ENVIRONMENTAL RADIOLOGICAL MONITORING REPORT FOR THE LOUISIANA POWER AND LIGHT WATERFORD STEAM ELECTRIC STATION, UNIT 3

JANUARY 1 THROUGH DECEMBER 31, 1985

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ENVIRONMENTAL RADIOLOGICAL MONITORING REPORT
FOR THE LOUISIANA POWER AND LIGHT
WATERFORD STEAM ELECTRIC STATION, UNIT 3

JANUARY 1 THROUGH DECEMBER 31, 1985

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ABSTRACT

This report is issued pursuant to Waterford 3 SES Technical Specification 6.9.1.7. Its purpose is to discuss the Waterford 3 SES Radiological Environmental Monitoring Program (REMP), present the results of the program for the year of 1985, and to evaluate the radiological impact on the environment resulting from plant operation.

The Waterford 3 SES REMP collected data on environmental radioactivity levels around the Waterford 3 SES nuclear power plant. These levels were determined by analyzing samples of air, water, shoreline soil, fish, vegetation, and milk from various locations around the facility. Based on the evaluation of these analyses, the operation of Waterford 3 SES exhibited no discernable impact on the levels of radioactivity in the environment during 1985.

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1.0 INTRODUCTION

This report describes the Radiological Environmental Monitoring Program (REMP) for the Waterford 3 SES nuclear power plant and discusses the results obtained during the calendar year 1985. The results discussed within this report were used to evaluate the radiological environmental impact resulting from the operation of Waterford 3 SES. The submission of this report to the Nuclear Regulatory Commission fulfills the requirements pursuant to Waterford 3 SES Technical Specification 6.9.1.7.

1.1 Program and Report Objectives

The overall objective of the monitoring program was to evaluate the radiological environmental impact of the plant. The evaluation included an assessment of actual or potential exposures of humans to radioactive materials or radiation resulting from plant operation. In order to conduct this evaluation, the data analyses and interpretations contained in this report fulfilled the following specific objectives:

a. identify if any radioactive materials or radiation in the environment was associated with plant operation;

b. compare the results obtained during the reporting period with past operational and preoperational data, when appropriate, to identify any trends or accumulation of radioactivity in the environment;

c. estimate the maximum exposure to a member of the general public from any environmental data which indicates the presence of plant related radioactivity; and

d. verify compliance, when appropriate, with relevant federal requirements.

1.2 Plant and Site Description

The Louisiana Power and Light Company, Waterford Steam Electric Station, Unit No. 3 employs a pressurized water reactor for the production of approximately 1153 gross (1104 net) megawatts of electricity. The station uses a once through flow of water obtained from and discharged to the Mississippi River for condenser cooling. During the period covered by this report, on March 4, 1985, the unit achieved initial criticality.

Waterford 3 SES is located on the west bank of the Mississippi River at River Mile 129.6 between Baton Rouge and New Orleans, Louisiana. The site is in the northwestern section of St. Charles Parish approximately 3 miles southeast of the St. John the Baptist Parish boundary near the towns of Killona and Taft. The Mississippi River is the closest prominent natural feature while others include Lac des Allemends, about 5.5 miles southwest of the site, and Lake Ponchartrain, about 7 miles northeast of the site.

Most of the man-made features are located on the narrow strip of dry land between the Mississippi River and the wetlands. Near the Waterford SES site are several large industrial facilities, including Waterford 1 and 2 Steam Electric Stations (0.4 miles northwest of the site), Little Gypsy Steam Electric Station (0.8 miles north northwest of the site, across the river from Waterford 3 SES), Beker Industries, a fertilizer manufacturer (0.6 miles east southeast), Occidental Chemical Company (0.8 miles east southeast), and Union Carbide, a chemical manufacturer (1.2 miles east southeast). Louisiana Power and Light Company owns and operates the above mentioned steam electric stations.

Major urban centers in the region of the site include New Orleans (approximately 25 miles east of the site) and Baton Rouge (approximately 50 miles west northwest). Communities in St. Charles Parish near the site include Killona (0.9 miles west northwest), Montz (1.0 miles north), Norco (1.9 miles east), Hahnville (3.7 miles east southeast), and Destrehan (6.3 miles east southeast). Laplace (4.7 miles north) is located in St. John the Baptist Parish.

2.0 PROGRAM DESCRIPTION

A general summary of the REMP is given in Table 2.1. Brief descriptions of the sampling stations and their locations are given in Table 2.2. The locations of the sampling stations with respect to the Waterford 3 SES site are illustrated in Figures 2.1 through 2.3. A more detailed description of the overall REMP is discussed in the following chapter.

2.1 History and Development

The Waterford 3 SES REMP was initiated in April of 1983. The program evolved from the Preoperational Environmental Radiological Surveillance (PERS) Program which was conducted from 1978 through 1982. The equipment, procedures, techniques, and many of the same sampling locations used during the preoperational survey were incorporated into the operational program. The environmental data collected during the first two years of the REMP (1983 and 1984), when Waterford 3 SES had not yet achieved initial criticality, were used to supplement the baseline data obtained during the PERS Program.

LP&L personnel were responsible for the proper implementation of the REMP and insuring that the program complied with federal regulatory requirements and Technical Specification requirements. Specific responsibilities of LP&L personnel included collecting (with the exception of fish samples), preparing, and shipping of environmental samples; conducting environmental dosimetry measurements; reviewing analytical results reports; and preparing and submitting the annual Environmental Radiological Monitoring Report as well as any other relevant report to the Nuclear Regulatory Commission.

The primary contractor, Teledyne Isotopes, Inc., located in Westwood, New Jersey, was responsibile for performing radiological analyses; conducting the initial data review; preparing quarterly and annual results reports; and overseeing laboratory quality assurance and control. A separate contractor, Dames and Moore, was responsible for the collection, and delivery to LP&L, of fish samples.

2.2 Sample Collection and Handling Procedures

The types of samples collected, the analyses performed, the sample collection frequencies, and the location of the sampling stations are summarized in Tables 2.1 and 2.2. The information contained in these tables is based on the

requirements in Table 3.12-1 of Waterford 3 SES Technical Specification 3.12.1. The locations of the sampling stations with respect to the Waterford 3 SES site are illustrated in Figures 2.1 through 2.3. Any deviations from the REMP (i.e., unavailable samples and missed lower limits of detection) observed during 1985 are discussed in Section 3.5. Changes made to the REMP during 1985 as a result of the annual land use census are also discussed in Section 3.5.

The environmental samples collected were classified into four general categories according to exposure pathways: direct radiation, airborne, waterborne, and ingestion. The collection and handling procedures used to obtain these samples are described in the following sections. The descriptions are intended to provide a concise overview of what was done rather than to be step-by-step procedures.

2.2.1 Direct Radiation Exposure Pathway Samples

Integrated external gamma exposures were determined using thermoluminescent dosimeters (TLDs). Multi-element TLDs manufactured by Panasonic were placed at thirty-one locations as follows:

a. an inner ring of stations, one in each of the sixteen meteorological sectors in the general area of the site boundary,

b. an outer ring of stations, one in ten of the meteorological sectors in the six to eight kilometer range from the site, and

c. the balance placed in areas of special interest (e.g., population centers, schools, etc.) with one area serving as a control.

The TLDs were exchanged and analyzed quarterly by LP&L personnel.

2.2.2 Airborne Exposure Pathway Samples

Samples of airborne particulates and radioiodines were collected at five locations. The locations included four indicator stations (APP-1, APQ-1, APG-1, APC-1) and one control station (APE-30). The samples were collected using low-volume air sampling devices. The devices were designed to sample air on a continuous

basis and record the volume of air sampled. The pump and metering device were housed inside a weatherproof shelter.

Airborne particulate samples were obtained by passing air through a particulate filter using the device described above. The filters were collected weekly by LP&L personnel and sent to the contract laboratory for gross beta analysis. These filters were composited by the contract laboratory on a quarterly basis for analysis by gamma spectroscopy.

Airborne iodine sampling was done in conjunction with air particulate sampling. After the air passed through the particulate filter, it passed through a charcoal cartridge to collect airborne iodine. The cartridges were collected weekly by LP&L personnel and sent to the contract laboratory for iodine-131 analysis by gamma spectroscopy.

2.2.3 Waterborne Exposure Pathway Samples

The Mississippi River is the major source of drinking water in the vicinity of Waterford 3 SES and it is also the surface water into which the plant discharges. Therefore, water samples taken from the Mississippi River were designated as both drinking water and surface water samples.

Composite drinking/surface water samples were obtained from the Mississippi River using automatic composite samplers placed at one upstream (DWP-7) and two downstream (DWG-2, DWE-5) locations from the plant. These composite water samples were collected biweekly by LP&L personnel. LP&L personnel acidified the samples with hydrochloric acid and added sodium bisulfite (to prevent protein binding of iodine) prior to shipment to the contract laboratory. The contract laboratory analyzed the biweekly samples for iodine-131. The biweekly samples were composited on a monthly basis by the contract laboratory for gross beta and gamma spectroscopy analyses. The samples were also composited on a quarterly basis for tritium analysis.

Due to the high water table resulting from shallow aquifers in the vicinity of the site, groundwater discharge could be sampled from a drainage canal. Groundwater samples were obtained quarterly by LP&L personnel from one sampling location (GWJ-1) using a

grab sampling technique. The samples were acidified with hydrochloric acid and had sodium bisulfite added prior to shipment to the contract laboratory for tritium and gamma spectroscopy analyses.

Shoreline soil samples were obtained semi-annually by LP&L personnel from two sampling stations. One station was located on the shoreline of the Mississippi River (SHWE-3) and the other was located on the shoreline of the 40-Arpent canal (SHWJ-1). Station SHWJ-1 was not added to the REMP until the second half of 1985 and therefore only one sample was obtained. The samples collected were shipped to the contract laboratory without further processing.

2.2.4 Ingestion Exposure Pathway Samples

Milk samples were collected semi-monthly by LP&L personnel. Control samples were obtained through Louisiana Nuclear Energy Division personnel from the Louisiana State University Department of Agriculture (MKQ-50) located in Baton Rouge, Louisiana. Indicator samples were collected locally from two stations (MKQ-5, MKE-4). All samples had sodium bisulfite added (to inhibit protein binding of iodine) prior to shipment to the contract laboratory for iodine-131 and gamma spectroscopy analyses.

Fish samples were collected upstream (FH-1) and downstream (FH-2) from the plant by a contractor. The fish were obtained by netting. The contractor segregated the samples by species and location sampled prior to delivery to LP&L. The samples were shipped frozen to the contract laboratory for analysis by gamma spectroscopy.

LP&L personnel collected broad leaf vegetation samples monthly by obtaining cuttings taken at least one inch above the ground. Samples were collected from two indicator locations (BLB-1, BLQ-1) and from one of two control locations (BLH-10, BLK-15). The samples were shipped to the contract laboratory without further processing.

A food/garden crop sample (soybeans) was collected by LP&L personnel from one location (FPP-1). The sample was collected by normal harvesting techniques at the time of harvest. The sample was sent to the contract laboratory without further processing for iodine-131 and gamma spectroscopy analyses.

2.3 Analytical Procedures

Brief synopses of the analytical procedures used by Teledyne Isotopes and LP&L are given in Appendix E. These synopses are intended to provide an overview of what was done rather than to be step-by-step procedures.

The minimum sensitivities for the analytical procedures used in the REMP are reflected by the Lower Limits of Detection (LLD) values presented in Table 2.3. These values are the same as the ones given in Table 4.12-1 of Waterford 3 SES Technical Specification 4.12.1. The LLD's are a priori estimates based on assumed sample volumes, counting times, detector efficiencies, etc. These values reflect the lower levels of detection that were to be attained for the majority of the analyses performed. Deviations from the assumptions used in calculating these estimates (i.e., different sample volumes, counting times, etc.) caused some actual values to be higher than the ones given in Table 2.3. All analyses that could not achieve these lower limits of detection are discussed in Section 3.5.

2.4 Laboratory Quality Assurance

Teledyne Isotopes performed a variety of quality assurance analyses. The types consisted of spiked and blank samples prepared in-house; spiked samples sent by customers or by a second laboratory under contract to a customer; and EPA and NRC samples sent by the originator to customers and then sent to Teledyne Isotopes. Also certain customers have either 5% or 10% of their samples analyzed in duplicate. It has been estimated that at Teledyne Isotopes, 5% of all analyses are for quality assurance purposes.

Teledyne Isotopes also participates in the EPA radiological interlaboratory comparison (cross-check) program. Participation in this program involves a number of analyses on various sample media as found in most REMP's. As a result of participation in the program, an objective measure of analytical precision, accuracy, and an estimation of bias can be obtained. In the event that any results obtained by Teledyne Isotopes were not within control limits, as specified by the EPA, an investigation was conducted to determine the cause and corrective action was taken to prevent a recurrence. Appendix D lists the 1985 results of Teledyne Isotopes participation in the crosscheck program.

In 1984 and 1985, LP&L participated in the Seventh and Eighth International Environmental Dosimeter Intercomparison Project sponsored jointly by the Department of Energy, the

Nuclear Regulatory Commission, and the Environmental Protection Agency. Results of LP&L's participation in this comparison program for 1984 are presented in Appendix D. The results for 1985 will not be available until some time during 1986. These results will be presented and discussed in the 1986 Environmental Radiological Monitoring Report.

TABLE 2.1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM (REMP) SUMMARY[a]

Sample Type	Location	Analysis	Frequency
Direct Radiation	A-2, B-1, C-1, D-2, E-1, F-2, G-2, H-2, J-2, K-1, L-1, M-1, N-1, P-1, Q-1, R-1, A-5, B-4, D-5, E-5, F-4, G-4, H-6, P-6, Q-5, R-6, F-9, G-9, E-15, J-15, E-30	TLD gamma	Quarterly
Radioiodine and Particulates	APP-1, APQ-1, APG-1, APC-1, APE-30	Gross beta, I-131 γ isotopic	Weekly Quarterly composite
Drinking Water[b]	DWG-2, DWE-5, DWP-7	H-3 Gross beta, γ isotopic I-131	Quarterly composite Monthly composite Bi-weekly composite
Surface Water[b]	SWG-2, SWE-5, SWP-7	H-3 γ isotopic	Quarterly composite Monthly composite
Ground Water	GWJ-1	γ isotopic, H-3	Quarterly
Shoreline Sediment	SHWE-3, SHWJ-1	γ isotopic	Semi-annually
Milk	MKE-4, MKQ-5, MKQ-50, MKQ-1	γ isotopic, I-131	Semi-monthly/monthly
Fish	FH-1, FH-2	γ isotopic	In season or semi-annually
Food Products	FPP-1	γ isotopic	At harvest time
Broad Leaf	BLQ-1, BLB-1, BLH-10, BLK-15	γ isotopic, I-131	Monthly When milk samples not collected

a. Based on requirements in Table 3.12-1 of Waterford 3 SES Technical Specification 3.12.1.
b. Drinking and surface water samples are identical.

TABLE 2.2

DESCRIPTION OF REMP SAMPLING STATION LOCATIONS

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
Direct Radiation (TLD)			
A-2	(Eastbank) On fence enclosure surrounding water tower west of Little Gypsy opposite Etienne St. Access from River Road (LA 628). The TLD's are located on the (S) fence opposite the entrance gate to the water tower.	1.1	N
B-1	(Eastbank) On fence enclosing the transmission tower 0.3 miles west (up-river) from Little Gypsy. Access from River Road (LA 628). TLD's are located at SW corner of fence enclosure.	0.8	NNE
C-1	(Eastbank) On fence enclosing the Little Gypsy Cooling Water Intake. Access is from River Road (LA 628) across from Little Gypsy Power Station entrance. TLD's are on the south side (inside) of the Cooling Water Intake fence enclosure, directly opposite the entrance gate.	0.8	NE
D-2	(Eastbank) Located at USGS Witness Post Survey Marker approximately 0.3 miles east of Little Gypsy Power Station. Access from River Road (LA 628) near the west end of the Bonne Carre Spillway. TLD's are on the back of the Survey Marker Sign (located on levee).	1.1	ENE
E-1	(Westbank) Located on utility pole along River Road (LA 18) approximately 0.3 miles east of Waterford 3 plant entrance. Access from LA 18. TLD's are on the third utility pole east of the construction entrance road.	0.2	E

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
F-2	(Westbank) Located on fence enclosure surrounding the LP&L substation on LA 3142. Access from LA 3142 approximately 0.2 miles south of LA 18. TLD's are on the southeast corner of the fence enclosure.	1.1	ESE
G-2	(Westbank) Located on utility pole on East side of LA 3142 near Witco entrance gate (Next to Union Carbide Star Plant Gate 3). Access from LA 3142 approximately 0.2 miles north of railroad overpass.	1.2	SE
H-2	(Westbank) Located on fence enclosure to shell road off of LA 3142. Access from LA 3142 south of railroad overpass on east side of LA 3142. TLD's are on the south side of the gate for shell road. (Just south of Texaco pipeline station)	1.2	SSE
J-2	(Westbank) Located on northeast corner of fence enclosing Texaco valve station south of LA 3127. Access from LA 3127, approximately 0.6 miles west of LA 3127/3142 intersection.	1.3	S
K-1	(Westbank) Located behind "Private Road" sign at Gate 8 entrance off of LA 3127. Access from LA 3127, approximately 1.3 miles west of LA 3127/3142 intersection. (Gate 8 is the access to the Waterford 3 switchyard station)	1.0	SSW
L-1	(Westbank) located behind "Private Road" sign at LP&L Gate 9 entrance off of LA 3127, approximately 1.6 miles west of LA 3127/3142 intersection. (Gate 9 is an access road for Waterford 3)	1.0	SW

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
M-1	(Westbank) Located on south gate into the Waterford 1 and 2 fuel oil storage tank enclosure. Access is either thru LP&L Gate 8, Gate 9 off of LA 3127, the shell access road from LA 18 between Waterford 3, or thru the Waterford 1 and 2 access road.	0.7	WSW
N-1	(Westbank) Located behind the "No Trespassing" sign off on Short Street, in Killona, just south of the entrance to Killona Elementary School.	0.9	W
P-1	(Westbank) Located behind "No Trespassing" sign on Short Street, in Killona, approximately 0.1 miles south of air sample station.	0.8	WNW
Q-1	(Westbank) Located on fence enclosing air sample station approximately 0.5 miles west of Waterford 1 and 2 on River Road (LA 18).	0.8	NW
R-1	(Westbank) Located on fence enclosure for Waterford 1 and 2 Cooling Water Intake Structure. Access is from River Road (LA 18) opposite Waterford 1 and 2. TLD's are on the southwest corner of fence.	0.5	NNW
A-5	(Eastbank) Located on utility pole just east of the Shady Nook Trailer Park on Hwy 61 in LaPlace. TLD's are on second utility pole east of trailer park on north side of Hwy 61 (eastern end of La Place).	4.5	N

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
B-4	(Eastbank) Located on utility pole just east of shell access road to South Central Bell transmission tower on south side of Hwy 61. Transmission tower is just east of Weigh Station at St. John/St. Charles Parish line. TLD's are on first utility pole east of access road.	3.8	NNE
D-5	(Eastbank) Located on fence gate on shell access road to Big 3 Chemical Plant. Shell access road is approximately 0.1 miles west of Hwy 61/48 intersection (at black and yellow gate). TLD's are on fence gate 0.1 miles north on shell access road from Hwy 61.	4.2	ENE
E-5	(Eastbank) Located on the Norco Substation fence enclosure. Access from River Road (LA 48) onto Wesco St. (adjacent to Norco Shell Chemical Plant), take Wesco St. to the dead end. TLD's are located on sixth fence post south of the north substation gate.	4.2	E
F-4	(Westbank) Located on utility pole behind blonde brick house on Aquarius St. in Hahnville. Access from River Road (LA 18) and turn onto Oak St. Follow Oak St. to Hickory St., turn right on Hickory St. and follow to Aquarius St. and turn left. Blonde brick house is second house on right (west) side of Aquarius St. heading south.	3.5	ESE
G-4	(Westbank) Located on railroad sign northwest side of LA 3160/railroad track intersection. Access from either LA 3127 or River Road (LA 18) onto LA 3160.	3.2	SE

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
H-6	(Westbank) Located on a construction sign on the southwest side of the second canal bridge east of LA 3160 along LA 3127.	5.7	SSE
P-6	(Westbank) Located on utility pole at southwest corner of LA 640/ railroad track intersection. Utility pole is just west of LA 640 and east of radio transmission tower.	5.5	WNW
Q-5	(Westbank) Located on fence post surrounding (green) river marker on levee just east of Edgard. Fence post is located along River Road (LA 18) across from the Webre's house.	5.0	NW
R-6	(Eastbank) Located on fence enclosing LP&L Laydown Yard on LA 3223 in LaPlace. Access from Hwy 61 onto Elm St. (LA 3223), take Elm St. to the northeast corner of LA 3223/railroad intersection. TLD's are located on the southeast corner of fence enclosure.	5.3	NNW
F-9	(Eastbank) Located on entrance gate to Destrehan Substation Access from River Road (LA 48), approximately 0.3 miles east of Luling-Destrehan Ferry, onto Destrehan Road (west of Bunge Corp. Grain Elevator), and proceed to substation gate.	8.2	ESE
G-9	(Westbank) Located on back fence of LP&L District Office in Luling. Access via Ellington St. from either River Road (LA 18); or Second or Third St. from Paul Mallard Rd. (LA 52) to Ellington St.	8.1	SE

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
E-15	(Eastbank) Located on Kenner Substation fence enclosure. Access from either River Road (LA 43) or Hwy 61, turn onto Alliance Ave. TLD's are located on the north side of the fence enclosure, near a light pole.	11.8	E
J-15	(Westbank) Located on fence enclosure surrounding LP&L switchyard at LA 631/Hwy 90 intersection in Des Allemands. TLD's are on the northwest corner of fence. Access from LA 631 via shell road.	12.0	S
E-30*	(Westbank) Located on fence at LP&L General Office on Delaronde St. in Algiers. TLD's are on the fence, facing the Mississippi River, in the passageway to the transformer shop.	27.0	E
Airborne			
APP-1	(Westbank) Located in soybean field at northwest corner of Short St. in Killona.	0.8	WNW
APQ-1	(Westbank) Located at northwest corner of soybean field on east side of Killona. Access from River Road (LA 18) approximately 0.6 miles east of LA 18/3141 intersection.	0.8	NW
APG-1	(Westbank) Located at the north side of the Secondary Meteorology Tower.	0.5	SE

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
APC-1	(Eastbank) Located inside the Little Gypsy Cooling Water Intake Structure fence enclosure.	0.8	NE
APE-30*	(Westbank) Located on the roof of the LP&L General Office building on Delaronde St. in Algiers.	27.0	E
Waterborne			
DWG-2 SWG-2	(Westbank) Located at the Union Carbide drinking water canal. Access from LA 3142 through Gate 28.	2.0	ESE
DWE-5 SWE-5	(Eastbank) Located at the St. Charles Parish Waterworks off of River Road (LA 48) near New Sarpy.	4.5	E
DWP-7* SWP-7*	(Westbank) Located at the St. John Parish Waterworks off of LA 18 in Edgard.	6.5	NW
SHWE-3	(Westbank) Located at the Foot Ferry Landing off of LA 18 in Taft.	3.0	E
SHWJ-1	(Westbank) Located at 40 Arpent Canal South of the Plant. Access from LA 3127 through LP&L Gate 8. The canal is northwest of the shell access road/railroad track intersection.	0.3	S
GWJ-1	(Westbank) Located at 40 Arpent Canal south of the plant. Access from LA 3127 through LP&L Gate 8. The canal is northwest of the shell access road/railroad track intersection.	0.3	S

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
Ingestion			
Milk			
MKE-4	(Westbank) Located .8 miles west of the Time Saver in Hahnville off of River Road.	4.0	E
MKQ-1	(Westbank) 1.0 miles west of Waterford 3 at the corner of River Road and Post Street in Killona.	1.0	NW
MKQ-5	(Westbank) Located at the Webre's house, just across LA 18 from river marker, at the eastern end of Edgard.	5.0	NW
MKQ-50*	(Eastbank) Located at the LSU Dairy in Baton Rouge.	52	NW
Fish			
FH-1*	Upstream of the plant intake structure.		
FH-2	Downstream of the plant intake structure.		
Broad Leaf			
BLQ-1	(Westbank) Located between LA 18 and soybean field on eastern edge of Killona, near air sample station APQ-1.	0.8	NW
BLB-1	(Eastbank) Located at wooded area at the southwestern corner of the LP&L Little Gypsy plant along River Road.	0.8	NNE

TABLE 2.2

(CONTINUED)

LOCATION NUMBER	LOCATION DESCRIPTION	MILES FROM PLANT	SECTOR DIRECTION
BLH-10*	(Westbank) Located under overhead transmission lines along LA 633.	9.5	SSE
BLK-15*	(Westbank) Located 3.5 miles SSW of Des Allemands on Hwy. 90.	15	SSW
Food Products			
FPP-1	(Westbank) Located in soybean field on eastern edge of Killona, between air sample stations APP-1 and APQ-1.	0.8	WNW

* DENOTES CONTROL LOCATION

TABLE 2.3

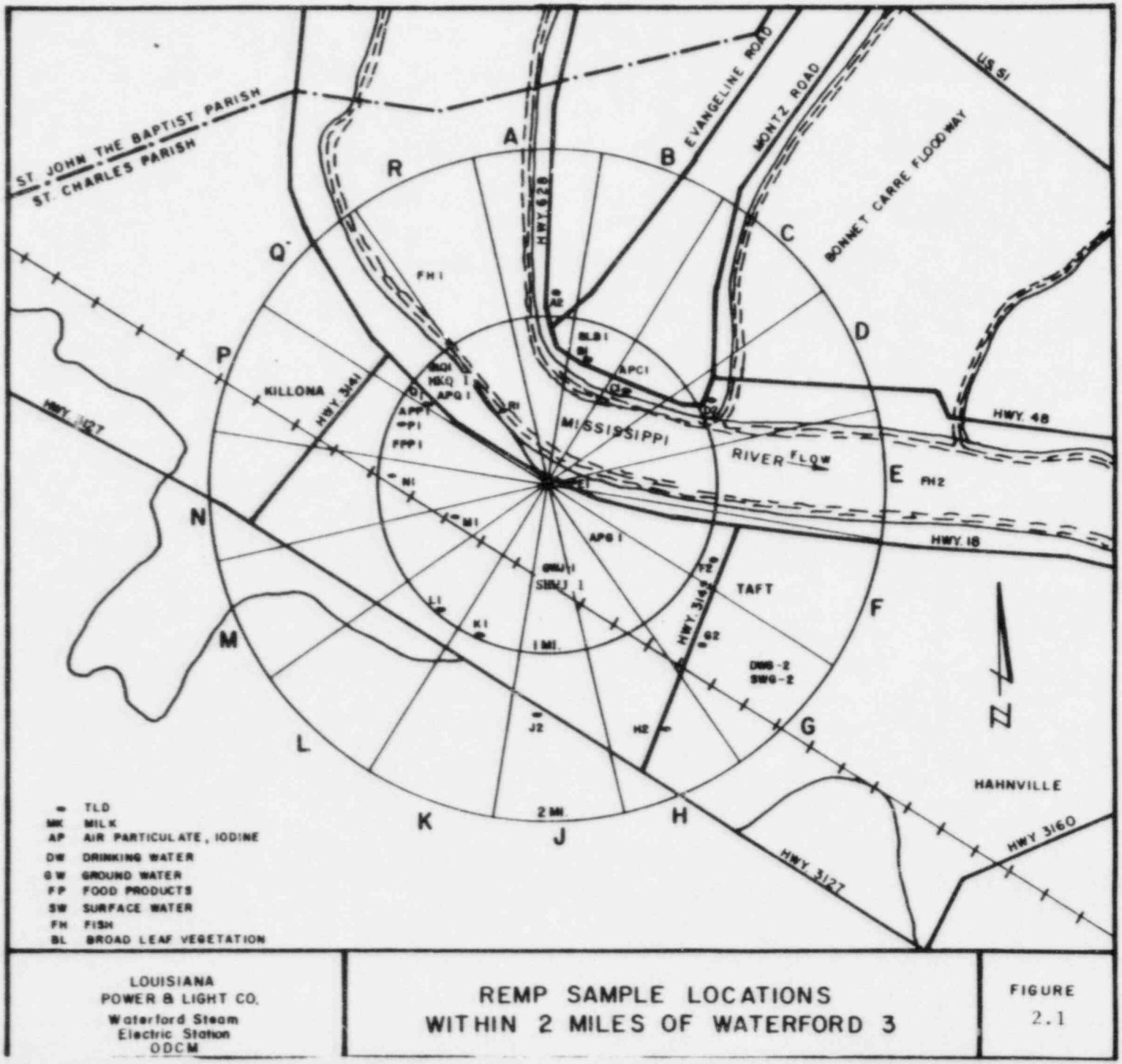
DETECTION CAPABILITIES FOR ENVIRONMENTAL SAMPLE ANALYSIS

LOWER LIMIT OF DETECTION (LLD)[a]

ANALYSIS	WATER (pCi/ℓ)	AIRBORNE PARTICULATE OR GAS (pCi/m^3)	FISH (pCi/kg,wet)	MILK (pCi/ℓ)	FOOD PRODUCTS[b] (pCi/kg,wet)	SEDIMENT (pCi/kg,dry)
gross beta	4	0.01				
H-3	2000					
Mn-54	15		130			
Fe-59	30		260			
Co-58,60	15		130			
Zn-65	30		260			
Zr-Nb-95	15					
I-131	1[d]	0.07		1	60	
Cs-134	15	0.05	130	15	60	150
Cs-137	18	0.06	150	18	80	180
Ba-La-140	15			15		

a. From Table 4.12-1 of Waterford 3 SES Technical Specification 12.4.1.

