-1	7.71E-1

\* % of Tech Spec limits is based on the maximum release rate for the period considered.

\*\* Iodine, particulate, and tritium are expressed as a total limit. See step E.

TABLE 1.1-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 1 DOCKET NUMBER STN-50-454  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY \_\_\_\_\_, 1995 THROUGH DECEMBER \_\_\_\_\_, 1995

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES (CONT)

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR
<b>E. TOTAL OF IODINE, PARTICULATE (&gt;8 day half-life), AND TRITIUM RELEASES</b>					
1. Total Activity	Ci	5.79E-1	6.21E-1	4.56E-1	7.71E-1
2. % of Tech Spec Limit					
a. Any Organ (1500 mrem/yr)	%	0.00	0.00	0.00	0.00
3. % of 10CFR50 Limit					
a. Quarterly Any Organ (7.5 mrem)	%	0.00	0.01	0.01	0.03
b. Annual Any Organ (15.0 mrem)	%	0.00	0.00	0.01	0.01



TABLE 1.1-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
 UNIT 2 DOCKET NUMBER STN-50-455  
 RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY, 1995 THROUGH DECEMBER, 1995

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR
<b>A. FISSION AND ACTIVATION GAS RELEASES</b>					
1. Total Release Activity	Ci	2.34E+1	8.09E-1	1.37E+0	1.26E+1
2. Maximum Release Rate for Quarter	uCi/sec	1.99E+2	7.53E+0	9.50E+0	1.06E+3
3. % of Tech Spec Limits*					
a. Whole Body (500 mrem/yr)	%	0.00	0.00	0.00	0.02
b. Skin (3000 mrem/yr)	%	0.00	0.00	0.00	0.01
4. % of 10CFR50 Limits					
a. Gamma Quarterly (5 mrad)	%	0.00	0.00	0.00	0.00
b. Beta Quarterly (10 mrad)	%	0.00	0.00	0.00	0.00
c. Gamma Annual (10 mrad)	%	0.00	0.00	0.00	0.00
d. Beta Annual (20 mrad)	%	0.00	0.00	0.00	0.00
<b>B. IODINE RELEASES**</b>					
1. Total I-131/I-133 Activity	Ci	5.82E-5	<LLD	<LLD	9.92E-5
<b>C. PARTICULATE (&gt;8 day half-life) RELEASES**</b>					
1. Gross Activity	Ci	5.13E-6	<LLD	<LLD	1.33E-6
2. Gross Alpha Activity for Quarter	Ci	<LLD	<LLD	<LLD	<LLD
<b>D. TRITIUM RELEASES**</b>					
1. Total Release Activity	Ci	2.74E-1	3.73E-1	2.49E-1	9.35E-1

\* % of Tech Spec limits is based on the maximum release rate for the period considered.

\*\* Iodine, particulate, and tritium are expressed as a total limit. See step E.

TABLE 1.1-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 2 DOCKET NUMBER STN-50-455  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY, 1995 THROUGH DECEMBER, 1995

GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES (CONT)

UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR
-------	---------	---------	---------	---------

E. TOTAL OF IODINE, PARTICULATE (>8 day half-life), AND TRITIUM RELEASES

1. Total Activity

Ci	2.74E-1	3.73E-1	2.49E-1	9.35E-1
----	---------	---------	---------	---------

2. % of Tech Spec Limit

a. Any Organ (1500 mrem/yr)

%	0.00	0.00	0.00	0.00
---	------	------	------	------

3. % of 10CFR50 Limit

a. Quarterly Any Organ (7.5 mrem)

%	0.00	0.01	0.01	0.01
---	------	------	------	------

b. Annual Any Organ (15.0 mrem)

%	0.00	0.00	0.00	0.00
---	------	------	------	------

TABLE 1.2-1

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
 UNIT 1 DOCKET NUMBER STN-50-454  
 RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY, 1995 THROUGH DECEMBER, 1995

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR
<b>L. FISSION AND ACTIVATION PRODUCT RELEASES</b>					
1. Total Activity Released	Ci	5.65E-1	8.16E-2	9.61E-2	1.59E-1
2. Average Concentration Released for Quarter	uCi/ml	2.41E-7	2.70E-8	2.98E-8	7.31E-8
3. % of 10CFR50 Limits					
a. Quarterly Whole Body (1.5 mrem)	%	0.04	0.02	0.19	0.06
b. Quarterly Any Organ (5.0 mrem)	%	0.15	0.07	0.08	0.04
c. Annual Whole Body (3.0 mrem)	%	0.02	0.01	0.09	0.03
d. Annual Any Organ (10.0 mrem)	%	0.08	0.03	0.04	0.02
<b>M. DISSOLVED RADIUM</b>					
1. Total Activity Released	Ci	1.07E+2	1.64E+2	1.55E+2	2.50E+2
2. Average Concentration Released for Quarter	uCi/ml	4.54E-5	5.42E-5	4.81E-5	1.15E-4
3. % of 10CFR20 Limit (1.00E-3 uCi/ml)	%	4.54	5.42	4.81	11.50
<b>N. DISSOLVED NOBLE GASES</b>					
1. Total Activity Released	Ci	3.47E-1	3.97E-2	1.72E-2	4.25E-1
2. Average Concentration Released for Quarter	uCi/ml	1.48E-7	1.31E-8	5.35E-9	1.96E-7
3. % of Admin Tech Reqt. Limit (2.00E-4 uCi/ml)	%	7.39E-2	6.57E-3	2.67E-3	9.80E-2
<b>O. GROSS ALPHA</b>					
1. Total Activity Released	Ci	<LLD	<LLD	<LLD	<LLD
2. Average Concentration Released for Quarter	uCi/ml	<LLD	<LLD	<LLD	<LLD
<b>P. VOLUME OF WASTE RELEASED PER UNIT</b>					
	liters	4.60E+6	2.22E+6	3.58E+6	2.64E+6
<b>Q. VOLUME OF DILUTION WATER PER UNIT</b>					
	liters	2.34E+9	3.02E+9	3.22E+9	2.17E+9

TABLE 1.2-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 2 DOCKET NUMBER STN-50-455  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY, 1995 THROUGH DECEMBER, 1995

LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

	UNITS	1ST QTR	2ND QTR	3RD QTR	4TH QTR
<b>L. FISSION AND ACTIVATION PRODUCT RELEASES</b>					
1. Total Activity Released	Ci	5.65E-1	8.16E-2	9.61E-2	1.59E-1
2. Average Concentration Released for Quarter	uCi/ml	2.41E-7	2.70E-8	2.98E-8	7.31E-8
3. % of 10CFR50 Limits					
a. Quarterly Whole Body (1.5 mrem)	%	0.04	0.02	0.19	0.06
b. Quarterly Any Organ (5.0 mrem)	%	0.16	0.07	0.08	0.04
c. Annual Whole Body (3.0 mrem)	%	0.02	0.01	0.09	0.03
d. Annual Any Organ (10.0 mrem)	%	0.08	0.03	0.04	0.02
<b>M. TRITIUM</b>					
1. Total Activity Released	Ci	1.07E+2	1.64E+2	1.55E+2	2.50E+2
2. Average Concentration Released for Quarter	uCi/ml	4.54E-5	5.42E-5	4.81E-5	1.15E-4
3. % of 10CFR20 Limit (1.00E-3 uCi/ml)	%	4.54	5.42	4.81	11.50
<b>N. DISSOLVED NOBLE GASES</b>					
1. Total Activity Released	Ci	3.47E-1	3.97E-2	1.72E-2	4.25E-1
2. Average Concentration Released for Quarter	uCi/ml	1.48E-7	1.31E-8	5.35E-9	1.96E-7
3. % of Admin Tech Reqt. Limit (2.00E-4 uCi/ml)	%	7.39E-2	6.57E-3	2.67E-3	9.80E-2
<b>O. GROSS ALPHA</b>					
1. Total Activity Released	Ci	<LLD	<LLD	<LLD	<LLD
2. Average Concentration Released for Quarter	uCi/ml	<LLD	<LLD	<LLD	<LLD
<b>P. VOLUME OF WASTE RELEASED PER UNIT</b>					
	liters	4.60E+6	2.22E+6	3.58E+6	2.64E+6
<b>Q. VOLUME OF DILUTION WATER PER UNIT</b>					
	liters	2.34E+9	3.02E+9	3.22E+9	2.17E+9

TABLE 2.0-1

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 1/2 DOCKET NUMBER STN-50-454/455  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY, 1995 THROUGH DECEMBER, 1995  
SOLID RADIOACTIVE WASTE 1ST QUARTER 1995 YEAR

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE, AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT CUBIC FT	CURIES PER SHIPMENT
	NONE				
				0	0
QUARTERLY TOTALS - NUMBER OF SHIPMENTS: <u>0</u>				CUBIC FT	CURIES

TABLE 2.0-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 1/2 DOCKET NUMBER STN-50-454/455  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY , 1995 THROUGH DECEMBER , 1995  
SOLID RADIOACTIVE WASTE 2ND QUARTER 1995 YEAR

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE, AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT CUBIC FT	CURIES PER SHIPMENT
	NONE				
				0	0
QUARTERLY TOTALS - NUMBER OF SHIPMENTS: <u>0</u>				CUBIC FT	CURIES

TABLE 2.0-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 1/2 DOCKET NUMBER STN-50-454/455  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY, 1995 THROUGH DECEMBER, 1995  
SOLID RADIOACTIVE WASTE 3RD QUARTER 1995 YEAR

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE, AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT CUBIC FT	CURIES PER SHIPMENT
8-17-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	18.2
8-23-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	2.76
8-30-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	0.85
9-20-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	1.41
9-27-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	3.13
				1010.5	26.4
QUARTERLY TOTALS - NUMBER OF SHIPMENTS: 5				CUBIC FT	CURIES

TABLE 2.0-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 1/2 DOCKET NUMBER STN-50-454/455  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY , 1995 THROUGH DECEMBER , 1995  
SOLID RADIOACTIVE WASTE 4TH QUARTER 1995 YEAR

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE, AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT CUBIC FT	CURIES PER SHIPMENT
10-4-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	0.37
10-11-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	0.68
10-18-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	0.08
10-24-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	0.33
10-31-95	Dry Active Waste, low specific activity NOS 7 UN2912 strong- tight container, none	Exclusive Use	Oak Ridge TN	1119	1.73
11-1-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	1.99
11-7-95	Dry Active Waste, Low Specific Activity NOS 7 UN2912 strong- tight container, none	Exclusive Use	Oak Ridge TN	933	1.61
11-8-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	1.29
11-13-95	Steam Generator Secondary Sludge, Low Specific Activity NOS 7 UN2912 strong-tight container, none	Exclusive Use	Oak Ridge TN	782	0.01
				N/A	N/A
QUARTERLY TOTALS - NUMBER OF SHIPMENTS: <u>21 for 4th Qtr.</u>				CUBIC FT	CURIES



TABLE 2.0-1 (continued)

BRP 6100-6T1  
Revision 3BYRON NUCLEAR POWER STATION  
UNIT 1/2 DOCKET NUMBER STN-50-454/455  
RADIOACTIVE EFFLUENT RELEASE REPORTJANUARY, 1995 THROUGH DECEMBER, 1995SOLID RADIOACTIVE WASTE 4TH QUARTER 1995 YEAR

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE, AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT CUBIC FT	CURIES PER SHIPMENT
11-16-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	8.63
11-30-95	Steam Generator Secondary Sludge, Low Specific Activity NOS 7 UN2912 strong tight container, none	Exclusive Use	Oak Ridge TN	788	0.01
12-01-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	1.13
12-01-95	Steam Generator Secondary Sludge, Low Specific Activity NOS 7 UN2912 strong tight container, none	Exclusive Use	Oak Ridge TN	788	0.01
12-05-95	Steam Generator Secondary Sludge, Low Specific Activity NOS 7 UN2912 strong tight container, none	Exclusive Use	Oak Ridge TN	788	0.01
12-07-95	Dewatered bead resin and Dry Active Waste, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	14.4
12-11-95	Dewatered bead resin, Class C stable, HIC, none	Exclusive Use	Barnwell S.C.	132.4	200
12-12-95	Steam Generator Secondary Sludge, Low Specific Activity NOS 7 UN2912 strong tight container, none	Exclusive Use	Oak Ridge TN	788	0.01
12-13-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	1.28
				N/A	N/A
QUARTERLY TOTALS - NUMBER OF SHIPMENTS: <u>21 for 4th Qtr.</u>				CUBIC FT	CURIES

TABLE 2.0-1 (continued)

BRP 6100-6T1  
Revision 3

BYRON NUCLEAR POWER STATION  
UNIT 1/2 DOCKET NUMBER STN-50-454/455  
RADIOACTIVE EFFLUENT RELEASE REPORT  
JANUARY , 1995 THROUGH DECEMBER , 1995  
SOLID RADIOACTIVE WASTE 4TH QUARTER 1995 YEAR

DATE	DISPOSITION OF MATERIAL (DESCRIPTION, CLASS, TYPE, AND SOLIDIFYING AGENT)	MODE OF TRANSPORT	DESTINATION	VOLUME PER SHIPMENT CUBIC FT	CURIES PER SHIPMENT
12-15-95	Steam Generator Secondary Sludge, Low Specific Activity NOS 7 UN2912 strong-tight container, none	Exclusive Use	Oak Ridge TN	788	0.01
12-19-95	Dewatered bead resin, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	0.23
12-27-95	Dewatered bead resin and Dry Active Waste, Class A stable, HIC, none	Exclusive Use	Barnwell S.C.	202.1	29.0
				9337.6	262.8
QUARTERLY TOTALS - NUMBER OF SHIPMENTS: <u>21 for 4th Qtr.</u>				CUBIC FT	CURIES

FIGURE 3.1-1

Estimated Cumulative Gamma Dose (in mrem)  
from the Byron Station for the period  
January-December 1995

Isopleth Labels

Small figure - multiply by  $10^{-7}$

Large figure - multiply by  $10^{-6}$

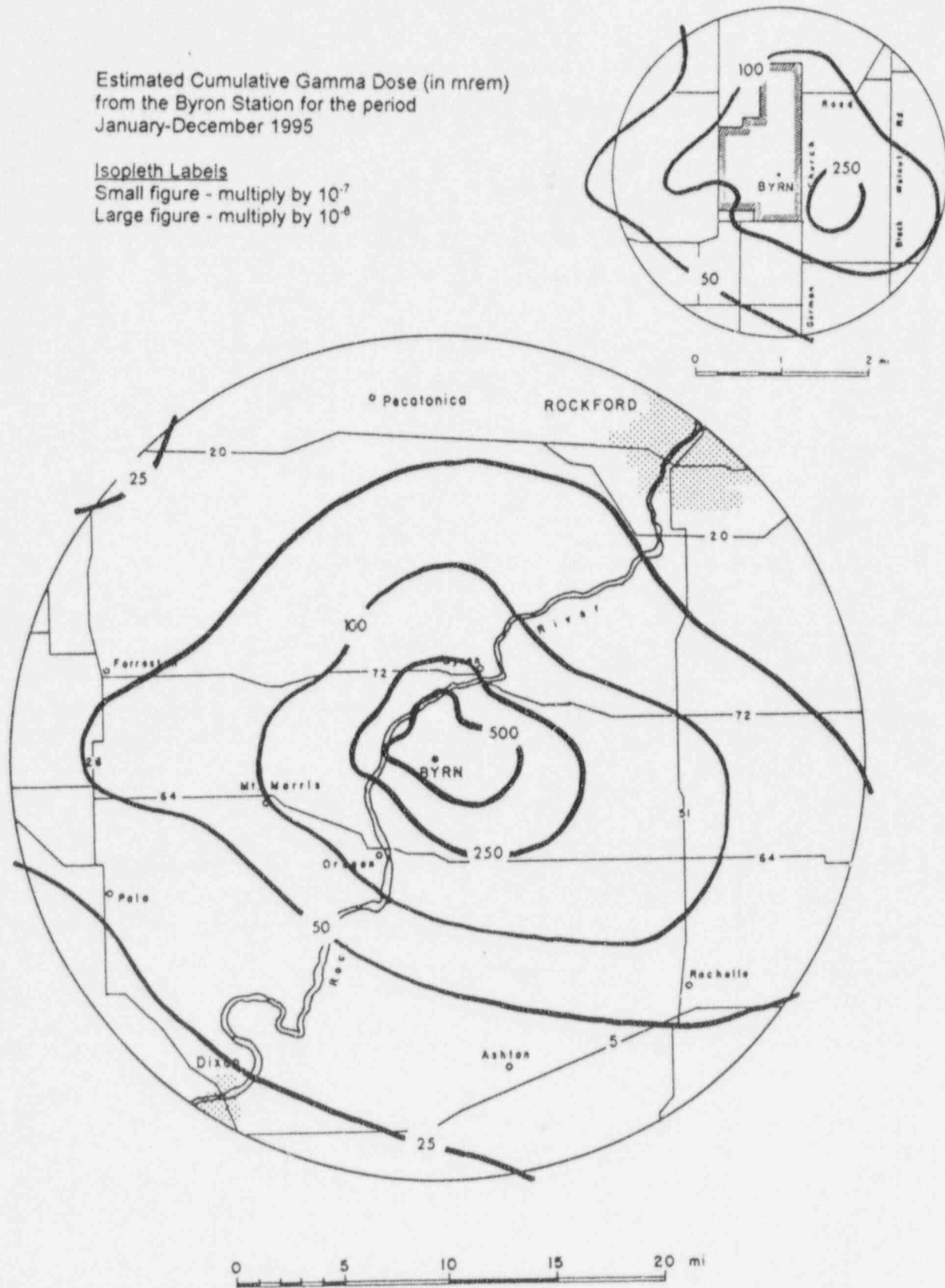


FIGURE 3.1-2

Estimated Total Concentrations (in pCi/m<sup>3</sup>)  
of Noble Gases from the Byron Station  
for the period January-December 1995

Isopleth Labels

Small figure - multiply by 10<sup>-2</sup>

Large figure - multiply by 10<sup>-2</sup>

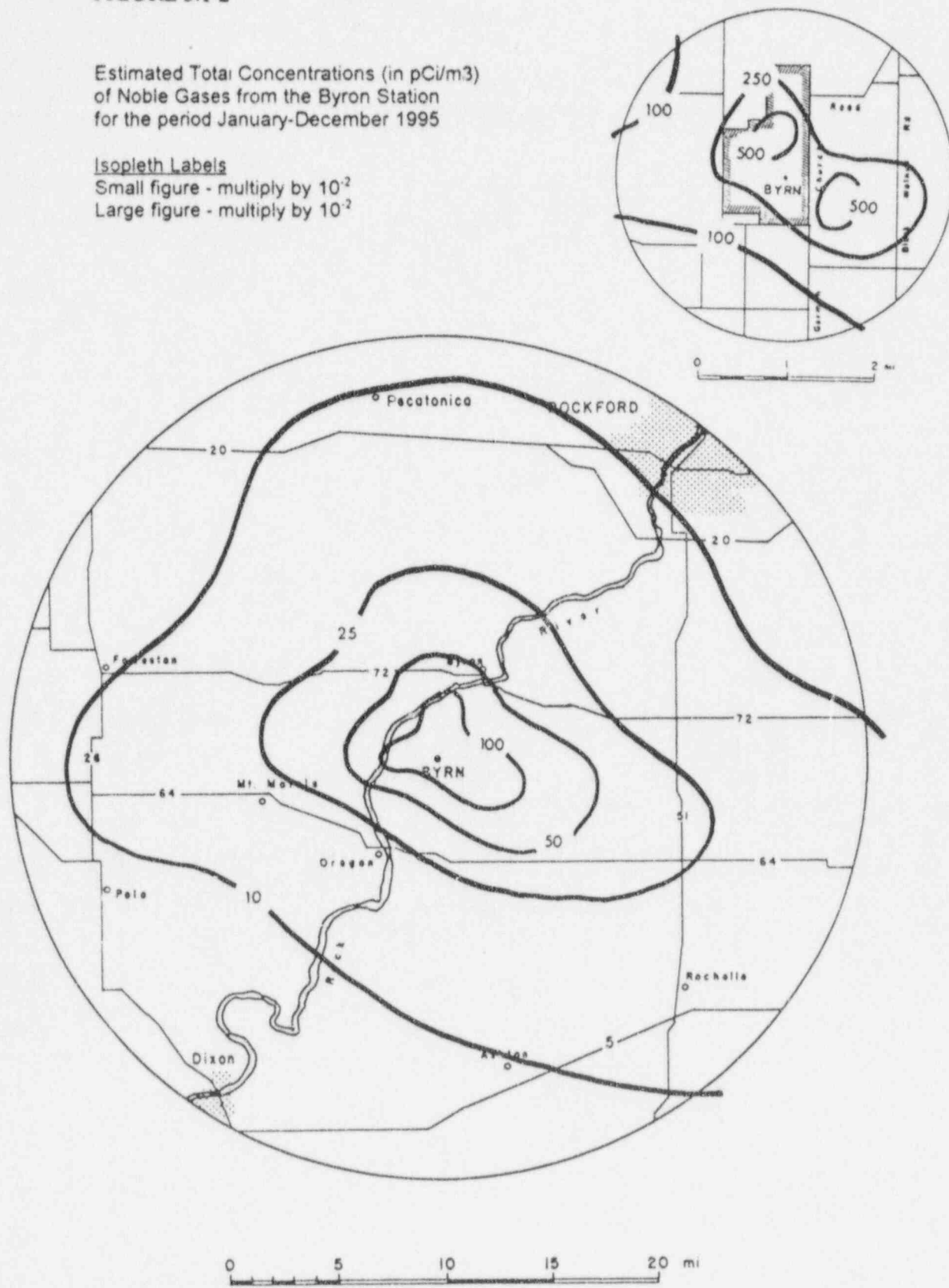


FIGURE 3.1-3

Estimated Total Concentrations (in pCi/m<sup>3</sup>)  
of Iodines from the Byron Station for  
the period January-December 1995

Isopleth Labels

Small figure - multiply by 10<sup>-7</sup>

Large figure - multiply by 10<sup>-7</sup>

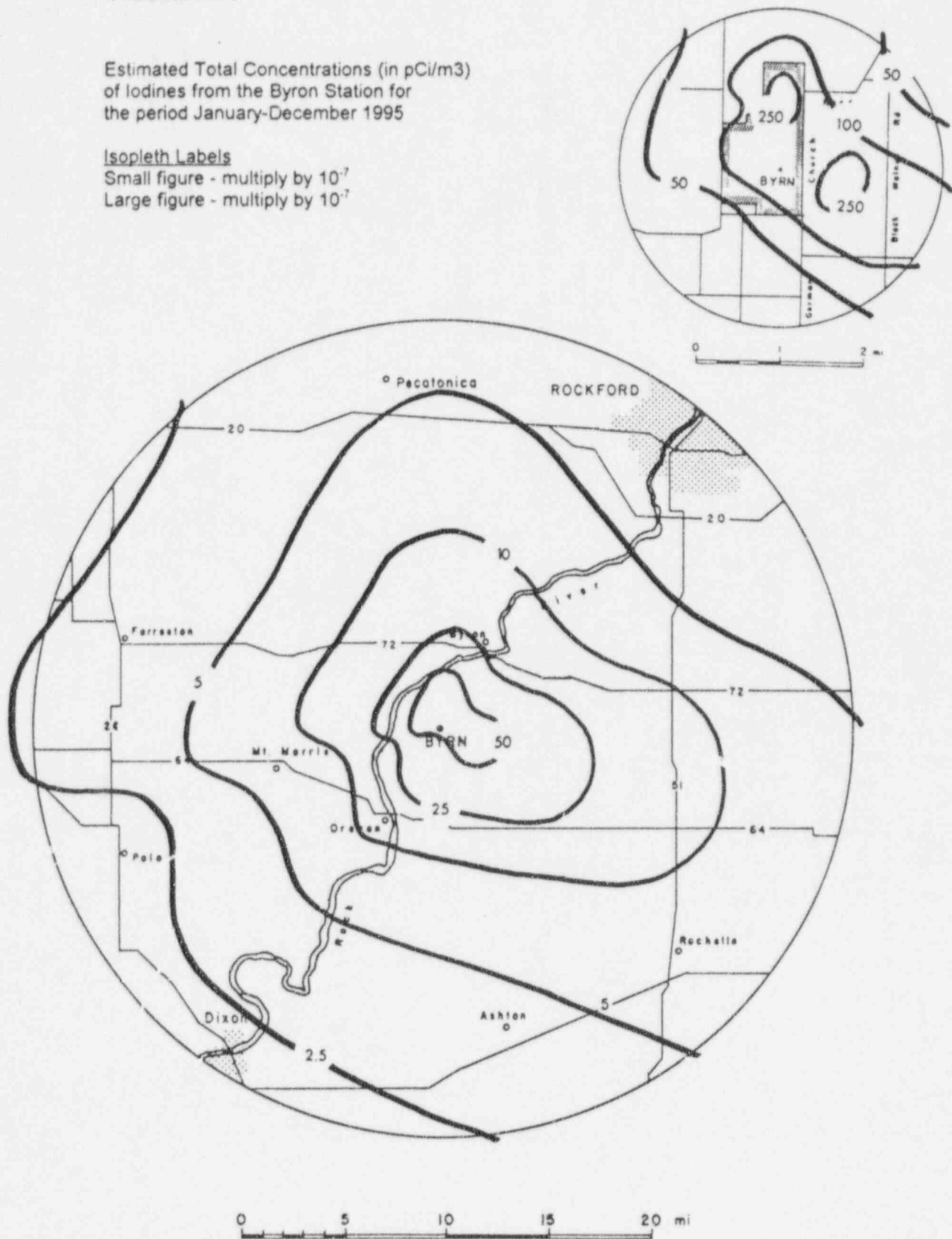


FIGURE 3.1-4

Estimated Total Concentrations (in pCi/m<sup>3</sup>)  
of Particulates from the Byron Station  
for the period January-December 1995

Isopleth Labels

Small figure - multiply by 10<sup>-9</sup>

Large figure - multiply by 10<sup>-9</sup>

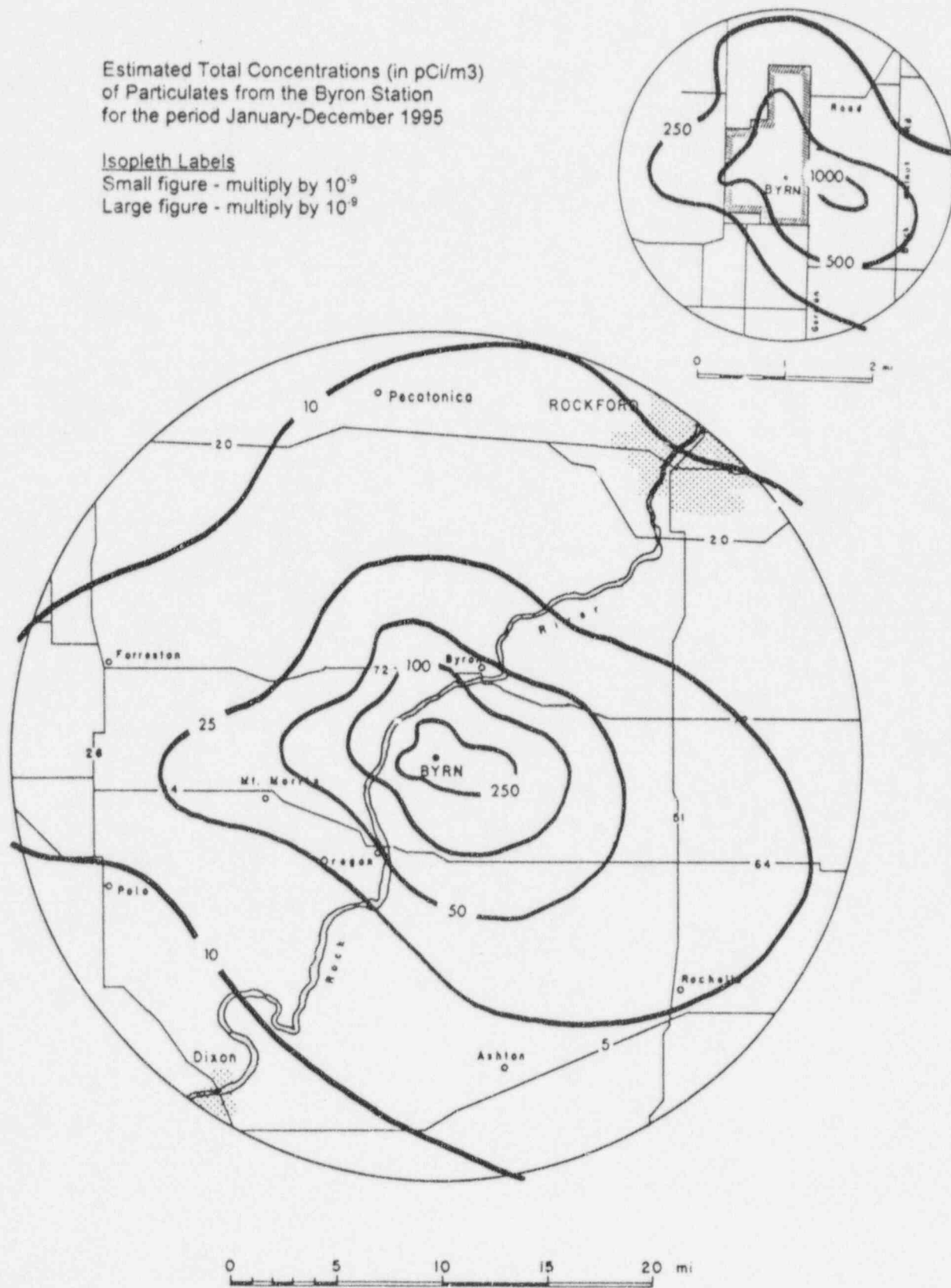


TABLE 3.1-1

BYRON STATION UNIT ONE

ACTUAL 1995  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 02/17/96  
 INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	7.81E-05 (SSE )	7.80E-05 (SSE )	5.04E-05 (SSE )	7.70E-05 (SSE )	2.85E-04 (SSE )
BETA AIR (MRAD)	3.27E-04 (SSE )	3.17E-04 (SSE )	2.08E-04 (SSE )	3.17E-04 (SSE )	1.17E-03 (SSE )
TOT. BODY (MREM)	5.49E-05 (SSE )	5.48E-05 (SSE )	3.54E-05 (SSE )	5.41E-05 (SSE )	1.99E-04 (SSE )
SKIN (MREM)	1.63E-04 (SSE )	1.55E-04 (SSE )	1.03E-04 (SSE )	1.56E-04 (SSE )	5.76E-04 (SSE )
ORGAN (MREM)	2.54E-04 (NE )	2.73E-04 (NE )	2.01E-04 (NE )	2.64E-03 (NE )	3.37E-03 (NE )
	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10CFR 50 APP. I  
 INFANT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.01
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.04	15.0	0.02
	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID	THYROID		

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.1-1 (continued)

BYRON STATION UNIT ONE

ACTUAL 1995  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 02/17/96  
 ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	7.81E-05 (SSE )	7.80E-05 (SSE )	5.04E-05 (SSE )	7.70E-05 (SSE )	2.83E-04 (SSE )
BETA AIR (MRAD)	3.27E-04 (SSE )	3.17E-04 (SSE )	2.08E-04 (SSE )	3.17E-04 (SSE )	1.17E-03 (SSE )
TOT. BODY (MREM)	5.49E-05 (SSE )	5.48E-05 (SSE )	3.54E-05 (SSE )	5.41E-05 (SSE )	1.99E-04 (SSE )
SKIN (MREM)	1.63E-04 (SSE )	1.55E-04 (SSE )	1.03E-04 (SSE )	1.56E-04 (SSE )	5.76E-04 (SSE )
ORGAN (MREM)	1.45E-04 (S )	3.95E-04 (S )	4.59E-04 (SE )	1.29E-03 (SSE )	2.20E-03 (SE )
	GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10CFR 50 APP. I  
 ADULT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.01
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.01	0.01	0.02	15.0	0.01
		GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995



TABLE 3.1-1 (continued)

BYRON STATION UNIT TWO

ACTUAL 1995  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 02/17/96  
 INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	8.57E-05 (SSE )	3.63E-06 (SSE )	5.15E-06 (SSE )	4.62E-05 (SSE )	1.41E-04 (SSE )
BETA AIR (MRAD)	3.57E-04 (SSE )	1.40E-05 (SSE )	2.33E-05 (SSE )	1.91E-04 (SSE )	5.86E-04 (SSE )
TOT. BODY (MREM)	6.03E-05 (SSE )	2.60E-06 (SSE )	3.65E-06 (SSE )	3.25E-05 (SSE )	9.90E-05 (SSE )
SKIN (MREM)	1.77E-04 (SSE )	8.55E-06 (SSE )	1.32E-05 (SSE )	9.52E-05 (SSE )	2.94E-04 (SSE )
ORGAN (MREM)	1.25E-04 (NE )	1.64E-04 (NE )	1.10E-04 (NE )	4.19E-04 (NE )	8.18E-04 (NE )
	THYROID	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10CFR 50 APP. I  
 INFANT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.01	15.0	0.01
		THYROID	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.1-1 (continued)

BYRON STATION UNIT TWO

ACTUAL 1995  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 02/17/96  
 ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	8.57E-05 (SSE )	3.63E-06 (SSE )	5.15E-06 (SSE )	4.62E-05 (SSE )	1.41E-04 (SSE )
BETA AIR (MRAD)	3.57E-04 (SSE )	1.40E-05 (SSE )	2.33E-05 (SSE )	1.91E-04 (SSE )	5.86E-04 (SSE )
TOT. BODY (MREM)	6.03E-05 (SSE )	2.60E-06 (SSE )	3.65E-06 (SSE )	3.25E-05 (SSE )	9.90E-05 (SSE )
SKIN (MREM)	1.77E-04 (SSE )	8.55E-06 (SSE )	1.32E-05 (SSE )	9.52E-05 (SSE )	2.94E-04 (SSE )
ORGAN (MREM)	7.34E-05 (S )	2.52E-04 (S )	2.51E-04 (SE )	3.18E-04 (S )	8.77E-04 (S )
	THYROID	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID	THYROID

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10CFR 50 APP. I  
 ADULT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.01
		THYROID	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	THYROID		THYROID

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.2-1

BYRON STATION UNIT ONE

ACTUAL 1995  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 02/17/96  
 ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	6.09E-04	2.28E-04	2.78E-03	8.37E-04	4.45E-03
INTERNAL ORGAN	7.92E-03	3.36E-03	3.85E-03	1.92E-03	1.43E-02
	GI_LLI	GI_LLI	LIVER	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
TOTAL BODY (MREM)	1.5	0.04	0.02	0.19	0.06	3.0	0.15
CRIT. ORGAN (MREM)	5.0	0.16	0.07	0.08	0.04	10.0	0.14
		GI_LLI	GI_LLI	LIVER	GI_LLI		GI_LLI

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.2-1 (continued)

BYRON STATION UNIT TWO

ACTUAL 1995  
 MAXIMUM DOSES (MREM) RESULTING FROM AQUATIC EFFLUENTS  
 PERIOD OF RELEASE - 01/01/95 TO 12/31/95 CALCULATED 02/17/96  
 ADULT RECEPTOR

DOSE TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
TOTAL BODY	6.09E-04	2.28E-04	2.78E-03	8.37E-04	4.45E-03
INTERNAL ORGAN	7.92E-03	3.36E-03	3.85E-03	1.92E-03	1.43E-02
	GI_LLI	GI_LLI	LIVER	GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1995

COMPLIANCE STATUS - 10 CFR 50 APP. I

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
TOTAL BODY (MREM)	1.5	0.04	0.02	0.19	0.06	3.0	0.15
CRIT. ORGAN (MREM)	5.0	0.16	0.07	0.08	0.04	10.0	0.14
		GI_LLI	GI_LLI	LIVER	GI_LLI		GI_LLI

RESULTS BASED UPON:  
 ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.3-1

BYRON STATION UNIT ONE

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/95 TO 12/31/95

CALCULATED 02/17/96

1.	10 CFR 20.1301 (a)(1) Compliance		
	Total Effective Dose Equivalent, mrem/yr	7.89E-03	
	10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
		% of limit	0.01

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	2.94E-03	1.16E-03	2.43E-03	1.36E-03	0.01

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.3-1 (continued)

BYRON STATION UNIT ONE

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/95 TO 12/31/95

CALCULATED 02/17/96

2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body (DDE)	Plume	1.99E-04		
	Skyshine	0.00E+00		
	Ground	1.65E-06		
	Total	2.01E-04	25.0	0.00
Organ Dose (CDE)	Thyroid	5.82E-03	75.0	0.01
	Gonads	6.79E-03	25.0	0.03
	Breast	4.60E-03	25.0	0.02
	Lung	4.44E-03	25.0	0.02
	Marrow	7.06E-03	25.0	0.03
	Bone	2.70E-02	25.0	0.11
	Remainder	9.81E-03	25.0	0.04
	CEDE	7.69E-03		
	TEDE	7.89E-03	100.0	0.01

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.3-1 (continued)

BYRON STATION UNIT TWO

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/95 TO 12/31/95

CALCULATED 02/17/96

1.	10 CFR 20.1301 (a)(1) Compliance		
	Total Effective Dose Equivalent, mrem/yr	7.36E-03	
	10 CFR 20.1301 (a)(1) limit	mrem/yr	100.0
		% of limit	0.01

Compliance Summary - 10CFR20

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	% of Limit
TEDE	2.88E-03	9.88E-04	2.23E-03	1.26E-03	0.01

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

TABLE 3.3-1 (continued)

BYRON STATION UNIT TWO

10 CFR 20 COMPLIANCE ASSESSMENT

PERIOD OF ASSESSMENT 01/01/95 TO 12/31/95

CALCULATED 02/17/96

2. 10 CFR 20.1301 (d)/40 CFR 190 Compliance

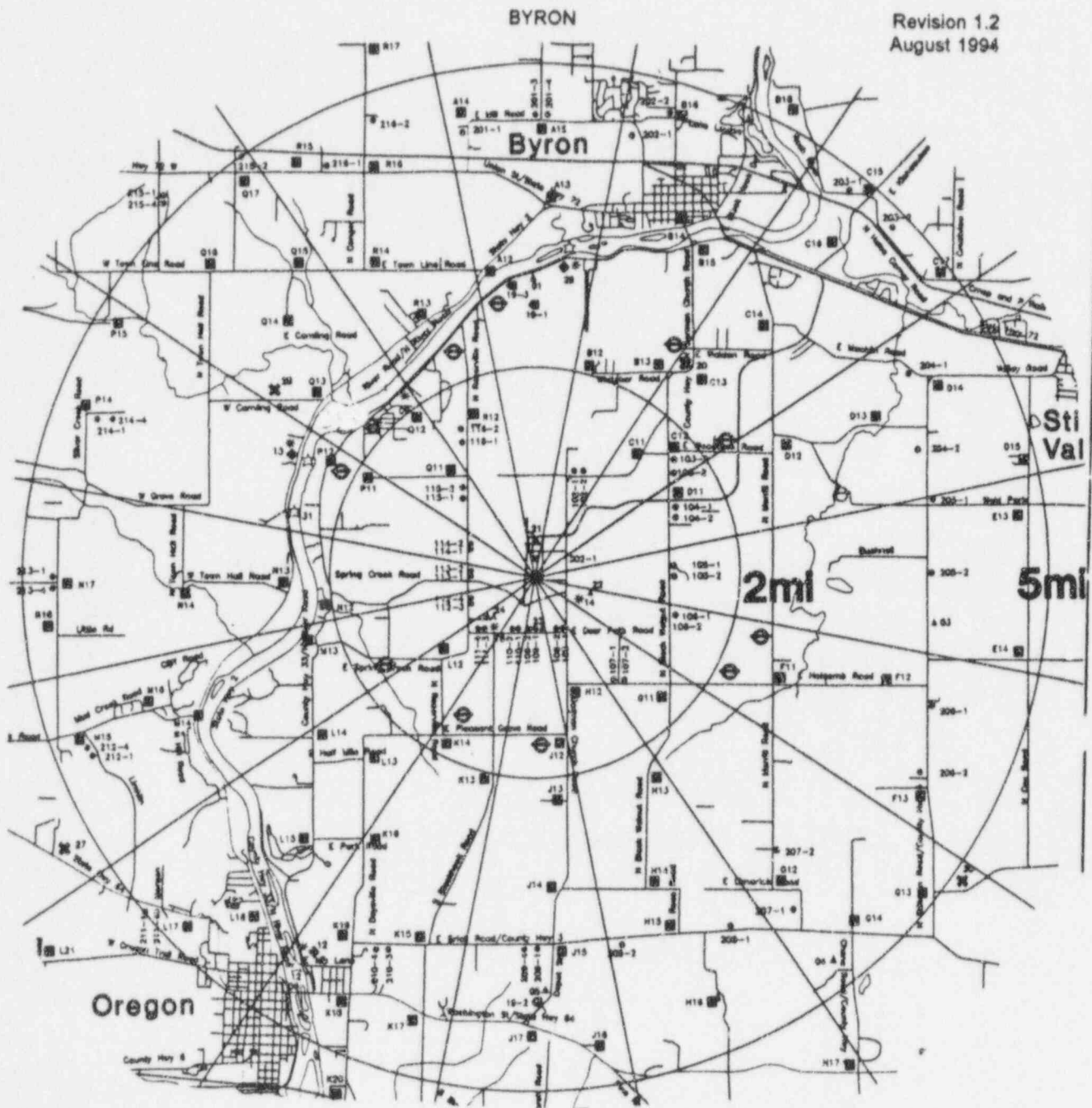
		Dose (mrem)	Limit (mrem)	% of Limit
Whole Body (DDE)	Plume	9.90E-05		
	Skyshine	0.00E+00		
	Ground	6.17E-07		
	Total	9.96E-05	25.0	0.00
Organ Dose (CDE)	Thyroid	4.30E-03	75.0	0.01
	Gonads	6.39E-03	25.0	0.03
	Breast	4.20E-03	25.0	0.02
	Lung	4.04E-03	25.0	0.02
	Marrow	6.66E-03	25.0	0.03
	Bone	2.66E-02	25.0	0.11
	Remainder	9.41E-03	25.0	0.04
	CEDE	7.26E-03		
TEDE	7.36E-03	100.0	0.01	

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995



FIGURE 5.0-1

Revision 1.2  
August 1994



• TLD Location

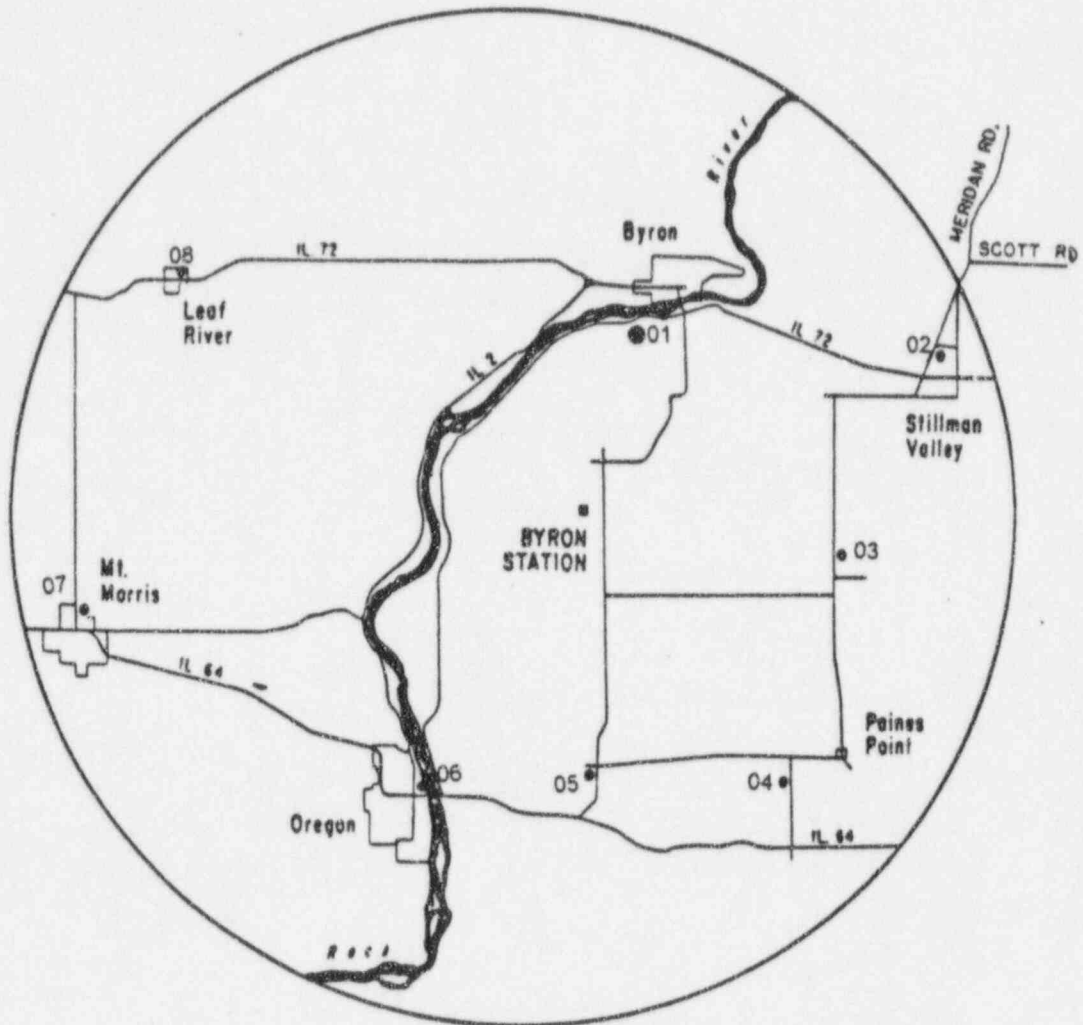


BYRON STATION

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INNER AND OUTER RING TLD LOCATIONS

FIGURE 5.0-2



- Air Sampling Location
- Byron Station

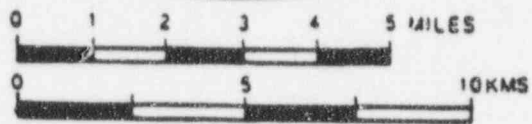
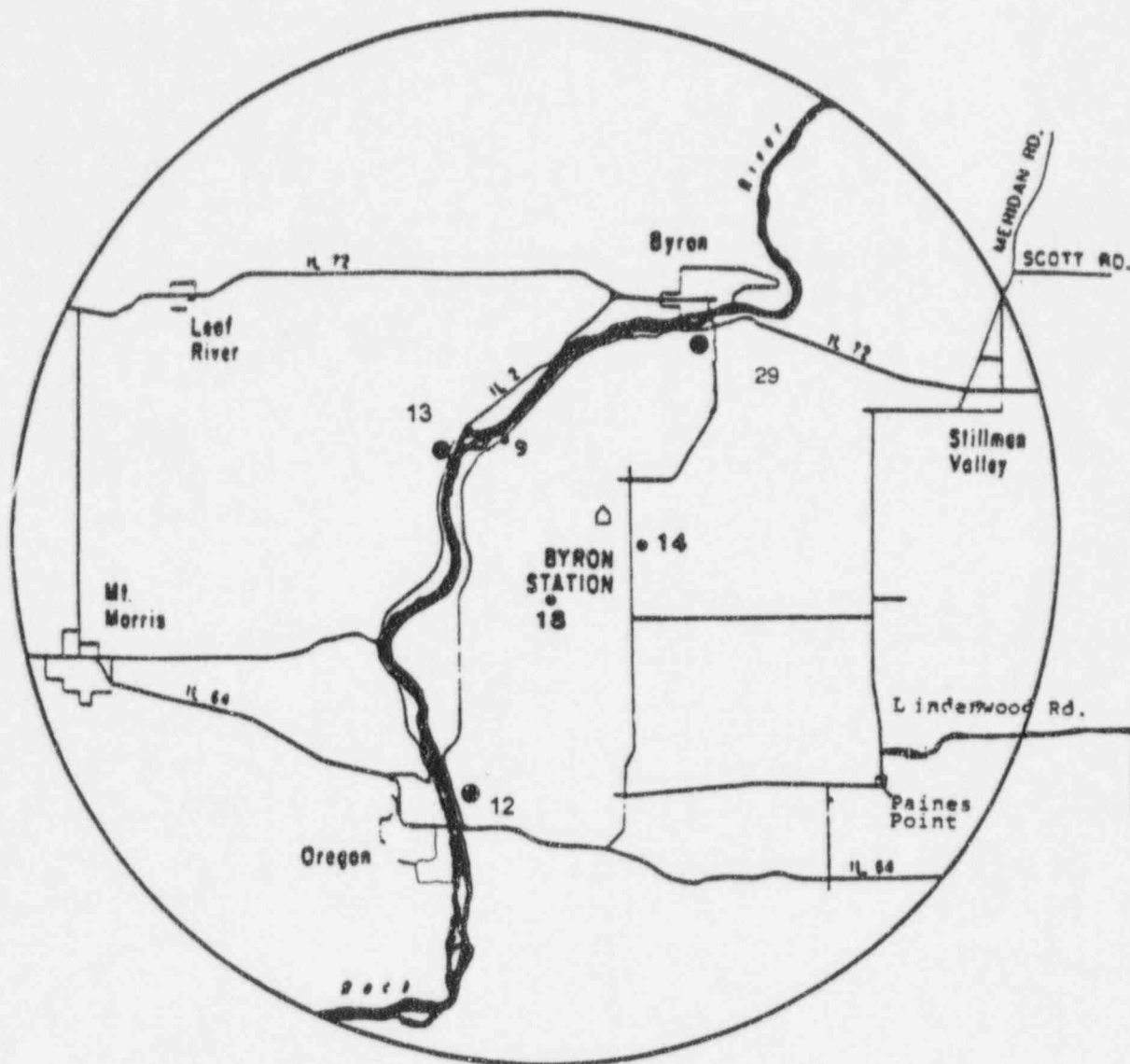
**BYRON STATION**

---

FIXED AIR SAMPLER LOCATIONS

- BY-01 Byron
- BY-02 Stillman Valley
- BY-03 Nearsite - East
- BY-04 Paynes Point
- BY-05 Nearsite - South
- BY-06 Oregon
- BY-07 Mt. Morris
- BY-08 Leaf River
- BY-21 Byron Nearsite North
- BY-22 Byron Nearsite East Southeast
- BY-23 Byron Nearsite South
- BY-24 Byron Nearsite Southwest

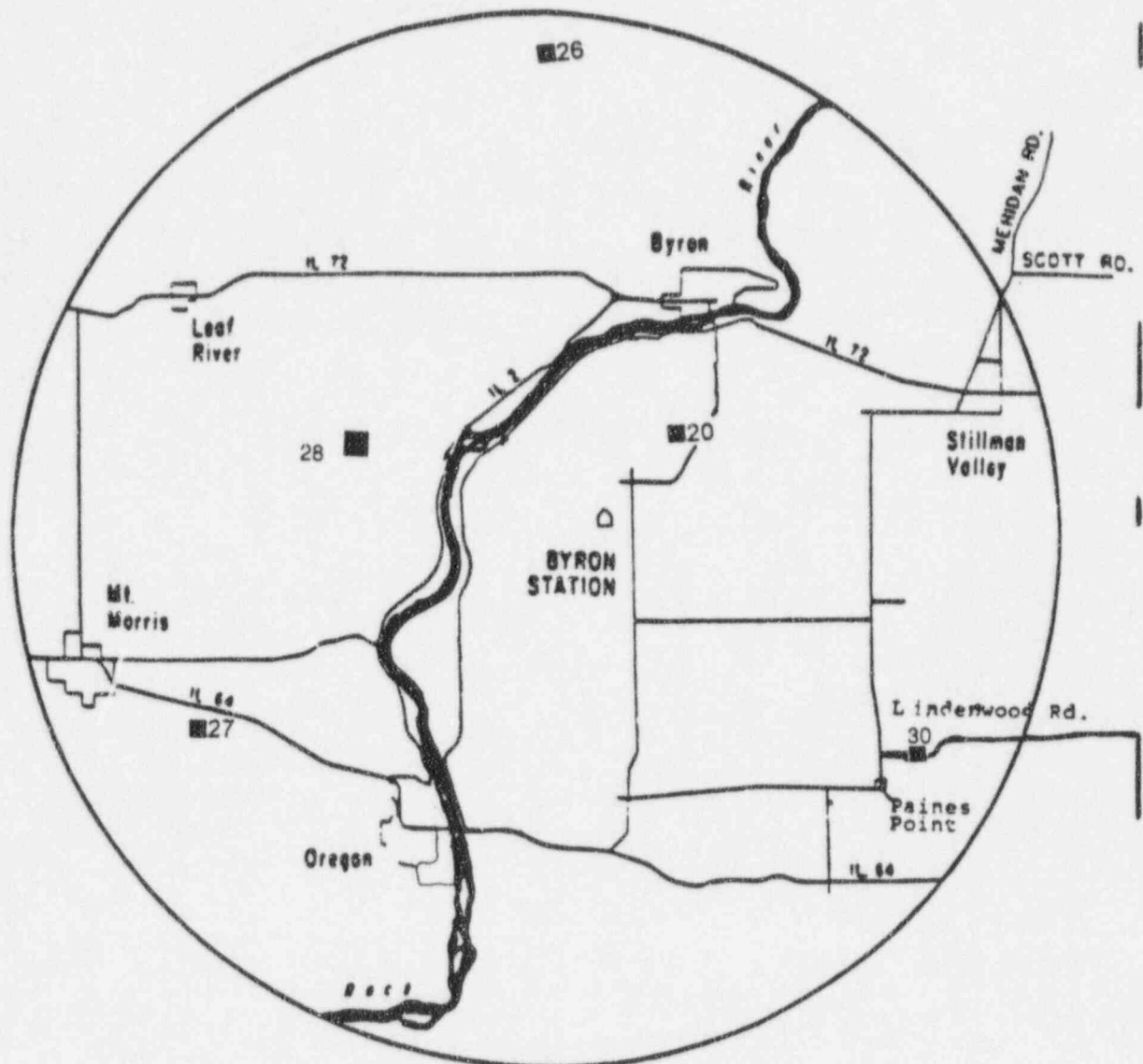
FIGURE 5.0-3



● Water  
 △ Byron Station

BYRON STATION	
WATER SAMPLE LOCATIONS	
BY-09	Wookland Creek
BY-12	Oregon Pool of Rock River, Downstream
BY-13	Rock River, Upstream
BY-14	CECo Offsite Well
BY-18	McCoy Farmstead
BY-29	Byron, Upstream

FIGURE 5.0-4



0 1 2 3 4 5 MILES

0 5 10 KMS



■ Milk

△ Byron Station

**BYRON STATION**

MILK SAMPLE LOCATIONS

- BY-20 K. Reeverts Dairy Farm
- BY-26 Glen Hazzard's Dairy
- BY-27 Kenneth Druien Dairy Farm
- BYSP-28 Duane Camling Dairy Farm
- BY-30 Don Roos Dairy

TABLE 5.0-1

Byron Station Radiological Environmental Monitoring Locations		Air Sampling	TLD	Cooling Water	Fish	Vegetables	Milk	Sediments	Surface Water	Ground/Well Water
BY-01	Byron	0	0	.	.	.	.	.	.	.
BY-02	Stillman Valley	0	0	.	.	.	.	.	.	.
BY-03	Nearsite - East	0	0	.	.	.	.	.	.	.
BY-04	Paynes Point	0	0	.	.	.	.	.	.	.
BY-05	Nearsite South	0	0	.	.	.	.	.	.	.
BY-06	Oregon	0	0	.	.	.	.	.	.	.
BY-07	Mt. Morris	0	0	.	.	.	.	.	.	.
BY-08	Leaf Road	0	0	.	.	.	.	.	.	.
BY-09	Woodland Creek	.	.	.	.	.	.	.	.	.
BY-12	Oregon Pool of Rock River, Downstream	.	.	.	0	.	.	0	0	.
BY-13	Rock River, Upstream	.	.	.	0	.	.	0	0	.
BY-14	CECo Offsite Well	.	.	.	.	.	.	.	.	0
BY-18	McCoy Farmstead	.	.	.	.	.	.	.	.	0
BY-19-1	River Road Across from BY-01	.	.	.	.	0	.	.	.	.
BYSP-19-2	German Church Road	.	.	.	.	0	.	.	.	.
BYSP-19-3	6773 River Road	.	.	.	.	0	.	.	.	.
BY-20	K. Reeverts Dairy Farm	.	.	.	.	.	0	.	.	.
BY-21	Byron Near Site N	0	0	.	.	.	.	.	.	.
BY-22	Byron Near Site ESE	0	0	.	.	.	.	.	.	.
BY-23	Byron Near Site S	0	0	.	.	.	.	.	.	.
BY-24	Byron Near Site SW	0	0	.	.	.	.	.	.	.
BY-26	Glen Hazzard's Dairy	.	.	.	.	.	0	.	.	.
BY-27	Kenneth Druien Dairy Farm	.	.	.	.	.	0	.	.	.
BYSP-28	Duane Camling Dairy Farm	.	.	.	.	.	0	.	.	.
BY-29	Byron, Upstream	.	.	.	0	.	.	0	0	.
BY-30	Don Roos Dairy	.	.	.	.	.	0	.	.	.
BYSP-31	Byron, Discharge	.	.	.	0	.	.	.	.	.

CENSUS  
Dairy  
Residence  
Cattle

TABLE 5.0-2

## BYRON STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

## 1. AIR SAMPLERS

<u>Site Code</u> <sup>a</sup>	<u>Location</u>	<u>Distance</u> <u>(miles)</u>	<u>Direction</u> <u>(°)</u>
BY-01	Byron	3.5	25
BY-02 (C)	Stillman Valley	6.2	56
BY-03	Nearsite - East	3.8	85
BY-04	Paynes Point	4.5	140
BY-05	Nearsite - South	3.6	180
BY-06	Oregon	4.6	213
BY-07 (C)	Mt. Morris	7.8	240
BY-08 (C)	Leaf River	7.0	315
BY-21	Byron Nearsite North	0.3	9
BY-22	Byron Nearsite East-Southeast	0.3	101
BY-23	Byron Nearsite South	0.6	182
BY-24	Byron Nearsite Southwest	0.7	229

## 2. TLDs

a. Same as No. 1.

b. Special TLD Locations

<u>Site Code</u>	<u>Distance</u> <u>(miles)</u>	<u>Direction</u> <u>(°)</u>
Inner Ring		
BY-102-1,2	1.0	25
BY-103-1,2	1.7	51
BY-104-1,2	1.4	64
BY-105-1,2	1.3	84
BY-106-1,2	1.4	108
BY-107-1,2	1.4	141
BY-108-1,2	0.6	158
BY-109-1,2	0.6	183
BY-110-1,2	0.6	201
BY-111-3,4	0.8	224
BY-112-3,4	0.8	255
BY-113-1,2	0.7	270
BY-114-1,2	0.8	298
BY-115-1,2	1.0	314
BY-116-1,2	1.4	329

<sup>a</sup> Control (background) locations are denoted by a "C" after site code. All other locations are indicators.

