

RETURN TO REACTOR DOCKET
FILES

Omaha Public Power District Fort Calhoun Station Unit No. 1

Semi Annual Report
for
Technical Specification

Section 5.9.4
and Appendix B

RETURN TO REACTOR DOCKET
FILES

50-285
Ltr 8.30.79
7909070323

January 1, 1979 to June 30, 1979 inclusive

— NOTICE —

THE ATTACHED FILES ARE OFFICIAL RECORDS OF THE
DIVISION OF DOCUMENT CONTROL. THEY HAVE BEEN
CHARGED TO YOU FOR A LIMITED TIME PERIOD AND
MUST BE RETURNED TO THE RECORDS FACILITY
BRANCH 016. PLEASE DO NOT SEND DOCUMENTS
CHARGED OUT THROUGH THE MAIL. REMOVAL OF ANY
PAGE(S) FROM DOCUMENT FOR REPRODUCTION MUST
BE REFERRED TO FILE PERSONNEL.

ENVIRO 50-285

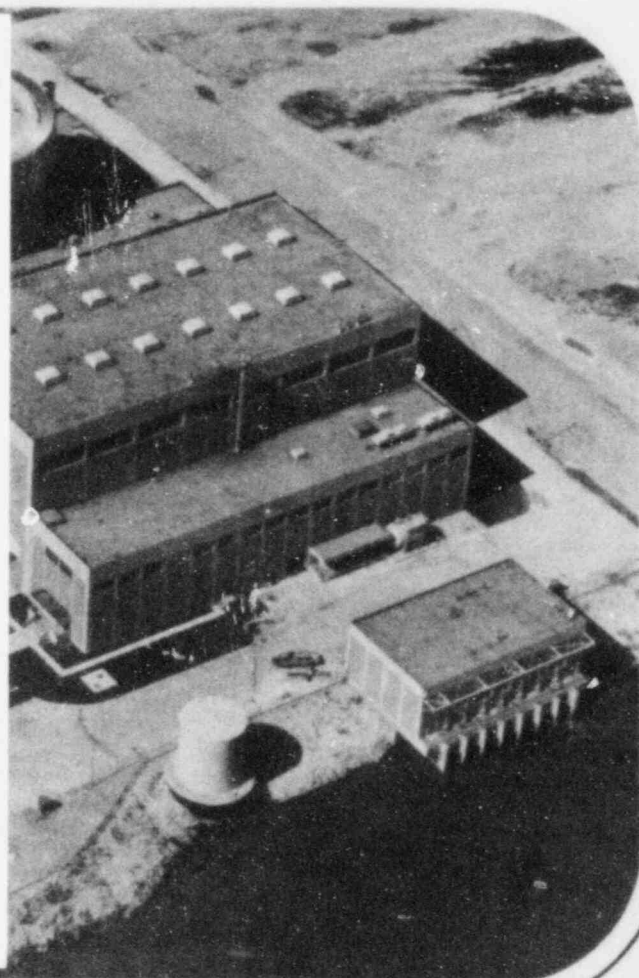
DEADLINE RETURN DATE

RETURN TO REACTOR DOCKET

FILES Ltr 8.30.79

7909070323

RECORDS FACILITY BRANCH



Docket No. 50-285

Operating License No. DPR-40

7909070328

7909070328

TABLE OF CONTENTS

SECTION

I	Radioactive Effluent Releases - Gaseous Effluents Technical Specification (5.9.4.a.1)
	Table 1-A Summation of All Releases
	Table 1-B Not Applicable
	Table 1-C Summation of All Releases
II	Radioactive Effluent Releases - Liquid Effluents Technical Specification (5.9.4.a.2)
	Table 2-A Summation of All Releases
	Table 2-B Summation of All Releases
III	Radioactive Effluent Releases - Solid Radioactive Waste Technical Specification (5.9.4.a.3)
IV	Joint Frequency Distribution Wind Direction vs. Wind Speed by Stability Class and Meteorology Data Per Batch Release (Regulatory Guide 1.21)
V	Environmental Monitoring (5.9.4.b)
VI	Environmental Technical Specifications - Non-Radiological (Appendix B)
VII	Potential Doses to Individuals and Populations (As Required by Safety Guide 23, Regulatory Guide 1.21)

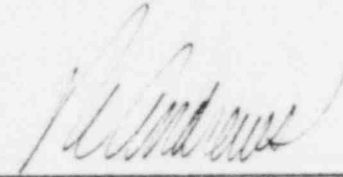
RETURN TO REACTOR DOCKET
FILES

ENVU120
50-285
Ltr 8-30-79
7909070323

INTRODUCTION

This report is submitted in accordance with Section 5.9.4 and Appendix B of the Technical Specifications of the Fort Calhoun Station Unit No. 1, Facility Operating License No. DPR-40.

This report covers only the period January 1, 1979, through June 30, 1979, inclusive.



R. L. Andrews
Manager
Fort Calhoun Station

50-285
FORT CALHOUN

Section I

RADIOACTIVE EFFLUENT RELEASES - GASEOUS EFFLUENTS
TECHNICAL SPECIFICATION (5.9.4.a.1)

Table 1-A Gaseous Effluents-Summation of All Releases

Table 1-B Not Applicable

Table 1-C Gaseous Effluents-Summation of All Releases

January 1, 1979 to June 30, 1979

I. Radioactive Effluent Release (5.9.4.a.1)

A. GASEOUS EFFLUENTS

Radioactive gaseous releases for the reporting period totalled 210.1 Curies of inert gases. The highest release rate was $6.62\text{E}+01$ $\mu\text{Ci/sec.}$ or 0.08% of the Technical Specification Limit (83,000 $\mu\text{Ci/sec.}$). Averaged over each calendar quarter of the reporting period, the gross gaseous activity release rates were $1.16\text{E}+01$ $\mu\text{Ci/sec.}$ or 0.014% and $1.53\text{E}+01$ $\mu\text{Ci/sec.}$ or 0.018% for each quarter respectively of the maximum release rate of the Technical Specifications (83,000 $\mu\text{Ci/sec.}$). This is 0.087% and 0.115% respectively of the 16% value specified (13,280 $\mu\text{Ci/sec.}$).

Radioactive halogens and particulates with half-lives greater than eight days released during the reporting period totalled $6.61\text{E}-04$ Curies. The highest release rate for halogens with half-lives greater than eight days was $1.38\text{E}-04$ $\mu\text{Ci/sec.}$ or 0.14% of the maximum release rate of the Technical Specifications (0.094 $\mu\text{Ci/sec.}$). The highest release rate for particulates with half-lives greater than eight days was $5.65\text{E}-06$ $\mu\text{Ci/sec.}$ or 0.28% of the maximum release rate of the Technical Specifications (0.002 $\mu\text{Ci/sec.}$). Averaged over each calendar quarter of the reporting period, the halogen release rates were $3.79\text{E}-05$ $\mu\text{Ci/sec.}$ or 0.04% and $4.38\text{E}-05$ $\mu\text{Ci/sec.}$ or 0.05% for each quarter respectively of the maximum release rate of the Technical Specifications (0.094 $\mu\text{Ci/sec.}$). This is 0.50% and 0.58% respectively of the 8% value specified (0.0075 $\mu\text{Ci/sec.}$). Averaged over each calendar quarter of the reporting period, the particulate release rates

were $1.07\text{E}-06$ $\mu\text{Ci/sec.}$ or 0.054% and $1.61\text{E}-06$ $\mu\text{Ci/sec.}$ or 0.081% for each quarter respectively of the maximum release rate of the Technical Specifications (0.002 $\mu\text{Ci/sec.}$). This is 0.67% and 1.01% respectively of the 8% value specified ($1.6\text{E}-04$ $\mu\text{Ci/sec.}$).

Radioactive tritium released during the reporting period totalled $6.87\text{E}-01$ Curies. Gross alpha radioactivity released during the reporting period totalled $6.19\text{E}-07$ Curies.

TABLE 1A

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS-FORMATION OF ALL RELEASES

SEMIANNUAL FOR JAN 1970-JUN 79

		1 QUARTER			2 QUARTER					
NUCLIDES IN CURIES	CONF	DECAY	RM000	TOTAL	CONF	DECAY	RM050	TOTAL		
A. FISSION-ACTIVATION GASES										
TOTAL RELEASE	CI	8.53E+01	4.79E+00	0.0	9.01E+01	1.20E+02	7.50E-02	0.0	1.20E+02	
AVG RELEASE RATE FOR PERIOD	UCI/SEC	1.10E+01	6.16E-01	0.0	1.16E+01	1.53E+01	9.54E-03	0.0	1.53E+01	
PERCENT OF LIMIT TECH SPEC = 13280	%	8.26E-02	4.64E-03	0.0	8.72E-02	1.15E-01	7.18E-05	0.0	1.15E-01	
B. IODINES										
TOTAL RELEASE IODINE = 131	CI	0.0	0.0	2.95E-04	2.95E-04	0.0	0.0	3.45E-04	3.45E-04	
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.0	0.0	3.79E-05	3.79E-05	0.0	0.0	4.38E-05	4.38E-05	
PERCENT OF LIMIT TECH SPEC = .66752	%	0.0	0.0	5.04E-01	5.04E-01	0.0	0.0	5.83E-01	5.83E-01	
C. PARTICULATES										
PARTICULATES WITH HALF LIVES .61- 8 DAYS	CI	0.0	0.0	8.30E-06	8.30E-06	0.0	0.0	1.26E-05	1.26E-05	
AVG RELEASE RATE FOR PERIOD	UCI/SEC	0.0	0.0	1.07E-06	1.07E-06	0.0	0.0	1.61E-06	1.61E-06	
PERCENT OF LIMIT TECH SPEC = .00016	%	0.0	0.0	6.67E-01	6.67E-01	0.0	0.0	1.01E+00	1.01E+00	
GROSS ALPHA RADIOACTIVITY	CI	0.0	0.0	1.24E+07	1.24E+07	0.0	0.0	4.95E+07	4.95E+07	
D. TRITIUM										
TOTAL RELEASE	CI	2.53E+01	5.09E+02	0.0	3.04E+01	3.81E+01	1.20E+03	0.0	3.83E+01	
AVG RELEASE RATE FOR PERIOD	UCI/SEC	1.26E+02	6.59E+03	0.0	3.91E+02	4.85E+02	1.53E+04	0.0	4.87E+02	
PERCENT OF LIMIT TECH SPEC = 1000	%									

TABLE 1C
EFFLUENT AND WASTE DISPOSAL REPORT
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JAN THRU JUN 79

NUCLIDES IN CURIES	1 QUARTER				2 QUARTER			
	CONT	DECAY	PM1060	TOTAL	CONT	DECAY	PM1060	TOTAL
FISSION GASES								
XENON-133	8.23E+01	3.94E+00	0.0	8.63E+01	1.16E+02	2.42E-02	0.0	1.16E+02
KRYPTON-85M	53.01E-02	6.55E-02	0.0	9.56E-02	52.57E-02	51.25E-06	0.0	52.58E-02
KRYPTON-88	6.67E-02	5.93E-02	0.0	1.26E-01	7.53E-02	52.75E-06	0.0	7.53E-02
XENON-133M	6.68E-01	4.60E-02	0.0	7.14E-01	7.28E-01	55.64E-06	0.0	7.28E-01
XENON-135	9.18E-01	4.67E-01	0.0	1.39E+00	1.11E+00	8.80E-07	0.0	1.11E+00
KRYPTON-87	1.29E-02	2.07E-02	0.0	3.36E-02	2.57E-02	51.22E-06	0.0	2.57E-02
XENON-138	56.62E-03	52.43E-06	0.0	56.62E-03	52.36E-03	51.04E-06	0.0	52.36E-03
KRYPTON-85	57.67E-01	1.03E-01	0.0	9.50E-01	1.89E+00	5.08E-02	0.0	1.94E+00
XENON-135M	51.60E-03	55.93E-07	0.0	51.60E-03	51.54E-03	53.93E-07	0.0	51.54E-03
ARGON-41	5.20E-01	6.59E-03	0.0	5.27E-01	5.15E-01	52.21E-07	0.0	5.15E-01
TOTAL FOR PERIOD	8.53E+01	4.79E+00	0.0	9.01E+01	1.20E+02	7.50E-02	0.0	1.20E+02
IODINES								
IODINE-131 CTD.	0.0	0.0	2.95E-04	2.95E-04	0.0	0.0	3.45E-04	3.45E-04
IODINE-133 CTD.	0.0	0.0	5.34E-04	5.34E-04	0.0	0.0	1.06E-03	1.06E-03
IODINE-135 CTD.	0.0	0.0	54.38E-03	54.38E-03	0.0	0.0	51.65E-04	51.65E-04
TOTAL FOR PERIOD	0.0	0.0	1.02E-02	1.02E-02	0.0	0.0	1.57E-03	1.57E-03
PARTICULATES								
STRONTIUM-89	0.0	0.0	52.85E-08	52.85E-08	0.0	0.0	0.0*	0.0*
STRONTIUM-90	0.0	0.0	9.13E-08	9.13E-08	0.0	0.0	0.0*	0.0*
IODINE-131 PPF.	0.0	0.0	2.86E-07	2.86E-07	0.0	0.0	1.89E-06	1.89E-06
IODINE-133 PPF.	0.0	0.0	2.05E-06	2.05E-06	0.0	0.0	0.0	0.0
BARIUM-140	0.0	0.0	51.72E-06	51.72E-06	0.0	0.0	52.08E-06	52.08E-06
CESIUM-137	0.0	0.0	1.97E-06	1.97E-06	0.0	0.0	4.79E-06	4.79E-06
CESIUM-134	0.0	0.0	2.09E-06	2.09E-06	0.0	0.0	1.71E-06	1.71E-06
CORAL T-58	0.0	0.0	1.48E-06	1.48E-06	0.0	0.0	1.43E-06	1.43E-06
MANGANESE-54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
CORAL T-60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
IODINE-135 PPF.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LANTHANUM-140	0.0	0.0	56.30E-07	56.30E-07	0.0	0.0	57.44E-07	57.44E-07
TOTAL FOR PERIOD	0.0	0.0	1.03E-05	1.03E-05	0.0	0.0	1.26E-05	1.26E-05
ALPHA, TRITIUM & OTHER								
ALPHA	0.0	0.0	1.24E-07	1.24E-07	0.0	0.0	4.95E-07	4.95E-07
TRITIUM	2.53E-01	5.09E-02	0.0	3.04E-01	3.81E-01	1.20E-03	0.0	3.83E-01
GROSS BETA/GAMMA	0.0	0.0	3.38E-06	3.38E-06	0.0	0.0	7.13E-06	7.13E-06

* Strontium Analysis not completed.

Section II

RADIOACTIVE EFFLUENT RELEASES - LIQUID EFFLUENTS
TECHNICAL SPECIFICATION (5.9.4.a.2)

Table 2-A Liquid Effluents-Summation of All Releases

Table 2-B Liquid Effluents-Summation of All Releases

January 1, 1979 to June 30, 1979

II. Radioactive Effluent Releases (5.9.4.a.2)

B. LIQUID EFFLUENTS

During the six months a total of $1.26\text{E}-01$ Curies of radioactive liquid materials less tritium and dissolved noble gases were released to the Missouri River at an average concentration of $1.77\text{E}-10$ $\mu\text{Ci}/\text{ml}$. This represents 0.177% of the limits specified in Appendix B to 10 CFR Part 20 ($1.0\text{E}-07$ $\mu\text{Ci}/\text{ml}$) for unrestricted areas. The maximum concentration of total activity (excluding tritium) released to the unrestricted area and averaged during the release was $2.69\text{E}-07$ $\mu\text{Ci}/\text{ml}$ due to the inclusion of dissolved noble gases and large decay correction time.

Dilution water during the period amounted to $7.13\text{E}+11$ liters, while radioactive liquid waste volume was $6.84\text{E}+07$ liters including 120 batch releases and steam generator blowdown.

Additionally, 105.1 Curies of tritium were discharged at an average concentration of $1.47\text{E}-07$ $\mu\text{Ci}/\text{ml}$ or 0.005% of MPC ($3.0\text{E}-03$ $\mu\text{Ci}/\text{ml}$).

Gross alpha radioactivity released during the reporting period totalled $3.79\text{E}-05$ Curies and was discharged at an average concentration of $5.32\text{E}-14$ $\mu\text{Ci}/\text{ml}$ or $1.77\text{E}-04\%$ of MPC ($3.0\text{E}-08$ $\mu\text{Ci}/\text{ml}$).

During the two calendar quarters in the reporting period, $9.75\text{E}-02$ Curies and $2.87\text{E}-02$ Curies of radioactive liquids were released. This represents 0.97% and 0.28% of the 10 Curie per calendar quarter specified as the Technical Specification limit.

TABLE 2A

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JAN THRU JUN 79

1 QUARTER 2 QUARTER

A. FISSION&ACTIVATION PRODUCTS

TOTAL RELEASE (NO

TRITIUM,GAS,ALPHA) CI

9.75E-02 2.87E-02

AVG DILUTED

CONCENTRATION UCI/ML

2.74E-10 8.04E-11

PERCENT OF LIMIT

TECH SPEC = 3.0E-8 %

9.13E-01 2.68E-01

B. TRITIUM

TOTAL RELEASE CI

5.87E+01 4.64E+01

AVG DILUTED

CONCENTRATION UCI/ML

1.65E-07 1.30E-07

PERCENT OF LIMIT

TECH SPEC = 3.0E-3 %

5.50E-03 4.33E-03

C. DISSOLVED&ENTRAINED GASES

TOTAL RELEASE CI

3.38E-01 4.10E-01

AVG DILUTED

CONCENTRATION UCI/ML

9.50E-10 1.15E-09

PERCENT OF LIMIT %

D. GROSS ALPHA RADIOACTIVITY

TOTAL RELEASE CI

1.21E-05 2.58E-05

E. VOLUME OF WASTE RELEASE

PRIOR TO DIL. LITERS

3.64E+07 3.20E+07

F. VOLUME OF DILUTION WATER

THIS PERIOD LITERS

3.56E+11 3.57E+11

TABLE 2B

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

SEMIANNUAL FOR JAN THRU JUN 79

NUCLIDES IN CURIES	1 QUARTER		2 QUARTER	
	CONT	BATCH	CONT	BATCH
STRONTIUM-89	$\leq 3.18E-05$	$2.02E-04$	0.0*	0.0*
STRONTIUM-90	$\leq 3.18E-05$	$4.57E-05$	0.0*	0.0*
COBALT-57	$\leq 2.54E-04$	$\leq 2.58E-04$	$\leq 3.85E-04$	$\leq 5.68E-05$
MOLYBDENUM-99	$\leq 1.35E-04$	$\leq 2.68E-05$	$\leq 1.83E-04$	$\leq 1.55E-05$
TECHNETIUM-99M	$\leq 6.54E-05$	$\leq 1.30E-05$	$\leq 8.87E-05$	$\leq 7.54E-06$
CERIUM-141	$\leq 8.36E-04$	$\leq 1.47E-04$	$\leq 6.42E-04$	$\leq 9.86E-05$
TIN-117M	$\leq 3.84E-04$	$\leq 7.67E-05$	$\leq 3.64E-04$	$\leq 5.10E-05$
CHROMIUM-51	$\leq 3.27E-03$	$\leq 6.61E-04$	$\leq 4.48E-03$	$4.65E-04$
IODINE-131	$\leq 3.66E-04$	$5.77E-03$	$\leq 4.31E-04$	$6.95E-04$
IODINE-133	$\leq 4.77E-04$	$\leq 1.99E-04$	$\leq 5.54E-04$	$\leq 1.26E-04$
BARIUM-140	$\leq 7.13E-04$	$\leq 1.73E-04$	$\leq 7.15E-04$	$\leq 1.16E-04$
RUTHENIUM-103	$\leq 4.53E-04$	$\leq 7.69E-05$	$\leq 2.94E-04$	$\leq 4.41E-05$
CESIUM-137	$\leq 4.71E-04$	$4.20E-02$	$\leq 1.27E-03$	$6.98E-03$
ZIRCONIUM-95	$\leq 4.74E-04$	$\leq 6.14E-05$	$\leq 4.32E-04$	$\leq 5.38E-05$
NIOBIUM-95	$\leq 2.55E-04$	$\leq 5.58E-05$	$\leq 2.42E-04$	$\leq 3.69E-05$
CESIUM-134	$\leq 4.83E-04$	$2.72E-02$	$\leq 4.08E-04$	$4.21E-03$
COBALT-58	$\leq 1.64E-03$	$4.97E-03$	$\leq 3.96E-04$	$1.32E-03$
MANGANESE-54	$\leq 2.51E-04$	$1.37E-03$	$\leq 2.43E-04$	$4.54E-04$
CESIUM-136	$\leq 3.07E-04$	$\leq 6.76E-05$	$\leq 2.95E-04$	$\leq 3.66E-05$
IRON-59	$\leq 4.39E-04$	$\leq 4.55E-05$	$\leq 4.23E-04$	$\leq 3.65E-05$
ZINC-65	$\leq 5.04E-04$	$\leq 5.16E-05$	$\leq 5.04E-04$	$\leq 4.06E-05$
COBALT-60	$\leq 2.59E-04$	$1.05E-03$	$\leq 2.25E-04$	$5.71E-04$
LANTHANUM-140	$\leq 2.57E-04$	$\leq 1.84E-05$	$\leq 2.24E-04$	$\leq 1.53E-05$
ANTIMONY-124	$\leq 5.41E-04$	$\leq 3.98E-05$	$\leq 4.36E-04$	$\leq 3.34E-05$
TOTAL FOR PERIOD	$\leq 1.29E-02$	$8.46E-02$	$\leq 1.32E-02$	$1.55E-02$
DISSOLVED GASES ENTRAINED GASES				
XENON-133	$\leq 1.46E-03$	$3.19E-01$	$\leq 3.17E-03$	$3.63E-01$
XENON-135	$\leq 1.08E-02$	$6.77E-03$	$\leq 3.58E-02$	$7.45E-03$
TOTAL FOR PERIOD	$\leq 1.22E-02$	$3.26E-01$	$\leq 3.89E-02$	$3.71E-01$
OTHER, ALPHA & TRITIUM				
ALPHA	$1.14E-05$	$7.70E-07$	$2.29E-05$	$2.96E-06$
TRITIUM	$5.24E-02$	$5.87E+01$	$3.47E-01$	$4.61E+01$
GROSS BETA/GAMMA	0.0	0.0	0.0	0.0
TOTAL FOR PERIOD	$5.25E-02$	$5.87E+01$	$3.47E-01$	$4.61E+01$
AVG. CONC. IN UCI/ML				
ALPHA	$1.75E-13$	$3.68E-13$	$4.58E-13$	$1.81E-12$
TRITIUM	$8.59E-10$	$3.37E-05$	$3.25E-09$	$1.97E-05$

* Strontium Analysis not completed.

Section III

RADIOACTIVE EFFLUENT RELEASES - SOLID RADIOACTIVE WASTE
TECHNICAL SPECIFICATION (5.9.4.a.3)

January 1, 1979, to June 30, 1979

III. Radioactive Effluent Releases - Solid Radioactive Waste
Effluent and Waste Disposal Report, Technical Specification
5.9.4.a.3, January 1 thru June 30, 1979.

Solid Waste and Irradiated Fuel Shipments

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (Not Irradiated)

1. TYPE OF WASTE	MONTH SHIPPED	NUMBER OF SHIPMENTS	VOLUME CUBIC METERS	CURIE CONTENT	EST. TOTAL % ERROR
a. Spent resins, filter sludges, evaporator bottoms, etc.	Jan.	6	61.7	2.790	20%
	Feb.	2	15.2	17.812	20%
	Mar.	1	10.4	0.438	20%
	Apr.	2	19.1	1.207	20%
	May	0	0.0	0.0	N/A
	June	1	13.6	0.439	20%
Six month total (Type a.)		12	120.0	22.686	20%
b. Dry Compressable Waste, Contaminated Equipment, etc.	Jan.	5	10.6	0.166	20%
	Feb.	1	4.6	1.089	20%
	Mar.	1	5.1	0.125	20%
	Apr.	2	7.9	0.115	20%
	May	0	0.0	0.0	N/A
	June	1	1.5	0.004	20%
Six Month Total (Type b.)		10	29.7	1.499	20%

A. (Continued)

1. TYPE OF WASTE	MONTH SHIPPED	NUMBER OF SHIPMENTS	VOLUME CUBIC METERS	CURIE CONTENT	EST. TOTAL % ERROR
c. Irradiated Components and Other Categories	Jan.	0	N/A	N/A	N/A
	Feb.	0	N/A	N/A	N/A
	Mar.	0	N/A	N/A	N/A
	Apr.	0	N/A	N/A	N/A
	May	0	N/A	N/A	N/A
	June	0	N/A	N/A	N/A
Six Month Total (Type c.)		0	N/A	N/A	N/A

2. ESTIMATE OF MAJOR NUCLIDE COMPOSITION (by type of waste)

a.	Cs ¹³⁷	54.8%	12.432 Ci
	Cs ¹³⁴	33.1%	7.510 Ci
	Co ⁵⁸	10.1%	2.291 Ci
	MN ⁵⁴	1.9%	0.431 Ci
b.	Cs ¹³⁷	54.8%	0.821 Ci
	Cs ¹³⁴	33.1%	0.496 Ci
	Co ⁵⁸	10.1%	0.151 Ci
	MN ⁵⁴	1.9%	0.028 Ci
c.	N/A	N/A	N/A

Other Nuclides Constitute less than 0.1% of total composition.

3. SOLID WASTE (DISPOSITION)

<u>Number of Shipments</u>	<u>Transportation Mode</u>	<u>Destination</u>
12	Closed, Sole Use Vehicle	Barnwell, SC

IRRADIATED FUEL SHIPMENTS (DISPOSITION)

<u>Number of Shipments</u>	<u>Transportation Mode</u>	<u>Destination</u>
0	N/A	N/A

Section IV

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED
BY STABILITY CLASS AND METEOROLOGY DATA PER BATCH RELEASE
(Regulatory Guide 1.21)

January 1, 1979 to June 30, 1979

IV. JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED
BY STABILITY CLASS AND METEOROLOGY DATA PER BATCH RELEASE

- A. Meteorology data per batch tables will have -99 values
signifying either invalid data or no data available.

TABLE 150 - A

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -2.0 TO -INF IN FREQUENCY DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.5	0.9	1.0	1.4	1.5	1.9	2.0	2.4	2.5	2.9	3.0	3.4	3.5	3.9	4.0	4.4	4.5	4.9	5.0	5.9	6.0	6.9	7.0	7.9	8.0	8.9	9.0	INF		
NNE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SF	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.9
SSS	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SW	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.4
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.6

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.1

TABLE 150 - B

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

01100 = -1.7 TO -1.9 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DI100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	5.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.1

TABLE 150 - C

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN FREQUENCY DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NE	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.7
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.	6.0
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
NNW	0.	0.	0.	0.	0.	1.	1.	0.	1.	3.	0.	0.	2.	0.	1.	7.	6.9
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	11.	5.5
TOTAL	0.	0.	0.	0.	1.	2.	1.	0.	1.	4.	2.	2.	2.	3.	2.	20.	5.9

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 1.2

TABLE 150 - D

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	0.	3.	7.	7.	2.	4.	0.	1.	1.	1.	0.	0.	0.	0.	26.	2.4
NF	0.	0.	1.	7.	3.	6.	2.	0.	0.	0.	0.	0.	0.	0.	0.	19.	2.1
ENE	0.	0.	0.	0.	5.	4.	1.	3.	0.	0.	0.	0.	0.	0.	0.	13.	2.7
E	0.	0.	1.	1.	2.	2.	3.	4.	1.	0.	0.	0.	0.	0.	0.	14.	2.9
ESE	0.	1.	2.	3.	3.	4.	8.	14.	9.	12.	17.	3.	1.	0.	0.	77.	4.1
SE	0.	0.	3.	4.	6.	3.	11.	7.	13.	5.	22.	5.	1.	0.	0.	80.	4.1
SSE	0.	0.	0.	4.	3.	4.	3.	10.	3.	10.	17.	11.	4.	1.	2.	72.	4.8
S	0.	1.	1.	0.	5.	4.	6.	5.	2.	5.	2.	11.	10.	2.	6.	60.	5.4
SSW	0.	1.	1.	1.	0.	3.	1.	0.	1.	0.	1.	0.	1.	1.	2.	13.	4.6
SW	0.	3.	1.	1.	1.	0.	3.	0.	1.	0.	1.	1.	2.	0.	0.	14.	3.4
WSW	0.	0.	2.	0.	2.	2.	1.	3.	0.	0.	1.	0.	0.	0.	0.	11.	2.9
W	0.	0.	3.	0.	1.	4.	8.	4.	3.	5.	5.	0.	0.	0.	0.	33.	3.6
WNE	0.	2.	1.	5.	5.	2.	6.	2.	9.	10.	5.	2.	3.	1.	1.	54.	4.0
NW	0.	1.	3.	4.	19.	22.	30.	29.	12.	12.	39.	26.	14.	6.	8.	225.	4.6
NNW	0.	2.	5.	14.	14.	19.	21.	25.	20.	21.	26.	31.	16.	5.	2.	221.	4.4
N	0.	2.	6.	9.	8.	8.	12.	5.	1.	1.	5.	1.	0.	0.	0.	58.	2.7
TOTAL	0.	13.	33.	60.	84.	89.	120.	111.	76.	82.	142.	91.	52.	16.	21.	990.	4.2

NUMBER OF INVALID OBSERVATIONS= 33.

PERCENT OF VALID OBSERVATIONS= 54.3

TABLE 150 - E

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DI100 = -0.4 TO +1.5 IN FREQUENCY DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	1.	7.	6.	3.	2.	0.	0.	0.	1.	2.	1.	0.	0.	0.	0.	23.	1.7
NE	2.	4.	1.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.0
ENE	0.	2.	1.	1.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	5.	1.8
E	0.	2.	2.	4.	2.	1.	1.	2.	1.	1.	0.	0.	0.	0.	0.	16.	2.2
ESE	1.	0.	6.	5.	10.	15.	9.	5.	2.	1.	3.	0.	0.	0.	0.	57.	2.7
SE	2.	3.	5.	10.	19.	10.	15.	12.	12.	10.	9.	0.	0.	1.	0.	106.	3.1
SSE	1.	5.	0.	4.	6.	6.	2.	3.	3.	10.	9.	1.	1.	0.	0.	64.	4.1
S	1.	1.	3.	1.	1.	2.	4.	2.	2.	0.	11.	7.	1.	3.	1.	40.	4.7
SSW	1.	3.	2.	1.	1.	0.	1.	2.	0.	0.	3.	3.	3.	5.	1.	26.	4.9
SW	1.	2.	2.	1.	2.	1.	1.	1.	0.	0.	2.	2.	2.	1.	3.	21.	4.5
WSW	1.	5.	1.	2.	5.	1.	1.	0.	4.	1.	4.	1.	1.	0.	0.	27.	3.0
W	1.	10.	7.	4.	3.	13.	6.	2.	6.	4.	1.	0.	0.	0.	0.	57.	2.4
WNW	6.	8.	16.	16.	20.	9.	8.	3.	1.	3.	0.	0.	0.	0.	0.	91.	2.0
NW	4.	4.	9.	14.	22.	24.	12.	15.	7.	3.	6.	1.	0.	1.	1.	123.	2.8
NNW	2.	1.	6.	2.	3.	1.	0.	2.	2.	0.	1.	2.	2.	0.	0.	24.	2.9
N	0.	0.	8.	2.	1.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	14.	1.7
TOTAL	24.	57.	75.	70.	97.	84.	63.	49.	41.	36.	50.	31.	10.	11.	6.	704.	3.0

NUMBER OF INVALID OBSERVATIONS= 29.