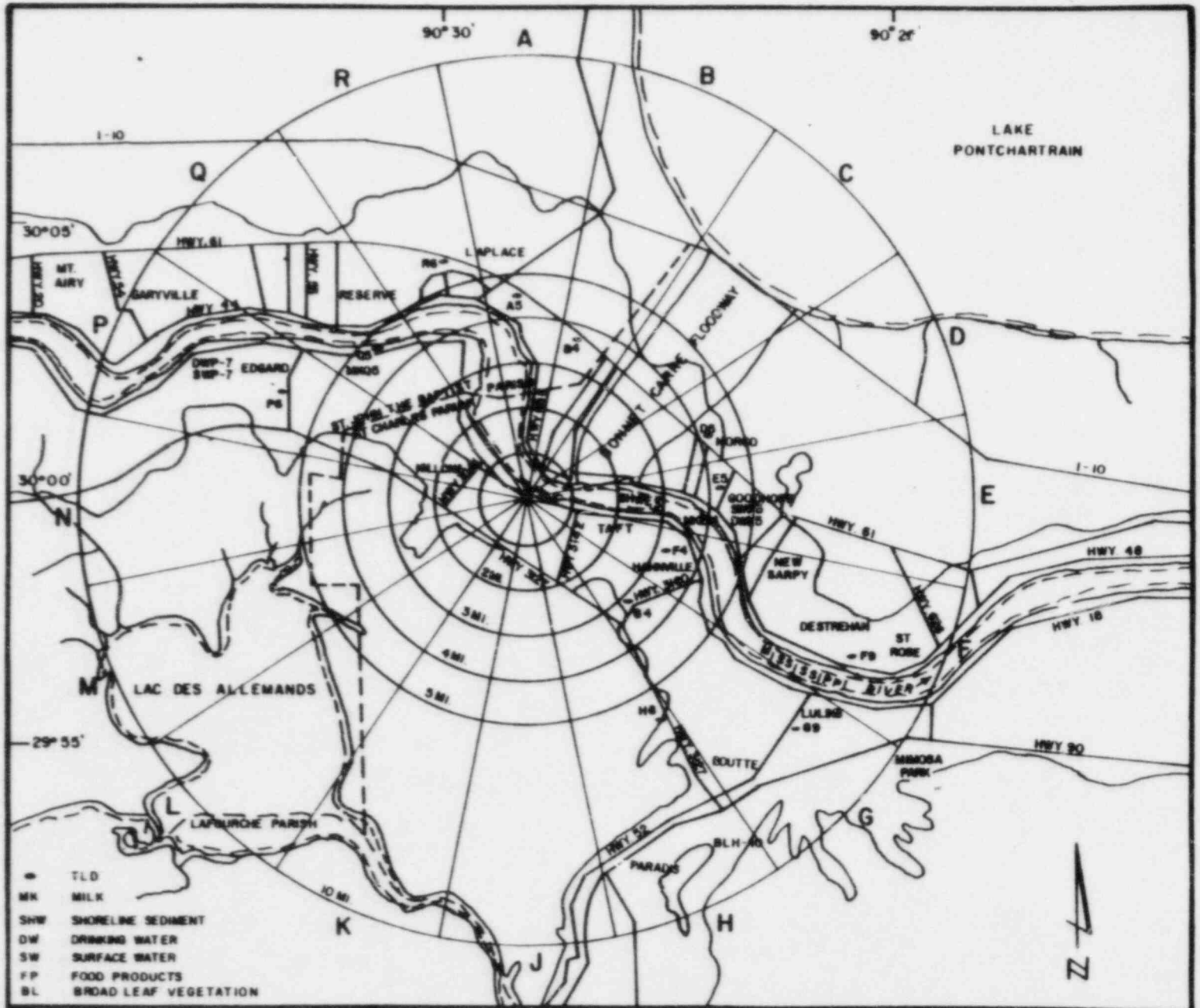
b. Applicable to broad leaf vegetation.



LOUISIANA
POWER & LIGHT CO.
Waterford Steam
Electric Station
ODCM

REMP SAMPLE LOCATIONS
WITHIN 2 MILES OF WATERFORD 3

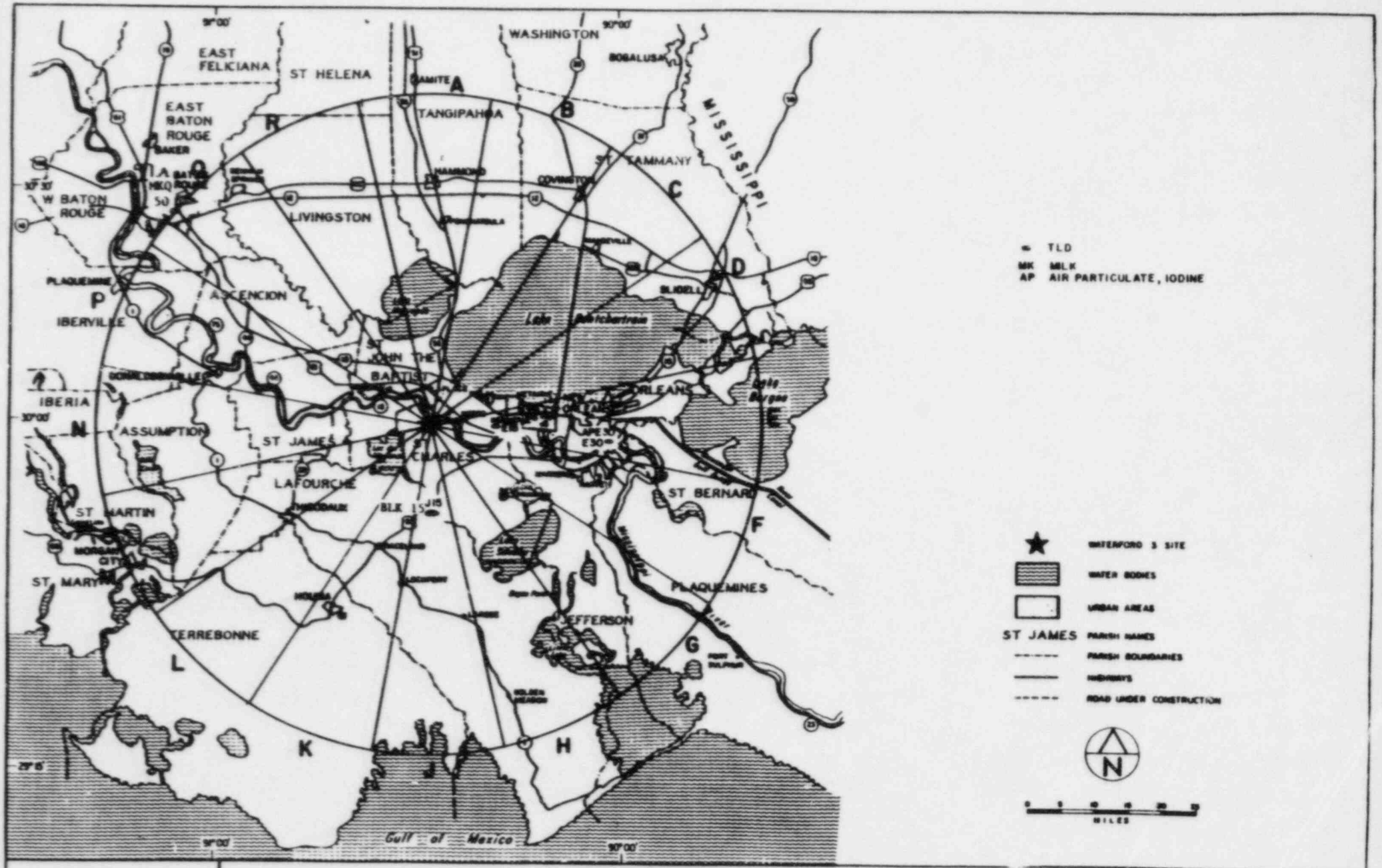
FIGURE
2.1



LOUISIANA
POWER & LIGHT CO
Waterford Steam
Electric Station

REMP SAMPLE LOCATIONS
WITHIN 10 MILES OF WATERFORD 3

FIGURE
2.2



LOUISIANA POWER & LIGHT Co.
WATERFORD STEAM ELECTRIC STATION

REMP SAMPLE LOCATIONS
WITHIN 50 MILES OF WATERFORD 3

FIGURE
2.3

3.0 DISCUSSION OF RESULTS

Analytical results for the year 1985 are discussed in this section by exposure pathway, type of sample, and analysis performed. The analytical results of the REMP are summarized in Appendix A and data for the individual analyses are presented in the tables of Appendix B. The radioactivity values summarized in Appendix A do not include any from naturally occurring radioactivity.

3.1 Direct Radiation Exposure Pathway

The average exposures on both control and indicator Thermoluminescent Dosimeters (TLDs) were 16, 19, 16, and 15 mrem per standard quarter (90 days) for the first, second, third, and fourth quarters of 1985, respectively. The average of 112 TLD exposures for all of the indicator locations was 17 mrem/standard quarter compared to 21 mrem/standard quarter for the average of four exposures at the control location. The lowest and highest individual exposures were 13 and 27 mrem per standard quarter for all locations. Note that the exposure for station J-2 during the first quarter of 1985 was 32 mrem per standard quarter. Upon investigation it was found that radiography was performed in the vicinity of station J-2 by the company which owns the property on which the TLD is located. The results obtained from this TLD were deemed to have been affected by the radiography and therefore the datum was not included in the evaluation.

Table 3.1 compares the TLD results by direction and distance from the facility. The average exposure rate from TLD's located within two miles from the plant was statistically lower than the average exposure from stations located more than five miles from the plant using the standard "t" test (see Appendix F). The average exposure rate from TLD's located between two and five miles from the plant was statistically the same as the average exposure rate from stations located more than five miles from the plant. Therefore, Waterford 3 SES operation did not have a detectable impact on direct radiation exposures from gamma radiation.

3.2 Airborne Exposure Pathway

3.2.1 Airborne Particulates

Gross beta activity ranged from 0.0034 to 0.083 pCi/cubic meter with an average of 0.021 pCi/cubic meter for 253 measurements from all five sampling locations. The average gross beta activity for the control location, APE-30, was 0.022 pCi/cubic meter compared to 0.021 pCi/cubic meter for the four indicator locations (APP-1, APQ-1, APG-1, APC-1). The control station average is statistically the same as the average from each indicator station using the standard statistical "t" test (see Appendix F).

The gross beta activity results obtained during 1985 are consistent with those from the preoperational program. During the preoperational survey, in periods not significantly influenced by nuclear weapons detonations, the gross beta activity ranged between 0.02 and 0.04 pCi/cubic meter. During the first two years of the REMP prior to Waterford 3 SES operation, the average gross beta activity for all stations was 0.021 pCi/cubic meter with a range of 0.006 to 0.5 pCi/cubic meter.

Gamma spectroscopy results indicated detectable levels of cosmogenically produced beryllium-7 and potassium-40 in the twenty quarterly composites. No man-made radionuclides were detected above their respective lower limits of detection.

3.2.2 Airborne Iodine

All of the 255 airborne iodine-131 results were below the lower limit of detection which ranged from 0.01 to 0.6 pCi/cubic meter. The variability of the lower limit of detection was due primarily to the difference between air sample volumes.

3.3 Waterborne Exposure Pathway

3.3.1 Drinking/Surface Water

As mentioned previously, drinking water is considered synonymous with surface water. Results obtained from samples collected and analyzed as drinking water can be designated "surface water results". Therefore, the results of the monthly and quarterly gamma spectral

analyses as well as the quarterly tritium analysis reported as drinking water results are the same as for those reported as surface water results.

Seventy-six composite drinking/surface water samples were analyzed by a radiochemical procedure for iodine-131. All measurements were below the lower limits of detection. The samples were composited on a monthly basis and analyzed by gamma spectroscopy. Only naturally occurring potassium-40 was detected. No man-made gamma emitters were detected above their respective lower limits of detection.

The monthly composites were then filtered through a Whatman number 54 filter and a gross beta analysis performed on the filtrate. Gross beta activity was detected in all of the thirty-six composites with an average activity of 6.2 pCi/liter. The average activity for the control location was 5.7 pCi/liter, compared to the averages of 7.9 and 5.0 pCi/liter for indicator stations DWG-2 and DWE-5, respectively.

The average gross beta activity detected at indicator station DWE-5 is statistically the same as that of the control station DWP-7 using the standard "t" test (see Appendix F). The average gross beta activity at station DWG-2, two miles downstream, is statistically larger than the control station average using the same statistical test. However, the difference between gross beta results for stations DWG-2 and DWP-7 was also observed prior to Waterford 3 SES operation during 1984. Therefore the difference in measurements between stations DWG-2 and DWP-7 appears to be the result of some factor other than Waterford 3 SES operation.

In order to test this assumption, the numerical differences between control and indicator station monthly gross beta results were calculated and compared for the years 1984 and 1985. A detailed discussion of this comparison is presented in Appendix F. Based on the results of this comparison, the difference in gross beta activity between control station DWP-7 and indicator station DWG-2 were deemed to be unrelated to the operation of Waterford 3 SES.

Drinking/surface water samples were also composited quarterly and analyzed for tritium. All measurements were below the respective lower limits of detection.

Although not required in the REMP the filters obtained from the gross beta analysis were composited quarterly and analyzed by gamma spectroscopy. No man-made gamma

emitters were detected above their respective lower limits of detection.

3.3.2 Groundwater

Four groundwater samples were collected from one sampling location, GWJ-1, and analyzed for tritium and gamma ray emitters. All measurements were below the lower limits of detection.

3.3.3 Shoreline Soil

Three shoreline soil samples were collected from two sampling locations: two samples from the Mississippi River shoreline downriver of the plant (SHWE-3) and one sample from the shoreline of a drainage canal into which turbine building sumps are discharged (SHWJ-1). The latter location was added to the REMP during the second half of 1985.

Naturally occurring potassium-40, radium-226, and thorium-228 were detected in all of the samples. Man-made radioactivity, cesium-137, was detected in the sample obtained from station SHWJ-1 at a concentration of 99 pCi/kg(dry). No other man-made radionuclides were detected in any of the samples.

Radioactive release permits for the year 1985 show that no cesium-137 was discharge into the drainage canal from which the sample came. Therefore, the presence of the cesium-137 is most likely attributable to fallout from past nuclear weapons detonations. This assumption is consistent with observations made during the preoperational survey for soil samples collected from the shoreline of the Mississippi River. During the preoperational program, cesium-137 was detected in 13 of 18 soil samples at concentrations ranging between 30 and 890 pCi/kg(dry) with an average concentration of 138 pCi/kg(dry).

However, conservatively assuming that all of the cesium-137 activity detected in the shoreline soil at station SHWJ-1 originated from the plant, the maximum dose to a member of the general public was calculated. The methodology and assumptions used to calculate the maximum dose were based on the guidance provided in Regulatory Guide 1.109 (10/77). The dose

to the maximum exposed individual, a teenager, was calculated by the following equation:

(1) $R = (40)(C)(U)(D)$

where:

R is the annual dose to the skin or the total body in mrem/year;

40 is the area-mass conversion factor given in Appendix A of Regulatory Guide 1.109 in kg/square meter;

C is the radionuclide concentration in the shoreline soil sample in pCi/kg;

U is the maximum exposure time given in Table E-5 of Regulatory Guide 1.109; 67 hours for a teenager; and

D is the external dose conversion factor for standing on contaminated ground given in Table E-6 of Regulatory Guide 1.109; the values for exposures resulting from cesium-137 to the skin and total body are 4.9E-09 and 4.2E-09 mrem/hr per pCi/square meter, respectively.

Using Equation (1), the maximum annual dose to a teenager spending 67 hours at the shoreline of the canal was calculated to be approximately 0.001 mrem/yr to the skin and to the total body. Therefore, any radiological impacts to the general public resulting from cesium-137 detected in the shoreline soil are infinitesimal.

3.4 Ingestion Exposure Pathway

3.4.1 Milk

Fifty milk samples were collected from three sampling locations and analyzed by a radiochemical procedure for iodine-131. All measurements were below the lower limits of detection. The samples were also analyzed by gamma spectroscopy. Naturally occurring potassium-40 was detected in all samples. All man-made gamma

emitters were below their respective lower limits of detection.

3.4.2 Fish

Twelve fish samples, five upstream and seven downstream of the plant, were collected and the edible portions analyzed by gamma spectroscopy. Naturally occurring potassium-40 was detected in all samples. No man-made gamma emitters were detected above their respective lower limits of detection.

3.4.3 Broad Leaf Vegetation

Waterford 3 SES Technical Specification 3.12.1 requires broad leaf vegetation to be sampled in the event milk samples are unavailable. Since milk samples could be collected reliably from only one sampling location within five miles of Waterford 3 SES, broad leaf vegetation was sampled monthly at two indicator locations. Broad leaf vegetation was also collected from one of two control locations when milk from a control location was unavailable.

Twenty-seven broad leaf vegetation samples were collected and analyzed by a radiochemical procedure for iodine-131. All measurements were below the lower limits of detection. The samples were also analyzed by gamma spectroscopy. Naturally occurring radionuclides were detected in all of the samples. Cesium-137 was detected in two of the control samples at an average concentration of 33 pCi/kg(wet). This man-made activity is most likely attributable to fallout from past nuclear weapons detonations.

The cesium-137 concentrations detected in the control samples are consistent with preoperational results. During the preoperational program, cesium-137 was occasionally detected at concentration ranging between 27 and 140 pCi/kg(wet) with an average concentration of 70 pCi/kg. No dose calculations were performed for these results since the activity was detected at a control location and could not attributed to Waterford 3 SES operation.

3.4.4 Food/Garden Crops

One food/garden crop sample was collected and analyzed by a radiochemical procedure for iodine-131. Iodine-131 was below the lower limit of detection. The sample was also analyzed by gamma spectroscopy. Naturally occurring potassium-40 was the only radionuclide detected. All man-made gamma emitters were below their respective lower limits of detection.

3.5 Deviations from the REMP

3.5.1 Unavailable Samples

During 1985 deviations from the REMP sampling schedule occurred. All of the deviations (with the exception of those associated with TLDs) were either the result of equipment malfunctions or the result of natural events beyond the control of LP&L. With respect to equipment malfunctions, the causes leading to the malfunction were identified and maintenance or replacement performed to prevent recurrence of the event. Deviations from the REMP associated with TLDs were beyond the control of LP&L and resulted from theft of a few of the dosimeters placed in the field. When a dosimeter was discovered missing during a monthly inspection, the TLD was replaced and the deviation noted. A listing of all unavailable samples for 1985 along with associated explanations of why the samples were not collected is given in Appendix C. A more detailed explanation for milk and vegetation sample unavailability is discussed below.

Milk samples were not available on a regular basis from the animal owner at station MKE-4 due to the small volume of milk produced by the animals. With the absence of milk samples at this station, broad leaf vegetation sampling was performed. One control location sample, MKQ-50, was unavailable from Louisiana Nuclear Energy Division personnel due to participation of the state in the Annual Emergency Planning Exercise conducted in September of 1985. Broad leaf vegetation was sampled at a control location during this month in lieu of the milk sample.

Broad leaf vegetation was not sampled at a control location during the months of January through May, 1985, since milk samples were available from the

control location. However, beginning in June of 1985, broad leaf vegetation was sampled even when control milk samples were available in order to accumulate baseline data for future comparisons.

3.5.2 Missed Lower Limits of Detection

A listing of all analyses that could not attain the lower limits of detection specified in Table 4.12-2 of Waterford 3 SES Technical Specification 4.12.1 is presented in Appendix C. With the exception of one drinking/surface water sample, the LLDs were not attained due to insufficient sample size resulting from equipment malfunction. In all of these cases the equipment was repaired or replaced to prevent recurrence.

The LLD for barium-140/lanthanum-140 could not be attained for one drinking/surface water sample. The missed LLD resulted from the gamma spectroscopy analysis being delayed. The delay was caused by the contract laboratory postponing the analysis while awaiting arrival of a biweekly sample necessary to form a monthly composite. However, the biweekly sample was never collected due to equipment malfunction and miscommunication regarding the unavailable sample delayed analysis.

3.5.3 Changes to the REMP

During 1985, one new milk station, MKQ-1, was added to the REMP as a result of the 1985 Annual Land Use Census. However, no samples were available from the new location during 1985 (see Section 3.6).

The location of the control broad leaf vegetation station was changed during 1985 as a result of re-evaluating site meteorological data. The location was changed from BLH-10 to BLK-15 such that the new sampling station was located in the compass sector coinciding with the least prevalent wind direction.

Shoreline soil sampling location SHWJ-1 was added to the REMP during the second half of 1985. The new location was added to monitor shoreline soil from a drainage canal into which effluents from the turbine building sumps are discharged.

3.6 Annual Land Use Census Results

In compliance with Waterford 3 SES Technical Specification 4.12.2, the Annual Land Use Census was conducted on July 10 and 11, 1985. The nearest residence, garden, and milking animal in each sector within a five mile radius of the plant were found by visual inspection and verbal inquiry. The results of the 1985 census are given in Table 3.2.

A new milking cow was found in sector Q at a distance of 1.1 miles from the plant. As a result, a new milk sampling station (MKQ-1) was added to the REMP. The owner of the animal stated that the cow was nursing a calf and would not begin producing milk for human consumption until December 1985. The owner was contacted on a periodic basis to determine the status of obtaining samples.

The owner of milking goats at location MKE-4 has sold all but one of his goats. The remaining goat does not produce enough milk for Waterford 3 SES to obtain samples as stated by the owner. However, the sampling station will remain as part of the REMP and the owner will be contacted periodically to determine the status of obtaining samples.

TABLE 3.1
1985 DIRECT RADIATION DATA
ORGANIZED BY COMPASS DIRECTION
AND DISTANCE FROM WATERFORD 3 SES

BY COMPASS DIRECTION

SECTOR	COMPASS DIRECTION	AVERAGE EXPOSURE (mrem/std qtr)	STANDARD DEVIATION (mrem/std qtr)	NUMBER IN GROUP
A	N	18	3.6	8
B	NNE	16	0.8	8
C	NE	13	1.5	3
D	ENE	18	3.7	6
E(a)	E	16	2.0	12
F	ESE	17	2.8	12
G	SE	17	1.9	11
H	SSE	16	4.5	7
J	S	17	5.1	7
K	SSW	16	1.3	4
L	SW	15	0.5	4
M	WSW	17	2.4	4
N	W	21	4.9	2
P	WNW	19	3.6	8
Q	NW	16	2.0	8
R	NNW	16	2.3	8
CONTROL	E	21	4.1	4

BY DISTANCE FROM PLANT

DISTANCE FROM PLANT (miles)	AVERAGE EXPOSURE (mrem/std qtr)	STANDARD DEVIATION (mrem/std qtr)	NUMBER IN GROUP
0 - 2	16	1.6	58
2 - 5	17	3.0	26
> 5(a)	18	3.4	28
CONTROL	21	4.1	4

a. Does not include control station data

TABLE 3.2
1985 ANNUAL LAND USE CENSUS RESULTS

SECTOR	DIRECTION	DISTANCE FROM THE PLANT (miles)			
		MILK COW	MILK GOAT	VEGETABLE GARDEN	RESIDENCE
A	N	-	-	1.1	0.8
B	NNE	-	-	1.3	0.8
C	NE	-	-	1.0	0.9
D	ENE	-	-	0.9	0.9
E	E	-	3.3(a)	3.2	2.6
F	ESE	-	-	2.3	3.4
G	SE	-	-	2.3	3.9
H	SSE	-	-	-	-
J	S	-	-	0.9	-
K	SSW	-	-	0.9	-
L	SW	-	-	0.9	-
M	WSW	-	-	0.9	-
N	W	-	-	1.1	1.3
P	WNW	-	-	0.9	0.9
Q	NW	1.1(b,c)	-	0.9	0.9
R	NNW	-	-	2.9	2.0

- Means none found in sector within a 5 mile radius of Waterford 3 SES.

a. Goat was not producing enough milk for samples.

b. Milk cow was nursing calf and does not supply milk for human consumption. The owner will be contacted on a periodic basis to determine availability of samples.

c. Samples will also continue to be taken 4.4 miles (MKQ-5). This is the only reliable milk sample within 5 miles of Waterford 3 SES.

4.0 CONCLUSIONS

The radiological environmental data collected during 1985 are consistent with the data obtained during the Preoperation Environmental Radiological Surveillance (PERS) Program and during the first two years of the REMP prior to Waterford 3 SES initial criticality. The only man-made radionuclide detected out of all of the environmental samples analyzed during 1985 was cesium-137. Cesium-137 was detected in one shoreline soil sample and two control location broad leaf vegetation samples. The origin of this man-made radioactivity is most likely attributable to fallout from past nuclear weapons detonations and not Waterford 3 SES operation.

In conclusion, based on the evaluation of the REMP data collected during 1985 the operation of Waterford 3 SES had no observable radiological impact on the environment.

APPENDIX A
REMP DATA SUMMARY

TABLE A-1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility Waterford 3 SES Docket No. 50-382

Location of Facility St. Charles, Louisiana Reporting Period January 1 to December 31, 1985
(Parish, State)

MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	ANALYSIS AND TOTAL NUMBER OF ANALYSES PERFORMED	LOWER LIMIT OF DETECTION[a] (LLD)	ALL INDICATOR LOCATIONS MEAN[b] (RANGE)[b]	LOCATION WITH HIGHEST ANNUAL MEAN NAME DISTANCE AND DIRECTION	MEAN[b] (RANGE)[b]	CONTROL LOCATION MEAN (RANGE)	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
1. Direct Radiation (mrem/Std. Qtr.)	TLD 116	1	17(112/112) (13-27)	E-30 27.0 miles E	21(4/4) (18-27)	E-30 21(4/4) (18-27)	0
2. Airborne Particulates (10^{-3}pCi/m^3)	Gross Beta 253	10	21(200/201) (3-82)	APE-30 27.0 miles E	22(51-52) (10-82)	APE-30 22(51/52) (10-82)	0
	Gamma 20	(c)	<LLD (0/16) (-)	NA	NA	APE-30 <LLD (0/4) (-)	0
3. Airborne Iodine (10^{-3}pCi/m^3)	I-131 255	70	<LLD (0/203) (-)	NA	NA	APE-30 <LLD (0/52) (-)	0
4. Drinking Water (pCi/l)	Gross Beta 36	4	6.4 (24/24) (3.4-11)	DW-2 2.0 miles ESE	7.9(12/12) (5.6-11)	DW-7 5.7(12/12) (3.8-8.1)	0

TABLE A-1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility Waterford 3 SES Docket No. 50-382

Location of Facility St. Charles, Louisiana (Parish, State) Reporting Period January 1 to December 31, 1985

MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	ANALYSIS AND TOTAL NUMBER OF ANALYSES PERFORMED	LOWER LIMIT OF DETECTION[a] (LLD)	ALL INDICATOR LOCATIONS MEAN[b] (RANGE)[b]	LOCATION WITH HIGHEST ANNUAL MEAN NAME DISTANCE AND DIRECTION	MEAN[b] (RANGE)[b]	CONTROL LOCATION MEAN (RANGE)	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
4. Drinking Water (pCi/l) (Continued)	I-131 76	1	<LLD (0/50) (-)	NA	NA	DWP-7 <LLD (0/26) (-)	0
	Gamma: 36 Monthly	(c)	<LLD (0/24) (-)	NA	NA	DWP-7 <LLD (0/12) (-)	0
	Gamma: 12 (Filters) Quarterly	(d)	<LLD (0/8) (-)	NA	NA	DWP-7 <LLD (0/4) (-)	0
	Tritium 12	2000	<LLD (0/8) (-)	NA	NA	DWP-7 <LLD (0/4) (-)	0
5. Surface Water (pCi/l)	Gamma: 36 Monthly	(c)	<LLD (0/8) (-)	NA	NA	SWP-7 <LLD (0/4) (-)	0

TABLE A-1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility Waterford 3 SES Docket No. 50-382

Location of Facility St. Charles, Louisiana (Parish, State) Reporting Period January 1 to December 31, 1985

MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	ANALYSIS AND TOTAL NUMBER OF ANALYSES PERFORMED	LOWER LIMIT OF DETECTION[a] (LLD)	ALL INDICATOR LOCATIONS MEAN[b] (RANGE)[b]	LOCATION WITH HIGHEST ANNUAL MEAN RANGE DISTANCE AND DIRECTION	MEAN[b] (RANGE)[b]	CONTROL LOCATIONS MEAN (RANGE)	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
5. Surface Water (pCi/l) (Continued)	Gamma: 12 (Filters) Quarterly	(d)	<LLD (0/8) (-)	NA	NA	SMP-7 <LLD (0/4) (-)	0
	Tritium 12	2000	<LLD (0/8) (-)	NA	NA	SMP-7 LLD (0/4) (-)	0
6. Groundwater (pCi/l)	Gamma 4	(c)	<LLD (0/4) (-)	NA	NA	None	0
	Tritium 4	2000	<LLD (0/4) (-)	NA	NA	None	0
7. Shoreline Soil (pCi/kg-dry)	Gamma 3 Cs-137	180	99 (1/3) (-)	SSMJ-1 0.3 miles S	99 (1/3) (-)	None	0

TABLE A-1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility Waterford 3 SES Docket No. 50-382

Location of Facility St. Charles, Louisiana (Parish, State) Reporting Period January 1 to December 31, 1985

MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	ANALYSIS AND TOTAL NUMBER OF ANALYSES PERFORMED	LOWER LIMIT OF DETECTION[a] (LLD)	ALL INDICATOR LOCATIONS MEAN[b] (RANGE)[b]	LOCATION WITH HIGHEST ANNUAL MEAN NAME DISTANCE AND DIRECTION	MEAN[b] (RANGE)[b]	CONTROL LOCATIONS MEAN (RANGE)	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
8. Milk (pCi/l)	I-131 50	1	<LLD (0/27) (-)	NA	NA	MEQ-50 <LLD (0/23) (-)	0
	Gamma 50	(c)	<LLD (0/27) (-)	NA	NA	MEQ-50 <LLD (0/23) (-)	0
9. Fish (pCi/kg-wet)	Gamma 12	(c)	<LLD (0/7) (-)	NA	NA	FH-1 <LLD (0/5) (-)	0
10. Broad Leaf Vegetation (pCi/kg-wet)	I-131 27	50	<LLD (0/22) (-)	NA	NA	BLH-10, BLK-15 <LLD (0/5) (-)	0
	Gamma 27 Cs-137	80	<LLD (0/22) (-)	NA	NA	BLH-10, BLK-15 33 (2/5) (14-53)	0 0

TABLE A-1

RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM SUMMARY

Name of Facility Waterford 3 SES Docket No. 50-382

Location of Facility St. Charles, Louisiana (Parish, State) Reporting Period January 1 to December 31, 1985

MEDIUM OR PATHWAY SAMPLED (UNIT OF MEASUREMENT)	ANALYSIS AND TOTAL NUMBER OF ANALYSES PERFORMED	LOWER LIMIT OF DETECTION[a] (LLD)	ALL INDICATOR LOCATIONS MEAN[b] (RANGE)[b]	LOCATION WITH HIGHEST ANNUAL MEAN RANGE DISTANCE AND DIRECTION	MEAN[b] (RANGE)[b]	CONTROL LOCATION MEAN (RANGE)	NUMBER OF NONROUTINE REPORTED MEASUREMENTS
11. Food/Garden Crop (pCi/kg-wet)	Gamma 1	(c)	<LLD (0/1) (-)	NA	NA	None	0

[a] Nominal Lower Limit of Detection (LLD) as defined in Waterford 3 Technical Specifications.