TABLE 5.0-2 (continued)

## BYRON STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

2. TLDs

## b. Special TLD Locations (continued)

<u>Site Code</u> <sup>a</sup>	<u>Distance</u> <u>(miles)</u>	<u>Direction</u> <u>(°)</u>
Outer Ring		
BY-201-3,4	4.5	360
BY-202-1,2	4.5	13
BY-203-1,2	5.1	42
BY-204-1,2	4.2	66
BY-205-1,2	3.9	89
BY-206-1,2	4.2	112
BY-207-1,2	4.2	140
BY-208-1,2	4.1	159
BY-209-1	3.8	189
BY-209-4	3.6	189
BY-210-3,4	4.8	203
BY-211-1	5.2	238
BY-211-4	4.9	238
BY-212-1,4	4.9	257
BY-213-1	5.0	270
BY-213-4	4.8	270
BY-214-1,4	4.8	298
BY-215-1,4	5.2	322
BY-216-1,2	4.8	337

3. MILK

<u>Site Code</u> <sup>a</sup>	<u>Location</u>	<u>Distance</u> <u>(miles)</u>	<u>Direction</u> <u>(°)</u>
BY-20	K. Reeverts Dairy Farm	2.1	37
BY-26 (C)	Glen Hazzard's Dairy Farm	13.5	355
BY-27	Kenneth Druien Dairy Farm	5.8	244
BYSP-28	Duane Camling Dairy Farm <sup>b</sup>	3.2	305
BY-30	Don Roos Dairy	5.1	125

<sup>a</sup> Control (background) locations are denoted by a "C" after site code. All other locations are indicators.

<sup>b</sup> Additional dairy was not required by ODCM but was included to ensure that program has at least four dairies

TABLE 5.0-2 (continued)

## BYRON STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLING LOCATIONS

4. VEGETABLES

<u>Site Code</u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
BY-19-1	River Road Across from BY-01	2.7	25
BYSP-19-2	German Church Road	3.6	180
BYSP-19-3	6773 River Road	3.0	350

5. GROUND/WELL WATER

<u>Site Code</u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
BY-14	CECo Offsite Well	0.3	101
BY-18	McCoy Farmstead	1.0	235

6. SURFACE WATER

<u>Site Code</u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
BY-09	Woodland Creek	2.1	320
BY-12	Oregon Pool of Rock River, Downstream	4.5	213
BY-13 (C)	Rock River, Upstream	2.6	302
BY-29 (C)	Byron, Upstream	3.5	25

7. FISH

<u>Site Code</u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
BY-12	Oregon Pool of Rock River, Downstream	4.5	213
BY-13 (C)	Rock River, Upstream	2.6	302
BY-29 (C)	Byron, Upstream	3.5	25
BYSP-31	Byron, Discharge	2.5	282

9. SHORELINE SEDIMENTS

<u>Site Code</u>	<u>Location</u>	<u>Distance (miles)</u>	<u>Direction (°)</u>
BY-12	Oregon Pool of Rock River, Downstream	4.5	213
BY-13 (C)	Rock River, Upstream	2.6	302
BY-29 (C)	Byron, Upstream	3.5	25

<sup>a</sup> Control (background) locations are denoted by a "C" after site code. All other locations are indicators.



TABLE 5.0-2 (continued)

## BYRON STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location		Collection Frequency	Type of Analysis	Frequency of Analysis	Remarks	
	Code <sup>a</sup>	Site					
1. Airborne Particulates	Onsite and Near Field		Continuous operation for a week	Gross Beta Filter exchange	Weekly	On all samples.	
					Weekly		
	BY-01	Byron		Gamma Isot.	Quarterly		On Quarterly composite from each location. Gamma isotopic if gross beta in a sample exceeds 5X the average concentration of the preceding calendar quarter for the
	BY-02 (C)	Stillman Valley					
	BY-03	Nearsite - East					
	BY-04	Paynes Point					
	BY-05	Nearsite - South					
	BY-06	Oregon					
	BY-07 (C)	Mt. Morris					
	BY-08 (C)	Leaf River					
	BY-21	Byron Nearsite North					
	BY-22	Byron Nearsite East-Southeast					
	RY-23	Byron Nearsite South					
	BY-24	Byron Nearsite Southwest					
2. Airborne Iodine	Same as 1.		Continuous operation for one week	I-131	Weekly	On all samples.	
3. Air Sampling Train	Same as 1.		—	Test and Maintenance	Weekly	On all samples.	
4. TLD	a. Same as 1.		Quarterly	Gamma	Quarterly	Two sets of TLD's at all air sampler locations. All sets read Quarterly. All sets read Quarterly.	
			Quarterly	Gamma	Quarterly		
	b. BY-102-1,2	Inner Ring					
	103-1,2						
	104-1,2						
	105-1,2						
	106-1,2						
	107-1,2						
	108-1,2						
	109-1,2						
	110-1,2						
	111-3,4						
	112-3,4						
	113-1,2						
	114-1,2						
	115-1,2						
	116-1,2						

<sup>a</sup> Control (background) locations are denoted by a "C" in this column. All other locations are indicators.

TABLE 5.0-2 (continued)

## BYRON STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location		Collection Frequency	Type of Analysis	Frequency of Analysis	Remarks	
	Code <sup>a</sup>	Site					
4. TLDs (continued)	b.	BY-201-3,4	Outer Ring	Quarterly	Gamma	Quarterly	All sets read Quarterly.
		202-1,2					
		203-1,2					
		204-1,2					
		205-1,2					
		206-1,2					
		207-1,2					
		208-1,2					
		209-1,4					
		210-3,4					
		211-4					
		212-1,4					
		213-1,4					
		214-1,4					
215-1,4							
216-1,2							
5. Milk		BY-20	K. Reeverts Dairy Farm	Semimonthly: May -October	I-131 Gamma Isot.	Semimonthly: May-October	On all samples.
		BY-26 (C)					
		BY-27	D. Camling Dairy Farm <sup>b</sup>	Monthly: November-April	I-131 Gamma Isot.	Monthly: November-April	On all samples.
		BYSP-28					
		BY-30					
6. Vegetables		BY-19-1	Rivr Road Accross from BY-01	Annually at harvest	Gamma Isot.	Annually	Four Varieties from each location as available at harvest. (Gamma isotopic an edible portion only).
		BYSP-19-2	German Church Road				
		BYSP-19-3	6773 River Road				
7. Groung/Well Water		BY-14	CECo Offsite Well	Monthly	Gross Beta	Monthly	On all samples.
		BY-18	McCoy Farmstead		Gamma Isot. Tritium		
8. Surface Water		BY-09	Woodland Creek	Weekly	Tritium Gamma Isot.	Quarterly Monthly	On quarterly composite from each location. On monthly composite from each location.
		BY-12	Oregon Pool of Rock River, Downstream				
		BY-13 (C)	Rock River, Upstream				
		BY-29 (C)	Byron, Upstream				

<sup>a</sup> Control (background) locations are denoted by a "C" in this column. All other locations are indicators.

<sup>b</sup> Additional dairy was not required by ODCM but included to assure that the program has at least four dairies.

TABLE 5.0-2 (continued)

## BYRON STATION

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM, SAMPLE COLLECTION AND ANALYSES

Sample Media	Location		Collection Frequency	Type of Analysis	Frequency of Analysis	Remarks
	Code <sup>a</sup>	Site				
9. Fish	BY-12	Oregon Pool of Rock River, Downstream	Three times a year	Gamma Isot.	Three times a year spring, summer, and fall	From Oregon Pool of Rock River, on edible portions only. At least two species.
	BY-13 (C)	Rock River, Upstream				
	BY-29 (C)	Byron, Upstream				
	BYSP-31	Byron, Discharge				
11. Shoreline Sediments	BY-12	Oregon Pool of Rock River, Downstream	Semiannually	Gamma Isot.	Semiannually	On all samples.
	BY-13 (C)	Rock River, Upstream				
	BY-29 (C)	Byron, Upstream				
12. Land Use Census						
Milch Animals	a. Site boundary to 2 miles		--	a. Enumeration by a door to door or equivalent counting technique.	Annually	During grazing season.
	b. 2 miles to 5 miles		--	b. Enumeration by using referenced information from county agricultural agents or other reliable sources.	Annually	During grazing season.
	c. At dairies listed in Item 5.		--	c. Inquire as to feeding practices: 1. Pasture only. 2. Feed and chop only. 3. Pasture and feed: if both, ask farmer to estimate fraction of food from pasture: <25%, 25-50%, 50-75% or >75%.	Annually	During grazing season.
Nearest Residence Census	In all 16 sectors up to 5 miles				Annually	

<sup>a</sup> Control (background) locations are denoted by a "C" in this column. All other locations are indicators.

TABLE 5.0-3

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility Byron Nuclear Power Station Docket No. 50-454, 50-455Location of Facility Oyle, Illinois Reporting Period 1st Quarter 1995

(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 156	0.01	0.023 (117/117) (0.011-0.043)	BY-06, Oregon 4.6 mi @ 213°	0.025 (13/13) (0.013-0.043)	0.023 (39/39) (0.011-0.033)	0
	Gamma Spec. 12						
	Cs-134	0.05	<LLD	-	-	<LLD	0
	Cs-137	0.06	<LLD	-	-	<LLD	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 156	0.07	<LLD	-	-	<LLD	0
Background (TLDs) (mR/Qtr.)	Gamma Dose 86	9.7	15.9 (80/80) (11.8-17.9)	BY-210-4 <sup>b</sup> , 3.6 mi @ 218°	17.9 (1/1)	13.5 (6/6) (12.9-14.5)	0
Milk (pCi/L)	I-131 15	1	<LLD	-	-	<LLD	0
	Gamma Spec. 15						
	Cs-134	15	<LLD	-	-	<LLD	0
	Cs-137	18	<LLD	-	-	<LLD	0
	Ba-La-140	15	<LLD	-	-	<LLD	0
	Other Gammas	20	<LLD	-	-	<LLD	0
Surface Water (pCi/L)	Gamma Spec. 11			-	-		
	Cs-134	15	<LLD	-	-	<LLD	0
	Cs-137	18	<LLD	-	-	<LLD	0
	Other Gammas	15	<LLD	-	-	<LLD	0
	Tritium 4	200	469 (1/1)	BY-12, Oregon Pool of Rock River 4.5 mi @ 213°	469(1/1)	<LLD	0
Well Water (pCi/L)	Gross Beta 6	4	<LLD	-	-	None	0
	Gamma Spec. 6						
	Cs-134	15	<LLD	-	-	None	0
	Cs-137	18	<LLD	-	-	None	0
	Other Gammas	15	<LLD	-	-	None	0
	Tritium 6	200	<LLD	-	-	None	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.<sup>b</sup> Locations RY-210-4 and RY-214-1 had identical means of 17.9 mR. Only RY-210-4 is detailed in this summary.

TABLE 5.0-4

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility Byron Nuclear Power Station Docket No. 50-454, 50-455  
 Location of Facility Ogle, Illinois Reporting Period 2nd Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results				
				Location	Mean Range						
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 144	0.01	0.016 (100/108) (0.010-0.029)	BY-02 <sup>b</sup> , Stillman Valley 6.2 mi @ 56°	0.016 (12/12) (0.010-0.030)	0.016 (33/36) (0.011-0.030)	0				
	Gamma Spec. 12										
	Cs-134	0.5	<LLD					-	-	<LLD	0
	Cs-137	0.6	<LLD					-	-	<LLD	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 144	0.07	<LLD	-	-	<LLD	0				
Gamma Background (TLDs) (mR/Qtr.)	Gamma Dose 86	9.7	16.6 (80/80) (11.9-19.2)	BY-111-3 0.7 mi @ 270°	19.2 (1/1)	14.6 (6/6) (13.9-15.4)	0				
Milk (pCi/L)	I-131 25	1	<LLD	-	-	<LLD	0				
	Gamma Spec. 25										
	Cs-134	15	<LLD	-	-	<LLD	0				
	Cs-137	18	<LLD	-	-	<LLD	0				
	Ba-La-140	15	<LLD	-	-	<LLD	0				
	Other Gammas	20	<LLD	-	-	<LLD	0				
Surface Water (pCi/L)	Gamma Spec. 12			-	-						
	Cs-134	15	<LLD	-	-	<LLD	0				
	Cs-137	18	<LLD	-	-	<LLD	0				
	Other Gammas	15	<LLD	-	-	<LLD	0				
	Tritium 4	200	<LLD	-	-	<LLD	0				

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

<sup>b</sup> Locations BY-02, BY-03, BY-06, BY-08, BY-22 and BY-24 had identical means of 0.016 pCi/m<sup>3</sup>. Only BY-02 is detailed in this summary.

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility Byron Nuclear Power Station Docket No. 50-454, 50-455  
 Location of Facility Ogle, Illinois Reporting Period 2nd Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Well Water (pCi/L)	Gross Beta 6	4	<LLD	-	-	None	0
	Gamma Spec. 6						
	Cs-134	15	<LLD	-	-	None	0
	Cs-137	18	<LLD	-	-	None	0
	Other Gammas	15	<LLD	-	-	None	0
	Tritium 6	200	<LLD	-	-	None	0
Bottom Sediments (pCi/g dry)	Gamma Spec. 3						
	Cs-134	0.15	<LLD	-	-	<LLD	0
	Cs-137	0.18	<LLD	-	-	<LLD	0
	Other Gammas	0.20	<LLD	-	-	<LLD	0
Fish (pCi/g wet)	Gamma Spec. 23						
	Cs-134	0.13	<LLD	-	-	<LLD	0
	Cs-137	0.15	<LLD	-	-	<LLD	0
	Other Gammas	0.13	<LLD	-	-	<LLD	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

TABLE 5.0-5

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility Byron Nuclear Power Station Docket No. 50-454, 50-455Location of Facility Ogle, Illinois Reporting Period 3rd Quarter 1995

(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results				
				Location	Mean Range						
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 156	0.01	0.022 (117/117) (0.011-0.038)	BY-02 <sup>b</sup> Stillman Valley, 6.2 mi @ 56°	0.023 (13/13) (0.014-0.033)	0.022 (39/39) (0.012-0.034)	0				
	Gamma Spec. 12										
	Cs-134	0.05	<LLD					-	-	<LLD	0
	Cs-137	0.06	<LLD					-	-	<LLD	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 156	0.07	<LLD	-	-	<LLD	0				
Background (TLDs) (mR/Qtr.)	Gamma Dose 86	9.7	16.9 (80/80) (11.6-21.1)	BY-212-4, 4.8 mi @ 240°	21.1 (1/1)	14.5 (6/6) (13.8-14.9)	0				
Milk (pCi/L)	I-131 30	1	<LLD	-	-	<LLD	0				
	Gamma Spec. 30										
	Cs-134	15	<LLD	-	-	<LLD	0				
	Cs-137	18	<LLD	-	-	<LLD	0				
	Ba-La-140	15	<LLD	-	-	<LLD	0				
	Other Gammas	20	<LLD	-	-	<LLD	0				
Surface Water (pCi/L)	Gamma Spec. 12			-	-						
	Cs-134	15	<LLD	-	-	<LLD	0				
	Cs-137	18	<LLD	-	-	<LLD	0				
	Other Gammas	15	<LLD	-	-	<LLD	0				
	Tritium 4	200	1,227 (1/1)	BY-12, Oregon Pool of Rock River, 4.5 mi @ 213°	1,227 (1/1)	<LLD	0				

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.<sup>b</sup> Locations BY-02 and BY-24 had identical means of 0.023 pCi/m<sup>3</sup>. Only BY-02 is detailed in this summary.

TABLE 5.0-5 (continued)

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility Byron Nuclear Power Station Docket No. 50-454, 50-455Location of Facility Opoka, Illinois Reporting Period 3rd Quarter 1995

(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Well Water (pCi/L)	Gross Beta 6	4	<LLD	-	-	None	0
	Gamma Spec. 6						
	Cs-134 15		<LLD	-	-	None	0
	Cs-137 18		<LLD	-	-	None	0
	Other Gammas 15		<LLD	-	-	None	0
Tritium 6	200		<LLD	-	-	None	0
Vegetation (pCi/g wet)	Gamma Spec. 12						
	Cs-134 0.06		<LLD	-	-	<LLD	0
	Cs-137 0.08		<LLD	-	-	<LLD	0
	Other Gammas 0.08		<LLD	-	-	<LLD	0
	I-131 2	0.06		<LLD	-	-	<LLD
Fish (pCi/g wet)	Gamma Spec. 21						
	Cs-134 0.13		<LLD	-	-	<LLD	0
	Cs-137 0.15		<LLD	-	-	<LLD	0
	Other Gammas 0.13		<LLD	-	-	<LLD	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.



TABLE 5.0-6

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility Byron Nuclear Power Station Docket No. 50-454, 50-455  
 Location of Facility Ogle, Illinois Reporting Period 4th Quarter 1995  
 (County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results				
				Location	Mean Range						
Air Particulates (pCi/m <sup>3</sup> )	Gross Beta 156	0.01	0.025 (117/117) (0.013-0.045)	BY-01 <sup>b</sup> , Byron, 3.5 mi @ 25°	0.026 (13/13) (0.013-0.041)	0.026 (39/39) (0.014-0.044)	0				
	Gamma Spec. 12										
	Cs-134	0.05	<LLD					-	-	<LLD	0
	Cs-137	0.06	<LLD					-	-	<LLD	0
Airborne Iodine (pCi/m <sup>3</sup> )	I-131 156	0.07	<LLD	-	-	<LLD	0				
Gamma Background (TL <sup>100</sup> , mR/Qtr.)	Gamma Dose 86	9.7	17.0 (80/80) (12.6-27.3)	BY-213-4, 5.0 mi @ 280°	27.3 (1/1)	15.1 (6/6) (14.4-15.9)	0				
Milk (pCi/L)	I-131 20	1	<LLD	-	-	<LLD	0				
	Gamma Spec. 20										
	Cs-134	15	<LLD	-	-	<LLD	0				
	Cs-137	18	<LLD	-	-	<LLD	0				
	Ba-La-140	15	<LLD	-	-	<LLD	0				
	Other Gammas	20	<LLD	-	-	<LLD	0				
Surface Water (pCi/L)	Gamma Spec. 12			-	-						
	Cs-134	15	<LLD	-	-	<LLD	0				
	Cs-137	18	<LLD	-	-	<LLD	0				
	Other Gammas	15	<LLD	-	-	<LLD	0				
	Tritium 4	200	1,417 (1/1)	BY-12, Oregon Pool of Rock River, 4.5 mi @ 213°	1,417 (1/1)	<LLD	0				

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

<sup>b</sup> Locations BY-01, BY-02, BY-03, BY-04, BY-06, BY-08 and BY-22 had identical means of 0.026 pCi/m<sup>3</sup>. Only BY-01 is detailed in this summary.

TABLE 5.0-6 (continued)

## RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM QUARTERLY SUMMARY

Name of Facility Byron Nuclear Power Station Docket No. 50-154, 50-455Location of Facility Ogle, Illinois Reporting Period 4th Quarter 1995  
(County, State)

Sample Type (Units)	Type and Number of Analyses	LLD	Indicator Locations Mean <sup>a</sup> Range	Location with Highest Quarterly Mean		Control Locations Mean <sup>a</sup> Range	Number of Non-routine Results
				Location	Mean Range		
Well Water (pCi/L)	Gross Beta 6	4	<LLD	-	-	None	0
	Gamma Spec. 6						
	Cs-134	15	<LLD	-	-	None	0
	Cs-137	18	<LLD	-	-	None	0
	Other Gammas	15	<LLD	-	-	None	0
	Tritium 6	200	<LLD	-	-	None	0
Bottom Sediments (pCi/g dry)	Gamma Spec. 3						
	Cs-134	0.15	<LLD	-	-	<LLD	0
	Cs-137	0.18	<LLD	-	-	<LLD	0
	Other Gammas	0.20	<LLD	-	-	<LLD	0
Fish (pCi/g wet)	Gamma Spec. 18						
	Cs-134	0.13	<LLD	-	-	<LLD	0
	Cs-137	0.15	<LLD	-	-	<LLD	0
	Other Gammas	0.13	<LLD	-	-	<LLD	0

<sup>a</sup> Mean and range based on detectable measurements only. Fractions indicated in parentheses.

APPENDIX II

METEOROLOGICAL DATA

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
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	5	0	0	0	5
ESE	0	0	5	0	0	0	5
SE	0	0	1	3	4	0	8
SSE	0	0	3	2	0	0	5
S	0	0	0	2	3	0	5
SSW	0	0	0	0	1	0	1
SW	0	0	1	0	0	0	1
WSW	0	0	0	0	0	0	0
W	0	0	0	0	0	0	0
WNW	0	0	0	0	0	0	0
NW	0	0	0	2	0	0	2
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	15	9	8	0	32

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	0	0	0	0	0
ENE	0	1	0	0	0	0	1
E	0	2	0	1	0	0	3
ESE	1	2	2	1	0	0	6
SE	0	0	4	4	1	0	9
SSE	0	0	3	0	1	0	4
S	0	0	3	1	0	1	5
SSW	0	0	3	0	2	0	5
SW	0	0	0	0	0	0	0
WSW	0	0	0	0	0	0	0
W	0	0	2	0	3	0	5
WNW	0	0	2	0	0	0	2
NW	0	0	2	1	0	0	3
NNW	0	0	1	2	0	0	3
VARIABLE	0	0	0	0	0	0	0
TOTAL	1	5	22	10	7	1	46

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
NNE	0	0	0	0	0	0	0
NE	0	0	2	0	0	0	2
ENE	0	1	0	0	0	0	1
E	0	1	0	2	0	0	3
ESE	0	3	0	1	0	0	4
SE	0	1	2	2	0	0	5
SSE	0	1	2	0	1	0	4
S	0	0	0	0	2	1	3
SSW	0	0	0	1	4	0	5
SW	0	0	3	0	2	0	5
WSW	0	0	0	0	0	1	1
W	0	2	0	1	1	0	4
WNW	0	4	3	0	1	0	8
NW	0	2	1	3	0	0	6
NNW	0	2	0	1	0	0	3
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	17	13	11	11	2	54

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 250-300)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	11	33	32	15	9	100
NNE	3	7	24	24	10	6	74
NE	4	7	17	6	10	4	48
ENE	1	8	10	14	22	3	58
E	0	14	14	32	5	0	65
ESE	0	7	13	24	9	0	53
SE	0	7	5	11	13	7	43
SSE	0	2	9	5	14	14	44
S	0	3	5	7	11	9	35
SSW	0	2	8	5	15	0	30
SW	1	6	12	13	9	3	44
WSW	0	13	22	25	6	4	70
W	2	18	26	54	24	10	134
WNW	0	16	54	62	17	21	170
NW	4	10	52	41	26	7	140
NNW	2	15	38	42	34	4	135
VARIABLE	0	0	0	0	0	0	0
TOTAL	17	146	342	397	240	101	1243

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	4	10	10	0	0	24
NNE	2	1	7	6	2	0	18
NE	2	0	2	3	2	0	9
ENE	1	2	2	9	2	0	16
E	4	4	16	6	5	1	36
ESE	1	0	6	14	11	8	40
SE	0	0	4	7	2	0	13
SSE	0	0	3	4	6	5	18
S	1	0	0	5	17	7	30
SSW	0	0	5	20	18	10	53
SW	0	2	8	22	10	3	45
WSW	0	2	15	23	6	0	46
W	0	3	6	48	2	0	59
WNW	0	2	30	22	1	0	55
NW	0	2	27	32	3	0	64
NNW	0	4	18	6	0	0	28
VARIABLE	0	0	0	0	0	0	0
TOTAL	11	26	159	237	87	34	554

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0



BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	3	1	0	0	5
NNE	0	0	3	4	1	0	8
NE	0	1	2	3	1	0	7
ENE	0	1	0	0	0	0	1
E	0	0	11	5	2	0	18
ESE	1	0	0	5	3	0	9
SE	0	0	0	4	1	0	5
SSE	0	1	3	0	3	6	13
S	0	1	3	4	12	8	28
SSW	0	1	2	6	4	0	13
SW	0	0	1	6	0	0	7
WSW	0	1	2	0	0	0	3
W	1	0	7	1	0	0	9
WNW	0	1	0	1	0	0	2
NW	0	2	2	7	0	0	11
NNW	0	1	1	2	0	0	4
VARIABLE	0	0	0	0	0	0	0
TOTAL	2	11	40	49	27	14	143

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JANUARY-MARCH 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	5	2	0	0	7
NNE	1	0	3	3	0	0	7
NE	0	0	1	1	0	0	2
ENE	0	0	0	0	0	0	0
E	0	0	3	1	0	0	4
ESE	0	0	1	1	1	0	3
SE	1	0	1	3	2	0	7
SSE	0	0	1	5	1	6	13
S	1	0	3	2	1	0	7
SSW	0	1	1	0	0	0	2
SW	0	1	1	0	0	0	2
WSW	0	0	1	0	0	0	1
W	0	2	6	0	0	0	8
WNW	1	0	0	0	0	0	1
NW	1	2	3	3	0	0	9
NNW	0	4	9	1	0	0	14
VARIABLE	0	0	0	0	0	0	0
TOTAL	5	10	39	22	5	6	87

Hours of calm in this stability class: 1  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
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	1	3	0	0	4
ESE	0	0	0	1	0	1	2
SE	0	0	0	0	0	0	0
SSE	0	0	0	2	5	0	7
S	0	0	0	5	2	0	7
SSW	0	0	0	3	1	0	4
SW	0	0	0	2	0	1	3
WSW	0	0	0	2	0	0	2
W	0	0	0	0	2	0	2
WNW	0	0	0	5	5	0	10
NW	0	0	1	6	1	0	8
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	2	29	16	2	49

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	2	1	0	0	3
NNE	0	0	3	3	0	0	6
NE	0	0	1	0	0	0	1
ENE	0	0	1	0	2	0	3
E	0	0	1	0	0	0	1
ESE	0	0	3	4	0	1	8
SE	0	0	0	3	1	0	4
SSE	0	0	0	0	0	0	0
S	0	1	4	1	1	0	7
SSW	0	1	3	4	0	0	8
SW	0	0	3	3	0	0	6
WSW	0	0	5	0	1	0	6
W	0	1	1	0	1	0	3
WNW	0	0	0	3	6	1	10
NW	0	1	2	5	2	0	10
NNW	0	0	2	0	2	0	4
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	4	31	27	16	2	80

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	3	2	0	0	5
NNE	0	0	6	2	0	0	8
NE	0	1	1	3	1	0	6
ENE	0	1	2	1	0	0	4
E	0	0	4	1	0	0	5
ESE	0	3	2	3	0	1	9
SE	0	0	4	1	0	0	5
SSE	0	4	0	1	0	1	6
S	0	0	2	4	0	0	6
SSW	0	2	5	1	0	0	8
SW	0	2	6	3	0	3	14
WSW	0	2	7	1	3	0	13
W	0	1	3	3	4	1	12
WNW	0	2	4	3	4	2	15
NW	0	1	6	8	1	1	17
NNW	0	0	1	0	1	0	2
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	19	56	37	14	9	135

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	1	8	22	20	6	0	57
NNE	1	4	35	16	7	0	63
NE	3	9	17	24	12	12	77
ENE	3	11	25	24	11	12	86
E	2	13	41	35	22	2	115
ESE	3	9	11	13	11	19	66
SE	2	9	5	0	4	8	28
SSE	2	12	5	5	1	8	33
S	2	11	8	14	8	2	45
SSW	4	7	15	6	11	1	44
SW	0	12	17	5	13	9	56
WSW	2	13	26	8	20	5	74
W	0	11	13	13	15	10	62
WNW	0	8	16	23	22	5	74
NW	1	6	27	23	16	2	75
NNW	1	10	7	7	7	0	32
VARIABLE	1	0	0	0	0	0	1
TOTAL	28	153	290	236	186	95	988

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 3  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	5	5	9	0	0	19
NNE	0	7	3	9	1	0	20
NE	2	5	14	6	1	0	28
ENE	0	5	11	20	3	0	39
E	0	13	40	35	7	0	95
ESE	0	7	15	17	13	14	66
SE	0	3	6	8	12	3	32
SSE	0	3	5	2	10	5	25
S	0	3	7	20	8	5	43
SSW	1	1	12	21	3	5	43
SW	2	3	11	7	10	1	34
WSW	2	6	13	12	4	1	38
W	1	4	12	19	1	1	38
WNW	1	7	21	11	1	0	41
NW	0	2	18	23	0	0	43
NNW	2	2	15	3	0	0	22
VARIABLE	0	0	0	0	0	0	0
TOTAL	11	76	208	222	74	35	626

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	3	0	0	4
NNE	0	0	0	2	0	0	2
NE	1	0	3	3	0	0	7
ENE	0	3	2	0	0	0	5
E	0	3	6	0	0	0	9
ESE	0	5	4	15	5	3	32
SE	1	3	3	11	2	0	20
SSE	0	5	5	12	4	0	26
S	0	0	5	10	5	1	21
SSW	1	1	4	6	1	0	13
SW	0	0	2	2	0	0	4
WSW	0	2	3	5	0	0	10
W	0	1	8	8	0	0	17
WNW	1	1	11	12	0	0	25
NW	0	3	4	11	0	0	18
NNW	0	2	8	3	0	0	13
VARIABLE	0	0	0	0	0	0	0
TOTAL	4	30	68	103	17	4	226

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0



BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: APRIL-JUNE 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	2	0	6	0	0	8
NNE	0	3	0	1	1	0	5
NE	0	1	0	0	0	0	1
ENE	0	0	0	0	0	0	0
E	1	1	0	0	0	0	2
ESE	1	0	3	0	0	0	4
SE	0	2	3	6	2	0	13
SSE	0	1	2	0	1	0	4
S	0	1	2	0	0	0	3
SSW	0	2	1	1	0	0	4
SW	0	0	4	0	0	0	4
WSW	0	0	1	2	0	0	3
W	0	2	1	4	0	0	7
WNW	0	1	1	2	0	0	4
NW	0	0	2	8	0	0	10
NNW	0	1	1	3	0	0	5
VARIABLE	0	0	0	0	0	0	0
TOTAL	2	17	21	33	4	0	77

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	1	0	0	1
NNE	0	0	0	0	0	0	0
NE	0	0	1	0	0	0	1
ENE	0	0	1	0	0	0	1
E	0	0	0	0	0	0	0
ESE	0	0	0	0	0	0	0
SE	0	1	3	2	0	0	6
SSE	0	0	4	3	2	0	9
S	0	1	2	1	0	0	4
SSW	0	0	2	2	0	0	4
SW	0	0	3	4	0	0	7
WSW	0	0	0	1	0	0	1
W	0	0	0	2	0	0	2
WNW	0	0	0	3	6	0	9
NW	0	0	0	3	0	0	3
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	2	16	22	8	0	48

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	5	0	0	7
NNF	0	0	0	1	0	0	1
NE	0	0	3	1	0	0	4
ENE	0	0	1	0	0	0	1
E	0	1	1	0	1	0	3
ESE	0	3	3	0	0	0	6
SE	0	1	4	2	0	0	7
SSE	1	1	4	1	0	0	7
S	0	0	1	1	0	0	2
SSW	0	0	0	4	0	0	4
SW	0	0	6	6	0	0	12
WSW	0	0	4	0	1	0	5
W	0	0	1	1	0	0	2
WNW	0	0	0	2	1	0	3
NW	0	0	0	6	0	0	6
NNW	0	0	0	1	0	0	1
VARIABLE	0	0	0	0	0	0	0
TOTAL	1	7	29	31	3	0	71

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	3	5	4	0	0	12
NNE	0	0	2	1	0	0	3
NE	0	1	3	2	0	0	6
ENE	0	1	0	0	0	0	1
E	0	4	1	0	0	0	5
ESE	1	0	1	0	0	0	2
SE	0	8	7	1	0	0	16
SSE	0	1	9	2	1	0	13
S	0	6	10	0	7	0	23
SSW	0	3	9	4	0	0	16
SW	1	8	12	15	1	0	37
WSW	0	5	6	6	2	1	20
W	0	1	2	2	0	0	5
WNW	0	2	0	9	2	0	13
NW	0	1	2	9	0	0	12
NNW	0	3	5	4	0	0	12
VARIABLE	0	0	0	0	0	0	0
TOTAL	2	47	74	59	13	1	196

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	2	14	8	46	2	0	72
NNE	0	2	9	18	3	2	34
NE	2	6	3	0	4	3	18
ENE	1	3	6	2	0	0	12
E	3	14	10	1	0	0	28
ESE	3	9	11	0	1	0	24
SE	2	8	20	4	2	1	37
SSE	0	12	29	9	4	3	57
S	3	12	29	25	10	3	82
SSW	1	15	35	19	19	1	90
SW	3	8	43	32	7	1	94
WSW	1	16	24	15	3	5	64
W	2	8	7	2	3	3	25
WNW	1	4	10	14	1	0	30
NW	0	5	10	7	0	0	22
NNW	1	8	10	8	0	0	27
VARIABLE	0	0	0	0	0	0	0
TOTAL	25	144	264	202	59	22	716

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	1	4	9	13	2	0	29
NNE	4	3	3	8	0	0	18
NE	1	4	5	3	0	0	13
ENE	3	6	10	8	0	0	27
E	0	9	26	6	0	0	41
ESE	0	3	13	9	1	0	26
SE	3	3	14	16	7	1	44
SSE	2	1	7	22	20	6	58
S	0	1	18	24	11	4	58
SSW	1	6	30	32	19	0	88
SW	2	5	27	27	11	0	72
WSW	2	2	15	17	1	0	37
W	1	3	7	18	1	0	30
WNW	0	6	12	18	0	0	36
NW	0	6	10	8	1	0	25
NNW	0	4	9	7	0	0	20
VARIABLE	0	0	0	0	0	0	0
TOTAL	20	66	215	236	74	11	622

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	5	6	0	0	11
NNE	0	5	4	3	0	0	12
NE	1	2	1	5	0	0	9
ENE	1	0	0	2	0	0	3
E	0	0	4	6	0	0	10
ESE	0	2	10	23	6	0	41
SE	0	1	5	19	11	0	36
SSE	0	0	14	8	5	5	32
S	0	1	9	33	21	0	64
SSW	0	2	15	24	3	0	44
SW	0	3	19	34	3	0	59
WSW	2	3	13	6	0	0	24
W	0	3	12	2	0	0	17
WNW	0	3	8	5	0	0	16
NW	0	2	3	1	1	0	7
NNW	0	1	4	8	0	0	13
VARIABLE	0	0	0	0	0	0	0
TOTAL	4	28	126	185	50	5	398

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: JULY-SEPTEMBER 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	1	0	8	2	0	0	11
NNE	0	4	0	1	0	0	5
NE	1	1	0	0	0	0	2
ENE	0	0	0	0	0	0	0
E	2	0	2	1	0	0	5
ESE	1	0	4	7	8	0	20
SE	0	0	1	8	8	0	17
SSE	0	1	0	11	3	0	15
S	0	1	7	12	5	0	25
SSW	0	3	3	9	0	0	15
SW	0	1	2	5	0	0	8
WSW	1	2	0	1	0	0	4
W	0	2	4	2	0	0	8
WNW	0	0	5	4	0	0	9
NW	0	0	3	1	0	0	4
NNW	0	2	6	1	0	0	9
VARIABLE	0	0	0	0	0	0	0
TOTAL	6	17	45	65	24	0	157

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 0



BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - EXTREMELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0
SSE	0	0	0	0	0	0	0
S	0	0	0	0	1	0	1
SSW	0	0	0	0	0	0	0
SW	0	0	0	0	0	0	0
WSW	0	0	0	1	0	0	1
W	0	0	0	2	0	0	2
WNW	0	0	0	0	0	0	0
NW	0	0	0	0	0	0	0
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	0	3	1	0	4

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 1

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - MODERATELY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	0	0	0	0	0	0
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	1	0	0	0	1
ESE	0	0	0	1	0	0	1
SE	0	0	0	1	0	0	1
SSE	0	0	0	1	0	0	1
S	0	0	0	1	1	0	2
SSW	0	0	0	1	1	0	2
SW	0	0	1	0	0	0	1
WSW	0	0	0	2	0	2	4
W	0	0	0	1	0	0	1
WNW	0	0	0	3	1	0	4
NW	0	0	2	3	1	0	6
NNW	0	0	0	0	0	0	0
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	0	4	14	4	2	24

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 1

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - SLIGHTLY UNSTABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	0	0	0	1
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	1	0	0	0	0	1
ESE	0	5	0	0	0	0	5
SE	0	1	1	1	0	0	3
SSE	0	1	0	1	0	2	4
S	0	0	0	1	0	1	2
SSW	0	2	5	5	7	0	19
SW	0	1	1	1	0	0	3
WSW	0	1	0	0	0	1	2
W	0	1	1	3	2	1	8
WNW	0	1	3	3	3	0	10
NW	0	0	2	9	5	0	16
NNW	0	0	1	0	0	0	1
VARIABLE	0	0	0	0	0	0	0
TOTAL	0	15	14	24	17	5	75

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 0  
 Hours of missing stability measurements in all stability classes: 1

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - NEUTRAL (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	2	7	21	18	8	3	59
NNE	2	15	19	2	7	10	55
NE	2	8	13	13	11	19	66
ENE	1	3	3	23	25	4	59
E	3	5	6	11	4	0	29
ESE	0	4	4	4	14	3	29
SE	0	8	7	9	7	1	32
SSE	0	6	11	18	24	24	83
S	1	3	7	17	14	12	54
SSW	3	8	12	22	20	8	73
SW	1	4	11	3	6	7	32
WSW	2	6	15	30	17	9	79
W	0	3	13	63	53	43	175
WNW	2	24	36	105	34	23	224
NW	0	17	50	40	10	4	121
NNW	0	10	22	14	4	6	56
VARIABLE	0	0	0	0	0	0	0
TOTAL	19	131	250	392	258	176	1226

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 4  
 Hours of missing stability measurements in all stability classes: 1

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - SLIGHTLY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	1	1	7	13	0	0	22
NNE	1	2	3	7	0	0	13
NE	3	2	2	4	0	0	11
ENE	1	1	0	6	7	0	15
E	1	2	9	8	1	0	21
ESE	0	4	7	10	2	1	24
SE	0	1	7	14	14	1	37
SSE	0	0	3	11	14	14	42
S	0	0	4	8	23	18	53
SSW	0	0	3	17	21	3	44
SW	0	2	5	24	6	0	37
WSW	0	0	5	15	7	0	27
W	1	1	13	44	21	0	80
WNW	1	2	23	43	3	0	72
NW	3	2	19	39	3	0	66
NNW	0	2	8	24	4	0	38
VARIABLE	0	0	0	0	0	0	0
TOTAL	12	22	118	287	126	37	602

Hours of cal<sup>l</sup> in this stability class: 0  
 Hours of missing wind measurements in this stability class: 6  
 Hours of missing stability measurements in all stability classes: 1

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - MODERATELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	1	8	0	0	10
NNE	0	1	2	0	0	0	3
NE	0	2	0	1	0	0	3
ENE	0	0	0	0	0	0	0
E	1	2	0	2	1	0	6
ESE	0	0	0	5	8	0	13
SE	0	1	2	4	5	0	12
SSE	0	0	1	7	5	2	15
S	1	2	1	2	14	2	22
SSW	0	1	0	7	7	1	16
SW	0	1	2	11	4	0	18
WSW	0	1	0	5	2	0	8
W	1	1	1	7	0	0	10
WNW	0	1	7	9	0	0	17
NW	0	1	5	14	0	0	20
NNW	0	1	8	4	0	0	13
VARIABLE	0	0	0	0	0	0	0
TOTAL	3	16	30	86	46	5	186

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 8  
 Hours of missing stability measurements in all stability classes: 1

BYRON NUCLEAR POWER STATION

PERIOD OF RECORD: OCTOBER-DECEMBER 1995

STABILITY CLASS - EXTREMELY STABLE (DIFF TEMP 250-30 FT)  
WINDS MEASURED AT 250 FEET

WIND DIRECTION	WIND SPEED (in mph)						TOTAL
	0.9-3	4-7	8-12	13-18	19-24	> 24	
N	0	1	0	1	0	0	2
NNE	0	0	4	0	0	0	4
NE	0	1	0	0	0	0	1
ENE	0	2	0	0	0	0	2
E	0	1	0	1	0	0	2
ESE	0	0	0	2	4	0	6
SE	0	0	0	0	2	0	2
SSE	0	0	0	0	2	2	4
S	0	0	0	0	0	0	0
SSW	0	0	1	5	3	0	9
SW	0	0	2	5	1	0	8
WSW	0	0	0	3	0	0	3
W	0	1	1	1	0	0	3
WNW	0	0	1	0	0	0	1
NW	1	2	2	4	0	0	9
NNW	0	1	1	5	0	0	7
VARIABLE	0	0	0	0	0	0	0
TOTAL	1	9	12	27	12	2	63

Hours of calm in this stability class: 0  
 Hours of missing wind measurements in this stability class: 9  
 Hours of missing stability measurements in all stability classes: 1

APPENDIX III

1995 REMP SAMPLE RESULTS



BYRON

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## BYRON

### 1.0 INTRODUCTION

The following constitutes the final, 1995 Monthly Progress Report for the Radiological Environmental Monitoring Program conducted at Byron Station, Byron, Illinois. Results of completed analyses are presented in the attached tables. Missing entries indicate analyses that are not completed and the results will appear in subsequent reports.

Data obtained in the program are well within the ranges previously encountered in the program and to be expected in the environmental media sampled.

For all gamma isotopic analyses, spectrum is computer scanned from 80 to 2048 KeV. Specifically included are Mn-54, Fe-59, Co-58, Co-60, Zn-65, Zr-95, Nb-95, Ru-103, Ru-106, I-131, Ba-La-140, Cs-134, Cs-137, Ce-141, and Ce-144. Naturally occurring gamma-emitters, such as K-40 and Ra daughters, are frequently detected but not listed here. The data is reported in the format of  $x \pm 2s; 2TPU$ , where "x" is the significant result, "s" is the one standard deviation counting uncertainty, and TPU is the total propagated uncertainty at the one sigma confidence level.

All concentrations, except for gross beta, are decay corrected to the date of collection.

#### Deviations from Scheduled Sampling and Corrective Actions Taken

All samples were collected within the scheduled period unless noted otherwise in the Listing of Missed Samples.

#### Unusual Environmental Results

Sample Type	Location	Date Collected	Comments
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BYRON

2.0 LISTING OF MISSED SAMPLES

Sample Type	Location	Expected Collection Date	Reason
SW	BY-09	01-03-95	Creek Frozen.
SW	BY-12	01-03-95	Rock River Frozen.
SW	BY-13	01-03-95	Rock River Frozen.
SW	BY-29	01-03-95	Rock River Frozen.
SW	BY-09	01-10-95	Creek Frozen.
SW	BY-13	01-10-95	Rock River Frozen.
SW	BY-29	01-10-95	Rock River Frozen.
SW	BY-09	01-24-95	Creek Frozen.
SW	BY-13	01-24-95	Rock River Frozen.
SW	BY-29	01-24-95	Rock River Frozen.
SW	BY-09	01-31-95	Creek Frozen.
SW	BY-13	01-31-95	Rock River Frozen.
SW	BY-29	01-31-95	Rock River Frozen.
SW	BY-09	02-07-95	Creek Frozen.
SW	BY-13	02-07-95	Rock River Frozen.
SW	BY-29	02-07-95	Rock River Frozen.
SW	BY-09	02-14-95	Creek Frozen.
SW	BY-13	02-14-95	Rock River Frozen.
SW	BY-29	02-14-95	Rock River Frozen.
SW	BY-09	02-21-95	Creek Frozen.
SW	BY-29	02-21-95	Rock River Frozen.
SW	BY-29	02-28-95	Icy conditions prevented collector from obtaining sample.
SW	BY-29	03-07-95	Access to sampling point icy and hazardous.
SW	BY-01 thru BY-08;	06-20-95	Samples lost by carrier during shipment to laboratory.
SW	BY-21 thru BY-24	06-20-95	Samples lost by carrier during shipment to laboratory..
SW	BY-09, BY-12, BY-13, and BY-29	06-20-95	Samples lost by carrier during shipment to laboratory..
SW	BY-09	11-28-95	Creek Frozen.
SW	BY-13	11-28-95	Rock River Frozen.
SW	BY-29	11-28-95	Rock River Frozen.
SW	BY-09	12-12-95	Creek Frozen.
SW	BY-12	12-12-95	Rock River Frozen.
SW	BY-13	12-12-95	Rock River Frozen.
SW	BY-29	12-12-95	Rock River Frozen.
SW	BY-12	12-26-95	Rock River Frozen.
SW	BY-29	12-26-95	Rock River Frozen.

BYRON

3.0 LISTING OF SAMPLE ANOMALIES

Sample Type	Location	Collection Date	Comments
A/I	BY-03	01-10-95	Volume estimated.
A/I	BY-07	01-10-95	Volume estimated.
A/I	BY-24	01-10-95	Volume estimated.
A/I	BY-24	01-24-95	Volume estimated.
A/I	BY-24	01-31-95	Volume estimated; installed new timer.
A/I	BY-06	02-28-95	Flowrate outside 10%.
A/I	BY-206-2	10-03-95	TLD was found on the ground in a damaged condition.
A/I	BY-03	10-24-95	Volume low; deposit on air filter very light due to heavy rain.
A/I	BY-21	10-24-95	Deposit on air filter very light due to heavy rain.
A/I	BY-21	11-14-95	Volume low; power loss suspected.
A/I	BY-05	11-29-95	Filter light due to heavy snow and rain.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>2</sup> pCi/m<sup>3</sup>

BY-01 Byron							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	286	2.8 ± 0.3 ; 0.6	-0.5 ± 1.1 ; 1.1	07-04-95	285	1.7 ± 0.3 ; 0.4	-0.7 ± 1.0 ; 1.0
01-10-95	290	2.6 ± 0.3 ; 0.6	-0.2 ± 1.0 ; 1.0	07-11-95	284	1.7 ± 0.3 ; 0.4	-0.7 ± 1.0 ; 1.0
01-17-95	284	2.5 ± 0.3 ; 0.6	0.7 ± 1.0 ; 1.0	07-18-95	287	3.2 ± 0.4 ; 0.7	-0.4 ± 1.0 ; 1.0
01-24-95	291	1.9 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1	07-24-95	244	1.9 ± 0.3 ; 0.5	-0.4 ± 1.4 ; 1.4
01-31-95	280	3.0 ± 0.3 ; 0.6	0.7 ± 1.1 ; 1.1	08-01-95	327	2.0 ± 0.3 ; 0.4	-0.4 ± 0.8 ; 0.8
02-07-95	286	2.7 ± 0.3 ; 0.6	0.7 ± 1.1 ; 1.1	08-08-95	284	1.6 ± 0.3 ; 0.4	0.3 ± 1.0 ; 1.0
02-14-95	283	2.5 ± 0.3 ; 0.5	0.1 ± 1.1 ; 1.1	08-15-95	290	2.7 ± 0.3 ; 0.6	-0.5 ± 1.2 ; 1.2
02-22-95	328	2.8 ± 0.3 ; 0.6	-0.8 ± 1.3 ; 1.3	08-22-95	282	1.7 ± 0.3 ; 0.4	0.3 ± 0.8 ; 0.8
02-28-95	244	1.7 ± 0.3 ; 0.4	0.0 ± 1.1 ; 1.1	08-29-95	279	3.3 ± 0.4 ; 0.7	0.2 ± 0.9 ; 0.9
03-07-95	286	2.0 ± 0.3 ; 0.5	0.4 ± 1.0 ; 1.0	09-05-95	285	2.8 ± 0.3 ; 0.6	0.7 ± 1.3 ; 1.3
03-14-95	285	2.6 ± 0.3 ; 0.6	-1.3 ± 1.0 ; 1.0	09-12-95	285	2.1 ± 0.3 ; 0.5	0.1 ± 1.0 ; 1.0
03-21-95	285	1.8 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1	09-19-95	283	2.3 ± 0.3 ; 0.5	0.1 ± 1.2 ; 1.2
03-28-95	286	1.1 ± 0.2 ; 0.3	-0.2 ± 0.9 ; 0.9	09-25-95	244	1.2 ± 0.3 ; 0.4	0.1 ± 1.3 ; 1.3
1st Qtr. Mean ± s.d.		2.3 ± 0.5	0.0 ± 0.6	3rd Qtr. Mean ± s.d.		2.2 ± 0.6	-0.1 ± 0.4
04-04-95	284	1.4 ± 0.3 ; 0.4	0.4 ± 0.9 ; 0.9	10-03-95	327	4.1 ± 0.3 ; 0.8	0.2 ± 0.9 ; 0.9
04-11-95	285	1.9 ± 0.3 ; 0.4	1.4 ± 0.8 ; 0.9	10-10-95	282	1.3 ± 0.3 ; 0.4	-0.4 ± 1.3 ; 1.3
04-18-95	290	1.3 ± 0.2 ; 0.3	0.4 ± 0.8 ; 0.8	10-17-95	285	2.9 ± 0.3 ; 0.6	0.6 ± 1.0 ; 1.0
04-25-95	276	0.9 ± 0.2 ; 0.3	-0.6 ± 1.0 ; 1.0	10-24-95	286	1.5 ± 0.3 ; 0.4	0.6 ± 1.2 ; 1.2
05-02-95	285	1.3 ± 0.2 ; 0.3	0.5 ± 0.9 ; 0.9	10-31-95	287	1.6 ± 0.3 ; 0.4	-0.3 ± 0.9 ; 0.9
05-09-95	285	1.4 ± 0.3 ; 0.4	-0.7 ± 1.1 ; 1.1	11-07-95	283	2.2 ± 0.3 ; 0.5	-0.2 ± 1.7 ; 1.7
05-16-95	285	1.4 ± 0.3 ; 0.4	0.0 ± 1.1 ; 1.1	11-14-95	290	2.3 ± 0.3 ; 0.5	0.9 ± 0.9 ; 0.9
05-23-95	286	1.3 ± 0.3 ; 0.4	-0.3 ± 0.9 ; 0.9	11-21-95	280	2.5 ± 0.3 ; 0.6	0.5 ± 1.3 ; 1.3
05-30-95	284	0.9 ± 0.2 ; 0.3	0.2 ± 1.1 ; 1.1	11-29-95	328	3.4 ± 0.3 ; 0.7	1.6 ± 1.1 ; 1.1
06-06-95	287	1.9 ± 0.3 ; 0.5	-0.7 ± 1.1 ; 1.1	12-05-95	241	3.2 ± 0.4 ; 0.7	-1.2 ± 1.2 ; 1.2
06-12-95	244	1.4 ± 0.3 ; 0.4	0.2 ± 1.1 ; 1.1	12-12-95	287	2.9 ± 0.3 ; 0.6	-0.5 ± 1.7 ; 1.7
06-20-95	NS <sup>a</sup>	-	-	12-18-95	246	3.7 ± 0.4 ; 0.8	0.3 ± 1.4 ; 1.4
06-27-95	287	2.6 ± 0.3 ; 0.6	-0.3 ± 1.1 ; 1.1	12-26-95	325	1.9 ± 0.3 ; 0.4	0.0 ± 0.9 ; 0.9
2nd Qtr. Mean ± s.d.		1.5 ± 0.4	0.0 ± 0.6	4th Qtr. Mean ± s.d.		2.6 ± 0.8	0.2 ± 0.7

<sup>a</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>2</sup> pCi/m<sup>3</sup>

BY-02 (C) Stillman Valley							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	291	2.4 ± 0.3 ; 0.5	0.3 ± 1.1 ; 1.1	07-04-95	283	1.6 ± 0.3 ; 0.4	-1.2 ± 1.0 ; 1.1
01-10-95	285	2.6 ± 0.3 ; 0.6	-1.7 ± 1.2 ; 1.2	07-11-95	290	1.9 ± 0.3 ; 0.5	0.1 ± 0.8 ; 0.8
01-17-95	284	2.5 ± 0.3 ; 0.6	-0.2 ± 1.2 ; 1.2	07-18-95	288	3.0 ± 0.4 ; 0.6	1.1 ± 0.9 ; 1.0
01-24-95	285	2.0 ± 0.3 ; 0.5	0.6 ± 1.0 ; 1.0	07-24-95	244	2.3 ± 0.4 ; 0.6	0.0 ± 1.3 ; 1.3
01-31-95	286	3.3 ± 0.3 ; 0.7	-0.1 ± 1.0 ; 1.0	08-01-95	327	2.4 ± 0.3 ; 0.5	-0.1 ± 0.8 ; 0.8
02-07-95	292	2.8 ± 0.3 ; 0.6	0.0 ± 1.2 ; 1.2	08-08-95	285	1.5 ± 0.3 ; 0.4	0.3 ± 1.0 ; 1.0
02-14-95	282	2.9 ± 0.3 ; 0.6	-0.4 ± 1.1 ; 1.1	08-15-95	289	2.8 ± 0.3 ; 0.6	-0.8 ± 1.0 ; 1.0
02-22-95	327	2.4 ± 0.3 ; 0.5	0.7 ± 1.1 ; 1.1	08-22-95	282	1.8 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1
02-28-95	245	1.5 ± 0.3 ; 0.4	0.0 ± 1.0 ; 1.0	08-29-95	284	3.2 ± 0.4 ; 0.7	0.0 ± 1.1 ; 1.1
03-07-95	293	2.0 ± 0.3 ; 0.5	-0.1 ± 1.0 ; 1.0	09-05-95	285	3.3 ± 0.3 ; 0.7	-0.7 ± 1.4 ; 1.4
03-14-95	289	2.9 ± 0.3 ; 0.6	0.0 ± 1.1 ; 1.1	09-12-95	283	2.3 ± 0.3 ; 0.5	0.0 ± 1.0 ; 1.0
03-21-95	285	1.8 ± 0.3 ; 0.4	0.8 ± 1.0 ; 1.0	09-19-95	283	2.4 ± 0.3 ; 0.5	-0.2 ± 1.6 ; 1.6
03-28-95	217	1.3 ± 0.2 ; 0.3	-0.6 ± 0.7 ; 0.7	09-25-95	244	1.4 ± 0.3 ; 0.4	-2.0 ± 1.4 ; 1.4
1st Qtr. Mean±s.d.		2.3 ± 0.6	-0.1 ± 0.6	3rd Qtr. Mean±s.d.		2.3 ± 0.6	-0.3 ± 0.7
04-04-95	288	1.6 ± 0.3 ; 0.4	-0.7 ± 1.0 ; 1.0	10-03-95	330	4.4 ± 0.3 ; 0.9	0.3 ± 1.0 ; 1.0
04-12-95	317	1.6 ± 0.2 ; 0.4	0.3 ± 0.8 ; 0.8	10-10-95	280	1.6 ± 0.3 ; 0.4	-0.2 ± 0.6 ; 0.6
04-18-95	257	1.5 ± 0.3 ; 0.4	-1.0 ± 1.1 ; 1.1	10-17-95	285	2.8 ± 0.3 ; 0.6	0.2 ± 1.0 ; 1.0
04-25-95	276	1.2 ± 0.3 ; 0.3	-0.2 ± 0.9 ; 0.9	10-24-95	287	1.4 ± 0.3 ; 0.4	0.4 ± 1.4 ; 1.4
05-02-95	289	1.1 ± 0.2 ; 0.3	0.4 ± 0.9 ; 0.9	10-31-95	287	1.5 ± 0.3 ; 0.4	-0.3 ± 1.1 ; 1.1
05-09-95	286	1.7 ± 0.3 ; 0.4	-1.1 ± 1.1 ; 1.1	11-07-95	286	2.1 ± 0.3 ; 0.5	0.7 ± 1.7 ; 1.7
05-16-95	285	1.5 ± 0.3 ; 0.4	-0.6 ± 1.0 ; 1.0	11-14-95	285	2.5 ± 0.3 ; 0.6	0.1 ± 1.1 ; 1.1
05-23-95	285	1.7 ± 0.3 ; 0.4	0.8 ± 0.9 ; 0.9	11-21-95	289	2.8 ± 0.3 ; 0.6	-0.6 ± 1.1 ; 1.1
05-30-95	284	1.0 ± 0.2 ; 0.3	-0.3 ± 1.0 ; 1.0	11-29-95	333	3.2 ± 0.3 ; 0.7	0.2 ± 1.2 ; 1.2
06-06-95	289	2.0 ± 0.3 ; 0.5	-0.3 ± 1.1 ; 1.1	12-05-95	246	2.8 ± 0.4 ; 0.6	0.4 ± 1.1 ; 1.1
06-12-95	243	1.2 ± 0.3 ; 0.4	-1.1 ± 1.2 ; 1.2	12-12-95	291	2.6 ± 0.3 ; 0.6	0.7 ± 1.3 ; 1.3
06-20-95	NS <sup>a</sup>	-	-	12-18-95	241	3.9 ± 0.4 ; 0.8	-0.1 ± 1.3 ; 1.3
06-27-95	283	3.0 ± 0.3 ; 0.6	1.1 ± 0.9 ; 0.9	12-26-95	325	2.0 ± 0.3 ; 0.5	-0.2 ± 1.0 ; 1.0
2nd Qtr. Mean±s.d.		1.6 ± 0.5	-0.2 ± 0.7	4th Qtr. Mean±s.d.		2.6 ± 0.9	0.1 ± 0.4

<sup>a</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-03 Nearsite - East							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	286	2.7 ± 0.3 ; 0.6	0.7 ± 1.1 ; 1.1	07-04-95	283	1.6 ± 0.3 ; 0.4	-0.5 ± 0.9 ; 0.9
01-10-95	285 <sup>a</sup>	2.4 ± 0.3 ; 0.5	0.3 ± 1.1 ; 1.1	07-11-95	281	1.9 ± 0.3 ; 0.5	0.7 ± 1.0 ; 1.0
01-17-95	285	2.2 ± 0.3 ; 0.5	-1.1 ± 1.0 ; 1.0	07-18-95	288	3.1 ± 0.4 ; 0.7	-0.1 ± 1.2 ; 1.2
01-24-95	285	1.8 ± 0.3 ; 0.4	-0.4 ± 1.1 ; 1.1	07-24-95	244	1.9 ± 0.3 ; 0.5	0.0 ± 1.2 ; 1.2
01-31-95	286	2.9 ± 0.3 ; 0.6	-0.8 ± 1.1 ; 1.1	08-01-95	327	2.4 ± 0.3 ; 0.5	-0.1 ± 0.9 ; 0.9
02-07-95	288	2.6 ± 0.3 ; 0.6	-0.6 ± 1.2 ; 1.2	08-08-95	285	1.5 ± 0.3 ; 0.4	1.4 ± 1.0 ; 1.0
02-14-95	278	2.2 ± 0.3 ; 0.5	0.6 ± 1.2 ; 1.2	08-15-95	290	2.5 ± 0.3 ; 0.6	0.1 ± 1.1 ; 1.1
02-22-95	332	2.5 ± 0.3 ; 0.5	-0.1 ± 1.1 ; 1.1	08-22-95	282	1.6 ± 0.3 ; 0.4	0.4 ± 0.9 ; 0.9
02-28-95	248	1.4 ± 0.3 ; 0.4	0.2 ± 1.0 ; 1.0	08-29-95	284	3.2 ± 0.4 ; 0.7	1.0 ± 1.2 ; 1.2
03-07-95	288	1.9 ± 0.3 ; 0.4	0.1 ± 0.9 ; 0.9	09-05-95	287	3.4 ± 0.3 ; 0.7	0.9 ± 1.3 ; 1.3
03-14-95	284	2.6 ± 0.3 ; 0.6	0.3 ± 1.1 ; 1.1	09-12-95	283	1.9 ± 0.3 ; 0.5	-0.4 ± 1.1 ; 1.1
03-21-95	281	1.8 ± 0.3 ; 0.4	1.0 ± 0.9 ; 0.9	09-19-95	283	2.2 ± 0.3 ; 0.5	-0.1 ± 0.8 ; 0.8
03-28-95	287	1.2 ± 0.2 ; 0.3	-0.2 ± 0.7 ; 0.7	09-25-95	244	1.3 ± 0.3 ; 0.4	-0.7 ± 1.3 ; 1.3
1st Qtr. Meant ± d.		2.2 ± 0.5	0.0 ± 0.6	3rd Qtr. Meant ± d.		2.2 ± 0.7	0.2 ± 0.6
04-04-95	288	1.6 ± 0.3 ; 0.4	0.2 ± 1.0 ; 1.0	10-03-95	335	4.5 ± 0.3 ; 0.9	-0.7 ± 1.0 ; 1.0
04-12-95	317	1.8 ± 0.3 ; 0.4	-0.8 ± 0.9 ; 0.9	10-10-95	280	1.4 ± 0.3 ; 0.4	0.8 ± 1.3 ; 1.3
04-18-95	257	1.5 ± 0.3 ; 0.4	0.7 ± 1.0 ; 1.0	10-17-95	285	2.8 ± 0.3 ; 0.6	-0.6 ± 1.2 ; 1.2
04-25-95	276	1.2 ± 0.3 ; 0.3	-0.2 ± 1.1 ; 1.1	10-24-95	260 <sup>c</sup>	1.7 ± 0.3 ; 0.4	-0.2 ± 1.6 ; 1.6
05-02-95	285	1.4 ± 0.2 ; 0.4	0.4 ± 0.8 ; 0.8	10-31-95	287	1.7 ± 0.3 ; 0.4	-0.5 ± 1.0 ; 1.0
05-09-95	286	1.6 ± 0.3 ; 0.4	-0.1 ± 1.1 ; 1.1	11-07-95	286	2.2 ± 0.3 ; 0.5	0.3 ± 0.9 ; 0.9
05-16-95	285	1.6 ± 0.3 ; 0.4	0.3 ± 1.0 ; 1.0	11-14-95	285	2.2 ± 0.3 ; 0.5	0.2 ± 1.1 ; 1.1
05-23-95	285	1.3 ± 0.3 ; 0.4	1.4 ± 1.0 ; 1.0	11-21-95	284	2.7 ± 0.3 ; 0.6	0.1 ± 1.0 ; 1.0
05-30-95	284	1.0 ± 0.2 ; 0.3	0.6 ± 0.9 ; 0.9	11-29-95	327	3.0 ± 0.3 ; 0.6	-0.4 ± 1.3 ; 1.3
06-06-95	289	2.1 ± 0.3 ; 0.5	1.1 ± 1.0 ; 1.0	12-05-95	242	3.1 ± 0.4 ; 0.7	-0.2 ± 1.1 ; 1.1
06-12-95	243	1.1 ± 0.3 ; 0.3	0.6 ± 1.2 ; 1.2	12-12-95	286	2.6 ± 0.3 ; 0.6	1.3 ± 1.2 ; 1.2
06-20-95	NS <sup>b</sup>	-	-	12-18-95	241	3.9 ± 0.4 ; 0.8	2.1 ± 1.2 ; 1.3
06-27-95	287	2.8 ± 0.3 ; 0.6	-0.3 ± 0.9 ; 0.9	12-26-95	325	1.8 ± 0.3 ; 0.4	0.5 ± 0.9 ; 0.9
2nd Qtr. Meant ± d.		1.6 ± 0.5	0.3 ± 0.6	4th Qtr. Meant ± d.		2.6 ± 0.9	0.2 ± 0.8

<sup>a</sup> Volume estimated.