PERCENT OF VALID OBSERVATIONS= 38.6

TABLE 150 - F

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TR1-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DI100 = +1.6 TO +4.0 IN FREQUENCY DATA USED -- WD10 *WS10 *DI100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	0.4	TO	0.9	TO	1.4	TO	1.9	TO	2.4	TO	2.9	TO	3.4	TO	3.9	TO	4.4	TO	4.9	TO	5.9	TO	6.9	TO	7.9	TO	8.9	TO	INF		
NNE	1.		2.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		3.	0.5
NF	0.		1.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		1.		5.	7.0
ENE	0.		1.		0.		0.		0.		0.		1.		0.		0.		0.		0.		0.		0.		0.		0.		3.	1.8
E	0.		0.		0.		0.		0.		0.		0.		1.		0.		0.		0.		0.		0.		0.		0.		2.	2.2
ESE	0.		3.		2.		3.		2.		2.		1.		1.		0.		0.		0.		0.		0.		0.		0.		14.	1.8
SE	0.		2.		1.		3.		1.		1.		0.		0.		0.		1.		0.		0.		0.		0.		0.		10.	1.9
SSE	1.		4.		1.		2.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		8.	0.9
S	1.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		1.		0.		0.		2.	3.4
SSW	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		2.	4.8
SW	1.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		1.		0.		5.	3.9
WSW	1.		1.		0.		0.		0.		0.		0.		0.		1.		0.		0.		0.		0.		0.		0.		11.	2.9
W	2.		1.		0.		1.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		6.	1.4
WNW	1.		2.		5.		1.		3.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		14.	1.5
NW	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		3.	0.8
NNW	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	0.0
N	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	0.0
TOTAL	8.	19.	19.	14.	12.	6.	4.	4.	4.	4.	4.	4.	9.	5.	5.	1.	1.	1.	1.	1.	1.	1.	1.	1.	2.	3.	2.	2.	88.	2.2		

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 4.8

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

OTL00 = +4.1 TO +INF IN FREQUENCY

DATA USED -- WD:0 ,WS:0 ,DT:100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

[illegible]

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS = 0.9

TABLE 150 - ALL

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -INF TO +INF IN FREQUENCY DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	3	2	10	5	9	2	7	10	9	3	7	2	4	3	0	2	0	0	3	0	2	0	0	0	0	0	0	0	0	0		
NNE	3	2	10	5	9	2	7	10	9	3	7	2	4	3	0	2	0	0	3	0	2	0	0	0	0	0	0	0	0	0	33	2.6
N	0	0	4	3	4	1	2	6	4	5	4	3	2	2	3	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	22	2.3
ENE	0	0	3	4	4	6	4	3	4	3	3	3	4	7	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	34	2.4
E	1	1	4	7	14	12	15	18	26	14	21	18	26	20	11	13	16	20	13	20	31	5	1	1	1	1	0	0	0	0	153	3.2
ESE	2	2	7	11	11	18	26	9	10	14	14	26	21	13	6	25	20	26	20	26	25	5	5	5	5	1	1	2	7	144	4.3	
SE	2	2	9	1	1	10	9	10	6	10	6	5	13	7	4	4	5	13	5	13	19	19	11	11	5	1	1	2	7	102	5.1	
SSE	2	2	2	4	4	1	1	1	1	3	6	2	2	2	1	1	0	0	0	4	4	3	3	4	4	7	3	3	3	42	4.7	
S	1	1	4	5	5	2	2	3	3	1	3	2	4	1	1	1	0	0	0	3	3	2	2	1	1	1	1	4	4	41	3.9	
SSW	3	3	5	5	5	2	3	3	7	4	4	5	5	5	5	9	9	9	9	1	6	6	0	0	0	0	0	0	0	0	50	3.0
SW	2	2	6	3	3	3	5	5	4	5	17	4	5	6	6	9	9	9	9	1	6	6	0	0	0	0	0	0	0	0	96	2.8
WSW	3	3	11	10	10	5	4	5	4	17	17	11	16	16	16	6	6	13	13	13	6	6	3	3	3	3	1	1	1	1	160	2.6
W	7	7	12	22	22	22	28	22	28	11	11	11	42	42	44	10	10	19	17	17	47	28	28	16	16	7	7	10	10	359	4.0	
WNW	4	4	7	13	18	18	41	18	41	46	46	21	22	27	23	23	19	17	17	27	27	33	33	18	18	8	8	3	3	256	4.3	
W	2	2	3	11	16	16	18	16	18	21	21	9	14	14	5	1	1	24	24	24	27	33	33	18	18	8	8	0	0	72	2.5	
NNW	0	0	2	14	11	11	9	11	9	9	9	1	1	1	5	1	1	1	1	1	5	1	1	0	0	0	0	0	0	0	1822	3.6
N	34	94	129	145	168	168	179	193	166	166	179	193	193	193	166	166	119	124	124	124	196	125	125	66	66	33	33	31	31	1822	3.6	

NUMBER OF INVALID OBSERVATIONS= 338.

PERCENT OF VALID OBSERVATIONS= 84.4

TABLE 151 - A

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -2.0 TO -INF IN PERCENT DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4		
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.1

TABLE 151 - B

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.7 TO -1.9 IN PERCENT										DATA USED -- WD10 *WS10 *DT100										TOTAL	UBAR
SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION																					
SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF						
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
NF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	5.1				
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	4.9				
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.0	0.11	5.0				

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.1

TABLE 151 - C

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN PERCENT

DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 1.2

TABLE 151 - D

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN PERCENT DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	0.4	TO	0.9	TO	1.4	TO	1.9	TO	2.4	TO	2.9	TO	3.4	TO	3.9	TO	4.4	TO	4.9	TO	5.9	TO	6.9	TO	7.9	TO	8.9	TO	INF		
NNE	0.0	0.0	0.0	0.0	0.16	0.38	0.38	0.38	0.38	0.38	0.11	0.22	0.11	0.05	0.0	0.0	0.05	0.05	0.05	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.43	2.4
NE	0.0	0.0	0.0	0.0	0.05	0.38	0.38	0.38	0.16	0.27	0.33	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.04	2.1
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	0.27	0.22	0.05	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.71	2.7
E	0.0	0.0	0.0	0.0	0.05	0.05	0.05	0.05	0.11	0.16	0.22	0.16	0.22	0.05	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.77	2.9
ESE	0.0	0.05	0.11	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.22	0.44	0.77	0.49	0.66	0.93	0.93	0.16	0.27	0.05	0.05	0.05	0.0	0.16	0.05	0.05	0.0	0.0	0.0	0.0	4.23	4.1
SF	0.0	0.0	0.0	0.0	0.16	0.22	0.33	0.33	0.33	0.33	0.16	0.60	0.38	0.71	0.49	0.66	0.93	1.21	1.21	0.27	0.05	0.0	0.0	0.27	0.05	0.05	0.0	0.0	0.0	0.0	4.39	4.1
SSE	0.0	0.0	0.0	0.0	0.0	0.22	0.16	0.22	0.16	0.27	0.22	0.22	0.16	0.33	0.27	0.55	0.16	0.55	0.93	0.60	0.22	0.05	0.0	0.60	0.22	0.05	0.0	0.11	0.33	3.95	4.8	
S	0.0	0.05	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.27	0.22	0.33	0.27	0.11	0.27	0.11	0.60	0.55	0.11	0.60	0.55	0.05	0.0	0.60	0.55	0.11	0.05	0.11	0.33	3.29	5.4	
SSW	0.0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0	0.0	0.16	0.05	0.0	0.05	0.0	0.05	0.0	0.05	0.0	0.05	0.05	0.05	0.0	0.0	0.05	0.05	0.0	0.11	0.71	4.6		
SW	0.0	0.16	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0	0.16	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.0	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.77	3.4	
WSW	0.0	0.0	0.0	0.0	0.11	0.16	0.16	0.16	0.11	0.11	0.11	0.05	0.16	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	2.9
W	0.0	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.05	0.05	0.22	0.44	0.22	0.16	0.27	0.16	0.27	0.16	0.27	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.81	3.6
WNW	0.0	0.11	0.05	0.05	0.27	0.27	0.27	0.27	0.27	0.27	0.11	0.33	0.11	0.49	0.22	0.55	0.16	0.55	0.27	0.11	0.16	0.05	0.0	0.16	0.05	0.05	0.0	0.05	0.05	2.46	4.0	
NW	0.0	0.05	0.16	0.22	0.22	1.04	1.04	1.04	1.04	1.21	1.21	1.65	1.59	0.66	0.66	0.66	0.66	0.66	2.14	1.43	0.77	0.33	1.43	0.77	0.33	0.33	0.44	0.44	12.35	4.6		
NNW	0.0	0.11	0.27	0.27	0.27	0.77	0.77	0.77	0.77	1.04	1.04	1.15	1.37	1.10	1.37	1.10	1.15	1.43	1.70	0.88	0.68	0.27	1.70	0.88	0.68	0.27	0.11	0.11	0.11	12.13	4.4	
N	0.0	0.11	0.33	0.33	0.49	0.44	0.44	0.44	0.44	0.44	0.44	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	3.18	2.7	
TOTAL	0.0	0.71	1.81	3.29	4.61	4.88	6.59	6.09	6.09	4.17	4.50	7.79	5.09	2.85	0.88	1.15	54.33	4.2													54.33	4.2

NUMBER OF INVALID OBSERVATIONS= 33.

PERCENT OF VALID OBSERVATIONS= 54.3

TABLE 151 - E

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES INT-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.4 TO +1.5 IN PERCENT DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.5	0.9	1.0	1.4	1.5	1.9	2.0	2.4	2.5	2.9	3.0	3.4	3.5	3.9	4.0	4.4	4.5	4.9	5.0	5.9	6.0	6.9	7.0	7.9	8.0	8.9	9.0	INF		
NNE	0.05	0.05	0.38	0.33	0.33	0.16	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.11	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	1.7
NE	0.11	0.11	0.22	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	1.0
ENE	0.00	0.00	0.11	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	1.8
E	0.00	0.00	0.11	0.11	0.11	0.22	0.11	0.11	0.11	0.05	0.05	0.05	0.05	0.05	0.11	0.00	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.86	2.2
ESE	0.05	0.05	0.00	0.33	0.33	0.27	0.55	1.04	0.55	0.82	0.82	0.55	0.49	0.82	0.66	0.66	0.11	0.11	0.05	0.16	0.16	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.13	2.7
SE	0.11	0.11	0.16	0.27	0.27	0.55	1.04	0.55	0.82	0.82	0.55	0.49	0.82	0.66	0.66	0.11	0.11	0.05	0.16	0.16	0.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.93	3.1
SSE	0.05	0.05	0.27	0.00	0.16	0.05	0.05	0.05	0.05	0.11	0.11	0.05	0.11	0.11	0.11	0.11	0.11	0.11	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51	4.1
S	0.05	0.05	0.05	0.16	0.11	0.05	0.05	0.05	0.11	0.05	0.05	0.00	0.05	0.05	0.11	0.11	0.11	0.00	0.00	0.16	0.60	0.38	0.05	0.05	0.16	0.05	0.05	0.05	0.05	0.05	2.19	4.7
SSW	0.05	0.05	0.16	0.11	0.11	0.05	0.05	0.11	0.05	0.11	0.05	0.00	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.05	1.43	4.9
SW	0.05	0.05	0.11	0.11	0.11	0.05	0.11	0.05	0.11	0.05	0.05	0.00	0.05	0.05	0.05	0.05	0.00	0.00	0.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.05	1.15	4.5
WSW	0.05	0.05	0.27	0.05	0.05	0.11	0.27	0.11	0.27	0.05	0.05	0.05	0.05	0.05	0.00	0.00	0.22	0.33	0.05	0.22	0.22	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.48	3.0
W	0.05	0.05	0.55	0.38	0.38	0.22	0.49	0.77	0.16	0.71	0.71	0.49	0.44	0.33	0.11	0.11	0.33	0.05	0.22	0.22	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.13	2.4
WNW	0.33	0.33	0.44	0.88	0.88	0.68	1.10	0.68	1.10	0.49	0.49	0.49	0.44	0.33	0.11	0.11	0.05	0.05	0.16	0.16	0.16	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.99	2.0
WNW	0.22	0.22	0.22	0.49	0.49	0.77	1.21	0.77	1.21	1.32	1.32	1.32	0.66	0.66	0.82	0.82	0.38	0.38	0.16	0.16	0.33	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.05	6.75	2.8
NNW	0.11	0.11	0.05	0.33	0.33	0.11	0.16	0.16	0.16	0.05	0.05	0.05	0.00	0.00	0.11	0.11	0.11	0.11	0.00	0.00	0.05	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.00	0.00	1.32	2.9
N	0.00	0.00	0.00	0.44	0.44	0.11	0.05	0.05	0.05	0.05	0.05	0.05	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	1.7
TOTAL	1.32	1.32	3.13	4.11	4.11	3.84	5.32	4.61	4.61	4.61	4.61	4.61	3.46	3.46	2.69	2.69	2.25	2.25	1.98	2.74	2.74	1.70	1.70	0.55	0.55	0.55	0.55	0.55	0.55	0.33	38.64	3.0

NUMBER OF INVALID OBSERVATIONS= 29.

PERCENT OF VALID OBSERVATIONS= 38.6

TABLE 151 - F

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = 1.6 TO 14.0 IN PERCENT DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NRF	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.5
NF	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.11	0.05	0.27	7.0
ENE	0.0	0.05	0.0	0.05	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	1.8
E	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	2.2
ESE	0.0	0.16	0.11	0.16	0.11	0.11	0.05	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.77	1.8
SE	0.0	0.11	0.05	0.16	0.05	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.55	1.9
SSE	0.05	0.22	0.05	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.44	0.9
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.11	3.4
SSW	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.11	4.8
SW	0.05	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.27	3.9
WSW	0.05	0.05	0.0	0.05	0.0	0.05	0.16	0.11	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.60	2.9
W	0.11	0.05	0.0	0.05	0.0	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.33	1.4
WNW	0.05	0.11	0.27	0.05	0.16	0.0	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.77	1.5
NW	0.0	0.11	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.16	0.8
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.44	1.04	0.77	0.66	0.33	0.22	0.49	0.27	0.05	0.05	0.05	0.05	0.11	0.16	0.11	4.83	2.2

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 4.8

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR
OT100 = 4.1 TO .INF IN PERCENT DATA USED -- WD10 WS10 DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.5	0.9	1.0	1.4	1.5	1.9	2.0	2.4	2.5	2.9	3.0	3.4	3.5	3.9	4.0	4.4	4.5	4.9	5.0	5.9	6.0	6.9	7.0	7.9	8.0	8.9	9.0	INF		
NRE	0.05		0.05		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.4
NE	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0		0.05		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.7
E	0.0		0.05		0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.11	0.9
ESE	0.0		0.0		0.0	0.22	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	1.2
SE	0.0		0.11		0.11	0.11	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27	1.0
SSE	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.05		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.4
W	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.11		0.27		0.33	0.16																									0.88	0.9

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.9

TABLE 151 - ALL

DATA PERIOD 01/01/1979 THROUGH 03/31/1979 RUN FROM TAPE SERIES TRI-EX

UMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -INF TO +INF IN PERCENT

DATA USED -- WD10 *WS10 *DT100

SECTOR 15 WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR	
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM			
NNE	0.16	0.55	0.27	0.11	0.49	0.55	0.27	0.11	0.49	0.55	0.11	0.22	0.16	0.0	0.0	0.11	0.16	0.11	0.16	0.16	0.11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.96	1.9	
NE	0.11	0.27	0.11	0.38	0.16	0.38	0.16	0.38	0.16	0.38	0.16	0.38	0.16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.81	2.6	
ENE	0.0	0.22	0.05	0.11	0.27	0.22	0.11	0.22	0.11	0.27	0.22	0.11	0.16	0.0	0.0	0.0	0.05	0.11	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.21	2.3	
E	0.0	0.16	0.22	0.33	0.22	0.33	0.22	0.33	0.22	0.33	0.16	0.22	0.38	0.0	0.0	0.0	0.05	0.11	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.87	2.4	
ESE	0.05	0.22	0.77	0.66	0.82	1.15	0.99	1.43	0.77	1.43	1.15	0.99	1.10	0.27	0.71	0.60	0.71	0.60	0.71	0.88	1.10	0.16	0.27	0.05	0.0	0.0	0.0	0.0	0.0	0.0	8.40	3.2	
SE	0.11	0.38	0.60	0.99	1.43	0.99	1.43	0.99	1.43	1.15	0.99	1.43	1.15	0.38	0.71	1.37	0.33	1.37	0.27	1.10	1.70	0.27	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	11.20	3.4	
SSE	0.11	0.49	0.05	0.55	0.49	0.55	0.49	0.55	0.49	0.55	0.33	0.33	0.55	0.38	0.71	0.33	0.33	0.22	0.27	0.88	1.43	1.37	0.27	0.05	0.27	0.05	0.27	0.05	0.11	0.11	7.90	4.3	
S	0.11	0.11	0.22	0.05	0.33	0.05	0.33	0.05	0.33	0.16	0.11	0.11	0.11	0.11	0.11	0.05	0.05	0.05	0.0	0.0	0.22	0.16	0.16	0.22	0.22	0.38	0.16	0.22	0.38	0.16	5.60	5.1	
SSW	0.05	0.22	0.27	0.11	0.05	0.16	0.11	0.05	0.16	0.05	0.16	0.05	0.22	0.05	0.22	0.05	0.05	0.05	0.0	0.0	0.22	0.16	0.16	0.22	0.22	0.38	0.16	0.22	0.38	0.16	2.30	4.7	
SW	0.16	0.27	0.27	0.16	0.38	0.16	0.38	0.16	0.38	0.22	0.27	0.22	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.33	0.11	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	2.25	3.9	
WSW	0.11	0.33	0.16	0.16	0.38	0.22	0.27	0.16	0.38	0.22	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.49	0.33	0.11	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	2.74	3.0	
W	0.16	0.60	0.55	0.27	0.22	0.93	0.88	0.27	0.22	0.93	0.88	0.88	0.33	0.33	0.33	0.49	0.49	0.49	0.49	0.49	0.33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.27	2.8	
WNW	0.38	0.66	1.21	1.21	1.54	0.60	0.60	1.21	1.54	0.60	0.60	0.60	0.27	0.55	0.71	0.55	0.71	0.55	0.71	0.88	1.37	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	8.78	2.6	
NW	0.22	0.38	0.71	0.99	2.25	2.52	2.30	0.99	2.25	2.52	2.30	2.41	1.04	2.41	1.04	1.04	0.93	1.04	0.93	1.32	2.58	1.54	0.88	1.54	0.88	1.54	0.88	1.54	0.88	1.54	19.70	4.0	
NNW	0.11	0.16	0.60	0.88	0.99	1.15	1.21	0.88	0.99	1.15	1.21	1.48	1.26	1.48	1.26	1.26	1.26	1.26	1.32	1.48	1.81	0.99	1.81	0.99	1.81	0.99	1.81	0.99	1.81	0.99	14.05	4.3	
N	0.0	0.11	0.77	0.60	0.49	0.49	0.77	0.60	0.49	0.49	0.77	0.60	0.27	0.27	0.27	0.27	0.27	0.27	0.05	0.05	0.27	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.95	2.5	
TOTAL	1.87	5.16	7.08	7.96	10.32	9.82	10.59	9.11	6.53	6.80	10.76	6.86	3.62	1.81	1.70	100.00	3.62	1.81	1.70	100.00	3.62	1.81	1.70	100.00	3.62	1.81	1.70	100.00	3.62	1.81	1.70	100.00	3.6

NUMBER OF INVALID OBSERVATIONS= 338.

PERCENT OF VALID OBSERVATIONS= 84.4

TABLE 150 - A

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -2.0 TO -INF IN FREQUENCY DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR		
	0.0	0.4	0.5	0.9	1.0	1.4	1.5	1.9	2.0	2.4	2.5	2.9	3.0	3.4	3.5	3.9	4.0	4.4	4.5	4.9	5.0	5.9	6.0	6.9	7.0	7.9	8.0	8.9	9.0	TO			INF	
NNE	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
NE	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
ENE	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*	3.9	
E	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
ESE	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*	0*	0*	0*	2*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	2*	0*	0*	0*	0*	0*	0*	5*	4.9
SE	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*	2.8	
SSE	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
S	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
SSW	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	2*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	2*	5.3	
SW	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
WSW	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
W	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
WNW	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
NW	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
NNW	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
N	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0	
N TOTAL	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	2*	0*	0*	0*	2*	0*	1*	0*	0*	0*	2*	0*	0*	0*	0*	2*	0*	0*	0*	0*	0*	9*	4.7	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.4

TABLE 150 - B

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES IRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.7 TO -1.9 IN FREQUENCY DATA USED -- WD10 WS10 DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.5	0.9	1.0	1.4	1.5	1.9	2.0	2.4	2.5	2.9	3.0	3.4	3.5	3.9	4.0	4.4	4.5	4.9	5.0	5.9	6.0	6.9	7.0	7.9	8.0	8.9	9.0	INF		
NNE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
E	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.2
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.2
SF	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.6
SSE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
SW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.7
NW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.1
NNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.9
N	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
TOTAL	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	1.	0.	1.	1.	0.	0.	0.	0.	0.	1.	2.	0.	1.	0.	1.	1.	0.	0.	8.	5.3

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.4

TABLE 150 - C

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN FREQUENCY

DATA USED -- WD10 ,WS10 ,DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	0.4	TO	0.9	TO	1.4	TO	1.9	TO	2.4	TO	2.9	TO	3.4	TO	3.9	TO	4.4	TO	4.9	TO	5.9	TO	6.9	TO	7.9	TO	8.9	TO	INF		
NNE	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	4.	3.7	
NF	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	2.	7.0	
ENE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	2.	5.6	
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	3.4	
ESE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	2.	0.	1.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	5.	4.2	
SE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	1.	1.	3.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	7.	3.6	
SSE	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.	4.0	
S	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	4.8	
SSW	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	2.3	
SW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0	
WSW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0	
W	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	1.	2.	0.	0.	0.	0.	0.	0.	5.	5.5	
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	0.	0.	0.	1.	0.	0.	0.	0.	3.	5.3	
NW	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	1.	0.	1.	1.	0.	0.	2.	1.	1.	1.	1.	1.	0.	0.	0.	0.	0.	7.	4.3	
NNW	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	1.	0.	0.	0.	1.	1.	4.	0.	2.	2.	2.	2.	0.	0.	0.	0.	1.	0.	0.	12.	4.4	
N	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	3.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	5.	3.9	
N TOTAL	0.	0.	0.	0.	0.	0.	3.	4.	2.	4.	4.	4.	4.	4.	8.	13.	10.	10.	10.	4.	4.	4.	5.	5.	4.	4.	1.	1.	0.	58.	4.4	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 2.7

TABLE 150 - D

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN FREQUENCY DATA USED -- WD10 WS10 DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	0.4	TO	0.9	TO	1.4	TO	1.9	TO	2.4	TO	2.9	TO	3.4	TO	3.9	TO	4.4	TO	4.9	TO	5.9	TO	6.9	TO	7.9	TO	8.9	TO	INF		
NPE	0.	0.	0.	0.	3.	3.	9.	9.	8.	11.	12.	12.	12.	12.	3.	3.	0.	0.	0.	0.	2.	2.	3.	3.	0.	0.	4.	4.	7.	62.	4.1	
NL	0.	0.	0.	0.	1.	1.	5.	5.	9.	10.	12.	12.	12.	12.	11.	11.	4.	4.	7.	7.	5.	5.	7.	7.	5.	5.	5.	5.	5.	5.	86.	4.4
ENE	0.	0.	0.	0.	1.	1.	0.	0.	2.	14.	5.	5.	5.	5.	6.	6.	2.	2.	1.	1.	2.	2.	0.	0.	3.	3.	0.	0.	0.	2.	38.	3.8
E	0.	0.	0.	0.	1.	1.	0.	0.	3.	5.	8.	8.	8.	8.	2.	2.	1.	1.	4.	4.	7.	7.	4.	4.	0.	0.	0.	0.	0.	0.	35.	4.0
ESE	0.	0.	0.	0.	0.	0.	2.	2.	4.	3.	4.	3.	4.	4.	2.	2.	6.	6.	4.	4.	7.	7.	6.	6.	14.	14.	2.	2.	1.	1.	55.	5.2
SF	0.	0.	0.	0.	2.	2.	0.	0.	5.	5.	9.	9.	9.	9.	16.	16.	21.	21.	8.	8.	13.	13.	11.	11.	7.	7.	7.	7.	1.	1.	105.	4.7
SSE	0.	0.	0.	0.	2.	2.	2.	2.	4.	7.	12.	12.	12.	12.	9.	9.	16.	16.	12.	12.	13.	13.	7.	7.	9.	9.	10.	10.	1.	1.	104.	4.8
S	0.	0.	0.	0.	0.	0.	5.	5.	2.	2.	5.	5.	5.	5.	2.	2.	3.	3.	3.	3.	9.	9.	5.	5.	4.	4.	3.	3.	2.	2.	41.	5.2
SSW	0.	0.	0.	0.	1.	1.	0.	0.	3.	3.	3.	3.	3.	3.	7.	7.	4.	4.	3.	3.	3.	3.	1.	1.	1.	1.	0.	0.	0.	0.	31.	3.9
SW	0.	0.	0.	0.	1.	1.	0.	0.	2.	4.	4.	4.	4.	4.	3.	3.	2.	2.	3.	3.	6.	6.	6.	6.	5.	5.	1.	1.	0.	0.	31.	5.2
WSW	0.	0.	0.	0.	1.	1.	0.	0.	1.	2.	1.	1.	1.	1.	3.	3.	2.	2.	3.	3.	8.	8.	4.	4.	1.	1.	1.	1.	0.	0.	29.	4.5
W	0.	0.	1.	1.	1.	1.	6.	6.	4.	0.	2.	2.	2.	2.	7.	7.	3.	3.	5.	5.	4.	4.	5.	5.	0.	0.	0.	0.	0.	0.	38.	3.7
NNW	0.	0.	0.	0.	0.	0.	2.	2.	8.	7.	8.	8.	8.	8.	18.	18.	34.	34.	33.	33.	21.	21.	3.	3.	4.	4.	1.	1.	1.	1.	140.	4.3
NW	0.	0.	0.	0.	2.	2.	5.	5.	10.	20.	19.	19.	19.	19.	22.	22.	31.	31.	15.	15.	13.	13.	9.	9.	6.	6.	1.	1.	0.	0.	153.	3.9
NNW	0.	0.	0.	0.	2.	2.	5.	5.	7.	12.	12.	12.	11.	11.	14.	14.	6.	6.	9.	9.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	67.	3.2
TOTAL	0.	0.	1.	1.	19.	19.	42.	42.	73.	116.	117.	117.	117.	117.	131.	131.	147.	147.	122.	122.	122.	122.	85.	65.	65.	39.	39.	24.	24.	1103.	4.4	

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 51.0

TABLE 150 - E

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES IRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.4 TO +1.5 IN FREQUENCY DATA USED -- WD10 *WS10 *DT100

SECTOR VS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.5	0.9	1.0	1.4	1.5	1.9	2.0	2.4	2.5	2.9	3.0	3.4	3.5	3.9	4.0	4.4	4.5	4.9	5.0	5.9	6.0	6.9	7.0	7.9	8.0	8.9	9.0	INF		
NNE	0.	0.	3.	2.	2.	3.	3.	3.	5.	5.	2.	2.	1.	4.	4.	2.	2.	4.	4.	9.	9.	6.	6.	5.	5.	1.	1.	0.	0.	47.	4.3	
NE	0.	0.	0.	4.	2.	4.	2.	2.	1.	1.	1.	1.	4.	3.	3.	3.	6.	5.	5.	13.	13.	5.	5.	2.	2.	1.	1.	0.	0.	47.	4.5	
ENE	0.	0.	1.	2.	2.	2.	2.	2.	3.	3.	3.	3.	1.	0.	0.	0.	1.	1.	1.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	15.	2.6	
E	0.	0.	0.	4.	4.	4.	4.	4.	3.	3.	4.	4.	1.	2.	2.	2.	3.	2.	2.	6.	6.	1.	1.	0.	0.	0.	0.	0.	0.	28.	3.4	
ESE	0.	0.	1.	7.	7.	7.	8.	3.	3.	3.	3.	3.	6.	3.	3.	3.	2.	2.	2.	3.	3.	1.	1.	2.	2.	3.	3.	0.	0.	44.	3.3	
SE	0.	0.	1.	5.	5.	5.	7.	7.	14.	14.	17.	17.	19.	8.	8.	10.	10.	8.	8.	13.	13.	5.	5.	0.	0.	1.	1.	0.	0.	108.	3.4	
SSE	0.	0.	2.	4.	4.	4.	0.	0.	2.	2.	11.	11.	14.	5.	5.	9.	9.	2.	2.	12.	12.	12.	12.	0.	0.	1.	1.	1.	1.	75.	4.1	
S	0.	0.	1.	0.	0.	0.	1.	1.	0.	0.	9.	9.	10.	14.	14.	15.	15.	5.	5.	15.	15.	4.	4.	5.	5.	2.	2.	0.	0.	81.	4.4	
SSW	0.	0.	4.	1.	1.	1.	2.	2.	2.	2.	0.	0.	3.	1.	1.	2.	3.	2.	2.	19.	19.	7.	7.	3.	3.	0.	0.	0.	0.	48.	4.5	
SW	0.	0.	3.	0.	0.	0.	3.	3.	1.	1.	1.	1.	1.	1.	1.	1.	1.	3.	3.	3.	3.	4.	4.	0.	0.	0.	0.	0.	0.	21.	3.8	
WSW	0.	0.	1.	2.	2.	2.	0.	0.	1.	1.	1.	1.	2.	1.	1.	2.	2.	2.	2.	4.	4.	3.	3.	0.	0.	0.	0.	0.	0.	19.	4.0	
W	0.	0.	1.	11.	11.	11.	4.	4.	2.	2.	1.	1.	2.	1.	1.	1.	1.	0.	0.	0.	0.	2.	2.	0.	0.	0.	0.	0.	0.	25.	2.1	
WNW	0.	0.	4.	12.	12.	12.	16.	16.	6.	6.	4.	4.	5.	1.	1.	3.	3.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	55.	2.1	
WNW	0.	0.	0.	3.	3.	3.	12.	12.	6.	6.	12.	12.	12.	4.	4.	7.	7.	3.	3.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	63.	2.9
WNW	0.	0.	0.	0.	0.	0.	7.	7.	3.	3.	1.	1.	4.	5.	5.	5.	3.	3.	3.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	32.	2.8
W	0.	0.	1.	0.	0.	0.	2.	2.	2.	2.	2.	2.	2.	1.	1.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	12.	2.5	
TOTAL	0.	0.	23.	64.	69.	64.	69.	69.	56.	56.	72.	72.	87.	58.	58.	70.	70.	43.	43.	99.	99.	51.	51.	18.	18.	9.	9.	1.	1.	720.	3.6	

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 33.3

TABLE 150 - F

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +1.6 TO +4.0 IN FREQUENCY DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NPE	0.	3.	2.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	1.1
NE	0.	6.	2.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	9.	1.2
ENE	0.	2.	2.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.9
E	0.	1.	5.	0.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	8.	1.5
ESE	0.	2.	6.	3.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	13.	1.4
SE	0.	1.	8.	6.	5.	6.	5.	1.	0.	0.	0.	0.	1.	0.	0.	33.	2.2
SSE	0.	2.	3.	3.	1.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	11.	1.7
S	0.	2.	1.	1.	0.	3.	1.	1.	0.	0.	1.	0.	0.	0.	0.	10.	2.3
SSW	0.	4.	2.	3.	1.	0.	0.	0.	1.	1.	1.	0.	0.	0.	0.	13.	2.0
SW	0.	9.	3.	6.	0.	0.	1.	1.	0.	0.	1.	1.	1.	0.	0.	17.	2.1
WSW	0.	7.	7.	0.	0.	0.	1.	0.	2.	0.	0.	0.	0.	0.	0.	17.	1.4
W	0.	1.	16.	5.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	23.	1.3
WNW	0.	0.	12.	12.	4.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	28.	1.5
NW	0.	0.	3.	7.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	11.	1.6
WNW	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.0
W	0.	0.	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	2.	2.0
TOTAL	0.	40.	73.	40.	14.	12.	11.	4.	3.	2.	3.	1.	2.	0.	0.	205.	1.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 9.5

TABLE 150 - G

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-LX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DI100 = *4.1 TO *INF IN FREQUENCY DATA USED -- WD10 *WS10 *DI100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR	
	TO	0.4	TO	0.9	TO	1.4	TO	1.9	TO	2.4	TO	2.9	TO	3.4	TO	3.9	TO	4.4	TO	4.9	TO	5.9	TO	6.9	TO	7.9	TO	8.9	TO	INF			
ENE	0*	0*	3*	0*	0*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	4*	1.0	
NE	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0
E NE	0*	0*	1*	0*	1*	2*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	3*	1.0	
E	0*	0*	3*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	4*	1.0	
E SE	0*	0*	2*	0*	4*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	6*	1.0	
SE	0*	0*	6*	0*	5*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	11*	0.9	
SSE	0*	0*	2*	0*	2*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	4*	0.9	
S	0*	0*	1*	0*	1*	2*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	2*	1.0	
SSW	0*	0*	3*	0*	2*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	5*	0.8	
SW	0*	0*	0*	0*	4*	0*	1*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	6*	1.2	
WSW	0*	0*	1*	0*	1*	2*	0*	0*	0*	0*	1*	0*	1*	0*	0*	0*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	6*	2.3	
W	0*	0*	2*	0*	2*	0*	2*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	6*	1.2	
WNW	0*	0*	0*	0*	0*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*	1.3	
W	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0
NNW	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	1*	1.0	
N	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0.0
TOTAL	0*	0*	28*	0*	22*	0*	4*	0*	1*	1*	2*	1*	1*	0*	0*	0*	0*	0*	0*	1*	1*	0*	0*	0*	0*	0*	0*	0*	0*	0*	59*	1.1	

NUMBER OF INVALID OBSERVATIONS= 0*

PERCENT OF VALID OBSERVATIONS= 2.7

TABLE 150 - ALL

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -INF TO +INF IN FREQUENCY

DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.	9.	7.	12.	16.	15.	13.	7.	2.	4.	11.	9.	6.	5.	7.	123.	3.9
NE	0.	6.	7.	7.	10.	11.	16.	14.	10.	13.	18.	13.	8.	6.	5.	144.	4.3
ENE	0.	4.	7.	2.	5.	17.	6.	6.	5.	2.	2.	0.	5.	0.	2.	63.	3.3
E	0.	4.	10.	3.	7.	9.	11.	5.	4.	6.	13.	5.	0.	0.	0.	77.	3.3
ESE	0.	5.	17.	13.	8.	8.	12.	9.	9.	6.	10.	8.	18.	5.	1.	129.	3.9
SE	0.	8.	20.	13.	24.	30.	34.	29.	33.	16.	26.	16.	8.	8.	1.	266.	3.7
SSE	0.	6.	12.	5.	7.	19.	27.	15.	27.	14.	25.	19.	9.	11.	2.	198.	4.3
S	0.	4.	2.	7.	2.	21.	16.	22.	27.	18.	24.	18.	11.	6.	4.	182.	4.5
SSW	0.	11.	6.	5.	7.	3.	6.	4.	7.	6.	31.	12.	7.	3.	2.	110.	4.3
SW	0.	16.	4.	4.	3.	6.	7.	9.	5.	6.	7.	6.	2.	0.	0.	75.	3.2
WSW	0.	9.	12.	0.	2.	4.	5.	4.	6.	6.	10.	9.	5.	1.	0.	73.	3.7
W	0.	4.	30.	12.	3.	5.	4.	3.	4.	4.	9.	9.	1.	1.	0.	89.	2.9
WNW	0.	5.	26.	34.	16.	4.	7.	8.	7.	7.	6.	5.	1.	0.	0.	126.	2.5
NW	0.	0.	6.	22.	15.	19.	21.	26.	41.	38.	23.	5.	5.	1.	1.	223.	3.8
NNW	0.	1.	10.	11.	13.	22.	23.	28.	38.	20.	15.	10.	6.	3.	0.	200.	3.8
N	0.	1.	3.	8.	9.	15.	13.	15.	9.	12.	1.	0.	0.	0.	0.	86.	3.1
TOTAL	0.	93.	179.	158.	147.	208.	221.	204.	234.	178.	231.	144.	92.	50.	25.	2164.	3.8

NUMBER OF INVALID OBSERVATIONS= 20.