[b] Mean and range based upon detectable measurements only. Fraction of detectable measurements at specified locations is indicated in parenthesis.

[c] Lower Limits of Detection (LLD) for individual radionuclides analyzed for by gamma spectroscopy are given in Waterford 3 Technical Specifications.

[d] No minimum Lower Limit of Detection (LLD) defined in Waterford 3 Technical Specifications.

APPENDIX B
REMP DATA

TABLE B-1

QUARTERLY TLD EXPOSURES

mRem/standard 90 day quarter

STATION NUMBER	FIRST QUARTER 12/27/84-03/28/85	SECOND QUARTER 03/28/85-06/28/85	THIRD QUARTER 06/28/85-10/02/85	FOURTH QUARTER 10/02/85-01/03/86
A-2	18	19	19	15
A-5	17	26 (d)	15	15
B-1	15	16	16	15
B-4	17	17	16	15
C-1	13 (a)	14	11	(b)
D-2	18	21	19	(b)
D-5	(b)	21 (d)	13	13
E-1	17 (a)	19	16	15
E-5	14	17	14	13
E-15	17	19	18	15
E-30	27 (c)	20	19	18
F-2	15	15	15	14
F-4	18	21	19	15
F-9	17	23	16	15
G-2	18	20	19	16
G-4	17	(b)	14	14
G-9	17	18	17	15
H-2	17	18	17	(b)
H-6	13	25	13	12

(a) TLD Vandalized; replaced 03/01/85.
(b) TLD Vandalized
(c) TLD Vandalized; replaced 03/08/85.
(d) TLD Vandalized; replaced 05/03/85.

TABLE B-1 (Cont.)

QUARTERLY TLD EXPOSURES

mRem/standard 90 day quarter

STATION NUMBER	FIRST QUARTER 12/27/84-03/28/85	SECOND QUARTER 03/28/85-06/28/85	THIRD QUARTER 06/28/85-10/02/85	FOURTH QUARTER 10/02/85-01/03/86
J-2	32 (a)	16	14	13
J-15	15	28	16	15
K-1	16	17	16	14
L-1	15	15	16	15
M-1	15	20	15	16
N-1	(b)	24 (c)	17	(b)
P-1	17	27 (d)	18	15
P-6	19	20	18	17
Q-1	14	17	15	13
Q-5	17	19	18	16
R-1	14	17	14	13
R-6	17	19	18	18

(a) Radiography in area
(b) TLD Vandalized
(c) TLD Vandalized; replaced 06/08/85.
(d) TLD Vandalized; replaced 05/01/85.

TABLE B-2

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APC-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
12/31	01/07	1.02E 04	CU. FT.	01/15	2.2 ± 0.3 E-02	01/11	L.T. 4. E-02
01/07	01/14	1.02E 04	CU. FT.	01/25	2.4 ± 0.4 E-02	01/16	L.T. 2. E-02
01/14	01/22	1.17E 04	CU. FT.	01/30	2.1 ± 0.3 E-02	01/24	L.T. 3. E-02
01/22	01/28	8.51E 03	CU. FT.	02/06	1.9 ± 0.4 E-02	01/30	L.T. 3. E-02
01/28	02/04	1.01E 04	CU. FT.	02/11	1.9 ± 0.3 E-02	02/07	L.T. 5. E-02
02/04	02/11	9.94E 03	CU. FT.	02/21	3.4 ± 0.4 E-02	02/13	L.T. 3. E-02
02/11	02/18	1.02E 04	CU. FT.	02/26	2.8 ± 0.4 E-02	02/21	L.T. 3. E-02
02/18	02/25	1.02E 04	CU. FT.	03/05	1.5 ± 0.3 E-02	02/27	L.T. 3. E-02
02/25	03/04	1.03E 04	CU. FT.	03/13	1.8 ± 0.3 E-02	03/06	L.T. 3. E-02
03/04	03/11	1.03E 04	CU. FT.	03/20	2.1 ± 0.3 E-02	03/13	L.T. 3. E-02
03/11	03/18	1.03E 04	CU. FT.	03/26	2.0 ± 0.3 E-02	03/20	L.T. 3. E-02
03/18	03/25	1.03E 04	CU. FT.	03/29	1.3 ± 0.3 E-02	03/28	L.T. 4. E-02
03/25	04/01	6.56E 03	CU. FT.	04/08	2.4 ± 0.4 E-02	04/03	L.T. 6. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APC-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
04/01	04/09	1.16E 04	CU. FT.	04/16	2.0 ± 0.3 E-02	04/11	L.T. 3. E-02
04/09	04/15	8.73E 03	CU. FT.	04/25	2.1 ± 0.4 E-02	04/18	L.T. 4. E-02
04/15	04/22	1.02E 04	CU. FT.	05/01	1.8 ± 0.3 E-02	04/24	L.T. 3. E-02
04/22	04/30	1.20E 04	CU. FT.	05/24	2.1 ± 0.3 E-02	05/01	L.T. 2. E-02
04/30	05/06	(a)					
05/06	05/08	3.69E 03	CU. FT.	05/21	3.8 ± 0.8 E-02	05/16	L.T. 2. E-01(b)
05/08	05/20	(c)					
05/20	05/27	1.02E 04	CU. FT.	06/06	2.1 ± 0.3 E-02	05/30	L.T. 2. E-02
05/27	06/03	1.00E 04	CU. FT.	06/17	3.0 ± 0.3 E-02	06/05	L.T. 3. E-02
06/03	06/10	1.00E 04	CU. FT.	06/19	2.6 ± 0.4 E-02	06/13	L.T. 3. E-02
06/10	06/17	1.01E 04	CU. FT.	07/02	1.3 ± 0.3 E-02	06/19	L.T. 4. E-02
06/17	06/24	1.01E 04	CU. FT.	07/10	2.0 ± 0.3 E-02	06/26	L.T. 3. E-02
06/24	07/01	1.01E 04	CU. FT.	07/15	2.7 ± 0.4 E-02	07/03	L.T. 4. E-02

(a) Sample not collected; pump not working.
(b) Required LLD could not be met due to low air volume.
(c) Power failure; sample not collected.

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APC-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
07/01	07/03	3.95E 03	CU. FT.	07/17	3.5 ± 0.6 E-02	07/11	L.T. 1. E-01(a)
07/09	07/15	8.80E 03	CU. FT.	07/22	2.3 ± 0.4 E-02	07/17	L.T. 3. E-02
07/15	07/23	1.11E 04	CU. FT.	07/26	1.9 ± 0.3 E-02	07/24	L.T. 3. E-02
07/23	07/29	9.22E 03	CU. FT.	08/07	1.8 ± 0.3 E-02	07/31	L.T. 3. E-02
07/29	08/05	1.02E 04	CU. FT.	08/15	2.0 ± 0.3 E-02	08/07	L.T. 3. E-02
08/05	08/12	1.01E 04	CU. FT.	08/19	2.2 ± 0.3 E-02	08/14	L.T. 3. E-02
08/12	08/19	1.02E 04	CU. FT.	08/29	1.5 ± 0.3 E-02	08/22	L.T. 3. E-02
08/19	08/26	1.04E 04	CU. FT.	08/30	1.9 ± 0.3 E-02	08/28	L.T. 3. E-02
08/26	09/03	1.15E 04	CU. FT.	09/09	2.0 ± 0.3 E-02	09/04	L.T. 2. E-02
09/03	09/09	9.71E 03	CU. FT.	09/19	1.5 ± 0.3 E-02	09/10	L.T. 3. E-02
09/09	09/16	1.02E 04	CU. FT.	09/23	2.1 ± 0.3 E-02	09/17	L.T. 4. E-02
09/16	09/23	1.01E 04	CU. FT.	10/03	1.8 ± 0.3 E-02	09/24	L.T. 2. E-02
09/23	0^/30	1.03E 04	CU. FT.	10/07	2.3 ± 0.3 E-02	10/01	L.T. 2. E-02

(a) Required LLD could not be met due to low air volume.

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APC-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
09/30	10/07	1.01E 04	CU. FT.	10/11	1.9 ± 0.3 E-02	10/08	L.T. 3. E-02
10/07	10/14	1.02E 04	CU. FT.	10/22	2.3 ± 0.3 E-02	10/16	L.T. 3. E-02
10/14	10/21	1.02E 04	CU. FT.	10/29	1.3 ± 0.3 E-02	10/23	L.T. 2. E-02
10/21	10/28	1.02E 04	CU. FT.	11/13	2.1 ± 0.3 E-02	10/30	L.T. 3. E-02
10/28	11/04	1.01E 04	CU. FT.	11/13	1.5 ± 0.3 E-02	11/06	L.T. 3. E-02
11/04	11/11	1.01E 04	CU. FT.	11/21	3.1 ± 0.4 E-02	11/14	L.T. 3. E-02
11/11	11/18	(a)					
11/18	11/25	(a)					
11/25	12/02	1.00E 04	CU. FT.	12/09	7.2 ± 3.3 E-03	12/04	L.T. 3. E-02
12/02	12/09	1.02E 04	CU. FT.	12/18	3.1 ± 0.4 E-02	12/11	L.T. 3. E-02
12/09	12/16	9.61E 03	CU. FT.	12/30	2.1 ± 0.3 E-02	12/19	L.T. 3. E-02
12/16	12/23	9.96E 03	CU. FT.	01/03	3.5 ± 0.4 E-02	12/27	L.T. 2. E-02
12/23	12/30	9.89E 03	CU. FT.	01/07	2.3 ± 0.3 E-02	01/02	L.T. 3. E-02

(a) Pump malfunction; no sample available.

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APG-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
12/31	01/07	9.79E 03	CU. FT.	01/15	2.2 ± 0.3 E-02	01/11	L.T. 4. E-02
01/07	01/14	9.88E 03	CU. FT.	01/25	2.6 ± 0.4 E-02	01/16	L.T. 2. E-02
01/14	01/22	9.18E 03	CU. FT.	01/30	2.4 ± 0.4 E-02	01/24	L.T. 4. E-02
01/22	01/28	8.34E 03	CU. FT.		(a)	01/30	L.T. 3. E-02
01/28	02/04	9.89E 03	CU. FT.	02/11	1.9 ± 0.3 E-02	02/07	L.T. 5. E-02
02/04	02/11	9.86E 03	CU. FT.	02/21	3.3 ± 0.4 E-02	02/13	L.T. 3. E-02
02/11	02/18	9.90E 03	CU. FT.	02/26	2.6 ± 0.4 E-02	02/21	L.T. 3. E-02
02/18	02/25	9.96E 03	CU. FT.	03/05	1.7 ± 0.3 E-02	02/27	L.T. 3. E-02
02/25	03/04	9.97E 03	CU. FT.	03/13	1.5 ± 0.3 E-02	03/06	L.T. 3. E-02
03/04	03/11	1.00E 04	CU. FT.	03/20	1.9 ± 0.3 E-02	03/13	L.T. 3. E-02
03/11	03/18	9.98E 03	CU. FT.	03/26	1.9 ± 0.3 E-02	03/20	L.T. 3. E-02
03/18	03/25	9.98E 03	CU. FT.	03/29	1.7 ± 0.3 E-02	03/28	L.T. 5. E-02
03/25	04/01	1.00E 04	CU. FT.	04/08	2.2 ± 0.3 E-02	04/03	L.T. 3. E-02

(a) Lost filter during collection. High winds blew filter onto puddle of water.

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER AP6-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
04/01	04/09	1.06E 04	CU. FT.	(a)		04/11	L.T. 3. E-02
04/09	04/15	7.93E 03	CU. FT.	04/25	2.4 ± 0.4 E-02	04/18	L.T. 4. E-02
04/15	04/22	9.20E 03	CU. FT.	05/01	2.2 ± 0.4 E-02	04/24	L.T. 3. E-02
04/22	04/29	9.13E 03	CU. FT.	05/24	2.0 ± 0.4 E-02	05/01	L.T. 3. E-02
04/29	05/06	9.22E 03	CU. FT.	05/14	1.9 ± 0.3 E-02	05/08	L.T. 3. E-02
05/06	05/13	9.23E 03	CU. FT.	05/21	2.3 ± 0.4 E-02	05/16	L.T. 5. E-02
05/13	05/20	9.96E 03	CU. FT.	05/31	2.3 ± 0.3 E-02	05/23	L.T. 4. E-02
05/20	05/27	9.95E 03	CU. FT.	06/06	2.0 ± 0.3 E-02	05/30	L.T. 2. E-02
05/27	06/03	9.93E 03	CU. FT.	06/17	2.7 ± 0.3 E-02	06/05	L.T. 3. E-02
06/03	06/10	1.11E 04	CU. FT.	06/19	4.2 ± 2.0 E-03	06/13	L.T. 2. E-02
06/11	06/18	9.96E 03	CU. FT.	07/02	1.2 ± 0.3 E-02	06/19	L.T. 4. E-02
06/18	06/24	1.14E 04	CU. FT.	07/10	3.4 ± 1.9 E-03	06/26	L.T. 3. E-02
06/24	06/27	3.81E 03	CU. FT.	07/15	3.3 ± 0.7 E-02	07/03	L.T. 1. E-01(b)

(a) Sample not received; lost during collection.
(b) Pump malfunction; required LLD not met due to low air volume.

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APG-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
07/01	07/02	1.75E 03	CU. FT.	07/17	5.1 ± 1.2 E-02	07/11	L.T. 3. E-01(a)
07/08	07/13	7.78E 03	CU. FT.	07/22	2.4 ± 0.4 E-02	07/17	L.T. 4. E-02
07/15	07/22	9.70E 03	CU. FT.	07/26	1.7 ± 0.3 E-02	07/24	L.T. 3. E-02
07/22	07/29	9.40E 03	CU. FT.	08/07	1.9 ± 0.3 E-02	07/31	L.T. 3. E-02
07/29	08/05	9.81E 03	CU. FT.	08/15	2.0 ± 0.3 E-02	08/07	L.T. 3. E-02
08/05	08/12	9.28E 03	CU. FT.	08/19	2.1 ± 0.3 E-02	08/14	L.T. 3. E-02
08/13	08/19	8.35E 03	CU. FT.	08/29	1.4 ± 0.4 E-02	08/22	L.T. 4. E-02
08/19	08/26	9.68E 03	CU. FT.	08/30	1.9 ± 0.3 E-02	08/28	L.T. 3. E-02
08/26	09/03	1.13E 04	CU. FT.	09/09	2.0 ± 0.3 E-02	09/04	L.T. 2. E-02
09/03	09/09	8.35E 03	CU. FT.	09/19	1.9 ± 0.4 E-02	09/10	L.T. 3. E-02
09/09	09/16	9.79E 03	CU. FT.	09/23	2.1 ± 0.3 E-02	09/17	L.T. 4. E-02
09/16	09/23	9.97E 03	CU. FT.	10/03	2.1 ± 0.3 E-02	09/24	L.T. 2. E-02
09/23	09/30	1.04E 04	CU. FT.	10/07	1.9 ± 0.3 E-02	10/01	L.T. 2. E-02

(a) Required LLD could not be met due to low air volume; pump malfunctioned.

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APG-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
09/30	10/07	9.63E 03	CU. FT.	10/11	1.9 ± 0.3 E-02	10/08	L.T. 3. E-02
10/07	10/14	9.96E 03	CU. FT.	10/22	1.8 ± 0.3 E-02	10/16	L.T. 3. E-02
10/14	10/21	9.92E 03	CU. FT.	10/29	9.7 ± 2.5 E-03	10/23	L.T. 3. E-02
10/21	10/28	9.88E 03	CU. FT.	11/13	1.3 ± 0.3 E-02	10/30	L.T. 3. E-02
10/30	11/04	6.76E 03	CU. FT.	11/13	2.6 ± 0.5 E-02	11/06	L.T. 4. E-02
11/04	11/11	9.88E 03	CU. FT.	11/21	4.1 ± 0.5 E-02	11/14	L.T. 3. E-02
11/11	11/18	9.86E 03	CU. FT.	11/25	1.5 ± 0.3 E-02	11/22	L.T. 3. E-02
11/18	11/25	9.92E 03	CU. FT.	12/06	2.3 ± 0.4 E-02	12/02	L.T. 4. E-02
11/25	12/02	9.88E 03	CU. FT.	12/09	7.6 ± 3.3 E-03	12/04	L.T. 3. E-02
12/02	12/09	1.00E 04	CU. FT.	12/18	3.4 ± 0.4 E-02	12/11	L.T. 3. E-02
12/09	12/16	9.30E 03	CU. FT.	12/30	2.4 ± 0.3 E-02	12/19	L.T. 3. E-02
12/16	12/23	9.70E 03	CU. FT.	01/03	3.3 ± 0.4 E-02	12/27	L.T. 3. E-02
12/23	12/30	9.96E 03	CU. FT.	01/07	2.6 ± 0.4 E-02	01/02	L.T. 3. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APP-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
12/31	01/07	1.02E 04	CU. FT.	01/15	2.0 ± 0.3 E-02	01/11	L.T. 4. E-02
01/07	01/14	8.70E 03	CU. FT.	01/25	2.5 ± 0.4 E-02	01/16	L.T. 2. E-02
01/14	01/22	1.17E 04	CU. FT.	01/30	1.9 ± 0.3 E-02	01/24	L.T. 4. E-02
01/22	01/28	8.70E 03	CU. FT.	02/06	2.0 ± 0.4 E-02	01/30	L.T. 3. E-02
01/28	02/04	1.03E 04	CU. FT.	02/11	2.0 ± 0.3 E-02	02/07	L.T. 4. E-02
02/04	02/11	1.02E 04	CU. FT.	02/21	3.4 ± 0.4 E-02	02/13	L.T. 3. E-02
02/11	02/18	1.01E 04	CU. FT.	02/26	2.6 ± 0.4 E-02	02/21	L.T. 3. E-02
02/18	02/25	1.03E 04	CU. FT.	03/05	1.5 ± 0.3 E-02	02/27	L.T. 3. E-02
02/25	03/04	1.03E 04	CU. FT.	03/13	1.9 ± 0.3 E-02	03/06	L.T. 3. E-02
03/04	03/11	1.03E 04	CU. FT.	03/20	1.8 ± 0.3 E-02	03/13	L.T. 3. E-02
03/11	03/18	1.03E 04	CU. FT.	03/26	2.0 ± 0.3 E-02	03/20	L.T. 3. E-02
03/18	03/25	1.03E 04	CU. FT.	03/29	1.4 ± 0.3 E-02	03/28	L.T. 4. E-02
03/25	04/01	1.03E 04	CU. FT.	04/08	2.1 ± 0.3 E-02	04/03	L.T. 3. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APP-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
04/01	04/09	1.18E 04	CU. FT.	04/16	1.8 ± 0.3 E-02	04/11	L.T. 3. E-02
04/09	04/15	8.83E 03	CU. FT.	04/25	1.9 ± 0.4 E-02	04/18	L.T. 4. E-02
04/15	04/22	1.02E 04	CU. FT.	05/01	2.5 ± 0.4 E-02	04/24	L.T. 3. E-02
04/22	04/29	1.01E 04	CU. FT.	05/24	2.2 ± 0.3 E-02	05/01	L.T. 3. E-02
04/29	05/06	1.01E 04	CU. FT.	05/14	2.0 ± 0.3 E-02	05/08	L.T. 2. E-02
05/06	05/13	1.02E 04	CU. FT.	05/21	2.3 ± 0.3 E-02	05/16	L.T. 4. E-02
05/13	05/20	1.03E 04	CU. FT.	05/31	2.1 ± 0.3 E-02	05/23	L.T. 3. E-02
05/20	05/27	1.03E 04	CU. FT.	06/06	2.5 ± 0.3 E-02	05/30	L.T. 2. E-02
05/27	06/03	1.00E 04	CU. FT.	06/17	2.9 ± 0.3 E-02	06/05	L.T. 3. E-02
06/03	06/10	1.04E 04	CU. FT.	06/19	3.1 ± 0.4 E-02	06/13	L.T. 2. E-02
06/10	06/17	9.65E 03	CU. FT.	07/02	1.1 ± 0.3 E-02	06/19	L.T. 5. E-02
06/17	06/24	1.01E 04	CU. FT.	07/10	2.4 ± 0.3 E-02	06/26	L.T. 3. E-02
06/24	07/01	9.94E 03	CU. FT.	07/15	2.7 ± 0.4 E-02	07/03	L.T. 4. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APP-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
07/01	07/08	1.01E 04	CU. FT.	07/17	1.7 ± 0.3 E-02	07/11	L.T. 3. E-02
07/08	07/15	9.99E 03	CU. FT.	07/22	2.4 ± 0.3 E-02	07/17	L.T. 3. E-02
07/15	07/22	1.05E 04	CU. FT.	07/26	1.5 ± 0.3 E-02	07/24	L.T. 3. E-02
07/22	07/29	9.53E 03	CU. FT.	08/07	1.7 ± 0.3 E-02	07/31	L.T. 3. E-02
07/29	08/05	1.00E 04	CU. FT.	08/15	1.7 ± 0.3 E-02	08/07	L.T. 3. E-02
08/05	08/12	9.96E 03	CU. FT.	08/19	1.9 ± 0.3 E-02	08/14	L.T. 3. E-02
08/12	08/19	1.00E 04	CU. FT.	08/29	1.3 ± 0.3 E-02	08/22	L.T. 3. E-02
08/19	08/26	1.02E 04	CU. FT.	08/30	1.8 ± 0.3 E-02	08/28	L.T. 3. E-02
08/26	09/03	1.12E 04	CU. FT.	09/09	1.8 ± 0.3 E-02	09/04	L.T. 2. E-02
09/03	09/09	8.53E 03	CU. FT.	09/19	1.3 ± 0.3 E-02	09/10	L.T. 3. E-02
09/09	09/16	9.98E 03	CU. FT.	09/23	2.1 ± 0.3 E-02	09/17	L.T. 4. E-02
09/16	09/23	9.91E 03	CU. FT.	10/03	2.0 ± 0.3 E-02	09/24	L.T. 2. E-02
09/23	09/30	1.03E 04	CU. FT.	10/07	1.8 ± 0.3 E-02	10/01	L.T. 2. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APP-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
09/30	10/07	9.64E 03	CU. FT.	10/11	2.1 ± 0.3 E-02	10/08	L.T. 3. E-02
10/07	10/14	9.95E 03	CU. FT.	10/22	2.4 ± 0.3 E-02	10/16	L.T. 3. E-02
10/14	10/2.	9.88E 03	CU. FT.	10/29	1.3 ± 0.3 E-02	10/23	L.T. 3. E-02
10/21	10/28	9.97E 03	CU. FT.	11/13	1.4 ± 0.3 E-02	10/30	L.T. 3. E-02
10/28	11/0[illegible]	[illegible]E 03	CU. FT.	11/13	1.5 ± 0.3 E-02	11/06	L.T. 3. E-02
11/04	11/11	9.90E 03	CU. FT.	11/21	3.4 ± 0.4 E-02	11/14	L.T. 3. E-02
11/11	11/18	9.85E 03	CU. FT.	11/25	1.6 ± 0.3 E-02	11/22	L.T. 3. E-02
11/18	11/25	9.94E 03	CU. FT.	12/06	2.5 ± 0.4 E-02	12/02	L.T. 4. E-02
11/25	12/02	1.02E 04	CU. FT.	12/09	L.T. 5. E-03	12/04	L.T. 3. E-02
12/02	12/09	1.01E 04	CU. FT.	12/18	3.2 ± 0.4 E-02	12/11	L.T. 3. E-02
12/09	12/16	9.54E 03	CU. FT.	12/30	2.1 ± 0.3 E-02	12/19	L.T. 3. E-02
12/16	12/23	9.86E 03	CU. FT.	01/03	3.8 ± 0.4 E-02	12/27	L.T. 3. E-02
12/23	12/30	9.84E 03	CU. FT.	01/07	2.2 ± 0.3 E-02	01/02	L.T. 3. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APQ-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
12/31	01/07	8.08E 03	CU. FT.	01/15	2.3 ± 0.4 E-02	01/11	L.T. 5. E-02
01/07	01/14	8.22E 03	CU. FT.	01/25	2.7 ± 0.4 E-02	01/16	L.T. 3. E-02
01/14	01/22	8.90E 03	CU. FT.	01/30	2.4 ± 0.4 E-02	01/24	L.T. 5. E-02
01/22	01/28	6.27E 03	CU. FT.	02/06	2.0 ± 0.5 E-02	01/30	L.T. 4. E-02
01/28	02/04	7.49E 03	CU. FT.	02/11	2.2 ± 0.4 E-02	02/07	L.T. 6. E-02
02/04	02/11	7.45E 03	CU. FT.	02/21	3.5 ± 0.5 E-02	02/13	L.T. 4. E-02
02/11	02/18	7.47E 03	CU. FT.	02/26	2.6 ± 0.4 E-02	02/21	L.T. 4. E-02
02/18	02/25	7.47E 03	CU. FT.	03/05	1.7 ± 0.4 E-02	02/27	L.T. 4. E-02
02/25	03/04	7.48E 03	CU. FT.	03/13	1.8 ± 0.4 E-02	03/06	L.T. 4. E-02
03/05	03/11	8.60E 03	CU. FT.	03/20	2.4 ± 0.3 E-02	03/13	L.T. 3. E-02
03/11	03/18	1.01E 04	CU. FT.	03/26	2.0 ± 0.2 E-02	03/20	L.T. 3. E-02
03/18	03/25	1.01E 04	CU. FT.	03/29	3.0 ± 0.4 E-02	03/28	L.T. 5. E-02
03/25	04/01	1.02E 04	CU. FT.	04/08	2.2 ± 0.3 E-02	04/03	L.T. 3. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APQ-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
04/01	04/09	1.16E 04	CU. FT.	04/16	1.8 ± 0.3 E-02	04/11	L.T. 3. E-02
04/09	04/15	8.69E 03	CU. FT.	04/25	2.2 ± 0.4 E-02	04/18	L.T. 4. E-02
04/15	04/22	1.02E 04	CU. FT.	05/01	2.0 ± 0.3 E-02	04/24	L.T. 3. E-02
04/22	04/29	1.03E 04	CU. FT.	05/24	2.1 ± 0.3 E-02	05/01	L.T. 3. E-02
04/29	05/06	1.04E 04	CU. FT.	05/14	2.0 ± 0.3 E-02	05/08	L.T. 2. E-02
05/06	05/13	1.04E 04	CU. FT.	05/21	2.4 ± 0.3 E-02	05/16	L.T. 4. E-02
05/13	05/20	1.03E 04	CU. FT.	05/31	2.3 ± 0.3 E-02	05/23	L.T. 3. E-02
05/20	05/27	1.03E 04	CU. FT.	06/06	2.1 ± 0.3 E-02	05/30	L.T. 2. E-02
05/27	06/03	1.08E 04	CU. FT.	06/17	2.3 ± 0.3 E-02	06/05	L.T. 3. E-02
06/03	06/10	1.09E 04	CU. FT.	06/19	2.9 ± 0.3 E-02	06/13	L.T. 2. E-02
06/10	06/17	1.04E 04	CU. FT.	07/02	1.2 ± 0.3 E-02	06/19	L.T. 4. E-02
06/17	06/24	1.11E 04	CU. FT.	07/10	2.1 ± 0.3 E-02	06/26	L.T. 3. E-02
06/24	07/01	1.04E 04	CU. FT.	07/15	2.6 ± 0.3 E-02	07/03	L.T. 4. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APQ-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
07/01	07/08	1.05E 04	CU. FT.	07/17	1.7 ± 0.3 E-02	07/11	L.T. 3. E-02
07/08	07/15	1.03E 04	CU. FT.	07/22	2.4 ± 0.3 E-02	07/17	L.T. 2. E-02
07/15	07/22	1.10E 04	CU. FT.	07/26	1.9 ± 0.3 E-02	07/24	L.T. 2. E-02
07/22	07/29	1.00E 04	CU. FT.	08/07	2.0 ± 0.3 E-02	07/31	L.T. 3. E-02
07/29	08/05	1.04E 04	CU. FT.	08/15	2.1 ± 0.3 E-02	08/07	L.T. 3. E-02
08/05	08/12	1.03E 04	CU. FT.	08/19	2.5 ± 0.3 E-02	08/14	L.T. 3. E-02
08/12	08/19	1.04E 04	CU. FT.	08/29	1.5 ± 0.3 E-02	08/22	L.T. 3. E-02
08/19	08/26	1.05E 04	CU. FT.	08/30	2.0 ± 0.3 E-02	08/28	L.T. 3. E-02
08/26	09/03	1.15E 04	CU. FT.	09/09	2.1 ± 0.3 E-02	09/04	L.T. 2. E-02
09/03	09/09	8.59E 03	CU. FT.	09/19	1.4 ± 0.3 E-02	09/10	L.T. 3. E-02
09/09	09/16	1.01E 04	CU. FT.	09/23	1.7 ± 0.3 E-02	09/17	L.T. 4. E-02
09/16	09/23	9.91E 03	CU. FT.	10/03	1.7 ± 0.3 E-02	09/24	L.T. 2. E-02
09/23	09/30	1.02E 04	CU. FT.	10/07	2.0 ± 0.3 E-02	10/01	L.T. 2. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APQ-1

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
09/30	10/07	9.47E 03	CU. FT.	10/11	1.7 ± 0.3 E-02	10/08	L.T. 3. E-02
10/07	10/14	9.80E 03	CU. FT.	10/22	2.3 ± 0.3 E-02	10/16	L.T. 3. E-02
10/14	10/21	9.70E 03	CU. FT.	10/29	1.1 ± 0.3 E-02	10/23	L.T. 3. E-02
10/21	10/28	8.88E 03	CU. FT.	11/13	1.5 ± 0.3 E-02	10/30	L.T. 3. E-02
10/30	11/04	(a)					
11/04	11/11	1.02E 04	CU. FT.	11/21	3.1 ± 0.4 E-02	11/14	L.T. 3. E-02
11/11	11/18	1.00E 04	CU. FT.	11/25	1.4 ± 0.3 E-02	11/22	L.T. 3. E-02
11/18	11/25	1.02E 04	CU. FT.	12/06	2.4 ± 0.4 E-02	12/02	L.T. 4. E-02
11/25	12/02	9.89E 03	CU. FT.	12/09	7.8 ± 3.3 E-03	12/04	L.T. 3. E-02
12/02	12/09	1.04E 04	CU. FT.	12/18	3.4 ± 0.4 E-02	12/11	L.T. 3. E-02
12/09	12/16	9.57E 03	CU. FT.	12/30	2.1 ± 0.3 E-02	12/19	L.T. 3. E-02
12/16	12/23	9.96E 03	CU. FT.	01/03	3.6 ± 0.4 E-02	12/27	L.T. 3. E-02
12/23	12/30	9.97E 03	CU. FT.	01/07	2.2 ± 0.3 E-02	01/02	L.T. 3. E-02

(a) No sample available; unit being repaired.