<sup>b</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

<sup>c</sup> Volume low; deposit on air filter very light due to heavy rain.



BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-04 Paynes Point							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	286	2.3 ± 0.3 ; 0.5	0.7 ± 1.1 ; 1.1	07-04-95	283	1.5 ± 0.3 ; 0.4	-0.4 ± 1.0 ; 1.0
01-10-95	284	2.3 ± 0.3 ; 0.5	-0.8 ± 1.1 ; 1.1	07-11-95	286	1.7 ± 0.3 ; 0.4	0.6 ± 1.0 ; 1.0
01-17-95	285	2.3 ± 0.3 ; 0.5	0.6 ± 1.0 ; 1.0	07-18-95	287	3.3 ± 0.4 ; 0.7	0.0 ± 1.0 ; 1.0
01-24-95	285	2.2 ± 0.3 ; 0.5	0.3 ± 1.0 ; 1.0	07-24-95	244	2.1 ± 0.4 ; 0.5	-0.4 ± 1.5 ; 1.5
01-31-95	286	2.8 ± 0.3 ; 0.6	0.7 ± 1.0 ; 1.0	08-01-95	332	2.3 ± 0.3 ; 0.5	-0.5 ± 0.9 ; 0.9
02-07-95	292	2.3 ± 0.3 ; 0.5	0.3 ± 1.1 ; 1.1	08-08-95	285	1.8 ± 0.3 ; 0.4	-0.7 ± 1.0 ; 1.0
02-14-95	282	2.9 ± 0.3 ; 0.6	0.9 ± 1.1 ; 1.1	08-15-95	289	2.5 ± 0.3 ; 0.6	-0.1 ± 1.3 ; 1.3
02-22-95	327	2.6 ± 0.3 ; 0.6	0.8 ± 1.1 ; 1.1	08-22-95	282	1.7 ± 0.3 ; 0.4	0.4 ± 1.1 ; 1.1
02-28-95	244	1.3 ± 0.3 ; 0.4	1.6 ± 1.0 ; 1.1	08-29-95	289	3.2 ± 0.4 ; 0.7	0.1 ± 1.1 ; 1.1
03-07-95	288	2.1 ± 0.3 ; 0.5	0.4 ± 0.9 ; 0.9	09-05-95	289	3.1 ± 0.3 ; 0.7	0.8 ± 1.2 ; 1.2
03-14-95	284	2.9 ± 0.3 ; 0.6	0.6 ± 1.0 ; 1.0	09-12-95	283	2.0 ± 0.3 ; 0.5	1.1 ± 1.1 ; 1.1
03-21-95	285	1.5 ± 0.3 ; 0.4	-0.3 ± 0.9 ; 1.0	09-19-95	282	2.1 ± 0.3 ; 0.5	0.1 ± 1.3 ; 1.3
03-28-95	287	1.4 ± 0.3 ; 0.4	-0.1 ± 1.3 ; 1.3	09-25-95	244	1.5 ± 0.3 ; 0.4	-0.9 ± 1.2 ; 1.2
1st Qtr. Meant±s.d.		2.2 ± 0.5	0.4 ± 0.6	3rd Qtr. Meant±s.d.		2.2 ± 0.6	0.0 ± 0.6
04-04-95	288	1.5 ± 0.3 ; 0.4	-0.7 ± 1.1 ; 1.1	10-03-95	335	4.5 ± 0.3 ; 0.9	-0.5 ± 1.0 ; 1.0
04-12-95	317	1.8 ± 0.3 ; 0.4	-0.5 ± 0.8 ; 0.8	10-10-95	280	1.6 ± 0.3 ; 0.4	-0.3 ± 0.6 ; 0.6
04-18-95	261	1.5 ± 0.3 ; 0.4	1.5 ± 1.0 ; 1.1	10-17-95	285	3.2 ± 0.3 ; 0.7	0.7 ± 1.1 ; 1.1
04-25-95	276	1.0 ± 0.3 ; 0.3	-0.2 ± 0.9 ; 0.9	10-24-95	291	1.8 ± 0.3 ; 0.4	-0.4 ± 1.6 ; 1.6
05-02-95	285	1.3 ± 0.2 ; 0.3	-0.4 ± 1.0 ; 1.0	10-31-95	287	1.5 ± 0.3 ; 0.4	-0.1 ± 0.9 ; 0.9
05-09-95	286	1.7 ± 0.3 ; 0.4	0.2 ± 1.1 ; 1.1	11-07-95	286	2.4 ± 0.3 ; 0.5	0.2 ± 2.2 ; 2.2
05-16-95	285	1.6 ± 0.3 ; 0.4	0.1 ± 0.9 ; 0.9	11-14-95	286	1.9 ± 0.3 ; 0.5	-0.5 ± 1.1 ; 1.1
05-23-95	285	1.7 ± 0.3 ; 0.4	0.0 ± 0.9 ; 0.9	11-21-95	289	2.8 ± 0.3 ; 0.6	-0.8 ± 1.2 ; 1.2
05-30-95	289	1.0 ± 0.2 ; 0.3	0.6 ± 1.1 ; 1.1	11-29-95	327	2.8 ± 0.3 ; 0.6	-0.3 ± 1.2 ; 1.2
06-06-95	284	2.0 ± 0.3 ; 0.5	0.1 ± 1.1 ; 1.1	12-05-95	245	3.0 ± 0.4 ; 0.7	-0.8 ± 1.2 ; 1.2
06-12-95	247	1.0 ± 0.3 ; 0.3	-0.3 ± 1.2 ; 1.2	12-12-95	286	2.4 ± 0.3 ; 0.5	-0.7 ± 1.6 ; 1.6
06-20-95	NS*	-	-	12-18-95	245	3.7 ± 0.4 ; 0.8	-1.0 ± 1.3 ; 1.3
06-27-95	292	2.4 ± 0.3 ; 0.5	-0.2 ± 0.9 ; 0.9	12-26-95	325	1.9 ± 0.3 ; 0.4	0.9 ± 1.0 ; 1.0
2nd Qtr. Meant±s.d.		1.5 ± 0.4	0.0 ± 0.6	4th Qtr. Meant±s.d.		2.6 ± 0.8	-0.3 ± 0.6

\* NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-05 Nearsite - South							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	286	2.8 ± 0.3 ; 0.6	0.5 ± 0.9 ; 0.9	07-04-95	284	1.4 ± 0.3 ; 0.4	1.0 ± 1.0 ; 1.0
01-10-95	283	2.5 ± 0.3 ; 0.6	-0.5 ± 1.2 ; 1.2	07-11-95	290	1.5 ± 0.3 ; 0.4	-0.2 ± 1.1 ; 1.1
01-17-95	285	2.1 ± 0.3 ; 0.5	-0.6 ± 1.1 ; 1.1	07-18-95	287	3.1 ± 0.4 ; 0.7	-0.7 ± 1.3 ; 1.3
01-24-95	285	1.9 ± 0.3 ; 0.4	0.4 ± 1.2 ; 1.2	07-24-95	244	2.1 ± 0.4 ; 0.5	1.3 ± 1.3 ; 1.4
01-31-95	285	3.1 ± 0.3 ; 0.7	0.2 ± 1.3 ; 1.3	08-01-95	327	2.2 ± 0.3 ; 0.5	0.2 ± 0.9 ; 0.9
02-07-95	287	2.7 ± 0.3 ; 0.6	1.8 ± 1.1 ; 1.1	08-08-95	285	1.6 ± 0.3 ; 0.4	-0.5 ± 1.0 ; 1.0
02-14-95	283	2.6 ± 0.3 ; 0.6	0.0 ± 1.0 ; 1.0	08-15-95	289	2.6 ± 0.3 ; 0.6	0.6 ± 1.1 ; 1.1
02-22-95	321	2.5 ± 0.3 ; 0.5	0.3 ± 1.2 ; 1.2	08-22-95	287	1.8 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1
02-28-95	244	1.8 ± 0.3 ; 0.5	-1.1 ± 1.2 ; 1.2	08-29-95	284	3.1 ± 0.4 ; 0.7	-0.5 ± 1.2 ; 1.2
03-07-95	288	1.9 ± 0.3 ; 0.4	0.9 ± 0.9 ; 0.9	09-05-95	288	3.0 ± 0.3 ; 0.6	-0.9 ± 1.4 ; 1.4
03-14-95	284	2.7 ± 0.3 ; 0.6	-0.9 ± 1.1 ; 1.1	09-12-95	283	2.1 ± 0.3 ; 0.5	-1.3 ± 1.1 ; 1.1
03-21-95	285	1.6 ± 0.3 ; 0.4	-0.1 ± 1.1 ; 1.1	09-19-95	283	1.9 ± 0.3 ; 0.5	0.1 ± 0.7 ; 0.7
03-28-95	291	1.2 ± 0.2 ; 0.3	0.0 ± 0.6 ; 0.6	09-25-95	244	1.4 ± 0.3 ; 0.4	-0.9 ± 1.1 ; 1.1
1st Qtr. Mean ± s.d.		2.3 ± 0.5	0.1 ± 0.7	3rd Qtr. Mean ± s.d.		2.1 ± 0.6	-0.1 ± 0.8
04-04-95	289	1.7 ± 0.3 ; 0.4	-0.7 ± 1.0 ; 1.0	10-03-95	328	4.3 ± 0.3 ; 0.9	0.5 ± 0.8 ; 0.8
04-12-95	317	1.7 ± 0.3 ; 0.4	-0.1 ± 0.8 ; 0.8	10-10-95	281	1.5 ± 0.3 ; 0.4	-0.1 ± 1.3 ; 1.3
04-18-95	252	1.6 ± 0.3 ; 0.4	-0.5 ± 1.1 ; 1.1	10-17-95	285	3.0 ± 0.3 ; 0.6	-0.6 ± 1.0 ; 1.0
04-25-95	280	1.0 ± 0.2 ; 0.3	0.0 ± 1.0 ; 1.0	10-24-95	286	1.6 ± 0.3 ; 0.4	-1.6 ± 1.6 ; 1.6
05-02-95	285	1.3 ± 0.2 ; 0.3	-0.5 ± 1.0 ; 1.0	10-31-95	287	1.5 ± 0.3 ; 0.4	-0.4 ± 1.2 ; 1.2
05-09-95	286	1.7 ± 0.3 ; 0.4	-0.6 ± 1.0 ; 1.0	11-07-95	284	2.1 ± 0.3 ; 0.5	0.6 ± 1.4 ; 1.4
05-16-95	285	1.7 ± 0.3 ; 0.4	0.7 ± 1.0 ; 1.0	11-14-95	286	1.6 ± 0.3 ; 0.4	-0.1 ± 0.9 ; 0.9
05-23-95	285	1.5 ± 0.3 ; 0.4	-0.7 ± 1.0 ; 1.0	11-21-95	284	2.4 ± 0.3 ; 0.5	0.6 ± 1.2 ; 1.2
05-30-95	284	1.0 ± 0.2 ; 0.3	0.4 ± 0.9 ; 0.9	11-29-95	327 <sup>b</sup>	2.2 ± 0.3 ; 0.5	1.5 ± 1.1 ; 1.1
06-06-95	289	1.7 ± 0.3 ; 0.4	-0.1 ± 1.1 ; 1.1	12-05-95	245	2.6 ± 0.3 ; 0.6	-1.8 ± 1.4 ; 1.4
06-12-95	243	1.0 ± 0.3 ; 0.3	-1.7 ± 1.3 ; 1.3	12-12-95	296	2.8 ± 0.3 ; 0.6	1.4 ± 1.3 ; 1.4
06-20-95	NS <sup>a</sup>	-	-	12-18-95	246	3.8 ± 0.4 ; 0.8	-0.8 ± 1.2 ; 1.2
06-27-95	287	2.5 ± 0.3 ; 0.6	0.4 ± 1.1 ; 1.1	12-26-95	325	1.9 ± 0.3 ; 0.4	0.2 ± 0.9 ; 0.9
2nd Qtr. Mean ± s.d.		1.5 ± 0.4	-0.3 ± 0.6	4th Qtr. Mean ± s.d.		2.4 ± 0.9	-0.1 ± 1.0

<sup>a</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

<sup>b</sup> Filter light due to heavy rain and snow.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-06 Oregon							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	290	2.3 ± 0.3 ; 0.5	-0.1 ± 1.1 ; 1.1	07-04-95	285	1.4 ± 0.3 ; 0.4	-0.7 ± 1.0 ; 1.0
01-10-95	286	2.7 ± 0.3 ; 0.6	-0.4 ± 1.1 ; 1.1	07-11-95	285	1.8 ± 0.3 ; 0.4	-1.2 ± 1.2 ; 1.2
01-17-95	284	2.1 ± 0.3 ; 0.5	0.0 ± 1.0 ; 1.0	07-18-95	286	3.1 ± 0.4 ; 0.7	0.0 ± 1.2 ; 1.2
01-24-95	296	2.0 ± 0.3 ; 0.5	1.6 ± 1.0 ; 1.1	07-24-95	245	1.8 ± 0.3 ; 0.5	-0.9 ± 1.3 ; 1.3
01-31-95	294	2.8 ± 0.3 ; 0.6	-0.1 ± 1.1 ; 1.1	08-01-95	326	2.3 ± 0.3 ; 0.5	0.1 ± 0.9 ; 0.9
02-07-95	301	3.0 ± 0.3 ; 0.6	0.3 ± 1.1 ; 1.1	08-08-95	285	1.6 ± 0.3 ; 0.4	1.0 ± 1.1 ; 1.1
02-14-95	293	2.5 ± 0.3 ; 0.5	-0.7 ± 1.0 ; 1.0	08-15-95	286	2.7 ± 0.3 ; 0.6	0.3 ± 1.2 ; 1.2
02-22-95	344	4.3 ± 0.4 ; 0.9	0.8 ± 1.1 ; 1.1	08-22-95	287	1.6 ± 0.3 ; 0.4	0.1 ± 0.9 ; 0.9
02-28-95	221 <sup>a</sup>	1.5 ± 0.3 ; 0.4	0.6 ± 1.1 ; 1.1	08-29-95	288	3.8 ± 0.4 ; 0.8	0.7 ± 1.1 ; 1.1
03-07-95	286	2.3 ± 0.3 ; 0.5	-0.1 ± 1.1 ; 1.1	09-05-95	289	3.3 ± 0.3 ; 0.7	0.2 ± 1.4 ; 1.4
03-14-95	299	3.1 ± 0.3 ; 0.6	0.8 ± 0.9 ; 1.0	09-12-95	290	2.0 ± 0.3 ; 0.5	0.3 ± 1.0 ; 1.0
03-21-95	299	2.0 ± 0.3 ; 0.5	-0.1 ± 1.1 ; 1.1	09-19-95	283	1.8 ± 0.3 ; 0.4	0.7 ± 1.4 ; 1.4
03-28-95	286	1.3 ± 0.3 ; 0.3	0.0 ± 0.8 ; 0.8	09-25-95	244	1.2 ± 0.3 ; 0.4	-0.4 ± 1.3 ; 1.3
1st Qtr. Meant±.d.		2.5 ± 0.7	0.2 ± 0.6	3rd Qtr. Meant±.d.		2.2 ± 0.8	0.0 ± 0.6
04-04-95	288	1.5 ± 0.3 ; 0.4	0.2 ± 1.0 ; 1.0	10-03-95	332	4.5 ± 0.3 ; 0.9	0.7 ± 0.9 ; 0.9
04-11-95	295	2.1 ± 0.3 ; 0.5	0.9 ± 0.9 ; 0.9	10-10-95	287	1.5 ± 0.3 ; 0.4	-0.2 ± 0.8 ; 0.8
04-18-95	280	1.4 ± 0.3 ; 0.4	-0.3 ± 1.1 ; 1.1	10-17-95	285	3.1 ± 0.3 ; 0.6	-0.3 ± 1.2 ; 1.2
04-25-95	276	1.3 ± 0.3 ; 0.4	0.2 ± 1.0 ; 1.0	10-24-95	286	1.9 ± 0.3 ; 0.4	-0.6 ± 1.6 ; 1.6
05-02-95	281	1.1 ± 0.2 ; 0.3	-0.5 ± 1.0 ; 1.0	10-31-95	287	1.6 ± 0.3 ; 0.4	0.9 ± 1.1 ; 1.2
05-09-95	285	1.8 ± 0.3 ; 0.4	-0.2 ± 1.2 ; 1.2	11-07-95	285	2.3 ± 0.3 ; 0.5	-1.2 ± 2.1 ; 2.1
05-16-95	280	1.7 ± 0.3 ; 0.4	0.1 ± 1.0 ; 1.0	11-14-95	286	2.0 ± 0.3 ; 0.5	0.0 ± 1.0 ; 1.0
05-23-95	290	1.3 ± 0.3 ; 0.3	-0.5 ± 0.9 ; 0.9	11-21-95	284	2.4 ± 0.3 ; 0.5	0.0 ± 1.3 ; 1.3
05-30-95	289	1.0 ± 0.2 ; 0.3	0.0 ± 1.2 ; 1.2	11-29-95	328	2.9 ± 0.3 ; 0.6	0.4 ± 1.3 ; 1.3
06-06-95	292	1.9 ± 0.3 ; 0.5	0.2 ± 1.0 ; 1.0	12-05-95	245	3.1 ± 0.4 ; 0.7	0.1 ± 1.3 ; 1.3
06-12-95	248	1.2 ± 0.3 ; 0.4	-0.4 ± 1.3 ; 1.3	12-12-95	287	2.4 ± 0.3 ; 0.5	-0.5 ± 1.6 ; 1.6
06-20-95	NS <sup>b</sup>	-	-	12-18-95	245	4.0 ± 0.4 ; 0.8	1.6 ± 1.2 ; 1.2
06-27-95	291	2.6 ± 0.3 ; 0.6	-1.0 ± 1.1 ; 1.1	12-26-95	325	1.8 ± 0.3 ; 0.4	1.1 ± 0.9 ; 0.9
2nd Qtr. Meant±.d.		1.6 ± 0.4	-0.1 ± 0.5	4th Qtr. Meant±.d.		2.6 ± 0.9	0.2 ± 0.7

<sup>a</sup> Flowrate outside 10%.

<sup>b</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>2</sup> pCi/m<sup>3</sup>

BY-07 (C) Mt. Morris							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	286	2.7 ± 0.3 ; 0.6	-1.0 ± 1.3 ; 1.3	07-04-95	285	1.5 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1
01-10-95	285 <sup>a</sup>	2.2 ± 0.3 ; 0.5	0.3 ± 1.1 ; 1.1	07-11-95	290	1.6 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1
01-17-95	279	2.5 ± 0.3 ; 0.6	-0.4 ± 1.1 ; 1.1	07-18-95	286	3.2 ± 0.4 ; 0.7	0.6 ± 1.1 ; 1.1
01-24-95	291	2.1 ± 0.3 ; 0.5	-0.5 ± 1.2 ; 1.2	07-24-95	245	2.1 ± 0.4 ; 0.5	0.1 ± 1.5 ; 1.5
01-31-95	280	2.9 ± 0.3 ; 0.6	1.1 ± 1.1 ; 1.1	08-01-95	326	2.3 ± 0.3 ; 0.5	0.1 ± 0.9 ; 0.9
02-07-95	286	2.7 ± 0.3 ; 0.6	0.1 ± 1.2 ; 1.2	08-08-95	281	1.6 ± 0.3 ; 0.4	-0.7 ± 1.2 ; 1.2
02-14-95	284	2.7 ± 0.3 ; 0.6	-0.6 ± 1.1 ; 1.1	08-15-95	286	2.6 ± 0.3 ; 0.6	0.9 ± 1.1 ; 1.1
02-22-95	322	2.8 ± 0.3 ; 0.6	0.0 ± 1.1 ; 1.1	08-22-95	287	1.8 ± 0.3 ; 0.4	0.3 ± 0.9 ; 0.9
02-28-95	240	1.4 ± 0.3 ; 0.4	0.9 ± 1.2 ; 1.2	08-29-95	283	3.4 ± 0.4 ; 0.7	1.5 ± 1.1 ; 1.1
03-07-95	285	1.9 ± 0.3 ; 0.4	1.5 ± 1.0 ; 1.1	09-05-95	284	3.4 ± 0.3 ; 0.7	0.6 ± 1.6 ; 1.6
03-14-95	285	2.6 ± 0.3 ; 0.6	-0.2 ± 1.0 ; 1.0	09-12-95	285	1.9 ± 0.3 ; 0.5	-0.5 ± 1.1 ; 1.1
03-21-95	281	1.7 ± 0.3 ; 0.4	-0.2 ± 1.1 ; 1.1	09-19-95	283	2.2 ± 0.3 ; 0.5	-0.3 ± 0.8 ; 0.8
03-28-95	285	1.2 ± 0.2 ; 0.3	0.1 ± 0.8 ; 0.8	09-25-95	244	1.3 ± 0.3 ; 0.4	0.1 ± 1.3 ; 1.3
1st Qtr. Mean ± s.d.		2.3 ± 0.5	0.1 ± 0.7	3rd Qtr. Mean ± s.d.		2.2 ± 0.7	0.3 ± 0.6
04-04-95	289	1.3 ± 0.3 ; 0.4	± 0.9 ; 0.9	10-03-95	325	4.0 ± 0.3 ; 0.8	0.7 ± 0.8 ; 0.8
04-11-95	284	1.5 ± 0.3 ; 0.4	± 0.9 ; 0.9	10-10-95	284	1.6 ± 0.3 ; 0.4	0.6 ± 1.4 ; 1.4
04-18-95	289	1.6 ± 0.3 ; 0.4	0.1 ± 0.8 ; 0.8	10-17-95	285	3.1 ± 0.3 ; 0.7	-0.6 ± 1.0 ; 1.0
04-25-95	276	1.2 ± 0.3 ; 0.3	0.2 ± 1.0 ; 1.0	10-24-95	281	1.6 ± 0.3 ; 0.4	0.0 ± 1.6 ; 1.6
05-02-95	281	1.2 ± 0.2 ; 0.3	-0.3 ± 1.0 ; 1.0	10-31-95	287	1.6 ± 0.3 ; 0.4	-0.2 ± 0.9 ; 0.9
05-09-95	284	1.6 ± 0.3 ; 0.4	-0.1 ± 1.1 ; 1.1	11-07-95	284	2.3 ± 0.3 ; 0.5	-0.1 ± 1.3 ; 1.3
05-16-95	285	1.3 ± 0.3 ; 0.4	-1.3 ± 1.1 ; 1.1	11-14-95	286	2.0 ± 0.3 ; 0.5	-0.6 ± 1.1 ; 1.1
05-23-95	286	1.3 ± 0.3 ; 0.4	0.4 ± 0.8 ; 0.8	11-21-95	289	2.8 ± 0.3 ; 0.6	0.9 ± 1.2 ; 1.2
05-30-95	284	0.9 ± 0.2 ; 0.3	-0.3 ± 1.2 ; 1.2	11-29-95	322	2.8 ± 0.3 ; 0.6	-0.3 ± 1.4 ; 1.4
06-06-95	286	1.8 ± 0.3 ; 0.4	1.0 ± 1.0 ; 1.0	12-05-95	244	2.9 ± 0.4 ; 0.6	-0.1 ± 1.3 ; 1.3
06-12-95	245	1.2 ± 0.3 ; 0.4	0.4 ± 1.1 ; 1.1	12-12-95	292	2.5 ± 0.3 ; 0.5	0.5 ± 1.4 ; 1.4
06-20-95	NS <sup>b</sup>	-	-	12-18-95	245	4.0 ± 0.4 ; 0.8	-0.6 ± 1.2 ; 1.2
06-27-95	285	2.8 ± 0.3 ; 0.6	0.6 ± 1.1 ; 1.1	12-26-95	330	1.7 ± 0.3 ; 0.4	-0.1 ± 0.9 ; 0.9
2nd Qtr. Mean ± s.d.		1.5 ± 0.4	0.2 ± 0.6	4th Qtr. Mean ± s.d.		2.5 ± 0.8	0.0 ± 0.5

<sup>a</sup> Volume estimated.

<sup>b</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-08 (C) Leaf River							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	291	2.4 ± 0.3 ; 0.5	0.3 ± 1.2 ; 1.2	07-04-95	285	1.5 ± 0.3 ; 0.4	-1.4 ± 1.1 ; 1.1
01-10-95	286	2.3 ± 0.3 ; 0.5	0.6 ± 1.1 ; 1.1	07-11-95	284	1.6 ± 0.3 ; 0.4	0.3 ± 1.0 ; 1.0
01-17-95	284	2.2 ± 0.3 ; 0.5	-0.8 ± 1.1 ; 1.1	07-18-95	286	2.6 ± 0.3 ; 0.6	0.9 ± 1.1 ; 1.1
01-24-95	291	2.1 ± 0.3 ; 0.5	0.7 ± 1.1 ; 1.1	07-24-95	245	1.9 ± 0.4 ; 0.5	-1.5 ± 1.4 ; 1.4
01-31-95	285	2.9 ± 0.3 ; 0.6	-0.4 ± 1.2 ; 1.2	08-01-95	326	2.5 ± 0.3 ; 0.5	1.1 ± 1.1 ; 1.1
02-07-95	286	2.8 ± 0.3 ; 0.6	-0.5 ± 1.2 ; 1.2	08-08-95	281	1.6 ± 0.3 ; 0.4	0.5 ± 1.1 ; 1.1
02-14-95	283	2.5 ± 0.3 ; 0.5	0.7 ± 1.2 ; 1.2	08-15-95	286	2.7 ± 0.3 ; 0.6	-1.0 ± 1.4 ; 1.4
02-22-95	323	2.4 ± 0.3 ; 0.5	-0.5 ± 1.1 ; 1.1	08-22-95	287	1.6 ± 0.3 ; 0.4	0.0 ± 1.0 ; 1.0
02-28-95	244	1.7 ± 0.3 ; 0.4	0.1 ± 1.2 ; 1.2	08-29-95	283	3.0 ± 0.4 ; 0.7	1.0 ± 1.1 ; 1.1
03-07-95	285	2.0 ± 0.3 ; 0.5	-1.2 ± 1.0 ; 1.1	09-05-95	283	2.9 ± 0.3 ; 0.6	-0.4 ± 1.3 ; 1.3
03-14-95	280	2.4 ± 0.3 ; 0.5	1.0 ± 1.0 ; 1.0	09-12-95	286	2.2 ± 0.3 ; 0.5	1.2 ± 1.2 ; 1.2
03-21-95	286	2.1 ± 0.3 ; 0.5	-1.4 ± 1.2 ; 1.2	09-19-95	283	2.0 ± 0.3 ; 0.5	1.5 ± 1.3 ; 1.4
03-28-95	285	1.1 ± 0.2 ; 0.3	-0.7 ± 1.7 ; 1.7	09-25-95	244	1.2 ± 0.3 ; 0.4	0.8 ± 1.0 ; 1.0
1st Qtr. Mean ± s.d.		2.2 ± 0.4	-0.2 ± 0.7	3rd Qtr. Mean ± s.d.		2.1 ± 0.6	0.2 ± 1.0
04-04-95	289	1.5 ± 0.3 ; 0.4	-0.6 ± 1.1 ; 1.1	10-03-95	325	4.0 ± 0.3 ; 0.8	0.6 ± 0.8 ; 0.9
04-11-95	286	1.7 ± 0.3 ; 0.4	-1.1 ± 1.1 ; 1.1	10-10-95	284	1.6 ± 0.3 ; 0.4	-0.2 ± 0.8 ; 0.8
04-18-95	285	1.6 ± 0.3 ; 0.4	-0.6 ± 0.9 ; 0.9	10-17-95	285	3.0 ± 0.3 ; 0.6	-0.8 ± 1.2 ; 1.2
04-25-95	281	1.2 ± 0.3 ; 0.3	-0.5 ± 1.0 ; 1.0	10-24-95	286	1.8 ± 0.3 ; 0.4	-1.7 ± 1.6 ; 1.7
05-02-95	281	1.5 ± 0.3 ; 0.4	0.8 ± 1.0 ; 1.0	10-31-95	292	1.6 ± 0.3 ; 0.4	-0.5 ± 1.0 ; 1.0
05-09-95	284	1.5 ± 0.3 ; 0.4	-0.6 ± 1.0 ; 1.0	11-07-95	284	2.4 ± 0.3 ; 0.5	-1.5 ± 1.8 ; 1.8
05-16-95	285	1.6 ± 0.3 ; 0.4	1.1 ± 1.1 ; 1.1	11-14-95	286	2.1 ± 0.3 ; 0.5	0.2 ± 1.0 ; 1.0
05-23-95	286	1.6 ± 0.3 ; 0.4	-0.3 ± 1.1 ; 1.1	11-21-95	284	2.7 ± 0.3 ; 0.6	-0.4 ± 1.2 ; 1.2
05-30-95	284	0.9 ± 0.2 ; 0.3	-0.1 ± 1.0 ; 1.0	11-29-95	328	2.9 ± 0.3 ; 0.6	-0.2 ± 1.3 ; 1.3
06-06-95	286	2.0 ± 0.3 ; 0.5	0.9 ± 1.1 ; 1.1	12-05-95	244	3.0 ± 0.4 ; 0.7	-0.3 ± 1.3 ; 1.3
06-12-95	249	1.2 ± 0.3 ; 0.4	0.3 ± 1.0 ; 1.0	12-12-95	287	2.5 ± 0.3 ; 0.5	-1.1 ± 1.4 ; 1.4
06-20-95	NS <sup>a</sup>	-	-	12-18-95	245	3.9 ± 0.4 ; 0.8	0.7 ± 1.5 ; 1.5
06-27-95	285	2.8 ± 0.3 ; 0.6	0.1 ± 1.0 ; 1.0	12-26-95	331	1.8 ± 0.3 ; 0.4	-0.2 ± 0.8 ; 0.8
2nd Qtr. Mean ± s.d.		1.6 ± 0.5	0.0 ± 0.7	4th Qtr. Mean ± s.d.		2.6 ± 0.8	-0.4 ± 0.7

<sup>a</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-21 Byron Nearsite N							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	291	2.5 ± 0.3 ; 0.6	0.6 ± 1.1 ; 1.1	07-04-95	285	1.6 ± 0.3 ; 0.4	0.6 ± 0.9 ; 0.9
01-10-95	286	2.3 ± 0.3 ; 0.5	-0.9 ± 1.1 ; 1.1	07-11-95	289	1.9 ± 0.3 ; 0.5	0.6 ± 1.0 ; 1.0
01-17-95	284	2.2 ± 0.3 ; 0.5	-0.6 ± 1.2 ; 1.2	07-18-95	287	3.3 ± 0.4 ; 0.7	0.4 ± 1.0 ; 1.0
01-24-95	286	2.2 ± 0.3 ; 0.5	-0.8 ± 1.2 ; 1.2	07-24-95	244	1.8 ± 0.3 ; 0.5	-0.2 ± 1.4 ; 1.4
01-31-95	285	3.1 ± 0.3 ; 0.6	-0.5 ± 1.0 ; 1.0	08-01-95	327	2.1 ± 0.3 ; 0.5	0.4 ± 0.9 ; 0.9
02-07-95	287	3.0 ± 0.3 ; 0.6	0.7 ± 1.0 ; 1.0	08-08-95	285	1.5 ± 0.3 ; 0.4	-0.1 ± 1.2 ; 1.2
02-14-95	283	2.6 ± 0.3 ; 0.6	0.1 ± 1.1 ; 1.1	08-15-95	289	2.5 ± 0.3 ; 0.6	-0.1 ± 1.3 ; 1.3
02-22-95	322	3.0 ± 0.3 ; 0.6	0.3 ± 1.1 ; 1.1	08-22-95	282	1.7 ± 0.3 ; 0.4	-0.2 ± 1.1 ; 1.1
02-28-95	244	1.4 ± 0.3 ; 0.4	0.2 ± 1.0 ; 1.0	08-29-95	288	3.5 ± 0.4 ; 0.7	-0.3 ± 1.2 ; 1.2
03-07-95	287	2.1 ± 0.3 ; 0.5	-0.1 ± 1.1 ; 1.1	09-05-95	289	3.1 ± 0.3 ; 0.7	-0.1 ± 1.6 ; 1.6
03-14-95	284	2.6 ± 0.3 ; 0.6	-0.1 ± 1.0 ; 1.0	09-12-95	283	1.8 ± 0.3 ; 0.5	-1.2 ± 1.1 ; 1.1
03-21-95	285	1.7 ± 0.3 ; 0.4	0.6 ± 1.1 ; 1.1	09-19-95	283	2.1 ± 0.3 ; 0.5	0.4 ± 0.8 ; 0.8
03-28-95	286	1.2 ± 0.2 ; 0.3	0.1 ± 0.6 ; 0.6	09-25-95	244	1.1 ± 0.3 ; 0.4	-0.4 ± 1.3 ; 1.3
1st Qtr. Meants.d.		2.3 ± 0.6	0.0 ± 0.5	3rd Qtr. Meants.d.		2.2 ± 0.7	0.0 ± 0.5
04-04-95	284	1.5 ± 0.3 ; 0.4	0.0 ± 1.1 ; 1.1	10-03-95	327	3.8 ± 0.3 ; 0.8	-0.5 ± 1.0 ; 1.0
04-11-95	285	1.9 ± 0.3 ; 0.4	-0.3 ± 0.8 ; 0.8	10-10-95	282	1.4 ± 0.3 ; 0.4	0.6 ± 1.8 ; 1.8
04-18-95	299	1.6 ± 0.3 ; 0.4	-0.1 ± 0.8 ; 0.8	10-17-95	285	3.1 ± 0.3 ; 0.7	-0.2 ± 1.0 ; 1.0
04-25-95	276	1.0 ± 0.2 ; 0.3	-0.2 ± 1.1 ; 1.1	10-24-95	286 <sup>b</sup>	1.3 ± 0.3 ; 0.3	-1.3 ± 1.6 ; 1.6
05-02-95	285	1.0 ± 0.2 ; 0.3	1.3 ± 1.1 ; 1.1	10-31-95	287	1.6 ± 0.3 ; 0.4	-0.6 ± 1.0 ; 1.0
05-09-95	285	1.6 ± 0.3 ; 0.4	1.2 ± 0.9 ; 1.0	11-07-95	284	2.4 ± 0.3 ; 0.5	-0.9 ± 2.0 ; 2.0
05-16-95	285	1.6 ± 0.3 ; 0.4	1.3 ± 1.0 ; 1.1	11-14-95	250 <sup>c</sup>	2.1 ± 0.3 ; 0.5	-0.5 ± 1.0 ; 1.0
05-23-95	285	1.5 ± 0.3 ; 0.4	-0.7 ± 1.1 ; 1.1	11-21-95	284	2.5 ± 0.3 ; 0.6	-0.2 ± 1.2 ; 1.2
05-30-95	289	1.1 ± 0.2 ; 0.3	-0.2 ± 1.1 ; 1.1	11-29-95	328	3.1 ± 0.3 ; 0.6	0.6 ± 1.3 ; 1.3
06-06-95	288	1.8 ± 0.3 ; 0.4	-1.1 ± 1.0 ; 1.0	12-05-95	245	2.8 ± 0.4 ; 0.6	0.5 ± 1.3 ; 1.3
06-12-95	244	1.6 ± 0.3 ; 0.4	-1.0 ± 1.5 ; 1.5	12-12-95	291	2.6 ± 0.3 ; 0.6	0.7 ± 1.6 ; 1.6
06-20-95	NS <sup>a</sup>	-	-	12-18-95	246	4.0 ± 0.4 ; 0.8	0.1 ± 1.4 ; 1.4
06-27-95	286	2.1 ± 0.3 ; 0.5	0.4 ± 1.2 ; 1.2	12-26-95	331	1.9 ± 0.3 ; 0.4	-0.8 ± 0.9 ; 1.0
2nd Qtr. Meants.d.		1.5 ± 0.3	0.1 ± 0.8	4th Qtr. Meants.d.		2.5 ± 0.8	-0.2 ± 0.6

<sup>a</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

<sup>b</sup> Deposit on air filter very light due to heavy rain.

<sup>c</sup> Volume low; power loss suspected.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-22 Byron Nearsite ESE							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	286	2.4 ± 0.3 ; 0.5	0.0 ± 1.1 ; 1.1	07-04-95	285	1.4 ± 0.3 ; 0.4	-0.6 ± 1.1 ; 1.1
01-10-95	284	2.3 ± 0.3 ; 0.5	0.4 ± 1.2 ; 1.2	07-11-95	289	1.7 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1
01-17-95	280	2.3 ± 0.3 ; 0.5	-1.0 ± 1.1 ; 1.1	07-18-95	287	3.3 ± 0.4 ; 0.7	-0.3 ± 1.2 ; 1.2
01-24-95	286	2.1 ± 0.3 ; 0.5	-0.6 ± 1.3 ; 1.3	07-24-95	248	1.7 ± 0.3 ; 0.5	-1.8 ± 1.3 ; 1.4
01-31-95	290	3.2 ± 0.3 ; 0.7	-0.4 ± 1.1 ; 1.1	08-01-95	326	2.3 ± 0.3 ; 0.5	0.0 ± 0.9 ; 0.9
02-07-95	287	2.8 ± 0.3 ; 0.6	-0.5 ± 1.1 ; 1.1	08-08-95	281	1.6 ± 0.3 ; 0.4	0.8 ± 1.1 ; 1.1
02-14-95	283	2.5 ± 0.3 ; 0.5	-0.4 ± 1.2 ; 1.2	08-15-95	289	2.6 ± 0.3 ; 0.6	0.7 ± 1.4 ; 1.4
02-22-95	327	2.4 ± 0.3 ; 0.5	0.1 ± 1.3 ; 1.3	08-22-95	287	1.7 ± 0.3 ; 0.4	-0.2 ± 1.1 ; 1.1
02-28-95	244	1.7 ± 0.3 ; 0.4	0.1 ± 1.1 ; 1.1	08-29-95	283	3.1 ± 0.4 ; 0.7	-0.6 ± 1.2 ; 1.2
03-07-95	287	1.9 ± 0.3 ; 0.4	0.1 ± 1.0 ; 1.0	09-05-95	289	3.2 ± 0.3 ; 0.7	-0.5 ± 0.7 ; 0.7
03-14-95	294	2.9 ± 0.3 ; 0.6	0.1 ± 1.1 ; 1.1	09-12-95	234	1.9 ± 0.3 ; 0.5	-0.1 ± 1.1 ; 1.1
03-21-95	276	1.7 ± 0.3 ; 0.4	-0.2 ± 1.2 ; 1.2	09-19-95	278	1.8 ± 0.3 ; 0.4	0.2 ± 1.4 ; 1.4
03-28-95	286	1.5 ± 0.3 ; 0.4	-0.5 ± 0.5 ; 0.5	09-25-95	244	1.3 ± 0.3 ; 0.4	0.6 ± 1.3 ; 1.3
1st Qtr. Mean ± s.d.		2.3 ± 0.5	-0.2 ± 0.4	3rd Qtr. Mean ± s.d.		2.1 ± 0.7	-0.1 ± 0.7
04-04-95	289	1.5 ± 0.3 ; 0.4	-0.6 ± 1.0 ; 1.0	10-03-95	333	4.2 ± 0.3 ; 0.8	0.5 ± 1.0 ; 1.0
04-12-95	319	1.8 ± 0.3 ; 0.4	-0.6 ± 0.8 ; 0.8	10-10-95	282	1.7 ± 0.3 ; 0.4	0.1 ± 1.0 ; 1.0
04-18-95	257	1.7 ± 0.3 ; 0.4	-0.1 ± 0.9 ; 0.9	10-17-95	285	3.2 ± 0.3 ; 0.7	0.1 ± 1.0 ; 1.0
04-25-95	276	1.0 ± 0.3 ; 0.3	-0.5 ± 1.1 ; 1.1	10-24-95	282	1.7 ± 0.3 ; 0.4	-1.4 ± 1.7 ; 1.7
05-02-95	281	1.4 ± 0.3 ; 0.3	-0.5 ± 1.1 ; 1.1	10-31-95	287	1.8 ± 0.3 ; 0.4	0.1 ± 1.0 ; 1.0
05-09-95	285	1.7 ± 0.3 ; 0.4	1.5 ± 1.0 ; 1.0	11-07-95	285	2.3 ± 0.3 ; 0.5	1.4 ± 1.7 ; 1.7
05-16-95	290	1.4 ± 0.3 ; 0.4	-0.1 ± 1.1 ; 1.1	11-14-95	286	2.0 ± 0.3 ; 0.5	0.6 ± 1.0 ; 1.0
05-23-95	285	1.7 ± 0.3 ; 0.4	0.7 ± 1.0 ; 1.0	11-21-95	284	2.8 ± 0.3 ; 0.6	-0.5 ± 1.2 ; 1.2
05-30-95	284	0.9 ± 0.2 ; 0.3	0.3 ± 1.0 ; 1.0	11-29-95 <sup>a</sup>	328	2.3 ± 0.3 ; 0.5	-1.3 ± 1.2 ; 1.2
06-06-95	288	1.7 ± 0.3 ; 0.4	0.7 ± 0.9 ; 0.9	12-05-95	245	2.8 ± 0.4 ; 0.6	0.5 ± 1.3 ; 1.3
06-12-95	248	1.4 ± 0.3 ; 0.4	1.7 ± 1.1 ; 1.1	12-12-95	287	2.8 ± 0.3 ; 0.6	1.2 ± 1.3 ; 1.4
06-20-95	NS <sup>a</sup>	-	-	12-18-95	246	4.0 ± 0.4 ; 0.8	0.0 ± 1.3 ; 1.3
06-27-95	286	2.9 ± 0.3 ; 0.6	-0.2 ± 1.1 ; 1.1	12-26-95	325	1.8 ± 0.3 ; 0.4	-1.0 ± 0.9 ; 1.0
2nd Qtr. Mean ± s.d.		1.6 ± 0.5	0.2 ± 0.8	4th Qtr. Mean ± s.d.		2.6 ± 0.8	0.0 ± 0.8

<sup>a</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-23 Byron Nearsite S							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	286	2.7 ± 0.3 ; 0.6	-0.2 ± 1.1 ; 1.1	07-04-95	285	1.6 ± 0.3 ; 0.4	-0.6 ± 1.1 ; 1.1
01-10-95	283	2.5 ± 0.3 ; 0.5	0.6 ± 1.2 ; 1.2	07-11-95	285	1.9 ± 0.3 ; 0.5	-0.6 ± 1.0 ; 1.0
01-17-95	284	2.3 ± 0.3 ; 0.5	-0.8 ± 1.1 ; 1.1	07-18-95	287	3.4 ± 0.4 ; 0.7	0.3 ± 1.1 ; 1.1
01-24-95	286	1.9 ± 0.3 ; 0.4	0.8 ± 1.1 ; 1.1	07-24-95	244	1.7 ± 0.3 ; 0.5	-0.5 ± 1.8 ; 1.8
01-31-95	285	2.9 ± 0.3 ; 0.6	0.4 ± 1.2 ; 1.2	08-01-95	326	2.3 ± 0.3 ; 0.5	-0.5 ± 0.8 ; 0.8
02-07-95	287	2.8 ± 0.3 ; 0.6	0.3 ± 1.2 ; 1.2	08-08-95	285	1.7 ± 0.3 ; 0.4	-0.5 ± 1.2 ; 1.2
02-14-95	283	2.5 ± 0.3 ; 0.5	0.3 ± 1.1 ; 1.1	08-15-95	289	2.5 ± 0.3 ; 0.5	-1.2 ± 1.4 ; 1.4
02-22-95	327	2.6 ± 0.3 ; 0.6	0.6 ± 1.0 ; 1.0	08-22-95	282	1.7 ± 0.3 ; 0.4	0.4 ± 1.1 ; 1.1
02-28-95	248	1.3 ± 0.3 ; 0.4	-0.3 ± 1.2 ; 1.2	08-29-95	284	3.1 ± 0.4 ; 0.7	0.6 ± 0.9 ; 0.9
03-07-95	287	1.9 ± 0.3 ; 0.4	0.4 ± 1.0 ; 1.0	09-05-95	289	3.6 ± 0.3 ; 0.7	0.6 ± 1.5 ; 1.5
03-14-95	285	2.8 ± 0.3 ; 0.6	-0.1 ± 1.0 ; 1.0	09-12-95	284	2.0 ± 0.3 ; 0.5	0.7 ± 1.0 ; 1.0
03-21-95	285	1.6 ± 0.3 ; 0.4	0.4 ± 1.0 ; 1.0	09-19-95	283	1.8 ± 0.3 ; 0.4	0.4 ± 1.4 ; 1.4
03-28-95	286	1.2 ± 0.2 ; 0.3	0.1 ± 0.6 ; 0.6	09-25-95	244	1.4 ± 0.3 ; 0.4	0.4 ± 1.5 ; 1.5
1st Qtr. Meant±s.d.		2.2 ± 0.6	0.2 ± 0.4	3rd Qtr. Meant±s.d.		2.2 ± 0.7	0.0 ± 0.6
04-04-95	289	1.5 ± 0.3 ; 0.4	-1.0 ± 1.1 ; 1.1	10-03-95	333	4.3 ± 0.3 ; 0.8	0.4 ± 0.9 ; 0.9
04-12-95	317	1.7 ± 0.2 ; 0.4	-0.3 ± 0.8 ; 0.8	10-10-95	281	1.4 ± 0.3 ; 0.4	0.3 ± 1.3 ; 1.3
04-18-95	257	1.9 ± 0.3 ; 0.4	0.2 ± 0.9 ; 0.9	10-17-95	285	3.0 ± 0.3 ; 0.6	-0.2 ± 1.1 ; 1.1
04-25-95	276	1.1 ± 0.3 ; 0.3	-0.8 ± 1.1 ; 1.1	10-24-95	286	1.8 ± 0.3 ; 0.4	0.8 ± 1.4 ; 1.4
05-02-95	280	1.3 ± 0.2 ; 0.3	0.0 ± 1.0 ; 1.0	10-31-95	287	1.8 ± 0.3 ; 0.4	0.0 ± 1.1 ; 1.1
05-09-95	285	1.5 ± 0.3 ; 0.4	-0.5 ± 1.1 ; 1.1	11-07-95	285	2.2 ± 0.3 ; 0.5	0.5 ± 1.8 ; 1.8
05-16-95	285	1.2 ± 0.3 ; 0.3	0.0 ± 1.1 ; 1.1	11-14-95	286	1.8 ± 0.3 ; 0.4	-0.8 ± 1.1 ; 1.1
05-23-95	285	1.2 ± 0.3 ; 0.3	0.0 ± 1.1 ; 1.1	11-21-95	284	2.7 ± 0.3 ; 0.6	0.7 ± 1.2 ; 1.2
05-30-95	284	1.0 ± 0.2 ; 0.3	0.9 ± 1.1 ; 1.1	11-29-95	327	2.1 ± 0.3 ; 0.5	0.7 ± 1.3 ; 1.3
06-06-95	288	1.9 ± 0.3 ; 0.4	-0.8 ± 1.0 ; 1.0	12-05-95	245	3.1 ± 0.4 ; 0.7	-0.3 ± 1.2 ; 1.2
06-12-95	244	1.3 ± 0.3 ; 0.4	0.5 ± 1.3 ; 1.3	12-12-95	291	2.8 ± 0.3 ; 0.6	-0.4 ± 1.5 ; 1.5
06-20-95	NS*	-	-	12-18-95	246	4.0 ± 0.4 ; 0.8	-0.1 ± 1.1 ; 1.1
06-27-95	286	2.6 ± 0.3 ; 0.6	0.3 ± 1.0 ; 1.0	12-26-95	325	1.7 ± 0.3 ; 0.4	0.1 ± 0.9 ; 0.9
2nd Qtr. Meant±s.d.		1.5 ± 0.4	-0.1 ± 0.6	4th Qtr. Meant±s.d.		2.5 ± 0.9	0.1 ± 0.5

\* NS=No Sample; sample lost by carrier during shipment to laboratory.



BYRON

Table 1. Airborne Particulates and Iodine I-131  
 Collection: Continuous; weekly exchange  
 Required LLD: 0.01 pCi/m<sup>3</sup> for Gross Beta and 0.07 pCi/m<sup>3</sup> for I-131  
 Units: 10<sup>-2</sup> pCi/m<sup>3</sup>

BY-24 Byron Nearsite SW							
Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131	Date Collected	Volume (m <sup>3</sup> )	Gross Beta	I-131
01-03-95	278	2.7 ± 0.3 ; 0.6	-0.4 ± 1.1 ; 1.1	07-04-95	285	1.5 ± 0.3 ; 0.4	0.1 ± 1.1 ; 1.1
01-10-95	285 <sup>a</sup>	2.7 ± 0.3 ; 0.6	1.2 ± 1.1 ; 1.1	07-11-95	285	1.8 ± 0.3 ; 0.4	0.6 ± 1.2 ; 1.2
01-17-95	280	2.5 ± 0.3 ; 0.6	0.5 ± 1.2 ; 1.2	07-18-95	287	3.5 ± 0.4 ; 0.7	-0.2 ± 1.1 ; 1.1
01-24-95	286 <sup>a</sup>	2.1 ± 0.3 ; 0.5	-0.1 ± 1.3 ; 1.3	07-24-95	244	1.9 ± 0.4 ; 0.5	-1.7 ± 1.3 ; 1.4
01-31-95	281 <sup>b</sup>	3.0 ± 0.3 ; 0.6	-1.2 ± 1.0 ; 1.0	08-01-95	326	2.0 ± 0.3 ; 0.5	-0.8 ± 0.8 ; 0.8
02-07-95	286	2.7 ± 0.3 ; 0.6	-1.0 ± 1.1 ; 1.1	08-08-95	285	1.7 ± 0.3 ; 0.4	0.9 ± 1.1 ; 1.1
02-14-95	283	2.8 ± 0.3 ; 0.6	-0.5 ± 1.2 ; 1.2	08-15-95	289	2.7 ± 0.3 ; 0.6	-0.2 ± 1.1 ; 1.1
02-22-95	327	2.8 ± 0.3 ; 0.6	-0.4 ± 1.2 ; 1.2	08-22-95	282	1.9 ± 0.3 ; 0.4	-0.8 ± 1.0 ; 1.0
02-28-95	244	1.8 ± 0.3 ; 0.5	-0.3 ± 1.3 ; 1.3	08-29-95	284	3.7 ± 0.4 ; 0.8	-0.3 ± 1.1 ; 1.1
03-07-95	287	1.7 ± 0.3 ; 0.4	0.7 ± 1.1 ; 1.1	09-05-95	288	3.4 ± 0.3 ; 0.7	0.4 ± 0.9 ; 0.9
03-14-95	285	2.8 ± 0.3 ; 0.6	-0.7 ± 1.2 ; 1.2	09-12-95	284	2.0 ± 0.3 ; 0.5	-0.3 ± 1.1 ; 1.1
03-21-95	285	1.9 ± 0.3 ; 0.4	-0.3 ± 2.2 ; 2.2	09-19-95	283	2.2 ± 0.3 ; 0.5	0.1 ± 0.9 ; 0.9
03-28-95	287	1.2 ± 0.2 ; 0.3	1.0 ± 1.0 ; 1.0	09-25-95	244	1.2 ± 0.3 ; 0.4	-0.2 ± 1.2 ; 1.2
1st Qtr. Mean ± s.d.		2.3 ± 0.5	-0.1 ± 0.7	3rd Qtr. Mean ± s.d.		2.3 ± 0.8	-0.2 ± 0.6
04-04-95	288	1.5 ± 0.3 ; 0.4	0.4 ± 1.0 ; 1.0	10-03-95	334	4.4 ± 0.3 ; 0.9	0.3 ± 0.9 ; 0.9
04-12-95	318	1.8 ± 0.3 ; 0.4	-0.3 ± 0.8 ; 0.8	10-10-95	281	1.3 ± 0.3 ; 0.4	0.1 ± 0.6 ; 0.6
04-18-95	257	1.5 ± 0.3 ; 0.4	-0.8 ± 1.0 ; 1.0	10-17-95	285	2.7 ± 0.3 ; 0.6	-0.8 ± 1.2 ; 1.2
04-25-95	276	1.3 ± 0.3 ; 0.4	0.2 ± 1.2 ; 1.2	10-24-95	286	1.7 ± 0.3 ; 0.4	2.7 ± 1.5 ; 1.6
05-02-95	285	1.2 ± 0.2 ; 0.3	-0.2 ± 0.9 ; 0.9	10-31-95	282	1.6 ± 0.3 ; 0.4	-1.0 ± 1.1 ; 1.1
05-09-95	286	1.7 ± 0.3 ; 0.4	0.3 ± 1.1 ; 1.1	11-07-95	285	2.5 ± 0.3 ; 0.5	-0.1 ± 2.1 ; 2.1
05-16-95	285	1.6 ± 0.3 ; 0.4	0.1 ± 1.0 ; 1.0	11-14-95	286	2.1 ± 0.3 ; 0.5	-0.4 ± 1.1 ; 1.1
05-23-95	285	1.6 ± 0.3 ; 0.4	0.1 ± 0.9 ; 0.9	11-21-95	284	3.1 ± 0.3 ; 0.6	0.2 ± 1.3 ; 1.3
05-30-95	284	0.9 ± 0.2 ; 0.3	0.4 ± 1.0 ; 1.0	11-29-95	327	2.8 ± 0.3 ; 0.6	-0.5 ± 1.1 ; 1.1
06-06-95	288	2.0 ± 0.3 ; 0.5	-0.2 ± 1.0 ; 1.0	12-05-95	245	2.8 ± 0.4 ; 0.6	-0.3 ± 1.4 ; 1.4
06-12-95	243	1.1 ± 0.3 ; 0.4	0.5 ± 1.2 ; 1.2	12-12-95	287	2.6 ± 0.3 ; 0.6	0.6 ± 1.3 ; 1.3
06-20-95	NS <sup>c</sup>	-	-	12-18-95	242	3.4 ± 0.4 ; 0.7	-0.5 ± 1.7 ; 1.7
06-27-95	286	2.9 ± 0.3 ; 0.6	-0.2 ± 1.1 ; 1.1	12-26-95	325	1.6 ± 0.3 ; 0.4	0.2 ± 1.0 ; 1.0
2nd Qtr. Mean ± s.d.		1.6 ± 0.5	0.0 ± 0.4	4th Qtr. Mean ± s.d.		2.5 ± 0.8	0.0 ± 0.9

<sup>a</sup> Volume estimated.

<sup>b</sup> Volume estimated; installed new timer.

<sup>c</sup> NS=No Sample; sample lost by carrier during shipment to laboratory.