PERCENT OF VALID OBSERVATIONS= 99.1

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

01100 = -2.0 TO -INF IN PERCENT

DATA USED -- W010 , W510 , DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO Inf	TOTAL	UBAR
MINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ene	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.05	3.9
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	4.9
SE	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	2.8
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.09	5.3
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N TOTAL	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.09	0.05	0.0	0.09	0.0	0.09	0.0	0.0	0.42	4.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.4

TABLE 151 - E

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.7 TO -1.9 IN PERCENT

DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4	0.0	0.4
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0	0.09	0.0	0.05	0.0	0.05	0.0	0.0	0.0	0.37	5.3

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 0.4

TABLE 151 - C

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -1.5 TO -1.6 IN PERCENT DATA USED -- WD10 WSI0 DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4		0.5 TO 0.9		1.0 TO 1.4		1.5 TO 1.9		2.0 TO 2.4		2.5 TO 2.9		3.0 TO 3.4		3.5 TO 3.9		4.0 TO 4.4		4.5 TO 4.9		5.0 TO 5.9		6.0 TO 6.9		7.0 TO 7.9		8.0 TO 8.9		9.0 TO INF		TOTAL	UBAR
	0.0	0.4	0.0	0.9	1.0	1.4	1.5	1.9	2.0	2.4	2.5	2.9	3.0	3.4	3.5	3.9	4.0	4.4	4.5	4.9	5.0	5.9	6.0	6.9	7.0	7.9	8.0	8.9	9.0	0.18		
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.09	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.0	0.09	7.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.09	5.6
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	3.4
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.09	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	4.2
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.0	0.14	0.09	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	3.6
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	4.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	4.8
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	2.3
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	5.5
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.14	5.3
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.0	0.0	0.09	0.09	0.0	0.05	0.09	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.32	4.3
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.05	0.0	0.0	0.0	0.05	0.0	0.18	0.18	0.14	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.55	4.4
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	3.9	
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.14	0.09	0.09	0.18	0.18	0.37	0.18	0.18	0.37	0.60	0.60	0.46	0.18	0.23	0.18	0.23	0.18	0.23	0.18	0.18	0.05	0.05	0.0	0.0	2.68	4.4

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 2.7

TABLE 151 - D

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = -0.5 TO -1.4 IN PERCENT										DATA USED -- WD10 ,WS10 ,DT100											
SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION																					
SECTOR	TO	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0	7.0	8.0	9.0	TOTAL	UBAR			
		0.4	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.4	4.9	5.9	6.9	7.9	8.9	INF					
NNE	0.0	0.0	0.0	0.14	0.42	0.37	0.51	0.55	0.14	0.0	0.0	0.09	0.14	0.0	0.18	0.32	2.87	4.1			
NE	0.0	0.0	0.0	0.05	0.23	0.42	0.46	0.55	0.51	0.18	0.32	0.23	0.32	0.23	0.23	0.23	3.98	4.4			
ENE	0.0	0.0	0.0	0.05	0.0	0.09	0.65	0.23	0.28	0.09	0.05	0.09	0.0	0.14	0.0	0.09	1.76	3.8			
E	0.0	0.0	0.0	0.05	0.0	0.14	0.23	0.37	0.09	0.05	0.18	0.32	0.18	0.0	0.0	0.0	1.62	4.0			
ESE	0.0	0.0	0.0	0.0	0.09	0.18	0.14	0.18	0.09	0.28	0.18	0.32	0.28	0.65	0.09	0.05	2.54	5.2			
SF	0.0	0.0	0.0	0.09	0.0	0.23	0.23	0.42	0.74	0.97	0.37	0.60	0.51	0.32	0.32	0.05	4.86	4.7			
SSE	0.0	0.0	0.0	0.09	0.09	0.18	0.32	0.55	0.42	0.74	0.55	0.60	0.32	0.42	0.46	0.05	4.61	4.8			
S	0.0	0.0	0.0	0.0	0.23	0.09	0.42	0.23	0.32	0.55	0.55	0.37	0.65	0.28	0.18	0.18	4.07	4.9			
SSW	0.0	0.0	0.0	0.05	0.0	0.14	0.14	0.14	0.09	0.14	0.14	0.42	0.23	0.18	0.14	0.09	1.90	5.2			
SW	0.0	0.0	0.0	0.05	0.0	0.09	0.18	0.23	0.32	0.18	0.14	0.14	0.05	0.05	0.0	0.0	1.43	3.9			
WSW	0.0	0.0	0.0	0.05	0.0	0.05	0.09	0.05	0.14	0.09	0.14	0.28	0.28	0.23	0.05	0.0	1.43	5.2			
W	0.0	0.0	0.0	0.05	0.05	0.05	0.18	0.05	0.09	0.09	0.14	0.37	0.18	0.05	0.05	0.0	1.34	4.5			
WNW	0.0	0.0	0.05	0.05	0.28	0.18	0.0	0.09	0.32	0.14	0.23	0.18	0.23	0.0	0.0	0.0	1.76	3.7			
NW	0.0	0.0	0.0	0.0	0.09	0.37	0.32	0.37	0.83	1.57	1.53	0.97	0.14	0.18	0.05	0.05	6.47	4.3			
NNW	0.0	0.0	0.0	0.09	0.23	0.46	0.92	0.88	1.02	1.43	0.69	0.60	0.42	0.28	0.05	0.0	7.08	3.9			
N	0.0	0.0	0.0	0.09	0.23	0.32	0.55	0.51	0.65	0.28	0.42	0.05	0.0	0.0	0.0	0.0	3.10	3.2			
TOTAL	0.0	0.0	0.05	0.88	1.94	3.38	5.37	5.41	6.06	6.80	5.64	5.64	3.93	3.01	1.80	1.11	51.02	4.4			

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 51.0

TABLE 151 - E

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DIR100 = -0.4 TO +1.5 IN PERCENT DATA USED -- W010 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NPE	0.0	0.14	0.09	0.14	0.23	0.09	0.05	0.18	0.09	0.18	0.42	0.28	0.23	0.05	0.0	2.17	4.3
NE	0.0	0.0	0.18	0.09	0.05	0.05	0.18	0.14	0.28	0.23	0.60	0.23	0.09	0.05	0.0	2.17	4.5
ENE	0.0	0.05	0.09	0.09	0.14	0.14	0.05	0.0	0.05	0.05	0.0	0.0	0.05	0.0	0.0	0.69	2.6
E	0.0	0.0	0.18	0.09	0.14	0.18	0.05	0.09	0.14	0.09	0.28	0.05	0.0	0.0	0.0	1.29	3.4
ESE	0.0	0.05	0.32	0.37	0.14	0.14	0.28	0.14	0.09	0.09	0.14	0.05	0.09	0.14	0.0	2.03	3.3
SE	0.0	0.05	0.23	0.32	0.65	0.79	0.88	0.37	0.46	0.37	0.60	0.23	0.0	0.05	0.0	4.99	3.4
SSE	0.0	0.09	0.18	0.0	0.09	0.51	0.65	0.23	0.42	0.09	0.55	0.55	0.0	0.05	0.05	3.47	4.1
S	0.0	0.05	0.0	0.05	0.0	0.42	0.46	0.65	0.69	0.23	0.69	0.18	0.23	0.09	0.0	3.75	4.4
SSW	0.0	0.18	0.05	0.09	0.09	0.0	0.14	0.09	0.14	0.09	0.88	0.32	0.14	0.0	0.0	2.22	4.5
SW	0.0	0.14	0.0	0.14	0.05	0.05	0.05	0.05	0.05	0.14	0.14	0.18	0.0	0.0	0.0	0.97	3.8
WSW	0.0	0.05	0.09	0.0	0.05	0.05	0.09	0.05	0.09	0.09	0.18	0.14	0.0	0.0	0.0	0.88	4.0
W	0.0	0.05	0.51	0.18	0.09	0.05	0.09	0.05	0.05	0.0	0.0	0.09	0.0	0.0	0.0	1.16	2.1
WNW	0.0	0.18	0.55	0.74	0.37	0.18	0.23	0.05	0.14	0.05	0.05	0.0	0.0	0.0	0.0	2.54	2.1
NW	0.0	0.0	0.14	0.55	0.28	0.55	0.55	0.32	0.32	0.14	0.05	0.0	0.0	0.0	0.0	2.91	2.9
NPNW	0.0	0.0	0.32	0.23	0.14	0.05	0.18	0.23	0.14	0.14	0.0	0.05	0.0	0.0	0.0	1.48	2.8
N	0.0	0.05	0.0	0.09	0.09	0.09	0.09	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.55	2.6
TOTAL	0.0	4.66	2.96	3.19	2.59	3.33	4.03	2.68	3.24	1.99	4.58	2.36	0.83	0.42	0.05	33.30	3.6

NUMBER OF INVALID OBSERVATIONS= 1.

PERCENT OF VALID OBSERVATIONS= 33.3

TABLE 151 - F

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TRI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DT100 = +1.6 TO +4.0 IN PERCENT

DATA USED -- WD10 *WS10 *DT100

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		5.5		6.0		6.5		7.0		7.5		8.0		8.5		9.0		TOTAL	UBAR
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM		
NNE	0.0	0.0	0.14	0.09	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	1.1
NF	0.0	0.0	0.28	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.42	1.2
ENE	0.0	0.0	0.09	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.9
E	0.0	0.0	0.05	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.37	1.5
ESE	0.0	0.0	0.09	0.28	0.14	0.05	0.05	0.14	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.60	1.4
SF	0.0	0.0	0.05	0.37	0.28	0.23	0.28	0.23	0.05	0.05	0.28	0.28	0.23	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	1.53	2.2
SSE	0.0	0.0	0.09	0.14	0.14	0.05	0.14	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	1.7
S	0.0	0.0	0.09	0.05	0.05	0.0	0.05	0.05	0.0	0.0	0.14	0.05	0.05	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.46	2.3
SSW	0.0	0.0	0.18	0.09	0.14	0.05	0.14	0.05	0.05	0.05	0.0	0.0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.60	2.0
SW	0.0	0.0	0.42	0.14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.05	0.05	0.0	0.09	0.0	0.0	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.79	2.1
WSW	0.0	0.0	0.32	0.32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.06	1.3
W	0.0	0.0	0.05	0.74	0.23	0.0	0.0	0.23	0.0	0.0	0.0	0.0	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.29	1.5
WNW	0.0	0.0	0.0	0.55	0.55	0.18	0.0	0.55	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	1.6
NW	0.0	0.0	0.0	0.14	0.32	0.05	0.0	0.32	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
N	0.0	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	2.0
TOTAL	0.0	0.0	1.85	3.38	1.85	0.65	0.55	0.55	0.65	0.55	0.55	0.55	0.51	0.18	0.14	0.09	0.14	0.09	0.09	0.09	0.14	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	9.48	1.7

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 9.5

TABLE 151 - 6

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TPI-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR																	
DT100 = +4.1 TO +INF IN PERCENT DATA USED -- WD10 +WS10 +DT100																	
SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION																	
SECTOR	0.0 TO 0.4	0.5 TO 0.9	1.0 TO 1.4	1.5 TO 1.9	2.0 TO 2.4	2.5 TO 2.9	3.0 TO 3.4	3.5 TO 3.9	4.0 TO 4.4	4.5 TO 4.9	5.0 TO 5.9	6.0 TO 6.9	7.0 TO 7.9	8.0 TO 8.9	9.0 TO INF	TOTAL	UBAR
NNE	0.0	0.14	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	1.0
NF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.05	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.14	1.0
E	0.0	0.14	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	1.0
ESE	0.0	0.09	0.18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	1.0
SE	0.0	0.28	0.23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.51	0.9
SSE	0.0	0.09	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.18	0.9
S	0.0	0.05	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.09	1.0
SSW	0.0	0.14	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.23	0.8
SW	0.0	0.18	0.0	0.05	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	1.2
WSW	0.0	0.05	0.09	0.0	0.0	0.05	0.05	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.28	2.3
W	0.0	0.09	0.09	0.09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.28	1.2
WNW	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	1.3
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.05	1.0
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	1.30	1.02	0.18	0.05	0.09	0.05	0.0	0.0	0.05	0.0	0.0	0.0	0.0	0.0	2.73	1.1
NUMBER OF INVALID OBSERVATIONS= 0.																	
PERCENT OF VALID OBSERVATIONS 2.7																	

NUMBER OF INVALID OBSERVATIONS= 0.

PERCENT OF VALID OBSERVATIONS= 2.7

TABLE 151 - ALL

DATA PERIOD 04/01/1979 THROUGH 06/30/1979 RUN FROM TAPE SERIES TH1-EX

OMAHA PUBLIC POWER DISTRICT
FORT CALHOUN NUCLEAR STATION

JOINT FREQUENCY DISTRIBUTION WIND DIRECTION VS. WIND SPEED IN METERS/SEC FOR

DATA USED -- WD10 *WS10 *DT100
OT100 = -INF TO +INF IN PERCENT

SECTOR IS WIND DIRECTION NOT AFFECTED DIRECTION

SECTOR	0.0		0.5		1.0		1.5		2.0		2.5		3.0		3.5		4.0		4.5		5.0		6.0		7.0		8.0		9.0		TOTAL	UBAR
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM		
NNE	0.0	0.0	0.42	0.32	0.55	0.74	0.69	0.60	0.32	0.09	0.18	0.51	0.42	0.28	0.23	0.32	0.28	0.23	0.28	0.18	0.51	0.42	0.28	0.23	0.32	0.28	0.23	0.32	0.28	0.23	5.68	3.9
NE	0.0	0.0	0.28	0.32	0.32	0.46	0.51	0.74	0.65	0.46	0.60	0.83	0.60	0.37	0.28	0.23	0.39	0.09	0.0	0.23	0.0	0.23	0.60	0.37	0.28	0.23	0.37	0.28	0.23	0.28	6.65	4.3
E	0.0	0.0	0.18	0.32	0.09	0.23	0.79	0.28	0.28	0.23	0.39	0.09	0.0	0.23	0.0	0.09	0.0	0.23	0.0	0.23	0.0	0.09	0.0	0.23	0.0	0.09	0.0	0.23	0.0	0.09	2.91	3.3
ESE	0.0	0.0	0.18	0.46	0.14	0.32	0.42	0.51	0.23	0.18	0.28	0.60	0.23	0.83	0.05	0.0	0.42	0.28	0.46	0.37	0.83	0.46	0.37	0.83	0.23	0.37	0.83	0.23	0.05	5.96	3.9	
SE	0.0	0.0	0.23	0.78	0.60	0.37	0.37	0.55	0.42	0.42	0.28	0.46	0.37	0.83	0.05	0.0	0.42	0.28	0.46	0.37	0.83	0.46	0.37	0.83	0.23	0.37	0.83	0.23	0.05	12.29	3.7	
SSE	0.0	0.0	0.37	0.92	0.60	1.11	1.39	1.57	1.34	1.52	0.74	1.25	0.74	1.25	0.69	1.02	1.25	0.65	1.15	0.88	0.42	0.51	0.88	0.42	0.51	0.88	0.42	0.51	0.09	9.15	4.3	
S	0.0	0.0	0.28	0.55	0.23	0.32	0.88	1.25	0.69	1.25	0.63	1.11	0.83	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.09	8.41	4.5
SSW	0.0	0.0	0.18	0.09	0.32	0.09	0.97	0.74	1.02	1.25	0.63	1.11	0.83	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.28	0.18	0.51	0.09	5.08	4.3
SW	0.0	0.0	0.74	0.18	0.18	0.14	0.28	0.32	0.42	0.23	0.28	0.32	0.28	0.42	0.23	0.42	0.23	0.28	0.46	0.37	0.83	0.46	0.37	0.83	0.23	0.37	0.83	0.23	0.05	3.47	3.2	
WSW	0.0	0.0	0.42	0.55	0.0	0.09	0.18	0.23	0.18	0.23	0.18	0.28	0.46	0.23	0.05	0.0	0.46	0.23	0.05	0.0	0.46	0.23	0.05	0.0	0.46	0.23	0.05	0.0	0.0	3.37	3.7	
W	0.0	0.0	0.18	1.39	0.55	0.14	0.23	0.18	0.14	0.18	0.18	0.42																				
WNW	0.0	0.0	0.23	1.20	1.57	0.74	0.18	0.32	0.37	0.32	0.32	0.32	0.32	0.32	0.37	0.32	0.32	0.32	0.32	0.32	0.28	0.23	0.23	0.05	0.0	0.41	2.9	0.0	5.82	2.5		
NNW	0.0	0.0	0.0	0.28	1.02	0.69	0.88	0.97	1.20	1.89	1.76	1.06	1.06	0.97	1.20	1.89	1.76	1.06	1.76	1.06	1.06	0.97	1.20	1.89	1.76	1.06	0.97	1.20	0.05	10.30	3.8	
NNW	0.0	0.0	0.05	0.46	0.51	0.60	1.02	1.06	1.29	1.76	0.92	0.69	0.46	0.28	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.14	0.0	9.24	3.8
NNW	0.0	0.0	0.05	0.14	0.37	0.42	0.69	0.60	0.69	0.42	0.55	0.05	0.0	0.0	0.0	0.0	0.42	0.55	0.05	0.0	0.42	0.55	0.05	0.0	0.0	0.0	0.0	0.0	0.0	3.97	3.1	
TOTAL	0.0	0.0	4.30	8.27	7.30	6.79	9.61	10.21	9.43	10.81	8.22	10.67	6.65	4.25	2.23	1.11	100.00	3.8														

NUMBER OF INVALID OBSERVATIONS= 20.

PERCENT OF VALID OBSERVATIONS= 99.1

RELEASE NUMBER 79001

CONTAINMENT PURGE

STARTING TIME

JAN

2,1979

HOUR 19 MINUTE 55

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	0.9	201.6	1.1
20	3.1	227.0	0.8
21	4.0	253.6	1.2
22	7.6	237.0	1.9
23	8.3	246.7	2.0
24	11.0	241.7	1.8
1	10.0	261.8	1.4
2	7.6	279.6	0.9
3	5.9	276.2	0.7
4	5.5	286.6	1.2
5	6.4	277.9	1.0
6	5.7	277.1	1.1
7	6.4	270.8	0.7
8	6.4	278.4	0.8
9	6.1	278.2	-0.2
10	7.3	277.5	-1.0
11	9.1	277.8	-1.2
12	8.2	280.0	-1.3
13	9.5	281.8	-1.2
14	9.4	280.6	-1.4
15	8.1	278.9	-1.4
16	7.7	268.1	-1.2
17	8.1	258.3	-0.7
18	9.2	257.8	0.2
19	9.0	254.4	1.0
20	9.5	267.2	0.6
21	9.7	268.3	-0.4
22	9.4	307.6	-0.1
23	11.7	322.9	-0.5
24	11.6	324.6	-0.6
1	6.1	308.3	-0.4
2	9.3	322.9	-0.2
3	6.5	309.5	0.1
4	5.9	308.0	-0.3
5	4.5	288.0	-0.4
6	7.2	303.6	-0.8
7	5.9	306.0	-1.0
8	6.4	307.1	-1.1
9	6.7	298.9	-1.1
10	6.6	309.8	-1.1
11	5.6	308.8	-1.1
12	5.6	311.4	-1.1
13	5.2	293.2	-1.2
14	5.5	285.7	-1.1
15	6.5	308.5	-1.1
16	6.1	315.7	-1.1
17	7.7	318.8	-1.1
18	4.7	320.1	-1.0
19	5.6	321.0	-1.0

20	5.3	316.4	-1.0
21	3.7	319.7	-0.9
22	3.0	313.4	-0.6
23	3.0	303.2	-0.3
24	5.1	317.1	-0.1
1	4.4	313.9	0.1
2	3.8	309.8	0.1
3	4.9	313.6	-0.1
4	4.1	317.1	-0.1
5	4.5	310.6	-0.5
6	4.4	300.3	-0.9
7	5.3	315.9	-0.9
8	4.7	307.6	-0.6
9	2.7	288.6	-0.2
10	2.8	280.5	-0.4
11	7.0	284.0	-0.9
12	6.6	274.8	-1.2
13	6.2	273.2	-1.2
14	7.4	262.6	-1.2
15	7.3	261.8	-1.2
16	6.1	250.3	-1.1
17	4.4	239.5	-0.9
18	3.2	209.4	-0.2
19	3.1	174.8	0.5
20	7.1	183.5	1.1
21	12.4	204.9	1.5
22	15.6	208.4	0.9

STOP TIME JAN 5, 1979 HOUR 21 MINUTE 40

RELEASE NUMBER 79002

CONTAINMENT PURGE

STARTING TIME JAN 9, 1979 HOUR 17 MINUTE 28

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	5.6	314.0	-0.9
18	2.8	271.9	0.1
19	1.0	273.2	0.6
20	0.3	11.3	1.3
21	0.4	264.6	1.2

STOP TIME JAN 9, 1979 HOUR 20 MINUTE 28

STARTING TIME JAN 9, 1979 HOUR 20 MINUTE 33

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	0.3	11.3	1.3
21	0.4	264.6	1.2

STOP TIME JAN 9, 1979 HOUR 20 MINUTE 42

STARTING TIME JAN 9, 1979 HOUR 20 MINUTE 48

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	0.3	11.3	1.3
21	0.4	264.6	1.2
22	0.3	197.4	1.2
23	0.3	265.1	1.7
24	0.3	160.2	0.8

STOP TIME JAN 9, 1979 HOUR 23 MINUTE 25

STARTING TIME JAN 10, 1979 HOUR 1 MINUTE 50

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	1.4	199.8	0.9
2	2.8	252.7	0.4
3	4.0	271.3	0.3
4	3.5	310.7	-0.1
5	3.9	289.5	-0.4
6	3.8	308.7	-0.8
7	3.7	302.0	-0.5
8	2.4	291.9	-0.5
9	2.9	341.3	-0.8
10	3.7	349.2	-1.0
11	4.2	354.1	-1.1
12	3.4	359.9	-1.1
13	3.5	351.1	-1.0
14	4.0	354.2	-1.1
15	3.3	13.2	-1.1
16	4.3	33.0	-1.2
17	3.4	17.2	-1.2
18	4.2	352.3	-0.9
19	4.2	308.5	-0.4
20	3.3	292.5	0.3
21	2.8	290.3	0.3
22	0.9	236.3	0.5
23	0.4	179.8	0.7
24	3.8	125.2	0.0
1	5.1	133.7	-0.7
2	6.9	132.6	-0.7
3	8.5	132.7	-0.8
4	8.7	133.4	-0.8
5	7.4	136.8	-0.9
6	9.3	136.0	-0.9
7	11.1	146.8	-1.0
8	12.5	143.5	-1.0
9	14.9	144.7	-0.9
10	17.8	146.5	-1.0
11	15.8	151.3	-1.0
12	12.9	150.7	-1.0
13	11.9	151.0	-0.9
14	12.4	155.4	-1.0
15	11.3	157.1	-0.9
16	12.1	159.4	-0.9
17	10.5	159.3	-0.9
18	8.7	158.0	-0.8
19	10.0	153.5	-0.7
20	8.0	155.0	-0.6
21	6.4	155.4	-0.4
22	7.5	140.5	-0.2
23	7.2	128.7	-0.2
24	6.6	131.2	-0.1
1	5.8	130.6	-0.3

2	4.9	137.2	-0.4
3	4.1	141.7	-0.3
4	5.1	120.2	-0.1
5	6.6	125.6	-0.4
6	5.5	132.8	-0.3
7	5.2	129.6	-0.2
8	5.2	128.7	-0.5
9	4.2	119.2	-0.5
10	3.5	100.5	-0.5
11	3.8	126.9	-0.6
12	3.1	89.8	-0.7
13	3.3	43.0	-0.8
14	3.1	34.2	-0.8
15	3.4	30.3	-0.8
16	3.9	31.3	-0.9

STOP TIME JAN 12, 1979 HOUR 15 MINUTE 42

RELEASE NUMBER 79003

CONTAINMENT PURGE

STARTING TIME

JAN 17, 1979

HOUR 18 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	0.9	323.7	1.6
19	0.6	236.4	2.1
20	2.5	194.2	2.9
21	2.9	230.0	3.4
22	2.8	296.5	1.2
23	3.4	76.5	2.7
24	2.2	108.8	3.7
1	2.3	141.3	3.6
2	2.2	92.9	3.9
3	3.0	142.7	5.1
4	1.6	62.3	5.0
5	3.2	87.2	5.3
6	3.6	126.2	5.7
7	3.9	119.2	5.9
8	2.7	118.8	6.7
9	5.9	109.5	4.0
10	6.5	118.5	2.5
11	8.2	119.1	-0.1
12	7.3	125.4	-0.9
13	8.2	120.4	-0.9
14	9.8	116.2	-1.0
15	12.9	127.1	-0.9
16	14.1	127.4	-0.7
17	12.0	119.3	-0.7
18	11.4	114.0	-0.9
19	15.0	113.1	-1.1
20	-99.0	119.0	-1.2
21	-99.0	114.7	-1.2
22	-99.0	128.4	-0.7
23	-99.0	135.8	-0.4
24	-99.0	135.0	-0.6
1	-99.0	136.6	-0.3
2	-99.0	131.0	-0.1
3	-99.0	130.7	0.5
4	-99.0	123.0	0.6
5	-99.0	138.4	0.4
6	-99.0	184.9	0.3

STOP TIME

JAN 19, 1979

HOUR 5 MINUTE 43

STARTING TIME

JAN 19, 1979

HOUR 11 MINUTE 19

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	-99.0	257.6	-0.8
12	-99.0	272.1	-1.0

STOP TIME

JAN 19, 1979

HOUR 11 MINUTE 45

RELEASE NUMBER 79004

CONTAINMENT PURGE

STARTING TIME

JAN 20, 1979

HOUR 16 MINUTE 8

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	-99.0	313.2	-0.6
17	-99.0	314.0	-0.6
18	-99.0	320.7	-0.5
19	-99.0	321.9	-0.3
20	-99.0	321.3	-0.3
21	-99.0	322.4	-0.1
22	-99.0	322.7	-0.2
23	-99.0	324.7	-0.1
24	-99.0	323.4	-0.1
1	-99.0	323.0	-0.3
2	-99.0	322.6	-0.6
3	-99.0	321.2	-0.2
4	-99.0	321.3	-0.4
5	-99.0	323.3	-0.8
6	-99.0	323.9	-0.7
7	-99.0	318.6	-0.7
8	-99.0	322.4	-0.8
9	-99.0	322.7	-0.8
10	8.1	323.0	-0.9
11	8.7	322.8	-1.2
12	8.4	315.7	-1.2
13	8.6	312.6	-1.2
14	7.5	304.2	-1.2
15	6.1	293.7	-1.1
16	4.4	293.4	-1.0
17	2.5	265.2	-0.9
18	2.1	201.9	-0.3
19	0.8	143.6	0.2
20	3.6	122.7	1.2
21	3.8	121.6	1.3
22	3.8	134.4	1.9
23	5.6	145.8	2.9
24	5.5	122.0	0.4
1	5.1	109.9	-0.4
2	5.3	105.6	-0.4
3	4.7	103.3	0.3
4	6.3	105.8	0.5
5	5.8	105.8	1.4
6	5.5	110.0	0.1
7	6.4	107.3	0.6
8	7.9	125.2	1.4
9	8.0	135.6	0.9
10	9.8	137.8	0.4
11	9.7	144.2	-0.5
12	8.5	125.9	0.5
13	8.9	139.3	-0.2
14	12.9	160.2	-1.1

STOP TIME

JAN 22, 1979

HOUR 13 MINUTE 43

RELEASE NUMBER 79005

CONTAINMENT PURGE

STARTING TIME

JAN 26, 1979

HOUR 19 MINUTE 10

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	2.9	352.6	-0.0
20	3.1	350.7	0.7
21	3.2	328.8	0.8
22	4.6	322.2	0.4
23	5.4	313.9	0.0
24	4.6	323.5	-0.5
1	5.1	334.7	-0.6
2	6.0	344.2	-0.6
3	6.2	338.3	-0.7
4	7.2	328.8	-0.6
5	8.6	330.4	-0.7
6	10.1	333.6	-0.8
7	11.2	332.0	-0.8
8	10.0	328.0	-0.7
9	11.2	324.4	-0.6
10	11.9	322.7	-0.7
11	12.4	324.2	-1.0
12	15.0	320.8	-1.2
13	16.5	320.7	-1.3
14	15.8	317.0	-1.2
15	18.7	321.9	-1.3
16	15.1	322.0	-1.1
17	11.6	317.0	-0.7
18	10.9	323.7	-0.7
19	12.0	324.9	-0.7
20	13.8	317.6	-0.8
21	11.0	320.6	-0.8
22	12.8	323.2	-0.8
23	13.2	315.6	-0.7
24	14.1	319.5	-0.9
1	13.2	312.4	-0.8
2	12.6	308.0	-0.9
3	14.7	319.2	-0.8
4	10.9	312.5	-0.6
5	11.2	314.9	-0.6
6	10.9	303.8	-0.5
7	10.9	303.6	-0.5
8	11.5	319.4	-0.5
9	9.8	320.6	-0.7
10	11.5	320.3	-1.0
11	13.0	318.5	-1.1
12	12.9	315.2	-1.3
13	13.5	315.9	-1.3
14	14.0	316.1	-1.4
15	13.1	319.5	-1.3
16	12.2	320.3	-1.2
17	10.0	317.4	-1.0
18	7.3	308.2	-0.3
19	6.6	306.4	0.0

20	5.9	303.7	0.3
21	4.2	301.5	0.4
22	5.2	286.1	0.3
23	6.1	300.6	0.4
24	5.1	289.4	0.2
1	5.1	286.2	0.4
2	5.1	302.0	0.4
3	5.4	305.5	0.3
4	4.6	304.5	0.2
5	5.4	296.0	0.5
6	4.5	292.1	0.8
7	4.8	296.7	0.8