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APE-30

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
12/31	01/07	9.77E 03	CU. FT.	01/15	2.4 ± 0.3 E-02	01/11	L.T. 2. E-02
01/07	01/14	9.84E 03	CU. FT.	01/25	2.5 ± 0.4 E-02	01/16	L.T. 1. E-02
01/14	01/22	1.12E 04	CU. FT.	01/30	2.0 ± 0.3 E-02	01/24	L.T. 2. E-02
01/22	01/28	8.21E 03	CU. FT.	02/06	1.9 ± 0.4 E-02	01/30	L.T. 3. E-02
01/28	02/04	9.68E 03	CU. FT.	02/11	2.2 ± 0.4 E-02	02/07	L.T. 2. E-02
02/04	02/11	9.69E 03	CU. FT.	02/21	3.2 ± 0.4 E-02	02/13	L.T. 2. E-02
02/11	02/18	9.68E 03	CU. FT.	02/26	2.8 ± 0.4 E-02	02/21	L.T. 2. E-02
02/18	02/25	9.65E 03	CU. FT.	03/05	1.7 ± 0.3 E-02	02/27	L.T. 2. E-02
02/25	03/04	9.83E 03	CU. FT.	03/13	1.7 ± 0.3 E-02	03/06	L.T. 2. E-02
03/04	03/11	9.80E 03	CU. FT.	03/20	2.0 ± 0.3 E-02	03/13	L.T. 2. E-02
03/11	03/18	9.84E 03	CU. FT.	03/26	1.9 ± 0.3 E-02	03/20	L.T. 2. E-02
03/18	03/25	9.90E 03	CU. FT.	03/29	1.6 ± 0.3 E-02	03/28	L.T. 2. E-02
03/25	03/29	9.89E 03	CU. FT.	04/08	2.2 ± 0.3 E-02	04/03	L.T. 2. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APE-30

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
04/01	04/09	1.11E 04	CU. FT.	04/16	2.1 ± 0.3 E-02	04/11	L.T. 2. E-02
04/09	04/15	8.43E 03	CU. FT.	04/25	2.4 ± 0.4 E-02	04/18	L.T. 2. E-02
04/15	04/22	9.87E 03	CU. FT.	05/01	2.3 ± 0.3 E-02	04/24	L.T. 2. E-02
04/22	04/29	9.99E 03	CU. FT.	05/24	2.4 ± 0.4 E-02	05/01	L.T. 2. E-02
04/29	05/06	9.88E 03	CU. FT.	05/14	1.9 ± 0.3 E-02	05/08	L.T. 2. E-02
05/06	05/13	9.99E 03	CU. FT.	05/21	2.0 ± 0.3 E-02	05/16	L.T. 2. E-02
05/13	05/20	9.95E 03	CU. FT.	05/31	2.0 ± 0.3 E-02	05/23	L.T. 3. E-02
05/20	05/27	1.00E 04	CU. FT.	06/06	2.5 ± 0.3 E-02	05/30	L.T. 2. E-02
05/27	06/03	9.98E 03	CU. FT.	06/17	2.2 ± 0.3 E-02	06/05	L.T. 2. E-02
06/03	06/10	9.82E 03	CU. FT.	06/19	2.6 ± 0.4 E-02	06/13	L.T. 2. E-02
06/10	06/17	9.94E 03	CU. FT.	07/02	1.6 ± 0.3 E-02	06/19	L.T. 2. E-02
06/17	06/24	1.02E 04	CU. FT.	07/10	2.0 ± 0.3 E-02	06/26	L.T. 2. E-02
06/24	07/01	1.00E 04	07/15	07/15	2.5 ± 0.3 E-02	07/03	L.T. 2. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APE-30

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
07/01	07/08	9.93E 03	CU. FT.	07/17	1.7 ± 0.3 E-02	07/11	L.T. 2. E-02
07/08	07/15	1.01E 04	CU. FT.	07/22	2.2 ± 0.3 E-02	07/17	L.T. 2. E-02
07/15	07/23	1.10E 04	CU. FT.	07/26	1.7 ± 0.3 E-02	07/24	L.T. 2. E-02
07/23	07/29	8.91E 03	CU. FT.	08/07	1.8 ± 0.3 E-02	07/31	L.T. 2. E-02
07/29	08/05	1.00E 04	CU. FT.	08/15	1.7 ± 0.3 E-02	08/07	L.T. 2. E-02
08/05	08/12	9.96E 03	CU. FT.	08/19	1.9 ± 0.3 E-02	08/14	L.T. 2. E-02
08/12	08/19	1.00E 04	CU. FT.	08/29	1.5 ± 0.3 E-02	08/22	L.T. 2. E-02
08/19	08/26	1.02E 04	CU. FT.	08/30	1.8 ± 0.3 E-02	08/28	L.T. 2. E-02
08/26	09/03	1.13E 04	CU. FT.	09/09	1.8 ± 0.3 E-02	09/04	L.T. 1. E-02
09/03	09/09	8.45E 03	CU. FT.	09/19	1.3 ± 0.3 E-02	09/10	L.T. 2. E-02
09/09	09/16	9.98E 03	CU. FT.	09/23	2.2 ± 0.3 E-02	09/17	L.T. 2. E-02
09/16	09/23	9.82E 03	CU. FT.	10/03	1.6 ± 0.3 E-02	09/24	L.T. 2. E-02
09/23	09/30	9.73E 03	CU. FT.	10/07	2.3 ± 0.3 E-02	10/01	L.T. 2. E-02

TABLE B-2 (Cont.)

AIR PARTICULATE FILTERS AND CHARCOAL CARTRIDGES:

GROSS BETA AND IODINE-131 ANALYSES

STATION NUMBER APE-30

1985 COLLECTION START DATE	DATE STOP DATE	VOLUME	UNITS	MID COUNT TIME DATE	A P FILTER GROSS BETA (pCi/Cu. M.)	MID COUNT TIME DATE	CHARCOAL FILTER I-131 (pCi/Cu. M.)
09/30	10/07	1.00E 04	CU. FT.	10/11	1.6 ± 0.3 E-02	10/08	L.T. 1. E-02
10/07	10/14	9.83E 03	CU. FT.	10/22	2.5 ± 0.3 E-02	10/16	L.T. 2. E-02
10/14	10/21	9.88E 03	CU. FT.	10/29	1.2 ± 0.3 E-02	10/23	L.T. 2. E-02
10/21	10/28	9.90E 03	CU. FT.	11/13	9.9 ± 2.7 E-03	10/30	L.T. 2. E-02
10/28	11/04	9.82E 03	CU. FT.	11/13	2.1 ± 0.3 E-02	11/06	L.T. 3. E-02
11/04	11/11	9.64E 03	CU. FT.	11/21	3.2 ± 0.4 E-02	11/14	L.T. 2. E-02
11/11	11/18	9.79E 03	CU. FT.	11/25	1.5 ± 0.3 E-02	11/22	L.T. 3. E-02
11/18	11/25	9.66E 03	CU. FT.	12/06	2.4 ± 0.4 E-02	12/02	L.T. 4. E-02
11/25	12/02	9.77E 03	CU. FT.	12/09	L.T. 5. E-03	12/04	L.T. 2. E-02
12/02	12/09	8.46E 02	CU. FT.	12/18	8.2 ± 3.1 E-02(a)	12/11	L.T. 2. E-01(b)
12/10	12/16	8.04E 03	CU. FT.	12/30	2.4 ± 0.4 E-02	12/19	L.T. 3. E-02
12/16	12/23	9.33E 03	CU. FT.	01/03	3.6 ± 0.4 E-02	12/27	L.T. 2. E-02
12/23	12/30	9.28E 03	CU. FT.	01/07	1.9 ± 0.3 E-02	01/02	L.T. 2. E-02

(a) High gross beta result due to low air volume.
(b) Required LLD could not be met due to low air volume.

TABLE B-3

AIR PARTICULATE FILTERS:

GAMMA ISOTOPIC ANALYSIS

ON QUARTERLY COMPOSITES

(pCi/Cu.M.)

STATION NUMBER APC-1

GAMMA SPECTRUM ANALYSIS	FIRST QUARTER 12/31-04/01	SECOND QUARTER 04/01-07/01	THIRD QUARTER 07/01-09/30	FOURTH QUARTER 09/30-12/30
BE-7	8.86± 0.95E-02	9.03± 1.27E-02	8.04± 0.80E-02	9.49± 0.95E-02
K-40	L.T. 1. E-02	L.T. 3. E-02	5.22 ±2.92E-03	1.02± 0.38E-02
MN-54	L.T. 7. E-04	L.T. 1. E-03	L.T. 4. E-04	L.T. 7. E-04
CO-58	L.T. 8. E-04	L.T. 1. E-03	L.T. 5. E-04	L.T. 8. E-04
FE-59	L.T. 2. E-03	L.T. 3. E-03	L.T. 1. E-03	L.T. 2. E-03
CO-60	L.T. 1. E-03	L.T. 1. E-03	L.T. 4. E-04	L.T. 9. E-04
ZN-65	L.T. 2. E-03	L.T. 3. E-03	L.T. 1. E-03	L.T. 1. E-03
ZR-95/NB-95	L.T. 8. E-04	L.T. 1. E-03	L.T. 5. E-04	L.T. 8. E-04
RU-103	L.T. 1. E-03	L.T. 1. E-03	L.T. 6. E-04	L.T. 1. E-03
RU-106	L.T. 6. E-03	L.T. 8. E-03	L.T. 4. E-03	L.T. 6. E-03
I-131	L.T. 7. E-03	L.T. 7. E-03	L.T. 2. E-03	L.T. 5. E-03
CS-134	L.T. 8. E-04	L.T. 1. E-03	L.T. 5. E-04	L.T. 9. E-04
CS-137	L.T. 7. E-04	L.T. 1. E-04	L.T. 4. E-04	L.T. 8. E-04
BA-140/LA-140	L.T. 3. E-03	L.T. 4. E-03	L.T. 1. E-03	L.T. 3. E-03
CE-141	L.T. 1. E-03	L.T. 2. E-03	L.T. 1. E-03	L.T. 1. E-03
CE-144	L.T. 3. E-03	L.T. 5. E-03	L.T. 3. E-03	L.T. 4. E-03
RA-226	L.T. 1. E-02	L.T. 1. E-02	L.T. 9. E-03	L.T. 1. E-02
TH-228	L.T. 1. E-03	L.T. 1. E-03	L.T. 9. E-04	L.T. 1. E-03

TABLE B-3 (Cont.)

AIR PARTICULATE FILTERS:

GAMMA ISOTOPIC ANALYSIS

ON QUARTERLY COMPOSITES

(pCi/Cu.M.)

STATION NUMBER APG-1

GAMMA SPECTRUM ANALYSIS	FIRST QUARTER 12/31-04/01	SECOND QUARTER 04/01-07/01	THIRD QUARTER 07/01-09/30	FOURTH QUARTER 09/30-12/30
BE-7	9.61± 1.41E-02	7.31± 0.89E-02	8.53 ±0.79E-02	1.01 ±0.11E-01
K-40	1.86± 0.92E-02	L.T. 9. E-03	L.T. 9. E-03	L.T. 3. E-02
MN-54	L.T. 9. E-04	L.T. 5. E-04	L.T. 4. E-04	L.T. 1. E-03
CO-58	L.T. 1. E-03	L.T. 6. E-04	L.T. 6. E-04	L.T. 1. E-03
FE-59	L.T. 3. E-03	L.T. 1. E-03	L.T. 1. E-03	L.T. 3. E-03
CO-60	L.T. 1. E-03	L.T. 5. E-04	L.T. 5. E-04	L.T. 1. E-03
ZN-65	L.T. 3. E-03	L.T. 1. E-03	L.T. 1. E-03	L.T. 2. E-03
ZR-95/NB-95	L.T. 1. E-03	L.T. 6. E-04	L.T. 5. E-04	L.T. 1. E-03
RU-103	L.T. 1. E-03	L.T. 8. E-04	L.T. 7. E-04	L.T. 1. E-03
RU-106	L.T. 9. E-03	L.T. 5. E-03	L.T. 4. E-03	L.T. 8. E-03
I-131	L.T. 9. E-03	L.T. 8. E-03	L.T. 3. E-03	L.T. 6. E-03
CS-134	L.T. 1. E-03	L.T. 6. E-04	L.T. 5. E-04	L.T. 1. E-03
CS-137	L.T. 1. E-03	L.T. 5. E-04	L.T. 6. E-04	L.T. 9. E-04
BA-140/LA-140	L.T. 4. E-03	L.T. 4. E-03	L.T 2. E-03	L.T. 3. E-03
CE-141	L.T. 2. E-03	L.T. 1. E-03	L.T. 1. E-03	L.T. 2. E-03
CE-144	L.T. 5. E-03	L.T. 3. E-03	L.T. 3. E-03	L.T. 5. E-03
RA-226	L.T. 1. E-02	L.T. 9. E-03	L.T. 1. E-02	L.T. 1. E-02
TH-228	L.T. 1. E-03	L.T. 9. E-04	L.T. 8. E-04	L.T. 1. E-03

TABLE B-3 (Cont.)

AIR PARTICULATE FILTERS:

GAMMA ISOTOPIC ANALYSIS

ON QUARTERLY COMPOSITES

(pCi/Cu.M.)

STATION NUMBER APP-1

GAMMA SPECTRUM ANALYSIS	FIRST QUARTER 12/31-04/01	SECOND QUARTER 04/01-07/01	THIRD QUARTER 07/01-09/30	FOURTH QUARTER 09/30-12/30
BE-7	9.36± 1.16E-02	8.30± 0.70E-02	7.15 ±0.72E-02	8.00± 0.10E-02
K-40	L.T. 3. E-02	L.T. 1. E-02	5.17 ±3.03E-03	3.06± 1.01E-02
MN-54	L.T. 9. E-04	L.T. 4. E-04	L.T. 3. E-04	L.T. 9. E-04
CO-58	L.T. 9. E-04	L.T. 5. E-04	L.T. 4. E-04	L.T. 1. E-03
FE-59	L.T. 2. E-03	L.T. 1. E-03	L.T. 9. E-04	L.T. 2. E-03
CO-60	L.T. 1. E-03	L.T. 4. E-04	L.T. 4. E-04	L.T. 1. E-03
ZN-65	L.T. 2. E-03	L.T. 1. E-03	L.T. 7. E-04	L.T. 2. E-03
ZR-95/NB-95	L.T. 1. E-03	L.T. 5. E-04	L.T. 5. E-04	L.T. 1, E-03
RU-103	L.T. 1. E-03	L.T. 5. E-04	L.T. 5. E-04	L.T. 1. E-03
RU-106	L.T. 7. E-03	L.T. 4. E-03	L.T. 3. E-03	L.T. 8. E-03
I-131	L.T. 8. E-03	L.T. 3. E-03	L.T. 2. E-03	L.T. 5. E-03
CS-134	L.T. 9. E-04	L.T. 5. E-04	L.T. 4. E-04	L.T. 9. E-04
CS-137	L.T. 8. E-04	L.T. 5. E-04	L.T. 4. E-04	L.T. 8. E-04
BA-140/LA-140	L.T. 5. E-03	L.T. 2. E-03	L.T. 1. E-03	L.T. 4. E-03
CE-141	L.T. 2. E-03	L.T. 1. E-03	L.T. 1. E-03	L.T. 1. E-03
CE-144	L.T. 4. E-03	L.T. 3. E-03	L.T. 3. E-03	L.T. 4. E-03
RA-226	L.T. 1. E-02	L.T. 9. E-03	L.T. 9. E-03	L.T. 1. E-02
TH-228	L.T. 1. E-03	L.T. 9. E-04	L.T. 9. E-04	L.T. 2. E-03

TABLE B-3 (Cont.)

AIR PARTICULATE FILTERS:

GAMMA ISOTOPIC ANALYSIS

ON QUARTERLY COMPOSITES

(pCi/Cu.M.)

STATION NUMBER APQ-1

GAMMA SPECTRUM ANALYSIS	FIRST QUARTER 12/31-04/01	SECOND QUARTER 04/01-07/01	THIRD QUARTER 07/01-09/30	FOURTH QUARTER 09/30-12/30
BE-7	8.62± 0.86E-02	8.71± 0.97E-02	8.44 ±1.50E-02	9.35± 0.94E-02
K-40	L.T. 1. E-02	L.T. 3. E-02	1.37 ±0.55E-02	L.T. 9. E-03
MN-54	L.T. 5. E-04	L.T. 9. E-04	L.T. 8. E-04	L.T. 4. E-04
CO-58	L.T. 6. E-04	L.T. 1. E-03	L.T. 8. E-04	L.T. 5. E-04
FE-59	L.T. 1. E-03	L.T. 3. E-03	L.T. 2. E-03	L.T. 1. E-03
CO-60	L.T. 5. E-04	L.T. 8. E-04	L.T. 7. E-04	L.T. 5. E-04
ZN-65	L.T. 1. E-03	L.T. 2. E-03	L.T. 2. E-03	L.T. 1. E-03
ZR-95/NB-95	L.T. 6. E-04	L.T. 1. E-03	L.T. 8. E-04	L.T. 6. E-04
RU-103	L.T. 6. E-04	L.T. 1. E-03	L.T. 1. E-03	L.T. 6. E-04
RU-106	L.T. 4. E-03	L.T. 7. E-03	L.T. 7. E-03	L.T. 4. E-03
I-131	L.T. 5. E-03	L.T. 6. E-03	L.T. 5. E-03	L.T. 3. E-03
CS-134	L.T. 5. E-04	L.T. 9. E-04	L.T. 9. E-04	L.T. 5. E-04
CS-137	L.T. 7. E-04	L.T. 9. E-04	L.T. 8. E-04	L.T. 6. E-04
BA-140/LA-140	L.T. 2. E-03	L.T. 3. E-03	L.T. 2. E-03	L.T. 2. E-03
CE-141	L.T. 1. E-03	L.T. 1. E-03	L.T. 2. E-03	L.T. 1. E-03
CE-144	L.T. 3. E-03	L.T. 4. E-03	L.T. 5. E-03	L.T. 3. E-03
RA-226	L.T. 9. E-03	L.T. 1. E-02	L.T. 2. E-02	L.T. 8. E-03
TH-228	L.T. 1. E-03	L.T. 1. E-03	L.T. 2. E-03	L.T. 9. E-04

TABLE B-3 (Cont.)

AIR PARTICULATE FILTERS:

GAMMA ISOTOPIC ANALYSIS

ON QUARTERLY COMPOSITES

(pCi/Cu.M.)

STATION NUMBER APE-30

GAMMA SPECTRUM ANALYSIS	FIRST QUARTER 12/31-04/01	SECOND QUARTER 04/01-07/01	THIRD QUARTER 07/01-09/30	FOURTH QUARTER 09/30-12/30
BE-7	9.12± 0.91E-02	8.80± 0.69E-02	8.93 ±0.92E-02	8.26± 0.83E-02
K-40	L.T. 1. E-02	L.T. 8. E-03	L.T. 2. E-02	L.T. 1. E-02
MN-54	L.T. 4. E-04	L.T. 4. E-04	L.T. 7. E-04	L.T. 5. E-04
CO-58	L.T. 6. E-04	L.T. 5. E-04	L.T. 8. E-04	L.T. 5. E-04
FE-59	L.T. 2. E-03	L.T. 1. E-03	L.T. 1. E-03	L.T. 2. E-03
CO-60	L.T. 7. E-04	L.T. 4. E-04	L.T. 7. E-04	L.T. 5. E-04
ZN-65	L.T. 1. E-03	L.T. 1. E-03	L.T. 2. E-03	L.T. 1. E-03
ZR-95/NB-95	L.T. 7. E-04	L.T. 5. E-04	L.T. 8. E-04	L.T. 7. E-04
RU-103	L.T. 9. E-04	L.T. 6. E-04	L.T. 1. E-03	L.T. 7. E-04
RU-106	L.T. 4. E-03	L.T. 4. E-03	L.T. 7. E-03	L.T. 5. E-03
I-131	L.T. 5. E-03	L.T. 4. E-03	L.T. 4. E-03	L.T. 4. E-03
CS-134	L.T. 6. E-04	L.T. 4. E-04	L.T. 7. E-04	L.T. 5. E-04
CS-137	L.T. 5. E-04	L.T. 4. E-04	L.T. 7. E-04	L.T. 6. E-04
BA-140/LA-140	L.T. 2. E-03	L.T. 2. E-03	L.T. 3. E-03	L.T. 2. E-03
CE-141	L.T. 1. E-03	L.T. 7. E-04	L.T. 1. E-03	L.T. 1. E-03
CE-144	L.T. 3. E-03	L.T. 2. E-03	L.T. 3. E-03	L.T. 3. E-03
RA-226	L.T. 1. E-03	L.T. 6. E-03	L.T. 8. E-03	L.T. 9. E-03
TH-228	L.T. 9. E-04	L.T. 6. E-04	L.T. 9. E-04	L.T. 9. E-04

TABLE B-4

DRINKING WATER:

IODINE-131 ANALYSIS

(pCi/l)

DATE - STATION	DWG-2	DWE-5	DWP-7
12/24/84-01/07/85	L.T. 5. E-01	L.T. 5. E-01	L.T. 5. E-01
01/07/85-01/22/85	L.T. 5. E-01	(a)	L.T. 4. E-01
01/22/85-02/05/85	L.T. 4. E-01	L.T. 5. E-01	L.T. 5. E-01
02/05/85-02/18/85	L.T. 5. E-01	L.T. 4. E-01	L.T. 5. E-01
02/18/85-03/04/85	L.T. 3. E-01	L.T. 3. E-01	L.T. 3. E-01
03/04/85-03/18/85	L.T. 3. E-01	(a)	L.T. 2. E-01
03/18/85-04/01/85	L.T. 3. E-01	L.T. 4. E-01	L.T. 4. E-01
04/01/85-04/15/85	L.T. 4. E-01	L.T. 4. E-01	L.T. 4. E-01
04/15/85-04/29/85	L.T. 3. E-01	L.T. 3. E-01	L.T. 4. E-01
04/29/85-05/13/85	L.T. 5. E-01	L.T. 5. E-01	L.T. 4. E-01
05/13/85-05/27/85	L.T. 3. E-01	L.T. 4. E-01	L.T. 3. E-01
05/27/85-06/10/85	L.T. 3. E-01	L.T. 3. E-01	L.T. 3. E-01
06/10/85-06/24/85	L.T. 3. E-01	L.T. 3. E-01	L.T. 2. E-01
06/24/85-07/08/85	L.T. 5. E-01	L.T. 8. E-01	L.T. 4. E-01

(a) Sample not available due to sampler malfunction; insufficient volume.

TABLE B-4 (Cont.)