BYRON

Table 2. Airborne Particulates  
 Collection: Quarterly composites of weekly collections  
 Required LLD: 0.05 pCi/m<sup>3</sup> for Cs-134 and 0.06 pCi/m<sup>3</sup> for Cs-137 and  
 0.01 pCi/m<sup>3</sup> for all other gamma emitters  
 Units: 10<sup>-4</sup> pCi/m<sup>3</sup>

Sample Description and Concentration

BY-01 Byron

1995 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	BYAP-2777	BYAP-8101	BYAP-11137	BYAP-13108
Volume	3,714	3,378	3,659	3,747
Mn-54	1.9±7.1;7.1	2.9±6.2;6.3	2.8±4.0;4.0	1.0±4.3;4.3
Fe-59	-5.8±16.0;16.0	3.3±25.4;25.4	-10.3±10.3;10.5	0.5±10.9;10.9
Co-58	-0.6±6.6;6.6	0.7±8.0;8.0	0.4±4.7;4.7	-0.3±5.2;5.2
Co-60	0.4±6.5;6.5	-3.5±8.3;8.3	1.7±3.5;3.5	-0.9±4.5;4.5
Zn-65	1.6±10.8;10.8	-8.5±17.6;17.7	-9.7±9.7;9.9	1.3±8.9;8.9
Zr-Nb-95	1.3±13.0;13.0	1.3±15.3;15.3	0.4±9.8;9.8	3.9±8.7;8.7
Cs-134	-2.8±6.9;6.9	5.9±6.9;6.9	0.8±4.3;4.3	-1.2±5.6;5.6
Cs-137	-3.6±6.0;6.0	3.3±8.0;8.0	3.4±4.5;4.5	0.3±4.3;4.3
Ba-La-140	-48.2±40.5;41.4	11.8±57.2;57.2	21.6±16.0;16.5	9.5±20.9;20.9

BY-02(C) Stillman Valley

Lab Code	BYAP-2778	BYAP-8102	BYAP-11138	BYAP-13109
Volume	3,731	3,382	3,667	3,765
Mn-54	-2.8±6.8;6.8	-5.4±7.2;7.2	0.4±5.0;5.0	0.2±4.0;4.0
Fe-59	6.8±11.3;11.4	1.3±15.7;15.7	-4.2±12.7;12.7	1.4±8.7;8.7
Co-58	-0.6±6.6;6.6	-7.7±7.7;7.8	-4.7±5.3;5.4	0.8±4.0;4.0
Co-60	0.4±6.4;6.4	2.8±7.1;7.2	-1.0±5.4;5.4	3.7±3.9;3.9
Zn-65	-18.7±15.7;16.0	-7.5±13.9;14.0	-3.3±8.6;8.6	-5.4±8.7;8.7
Zr-Nb-95	-1.0±11.4;11.4	-2.2±16.6;16.6	3.4±8.9;8.9	0.7±7.0;7.0
Cs-134	5.2±5.4;5.4	0.4±7.6;7.6	-4.8±5.3;5.4	0.6±3.5;3.5
Cs-137	-0.5±5.1;5.1	-0.9±6.5;6.5	-2.0±4.8;4.8	2.9±3.5;3.6
Ba-La-140	2.7±29.3;29.3	12.7±59.6;59.6	8.7±25.5;25.5	-4.3±19.1;19.1

BYRON

Table 2. Airborne Particulates  
 Collection: Quarterly composites of weekly collections  
 Required LLD: 0.05 pCi/m<sup>3</sup> for Cs-134 and 0.06 pCi/m<sup>3</sup> for Cs-137 and  
 0.01 pCi/m<sup>3</sup> for all other gamma emitters  
 Units: 10<sup>-4</sup> pCi/m<sup>3</sup>

Sample Description and Concentration

<u>BY-03 Nearsite - East</u>				
1995 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	BYAP-2779	BYAP-8103	BYAP-11139	BYAP-13110
Volume	3,713	3,382	3,661	3,723
Mn-54	4.1±5.8;5.8	4.0±7.0;7.0	4.2±5.7;5.8	-0.4±3.5;3.5
Fe-59	15.6±10.9;11.2	-4.0±23.0;23.0	-3.6±17.8;17.8	0.9±7.7;7.7
Co-58	-3.0±7.4;7.4	1.9±8.4;8.4	-4.2±6.7;6.7	0.8±4.1;4.1
Co-60	8.6±6.4;6.6	1.8±5.6;5.6	3.7±6.4;6.5	-0.5±3.2;3.2
Zn-65	5.7±9.5;9.5	-7.5±14.3;14.4	-4.3±13.2;13.2	-6.9±7.8;7.9
Zr-Nb-95	-1.1±11.5;11.5	-0.5±15.4;15.4	-1.8±13.1;13.1	4.1±8.7;8.7
Cs-134	16.3±6.6;7.2	-7.1±6.8;6.9	0.2±6.8;6.8	0.7±0.9;0.9
Cs-137	5.9±5.4;5.5	-1.1±6.6;6.6	1.0±6.2;6.2	-1.3±3.4;3.4
Ba-La-140	-4.7±18.3;18.3	18.6±66.6;66.7	-16.0±39.0;39.1	3.5±16.2;16.2
<u>BY-04 Paynes Point</u>				
Lab Code	BYAP-2780	BYAP-8104	BYAP-11140	BYAP-13111
Volume	3,715	3,395	3,675	3,767
Mn-54	4.4±5.1;5.1	5.6±4.3;4.4	1.4±4.6;4.6	0.6±3.5;3.5
Fe-59	19.5±12.1;12.6	-4.9±12.6;12.6	-5.0±13.2;13.2	-5.4±9.0;9.1
Co-58	1.0±6.3;6.3	-1.1±5.8;5.8	1.4±6.6;6.6	1.0±3.6;3.6
Co-60	1.2±6.6;6.6	0.9±3.8;3.8	0.2±5.1;5.1	3.4±3.7;3.8
Zn-65	0.8±16.5;16.5	3.6±9.2;9.3	4.8±10.3;10.3	4.7±8.5;8.5
Zr-Nb-95	-5.5±13.8;13.8	5.2±10.7;10.7	0.7±11.4;11.4	-0.3±7.3;7.3
Cs-134	0.9±5.9;5.9	-0.9±5.4;5.4	1.5±5.3;5.3	0.8±3.7;3.7
Cs-137	3.9±6.5;6.5	-0.2±4.9;4.9	2.7±3.9;3.9	0.1±3.4;3.4
Ba-La-140	-18.3±30.7;30.9	16.4±18.7;18.9	-11.7±24.9;25.0	11.4±21.5;21.6

BYRON

Table 2. Airborne Particulates  
 Collection: Quarterly composites of weekly collections  
 Required LLD: 0.05 pCi/m<sup>3</sup> for Cs-134 and 0.06 pCi/m<sup>3</sup> for Cs-137 and  
 0.01 pCi/m<sup>3</sup> for all other gamma emitters  
 Units: 10<sup>-4</sup> pCi/m<sup>3</sup>

Sample Description and Concentration

BY-05 Nearsite - South

1995 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	BYAP-2781	BYAP-8105	BYAP-11141,2	BYAP-13112
Volume	3,707	3,382	3,675	3,760
Mn-54	0.6±5.6;5.6	-0.4±5.4;5.4	1.0±2.6;2.6	1.5±4.9;4.9
Fe-59	20.5±15.2;15.6	1.6±15.4;15.4	2.1±3.8;3.8	-9.5±13.5;13.6
Co-58	0.1±6.8;6.8	0.8±8.2;8.2	0.2±2.7;2.7	2.1±4.8;4.9
Co-60	-4.1±6.3;6.4	3.9±5.7;5.8	1.3±2.1;2.1	0.8±5.5;5.5
Zn-65	1.6±15.0;15.0	4.9±12.7;12.7	-0.2±5.6;5.6	-11.5±10.6;10.8
Zr-Nb-95	4.8±14.7;14.7	-1.4±13.1;13.1	1.1±50.6;50.6	8.7±11.0;11.1
Cs-134	0.7±6.9;6.9	0.5±7.0;7.0	0.4±13.8;13.8	-0.9±5.0;5.0
Cs-137	4.0±6.0;6.0	-2.2±6.4;6.4	1.6±2.5;2.5	0.9±5.1;5.1
Ba-La-140	8.2±11.4;11.5	18.4±50.0;50.1	-9.9±35.9;35.9	-7.6±24.2;24.2

BY-06 Oregon

Lab Code	BYAP-2782	BYAP-8106	BYAP-11143	BYAP-13113
Volume	3,779	3,395	3,679	3,762
Mn-54	-7.7±8.0;8.1	-2.4±8.6;8.6	1.7±4.1;4.1	-2.8±3.5;3.5
Fe-59	13.4±10.0;10.2	-16.4±25.9;26.1	-4.1±12.6;12.6	-3.1±11.3;11.3
Co-58	-6.9±8.3;8.4	0.9±9.5;9.5	-0.6±5.9;5.9	3.0±4.2;4.3
Co-60	-2.0±7.6;7.6	3.1±6.8;6.8	-1.6±3.8;3.9	0.5±3.7;3.7
Zn-65	8.0±7.1;7.2	-11.9±18.8;18.9	-2.3±7.9;8.0	-4.6±9.3;9.3
Zr-Nb-95	-5.2±12.6;12.6	-17.0±18.4;18.6	3.2±8.0;8.0	2.2±7.8;7.8
Cs-134	0.7±6.8;6.8	6.8±9.2;9.3	0.6±5.4;5.4	-0.3±4.1;4.1
Cs-137	-2.0±6.9;6.9	-0.9±8.1;8.1	0.6±4.6;4.6	-2.9±4.0;4.0
Ba-La-140	16.1±16.1;16.4	4.3±58.1;58.1	-14.7±20.6;20.8	-7.2±17.4;17.4

BYRON

Table 2. Airborne Particulates  
 Collection: Quarterly composites of weekly collections  
 Required LLD: 0.05 pCi/m<sup>3</sup> for Cs-134 and 0.06 pCi/m<sup>3</sup> for Cs-137 and  
 0.01 pCi/m<sup>3</sup> for all other gamma emitters  
 Units: 10<sup>-4</sup> pCi/m<sup>3</sup>

Sample Description and Concentration

<u>BY-07 (C) Mt. Morris</u>				
1995 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	BYAP-2783	BYAP-8107	BYAP-11144	BYAP-13114,5
Volume	3,689	3,374	3,665	3,754
Mn-54	-3.1±7.4;7.4	0.5±6.4;6.4	1.1±4.2;4.2	0.6±3.1;3.1
Fe-59	1.0±15.5;15.5	9.7±20.7;20.8	4.5±9.0;9.0	3.8±10.6;10.6
Co-58	-2.1±6.4;6.4	-0.6±7.4;7.4	-0.8±5.2;5.2	0.0±3.7;7
Co-60	1.7±7.7;7.7	-4.4±6.3;6.3	2.1±5.9;5.9	0.8±3.7;3.7
Zn-65	9.0±10.5;10.6	-6.8±16.8;16.8	-4.2±11.5;11.5	-12.2±8.6;8.9
Zr-Nb-95	13.3±12.3;12.5	1.1±14.1;14.1	-2.7±8.2;8.2	-5.9±7.2;7.3
Cs-134	2.2±6.8;6.8	0.5±6.3;6.3	1.2±5.1;5.1	1.0±3.5;3.5
Cs-137	4.4±4.5;4.6	-2.3±6.3;6.3	1.5±4.4;4.4	-0.8±3.6;3.6
Ba-La-140	-14.4±32.3;32.4	34.3±61.1;61.4	-19.7±27.6;27.8	-5.4±14.3;14.3
<u>BY-08 (C) Leaf River</u>				
Lab Code	BYAP-2784,5	BYAP-8108	BYAP-11145	BYAP-13116
Volume	3,709	3,381	3,659	3,761
Mn-54	-0.7±3.1;3.1	5.8±5.6;5.7	2.2±4.2;4.2	4.0±4.2;4.3
Fe-59	6.8±8.2;8.3	-14.9±18.1;18.3	-6.5±14.4;14.4	2.5±11.2;11.2
Co-58	-3.0±4.0;4.1	-2.7±7.5;7.5	-1.7±4.4;4.4	-2.6±4.8;4.8
Co-60	-3.3±4.0;4.1	0.3±5.1;5.1	4.1±4.8;4.8	-1.0±4.7;4.7
Zn-65	5.1±8.3;8.3	3.7±9.1;9.1	3.3±6.0;6.1	-2.5±9.8;9.8
Zr-Nb-95	-0.3±8.6;8.6	3.9±10.5;10.5	-7.4±8.6;8.7	-1.9±9.0;9.0
Cs-134	1.6±4.6;4.6	-0.8±5.7;5.7	5.1±4.1;4.2	-1.2±4.9;4.9
Cs-137	-1.0±3.7;3.7	1.3±5.4;5.4	3.7±4.3;4.3	-1.9±3.8;3.8
Ba-La-140	8.8±12.0;12.1	44.6±52.6;53.2	-15.0±15.6;15.8	-30.3±20.0;20.7

BYRON

Table 2. Airborne Particulates  
 Collection: Quarterly composites of weekly collections  
 Required LLD: 0.05 pCi/m<sup>3</sup> for Cs-134 and 0.06 pCi/m<sup>3</sup> for Cs-137 and  
 0.01 pCi/m<sup>3</sup> for all other gamma emitters  
 Units: 10<sup>-4</sup> pCi/m<sup>3</sup>

Sample Description and Concentration

<u>BY-21 Byron Nearsite N</u>				
1995 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	BYAP-2786	BYAP-8109	BYAP-11146	BYAP-13117
Volume	3,710	3,391	3,675	3,726
Mn-54	0.9±6.4;6.4	3.3±5.7;5.7	-2.5±5.9;6.0	-1.0±4.3;4.3
Fe-59	3.9±18.4;18.4	3.0±22.2;22.2	-2.2±15.9;15.9	-0.7±13.8;13.8
Co-58	0.7±7.6;7.6	0.6±7.8;7.8	2.7±7.8;7.8	0.5±5.7;5.7
Co-60	-5.3±8.8;8.8	2.0±6.8;6.8	1.7±8.1;8.1	2.1±5.4;5.4
Zn-65	-7.4±10.6;10.7	-0.6±14.8;14.8	10.5±15.3;15.4	4.8±7.8;7.8
Zr-Nb-95	-10.5±12.8;12.9	-4.1±13.7;13.7	1.2±14.0;14.0	-5.3±9.2;9.2
Cs-134	-1.4±6.6;6.6	1.0±7.1;7.1	-0.6±6.5;6.5	-1.3±4.4;4.4
Cs-137	1.0±6.4;6.4	2.6±7.2;7.2	-3.9±5.6;5.6	-1.7±3.8;3.8
Ba-La-140	-22.7±30.0;30.3	-89.9±61.1;63.2	-2.4±34.3;34.3	-38.3±23.0;24.0
<u>BY-22 Byron Nearsite ESE</u>				
Lab Code	BYAP-2787	BYAP-8110	BYAP-11147	BYAP-13118
Volume	3,710	3,388	3,670	3,755
Mn-54	4.1±5.8;5.8	1.1±8.0;8.0	1.4±4.0;4.0	2.6±5.4;5.4
Fe-59	-20.6±19.4;19.7	14.2±29.2;29.3	-0.4±14.8;14.8	-7.5±15.5;15.6
Co-58	-2.1±6.3;6.4	2.9±9.9;9.9	2.6±5.2;5.2	-4.1±7.1;7.1
Co-60	-2.9±7.6;7.6	5.0±10.3;10.3	4.8±4.9;4.9	1.7±5.5;5.5
Zn-65	5.7±9.5;9.6	2.0±19.6;19.6	9.2±12.1;12.2	-5.9±12.3;12.3
Zr-Nb-95	-5.1±11.8;11.8	10.8±17.2;17.3	1.1±10.0;10.0	-3.8±12.1;12.1
Cs-134	4.2±7.1;7.1	-2.0±6.9;6.9	5.4±5.4;5.5	3.5±5.7;5.7
Cs-137	-5.3±5.6;5.7	3.9±9.4;9.4	0.6±4.9;4.9	1.1±5.0;5.0
Ba-La-140	-40.0±32.0;32.8	9.7±19.4;19.5	-3.6±25.8;25.8	-21.3±29.0;29.2

BYRON

Table 2. Airborne Particulates  
 Collection: Quarterly composites of weekly collections  
 Required LLD: 0.05 pCi/m<sup>3</sup> for Cs-134 and 0.06 pCi/m<sup>3</sup> for Cs-137 and  
 0.01 pCi/m<sup>3</sup> for all other gamma emitters  
 Units: 10<sup>-4</sup> pCi/m<sup>3</sup>

Sample Description and Concentration

BY-23 Byron Nearsite S

1995 Collection Period	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Lab Code	BYAP-2788	BYAP-8111,2	BYAP-11148	BYAP-13119
Volume	3,712	3,376	3,667	3,761
Mn-54	0.9±6.4;6.4	1.1±3.7;3.7	-1.5±4.9;4.9	-1.1±4.6;4.6
Fe-59	2.0±17.6;17.6	-2.0±12.0;12.0	11.5±14.0;14.1	-10.7±14.4;14.5
Co-58	12.4±6.0;6.4	1.9±4.7;4.7	-2.9±7.0;7.0	3.1±4.6;4.6
Co-60	1.6±5.7;5.7	1.0±4.7;4.7	-0.3±7.5;7.5	3.7±4.5;4.6
Zn-65	-15.5±12.7;13.0	5.3±9.4;9.5	-5.6±10.6;10.6	-0.4±12.1;12.1
Zr-Nb-95	-9.5±14.0;14.1	4.3±8.3;8.3	0.8±10.0;10.0	-0.6±8.5;8.5
Cs-134	5.1±6.1;6.2	-0.3±4.0;4.0	4.4±5.4;5.4	2.6±4.5;4.6
Cs-137	1.0±6.4;6.4	1.0±4.2;4.2	2.7±5.4;5.4	-0.7±4.8;4.8
Ba-La-140	-0.7±20.6;20.6	-9.6±40.1;40.2	13.9±33.6;33.7	2.3±23.8;23.8

BY-24 Byron Nearsite SW

Lab Code	BYAP-2789	BYAP-8113	BYAP-11149	BYAP-13120
Volume	3,694	3,381	3,666	3,749
Mn-54	-2.2±7.0;7.0	2.3±4.7;4.7	2.5±3.4;3.4	-2.9±4.6;4.6
Fe-59	-2.0±17.2;17.2	-5.4±13.7;13.7	-3.0±11.6;11.6	-6.2±11.5;11.6
Co-58	-1.5±7.2;7.2	0.2±6.4;6.4	0.2±4.5;4.5	-1.1±5.7;5.7
Co-60	-5.0±6.1;6.2	0.5±4.1;4.1	1.6±4.1;4.1	1.5±4.1;4.1
Zn-65	-4.1±11.6;11.6	3.9±10.2;10.2	-10.6±10.8;11.0	-3.7±9.5;9.5
Zr-Nb-95	-3.4±9.7;9.7	-1.6±9.8;9.8	1.4±8.8;8.8	0.9±11.2;11.2
Cs-134	-3.5±6.8;6.9	2.8±4.3;4.4	0.4±4.0;4.0	2.6±4.3;4.3
Cs-137	5.1±6.6;6.7	-4.6±4.0;4.1	-0.2±4.3;4.3	2.7±5.4;5.4
Ba-La-140	-10.5±33.9;34.0	-19.3±40.9;41.0	-10.0±21.1;21.2	-20.2±33.1;33.3

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-20 K. Reeverts Dairy Farm

Date Collected	01-03-95	02-07-95	03-07-95
Lab Code	BYMI-0048	BYMI-0849	BYMI-1650
I-131	0.09±0.18;0.18	0.20±0.22;0.22	0.03±0.19;0.19
Mn-54	-0.4±3.4;3.4	2.5±4.4;4.4	2.6±3.5;3.5
Fe-59	-1.7±7.4;7.4	2.0±8.7;8.7	-2.7±8.3;8.3
Co-58	0.4±3.2;3.2	-2.6±4.5;4.5	-1.7±3.4;3.4
Co-60	1.5±4.2;4.2	-2.8±5.8;5.8	2.5±4.4;4.4
Zn-65	-2.3±7.3;7.3	-0.6±9.7;9.7	-6.6±7.9;7.9
Zr-Nb-95	-0.7±5.9;5.9	-7.9±55.7;55.7	7.4±5.9;5.9
Cs-134	-2.9±4.0;4.0	-1.2±3.8;3.8	1.1±4.2;4.2
Cs-137	0.1±3.3;3.3	3.0±4.0;4.0	1.4±3.5;3.5
Ba-La-140	-1.3±3.1;3.1	-0.7±6.0;6.0	4.1±4.8;4.8
Date Collected	04-04-95	05-02-95	05-16-95
Lab Code	BYMI-2345	BYMI-3562	BYMI-4677
I-131	0.03±0.12;0.12	0.07±0.24;0.24	-0.01±0.11;0.11
Mn-54	-1.9±3.2;3.2	0.1±2.1;2.1	-2.0±2.8;2.8
Fe-59	0.9±8.1;8.1	2.3±5.3;5.3	-2.3±6.4;6.4
Co-58	-0.5±2.9;2.9	0.6±2.3;2.3	-2.2±3.6;3.6
Co-60	-0.8±4.3;4.3	-0.8±3.0;3.0	1.7±4.8;4.8
Zn-65	6.3±8.4;8.4	-4.8±5.5;5.5	-4.5±8.3;8.3
Zr-Nb-95	-0.8±4.9;4.9	0.8±4.1;4.1	1.4±5.3;5.3
Cs-134	-1.2±3.5;3.5	1.4±2.6;2.6	2.4±3.5;3.5
Cs-137	2.0±3.5;3.5	1.9±2.5;2.5	2.7±3.1;3.1
Ba-La-140	-2.2±5.3;5.3	0.3±2.9;2.9	-4.8±3.8;3.8



BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-20 K. Reeverts Dairy Farm

Date Collected	06-06-95	06-29-95	07-04-95
Lab Code	BYMI-5976	BYMI-7188	BYMI-7259
I-131	0.09±0.11;0.11	0.12±0.20;0.20	0.10±0.15;0.15
Mn-54	-0.9±2.4;2.4	-1.6±2.9;2.9	-0.5±2.3;2.3
Fe-59	1.6±6.1;6.1	-2.9±8.2;8.2	-1.1±4.5;4.5
Co-58	-0.5±2.7;2.7	-1.8±3.4;3.4	0.4±2.1;2.1
Co-60	-0.5±3.0;3.0	-0.1±4.5;4.5	-1.1±3.4;3.4
Zn-65	0.9±6.5;6.5	3.0±9.5;9.5	2.6±4.7;4.8
Zr-Nb-95	1.0±4.0;4.0	-0.7±6.2;6.2	0.2±4.0;4.0
Cs-134	0.6±2.5;2.5	-2.5±3.6;3.6	1.4±2.4;2.4
Cs-137	2.6±2.5;2.5	1.9±3.7;3.7	-0.2±2.5;2.5
Ba-La-140	2.8±3.9;3.9	-1.0±4.1;4.1	-0.3±2.4;2.4
Date Collected	07-18-95	08-01-95	08-15-95
Lab Code	BYMI-7830	BYMI-8290	BYMI-8789
I-131	-0.05±0.15;0.15	-0.01±0.20;0.20	0.07±0.16;0.16
Mn-54	-0.6±2.1;2.1	0.9±3.2;3.2	0.9±2.1;2.1
Fe-59	2.6±5.5;5.5	2.9±7.9;7.9	-0.8±6.1;6.1
Co-58	-1.0±2.4;2.4	-1.1±3.3;3.3	0.2±2.7;2.7
Co-60	0.8±3.2;3.2	-0.5±4.6;4.6	0.0±3.2;3.2
Zn-65	-1.1±5.3;5.3	-1.2±7.0;7.0	2.6±5.5;5.5
Zr-Nb-95	0.6±3.7;3.7	1.9±6.2;6.2	3.3±4.5;4.5
Cs-134	-0.7±2.2;2.2	-0.7±3.4;3.4	1.3±2.4;2.4
Cs-137	0.4±2.6;2.6	-0.5±3.9;3.9	0.7±2.7;2.7
Ba-La-140	1.3±3.0;3.0	-0.1±5.0;5.0	-0.6±3.2;3.2

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-20 K. Reeverts Dairy Farm

Date Collected	09-05-95	09-19-95	10-03-95
Lab Code	BYMI-9391	BYMI-9758,9	BYMI-10327
I-131	0.15±0.22;0.22	0.08±0.09;0.09	0.07±0.12;0.12
Mn-54	0.9±2.0;2.0	0.1±1.9;1.9	0.2±2.4;2.4
Fe-59	-1.2±4.5;4.5	2.9±4.8;4.8	-0.9±5.6;5.6
Co-58	0.4±2.0;2.0	2.1±1.8;1.8	1.1±2.3;2.3
Co-60	-1.0±2.5;2.5	-0.5±3.0;3.0	-0.8±3.5;3.5
Zn-65	-1.8±5.2;5.2	2.0±4.4;4.4	1.7±5.0;5.0
Zr-Nb-95	2.6±3.7;3.7	1.4±3.4;3.4	1.5±4.2;4.2
Cs-134	-2.7±2.4;2.4	1.0±2.2;2.2	-2.9±2.6;2.6
Cs-137	1.2±2.4;2.4	1.7±2.3;2.3	0.1±2.8;2.8
Ba-La-140	-1.6±2.4;2.4	-0.3±2.3;2.3	-2.2±2.9;2.9
Date Collected	10-17-95	11-07-95	12-05-95
Lab Code	BYMI-10951	BYMI-11637	BYMI-12286
I-131	-0.05±0.14;0.14	0.10±0.22;0.22	-0.07±0.17;0.17
Mn-54	0.4±4.6;4.6	1.1±2.4;2.4	-0.5±3.1;3.1
Fe-59	4.3±12.2;12.2	-2.0±6.2;6.2	-4.2±8.6;8.6
Co-58	-3.5±4.7;4.7	0.7±2.7;2.7	0.1±3.7;3.7
Co-60	2.3±5.5;5.5	-1.0±2.7;2.7	0.6±4.2;4.2
Zn-65	-8.7±11.5;11.6	-3.7±5.7;5.7	0.6±7.7;7.7
Zr-Nb-95	0.5±7.0;7.0	-4.5±4.9;5.0	-3.6±6.8;6.8
Cs-134	-2.0±3.9;3.9	-0.2±2.8;2.8	1.7±3.6;3.6
Cs-137	0.8±3.9;3.9	0.6±2.6;2.6	2.2±3.4;3.5
Ba-La-140	-13.7±10.9;11.1	-1.6±6.0;6.0	0.2±4.0;4.0

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-26(C) Glen Hazzard's Dairy

Date Collected	01-03-95	02-07-95	03-07-95
Lab Code	BYMI-0049	BYMI-0850	BYMI-1651
I-131	-0.02±0.19;0.19	0.00±0.20;0.20	0.14±0.18;0.18
Mn-54	-2.0±4.3;4.3	0.1±2.8;2.8	-1.6±4.0;4.0
Fe-59	-6.0±9.8;9.8	5.5±6.6;6.6	-1.0±9.7;9.7
Co-58	-3.1±4.5;4.5	-2.4±2.9;2.9	1.2±4.2;4.2
Co-60	1.5±6.0;6.0	0.4±4.3;4.3	-0.2±5.1;5.1
Zn-65	-2.5±11.1;11.1	-0.5±8.2;8.2	8.5±10.9;10.9
Zr-Nb-95	-5.0±9.0;9.0	3.3±5.4;5.4	-4.0±7.5;7.5
Cs-134	-0.6±5.2;5.2	1.4±3.1;3.1	1.2±4.0;4.0
Cs-137	5.5±4.6;4.6	-1.4±3.2;3.2	1.8±4.4;4.4
Ba-La-140	-2.8±5.7;5.7	-3.2±3.9;3.9	-2.9±6.8;6.8
Date Collected	04-04-95	05-02-95	05-16-95
Lab Code	BYMI-2346	BYMI-3563	BYMI-4678
I-131	-0.01±0.15;0.15	0.13±0.25;0.25	-0.18±0.12;0.13
Mn-54	-1.6±2.3;2.3	1.8±2.5;2.5	-1.1±2.2;2.2
Fe-59	-0.4±5.6;5.6	2.6±6.9;6.9	1.5±5.1;5.1
Co-58	-0.3±2.7;2.7	2.3±2.6;2.6	0.0±2.2;2.2
Co-60	1.9±3.2;3.2	-2.7±3.5;3.5	0.2±3.0;3.0
Zn-65	2.3±5.3;5.3	-3.4±7.3;7.3	-0.4±5.6;5.6
Zr-Nb-95	2.5±4.5;4.5	-2.4±5.1;5.2	-0.4±4.5;4.5
Cs-134	1.2±2.5;2.5	0.5±2.9;2.9	-0.4±2.5;2.5
Cs-137	-0.4±2.6;2.6	0.7±2.9;2.9	-0.1±2.7;2.7
Ba-La-140	-1.8±3.2;3.2	-0.3±3.8;3.8	1.3±2.6;2.6

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-26(C) Glen Hazzard's Dairy

Date Collected	06-06-95	06-20-95	07-04-95
Lab Code	BYMI-6168	BYMI-6787	BYMI-7260,1
I-131	0.19±0.26;0.26	0.06±0.21;0.21	0.14±0.13;0.13
Mn-54	4.3±3.4;3.5	-1.8±3.4;3.4	0.7±1.9;1.9
Fe-59	0.6±7.4;7.4	1.2±8.7;8.7	-2.5±4.9;4.9
Co-58	1.8±3.3;3.3	1.8±3.6;3.6	0.1±2.0;2.0
Co-60	4.1±3.9;3.9	-1.2±4.7;4.7	0.5±3.0;3.0
Zn-65	-1.5±7.9;7.9	-1.6±8.8;8.8	1.7±4.6;4.6
Zr-Nb-95	0.6±5.5;5.5	-0.7±5.8;5.8	-0.7±3.7;3.7
Cs-134	0.4±3.8;3.8	-0.6±3.5;3.5	-0.1±2.0;2.0
Cs-137	0.2±3.1;3.1	1.9±3.9;3.9	0.1±2.1;2.1
Ba-La-140	-0.4±4.8;4.8	-7.2±5.0;5.1	0.7±2.4;2.4
Date Collected	07-18-95	08-01-95	08-15-95
Lab Code	BYMI-7831	BYMI-8291	BYMI-8790
I-131	-0.21±0.15;0.15	-0.21±0.18;0.19	0.05±0.19;0.19
Mn-54	0.7±2.4;2.4	0.7±2.3;2.3	0.6±2.5;2.5
Fe-59	-4.9±5.1;5.2	-2.0±6.0;6.0	-3.3±6.9;6.9
Co-58	-0.6±2.3;2.3	1.8±2.4;2.4	-2.3±3.1;3.1
Co-60	1.8±3.1;3.1	-2.4±3.6;3.6	1.4±4.0;4.0
Zn-65	-1.2±5.4;5.4	-1.7±6.6;6.6	1.6±7.3;7.3
Zr-Nb-95	-1.2±3.4;3.4	-0.6±4.4;4.4	-6.9±5.1;5.2
Cs-134	-0.5±2.5;2.5	-0.4±2.6;2.6	3.0±3.1;3.2
Cs-137	1.1±2.3;2.3	-1.1±2.5;2.5	2.5±2.5;2.6
Ba-La-140	-0.4±3.3;3.3	-0.2±4.2;4.2	-2.5±3.7;3.7

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-26(C) Glen Hazzard's Dairy

Date Collected	09-05-95	09-19-95	10-03-95
Lab Code	BYMI-9392	BYMI-9760	BYMI-10328
I-131	-0.08±0.15;0.15	-0.01±0.10;0.10	0.10±0.18;0.18
Mn-54	-0.6±2.4;2.4	0.2±2.0;2.0	0.2±3.3;3.3
Fe-59	-0.3±4.2;4.2	0.2±4.6;4.6	-1.4±7.1;7.1
Co-58	0.1±2.3;2.3	-0.3±1.9;1.9	-0.8±2.7;2.7
Co-60	-3.2±3.1;3.1	-2.3±2.6;2.6	1.0±4.2;4.2
Zn-65	0.5±5.4;5.4	-1.3±4.4;4.4	1.5±7.7;7.7
Zr-Nb-95	-0.2±4.1;4.1	1.5±3.4;3.4	2.2±4.9;4.9
Cs-134	-0.8±2.8;2.8	-1.3±2.1;2.1	0.9±3.1;3.1
Cs-137	1.1±2.5;2.5	0.6±2.2;2.2	0.7±3.2;3.2
Ba-La-140	-1.6±2.5;2.5	-0.6±2.7;2.7	2.8±3.6;3.6
Date Collected	10-17-95	11-07-95	12-05-95
Lab Code	BYMI-10952	BYMI-11638	BYMI-12287
I-131	-0.11±0.14;0.14	0.07±0.16;0.16	0.06±0.17;0.17
Mn-54	0.3±2.5;2.5	0.7±3.7;3.7	3.4±3.4;3.4
Fe-59	0.5±6.6;6.6	5.7±11.4;11.4	-2.2±11.6;11.6
Co-58	-1.5±2.9;2.9	3.9±4.2;4.2	1.0±3.9;3.9
Co-60	1.1±3.6;3.6	2.2±4.1;4.2	-0.4±4.7;4.7
Zn-65	6.6±6.2;6.3	2.1±8.6;8.6	-3.9±10.7;10.7
Zr-Nb-95	0.8±5.1;5.1	-3.3±8.0;8.0	10.0±7.4;7.6
Cs-134	1.9±2.8;2.8	1.2±3.7;3.7	-0.1±3.6;3.6
Cs-137	-0.1±2.7;2.7	1.4±3.1;3.1	1.5±3.8;3.8
Ba-La-140	4.5±6.6;6.6	-7.0±7.9;7.9	-1.6±11.5;11.5

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-27 Kenneth Druien Dairy Farm

Date Collected	01-03-95	02-07-95	03-07-95
Lab Code	BYMI-0050	BYMI-0851	BYMI-1652
I-131	0.14±0.15;0.15	-0.06±0.16;0.16	0.14±0.15;0.15
Mn-54	0.2±4.0;4.0	0.6±2.3;2.3	-0.2±2.4;2.4
Fe-59	-6.9±10.5;10.5	4.7±5.9;5.9	1.4±6.0;6.0
Co-58	-0.2±4.8;4.8	0.8±2.2;2.2	-0.7±2.5;2.5
Co-60	2.8±5.1;5.1	1.0±2.9;2.9	-1.9±3.2;3.2
Zn-65	6.1±10.2;10.2	0.9±6.2;6.2	0.4±5.8;5.8
Zr-Nb-95	2.8±6.6;6.6	0.1±4.4;4.4	1.5±4.3;4.3
Cs-134	-2.5±4.4;4.4	1.2±2.7;2.7	0.1±2.6;2.6
Cs-137	0.9±4.0;4.0	0.8±2.5;2.5	0.1±2.7;2.7
Ba-La-140	1.0±5.2;5.2	0.3±2.6;2.6	-2.8±3.0;3.0
Date Collected	04-04-95	05-02-95	05-16-95
Lab Code	BYMI-2347	BYMI-3564	BYMI-4679
I-131	0.04±0.11;0.11	0.16±0.23;0.23	0.02±0.12;0.12
Mn-54	0.5±2.1;2.1	-0.7±2.1;2.1	-0.4±1.6;1.6
Fe-59	-4.2±5.9;5.9	-2.4±4.5;4.5	-1.2±3.6;3.6
Co-58	1.6±2.5;2.5	-1.5±2.2;2.2	-1.7±1.6;1.6
Co-60	1.8±2.9;2.9	-0.1±3.0;3.0	-0.2±2.0;2.0
Zn-65	1.1±6.1;6.1	-0.5±4.7;4.7	-1.1±4.0;4.0
Zr-Nb-95	-0.1±3.9;3.9	-1.6±3.7;3.7	1.6±3.0;3.0
Cs-134	1.9±2.6;2.6	0.2±2.3;2.3	0.9±1.9;1.9
Cs-137	2.9±2.5;2.6	0.2±2.1;2.1	0.4±1.9;1.9
Ba-La-140	-2.9±3.0;3.1	-1.2±3.2;3.2	-0.9±1.8;1.8

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-27 Kenneth Druen Dairy Farm

Date Collected	06-06-95	06-20-95	07-04-95
Lab Code	BYMI-6169	BYMI-6788	BYMI-7262
I-131	0.08±0.22;0.22	0.08±0.22;0.22	0.11±0.15;0.15
Mn-54	-0.4±2.1;2.1	1.1±3.7;3.7	1.0±2.1;2.1
Fe-59	1.1±5.6;5.6	0.4±8.4;8.4	-1.1±4.3;4.3
Co-58	-0.2±2.5;2.5	2.8±3.4;3.4	1.1±2.2;2.2
Co-60	0.5±3.1;3.1	-2.8±4.8;4.8	2.6±3.3;3.3
Zn-65	-1.7±5.9;5.9	1.2±7.9;7.9	0.9±5.0;5.0
Zr-Nb-95	-2.3±4.2;4.2	-3.7±6.4;6.4	1.1±3.6;3.6
Cs-134	1.8±2.6;2.7	2.7±4.0;4.0	1.3±2.3;2.3
Cs-137	1.0±2.5;2.5	-1.0±3.7;3.7	-0.9±2.5;2.5
Ba-La-140	-2.3±2.7;2.7	-3.4±5.2;5.2	0.4±2.0;2.0
Date Collected	07-18-95	08-01-95	08-15-95
Lab Code	BYMI-7832	BYMI-8292	BYMI-8791
I-131	0.12±0.18;0.18	0.11±0.22;0.22	0.04±0.16;0.17
Mn-54	-1.2±3.0;3.0	-0.5±2.1;2.1	0.8±2.2;2.2
Fe-59	5.7±8.4;8.4	1.3±4.8;4.8	3.0±5.2;5.2
Co-58	-1.4±3.4;3.4	-1.3±2.6;2.6	0.7±2.2;2.2
Co-60	2.4±4.4;4.4	-0.4±2.8;2.8	0.8±2.6;2.6
Zn-65	-2.7±9.1;9.1	2.1±5.1;5.1	-1.1±4.3;4.3
Zr-Nb-95	0.4±0.7;0.7	0.6±3.9;3.9	1.5±3.3;3.3
Cs-134	1.5±3.9;3.9	-0.1±2.3;2.3	-0.5±2.5;2.5
Cs-137	1.4±3.6;3.6	-0.3±2.7;2.7	0.6±2.6;2.6
Ba-La-140	-0.7±5.1;5.1	1.9±2.7;2.7	4.2±2.8;2.9

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-27 Kenneth Druien Dairy Farm

Date Collected	09-05-95	09-19-95	10-03-95
Lab Code	BYMI-9393	BYMI-9761	BYMI-10329
I-131	-0.05±0.14;0.14	0.01±0.10;0.10	0.08±0.12;0.12
Mn-54	0.2±3.2;3.2	-0.5±1.2;1.2	1.5±2.6;2.6
Fe-59	1.2±7.7;7.7	0.5±2.6;2.6	4.0±7.7;7.7
Co-58	-1.2±2.8;2.8	0.6±1.2;1.2	0.7±3.7;3.7
Co-60	4.5±4.6;4.6	0.6±1.7;1.7	-2.3±4.8;4.8
Zn-65	0.6±7.6;7.6	-0.7±2.8;2.8	3.2±7.7;7.7
Zr-Nb-95	-3.4±5.7;5.7	0.3±2.2;2.2	0.6±5.8;5.8
Cs-134	0.4±3.5;3.5	-0.7±1.3;1.3	-1.3±3.7;3.7
Cs-137	2.3±3.5;3.5	0.9±1.4;1.4	1.6±2.9;2.9
Ba-La-140	1.6±1.8;1.8	0.2±1.3;1.3	-1.2±6.3;6.3
Date Collected	10-17-95	11-07-95	12-05-95
Lab Code	BYMI-1095	BYMI-11669	BYMI-12288
I-131	0.06±0.15;0.15	0.06±0.19;0.19	0.15±0.21;0.21
Mn-54	0.2±3.0;3.0	1.0±2.0;2.0	0.3±3.3;3.3
Fe-59	1.3±9.1;9.1	-3.3±6.3;6.3	8.2±10.5;10.6
Co-58	1.9±3.2;3.2	0.1±2.5;2.5	-2.6±4.6;4.6
Co-60	-4.3±4.6;4.7	1.7±2.9;2.9	3.0±4.5;4.5
Zn-65	-4.4±7.6;7.6	1.2±5.2;5.2	-4.4±9.2;9.3
Zr-Nb-95	-1.5±5.7;5.7	1.2±4.8;4.8	-2.7±6.9;6.9
Cs-134	1.3±3.4;3.4	0.8±2.3;2.3	1.4±3.9;3.9
Cs-137	-0.9±3.2;3.2	0.2±2.4;2.4	2.0±4.0;4.0
Ba-La-140	-1.2±8.4;8.4	-4.8±5.4;5.4	3.3±10.2;10.2



BYRON

Table 3. Milk

Collection: Semimonthly - May through October  
 Monthly - November through April

Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma emitters

Units: pCi/L

Sample Description and Concentration

BYSP-28 Duane Camling Dairy Farm

Date Collected	01-03-95	02-07-95	03-07-95
Lab Code	BYMI-0051	BYMI-852	BYMI-1653
I-131	0.06±0.18;0.18	0.05±0.16;0.16	-0.07±0.16;0.16
Mn-54	-0.6±3.1;3.1	0.2±2.6;2.6	0.3±3.0;3.0
Fe-59	0.8±6.3;6.3	-2.2±6.3;6.3	-3.5±7.7;7.7
Co-58	-0.8±3.3;3.3	-0.8±2.3;2.3	-2.3±3.1;3.1
Co-60	0.9±3.9;3.9	-1.9±3.5;3.5	-1.8±3.8;3.8
Zn-65	6.7±8.6;8.6	-1.8±6.6;6.6	-0.4±8.6;8.6
Zr-Nb-95	1.8±6.1;6.1	0.1±4.7;4.7	3.8±5.6;5.6
Cs-134	0.5±3.2;3.2	-0.9±2.9;2.9	0.9±3.1;3.1
Cs-137	0.2±3.2;3.2	3.1±2.7;2.7	3.3±3.2;3.2
Ba-La-140	-2.2±5.4;5.4	-0.1±2.4;2.4	4.8±3.9;3.9
Date Collected	04-04-95	05-02-95	05-16-95
Lab Code	BYMI-2348	BYMI-3565	BYMI-4680
I-131	0.10±0.11;0.11	-0.08±0.16;0.16	-0.06±0.21;0.21
Mn-54	-0.6±1.7;1.7	-0.1±3.4;3.4	2.0±2.2;2.2
Fe-59	3.3±4.3;4.3	3.5±7.4;7.4	-6.2±5.0;5.0
Co-58	-0.4±1.8;1.8	-2.0±2.9;2.9	0.2±2.3;2.3
Co-60	-0.6±2.4;2.4	-1.7±4.0;4.0	2.6±3.2;3.2
Zn-65	0.2±4.3;4.3	1.3±7.1;7.1	1.5±5.1;5.1
Zr-Nb-95	-1.1±3.2;3.2	-2.2±5.6;5.6	-2.6±3.8;3.8
Cs-134	2.2±1.9;2.0	-0.8±3.3;3.3	-1.1±2.7;2.7
Cs-137	1.6±1.9;1.9	3.0±3.5;3.6	-0.5±2.2;2.2
Ba-La-140	-1.3±2.6;2.6	-0.7±4.6;4.6	1.3±2.9;2.9

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BYSP-28 Duane Camling Dairy Farm

Date Collected	06-06-95	06-20-95	07-04-95
Lab Code	BYMI-6170	BYMI-6789	BYMI-7263
I-131	-0.16±0.17;0.17	0.08±0.22;0.22	0.14±0.14;0.14
Mn-54	-0.6±1.7;1.7	-0.1±2.3;2.3	0.8±2.7;2.7
Fe-59	-0.7±4.3;4.3	4.0±5.3;5.3	-3.4±6.5;6.5
Co-58	-0.2±1.8;1.8	0.2±2.5;2.5	-1.7±3.1;3.1
Co-60	1.8±2.4;2.4	0.2±3.2;3.2	6.7±4.4;4.5
Zn-65	-0.1±4.3;4.3	0.2±5.4;5.4	4.5±7.0;7.0
Zr-Nb-95	-0.5±3.3;3.3	-1.4±4.4;4.4	-1.0±5.3;5.3
Cs-134	1.1±2.0;2.0	1.1±2.7;2.7	-0.9±3.0;3.0
Cs-137	0.5±1.9;1.9	1.6±2.6;2.6	2.6±3.5;3.5
Ba-La-140	-1.5±2.9;2.9	0.3±3.3;3.3	2.2±3.7;3.8
Date Collected	07-18-95	08-01-95	08-15-95
Lab Code	BYMI-7833	BYMI-8293,4	BYMI-8792
I-131	-0.04±0.14;0.14	-0.05±0.14;0.14	0.09±0.15;0.15
Mn-54	-0.5±2.9;2.9	-0.7±3.6;3.6	0.3±2.8;2.8
Fe-59	-4.7±8.2;8.2	-0.5±6.9;6.9	-3.7±6.7;6.7
Co-58	-2.8±3.5;3.6	1.7±3.7;3.7	-0.7±3.1;3.1
Co-60	2.1±4.0;4.0	-2.3±5.0;5.0	1.5±4.2;4.2
Zn-65	-1.6±7.1;7.1	-1.1±9.1;9.1	1.7±6.8;6.8
Zr-Nb-95	0.5±5.4;5.4	-0.4±6.5;6.5	-1.8±5.1;5.1
Cs-134	-1.0±3.6;3.6	-1.0±3.8;3.8	-2.1±2.9;2.9
Cs-137	-1.0±3.6;3.6	0.3±3.5;3.5	1.0±2.8;2.8
Ba-La-140	2.2±3.6;3.6	-4.4±3.5;3.6	-1.2±5.3;5.3

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BYSP-28 Duane Camling Dairy Farm

Date Collected	09-05-95	09-19-95	10-03-95
Lab Code	BYMI-9394	BYMI-9762	BYMI-10330
I-131	0.11±0.17;0.17	-0.02±0.11;0.11	0.09±0.11;0.11
Mn-54	1.7±3.4;3.4	-0.2±1.9;1.9	0.4±2.3;2.3
Fe-59	-1.5±9.3;9.3	0.7±4.2;4.2	-2.1±5.1;5.1
Co-58	0.1±3.7;3.7	0.1±1.8;1.8	0.3±2.2;2.2
Co-60	-1.3±5.2;5.2	-0.8±2.8;2.8	0.1±3.1;3.1
Zn-65	4.6±8.2;8.2	-0.5±4.5;4.5	-1.8±4.9;4.9
Zr-Nb-95	-0.8±6.7;6.7	2.2±3.3;3.4	2.3±3.5;3.5
Cs-134	1.6±4.2;4.2	0.2±2.2;2.2	1.5±2.6;2.6
Cs-137	-1.7±4.0;4.0	1.5±2.0;2.0	2.9±2.4;2.4
Ba-La-140	-1.3±4.8;4.8	-0.9±2.3;2.3	0.8±2.5;2.5
Date Collected	10-17-95	11-07-95	12-05-95
Lab Code	BYMI-10954	BYMI-11639	BYMI-12289
I-131	-0.04±0.15;0.15	0.05±0.16;0.16	0.03±0.19;0.19
Mn-54	-2.1±3.8;3.8	-1.0±3.7;3.7	0.2±2.1;2.1
Fe-59	8.5±10.6;10.7	1.2±9.4;9.4	-1.6±6.5;6.5
Co-58	-1.5±4.4;4.4	-0.3±4.3;4.3	-0.5±2.7;2.7
Co-60	1.7±4.9;4.9	2.1±4.9;4.9	-1.7±3.2;3.2
Zn-65	-5.9±10.1;10.1	-4.5±8.6;8.6	-2.0±5.7;5.7
Zr-Nb-95	0.5±7.5;7.5	0.3±7.3;7.3	3.3±4.9;4.9
Cs-134	1.3±4.1;4.1	0.3±4.2;4.2	1.0±2.7;2.7
Cs-137	-2.5±3.8;3.8	2.3±3.6;3.6	3.0±2.6;2.7
Ba-La-140	-11.5±7.6;7.8	-3.3±9.9;9.9	-4.1±5.4;5.4

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-30 Don Roos Dairy

Date Collected	01-03-95	02-07-95	03-07-95
Lab Code	BYMI-0052	BYMI-0853	BYMI-1654
I-131	0.03±0.16;0.16	0.17±0.17;0.17	0.16±0.19;0.19
Mn-54	-0.5±3.0;3.0	2.1±4.2;4.2	-0.1±2.1;2.1
Fe-59	0.1±7.9;7.9	-5.2±8.1;8.1	2.5±5.3;5.3
Co-58	-2.5±3.3;3.3	1.1±3.5;3.5	0.9±2.3;2.3
Co-60	-0.1±4.5;4.5	0.9±4.0;4.0	-0.5±3.2;3.2
Zn-65	3.4±8.3;8.3	-4.2±8.4;8.4	-1.5±5.2;5.2
Zr-Nb-95	1.9±6.1;6.1	-0.2±5.8;5.8	-1.1±4.1;4.1
Cs-134	0.2±4.0;4.0	2.3±3.9;3.9	-1.0±2.8;2.8
Cs-137	3.4±3.2;3.2	-0.3±3.9;3.9	-1.1±2.5;2.5
Ba-La-140	-5.3±5.0;5.0	2.5±3.3;3.3	2.1±3.6;3.6
Date Collected	04-04-95	05-02-95	05-16-95
Lab Code	BYMI-2349	BYMI-3566	BYMI-4681
I-131	-0.07±0.13;0.13	-0.08±0.20;0.20	0.16±0.23;0.23
Mn-54	-1.6±2.2;2.2	-0.6±2.8;2.8	-1.6±2.7;2.7
Fe-59	-0.9±4.9;4.9	-2.1±8.1;8.1	-2.5±6.2;6.2
Co-58	-0.4±2.2;2.2	-0.3±3.2;3.2	0.9±2.7;2.7
Co-60	0.4±2.8;2.8	0.1±4.2;4.2	1.3±3.9;3.9
Zn-65	0.6±5.1;5.1	5.6±6.9;7.0	2.4±6.6;6.6
Zr-Nb-95	0.2±3.8;3.8	0.4±5.6;5.6	-3.1±4.9;4.9
Cs-134	-1.0±2.6;2.6	-0.2±3.4;3.4	0.5±3.0;3.0
Cs-137	2.8±2.3;2.3	2.5±3.1;3.1	-0.3±2.9;2.9
Ba-La-140	-0.9±3.3;3.3	-0.4±4.1;4.1	2.3±3.0;3.0

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-30 Don Roos Dairy

Date Collected	06-06-95	06-29-95	07-04-95
Lab Code	BYMI-5977	BYMI-7189	BYMI-7264
I-131	0.04±0.10;0.10	0.05±0.19;0.19	0.08±0.14;0.14
Mn-54	0.7±3.6;3.6	-0.8±2.5;2.5	0.2±2.9;2.9
Fe-59	1.6±8.8;8.8	-2.1±5.3;5.3	-0.7±5.8;5.8
Co-58	1.5±3.5;3.5	-0.2±2.5;2.5	-1.6±2.2;2.2
Co-60	-0.1±5.3;5.3	0.3±3.5;3.5	-0.6±3.6;3.6
Zn-65	-1.3±8.6;8.6	1.4±6.3;6.3	-2.8±6.2;6.2
Zr-Nb-95	1.0±5.8;5.8	-1.4±4.1;4.1	0.8±4.4;4.4
Cs-134	2.1±3.7;3.7	-0.7±2.5;2.5	0.6±2.8;2.8
Cs-137	0.6±3.6;3.6	-0.8±2.3;2.3	-1.4±2.9;2.9
Ba-La-140	3.1±4.5;4.5	-1.6±2.8;2.8	0.8±2.3;2.3
Date Collected	07-18-95	08-01-95	08-15-95
Lab Code	BYMI-7834	BYMI-8295	BYMI-8793
I-131	0.13±0.17;0.17	-0.03±0.14;0.14	0.08±0.37;0.37
Mn-54	1.4±2.4;2.4	-1.8±2.3;2.3	-1.1±2.1;2.1
Fe-59	-0.4±5.6;5.6	1.4±5.3;5.3	1.8±4.7;4.7
Co-58	-0.4±2.6;2.6	-1.5±2.5;2.5	1.1±2.1;2.1
Co-60	-0.9±3.2;3.2	2.1±2.8;2.8	1.9±2.6;2.6
Zn-65	-4.1±5.5;5.5	-4.6±5.2;5.2	-2.2±5.0;5.0
Zr-Nb-95	0.7±4.9;4.9	-0.5±4.0;4.0	1.8±3.9;3.9
Cs-134	-1.4±3.1;3.1	1.9±2.5;2.5	1.0±2.6;2.6
Cs-137	1.2±2.6;2.6	-0.5±2.4;2.4	-1.0±2.2;2.2
Ba-La-140	1.1±3.3;3.3	-1.1±1.2;1.2	2.5±3.3;3.3

BYRON

Table 3. Milk  
 Collection: Semimonthly - May through October  
 Monthly - November through April  
 Required LLD: 1.0 pCi/L for I-131; 15 pCi/L for Cs-134 and Ba-La-140;  
 18 pCi/L for Cs-137; 20 pCi/L for all other gamma  
 emitters  
 Units: pCi/L

Sample Description and Concentration

BY-30 Don Roos Dairy

Date Collected	09-05-95	09-19-95	10-03-95
Lab Code	BYMI-9395	BYMI-9763	BYMI-10331
I-131	0.02±0.15;0.15	0.09±0.10;0.10	0.04±0.21;0.21
Mn-54	-3.6±3.1;3.1	0.6±3.9;3.9	2.4±2.8;2.8
Fe-59	-4.3±8.1;8.1	-3.0±8.5;8.5	2.5±6.5;6.5
Co-58	1.1±2.9;2.9	-1.3±4.1;4.1	-2.1±2.8;2.8
Co-60	0.9±4.0;4.0	0.4±5.1;5.1	-2.3±4.1;4.1
Zn-65	-0.3±8.8;8.8	-1.1±9.2;9.2	-4.1±7.3;7.4
Zr-Nb-95	-5.4±6.3;6.3	2.9±7.1;7.1	0.9±5.6;5.6
Cs-134	-0.5±3.7;3.7	-1.8±4.0;4.0	-0.4±3.2;3.2
Cs-137	2.0±3.4;3.4	0.3±3.9;3.9	1.1±3.4;3.4
Ba-La-140	3.3±2.6;2.7	-1.4±5.5;5.5	-0.9±3.6;3.6
Date Collected	10-17-95	11-07-95	12-05-95
Lab Code	BYMI-10955	BYMI-11670	BYMI-12290
I-131	0.06±0.17;0.17	0.16±0.22;0.22	0.17±0.25;0.26
Mn-54	-2.9±3.5;3.5	-1.8±3.3;3.3	-2.6±3.4;3.4
Fe-59	-2.0±10.5;10.5	0.8±9.4;9.4	7.4±9.2;9.3
Co-58	1.6±4.3;4.3	0.3±3.3;3.3	-2.1±3.7;3.7
Co-60	-5.6±6.1;6.1	-0.3±4.5;4.5	-3.9±4.9;5.0
Zn-65	0.4±8.8;8.8	-4.9±8.0;8.0	0.3±9.2;9.2
Zr-Nb-95	0.5±7.6;7.6	-2.9±6.5;6.5	1.9±6.6;6.6
Cs-134	2.3±3.5;3.5	-2.3±3.6;3.6	1.8±4.0;4.0
Cs-137	3.4±3.9;3.9	-0.2±3.5;3.5	-0.8±3.4;3.4
Ba-La-140	1.2±12.5;12.5	-2.7±4.0;4.0	3.7±7.2;7.2

BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

BY-12 Oregon Pool of Rock River, Downstream

Date Collected	05-23-95	05-23-95	05-23-95
Lab Code	BYF-5022	BYF-5023	BYF-5024
Type	Carp	Silver Redhorse	Carp sucker
Mn-54	0.0±0.8;0.8	-0.1±0.6;0.6	-0.5±0.8;0.8
Fe-59	-2.4±2.9;2.9	-2.6±1.9;1.9	-0.1±2.3;2.3
Co-58	0.1±0.9;0.9	-0.1±0.7;0.7	0.0±0.9;0.9
Co-60	0.5±1.2;1.2	0.3±0.8;0.8	0.2±0.9;0.9
Zn-65	-1.8±2.2;2.2	0.7±1.5;1.5	0.8±1.8;1.8
Zr-Nb-95	0.4±1.8;1.8	1.2±1.6;1.6	-0.4±1.5;1.5
Cs-134	0.0±0.9;0.9	0.3±0.7;0.7	-0.1±0.7;0.7
Cs-137	0.2±0.8;0.8	0.1±0.6;0.6	-0.1±0.7;0.7
Ba-La-140	-0.7±3.8;3.8	-0.7±2.9;2.9	1.3±2.1;2.1
Date Collected	05-23-95	05-23-95	07-06-95
Lab Code	BYF-5025,6	BYF-5027	BYF-7333
Type	Quillback	Walleye	Fresh Water Drum
Mn-54	0.2±0.4;0.4	-0.7±0.9;0.9	0.20±.5;0.5
Fe-59	0.3±1.2;1.2	0.4±2.9;2.9	1.2±1.1;1.1
Co-58	0.2±0.5;0.5	0.9±1.0;1.0	0.1±0.6;0.6
Co-60	0.3±0.5;0.5	0.9±0.9;0.9	0.3±0.7;0.7
Zn-65	0.6±1.0;1.0	-0.7±2.2;2.2	0.4±1.2;1.2
Zr-Nb-95	0.3±0.9;0.9	-0.5±2.1;2.1	0.1±1.1;1.1
Cs-134	-0.1±0.4;0.4	0.2±0.9;0.9	-0.4±0.5;0.6
Cs-137	-0.2±0.4;0.4	-0.2±0.7;0.7	0.6±0.5;0.5
Ba-La-140	-1.2±2.0;2.0	-1.6±7.8;7.8	-1.6±2.6;2.6

BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

BY-12 Oregon Pool of Rock River, Downstream

Date Collected	07-06-95	07-06-95	07-06-95
Lab Code	BYF-7334	BYF-7335	BYF-7336
Type	Carp	Quillback	Silver Redhorse
Mn-54	0.0±1.0;1.0	0.1±0.6;0.6	0.0±0.7;0.7
Fe-59	0.3±3.9;3.9	-0.1±1.4;1.4	1.6±2.1;2.1
Co-58	0.2±1.3;1.3	0.6±0.7;0.7	0.0±0.7;0.7
Co-60	0.0±1.0;1.0	0.5±0.8;0.8	-0.2±0.7;0.7
Zn-65	-0.5±2.1;2.1	-0.7±1.4;1.4	-1.2±1.6;1.6
Zr-Nb-95	0.2±2.6;2.6	0.0±1.2;1.2	0.0±1.2;1.2
Cs-134	-0.4±0.9;0.9	0.5±0.6;0.6	-1.0±0.6;0.6
Cs-137	-0.2±0.8;0.8	0.1±0.7;0.7	0.3±0.5;0.5
Ba-La-140	-6.2±6.4;6.5	-0.5±1.3;1.3	-2.6±3.4;3.5
Date Collected	10-10-95	10-10-95	10-10-95
Lab Code	BYF-10680	BYF-10681	BYF-10682
Type	Carp	Golden Redhorse	Shorthead Redhorse
Mn-54	0.3±0.8;0.8	0.1±0.7;0.7	-0.3±0.7;0.7
Fe-59	0.1±2.4;2.4	-0.4±2.0;2.0	0.1±2.0;2.0
Co-58	0.4±0.9;0.9	-0.2±0.8;0.8	-0.2±0.8;0.8
Co-60	1.1±1.3;1.3	0.0±1.3;1.3	0.0±0.9;0.9
Zn-65	-0.3±2.2;2.2	0.6±2.2;2.2	0.1±2.1;2.1
Zr-Nb-95	-0.2±1.5;1.5	0.7±1.5;1.5	-1.3±1.3;1.3
Cs-134	0.5±1.0;1.0	0.5±0.9;0.9	-0.5±0.9;0.9
Cs-137	0.6±0.9;0.9	0.0±0.7;0.7	0.3±0.8;0.8
Ba-La-140	0.7±2.0;2.0	-1.5±1.6;1.6	0.3±1.0;1.0



BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

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Sample Description and Concentration

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BY-12 Oregon Pool of Rock River, Downstream

Date Collected	10-10-95
Lab Code	BYF-10683
Type	Flathead Catfish
Mn-54	-0.2±0.7;0.7
Fe-59	-0.2±2.1;2.1
Co-58	0.3±0.8;0.8
Co-60	0.0±0.9;0.9
Zn-65	-2.7±2.2;2.2
Zr-Nb-95	1.0±1.5;1.5
Cs-134	-0.5±0.9;0.9
Cs-137	0.1±0.8;0.8
Ba-La-140	0.5±1.3;1.3

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BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration			
<u>BY-13(C) Rock River, Upstream</u>			
Date Collected	05-23-95	05-23-95	05-23-95
Lab Code	BYF-5016	BYF-5017	BYF-5018
Type	Carp	Silver Redhorse	Quillback
Mn-54	-0.4±1.1;1.1	0.4±0.9;0.9	0.1±0.8;0.8
Fe-59	2.1±3.7;3.7	0.7±3.1;3.1	-0.5±2.6;2.6
Co-58	0.3±1.0;1.0	0.4±1.1;1.1	0.5±0.9;0.9
Co-60	0.6±1.2;1.2	-0.2±1.1;1.1	-0.5±1.0;1.0
Zn-65	-0.1±2.9;2.9	-0.2±2.6;2.6	-1.5±2.2;2.2
Zr-Nb-95	0.6±2.3;2.3	0.2±1.8;1.8	0.1±1.7;1.7
Cs-134	-0.8±1.3;1.3	-0.2±1.0;1.0	0.5±0.8;0.8
Cs-137	0.1±1.0;1.0	0.3±1.0;1.0	0.2±0.7;0.7
Ba-La-140	1.1±5.3;5.3	3.0±3.5;3.5	-1.2±3.6;3.6
Date Collected	05-23-95	05-23-95	05-23-95
Lab Code	BYF-5019	BYF-5020	BYF-5021
Type	Big Mouth Buffalo	Walleye	Channel Catfish
Mn-54	0.4±0.9;0.9	-0.1±1.1;1.1	0.1±1.1;1.1
Fe-59	1.3±2.3;2.3	-4.1±3.4;3.5	-1.0±3.5;3.5
Co-58	-0.2±1.0;1.0	1.5±1.2;1.2	-0.2±1.3;1.3
Co-60	-0.3±1.0;1.0	-0.2±1.2;1.2	0.4±1.4;1.4
Zn-65	0.5±2.1;2.1	-2.0±2.5;2.5	-0.9±3.1;3.1
Zr-Nb-95	0.7±1.5;1.5	-0.9±2.0;2.0	-1.8±2.1;2.1
Cs-134	-0.1±0.9;0.9	0.7±1.0;1.0	0.6±1.1;1.1
Cs-137	0.2±0.9;0.9	0.3±1.0;1.0	-0.4±1.0;1.0
Ba-La-140	1.7±3.6;3.6	-1.5±4.7;4.7	-1.2±1.8;1.8

BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

BY-13 (C) Rock River, Upstream

Date Collected	07-06-95	07-06-95	07-06-95
Lab Code	BYF-7342	BYF-7343	BYF-7344,5
Type	Carp	Big Mouth Buffalo	Channel Catfish
Mn-54	0.2±0.9;0.9	0.0±0.5;0.5	0.0±0.6;0.6
Fe-59	-1.7±3.7;3.7	-0.8±1.8;1.8	-0.8±2.1;2.1
Co-58	0.7±1.1;1.1	0.5±0.7;0.7	0.0±0.7;0.7
Co-60	0.0±1.1;1.1	0.3±0.7;0.7	-0.2±0.7;0.7
Zn-65	-1.0±2.3;2.3	-0.6±1.3;1.3	0.9±1.4;1.4
Zr-Nb-95	0.4±2.0;2.0	0.5±1.0;1.0	-0.1±1.2;1.2
Cs-134	-0.1±1.0;1.0	-0.1±0.5;0.5	0.0±0.5;0.5
Cs-137	-0.1±0.9;0.9	0.0±0.5;0.5	0.2±0.6;0.6
Ba-La-140	-3.6±8.5;8.5	0.3±0.3;0.3	-1.5±5.5;5.5
Date Collected	07-06-95	07-06-95	07-06-95
Lab Code	BYF-7346	BYF-7347	BYF-7348
Type	Shorthead Redhorse	Silver Redhorse	Flathead Catfish
Mn-54	0.0±0.5;0.5	0.1±0.7;0.7	-0.3±0.5;0.5
Fe-59	0.6±1.8;1.8	-1.5±3.2;3.2	-0.4±1.8;1.8
Co-58	-0.7±0.7;0.7	0.5±1.0;1.0	0.1±0.6;0.6
Co-60	0.5±0.5;0.6	0.1±1.0;1.0	0.4±0.6;0.6
Zn-65	0.3±1.2;1.2	0.9±1.8;1.8	-1.9±1.1;1.2
Zr-Nb-95	0.3±1.3;1.3	0.1±1.9;1.9	-0.7±1.1;1.1
Cs-134	-0.2±0.5;0.5	0.4±0.8;0.8	0.5±0.5;0.5
Cs-137	-0.1±0.4;0.4	-0.1±0.8;0.8	-0.2±0.5;0.5
Ba-La-140	-0.2±9.6;9.6	3.7±7.6;7.6	-2.4±3.5;3.5

BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

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Sample Description and Concentration

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BY-13 (C) Rock River, Upstream

Date Collected	10-10-95	10-10-95	10-10-95
Lab Code	BYF-10676	BYF-10677	BYF-10678
Type	Carp	River Carpsucker	Silver Redhorse
Mn-54	0.0±0.9;0.9	0.1±1.1;1.1	0.6±0.9;0.9
Fe-59	-0.6±2.0;2.0	-2.0±2.7;2.7	1.4±2.4;2.4
Co-58	0.2±0.9;0.9	0.8±1.1;1.1	0.5±1.0;1.0
Co-60	-0.6±1.2;1.2	-0.8±1.4;1.4	-0.2±1.0;1.0
Zn-65	0.1±2.4;2.4	0.2±2.3;2.3	-2.3±1.8;1.8
Zr-Nb-95	-0.4±1.8;1.8	-0.7±1.8;1.8	0.1±1.7;1.7
Cs-134	0.6±1.1;1.1	-0.2±1.1;1.1	-0.6±1.0;1.0
Cs-137	-0.3±1.0;1.0	0.3±1.0;1.0	0.2±1.0;1.0
Ba-La-140	1.5±1.5;1.5	-0.1±1.9;1.9	-0.7±1.7;1.7

Date Collected	10-10-95
Lab Code	BYF-10679
Type	Fresh Water Drum
Mn-54	0.6±1.0;1.0
Fe-59	0.2±2.7;2.7
Co-58	-0.2±1.1;1.1
Co-60	-0.3±1.2;1.2
Zn-65	-0.7±2.7;2.7
Zr-Nb-95	0.3±1.8;1.8
Cs-134	0.1±1.1;1.1
Cs-137	0.3±1.0;1.0
Ba-La-140	-0.9±1.0;1.0

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BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

BY-29(C) Byron, Upstream

Date Collected	05-23-95	05-23-95	05-23-95
Lab Code	BYF-5010	BYF-5011	BYF-5012
Type	Carp	Golden Redhorse	Silver Redhorse
Mn-54	0.7±0.8;0.8	0.7±0.7;0.8	-0.3±0.6;0.6
Fe-59	1.1±2.8;2.8	-0.7±2.3;2.3	-0.4±2.6;2.6
Co-58	0.7±0.9;0.9	-0.4±0.9;0.9	0.5±0.9;0.9
Co-60	0.1±0.8;0.8	-0.1±0.9;0.9	-0.4±1.0;1.0
Zn-65	-0.4±2.1;2.1	-0.5±1.8;1.8	0.5±2.1;2.1
Zr-Nb-95	-0.6±1.6;1.6	0.3±1.6;1.6	-2.0±1.7;1.8
Cs-134	-0.3±0.8;0.8	-0.3±0.8;0.8	-0.2±0.7;0.7
Cs-137	-0.2±0.8;0.8	-0.1±0.7;0.7	0.1±0.7;0.7
Ba-La-140	0.3±3.8;3.8	-1.6±4.9;4.9	-0.2±3.8;3.8
Date Collected	05-23-95	05-23-95	05-23-95
Lab Code	BYF-5013	BYF-5014	BYF-5014
Type	Carp sucker	Fresh Water Drum	Walleye
Mn-54	0.2±0.7;0.7	-0.3±1.0;1.0	0.1±0.7;0.7
Fe-59	1.5±2.3;2.3	0.9±3.5;3.5	-1.4±1.8;1.8
Co-58	0.1±0.9;0.9	1.3±1.3;1.3	-0.3±0.8;0.8
Co-60	0.0±1.2;1.2	1.0±1.2;1.2	0.8±0.9;0.9
Zn-65	2.0±1.9;1.9	1.9±2.1;2.1	0.3±2.0;2.0
Zr-Nb-95	-0.5±1.7;1.7	-0.3±2.9;2.9	-1.9±1.3;1.3
Cs-134	0.1±0.8;0.8	0.4±1.2;1.2	0.2±0.9;0.9
Cs-137	0.9±0.7;0.8	0.0±0.8;0.8	-0.7±0.9;0.9
Ba-La-140	-0.6±4.5;4.5	-8.2±12.8;12.8	1.1±1.1;1.1

BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration			
<u>BY-29(C) Byron, Upstream</u>			
Date Collected	07-06-95	07-06-95	07-06-95
Lab Code	BYF-7349	BYF-7350	BYF-7351
Type	Carp	River Carpsucker	Quillback
Mn-54	0.4±0.7;0.7	-0.5±0.9;0.9	0.3±0.7;0.7
Fe-59	0.1±2.8;2.8	1.3±3.6;3.6	2.0±2.8;2.8
Co-58	-0.1±1.0;1.0	-0.7±1.2;1.2	0.0±0.8;0.8
Co-60	0.0±0.8;0.8	0.3±1.2;1.2	0.6±0.8;0.8
Zn-65	-1.3±1.8;1.8	1.0±2.4;2.4	-0.7±1.8;1.8
Zr-Nb-95	-0.9±2.0;2.0	-1.0±2.3;2.3	0.5±1.7;1.7
Cs-134	0.1±0.8;0.8	0.5±0.9;0.9	0.0±0.7;0.7
Cs-137	0.2±0.7;0.7	0.3±0.9;0.9	0.2±0.7;0.7
Ba-La-140	-16.4±11.8;12.0	-12.6±15.1;15.2	-2.5±4.6;4.6
Date Collected	07-06-95	07-06-95	07-06-95
Lab Code	BYF-7352	BYF-7353	BYF-7354
Type	Silver Redhorse	Freshwater Drum	Channel Catfish
Mn-54	0.3±0.9;0.9	0.0±1.3;1.3	-0.2±0.8;0.8
Fe-59	-0.2±3.7;3.7	-0.7±5.6;5.6	-0.4±2.4;2.4
Co-58	0.3±1.1;1.1	-0.1±1.7;1.7	-0.4±1.0;1.0
Co-60	-1.21±.3;1.3	-0.4±1.4;1.4	0.2±0.7;0.7
Zn-65	-1.3±2.3;2.3	-0.2±3.4;3.4	0.8±1.7;1.7
Zr-Nb-95	1.6±2.0;2.0	0.8±3.0;3.0	-0.9±1.7;1.7
Cs-134	0.3±0.9;0.9	-0.3±1.4;1.4	0.4±0.8;0.8
Cs-137	0.1±0.9;0.9	0.5±1.2;1.2	0.1±0.9;0.9
Ba-La-140	-4.7±10.7;10.7	-12.4±19.5;19.6	-1.8±5.3;5.3

BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

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Sample Description and Concentration

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BY-29(C) Byron, Upstream

Date Collected	10-10-95	10-10-95	10-10-95
Lab Code	BYF-10672	BYF-10673	BYF-10674
Type	Channel Catfish	River Carpsucker	Carp
Mn-54	-0.7±1.0;1.0	0.4±0.9;0.9	-0.5±1.0;1.0
Fe-59	-0.3±2.3;2.3	0.3±2.5;2.5	0.2±2.8;2.8
Co-58	-0.6±0.9;0.9	0.2±1.0;1.0	0.1±1.0;1.0
Co-60	-0.6±1.0;1.0	0.7±1.2;1.2	0.7±1.2;1.2
Zn-65	-0.3±2.2;2.2	1.2±2.5;2.5	-0.1±2.3;2.3
Zr-Nb-95	-0.5±2.0;2.0	-0.3±1.8;1.8	-0.4±1.9;1.9
Cs-134	-0.6±1.0;1.0	-0.6±1.1;1.1	0.7±1.0;1.0
Cs-137	-0.2±1.2;1.2	0.2±0.9;0.9	0.9±1.0;1.0
Ba-La-140	-1.9±1.7;1.7	-1.4±2.4;2.4	0.2±1.5;1.5
Date Collected	10-10-95		
Lab Code	BYF-10675		
Type	Silver Redhorse		
Mn-54	-0.1±0.6;0.6		
Fe-59	0.6±1.4;1.4		
Co-58	0.0±0.6;0.6		
Co-60	0.3±0.7;0.7		
Zn-65	1.0±1.4;1.4		
Zr-Nb-95	0.4±1.0;1.0		
Cs-134	-0.6±0.7;0.7		
Cs-137	0.2±0.6;0.6		
Ba-La-140	0.3±0.7;0.7		

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BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration			
BYSP-31 Byron, Discharge			
Date Collected	05-23-95	05-23-95	05-23-95
Lab Code	BYF-5028	BYF-5029	BYF-5030
Type	Carp	Carp sucker	Silver Redhorse
Mn-54	-0.2±0.9;0.9	0.4±0.6;0.6	0.7±1.0;1.0
Fe-59	-3.1±3.2;3.2	0.9±2.3;2.3	0.1±3.3;3.3
Co-58	0.1±1.1;1.1	9.3±2.8;2.8	0.4±1.1;1.1
Co-60	-1.2±1.4;1.4	0.6±0.8;0.8	0.2±1.4;1.4
Zn-65	0.5±2.4;2.4	0.4±1.7;1.7	0.8±2.7;2.7
Zr-Nb-95	0.1±2.1;2.1	0.4±1.5;1.5	0.3±2.2;2.2
Cs-134	-0.9±1.1;1.1	0.0±0.6;0.6	-0.4±0.9;0.9
Cs-137	0.3±1.0;1.0	0.8±0.6;0.6	0.2±1.0;1.0
Ba-La-140	-1.5±4.2;4.2	1.7±2.3;2.3	-4.2±5.3;5.3
Date Collected	05-23-95	05-23-95	05-23-95
Lab Code	BYF-5031	BYF-5032	BYF-5033
Type	Channel Catfish	Golden Redhorse	Walleye
Mn-54	0.8±0.6;0.6	0.6±1.4;1.4	-0.4±1.4;1.4
Fe-59	-1.0±2.0;2.0	4.4±4.1;4.1	2.4±4.2;4.2
Co-58	-0.2±0.8;0.8	0.0±1.7;1.7	1.4±1.5;1.6
Co-60	0.0±0.7;0.7	-0.7±1.7;1.7	0.4±1.5;1.5
Zn-65	-0.3±1.6;1.6	0.9±2.9;2.9	-1.6±3.0;3.0
Zr-Nb-95	0.3±1.3;1.3	0.4±3.4;3.4	1.6±3.0;3.0
Cs-134	0.2±0.7;0.7	0.2±1.6;1.6	0.7±1.4;1.4
Cs-137	0.0±0.7;0.7	0.9±1.4;1.4	0.7±1.3;1.3
Ba-La-140	0.6±4.0;4.0	2.1±8.9;8.9	-5.1±10.3;10.3



BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

BYSP-31 Byron Discharge

Date Collected	07-06-95	07-06-95	07-06-95
Lab Code	BYF-7337	BYF-7338	BYF-7339
Type	Silver Redhorse	Carp	Channel Catfish
Mn-54	-0.3±0.4;0.4	0.1±0.5;0.5	0.2±0.6;0.6
Fe-59	-0.1±1.5;1.5	-0.3±1.7;1.7	-1.0±1.9;1.9
Co-58	-0.1±0.5;0.5	-0.3±0.6;0.6	1.3±0.8;0.8
Co-60	0.2±0.5;0.5	0.3±0.7;0.7	0.1±0.8;0.8
Zn-65	0.2±0.9;0.9	-1.1±1.3;1.3	1.2±1.4;1.4
Zr-Nb-95	0.1±1.0;1.0	0.0±1.1;1.1	-0.6±1.2;1.2
Cs-134	-0.2±0.5;0.5	0.1±0.5;0.5	0.3±0.7;0.7
Cs-137	0.6±0.4;0.4	0.1±0.5;0.5	0.4±0.7;0.7
Ba-La-140	-2.4±3.5;3.5	-2.0±3.2;3.2	-0.2±2.1;2.1
Date Collected	07-06-95	07-06-95	10-10-95
Lab Code	BYF-7340	BYF-7341	BYF-10665
Type	Quillback	Big Mouth Buffalo	Carp
Mn-54	0.0±0.8;0.8	0.0±0.9;0.9	0.4±0.6;0.6
Fe-59	-1.1±3.3;3.3	-1.3±2.7;2.7	0.6±1.7;1.7
Co-58	0.9±1.1;1.1	0.8±1.0;1.0	0.3±0.9;0.9
Co-60	0.9±0.9;0.9	0.2±0.8;0.8	0.5±0.8;0.8
Zn-65	-0.6±2.1;2.1	0.8±1.7;1.7	-0.2±1.7;1.7
Zr-Nb-95	0.9±1.8;1.8	0.3±1.6;1.6	-0.5±1.1;1.1
Cs-134	0.0±0.7;0.7	-0.1±0.8;0.8	0.1±0.7;0.7
Cs-137	0.3±0.7;0.7	-0.2±0.7;0.7	0.0±0.7;0.7
Ba-La-140	-13.1±11.5;11.6	-5.3±5.8;5.8	-0.2±1.3;1.3

BYRON

Table 4. Fish, Edible Portions  
 Collection: Three (3) times per year  
 Required LLD: 0.13 pCi/g for Cs-134, Co-58,60 and Mn-54; 0.15 pCi/g for Cs-137 and 0.26 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration			
<u>BYSP-31 Byron, Discharge</u>			
Date Collected	10-10-95	10-10-95	10-10-95
Lab Code	BYF-10666,7	BYF-10668	BYF-10669
Type	Golden Redhorse	Quillback	Shorthead Redhorse
Mn-54	0.1±0.7;0.7	-0.1±1.0;1.0	0.1±0.7;0.7
Fe-59	0.5±1.8;1.8	0.0±2.5;2.5	-0.2±1.9;1.9
Co-58	0.1±0.8;0.8	0.5±1.1;1.1	0.1±0.8;0.8
Co-60	0.1±1.0;1.0	-0.1±1.4;1.4	-0.1±0.9;0.9
Zn-65	-1.0±2.0;2.0	-0.2±2.9;2.9	-1.0±1.9;1.9
Zr-Nb-95	-0.5±1.3;1.3	-0.9±1.8;1.8	1.1±1.4;1.4
Cs-134	0.4±0.9;0.9	-0.8±1.1;1.1	0.5±0.7;0.7
Cs-137	0.8±0.7;0.8	0.2±1.0;1.0	0.3±0.8;0.8
Ba-La-140	0.2±1.0;1.0	-0.7±1.8;1.8	-0.1±1.0;1.0
Date Collected	10-10-95	10-10-95	
Lab Code	BYF-10670	BYF-10671	
Type	Walleye	Small Mouth Bass	
Mn-54	-0.5±0.8;0.8	0.4±0.9;0.9	
Fe-59	0.3±2.3;2.3	1.1±1.8;1.8	
Co-58	-0.1±1.0;1.0	-0.5±0.9;0.9	
Co-60	-0.5±1.0;1.0	0.5±1.1;1.1	
Zn-65	-0.8±2.0;2.0	0.1±2.0;2.0	
Zr-Nb-95	0.6±1.7;1.7	0.1±1.5;1.5	
Cs-134	0.7±1.0;1.0	-0.4±0.8;0.8	
Cs-137	-0.1±1.1;1.1	0.1±0.8;0.8	
Ba-La-140	0.2±2.0;2.0	-1.2±1.3;1.3	

BYRON

Table 5. Bottom Sediments  
 Collection: Semiannually  
 Required LLD: 0.15 pCi/g for Cs-134 and 0.18 pCi/g for Cs-137 and  
 0.20 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g dry weight

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Sample Description and Concentration

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BY-12 Oregon Pool of Rock River

Date Collected	6-27-95	10-10-95
Lab Code	BYBS-7007	BYBS-10872
Mn-54	0.3±0.7;0.7	0.0±0.7;0.7
Fe-59	-0.7±2.2;2.2	0.1±2.1;2.1
Co-58	0.7±0.8;0.8	-0.3±0.7;0.7
Co-60	1.5±0.8;0.8	0.2±0.9;0.9
Zn-65	-1.3±1.7;1.7	1.3±1.9;1.9
Zr-Nb-95	0.7±1.4;1.4	-0.8±1.6;1.6
Cs-134	1.2±0.8;0.8	-0.2±0.9;0.9
Cs-137	1.5±0.7;0.8	0.7±0.8;0.8
Ba-La-140	-5.4±3.4;3.4	4.8±3.8;3.8

BY-13 (C) Rock River, Upstream

Date Collected	6-27-95	10-10-95
Lab Code	BYBS-7008	BYBS-10873
Mn-54	0.2±2.1;2.1	1.7±1.3;1.3
Fe-59	-2.4±7.2;7.2	-2.8±4.5;4.6
Co-58	-0.8±2.7;2.7	-4.5±1.7;1.8
Co-60	1.5±2.6;2.6	1.0±1.8;1.8
Zn-65	-10.0±6.0;6.2	-1.6±3.3;3.3
Zr-Nb-95	4.2±4.7;4.7	-0.6±3.2;3.2
Cs-134	2.1±2.2;2.2	3.6±1.7;1.8
Cs-137	13.2±3.9;4.3	17.2±3.6;4.3
Ba-La-140	-30.3±15.2;15.7	-7.7±8.2;8.3

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BYRON

Table 5. Bottom Sediments  
 Collection: Semiannually  
 Required LLD: 0.15 pCi/g for Cs-134 and 0.18 pCi/g for Cs-137 and  
 0.20 pCi/g for all other gamma emitters  
 Units:  $10^{-2}$  pCi/g dry weight

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Sample Description and Concentration

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BY-29(C) Byron, Upstream

Date Collected	6-27-95	10-10-95
Lab Code	BYBS-7009	BYBS-10874
Mn-54	0.2±0.7;0.7	0.2±0.6;0.6
Fe-59	-0.2±2.7;2.7	0.8±1.7;1.7
Co-58	-0.3±0.9;0.9	0.4±0.7;0.7
Co-60	-0.1±1.1;1.1	-0.3±0.8;0.8
Zn-65	-1.1±2.4;2.4	-0.5±1.6;1.6
Zr-Nb-95	-0.2±1.6;1.6	-0.2±1.5;1.5
Cs-134	0.4±0.8;0.8	0.7±0.7;0.7
Cs-137	0.4±0.8;0.8	0.6±0.7;0.7
Ba-La-140	-7.4±3.7;3.9	-1.5±4.4;4.4

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BYRON

Table 6. Vegetation  
 Collection: Annually  
 Required LLD: 0.06 pCi/g for Cs-134 and I-131 and  
 0.08 pCi/g for Cs-137 and all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

BY-19-1 River Road Across from BY-01

Date Collected	08-08-95	08-08-95	08-08-95
Lab Code	BYVE-8559	BYVE-8560	BYVE-8561
Type	Potatoes	Cucumbers	Zucchini
I-131 <sup>a</sup>	-	-	-
Mn-54	-0.3±0.6;0.6	0.0±0.8;0.8	-0.5±0.6;0.6
Fe-59	-0.6±1.5;1.5	-0.6±1.8;1.3	-0.8±1.3;1.3
Co-58	0.2±0.6;0.6	-0.2±0.8;0.8	-0.2±0.6;0.6
Co-60	0.4±0.9;0.9	0.9±1.0;1.0	-0.1±0.7;0.7
Zn-65	0.9±1.6;1.6	-0.4±2.2;2.2	-0.4±1.4;1.4
Zr-Nb-95	-1.3±1.1;1.1	-1.4±4.4;4.4	0.0±1.1;1.1
Cs-134	-0.2±0.7;0.7	-0.8±0.9;0.9	0.1±0.7;0.7
Cs-137	0.3±0.6;0.6	0.3±0.9;0.9	0.4±0.6;0.6
Ba-La-140	-0.1±0.9;0.9	-0.5±1.1;1.1	0.3±0.7;0.8
Date Collected	08-08-95	08-08-95	
Lab Code	BYVE-8562	BYVE-8563	
Type	Squash	Cabbage	
I-131 <sup>a</sup>	-	0.1±1.0;1.0	
Mn-54	0.7±0.7;0.7	0.1±0.7;0.7	
Fe-59	1.3±1.7;1.7	1.2±1.8;1.8	
Co-58	-0.1±0.8;0.8	-0.2±0.9;0.9	
Co-60	-0.4±0.9;0.9	-0.1±1.1;1.1	
Zn-65	0.2±1.7;1.7	-0.2±2.2;2.2	
Zr-Nb-95	-0.8±1.3;1.3	0.4±1.5;1.5	
Cs-134	-0.8±0.9;0.9	-0.3±0.8;0.8	
Cs-137	-0.5±0.8;0.8	-0.3±0.9;0.9	
Ba-La-140	-0.2±0.3;0.3	0.9±0.6;0.6	

<sup>a</sup> Analysis for I-131 required for green leafy vegetation only.

BYRON

Table 6. Vegetation  
 Collection: Annually  
 Required LLD: 0.06 pCi/g for Cs-134 and I-131 and  
 0.08 pCi/g for Cs-137 and all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

BYSP-19-2 German Church Road

Date Collected	08-08-95	08-08-95	08-08-95
Lab Code	BYVE-8564	BYVE-8564,5	BYVE-8566
Type	Rhubarb	Rhubarb	Radishes
I-131 <sup>a</sup>	0.2±1.0;1.0	0.0±0.7;0.7	-
Mn-54	-0.2±0.9;0.9	-0.3±0.6;0.6	0.1±0.6;0.6
Fe-59	-0.3±1.9;1.9	0.0±1.4;1.4	0.9±1.4;1.4
Co-58	-0.3±0.9;0.9	0.0±0.6;0.6	0.1±0.7;0.7
Co-60	0.5±1.2;1.2	0.5±0.9;0.9	0.3±0.8;0.8
Zn-65	0.6±2.5;2.5	0.2±1.7;1.7	-0.1±1.7;1.7
Zr-Nb-95	-1.0±1.6;1.6	0.0±1.2;1.2	-0.8±1.1;1.1
Cs-134	0.9±1.0;1.0	0.6±0.7;0.7	0.2±0.7;0.7
Cs-137	0.4±0.9;0.9	0.2±0.6;0.6	0.3±0.6;0.6
Ba-La-140	-0.2±0.8;0.8	0.0±0.6;0.6	-0.1±0.6;0.6

Date Collected

Lab Code

Type

I-131<sup>a</sup>

Mn-54

Fe-59

Co-58

Co-60

Zn-65

Zr-Nb-95

Cs-134

Cs-137

Ba-La-140

<sup>a</sup> Analysis for I-131 required for green leafy vegetation only.

BYRON

Table 6. Vegetation  
 Collection: Annually  
 Required LLD: 0.06 pCi/g for Cs-134 and I-131 and  
 0.08 pCi/g for Cs-137 and all other gamma emitters  
 Units:  $10^{-2}$  pCi/g wet weight

Sample Description and Concentration

<u>BYSP-19-3 6773 River Road</u>			
Date Collected	08-08-95	08-08-95	08-08-95
Lab Code	BYVE-8567	BYVE-8568	BYVE-8569
Type	Tomatoes	Onions	Squash
I-131 <sup>a</sup>	-	-	-
Mn-54	0.4±0.8;0.8	0.1±1.5;1.5	-0.2±0.7;0.7
Fe-59	0.1±1.5;1.5	0.5±2.9;2.9	0.5±1.4;1.4
Co-58	-0.4±0.8;0.8	-0.4±1.6;1.6	-0.3±0.8;0.8
Co-60	-0.3±1.0;1.0	1.8±1.9;1.9	0.5±1.0;1.0
Zn-65	0.1±1.6;1.6	-0.1±3.4;3.4	0.1±1.5;1.5
Zr-Nb-95	1.1±1.4;1.4	0.4±2.9;2.9	-0.7±1.2;1.2
Cs-134	0.2±0.9;0.9	0.6±1.8;1.8	-0.3±0.8;0.8
Cs-137	-0.1±0.8;0.8	0.2±1.8;1.8	0.6±0.9;0.9
Ba-La-140	-0.1±1.0;1.0	-1.5±2.2;2.2	0.1±1.1;1.1
Date Collected	08-08-95		
Lab Code	BYVE-8570		
Type	Broccoli		
I-131 <sup>a</sup>	-		
Mn-54	0.2±1.2;1.2		
Fe-59	0.9±2.2;2.2		
Co-58	0.1±1.2;1.2		
Co-60	-0.8±1.5;1.5		
Zn-65	1.1±2.5;2.5		
Zr-Nb-95	-0.5±1.8;1.8		
Cs-134	-0.2±1.2;1.2		
Cs-137	-0.3±1.3;1.3		
Ba-La-140	0.1±1.2;1.2		

<sup>a</sup> Analysis for I-131 required for green leafy vegetation only.

BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-09 Woodland Creek

1995 Collection Period	January	February	March
Lab Code	BYSW-0290 <sup>a</sup>	BYSW-1454 <sup>a</sup>	BYSW-2074
Mn-54	0.0±1.6;1.6	0.2±2.8;2.8	0.2±1.1;1.1
Fe-59	-2.2±3.9;3.9	-5.0±5.6;5.6	-2.3±2.2;2.2
Co-58	1.6±1.6;1.6	0.8±2.7;2.7	0.3±1.0;1.0
Co-60	-0.3±1.7;1.7	3.9±3.0;3.0	0.3±1.1;1.1
Zn-65	-1.0±3.1;3.1	-0.3±5.7;5.7	-0.8±2.2;2.2
Zr-Nb-95	0.5±3.1;3.1	-0.7±4.6;4.6	0.8±2.0;2.0
Cs-134	1.3±1.6;1.6	-0.2±3.0;3.0	0.3±1.2;1.2
Cs-137	0.1±1.8;1.8	1.3±3.0;3.0	0.1±1.3;1.3
Ba-La-140	0.2±5.0;5.0	-0.9±4.2;4.2	-0.6±1.4;1.4
1995 Collection Period	April	May	June
Lab Code	BYSW-3919	BYSW-6189	BYSW-7626 <sup>b</sup>
Mn-54	0.0±0.7;0.7	0.5±1.9;1.9	-1.5±2.5;2.5
Fe-59	-1.1±1.6;1.6	-3.2±4.6;4.6	0.8±6.7;6.7
Co-58	0.2±0.8;0.8	1.1±2.2;2.2	1.4±2.7;2.7
Co-60	-0.6±0.8;0.8	1.6±2.4;2.4	1.2±2.6;2.6
Zn-65	0.6±1.6;1.6	-0.2±3.4;3.4	-2.0±6.2;6.2
Zr-Nb-95	1.1±1.5;1.5	1.9±4.1;4.1	0.5±5.3;5.3
Cs-134	0.0±0.8;0.8	0.7±2.3;2.3	-0.9±2.7;2.7
Cs-137	0.5±0.8;0.8	2.4±2.4;2.4	-1.2±3.0;3.0
Ba-La-140	0.9±2.1;2.1	2.5±4.3;4.3	-2.2±8.9;8.9

<sup>a</sup> Results reflect one weekly collection during the month.

<sup>b</sup> Results reflect three weekly collection during the month.



BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-09 Woodland Creek

1995 Collection Period	July	August	September
Lab Code	BYSW-8701	BYSW-9550	BYSW-10171
Mn-54	0.3±2.9;2.9	-0.8±2.1;2.1	-0.9±1.7;1.7
Fe-59	-4.9±6.6;6.7	-3.8±4.3;4.4	-5.1±4.6;4.7
Co-58	-2.7±3.0;3.0	0.2±1.9;1.9	-0.2±2.2;2.2
Co-60	1.4±2.8;2.8	1.5±2.4;2.4	-1.1±2.0;2.0
Zn-65	-1.8±5.3;5.3	-0.4±3.7;3.7	-0.5±3.4;3.4
Zr-Nb-95	-2.5±5.8;5.8	0.6±4.5;4.5	-0.3±3.5;3.5
Cs-134	0.6±2.7;2.7	0.8±8.1;8.1	-0.5±1.8;1.8
Cs-137	-0.8±2.8;2.8	1.1±2.2;2.2	-0.2±1.8;1.8
Ba-La-140	0.7±9.4;9.4	0.1±2.3;2.3	1.5±7.1;7.1
1995 Collection Period	October	November <sup>a</sup>	December <sup>a</sup>
Lab Code	BYSW-11596	BYSW-12440	BYSW-13037
Mn-54	0.3±1.5;1.5	-0.9±2.2;2.2	-2.3±2.1;2.1
Fe-59	-3.6±4.2;4.3	0.9±8.8;8.8	-0.4±5.3;5.3
Co-58	0.8±1.9;1.9	-2.0±3.9;3.9	-0.6±2.4;2.4
Co-60	-0.2±1.6;1.6	-1.4±2.9;2.9	0.6±1.8;1.8
Zn-65	-1.8±3.4;3.4	0.3±7.2;7.2	0.9±3.8;3.8
Zr-Nb-95	-1.1±3.5;3.5	1.7±6.5;6.5	-0.6±4.3;4.3
Cs-134	0.8±2.0;2.0	0.3±2.5;2.5	0.2±2.1;2.1
Cs-137	-1.4±1.7;1.7	0.7±2.8;2.8	-0.7±2.4;2.4
Ba-La-140	0.7±6.3;6.3	8.9±8.9;9.0	2.1±6.7;6.7

<sup>a</sup> Results reflect three weekly collections during the month.

BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-12 Oregon Pool of Rock River, Downstream

1995 Collection Period	January	February	March
Lab Code	BYSW-0685	BYSW-1660	BYSW-2075
Mn-54	1.4±1.9;1.9	0.3±1.2;1.2	-0.2±0.7;0.7
Fe-59	-0.6±4.6;4.6	-0.2±2.6;2.6	-0.1±1.4;1.4
Co-58	2.1±2.1;2.1	0.0±1.3;1.3	-0.3±0.7;0.7
Co-60	0.2±2.4;2.4	-0.3±1.4;1.4	0.2±0.8;0.8
Zn-65	0.2±4.8;4.8	-1.8±2.4;2.4	-0.8±1.3;1.3
Zr-Nb-95	-0.6±4.0;4.0	1.6±2.2;2.2	-0.3±1.3;1.3
Cs-134	1.5±2.6;2.6	1.0±1.4;1.4	0.6±0.8;0.8
Cs-137	0.2±2.5;2.5	0.1±1.2;1.2	0.0±0.8;0.8
Ba-La-140	-0.3±3.2;3.2	1.0±2.3;2.3	0.1±0.9;0.9

1995 Collection Period	April	May	June
Lab Code	BYSW-3920	BYSW-6190	BYSW-7627 <sup>a</sup>
Mn-54	0.0±1.2;1.2	-1.1±2.0;2.0	1.9±1.6;1.7
Fe-59	2.9±2.9;2.9	0.3±4.3;4.3	2.1±4.0;4.0
Co-58	-0.6±1.3;1.3	0.3±2.1;2.1	0.1±1.9;1.9
Co-60	0.2±1.3;1.3	-0.6±1.8;1.8	2.0±1.7;1.7
Zn-65	-1.3±2.8;2.8	-5.5±4.2;4.2	-2.8±3.9;3.9
Zr-Nb-95	0.1±2.2;2.2	-1.5±3.8;3.8	-0.7±3.7;3.7
Cs-134	-0.1±1.4;1.4	1.2±2.1;2.1	-1.1±1.9;1.9
Cs-137	-0.2±1.2;1.2	-1.5±2.3;2.3	0.5±1.9;1.9
Ba-La-140	1.5±2.9;2.9	-1.3±4.4;4.4	-2.9±6.1;6.1

<sup>a</sup> Results reflect three weekly collections during the month.

BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-12 Oregon Pool of Rock River, Downstream

1995 Collection Period	July	August	September
Lab Code	BYSW-8702	BYSW-9551	BYSW-10172
Mn-54	-1.2±1.8;1.8	2.3±2.1;2.1	0.3±1.8;1.8
Fe-59	-1.8±3.9;3.9	-1.7±4.1;4.1	-0.3±4.7;4.7
Co-58	-0.9±1.9;1.9	0.1±2.1;2.1	-0.1±2.1;2.1
Co-60	0.1±2.1;2.1	-0.5±1.7;1.7	0.4±1.5;1.5
Zn-65	0.9±3.7;3.7	-2.7±4.1;4.1	-3.5±3.6;3.6
Zr-Nb-95	-0.6±3.3;3.3	1.5±4.1;4.1	-1.7±4.2;4.2
Cs-134	0.1±2.0;2.0	-0.2±2.2;2.2	0.8±2.0;2.0
Cs-137	1.6±2.0;2.0	0.2±2.0;2.0	1.2±2.0;2.0
Ba-La-140	-7.3±4.8;4.9	2.9±4.8;4.8	-4.0±8.1;8.1

1995 Collection Period	October	November	December <sup>a</sup>
Lab Code	BYSW-11597	BYGW-12441	BYSW-13038
Mn-54	-0.7±2.6;2.6	-0.3±2.7;2.7	0.2±2.0;2.0
Fe-59	-1.5±5.2;5.2	-6.6±7.7;7.7	1.0±5.8;5.8
Co-58	-0.8±2.6;2.6	-2.4±3.5;3.5	0.5±2.8;2.8
Co-60	0.8±2.6;2.6	-1.0±3.1;3.1	0.6±1.8;1.8
Zn-65	-4.2±4.9;4.9	-4.5±7.1;7.2	0.4±4.7;4.7
Zr-Nb-95	2.9±4.9;4.9	1.1±5.7;5.7	-1.7±4.8;4.8
Cs-134	-0.8±2.9;2.9	1.7±2.9;3.0	-0.9±2.1;2.1
Cs-137	-0.7±2.4;2.4	1.1±2.9;2.9	1.5±2.5;2.5
Ba-La-140	-0.8±5.8;5.8	0.8±9.5;9.5	-0.2±11.2;11.2

<sup>a</sup> Results reflect two weekly collections during the month.

BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-13(C) Rock River, Upstream

1995 Collection Period	January	February	March
Lab Code	BYSW-0292 <sup>a</sup>	BYSW-1661 <sup>b</sup>	BYSW-2076
Mn-54	-1.0±1.9;1.9	-1.6±2.9;2.9	-0.6±1.4;1.4
Fe-59	-0.6±4.6;4.6	-1.1±6.3;6.3	2.8±2.9;2.9
Co-58	1.1±2.2;2.2	3.2±3.4;3.4	0.5±1.4;1.4
Co-60	-1.7±2.1;2.1	0.2±2.8;2.8	0.2±1.6;1.6
Zn-65	1.5±4.1;4.1	1.7±5.7;5.7	-3.0±2.9;3.0
Zr-Nb-95	-1.2±3.7;3.7	-1.5±5.7;5.7	0.6±2.6;2.6
Cs-134	-1.1±2.1;2.1	0.1±3.4;3.4	0.3±1.5;1.5
Cs-137	-2.0±2.2;2.2	-1.3±3.1;3.1	0.4±1.5;1.5
Ba-La-140	-4.2±6.2;6.2	8.9±6.9;7.0	0.1±2.0;2.0
1995 Collection Period	April	May	June
Lab Code	BYSW-3921	BYSW-6191	BYSW-7628 <sup>c</sup>
Mn-54	0.3±1.5;1.5	-2.0±2.9;2.9	0.4±2.2;2.2
Fe-59	1.3±3.7;3.7	1.4±5.3;5.3	-0.6±4.2;4.2
Co-58	0.9±1.7;1.7	1.7±3.1;3.1	-0.6±3.0;3.0
Co-60	-0.1±1.6;1.6	-1.8±2.1;2.1	1.6±2.5;2.5
Zn-65	0.7±3.6;3.6	1.0±5.4;5.4	-2.7±5.5;5.5
Zr-Nb-95	1.8±3.0;3.0	0.5±6.4;6.4	-1.1±4.2;4.2
Cs-134	0.2±1.7;1.7	-1.4±2.9;2.9	1.8±2.5;2.5
Cs-137	-0.4±1.6;1.6	0.5±2.8;2.8	-0.9±3.0;3.0
Ba-La-140	-1.8±4.5;4.5	-1.5±6.1;6.1	1.5±6.5;6.5

<sup>a</sup> Results reflect one weekly collection during the month.

<sup>b</sup> Results reflect two weekly collections during the month.

<sup>c</sup> Results reflect three weekly collections during the month.

BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-13 (C) Rock River, Upstream

1995 Collection Period	July	August	September
Lab Code	BYSW-8703	BYSW-9552	BYSW-10173
Mn-54	-0.4±1.9;1.9	0.2±2.7;2.7	0.4±1.0;1.0
Fe-59	-2.6±4.4;4.4	0.6±6.6;6.6	0.7±2.6;2.6
Co-58	-1.0±2.2;2.2	-1.0±3.0;3.0	0.4±1.3;1.3
Co-60	0.7±1.9;1.9	0.3±2.7;2.7	1.2±1.1;1.1
Zn-65	-0.7±3.8;3.8	-3.1±4.3;4.4	1.3±2.1;2.1
Zr-Nb-95	3.1±4.2;4.2	-1.5±5.7;5.7	0.2±2.3;2.3
Cs-134	0.3±2.4;2.4	-0.5±2.8;2.8	0.2±1.2;1.2
Cs-137	1.5±2.0;2.0	1.4±3.0;3.0	0.1±1.2;1.2
Ba-La-140	2.3±7.6;7.6	-4.5±6.3;6.4	-2.4±4.2;4.2
1995 Collection Period	October	November <sup>a</sup>	December <sup>a</sup>
Lab Code	BYSW-11598	BYSW-12442	BYSW-13039
Mn-54	-1.5±2.7;2.7	-0.5±1.9;1.9	0.9±3.2;3.2
Fe-59	-0.5±7.6;7.6	-1.9±4.5;4.5	4.7±5.4;5.4
Co-58	-1.1±3.0;3.0	0.2±2.7;2.7	1.1±3.0;3.0
Co-60	0.2±3.2;3.2	-1.7±2.2;2.2	-1.4±2.9;2.9
Zn-65	-5.3±6.8;6.9	-1.1±4.7;4.7	-3.4±4.8;4.8
Zr-Nb-95	4.7±5.6;5.7	-1.8±4.7;4.7	-2.9±5.5;5.5
Cs-134	-0.1±3.2;3.2	-0.7±2.3;2.3	0.7±3.1;3.1
Cs-137	-2.4±2.9;2.9	1.9±2.4;2.4	-1.2±3.6;3.6
Ba-La-140	-3.1±8.9;8.9	4.3±8.3;8.3	0.8±10.3;10.3

<sup>a</sup> Results reflect three weekly collections during the month.

BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-29(C) Byron, Upstream

1995 Collection Period	January	February	March
Lab Code	BYSW-0293 <sup>a</sup>	NS <sup>b</sup>	BYSW-2077 <sup>c</sup>
Mn-54	0.7±1.5;1.5	-	0.5±1.1;1.1
Fe-59	1.6±3.8;3.8	-	1.4±2.3;2.3
Co-58	-0.8±1.7;1.7	-	-0.2±1.1;1.1
Co-60	0.1±1.7;1.7	-	-0.3±1.3;1.3
Zn-65	1.0±3.3;3.3	-	-0.7±2.4;2.4
Zr-Nb-95	-1.0±3.1;3.1	-	1.6±2.1;2.1
Cs-134	0.6±1.6;1.6	-	0.3±1.3;1.3
Cs-137	1.2±1.6;1.6	-	-0.8±1.3;1.3
Ba-La-140	-3.6±4.6;4.6	-	-1.0±1.4;1.4

1995 Collection Period	April	May	June
Lab Code	BYSW-3922	BYSW-6192	BYSW-7629 <sup>c</sup>
Mn-54	1.9±2.3;2.3	1.1±2.7;2.7	-0.5±1.8;1.8
Fe-59	-0.6±4.8;4.8	-2.2±5.6;5.6	0.6±4.5;4.5
Co-58	-0.2±2.2;2.2	0.3±2.4;2.4	-0.8±2.1;2.1
Co-60	1.3±2.3;2.3	1.1±3.0;3.0	0.8±2.2;2.2
Zn-65	0.4±4.5;4.5	-3.6±5.5;5.5	-0.5±3.4;3.4
Zr-Nb-95	-0.7±4.4;4.4	2.9±5.5;5.5	-1.9±3.7;3.7
Cs-134	0.6±2.3;2.3	0.8±2.5;2.5	0.8±2.1;2.1
Cs-137	1.1±2.1;2.1	1.9±2.9;2.9	-0.5±2.0;2.0
Ba-La-140	-0.6±5.5;5.5	-1.5±7.8;7.8	2.1±7.1;7.1

<sup>a</sup> Results reflect one weekly collection during the month.

<sup>b</sup> NS=No sample; Rock River frozen.

<sup>c</sup> Results reflect three weekly collections during the month.

BYRON

Table 7. Surface Water  
 Collection: Monthly composites of weekly collections  
 Required LLD: 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-29(C) Byron, Upstream

1995 Collection Period	July	August	September
Lab Code	BYSW-8704,5	BYSW-9553	BYSW-10174,5
Mn-54	0.2±1.7;1.7	-0.8±1.6;1.6	1.6±1.8;1.9
Fe-59	-0.2±3.7;3.7	-1.1±3.2;3.2	0.1±4.9;4.9
Co-58	-0.3±1.9;1.9	-4.0±2.3;2.4	0.4±2.2;2.2
Co-60	0.6±1.5;1.5	-0.2±2.0;2.0	-0.1±1.9;1.9
Zn-65	-2.3±3.8;3.8	0.8±3.9;3.9	-0.3±4.1;4.1
Zr-Nb-95	2.9±3.5;3.5	-0.5±3.4;3.4	-0.5±4.2;4.2
Cs-134	-0.8±1.8;1.8	0.1±2.2;2.2	-0.2±2.0;2.0
Cs-137	-0.2±2.0;2.0	0.9±2.1;2.1	-0.1±2.0;2.0
Ba-La-140	3.1±5.6;5.6	0.2±3.4;3.4	-2.0±12.0;12.0

1995 Collection Period	October	November <sup>a</sup>	December
Lab Code	BYSW-11599	BYSW-12443	BYSW-13040 <sup>b</sup>
Mn-54	0.1±2.1;2.1	-0.4±1.7;1.7	-0.4±1.1;1.1
Fe-59	1.8±4.5;4.5	-3.4±6.1;6.1	-1.9±2.9;2.9
Co-58	-0.3±2.2;2.2	-0.2±2.2;2.2	-0.6±1.4;1.4
Co-60	0.4±1.9;1.9	-0.6±2.2;2.2	0.3±1.1;1.1
Zn-65	-3.4±3.8;3.9	0.4±4.1;4.1	-2.5±2.1;2.1
Zr-Nb-95	2.2±4.4;4.4	-2.3±3.8;3.8	-1.2±2.5;2.5
Cs-134	-1.9±2.1;2.1	-0.4±2.3;2.3	0.6±1.2;1.2
Cs-137	3.4±2.2;2.3	1.0±1.9;1.9	0.1±1.2;1.2
Ba-La-140	-5.4±8.7;8.7	-6.1±8.5;8.6	5.4±6.5;6.6

<sup>a</sup> Results reflect three weekly collections during the month.

<sup>b</sup> Results reflect two weekly collections during the month.

BYRON

Table 7. Surface Water  
 Collection: Quarterly composites of weekly collections  
 Required LLD: 200 pCi/L for H-3  
 Units: pCi/L

QUARTERLY COMPOSITES		
1995 Composite Period	Lab Code	Concentration (pCi/L) Tritium
<u>BY-09 Woodland Creek</u>		
1st Quarter	BYSW-2068	110±91;92
2nd Quarter	-7390	89±84;85
3rd Quarter	-9951	114±80;81
4th Quarter	-12739	77±80;81
<u>BY-12 Oregon Pool of Rock River, Downstream</u>		
1st Quarter	BYSW-2069	469±107;124
2nd Quarter	-7391	168±88;90
3rd Quarter	-9952 <sup>a</sup>	1,227±119;205
4th Quarter	-12740	1,417±127;231
<u>BY-13(C) Rock River, Upstream</u>		
1st Quarter	BYSW-2070	-25±85;85
2nd Quarter	-7392	118±85;87
3rd Quarter	-9953	39±76;77
4th Quarter	-12741	25±76;76
<u>BY-29(C) Byron, Upstream</u>		
1st Quarter	BYSW-2071	113±91;92
2nd Quarter	-7393	98±84;85
3rd Quarter	-9954	5±78;78
4th Quarter	-12742	-38±73;73

<sup>a</sup> Sample was reanalyzed; result of reanalysis is 1,201±119;202 pCi/L.



BYRON

Table 8. Well Water  
 Collection: Monthly  
 Required LLD: 4.0 pCi/L for Gross Beta and 200 pCi/L for H-3;  
 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-14 CECo Offsite Well

Collection Date	01-03-95	02-07-95	03-07-95
Lab Code	BYWW-0053	BYWW-0847	BYWW-1658
Gross Beta	-0.2±0.9;0.9	0.5±1.1;1.1	1.0±1.5;1.5
H-3	153±85;88	91±84;85	62±84;84
Mn-54	2.0±1.9;1.9	-0.1±1.3;1.3	3.3±1.7;1.7
Fe-59	1.0±1.0;1.0	-0.1±2.4;2.4	-1.5±3.0;3.0
Co-58	-0.4±2.0;2.0	-0.7±1.2;1.2	-1.5±1.6;1.6
Co-60	0.1±0.2;0.2	1.4±1.3;1.3	0.7±1.8;1.8
Zn-65	-2.2±4.5;4.5	-9.8±3.1;3.1	2.2±3.5;3.5
Zr-Nb-95	-3.9±2.6;2.6	-0.1±2.1;2.1	-0.9±2.7;2.7
Cs-134	-0.6±21.2;21.2	1.0±1.4;1.4	-1.2±1.8;1.8
Cs-137	-1.7±2.2;2.2	-0.9±1.5;1.5	0.0±1.8;1.8
Ba-La-140	4.0±8.6;8.6	-0.1±1.6;1.6	-0.4±2.1;2.1
Collection Date	04-04-95	05-02-95	06-06-95
Lab Code	BYWW-2395	BYWW-3571	BYWW-5982
Gross Beta	0.2±0.9;0.9	0.5±1.1;1.1	-0.2±1.3;1.3
H-3	72±87;88	135±87;89	59±74;74
Mn-54	-0.2±2.8;2.8	0.5±1.4;1.4	0.3±1.4;1.4
Fe-59	3.3±5.3;5.4	1.3±3.2;3.2	-1.2±3.6;3.6
Co-58	1.5±2.8;2.8	0.5±1.4;1.4	0.9±1.5;1.5
Co-60	-1.1±2.7;2.7	-0.2±1.4;1.4	-0.2±1.6;1.6
Zn-65	-3.3±5.4;5.4	-1.3±3.1;3.1	0.7±3.1;3.1
Zr-Nb-95	-1.0±3.8;3.8	2.7±2.8;2.8	2.2±2.8;2.8
Cs-134	-0.5±3.1;3.1	0.6±1.6;1.6	0.0±1.6;1.6
Cs-137	-1.7±2.6;2.6	0.6±1.5;1.5	0.1±1.6;1.6
Ba-La-140	-0.7±5.3;5.3	-1.4±2.7;2.7	-1.7±4.2;4.2

BYRON

Table 8. Well Water  
 Collection: Monthly  
 Required LLD: 4.0 pCi/L for Gross Beta and 200 pCi/L for H-3;  
 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-14 CECo Offsite Well

Collection Date	07-04-95	08-01-95	09-05-95
Lab Code	BYWW-7269	BYWW-8303	BYWW-9396,7
Gross Beta	0.9±1.2;1.2	0.2±1.2;1.3	1.2±0.9;1.0
H-3	-5±100;100	90±81;82	32±55;55
Mn-54	-1.2±1.1;1.1	-0.8±1.8;1.8	-0.8±2.0;2.0
Fe-59	0.3±2.3;2.3	0.8±6.3;6.3	2.4±3.5;3.6
Co-58	-0.4±1.1;1.1	-5.5±3.0;3.1	-1.3±1.8;1.8
Co-60	0.6±1.2;1.2	1.0±2.9;2.9	1.4±1.9;1.9
Zn-65	-0.8±2.3;2.3	-2.4±5.4;5.5	1.1±3.8;3.8
Zr-Nb-95	-0.5±2.1;2.1	-5.5±4.9;5.0	-1.5±3.1;3.1
Cs-134	0.9±1.3;1.3	2.5±3.0;3.0	0.6±1.9;1.9
Cs-137	2.1±1.3;1.3	0.8±2.6;2.6	1.7±1.9;1.9
Ba-La-140	-1.7±1.8;1.8	-10.2±10.4;10.5	-1.3±2.8;2.8
Collection Date	10-03-95	11-07-95	12-05-95
Lab Code	BYWW-10336	BYWW-11644	BYWW-12298,9
Gross Beta	1.5±1.4;1.4	0.9±1.3;1.3	0.8±1.0;1.0
H-3	23±77;77	64±77;77	71±56;57
Mn-54	-1.3±1.9;1.9	1.5±1.9;1.9	-0.4±1.7;1.7
Fe-59	1.9±5.1;5.1	-2.0±5.6;5.6	-3.5±4.1;4.2
Co-58	-0.6±2.4;2.4	-0.2±2.0;2.0	0.4±1.9;1.9
Co-60	0.7±2.0;2.0	0.6±1.8;1.8	0.3±2.4;2.4
Zn-65	3.1±3.6;3.6	-6.2±4.4;4.5	-0.4±3.4;3.4
Zr-Nb-95	0.4±4.1;4.1	0.2±5.0;5.0	1.7±3.6;3.6
Cs-134	0.6±1.9;1.9	1.0±2.4;2.4	1.7±2.0;2.1
Cs-137	-0.4±2.0;2.0	-0.7±2.2;2.2	0.8±1.7;1.7
Ba-La-140	1.0±9.1;9.1	-2.7±10.1;10.1	4.6±6.0;6.1

BYRON

Table 8. Well Water  
 Collection: Monthly  
 Required LLD: 4.0 pCi/L for Gross Beta and 200 pCi/L for H-3;  
 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-18 McCoy Farmstead Well

Collection Date	01-03-95	02-07-95	03-07-95
Lab Code	BYWW-0054	BYWW-0848	BYWW-1659
Gross Beta	0.2±1.3;2.5	1.4±1.1;1.2	0.8±1.5;1.5
H-3	50±80;81	64±83;83	92±85;86
Mn-54	0.5±2.0;2.0	-0.7±2.1;2.1	0.6±1.7;1.7
Fe-59	3.1±6.0;6.0	-0.2±4.0;4.0	0.9±3.1;3.1
Co-58	0.7±2.1;2.1	-0.1±2.3;2.3	0.7±1.6;1.6
Co-60	1.2±2.6;2.6	-0.2±2.2;2.2	2.4±1.7;1.7
Zn-65	-0.1±4.4;4.4	-1.2±4.7;4.7	1.0±3.5;3.5
Zr-Nb-95	-5.5±13.2;13.2	-0.4±3.4;3.4	0.7±2.8;2.8
Cs-134	-1.9±3.2;3.2	-0.8±2.2;2.2	1.2±1.9;1.9
Cs-137	1.1±2.2;2.2	-1.1±2.2;2.2	1.8±1.7;1.7
Ba-La-140	-1.6±2.0;2.0	0.6±3.0;3.0	-4.4±2.8;2.9
Collection Date	04-04-95	05-02-95	06-06-95
Lab Code	BYWW-2396	BYWW-3572	BYWW-5983
Gross Beta	0.8±0.9;0.9	1.1±1.1;1.1	-0.1±1.3;1.3
H-3	58±87;87	88±85;86	136±77;79
Mn-54	0.4±1.1;1.1	1.0±3.1;3.1	1.4±1.7;1.7
Fe-59	0.3±2.2;2.2	-3.9±7.9;7.9	0.7±3.0;3.0
Co-58	0.0±1.1;1.1	1.8±3.7;3.7	0.1±2.1;2.1
Co-60	0.8±1.3;1.3	1.0±3.2;3.2	1.6±1.9;1.9
Zn-65	-2.9±2.5;2.5	0.4±4.8;4.8	-0.8±3.8;3.8
Zr-Nb-95	-0.3±2.0;2.0	-0.5±6.2;6.2	-1.3±3.0;3.0
Cs-134	0.7±1.2;1.2	0.5±3.6;3.6	0.1±2.0;2.0
Cs-137	0.0±1.2;1.2	-1.0±3.5;3.5	2.0±1.9;1.9
Ba-La-140	-0.6±1.7;1.7	2.3±7.2;7.2	-0.1±4.3;4.3

BYRON

Table 8. Well Water  
 Collection: Monthly  
 Required LLD: 4.0 pCi/L for Gross Beta and 200 pCi/L for H-3;  
 15 pCi/L for Cs-134, Co-58,60, Mn-54, and Ba-La-140;  
 18 pCi/L for Cs-137; 30.0 pCi/L for all other gamma emitters  
 Units: pCi/L

Sample Description and Concentration

BY-18 McCoy Farmstead Well

Collection Date	07-04-95	08-01-95	09-05-95
Lab Code	BYWW-7270	BYWW-8304	BYWW-9398 <sup>a</sup>
Gross Beta	0.7±1.3;1.3	0.5±1.3;1.3	2.2±1.8;1.8
H-3	13±81;81	-15±76;76	38±78;78
Mn-54	-0.6±2.0;2.0	-3.3±2.9;3.0	0.2±2.6;2.6
Fe-59	-1.0±4.3;4.3	9.5±5.5;5.7	-0.9±5.0;5.0
Co-58	-1.1±2.0;2.0	-0.6±3.0;3.0	-2.1±2.2;2.2
Co-60	1.0±2.1;2.1	2.9±2.5;2.5	1.9±2.7;2.7
Zn-65	-1.1±4.3;4.3	-0.2±5.5;5.5	1.5±5.1;5.1
Zr-Nb-95	-0.4±3.6;3.6	5.7±4.8;4.8	-1.3±4.8;4.8
Cs-134	0.5±2.3;2.3	-2.7±2.7;2.8	2.0±2.8;2.8
Cs-137	1.5±2.2;2.2	0.7±2.9;2.9	2.4±2.8;2.8
Ba-La-140	0.9±3.3;3.3	-3.2±9.6;9.6	0.9±4.3;4.3
Collection Date	10-03-95	11-07-95	12-05-95
Lab Code	BYWW-10337	BYWW-11645	BYWW-12300
Gross Beta	1.0±1.4;1.4	2.1±1.4;1.4	0.2±1.3;1.3
H-3	21±77;77	55±77;77	55±79;79
Mn-54	-0.9±2.1;2.1	1.3±2.7;2.7	-0.5±3.4;3.4
Fe-59	0.4±5.2;5.2	-2.3±4.5;4.5	-0.9±7.7;7.7
Co-58	0.4±2.0;2.0	-1.4±3.1;3.1	0.2±3.3;3.3
Co-60	-0.1±2.1;2.1	3.1±2.1;2.1	-1.5±3.6;3.6
Zn-65	-2.7±4.0;4.0	-2.8±4.7;4.7	-6.9±6.0;6.1
Zr-Nb-95	-1.0±4.3;4.3	0.2±5.5;5.5	-0.6±6.6;6.6
Cs-134	-0.1±1.8;1.8	0.2±2.6;2.6	1.3±3.8;3.8
Cs-137	1.0±1.8;1.8	-1.6±3.1;3.1	-1.8±3.7;3.7
Ba-La-140	1.7±8.2;8.2	-3.3±17.5;17.5	-6.8±10.5;10.5

<sup>a</sup> Sample was reanalyzed for gross beta; result of reanalysis is 2.4±1.5;1.5 pCi/L.