STOP TIME JAN 29, 1979 HOUR 6 MINUTE 10

RELEASE NUMBER 79006

CONTAINMENT PURGE

STARTING TIME FEB 2, 1979 HOUR 8 MINUTE 25

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
8	6.0	323.2	-0.5
9	8.9	322.5	-0.7
10	8.6	314.4	-0.5
11	7.9	309.3	-0.9
12	9.3	311.5	-0.5
13	8.3	314.0	-0.7
14	8.2	310.1	-0.8
15	7.1	315.4	-0.7
16	7.8	318.5	-0.9
17	5.6	331.9	-0.9
18	6.2	321.3	-0.5
19	6.1	322.4	0.0
20	7.2	320.7	-0.6
21	7.2	322.1	-1.0
22	7.5	322.3	-1.0
23	6.7	317.8	-0.8
24	4.4	317.9	-0.1
1	3.2	309.8	0.4
2	1.6	297.3	0.5
3	2.1	302.3	0.4
4	1.6	283.9	0.2
5	1.9	288.4	0.7
6	1.7	256.5	0.2
7	1.9	278.9	1.1
8	1.3	213.2	1.1
9	2.0	244.5	0.6
10	2.5	331.5	0.1
11	3.1	202.1	-0.8
12	4.0	213.4	-1.1
13	7.5	223.3	-1.2
14	8.9	228.9	-1.2
15	7.0	235.6	-1.1
16	7.0	248.0	-1.1
17	4.9	256.0	-0.7
18	4.4	284.5	0.6
19	5.0	294.4	1.6
20	4.1	297.3	2.1
21	4.3	292.9	1.6
22	4.8	294.5	0.9
23	8.0	311.7	0.2
24	7.8	323.8	-0.1
1	9.3	327.7	-0.5
2	6.8	328.2	-0.6
3	5.3	333.7	-0.4
4	4.1	312.7	0.2
5	4.2	320.1	-0.2
6	5.1	337.5	-0.3
7	4.5	323.4	-0.4
8	4.6	311.8	-0.3

9	5.2	311.9	-0.8
10	8.6	324.8	-1.2
11	6.3	335.6	-1.2
12	7.0	327.4	-1.1
13	7.3	319.6	-1.0
14	7.4	319.8	-0.9
15	6.8	327.2	-1.1
16	4.3	346.3	-1.2
17	3.4	359.2	-1.1
18	2.3	358.6	-0.4
19	1.9	305.6	0.1
20	2.5	287.7	0.3
21	1.5	278.4	0.2
22	1.9	248.4	0.6
23	1.3	272.6	0.9
24	1.2	173.0	1.4
1	1.8	153.0	2.1
2	2.5	159.7	2.6
3	2.0	123.6	1.9

STOP TIME FEB 5, 1979 HOUR 2 MINUTE 3

STARTING TIME FEB 8,1979 HOUR 18 MINUTE 4

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	5.1	334.1	-0.8
19	4.7	318.6	-0.1
20	2.4	292.5	0.6
21	0.9	266.6	0.3
22	1.8	273.4	0.5
23	0.8	214.2	1.0
24	0.4	164.1	2.3

STOP TIME FEB 8,1979 HOUR 23 MINUTE 40

STARTING TIME FEB 9,1979 HOUR 3 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
3	3.5	143.5	3.2
4	2.3	125.7	4.4
5	3.6	127.6	3.1
6	4.4	118.8	0.4
7	3.2	91.6	-0.1
8	3.4	93.4	-0.4
9	4.4	100.6	-0.3
10	6.1	151.8	-0.8
11	9.3	173.0	-1.0
12	6.6	167.9	-1.1
13	7.0	176.5	-1.1

STOP TIME FEB 9,1979 HOUR 12 MINUTE 48

STARTING TIME FEB 9,1979 HOUR 13 MINUTE 43

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
13	7.0	176.5	-1.1
14	6.0	154.5	-1.2
15	9.6	121.8	-1.2
16	11.3	125.5	-1.2
17	10.1	132.1	-1.0
18	9.3	125.4	-0.7
19	6.6	120.0	-0.6
20	4.7	122.5	-0.4
21	0.3	129.1	-0.2
22	4.6	132.6	0.2
23	5.6	134.5	0.4

24 5.1 126.8 0.6

STOP TIME FEB 9, 1979 HOUR 23 MINUTE 51

STARTING TIME FEB 10, 1979 HOUR 12 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
12	8.0	124.6	-1.1
13	8.4	117.3	-1.1
14	9.9	119.6	-1.1
15	7.4	168.9	-1.1
16	6.8	124.8	-1.1
17	8.2	122.1	-0.9
18	10.2	130.7	-0.4
19	5.9	131.4	0.0
20	5.3	141.1	-0.3
21	3.4	120.9	0.1
22	1.5	153.0	0.9
23	2.2	123.9	0.9
24	2.2	117.9	1.2
1	0.9	137.8	1.9
2	3.6	114.5	2.1
3	0.4	214.0	2.4
4	0.4	174.3	2.8
5	2.2	298.9	2.7
6	3.0	283.6	1.6
7	2.3	315.2	1.3
8	1.1	235.5	0.6
9	2.3	331.5	-0.1
10	3.7	44.7	-1.0
11	4.4	65.9	-1.2
12	4.4	108.3	-0.7
13	6.0	37.5	-1.6
14	5.8	44.0	-1.5
15	5.2	23.9	-1.4
16	4.6	16.8	-1.3
17	4.1	0.9	-1.2
18	6.4	342.2	-1.0
19	6.9	340.5	-0.9
20	6.5	350.0	-0.9
21	6.3	342.4	-0.8
22	7.8	331.9	-0.9
23	7.9	333.1	-0.9
24	8.8	330.1	-0.9
1	7.1	333.4	-0.9
2	8.8	338.2	-0.9
3	8.9	336.7	-1.0
4	7.1	336.1	-0.8
5	7.4	329.3	-0.6
6	5.2	326.5	-0.3
7	4.6	311.4	0.4

8	5.4	310.4	0.4
9	6.4	315.0	-0.3
10	7.3	314.2	-1.0
11	5.3	329.5	-1.1
12	4.6	305.6	-1.0

STOP TIME FEB 12, 1979 HOUR 11 MINUTE 10

RELEASE NUMBER 79008

CONTAINMENT PURGE

STARTING TIME

FEB 15, 1979

HOUR 16 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	19.1	329.7	-1.6
17	20.2	326.6	-1.3
18	18.4	326.2	-1.1
19	14.5	328.1	-1.0
20	14.9	326.9	-1.0
21	17.8	324.1	-1.0
22	17.2	323.3	-1.0
23	17.7	325.4	-0.9
24	10.9	332.4	-0.9
1	12.9	330.3	-0.9
2	12.8	328.2	-0.9
3	8.0	333.7	-0.8
4	9.0	325.7	-0.8
5	12.6	321.5	-0.9
6	12.1	322.3	-0.9
7	11.5	323.3	-0.9
8	10.2	326.6	-0.9
9	8.6	334.0	-1.1
10	9.1	335.5	-1.3
11	8.8	338.9	-1.4
12	8.0	345.7	-1.5
13	8.1	353.7	-1.5
14	7.8	348.7	-1.5
15	7.0	352.0	-1.4
16	6.7	0.2	-1.5
17	5.9	353.4	-1.3
18	4.6	346.4	-0.9
19	3.7	331.5	-0.5
20	3.4	342.6	-0.4
21	3.2	12.8	-0.2
22	3.1	31.2	-0.3
23	3.5	48.5	-0.6
24	0.7	48.3	-0.4
1	0.4	319.1	-0.2
2	0.4	298.4	0.0
3	0.5	302.4	0.3
4	0.9	317.4	-0.2
5	1.5	350.0	-0.8
6	1.1	3.0	-0.8
7	1.4	336.9	-0.7
8	2.2	306.8	-0.7
9	0.4	281.5	0.2
10	0.3	118.0	0.7
11	1.3	280.8	0.8
12	0.4	296.8	1.2
13	8.8	125.6	-0.6
14	12.9	118.3	-1.0
15	12.2	113.6	-1.1
16	11.4	111.0	-1.0

17	10.2	102.3	-1.0
18	10.0	108.4	-0.9
19	11.0	112.8	-0.9
20	9.2	112.5	-0.9
21	9.2	110.8	-0.9
22	8.4	123.2	-0.7
23	2.7	139.4	-0.3
24	5.3	125.5	-0.2
1	6.9	131.1	-0.5
2	4.5	140.7	-0.7
3	4.7	130.6	-0.6
4	3.6	138.4	-0.4
5	1.8	149.3	-0.3
6	4.2	126.8	-0.7
7	5.9	134.1	-0.7
8	4.0	151.6	-0.5
9	6.1	159.3	-0.7
10	7.8	175.7	-1.0
11	7.9	176.7	-1.0
12	9.9	190.6	-1.1
13	8.8	202.7	-1.2
14	7.4	207.5	-1.1
15	6.3	193.9	-1.1
16	5.3	183.5	-1.1
17	6.9	180.4	-1.0
18	4.7	186.1	-0.6
19	5.3	173.7	0.0
20	6.3	147.8	0.3
21	6.6	134.0	0.2
22	5.3	131.9	0.2
23	6.6	117.0	0.6
24	6.6	125.7	0.1
1	6.6	142.2	-0.1
2	7.6	120.0	0.9
3	6.3	120.9	1.1
4	14.1	169.1	0.3
5	13.3	169.1	-0.0
6	10.7	167.0	-0.0
7	11.2	173.0	0.9
8	10.7	161.1	0.1

STOP TIME FEB 19, 1979 HOUR 7 MINUTE 46

RELEASE NUMBER 79009

CONTAINMENT PURGE

STARTING TIME

FEB 22, 1979

HOUR 16 MINUTE 41

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	9.0	145.9	-0.1
17	9.5	172.8	-0.3
18	7.7	178.3	-0.2
19	7.1	198.3	-0.2
20	8.2	203.7	0.3
21	8.2	227.9	-0.0
22	5.3	244.4	-0.2
23	10.7	268.9	-0.6
24	15.2	304.6	-0.1
1	14.8	302.8	-0.8
2	15.8	300.5	-0.9
3	16.2	294.5	-1.0
4	12.9	296.0	-1.0
5	15.1	302.1	-1.0
6	12.8	301.2	-1.0
7	10.4	298.0	-1.0
8	10.2	295.8	-1.0
9	10.3	298.3	-1.3
10	13.4	306.8	-1.4
11	15.5	310.5	-1.5
12	14.4	310.3	-1.5
13	13.1	314.7	-1.5
14	12.6	318.3	-1.5
15	10.6	328.9	-1.5
16	11.9	321.0	-1.3
17	10.4	319.7	-1.2
18	7.5	327.5	-1.1
19	6.6	326.0	-0.7
20	4.9	331.5	-0.5
21	5.0	321.5	-0.5
22	4.3	332.7	-0.5
23	5.0	341.2	-0.6
24	5.7	329.6	-0.6
1	4.1	314.9	-0.3
2	3.1	323.5	-0.5
3	3.2	342.3	-0.8
4	4.3	352.8	-0.8
5	2.2	349.1	-0.8
6	1.9	346.0	-0.5
7	0.5	340.1	-0.2

STOP TIME

FEB 24, 1979

HOUR 6 MINUTE 1

STARTING TIME

FEB 24, 1979

HOUR 9 MINUTE 38

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
9	4.2	319.3	-0.9
10	5.5	326.7	-1.4
11	6.0	347.5	-1.6
12	5.0	347.2	-1.6
13	7.3	338.0	-1.5
14	7.4	327.5	-1.4
15	6.6	327.3	-1.4
16	8.6	325.2	-1.4
17	6.9	330.5	-1.3
18	5.4	326.6	-1.1
19	8.4	320.7	-0.8
20	6.4	325.6	-0.1
21	5.4	313.9	0.2
22	5.8	311.4	0.9
23	4.9	324.7	0.7
24	-99.0	-99.0	-99.0
1	6.1	314.7	1.0
2	2.4	305.8	0.3
3	5.8	308.2	1.1
4	4.2	296.2	0.9
5	4.6	301.6	0.0
6	5.4	311.4	0.9
7	4.1	301.1	0.5

STOP TIME

FEB 25, 1979

HOUR 6 MINUTE 2

RELEASE NUMBER 79010

CONTAINMENT PURGE

STARTING TIME MAR 1, 1979 HOUR 16 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	-99.0	-99.0	-99.0
17	-99.0	-99.0	-99.0
18	-99.0	-99.0	-99.0
19	-99.0	-99.0	-99.0
20	-99.0	-99.0	-99.0
21	-99.0	-99.0	-99.0
22	-99.0	-99.0	-99.0
23	-99.0	-99.0	-99.0
24	-99.0	-99.0	-99.0
1	-99.0	-99.0	-99.0
2	-99.0	-99.0	-99.0
3	-99.0	-99.0	-99.0
4	-99.0	-99.0	-99.0
5	-99.0	-99.0	-99.0
6	-99.0	-99.0	-99.0
7	-99.0	-99.0	-99.0
8	-99.0	-99.0	-99.0
9	-99.0	-99.0	-99.0
10	-99.0	-99.0	-99.0
11	-99.0	-99.0	-99.0
12	-99.0	-99.0	-99.0
13	-99.0	-99.0	-99.0
14	-99.0	-99.0	-99.0
15	-99.0	-99.0	-99.0
16	-99.0	-99.0	-99.0
17	-99.0	-99.0	-99.0
18	-99.0	-99.0	-99.0
19	-99.0	-99.0	-99.0
20	-99.0	-99.0	-99.0
21	-99.0	-99.0	-99.0
22	-99.0	-99.0	-99.0
23	-99.0	-99.0	-99.0
24	-99.0	-99.0	-99.0
1	-99.0	-99.0	-99.0
2	-99.0	-99.0	-99.0
3	-99.0	-99.0	-99.0
4	-99.0	-99.0	-99.0

STOP TIME MAR 3, 1979 HOUR 3 MINUTE 55

STARTING TIME MAR 3,1979 HOUR 21 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
--------------	-------------	-------------	----------------

21	-99.0	-99.0	-99.0
22	-99.0	-99.0	-99.0
23	-99.0	-99.0	-99.0
24	-99.0	-99.0	-99.0
1	-99.0	-99.0	-99.0
2	-99.0	-99.0	-99.0
3	-99.0	-99.0	-99.0
4	-99.0	-99.0	-99.0
5	-99.0	-99.0	-99.0
6	-99.0	-99.0	-99.0
7	-99.0	-99.0	-99.0
8	-99.0	-99.0	-99.0
9	-99.0	-99.0	-99.0
10	-99.0	-99.0	-99.0
11	-99.0	-99.0	-99.0
12	-99.0	-99.0	-99.0
13	-99.0	-99.0	-99.0
14	-99.0	-99.0	-99.0
15	-99.0	-99.0	-99.0
16	-99.0	-99.0	-99.0
17	-99.0	-99.0	-99.0
18	-99.0	-99.0	-99.0
19	-99.0	-99.0	-99.0
20	-99.0	-99.0	-99.0
21	-99.0	-99.0	-99.0
22	-99.0	-99.0	-99.0
23	-99.0	-99.0	-99.0
24	-99.0	-99.0	-99.0
1	-99.0	-99.0	-99.0
2	-99.0	-99.0	-99.0
3	-99.0	-99.0	-99.0
4	-99.0	-99.0	-99.0
5	-99.0	-99.0	-99.0
6	-99.0	-99.0	-99.0

STOP TIME MAR 5,1979 HOUR 5 MINUTE 45

RELEASE NUMBER 79011

CONTAINMENT PURGE

STARTING TIME

MAR

8,1979

HOUR 17 MINUTE 36

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	-99.0	-99.0	-99.0
18	-99.0	-99.0	-99.0
19	-99.0	-99.0	-99.0
20	-99.0	-99.0	-99.0
21	-99.0	-99.0	-99.0
22	-99.0	-99.0	-99.0
23	-99.0	-99.0	-99.0
24	-99.0	-99.0	-99.0
1	-99.0	-99.0	-99.0
2	-99.0	-99.0	-99.0
3	-99.0	-99.0	-99.0
4	-99.0	-99.0	-99.0
5	-99.0	-99.0	-99.0
6	-99.0	-99.0	-99.0
7	-99.0	-99.0	-99.0
8	-99.0	-99.0	-99.0
9	-99.0	-99.0	-99.0
10	-99.0	-99.0	-99.0
11	-99.0	-99.0	-99.0

STOP TIME

MAR

9,1979

HOUR 10 MINUTE 42

STARTING TIME

MAR

9,1979

HOUR 11 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	-99.0	-99.0	-99.0
12	-99.0	-99.0	-99.0
13	-99.0	-99.0	-99.0
14	-99.0	-99.0	-99.0
15	-99.0	-99.0	-99.0
16	-99.0	-99.0	-99.0
17	-99.0	-99.0	-99.0
18	-99.0	-99.0	-99.0
19	-99.0	-99.0	-99.0
20	-99.0	-99.0	-99.0
21	-99.0	-99.0	-99.0
22	-99.0	-99.0	-99.0
23	-99.0	-99.0	-99.0
24	-99.0	-99.0	-99.0
1	-99.0	-99.0	-99.0
2	-99.0	-99.0	-99.0
3	-99.0	-99.0	-99.0
4	-99.0	-99.0	-99.0
5	-99.0	-99.0	-99.0
6	-99.0	-99.0	-99.0

7	-99.0	-99.0	-99.0
8	-99.0	-99.0	-99.0

STOP TIME MAR 10,1979 HOUR 7 MINUTE 10

STARTING TIME MAR 10,1979 HOUR 10 MINUTE 55

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
10	-99.0	-99.0	-99.0
11	-99.0	-99.0	-99.0
12	-99.0	-99.0	-99.0

STOP TIME MAR 10,1979 HOUR 11 MINUTE 28

STARTING TIME MAR 11,1979 HOUR 8 MINUTE 11

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
8	7.7	82.3	2.0
9	3.4	95.1	0.1
10	7.0	122.0	0.1
11	8.0	131.8	-0.4
12	9.7	145.2	-0.7
13	8.3	162.1	-0.9
14	7.1	173.6	-1.1
15	5.6	175.0	-1.1
16	6.1	170.8	-0.9
17	5.0	168.5	-0.8
18	4.7	181.4	-0.5
19	3.8	157.5	0.1
20	4.4	143.0	0.5
21	3.4	150.7	0.9
22	1.7	97.5	1.0
23	2.1	113.8	1.6
24	2.0	82.1	1.2
1	1.9	112.2	1.6
2	1.4	34.4	1.5
3	1.4	113.9	2.1
4	1.2	281.7	2.3
5	1.7	20.2	2.0
6	1.3	19.8	2.1
7	2.2	287.7	2.1
8	2.4	286.4	1.2
9	4.6	293.0	0.2
10	8.4	344.6	-0.5

STOP TIME MAR 12,1979 HOUR 9 MINUTE 0

RELEASE NUMBER 79012

CONTAINMENT PURGE

STARTING TIME MAR 15, 1979 HOUR 18 MINUTE 5

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	10.0	143.5	-0.6
19	7.3	128.9	-0.2
20	7.7	113.5	0.5
21	8.6	139.5	0.5
22	9.7	150.0	0.2
23	12.1	156.5	0.1
24	11.7	161.4	0.1
1	9.7	158.1	-0.1
2	8.7	146.3	-0.1
3	9.0	144.0	0.0
4	10.1	147.5	-0.0
5	9.9	151.7	0.1
6	10.8	159.1	-0.0
7	9.4	147.1	-0.1
8	10.3	141.3	-0.0
9	11.7	144.2	0.0
10	13.2	151.5	-0.5

STOP TIME MAR 16, 1979 HOUR 9 MINUTE 5

STARTING TIME MAR 16, 1979 HOUR 9 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
9	11.7	144.2	0.0
10	13.2	151.5	-0.5
11	15.1	150.3	-0.7
12	17.4	182.4	-0.8
13	20.8	184.5	-0.8
14	22.2	173.5	-0.8
15	18.3	169.8	-0.7
16	17.4	170.4	-0.6
17	17.3	169.5	-0.5
18	15.7	170.4	-0.4
19	13.8	166.7	-0.3
20	14.9	168.0	-0.2
21	15.0	163.3	-0.2
22	14.2	162.8	-0.3
23	13.5	168.9	-0.2
24	13.9	164.7	-0.2
1	14.1	163.3	-0.3
2	14.2	164.9	-0.4
3	14.6	167.4	-0.4
4	13.2	163.8	-0.5
5	13.8	164.3	-0.5
6	14.5	162.7	-0.5

7	14.8	156.6	-0.5
8	14.3	157.7	-0.5
9	14.1	158.8	-0.4
10	15.9	167.3	-0.5
11	17.3	175.6	-0.5
12	17.9	178.5	-0.6
13	16.5	177.0	-0.6
14	14.4	179.7	-0.6
15	14.5	180.9	-0.5
16	16.2	182.3	-0.6
17	14.1	181.0	-0.6
18	11.6	171.8	-0.5
19	10.7	161.0	-0.4
20	14.3	161.7	-0.4
21	10.6	161.8	-0.3
22	13.1	170.8	-0.2
23	8.6	146.8	-0.0
24	7.5	143.1	0.2
1	7.6	134.6	0.4
2	9.5	145.1	0.3
3	11.8	154.6	-0.1
4	12.1	137.1	0.2
5	9.7	133.8	0.0
6	11.9	131.4	0.0
7	11.8	139.9	-0.2
8	10.9	129.9	-0.0
9	10.2	124.6	-0.1
10	10.2	119.2	-0.2
11	9.4	118.3	-0.1
12	12.7	105.2	-0.1
13	12.0	112.5	-0.3
14	18.5	135.7	-0.3
15	21.8	151.7	-0.6
16	19.9	167.2	-0.5
17	18.7	182.7	-0.4
18	11.8	173.3	-0.4
19	11.3	157.1	0.1
20	11.4	222.9	0.1
21	7.9	210.1	0.2
22	6.3	270.6	-0.3
23	6.6	272.5	-0.6
24	6.8	270.0	-0.7
1	6.7	282.0	-0.5
2	5.9	278.9	-0.6
3	4.4	258.7	-0.4
4	6.5	265.0	-0.4
5	7.3	262.2	-0.6
6	7.3	253.2	-0.3
7	7.2	267.5	-0.5
8	8.1	258.2	-0.6

STOP TIME MAR 19, 1979 HOUR 7 MINUTE 35

RELEASE NUMBER 79013

CONTAINMENT PURGE

STARTING TIME MAR 22, 1979 HOUR 21 MINUTE 44

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
21	12.2	340.1	-0.6
22	12.9	337.3	-0.6
23	14.4	341.2	-0.6
24	14.1	341.2	-0.6
1	15.0	344.5	-0.6

STOP TIME MAR 23, 1979 HOUR 0 MINUTE 35

STARTING TIME MAR 23, 1979 HOUR 8 MINUTE 14

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
8	15.9	338.9	-0.4
9	17.6	335.5	-0.7

STOP TIME MAR 23, 1979 HOUR 8 MINUTE 17

STARTING TIME MAR 23, 1979 HOUR 16 MINUTE 58

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	19.5	328.5	-0.9
17	17.2	330.3	-0.8
18	16.5	331.1	-0.8
19	14.6	331.6	-0.6
20	14.1	335.2	-0.8
21	11.8	342.4	-0.7
22	13.4	337.2	-0.7
23	12.5	344.7	-0.7
24	12.4	335.3	-0.6
1	14.3	336.7	-0.8
2	13.0	336.6	-0.8
3	13.4	330.1	-0.8
4	12.6	337.5	-0.7
5	12.2	339.9	-0.7
6	11.9	336.4	-0.9
7	11.8	332.3	-0.7
8	12.6	336.7	-0.9
9	14.0	335.9	-1.0
10	14.0	338.4	-1.1
11	14.6	340.6	-1.1
12	15.0	339.5	-1.2
13	15.3	340.6	-1.3

14	15.5	340.7	-1.3
15	13.9	339.7	-1.2
16	14.4	337.7	-1.1
17	11.8	343.5	-1.0
18	11.5	344.7	-0.8
19	9.1	347.5	-0.8
20	9.3	338.6	-0.6
21	8.0	338.7	-0.6
22	7.0	349.0	-0.7
23	7.4	355.5	-0.8
24	5.9	355.3	-0.7
1	4.4	349.4	-0.6
2	3.5	340.6	-0.5
3	4.6	317.3	-0.5
4	3.6	303.2	-0.5
5	3.4	300.4	-0.5
6	3.1	293.0	-0.4
7	2.8	287.9	-0.5
8	3.0	334.0	-0.6
9	2.5	23.4	-0.9
10	2.3	30.0	-1.0
11	2.7	343.9	-1.0
12	3.1	30.2	-1.2
13	3.3	34.0	-1.3
14	3.9	42.4	-1.2
15	4.1	31.2	-1.2
16	3.8	9.5	-1.1
17	4.4	35.7	-1.0
18	4.0	29.0	-1.0
19	1.8	70.8	-0.1
20	1.4	165.5	0.3
21	1.7	45.6	0.6
22	2.1	3.7	0.1
23	1.1	68.5	0.3
24	2.4	278.5	-0.1
1	3.5	324.8	-0.2
2	5.8	327.1	-0.5
3	4.7	321.5	-0.6
4	6.6	330.1	-0.6
5	6.7	328.1	-0.6
6	5.2	324.1	-0.6
7	7.0	335.3	-0.5
8	10.3	326.7	-0.8

STOP TIME MAR 26, 1979 HOUR 7 MINUTE 34

RELEASE NUMBER 79014

CONTAINMENT PURGE

STARTING TIME

MAR 29, 1979

HOUR 18 MINUTE 23

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	5.0	300.8	1.4
19	4.0	168.1	3.7
20	6.7	265.9	3.0
21	7.7	313.8	-0.3
22	8.6	303.9	-0.6
23	6.4	308.7	-0.8
24	7.4	310.8	-1.0
1	7.3	296.6	-0.8
2	9.5	297.4	-1.0
3	10.6	297.7	-1.0
4	11.6	307.1	-0.9
5	11.3	317.7	-1.0
6	10.4	314.7	-1.0
7	13.7	312.4	-0.9
8	16.0	322.6	-1.0
9	14.8	326.7	-1.1
10	14.6	329.8	-1.2
11	12.9	327.8	-1.2
12	12.1	9.2	-1.3
13	11.7	16.6	-1.3
14	13.1	343.8	-1.2
15	12.8	329.5	-1.3
16	9.2	333.8	-1.1
17	10.5	330.7	-1.0
18	10.8	329.9	-1.1
19	8.5	332.1	-1.0
20	8.1	331.5	-0.9
21	6.3	332.8	-0.9
22	4.0	336.2	-0.8
23	5.1	351.0	-0.9
24	5.9	19.1	-0.9
1	6.7	28.1	-1.0
2	6.0	53.7	-0.9
3	4.5	18.4	-1.0
4	4.0	347.3	-1.0
5	4.7	0.6	-1.0
6	4.9	14.4	-0.8
7	3.4	53.4	-0.8
8	5.5	71.5	-1.2
9	7.7	85.2	-1.2
10	7.3	105.9	-1.2
11	8.4	122.7	-1.3
12	7.6	127.8	-1.3
13	6.9	99.8	-1.4
14	7.1	118.9	-1.4
15	7.6	125.4	-1.4
16	7.4	115.5	-1.3
17	7.7	103.6	-1.3
18	8.5	109.4	-1.1

19	6.0	94.7	-0.8
20	6.7	97.2	-0.5
21	7.6	90.5	-0.6
22	10.1	123.7	-0.9

STOP TIME MAR 31, 1979 HOUR 21 MINUTE 29

STARTING TIME APR 1, 1979 HOUR 0 MINUTE 35

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	6.0	95.7	-1.0
2	5.4	78.0	-1.0
3	5.4	58.2	-1.0
4	4.5	51.8	-0.7
5	5.3	58.0	-0.9
6	5.6	54.7	-0.6
7	5.7	42.2	-0.8
8	7.7	50.1	-0.9
9	7.4	43.4	-1.2
10	8.1	48.6	-1.3
11	7.9	54.4	-1.1
12	8.1	59.1	-1.1
13	7.9	33.9	-1.1
14	8.7	22.2	-1.0
15	7.4	33.3	-1.0
16	4.9	27.5	-0.5
17	4.0	30.4	-0.6
18	4.0	17.5	-0.7
19	2.3	30.7	-0.8
20	5.0	27.3	-0.6
21	7.1	12.0	-0.8
22	5.6	0.2	-0.9
23	6.0	0.0	-0.7

STOP TIME APR 1, 1979 HOUR 22 MINUTE 45

RELEASE NUMBER 79015

CONTAINMENT PURGE

STARTING TIME

APR

5,1979

HOUR 17 MINUTE 27

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	15.3	331.5	-1.2
18	13.7	341.0	-1.1
19	11.9	340.2	-0.9
20	11.4	347.1	-1.0
21	8.8	349.2	-0.7
22	7.6	344.5	-0.8
23	6.4	340.2	-0.7
24	7.1	333.2	-0.9
1	7.7	328.1	-1.1
2	6.9	345.6	-1.0
3	6.7	353.7	-1.1
4	4.9	358.3	-1.0
5	6.0	10.0	-1.0
6	5.9	24.6	-1.0
7	5.4	24.5	-1.1
8	5.2	41.7	-1.0
9	4.6	73.9	0.8
10	6.3	139.9	-2.3
11	8.3	109.0	-2.3
12	8.8	107.1	-1.1
13	10.5	121.0	-1.2
14	10.7	148.2	-1.3
15	12.4	135.4	-1.3
16	13.8	140.0	-1.2
17	13.0	150.3	-1.2
18	12.8	149.1	-0.9
19	11.8	153.8	-0.6
20	10.5	149.9	-0.6
21	9.3	152.0	-0.6
22	9.2	149.2	-0.5
23	9.8	148.2	-0.6
24	11.3	148.7	-0.4
1	13.5	154.8	-0.3
2	14.1	156.3	-0.3
3	11.3	150.4	-0.2
4	10.7	145.3	-0.0
5	9.4	141.8	-0.4
6	9.2	140.5	-0.2
7	9.4	140.9	-0.3
8	12.8	139.4	-0.8
9	13.3	139.8	-1.0
10	13.8	143.5	-1.2
11	12.1	147.5	-1.1
12	10.9	179.6	-1.2
13	10.2	180.7	-1.2
14	9.2	200.9	-1.3
15	8.7	220.6	-1.1
16	7.9	208.2	-1.1
17	11.6	205.1	-1.0

18	9.8	208.9	-0.8
19	4.9	194.5	0.2
20	3.0	151.2	1.7
21	2.8	285.2	3.6
22	3.6	311.1	3.5
23	4.3	297.1	1.5
24	5.1	297.2	1.6
1	8.9	322.4	0.6
2	13.8	334.4	-0.2
3	12.5	334.9	-0.5
4	13.3	334.5	-0.6
5	13.1	343.2	-0.7
6	14.3	336.6	-0.7
7	13.4	338.9	-0.8
8	13.5	335.1	-0.8
9	17.1	331.8	-1.0
10	17.6	330.8	-1.1
11	16.3	333.9	-1.3
12	15.4	332.9	-1.4
13	16.8	330.9	-1.3
14	15.5	332.6	-1.3
15	15.1	336.1	-1.2
16	17.3	331.5	-1.1
17	14.6	333.7	-1.1
18	12.9	333.6	-0.8
19	10.7	335.6	-0.6
20	11.4	334.1	-0.8
21	9.3	343.9	-0.6
22	8.7	355.9	-0.9
23	8.4	354.8	-0.8
24	7.8	354.0	-0.8
1	7.7	353.1	-0.8
2	6.8	0.1	-0.6
3	6.2	5.8	-0.6
4	5.9	9.1	-0.8
5	6.1	5.5	-0.8
6	6.1	346.2	-0.7

STOP TIME APR 9, 1979 HOUR 5 MINUTE 53

RELEASE NUMBER 79016

CONTAINMENT PURGE

STARTING TIME APR 12, 1979 HOUR 18 MINUTE 8

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	9.2	269.1	-0.6
19	9.2	268.7	-0.5
20	7.6	280.4	-0.3
21	6.8	274.3	-0.2
22	7.7	271.7	0.1
23	9.2	268.1	0.4
24	11.9	256.4	0.2
1	14.9	257.7	-0.1
2	14.4	258.6	-0.2
3	13.7	262.5	-0.2
4	13.7	264.1	-0.1
5	12.5	256.2	0.2
6	11.6	238.9	0.3
7	10.9	243.5	-0.1