DRINKING WATER:

IODINE-131 ANALYSIS

(pCi/l)

COLLECTION DATE	STATION	DWG-2	DWE-5	DWP-7
07/08/85-07/23/85		L.T. 2. E-01	L.T. 2. E-01	L.T. 2. E-01
07/23/85-08/05/85		L.T. 5. E-01	L.T. 5. E-01	L.T. 5. E-01
08/05/85-08/19/85		L.T. 4. E-01	L.T. 4. E-01	L.T. 4. E-01
08/19/85-09/03/85		L.T. 3. E-01	L.T. 3. E-01	L.T. 5. E-01
09/03/85-09/16/85		L.T. 4. E-01	L.T. 4. E-01	L.T. 4. E-01
09/16/85-09/30/85		L.T. 4. E-01	L.T. 3. E-01	L.T. 5. E-01
09/30/85-10/14/85		L.T. 4. E-01	L.T. 3. E-01	L.T. 3. E-01
10/14/85-10/28/85		L.T. 2. E-01 (a)	L.T. 2. E-01	L.T. 2. E-01
10/28/85-11/11/85		L.T. 3. E-01	L.T. 3. E-01	L.T. 4. E-01
11/11/85-11/25/85		L.T. 4. E-01	L.T. 4. E-01	L.T. 4. E-01
11/25/85-12/09/85		L.T. 2. E-01 (b)	L.T. 2. E-01	L.T. 4. E-01
12/10/85-12/23/85		L.T. 4. E-01	L.T. 4. E-01	L.T. 5. E-01

(a) Collection dates 10/15/85-10/28/85
(b) Collection dates 11/25/85-12/10/85

TABLE B-5

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - DWG-2

DATE COLLECTED:	JANUARY 12/24-01/22	FEBRUARY 01/22-02/18	MARCH 02/18-03/18
RADIOCHEMICAL ANALYSIS:			
GR-B	1.1 ± 0.2 E 01	7.2 ± 1.3 E 00	9.3 ± 1.4 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	9.17± 2.78E 01	L.T. 4. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 9. E 00	L.T. 6. E 00	L.T. 6. E 00
CO-60	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 7. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 3. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 3. E 01	L.T. 9. E 00	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 6. E 00	L.T. 4. E 00
CE-141	L.T. 9. E 00	L.T. 6. E 00	L.T. 5. E 00
CE-144	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
RA-226	L.T. 7. E 01	L.T. 7. E 01	L.T. 7. E 01
TH-228	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - DWG-2

DATE COLLECTED:	APRIL 03/18-04/15	MAY 04/15-05/27	JUNE 05/27-06/24
RADIOCHEMICAL ANALYSIS:			
GR-B	7.6 ± 1.5 E 00	1.0 ± 0.2 E 01	6.6 ± 1.5 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	L.T. 5. E 01	L.T. 5. E 01	L.T. 4. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 7. E 00	L.T. 6. E 00	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 8. E 00	L.T. 6. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 1. E 01	L.T. 9. E 00	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 6. E 00	L.T. 8. E 00
CE-141	L.T. 8. E 00	L.T. 7. E 00	L.T. 8. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 9. E 01	L.T. 8. E 01	L.T. 8. E 01
TH-228	L.T. 8. E 00	L.T. 7. E 00	L.T. 6. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION - DW6-2

DATE COLLECTED:	JULY 06/24-07/23	AUGUST 07/23-09/03	SEPTEMBER 09/03-09/30
RADIOCHEMICAL ANALYSIS:			
GR-B	7.8 ± 1.7 E 00	6.8 ± 1.2 E 00	7.2 ± 1.5 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	L.T. 5. E 01	L.T. 5. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 9. E 00	L.T. 7. E 00	L.T. 6. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 7. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
I-131	L.T. 3. E 01	L.T. 2. E 01	L.T. 9. E 00
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 9. E 00	L.T. 6. E 00
CE-141	L.T. 9. E 00	L.T. 7. E 00	L.T. 8. E 00
CE-144	L.T. 2. E 01	L.T. 2. E 01	L.T. 3. E 01
RA-226	L.T. 7. E 01	L.T. 7. E 01	L.T. 8. E 01
TH-228	L.T. 7. E 00	L.T. 7. E 00	L.T. 7. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION - DWG-2

DATE COLLECTED:	OCTOBER 09/30-10/28	NOVEMBER 10/28-11/25	DECEMBER 11/25-12/23
RADIOCHEMICAL ANALYSIS:			
GR-B	5.6 ± 1.6 E 00	8.9 ± 1.7 E 00	7.1 ± 1.6 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 9. E 00	L.T. 4. E 01
K-40	L.T. 6. E 01	L.T. 1. E 01	L.T. 4. E 01
MN-54	L.T. 3. E 00	L.T. 7. E-01	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 9. E-01	L.T. 4. E 00
FE-59	L.T. 7. E 00	L.T. 3. E 00	L.T. 8. E 00
CO-60	L.T. 3. E 00	L.T. 8. E-01	L.T. 4. E 00
ZN-65	L.T. 6. E 00	L.T. 2. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 1. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 1. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 6. E 00	L.T. 4. E 01
I-131	L.T. 1. E 01	L.T. 7. E 01	L.T. 1. E 01
CS-134	L.T. 3. E 00	L.T. 7. E-01	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 7. E-01	L.T. 4. E 00
BA-140/LA-140	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00
CE-141	L.T. 1. E 01	L.T. 3. E 00	L.T. 8. E 00
CE-144	L.T. 3. E 01	L.T. 4. E 00	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 01	L.T. 8. E 01
TH-228	L.T. 9. E 00	L.T. 2. E 00	L.T. 8. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - DWE-5

DATE COLLECTED:	JANUARY 12/24-01/07(a)	FEBRUARY 01/22-02/18	MARCH 02/18-03/04(c)
RADIOCHEMICAL ANALYSIS:			
GR-B	4.4 ± 1.1 E 00	3.9 ± 1.0 E 00	4.8 ± 1.1 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 5. E 01	L.T. 3. E 01	L.T. 4. E 01
K-40	L.T. 6. E 01	L.T. 4. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 1. E 01	L.T. 6. E 00	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 5. E 00	L.T. 3. E 00	L.T. 3. E 00
RU-103	L.T. 7. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 1. E 02	L.T. 9. E 00	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 2. E 01(b)	L.T. 6. E 00	L.T. 9. E 00
CE-141	L.T. 1. E 01	L.T. 7. E 00	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 9. E 01	L.T. 7. E 01	L.T. 8. E 01
TH-228	L.T. 8. E 00	L.T. 7. E 00	L.T. 8. E 00

(a) No sample collected from 01/07 to 01/22 due to insufficient volume.
(b) LLD not met for Ba-140/La-140 due to delayed analysis resulting from missed sample.
(c) No sample collected from 03/04 to 03/18 due to insufficient volume.

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - DWE-5

DATE COLLECTED:	APRIL 03/18-04/15	MAY 04/15-05/27	JUNE 05/27-06/24
RADIOCHEMICAL ANALYSIS:			
GR-B	3.4 ± 1.0 E 00	5.0 ± 1.5 E 00	3.7 ± 1.2 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 5. E 01	L.T. 4. E 01
K-40	L.T. 5. E 01	L.T. 6. E 01	L.T. 5. E 01
MN-54	L.T. 4. E 00	L.T. 5. E 00	L.T. 3. E 00
CO-58	L.T. 3. E 00	L.T. 5. E 00	L.T. 3. E 00
FE-59	L.T. 7. E 00	L.T. 1. E 01	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 5. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 1. E 01	L.T. 7. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 6. E 00	L.T. 4. E 00
RU-103	L.T. 4. E 00	L.T. 7. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 5. E 01	L.T. 3. E 01
I-131	L.T. 1. E 01	L.T. 2. E 01	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 6. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 1. E 01	L.T. 1. E 01
CE-141	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00
CE-144	L.T. 3. E 01	L.T. 4. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 7. E 01
TH-228	L.T. 8. E 00	L.T. 1. E 01	L.T. 7. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION - DWE-5

DATE COLLECTED:	JULY 06/24-07/23	AUGUST 07/23-09/03	SEPTEMBER 09/03-09/30
RADIOCHEMICAL ANALYSIS:			
GR-B	5.1 ± 1.4 E 00	6.3 ± 1.4 E 00	4.9 ± 1.3 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
K-40	L.T. 5. E 01	L.T. 5. E 01	L.T. 1. E 02
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 7. E 00	L.T. 1. E 01
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 5. E 00
ZN-65	L.T. 7. E 00	L.T. 6. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-103	L.T. 6. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 4. E 01
I-131	L.T. 3. E 01	L.T. 2. E 01	L.T. 1. E 01
CS-134	L.T. 3. E 00	L.T. 3. E 00	L.T. 5. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 9. E 00	L.T. 9. E 00
CE-141	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 4. E 01
RA-226	L.T. 9. E 01	L.T. 9. E 01	L.T. 1. E 02
TH-228	L.T. 8. E 00	L.T. 8. E 00	L.T. 9. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION - DWE-5

DATE COLLECTED:	OCTOBER 09/30-10/28	NOVEMBER 10/28-11/25	DECEMBER 11/25-12/23
RADIOCHEMICAL ANALYSIS:			
GR-B	5.0 ± 1.5 E 00	7.9 ± 1.6 E 00	5.1 ± 1.5 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 8. E 01	L.T. 9. E 00	L.T. 4. E 01
K-40	L.T. 2. E 02	L.T. 1. E 01	L.T. 6. E 01
MN-54	L.T. 7. E 00	L.T. 7. E-01	L.T. 3. E 00
CO-58	L.T. 7. E 00	L.T. 1. E 00	L.T. 4. E 00
FE-59	L.T. 2. E 01	L.T. 3. E 00	L.T. 8. E 00
CO-60	L.T. 7. E 00	L.T. 6. E-01	L.T. 3. E 00
ZN-65	L.T. 2. E 01	L.T. 1. E 00	L.T. 8. E 00
ZR-95/NB-95	L.T. 9. E 00	L.T. 1. E 00	L.T. 4. E 00
RU-103	L.T. 1. E 01	L.T. 1. E 00	L.T. 5. E 00
RU-106	L.T. 6. E 01	L.T. 6. E 00	L.T. 4. E 01
I-131	L.T. 3. E 01	L.T. 6. E 01	L.T. 2. E 01
CS-134	L.T. 7. E 00	L.T. 7. E-01	L.T. 4. E 00
CS-137	L.T. 7. E 00	L.T. 6. E-01	L.T. 4. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
CE-141	L.T. 2. E 01	L.T. 2. E 00	L.T. 1. E 01
CE-144	L.T. 7. E 01	L.T. 3. E 00	L.T. 4. E 01
RA-226	L.T. 2. E 02	L.T. 1. E 01	L.T. 1. E 02
TH-228	L.T. 1. E 01	L.T. 1. E 00	L.T. 9. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - DWP-7

DATE COLLECTED:	JANUARY 12/24-01/22	FEBRUARY 01/22-02/18	MARCH 02/18-03/18
RADIOCHEMICAL ANALYSIS:			
GR-B	5.2 ± 1.1 E 00	6.7 ± 1.3 E 00	8.1 ± 1.3 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
K-40	L.T. 6. E 01	L.T. 5. E 01	L.T. 4. E 01
MN-54	L.T. 3. E 00	L.T. 4. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
FE-59	L.T. 9. E 00	L.T. 7. E 00	L.T. 6. E 00
CO-60	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 8. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
RU-103	L.T. 5. E 00	L.T. 5. E 00	L.T. 3. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
I-131	L.T. 3. E 01	L.T. 1. E 01	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 8. E 00	L.T. 4. E 00
CE-141	L.T. 1. E 01	L.T. 8. E 00	L.T. 6. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
RA-226	L.T. 1. E 02	L.T. 8. E 01	L.T. 7. E 01
TH-228	L.T. 9. E 00	L.T. 7. E 00	L.T. 6. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - DWP-7

DATE COLLECTED:	APRIL 03/18-04/15	MAY 04/15-05/27	JUNE 05/27-06/24
RADIOCHEMICAL ANALYSIS:			
GR-B	5.3 ± 1.2 E 00	6.2 ± 1.5 E 00	4.0 ± 1.2 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 3. E 01	L.T. 3. E 01	L.T. 4. E 01
K-40	L.T. 5. E 01	L.T. 4. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 8. E 00	L.T. 6. E 00	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 6. E 00	L.T. 8. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RH-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 9. E 00	L.T. 8. E 00	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 6. E 00	L.T. 8. E 00
CE-141	L.T. 7. E 00	L.T. 6. E 00	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 2. E 01	L.T. 3. E 01
RA-226	L.T. 7. E 01	L.T. 6. E 01	L.T. 8. E 01
TH-228	L.T. 7. E 00	L.T. 6. E 00	L.T. 7. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION - DWP-7

DATE COLLECTED:	JULY 06/24-07/23	AUGUST 07/23-09/03	SEPTEMBER 09/03-09/30
RADIOCHEMICAL ANALYSIS:			
GR-B	6.4 ± 1.5 E 00	3.3 ± 0.8 E 00	4.2 ± 1.3 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 5. E 01	L.T. 5. E 01	L.T. 4. E 01
K-40	L.T. 7. E 01	L.T. 7. E 01	L.T. 6. E 01
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
FE-59	L.T. 1. E 01	L.T. 1. E 01	L.T. 8. E 00
CO-60	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
ZN-65	L.T. 8. E 00	L.T. 8. E 00	L.T. 8. E 00
ZR-95/NB-95	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
RU-103	L.T. 7. E 00	L.T. 7. E 00	L.T. 5. E 00
RU-106	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
I-131	L.T. 4. E 01	L.T. 3. E 01	L.T. 1. E 01
CS-134	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 5. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 1. E 01	L.T. 6. E 00
CE-141	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
CE-144	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 8. E 01
TH-228	L.T. 1. E 01	L.T. 1. E 01	L.T. 7. E 00

TABLE B-5 (Cont.)

DRINKING WATER:

GROSS BETA AND GAMMA ISOTOPIC ANALYSES

ON MONTHLY COMPOSITES

(pCi/l)

STATION - DWP-7

DATE COLLECTED:	OCTOBER 09/30-10/28	NOVEMBER 10/28-11/25	DECEMBER 11/25-12/23
RADIOCHEMICAL ANALYSIS:			
GR-B	5.8 ± 1.5 E 00	5.5 ± 1.2 E 00	7.3 ± 1.6 E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 1. E 01	L.T. 4. E 01
K-40	L.T. 6. E 01	L.T. 1. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 8. E-01	L.T. 4. E 00
CO-58	L.T. 3. E 00	L.T. 1. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 3. E 00	L.T. 8. E 00
CO-60	L.T. 4. E 00	L.T. 8. E-01	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 2. E 00	L.T. 7. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 1. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 2. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 7. E 00	L.T. 3. E 01
I-131	L.T. 1. E 01	L.T. 7. E 01	L.T. 1. E 01
CS-134	L.T. 4. E 00	L.T. 7. E-01	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 8. E-01	L.T. 4. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 1. E 01	L.T. 1. E 01
CE-141	L.T. 1. E 01	L.T. 3. E 00	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 4. E 00	L.T. 3. E 01
RA-226	L.T. 9. E 01	L.T. 1. E 01	L.T. 9. E 01
TH-228	L.T. 8. E 00	L.T. 1. E 00	L.T. 8. E 00

TABLE B-6

DRINKING WATER:

TRITIUM ANALYSIS ON QUARTERLY COMPOSITES

AND GAMMA ISOTOPIC ANALYSIS ON FILTERS

(pCi/l)

STATION - DWG-2

DATE COLLECTED:	FIRST QUARTER 12/24-03/18	SECOND QUARTER 03/18-06/24	THIRD QUARTER 06/24-09/30	FOURTH QUARTER 09/30-12/23
TRITIUM ANALYSIS:				
H-3	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
K-40	L.T. 2. E 01	L.T. 5. E 01	L.T. 1. E 01	L.T. 1. E 01
MN-54	L.T. 1. E 00	L.T. 2. E 00	L.T. 9. E-01	L.T. 1. E 00
CO-58	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
FE-59	L.T. 2. E 00	L.T. 6. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-60	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
ZN-65	L.T. 3. E 00	L.T. 4. E 00	L.T. 2. E 00	L.T. 2. E 00
ZR-95/NB-95	L.T. 1. E 00	L.T. 3. E 00	L.T. 1. E 00	L.T. 2. E 00
RU-103	L.T. 1. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00
RU-106	L.T. 1. E 01	L.T. 2. E 01	L.T. 8. E 00	L.T. 1. E 01
I-131	L.T. 5. E 00	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
CS-134	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
CS-137	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
BA-140/LA-140	L.T. 2. E 00	L.T. 1. E 01	L.T. 6. E 00	L.T. 7. E 00
CE-141	L.T. 3. E 00	L.T. 6. E 00	L.T. 3. E 00	L.T. 4. E 00
CE-144	L.T. 1. E 01	L.T. 2. E 01	L.T. 8. E 00	L.T. 8. E 00
RA-226	L.T. 3. E 01	L.T. 4. E 01	L.T. 2. E 01	L.T. 3. E 01
TH-228	L.T. 3. E 00	L.T. 4. E 00	L.T. 2. E 00	L.T. 2. E 00

TABLE B-6 (Cont.)

DRINKING WATER:

TRITIUM ANALYSIS ON QUARTERLY COMPOSITES

AND GAMMA ISOTOPIC ANALYSIS ON FILTERS

(pC1/1)

STATION NUMBER - OWE-5

DATE COLLECTED:	FIRST QUARTER 12/24-03/04	SECOND QUARTER 03/18-06/24	THIRD QUARTER 06/24-09/30	FOURTH QUARTER 09/30-12/23
TRITIUM ANALYSIS:				
H-3	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01
K-40	L.T. 5. E 01	L.T. 2. E 01	L.T. 4. E 01	L.T. 1. E 01
MN-54	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
CO-58	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
FE-59	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00	L.T. 3. E 00
CO-60	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
ZN-65	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00
ZR-95/NB-95	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
RU-103	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 1. E 00
RU-106	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
I-131	L.T. 2. E 01	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
CS-134	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
CS-137	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
BA-140/LA-140	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00	L.T. 6. E 00
CE-141	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00	L.T. 2. E 00
CE-144	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01	L.T. 5. E 00
RA-226	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
TH-228	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00

TABLE B-6 (Cont.)

DRINKING WATER:

TRITIUM ANALYSIS ON QUARTERLY COMPOSITES

AND GAMMA ISOTOPIC ANALYSIS ON FILTERS

(pCi/l)

STATION NUMBER - DWP-7

DATE COLLECTED:	FIRST QUARTER 12/24-03/18	SECOND QUARTER 03/18-06/24	THIRD QUARTER 06/24-09/30	FOURTH QUARTER 09/30-12/23
TRITIUM ANALYSIS:				
H-3	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
K-40	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
MN-54	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00
CO-58	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00
FE-59	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00
CO-60	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 9. E-01
ZN-65	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00
ZR-95/NB-95	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
RU-103	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 2. E 00
RU-106	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00	L.T. 8. E 00
I-131	L.T. 5. E 00	L.T. 2. E 01	L.T. 1. E 01	L.T. 2. E 01
CS-134	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00
CS-137	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
BA-140/LA-140	L.T. 3. E 00	L.T. 9. E 00	L.T. 6. E 00	L.T. 6. E 00
CE-141	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 3. E 00
CE-144	L.T. 1. E 01	L.T. 7. E 00	L.T. 5. E 00	L.T. 8. E 00
RA-226	L.T. 4. E 01	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
TH-228	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00

TABLE B-7

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - SWG-2

DATE COLLECTED:	JANUARY 12/24-01/22	FEBRUARY 01/22-02/18	MARCH 02/18-03/18
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	9.17± 2.78E 01	L.T. 4. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 9. E 00	L.T. 6. E 00	L.T. 6. E 00
CO-60	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 7. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 3. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 3. E 01	L.T. 9. E 00	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 6. E 00	L.T. 4. E 00
CE-141	L.T. 9. E 00	L.T. 6. E 00	L.T. 5. E 00
CE-144	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
RA-226	L.T. 7. E 01	L.T. 7. E 01	L.T. 7. E 01
TH-228	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - SWG-2

DATE COLLECTED:	APRIL 03/18-04/15	MAY 04/15-05/27	JUNE 05/27-06/24
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	L.T. 5. E 01	L.T. 5. E 01	L.T. 4. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 7. E 00	L.T. 6. E 00	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 8. E 00	L.T. 6. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 1. E 01	L.T. 9. E 00	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 6. E 00	L.T. 8. E 00
CE-141	L.T. 8. E 00	L.T. 7. E 00	L.T. 8. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 9. E 01	L.T. 8. E 01	L.T. 6. E 01
TH-228	L.T. 8. E 00	L.T. 7. E 00	L.T. 6. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION - SWG-2

DATE COLLECTED:	JULY 06/24-07/23	AUGUST 07/23-09/03	SEPTEMBER 09/03-09/30
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	L.T. 5. E 01	L.T. 5. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 9. E 00	L.T. 7. E 00	L.T. 6. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 7. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
I-131	L.T. 3. E 01	L.T. 2. E 01	L.T. 9. E 00
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 9. E 00	L.T. 6. E 00
CE-141	L.T. 9. E 00	L.T. 7. E 00	L.T. 8. E 00
CE-144	L.T. 2. E 01	L.T. 2. E 01	L.T. 3. E 01
RA-226	L.T. 7. E 01	L.T. 7. E 01	L.T. 8. E 01
TH-228	L.T. 7. E 00	L.T. 7. E 00	L.T. 7. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION - SWG-2

DATE COLLECTED:	OCTOBER 09/30-10/28	NOVEMBER 10/28-11/25	DECEMBER 11/25-12/23
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 9. E 00	L.T. 4. E 01
K-40	L.T. 6. E 01	L.T. 1. E 01	L.T. 4. E 01
MN-54	L.T. 3. E 00	L.T. 7. E-01	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 9. E-01	L.T. 4. E 00
FE-59	L.T. 7. E 00	L.T. 3. E 00	L.T. 8. E 00
CO-60	L.T. 3. E 00	L.T. 8. E-01	L.T. 4. E 00
ZN-65	L.T. 6. E 00	L.T. 2. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 1. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 1. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 6. E 00	L.T. 4. E 01
I-131	L.T. 1. E 01	L.T. 7. E 01	L.T. 1. E 01
CS-134	L.T. 3. E 00	L.T. 7. E-01	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 7. E-01	L.T. 4. E 00
BA-140/LA-140	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00
CE-141	L.T. 1. E 01	L.T. 3. E 00	L.T. 8. E 00
CE-144	L.T. 3. E 01	L.T. 4. E 00	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 01	L.T. 8. E 01
TH-228	L.T. 9. E 00	L.T. 2. E 00	L.T. 8. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - SWE-5

DATE COLLECTED:	JANUARY 12/24-01/07	FEBRUARY 01/22-02/18	MARCH 02/18-03/04
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 5. E 01	L.T. 3. E 01	L.T. 4. E 01
K-40	L.T. 6. E 01	L.T. 4. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 1. E 01	L.T. 6. E 00	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 5. E 00	L.T. 3. E 00	L.T. 3. E 00
RU-103	L.T. 7. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 1. E 02	L.T. 9. E 00	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 2. E 01	L.T. 6. E 00	L.T. 9. E 00
CE-141	L.T. 1. E 01	L.T. 7. E 00	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 9. E 01	L.T. 7. E 01	L.T. 8. E 01
TH-228	L.T. 8. E 00	L.T. 7. E 00	L.T. 8. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - SWE-5

DATE COLLECTED:	APRIL 03/18-04/15	MAY 04/15-05/27	JUNE 05/27-06/24
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 5. E 01	L.T. 4. E 01
K-40	L.T. 5. E 01	L.T. 6. E 01	L.T. 5. E 01
MN-54	L.T. 4. E 00	L.T. 5. E 00	L.T. 3. E 00
CO-58	L.T. 3. E 00	L.T. 5. E 00	L.T. 3. E 00
FE-59	L.T. 7. E 00	L.T. 1. E 01	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 5. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 1. E 01	L.T. 7. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 6. E 00	L.T. 4. E 00
RU-103	L.T. 4. E 00	L.T. 7. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 5. E 01	L.T. 3. E 01
I-131	L.T. 1. E 01	L.T. 2. E 01	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 6. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 1. E 01	L.T. 1. E 01
CE-141	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00
CE-144	L.T. 3. E 01	L.T. 4. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 7. E 01
TH-228	L.T. 8. E 00	L.T. 1. E 01	L.T. 7. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION - SWE-5

DATE COLLECTED:	JULY 06/24-07/23	AUGUST 07/23-09/03	SEPTEMBER 09/03-9/30
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
K-40	L.T. 5. E 01	L.T. 5. E 01	L.T. 1 E 02
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 7. E 00	L.T. 1. E 01
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 5. E 00
ZN-65	L.T. 7. E 00	L.T. 6. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-103	L.T. 6. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 4. E 01
I-131	L.T. 3. E 01	L.T. 2. E 01	L.T. 1. E 01
CS-134	L.T. 3. E 00	L.T. 3. E 00	L.T. 5. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 9. E 00	L.T. 9. E 00
CE-141	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 4. E 01
RA-226	L.T. 9. E 01	L.T. 9. E 01	L.T. 1. E 02
TH-228	L.T. 8. E 00	L.T. 8. E 00	L.T. 9. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION - SWE-5

DATE COLLECTED:	OCTOBER 09/30-10/28	NOVEMBER 10/28-11/25	DECEMBER 11/25-12/23
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 8. E 01	L.T. 9. E 00	L.T. 4. E 01
K-40	L.T. 2. E 02	L.T. 1. E 01	L.T. 6. E 01
MN-54	L.T. 7. E 00	L.T. 7. E-01	L.T. 3. E 00
CO-58	L.T. 7. E 00	L.T. 1. E 00	L.T. 4. E 00
FE-59	L.T. 2. E 01	L.T. 3. E 00	L.T. 8. E 00
CO-60	L.T. 7. E 00	L.T. 6. E-01	L.T. 3. E 00
ZN-65	L.T. 2. E 01	L.T. 1. E 00	L.T. 8. E 00
ZR-95/NB-95	L.T. 9. E 00	L.T. 1. E 00	L.T. 4. E 00
RU-103	L.T. 1. E 01	L.T. 1. E 00	L.T. 5. E 00
RU-106	L.T. 6. E 01	L.T. 6. E 00	L.T. 4. E 01
I-131	L.T. 3. E 01	L.T. 6. E 01	L.T. 2. E 01
CS-134	L.T. 7. E 00	L.T. 7. E-01	L.T. 4. E 00
CS-137	L.T. 7. E 00	L.T. 6. E-01	L.T. 4. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
CE-141	L.T. 2. E 01	L.T. 2. E 00	L.T. 1. E 01
CE-144	L.T. 7. E 01	L.T. 3. E 00	L.T. 4. E 01
RA-226	L.T. 2. E 02	L.T. 1. E 01	L.T. 1. E 02
TH-228	L.T. 1. E 01	L.T. 1. E 00	L.T. 9. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - SWP-7

DATE COLLECTED:	JANUARY 12/24-01/22	FEBRUARY 01/22-02/18	MARCH 02/18-03/18
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
K-40	L.T. 6. E 01	L.T. 5. E 01	L.T. 4. E 01
MN-54	L.T. 3. E 00	L.T. 4. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
FE-59	L.T. 9. E 00	L.T. 7. E 00	L.T. 6. E 00
CO-60	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 8. E 00	L.T. 6. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
RU-103	L.T. 5. E 00	L.T. 5. E 00	L.T. 3. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
I-131	L.T. 3. E 01	L.T. 1. E 01	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 8. E 00	L.T. 4. E 00
CE-141	L.T. 1. E 01	L.T. 8. E 00	L.T. 6. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
RA-226	L.T. 1. E 02	L.T. 8. E 01	L.T. 7. E 01
TH-228	L.T. 9. E 00	L.T. 7. E 00	L.T. 6. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION NUMBER - SWP-7

DATE COLLECTED:	APRIL 03/18-04/15	MAY 04/15-05/27	JUNE 05/27-06/24
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 3. E 01	L.T. 3. E 01	L.T. 4. E 01
K-40	L.T. 5. E 01	L.T. 4. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
FE-59	L.T. 8. E 00	L.T. 6. E 00	L.T. 7. E 00
CO-60	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 6. E 00	L.T. 8. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 9. E 00	L.T. 8. E 00	L.T. 2. E 01
CS-134	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
CS-137	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 6. E 00	L.T. 8. E 00
CE-141	L.T. 7. E 00	L.T. 6. E 00	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 2. E 01	L.T. 3. E 01
RA-226	L.T. 7. E 01	L.T. 6. E 01	L.T. 8. E 01
TH-228	L.T. 7. E 00	L.T. 6. E 00	L.T. 7. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION - SWP-7

DATE COLLECTED:	JULY 06/24-07/23	AUGUST 07/23-09/03	SEPTEMBER 09/03-09/30
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 5. E 01	L.T. 5. E 01	L.T. 4. E 01
K-40	L.T. 7. E 01	L.T. 7. E 01	L.T. 6. E 01
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
FE-59	L.T. 1. E 01	L.T. 1. E 01	L.T. 8. E 00
CO-60	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
ZN-65	L.T. 8. E 00	L.T. 8. E 00	L.T. 8. E 00
ZR-95/NB-95	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
RU-103	L.T. 7. E 00	L.T. 7. E 00	L.T. 5. E 00
RU-106	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
I-131	L.T. 4. E 01	L.T. 3. E 01	L.T. 1. E 01
CS-134	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 5. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 1. E 01	L.T. 6. E 00
CE-141	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
CE-144	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 8. E 01
TH-228	L.T. 1. E 01	L.T. 1. E 01	L.T. 7. E 00

TABLE B-7 (Cont.)

SURFACE WATER:

GAMMA ISOTOPIC ANALYSIS

ON MONTHLY COMPOSITES

(pCi/l)

STATION - SWP-7

DATE COLLECTED:	OCTOBER 09/30-10/28	NOVEMBER 10/28-11/25	DECEMBER 11/25-12/23
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 1. E 01	L.T. 4. E 01
K-40	L.T. 6. E 01	L.T. 1. E 01	L.T. 5. E 01
MN-54	L.T. 3. E 00	L.T. 8. E-01	L.T. 4. E 00
CO-58	L.T. 3. E 00	L.T. 1. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 3. E 00	L.T. 8. E 00
CO-60	L.T. 4. E 00	L.T. 8. E-01	L.T. 3. E 00
ZN-65	L.T. 7. E 00	L.T. 2. E 00	L.T. 7. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 1. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 2. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 7. E 00	L.T. 3. E 01
I-131	L.T. 1. E 01	L.T. 7. E 01	L.T. 1. E 01
CS-134	L.T. 4. E 00	L.T. 7. E-01	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 8. E-01	L.T. 4. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 1. E 01	L.T. 1. E 01
CE-141	L.T. 1. E 01	L.T. 3. E 00	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 4. E 00	L.T. 3. E 01
RA-226	L.T. 9. E 01	L.T. 1. E 01	L.T. 9. E 01
TH-228	L.T. 8. E 00	L.T. 1. E 00	L.T. 8. E 00

TABLE B-8

SURFACE WATER:

TRITIUM ANALYSIS ON QUARTERLY COMPOSITES

AND GAMMA ISOTOPIC ANALYSIS ON FILTERS

(pCi/l)

STATION NUMBER - SWG-2

DATE COLLECTED:	FIRST QUARTER 12/24-03/18	SECOND QUARTER 03/18-06/24	THIRD QUARTER 06/24-09/30	FOURTH QUARTER 09/30-12/23
TRITIUM ANALYSIS:				
H-3	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
K-40	L.T. 2. E 01	L.T. 5. E 01	L.T. 1. E 01	L.T. 1. E 01
MN-54	L.T. 1. E 00	L.T. 2. E 00	L.T. 9. E-01	L.T. 1. E 00
CO-58	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
FE-59	L.T. 2. E 00	L.T. 6. E 00	L.T. 3. E 00	L.T. 3. E 00
CO-60	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
ZN-65	L.T. 3. E 00	L.T. 4. E 00	L.T. 2. E 00	L.T. 2. E 00
ZR-95/NB-95	L.T. 1. E 00	L.T. 3. E 00	L.T. 1. E 00	L.T. 2. E 00
RU-103	L.T. 1. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00
RU-106	L.T. 1. E 01	L.T. 2. E 01	L.T. 8. E 00	L.T. 1. E 01
I-131	L.T. 5. E 00	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
CS-134	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 01
CS-137	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
BA-140/LA-140	L.T. 2. E 00	L.T. 1. E 01	L.T. 6. E 00	L.T. 7. E 00
CE-141	L.T. 3. E 00	L.T. 6. E 00	L.T. 3. E 00	L.T. 4. E 00
CE-144	L.T. 1. E 01	L.T. 2. E 01	L.T. 8. E 00	L.T. 8. E 00
RA-226	L.T. 3. E 01	L.T. 4. E 01	L.T. 2. E 01	L.T. 3. E 01
TH-228	L.T. 3. E 00	L.T. 4. E 00	L.T. 2. E 00	L.T. 2. E 00

TABLE B-8 (Cont.)