BYRON

MILCH ANIMALS, NEAREST LIVESTOCK, AND  
NEAREST RESIDENCES CENSUSES

BYRON

MILCH ANIMALS CENSUS 1995

A. There are six dairy farms within a 6.5 mile radius of Byron Station.

B. Sampling Locations

- BY-20 K. Reeverts Dairy Farm  
1.9 miles @ 37°  
  
Number of cows - 30  
  
Diet consists of: no pasture  
100% feed
- BY-26 Glen Hazzard's Dairy  
11.8 miles @ 355°  
  
Number of cows - 26  
  
Diet consists of: 10% pasture  
90% feed
- BY-27 Kenneth Druien Dairy Farm  
5.2 miles @ 240°  
  
Number of cows - 51  
  
Diet consists of: 10% pasture  
90% feed
- BYSP-28 Duane Camling Dairy Farm  
3.0 miles @ 305°  
  
Number of cows - 26  
  
Diet consists of: 50% pasture  
50% feed
- BY-30 Don Roos Dairy  
5.1 miles @ 125°  
  
Number of cows - 35  
  
Diet consists of: no pasture  
100% feed
-

BYRON

MILCH ANIMALS CENSUS 1995

B. Sampling Locations (continued)

Shamrock View Farm<sup>a</sup>  
4.8 miles @ 180°

Number of cows - 60

Diet consists of: 25% pasture  
75% feed

Ashelford<sup>a</sup>  
2.5 miles @ 272°

Number of cows - 20

Diet consists of: 10% pasture  
90% feed

Dairy Farm<sup>a</sup>  
5.8 miles @ 308°

Number of cows - 48

Diet consists of: 0% pasture  
100% feed

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<sup>a</sup> Non-participating.

Census conducted by W. Mueller on August 21, 1995.

# BYRON

## NEAREST LIVESTOCK CENSUS, 1995

Nearest livestock of the Byron Station within a 6.5 mile radius.

<u>Sector</u>	<u>Direction</u>	<u>Distance</u>
A	N	3.0 miles
B	NNE	1.5 miles
C	NE	4.7 miles
D	ENE	3.0 miles
E	E	2.8 miles
F	ESE	1.5 miles
G	SE	3.5 miles
H	SSE	3.2 miles
J	S	0.6 miles
K	SSW	2.2 miles
L	SW	3.2 miles
M	WSW	1.7 miles
N	W	2.5 miles
P	WNW	3.5 miles
Q	NW	3.8 miles
R	NNW	1.4 miles

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Census conducted by W. Mueller on August 21, 1995.



BYRON

NEAREST RESIDENCE CENSUS, 1995

Nearest resident of the Byron Station within a 6.5 mile radius.

<u>Sector</u>	<u>Direction</u>	<u>Distance</u>
A	N	2.7 miles
B	NNE	1.0 miles
C	NE	1.2 miles
D	ENE	1.3 miles
E	E	1.3 miles
F	ESE	1.5 miles
G	SE	0.8 miles
H	SSE	0.6 miles
J	S	0.5 miles
K	SSW	0.6 miles
L	SW	0.8 miles
M	WSW	1.7 miles
N	W	1.8 miles
P	WNW	0.8 miles
Q	NW	1.0 miles
R	NNW	1.3 miles

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Census conducted by W. Mueller on August 21, 1995.

BYRON

4.0 TLD DATA\*

\*TLD Data provided by Commonwealth Edison Company.

Commonwealth Edison Company

Date: 24-JAN-96

Environmental Site Report for Byron

Gamma Radiation Measured in mR by TLDs

Site	Description	Quarter 1 1995	Quarter 2 1995	Quarter 3 1995	Quarter 4 1995
<b>I. INDICATOR LOCATIONS</b>					
<b>a. Air Samplers (2 TLDs per location)</b>					
BY-01	BYRON	17.7	12.8 #	12.9	13.1
BY-03	NEARSITE - EAST	13.6	15.2	15.6	15.2
BY-04	PAYNES PT.	14.3	16.5	16.8	16.4
BY-05	NEARSITE - SOUTH	15.1	17.9	18.4	17.6
BY-06	OREGON	16.7	13.2	14.1	13.4
BY-21	BYRON NEARSITE N	16.5	11.9	11.6	12.9
BY-22	BYRON NEARSITE ESE	15.0	16.9	17.1	17.1
BY-23	BYRON NEARSITE S	15.8	15.8	16.4	16.2
BY-24	BYRON NEARSITE SW	15.7	15.2	14.7	14.9
Air Sampler Mean ± S.D.		15.6 ± 1.3	15.0 ± 2.0	15.3 ± 2.2	15.2 ± 1.8
Annual Air Sampler Mean ± S.D.					15.3 ± 1.8
<b>b. Inner Ring (100 Series)</b>					
BY-102-1		14.5	17.6	18.3	18.3
BY-102-2		14.3	18.1	18.4	18.1
BY-103-1		16.7	16.9	16.9	17.0
BY-103-2		16.3	17.0	17.1	16.7
BY-104-1		16.1	17.3	17.3	17.5
BY-104-2		16.0	17.9	18.1	17.8
BY-105-1		16.5	18.2	19.1	18.7
BY-105-2		16.5	18.5	19.3	18.5
BY-106-1		16.9	17.5	17.4	17.3
BY-106-2		17.2	16.9	17.5	17.6
BY-107-1		16.6	18.4	18.5	18.1
BY-107-2		16.1	18.7	18.0	18.3
BY-108-1		15.8	17.0	17.2	17.0
BY-108-2		15.0	16.0	15.3	16.4
BY-109-1		15.0	16.3	16.0	16.4
BY-109-2		15.8	15.9	15.9	16.2
BY-110-1		15.6	15.4	14.9	16.6
BY-110-2		15.5	15.8	15.8	16.6
BY-111-3		16.8	19.2	18.1	16.6
BY-111-4		16.9	17.4	16.4	16.7
BY-112-3		17.3	15.7	16.0	16.3
BY-112-4		16.5	17.1	16.5	18.0
BY-113-1		17.0	16.0	16.1	15.8
BY-113-2		16.1	14.3	14.2	15.9
BY-114-1		17.0	13.5	14.3	16.4
BY-114-2		15.9	15.9	16.1	15.6
BY-115-1		11.8	15.1	17.4	16.2
BY-115-2		12.0	14.6	15.0	14.7
BY-116-1		14.5	15.0	15.0	14.5
BY-116-2		16.2	16.4	14.7	15.4
Inner Ring Mean ± S.D.		15.8 ± 1.3	16.7 ± 1.4	16.7 ± 1.4	16.8 ± 1.1
Annual Inner Ring Mean ± S.D.					16.5 ± 1.4
<b>c. Outer Ring (200 Series)</b>					
BY-201-3		16.7	16.7	16.4	16.5
BY-201-4		15.0	16.4	17.4	16.0
BY-202-1		15.4	16.1	16.0	15.8
BY-202-2		13.9	18.1	18.7	18.3
BY-203-1		13.8	12.6	11.7	12.6
BY-203-2		14.6	15.1	15.7	15.9
BY-204-1		15.7	14.5	15.1	15.0
BY-204-2		14.9	17.3	18.3	18.1
BY-205-1		14.5	17.5	18.1	20.0
BY-205-2		14.6	15.4	16.2	16.2
BY-206-1		15.8	17.8	18.2	18.0
BY-206-2		17.5	17.5	17.8 #	18.5
BY-207-1		12.8	17.7	19.8	18.8
BY-207-2		15.5	17.5	17.2	17.9
BY-208-1		14.9	18.2	19.0	18.8
BY-208-2		16.8	17.6	17.7	17.7
BY-209-1		15.8	17.2	18.2	17.2
BY-209-4		15.5	17.5	17.8	17.7
BY-210-3		17.6	16.8	17.1	16.4
BY-210-4		17.9	16.0	16.8	16.0
BY-211-1		17.2	16.6	17.3	17.1
BY-211-4		17.2	16.5	17.0	16.2
BY-212-1		16.4	17.3	18.6	17.8
BY-212-4		15.9	17.8	21.1	18.5
BY-213-1		17.7	17.4	18.2	17.6
BY-213-4		17.7	17.6	17.7	27.3
BY-214-1		17.9	16.4	17.0	16.6
BY-214-4		16.2 #	16.3	16.4	16.8
BY-215-1		16.8	17.7	18.9	18.8
BY-215-4		17.8	17.9	18.9	18.3
BY-216-1		15.5	18.6	18.8	18.6
BY-216-2		16.0	17.1	17.6	17.2
Outer Ring Mean ± S.D.		16.0 ± 1.3	16.9 ± 1.2	17.5 ± 1.6	17.6 ± 2.3
Annual Outer Ring Mean ± S.D.					17.0 ± 1.8
INDICATOR LOCATION MEAN ± S.D.		15.9 ± 1.3	16.6 ± 1.5	16.9 ± 1.8	17.0 ± 1.9
Annual INDICATOR LOCATION MEAN ± S.D.					16.6 ± 1.7

Date: 24-JAN-96

## Environmental Site Report for Byron

Site	Description	Quarter 1 1995	Quarter 2 1995	Quarter 3 1995	Quarter 4 1995
II. CONTROL LOCATIONS (2 TLDs per location)					
BY-02	STILLMAN VALLEY	12.9	13.9	13.8	14.4
BY-07	MT. MORRIS	13.2	15.4	14.9	15.9
BY-08	LEAF RIVER	14.5	14.5	14.8	14.9
	CONTROL LOCATION Mean $\pm$ S.D.	13.5 $\pm$ 0.9	14.6 $\pm$ 0.7	14.5 $\pm$ 0.6	15.1 $\pm$ 0.8
	Annual CONTROL LOCATION Mean $\pm$ S.D.				14.4 $\pm$ 0.9
III. SPECIAL INTEREST LOCATIONS (1 TLD per location)					
BY-302-1	PARKING LOT	16.0	15.5	15.8	15.9
BY-314-1	RESTRICTED AREA FENCE/WEST OF DAW	16.8	14.8	14.5	15.9
	SPECIAL INTEREST LOCATION Mean $\pm$ S.D.	16.4 $\pm$ 0.6	15.2 $\pm$ 0.5	15.2 $\pm$ 0.9	15.9 $\pm$ 0.0
	Annual SPECIAL INTEREST LOCATION Mean $\pm$ S.D.				15.7 $\pm$ 0.7

COMMENTS: "\*" Indicates lost dosimeter. A portion of the Dose was estimated.  
 "e" Indicates edited dosimeter. The original Dose was replaced with an estimated value.

Commonwealth Edison Company

Date: 24-JAN-96

Environmental Site Report for Byron

Gamma Radiation Measured in mR by TLDs

Site	Description	Quarter 1 1995	Quarter 2 1995	Quarter 3 1995	Quarter 4 1995
<b>I. INDICATOR LOCATIONS</b>					
<b>a. Air Samplers (2 TLDs per location)</b>					
BY-01	BYRON	17.7	12.8 #	12.9	13.1
BY-03	NEARSITE - EAST	13.6	15.2	15.6	15.2
BY-04	PAYNES PT.	14.3	16.5	16.2	16.4
BY-05	NEARSITE - SOUTH	15.1	17.9	18.4	17.6
BY-06	OREGON	16.7	13.2	14.1	13.4
BY-21	BYRON NEARSITE N	16.3	11.9	11.6	12.9
BY-22	BYRON NEARSITE ESE	15.0	16.9	17.1	17.1
BY-23	BYRON NEARSITE S	15.8	15.8	16.4	16.2
BY-24	BYRON NEARSITE SW	15.7	15.2	14.7	14.9
Air Sampler Mean ± S.D.		15.6 ± 1.3	15.0 ± 2.0	15.3 ± 2.2	15.2 ± 1.8
Annual Air Sampler Mean ± S.D.					15.3 ± 1.8
<b>b. Inner Ring (100 Series)</b>					
BY-102-1		14.5	17.6	18.3	18.3
BY-102-2		14.3	18.1	18.4	18.1
BY-103-1		16.7	16.9	16.9	17.0
BY-103-2		16.3	17.0	17.1	16.7
BY-104-1		16.1	17.3	17.3	17.5
BY-104-2		16.0	17.9	18.1	17.3
BY-105-1		16.5	18.2	19.1	18.7
BY-105-2		16.5	18.5	19.3	18.5
BY-106-1		16.9	17.5	17.4	17.3
BY-106-2		17.2	16.9	17.5	17.6
BY-107-1		16.6	18.4	18.5	18.1
BY-107-2		16.1	18.7	18.0	18.3
BY-108-1		15.8	17.0	17.2	17.0
BY-108-2		15.0	16.0	15.3	16.4
BY-109-1		15.0	16.3	16.0	16.4
BY-109-2		15.8	15.9	15.9	16.2
BY-110-1		15.6	15.4	14.9	16.6
BY-110-2		15.3	15.8	15.8	16.6
BY-111-3		16.8	19.2	18.1	16.6
BY-111-4		16.9	17.4	16.4	16.7
BY-112-3		17.3	15.7	16.0	16.3
BY-112-4		16.5	17.1	16.5	18.0
BY-113-1		17.0	16.0	16.1	15.8
BY-113-2		16.1	14.3	14.2	15.9
BY-114-1		17.0	13.5	14.3	16.4
BY-114-2		15.9	15.9	16.1	15.6
BY-115-1		11.8	15.1	17.4	16.2
BY-115-2		12.0	14.6	15.0	14.7
BY-116-1		14.5	15.0	15.0	14.5
BY-116-2		16.2	16.4	14.7	15.4
Inner Ring Mean ± S.D.		15.8 ± 1.3	16.7 ± 1.4	16.7 ± 1.4	16.8 ± 1.1
Annual Inner Ring Mean ± S.D.					16.5 ± 1.4
<b>c. Outer Ring (200 Series)</b>					
BY-201-3		16.7	16.7	16.4	16.5
BY-201-4		15.0	16.4	17.4	16.0
BY-202-1		15.4	16.1	16.0	15.8
BY-202-2		13.9	18.1	18.7	18.3
BY-203-1		13.8	12.6	11.7	12.6
BY-203-2		14.6	15.1	15.7	15.9
BY-204-1		15.7	14.5	15.1	15.0
BY-204-2		14.9	17.3	18.3	18.1
BY-205-1		14.5	17.5	18.1	20.0
BY-205-2		14.6	15.4	16.2	16.2
BY-206-1		15.8	17.8	18.2	18.0
BY-206-2		17.5	17.5	17.8	18.5
BY-207-1		12.8	17.7	19.8	18.8
BY-207-2		15.5	17.5	17.2	17.9
BY-208-1		14.9	18.2	19.0	18.8
BY-208-2		16.8	17.6	17.7	17.7
BY-209-1		15.8	17.2	18.2	17.2
BY-209-4		15.5	17.5	17.8	17.7
BY-210-3		17.6	16.8	17.1	16.4
BY-210-4		17.9	16.0	16.8	16.0
BY-211-1		17.2	16.6	17.3	17.1
BY-211-4		17.2	16.5	17.0	16.2
BY-212-1		16.4	17.3	18.6	17.8
BY-212-4		15.9	17.8	21.1	18.5
BY-213-1		17.7	17.4	18.2	17.6
BY-213-4		17.7	17.6	17.7	27.3
BY-214-1		17.9	16.4	17.0	16.8
BY-214-4		16.2 #	16.3	16.4	16.8
BY-215-1		16.8	17.7	18.9	18.8
BY-215-4		17.8	17.9	18.9	18.3
BY-216-1		15.5	18.6	18.8	18.6
BY-216-2		16.0	17.1	17.6	17.2
Outer Ring Mean ± S.D.		16.0 ± 1.3	16.9 ± 1.2	17.5 ± 1.6	17.6 ± 2.3
Annual Outer Ring Mean ± S.D.					17.0 ± 1.8
INDICATOR LOCATION MEAN ± S.D.		15.9 ± 1.3	16.6 ± 1.5	16.9 ± 1.8	17.0 ± 1.9
Annual INDICATOR LOCATION MEAN ± S.D.					16.6 ± 1.7

Date: 24-JAN-96

Environmental Site Report for Byron

Site	Description	Quarter 1 1995	Quarter 2 1995	Quarter 3 1995	Quarter 4 1995
II. CONTROL LOCATIONS (2 TLDs per location)					
BY-02	STILLMAN VALLEY	12.9	13.9	13.8	14.4
BY-07	MT. MORRIS	13.2	15.4	14.9	15.9
BY-08	LEAF RIVER	14.5	14.5	14.8	14.9
	CONTROL LOCATION Mean $\pm$ S.D.	13.5 $\pm$ 0.9	14.6 $\pm$ 0.7	14.5 $\pm$ 0.6	15.1 $\pm$ 0.6
	Annual CONTROL LOCATION Mean $\pm$ S.D.				14.4 $\pm$ 0.9
III. SPECIAL INTEREST LOCATIONS (1 TLD per location)					
BY-302-1	PARKING LOT	16.0	15.5	15.8	15.9
BY-314-1	RESTRICTED AREA FENCE/WEST OF DAW	16.8	14.8	14.5	15.9
	SPECIAL INTEREST LOCATION Mean $\pm$ S.D.	16.4 $\pm$ 0.6	15.2 $\pm$ 0.5	15.2 $\pm$ 0.9	15.9 $\pm$ 0.0
	Annual SPECIAL INTEREST LOCATION Mean $\pm$ S.D.				15.7 $\pm$ 0.7

COMMENTS: "a" Indicates lost dosimeter. A portion of the Dose was estimated.  
 "b" Indicates edited dosimeter. The original Dose was replaced with an estimated value.

BYRON

5.0 GRAPHS OF DATA TRENDS

## Air Particulates - Gross Beta

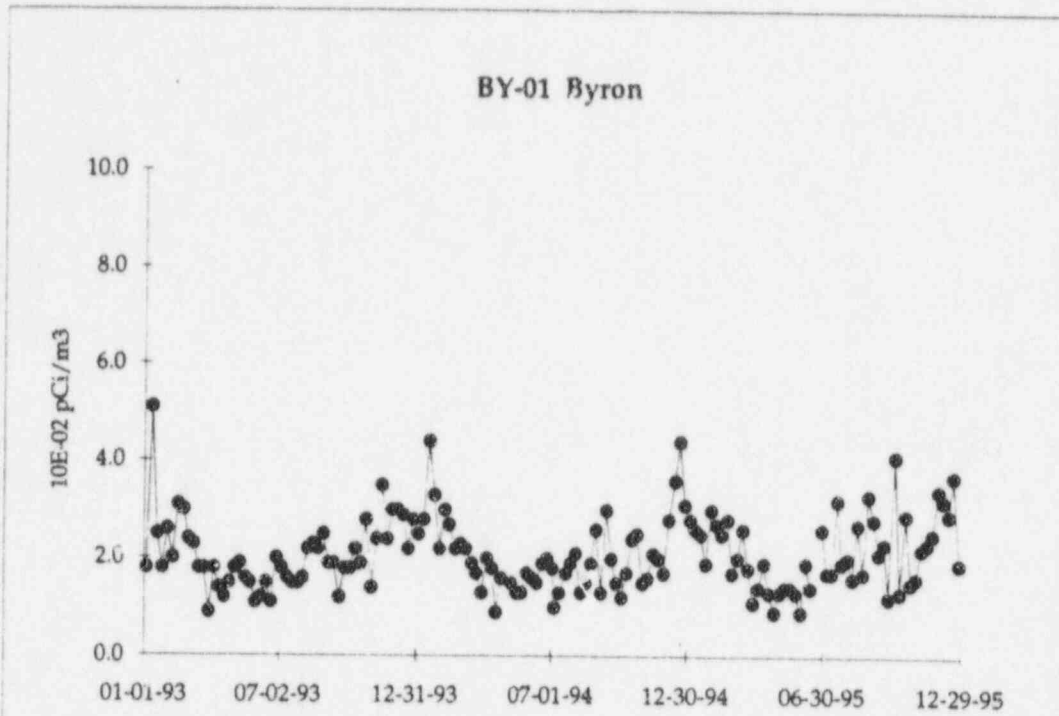


Figure 1. Continuous collection with weekly exchange of particulate filter.

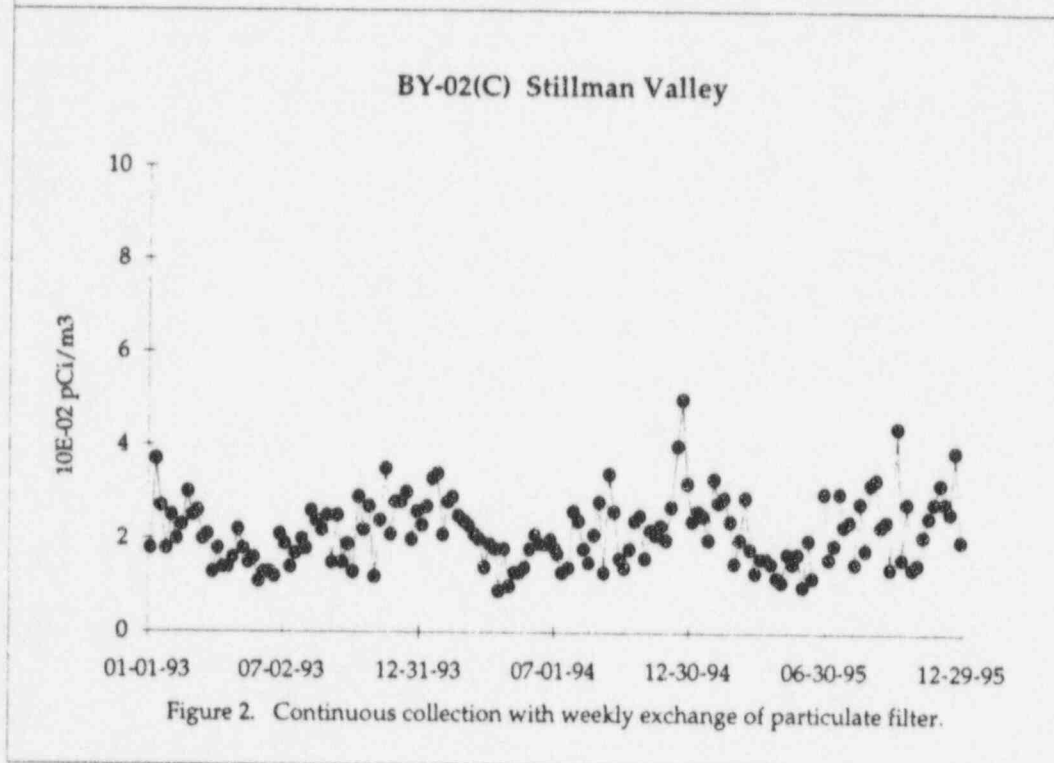


Figure 2. Continuous collection with weekly exchange of particulate filter.



## Air Particulates - Gross Beta

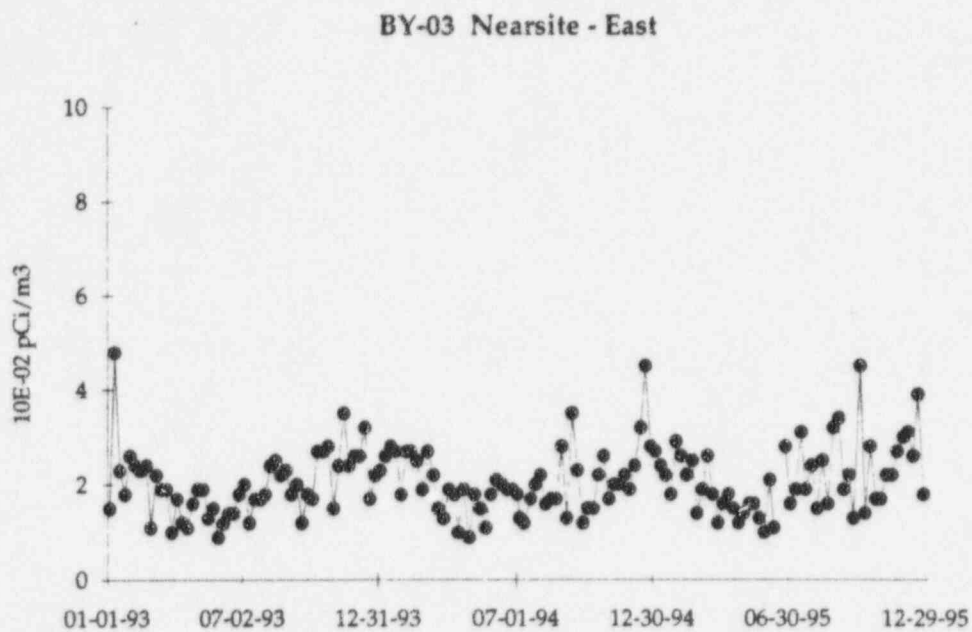


Figure 3. Continuous collection with weekly exchange of particulate filter.

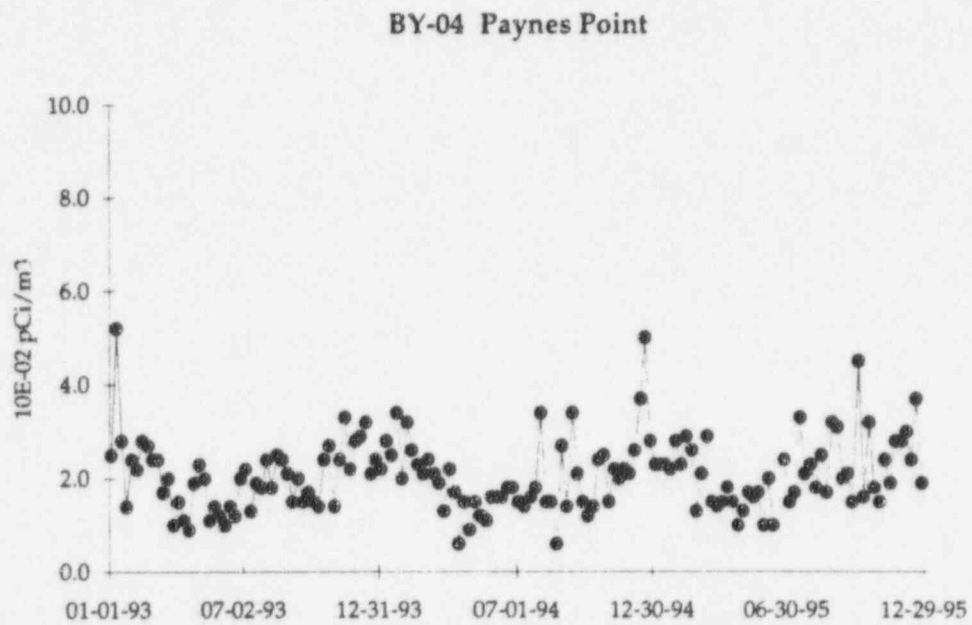
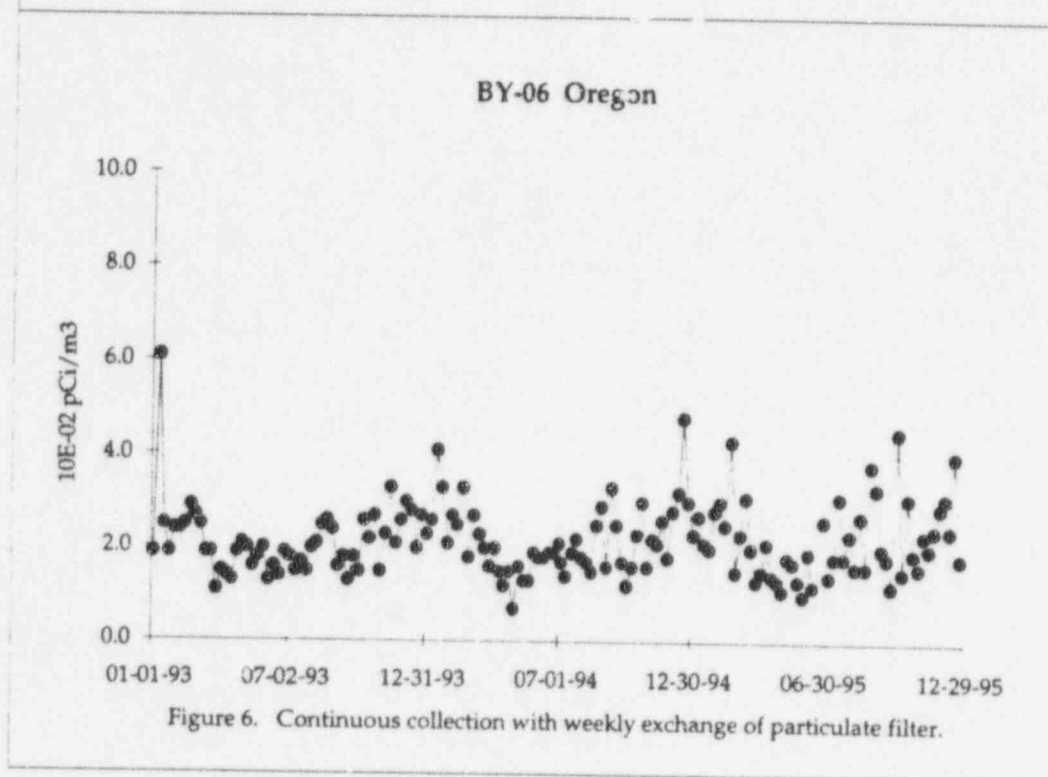
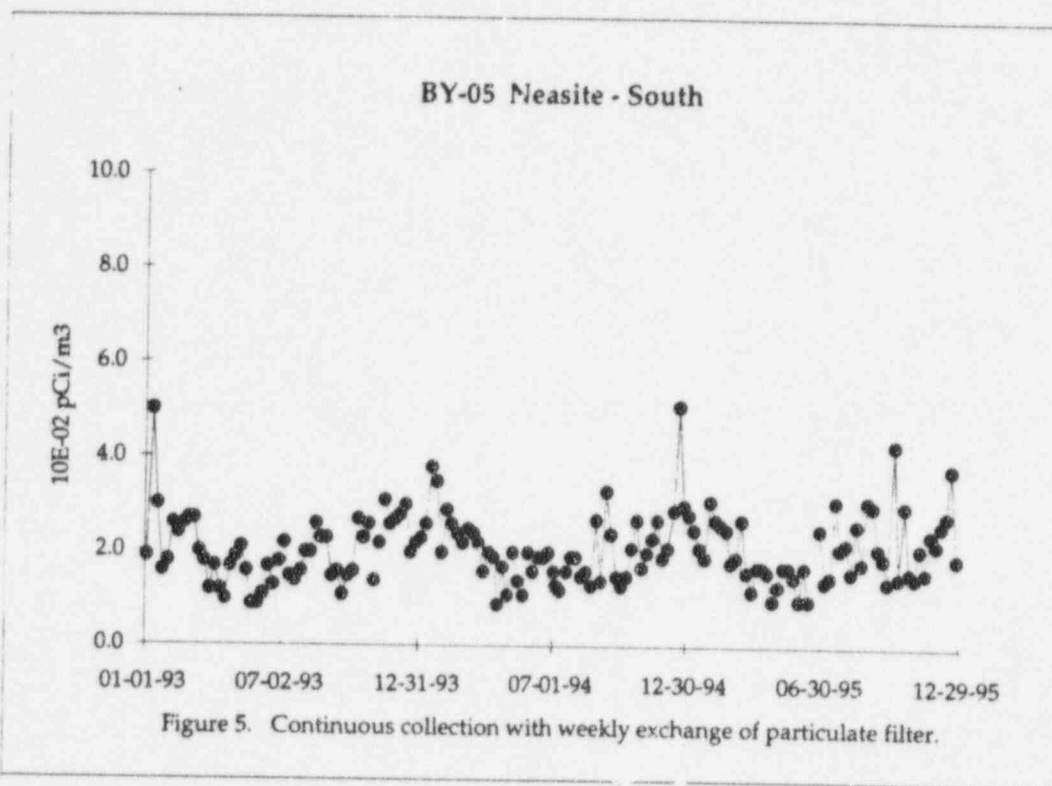


Figure 4. Continuous collection with weekly exchange of particulate filter.

## Air Particulates - Gross Beta



# Air Particulates - Gross Beta

## BY-07(C) Mt. Morris

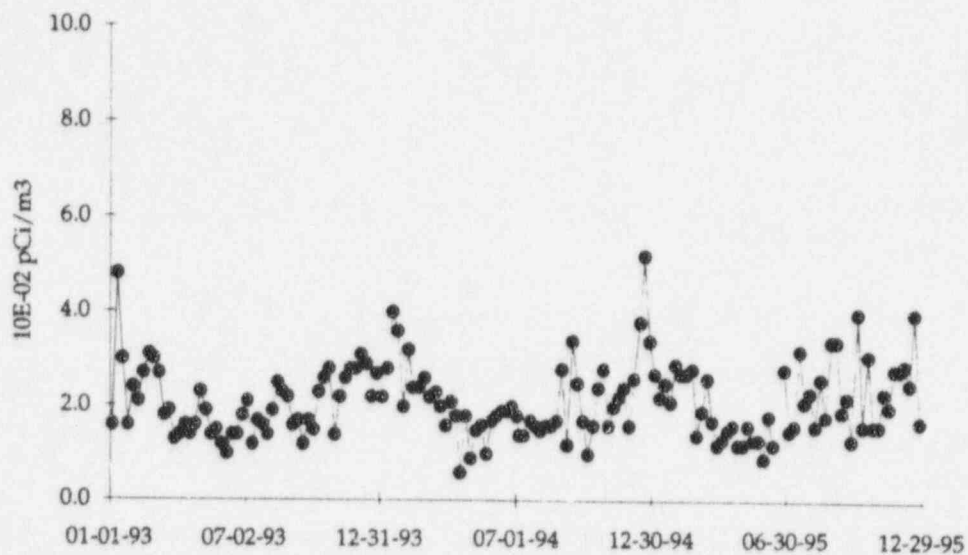


Figure 7. Continuous collection with weekly exchange of particulate filter.

## BY-08(C) Leaf River

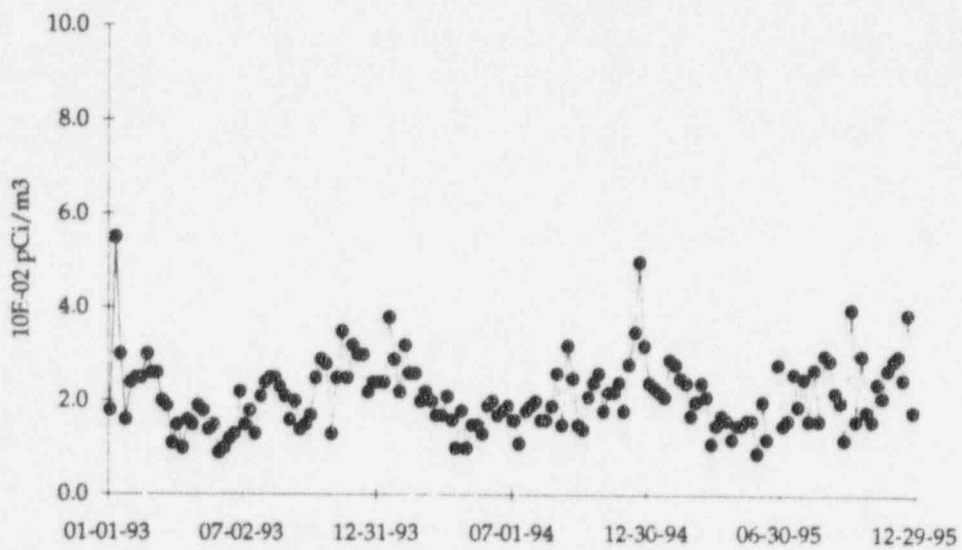
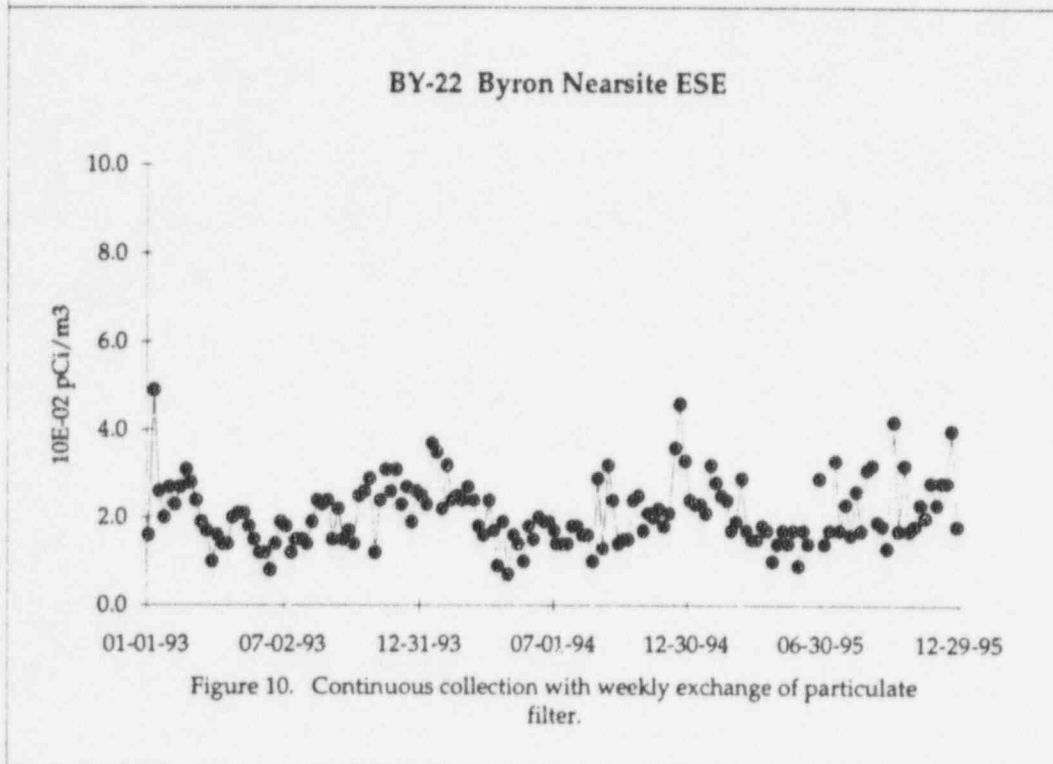
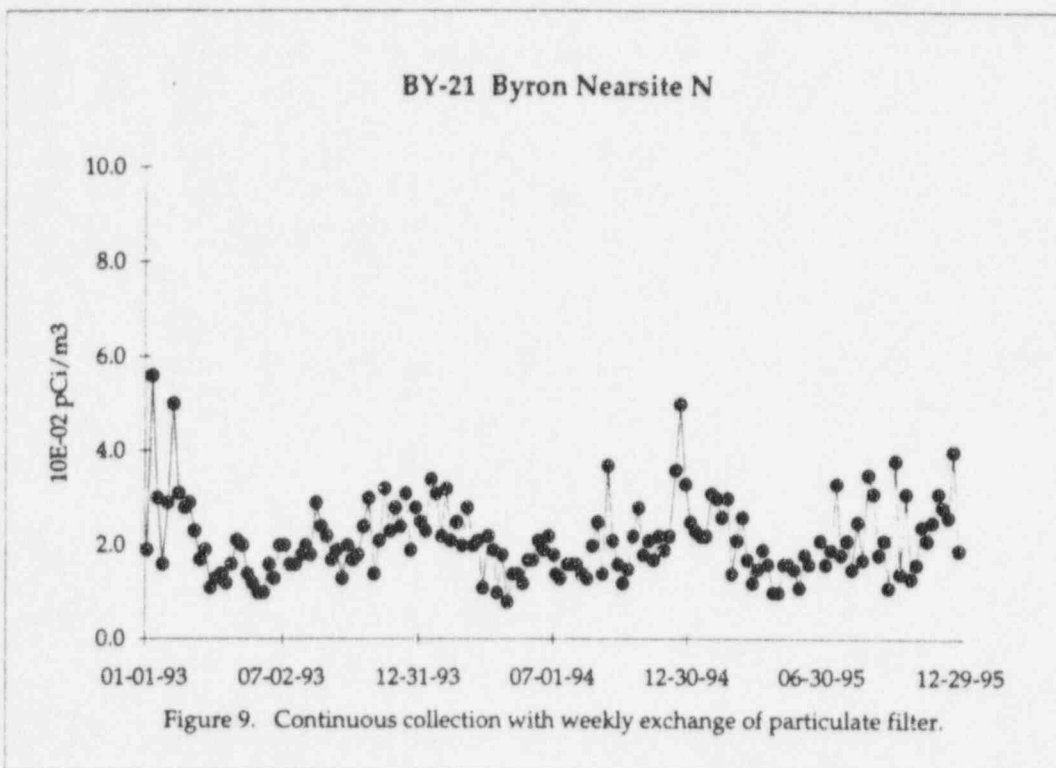


Figure 8. Continuous collection with weekly exchange of particulate filter.

## Air Particulates - Gross Beta



# Air Particulates - Gross Beta

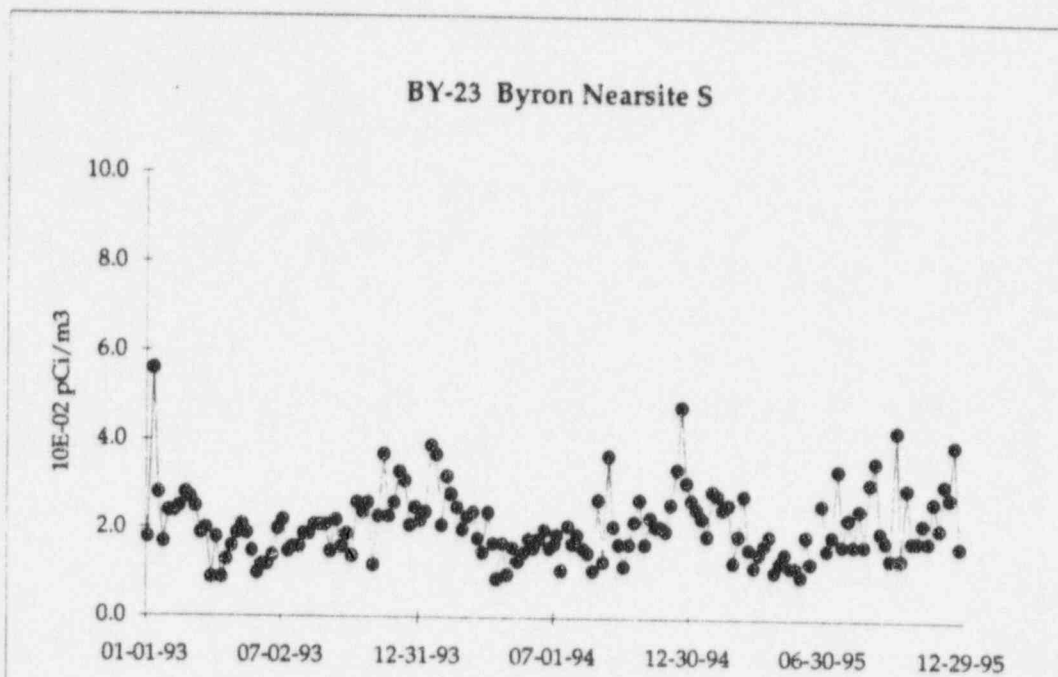


Figure 11. Continuous collection with weekly exchange of particulate filter.

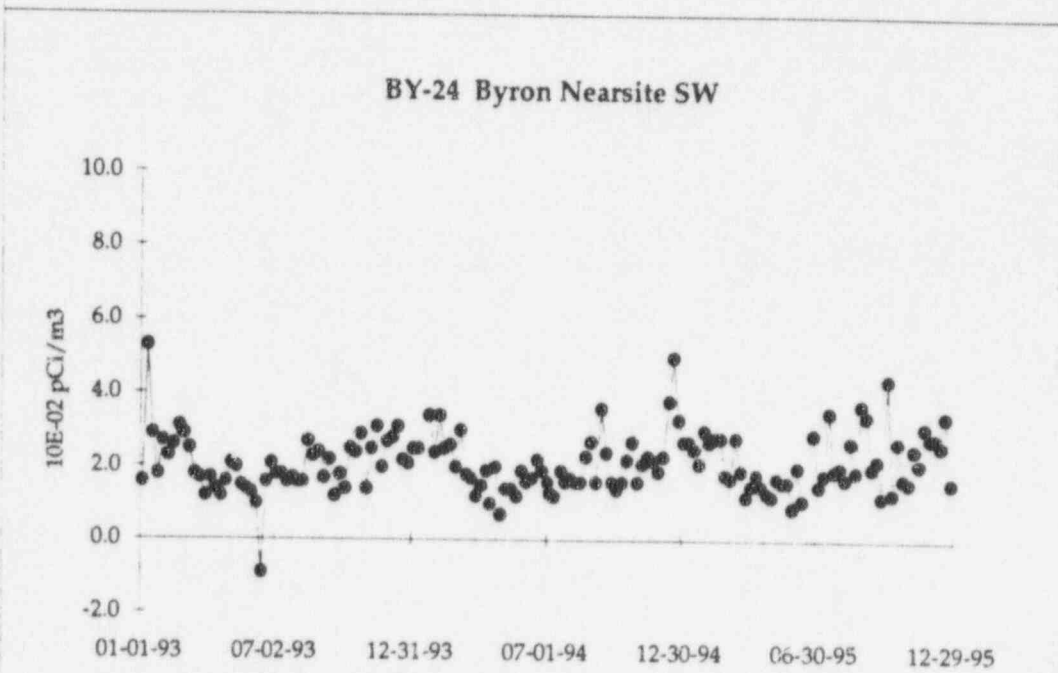


Figure 12. Continuous collection with weekly exchange of particulate filter.

## Surface Water-Tritium

### BY-09 Woodland Creek

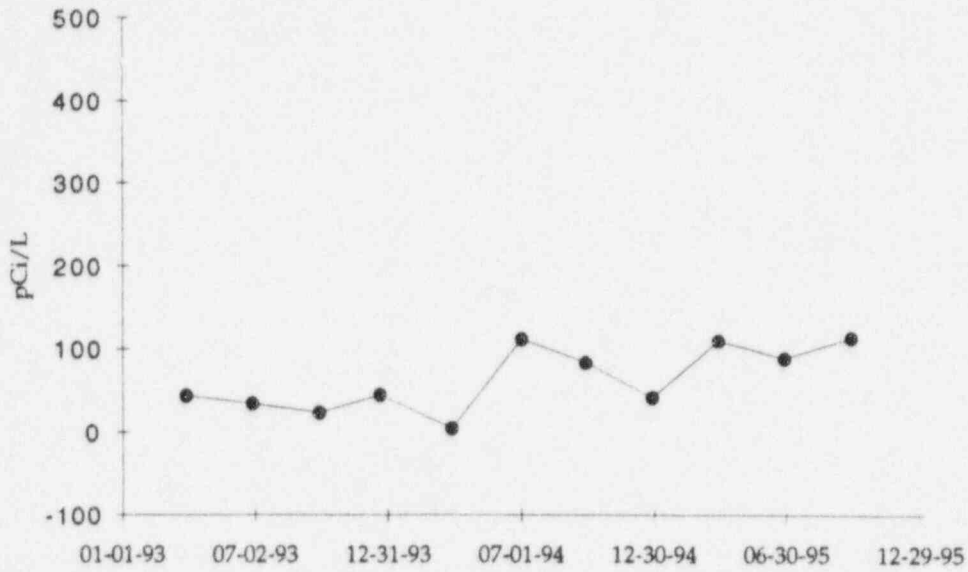


Figure 13. Quarterly composites of weekly collections.

### BY-12 Oregon Pool of Rock River, Downstream

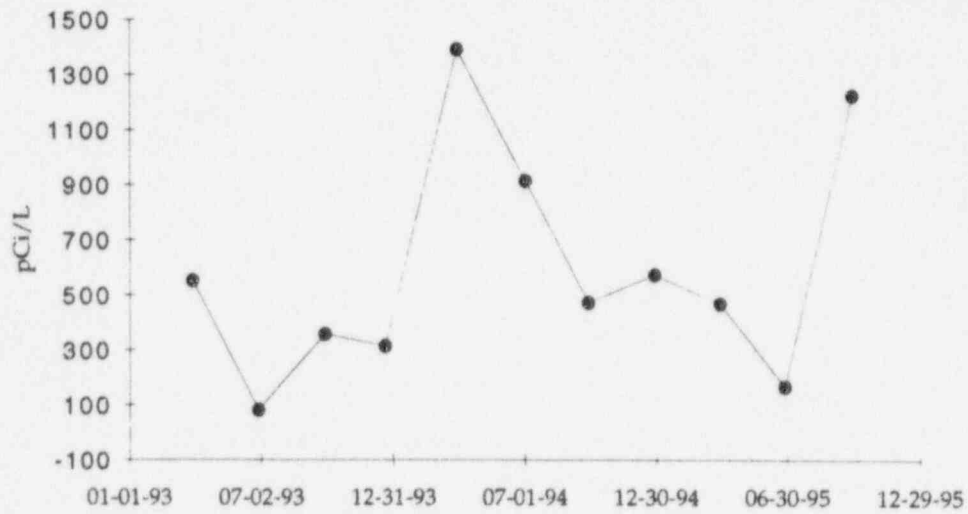


Figure 14. Quarterly composites of weekly collections.

# Surface Water-Tritium

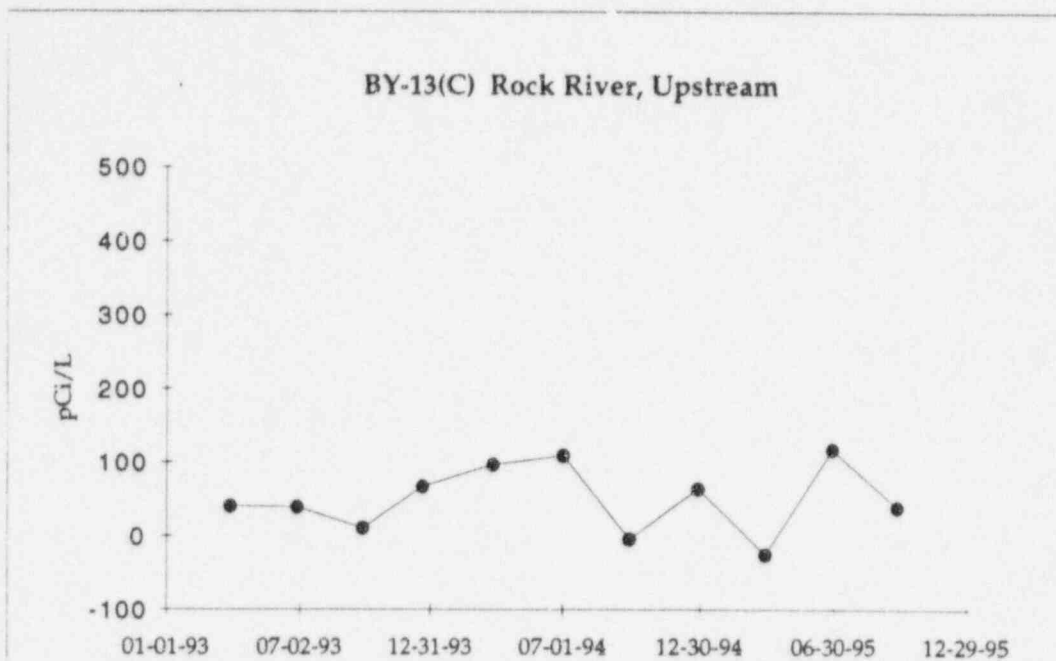


Figure 15. Quarterly composites of weekly collections.

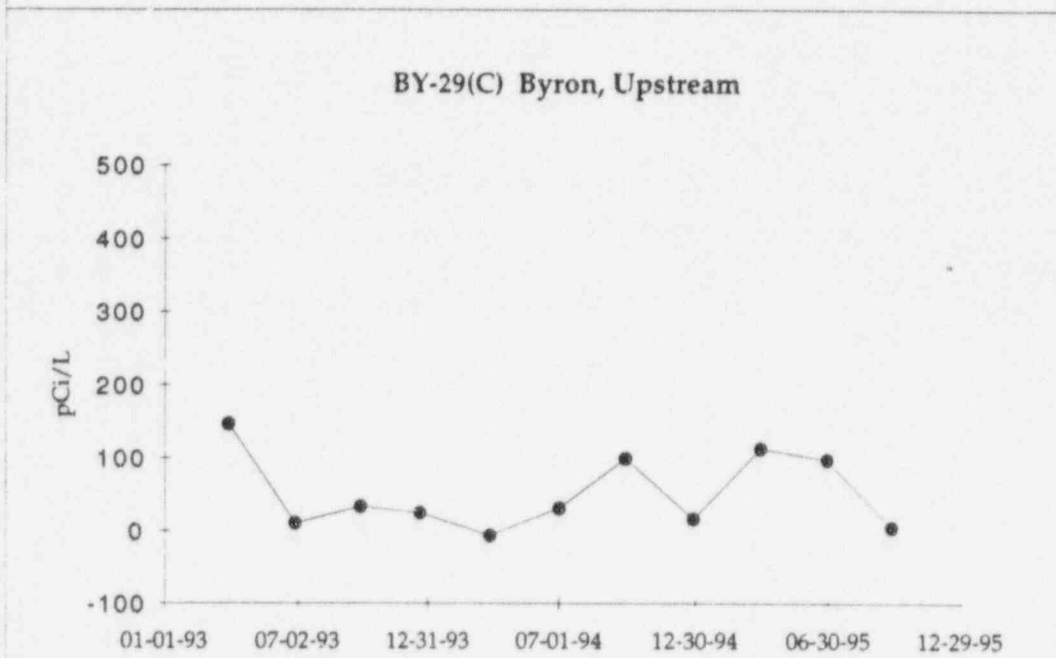


Figure 16. Quarterly composites of weekly collections.

# Well Water-Tritium

## BY-14 CECo Offsite Well

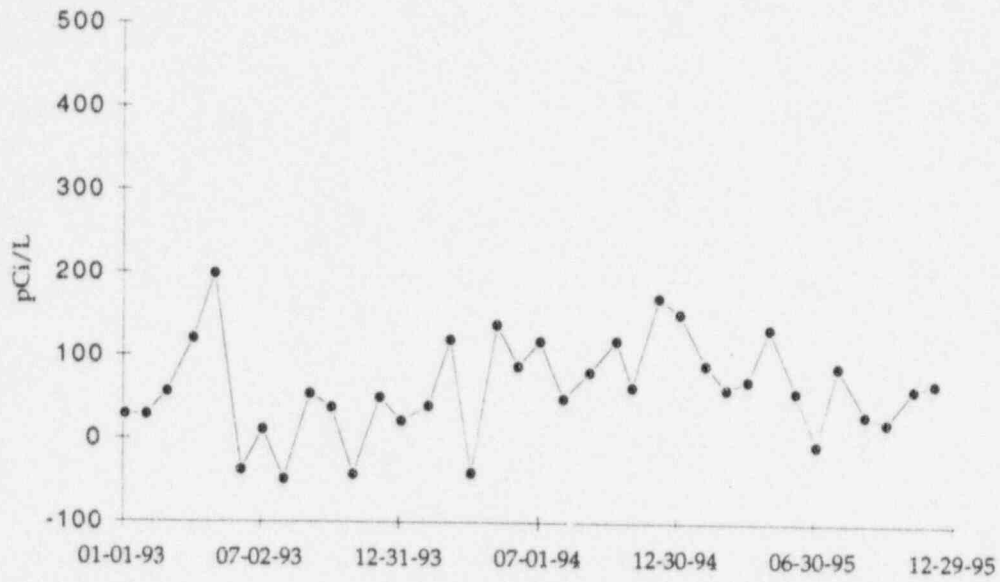


Figure 17. Monthly collections.

## BY-18 McCoy Farmstead Well

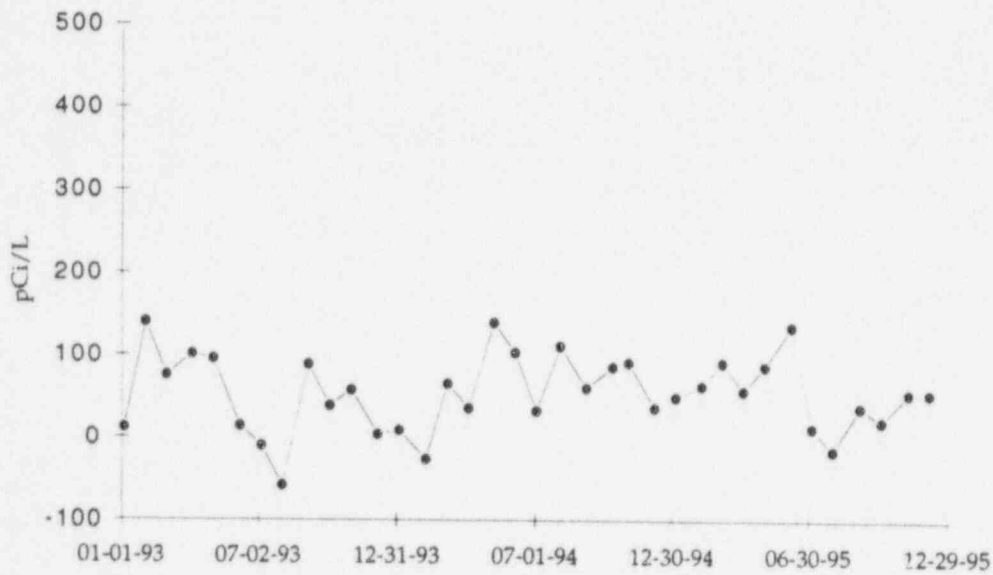


Figure 18. Monthly collections.