STOP TIME APR 13, 1979 HOUR 6 MINUTE 15

STARTING TIME APR 13, 1979 HOUR 9 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
9	12.8	254.3	-1.0
10	13.7	255.5	-1.2
11	14.0	244.1	-1.2
12	14.5	252.2	-1.4
13	15.2	260.8	-1.5
14	17.9	273.9	-1.5
15	15.4	274.4	-1.5
16	15.8	273.1	-0.9
17	12.8	277.2	-1.2
18	10.4	278.6	-0.6
19	6.8	316.2	-0.3
20	6.7	320.2	0.9
21	4.1	310.0	2.0
22	3.6	296.7	1.3
23	3.7	303.6	0.9
24	4.3	314.6	0.9
1	3.8	304.5	0.4
2	5.8	323.2	0.3
3	6.0	318.8	-0.2
4	5.6	351.2	-0.6
5	4.0	343.6	-0.5
6	2.8	298.9	-0.3
7	3.9	306.1	0.3
8	6.2	318.9	-1.0
9	6.4	320.1	-1.1

10	5.7	304.1	-1.2
11	7.8	290.2	-1.5
12	9.3	292.0	-1.6
13	10.4	294.9	-1.6
14	9.5	273.2	-1.5
15	8.9	293.9	-1.4
16	8.7	322.0	-1.1
17	8.2	308.2	-1.0
18	8.6	320.9	-1.0
19	7.9	320.3	-0.3
20	3.4	303.4	1.5
21	2.8	264.1	1.2
22	1.8	226.5	2.3
23	1.7	233.3	3.8
24	1.6	264.8	5.4

STOP TIME APR 14, 1979 HOUR 23 MINUTE 37

RELEASE NUMBER 79017

CONTAINMENT PURGE

STARTING TIME

APR 19, 1979

HOUR 17 MINUTE 40

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	19.0	162.1	-1.1
18	18.0	158.7	-0.8
19	14.4	151.6	-0.7
20	10.7	144.9	-0.5
21	10.3	142.6	-0.4
22	7.2	160.7	-0.5
23	6.1	188.8	-0.2
24	6.1	154.7	0.4
1	7.3	135.3	1.4
2	6.4	142.5	1.1
3	9.8	300.9	-0.3
4	4.8	337.4	-0.6
5	8.4	319.0	-0.7
6	9.4	317.7	-0.6
7	13.1	315.7	-0.7
8	10.0	318.2	-0.7
9	9.9	318.7	-0.7
10	12.2	318.3	-0.7
11	12.1	317.1	-0.8
12	10.9	320.1	-0.8
13	9.8	319.2	-0.8
14	10.9	317.9	-1.0
15	10.7	318.7	-1.1
16	10.4	320.7	-1.0
17	8.7	327.1	-1.0
18	7.8	326.3	-0.8
19	6.4	328.7	-0.6
20	4.2	323.9	0.2
21	2.7	276.7	1.5
22	4.7	304.6	2.0
23	4.1	288.8	2.4
24	3.3	282.5	1.8
1	2.5	269.8	2.2
2	2.6	267.9	2.0
3	2.5	257.0	1.6
4	2.0	250.0	2.0
5	2.5	279.9	1.8
6	1.6	249.7	1.7
7	3.9	280.7	1.2
8	4.6	287.1	0.2
9	8.8	312.1	-0.7
10	8.5	295.0	-1.0
11	7.2	331.7	-1.0
12	9.5	331.0	-0.9
13	10.4	39.2	-1.2
14	10.9	44.4	-1.1
15	9.4	113.6	-1.1
16	9.1	123.8	-1.0
17	9.1	131.6	-0.9

18	9.9	139.3	-0.8
19	7.8	152.5	-0.4
20	5.9	173.8	0.5
21	3.7	163.2	2.7
22	2.4	127.9	4.0
23	2.4	141.8	4.5
24	4.2	152.6	3.8
1	3.0	155.8	4.7
2	5.9	178.0	3.2
3	3.1	150.6	2.9
4	3.0	135.2	3.8
5	1.9	89.7	4.2
6	2.3	121.9	4.6
7	2.3	82.0	2.9
8	7.2	175.8	0.1
9	9.5	176.1	-0.9
10	9.6	176.9	-1.0
11	9.5	167.9	-1.2
12	9.1	147.8	-1.1
13	9.7	120.8	-1.1
14	9.4	136.5	-1.2
15	9.1	136.7	-1.2
16	8.7	134.6	-1.2
17	8.9	136.3	-1.1
18	9.7	139.8	-0.9

STOP TIME

APR 22, 1979

HOURLY 17 MINUTE 50

RELEASE NUMBER 79018

CONTAINMENT PURGE

STARTING TIME

APR 26, 1979

HOUR 18 MINUTE 8

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	8.9	254.8	-0.5
19	8.8	305.2	-0.1
20	9.6	305.8	0.1
21	8.9	306.9	-0.3
22	9.0	304.4	-0.5
23	9.9	303.9	-0.7
24	9.7	306.9	-0.7
1	10.0	317.8	-0.6
2	10.3	317.6	-0.6
3	10.3	316.4	-0.7
4	9.8	316.1	-0.6
5	7.3	304.3	-0.3
6	6.4	302.9	-0.3
7	9.7	308.3	-0.7
8	9.9	314.4	-1.0
9	9.6	318.0	-1.1
10	8.7	320.9	-1.4
11	8.7	323.0	-1.3
12	12.5	317.8	-1.4
13	10.3	316.3	-1.3
14	11.4	316.9	-1.2
15	12.9	310.7	-1.2
16	11.8	304.6	-1.2
17	8.7	325.4	-1.1
18	4.8	318.7	-1.1
19	7.7	343.4	-0.8
20	3.2	335.3	-0.2
21	2.4	253.1	1.0
22	3.1	280.6	1.2
23	3.4	283.3	1.4

STOP TIME

APR 27, 1979

HOUR 22 MINUTE 20

STARTING TIME

APR 28, 1979

HOUR 2 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
2	1.9	232.5	1.9
3	1.7	257.9	2.9
4	1.6	182.0	3.6
5	1.2	203.6	4.2
6	1.4	203.3	4.4
7	1.6	104.2	3.1
8	2.7	55.1	0.0
9	2.4	44.9	-1.2
10	4.0	172.1	-1.1
11	6.2	171.5	-1.2
12	5.7	177.7	-1.3
13	6.6	164.6	-1.3
14	8.7	164.7	-1.1
15	10.2	165.7	-1.2
16	10.3	178.8	-0.9
17	8.6	174.5	-0.7
18	7.2	174.4	-0.4
19	7.8	175.7	-0.4
20	10.2	138.5	-0.8
21	8.6	131.5	-0.6
22	6.0	128.9	-0.6
23	6.6	134.9	-0.5
24	3.8	177.5	-0.3
1	4.0	223.5	-0.4
2	4.1	220.4	-0.3
3	8.0	289.6	-0.2
4	7.6	282.7	0.0
5	10.9	284.2	-0.3
6	12.3	296.9	-0.5
7	11.8	306.6	-0.6
8	13.3	303.9	-0.6
9	14.5	306.9	-0.8
10	16.8	306.3	-1.1
11	16.2	306.2	-1.1
12	16.6	304.2	-1.1
13	15.6	304.1	-1.2
14	14.0	303.4	-1.1
15	15.1	301.4	-1.0
16	14.4	296.0	-1.2
17	14.7	299.5	-1.1
18	10.1	303.8	-0.8
19	7.4	304.4	-0.4
20	4.1	304.4	0.9
21	3.8	311.9	0.8
22	3.9	297.0	0.5
23	2.4	275.4	-0.1
24	3.3	300.1	0.3
1	4.2	298.8	0.3
2	5.0	302.4	0.3

3	3.0	279.3	0.6
4	3.3	275.9	0.5
5	2.8	293.4	1.0
6	5.0	303.4	0.3
7	7.4	300.2	-0.5
8	9.0	306.3	-0.9

STOP TIME APR 30, 1979 HOUR 7 MINUTE 35

RELEASE NUMBER 79019

CONTAINMENT PURGE

STARTING TIME

MAY

3,1979

HOUR 21 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
21	3.2	4.2	0.7
22	3.4	331.2	0.8
23	3.6	322.2	1.1
24	4.0	307.7	1.8
1	2.9	265.8	1.9
2	4.4	289.9	2.7
3	4.1	284.9	2.5
4	3.7	281.4	2.4
5	2.7	262.5	2.3
6	2.9	265.6	1.9
7	2.7	155.2	0.6
8	7.3	135.6	-0.8
9	5.9	117.8	-0.9
10	5.6	169.7	-1.1
11	8.0	218.2	-1.0
12	8.6	223.3	-1.1
13	8.1	229.6	-1.2
14	8.0	238.6	-1.2
15	7.1	267.3	-1.4
16	7.4	250.2	-1.0
17	7.5	222.6	-0.9
18	6.5	210.6	-0.7
19	7.1	194.4	-0.5
20	7.5	181.2	0.5
21	10.3	189.2	1.2
22	12.0	188.0	1.3
23	11.8	185.7	1.0
24	12.2	193.6	0.8
1	12.2	194.4	0.7
2	14.6	196.2	0.2
3	13.9	195.5	0.1
4	14.7	206.6	0.1
5	12.7	204.9	-0.1
6	12.6	198.9	-0.0
7	15.6	190.2	-0.5
8	17.6	200.7	-0.7
9	18.4	197.2	-0.9
10	17.4	196.7	-0.9
11	18.8	205.0	-1.1
12	18.7	211.9	-1.1
13	15.4	212.0	-1.0
14	17.0	209.5	-1.0
15	15.5	212.9	-1.0
16	14.8	216.6	-0.9
17	13.0	214.5	-0.8
18	9.2	191.3	-0.6
19	8.5	185.9	-0.4
20	7.5	160.9	0.4
21	9.4	166.6	0.6

22	12.3	170.6	0.0
23	13.5	176.1	0.1
24	13.6	172.6	0.2
1	13.1	168.7	-0.2
2	13.0	162.9	-0.2
3	13.2	161.4	-0.2
4	14.9	160.8	-0.3
5	15.3	160.3	-0.3
6	14.7	157.3	-0.5
7	17.5	162.6	-0.6
8	17.3	159.7	-0.8
9	17.2	169.1	-1.0
10	18.1	175.2	-1.0
11	18.7	174.3	-1.1
12	19.3	175.2	-1.2
13	20.0	173.5	-1.1
14	20.3	184.3	-1.2
15	20.5	181.0	-1.1
16	21.6	191.0	-1.0
17	21.5	196.9	-0.9
18	20.1	197.6	-0.7
19	17.3	194.1	-0.4
20	12.1	183.0	-0.1
21	12.8	167.8	-0.0
22	14.3	165.0	-0.2
23	15.5	169.4	-0.2
24	17.9	168.1	-0.2
1	18.6	168.9	-0.3
2	6.9	218.8	-0.1
3	7.5	145.0	0.4
4	7.9	140.3	0.5
5	8.6	174.0	-0.4
6	10.0	312.9	-0.5
7	4.5	329.1	-0.7

STOP TIME MAY 7, 1979 HOUR 6 MINUTE 44

RELEASE NUMBER 79020

CONTAINMENT PURGE

STARTING TIME MAY 10, 1979 HOUR 18 MINUTE 3

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	10.8	283.4	-0.8
19	10.1	302.8	-0.6
20	11.3	308.2	-0.6
21	9.8	302.3	-0.7
22	10.7	299.5	-0.8
23	8.8	294.6	-0.6
24	9.2	286.8	-0.4
1	6.7	292.9	-0.3
2	7.3	179.4	-0.6
3	7.4	160.2	-0.5
4	6.0	143.0	-0.6
5	6.8	154.1	-0.4
6	6.5	134.3	-0.5
7	7.6	165.9	-0.8
8	8.4	165.2	-1.0
9	9.5	146.7	-1.2
10	8.8	181.6	-1.3
11	9.5	141.8	-1.4

STOP TIME MAY 11, 1979 HOUR 10 MINUTE 26

STARTING TIME MAY 11, 1979 HOUR 14 MINUTE 17

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
14	9.4	135.4	-1.7
15	7.8	141.1	-1.4
16	5.7	152.8	-1.2
17	7.0	143.9	-1.2
18	5.2	167.0	-1.1
19	3.8	185.1	-0.9
20	2.2	270.1	0.0
21	2.2	262.8	1.1
22	1.3	23.3	1.6
23	1.2	47.0	1.7
24	2.4	43.5	1.1
1	1.5	36.9	1.8
2	2.3	21.0	2.1
3	4.1	16.2	1.5
4	4.4	22.5	1.0
5	4.2	14.2	0.8
6	4.5	13.4	0.8
7	4.8	10.9	-0.1
8	6.0	25.0	-0.7
9	7.5	32.7	-0.9
10	5.0	18.8	-0.8

11	6.7	17.1	-1.2
12	8.4	35.5	-1.2
13	9.8	37.0	-1.3
14	8.9	50.1	-0.8
15	7.4	50.7	-0.7
16	7.3	62.6	-0.6
17	7.0	91.0	-1.0
18	6.9	135.0	-0.4
19	3.0	114.1	0.2
20	6.0	147.6	0.1
21	3.3	101.6	0.7
22	1.9	41.6	2.3
23	2.4	97.8	2.4
24	3.0	127.8	3.2
1	2.7	140.4	3.4
2	3.0	142.6	2.4
3	6.6	88.6	2.6
4	6.6	92.7	2.3
5	3.9	109.5	2.4
6	2.7	111.6	2.2
7	4.8	137.3	0.4
8	7.5	123.0	-0.8
9	7.5	135.0	-1.4
10	8.3	140.7	-1.5
11	7.6	132.3	-1.6
12	7.3	112.1	-1.8
13	7.7	110.7	-1.6
14	7.5	100.0	-1.4
15	7.3	87.1	-1.3
16	6.5	111.5	-1.3
17	10.0	84.9	-0.8
18	7.7	71.9	-0.5
19	6.2	73.6	-0.3
20	5.8	83.6	0.2
21	5.0	152.6	0.3
22	3.1	88.9	0.6
23	2.1	50.9	2.2
24	1.8	149.9	2.9
1	2.7	123.8	2.0
2	3.1	70.7	2.1
3	1.5	62.8	2.5
4	2.3	93.2	3.1
5	2.0	112.5	3.3
6	2.4	92.9	3.5
7	3.6	146.0	1.9
8	3.0	139.7	-0.1

STOP TIME MAY 14, 1979 HOUR 7 MINUTE 45

RELEASE NUMBER 79021

CONTAINMENT PURGE

STARTING TIME

MAY 17, 1979

HOUR 18 MINUTE 21

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	17.9	43.6	-0.4
19	13.9	41.5	-0.2
20	11.7	46.9	-0.2
21	10.3	71.3	0.0
22	5.2	134.1	-0.6
23	2.8	102.3	-0.3
24	12.2	37.1	-0.0
1	11.0	41.2	-0.4
2	5.9	81.8	-0.4
3	5.8	56.8	0.1
4	6.7	37.9	0.2
5	8.3	26.9	0.1
6	8.6	30.4	-0.1
7	8.3	54.4	0.3
8	7.5	50.3	-0.4
9	5.4	62.0	-0.6
10	6.1	31.3	-0.7
11	8.1	38.5	-0.9
12	8.7	36.6	-0.9
13	9.2	41.3	-1.1
14	9.8	43.4	-0.9
15	13.9	36.1	-1.1
16	11.7	31.7	-0.8

STOP TIME

MAY 18, 1979

HOUR 15 MINUTE 26

STARTING TIME

MAY 18, 1979

HOUR 16 MINUTE 22

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	11.7	31.7	-0.8
17	6.0	144.1	-0.6
18	5.4	170.2	-0.5
19	9.4	163.8	-0.4
20	8.3	161.8	-0.4
21	6.8	155.0	-0.5
22	6.0	163.3	-0.5
23	4.3	166.3	-0.5
24	4.1	139.5	-0.1
1	2.9	116.1	0.6
2	3.7	123.0	0.5
3	3.0	104.8	0.5
4	3.0	99.8	0.9
5	2.3	102.7	0.9
6	2.3	81.4	0.7
7	2.8	112.0	0.2

8	3.1	181.5	-0.8
9	3.0	138.3	-0.8
10	3.2	178.1	-0.8
11	2.9	206.2	-1.0
12	3.8	27.2	-1.1
13	3.5	28.4	-1.2
14	5.1	137.3	-1.4
15	4.9	167.6	-1.1
16	4.6	153.1	-1.0
17	3.5	158.9	-0.8
18	2.9	162.5	-0.8
19	2.5	292.0	-0.3
20	1.7	108.3	0.6
21	1.7	204.4	1.5
22	1.4	219.2	2.3
23	2.5	268.3	4.2
24	1.6	253.5	3.8
1	1.7	263.9	3.9
2	1.5	204.7	3.8
3	1.9	208.2	4.2
4	3.0	273.8	3.3
5	3.3	286.9	2.0
6	3.5	279.0	0.9
7	2.8	276.8	0.6
8	3.5	351.5	-0.8
9	6.2	346.2	-1.1
10	7.8	345.8	-1.1
11	9.0	338.8	-1.4
12	10.5	342.4	-1.6
13	8.5	334.7	-1.5
14	8.5	329.5	-1.2
15	8.0	330.8	-1.1
16	9.4	329.3	-1.2
17	9.2	333.1	-1.1
18	8.4	342.1	-1.0
19	8.4	336.1	-0.7
20	4.2	347.6	-0.1
21	2.0	157.3	1.5
22	1.6	213.6	2.3
23	3.2	292.2	2.0
24	2.3	259.7	2.0
1	1.9	234.8	2.2
2	1.5	197.4	2.5
3	2.3	266.5	2.9
4	2.1	251.7	2.8
5	1.7	233.9	3.0
6	2.3	284.7	2.3
7	2.7	149.0	0.0
8	9.8	134.7	-1.0

STOP TIME MAY 21, 1979 HOUR 7 MINUTE 17

RELEASE NUMBER 79022

CONTAINMENT PURGE

STARTING TIME MAY 24, 1979 HOUR 18 MINUTE 28

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
18	2.8	350.0	-0.8
19	7.4	88.4	-0.7
20	4.5	115.7	0.1
21	2.7	120.7	1.5
22	2.7	100.5	3.1
23	2.0	96.8	4.6
24	2.0	129.9	4.4
1	2.6	63.7	5.3
2	1.8	142.6	4.9
3	1.6	219.9	3.2
4	2.5	120.9	4.3

STOP TIME MAY 25, 1979 HOUR 3 MINUTE 45

STARTING TIME MAY 25, 1979 HOUR 7 MINUTE 58

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
7	4.0	111.5	1.5
8	8.5	133.4	-0.6
9	10.8	149.9	-1.2
10	8.7	169.9	-1.3

STOP TIME MAY 25, 1979 HOUR 9 MINUTE 21

STARTING TIME MAY 25, 1979 HOUR 9 MINUTE 56

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
9	10.8	149.9	-1.2
10	8.7	169.9	-1.3
11	8.8	183.0	-1.4
12	6.7	212.0	-1.3
13	6.4	200.5	-1.4
14	6.6	227.6	-1.2
15	5.7	223.5	-1.2
16	5.1	226.4	-0.9
17	6.1	181.9	-1.0
18	6.0	169.7	-0.8
19	6.4	145.8	-0.4
20	5.9	164.0	0.8
21	6.6	190.0	1.5
22	10.0	207.2	1.5

23	10.4	200.0	0.5
24	11.6	210.4	-0.1
1	13.4	225.7	-0.1
2	15.0	234.0	-0.1
3	13.8	236.8	0.0
4	8.1	187.7	0.1
5	9.5	222.1	0.1
6	10.2	236.1	0.1
7	8.9	257.4	-0.2
8	8.7	297.9	-1.1
9	10.4	323.2	-1.2
10	9.6	329.5	-1.3
11	9.9	334.9	-1.3
12	9.0	329.7	-1.2
13	10.9	307.2	-1.5
14	14.7	310.7	-1.7
15	10.1	48.1	-1.3
16	7.5	89.4	-1.1
17	6.5	70.7	-1.0
18	4.1	352.8	-0.7
19	4.2	7.9	-0.4
20	3.8	73.2	-0.0
21	2.3	300.2	1.0
22	2.5	307.0	1.6
23	3.1	280.0	2.3
24	3.3	292.7	3.0
1	3.1	293.4	2.7
2	2.9	292.4	1.5
3	3.5	298.9	2.7
4	2.9	285.3	1.9
5	3.1	296.4	2.7
6	2.2	296.8	2.8
7	3.0	308.5	1.2
8	5.6	327.0	-0.9
9	6.8	338.1	-1.3
10	7.0	347.6	-1.4
11	7.1	348.2	-1.4
12	6.3	342.9	-1.5
13	7.8	347.5	-1.5
14	7.4	348.5	-1.5
15	5.2	334.0	-1.4
16	5.0	7.7	-1.4
17	5.0	1.6	-1.2
18	3.6	327.0	-1.0
19	4.4	120.9	-0.7
20	3.8	131.4	0.5
21	4.2	138.2	1.4
22	4.1	129.1	1.9
23	5.5	141.5	1.9
24	5.1	136.7	1.9
1	6.4	136.5	1.8
2	8.6	152.1	1.5
3	7.6	137.5	2.0
4	6.0	139.5	2.5
5	6.6	144.7	1.9

6	6.7	133.6	2.0
7	9.6	135.6	0.1
8	10.7	146.9	-1.0

STOP TIME MAY 28, 1979 HOUR 7 MINUTE 45

RELEASE NUMBER 79023 CONTAINMENT PURGE

STARTING TIME MAY 31, 1979 HOUR 20 MINUTE 18

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	4.4	318.4	0.0
21	2.2	236.3	1.5
22	2.1	218.9	2.5
23	2.1	221.5	3.4
24	3.0	265.5	3.7
1	2.2	165.3	5.1
2	2.1	134.9	6.3
3	2.0	123.6	7.7
4	2.2	72.1	7.2
5	3.2	85.4	7.8
6	1.8	103.1	6.1
7	4.5	165.9	2.5
8	9.0	204.0	-0.2
9	12.0	213.2	-1.1
10	12.5	221.4	-1.0
11	11.1	243.0	-1.4
12	11.8	240.9	-1.3
13	11.8	233.1	-1.2
14	12.0	245.1	-1.2
15	11.9	250.1	-1.2
16	10.5	252.5	-0.8
17	8.6	295.3	-1.0
18	8.1	264.6	-1.0
19	9.8	321.3	-0.8
20	4.3	335.8	-0.3
21	2.9	276.7	0.9
22	2.6	144.0	1.8
23	5.6	151.9	2.2
24	5.6	178.3	2.7
1	2.6	50.4	3.4
2	2.7	249.2	4.1
3	2.3	136.3	3.1
4	1.8	194.5	3.5
5	2.9	173.6	4.1
6	2.4	142.4	5.7
7	1.6	48.8	3.8
8	3.5	40.9	-0.1
9	5.0	29.8	-1.2
10	5.4	40.9	-1.3
11	8.8	63.7	-1.3
12	9.2	119.2	-1.3
13	8.3	163.5	-1.3
14	6.9	176.0	-1.4
15	7.2	196.2	-1.5
16	6.5	183.1	-1.3
17	7.6	179.9	-1.0
18	6.4	222.9	-0.8
19	4.8	229.7	-0.3
20	2.2	249.0	2.3

21	2.7	181.8	3.3
22	3.3	136.6	1.1
23	2.2	121.6	2.6
24	2.2	211.4	4.2
1	1.4	149.4	4.1
2	3.7	199.8	3.6
3	3.6	168.8	3.7
4	2.9	296.2	4.2
5	3.3	31.0	1.0
6	2.8	20.0	2.2
7	5.5	11.2	0.3
8	6.7	42.3	-0.8
9	10.7	55.3	-0.9
10	12.9	50.4	-1.1
11	14.6	52.5	-1.2
12	15.6	46.8	-1.3
13	15.6	47.8	-1.2
14	15.9	34.3	-1.4
15	13.6	36.8	-1.3
16	13.5	38.3	-1.2
17	13.0	37.4	-0.9
18	14.0	34.3	-0.7

STOP TIME JUNE 3, 1979 HOUR 17 MINUTE 47

STARTING TIME JUNE 8, 1979 HOUR 1 MINUTE 35

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	9.6	324.8	-0.1
2	7.2	339.6	-0.1
3	7.5	325.3	-0.0
4	8.3	333.3	-0.1
5	8.3	350.3	-0.4
6	8.4	348.4	-0.3
7	6.9	354.9	-0.5
8	6.6	331.8	-0.3
9	6.9	341.6	-0.3
10	8.4	348.5	-0.5

STOP TIME JUNE 8, 1979 HOUR 9 MINUTE 30

STARTING TIME JUNE 8, 1979 HOUR 11 MINUTE 14

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
11	8.5	349.9	-0.7
12	6.7	343.4	-0.7
13	5.5	345.8	-0.6
14	9.0	336.4	-0.8
15	8.6	340.7	-0.7
16	7.7	347.5	-0.6
17	7.9	346.8	-0.6
18	6.0	3.7	-0.8
19	5.4	344.6	-0.5
20	5.3	333.2	-0.5
21	5.4	332.2	-0.5
22	5.1	332.9	-0.3
23	3.9	324.8	-0.4
24	4.3	317.5	-0.2
1	4.4	304.5	0.1
2	4.1	302.8	0.4
3	5.7	309.9	0.4
4	6.6	316.1	-0.2
5	5.8	322.1	-0.4
6	4.2	336.8	-0.6
7	3.6	346.4	-0.5
8	3.8	331.0	-0.5
9	4.9	313.3	-0.2
10	4.1	312.3	-0.3
11	4.2	306.0	-0.5
12	4.2	302.9	-0.8
13	3.5	289.8	-1.1
14	3.5	283.2	-0.8
15	4.7	296.3	-0.8

16	6.8	296.2	-0.8
17	9.6	320.4	-0.7
18	9.9	324.0	-0.6
19	9.5	322.3	-0.5
20	9.9	318.8	-0.5
21	10.5	319.2	-0.6
22	10.6	317.3	-0.4
23	9.2	309.8	-0.5
24	10.6	310.7	-0.4
1	8.6	317.9	-0.1
2	7.5	308.8	-0.1
3	7.4	306.1	-0.2
4	5.2	299.8	0.0
5	3.1	293.9	0.5
6	4.3	260.2	0.1
7	5.4	268.9	-0.6
8	4.8	286.8	-1.0
9	6.0	279.0	-1.2
10	6.4	273.3	-1.4
11	8.0	294.2	-1.3
12	9.9	296.9	-1.4
13	12.0	311.6	-1.3
14	12.2	315.4	-1.4
15	12.2	307.9	-1.6
16	11.5	303.7	-1.5
17	9.8	310.8	-1.2
18	8.9	307.3	-0.9
19	5.9	314.1	-0.5
20	3.1	291.7	0.9
21	2.2	256.1	2.2
22	2.4	275.4	3.1
23	2.2	287.7	3.6
24	1.7	145.7	6.1
1	1.9	109.8	6.8
2	3.3	218.5	5.7
3	3.0	251.1	5.1
4	2.7	295.4	2.7
5	2.8	359.7	2.3
6	5.9	225.9	4.0
7	12.3	219.7	3.8
8	13.5	219.6	2.3

STOP TIME JUNE 11, 1979 HOUR 7 MINUTE 35

RELEASE NUMBER 79025 CONTAINMENT PURGE

STARTING TIME JUNE 14, 1979 HOUR 17 MINUTE 55

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
17	16.5	58.1	-1.0
18	15.8	61.5	-0.8
19	14.8	53.5	-0.6
20	14.3	50.3	-0.4
21	15.9	64.5	-0.4
22	16.5	175.4	-0.5
23	15.0	174.5	-0.5
24	16.5	175.8	-0.5
1	16.4	175.4	-0.5
2	16.5	177.1	-0.5
3	17.0	178.0	-0.5
4	13.8	173.8	-0.5
5	12.6	178.9	-0.5
6	11.4	45.5	-0.5

STOP TIME JUNE 15, 1979 HOUR 5 MINUTE 40

STARTING TIME JUNE 15, 1979 HOUR 16 MINUTE 47

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	4.8	170.6	-1.2
17	5.2	146.0	-0.5
18	5.9	270.4	-0.1
19	4.9	270.0	0.4
20	4.1	319.7	0.6
21	3.7	35.3	1.1
22	9.4	52.7	0.0
23	9.7	44.2	-0.2
24	10.5	42.5	-0.1
1	11.5	42.5	-0.1
2	13.0	40.4	-0.3
3	12.0	41.4	-0.2
4	10.9	41.5	-0.2
5	11.9	41.7	-0.2
6	14.4	43.5	-0.2
7	12.8	37.7	-0.2
8	10.8	34.1	-0.5
9	9.8	34.7	-0.6

STOP TIME JUNE 16, 1979 HOUR 8 MINUTE 0

STARTING TIME

JUNE 16, 1979

HOUR 20 MINUTE 49

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	9.8	347.6	-0.6
21	9.3	354.6	-0.6
22	8.0	354.9	-0.6
23	8.2	356.1	-0.5
24	7.3	1.7	-0.6
1	5.1	8.6	-0.5
2	6.5	45.5	-0.6
3	7.4	44.5	-0.7
4	6.6	53.6	-0.6
5	8.4	69.7	-0.6
6	8.0	65.1	-0.6
7	7.0	43.6	-0.7
8	7.1	1.9	-1.0

STOP TIME

JUNE 17, 1979

HOUR 7 MINUTE 20

STARTING TIME JUNE 21, 1979 HOUR 16 MINUTE 28

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	7.4	101.6	-1.0
17	6.2	76.0	-0.8
18	6.1	63.8	-0.7
19	5.5	68.1	-0.4
20	4.7	75.0	0.6
21	3.0	73.7	1.2
22	3.3	111.2	0.8
23	7.3	115.0	0.2
24	9.2	88.2	1.2
1	7.3	175.2	0.6
2	8.8	197.4	1.1
3	4.4	292.3	0.1
4	2.7	257.6	1.0
5	2.9	213.2	1.6
6	1.9	196.9	1.4
7	2.2	200.6	2.2
8	2.9	276.1	1.9
9	4.1	302.5	0.5

STOP TIME JUNE 22, 1979 HOUR 8 MINUTE 46

STARTING TIME JUNE 22, 1979 HOUR 9 MINUTE 27

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
9	4.1	302.5	0.5
10	6.2	325.7	-1.0
11	7.2	342.5	-1.2
12	7.3	334.9	-1.1
13	6.0	30.4	-1.6
14	6.3	83.2	-1.2
15	7.0	188.4	0.0
16	4.8	286.8	-0.2
17	7.8	238.0	0.3
18	11.9	176.8	0.9
19	8.3	295.7	-1.0
20	6.8	319.5	-0.4
21	9.0	351.3	0.4
22	6.3	292.5	0.1
23	4.1	299.7	1.6
24	2.5	269.1	2.0
1	8.8	337.7	1.1
2	2.3	42.2	0.7
3	2.6	48.8	0.7
4	1.9	303.6	-0.2
5	2.5	340.6	-0.3

6	3.8	66.6	-0.2
7	5.6	73.0	-0.6
8	3.3	1.3	-0.5
9	6.0	33.2	-0.7
10	9.6	86.0	-0.8
11	6.8	46.1	-1.0
12	5.6	41.8	-1.0
13	6.4	23.1	-1.0
14	4.8	54.9	-1.1
15	4.8	42.7	-1.3
16	5.7	29.5	-1.5
17	5.0	22.8	-1.4
18	5.4	29.3	-1.2
19	7.2	342.3	-1.2
20	7.4	99.5	-1.0

STOP TIME JUNE 23, 1979 HOUR 19 MINUTE 57

STARTING TIME JUNE 23, 1979 HOUR 20 MINUTE 11

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	7.4	99.5	-1.0
21	5.8	97.3	-0.9
22	4.8	101.6	-0.6
23	2.3	132.0	0.3
24	3.0	144.2	-0.6
1	4.9	141.5	0.3
2	-99.0	-99.0	-99.0
3	2.6	153.0	-99.0
4	1.4	330.8	-99.0
5	1.3	10.8	0.8
6	1.1	290.7	1.1
7	1.5	217.6	1.6
8	1.3	243.3	1.9
9	2.0	151.4	0.5
10	2.9	128.5	-0.3
11	5.2	274.2	-0.9
12	4.8	213.0	-1.2
13	5.5	4.4	-1.3
14	5.2	201.8	-1.5
15	5.1	178.3	-1.4
16	6.1	143.0	-1.5
17	7.3	145.5	-1.4
18	6.6	140.2	-1.3
19	6.1	149.4	-1.2
20	7.0	153.4	-1.1
21	7.6	158.6	-1.0
22	5.7	167.9	-0.3
23	6.6	167.9	0.7
24	6.0	163.8	1.4
1	-99.0	-99.0	-99.0