SURFACE WATER:

TRITIUM ANALYSIS ON QUARTERLY COMPOSITES

AND GAMMA ISOTOPIC ANALYSIS ON FILTERS

(pCi/l)

STATION NUMBER - SWE-5

DATE COLLECTED:	FIRST QUARTER 12/24-03/04	SECOND QUARTER 03/18-06/24	THIRD QUARTER 06/24-09/30	FOURTH QUARTER 09/30-12/23
TRITIUM ANALYSIS:				
H-3	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01
K-40	L.T. 5. E 01	L.T. 2. E 01	L.T. 4. E 01	L.T. 1. E 01
MN-54	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
CO-58	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
FE-59	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00	L.T. 3. E 00
CO-60	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
ZN-65	L.T. 4. E 00	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00
ZR-95/NB-95	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
RU-103	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 1. E 00
RU-106	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
I-131	L.T. 2. E 01	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
CS-134	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
CS-137	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00
BA-140/LA-140	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00	L.T. 6. E 00
CE-141	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00	L.T. 2. E 00
CE-144	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01	L.T. 5. E 00
RA-226	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
TH-228	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00

TABLE B-8 (Cont.)

SURFACE WATER:

TRITIUM ANALYSIS ON QUARTERLY COMPOSITES

AND GAMMA ISOTOPIC ANALYSIS ON FILTERS

(pCi/l)

STATION NUMBER - SWP-7

DATE COLLECTED:	FIRST QUARTER 12/24-03/18	SECOND QUARTER 03/18-06/24	THIRD QUARTER 06/24-09/30	FOURTH QUARTER 09/30-12/23
TRITIUM ANALYSIS:				
H-3	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
K-40	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
MN-54	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00
CO-58	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00
FE-59	L.T. 3. E 00	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00
CO-60	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 9. E-01
ZN-65	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00
ZR-95/NB-95	L.T. 1. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
RU-103	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 2. E 00
RU-106	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00	L.T. 8. E 00
I-131	L.T. 5. E 00	L.T. 2. E 01	L.T. 1. E 01	L.T. 2. E 01
CS-134	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00	L.T. 1. E 00
CS-137	L.T. 2. E 00	L.T. 2. E 00	L.T. 1. E 00	L.T. 1. E 00
BA-140/LA-140	L.T. 3. E 00	L.T. 9. E 00	L.T. 6. E 00	L.T. 6. E 00
CE-141	L.T. 3. E 00	L.T. 3. E 00	L.T. 2. E 00	L.T. 3. E 00
CE-144	L.T. 1. E 01	L.T. 7. E 00	L.T. 5. E 00	L.T. 8. E 00
RA-226	L.T. 4. E 01	L.T. 3. E 01	L.T. 2. E 01	L.T. 2. E 01
TH-228	L.T. 3. E 00	L.T. 2. E 00	L.T. 2. E 00	L.T. 2. E 00

TABLE B-9

GROUNDWATER:

TRITIUM AND GAMMA ISOTOPIC ANALYSES
(pCi/ℓ)

STATION - GWJ-1

DATE COLLECTED	JANUARY 01/29	APRIL 04/17	JULY 07/17	OCTOBER 10/22
RADIOCHEMICAL ANALYSIS:				
H-3	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03	L.T. 2.0 E 03
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 5. E 01	L.T. 5. E 01	L.T. 5. E 01	L.T. 5. E 01
K-40	L.T. 1. E 02	L.T. 7. E 01	L.T. 2. E 02	L.T. 1. E 02
MN-54	L.T. 5. E 00	L.T. 5. E 00	L.T. 5. E 00	L.T. 5. E 00
CO-58	L.T. 5. E 00	L.T. 4. E 00	L.T. 5. E 00	L.T. 5. E 00
FE-59	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CO-60	L.T. 5. E 00	L.T. 5. E 00	L.T. 5. E 00	L.T. 5. E 00
ZN-65	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
ZR-95/NB-95	L.T. 6. E 00	L.T. 5. E 00	L.T. 6 E 00	L.T. 5. E 00
RU-103	L.T. 5. E 00	L.T. 6. E 00	L.T. 6. E 00	L.T. 6. E 00
RU-106	L.T. 5. E 01	L.T. 4. E 01	L.T. 5. E 01	L.T. 4. E 01
I-131	L.T. 6. E 00	L.T. 9. E 00	L.T. 1. E 01	L.T. 1. E 01
CS-134	L.T. 6. E 00	L.T. 5. E 00	L.T. 6. E 00	L.T. 5. E 00
CS-137	L.T. 6. E 00	L.T. 6. E 00	L.T. 5. E 00	L.T. 5. E 00
BA-140/LA-140	L.T. 5. E 00	L.T. 6. E 00	L.T. 8. E 00	L.T. 7. E 00
CE-141	L.T. 9. E 00	L.T. 9. E 00	L.T. 1. E 01	L.T. 1. E 01
CE-144	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 1. E 02	L.T. 1. E 02
TH-228	L.T. 1. E 01	L.T. 9. E 00	L.T. 1. E 01	L.T. 1. E 01

TABLE B-10

SHORELINE SOIL:

GAMMA ISOTOPIC ANALYSES
(pCi/kg DRY)

STATION NUMBER - SHWE-3

DATE COLLECTED:	MARCH 03/06/85	OCTOBER 10/08/85
GAMMA SPECTRUM ANALYSIS:		
BE-7	4.00 ±1.76E 02	L.T. 4. E 02
K-40	1.13 ±0.11E 04	1.81 ±0.18E 04
MN-54	L.T. 3. E 01	L.T. 4. E 01
CO-58	L.T. 3. E 01	L.T. 4. E 01
FE-59	L.T. 6. E 01	L.T. 9. E 01
CO-60	L.T. 3. E 01	L.T. 4. E 01
ZN-65	L.T. 7. E 01	L.T. 9. E 01
ZR-95/NB-95	L.T. 4. E 01	L.T. 5. E 01
RU-103	L.T. 3. E 01	L.T. 5. E 01
RU-106	L.T. 2. E 02	L.T. 4. E 02
I-131	L.T. 8. E 01	L.T. 1. E 02
CS-134	L.T. 3. E 01	L.T. 5. E 01
CS-137	L.T. 3. E 01	L.T. 4. E 01
BA-140/LA-140	L.T. 5. E 01	L.T. 1. E 02
CE-141	L.T. 5. E 01	L.T. 8. E 01
CE-144	L.T. 2. E 02	L.T. 3. E 02
RA-226	4.18 ±0.53E 03	2.08 ±0.75E 03
TH-228	7.33 ±0.73E 02	1.94 ±0.19E 03

TABLE B-10 (Cont.)

SHORELINE SOIL:

GAMMA ISOTOPIC ANALYSES
(pCi/kg DRY)

STATION NUMBER - SHWJ-1

DATE COLLECTED:	OCTOBER 10/08
GAMMA SPECTRUM ANALYSIS:	
BE-7	1.74 ±0.33E 03
K-40	1.88 ±0.19E 04
MN-54	L.T. 4. E 01
CO-58	L.T. 5. E 01
FE-59	L.T. 1. E 02
CO-60	L.T. 4. E 01
ZN-65	L.T. 1. E 02
ZR-95/NB-95	L.T. 5. E 01
RU-103	L.T. 5. E 01
RU-106	L.T. 4. E 02
I-131	L.T. 2. E 02
CS-134	L.T. 5. E 01
CS-137	9.93 ±3.61E 01
BA-140/LA-140	L.T. 8. E 01
CE-141	L.T. 7. E 01
CE-144	L.T. 2. E 02
RA-226	3.44 ±0.63E 03
TH-228	1.26 ±0.13E 03

TABLE B-11

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/1)

STATION NUMBER MKQ-5

DATE COLLECTED:	JANUARY 01/08	JANUARY 01/23	FEBRUARY 02/05
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 2. E-01	L.T. 4. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	1.35 ±0.14E 03	1.18 ±0.12E 03	1.06 ±0.11E 03
MN-54	L.T. 3. E 00	L.T. 3. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 7. E 00	L.T. 8. E 00
CO-60	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
ZN-65	L.T. 1. E 01	L.T. 8. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
RU-103	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 7. E 00	L.T. 4. E 00	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
CE-141	L.T. 7. E 00	L.T. 5. E 00	L.T. 7. E 00
CE-144	L.T. 3. E 01	L.T. 2. E 01	L.T. 3. E 01
RA-226	L.T. 8. E 01	L.T. 7. E 01	L.T. 1. E 02
TH-228	L.T. 8. E 00	L.T. 7. E 00	L.T. 9. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-5

DATE COLLECTED:	FEBRUARY 02/19(a)	MARCH 03/05	MARCH 03/19
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 3. E-01	L.T. 2. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
K-40	1.24 ±0.12E 03	1.33 ±0.13E 03	1.18 ±0.12E 03
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 1. E 01	L.T. 9. E 00	L.T. 7. E 00
CO-60	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
ZN-65	L.T. 9. E 00	L.T. 9. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 5. E 00	L.T. 5. E 00
RU-106	L.T. 3. E 01	L.T. 4. E 01	L.T. 4. E 01
I-131	L.T. 8. E 00	L.T. 8. E 00	L.T. 8. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 5. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 5. E 00	L.T. 4. E 00
CE-141	L.T. 9. E 00	L.T. 1. E 01	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 4. E 01	L.T. 4. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 1. E 02
TH-228	L.T. 9. E 00	L.T. 9. E 00	L.T. 9. E 00

(a) Shipped late; 5 days old.

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-5

DATE COLLECTED:	APRIL 04/02	APRIL 04/16	MAY 05/07
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 1. E-01	L.T. 2. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 3. E 01	L.T. 5. E 01	L.T. 7. E 01
K-40	1.24 ±0.12E 03	1.22 ±0.12E 03	1.39 ±0.14E 03
MN-54	L.T. 4. E 00	L.T. 5. E 00	L.T. 7. E 00
CO-58	L.T. 4. E 00	L.T. 5. E 00	L.T. 7. E 00
FE-59	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CO-60	L.T. 5. E 00	L.T. 6. E 00	L.T. 7. E 00
ZN-65	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
ZR-95/NB-95	L.T. 4. E 00	L.T. 5. E 00	L.T. 8. E 00
RU-103	L.T. 4. E 00	L.T. 5. E 00	L.T. 8. E 00
RU-106	L.T. 4. E 01	L.T. 5. E 01	L.T. 7. E 01
I-131	L.T. 7. E 00	L.T. 7. E 00	L.T. 1. E 01
CS-134	L.T. 4. E 00	L.T. 5. E 00	L.T. 8. E 00
CS-137	L.T. 4. E 00	L.T. 6. E 00	L.T. 8. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 6. E 00	L.T. 7. E 00
CE-141	L.T. 7. E 00	L.T. 9. E 00	L.T. 2. E 01
CE-144	L.T. 3. E 01	L.T. 4. E 01	L.T. 7. E 01
RA-226	L.T. 8. E 01	L.T. 1. E 02	L.T. 2. E 02
TH-228	L.T. 8. E 00	L.T. 1. E 01	L.T. 2. E 01

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-5

DATE COLLECTED:	MAY 05/21	JUNE 06/04	JUNE 06/18
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 2. E-01	L.T. 2. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 4. E 01
K-40	1.27 ±0.13E 03	1.25 ±0.13E 03	1.40 ±0.14E 03
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 3. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 1. E 01	L.T. 9. E 00
CO-60	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
ZN-65	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-106	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
I-131	L.T. 1. E 01	L.T. 8. E 00	L.T. 7. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 5. E 00	L.T. 5. E 00
CE-141	L.T. 1. E 01	L.T. 8. E 00	L.T. 7. E 00
CE-144	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 8. E 01
TH-228	L.T. 9. E 00	L.T. 9. E 00	L.T. 8. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/1)

STATION NUMBER MKQ-5

DATE COLLECTED:	JULY 07/02	JULY 07/16	AUGUST 08/06
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 3. E-01	L.T. 2. E-01	L.T. 3. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 4. E 01
K-40	1.26 ±0.13E 03	1.50 ±0.15E 03	1.22 ±0.12E 03
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 9. E 00	L.T. 8. E 00
CO-60	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
ZN-65	L.T. 9. E 00	L.T. 1. E 01	L.T. 1. E 01
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
I-131	L.T. 7. E 00	L.T. 7. E 00	L.T. 7. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 4. E 00	L.T. 6. E 00	L.T. 5. E 00
CE-141	L.T. 7. E 00	L.T. 8. E 00	L.T. 8. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 8. E 01	L.T. 1. E 02	L.T. 9. E 01
TH-228	L.T. 8. E 00	L.T. 8. E 00	L.T. 8. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-5

DATE COLLECTED:	AUGUST 08/20	SEPTEMBER 09/04	SEPTEMBER 09/17
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 3. E-01	L.T. 2. E-01	L.T. 1.9 E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 5. E 01	L.T. 5. E 01
K-40	1.36 ±0.14E 03	1.22 ±0.12E 03	1.22 ±0.12E 03
MN-54	L.T. 4. E 00	L.T. 5. E 00	L.T. 5. E 00
CO-58	L.T. 4. E 00	L.T. 5. E 00	L.T. 5. E 00
FE-59	L.T. 9. E 00	L.T. 1. E 01	L.T. 1. E 01
CO-60	L.T. 4. E 00	L.T. 6. E 00	L.T. 6. E 00
ZN-65	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
ZR-95/NB-95	L.T. 4. E 00	L.T. 5. E 00	L.T. 5. E 00
RU-103	L.T. 4. E 00	L.T. 6. E 00	L.T. 7. E 00
RU-106	L.T. 4. E 01	L.T. 5. E 01	L.T. 5. E 01
I-131	L.T. 7. E 00	L.T. 7. E 00	L.T. 1. E 01
CS-134	L.T. 4. E 00	L.T. 6. E 00	L.T. 6. E 00
CS-137	L.T. 4. E 00	L.T. 6. E 00	L.T. 6. E 00
BA-140/LA-140	L.T. 5. E 00	L.T. 6. E 00	L.T. 7. E 00
CE-141	L.T. 7. E 00	L.T. 1. E 01	L.T. 1. E 01
CE-144	L.T. 3. E 01	L.T. 4. E 01	L.T. 4. E 01
RA-226	L.T. 8. E 01	L.T. 1. E 02	L.T. 1. E 02
TH-228	L.T. 8. E 00	L.T. 1. E 01	L.T. 1. E 01

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-5

DATE COLLECTED:	OCTOBER 10/01	OCTOBER 10/15	NOVEMBER 11/05
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 2. E-01	L.T. 3. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 5. E 01	L.T. 3. E 01
K-40	1.35 ±0.14E 03	1.34 ±0.13E 03	1.28 ±0.13E 03
MN-54	L.T. 4. E 00	L.T. 6. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 1. E 01	L.T. 8. E 00
CO-60	L.T. 5. E 00	L.T. 6. E 00	L.T. 4. E 00
ZN-65	L.T. 9. E 00	L.T. 1. E 01	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 6. E 00	L.T. 4. E 00
RU-103	L.T. 4. E 00	L.T. 6. E 00	L.T. 4. E 00
RU-106	L.T. 4. E 01	L.T. 5. E 01	L.T. 4. E 01
I-131	L.T. 7. E 00	L.T. 7. E 00	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 6. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 6. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 6. E 00	L.T. 4. E 00
CE-141	L.T. 7. E 00	L.T. 1. E 01	L.T. 6. E 00
CE-144	L.T. 3. E 01	L.T. 5. E 01	L.T. 3. E 01
RA-226	L.T. 8. E 01	L.T. 1. E 02	L.T. 8. E 01
TH-228	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-5

DATE COLLECTED:	NOVEMBER 11/19	DECEMBER 12/03	DECEMBER 12/16
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 2. E-01	L.T. 3. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	1.25 ±0.13E 03	1.21 ±0.12E 03	1.21 ±0.12E 03
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 9. E 00	L.T. 8. E 00
CO-60	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
ZN-65	L.T. 8. E 00	L.T. 1. E 01	L.T. 1. E 01
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
I-131	L.T. 8. E 00	L.T. 5. E 00	L.T. 6. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 4. E 00	L.T. 5. E 00
CE-141	L.T. 1. E 01	L.T. 7. E 00	L.T. 7. E 00
CE-144	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 1. E 02
TH-228	L.T. 9. E 00	L.T. 9. E 00	L.T. 9. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKE-4 (a)

DATE COLLECTED:	MARCH (b) 03/04	MARCH 03/19
RADIOCHEMICAL ANALYSIS:		
I-131	L.T. 2. E-01	L.T. 3. E-01
GAMMA SPECTRUM ANALYSIS:		
BE-7	L.T. 4. E 01	L.T. 4. E 01
K-40	1.27 ±0.13E 03	1.35 ±0.14E 03
MN-54	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 9. E 00
CO-60	L.T. 4. E 00	L.T. 4. E 00
ZN-65	L.T. 9. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00
RU-103	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 4. E 01	L.T. 3. E 01
I-131	L.T. 8. E 00	L.T. 8. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 6. E 00
CE-141	L.T. 9. E 00	L.T. 9. E 00
CE-144	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02
TH-228	L.T. 9. E 00	L.T. 9. E 00

(a) New station added to program.
(b) No samples were available prior to March since goats were not lactating.

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/1)

STATION NUMBER MKE-4

DATE COLLECTED:	MAY 05/07
RADIOCHEMICAL ANALYSIS:	
I-131	L.T. 3. E-01
GAMMA SPECTRUM ANALYSIS:	
BE-7	L.T. 4. E 01
K-40	1.23 ±0.12E 03
MN-54	L.T. 5. E 00
CO-58	L.T. 4. E 00
FE-59	L.T. 1. E 01
CO-60	L.T. 5. E 00
ZN-65	L.T. 1. E 01
ZR-95/NB-95	L.T. 5. E 00
RU-103	L.T. 5. E 00
RU-106	L.T. 4. E 01
I-131	L.T. 6. E 00
CS-134	L.T. 5. E 00
CS-137	L.T. 5. E 00
BA-140/LA-140	L.T. 5. E 00
CE-141	L.T. 8. E 00
CE-144	L.T. 4. E 01
RA-226	L.T. 1. E 02
TH-228	L.T. 1. E 01

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-50

DATE COLLECTED:	JANUARY 01/08	JANUARY 01/22	FEBRUARY 02/04
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 2. E-01	L.T. 3. E-01	L.T. 4. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
K-40	1.53 ±0.15E 03	1.26 ±0.13E 03	1.47 ±0.15E 03
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 9. E 00	L.T. 9. E 00	L.T. 8. E 00
CO-60	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
ZN-65	L.T. 9. E 00	L.T. 9. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 5. E 00	L.T. 4. E 00
RU-106	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
I-131	L.T. 8. E 00	L.T. 7. E 00	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 6. E 00	L.T. 5. E 00
CE-141	L.T. 9. E 00	L.T. 8. E 00	L.T. 7. E 00
CE-144	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 9. E 01	L.T. 8. E 01
TH-228	L.T. 1. E 01	L.T. 9. E 00	L.T. 7. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-50

DATE COLLECTED:	FEBRUARY 02/20(a)	MARCH 03/04	MARCH 03/18
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 3. E-01	L.T. 2. E-01	L.T. 3. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 6. E 01	L.T. 6. E 01	L.T. 4. E 01
K-40	1.12 ±0.11E 03	1.39 ±0.14E 03	1.37 ±0.14E 03
MN-54	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
CO-58	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
FE-59	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CO-60	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
ZN-65	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
ZR-95/NB-95	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
RU-103	L.T. 8. E 00	L.T. 7. E 00	L.T. 6. E 00
RU-106	L.T. 6. E 01	L.T. 5. E 01	L.T. 5. E 01
I-131	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CS-134	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
CS-137	L.T. 7. E 00	L.T. 6. E 00	L.T. 6. E 00
BA-140/LA-140	L.T. 8. E 00	L.T. 1. E 01	L.T. 9. E 00
CE-141	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CE-144	L.T. 5. E 01	L.T. 5. E 01	L.T. 5. E 01
RA-226	L.T. 2. E 02	L.T. 1. E 02	L.T. 1. E 02
TH-228	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01

(a) Shipped late; 5 days old.

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-50

DATE COLLECTED:	APRIL 04/01	APRIL 04/15	MAY 05/06
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 1. E-01	L.T. 3. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 5. E 01	L.T. 4. E 01
K-40	1.26 ±0.13E 03	1.30 ±0.13E 03	1.42 ±0.14E 03
MN-54	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
FE-59	L.T. 1. E 01	L.T. 1. E 01	L.T. 9. E 00
CO-60	L.T. 5. E 00	L.T. 6. E 01	L.T. 5. E 00
ZN-65	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
ZR-95/NB-95	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 6. E 00	L.T. 4. E 00
RU-106	L.T. 4. E 01	L.T. 5. E 01	L.T. 4. E 01
I-131	L.T. 9. E 00	L.T. 8. E 00	L.T. 5. E 00
CS-134	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
CS-137	L.T. 5. E 00	L.T. 6. E 00	L.T. 5. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 6. E 00	L.T. 5. E 00
CE-141	L.T. 1. E 01	L.T. 9. E 00	L.T. 8. E 00
CE-144	L.T. 4. E 01	L.T. 4. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 9. E 01
TH-228	L.T. 9. E 00	L.T. 1. E 01	L.T. 9. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-50

DATE COLLECTED:	MAY 05/20	JUNE 06/03	JUNE 06/17
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 2. E-01	L.T. 2. E-01	L.T. 3. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 6. E 01	L.T. 3. E 01	L.T. 4. E 01
K-40	1.49 ±0.15E 03	1.33 ±0.13E 03	1.36 ±0.14E 03
MN-54	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 1. E 01	L.T. 9. E 00	L.T. 9. E 00
CO-60	L.T. 7. E 00	L.T. 4. E 00	L.T. 4. E 00
ZN-65	L.T. 1. E 01	L.T. 9. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 6. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-103	L.T. 7. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-106	L.T. 5. E 01	L.T. 4. E 01	L.T. 4. E 01
I-131	L.T. 1. E 01	L.T. 6. E 00	L.T. 9. E 00
CS-134	L.T. 6. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 6. E 00	L.T. 5. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 8. E 00	L.T. 5. E 00	L.T. 6. E 00
CE-141	L.T. 1. E 01	L.T. 7. E 00	L.T. 9. E 00
CE-144	L.T. 4. E 01	L.T. 3. E 01	L.T. 4. E 01
RA-226	L.T. 1. E 02	L.T. 8. E 01	L.T. 1. E 02
TH-228	L.T. 1. E 01	L.T. 8. E 00	L.T. 9. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/1)

STATION NUMBER MKQ-50

DATE COLLECTED:	JULY 07/02	JULY 07/15	AUGUST 08/05
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 3. E-01	L.T. 3. E-01	L.T. 3. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 7. E 01	L.T. 4. E 01	L.T. 4. E 01
K-40	1.18 ±0.12E 03	1.35 ±0.14E 03	1.15 ±0.12E 03
MN-54	L.T. 7. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 7. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 2. E 01	L.T. 9. E 00	L.T. 9. E 00
CO-60	L.T. 7. E 00	L.T. 5. E 00	L.T. 5. E 00
ZN-65	L.T. 2. E 01	L.T. 1. E 01	L.T. 9. E 00
ZR-95/NB-95	L.T. 7. E 00	L.T. 4. E 00	L.T. 5. E 00
RU-103	L.T. 9. E 00	L.T. 5. E 00	L.T. 5. E 00
RU-106	L.T. 7. E 01	L.T. 4. E 01	L.T. 4. E 01
I-131	L.T. 2. E 01	L.T. 9. E 00	L.T. 8. E 00
CS-134	L.T. 9. E 00	L.T. 5. E 00	L.T. 5. E 00
CS-137	L.T. 8. E 00	L.T. 5. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 7. E 00	L.T. 6. E 00
CE-141	L.T. 1. E 01	L.T. 8. E 00	L.T. 8. E 00
CE-144	L.T. 6. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 2. E 02	L.T. 9. E 01	L.T. 9. E 01
TH-228	L.T. 1. E 01	L.T. 9. E 00	L.T. 9. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-50

DATE COLLECTED:	AUGUST 08/19	SEPTEMBER 09/04	SEPTEMBER 09/16
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 3. E-01	L.T. 2. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
K-40	1.14 ±0.11E 03	1.34 ± 0.13 03	1.30 ±0.13E 03
MN-54	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 4. E 00	L.T. 3. E 00	L.T. 4. E 00
FE-59	L.T. 1. E 01	L.T. 8. E 00	L.T. 1. E 01
CO-60	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
ZN-65	L.T. 1. E 01	L.T. 9. E 00	L.T. 1. E 01
ZR-95/NB-95	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-103	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 4. E 01	L.T. 3. E 01	L.T. 4. E 01
I-131	L.T. 9. E 00	L.T. 5. E 00	L.T. 8. E 00
CS-134	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
CS-137	L.T. 4. E 00	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 6. E 00	L.T. 4. E 00	L.T. 5. E 00
CE-141	L.T. 9. E 00	L.T. 7. E 00	L.T. 8. E 00
CE-144	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 9. E 01
TH-228	L.T. 9. E 00	L.T. 8. E 00	L.T. 8. E 00

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-50

DATE COLLECTED:	OCTOBER 10/01	OCTOBER 10/14	NOVEMBER 11/04
RADIOCHEMICAL ANALYSIS:			
I-131	(a)	L.T. 2. E-01	L.T. 3. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7		L.T. 5. E 01	L.T. 4. E 01
K-40		1.24 ±0.12E 03	1.27 ±0.13E 03
MN-54		L.T. 5. E 00	L.T. 4. E 00
CO-58		L.T. 5. E 00	L.T. 4. E 00
FE-59		L.T. 1. E 01	L.T. 9. E 00
CO-60		L.T. 7. E 00	L.T. 4. E 00
ZN-65		L.T. 1. E 01	L.T. 9. E 00
ZR-95/NB-95		L.T. 6. E 00	L.T. 4. E 00
RU-103		L.T. 6. E 00	L.T. 5. E 00
RU-106		L.T. 4. E 01	L.T. 4. E 01
I-131		L.T. 7. E 00	L.T. 6. E 00
CS-134		L.T. 6. E 00	L.T. 4. E 00
CS-137		L.T. 6. E 00	L.T. 5. E 00
BA-140/LA-140		L.T. 6. E 00	L.T. 5. E 00
CE-141		L.T. 9. E 00	L.T. 9. E 00
CE-144		L.T. 4. E 01	L.T. 4. E 01
RA-226		L.T. 1. E 02	L.T. 1. E 02
TH-228		L.T. 9. E 00	L.T. 9. E 00

(a) No sample available: emergency drill.

TABLE B-11 (Cont.)

MILK:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/l)

STATION NUMBER MKQ-50

DATE COLLECTED:	NOVEMBER 11/18	DECEMBER 12/03	DECEMBER 12/15
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 3. E-01	L.T. 2. E-01	L.T. 2. E-01
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 5. E 01	L.T. 3. E 01	L.T. 3. E 01
K-40	1.31 ±0.13E 03	1.44 ±0.14E 03	1.15 ±0.12E 03
MN-54	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
CO-58	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
FE-59	L.T. 1. E 01	L.T. 9. E 00	L.T. 9. E 00
CO-60	L.T. 5. E 00	L.T. 4. E 00	L.T. 5. E 00
ZN-65	L.T. 1. E 01	L.T. 9. E 00	L.T. 9. E 00
ZR-95/NB-95	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-103	L.T. 6. E 00	L.T. 4. E 00	L.T. 4. E 00
RU-106	L.T. 4. E 01	L.T. 3. E 01	L.T. 4. E 00
I-131	L.T. 1. E 01	L.T. 4. E 00	L.T. 6. E 00
CS-134	L.T. 6. E 00	L.T. 4. E 00	L.T. 5. E 00
CS-137	L.T. 5. E 00	L.T. 4. E 00	L.T. 4. E 00
BA-140/LA-140	L.T. 7. E 00	L.T. 4. E 00	L.T. 5. E 00
CE-141	L.T. 1. E 01	L.T. 6. E 00	L.T. 8. E 00
CE-144	L.T. 4. E 01	L.T. 3. E 01	L.T. 3. E 01
RA-226	L.T. 1. E 02	L.T. 8. E 01	L.T. 9. E 01
TH-228	L.T. 1. E 01	L.T. 8. E 00	L.T. 9. E 00

TABLE B-12

FISH:

GAMMA ISOTOPIC ANALYSIS
(pCi/kg WET)

STATION NUMBER FH-1

DATE COLLECTED:	05/07 YELLOW CATFISH	05/07 DRUM	05/07 BLUE CATFISH
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 6. E 01	L.T. 2. E 02	L.T. 6. E 01
K-40	3.40 ±0.31E 03	3.25±0.33 E 03	2.84±0.28 E 03
MN-54	L.T. 6. E 00	L.T. 2. E 01	L.T. 7. E 00
CO-58	L.T. 7. E 00	L.T. 2. E 01	L.T. 7. E 00
FE-59	L.T. 2. E 01	L.T. 4. E 01	L.T. 2. E 01
CO-60	L.T. 7. E 00	L.T. 2. E 01	L.T. 7. E 00
ZN-65	L.T. 2. E 01	L.T. 4. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 7. E 00	L.T. 2. E 01	L.T. 7. E 00
RU-103	L.T. 7. E 00	L.T. 2. E 01	L.T. 8. E 00
RU-106	L.T. 6. E 01	L.T. 1. E 02	L.T. 6. E 01
I-131	L.T. 2. E 01	L.T. 6. E 01	L.T. 2. E 01
CS-134	L.T. 6. E 00	L.T. 2. E 01	L.T. 7. E 00
CS-137	L.T. 7. E 00	L.T. 2. E 01	L.T. 7. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 3. E 01	L.T. 1. E 01
CE-141	L.T. 1. E 01	L.T. 3. E 01	L.T. 1. E 01
CE-144	L.T. 5. E 01	L.T. 1. E 02	L.T. 5. E 01
RA-226	L.T. 1. E 02	L.T. 3. E 02	L.T. 1. E 02
TH-228	L.T. 1. E 01	L.T. 3. E 01	L.T. 1. E 01

TABLE B-12 (Cont.)