APPENDIX IV

INTERLABORATORY COMPARISON PROGRAM RESULTS

## Appendix IV

### Interlaboratory Comparison Program Results

Teledyne Brown Engineering Environmental Services, Midwest Laboratory (formerly Teledyne Isotopes and Hazelton Environmental Services) has participated in interlaboratory comparison (crosscheck) programs since the formulation of its quality control program in December 1971. These programs are operated by agencies which supply environmental type samples (e.g., milk or water) containing concentrations of radionuclides known to the issuing agency but not to participant laboratories. The purpose of such a program is to provide an independent check on the laboratory's analytical procedures and to alert it to any possible problems.

Participant laboratories measure the concentration of specified radionuclides and report them to the issuing agency. Several months later, the agency reports the known values to the participant laboratories and specifies control limits. Results consistently higher or lower than the known values or outside the control limits indicate a need to check the instruments or procedures used.

The results in Table A-1 were obtained through participation in the environmental sample crosscheck program for milk, water, air filters, and food samples during the current year. This program is conducted by the U.S. Environmental Protection Agency Intercomparison and Calibration Section, Quality Assurance Branch, Environmental Monitoring and Support Laboratory, Las Vegas, Nevada.

Table A-2 lists results of the analyses on in-house "spiked" samples.

Table A-3 lists results of the in-house "blank" samples.

Table A-4 lists results of the in-house "duplicate" program.

Out-of-limit results are explained directly below the result.

Table A-1. U.S. Environmental Protection Agency's crosscheck program, comparison of EPA and Teledyne Brown Engineering Environmental Services, Midwest Laboratory results for various sample media<sup>a</sup>.

Lab Code	Sample Type	Date Collected	Analysis	Concentration in pCi/L <sup>b</sup>		
				EPA Result <sup>c</sup> 1s, N=1	Control Limits	TBEESML Results ± 2 Sigma <sup>d</sup>
STW-724	Water	Jan, 1995	Gr. Alpha	5.0±5.0	0.0 - 13.7	4.3±0.6;0.8
STW-724	Water	Jan, 1995	Gr. Beta	5.0±5.0	0.0 - 13.7	4.7±0.6;0.9
STW-723	Water	Jan, 1995	Sr-89	20.0±5.0	11.3 - 28.7	17.7±1.5;2.3
STW-723	Water	Jan, 1995	Sr-90	15.0±5.0	6.3 - 23.7	13.7±0.6;1.5
STW-725	Water	Feb, 1995	I-131	100.0±10.0	82.7 - 117.3	99.0±4.4;10.8
STW-727	Water	Mar, 1995	H-3	7435.0±744.0	6144.2 - 8725.8	7460.0±87.2;1018.3
STW-726	Water	Feb, 1995	Uranium	25.5±3.0	20.3 - 30.7	24.9±0.2;2.5
STW-726	Water	Feb, 1995	Ra-226	19.1±2.9	14.1 - 24.1	19.2±0.4;2.0
STW-726	Water	Feb, 1995	Ra-228	20.0±5.0	11.3 - 28.7	19.2±2.0;2.8
STW-728	Water	Mar, 1995	Pu-239	11.1±1.1	9.2 - 13.0	11.0±0.6;1.3
STW-729	Water	Apr, 1995	Gr. Alpha	47.5±11.9	26.9 - 68.1	41.7±0.6;5.1
STW-729	Water	Apr, 1995	Ra-226	14.9±2.2	11.1 - 18.7	13.4±0.5;1.4
STW-729	Water	Apr, 1995	Ra-228	15.8±4.0	8.9 - 22.7	13.1±2.4;2.8
STW-729	Water	Apr, 1995	Uranium	10.0±3.0	4.8 - 15.2	9.5±0.6;1.1
STW-730	Water	Apr, 1995	Gr. Beta	86.6±10.0	69.3 - 103.9	74.8±3.2;11.9
STW-730	Water	Apr, 1995	Sr-89	20.0±5.0	11.3 - 28.7	17.0±0.0;1.7
STW-730	Water	Apr, 1995	Sr-90	15.0±5.0	6.3 - 23.7	12.7±1.2;1.7
STW-730	Water	Apr, 1995	Co-60	29.0±5.0	20.3 - 37.7	29.0±1.7;4.5
STW-730	Water	Apr, 1995	Cs-134	20.0±5.0	11.3 - 28.7	17.3±1.2;2.7
STW-730	Water	Apr, 1995	Cs-137	11.0±5.0	2.3 - 19.7	11.0±1.0;1.9
STW-732	Water	Jun, 1995	Uranium	15.2±3.0	10.0 - 20.4	13.9±0.3;1.4
STW-732	Water	Jun, 1995	Ra-226	14.8±2.2	11.0 - 18.6	14.7±0.3;1.5
STW-732	Water	Jun, 1995	Ra-228	15.0±3.8	8.4 - 21.6	11.9±0.6;1.4
STW-735	Water	Jul, 1995	Gr. Alpha	27.5±6.9	15.5 - 39.5	16.4±2.4;3.1
STW-735	Water	Jul, 1995	Gr. Beta	19.4±5.0	10.7 - 28.1	16.8±1.0;2.8
STW-736	Water	Aug, 1995	H-3	4872.0±487.0	4027.1 - 5716.9	4773.7±49.9;651.1

Table A-1. U.S. Environmental Protection Agency's crosscheck program, comparison of EPA and Teledyne Brown Engineering Environmental Services, Midwest Laboratory results for various sample media<sup>a</sup>.

Lab Code	Sample Type	Date Collected	Analysis	Concentration in pCi/L <sup>b</sup>		
				EPA Result <sup>c</sup> 1s, N=1	Control Limits	TBEESML Results ± 2 Sigma <sup>d</sup>

<sup>a</sup> Results obtained by Teledyne Brown Engineering Environmental Services Midwest Laboratory as a participant in the environmental sample crosscheck program operated by the Intercomparison and Calibration Section, Quality Assurance Branch, Environmental Monitoring and Support Laboratory, U.S. Environmental Protection Agency (EPA), Las Vegas, Nevada.

<sup>b</sup> All results are in pCi/L, except for elemental potassium (K) data in milk, which are in mg/L; air filter samples, which are in pCi/Filter; and food products, which are in mg/Kg.

<sup>c</sup> USEPA results are presented as the known values and expected laboratory precision (1s, 1 determination) and control limits as defined by the EPA.

<sup>d</sup> Unless otherwise indicated, the TBEESML results are given as the mean ± 2 standard deviations for three determinations. The numbers after the semi-colon are the Total Propagated Uncertainty of the result.

Table A-2. In-house "spike" samples.

Lab Code	Sample Type	Date Collected	Analysis	Accepted Rejected	Concentration in pCi/L <sup>a</sup>		
					Known Activity	Control Limits <sup>b</sup>	TBEESML Results 2s, n=1 <sup>c</sup>
SPW-286	Water	Jan, 1995	H-3	A	40871.0	29852.0 - 51890.0	40929.9 ± 5594.5; 6931.9
SPW-289	Water	Jan, 1995	Co-60	A	247.5	194.0 - 301.0	250.5 ± 14.1; 28.7
SPW-289	Water	Jan, 1995	Cs-134	A	321.3	256.7 - 385.9	290.5 ± 14.4; 32.4
SPW-289	Water	Jan, 1995	Cs-137	A	394.3	310.7 - 477.9	387.7 ± 21.2; 44.2
SPAP-284	Air Filter	Jan, 1995	I-131(g)	A	1.9	1.5 - 2.3	2.2 ± 0.0; 0.2
SPMI-707	Milk	Jan, 1995	I-131(g)	A	86.0	64.0 - 108.0	84.8 ± 10.4; 13.4
SPAP-408	Air Filter	Jan, 1995	Gr. Beta	A	8.1	6.6 - 9.7	7.5 ± 0.0; 0.7
SPMI-205	Milk	Jan, 1995	Cs-137	A	49.4	35.4 - 63.4	51.2 ± 7.5; 9.1
SPCH-717	Charcoal Canister	Jan, 1995	I-131(g)	A	2.5	1.9 - 3.0	2.9 ± 0.1; 0.3
SPVE-729	Vegetation	Feb, 1995	I-131(g)	A	1.9	1.5 - 2.3	1.9 ± 0.1; 0.2
SPMI-205	Milk	Jan, 1995	Sr-89	A	23.1	16.9 - 29.4	19.4 ± 3.4; 3.9
SPMI-205	Milk	Jan, 1995	Sr-90	A	28.1	22.4 - 33.9	26.2 ± 1.3; 2.9
SPW-1204	Water	Feb, 1995	Ra-226	A	6.9	5.5 - 8.3	6.9 ± 0.1; 0.7
SPW-2652	Water	Apr, 1995	Co-60	A	24.8	18.9 - 30.7	23.8 ± 2.4; 3.4
SPW-2652	Water	Apr, 1995	Cs-134	A	30.8	24.0 - 37.6	29.3 ± 2.3; 3.7
SPW-2652	Water	Apr, 1995	Cs-137	A	40.9	31.1 - 50.7	42.3 ± 3.9; 5.8
SPW-2544	Water	Apr, 1995	H-3	A	9333.0	7391.0 - 11275.0	9656.2 ± 291.8; 1008.7
SPAP-2542	Air Filter	Apr, 1995	Cs-137	A	1.9	-0.3 - 4.2	2.3 ± 2.1; 2.1
SPMI-2988	Milk	Apr, 1995	Cs-134	A	40.7	32.5 - 48.9	37.0 ± 1.8; 4.1
SPMI-2988	Milk	Apr, 1995	Cs-137	A	54.5	42.1 - 67.0	62.4 ± 3.1; 7.0
SPW-3051	Water	Mar, 1995	Gr. Alpha	A	82.9	65.0 - 100.8	88.5 ± 3.7; 9.6
SPW-3051	Water	Mar, 1995	Gr. Beta	A	87.2	69.9 - 104.5	83.0 ± 2.3; 8.6
SPF-3708	Fish	May, 1995	Cs-134	A	0.1	0.1 - 0.2	0.1 ± 0.0; 0.0
SPF-3708	Fish	May, 1995	Cs-137	A	0.2	0.1 - 0.2	0.2 ± 0.0; 0.0
SPW-3589	Water	May, 1995	Fe-55	A	2274.0	1506.6 - 3041.4	2033.7 ± 500.2; 540.0
SPMI-2988	Milk	Apr, 1995	Sr-89	A	36.5	28.2 - 44.8	32.6 ± 3.3; 4.6
SPMI-2988	Milk	Apr, 1995	Sr-90	A	24.9	19.4 - 30.4	25.6 ± 1.6; 3.0
SPW-5608	Water	Jun, 1995	I-131	A	85.5	68.7 - 102.3	78.8 ± 2.3; 8.2
SPW-6008	Water	May, 1995	Gr. Alpha	A	20.7	16.4 - 25.0	17.3 ± 1.4; 2.2
SPW-6008	Water	May, 1995	Gr. Beta	A	21.8	17.3 - 26.3	21.2 ± 1.0; 2.3
SPW-6398	Water	May, 1995	Sr-89	A	21.2	16.1 - 26.3	18.7 ± 2.4; 3.0
SPW-6398	Water	May, 1995	Sr-90	A	23.2	18.5 - 27.9	21.2 ± 1.1; 2.4
SPMI-6838	Milk	Jun, 1995	I-131	A	39.6	31.8 - 47.4	38.5 ± 0.5; 3.9
SPW-6839	Water	Jun, 1995	I-131	A	39.5	32.0 - 47.0	34.9 ± 0.5; 3.5
SPSO-5130	Soil	May, 1995	Cs-134	A	0.3	0.2 - 0.3	0.3 ± 0.0; 0.0

Table A-2. In-house "spike" samples.

Lab Code	Sample Type	Date Collected	Analysis	Accepted Rejected	Concentration in pCi/L <sup>a</sup>		
					Known Activity	Control Limits <sup>b</sup>	TBEESML Results 2s, n=1 <sup>c</sup>
SPSO-5130	Soil	May, 1995	Cs-137	A	0.5	0.4 - 0.6	0.5 ± 0.0; 0.1
SPVE-6006	Vegetation	Jun, 1995	I-131(g)	A	0.5	0.4 - 0.7	0.6 ± 0.0; 0.1
SPVE-7190	Vegetation	Jul, 1995	I-131(g)	A	1.0	0.8 - 1.2	1.1 ± 0.0; 0.1
SPCH-596	Charcoal Canister	Jun, 1995	I-131(g)	A	2.3	1.9 - 2.8	2.2 ± 0.1; 0.2
SPW-3051	Water	Apr, 1995	Gr. Alpha	A	82.9	65.0 - 100.8	88.0 ± 3.8; 9.6
SPW-3051	Water	Apr, 1995	Gr. Beta	A	87.2	70.2 - 104.2	79.6 ± 2.3; 8.3
SPW-6005	Water	Jun, 1995	I-131	A	46.8	36.9 - 56.7	48.2 ± 1.9; 5.2
SPMI-7525	Milk	Jul, 1995	I-131(g)	A	45.6	34.1 - 57.1	44.7 ± 5.4; 7.0
SPMI-7525	Milk	Jul, 1995	Cs-134	A	34.4	26.9 - 41.9	31.5 ± 2.5; 4.0
SPMI-7525	Milk	Jul, 1995	Cs-137	A	43.4	32.7 - 54.1	50.2 ± 4.0; 6.4
SPW-8179	Water	Jul, 1995	Fe-55	A	2.1	1.4 - 2.9	2.3 ± 0.4; 0.5
SPAP-7557	Air Filter	Jul, 1995	Cs-137	A	1.9	1.5 - 2.3	2.3 ± 0.0; 0.2
SPAP-7554	Air Filter	Jul, 1995	Gr. Beta	A	8.1	6.5 - 9.6	7.3 ± 0.0; 0.7
SPAP-284	Air Filter	Jan, 1995	Cs-137	A	1.9	1.5 - 2.3	2.2 ± 0.0; 0.2
SPMI-707	Milk	Jan, 1995	I-131	A	86.0	69.3 - 102.7	80.3 ± 1.4; 8.1
SPW-1790	Water	Mar, 1995	Sr-89	R	42.7	34.5 - 50.9	0.9 ± 3.9; 3.9
					The raw data was reviewed and found to be free of errors. The sample was repeated with similar results. An Investigation was conducted to determine the cause of this deviation. No apparent cause was found for this discrepancy. It was determined the "spike" was prepared improperly. Another "spike" was prepared and analyzed (See SPW-6388). No further action is planned.		
SPW-1790	Water	Mar, 1995	Sr-90	R	39.1	31.6 - 46.6	31.4 ± 1.8; 3.6
					The raw data was reviewed and found to be free of errors. The sample was repeated with similar results. An Investigation was conducted to determine the cause of this deviation. No apparent cause was found for this discrepancy. It was determined the "spike" was prepared improperly. Another "spike" was prepared and analyzed (See SPW-6388). No further action is planned.		
SPAP-2513	Air Filter	Apr, 1995	Gr. Beta	A	8.1	6.5 - 9.7	7.5 ± 0.0; 0.8
SPW-7569	Water	Jul, 1995	H-3	A	26669.0	21382.9 - 31955.1	25806.9 ± 447.7; 2619.2
SPMI-7525	Milk	Jul, 1995	Sr-90	A	27.9	22.0 - 33.8	28.0 ± 1.4; 3.1
SPW-6388	Water	May, 1995	Sr-89	A	21.2	16.0 - 26.4	18.7 ± 2.4; 3.0
SPW-6388	Water	May, 1995	Sr-90	A	23.2	18.5 - 27.9	21.2 ± 1.1; 2.4
SPF-10921	Fish	Oct, 1995	Co-60	A	0.8	0.6 - 0.9	0.7 ± 0.0; 0.1
SPF-10921	Fish	Oct, 1995	Cs-134	A	0.6	0.4 - 0.7	0.5 ± 0.0; 0.1
SPF-10921	Fish	Oct, 1995	Cs-137	A	0.9	0.7 - 1.1	0.9 ± 0.1; 0.1
SPW-9981	Water	Sep, 1995	Sr-89	A	39.0	29.1 - 48.9	34.6 ± 4.9; 6.0
SPW-9981	Water	Sep, 1995	Sr-90	A	20.0	15.6 - 24.4	20.3 ± 1.3; 2.4

Table A-2. In-house "spike" samples.

Lab Code	Sample Type	Date Collected	Analysis	Accepted Rejected	Concentration in pCi/L <sup>a</sup>		
					Known Activity	Control Limits <sup>b</sup>	TBEESML Results 2s, n=1 <sup>c</sup>
SPW-1207	Water	Nov, 1995	H-3	A	29315.0	23551.9 - 35078.1	27963.4 ± 445.5; 2831.6
SPCH-112	Charcoal Canister	Oct, 1995	I-131(g)	A	0.8	0.6 - 1.0	0.8 ± 0.0; 0.1
SPW-1208	Water	Nov, 1995	Gr. Alpha	A	82.8	66.3 - 99.3	75.3 ± 3.2; 8.2
SPW-1208	Water	Nov, 1995	Gr. Beta	A	86.3	68.6 - 104.0	86.9 ± 2.5; 9.0
SPAP-109	Air Filter	Nov, 1995	Gr. Beta	A	8.0	6.5 - 9.5	7.3 ± 0.0; 0.7
SPW-1280	Water	Dec, 1995	Gr. Beta	A	21.6	16.7 - 26.5	21.0 ± 1.8; 2.8
SPW-1280	Water	Dec, 1995	Gr. Alpha	A	20.7	15.1 - 26.3	19.6 ± 3.0; 3.6
SPW-1208	Water	Nov, 1995	Co-60	A	23.0	17.8 - 28.2	22.0 ± 1.9; 2.9
SPW-1208	Water	Nov, 1995	Cs-134	A	41.7	33.2 - 50.2	38.1 ± 2.0; 4.3
SPW-1208	Water	Nov, 1995	Cs-137	A	24.3	17.8 - 30.8	27.2 ± 3.0; 4.0
SPMI-1091	Milk	Oct, 1995	I-131	A	73.4	58.9 - 87.8	70.9 ± 0.8; 7.1
SPMI-1091	Milk	Oct, 1995	I-131(g)	A	73.4	55.0 - 91.7	77.1 ± 7.9; 11.0
SPMI-1091	Milk	Oct, 1995	Cs-134	A	27.8	20.2 - 35.4	27.9 ± 3.9; 4.8
SPMI-1091	Milk	Oct, 1995	Cs-137	A	43.1	30.2 - 56.1	52.3 ± 6.9; 8.7

<sup>a</sup> All results are in pCi/L, except for elemental potassium (K) data in milk, which are in mg/L.; air filter samples, which are in pCi/Filter; and food products, which are in mg/Kg.

<sup>b</sup> Control limits are based on the known value ± 10%+TPU (Where all parametric uncertainties, other than counting statistics, are less than 5%).

<sup>c</sup> All samples are the results of single determinations. The result is reported in the following format: Activity ± Counting Error ; Total Propagated Uncertainty.

NOTE: For fish, Jello is used for the spike matrix. For vegetation, Sawdust is used for the spike matrix.

Table A-3. In-house "blank" samples.

Lab Code	Sample Type	Sample Date	Analysis	Concentration pCi/L <sup>a</sup>		Acceptance Criteria (4.66 Sigma)
				Teledyne Results (4.66 Sigma)		
				LLD	Activity <sup>b</sup>	
SPM-204	Milk	Jan 1995	I-131	<0.5	-0.03±0.22;0.22	<0.5
SPW-285	Water	Jan 1995	H-3	<165.0	-48.53±84.76;85.01	<200.0
SPW-288	Water	Jan 1995	Co-60	<2.3	-0.11±2.02;2.02	<10.0
SPW-288	Water	Jan 1995	Cs-134	<3.5	-0.19±2.61;2.61	<10.0
SPW-288	Water	Jan 1995	Cs-137	<4.7	0.98±2.54;2.54	<10.0
SPAP-283	Air Filter	Jan 1995	Co-60	<2.7	-0.36±1.40;1.40	<10.0
SPAP-283	Air Filter	Jan 1995	Cs-134	<1.5	-0.67±1.33;1.33	<10.0
SPAP-283	Air Filter	Jan 1995	Cs-137	<2.4	0.46±1.33;1.33	<10.0
SPCH-287	Charcoal Canister	Jan 1995	I-131(g)	<2.3	-1.98±3.12;3.13	<9.6
SPAP-409	Air Filter	Jan 1995	Gr. Beta	<0.5	0.02±0.28;0.28	<3.2
SPW-957	Water	Feb 1995	Co-60	<3.7	-1.25±3.02;3.03	<10.0
SPW-957	Water	Feb 1995	Cs-134	<5.2	0.76±2.77;2.77	<10.0
SPW-957	Water	Feb 1995	Cs-137	<3.6	-1.38±2.65;2.66	<10.0
SPVE-728	Vegetation	Jan 1995	I-131(g)	<12.0	2.33±7.54;7.55	<20.0
SPM-204	Milk	Jan 1995	Co-60	<5.3	0.41±3.48;3.48	<10.0
SPM-204	Milk	Jan 1995	Cs-134	<4.4	-0.07±2.05;2.05	<10.0
SPM-204	Milk	Jan 1995	Cs-137	<4.3	1.32±2.53;2.54	<10.0
SPM-204	Milk	Jan 1995	Sr-90	N/A	1.46±0.48;0.50	<1.0
Low level of Sr-90 concentration in milk (1-5 pCi/L) is not unusual.						
SPM-204	Milk	Jan 1995	Sr-89	<0.8	0.14±1.08;1.08	<5.0
SPW-1106	Water	Feb 1995	Ni-63	<12.0	0.25±6.31;6.31	<20.0
SPW-2545	Water	Apr 1995	H-3	<169	97.76±88.37;89.36	<200.0
SPW-2651	Water	Apr 1995	Co-60	<3.17	-1.08±2.45;2.45	<10.0
SPW-2651	Water	Apr 1995	Cs-134	<3.32	0.29±2.57;2.57	<10.0
SPW-2651	Water	Apr 1995	Cs-137	<3.56	-0.92±2.64;2.64	<10.0
SPAP-2543	Air Filter	Apr 1995	Cs-137	<1.1	-1.24±1.83;1.83	<10.0
SPAP-2543	Air Filter	Apr 1995	Cs-134	<1.9	0.05±2.11;2.11	<10.0
SPAP-2543	Air Filter	Apr 1995	Co-60	<4.4	0.39±2.20;2.20	<10.0
SPMI-2987	Milk	Apr 1995	Cs-134	<3.4	0.37±1.89;1.89	<10.0
SPMI-2987	Milk	Apr 1995	Cs-137	<3.3	1.29±1.75;1.76	<10.0
SPW-3052	Water	Mar 1995	Gr. Beta	<1.4	3.05±0.98;1.09	<3.2
SPW-3052	Water	Mar 1995	Gr. Alpha	<0.6	0.49±0.43;0.44	<1.0
SPF-3709	Fish	May 1995	Co-60	<8.4	2.21±5.97;5.98	<10.0
SPF-3709	Fish	May 1995	Cs-134	<1.3	6.79±8.55;8.60	<10.0



Table A-3. In-house "blank" samples.

Lab Code	Sample Type	Sample Date	Analysis	Concentration pCi/L <sup>a</sup>		Acceptance Criteria (4.66 Sigma)
				Teledyne Results (4.66 Sigma)		
				LLD	Activity <sup>b</sup>	
SPF-3709	Fish	May 1995	Cs-137	<1.3	3.61 ± 7.81; 7.83	<10.0
SPW-3590	Water	May 1995	Fe-55	<602.0	0.00 ± 365.40; 365.40	<1000.0
SPMI-2987	Milk	Apr 1995	Sr-89	<0.4	0.06 ± 0.62; 0.62	<5.0
SPMI-2987	Milk	Apr 1995	Sr-90	N/A	1.47 ± 0.38; 0.40	<1.0
Low level of Sr-90 concentration in milk (1-5 pCi/L) is not unusual.						
SPAP-2514	Air Filter	Apr 1995	Gr. Beta	<0.3	0.03 ± 0.25; 0.25	<3.2
SPSO-5131	Soil	May 1995	Cs-134	<0.034	0.01 ± 0.01; 0.01	<10.0
SPSO-5131	Soil	May 1995	Cs-137	<0.012	0.00 ± 0.01; 0.01	<10.0
SPVE-6007	Vegetation	Jun 1995	I-131(g)	<0.009	0.00 ± 0.01; 0.01	<20.0
SPVE-7191	Vegetation	Jul 1995	I-131(g)	<0.005	-0.00 ± 0.00; 0.00	<20.0
SPCH-5975	Charcoal Canister	Jun 1995	I-131(g)	<3.0	-0.71 ± 2.68; 2.69	<9.6
SPW-3052	Water	Apr 1995	Gr. Beta	<1.7	-0.02 ± 1.09; 1.09	<3.2
SPW-3052	Water	Apr 1995	Gr. Alpha	<0.7	0.23 ± 0.47; 0.47	<1.0
SPW-6011	Water	Jun 1995	I-131	<0.4	-0.03 ± 0.19; 0.19	<0.5
SPMI-7526	Milk	Jul 1995	Co-60	<5.8	1.19 ± 3.34; 3.34	<10.0
SPMI-7526	Milk	Jul 1995	Cs-134	<5.1	0.48 ± 2.76; 2.76	<10.0
SPMI-7526	Milk	Jul 1995	Cs-137	<3.7	0.98 ± 2.39; 2.39	<10.0
SPMI-7526	Milk	Jul 1995	I-131	<0.5	0.00 ± 0.23; 0.23	<0.5
SPW-8180	Water	Jul 1995	Fe-55	<0.4	0.00 ± 0.27; 0.27	<1000.0
SPAP-7558	Air Filter	Jul 1995	Co-60	<4.2	0.39 ± 3.06; 3.06	<10.0
SPAP-7558	Air Filter	Jul 1995	Co-60	<4.2	0.04 ± 3.07; 3.07	<10.0
SPAP-7558	Air Filter	Jul 1995	Cs-134	<3.0	-1.23 ± 2.45; 2.45	<10.0
SPAP-7558	Air Filter	Jul 1995	Cs-137	<3.5	1.18 ± 2.04; 2.04	<10.0
SPW-7570	Water	Jul 1995	H-3	<164	51.58 ± 83.71; 84.01	<200.0
SPAP-7556	Air Filter	Jul 1995	Gr. Beta	<1.0	0.06 ± 0.55; 0.55	<3.2
SPMI-7526	Milk	Jul 1995	Sr-89	<0.6	-0.19 ± 0.82; 0.82	<5.0
SPMI-7526	Milk	Jul 1995	Sr-90	N/A	1.35 ± 0.36; 0.39	<1.0
Low level of Sr-90 concentration in milk (1-5 pCi/L) is not unusual.						
SPW-8931	Water	Aug 1995	Ra-228	<1.0	0.58 ± 0.61; 0.61	<1.0
SPF-10922	Fish	Oct 1995	Co-60	<5.4	5.74 ± 4.70; 4.76	<10.0
SPF-10922	Fish	Oct 1995	Cs-134	<8.9	2.47 ± 5.44; 5.45	<10.0
SPF-10922	Fish	Oct 1995	Cs-137	<5.4	-2.44 ± 5.08; 5.09	<10.0
SPW-12080	Water	Nov 1995	H-3	<149	23.01 ± 74.94; 75.01	<200.0
SPW-9982	Water	Sep 1995	Sr-89	<0.8	0.52 ± 0.76; 0.76	<5.0

Table A-3. In-house "blank" samples.

Lab Code	Sample Type	Sample Date	Analysis	Concentration pCi/L <sup>a</sup>		Acceptance Criteria (4.66 Sigma)
				Teledyne Results (4.66 Sigma)		
				LLD	Activity <sup>b</sup>	
SPW-9982	Water	Sep 1995	Sr-90	<0.4	0.21±0.21;0.22	<1.0
SPCH-11238	Charcoal Canister	Oct 1995	I-131(g)	<1.9	-0.00±0.01;0.01	<9.6
SPMI-10920	Milk	Oct 1995	Cs-134	<3.5	-2.79±4.35;4.37	<10.0
SPMI-10920	Milk	Oct 1995	Cs-137	<6.0	1.55±4.13;4.14	<10.0
SPMI-10920	Milk	Oct 1995	Co-60	<3.8	-0.45±5.05;5.05	<10.0
SPSO-11225	Soil	Oct 1995	Cs-134	<0.034	0.00±0.02;0.02	<10.0
SPSO-11225	Soil	Oct 1995	Cs-137	<0.019	-0.00±0.01;0.01	<10.0
SPW-12082	Water	Nov 1995	Gr. Alpha	<0.6	0.19±0.43;0.43	<1.0
SPW-12082	Water	Nov 1995	Gr. Beta	<1.7	0.06±1.11;1.11	<3.2
SPW-12082	Water	Nov 1995	Co-60	<2.1	0.62±1.13;1.13	<10.0
SPW-12082	Water	Nov 1995	Cs-134	<1.9	0.02±1.28;1.28	<10.0
SPW-12082	Water	Nov 1995	Cs-137	<2.4	1.53±1.22;1.24	<10.0
SPAP-10968	Air Filter	Nov 1995	Gr. Beta	<0.4	0.61±0.26;0.26	<3.2
SPW-12808	Water	Dec 1995	Gr. Alpha	<1.0	0.08±0.49;0.49	<1.0
SPW-12808	Water	Dec 1995	Gr. Beta	<1.6	-0.53±0.78;0.78	<3.2
SPCH-608	Charcoal Canister	Feb 1996	I-131(g)	<2.7	-0.10±1.63;1.63	<9.6
SPMI-10920	Milk	Oct 1995	I-131	<0.4	0.10±0.19;0.19	<0.5

<sup>a</sup> Liquid sample results are reported in pCi/Liter, air filter sample results are in pCi/filter, charcoal sample results are in pCi/charcoal, and solid sample results are in pCi/kilogram.

<sup>b</sup> The activity reported is the net activity result.

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jan, 1995	Gr. Beta	Ww-62, 63	A	1.4±0.4;0.5	1.3±0.4;0.4
Jan, 1995	H-3	Ww-316, 317	A	17,618.0±377.0;2,425.5	17,390.0±381.0;2,395.5
Jan, 1995	K-40	Ww-41, 42	A	1.4±0.2;0.2	1.7±0.3;0.3
Jan, 1995	H-3	Ww-41, 42	A	30.1±81.2;81.3	-47.0±77.8;78.0
Jan, 1995	Gr. Beta	Cf-20, 21	A	2.9±0.1;0.3	3.0±0.1;0.3
Jan, 1995	Be-7	Cf-20, 21	A	0.4±0.1;0.1	0.5±0.1;0.1
Jan, 1995	K-40	Cf-20, 21	A	4.1±0.3;0.5	3.8±0.3;0.5
Jan, 1995	Sr-90	Ww-41, 42	A	0.2±0.3;0.3	0.1±0.2;0.2
Jan, 1995	Sr-89	Ww-41, 42	A	-0.3±0.6;0.6	-0.1±0.5;0.5
Jan, 1995	Gr. Beta	Ww-41, 42	A	4.7±0.8;1.1	5.0±0.9;1.2
Jan, 1995	Gr. Alpha	Ww-41, 42	A	5.1±2.5;2.6	2.5±2.2;2.2
Jan, 1995	I-131(G)	Mi-83, 84	A	-1.9±3.2;3.2	1.5±2.5;2.5
Jan, 1995	I-131	Mi-187, 188	A	0.1±0.3;0.3	0.3±0.4;0.4
Jan, 1995	K-40	Mi-187, 188	A	1,573.0±138.0;254.6	1,426.0±177.0;262.6
Jan, 1995	H-3	Ww-240, 241	A	39.8±80.3;80.5	10.0±78.9;79.0
Jan, 1995	Co-60	Mi-295, 296	A	-1.1±2.4;2.4	0.3±2.8;2.8
Jan, 1995	Cs-134	Mi-295, 296	A	-0.6±1.8;1.8	0.8±2.4;2.4
Jan, 1995	Cs-137	Mi-295, 296	A	0.5±1.8;1.8	1.3±2.7;2.7
Jan, 1995	I-131	Mi-295, 296	A	0.1±0.3;0.3	0.2±0.3;0.3
Jan, 1995	K-40	Mi-295, 296	A	1,449.1±91.2;217.2	1,311.8±108.0;208.5
Jan, 1995	La-140	Mi-295, 296	A	0.6±1.7;1.7	-1.2±2.5;2.5
Jan, 1995	Sr-89	Mi-295, 296	A	0.2±0.8;0.8	0.2±0.9;0.9
Jan, 1995	Sr-90	Mi-295, 296	A	1.4±0.4;0.4	1.6±0.4;0.5
Jan, 1995	Gr. Beta	Lw-609, 610	A	2.6±0.7;0.8	1.7±0.7;0.7
Jan, 1995	Co-60	Lw-344, 345	A	-0.2±1.9;1.9	1.5±3.1;3.1
Jan, 1995	Cs-137	Lw-344, 345	A	0.4±1.9;1.9	-0.2±3.0;3.0
Jan, 1995	I-131	Mi-374, 375	A	-0.1±0.2;0.2	-0.1±0.3;0.3
Jan, 1995	K-40	Mi-374, 375	A	1,250.0±150.0;226.7	1,286.5±141.0;224.7
Jan, 1995	H-3	Sw-463, 464	A	35.6±80.3;80.5	7.5±79.0;79.0
Jan, 1995	H-3	Ww-547, 548	A	602.6±102.9;131.6	619.6±103.6;133.5
Feb, 1995	H-3	Ww-763, 764	A	584.4±101.1;128.6	707.1±105.5;142.8
Jan, 1995	Gr. Beta	Sw-463, 464	A	1.9±0.6;0.7	1.9±0.6;0.7
Jan, 1995	Sr-89	Cf-20, 21	A	0.0±0.0;0.0	0.0±0.0;0.0
Jan, 1995	Sr-90	Cf-20, 21	A	0.0±0.0;0.0	0.0±0.0;0.0
Mar, 1995	K-40	Mi-2083, 2084	A	1,273.9±69.7;186.7	1,328.9±59.8;190.4
Mar, 1995	K-40	So-1861, 1862	A	11.7±0.6;1.3	11.3±0.5;1.2

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Mar, 1995	Cs-137	So-1861, 1862	A	0.3±0.0;0.0	0.2±0.0;0.0
Mar, 1995	Ra-226	So-1861, 1862	A	1.7±0.4;0.4	1.5±0.3;0.3
Feb, 1995	I-131	Mi-881, 882	A	0.2±0.3;0.3	0.2±0.3;0.3
Feb, 1995	I-131	Mi-937, 938	A	-0.0±0.2;0.2	-0.0±0.2;0.2
Feb, 1995	I-131	Mi-1216, 1217	A	0.3±0.3;0.3	0.1±0.3;0.3
Feb, 1995	Be-7	G-1343, 1344	A	11.4±0.3;1.2	11.9±0.3;1.2
Feb, 1995	H-3	Ww-1394, 1395	A	47.9±80.2;80.4	-24.9±76.6;76.7
Jan, 1995	Gr. Beta	Cw-105, 106	A	0.0±0.4;0.4	0.1±0.4;0.4
Jan, 1995	Gr. Beta	Cw-105, 106	A	5.4±1.0;1.1	6.2±1.0;1.2
Jan, 1995	Gr. Beta	Lw-344, 345	A	3.3±0.9;1.1	3.4±0.9;1.1
Feb, 1995	Gr. Beta	Sw-694, 695	A	3.9±0.7;1.0	4.2±0.8;1.0
Feb, 1995	Gr. Beta	Swt-1515, 1516	A	2.4±0.5;0.6	1.7±0.5;0.6
Mar, 1995	H-3	Ww-1563, 1564	A	33.5±82.7;82.8	39.5±83.0;83.1
Feb, 1995	K-40	Mi-881, 882	A	1,340.4±164.0;245.2	1,492.0±101.0;226.7
Feb, 1995	K-40	Mi-937, 938	A	1,451.8±69.6;209.4	1,456.6±141.0;243.2
Feb, 1995	K-40	G-1343, 1344	A	3.0±0.2;0.4	3.0±0.2;0.4
Feb, 1995	K-40	Mi-1216, 1217	A	1,583.0±131.0;252.0	1,493.6±174.0;267.5
Feb, 1995	H-3	Sw-1264, 1265	A	67.1±81.2;81.7	109.3±83.1;84.5
Mar, 1995	Gr. Beta	Sw-2104, 2105	A	1.7±0.5;0.6	1.7±0.6;0.6
Mar, 1995	K-40	Mi-1663, 1664	A	1,592.1±124.0;249.5	1,555.6±118.0;242.2
Mar, 1995	I-131	Mi-1663, 1664	A	0.1±0.3;0.3	0.2±0.3;0.3
Mar, 1995	Sr-89	Mi-1663, 1664	A	0.6±0.7;0.7	0.6±0.7;0.7
Mar, 1995	Sr-90	Mi-1663, 1664	A	1.4±0.4;0.4	1.5±0.5;0.5
Mar, 1995	Cs-134	Mi-1663, 1664	A	0.2±2.8;2.8	-1.1±2.1;2.1
Mar, 1995	Cs-137	Mi-1663, 1664	A	-0.1±2.7;2.7	0.9±2.4;2.4
Mar, 1995	La-140	Mi-1663, 1664	A	-1.7±3.1;3.1	-0.2±2.7;2.7
Mar, 1995	Co-60	Mi-1663, 1664	A	2.0±3.2;3.3	-1.5±2.7;2.7
Mar, 1995	Gr. Beta	Lw-1707, 1708	A	2.0±0.5;0.6	2.1±0.5;0.6
Mar, 1995	I-131	Lw-1707, 1708	A	0.2±0.3;0.3	-0.1±0.3;0.3
Mar, 1995	Mn-54	Lw-1707, 1708	A	-1.9±3.1;3.1	0.8±2.5;2.5
Mar, 1995	Fe-59	Lw-1707, 1708	A	5.5±6.2;6.2	-6.7±6.2;6.2
Mar, 1995	Co-60	Lw-1707, 1708	A	1.1±2.9;2.9	1.5±2.7;2.7
Mar, 1995	Co-58	Lw-1707, 1708	A	0.4±3.0;3.0	0.0±2.9;2.9
Mar, 1995	Zn-65	Lw-1707, 1708	A	-2.7±6.5;6.5	-1.7±5.8;5.8
Mar, 1995	Zr-Nb-95	Lw-1707, 1708	A	-0.3±3.1;3.1	-3.2±2.7;2.7
Mar, 1995	Cs-134	Lw-1707, 1708	A	-1.9±3.1;3.1	-1.5±2.8;2.8

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Mar, 1995	Cs-137	Lw-1707, 1708	A	2.6±3.0;3.0	-1.4±2.5;2.5
Mar, 1995	La-140	Lw-1707, 1708	A	-3.6±5.1;5.1	1.3±4.6;4.6
Mar, 1995	Ru-103	Lw-1707, 1708	A	-0.1±3.3;3.3	-0.8±3.0;3.0
Mar, 1995	Gr. Alpha	Wwu-2031, 2032	A	2.0±2.3;2.3	3.0±2.4;2.5
Mar, 1995	Gr. Beta	Wwu-2031, 2032	A	1.3±1.9;1.9	2.1±2.0;2.0
Mar, 1995	Gr. Beta	Ww-1684, 1685	A	4.9±0.7;1.1	5.0±0.7;1.1
Mar, 1995	H-3	Ww-1684, 1685	A	81.7±84.9;85.6	85.7±85.1;85.9
Mar, 1995	H-3	Sw-2200, 2201	A	33.8±85.6;85.8	54.0±86.6;86.9
Mar, 1995	I-131	Mi-2083, 2084	A	0.0±0.2;0.2	0.0±0.2;0.2
Mar, 1995	Sr-90	Mi-2083, 2084	A	1.6±0.5;0.5	1.8±0.6;0.6
Apr, 1995	Gr. Beta	Ww-2659, 2660	A	0.5±0.6;0.6	0.4±0.4;0.4
Apr, 1995	H-3	Ww-2659, 2660	A	38.4±87.5;87.6	133.4±91.7;93.5
Apr, 1995	K-40	Mi-2713, 2714	A	1,420.9±137.0;236.9	1,420.0±137.0;236.8
Jan, 1995	Gr. Beta	Swt-715, 716	A	2.3±0.6;0.7	2.3±0.5;0.6
Jan, 1995	Gr. Alpha	Wwu-860, 861	A	0.3±0.6;0.6	0.2±0.3;0.3
Jan, 1995	Gr. Beta	Wwu-860, 861	A	0.8±1.3;1.3	1.8±1.4;1.4
Apr, 1995	Gr. Beta	Ww-2313, 2314	A	0.6±0.5;0.5	1.0±0.5;0.5
Apr, 1995	Gr. Beta	Swt-3343, 3344	A	2.3±0.5;0.6	3.0±0.5;0.7
Apr, 1995	Gr. Beta	Ww-3447, 3448	A	1.2±1.7;1.7	3.2±1.8;1.9
Apr, 1995	Gr. Alpha	Ww-3447, 3448	A	-0.3±1.7;1.7	-1.5±1.6;1.7
Apr, 1995	Gr. Beta	Lw-3682, 3683	A	2.1±0.6;0.7	1.5±0.6;0.6
Apr, 1995	H-3	Lw-3682, 3683	A	139.9±91.1;93.1	75.0±88.2;88.8
Mar, 1995	H-3	Ww-1618, 1619	A	4,333.0±204.0;623.6	4,457.0±206.0;640.2
Mar, 1995	H-3	Sw-1762, 1763	A	104.4±89.4;90.5	92.2±88.8;89.7
Mar, 1995	H-3	Sw-1919, 1920	A	-9.1±85.2;85.2	66.7±88.9;89.3
Mar, 1995	Gr. Beta	Cw-1997, 1998	A	2.7±1.0;1.1	2.3±1.4;1.4
Mar, 1995	Co-60	Sw-2355, 2356	A	0.6±1.5;1.5	0.9±1.6;1.6
Mar, 1995	Cs-137	Sw-2355, 2356	A	2.2±1.5;1.6	0.1±1.9;1.9
Apr, 1995	I-131(G)	Mi-2149, 2150	A	0.1±2.2;2.2	0.3±2.5;2.5
Mar, 1995	Cs-137	Pw-2271, 2272	A	1.0±2.1;2.1	0.9±3.5;3.5
Mar, 1995	H-3	Pw-2248, 2249	A	154.6±91.1;93.5	164.8±91.5;94.2
Mar, 1995	Co-60	Ww-1618, 1619	A	2.8±1.5;1.6	2.2±4.6;4.6
Mar, 1995	Cs-137	Ww-1618, 1619	A	-0.9±1.7;1.7	-2.5±3.2;3.2
Mar, 1995	Co-60	Pw-2271, 2272	A	-0.5±2.0;2.0	-1.2±2.9;2.9
May, 1995	Gr. Alpha	So-3531, 3532	A	6.9±3.6;3.6	9.2±3.9;4.0
May, 1995	Gr. Beta	So-3531, 3532	A	17.1±3.1;3.5	18.8±3.1;3.7

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
May, 1995	I-131	Mi-3598, 3599	A	0.2±0.4;0.4	0.2±0.3;0.3
May, 1995	K-40	Mi-3598, 3599	A	1,349.0±112.0;214.9	1,297.4±151.0;232.2
May, 1995	I-131	Mi-4377, 4378	A	-0.1±0.1;0.1	-0.0±0.1;0.1
May, 1995	Sr-89	Mi-4377, 4378	A	-0.0±0.7;0.7	0.0±1.1;1.1
May, 1995	Sr-90	Mi-4377, 4378	A	1.3±0.4;0.5	1.3±0.6;0.7
May, 1995	K-40	Mi-4377, 4378	A	1,385.1±63.2;198.7	1,344.3±92.5;204.9
May, 1995	I-131	Mi-4544, 4545	A	0.1±0.3;0.3	0.1±0.2;0.2
May, 1995	Sr-90	Mi-4544, 4545	A	2.1±0.5;0.6	1.3±0.4;0.4
May, 1995	K-40	Mi-4544, 4545	A	1,410.0±72.3;204.9	1,359.0±65.7;196.2
May, 1995	Gr. Beta	G-4604, 4605	A	4.0±0.1;0.4	4.0±0.2;0.4
May, 1995	K-40	G-4604, 4605	A	5.1±0.7;0.8	5.1±0.7;0.9
May, 1995	Be-7	G-4604, 4605	A	1.9±0.4;0.4	1.7±0.4;0.4
May, 1995	I-131	Mi-4695, 4696	A	0.1±0.2;0.2	0.1±0.2;0.2
May, 1995	K-40	Mi-4695, 4696	A	1,568.8±114.0;241.9	1,573.1±50.1;219.7
May, 1995	Sr-89	Mi-4716, 4717	A	-0.3±0.8;0.8	-0.0±0.9;0.9
May, 1995	Sr-90	Mi-4716, 4717	A	1.2±0.4;0.5	1.6±0.4;0.5
May, 1995	Be-7	G-4814, 4815	A	0.6±0.3;0.3	0.6±0.2;0.2
May, 1995	K-40	G-4814, 4815	A	5.8±0.6;0.8	5.1±0.5;0.7
May, 1995	K-40	So-5178, 5179	A	19.9±1.1;2.3	22.1±1.2;2.5
May, 1995	I-131	Mi-5620, 5621	A	0.2±0.2;0.2	0.0±0.2;0.2
May, 1995	K-40	Mi-5620, 5621	A	1,526.2±119.0;239.3	1,449.3±162.0;255.1
May, 1995	Gr. Beta	Swu-5663, 5664	A	2.5±0.6;0.7	2.5±0.6;0.7
May, 1995	H-3	Swu-5663, 5664	A	867.2±104.9;157.8	865.5±104.9;157.6
May, 1995	I-131	Dw-5738, 5739	A	-0.0±0.2;0.2	-0.0±0.1;0.1
May, 1995	Gr. Beta	Dw-5738, 5739	A	2.5±1.2;1.2	3.6±1.2;1.3
Jun, 1995	Gr. Beta	Ww-6184, 6185	A	6.0±1.1;1.4	7.5±1.4;1.8
Jun, 1995	H-3	Ww-6184, 6185	A	86.1±78.3;79.2	107.0±79.3;80.6
Jun, 1995	I-131	Mi-6277, 6278	A	0.1±0.2;0.2	0.1±0.2;0.2
Jun, 1995	K-40	Mi-6277, 6278	A	1,285.5±152.0;231.7	1,355.2±114.0;216.7
May, 1995	Gr. Beta	Lw-6327, 6328	A	6.5±1.0;1.4	6.6±1.0;1.5
Jun, 1995	i-131	Mi-6419, 6420	A	0.1±0.2;0.2	0.1±0.2;0.2
Jun, 1995	K-40	Mi-6419, 6420	A	1,457.2±175.0;264.4	1,339.3±150.0;236.0
Jun, 1995	I-131	Mi-6521, 6522	A	0.1±0.2;0.2	0.0±0.2;0.2
Jun, 1995	K-40	Mi-6521, 6522	A	1,475.4±123.0;235.4	1,274.6±160.0;235.9
Jun, 1995	I-131	Mi-7032, 7033	A	0.3±0.3;0.3	-0.1±0.3;0.3
Jun, 1995	K-40	Mi-7032, 7033	A	1,577.6±127.0;249.3	1,522.8±164.0;264.2

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jun, 1995	H-3	Sw-7053, 7054	A	73.2±75.7;76.3	126.8±78.2;80.1
Jun, 1995	H-3	Swu-7101, 7102	A	118.6±85.8;87.3	92.6±84.7;85.6
Jun, 1995	H-3	Sw-7216, 7217	A	20.4±81.4;81.5	63.0±83.3;83.8
May, 1995	I-131	Mi-3809, 3810	A	0.1±0.2;0.2	0.2±0.2;0.2
Jun, 1995	I-131	Mi-5684, 5685	A	0.1±0.1;0.1	-0.0±0.1;0.1
Jun, 1995	I-131	Mi-6446, 6447	A	-0.0±0.2;0.2	0.0±0.2;0.2
Jun, 1995	I-131	Mi-6840, 6841	A	0.2±0.2;0.2	0.1±0.2;0.2
Jun, 1995	I-131	Mi-6564, 6565	A	0.2±0.3;0.3	0.1±0.2;0.2
Jul, 1995	I-131	Mi-7260, 7261	A	0.2±0.2;0.2	0.1±0.2;0.2
Feb, 1995	H-3	Sw-1367, 1368	A	560.3±103.1;128.2	606.1±104.8;133.3
Feb, 1995	H-3	Ww-1536, 1537	A	2,874.3±167.5;425.3	2,924.1±168.6;431.9
Mar, 1995	H-3	Sw-1919, 1920	A	-9.1±85.2;85.2	66.7±88.9;89.3
Apr, 1995	H-3	Ww-2432, 2433	A	-21.6±82.7;82.8	2.7±83.9;83.9
Apr, 1995	H-3	Sw-2686, 2687	A	52.7±87.0;87.3	2.0±84.6;84.6
Apr, 1995	H-3	Ww-3424, 3425	A	442.5±116.7;131.3	430.4±116.3;130.2
Apr, 1995	H-3	Sw-3403, 3404	A	159.6±90.6;93.2	72.7±86.6;87.2
May, 1995	H-3	Ww-3577, 3578	A	33.6±91.0;91.1	58.8±92.0;92.4
May, 1995	H-3	Ww-4784, 4785	A	18,665.3±390.2;2,568.3	18,274.9±386.3;2,515.2
May, 1995	H-3	Sw-4759, 4760	A	3,679.8±213.9;544.3	3,817.8±217.0;562.8
Jan, 1995	H-3	Sw-213, 214	A	5,939.6±241.2;843.0	6,091.2±232.8;860.5
Feb, 1995	H-3	Ww-736, 737	A	9,951.9±284.3;1,383.0	10,200.8±287.5;1,416.8
Feb, 1995	H-3	Sw-904, 905	A	640.3±104.6;136.1	597.4±103.0;131.2
Feb, 1995	H-3	Sw-1237, 1238	A	55.4±97.4;97.7	4.9±95.4;95.4
Jun, 1995	H-3	Ww-5992, 5993	A	67.0±76.2;76.7	94.0±77.3;78.4
May, 1995	H-3	Ww-5244, 5245	A	608.4±96.3;127.0	463.6±91.1;110.8
Jun, 1995	H-3	Sw-6256, 6257	A	423.9±92.0;108.6	585.0±97.9;126.1
Jun, 1995	H-3	Sw-6232, 6233	A	68.4±79.5;80.0	136.7±82.4;84.5
Jun, 1995	H-3	Ww-6861, 6862	A	1,422.4±128.0;232.0	1,505.1±130.3;242.6
Jun, 1995	H-3	Sw-7011, 7012	A	203.6±81.6;86.2	226.8±82.6;88.2
Jun, 1995	Gr. Beta	Cw-5713, 5714	A	0.0±1.5;1.5	0.4±1.5;1.5
Mar, 1995	Gr. Beta	Cw-1997, 1998	A	-0.5±1.0;1.0	0.6±1.1;1.1
Apr, 1995	Gr. Beta	Cw-2401, 2402	A	0.0±1.1;1.1	0.5±1.1;1.1
Apr, 1995	Gr. Beta	Cw-2739, 2740	A	5.1±1.5;1.6	2.3±1.3;1.4
Apr, 1995	Gr. Beta	Cw-2918, 2919	A	2.1±1.3;1.4	0.8±1.2;1.2
Apr, 1995	Gr. Beta	Cw-2835, 2836	A	0.2±1.2;1.2	0.8±1.2;1.2
May, 1995	Gr. Beta	Cw-3838, 3839	A	-0.7±1.2;1.2	-1.1±1.2;1.2

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Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
May, 1995	Gr. Beta	Cw-4575, 4576	A	-0.2±1.0;1.0	-0.6±1.0;1.0
Apr, 1995	Gr. Beta	Cw-2835, 2836	A	2.0±1.4;1.4	2.7±1.5;1.5
Apr, 1995	Gr. Beta	Cw-2739, 2740	A	13.8±2.1;3.0	14.3±2.1;3.0
Apr, 1995	Gr. Beta	Cw-2918, 2919	A	5.3±1.6;1.8	4.3±1.6;1.7
Apr, 1995	Gr. Beta	Cw-2401, 2402	A	1.7±1.3;1.3	3.5±1.5;1.5
May, 1995	Gr. Beta	Cw-3838, 3839	A	2.0±1.4;1.4	3.4±1.5;1.6
May, 1995	Gr. Beta	Cw-4575, 4576	A	2.0±1.2;1.2	2.8±1.3;1.3
Jun, 1995	Gr. Beta	Cw-5713, 5714	A	3.1±1.4;1.5	3.3±1.4;1.5
Apr, 1995	Cs-137	Mi-2149, 2150	A	0.2±2.0;2.0	2.3±2.2;2.2
Jan, 1995	Cs-137	Mi-83, 84	A	-1.1±2.3;2.3	0.1±1.9;1.9
Jan, 1995	Cs-137	Sw-586, 587	A	0.6±2.3;2.3	1.5±2.9;2.9
Feb, 1995	Cs-137	Sw-1494, 1495	A	3.5±3.7;3.7	0.2±3.6;3.6
Mar, 1995	Cs-137	Ap-2784, 2785	A	-0.0±0.0;0.0	0.0±0.0;0.0
Mar, 1995	Cs-137	Ap-2805, 2806	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	Ww-3577, 3578	A	1.2±2.2;2.2	-1.6±2.9;2.9
May, 1995	Cs-137	Mi-3809, 3810	A	0.9±2.5;2.5	0.1±2.4;2.4
May, 1995	Cs-137	F-4330, 4331	A	0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	Cs-137	F-4288, 4289	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Cs-137	Ww-5992, 5993	A	-1.4±1.4;1.4	-1.4±3.0;3.0
Jun, 1995	Cs-137	Mi-5684, 5685	A	1.8±2.7;2.7	-0.9±3.2;3.2
May, 1995	Cs-137	Sw-6013, 6014	A	-0.7±2.3;2.3	0.5±2.3;2.3
Jun, 1995	Cs-137	Mi-6446, 6447	A	1.3±3.4;3.4	0.1±2.2;2.2
May, 1995	Cs-137	F-5025, 5026	A	-0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	Cs-137	F-4309, 4310	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	F-5046, 5047	A	0.0±0.0;0.0	-0.0±0.0;0.0
Apr, 1995	Co-60	Mi-2149, 2150	A	-1.2±2.2;2.2	0.7±2.7;2.7
Jan, 1995	Co-60	Mi-83, 84	A	-0.3±2.5;2.5	0.7±2.2;2.2
Jan, 1995	Co-60	Sw-586, 587	A	-2.2±2.3;2.3	1.9±2.8;2.8
Feb, 1995	Co-60	Sw-1494, 1495	A	-2.2±4.1;4.1	0.1±3.4;3.4
Mar, 1995	Co-60	Ap-2784, 2785	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Mar, 1995	Co-60	Ap-2805, 2806	A	-0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Co-60	Ww-3577, 3578	A	-0.3±2.2;2.2	0.5±2.6;2.6
May, 1995	Co-60	Mi-3809, 3810	A	-0.4±3.0;3.0	0.2±3.0;3.0
May, 1995	Co-60	F-4330, 4331	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Co-60	F-4288, 4289	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Co-60	Ww-5992, 5993	A	0.4±1.2;1.2	0.9±2.7;2.7



Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jun, 1995	Co-60	Mi-5684, 5685	A	0.1±3.0;3.0	0.4±4.6;4.6
May, 1995	Co-60	Sw-6013, 6014	A	0.8±2.2;2.2	1.5±3.0;3.0
Jun, 1995	Co-60	Mi-6446, 6447	A	0.2±4.9;4.9	0.4±2.8;2.8
May, 1995	Co-60	F-5025, 5026	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Co-60	F-4309, 4310	A	-0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	Co-60	F-5046, 5047	A	0.0±0.0;0.0	-0.0±0.0;0.0
Jan, 1995	H-3	Ww-62, 63	A	22.6±80.9;80.9	18.8±80.7;80.8
Jan, 1995	I-131(g)	Mi-295, 296	A	-0.4±2.4;2.4	-0.0±4.3;4.3
Feb, 1995	I-131	Mi-838, 839	A	0.1±0.2;0.2	0.1±0.2;0.2
Feb, 1995	Sr-89	Mi-838, 839	A	0.5±0.6;0.6	0.5±0.6;0.6
Feb, 1995	Sr-90	Mi-838, 839	A	0.8±0.3;0.3	0.8±0.3;0.3
Feb, 1995	K-40	Mi-838, 839	A	1,298.6±99.4;202.7	1,232.5±125.0;209.1
Feb, 1995	Co-60	Mi-838, 839	A	1.0±2.7;2.7	-0.5±3.8;3.8
Feb, 1995	Cs-134	Mi-838, 839	A	-0.1±2.3;2.3	-1.4±3.1;3.1
Feb, 1995	Cs-137	Mi-838, 839	A	-0.4±2.6;2.6	-0.4±3.1;3.1
Feb, 1995	I-131(g)	Mi-838, 839	A	-0.3±2.6;2.6	-0.6±3.2;3.2
Jan, 1995	K-40	Wwu-860, 861	A	61.8±32.9;33.5	71.0±36.2;36.9
Mar, 1995	I-131(g)	Mi-1663, 1664	A	-0.4±3.7;3.7	0.1±3.4;3.4
Mar, 1995	K-40	Lw-1707, 1708	A	79.3±42.8;43.5	75.3±39.2;39.9
Mar, 1995	I-131(g)	Lw-1707, 1708	A	-0.7±6.7;6.7	-0.6±6.2;6.2
Mar, 1995	K-40	Sw-2221, 2222	A	149.7±74.4;75.9	119.4±46.7;48.2
Mar, 1995	Sr-89	Ap-2453, 2454	A	0.0±0.0;0.0	-0.0±0.0;0.0
Mar, 1995	Sr-90	Ap-2453, 2454	A	0.0±0.0;0.0	0.0±0.0;0.0
Apr, 1995	K-40	Sl-2567, 2568	A	1.4±0.4;0.5	1.7±0.4;0.4
Apr, 1995	I-131	Mi-2713, 2714	A	0.4±0.5;0.5	0.2±0.2;0.2
Apr, 1995	K-40	G-3133, 3134	A	6.5±0.2;0.7	6.1±0.3;0.7
May, 1995	Sr-89	So-3531, 3532	A	-0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Sr-90	So-3531, 3532	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	K-40	So-3531, 3532	A	25.0±0.8;2.6	23.8±0.7;2.5
May, 1995	Cs-137	So-3531, 3532	A	0.2±0.0;0.0	0.1±0.0;0.0
Apr, 1995	Sr-89	F-3552, 3553	A	-0.0±0.0;0.0	0.0±0.0;0.0
Apr, 1995	Sr-90	F-3552, 3553	A	0.0±0.0;0.0	0.0±0.0;0.0
Apr, 1995	K-40	F-3552, 3553	A	3.1±0.4;0.5	2.9±0.2;0.4
May, 1995	Co-60	Mi-4377, 4378	A	0.9±1.7;1.7	2.2±2.7;2.7
May, 1995	Cs-134	Mi-4377, 4378	A	0.8±1.5;1.5	-0.2±2.3;2.3
May, 1995	Cs-137	Mi-4377, 4378	A	0.9±1.4;1.4	0.6±2.1;2.1