2	6.8	174.3	1.5
3	2.6	164.9	2.6
4	4.7	134.8	2.2
5	5.9	140.3	1.1
6	7.7	142.1	0.9
7	6.8	142.3	0.8
8	6.6	157.8	0.1

STOP TIME

JUNE 25, 1979

HOUR 7 MINUTE 45

RELEASE NUMBER 79027

CONTAINMENT PURGE

STARTING TIME

JUNE 28, 1979

HOUR 16 MINUTE 21

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
16	6.1	236.9	-1.4
17	6.3	227.2	-1.4
18	7.5	214.8	-1.4
19	8.2	207.2	-1.3
20	8.2	234.7	-1.1
21	7.0	313.2	-0.5
22	6.9	320.9	0.9
23	3.8	315.8	1.7
24	2.7	310.4	2.8
1	3.9	309.1	2.5
2	3.2	307.1	1.7
3	3.4	305.5	1.6
4	5.9	306.6	0.4
5	4.4	299.6	0.8
6	5.5	311.0	0.4
7	5.8	316.4	0.5
8	6.3	315.3	-0.1
9	8.6	319.8	-0.8
10	9.7	322.9	-1.1
11	8.3	332.9	-1.3
12	9.9	330.6	-1.4
13	10.4	331.1	-1.4
14	9.5	338.6	-1.5
15	8.9	331.9	-1.4
16	9.3	341.1	-1.5
17	7.7	337.7	-1.4
18	7.2	333.0	-1.2
19	6.3	334.5	-1.0
20	5.4	335.2	-0.7
21	4.6	323.8	-0.6
22	2.8	344.3	0.2
23	1.9	216.4	2.8
24	2.8	233.9	3.6
1	2.0	242.1	4.0
2	1.6	178.6	5.4
3	1.8	134.5	6.9
4	2.6	132.8	5.2
5	2.2	346.2	5.8
6	1.6	234.7	5.4
7	1.7	219.0	5.9
8	1.4	133.2	6.5
9	2.0	164.2	2.0
10	2.8	242.9	-0.7
11	5.6	192.5	-1.2
12	6.8	115.7	-1.5
13	4.9	122.5	-1.3
14	5.5	78.2	-1.4
15	5.8	106.5	-1.3
16	7.5	50.3	-1.4

17	9.2	134.8	-1.4
18	8.1	138.2	-1.3
19	7.5	159.0	-1.1
20	5.4	145.1	-0.3
21	5.7	138.2	-0.1
22	5.7	123.0	0.4
23	4.6	140.0	2.2
24	3.9	152.3	3.9

STOP TIME JUNE 30, 1979 HOUR 24 MINUTE 0

RELEASE NUMBER 78024 DECAY TANK PURGE

STARTING TIME JAN 1, 1979 HOUR 0 MINUTE 0

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	9.7	342.9	-1.0
2	9.4	336.8	-1.0
3	10.1	330.8	-1.0
4	10.9	325.5	-1.0
5	9.9	327.2	-1.0
6	11.2	321.5	-0.8
7	9.9	324.7	-0.8
8	9.3	21.9	-0.7
9	9.4	312.5	-0.9
10	10.9	316.5	-1.0
11	11.7	319.3	-1.0
12	9.4	318.4	-1.1
13	9.3	314.0	-1.1
14	10.4	306.6	-1.3
15	12.5	302.2	-1.3
16	13.6	306.4	-1.3
17	9.3	302.4	-0.8
18	6.1	291.9	-0.4
19	6.4	277.3	-0.1
20	7.0	270.1	0.1
21	9.7	263.2	0.2
22	10.7	265.9	0.4
23	10.4	265.8	0.3
24	11.3	264.1	0.2
1	10.4	269.6	-0.3
2	9.9	269.1	-0.5
3	10.5	264.7	-0.5
4	12.4	254.5	-0.1
5	12.1	257.4	0.4
6	8.9	268.4	0.2
7	7.8	282.8	0.2
8	9.0	285.0	0.1
9	7.8	306.4	-0.5
10	7.0	310.2	-0.9
11	10.7	312.2	-1.1
12	13.2	314.5	-1.3
13	11.7	306.3	-1.3
14	11.0	304.9	-1.3
15	9.5	293.4	-1.3
16	9.4	297.8	-1.2
17	6.7	309.6	-0.9
18	1.3	255.2	-0.1
19	0.9	201.6	1.1
20	3.1	227.0	0.8

STOP TIME JAN 2, 1979 HOUR 19 MINUTE 45

STARTING TIME

JAN 6, 1979

HOUR 0 MINUTE 20

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
1	14.8	198.7	0.1
2	12.3	193.8	0.4
3	12.4	198.2	0.2
4	14.7	212.6	-0.1
5	11.6	233.7	-0.2
6	2.9	213.8	-0.4
7	6.7	234.7	0.9
8	7.1	271.9	2.0
9	7.0	285.8	2.0
10	6.1	313.0	-0.5
11	7.0	313.1	-1.0
12	7.7	322.1	-1.1
13	7.3	315.8	-1.1
14	6.1	314.7	-0.9
15	6.3	316.6	-1.0
16	4.7	307.8	-1.1
17	2.4	287.2	-0.8
18	1.5	282.8	0.5
19	0.5	292.2	1.1
20	0.7	294.4	0.9
21	2.3	292.9	1.4
22	2.7	311.3	1.3
23	2.3	305.1	1.8

STOP TIME

JAN 6, 1979

HOUR 22 MINUTE 0

RELEASE NUMBER 79001

DECAY TANK PURGE

STARTING TIME JAN 30, 1979 HOUR 20 MINUTE 55

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	9.7	318.8	-0.4
21	7.1	312.9	-0.1
22	8.3	321.2	-0.4
23	8.4	308.4	-0.6
24	6.8	312.6	-0.4
1	6.2	309.7	0.1
2	6.9	302.8	0.4
3	3.9	307.4	0.4
4	3.2	297.0	0.5
5	4.0	287.8	0.7
6	4.3	291.5	0.3
7	3.9	292.3	0.2
8	4.5	294.5	0.2
9	4.9	300.4	-0.3
10	6.2	305.4	-0.8
11	8.5	307.8	-1.0
12	8.4	317.9	-1.1
13	8.1	308.5	-1.2
14	7.9	312.0	-1.2
15	8.0	312.6	-1.2
16	7.1	316.8	-1.1
17	4.6	301.4	-0.8
18	2.9	281.6	-0.4
19	2.0	284.7	0.9
20	1.0	21.8	0.8
21	1.8	277.3	1.0
22	1.2	284.0	1.7
23	1.3	150.5	2.4
24	1.6	242.5	2.7
1	1.4	63.4	3.8
2	0.9	86.3	4.9
3	0.9	16.6	5.3
4	1.2	127.0	6.5
5	1.0	22.0	7.3
6	0.9	134.6	7.7
7	0.8	234.5	7.9
8	2.0	101.6	6.8
9	3.0	111.2	4.4
10	3.9	123.3	2.0
11	7.3	119.0	0.3
12	12.4	122.0	-1.1
13	12.8	121.2	-1.0
14	15.0	127.7	-0.7
15	17.1	128.5	-0.9
16	16.9	122.9	-1.1
17	12.6	125.6	-1.0
18	9.3	129.7	-0.9
19	8.8	130.8	-0.8
20	8.7	136.0	-0.8

21	6.8	130.9	-0.8
22	3.8	127.6	-0.5
23	3.4	120.5	-0.5
24	2.3	137.4	-0.6
1	2.7	129.1	-0.6
2	2.7	125.3	-0.8
3	1.9	187.3	-0.6
4	1.1	200.0	-0.6
5	1.6	19.7	-0.3
6	4.9	304.0	0.5
7	6.3	316.8	-0.4
8	6.0	323.2	-0.5
9	8.9	322.5	-0.7

STOP TIME FEB 2, 1979 HOUR 8 MINUTE 15

STARTING TIME FEB 5, 1979 HOUR 2 MINUTE 14

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
2	2.5	159.7	2.6
3	2.0	123.6	1.9
4	4.6	141.8	2.1
5	6.2	151.7	0.8
6	5.9	151.2	0.8
7	8.5	157.1	0.3
8	12.9	173.3	-0.0
9	10.8	165.0	-0.5
10	13.7	179.9	-0.8
11	13.9	187.2	-1.1
12	20.5	196.9	-1.0
13	22.1	199.7	-1.0
14	19.6	191.5	-1.2
15	20.9	188.0	-1.1
16	23.4	187.5	-1.0
17	23.7	183.9	-0.9
18	22.0	185.8	-0.6
19	18.4	192.3	-0.5
20	21.6	188.2	-0.3
21	23.6	198.4	-0.1
22	19.7	196.5	-0.1
23	16.1	192.6	-0.2
24	13.3	187.2	-0.5
1	12.2	180.1	-0.6

STOP TIME FEB 6, 1979 HOUR 0 MINUTE 7

RELEASE NUMBER 79002 DECAY TANK PURGE

STARTING TIME MAR 26, 1979 HOUR 20 MINUTE 35

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
20	4.4	8.4	-0.6
21	2.7	2.9	-0.5
22	2.0	20.3	-0.4
23	1.4	36.5	-0.4
24	1.5	221.9	0.1
1	1.4	164.4	-0.1
2	1.7	154.2	0.0
3	2.7	145.7	-0.2
4	3.3	145.7	-0.3
5	3.8	141.4	-0.1
6	3.5	144.0	0.1
7	4.5	154.9	-0.0
8	6.3	149.7	-0.8
9	10.5	144.7	-1.1

STOP TIME MAR 27, 1979 HOUR 8 MINUTE 17

STARTING TIME MAR 27, 1979 HOUR 8 MINUTE 22

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
8	6.3	149.7	-0.8
9	10.5	144.7	-1.1
10	12.0	143.3	-1.1
11	12.9	143.9	-1.1
12	12.4	145.3	-1.1
13	15.3	138.9	-1.1
14	12.8	160.3	-1.1
15	13.5	161.2	-1.1
16	15.9	165.9	-1.0
17	16.0	169.5	-0.9
18	15.0	159.5	-0.8
19	10.3	155.8	-0.6
20	10.2	155.9	-0.5
21	11.3	162.1	-0.6
22	12.6	165.3	-0.5
23	12.6	164.5	-0.7
24	11.3	160.9	-0.6
1	11.3	162.3	-0.6

STOP TIME MAR 28, 1979 HOUR 0 MINUTE 15

RELEASE NUMBER 79003

DECAY TANK PURGE

STARTING TIME APR 3, 1979 HOUR 19 MINUTE 10

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
19	4.7	47.4	-0.8
20	6.1	75.8	-0.8
21	5.3	79.5	-0.7
22	3.2	102.6	-0.5
23	1.1	224.9	-0.2
24	1.3	194.2	0.2
1	1.7	302.9	0.6
2	1.7	230.7	0.3
3	2.1	295.8	0.7
4	1.6	269.9	0.9
5	1.5	184.0	1.0
6	2.9	134.1	0.6

STOP TIME APR 4, 1979 HOUR 5 MINUTE 10

STARTING TIME APR 4, 1979 HOUR 12 MINUTE 22

TIME HOUR	WS10 MPH	WD10 DEG	DT100 DEG C
12	8.9	215.8	-1.2
13	10.8	227.3	-1.2
14	12.6	248.7	-1.1
15	14.3	254.3	-1.0
16	10.5	250.0	-1.2
17	8.1	221.0	-0.9
18	5.7	213.3	-0.6
19	7.0	250.1	1.0
20	6.5	240.0	1.4
21	4.1	213.7	2.7

STOP TIME APR 4, 1979 HOUR 20 MINUTE 0

Section V

Environmental Monitoring (5.9.4.b)

5.9.4.b.

Environmental Monitoring

1.
 - (a) The number of sample locations, sample collection and frequency, and the number of samples collected
 - (b) during this six-month period for each class of sample is given in Table 1.
 - (c) During the semi-annual period of January to June 1979, levels of radiation were not found to be significantly above local background at any sample location.
 - (d) Table 5 contains a complete summary of program findings. For each type of analysis of each sampled medium, this table reflects all indicator locations, all control locations and the location with the highest six-month mean result.
2. The levels of radioactivity exhibited in the environmental radiological monitoring program do not indicate the likelihood of public intakes in excess of one percent of those that would result from continuous exposure to the concentration values listed in Table II of Appendix B of 10 CFR 20.
3. There existed no statistically significant off-site environmental concentration attributable to plant activity.

Table 1 Sample Collection Program

Sample Class	Collection Frequency	Sample Location	Number of Samples Collected This Period
Background Radiation (TLD)	Quarterly	Eleven (11) Four (4)	22 8
Background Radiation (G-M Survey)	Quarterly	Fifteen (15)	30
Air Particulate	Weekly	Five (5)	125
Airborne Iodine	Weekly	Five (5)	120
Precipitation	Monthly Comp. Quarterly Comp.	One (1) One (1)	3 1
Milk	Weekly Quarterly	Four (4) Four (4)	52 8
Vegetation	Annually	Six (6)	0
Cattlefeed	Quarterly	Six (6)	12
Soil	Annually	Four (4)	0
Surface Water	Monthly Comp.	Five (5)	30
Fish	Annually	One (1)	0
Mud and Silt	Annually	One (1)	0
Wildlife	Annually	One (1)	0
Benthic Organisms ⁽¹⁾	Annually	One (1)	0

⁽¹⁾ Additional sampling locations not required by the technical specifications.

Table 2 Sampling locations, Ft. Calhoun Nuclear Power Station.

Station Code	Description	Location ^a
O-1a	On site	0.2 mi @ 294°
O-1b	On site crop fields	0.4 mi @ 225°-285° or 0.4 mi @ 150°-180°
O-2	Substation at S. 16th St. in Blair, Nebraska	3.1 mi @ 286°
O-3	Ft. Calhoun Fire Station	4.8 mi @ 149°
O-4	Electric Building at 17th and Harney, Omaha, Neb.	22 mi @ 152°
O-5	On site at the oxigester	0.1 mi @ 74°
O-6	O-5 miles downstream from Reactor Containment Bldg. on west bank of Missouri R.	0.4 mi @ 106°
O-7	125 ft. upstream from site intake structure on west bank of Missouri R.	0.1 mi @ 345°
O-8a	Fence surrounding intake gate control valve, Desoto National Wildlife Refuge	2.0 mi @ 101°
O-8b	Desoto Bend Lake, at boat dock ramp, Desoto National Wildlife Refuge	3.7 mi @ 118°
O-8c	Headquarters Bldg., Desoto National Wildlife Refuge	3.1 mi @ 53°
O-8d	Crop fields within or near Desoto National Wildlife Refuge	2.4 mi @ 64°-74°
O-9	Metro. Util District Chem. Lab for Florence Plant, North Omaha, Neb. (downstream of site)	17 mi @ 156°
O-10	Council Bluffs Municipal Water Works Intake, Council Bluffs, IA. (downstream of site)	22 mi @ 145°

Table 2 (continued)

Station Code	Description	Location ^a
O-11	One mile NW of site entrance on Highway 73	0.9 mi @ 248°
O-12	Rhon Weather Station	0.5 mi @ 304°
O-13	Entrance to plant site from Highway 73	0.5 mi @ 206°
O-14	Mechanical Weather Station	0.1 mi @ 113°
O-15	Bridge on Highway 73 at north edge of Desoto, Neb.	1.6 mi @ 144°
O-16	Smith Farm	1.9 mi @ 133°
O-17	Dana College, Blair, Neb.	4.3 mi @ 295°
O-18	Bridge on Highway 30 east of Blair, Neb. at Missouri R.	2.2 mi @ 334°
O-19	J. Rand Farm	1.9 mi @ 15°
O-20	S. Rand Farm	1.9 mi @ 31°
O-21	B. Jones Farm	1.0 mi @ 155°
O-22	G. Sawall/Schideler Farm	1.1 mi @ 204°
O-23	C. Jensen Farm	1.1 mi @ 250°
O-24	M. Hansen/Suverkrubbe Farm	1.2 mi @ 277°
O-25	Blair Sr. High School, Blair, Neb.	3.0 mi @ 308°
O-26	Japp ^b Dairy	9.1 mi @ 239°
O-27	Flynn Dairy	3.4 mi @ 310°
O-29	75 ft. downstream of lagoon discharge on west bank of Missouri R.	0.1 mi @ 81°
O-30	Agrico Ammonia Plant, on Highway 30, 1 mile E of Blair, Neb.	1.8 mi @ 325°

Table 2 (continued)

Station Code	Description	Location ^a
O-31	L. Rogge Farm	2.1 mi @ 278°
O-32	H. Sorensen Farm	3.7 mi @ 328°
O-33	Garden 2.0 mi NW of site entrance on east side of Highway 30	1.5 mi @ 271°
O-34	C. Marr and Sons field	4.3 mi @ 147°
O-35	Garden in southeast part of Blair, Neb., 0.5 mi. E of Highway 73	2.9 mi @ 297°
O-36	Farm near Desoto vegetable stand, 1 mi. SE of plant on Highway 73	1.0 mi @ 153°
O-41	M. Smith Dairy	7.2 mi @ 204°
O-42	Miller Farm	0.8 mi @ 206°
O-43	Fish sampling area, Missouri R. within 3 miles of site	-
O-44	A. Wulf Farm	8.8 mi @ 225°

^a Distance and direction are specified relative to Reactor Containment Building.

Table 3 Sample collection and analysis program, Ft. Calhoun Nuclear Power Station.

Sample Type	Collection Type and Frequency ^a	Analysis Type (and Frequency) ^b	Number of Sampling Sites	Sample Code	Location Code ^c	Location Type ^d
Background Radiation (TLD)	C/Q	Ambient gamma	11	OFA	O-11	I
				OFB	O-8a	I
				OFC	O-12	I
				OFD	O-13	I
				OFE	O-14	I
				OFF	O-1a	I
				OFG	O-15	I
				OFH	O-2	I
				OFI	O-16	C
				OFJ	O-15	I
				OFK	O-4	C
			4 ^e	Control ^e	-	-
				I-Hot Lab 12 ^e	-	-
G-M Survey	G/Q	Ambient beta-gamma	15	13 ^e	-	-
				Env. Lab ^e	-	-
				A	O-11	I
				B	O-17	I
				C	O-18	I
				D	O-1a	I
				E	O-3	I
				F	O-8	I
				G	O-19	I
				H	O-20	I
				I	O-21	I
				J	O-16	I
				K	O-22	I
				L	O-23	I
				M	O-24	I
				N	O-25	I
				P	O-4	C

Table 3 (continued)

Sample Type	Collection Type and Frequency ^a	Analysis Type (and Frequency) ^b	Number of Sampling Sites	Sample Code	Location Code ^c	Location Type ^d	
Airborne Particulates	C/W	GB, ^f GS (MC)	5	OAA	O-1a	I	
				OAB	O-2	I	
				OAC	O-3	I	
				OAD	O-4	C	
				OAE	O-5	I	
Airborne Iodine	C/W	I-131	5	OAA	O-1a	I	
				OAB	O-2	I	
				OAC	O-3	I	
				OAD	O-4	C	
				OAE	O-5	I	
Well Water	G/M	GB (QC) ^g	4	OWW-A	O-8c	I	
				OWW-E	O-16	I	
				OWW-F	O-22	I	
				OWW-I	O-25	I	
Precipitation	C/M	GB (2nd and 3rd Qtrs), ^h	1	OPA	O-30	I	
	C/Q	GB (QC, 1st and 4th Qtrs) ^h					
Milk, Fresh	G/W	I-131	4	OFM-A	O-26	C	
	(pasture season only)			OFM-B	O-27	I	
	G/Q	GS		OFM-C	O-44	C	
				OFM-D	O-42	I	
				OFM-E	O-44	C	
Milk,	G/W	GB (QC), Sr-90 (QC)	4	OPM-A	O-26	C	
				OPM-B	O-27	I	
				OPM-C	O-44	C	
				OPM-D	O-42	I	
				OPM-E	O-44	C	

Table 3 (continued)

Sample Type	Collection Type and Frequency ^a	Analysis Type (and Frequency) ^b	Number of Sampling Sites	Sample Code	Location Code ^c	Location Type ^d
Vegetation	G/A	Sr-90, GS	6	OVA	O-33	I
				OVB	O-34	I
				OVC	O-35	I
				OVD	O-36	I
				OVE	O-8d	I
				OVG	O-1b	I
Cattlefeed, Beef	G/Q	Sr-90, GS	2	OCA	O-31	I
				OCB	O-32	I
Cattlefeed, Dairy	G/Q	Sr-90, GS	4	DFV-1	O-26	C
				DFV-2	O-27	I
				DFV-3	O-44	C
				DFV-4	O-42	I
				DFV-5	O-44	C
Soil	G/A	Sr-90, GS	4	ODA	O-26	C
				ODB	O-27	I
				ODC	O-44	C
				ODD	O-42	I
Surface Water	G/W	GB (MC), ⁱ H-3 (MC)	5	OSW-A	O-6	I
				OSW-B	O-9	I
				OSW-C	O-10	I
				OSW-D	O-8b	I
				OSW-E	O-7	C
Fish (six samples)	G/A	Sr-90, GS	1	OMA	O-43	I
Mud and Silt	A	Sr-90, GS	2	OSB	O-29	I
				OSD ^e	O-7	C

Table 3 (continued)

Sample Type	Collection Type and Frequency ^a	Analysis Type (and Frequency) ^b	Number of Sampling Sites	Sample Code	Location Code ^c	Location Type ^d
Wildlife	A	Sr-90 on bone, GS on flesh	1	-	-	I
Benthic Organisms ^e	A	Sr-90, GS	1	OMA	Discharge Canal	I

^a Collection type is coded as follows: C/ = continuous, G/ = grab. Collection frequency is coded as follows: W = weekly, M = monthly, Q = quarterly, A = annually.

^b Analysis type is coded as follows: GB = gross beta, GS = gamma spectroscopy, H-3 = tritium, Sr-90 = strontium-90, I-131 = iodine-131. Analysis frequency is coded as follows: MC = monthly composite, QC = quarterly composite. Analysis frequency is indicated only if it is different from collection frequency.

^c Location codes are defined in Table 2.

^d I = indicator; C = control.

^e Additional collection or analysis not required by the technical specifications.

^f GS of air particulates required if GB > 1 pCi/m³.

^g H-3, Sr-90, and GS analysis of well water required if GB > 30 pCi/l.

^h H-3, Sr-90, and GS analysis of precipitation required if GB > 30 pCi/l.

ⁱ Sr-90 and GS analyses of Surface Water required if GB > 60 pCi/l.

TABLE 4

SENSITIVITY REQUIREMENTS

Sample	Units	Gross Beta	Sr-90	H-3	Gamma Scan	
					I-131	Cs-137
Surface Water	pCi/l	0.5	1.0	2000	2.0*	2.0
Well Water	pCi/l	0.5	1.0	2000	2.0*	2.0
Mud and Silt	pCi/g(dry)	0.4*	0.008	---	---	0.1
Fish	pCi/g(wet)	0.1*	0.02	---	---	0.035
Milk	pCi/l	6.0	1.0	---	0.5	2.0
Vegetation	pCi/g(wet)	0.15	0.03	10*	---	0.2
Air	pCi/m ³	0.02	---	---	0.2	---
Wildlife	**pCi/g(wet)	---	3.0	---	5.0	---
Film/or TLD	---	10 mrem/month above background	---	---	---	---

** Rabbit: Strontium-90 = pCi/g Calcium in Femur
Iodine-131 = pCi/g of Thyroid

* Analyses not required in present program

New table correct per J. Rhone, 08/20/79 (kk). Based on OPPD tables 4-2 and 3-10.

Table 5 Environmental Radiological Monitoring Program Semi-Annual SummaryName of Facility: Fort Calhoun Nuclear Station Unit No. 1 Docket No.: 50-285Location of Facility: Washington, Nebraska Reporting Period: January - June, 1979
County State

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Range)	Location with Highest Mean		Control Locations Mean (Range)	Number of Non-Routine Reported Measurements
				Name, Distance and Direction	Mean (Range)		
Air ($\mu\text{Ci}/\text{m}^3$)	Gross β 125	0.02	0.05 (0.002-0.14)	1200' NW of Reactor 1200' @ 294°	0.06 (0.03-0.14)	0.02 (0.008-0.027)	0
Airborne Iodine ($\mu\text{Ci}/\text{m}^3$)	I-131 120	0.2	All LLD	Not Applicable		All LLD	0
Background Radiation TLD (mR/week)	Gamma	0.10	1.22 (0.95-1.54)	Electric Bldg. 22 mi. @ 1520	1.42 (1.38-1.46)	1.36 (1.04-1.54)	0
Background Radiation G-M Survey (mR/hr.)	Beta-Gamma 30	0.05	0.03 (0.01-0.05)	Six Station Equal	0.04 (0.02-0.05)	0.04 (0.02-0.05)	0
Milk, Fresh ($\mu\text{Ci}/\ell$)	I-131 5	0.54	All LLD	Not Applicable		All LLD	0
	Cs-137 8	2	4 (4)	Miller Farm 0.8 mi. @ 206°	4 (4)	All LLD	0
	Other Gamma 8	2	~4 (<2 - <5)	Four Station Equal	~4 (<2 - <5)	~4 (<2 - <5)	0

Table 5 (Continued)

Name of Facility: Fort Calhoun Nuclear Station Unit No. 1

Medium or Pathway Sampled (Unit of Measurement)	Type and Total Number of Analyses Performed	Lower Limit of Detection (LLD)	All Indicator Locations Mean (Range)	Location with Highest Mean		Control Locations Mean (Range)	Number of Non-Routine Reported Measurements
				Name, Distance and Direction	Mean (Range)		
Milk, Preserved (pCi/l)	Gross β 4	6	<300 (<300)	Four Station Equal		<300 (<300)	0
	Sr-90 8	1	~ 2 (<1 - 3)	Miller Farm 0.8 mi. @ 206°	~ 6.5 (<1 - 9)	3.67 (2 - 9)	0
Surface Water (pCi/l)	Gross β 30	0.5	$\sim .59$ (5 - 17)	2,000' dwnstrm 0.4 mi. @ 106°	8.47 (5 - 12)	6.63 (5.8 - 8)	0
	H-3 30	2000	~ 275.42 (<150-450)	2,000' dwnstrm 0.4 mi. @ 106°	343.33 (200-400)	281.67 (200-430)	0
Well Water (pCi/l)	Gross β 8	0.5	8.88 (5 - 12)	Smith Farm 10,000' @ 133°	11 (11)	--	0
	H-3 8	2000	All LLD	Not Applicable		All LLD	0
Precipitation (pCi/l)	Gross β 4	0.5	6.15 (1.4 - 11)	Agrico Ammonia Plant 9,600' @ 325°	6.15 (1.4-11)	--	0
Cattlefeed (pCi/g wet)	Gamma 12	0.16	All LLD	Not Applicable		All LLD	0
	Sr-90 12	0.03	0.11 (0.03-0.38)	Wulf Farm 8.8 mi. @ 225°	0.27 (0.16-0.38)	0.03 (0.03-0.04)	0

Section VI

Environmental Technical Specifications - Non-Radiological

(Appendix B)

*B. ENVIRONMENTAL TECHNICAL SPECIFICATIONS (NON-RADIOLOGICAL)
APPENDIX B

1. Operating Limits

1.1 Condenser Cooling Water Temperature Limit:

1. The maximum discharge temperature was 95° F.
2. The difference (ΔT) between the ambient temperature of the Missouri River, as measured
3. just upstream from the cooling water intake structure, and the temperature of the cooling water at the discharge did not exceed any temperature specifications.
4. Changes in river temperature exceeded 2° F. per hour 2,000 feet downstream of the discharge on March 17, 1979 due to the breakup of an ice formation immediately upstream of the discharge. Operations Incident No. 790 was written to report this incident.

The 2,000 feet downstream temperatures were invalid due to recorded malfunctions on the following dates:

Jan. 1, 1979 through Jan. 31, 1979 - O.I. #742
Feb. 8, 1979 through Feb. 23, 1979,
Feb. 17, 1979 through Feb. 19, 1979, and
Feb. 21, 1979 through Feb. 27, 1979 - O.I. #762
March 23, 1979 through March 26, 1979 - O.I. #790

The Bristol Recorder for intake and discharge temperatures was out of service from April 20 through April 25, 1979 due to a malfunction. This incident was reported in Operations Incident No. 812.

1.2 Chemical Discharge Limits:

1. Chlorination of the condenser cooling water system has not occurred since commencement of plant operation.
2. The cooling water discharge pH ranged from a
3. maximum of 8.4 to a minimum of 7.6. The average pH through the semi-annual period was 8.1.

The chemical equalization and decantation holding basin (lagoon) discharge parameters ranged as follows:

*Each paragraph number in this section corresponds exactly to the number of that requirement in Appendix B, Operating License No. DPR-40, Environmental Technical Specifications.

	Total Suspended Solids Concentration mg/l	Flow Rate MGD	Quantity of Solids Released Kg/Day	pH
Maximum -	106.00	.594	90.43	10.1
Average -	8.75	.150	6.66	4.3
Minimum -	0.00	.014	0.00	2.1

2. Monitoring and Surveillance Program

2.1 Monitoring of Thermal Discharges

1. Temperature Monitoring

Upstream river ambient and cooling water intake and discharge temperatures were continuously monitored and recorded, and dates and time intervals of recirculating discharge water for ice control at the intake were also recorded. All continuously recorded information has been analyzed and reduced to hourly data and is seen to correlate with station operating levels. Compliance with specified limits has been summarized in Section 1.1.

2. Thermal Plume Measurements

Surface and triple depth thermal plume measurements were made during the months of March, April, May, and June 1979 to produce isotherm plots of the downstream thermal plume, Figures II to V and VII to X. Also included in this semi-annual report is the isotherm plot of the downstream thermal plume from October 1978, Figures I and VI. The magnitude of the thermal plumes correlates with station operating levels, circulating water discharge flow and Missouri River flow. Downstream isotherms at the surface, at one-half depth, and at the bottom were determined utilizing upstream ambient river transection averages at the surface, one-half depth, and at the bottom, respectively. At distances downstream less than 2,000 feet, thermal plume measurements at the surface, one-half depth, and at the bottom showed some variations in the isotherms from surface to bottom. At distances downstream greater than 2,000 feet, thermal plume measurements indicate essentially no difference in isotherms at the surface, at one-half depth, and at the bottom. Measurements made during

October 1978 and March through June 1979 at sampling transects downstream are presented in Tables III to VII.

In January and February 1979, no measurements were taken due to ice flow conditions in the Missouri River. Also, no infrared scanning was utilized during January and February 1979, as river flow and plant power conditions were similar to conditions previously documented (reference Fort Calhoun Station Unit No. 1 Five Year Report).

2.2 Monitoring & Reporting on Loss of Biota by Impingement

1. Traveling Screen Impingement Study

An accumulative data computer analysis (see Table 1) summarized impingement of fish and other aquatic fauna for the period January 1, 1979 through June 30, 1979, in accordance with Technical Specifications. Table II presents a ranking by species.

2. Sampling Frequency in Sixth Year of Operation

An evaluation of fish impingement after five years of plant operation was reported in the Fort Calhoun Station Unit No. 1 Five Year Report. This evaluation concluded that all specific objectives of the study had been successfully completed, and that the level of impingement was within an acceptable range. Facility License Change 79-1 was submitted to the Commission on February 2, 1979 to eliminate the impingement study.

Sampling frequency will remain the same during the sixth year of operation until a decision is reached by the Commission in regard to Facility License Change 79-1.

3. Study and Evaluation Programs

3.1 Periphyton, Macroinvertebrates, and Fish

Data analysis and reporting of results from the pre-operational and post-operational studies through December 31, 1977 was reported in the Fort Calhoun Station Unit No. 1 Five Year Report.

Collection of periphyton, macroinvertebrates, and fish continued as scheduled throughout the period of January 1, 1979 through June 30, 1979.

Fish Population Study

The adult and juvenile fish community in the Missouri River adjacent to the Fort Calhoun Station was sampled monthly from April through June 1979 as part of the station's ongoing environmental monitoring program. The study was designed to characterize the fish community in the Missouri River upstream and downstream of the station. Adult and juvenile fish were collected by electroshocking and seining on April 18, May 24, and June 21, 1979. Specific objectives of the study were to determine the effect of the thermal effluent from the Fort Calhoun Station on:

1. fish species composition and relative abundance,
2. spatial and temporal distribution of fish within the study area, and
3. food habits of selected species collected.