FISH:

GAMMA ISOTOPIC ANALYSIS

(pCi/kg WET)

STATION NUMBER FH-1

DATE COLLECTED:	11/08 YELLOW CATFISH	11/08 BLUE CATFISH
GAMMA SPECTRUM ANALYSIS:		
BE-7	L.T. 5. E 01	L.T. 9. E 01
K-40	3.46 ±0.35E 03	3.10 ±0.31E 03
MN-54	L.T. 5. E 00	L.T. 8. E 00
CO-58	L.T. 6. E 00	L.T. 9. E 00
FE-59	L.T. 2. E 01	L.T. 2. E 01
CO-60	L.T. 5. E 00	L.T. 8. E 00
ZN-65	L.T. 1. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 7. E 00	L.T. 9. E 00
RU-103	L.T. 7. E 00	L.T. 1. E 01
RU-106	L.T. 4. E 01	L.T. 6. E 01
I-131	L.T. 5. E 01	L.T. 8. E 01
CS-134	L.T. 5. E 00	L.T. 8. E 00
CS-137	L.T. 5. E 00	L.T. 7. E 00
BA-140/LA-140	L.T. 2. E 01	L.T. 3. E 01
CE-141	L.T. 1. E 01	L.T. 2. E 01
CE-144	L.T. 4. E 01	L.T. 6. E 01
RA-226	L.T. 1. E 02	L.T. 2. E 02
TH-228	L.T. 1. E 01	L.T. 1. E 01

TABLE B-12 (Cont.)

FISH:

GAMMA ISOTOPIC ANALYSIS

(pCi/kg WET)

STATION NUMBER FH-2

DATE COLLECTED:	05/07 YELLOW CATFISH	05/07 BLUE CATFISH	05/07 WHITE DRUM	05/07 STRIPED BASS
GAMMA SPECTRUM ANALYSIS:				
BE-7	L.T. 6. E 01	L.T. 8. E 01	L.T. 5. E 01	L.T. 2. E 02
K-40	3.58 ±0.36E 03	3.36±0.34 E 03	2.86±0.29 E 03	3.54±0.36 E 03
MN-54	L.T. 6. E 00	L.T. 8. E 00	L.T. 5. E 00	L.T. 2. E 01
CO-58	L.T. 6. E 00	L.T. 7. E 00	L.T. 5. E 00	L.T. 2. E 01
FE-59	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 4. E 01
CO-60	L.T. 7. E 00	L.T. 8. E 00	L.T. 6. E 00	L.T. 2. E 01
ZN-65	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 4. E 01
ZR-95/NB-95	L.T. 6. E 00	L.T. 8. E 00	L.T. 6. E 00	L.T. 2. E 01
RU-103	L.T. 7. E 00	L.T. 9. E 00	L.T. 6. E 00	L.T. 2. E 01
RU-106	L.T. 5. E 01	L.T. 7. E 00	L.T. 4. E 01	L.T. 2. E 02
I-131	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 4. E 01
CS-134	L.T. 6. E 00	L.T. 9. E 00	L.T. 5. E 00	L.T. 2. E 01
CS-137	L.T. 6. E 00	L.T. 8. E 00	L.T. 6. E 00	L.T. 2. E 01
BA-140/LA-140	L.T. 1. E 01	L.T. 1. E 01	L.T. 7. E 00	L.T. 3. E 01
CE-141	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01	L.T. 4. E 01
CE-144	L.T. 5. E 01	L.T. 6. E 01	L.T. 4. E 01	L.T. 1. E 02
RA-226	L.T. 1. E 02	L.T. 2. E 02	L.T. 1. E 02	L.T. 4. E 02
TH-228	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01	L.T. 4. E 01

TABLE B-12 (Cont.)

FISH:

GAMMA ISOTOPIC ANALYSIS

(pCi/kg WET)

STATION NUMBER FH-2

DATE COLLECTED:	11/08 DRUM	11/08 YELLOW CATFISH	11/08 BLUE CATFISH
GAMMA SPECTRUM ANALYSIS:			
BE-7	L.T. 8. E 01	L.T. 8. E 01	L.T. 1. E 02
K-40	2.49 ±0.25E 03	3.81 ±0.38E 03	3.46 ±0.35E 03
MN-54	L.T. 7. E 00	L.T. 7. E 00	L.T. 1. E 01
CO-58	L.T. 7. E 00	L.T. 8. E 00	L.T. 1. E 01
FE-59	L.T. 2. E 01	L.T. 2. E 01	L.T. 3. E 01
CO-60	L.T. 8. E 00	L.T. 8. E 00	L.T. 1. E 01
ZN-65	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 9. E 00	L.T. 9. E 00	L.T. 1. E 01
RU-103	L.T. 1. E 01	L.T. 1. E 01	L.T. 2. E 01
RU-106	L.T. 6. E 01	L.T. 6. E 01	L.T. 9. E 01
I-131	L.T. 7. E 01	L.T. 7. E 01	L.T. 1. E 02
CS-134	L.T. 7. E 00	L.T. 7. E 00	L.T. 1. E 01
CS-137	L.T. 8. E 00	L.T. 7. E 00	L.T. 1. E 01
BA-140/LA-140	L.T. 3. E 01	L.T. 2. E 01	L.T. 4. E 01
CE-141	L.T. 2. E 01	L.T. 2. E 01	L.T. 3. E 01
CE-144	L.T. 5. E 01	L.T. 5. E 01	L.T. 1. E 02
RA-226	L.T. 1. E 02	L.T. 1. E 02	L.T. 2. E 02
TH-228	L.T. 1. E 01	L.T. 1. E 01	L.T. 2. E 01

TABLE B-13

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION NUMBER BLB-1

DATE COLLECTED:	MARCH 03/04	MARCH 03/26
RADIOCHEMICAL ANALYSIS:		
I-131	L.T. 5. E 00	L.T. 3. E 00
GAMMA SPECTRUM ANALYSIS:		
BE-7	6.39± 0.72E 02	3.93± 0.97E 02
K-40	5.40± 0.54E 03	5.26± 0.53E 03
MN-54	L.T. 7. E 00	L.T. 9. E 00
CO-58	L.T. 8. E 00	L.T. 9. E 00
FE-59	L.T. 2. E 01	L.T. 2. E 01
CO-60	L.T. 7. E 00	L.T. 1. E 01
ZN-65	L.T. 2. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 8. E 00	L.T. 9. E 00
RU-103	L.T. 8. E 00	L.T. 9. E 00
RU-106	L.T. 6. E 01	L.T. 8. E 01
I-131	L.T. 1. E 01	L.T. 1. E 01
CS-134	L.T. 8. E 00	L.T. 1. E 01
CS-137	L.T. 7. E 00	L.T. 1. E 01
BA-140/LA-140	L.T. 1. E 01	L.T. 9. E 00
CE-141	L.T. 1. E 01	L.T. 2. E 01
CE-144	L.T. 4. E 01	L.T. 7. E 01
RA-226	L.T. 1. E 02	L.T. 2. E 02
TH-228	L.T. 1. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION NUMBER BLB-1

DATE COLLECTED:	MAY 05/01	MAY 05/28	JUNE 06/26
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 4. E 00	L.T. 1. E 01	L.T. 1. E 01
GAMMA SPECTRUM ANALYSIS:			
BE-7	1.22± 0.15E 03	8.57± 1.75E 02	5.96± 0.71E 02
K-40	7.31± 0.73E 03	8.51± 0.85E 03	8.32± 0.83E 03
MN-54	L.T. 1. E 01	L.T. 1. E 01	L.T. 7. E 00
CO-58	L.T. 2. E 01	L.T. 1. E 01	L.T. 7. E 00
FE-59	L.T. 3. E 01	L.T. 4. E 01	L.T. 2. E 01
CO-60	L.T. 1. E 01	L.T. 2. E 01	L.T. 8. E 00
ZN-65	L.T. 3. E 01	L.T. 4. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 2. E 01	L.T. 1. E 01	L.T. 8. E 00
RU-103	L.T. 2. E 01	L.T. 2. E 01	L.T. 9. E 00
RU-106	L.T. 1. E 02	L.T. 1. E 02	L.T. 7. E 01
I-131	L.T. 5. E 01	L.T. 4. E 01	L.T. 2. E 01
CS-134	L.T. 2. E 01	L.T. 1. E 01	L.T. 8. E 00
CS-137	L.T. 1. E 01	L.T. 2. E 01	L.T. 7. E 00
BA-140/LA-140	L.T. 3. E 01	L.T. 2. E 01	L.T. 1. E 01
CE-141	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
CE-144	L.T. 9. E 01	L.T. 1. E 02	L.T. 6. E 01
RA-226	L.T. 3. E 02	L.T. 3. E 02	L.T. 2. E 02
TH-228	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION - BLB-1

DATE COLLECTED:	JULY 07/31	AUGUST 08/28	SEPTEMBER 09/24
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 7. E 00	L.T. 4. E 00	L.T. 5. E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	2.27± 0.24E 03	1.47 ±0.15E 03	4.69 ±0.81E 02
K-40	4.28± 0.43E 03	6.03 ±0.60E 03	3.98 ±0.40E 03
MN-54	L.T. 2. E 01	L.T. 1. E 01	L.T. 8. E 00
CO-58	L.T. 2. E 01	L.T. 1. E 01	L.T. 9. E 00
FE-59	L.T. 5. E 01	L.T. 3. E 01	L.T. 2. E 01
CO-60	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
ZN-65	L.T. 5. E 01	L.T. 3. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 3. E 01	L.T. 1. E 01	L.T. 9. E 00
RU-103	L.T. 3. E 01	L.T. 1. E 01	L.T. 1. E 01
RU-106	L.T. 2. E 02	L.T. 1. E 02	L.T. 8. E 01
I-131	L.T. 4. E 01	L.T. 3. E 01	L.T. 2. E 01
CS-134	L.T. 3. E 01	L.T. 1. E 01	L.T. 9. E 00
CS-137	L.T. 3. E 01	L.T. 1. E 01	L.T. 9. E 00
BA-140/LA-140	L.T. 4. E 01	L.T. 2. E 01	L.T. 1. E 01
CE-141	L.T. 5. E 01	L.T. 3. E 01	L.T. 2. E 01
CE-144	L.T. 2. E 02	L.T. 1. E 02	L.T. 7. E 01
RA-226	L.T. 5. E 02	L.T. 3. E 02	L.T. 2. E 02
TH-228	L.T. 5. E 01	L.T. 3. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION - BLB-1

DATE COLLECTED:	OCTOBER 10/30	NOVEMBER 11/26	DECEMBER 12/31
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	3.07± 0.31E 03	L.T. 3. E 02	8.29 ±0.97E 02
K-40	4.76± 0.48E 03	5.07± 0.51E 03	6.19 ±0.62E 03
MN-54	L.T. 1. E 01	L.T. 2. E 01	L.T. 9. E 00
CO-58	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01
FE-59	L.T. 3. E 01	L.T. 6. E 01	L.T. 2. E 01
CO-60	L.T. 1. E 01	L.T. 3. E 01	L.T. 1. E 01
ZN-65	L.T. 3. E 01	L.T. 6. E 01	L.T. 3. E 01
ZR-95/NB-95	L.T. 1. E 01	L.T. 3. E 01	L.T. 1. E 01
RU-103	L.T. 2. E 01	L.T. 3. E 01	L.T. 1. E 01
RU-106	L.T. 1. E 02	L.T. 2. E 02	L.T. 9. E 01
I-131	L.T. 3. E 01	L.T. 6. E 01	L.T. 2. E 01
CS-134	L.T. 1. E 01	L.T. 3. E 01	L.T. 1. E 01
CS-137	L.T. 1. E 01	L.T. 3. E 01	L.T. 1. E 01
BA-140/LA-140	L.T. 2. E 01	L.T. 3. E 01	L.T. 1. E 01
CE-141	L.T. 3. E 01	L.T. 6. E 01	L.T. 2. E 01
CE-144	L.T. 1. E 02	L.T. 2. E 02	L.T. 8. E 01
RA-226	L.T. 3. E 02	L.T. 6. E 02	L.T. 2. E 02
TH-228	L.T. 3. E 01	L.T. 5. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION NUMBER BLQ-1

DATE COLLECTED:	MARCH 03/04	MARCH 03/26
RADIOCHEMICAL ANALYSIS:		
I-131	L.T. 5. E 00	L.T. 3. E 00
GAMMA SPECTRUM ANALYSIS:		
BE-7	8.88± 0.89E 02	8.06± 0.87E 02
K-40	4.76± 0.48E 03	4.82± 0.48E 03
MN-54	L.T. 8. E 00	L.T. 9. E 00
CO-58	L.T. 8. E 00	L.T. 8. E 00
FE-59	L.T. 2. E 01	L.T. 2. E 01
CO-60	L.T. 9. E 00	L.T. 1. E 01
ZN-65	L.T. 2. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 9. E 00	L.T. 9. E 00
RU-103	L.T. 9. E 00	L.T. 9. E 00
RU-106	L.T. 7. E 01	L.T. 8. E 01
I-131	L.T. 2. E 01	L.T. 1. E 01
CS-134	L.T. 9. E 00	L.T. 9. E 00
CS-137	L.T. 8. E 00	L.T. 9. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 9. E 00
CE-141	L.T. 1. E 01	L.T. 2. E 01
CE-144	L.T. 5. E 01	L.T. 7. E 01
RA-226	L.T. 2. E 02	L.T. 2. E 02
TH-228	L.T. 1. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION NUMBER BLQ-1

DATE COLLECTED:	MAY 05/01	MAY 05/29	JUNE 06/26
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 5. E 00	L.T. 1. E 01	L.T. 1. E 01
GAMMA SPECTRUM ANALYSIS:			
BE-7	6.32± 0.85E 02	9.49± 1.34E 02	3.60± 0.71E 02
K-40	6.63± 0.66E 03	7.48± 0.75E 03	3.93± 0.39E 03
MN-54	L.T. 7. E 00	L.T. 1. E 01	L.T. 8. E 00
CO-58	L.T. 8. E 00	L.T. 1. E 01	L.T. 8. E 00
FE-59	L.T. 2. E 01	L.T. 4. E 01	L.T. 2. E 01
CO-60	L.T. 8. E 00	L.T. 2. E 01	L.T. 9. E 00
ZN-65	L.T. 2. E 01	L.T. 4. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 8. E 00	L.T. 1. E 01	L.T. 9. E 00
RU-103	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01
RU-106	L.T. 6. E 01	L.T. 1. E 02	L.T. 7. E 01
I-131	L.T. 3. E 01	L.T. 4. E 01	L.T. 2. E 01
CS-134	L.T. 8. E 00	L.T. 1. E 01	L.T. 9. E 00
CS-137	L.T. 8. E 00	L.T. 2. E 01	L.T. 9. E 00
BA-140/LA-140	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01
CE-141	L.T. 2. E 01	L.T. 3. E 01	L.T. 2. E 01
CE-144	L.T. 6. E 01	L.T. 1. E 02	L.T. 6. E 01
RA-226	L.T. 2. E 02	L.T. 3. E 02	L.T. 2. E 02
TH-228	L.T. 1. E 01	L.T. 3. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION - BLQ-1

DATE COLLECTED:	JULY 07/31	AUGUST 08/28	SEPTEMBER 09/24
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 4. E 00	L.T. 5. E 00	L.T. 7. E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	4.84± 0.79E 02	2.71 ±0.27E 03	4.33 ±0.79E 02
K-40	1.86± 0.19E 03	3.47 ±0.35E 03	2.72 ±0.27E 03
MN-54	L.T. 8. E 00	L.T. 1. E 01	L.T. 1. E 01
CO-58	L.T. 7. E 00	L.T. 1. E 01	L.T. 8. E 00
FE-59	L.T. 2. E 01	L.T. 3. E 01	L.T. 2. E 01
CO-60	L.T. 8. E 00	L.T. 1. E 01	L.T. 9. E 00
ZN-65	L.T. 2. E 01	L.T. 3. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 8. E 00	L.T. 1. E 01	L.T. 1. E 01
RU-103	L.T. 8. E 00	L.T. 1. E 01	L.T. 1. E 01
RU-106	L.T. 6. E 01	L.T. 1. E 02	L.T. 9. E 01
I-131	L.T. 1. E 01	L.T. 3. E 01	L.T. 2. E 01
CS-134	L.T. 1. E 01	L.T. 1. E 01	L.T. 1. E 01
CS-137	L.T. 8. E 00	L.T. 1. E 01	L.T. 1. E 01
BA-140/LA-140	L.T. 1. E 01	L.T. 2. E 01	L.T. 1. E 01
CE-141	L.T. 2. E 01	L.T. 3. E 01	L.T. 2. E 01
CE-144	L.T. 6. E 01	L.T. 1. E 02	L.T. 7. E 01
RA-226	L.T. 2. E 02	L.T. 3. E 02	2.78 ±1.49E 02
TH-228	L.T. 2. E 01	L.T. 3. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION - BLQ-1

DATE COLLECTED:	OCTOBER 10/30	NOVEMBER 11/26	DECEMBER 12/31
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 4. E 00	L.T. 5. E 00	L.T. 4. E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	1.23± 0.17E 03	5.71± 1.36E 02	5.54 ±0.97E 02
K-40	3.15± 0.32E 03	5.00± 0.50E 03	3.80 ±0.38E 03
MN-54	L.T. 2. E 01	L.T. 1. E 01	L.T. 9. E 00
CO-58	L.T. 2. E 01	L.T. 1. E 01	L.T. 8. E 00
FE-59	L.T. 3. E 01	L.T. 3. E 01	L.T. 2. E 01
CO-60	L.T. 2. E 01	L.T. 2. E 01	L.T. 9. E 00
ZN-65	L.T. 4. E 01	L.T. 4. E 01	L.T. 2. E 01
ZR-95/NB-95	L.T. 2. E 01	L.T. 2. E 01	L.T. 9. E 00
RU-103	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01
RU-106	L.T. 2. E 02	L.T. 1. E 02	L.T. 8. E 01
I-131	L.T. 4. E 01	L.T. 3. E 01	L.T. 2. E 01
CS-134	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
CS-137	L.T. 2. E 01	L.T. 1. E 01	L.T. 1. E 01
BA-140/LA-140	L.T. 2. E 01	L.T. 2. E 01	L.T. 1. E 01
CE-141	L.T. 4. E 01	L.T. 3. E 01	L.T. 2. E 01
CE-144	L.T. 1. E 02	L.T. 1. E 02	L.T. 8. E 01
RA-226	L.T. 4. E 02	L.T. 3. E 02	L.T. 2. E 02
TH-228	L.T. 4. E 01	L.T. 3. E 01	L.T. 2. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION NUMBER BLH-10

DATE COLLECTED:	JUNE 06/26
RADIOCHEMICAL ANALYSIS:	
I-131	L.T. 1. E 01
GAMMA SPECTRUM ANALYSIS:	
BE-7	7.20± 0.72E 02
K-40	5.03± 0.50E 03
MN-54	L.T. 6. E 00
CO-58	L.T. 6. E 00
FE-59	L.T. 2. E 01
CO-60	L.T. 7. E 00
ZN-65	L.T. 1. E 01
ZR-95/NB-95	L.T. 6. E 00
RU-103	L.T. 7. E 00
RU-106	L.T. 5. E 01
I-131	L.T. 1. E 01
CS-134	L.T. 6. E 00
CS-137	1.35± 0.50E 01
BA-140/LA-140	L.T. 8. E 00
CE-141	L.T. 1. E 01
CE-144	L.T. 4. E 01
RA-226	L.T. 1. E 02
TH-228	L.T. 1. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION - BLH-10

DATE COLLECTED:	JULY 07/31	AUGUST 08/28	SEPTEMBER 09/24
RADIOCHEMICAL ANALYSIS:			
I-131	L.T. 5. E 00	L.T. 4. E 00	L.T. 7. E 00
GAMMA SPECTRUM ANALYSIS:			
BE-7	1.01± 0.14E 03	1.39 ±0.16E 03	1.28 ±0.14E 03
K-40	7.31± 0.73E 03	5.71 ±0.57E 03	6.79 ±0.68E 03
MN-54	L.T. 1. E 01	L.T. 1. E 01	L.T. 2. E 01
CO-58	L.T. 1. E 01	L.T. 2. E 01	L.T. 2. E 01
FE-59	L.T. 3. E 01	L.T. 4. E 01	L.T. 4. E 01
CO-60	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01
ZN-65	L.T. 4. E 01	L.T. 4. E 01	L.T. 4. E 01
ZR-95/NB-95	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01
RU-103	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01
RU-106	L.T. 1. E 02	L.T. 1. E 02	L.T. 1. E 02
I-131	L.T. 3. E 01	L.T. 4. E 01	L.T. 3. E 01
CS-134	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01
CS-137	L.T. 2. E 01	L.T. 2. E 01	L.T. 2. E 01
BA-140/LA-140	L.T. 1. E 01	L.T. 2. E 01	L.T. 2. E 01
CE-141	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01
CE-144	L.T. 1. E 02	L.T. 1. E 02	L.T. 1. E 02
RA-226	L.T. 4. E 02	L.T. 3. E 02	L.T. 3. E 02
TH-228	L.T. 3. E 01	L.T. 3. E 01	L.T. 3. E 01

TABLE B-13 (Cont.)

BROAD LEAF VEGETATION:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg WET)

STATION NUMBER BLK-15

DATE COLLECTED:	NOVEMBER 11/26
RADIOCHEMICAL ANALYSIS:	
I-131	L.T. 6. E 00
GAMMA SPECTRUM ANALYSIS:	
BE-7	2.15± 0.24E 03
K-40	7.41± 0.74E 03
MN-54	L.T. 2. E 01
CO-58	L.T. 2. E 01
FE-59	L.T. 5. E 01
CO-60	L.T. 2. E 01
ZN-65	L.T. 5. E 01
ZR-95/NB-95	L.T. 2. E 01
RU-103	L.T. 3. E 01
RU-106	L.T. 2. E 02
I-131	L.T. 6. E 01
CS-134	L.T. 2. E 01
CS-137	5.33± 2.14E 01
BA-140/LA-140	L.T. 3. E 00
CE-141	L.T. 5. E 01
CE-144	L.T. 2. E 02
RA-226	L.T. 6. E 02
TH-228	L.T. 5. E 01

TABLE B-14

FOOD/GARDEN CROPS:

IODINE-131 AND GAMMA ISOTOPIC ANALYSES

(pCi/kg wet)

STATION - FPP-1 - SOY BEANS

DATE COLLECTED:	SEPTEMBER 09/17
GAMMA SPECTRUM ANALYSIS:	
BE-7	L.T. 1. E 02
K-40	9.33 ±0.93E 03
MN-54	L.T. 1. E 01
CO-58	L.T. 1. E 01
FE-59	L.T. 3. E 01
CO-60	L.T. 1. E 01
ZN-65	L.T. 3. E 01
ZR-95/NB-95	L.T. 1. E 01
RU-103	L.T. 1. E 01
RU-106	L.T. 1. E 02
I-131	L.T. 2. E 01
CS-134	L.T. 1. E 01
CS-137	L.T. 1. E 01
BA-140/LA-140	L.T. 1. E 01
CE-141	L.T. 2. E 01
CE-144	L.T. 9. E 01
RA-226	L.T. 3. E 02
TH-228	L.T. 2. E 01

APPENDIX C
SUMMARY OF UNAVAILABLE SAMPLES AND MISSED LOWER LIMITS OF DETECTION

TABLE C-1

SUMMARY OF UNAVAILABLE SAMPLES AND MISSED LOWER LIMITS

OF DETECTION DURING THE PERIOD OF

JANUARY 1 TO MARCH 31, 1985

	SAMPLE MEDIA	ANALYSIS	LOCATION	DATE	EXPLANATION OF SAMPLE UNAVAILABILITY OR MISSED LLD
1.	Atmospheric	Gross Beta	APC-1	01/22/85-01/28/85	No sample available, particulate filter was lost during collection by strong winds blowing filter onto ground.
2.	Drinking/Surface Water	I-131	DWE-5/ SWE-5	01/07/85-01/22/85	No sample available, due to sampler malfunction.
3.	Drinking/Surface Water	I-131	DWE-5/ SWE-5	03/03/85-03/18/85	No sample available, due to sampler malfunction.
4.	Drinking/Surface Water	Gamma	DWE-5/ SWE-5	January Composite	LLD not met for Ba-140/La-140 due to delayed analysis resulting from missed sample.
5.	Milk	I-131, Gamma	MKE-4	January	No samples available, goats not lactating.
6.	Milk	I-131, Gamma	MKE-4	February	No samples available, goats not lactating.
7.	Broad Leaf Vegetation	I-131, Gamma	BLQ-1	January	No sample available due to freeze.
8.	Broad Leaf Vegetation	I-131, Gamma	BLB-1	January	No sample available due to freeze.
9.	Broad Leaf Vegetation	I-131, Gamma	BLH-10	January	No sample available due to freeze.
10.	Broad Leaf Vegetation	I-131, Gamma	BLH-10	February	No sample collected since milk samples were available at control location.
11.	Broad Leaf Vegetation	I-131, Gamma	BLH-10	March	No sample collected since milk samples were available at control location.

TABLE C-2

SUMMARY OF UNAVAILABLE SAMPLES AND MISSED LOWER LIMITS

OF DETECTION DURING THE PERIOD OF

APRIL 1 to JUNE 30, 1985

SAMPLE MEDIA	ANALYSIS	LOCATION	DATE	EXPLANATION OF SAMPLE UNAVAILABILITY OR MISSED LLD
1. Atmospheric	Gross Beta	APC-1	04/01/85-04/09/85	No sample available, particulate filter was lost during sample collection by strong winds blowing filter away.
2. Atmospheric	Gross Beta, I-131	APC-1	04/30/85-05/06/85	No sample available due to pump failure.
3. Atmospheric	I-131	APC-1	05/06/85-05/08/85	LLD not met due to low sample volume. Sample pump found not running.
4. Atmospheric	Gross Beta, I-131	APC-1	05/08/85-05/20/85	No sample available due to power failure at station.
5. Atmospheric	I-131	APC-1	06/24/85-06/27/85	LLD not met due to low sample volume. Sample pump found not running.
6. Milk	I-131, Gamma	MKE-4	April	No samples available; goats not lactating.
7. Milk	I-131, Gamma	MKE-4	05/20/85	No sample available from owner.
8. Milk	I-131, Gamma	MKE-4	June	No samples available from owner.
9. Broad Leaf Vegetation	I-131, Gamma	BLH-10	April	No sample collected since milk samples were available at control location.
10. Broad Leaf Vegetation	I-131, Gamma	BLH-10	May	No sample collected since milk samples were available at control location.

TABLE C-3

SUMMARY OF UNAVAILABLE SAMPLES AND MISSED LOWER LIMITS

OF DETECTION DURING THE PERIOD OF

JULY 1 to SEPTEMBER 30, 1985

SAMPLE MEDIA	ANALYSIS	LOCATION	DATE	EXPLANATION OF SAMPLE UNAVAILABILITY OR MISSED LLD
1. Atmospheric	I-131	APC-1	07/01/85-07/03/85	LLD could not be met. Insufficient sample volume collected.
2. Atmospheric	I-131	APC-1	07/01/85-07/02/85	LLD could not be met. Insufficient sample volume collected.
3. Milk	I-131, Gamma	MKE-4	July	No samples available from owner.
4. Milk	I-131, Gamma	MKE-4	August	No samples available from owner.
5. Milk	I-131, Gamma	MKE-4	September	No samples available from owner.