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
May, 1995	I-131(g)	Mi-4377, 4378	A	0.2±1.3;1.3	-1.1±2.6;2.6
May, 1995	Co-60	G-4604, 4605	A	-0.0±0.0;0.0	-0.0±0.0;0.0
May, 1995	Cs-134	G-4604, 4605	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	G-4604, 4605	A	0.1±0.0;0.0	0.1±0.0;0.0
May, 1995	I-131(g)	G-4604, 4605	A	0.0±0.0;0.0	0.0±0.0;0.0
May, 1995	Cs-137	So-5178, 5179	A	0.8±0.1;0.1	0.8±0.1;0.1
May, 1995	K-40	F-5385, 5386	A	2.5±0.3;0.4	2.6±0.4;0.5
Jun, 1995	Gr. Beta	Sl-5832, 5833	A	4.7±0.5;0.7	4.7±0.5;0.7
Jun, 1995	Sr-89	Sl-5832, 5833	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Sr-90	Sl-5832, 5833	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	K-40	Sl-5832, 5833	A	2.9±0.3;0.4	2.4±0.3;0.4
Jun, 1995	Co-60	Sl-5832, 5833	A	0.0±0.0;0.0	0.1±0.0;0.0
Jun, 1995	Cs-137	Sl-5832, 5833	A	0.1±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Gr. Beta	Sl-6205, 6206	A	3.3±0.1;0.3	3.3±0.1;0.3
Jun, 1995	K-40	Sl-6205, 6206	A	3.3±0.3;0.5	3.3±0.4;0.5
Jun, 1995	Co-60	Sl-6205, 6206	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Cs-134	Sl-6205, 6206	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Cs-137	Sl-6205, 6206	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	I-131(g)	Sl-6205, 6206	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Jun, 1995	Gr. Alpha	Ve-6348, 6349	A	0.3±0.1;0.1	0.2±0.1;0.1
Jun, 1995	Gr. Beta	Ve-6348, 6349	A	3.3±0.1;0.4	3.4±0.1;0.4
Jun, 1995	K-40	Ve-6348, 6349	A	3.1±0.3;0.5	3.0±0.3;0.4
May, 1995	Sr-89	W-6398, 6399	A	15.1±3.8;4.1	18.1±2.7;3.3
May, 1995	Sr-90	W-6398, 6399	A	25.1±1.9;3.1	24.4±1.3;2.8
Jun, 1995	K-40	Sl-6500, 6501	A	1.8±0.5;0.5	2.2±0.5;0.6
Jun, 1995	K-40	Bs-6960, 6961	A	17.7±0.9;2.0	17.0±1.1;2.0
Jun, 1995	Cs-137	Bs-6960, 6961	A	0.1±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Gr. Beta	Sw-7080, 7081	A	2.3±0.6;0.7	2.7±0.6;0.7
Jun, 1995	K-40	Sw-7080, 7081	A	61.3±28.3;29.0	95.4±26.0;27.7
Jun, 1995	Gr. Beta	Swu-7101, 7102	A	2.0±0.5;0.6	2.1±0.5;0.6
Jun, 1995	H-3	Wwt-7122, 7123	A	3.8±81.4;81.4	-13.4±80.6;80.6
Jun, 1995	Gr. Beta	Lw-7239, 7240	A	2.5±0.1;0.4	2.4±0.6;0.7
Jun, 1995	Gr. Beta	Ww-7281, 7282	A	1.8±0.3;0.4	2.1±0.6;0.7
Jun, 1995	H-3	Ww-7281, 7282	A	-24.3±75.2;75.2	10.3±76.8;76.8
Jul, 1995	I-131	Mi-7510, 7511	A	0.3±0.4;0.4	0.1±0.4;0.4
Jul, 1995	I-131	Wwt-7621, 7622	A	0.1±0.2;0.2	0.1±0.2;0.2

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jul, 1995	Gr. Beta	G-7805, 7806	A	5.1±0.2;0.5	5.1±0.2;0.6
Jul, 1995	K-40	G-7805, 7806	A	6.0±0.6;0.8	5.8±0.5;0.8
Jul, 1995	Co-60	G-7805, 7806	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-134	G-7805, 7806	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-137	G-7805, 7806	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	I-131(g)	G-7805, 7806	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Jul, 1995	Gr. Beta	Sw-7323, 7324	A	2.3±0.8;0.8	2.6±0.8;0.9
Jul, 1995	H-3	Sw-7323, 7324	A	77.9±84.0;84.7	48.4±82.6;82.9
Jul, 1995	Gr. Beta	Lw-7487, 7488	A	2.1±0.5;0.6	1.9±0.5;0.6
Jul, 1995	I-131	Lw-7487, 7488	A	0.2±0.3;0.3	-0.0±0.3;0.3
Jul, 1995	Co-60	Lw-7487, 7488	A	0.4±1.1;1.1	0.4±3.0;3.0
Jul, 1995	Cs-134	Lw-7487, 7488	A	0.1±1.1;1.1	-2.4±3.0;3.0
Jul, 1995	Cs-137	Lw-7487, 7488	A	0.5±1.1;1.1	-2.2±2.8;2.9
Jul, 1995	I-131(g)	Lw-7487, 7488	A	0.3±2.4;2.4	0.9±10.5;10.5
Jul, 1995	I-131	Mi-7575, 7576	A	0.2±0.2;0.2	0.1±0.2;0.2
Jul, 1995	Sr-89	Mi-7575, 7576	A	0.6±1.0;1.0	-0.5±0.9;0.9
Jul, 1995	Sr-90	Mi-7575, 7576	A	1.2±0.4;0.4	1.8±0.4;0.4
Jul, 1995	K-40	Mi-7575, 7576	A	1,481.9±111.0;230.1	1,398.8±106.0;217.8
Jul, 1995	Co-60	Mi-7575, 7576	A	-1.0±2.9;2.9	1.6±3.2;3.2
Jul, 1995	Cs-134	Mi-7575, 7576	A	1.7±2.4;2.4	-0.6±2.4;2.4
Jul, 1995	Cs-137	Mi-7575, 7576	A	-0.8±2.5;2.5	1.3±2.4;2.4
Jul, 1995	I-131(g)	Mi-7575, 7576	A	0.9±2.2;2.2	0.9±2.4;2.4
Jul, 1995	Sr-90	Ap-7600, 7601	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Sr-89	Mi-7896, 7897	A	0.4±1.0;1.0	0.2±0.9;0.9
Jul, 1995	Sr-90	Mi-7896, 7897	A	1.7±0.4;0.5	1.3±0.4;0.4
Jul, 1995	Gr. Beta	Ve-8090, 8091	A	2.4±0.1;0.3	2.3±0.1;0.2
Jul, 1995	K-40	Ve-8090, 8091	A	2.8±0.1;0.3	2.8±0.1;0.3
Jul, 1995	Gr. Beta	F-8154, 8155	A	2.3±0.1;0.2	2.3±0.1;0.2
Jul, 1995	K-40	F-8154, 8155	A	2.2±0.3;0.3	2.1±0.4;0.5
Jul, 1995	Gr. Alpha	Sw-8175, 8176	A	0.5±0.6;0.6	0.7±0.8;0.8
Jul, 1995	Gr. Beta	Sw-8175, 8176	A	0.8±1.1;1.1	0.8±1.1;1.1
Jul, 1995	K-40	Sw-8175, 8176	A	89.8±23.8;25.4	67.4±39.3;39.9
Aug, 1995	Gr. Beta	G-8272, 8273	A	6.2±0.3;0.7	6.0±0.3;0.6
Jul, 1995	Gr. Beta	Swu-8318, 8319	A	2.0±0.5;0.6	1.9±0.5;0.6
Jul, 1995	H-3	Swu-8318, 8319	A	102.7±103.7;104.6	35.5±101.2;101.3
Jul, 1995	K-40	Swu-8318, 8319	A	93.3±39.7;40.8	99.7±49.1;50.1

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Aug, 1995	I-131	Mi-8389, 8390	A	-0.0±0.1;0.1	0.1±0.1;0.1
Aug, 1995	K-40	Mi-8389, 8390	A	1,543.8±120.0;241.8	1,369.6±162.0;246.9
Jul, 1995	Gr. Alpha	Sp-8540, 8541	A	5.2±1.3;1.4	3.9±1.1;1.1
Jul, 1995	Sr-90	Sp-8540, 8541	A	15.7±3.8;4.1	19.4±4.1;4.6
Aug, 1995	I-131	Mi-8585, 8586	A	-0.2±0.2;0.2	0.1±0.2;0.2
Aug, 1995	Sr-89	Mi-8585, 8586	A	0.1±1.1;1.1	-0.1±0.9;0.9
Aug, 1995	Sr-90	Mi-8585, 8586	A	1.9±0.4;0.5	1.6±0.4;0.4
Aug, 1995	K-40	Mi-8585, 8586	A	1,454.6±150.0;248.3	1,478.2±104.0;226.3
Aug, 1995	Co-60	Mi-8585, 8586	A	-0.5±4.1;4.1	1.9±2.6;2.6
Aug, 1995	Cs-134	Mi-8585, 8586	A	0.1±3.5;3.5	0.9±2.3;2.3
Aug, 1995	Cs-137	Mi-8585, 8586	A	1.8±3.6;3.6	0.2±2.1;2.1
Aug, 1995	I-131(g)	Mi-8585, 8586	A	0.1±9.0;9.0	2.4±6.8;6.8
Aug, 1995	Gr. Beta	F-8754, 8755	A	13.1±0.3;1.3	12.6±0.3;1.3
Aug, 1995	K-40	F-8754, 8755	A	2.8±0.4;0.5	3.3±0.4;0.5
Aug, 1995	Co-60	F-8754, 8755	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Cs-134	F-8754, 8755	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Aug, 1995	Cs-137	F-8754, 8755	A	0.1±0.0;0.0	0.1±0.0;0.0
Aug, 1995	I-131(g)	F-8754, 8755	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Gr. Alpha	Ve-8946, 8947	A	0.2±0.1;0.1	0.2±0.1;0.1
Aug, 1995	Gr. Beta	Ve-8946, 8947	A	4.3±0.2;0.5	4.3±0.2;0.5
Aug, 1995	K-40	Ve-8946, 8947	A	4.0±0.3;0.5	4.0±0.3;0.5
Aug, 1995	K-40	Ve-9035, 9036	A	2.2±0.3;0.4	2.4±0.3;0.4
Aug, 1995	Gr. Beta	Swu-9162, 9163	A	2.5±0.5;0.6	2.5±0.5;0.7
Aug, 1995	H-3	Swu-9162, 9163	A	152.0±88.0;90.4	157.4±83.7;86.4
Aug, 1995	Gr. Beta	Ve-9210, 9211	A	4.1±0.2;0.5	4.1±0.2;0.4
Aug, 1995	K-40	Ve-9210, 9211	A	4.6±0.1;0.5	4.6±0.1;0.5
Aug, 1995	I-131	Mi-9297, 9298	A	0.0±0.2;0.2	0.1±0.2;0.2
Aug, 1995	K-40	Mi-9297, 9298	A	1,727.8±180.0;296.0	1,602.7±172.0;277.7
Sep, 1995	I-131	Mi-9350, 9351	A	-0.1±0.2;0.2	0.1±0.2;0.2
Sep, 1995	K-40	Mi-9350, 9351	A	1,335.3±163.0;244.0	1,521.4±179.0;273.6
Aug, 1995	Gr. Beta	Dw-9371, 9372	A	5.0±1.2;1.4	4.5±1.2;1.4
Aug, 1995	I-131	Dw-9371, 9372	A	0.1±0.2;0.2	0.1±0.2;0.2
Sep, 1995	K-40	Mi-9463, 9464	A	1,814.9±139.0;283.3	1,743.1±180.0;297.7
Sep, 1995	H-3	Sw-9583, 9584	A	191.8±84.4;88.3	59.6±78.6;79.0
Sep, 1995	I-131	Mi-9611, 9612	A	0.1±0.2;0.2	0.1±0.2;0.2
Sep, 1995	K-40	Mi-9611, 9612	A	1,463.6±163.0;257.3	1,381.6±117.0;221.3

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Sep, 1995	I-131	Mi-9677, 9678	A	0.1±0.2;0.2	-0.1±0.2;0.2
Sep, 1995	K-40	Mi-9677, 9678	A	1,579.6±149.0;261.4	1,387.5±150.0;241.1
May, 1995	K-40	Bs-5494, 5495	A	21.1±0.7;2.2	21.3±0.7;2.2
May, 1995	Cs-137	Bs-5494, 5495	A	0.6±0.0;0.1	0.6±0.0;0.1
May, 1995	Gr. Beta	Bs-6983, 6984	A	7.4±1.2;1.4	8.0±1.4;1.6
May, 1995	K-40	Bs-6983, 6984	A	8.3±0.3;0.9	8.5±0.1;0.9
May, 1995	Cs-137	Bs-6983, 6984	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jul, 1995	Sr-89	Ap-7600, 7601	A	0.0±0.0;0.0	0.0±0.0;0.0
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Jul, 1995	Sr-89	Sp-8540, 8541	A	1,443.1±42.1;150.3	1,419.5±35.3;146.3
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Aug, 1995	K-40	Ve-8802, 8803	A	2.3±0.2;0.3	2.3±0.3;0.4
Sep, 1995	I-131	Lw-9632, 9633	A	-0.0±0.2;0.2	0.2±0.2;0.2
Sep, 1995	K-40	Lw-9632, 9633	A	73.2±35.1;35.9	84.5±38.9;39.8
Sep, 1995	Co-60	Lw-9632, 9633	A	0.2±2.5;2.5	0.7±1.9;1.9
Sep, 1995	Cs-134	Lw-9632, 9633	A	-1.0±2.5;2.5	0.3±2.3;2.3
Sep, 1995	Cs-137	Lw-9632, 9633	A	0.7±2.7;2.7	2.0±2.0;2.0
Sep, 1995	I-131(g)	Lw-9632, 9633	A	-1.2±7.9;7.9	-1.8±6.9;6.9
Sep, 1995	K-40	Ve-9781, 9782	A	3.7±0.3;0.5	3.9±0.4;0.5
Sep, 1995	H-3	Ww-9988, 9989	A	126.1±81.2;83.0	18.3±76.3;76.4
Sep, 1995	I-131	Mi-10120, 10121	A	0.1±0.1;0.1	0.0±0.1;0.1
Sep, 1995	K-40	Mi-10120, 10121	A	1,446.6±163.0;255.5	1,300.9±145.0;228.7
Sep, 1995	H-3	Sw-10195, 10196	A	-19.6±74.7;74.7	103.2±80.3;81.5
Sep, 1995	H-3	P-10216, 10217	A	76.4±78.7;79.4	74.7±78.6;79.2
Sep, 1995	H-3	Sw-10261, 10262	A	279.1±88.4;96.2	300.6±89.3;98.2
Oct, 1995	K-40	Ve-10370, 10371	A	3.3±0.5;0.6	3.3±0.5;0.6
Oct, 1995	I-131	Wwu-10392, 10393	A	0.0±0.2;0.2	0.0±0.2;0.2
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Apr, 1995	Gr. Beta	Lw-3682, 3683	A	2.1±0.7;0.7	1.5±0.5;0.6
Apr, 1995	H-3	Lw-3682, 3683	A	75.0±88.2;88.8	139.9±91.1;93.1

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jul, 1995	I-131	Mi-7429, 7430	A	-0.2±0.3;0.3	0.2±0.2;0.2
Jul, 1995	I-131	Mi-7739, 7740	A	0.2±0.3;0.3	-0.0±0.2;0.2
Jul, 1995	I-131	Mi-7922, 7923	A	0.1±0.2;0.2	0.0±0.2;0.2
Aug, 1995	I-131	Mi-8293, 8294	A	-0.1±0.2;0.2	0.0±0.2;0.2
Aug, 1995	I-131	Mi-8413, 8414	A	0.1±0.2;0.2	0.1±0.2;0.2
Aug, 1995	I-131	Mi-8674, 8675	A	0.1±0.3;0.3	-0.1±0.2;0.2
Aug, 1995	I-131	Mi-8845, 8846	A	0.0±0.2;0.2	0.1±0.2;0.2
Sep, 1995	I-131	Mi-9327, 9328	A	0.1±0.2;0.2	0.1±0.2;0.2
Aug, 1995	I-131	Mi-8902, 8903	A	-0.0±0.2;0.2	0.1±0.3;0.3
Aug, 1995	I-131	Mi-9113, 9114	A	0.2±0.3;0.3	0.3±0.3;0.3
Sep, 1995	I-131	Mi-9758, 9759	A	0.0±0.1;0.1	0.1±0.1;0.1
Sep, 1995	I-131	Mi-9873, 9874	A	0.1±0.2;0.2	0.3±0.3;0.3
Jul, 1995	H-3	Ww-7454, 7455	A	7,142.8±243.6;1,001.5	6,985.4±241.2;980.2
Jun, 1995	H-3	Ww-7143, 7144	A	539.1±103.3;126.7	436.4±99.5;115.9
Jun, 1995	H-3	Pw-7174, 7175	A	144.1±84.3;86.5	121.4±83.3;84.9
Jul, 1995	H-3	Ww-7673, 7674	A	15.3±81.8;81.8	36.4±82.7;82.9
Jul, 1995	H-3	Ww-7967, 7968	A	109.5±84.6;85.9	70.8±82.8;83.4
Jul, 1995	H-3	Ww-8196, 8197	A	51.4±87.9;88.2	176.0±93.4;96.4
Jul, 1995	H-3	Cw-7648, 7649	A	-64.4±97.5;97.9	-70.2±97.2;97.7
Jul, 1995	H-3	Sw-8251, 8252	A	86.8±78.9;79.8	44.0±76.9;77.2
Aug, 1995	H-3	Sw-8648, 8649	A	35.6±75.1;75.3	21.3±74.5;74.5
Aug, 1995	H-3	Ww-8518, 8519	A	10.7±74.0;74.1	-19.6±72.6;72.6
Aug, 1995	H-3	Sw-9056, 9057	A	140.7±79.6;81.9	55.2±75.7;76.0
Aug, 1995	H-3	Ww-9276, 9277	A	1,636.0±131.0;258.2	1,680.8±132.2;264.1
Sep, 1995	H-3	Ww-9252, 9253	A	530.9±98.7;122.3	538.0±99.0;123.1
Sep, 1995	H-3	Ww-9396, 9397	A	14.9±76.6;76.6	48.9±78.2;78.5
Sep, 1995	H-3	Cw-9848, 9849	A	2.4±75.6;75.6	-2.9±75.4;75.4
Oct, 1995	H-3	Ww-10437, 10438	A	81.6±78.1;78.9	-10.6±73.8;73.9
Sep, 1995	H-3	Sw-10150, 10151	A	119.1±81.0;82.6	129.8±81.5;83.4
Jun, 1995	Gr. Beta	Cw-6474, 6475	A	0.0±1.2;1.2	0.1±1.2;1.2
Jul, 1995	Gr. Beta	Cw-7648, 7649	A	0.7±1.3;1.3	0.2±1.2;1.2
Aug, 1995	Gr. Beta	Cw-8873, 8874	A	-0.6±1.1;1.1	-0.0±1.2;1.2
Sep, 1995	Gr. Beta	Cw-9848, 9849	A	0.6±1.1;1.1	0.1±1.1;1.1
Sep, 1995	Gr. Beta	Cw-9654, 9655	A	-0.4±1.1;1.1	0.2±1.1;1.1
Jun, 1995	Gr. Beta	Cw-6474, 6475	A	2.8±1.4;1.5	3.2±1.4;1.5
Jun, 1995	Gr. Beta	Lw-6889, 6890	A	3.0±0.8;1.0	3.0±0.8;1.0

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jul, 1995	Gr. Beta	Ww-7673, 7674	A	14.1±2.2;3.1	14.2±2.2;3.1
Jul, 1995	Gr. Beta	Cw-7648, 7649	A	6.7±1.7;2.0	6.7±1.7;2.0
Jul, 1995	Gr. Beta	Lw-7944, 7945	A	4.1±0.9;1.1	4.0±0.9;1.1
Aug, 1995	Gr. Beta	Lw-8440, 8441	A	3.3±1.1;1.2	4.7±1.2;1.4
Aug, 1995	Gr. Beta	Lw-9079, 9080	A	2.8±0.9;1.0	2.7±0.9;1.0
Aug, 1995	Gr. Beta	Cw-8873, 8874	A	1.9±1.4;1.4	4.3±1.6;1.7
Sep, 1995	Gr. Beta	Cw-9486, 9487	A	3.2±1.5;1.6	3.4±1.6;1.7
Sep, 1995	Gr. Beta	Ww-9396, 9397	A	0.7±1.4;1.4	1.8±1.3;1.3
Sep, 1995	Gr. Beta	Cw-9654, 9655	A	3.9±1.5;1.6	4.0±1.5;1.6
Sep, 1995	Gr. Beta	Cw-9848, 9849	A	10.1±2.1;2.6	10.6±2.0;2.6
Jun, 1995	Cs-137	Lw-6889, 6890	A	-0.5±3.0;3.0	0.1±2.2;2.2
Jul, 1995	Cs-137	Mi-7260, 7261	A	1.7±2.6;2.6	-1.5±3.4;3.4
Jul, 1995	Cs-137	Sw-7387, 7388	A	0.6±2.3;2.3	-0.9±2.0;2.0
Jul, 1995	Cs-137	Mi-7739, 7740	A	0.9±3.7;3.7	-0.4±3.1;3.1
Jul, 1995	Cs-137	Mi-7922, 7923	A	1.2±2.9;2.9	-0.5±3.4;3.4
Jun, 1995	Cs-137	Ap-8111, 8112	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-137	Ap-8133, 8134	A	-0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Cs-137	Ve-8564, 8565	A	0.0±0.0;0.0	-0.0±0.0;0.0
Jul, 1995	Cs-137	F-7366, 7367	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Cs-137	Mi-8413, 8414	A	-0.7±2.9;2.9	-1.4±3.3;3.3
Jul, 1995	Cs-137	Sw-8704, 8705	A	0.3±3.5;3.5	-0.7±1.9;1.9
Jul, 1995	Cs-137	F-7344, 7345	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Cs-137	Lw-7944, 7945	A	0.6±2.2;2.2	-1.4±1.8;1.8
Jul, 1995	Cs-137	Sw-8606, 8607	A	-1.0±2.0;2.0	-0.7±2.2;2.2
Aug, 1995	Cs-137	Mi-8674, 8675	A	0.8±2.4;2.4	0.4±2.4;2.4
Aug, 1995	Cs-137	Lw-8440, 8441	A	0.8±2.0;2.0	-0.4±2.1;2.1
Aug, 1995	Cs-137	Lw-9079, 9080	A	0.8±2.8;2.8	-0.5±2.7;2.7
Aug, 1995	Cs-137	Ww-8518, 8519	A	1.7±2.9;2.9	0.4±2.8;2.8
Aug, 1995	Cs-137	Sw-9183, 9184	A	0.8±3.4;3.4	0.3±4.4;4.4
Sep, 1995	Cs-137	Ww-9396, 9397	A	2.7±2.7;2.8	0.8±2.6;2.6
Sep, 1995	Cs-137	Ve-9515, 9516	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Sep, 1995	Cs-137	Mi-9758, 9759	A	0.2±2.1;2.1	3.3±4.1;4.2
Oct, 1995	Cs-137	F-10470, 10471	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	Ww-10349, 10350	A	0.8±1.2;1.2	0.1±2.2;2.2
Oct, 1995	Cs-137	F-10491, 10492	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Jun, 1995	Co-60	Lw-6889, 6890	A	-2.4±3.4;3.4	1.4±1.7;1.8

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Jul, 1995	Co-50	Mi-7260, 7261	A	0.3±2.9;2.9	0.6±5.2;5.2
Jul, 1995	Co-60	Sw-7387, 7388	A	1.0±1.9;1.9	0.2±1.7;1.7
Jul, 1995	Co-60	Mi-7739, 7740	A	0.9±4.9;4.9	-0.6±4.6;4.6
Jul, 1995	Co-60	Mi-7922, 7923	A	0.6±3.1;3.1	-1.1±4.5;4.5
Jun, 1995	Co-60	Ap-8111, 8112	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Co-60	Ap-8133, 8134	A	-0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Co-60	Ve-8564, 8565	A	0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	Co-60	F-7366, 7367	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	Co-60	Mi-8413, 8414	A	0.3±3.1;3.1	-2.4±5.2;5.2
Jul, 1995	Co-60	Sw-8704, 8705	A	0.2±2.5;2.5	1.0±1.8;1.8
Jul, 1995	Co-60	F-7344, 7345	A	0.0±0.0;0.0	-0.0±0.0;0.0
Jul, 1995	Co-60	Lw-7944, 7945	A	0.1±2.2;2.2	1.3±1.9;1.9
Jul, 1995	Co-60	Sw-8606, 8607	A	0.1±1.7;1.7	-0.2±2.6;2.6
Aug, 1995	Co-60	Mi-8674, 8675	A	-0.8±3.2;3.2	0.5±3.3;3.3
Aug, 1995	Co-60	Lw-8440, 8441	A	0.1±2.4;2.4	1.0±1.8;1.8
Aug, 1995	Co-60	Lw-9079, 9080	A	0.8±2.8;2.8	0.2±3.0;3.0
Aug, 1995	Co-60	Ww-8518, 8519	A	1.5±3.1;3.1	-1.8±3.0;3.0
Aug, 1995	Co-60	Sw-9183, 9184	A	-0.3±3.0;3.0	2.2±4.0;4.1
Sep, 1995	Co-60	Ww-9396, 9397	A	2.1±2.5;2.5	0.7±3.0;3.0
Sep, 1995	Co-60	Ve-9515, 9516	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Sep, 1995	Co-60	Mi-9758, 9759	A	0.1±2.3;2.3	-1.1±5.6;5.6
Oct, 1995	Co-60	F-10470, 10471	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Co-60	Ww-10349, 10350	A	0.1±1.2;1.2	1.5±2.1;1.1
Oct, 1995	Co-60	F-10491, 10492	A	-0.0±0.0;0.0	0.0±0.0;0.0
Jul, 1995	K-40	Lw-7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jun, 1995	Sr-89	Swu-7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-90	Swu-7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
May, 1995	K-40	Bs - 5494, 5495	A	21.1±0.7;2.2	21.3±0.7;2.2
May, 1995	Cs-137	Bs - 5494, 5495	A	0.6±0.0;0.1	0.6±0.0;0.1
May, 1995	Gr. Alpha	Ww - 5642, 5643	A	2.3±2.3;2.3	2.3±2.3;2.3
May, 1995	Gr. Beta	Ww - 5642, 5643	A	2.3±3.3;3.3	2.3±3.3;3.3
May, 1995	K-40	Ww - 5642, 5643	A	94.4±19.8;21.9	59.0±29.5;30.1
May, 1995	Gr. Beta	Bs - 6983, 6984	A	7.4±1.2;1.4	8.0±1.4;1.6
May, 1995	K-40	Bs - 6983, 6984	A	8.3±0.3;0.9	8.5±0.1;0.9
Jul, 1995	K-40	Lw - 7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jun, 1995	Sr-90	Swu - 7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3



Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Aug, 1995	Sr-90	G - 8272, 8273	A	0.0±0.0;0.0	0.0±0.0;0.0
Aug, 1995	K-40	G - 8272, 8273	A	6.7±0.6;0.9	6.7±1.0;1.2
Aug, 1995	Sr-89	Ve - 8802, 8803	A	-0.0±0.0;0.0	-0.0±0.0;0.0
Aug, 1995	Sr-90	Ve - 8802, 8803	A	0.0±0.0;0.0	0.0±0.0;0.0
Sep, 1995	K-40	So - 9562, 9563	A	15.0±0.4;1.6	15.7±0.7;1.7
Sep, 1995	Cs-137	So - 9562, 9563	A	0.4±0.0;0.0	0.5±0.0;0.1
Sep, 1995	Gr. Beta	Lw - 9632, 9633	A	4.9±0.9;1.2	4.2±0.8;1.0
Sep, 1995	K-40	Bs - 9710, 9711	A	8.3±0.4;0.9	8.8±0.3;0.9
Sep, 1995	Gr. Alpha	Ww - 9917, 9918	A	1.0±1.2;1.2	0.2±1.3;1.3
Sep, 1995	Gr. Beta	Ww - 9917, 9918	A	2.0±1.6;1.6	1.5±1.5;1.6
Sep, 1995	K-40	Ww - 9917, 9918	A	61.6±27.2;27.9	55.5±30.1;30.6
Sep, 1995	Gr. Beta	Ve - 10012, 10013	A	5.7±0.3;0.6	5.0±0.4;0.7
Sep, 1995	Gr. Beta	Swt - 10033, 10034	A	1.8±0.5;0.5	1.9±0.5;0.5
Sep, 1995	Gr. Beta	Swu - 10054, 10055	A	2.9±0.7;0.8	3.0±0.6;0.8
Sep, 1995	H-3	Swu - 10054, 10055	A	272.2±86.6;94.1	186.8±83.0;86.8
Sep, 1995	Sr-89	Sw - 10075, 10076	A	-1.1±1.0;1.0	0.8±1.0;1.0
Sep, 1995	Sr-90	Sw - 10075, 10076	A	0.6±0.3;0.3	0.3±0.2;0.2
Sep, 1995	H-3	Sw - 10075, 10076	A	262.1±88.0;94.9	265.7±88.1;95.3
Oct, 1995	Gr. Beta	Sw - 10282, 10283	A	2.2±0.5;0.6	1.9±0.5;0.5
Oct, 1995	I-131	Mi - 10324, 10325	A	0.1±0.1;0.1	0.1±0.2;0.2
Oct, 1995	Sr-89	Mi - 10324, 10325	A	-0.5±0.9;0.9	-1.3±0.9;0.9
Oct, 1995	Sr-90	Mi - 10324, 10325	A	1.7±0.4;0.4	1.7±0.4;0.4
Oct, 1995	K-40	Mi - 10324, 10325	A	1,440.7±88.9;215.2	1,432.5±120.0;228.8
Oct, 1995	Co-60	Mi - 10324, 10325	A	0.3±2.2;2.2	-1.0±3.2;3.2
Oct, 1995	Cs-134	Mi - 10324, 10325	A	1.4±1.9;1.9	-1.0±2.6;2.6
Oct, 1995	Cs-137	Mi - 10324, 10325	A	0.3±2.1;2.1	1.0±2.6;2.6
Oct, 1995	I-131(g)	Mi - 10324, 10325	A	-0.9±2.7;2.7	1.2±3.3;3.3
Oct, 1995	Gr. Beta	So - 10577, 10578	A	18.4±3.0;3.5	20.1±3.0;3.6
Oct, 1995	K-40	So - 10577, 10578	A	19.0±0.6;2.0	18.5±0.6;1.9
Oct, 1995	Co-60	So - 10577, 10578	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-134	So - 10577, 10578	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	So - 10577, 10578	A	0.2±0.0;0.0	0.2±0.0;0.0
Oct, 1995	I-131	Mi - 10598, 10599	A	0.0±0.2;0.2	-0.1±0.1;0.1
Oct, 1995	I-131	Mi - 10710, 10711	A	-0.1±0.2;0.2	0.0±0.2;0.2
Oct, 1995	K-40	Ap - 10752, 10753	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Co-60	Ap - 10752, 10753	A	-0.0±0.0;0.0	-0.0±0.0;0.0

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Oct, 1995	Cs-134	Ap - 10752, 10753	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	Ap - 10752, 10753	A	-0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	I-131(g)	Ap - 10752, 10753	A	0.0±0.0;0.0	-0.0±0.0;0.0
Oct, 1995	K-40	F - 10882, 10883	A	2.4±0.3;0.4	2.3±0.5;0.5
Oct, 1995	Gr. Beta	Swu - 10923, 10924	A	2.4±0.6;0.7	2.7±0.6;0.7
Oct, 1995	H-3	Swu - 10923, 10924	A	908.5±108.7;164.6	878.3±107.7;160.9
Oct, 1995	Gr. Beta	F - 10969, 10970	A	2.3±0.1;0.2	2.2±0.1;0.2
Oct, 1995	K-40	F - 10969, 10970	A	2.1±0.4;0.4	1.9±0.4;0.4
Oct, 1995	Cs-137	F - 10969, 10970	A	0.0±0.0;0.0	0.1±0.0;0.0
Oct, 1995	K-40	Bs - 11056, 11057	A	18.5±0.4;1.9	18.3±0.4;1.9
Oct, 1995	Cs-137	Bs - 11056, 11057	A	0.3±0.0;0.0	0.3±0.0;0.0
Oct, 1995	K-40	F - 11078, 11079	A	2.7±0.2;0.3	2.7±0.1;0.3
Oct, 1995	I-131	Mi - 11284, 11285	A	0.2±0.3;0.3	0.2±0.2;0.2
Oct, 1995	K-40	Mi - 11284, 11285	A	1,759.4±182.0;300.6	1,581.9±164.0;270.5
Oct, 1995	Gr. Alpha	Sw - 11309, 11310	A	0.6±0.5;0.5	1.2±0.6;0.6
Oct, 1995	Gr. Beta	Sw - 11309, 11310	A	3.1±0.7;0.8	2.6±0.6;0.7
Oct, 1995	I-131	Mi - 11351, 11352	A	0.0±0.2;0.2	0.0±0.2;0.2
Oct, 1995	K-40	Mi - 11351, 11352	A	1,492.6±166.0;262.2	1,431.8±160.0;252.0
Nov, 1995	I-131	Mi - 11433, 11434	A	-0.1±0.2;0.2	0.1±0.1;0.1
Nov, 1995	Sr-89	Mi - 11433, 11434	A	-0.1±1.3;1.3	-0.1±1.2;1.2
Nov, 1995	Sr-90	Mi - 11433, 11434	A	1.9±0.5;0.5	1.9±0.5;0.5
Nov, 1995	K-40	Mi - 11433, 11434	A	1,446.0±167.0;258.0	1,450.8±119.0;230.4
Nov, 1995	I-131	Mi - 11476, 11477	A	-0.0±0.2;0.2	0.1±0.2;0.2
Nov, 1995	Sr-89	Mi - 11476, 11477	A	0.2±1.6;1.6	0.7±1.2;1.2
Nov, 1995	Sr-90	Mi - 11476, 11477	A	1.6±0.6;0.6	0.7±0.4;0.4
Nov, 1995	K-40	Mi - 11476, 11477	A	1,425.6±155.0;248.2	1,379.5±93.1;209.4
Oct, 1995	Gr. Beta	Dw - 11565, 11566	A	2.4±0.5;0.6	2.6±0.5;0.6
Oct, 1995	I-131	Dw - 11565, 11566	A	-0.1±0.3;0.3	0.2±0.3;0.3
Nov, 1995	I-131	Mi - 11611, 11612	A	0.0±0.2;0.2	0.1±0.2;0.2
Nov, 1995	K-40	Mi - 11611, 11612	A	1,368.1±112.0;217.2	1,291.1±158.0;236.2
Nov, 1995	Gr. Beta	Ww - 11657, 11658	A	0.4±0.5;0.5	0.5±0.5;0.5
Nov, 1995	H-3	Ww - 11657, 11658	A	110.2±79.0;80.4	172.2±81.7;85.0
Nov, 1995	I-131	Mi - 11786, 11787	A	0.1±0.2;0.2	-0.1±0.2;0.2
Nov, 1995	K-40	Mi - 11786, 11787	A	1,493.0±100.0;226.3	1,459.1±170.0;261.3
Nov, 1995	K-40	G - 12184, 12185	A	7.1±0.5;0.9	7.2±0.6;0.9
Nov, 1995	Gr. Beta	Dw - 12229, 12230	A	1.5±0.4;0.5	1.5±0.5;0.5

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Nov, 1995	H-3	Dw - 12229, 12230	A	48.4±76.6;76.8	70.9±77.6;78.2
Dec, 1995	I-131	Mi - 12325, 12326	A	-0.1±0.2;0.2	0.2±0.2;0.2
Dec, 1995	K-40	Mi - 12325, 12326	A	1,409.0±172.0;257.5	1,438.6±169.0;258.5
Dec, 1995	Gr. Alpha	So - 12430, 12431	A	15.7±4.5;4.7	10.9±4.1;4.2
Dec, 1995	Gr. Beta	So - 12430, 12431	A	22.4±2.9;3.6	23.1±3.0;3.8
Dec, 1995	K-40	So - 12430, 12431	A	16.7±1.3;2.1	17.7±1.4;2.2
Dec, 1995	Cs-137	So - 12430, 12431	A	0.2±0.1;0.1	0.2±0.1;0.1
Oct, 1995	I-131	Mi - 10512, 10513	A	0.1±0.1;0.1	0.1±0.2;0.2
Oct, 1995	I-131	Mi - 11162, 11163	A	0.2±0.2;0.2	0.1±0.2;0.2
Oct, 1995	I-131	Mi - 11407, 11408	A	-0.1±0.2;0.2	0.1±0.2;0.2
Oct, 1995	H-3	Ww - 10349, 10350	A	64.9±80.2;80.7	47.4±79.4;79.7
Oct, 1995	H-3	Ww - 10797, 10798	A	255.7±88.0;94.6	190.9±85.4;89.3
Oct, 1995	H-3	Ww - 11206, 11207	A	144.1±82.1;84.4	298.7±106.1;113.6
Oct, 1995	H-3	Sw - 10413, 10414	A	41.1±77.4;77.6	62.3±78.3;78.8
Oct, 1995	H-3	Cw - 10773, 10774	A	51.7±77.8;78.1	67.5±78.5;79.0
Oct, 1995	H-3	Sw - 11330, 11331	A	83.5±77.8;78.6	106.4±78.9;80.2
Nov, 1995	H-3	Sw - 11519, 11520	A	86.1±78.0;78.8	10.3±74.5;74.5
Dec, 1995	H-3	Ww - 12298, 12299	A	42.8±78.0;78.2	99.8±80.5;81.7
Nov, 1995	H-3	Ww - 12659, 12660	A	10,454.1±283.5;1,449.8	10,315.0±281.7;1,430.9
Sep, 1995	Gr. Beta	Cw - 9486, 9487	A	0.4±1.2;1.2	-0.9±1.4;1.4
Sep, 1995	Gr. Beta	Cw - 10240, 10241	A	0.6±1.2;1.2	2.4±1.3;1.3
Oct, 1995	Gr. Beta	Cw - 11261, 11262	A	-1.0±1.0;1.0	-0.1±1.1;1.1
Oct, 1995	Gr. Beta	Cw - 10773, 10774	A	-0.3±1.1;1.1	0.9±1.1;1.1
Oct, 1995	Gr. Beta	Cw - 10858, 10859	A	0.2±1.1;1.1	-0.3±1.1;1.1
Sep, 1995	Gr. Beta	Cw - 10240, 10241	A	2.8±1.4;1.5	3.7±1.5;1.6
Oct, 1995	Gr. Beta	Cw - 10858, 10859	A	3.8±1.5;1.6	5.5±1.6;1.8
Oct, 1995	Gr. Beta	Cw - 11261, 11262	A	3.4±1.5;1.6	3.8±1.5;1.6
Oct, 1995	Gr. Beta	Cw - 10773, 10774	A	8.4±1.9;2.3	9.9±2.0;2.5
Oct, 1995	Gr. Beta	Cw - 10826, 10827	A	2.0±1.3;1.4	1.1±1.3;1.3
Oct, 1995	Gr. Beta	Lw - 11185, 11186	A	7.9±1.4;1.8	6.7±1.3;1.6
Nov, 1995	Gr. Beta	Lw - 11926, 11927	A	3.6±0.9;1.1	4.3±1.0;1.2
Nov, 1995	Gr. Beta	Cw - 11678, 11679	A	2.7±1.5;1.6	2.1±1.4;1.4
Nov, 1995	Gr. Beta	Cw - 11865, 11866	A	2.0±1.4;1.4	1.1±1.3;1.4
Dec, 1995	Gr. Beta	Lw - 12152, 12153	A	5.2±1.3;1.5	4.9±1.2;1.4
Oct, 1995	Cs-137	F - 10666, 10667	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	F - 10687, 10688	A	0.0±0.0;0.0	-0.0±0.0;0.0

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Sep, 1995	Cs-137	Sw - 10174, 10175	A	-0.1±2.9;2.9	-0.1±2.9;2.9
Oct, 1995	Cs-137	Ap - 11141, 11142	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Cs-137	Lw - 11185, 11186	A	1.0±2.0;2.0	1.4±3.3;3.3
Nov, 1995	Cs-137	Ww - 11837, 11838	A	0.1±1.7;1.7	-0.5±3.0;3.0
Nov, 1995	Cs-137	Lw - 11926, 11927	A	1.4±2.0;2.0	1.7±2.7;2.7
Dec, 1995	Cs-137	Lw - 12152, 12153	A	-0.1±3.2;3.2	0.4±2.9;2.9
Nov, 1995	Cs-137	Pw - 12451, 12452	A	-1.1±1.7;1.7	0.9±2.5;2.5
Dec, 1995	Cs-137	Ww - 12298, 12299	A	0.2±2.1;2.1	1.5±2.8;2.8
Dec, 1995	Cs-137	Pw - 12945, 12946	A	1.5±2.6;2.6	0.1±2.2;2.2
Oct, 1995	Co-60	F - 10666, 10667	A	-0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Co-60	F - 10687, 10688	A	-0.0±0.0;0.0	0.0±0.0;0.0
Sep, 1995	Co-60	Sw - 10174, 10175	A	-0.2±1.9;1.9	0.1±3.3;3.3
Oct, 1995	Co-60	Ap - 11141, 11142	A	0.0±0.0;0.0	0.0±0.0;0.0
Oct, 1995	Co-60	Lw - 11185, 11186	A	0.3±2.0;2.0	0.1±3.9;3.9
Nov, 1995	Co-60	Ww - 11837, 11838	A	0.7±1.5;1.5	0.1±3.3;3.3
Nov, 1995	Co-60	Lw - 11926, 11927	A	-0.7±2.2;2.2	-1.4±3.3;3.3
Dec, 1995	Co-60	Lw - 12152, 12153	A	1.4±3.3;3.3	3.4±2.1;2.2
Nov, 1995	Co-60	Pw - 12451, 12452	A	0.1±1.6;1.6	1.6±2.0;2.0
Dec, 1995	Co-60	Ww - 12298, 12299	A	0.4±2.4;2.4	0.2±4.1;4.1
Dec, 1995	Co-60	Pw - 12945, 12946	A	0.3±2.8;2.8	1.4±2.0;2.0
May, 1995	K-40	Bs - 5494, 5495	A	21.1±0.7;2.2	21.3±0.7;2.2
May, 1995	Cs-137	Bs - 5494, 5495	A	0.6±0.0;0.1	0.6±0.0;0.1
May, 1995	Gr. Beta	Bs - 6983, 6984	A	7.4±1.2;1.4	8.0±1.4;1.6
May, 1995	K-40	Bs - 6983, 6984	A	8.3±0.3;0.9	8.5±0.1;0.9
Jul, 1995	K-40	Lw - 7487, 7488	A	48.0±14.4;15.2	95.8±39.9;41.0
Jun, 1995	Sr-89	Swu - 7828, 7829	A	0.6±0.8;0.8	0.1±0.7;0.7
Jun, 1995	Sr-90	Swu - 7828, 7829	A	0.2±0.3;0.3	0.2±0.3;0.3
Aug, 1995	Sr-89	G - 8272, 8273	A	0.0±0.0;0.0	-0.0±0.0;0.0
Sep, 1995	I-131	Mi - 9463, 9464	A	0.1±0.2;0.2	0.1±0.2;0.2
Nov, 1995	Gr. Beta	Bs - 11453, 11454	A	8.3±1.5;1.7	7.1±1.4;1.6
Nov, 1995	K-40	Bs - 11453, 11454	A	13.4±0.7;1.5	14.4±1.0;1.8
Nov, 1995	K-40	Mi - 11588, 11589	A	1,282.9±161.0;237.4	1,390.4±145.0;238.3
Dec, 1995	I-131	Mi - 12250, 12251	A	0.1±0.2;0.2	0.2±0.2;0.2
Dec, 1995	K-40	Mi - 12250, 12251	A	1,470.3±163.0;258.0	1,386.6±126.0;226.8
Dec, 1995	H-3	Ww - 12347, 12348	A	77.3±78.9;79.6	87.6±79.3;80.2
Dec, 1995	I-131	Lw - 12380, 12381	A	0.1±0.1;0.1	0.1±0.2;0.2

Table A-4. In-house "duplicate" program.

Date Collected	Analysis	Lab Codes <sup>b</sup>	Accepted <sup>c</sup> Rejected	Concentration in pCi/L <sup>a</sup>	
				First Result	Second Result
Dec, 1995	K-40	Lw - 12380, 12381	A	129.0±41.2;43.2	133.0±34.7;37.2
Dec, 1995	Co-60	Lw - 12380, 12381	A	1.3±2.4;2.4	2.2±2.2;2.3
Dec, 1995	Cs-134	Lw - 12380, 12381	A	0.5±2.1;2.1	2.0±2.2;2.2
Dec, 1995	Cs-137	Lw - 12380, 12381	A	0.8±2.5;2.5	1.2±2.4;2.4
Dec, 1995	I-131(g)	Lw - 12380, 12381	A	-7.4±13.8;13.8	4.7±13.4;13.4
Dec, 1995	K-40	F - 12688, 12689	A	2.4±0.3;0.4	2.5±0.4;0.4
Dec, 1995	Co-60	F - 12688, 12689	A	0.0±0.0;0.0	0.0±0.0;0.0
Dec, 1995	Cs-134	F - 12688, 12689	A	0.0±0.0;0.0	-0.0±0.0;0.0
Dec, 1995	Cs-137	F - 12688, 12689	A	0.0±0.0;0.0	0.0±0.0;0.0
Dec, 1995	I-131(g)	F - 12688, 12689	A	-0.0±0.0;0.0	0.0±0.0;0.0

<sup>a</sup> All concentrations are reported in pCi/L, except solid samples, which are reported in pCi/g wet. Results are reported as Activity±Counting Error;Total Propagated Uncertainty (TPU).

<sup>b</sup> Lab codes are comprised of the sample media and the sample numbers. Client codes have been eliminated to protect client anonymity.

<sup>c</sup> Acceptance is based on the difference of the two results divided by the pooled standard deviation being less than two, where, the pooled standard deviation is the square root of the sum of the squares of the TPU's.

APPENDIX V  
ERRATA DATA

BYRON STATION UNIT ONE

ACTUAL 1994

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96  
 INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	2.65E-06 (SSE )	3.94E-06 (SSE )	1.82E-06 (SSE )	2.25E-05 (SSE )	3.09E-05 (SSE )
BETA AIR (MRAD)	4.85E-06 (SSE )	6.53E-06 (SSE )	6.32E-06 (SSE )	9.14E-05 (SSE )	1.09E-04 (SSE )
TOT. BODY (MREM)	1.95E-06 (SSE )	2.90E-06 (SSE )	1.31E-06 (SSE )	1.58E-05 (SSE )	2.20E-05 (SSE )
SKIN (MREM)	4.10E-06 (SSE )	5.96E-06 (SSE )	3.97E-06 (SSE )	4.53E-05 (SSE )	5.94E-05 (SSE )
ORGAN (MREM)	5.99E-05 (NE )	3.17E-04 (NE )	1.21E-04 (SSE )	5.51E-05 (NE )	5.44E-04 (NE )
	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
 INFANT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
		LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI		LUNG

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 1994

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96  
 CHILD RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	2.65E-06 (SSE )	3.94E-06 (SSE )	1.82E-06 (SSE )	2.25E-05 (SSE )	3.09E-05 (SSE )
BETA AIR (MRAD)	4.85E-06 (SSE )	6.53E-06 (SSE )	6.32E-06 (SSE )	9.14E-05 (SSE )	1.09E-04 (SSE )
TOT. BODY (MREM)	1.95E-06 (SSE )	2.90E-06 (SSE )	1.31E-06 (SSE )	1.58E-05 (SSE )	2.20E-05 (SSE )
SKIN (MREM)	4.10E-06 (SSE )	5.96E-06 (SSE )	3.97E-06 (SSE )	4.53E-05 (SSE )	5.94E-05 (SSE )
ORGAN (MREM)	4.22E-05 (NE )	1.13E-03 (SSE )	4.22E-04 (SSE )	5.86E-05 (NE )	1.61E-03 (SSE )
	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
 CHILD RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.02	0.01	0.00	15.0	0.01
		LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	LUNG	LIVER THYROID KIDNEY LUNG GI_LLI		LUNG

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995



BYRON STATION UNIT ONE

ACTUAL 1994

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96  
 TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	2.65E-06 (SSE )	3.94E-06 (SSE )	1.82E-06 (SSE )	2.25E-05 (SSE )	3.09E-05 (SSE )
BETA AIR (MRAD)	4.85E-06 (SSE )	6.53E-06 (SSE )	6.32E-06 (SSE )	9.14E-05 (SSE )	1.09E-04 (SSE )
TOT. BODY (MREM)	1.95E-06 (SSE )	2.90E-06 (SSE )	1.31E-06 (SSE )	1.58E-05 (SSE )	2.20E-05 (SSE )
SKIN (MREM)	4.10E-06 (SSE )	5.96E-06 (SSE )	3.97E-06 (SSE )	4.53E-05 (SSE )	5.94E-05 (SSE )
ORGAN (MREM)	2.75E-05 (NE )	7.34E-04 (SSE )	3.16E-04 (SSE )	4.09E-05 (S )	1.09E-03 (SSE )
	LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	GI_LLI

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
 TEENAGER RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.01	0.00	0.00	15.0	0.01
		LIVER THYROID KIDNEY LUNG GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI	GI_LLI	LIVER THYROID KIDNEY LUNG GI_LLI		GI_LLI

RESULTS BASED UPON:

ODCM ANNEX REVISION 1.2 AUGUST 1994  
 ODCM SOFTWARE VERSION 1.1 January 1995  
 ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT ONE

ACTUAL 1994

MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96

ADULT RECEPTOR

TYPE	1ST	2ND	3RD	4TH	ANNUAL
	QUARTER JAN-MAR	QUARTER APR-JUN	QUARTER JUL-SEP	QUARTER OCT-DEC	
GAMMA AIR (MRAD)	2.65E-06 (SSE )	3.94E-06 (SSE )	1.82E-06 (SSE )	2.25E-05 (SSE )	3.09E-05 (SSE )
BETA AIR (MRAD)	4.85E-06 (SSE )	6.53E-06 (SSE )	6.32E-06 (SSE )	9.14E-05 (SSE )	1.09E-04 (SSE )
TOT. BODY (MREM)	1.95E-06 (SSE )	2.90E-06 (SSE )	1.31E-06 (SSE )	1.58E-05 (SSE )	2.20E-05 (SSE )
SKIN (MREM)	4.10E-06 (SSE )	5.96E-06 (SSE )	3.97E-06 (SSE )	4.53E-05 (SSE )	5.94E-05 (SSE )
ORGAN (MREM)	3.39E-05 (S )	6.60E-04 (SE )	2.92E-04 (SSE )	4.83E-05 (S )	9.85E-04 (SE )
	LIVER	LIVER	GI_LLI	LIVER	GI_LLI
	THYROID	THYROID		THYROID	
	KIDNEY	KIDNEY		KIDNEY	
	LUNG	LUNG		LUNG	
	GI_ILI	GI_LLI		GI_LLI	

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
ADULT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.01	0.00	0.00	15.0	0.01
		LIVER	LIVER	GI_LLI	LIVER		GI_LLI
		THYROID	THYROID		THYROID		
		KIDNEY	KIDNEY		KIDNEY		
		LUNG	LUNG		LUNG		
		GI_LLI	GI_LLI		GI_LLI		

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
ODCM SOFTWARE VERSION 1.1 January 1995  
ODCM DATABASE VERSION 1.1 January 1995

BYRON STATION UNIT TWO

ACTUAL 1994  
 MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES  
 PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96  
 INFANT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	1.10E-06 (SSE )	1.76E-06 (SSE )	2.77E-06 (SSE )	3.61E-06 (SSE )	9.25E-06 (SSE )
BETA AIR (MRAD)	2.74E-06 (SSE )	5.45E-06 (SSE )	8.75E-06 (SSE )	7.74E-06 (SSE )	2.47E-05 (SSE )
TOT. BODY (MREM)	8.03E-07 (SSE )	1.27E-06 (SSE )	2.00E-06 (SSE )	2.67E-06 (SSE )	6.74E-06 (SSE )
SKIN (MREM)	1.95E-06 (SSE )	3.20E-06 (SSE )	5.67E-06 (SSE )	6.97E-06 (SSE )	1.78E-05 (SSE )
ORGAN (MREM)	1.20E-04 (NE )	2.09E-04 (NE )	2.04E-04 (NE )	9.98E-05 (NE )	6.34E-04 (NE )

LIVER	LIVER	LIVER	LUNG	LUNG
THYROID	THYROID	THYROID		
KIDNEY	KIDNEY	KIDNEY		
LUNG	LUNG	LUNG		
GI_LLI	GI_LLI	GI_LLI		

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
 INFANT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00

LIVER	LIVER	LIVER	LUNG	LUNG
THYROID	THYROID	THYROID		
KIDNEY	KIDNEY	KIDNEY		
LUNG	LUNG	LUNG		
GI_LLI	GI_LLI	GI_LLI		

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
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MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96

CHILD RECEPTOR

TYPE	1ST	2ND	3RD	4TH	ANNUAL
	QUARTER JAN-MAR	QUARTER APR-JUN	QUARTER JUL-SEP	QUARTER OCT-DEC	
GAMMA AIR (MRAD)	1.10E-06 (SSE )	1.76E-06 (SSE )	2.77E-06 (SSE )	3.61E-06 (SSE )	9.25E-06 (SSE )
BETA AIR (MRAD)	2.74E-06 (SSE )	5.45E-06 (SSE )	8.75E-06 (SSE )	7.74E-06 (SSE )	2.47E-05 (SSE )
TOT. BODY (MREM)	8.03E-07 (SSE )	1.27E-06 (SSE )	2.00E-06 (SSE )	2.67E-06 (SSE )	6.74E-06 (SSE )
SKIN (MREM)	1.95E-06 (SSE )	3.20E-06 (SSE )	5.67E-06 (SSE )	6.97E-06 (SSE )	1.78E-05 (SSE )
ORGAN (MREM)	8.48E-05 (NE )	5.84E-04 (SSE )	8.01E-04 (SSE )	1.81E-04 (SE )	1.59E-03 (SSE )
	LIVER	LIVER	LIVER	LUNG	LUNG
	THYROID	THYROID	THYROID		
	KIDNEY	KIDNEY	KIDNEY		
	LUNG	LUNG	LUNG		
	GI_LLI	GI_LLI	GI_LLI		

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
CHILD RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.01	0.01	0.00	15.0	0.01
		LIVER	LIVER	LIVER	LUNG		LUNG
		THYROID	THYROID	THYROID			
		KIDNEY	KIDNEY	KIDNEY			
		LUNG	LUNG	LUNG			
		GI_LLI	GI_LLI	GI_LLI			

RESULTS BASED UPON: ODCM ANNEX REVISION 1.2 AUGUST 1994  
ODCM SOFTWARE VERSION 1.1 January 1995  
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MAXIMUM DOSES RESULTING FROM AIRBORNE RELEASES

PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96

TEENAGER RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	1.10E-06 (SSE )	1.76E-06 (SSE )	2.77E-06 (SSE )	3.61E-06 (SSE )	9.25E-06 (SSE )
BETA AIR (MRAD)	2.74E-06 (SSE )	5.45E-06 (SSE )	8.75E-06 (SSE )	7.74E-06 (SSE )	2.47E-05 (SSE )
TOT. BODY (MREM)	8.03E-07 (SSE )	1.27E-06 (SSE )	2.00E-06 (SSE )	2.67E-06 (SSE )	6.74E-06 (SSE )
SKIN (MREM)	1.95E-06 (SSE )	3.20E-06 (SSE )	5.67E-06 (SSE )	6.97E-06 (SSE )	1.78E-05 (SSE )
ORGAN (MREM)	5.53E-05 (NE )	3.82E-04 (SE )	5.22E-04 (SSE )	1.21E-04 (SE )	1.04E-03 (SE )
	LIVER	LIVER	LIVER	LUNG	LUNG
	THYROID	THYROID	THYROID		
	KIDNEY	KIDNEY	KIDNEY		
	LUNG	LUNG	LUNG		
	GI_LLI	GI_LLI	GI_LLI		

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
TEENAGER RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.01	0.01	0.00	15.0	0.01

LIVER	LIVER	LIVER	LUNG	LUNG
THYROID	THYROID	THYROID		
KIDNEY	KIDNEY	KIDNEY		
LUNG	LUNG	LUNG		
GI_LLI	GI_LLI	GI_LLI		

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PERIOD OF RELEASE - 01/01/94 TO 12/31/94 CALCULATED 02/17/96

ADULT RECEPTOR

TYPE	1ST QUARTER JAN-MAR	2ND QUARTER APR-JUN	3RD QUARTER JUL-SEP	4TH QUARTER OCT-DEC	ANNUAL
GAMMA AIR (MRAD)	1.10E-06 (SSE )	1.76E-06 (SSE )	2.77E-06 (SSE )	3.61E-06 (SSE )	9.25E-06 (SSE )
BETA AIR (MRAD)	2.74E-06 (SSE )	5.45E-06 (SSE )	8.75E-06 (SSE )	7.74E-06 (SSE )	2.47E-05 (SSE )
TOT. BODY (MREM)	8.03E-07 (SSE )	1.27E-06 (SSE )	2.00E-06 (SSE )	2.67E-06 (SSE )	6.74E-06 (SSE )
SKIN (MREM)	1.95E-06 (SSE )	3.20E-06 (SSE )	5.67E-06 (SSE )	6.97E-06 (SSE )	1.78E-05 (SSE )
ORGAN (MREM)	6.82E-05 (S )	3.50E-04 (ESE )	4.66E-04 (SE )	1.23E-04 (S )	9.71E-04 (S )
	LIVER	LIVER	LIVER	GI_LLI	GI_LLI
	THYROID	THYROID	THYROID		
	KIDNEY	KIDNEY	KIDNEY		
	LUNG	LUNG	LUNG		
	GI_LLI	GI_LLI	GI_LLI		

THIS IS A REPORT FOR THE CALENDAR YEAR 1994

COMPLIANCE STATUS - 10CFR 50 APP. I  
ADULT RECEPTOR

----- % OF APP I. -----

	QTRLY OBJ	1ST QTR JAN-MAR	2ND QTR APR-JUN	3RD QTR JUL-SEP	4TH QTR OCT-DEC	YRLY OBJ	% OF APP. I
GAMMA AIR (MRAD)	5.0	0.00	0.00	0.00	0.00	10.0	0.00
BETA AIR (MRAD)	10.0	0.00	0.00	0.00	0.00	20.0	0.00
TOT. BODY (MREM)	2.5	0.00	0.00	0.00	0.00	5.0	0.00
SKIN (MREM)	7.5	0.00	0.00	0.00	0.00	15.0	0.00
ORGAN (MREM)	7.5	0.00	0.00	0.01	0.00	15.0	0.01
		LIVER	LIVER	LIVER	GI_LLI		GI_LLI
		THYROID	THYROID	THYROID			
		KIDNEY	KIDNEY	KIDNEY			
		LUNG	LUNG	LUNG			
		GI_LLI	GI_LLI	GI_LLI			

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