SUMMARY AND CONCLUSIONS

1. A total of 381 fish, representing 26 species, was collected from April through June 1979. Of the total catch, carp (27.6%), goldeye (24.4%), river carpsucker (15.5%), and freshwater drum (7.9%) comprised 75.4%.
2. Electroshocking yielded a total of 339 fish, representing 15 species. Catch per unit effort (30 minutes of electroshocking) ranged from a high of 93 fish at Location 2 on April 18, to a low of 7 fish at Location 1 on June 21. Carp (30.7%), goldeye (27.4%), river carpsucker (17.4%), and freshwater drum (8.6%) comprised 84.10% of the total electroshocking catch.
3. Seining yielded a total of 42 fish, representing 15 species. Fourteen fish were collected in April, 6 fish in May, and 22 fish were collected in June. Silver chubs (23.8%), emerald shiners (19%), and channel catfish (9.5%) comprised 52.3% of the total catch, while sand shiners, fathead minnows, sauger, and rainbow smelt each contributed 7.1% of the total catch.
4. The contents of 21 stomachs from fish collected in April were analyzed. The major food item of goldeye was insects (aquatic and terrestrial).

The major food item of carp was plant matter whereas drums and sauger consumed primarily fish and aquatic insects. Stomachs collected in May and June will be analyzed and reported at a later date.

Eleven-Agency Study Programs

All data collection efforts by the eleven agencies have been terminated. Data from pre-operational and post-operational studies were evaluated and results were reported in the Fort Calhoun Station Unit No. 1 Five Year Report. The following papers have been written by the Nebraska Department of Environmental Control, the Region VII Environmental Protection Agency, and the Nebraska Game and Parks Commission, respectively.

1. "Chemical and Physical Characteristics of the Missouri River near Fort Calhoun and Cooper Nuclear Stations"
2. "Effects of Heated Waste Water Discharges from Fort Calhoun and Cooper Nuclear Power Stations upon the Biota of the Missouri River"
3. "Effects of Cooling Water Discharges from Fort Calhoun and Cooper Nuclear Stations of the Fishes of the Missouri River"

Dr. Glen Cada submitted his Ph.D. thesis entitled "The Entrainment of Larval Fishes at Two Nuclear Power Plants on the Missouri River in Nebraska." This is also an eleven-agency component completed in 1977 under the direction of Dr. Gary Hergenrader of the University of Nebraska at Lincoln and submitted to the District in accordance with Section 3.2 of the Environmental Technical Specifications, Appendix B.

3.2 Ichthyoplankton Entrainment Effects

INTRODUCTION:

This report presents a summary of fish larvae data collected April through June 1979 from the Missouri River near the Fort Calhoun Station. Larval fish numbers were too low for statistical evaluation of entrainment effects on all dates except June 19.

The specific objectives of this study were:

1. to document species composition of fish larvae in the Missouri River,
2. to document abundance and horizontal distribution of fish larvae in the Missouri River,
3. evaluate the immediate effects of condenser passage on fish larvae viability,
4. analyze the effects of thermal plume on fish larvae viability, and
5. predict the effects of entrainment on the total larvae fish assemblage passing the Fort Calhoun Station.

SUMMARY AND CONCLUSIONS:

1. The discharge temperature for June 19 was 30° C (86° F) which was 10° C above ambient. The plant was operating at 97.9% power. Cooling water usage was 360,000 gpm and the river flow was 52,400 cfs (recorded in Omaha).
2. The mean cross channel larvae density for June 19 was .707/m³.
3. Identification and measurement data for the fish larvae collected has not been completed and will be presented at a later date.
4. On June 19 larval fish mortality at the intake was 84.7%; at the discharge it was 98.2%, and in the plume at the 1° C isotherm 22 feet downstream of the plant it was 90.5%.
5. Cross channel densities at Location 3 (1.0 m³) were two times greater than at Location 2 (.51 m³) and about 1.5 times greater than at Location 1 (.61 m³).
6. The average number of fish passing the Fort Calhoun Station in each of the three cross channel locations sampled was 291 larval fish/second at Location 1, 339 larval fish/second at Location 2, and 340 larval fish/second at Location 3.
7. On June 19, plant effects caused an estimated increase in mortality of 1.01% in the ichthyoplankton population passing the station.
8. No significant thermal plume effects at Location 6 were found on June 19.

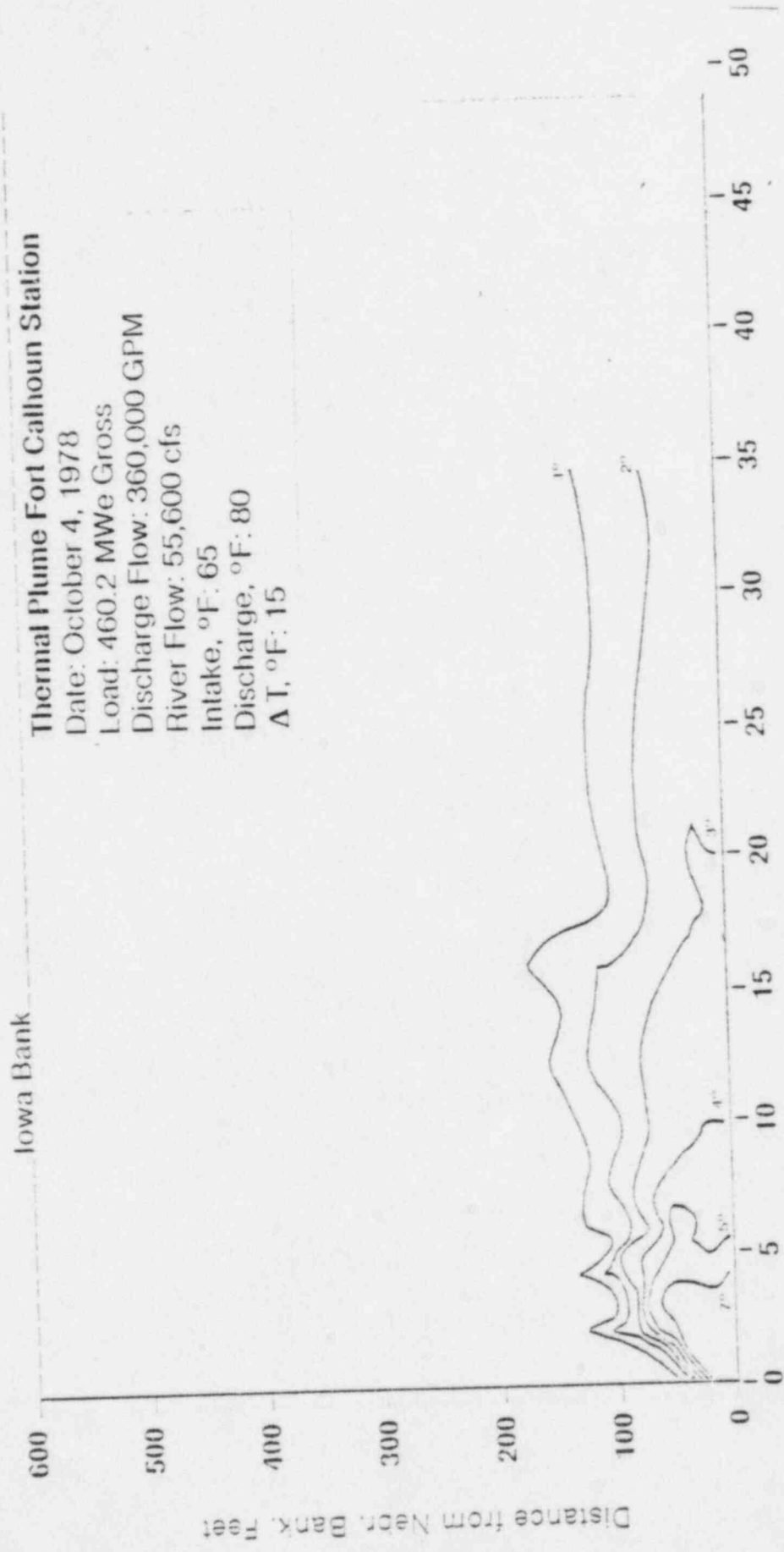


Figure 1

Thermal Plume Fort Calhoun Station

Date: March 28, 1979

Load: 475.2 MWe Gross

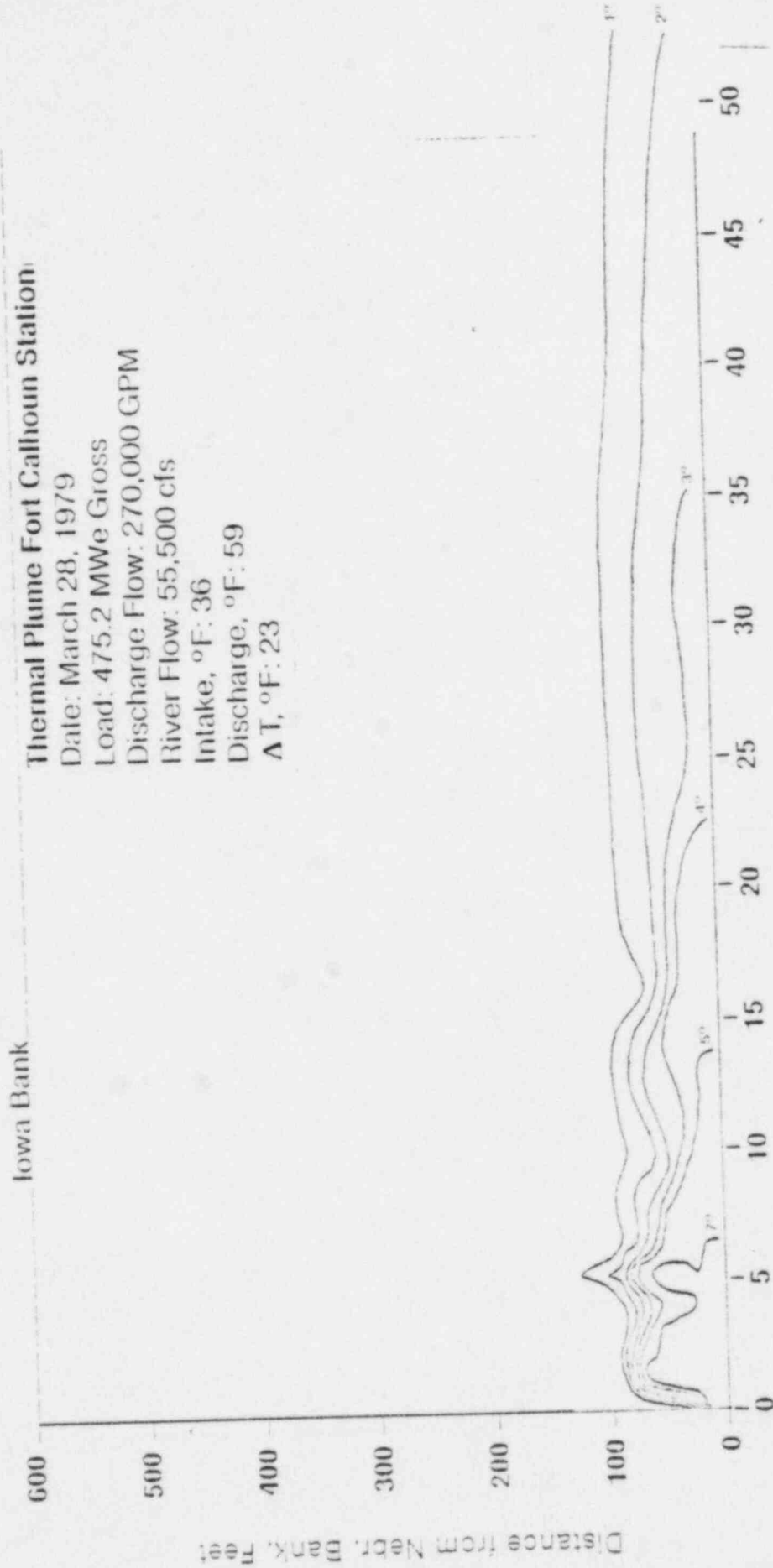
Discharge Flow: 270,000 GPM

River Flow: 55,500 cfs

Intake, °F: 36

Discharge, °F: 59

ΔT , °F: 23



Distance Downstream, Feet x 100

Figure II

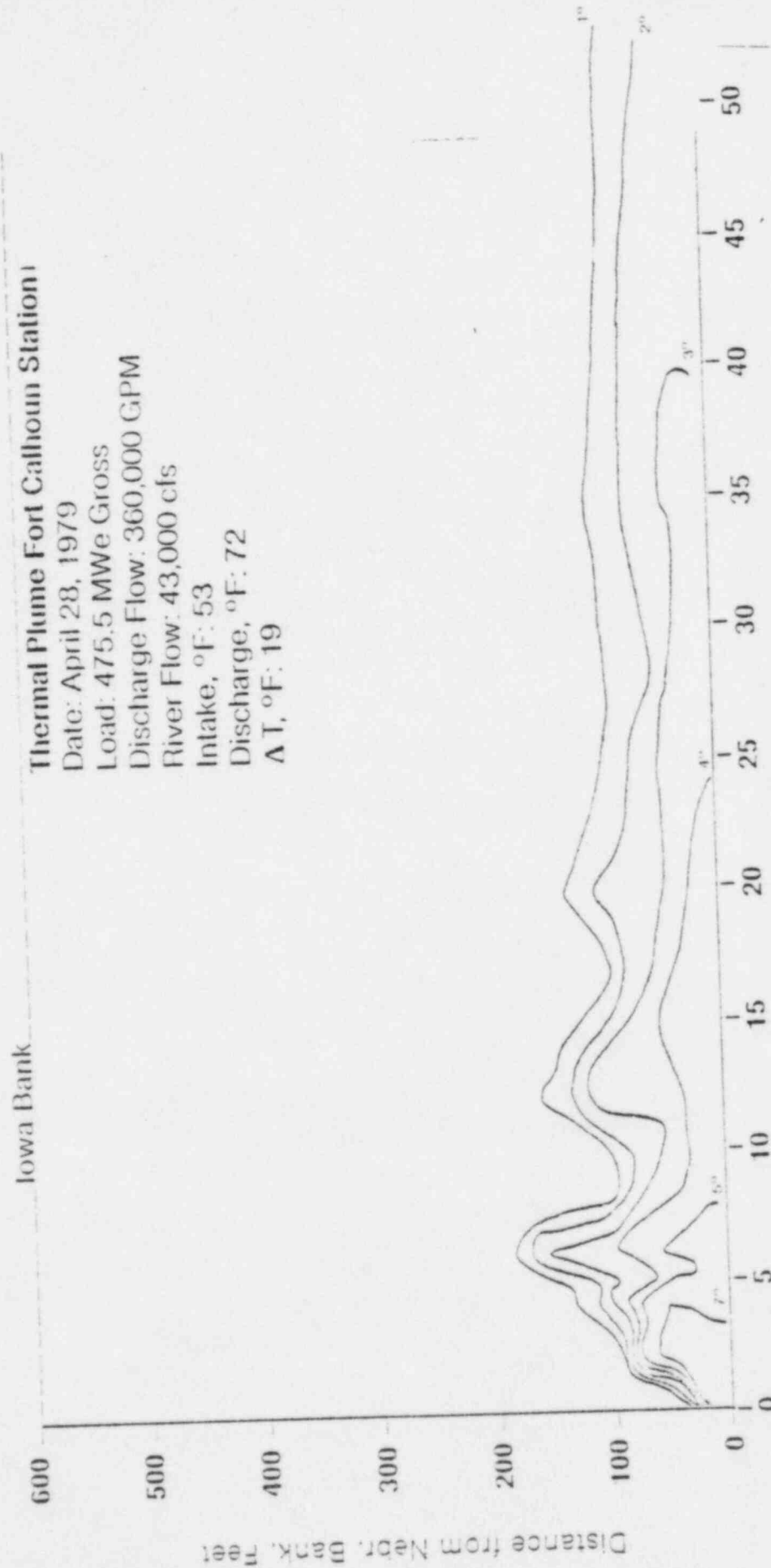


Figure III

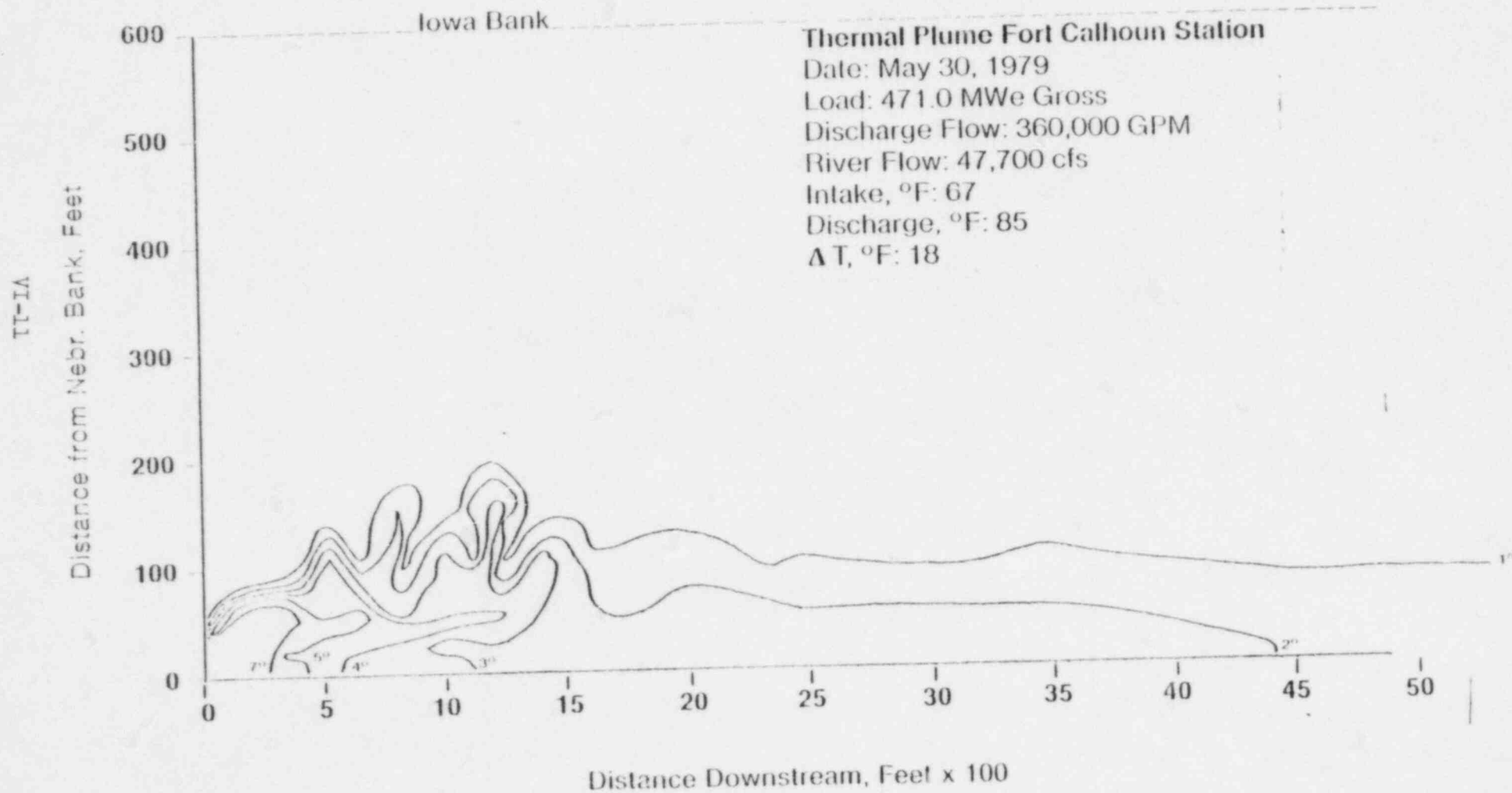


Figure IV

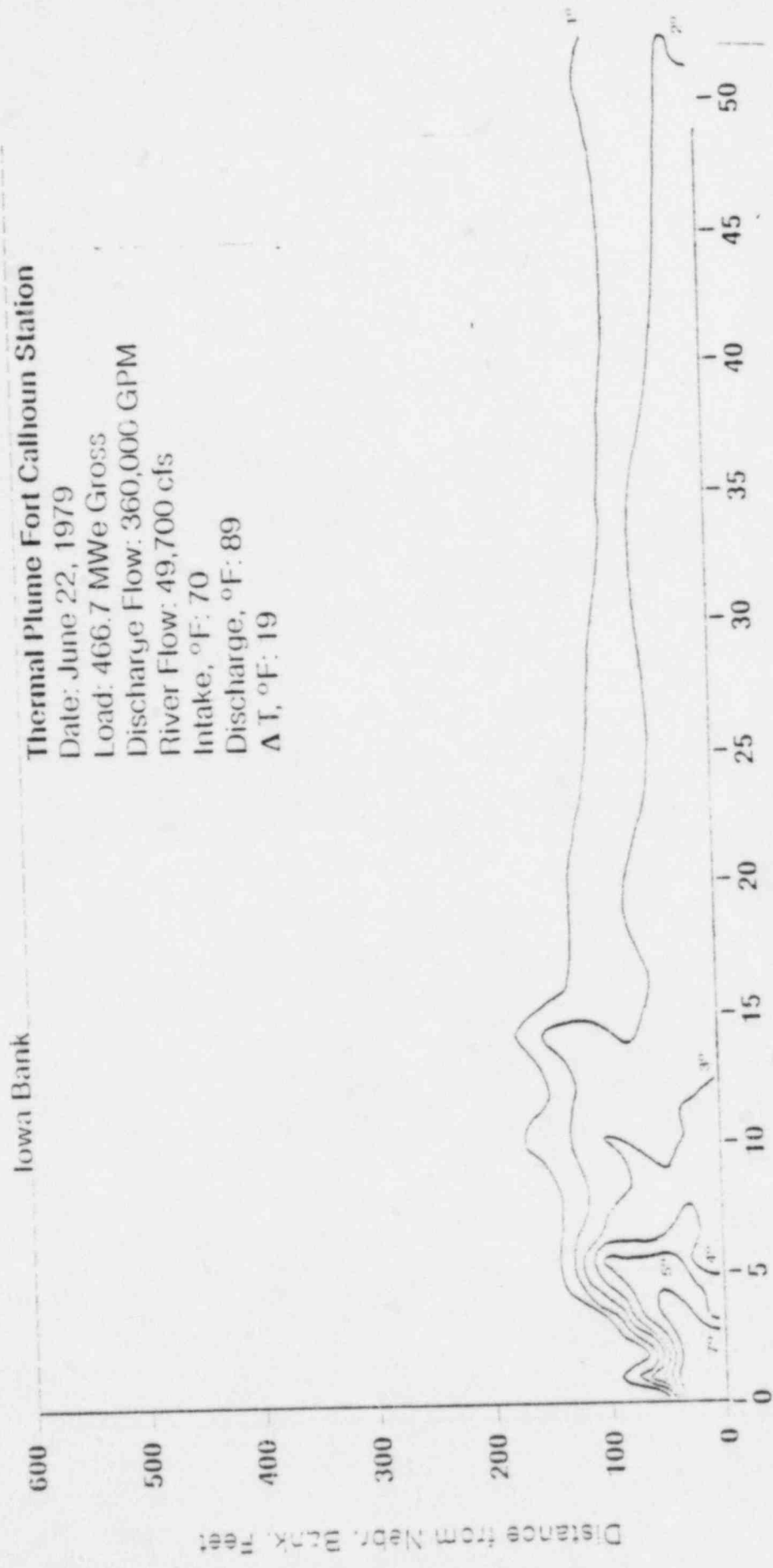


Figure V

Thermal Plant Fort Calhoun Station

Date: October 4, 1978

Load: 460.2 MWe Gross

Discharge Flow: 360,000 GPM

River Flow: 55,600 cfs

Intake, °F: 65

Discharge, °F: 80

ΔT , °F: 15

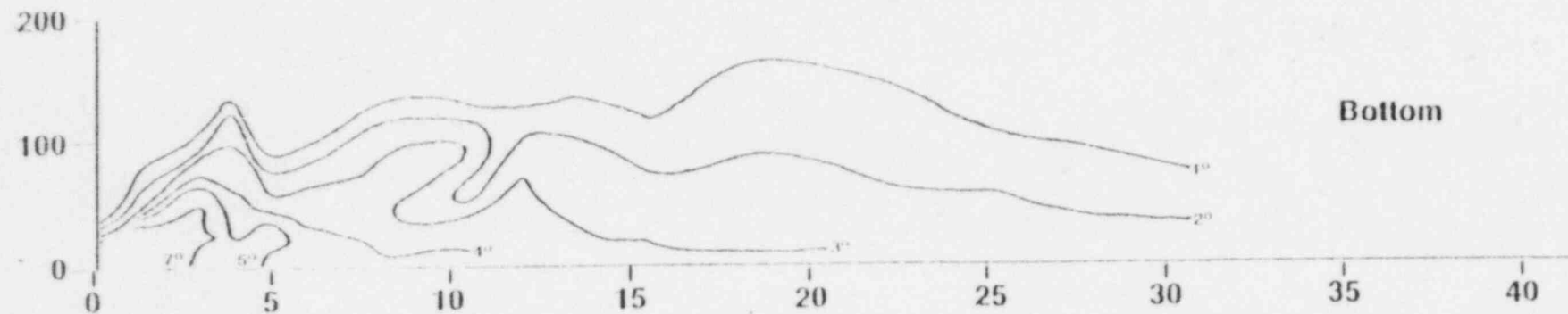
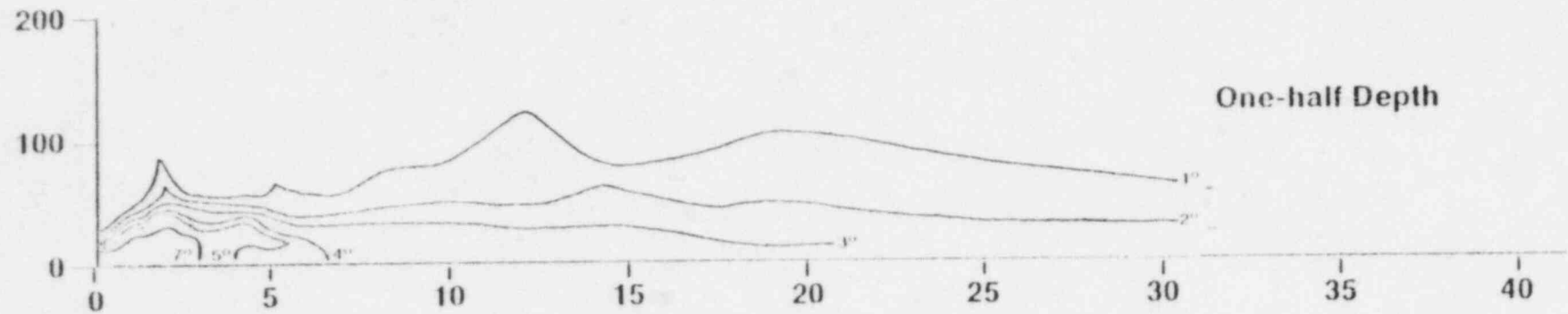
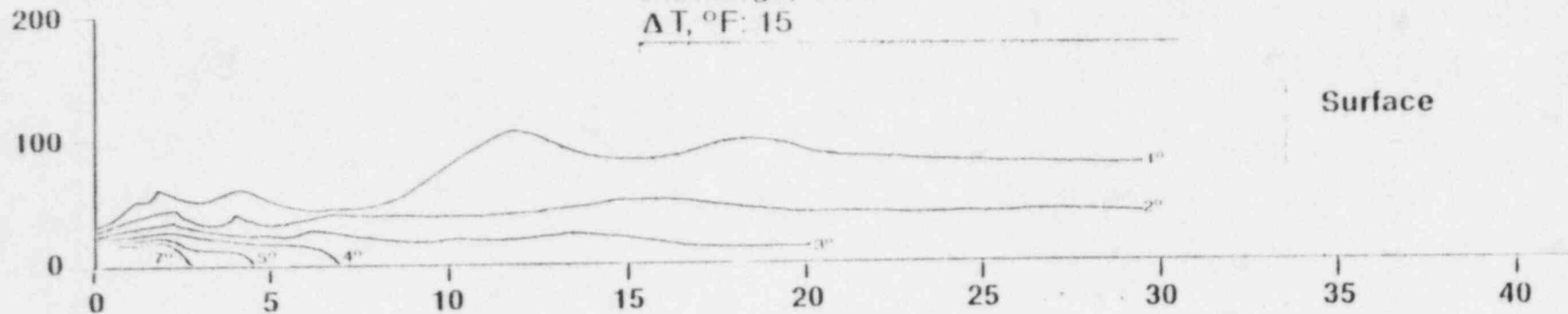
Surface