TABLE C-4

SUMMARY OF UNAVAILABLE SAMPLES AND MISSED LOWER LIMITS

OF DETECTION DURING THE PERIOD OF

OCTOBER 1 to DECEMBER 31, 1985

	SAMPLE MEDIA	ANALYSIS	LOCATION	DATE	EXPLANATION OF SAMPLE UNAVAILABILITY OR MISSED LLD
1.	Atmospheric	Gross Beta, I-131	APQ-1	10/30/85-11/04/85	No sample available; pump being repaired.
2.	Atmospheric	Gross Beta, I-131	APC-1	11/11/85-11/18/85	No sample available due to pump malfunction.
3.	Atmospheric	Gross Beta, I-131	APC-1	11/18/85-11/25/85	No sample available. Power to sample pump was disconnected due to work at discharge station.
4.	Atmospheric	I-131	APE-30	12/02/85-12/09/85	LLD could not be met due to insufficient sample volume. Pump found not running.
5.	Milk	I-131, Gamma	MKE-4	October	No sample available from owner.
6.	Milk	I-131, Gamma	MKE-4	November	No sample available from owner.
7.	Milk	I-131, Gamma	MKE-4	December	No sample available from owner.
8.	Milk	I-131, Gamma	MKQ-50	10/01/85	No sample collected by state due to Emergency Planning Exercise.
9.	Vegetation	I-131, Gamma	BLR-10	10/30/85	No sample available due to flooding from Hurricane Juan.
10.	Vegetation	I-131, Gamma	BLK-15	12/31/85	No sample available due to lack of vegetation.

TABLE C-5

SUMMARY OF UNAVAILABLE TLD MEASUREMENTS

DURING THE PERIOD OF JANUARY 1 TO DECEMBER 31, 1985

LOCATION	QUARTER	EXPLANATION
C-1	First	TLD stolen: Replaced 3/1/85
D-5	First	TLD stolen
E-1	First	TLD stolen: Replaced 3/1/85
E-30	First	TLD stolen: Replaced 3/8/85
J-2	First	TLD results affected by radiography in area; TLD results not included in Data Evaluation.
N-1	First	TLD stolen
A-5	Second	TLD stolen: Replaced 5/3/85
D-5	Second	TLD stolen: Replaced 5/3/85
G-4	Second	TLD stolen
N-1	Second	TLD stolen: Replaced 6/8/86
P-1	Second	TLD stolen: Replaced 5/1/85
C-1	Fourth	TLD stolen
D-2	Fourth	TLD stolen
H-2	Fourth	TLD stolen
N-1	Fourth	TLD stolen

APPENDIX D
SUMMARY OF INTERLABORATORY COMPARISONS

TABLE D-1

US EPA CROSS-CHECK PROGRAM 1985

EPA PREPARATION	Date TI Mailed Results	Date EPA Issued Results	Media	Nuclide	EPA Results(a)	TI Results(b)	Norm Dev. (Known)(d)	** Warning *** Action
01/04	02/01/85	04/04/85	Water	Sr-89	3.0 ± 8.7	L.T. 3.	--	
				Sr-90	30. ± 2.6	29.9 ± 12.	-0.8	
01/11	02/15/85	03/15/85	Water	Pu-239	15.7 ± 2.8	19. ± 3.	3.6	***(d)
01/18	02/15/85	03/15/85	Water	Gross Alpha	5.0 ± 8.7	5. ± 0.	0.0	
				Gross Beta	15.0 ± 8.7	15.0 ± 3.	0.1	
01/25	03/08/85	04/15/85	Food (c)	Sr-89	34.0 ± 8.7	17.0 ± 0.	-5.89	***(e)
				Sr-90	26.0 ± 2.6	22.0 ± 6.	-4.62	***(e)
				I-131	35.0 ± 10.4	26.3 ± 6.2	-2.50	**
				Cs-137	29.0 ± 8.7	31.0 ± 10.4	0.69	
				K	1382.0 ±207.9	1393.0 ± 96.4	0.16	
02/02	03/12/85	04/08/85	Water	H-3	3796. ±634.	3933. ±174.	0.6	
02/08	03/11/85	04/08/85	Water	Cr-51	48. ± 8.7	L.T. 57.	--	
				Co-60	20. ± 8.7	19.0 ± 6.	-0.5	
				Zn-65	55. ± 8.7	57. ± 6.	0.7	
				Ru-106	25. ± 8.7	L.T. 40.	--	
				Cs-134	35. ± 8.7	37.0 ± 12.	0.8	
				Cs-137	25. ± 8.7	31.0 ± 6.	2.0	
02/22	04/04/85	04/15/85	Water	Uranium	12.0 ± 10.4	12.0 ± 3.	0.1	
03/01	03/20/85	06/10/85	Milk	I-131	9. ± 1.6	8.0 ± 3.	-1.9	
03/15	05/09/85	06/07/85	Water	Ra-226	5.0 ± 1.3	5.9 ± 2.1	2.0	**
				Ra-228	9.0 ± 2.3	5.1 ± 1.8	-5.0	***(f)
03/29	05/13/85	07/02/85	Air Filter	Gross Alpha	10.0 ± 8.7	10.33 ± 1.7	0.11	
				Gross Beta	36.0 ± 8.7	36.66 ± 7.5	0.23	
				Sr-90	15.0 ± 2.6	14.66 ± 1.7	-0.38	
				Cs-137	6.0 ± 8.7	6.0 ± 0.0	0.00	
04/05	04/23/85	06/10/85	Water	I-131	7.5 ± 1.4	6.67 ± 1.7	-1.80	
04/12	05/09/85	06/10/85	Water	H-3	3559. ±630.	3367. ±963.	-0.9	

TABLE D-1

US EPA CROSS-CHECK PROGRAM 1985

EPA PREPARATION	Date TI Mailed Results	Date EPA Issued Results	Media	Nuclide	EPA Results(a)	TI Results(b)	Norm Dev. (Known)(d)	** Warning *** Action
04/19	06/28/85	08/15/85	Water (Sample A)	Gross Alpha	32.0 ± 8.7	25.33 ± 1.7	-2.31	**
				Ra-226	4.1 ± 1.0	3.66 ± 0.9	-1.25	
				Ra-228	6.2 ± 1.6	6.13 ± 0.7	.12	
				U	7.0 ± 10.4	6.67 ± 1.7	-0.10	
04/19	06/28/85	08/15/85	Water (Sample B)	Gross Beta	72.0 ± 8.7	92.33 ± 9.6	7.04	***(g)
				Sr-89	10.0 ± 8.7	10.0 ± 0.0	0.00	
				Sr-90	15.0 ± 2.6	13.33 ± 3.5	-1.92	
				Co-60	15.0 ± 8.7	20.0 ± 5.2	1.73	
				Cs-134	15.0 ± 8.7	14.66 ± 3.5	-0.11	
				Cs-137	12.0 ± 8.7	16.33 ± 9.6	1.50	
04/26	05/13/85	06/13/85	Urine	H-3	3056. ±622.	2833. ±345.	-1.1	
05/10	07/05/85	08/05/85	Water	Sr-89	39.0 ± 8.7	35.66 ± 9.2	-1.15	
				Sr-90	15.0 ± 2.6	12.66 ± 1.7	-2.69	**
05/24	06/18/85	08/09/85	Water	Gross Alpha	12.0 ± 8.7	12.00 ± 5.2	0.00	
				Gross Beta	11.0 ± 8.7	12.66 ± 1.7	0.58	
06/07	07/15/85	08/12/85	Water	Cr-51	44.0 ± 8.7	L.T. 53.3	--	
				Co-60	14.0 ± 8.7	15.66 ± 3.5	0.58	
				Zn-65	47.0 ± 8.7	48.33 ± 7.5	0.46	
				Ru-106	62.0 ± 8.7	53.67 ± 9.6	-2.88	**
				Cs-134	35.0 ± 8.7	33.0 ± 13.1	-0.69	
				Cs-137	20.0 ± 8.7	23.33 ± 6.2	1.15	
06/14	07/12/85	08/06/85	Water	H-3	2416.0 ±608.0	2366.66 ±346.4	-0.24	
06/21	08/16/85	09/19/85	Water	Ra-226	3.1 ± 0.7	3.86 ± 0.18	2.82	**
				Ra-228	4.2 ± 1.0	3.66 ± 2.0	-1.46	
06/28	09/06/85	10/10/85	Milk	Sr-89	11.00 ± 8.7	11.66 ± 3.5	0.23	
				Sr-90	11.00 ± 2.6	10.00 ± 0.0	-1.15	
				I-131	11.00 ± 10.4	9.00 ± 3.0	-0.58	
				Cs-137	11.00 ± 8.7	11.00 ± 7.9	0.00	
				K	1525.0 ±131.6	1540.0 ±103.9	0.34	

TABLE D-1

US EPA CROSS-CHECK PROGRAM 1985

EPA PREPARATION	Date TI Mailed Results	Date EPA Issued Results	Media	Nuclide	EPA Results(a)	TI Results(b)	Norm Dev. (Known)(d)	** Warning *** Action
07/05	07/30/85	08/19/85	Urine	H-3	2444.0 ±610.0	2066.66 ±624.5	-1.85	
07/13	09/06/85	09/30/85	Water	Pu-239	10.6 ± 1.9	8.20 ± 2.2	-3.78	***(h)
07/19	08/16/85	09/19/85	Water	Gross Alpha	11.0 ± 8.7	5.67 ± 1.7	-1.84	
				Gross Beta	8.0 ± 8.7	4.33 ± 1.7	-1.27	
07/26	10/04/85	12/09/85	Food (c)	Sr-89	33.0 ± 8.7	25.33 ± 6.2	<2.65	**
				Sr-90	26.0 ± 2.6	28.33 ± 4.6	2.69	**
				I-131	35.0 ± 10.4	37.33 ± 4.6	0.67	
				Cs-137	29.0 ± 8.7	31.00 ± 3.0	0.69	
				K	1514.0 ±131.6	1633.33 ±154.0	2.72	**
08/09	09/19/85	10/10/85	Water	I-131	33.0 ± 10.4	36.66 ± 4.6	1.05	
08/16	09/13/85	10/07/85	Water	H-3	4480.0 ±776.0	4433.3 ±458.3	-0.18	
08/23	09/19/85	11/04/85	Water	U	4.0 ± 10.4	4.33 ± 1.7	0.10	
08/30	10/30/85	12/30/85	Air Filter	Gross Alpha	13.0 ± 8.7	12.66 ± 1.7	-0.11	
				Gross Beta	44.0 ± 8.7	43.00 ± 9.0	-0.34	
				Sr-90	18.0 ± 2.6	20.00 ± 3.0	2.31	**
				Cs-137	8.0 ± 8.7	10.00 ± 3.0	0.69	
09/06	10/10/85	12/24/85	Water	Sr-89	20.0 ± 8.7	18.33 ± 4.6	-0.58	
				Sr-90	7.0 ± 2.6	6.00 ± 0.00	-1.15	
09/13	11/06/85	12/16/85	Water	Ra-226	8.9 ± 2.3	9.23 ± 1.5	0.43	
				Ra-228	4.6 ± 1.2	4.03 ± 0.6	-1.42	
09/20	10/07/85	12/16/85	Water	Gross Alpha	8.0 ± 8.7	3.33 ± 1.7	-1.61	
				Gross Beta	8.0 ± 8.7	4.00 ± 0.00	-1.38	
10/04	11/14/85	01/08/86	Water	Cr-51	21.00± 8.7	L.T. 63.	--	
				Co-60	20.00± 8.7	17.66 ± 9.6	-0.81	
				Zn-65	19.00± 8.7	25.33 ± 7.5	2.19	**
				Ru-106	20.00± 8.7	L.T. 37.	--	
				Cs-134	20.00± 8.7	18.33 ± 9.2	-0.58	
				Cs-137	20.00± 8.7	22.33 ± 3.5	0.81	
10/11	11/05/85	12/24/85	Water	H-3	1974.0 ±598.	2133.33 ±624.5	0.80	

TABLE D-1

US EPA CROSS-CHECK PROGRAM 1985

Collection Date	Media	Nuclide	EPA-Results(a)	Teledyne Isotopes Results(b)

NOTES:

(a) EPA Results-Expected laboratory precision (3 sigma). Units are pCi/ℓ for water, urine, and milk except K is in mg/ℓ. Units are total pCi for air particulate filters.

(b) Teledyne Results - Average ± three sigma. Units are pCi/ℓ for water, urine, and milk except K is in mg/ℓ. Units are total pCi for air particulate filters.

(c) Units for food analysis are pCi/kg.

(d) The history of this analysis indicates no problem with the chemistry. The high result is possibly technician related and sources of error have been discussed with the technician.

(e) The results from the EPA were received on August 09, 1985 for the analysis completed in April. The EPA had difficulty determining the correct results for this sample. It was difficult to scavenge and the results were reported as a courtesy although they were considered suspect because of the difficulty of analyzing a synthetic food sample.

(f) A new chemistry was tried but did not give good results. A further refinement of the chemistry is planned.

(g) The proportional counters are calibrated for beta efficiency with Cs-137. The efficiency correction applied for the low energy beta emitters overcompensated because the amount of the low energy emitters was small compared with the high energy emitters.

(h) A new Pu-239 standard solution was prepared and a new Pu disc was ordered from NBS to check the efficiency calibration of the counters.

TABLE D-2

SEVENTH INTERNATIONAL INTERCOMPARISON OF ENVIRONMENTAL DOSIMETER RESULTS

	DELIVERED EXPOSURES (mR)		ALL PARTICIPANTS RESULTS (mR) (a)				LP&L'S RESULTS (mR) (b)			
	Estimate	Uncertainty	Mean	SD (c)	% SD	N (d)	Exposure	Uncertainty	% Error (e)	ND (f)
Laboratory Exposures										
From Cesium-137 (g)	75.0	3.8	73.0	11.1	15.2	185	75.0	12.0	0.0	0.20
From Cobalt-60 (h)	79.9	4.0	77.9	13.8	17.7	184	64.0	7.8	-19.9	-1.0
Field Exposures (h)	75.8	6.0	75.1	14.9	19.8	184	70.0	8.9	- 7.6	-0.3

(a) Results of all participants in the Intercomparison Study.
(b) Results based on using Panasonic UD-814 AQ TLDs.
(c) SD stands for Standard Deviation.
(d) N stands for Number of results.
(e) % Error is a measure of how much LP&L's results differed from the estimated delivered exposure:

$$\% \text{ Error} = \frac{(\text{LP\&L's Exposure} - \text{Delivered Exposure}) \times 100}{\text{Delivered Exposure}}$$

(f) ND stands for "Normalized Deviation". It is a measure of how many standard deviations LP&L results were from all participants' results.

$$\text{ND} = \frac{\text{All participants' Results mean} - \text{LP\&L Exposure}}{\text{All Participants' SD}}$$

(g) Results of all dosimeter types for all participants' results.
(h) Results of all dosimeter types for all participants' results with one outliner excluded.

APPENDIX E
SYNOPSES OF ANALYITICAL PROCEDURES

E-1.0 ANALYSIS OF SAMPLES FOR GROSS BETA ACTIVITY

E-1.1 Air Particulates

After a delay of three or more days, allowing for the radon-222 and radon-220 daughter products to decay, the particulate filters were counted in a gas-flow proportional counter.

E-1.1 Water

A known volume (usually one liter) of water is evaporated to near dryness, transferred to a two inch diameter ringed planchet, and then evaporated to dryness. The planchet was then counted for 50 minutes in an automatic alpha-beta counter.

E-2.0 ANALYSIS OF WATER SAMPLES FOR TRITIUM

One milliliter of water was added to 20 milliliters of liquid scintillation solution in a 25 milliliter vial. The sample was then counted for 100 minutes in a liquid scintillation counter.

E-3.0 ANALYSIS OF SAMPLES FOR IODINE-131

E-3.1 Milk and Water

Two liters of sample were first equilibrated with stable iodide carrier. A batch treatment with anion exchange resin was used to remove iodine from the sample. The iodine was then stripped from the resin with sodium hypochlorite solution, reduced with hydroxylamine hydrochloride, and then extracted into carbon tetrachloride as free iodine. It was then back-extracted as iodide into sodium bisulfite solution and precipitated as palladium iodide. The precipitate was weighed for chemical yield and mounted on a nylon planchet for low level beta counting. The chemical yield was corrected by measuring the stable iodide content of the milk or the water with a specific ion electrode.

E-3.2 Broad Leaf Vegetation

Stable iodide carrier was first added to a measured weight of chopped sample. The sample was then leached with sodium hydroxide solution, evaporated to dryness, and fused in a muffle furnace. The melt was dissolved in water, filtered, and treated with sodium hypochlorite. The iodine was then reduced with hydroxylamine hydrochloride and extracted into chloroform. It was then back-extracted as iodide into sodium bisulfite solution and precipitated as palladium iodide. The precipitate was weighed for chemical yield and mounted on a nylon planchet for low level beta counting. The chemical yield was corrected for the natural, stable iodide content of the sample by use of a specific ion electrode on a separate aliquot (without carrier added) of the sample.

E-4.0 GAMMA SPECTROSCOPY ANALYSIS

E-4.1 Milk and Water

A one liter Marinelli beaker was filled with a representative aliquot of the sample. The sample was then counted for 1000 minutes with a shielded Ge(Li) detector coupled to a mini-computer-based data acquisition system which performed pulse height analysis.

E-4.2 Vegetation, Food and Garden Crops, and Fish

As much as possible (without drying) of a vegetation, food, or garden crop sample was loaded into a tared one liter Marinelli beaker and weighed. The sample was then counted for 1000 minutes with a shielded Ge(Li) detector coupled to a mini-computer-based data acquisition system which performed pulse height analysis.

As much as possible (up to the total sample) of the edible portion of a fish was loaded into a tared Marinelli beaker and weighed. The sample was then counted for 1000 minutes with a shielded Ge(Li) detector coupled to a mini-computer-based data acquisition system which performed pulse height analysis.

E-4.3 Soils and Sediment

Soils and sediments were dried at low temperatures, less than 100 degrees Centigrade. The soil or sediment was loaded into a tared, standard 300 ml container and weighed. The sample was then counted for at least six hours with a shielded Ge(Li) detector coupled to a mini-computer-based data acquisition system which performed pulse height analysis.

E-4.4 Charcoal Cartridges (Air Iodine)

Charcoal cartridges were counted up to five at a time, with one positioned on the face of a Ge(Li) detector and up to four on the side of the Ge(Li) detector. Each Ge(Li) detector was calibrated for both positions. The detection limit for iodine-131 of each charcoal cartridge was determined (assuming no positive iodine-131) uniquely from the volume of air which passed through it. In the event iodine-131 was observed in the initial counting of a set, each charcoal cartridge was then counted separately, positioned on the face of the detector.

E-4.5 Air Particulates

The weekly air particulate filters for a quarterly composite from each field station were aligned one in front of another and then counted for at least six hours with a shielded Ge(Li) detector coupled to a mini-computer-based data acquisition system which performed pulse height analysis.

E-4.6 Computer Software

A mini-computer software program defined peaks by certain changes in the slope of the spectrum. The program also compared the energy of each peak with a library of peaks for isotope identification and then performed the radioactivity calculation using the appropriate fractional gamma ray abundance, half life, detector efficiency, and net counts in the peak region.

E-5.0 ENVIRONMENTAL DOSIMETRY

Thermoluminescent Dosimeters (TLDs) manufactured by Panasonic (model UD-814AQ) were used for environmental dosimetry. The Panasonic TLDs contained one lithium borate and three calcium sulfate phosphor elements. However, only the calcium sulfate phosphor elements were used. An annealed dosimeter was placed inside a plastic bag and mounted in an aluminum frame prior to placement in the field. The dosimeters were exchanged every quarter. The exposures of the collected dosimeters were read using an automatic TLD reader manufactured by Panasonic (Model UD-710).

APPENDIX F
STATISTICAL ANALYSES

F-1.0 CALCULATION OF MEAN AND STANDARD DEVIATION

The mean and standard deviation for different groups of analyses were calculated using the following equations:

$$(F\text{-}1) \qquad \bar{x} = \frac{\sum_{i=1}^{n_x} x_i}{n_x}$$

$$(F\text{-}2) \qquad s = \left(\frac{\sum_{i=1}^{n_x} x_i^2 - (n_x)(\bar{x})^2}{(n_x - 1)} \right)^{0.5}$$

where:

$\bar{x}$ = mean of sample population,
s = standard deviation of sample population,
n_x = number of samples in sample population, and
x_i = value of the ith sample.

F-2.0 COMPARING TWO SAMPLE POPULATION MEANS

The means of two sample populations can be compared for a statisical difference using the standard "t" test. The use of the test requires the assumption that the data within the populations are normally distributed and that the true standard deviations of the mean are equal for both populations. The standard "t" test tests the hypothesis that the true means of both populations are equal. The "t" value can be calculated from the equation below (obtained from the CRC Standard Mathematical Tables, 26th Edition (1981)):

$$(F\text{-}3) \qquad t = \frac{(\bar{x} - \bar{y})}{\left(\frac{(n_x - 1)s_x^2 + (n_y - 1)s_y^2}{n_x + n_y - 2} \right)^{0.5} \left(\frac{1}{n_x} + \frac{1}{n_y} \right)^{0.5}}$$

where:

t = calculated "t" value,
$\bar{x}$ = mean of first data set,
$\bar{y}$ = mean of second data set,
n_x = number of variables in first data set,
s_x = standard deviation of first data set,
n_y = number of variables in second data set, and
s_y = standard deviation of second data set.

If the data from both sample populations are treated as correlated pairs, the difference between individual measurements can be examined using the statistical "t" test. In this case, if the true means and true standard deviations for the sample populations are equal, the difference between the correlated data points should be normally distributed about a mean of zero. The "t" value can then be calculated from the following equation (obtained from the CRC Standard Mathematical Tables, 26th Edition (1981)):

$$(F\text{-}4) \qquad t = \frac{\bar{d}\ (n)^{0.5}}{s_d}$$

where:

$\bar{d}$ = the average of the difference between the correlated data points from the two sample populations:

$$\bar{d} = \sum_{i=1}^{N} (x_i - y_i)/N$$

x_i = the ith data point from population x,
y_i = the ith data point from population y,
N = the number of correlated pairs of data points, and
s_d = the standard deviation of the difference between the correlated data points.

The calculated "t" value in both cases is used to test the hypothesis that the true mean of the first population (μ_x) is equal to the true mean of the second population (μ_y) assuming that the true standard deviations of both populations are equal ($\sigma_x = \sigma_y$). The calculated "t" value is compared to a tabular "t" value such that:

a. if $t > t_{\alpha,n}$ then reject the hypothesis when $\mu_x > \mu_y$,

b. if $t < -t_{\alpha,n}$ then reject the hypothesis when $\mu_x < \mu_y$,

c. if $|t| > t_{\alpha/2,n}$ then reject the hypothesis when $\mu_x \neq \mu_y$,

where $t_{\alpha/2,n}$ and $t_{\alpha,n}$ are the tabular "t" values, with a preselected error (5 percent in this case), confidence level $(1-\alpha)$ or $(1-\alpha/2)$, and degrees of freedom n ($n=n_X+n_Y-2$ and $n=N-1$ for Equations F-3 and F-4, respectively). Tabular values of "t" were obtained from the CRC Standard Mathematical Tables, 26th Edition (1981).

F-3.0 TLD MEASUREMENTS

The TLD measurements made during 1985 were grouped into categories based on distance from the plant. The means and standard deviations obtained for each category are given in Table F-1. The mean dose from the stations located more than five miles away from the plant were compared to the mean dose from stations located within two miles from the plant and to the mean dose from stations located between two and five miles from the plant using the standard "t" test. The "t" values were calculated using Equation F-3 and are given in Table F-1. Comparing the calculated and tabular "t" values show that the mean dose for stations within two miles from the plant is statistically lower than the mean dose from stations located greater than five miles from the plant. The mean dose for stations located between two and five miles from the plant is statistically the same as the mean dose for stations located more than five miles from the plant.

F-4.0 GROSS BETA ACTIVITY ON AIR PARTICULATE FILTERS

The means and standard deviations for airborne gross beta results obtained during 1985 from the control and indicator stations are given in Table F-2. The mean from each indicator station was compared to the mean from the control station using the standard "t" test to determine if there was a statistical difference. The calculated (using Equation F-3) and tabular "t" values for each indicator/control station comparison are given in Table F-2. Comparing the calculated and tabular values indicate that there is no statistical difference between the means from each indicator location and the mean from the control location.

F-5.0 GROSS BETA ACTIVITY IN MONTHLY DRINKING WATER COMPOSITES

The means and standard deviations for gross beta activity detected in the monthly drinking water composites obtained during 1985 from the control and indicator stations are given in Table F-3. The mean from each indicator station was compared to the mean from the control station using the standard "t" test to determine if there was a statistical difference. The calculated

(using Equation F-3) and tabular "t" values for each indicator/control station comparison are given in Table F-3. Comparing the calculated and tabular values indicate that there is no statistical difference between indicator station DWE-5 and control station DWP-7 means. However, there is a statistical difference between the means from indicator station DWG-2 and control station DWP-7.

In order to determine if this difference resulted from the operation of Waterford 3 SES, data obtained in 1985 were compared to data obtained in 1984. Monthly gross beta activity data from each indicator and control location were treated as correlated pairs. The differences between monthly measurements obtained from each indicator and control station samples were calculated and averaged for 1984 and 1985. The results of these calculations are presented in Table F-4. The "t" values for each indicator/control station difference were calculated using Equation F-4 and are given in Table F-4. Comparing the calculated "t" values to the tabular "t" values show that the means for data from station DWG-2 were statistically larger than the means from control station DWP-7 during both 1984 and 1985. The means for data from indicator location DWE-5 and control station DWP-7 were statistically the same during 1984 and 1985.

As further comparison, the average of the indicator/control station differences obtained during 1984 and 1985 were compared to each other using the standard "t" test. The "t" values were calculated using Equation F-3. The calculated and tabular "t" values are presented in Table F-4. Comparing these values indicate that there was no statistical difference between the results observed during 1984 prior to Waterford 3 SES initial criticality and the results obtained during 1985. Thus the difference between indicator station DWG-2 and control station DWP-7 gross beta results were deemed to be unrelated to Waterford 3 SES operation.

TABLE F-1

STATISTICAL COMPARISON OF TLD MEASUREMENTS FROM
STATIONS GROUPED BY DISTANCE FROM WATERFORD 3 SES

	0-2 Miles from the Plant	Stations Located 2-5 Miles from the Plant	Stations Located more than 5 Miles from the Plant
Mean (mrem/std. qtr.)	16	17	18
Standard Deviation (mrem/std. qtr.)	1.6	3.0	3.4
Number in Sample	58	26	32
Calculated "t" Value to Comparisons with Stations Located more than 5 miles from the plant	-3.794	-1.153	NA
Tabular "t" Value at 95% Confidence ($t_{0.025,n}$)	1.664 (a)	2.010	NA

a. Used value for $t_{0.025,n}$. Results indicate that the mean for station located 0-2 miles from the plant is statistically lower than stations located more than 5 miles from the plant.

NA Means not applicable

TABLE F-2

STATISTICAL COMPARISON OF GROSS BETA ACTIVITY

ON AIR PARTICULATE FILTERS FOR 1985

	STATION				
	APC-1	APG-1	APP-1	APQ-1	APE-30
Mean (10^{-3}pCi/m^3)	2.2	2.1	2.1	2.1	2.2
Standard Deviation (10^{-3}pCi/m^3)	0.6	1.0	0.7	0.8	1.0
Number in Sample	48	50	51	51	51
Calculated "t" Value Comparing Control Station (APE-30) to Indicate Station	NA	-0.492	-0.664	-0.604	NA
Tabular "t" Valve at 95% Condidence ($t_{0.025,n}$)	NA	1.99	1.99	1.99	NA

NA Means not applicable

TABLE F-3

STATISTICAL COMPARISON OF GROSS BETA ACTIVITY

IN MONTHLY DRINKING WATER COMPOSITES FOR 1985

	STATION		
	DWG-2	DWE-5	DWP-7
Mean (pCi/l)	7.9	5.0	5.7
Standard Deviation (pCi/l)	1.7	1.0	1.2
Number in Sample	12	12	12
Calculated "t" Value Comparing Control Station (DWP-7) to Indicator Station	3.506	-1.486	NA
Tabular "t" Value at 95% Confidence ($t_{0.025,n}$)	2.074 (a)	2.074	NA

a. Results from station DWG-2 are statistically larger than results from station DWP-7

NA Means not applicable

TABLE F-4

STATISTICAL COMPARISON OF GROSS BETA ACTIVITY

IN MONTHLY DRINKING WATER COMPOSITES FOR 1984 and 1985

	Difference of Monthly Results from Stations DWG-2 and DWP-7		Difference of Monthly Results from Stations DWE-5 and DWP-7	
	for 1984	for 1985	for 1984	for 1985
Mean (pCi/l)	1.9	2.3	-0.1	0.7
Standard Deviation (pCi/l)	1.5	1.8	1.7	1.9
Number in Sample	12	12	12	12
Calculated "t" Value Comparing Control/Indicator Station Difference	4.388	4.426	-0.204	1.276
Tabular "t" Value Comparing Control/Indicator Station Difference at 95% Confidence ($t_{0.025,p}$)	2.201	2.201	2.201	2.201
Calculated "t" Value Comparing 1984 Results to 1985 Results	-0.566	NA	-1.041	NA
Tabular "t" Value Comparing 1984 Results to 1985 Results at 95% Confidence ($t_{0.025,n}$)	2.074	NA	2.074	NA

NA Means not applicable

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April 30, 1986

W3P86-0078
A4.05
QA

Mr. Robert D. Martin
Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 1000
Arlington, TX 76011

Subject: Waterford 3 SES
Docket No. 50-382
License No. NPF-38
Radiological Environmental Monitoring Report

Dear Mr. Martin:

Enclosed is the subject 1985 annual report on radiological environmental monitoring which covers the period of January 1 through December 31, 1985. This report is submitted per Section 6.9.1.7 in the Waterford 3 Technical Specifications (NUREG-1117) of Appendix A to Facility Operating License No. NPF-38.

Very truly yours,

K.W. Cook
Nuclear Support & Licensing Manager

KWC:GEW:ssf

Enclosure

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