One-half Depth

Bottom

Distance from Nebr. Bank, Feet

Distance Downstream, Feet x 100



Thermal Plume Fort Calhoun Station

Date: March 28, 1979

Load: 475.2 MWe Gross

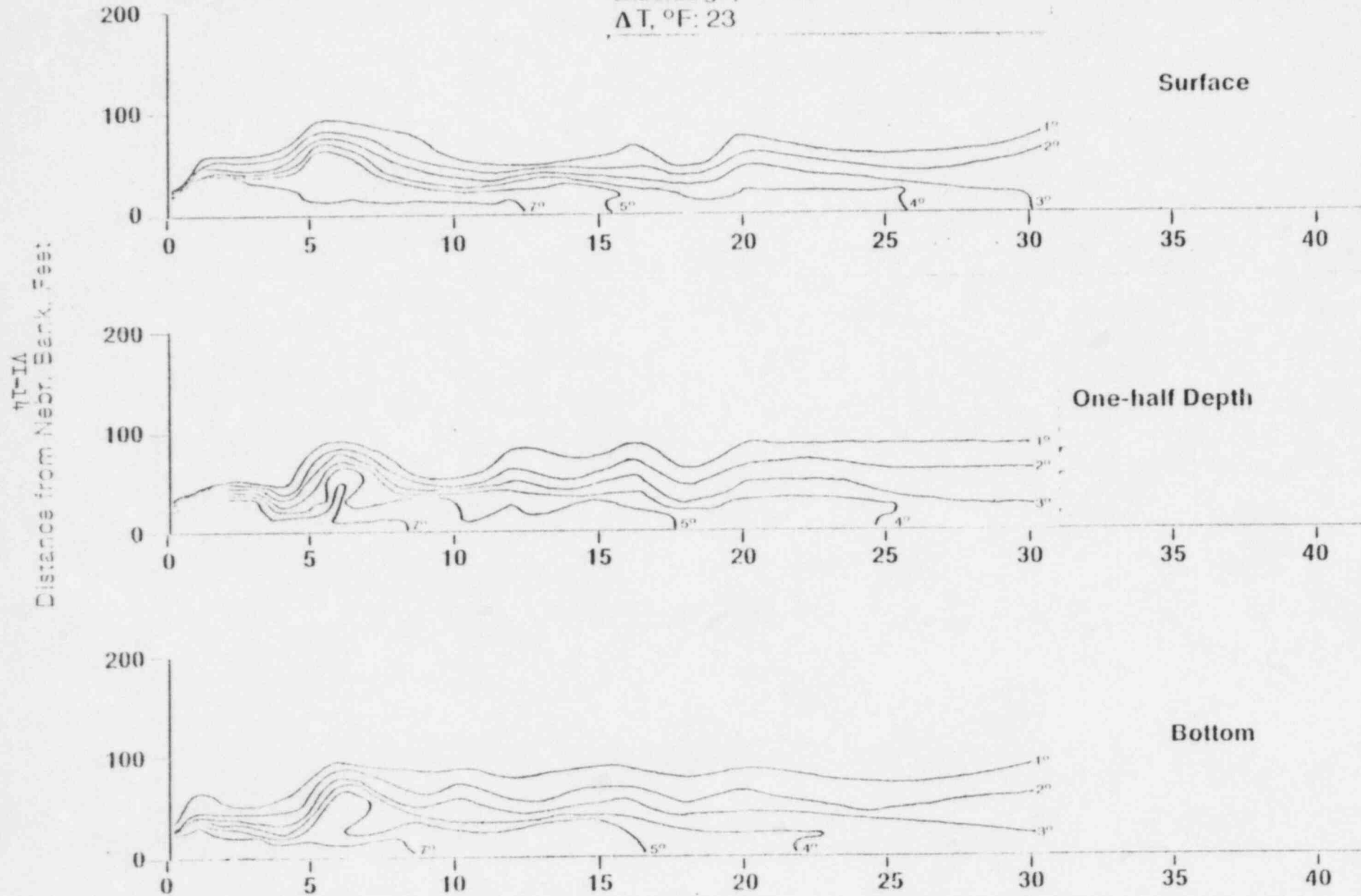
Discharge Flow: 270,000 GPM

River Flow: 55,500 cfs

Intake, °F: 36

Discharge, °F: 59

ΔT , °F: 23



Distance Downstream, Feet x 100

Figure VII

Thermal Plume Fort Calhoun Station

Date: April 8, 1979

Load: 475.5 MWe Gross

Discharge Flow: 360,000 GPM

River Flow: 43,000 cfs

Intake, °F: 53

Discharge, °F: 72

ΔT , °F: 19

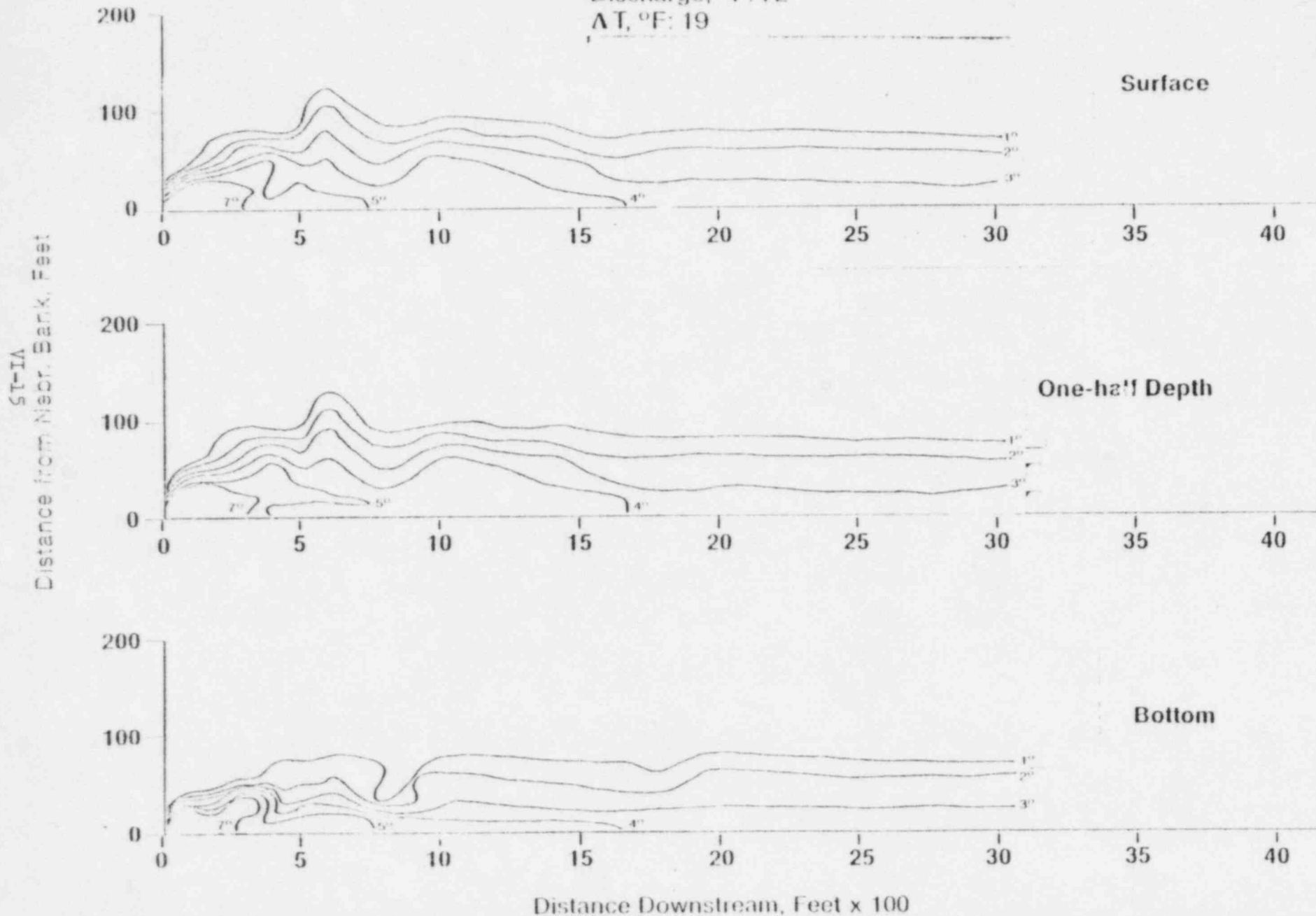


Figure VIII

Thermal Plume Fort Calhoun Station

Date: May 30, 1979

Load: 471.0 MWe Gross

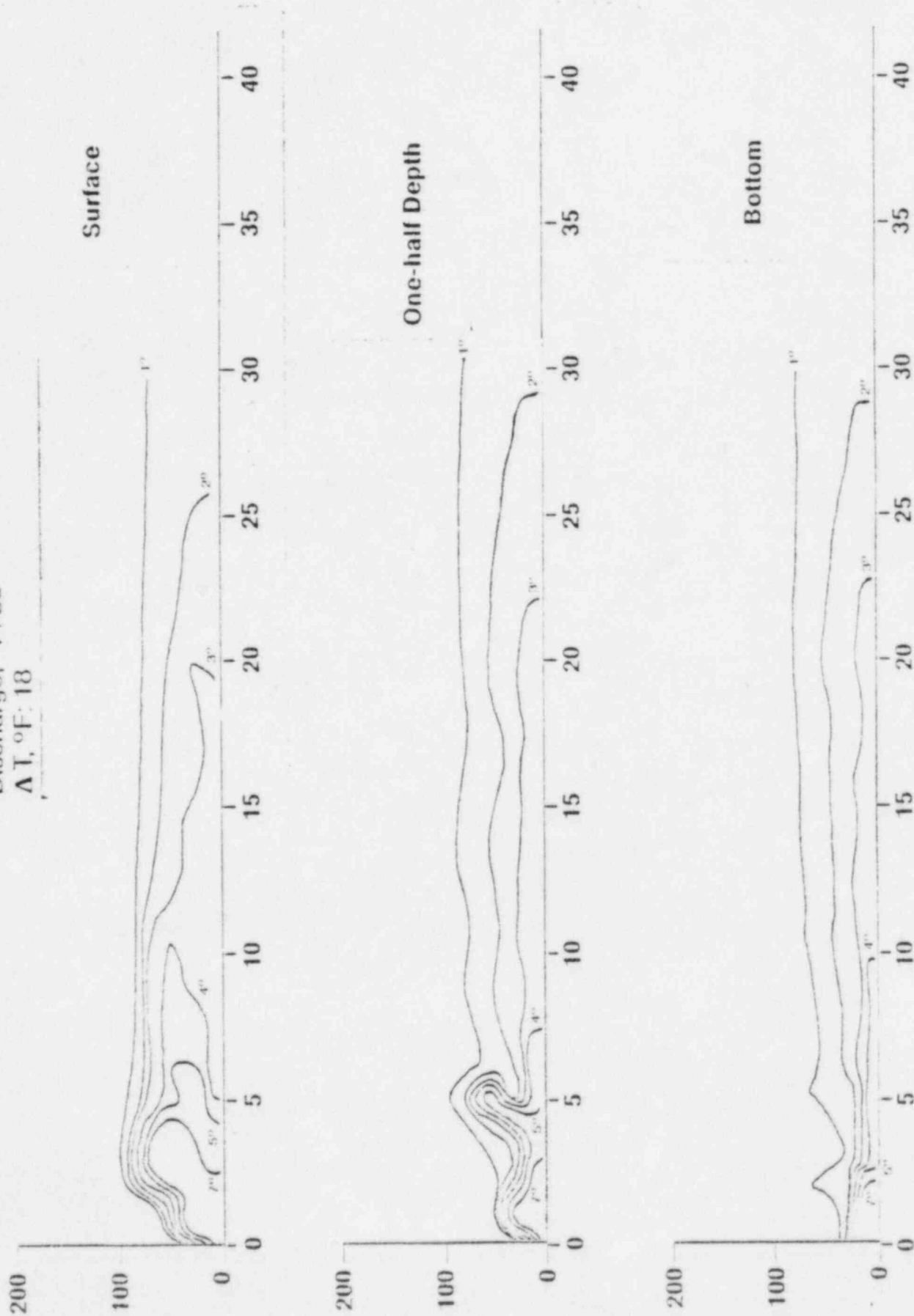
Discharge Flow: 360,000 GPM

River Flow: 47,700 cfs

Intake, °F: 67

Discharge, °F: 85

ΔT , °F: 18



Distance Downstream, Feet x 100

Thermal Plume Fort Calhoun Station

Date: June 22, 1979

Load: 466.7 MWe Gross

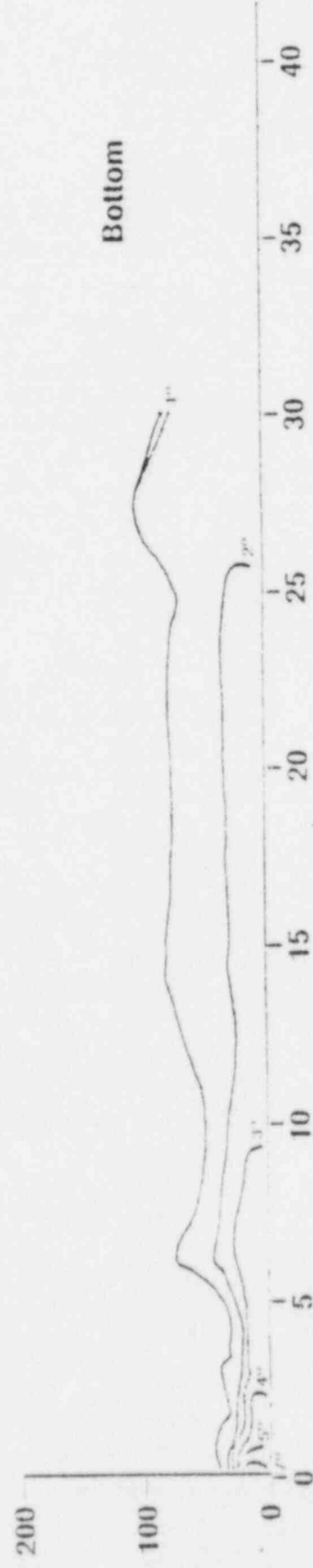
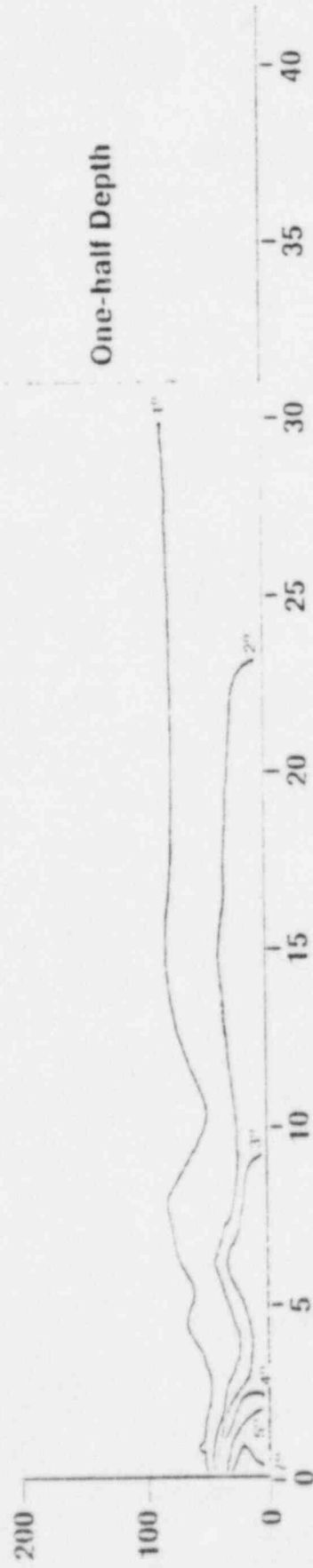
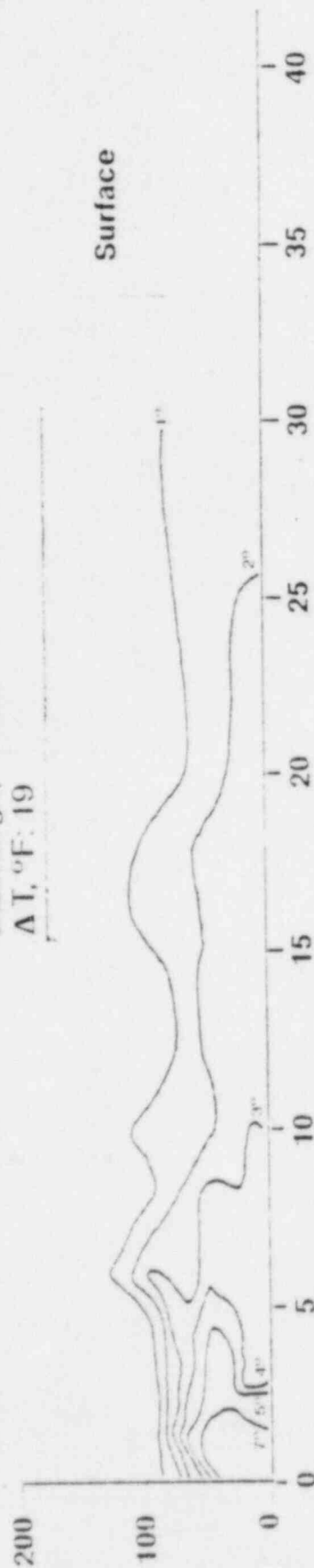
Discharge Flow: 360,000 GPM

River Flow: 49,700 cfs

Intake, °F: 70

Discharge, °F: 89

ΔT , °F: 19



Distance from Neck, in feet

TABLE I

OMAHA PUBLIC POWER DISTRICT
 ENVIRONMENTAL LAB
 TRAVELING SCREEN IMPINGEMENT STUDY

FISH IMPINGEMENT STUDY SUMMARY
 January 1, 1979 through June 30, 1979

ACCUMULATIVE DATA

Total Number of Sample Periods	240
Total Number of Sample Periods by Day Where No Organisms Were Impinged	117
Total Number of Sample Periods by Night Where No Organisms Were Impinged	54
Total Number of Fish Impinged	238
Total Number of Fish Impinged by Day	210
Total Number of Fish Impinged by Night	28
Average Size Fish Impinged (CM)	15.8
(GM)	26.3
Average Size Fish Impinged by Day (CM)	14.8
(GM)	26.0
Average Size Fish Impinged by Night (CM)	23.0
(GM)	28.5
Most Common Species Impinged <i>Ictalurus Punctatus</i> (Rafinesque)	Channel Catfish
Most Common Species Impinged <i>Ictalurus Punctatus</i> by Day (Rafinesque)	Channel Catfish
Most Common Species Impinged <i>Ictalurus Punctatus</i> by Night (Rafinesque)	Channel Catfish
Total Number of Non-Fish Aquatic Fauna Impinged	1
Total Number of Non-Fish Aquatic Fauna Impinged by Day	1
Total Number of Non-Fish Aquatic Fauna Impinged by Night	0

TABLE II

OMAHA PUBLIC POWER DISTRICT
ENVIRONMENTAL LAB
TRAVELING SCREEN IMPINGEMENT STUDY

FISH IMPINGEMENT STUDY SUMMARY
January 1, 1979 through June 30, 1979

Ranking By Species

<u>No.</u>	<u>Scientific Name</u>	<u>Common Name</u>	<u>Total</u>
1	<i>Ictalurus Punctatus</i> (Rafinesque)	Channel Catfish	83
2	<i>Noturus Flavus</i> (Rafinesque)	Stonecat	30
3	<i>Aplodinotus Grunniens</i> (Rafinesque)	Freshwater Drum	28
4	<i>Pomoxis Annularis</i> (Rafinesque)	White Crappie	26
5	<i>Osmerus Moroax</i> (Mitchill)	Rainbow Smelt	17
6	<i>Lepomis Macrochirus</i> (Rafinesque)	Bluegill	8
7	<i>Carpiodes Carpio</i> (Rafinesque)	River Carpsucker	7
8	<i>Ictalurus Melas</i> (Rafinesque)	Black Bullhead	7
9	<i>Roccus Chrysops</i> (Rafinesque)	White Bass	7
10	<i>Dorosoma Cepedianum</i> (Lesueur)	Gizzard Shad	4
11	<i>Stizostedion Canadense</i> (Smith)	Sauger	4
12	<i>Stizostedion Vitreum</i> (Mitchill)	Walleye	3
13	<i>Hiodon Alosiodes</i> (Rafinesque)	Goldeye	2
14	<i>Ictiobus Cyprinellus</i> (Valenciennes)	Bigmouth Buffalo	2
15	<i>Pylodictis Olivaris</i> (Rafinesque)	Flathead Catfish	2
16	<i>Micropterus Salmoides</i> (Lacepede)	Largemouth Bass	2
17	<i>Esox Lucius</i> (Linnaeus)	Northern Pike	1
18	<i>Cyprinum Carpio</i> (Linnaeus)	Carp	1
19	<i>Moxostoma Macrolepidotum</i> (Lesueur)	Shorthead Redhorse	1
20	<i>Pomoxis Nigromaculatus</i> (Lesueur)	Black Crappie	1
21	<i>Perca Flavescens</i> (Mitchill)	Yellow Perch	1
22	<i>Scaphirhynchus Platorynchus</i> (Raf.)	Shovelnose Sturgeon	1

TABLE III
Triple-Depth
Thermal Plume Measurements
Fort Calhoun Station
October 4, 1978

	ΔT , °F Distance from Nebraska Bank, Feet					
	<u>10</u>	<u>25</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>
Transect No. 1 (RM 646.0)						
Surface	0	0	0	0	0	0
One-half Depth	0	0	0	0	0	0
Bottom	0	0	0	0	0	0
Transect No. 1.5 (RM 645.9)						
Surface	12.2	0	0			
One-half Depth	0.2	0	0			
Bottom	15.2	0.5	0			
Transect No. 2 (RM 645.6)						
Surface	2.6	2.5	2.2	2.2	1.1	0
One-half Depth	2.5	2.5	1.7	1.7	0.9	0
Bottom	2.7	2.4	2.4	1.7	0.7	0
Transect No. 3 (RM 644.8)						
Surface	1.7	1.5	1.5	0.5	0.2	0
One-half Depth	1.7	1.5	1.5	0.5	0.2	0
Bottom	1.7	1.5	1.5	0.5	0.2	0
Transect No. 4 (RM 641.4)						
Surface	1.2	1.1	0.9	0.7	0.7	0.5
One-half Depth	1.2	1.1	0.9	0.7	0.7	0.5
Bottom	1.2	1.1	0.9	0.7	0.7	0.5
Transect No. 5 (RM 640.2)						
Surface	1.0	1.0	0.9	0.9	0.8	0.6
One-half Depth	0.9	1.0	0.9	0.9	0.7	0.7
Bottom	0.9	0.9	0.9	0.9	0.8	0.6

TABLE IV

Triple-Depth
Thermal Plume Measurements
Fort Calhoun Station
March 28, 1979

	$\Delta T, ^\circ F$ Distance from Nebraska Bank, Feet					
	<u>10</u>	<u>25</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>
Transect No. 1 (RM 646.0)						
Surface	0	0	0	0	0	0
One-half Depth	0	0	0	0	0	0
Bottom	0	0	0	0	0	0
Transect No. 2 (RM 645.9)						
Surface	20.4	0.3	0			
One-half Depth	14.7	0.4	0			
Bottom	17.9	0.1	0			
Transect No. 2 (RM 645.6)						
Surface	4.1	4.2	1.2	0.5	0.1	0.1
One-half Depth	4.0	4.1	2.5	0.3	0.1	0.1
Bottom	4.0	4.2	1.4	0.6	0.1	0.1
Transect No. 3 (RM 644.8)						
Surface	2.2	2.1	1.4	1.3	0.4	0.3
One-half Depth	2.1	2.2	1.4	0.9	0.4	0.3
Bottom	2.1	2.1	1.4	0.8	0.4	0.2
Transect No. 4 (RM 641.4)						
Surface	1.5	1.5	1.4	1.0	0.8	0.3
One-half Depth	1.6	1.5	1.4	1.0	0.8	0.6
Bottom	1.5	1.5	1.4	1.0	0.8	0.5
Transect No. 5						
Surface	1.3	0.8	1.0	0.9	0.9	0.3
One-half Depth	1.1	1.0	1.0	0.9	0.8	0.5
Bottom	1.2	1.0	1.0	0.9	0.8	0.4

TABLE V
Triple-Depth
Thermal Plume Measurements
Fort Calhoun Station
April 28, 1979

	ΔT , °F					
	Distance from Nebraska Bank, Feet					
	<u>10</u>	<u>25</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>
Transect No. 1 (RM 646.0)						
Surface	0	0	0	0	0	0
One-half Depth	0	0	0	0	0	0
Bottom	0	0	0	0	0	0
Transect No. 1.5 (RM 645.9)						
Surface	3.7	0.2	0			
One-half Depth	0.2	1.7	0			
Bottom	0.2	0.2	0			
Transect No. 2 (RM 645.6)						
Surface	3.3	3.0	2.6	0.1	0	
One-half Depth	3.3	3.0	2.1	0.2	0	
Bottom	3.4	3.1	2.2	0.3	0	
Transect No. 3 (RM 644.8)						
Surface	2.6	1.9	1.6	0		
One-half Depth	2.5	1.9	1.5	0		
Bottom	2.4	1.9	1.3	0		
Transect No. 4 (RM 641.4)						
Surface	1.6	1.3	0.9	0.7	0.3	0
One-half Depth	1.5	1.3	0.7	0.7	0.3	0
Bottom	1.4	1.2	0.7	0.3	0.1	0
Transect No. 5 (RM 640.2)						
Surface	1.1	1.1	0.8	0.7	0.5	0.2
One-half Depth	1.1	1.0	0.8	0.7	0.4	0.2
Bottom	1.1	0.9	0.7	2.6	0.4	0

TABLE VI
Triple-Depth
Thermal Plume Measurements
Fort Calhoun Station
May 30, 1979

	$\Delta T, ^\circ F$ Distance from Nebraska Bank, Feet					
	<u>10</u>	<u>25</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>
Transect No. 1 (RM 646.0)						
Surface	0	0	0	0	0	0
One-half	0	0	0	0	0	0
Bottom	0	0	0	0	0	0
Transect No. 1.5 (RM 645.9)						
Surface	2.0	3.0	0.2			
One-half Depth	0	0.2	0.2			
Bottom	15.0	3.0	0.2			
Transect No. 2 (RM 645.6)						
Surface	2.7	2.3	1.7	0.4	0.1	
One-half Depth	2.7	2.4	1.7	0.4	0.1	
Bottom	2.8	2.3	1.7	0.4	0.1	
Transect No. 3 (RM 644.8)						
Surface	1.8	1.8	1.4	0.5	0.1	
One-half Depth	1.8	1.8	1.4	0.5	0.1	
Bottom	1.8	1.8	1.4	0.5	0.1	
Transect No. 4 (RM 641.4)						
Surface	1.0	0.9	0.8	0.4	0.2	
One-half Depth	1.0	0.9	0.8	0.4	0.2	
Bottom	1.0	0.9	0.8	0.4	0.2	
Transect No. 5 (RM 640.2)						
Surface	0.8	0.8	0.7	0.4	0.2	
One-half Depth	0.8	0.8	0.7	0.4	0.3	
Bottom	0.8	0.8	0.7	0.4	0.3	

TABLE VII

Triple-Depth
Thermal Plume Measurements
Fort Calhoun Station
June 22, 1979

	ΔT , °F					
	Distance from Nebraska Bank, Feet					
	<u>10</u>	<u>25</u>	<u>50</u>	<u>100</u>	<u>150</u>	<u>200</u>
Transect No. 1 (RM 646.0)						
Surface	0	0	0	0	0	0
One-half Depth	0	0	0	0	0	0
Bottom	0	0	0	0	0	0
Transect No. 1.5 (RM 645.9)						
Surface	9.0	1.8	0.1			
One-half Depth	3.8	0.2	0.1			
Bottom	14.8	5.3	0.1			
Transect No. 2 (RM 645.6)						
Surface	2.1	2.1	1.3	0.4		
One-half Depth	2.2	2.1	1.5	0.5		
Bottom	2.2	2.1	1.7	0.5		
Transect No. 3 (RM 644.8)						
Surface	1.6	1.5	1.2	0.8	0.1	0.1
One-half Depth	1.6	1.5	1.2	0.8	0.1	0.1
Bottom	1.6	1.5	1.2	0.8	0.1	0.1
Transect No. 4 (RM 641.4)						
Surface	1.0	1.0	0.8	0.2	0.1	0.1
One-half Depth	1.0	1.0	0.8	0.2	0.1	0.1
Bottom	1.0	1.0	0.8	0.2	0.1	0.1
Transect No. 5 (RM 640.2)						
Surface	0.6	0.7	0.8	0.6	0.3	0.1
One-half Depth	0.6	0.7	0.8	0.6	0.3	0.1
Bottom	0.6	0.7	0.8	0.6	0.3	0.1

Section VII

POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS
(As Required by Safety Guide 23, Regulatory Guide 1.21)

January 1, 1979 to June 30, 1979

VII. POTENTIAL DOSES TO INDIVIDUALS AND POPULATIONS

A. Potential Semiannual Doses to Individuals from Gaseous Releases.

Total body, skin and organ doses from ground releases were calculated in millirem (mrem) to an average adult, teenager, child and infant using the annual configuration of GASPAR program. Results to each receptor are shown in Tables VII-A-1 through VII-A-16. Also, the doses to the same groups in units of millirads (mrad), due to gamma and beta radiation carried by air, were computed using GASPAR. In its annual configuration, GASPAR assumes that all release rates are entered in curies per year (Ci/yr). If the total curies released per isotope during the semiannual period are assumed released for an annual period (Ci/yr), this release rate reduction is conveniently offset by the annual usage or dose factors, thereby allowing GASPAR to calculate semiannual doses.

The inputs to GASPAR for the semiannual period from January through June of 1979 were as follows:

- (1) All gaseous effluents were as described in Section I. The totals in curies of I-133 and I-135 include all actual and estimated activities. In most cases, I-133 and I-135 activities were estimated, if there was no measurable activity in a release by exponentially back-calculating to a mid-week activity using the maximum instrument sensitivity (minimum detectable activity).

(2) Entrained gases (Xe-133 and Xe-135) from liquid effluents were as described in Section II.

(3) Semiannual "X/Q's" at the actual receptor locations, which were corrected for open terrain, plume depletion, and radioactive decay factors were calculated according to Regulatory Guide 1.111. Also included were semiannual deposition rates corrected for the open terrain factor.

(4) The production, intake and grazing fractions were as follows: 1.0 for fresh leafy vegetation grown locally, 0.5 for the pasture grazing season, 0.76 for vegetation intake grown in gardens, 1 for daily intake of animals while on pasture and 8 g/m³ for the air water concentration.

(5) All dose factors, transport times from receptor to individual, and usage factors were defined by Regulatory Guide 1.109 in GASPAR.

(6) Site specific information, within a five mile radius of the plant, on types of receptors located in each sector was used. That is, if a cow was not present in a sector, then the milk pathway for that sector was not considered. If it was present, then its actual sector distance was used.

These inputs introduce a most conservative approach for the following reasons:

(1) The open terrain and deposition corrections increase semiannual "X/Q's" by a factor ranging between 1.0 and 4.0.

(2) The production, intake and grazing fractions, as defined in the input definition statement, represent an environmental area in an extremely conservative manner.

(3) In the majority of the releases, I-133 and I-135 were back-calculated even though there was no measurable activity.

B. Potential Semiannual Doses to Population from Gaseous Releases.

The GASPAR program in its annual configuration was also used to calculate the ALARA integrated population dose summary for the total body, skin and organ doses in manrems for all individuals within a 50-mile radius population. Results are shown in Table VII-B-1. The population-integrated dose is the summation of the dose received by all individuals and has units of man-thyroid-rem when applied to the summation of thyroid doses. The same inputs were used as in the individual case with the addition of the following:

(1) A total population of 836,172, based on a 1980 conservative estimate, was used to define the sector segments within the 50-mile radius of the plant.

(2) Total productions for milk, meat and vegetation were based on 1973 annual data for Nebraska as recommended by the NRC for use in GASPAR.

C. Potential Semiannual Doses to Individuals from Liquid Releases.

Total body, skin and organ mrem doses for liquid releases were calculated for all significant liquid pathways using the annual configuration of the LADTAP program. Results are shown in Tables VII-C-1 through VII-C-11.

The inputs to LADTAP for the semiannual period from January through June 1979 were as follows:

(1) All liquid effluents were as described in Section II, except for the entrained gases (Xe-133 and Xe-135).

(2) A plant discharge rate of 802 cubic feet per second (CFS) was used.

(3) Dilution factors (inverse of the mixing ratios) were computed based on Regulatory Guide 1.113 (equation 7 in Section 2.a.1 of Appendix A) for a one-dimensional transport model.

(4) A drinking water transport time of 6.6 hours to the Omaha intake and 7.0 hours to the Council Bluffs intake for the ALARA doses in Table VII-C-1 through VII-C-7 was used. For Tables VII-C-8 through VII-C-11, a transport time of 0.0 was used from the plant to the discharge from the site.

(5) A shorewidth factor of .2 was used.

(6) All consumption rates, usage rates, and transport times from receptor to individual were as defined by Regulatory Guide 1.109 in LADTAP.

The discharge site in Table VII-C-8 through VII-C-11 was chosen to present a most conservative

estimate of mrem dose for an average adult, teenager, child and infant. A conservative approach is also presented by the assumption that Omaha and Council Bluffs receive all drinking water from the Missouri River.

D. Potential Semiannual Doses to Population from Liquid Releases.

The LADTAP program in its annual configuration was also used to calculate the total body and organ doses for the population of 836,172 within a 50-mile radius of the plant. Results are shown in Tables VII-D-1 through VII-D-6. The same input were used as in the individual cases with the addition of the following:

(1) Dilution factors and transport times for the pathways of sportfish, commercial fish, recreation and biota were calculated based on a distance of two miles downstream as approximately the distance to the nearest recreational facility - Desoto National Wildlife Refuge.

(2) The total fish harvest for both sport and commercial purposes was calculated using an average commercial fish catch for Nebraska.

E. Direct Radiation Doses to Individuals and Population.

Direct radiation doses, attributable to the gamma radiation emitted from the containment structure, were not observed above local background at any TLD and Geiger-Mueller sample locations for this

semi-annual period.

Details of this sample system are given in
Section V, Environmental Monitoring.

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 1 RES
AT 4.58 MILES N

SEMI-ANNUAL BETA AIR DOSE = 6.55E-04 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 2.55E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.53E-04	1.53E-04	1.53E-04	1.53E-04	1.53E-04	1.53E-04	1.53E-04	9.14E-04
GROUND	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.27E-06	1.48E-06
INFANT	2.05E-06	2.06E-06	1.55E-07	2.18E-06	2.33E-06	4.99E-05	1.98E-06	1.96E-06
ADULT	1.16E-06	1.16E-06	1.34E-07	1.30E-06	1.62E-06	4.32E-05	1.31E-06	1.08E-06
TEEN	1.21E-06	1.21E-06	2.08E-07	1.34E-06	8.60E-07	6.10E-05	1.12E-06	1.10E-06
CHILD	1.32E-06	1.21E-06	3.09E-07	1.58E-06	6.05E-07	1.04E-04	1.21E-06	1.17E-06

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 13 REF
AT 1.79 MILES N

SEMI-ANNUAL BETA AIR DOSE = 4.71E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 1.84E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.15E-03	2.97E-03
ADULT	6.71E-06	6.07E-06	7.68E-07	7.02E-06	6.61E-06	8.22E-05	6.02E-06	5.92E-06
TEEN	3.17E-06	2.84E-06	6.06E-07	3.63E-06	3.91E-06	5.57E-05	2.86E-06	2.77E-06
CHILD	3.70E-06	3.39E-06	1.06E-06	4.46E-06	2.47E-06	6.32E-05	3.49E-06	3.34E-06

TABLE VII-A-1

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 2 BEEF VEG. RES
AT 1.91 MILES NNE

SEMI-ANNUAL BETA AIR DOSE = 3.68E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 1.93E-03 MILLRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.60E-04	8.60E-04	8.60E-04	8.60E-04	8.60E-04	8.60E-04	8.90E-04	2.32E-03
GROUND	5.13E-06	5.13E-06	5.13E-06	5.13E-06	5.13E-06	5.13E-06	5.13E-06	6.01E-06
VEGET								
ADULT	3.68E-05	3.28E-05	7.03E-06	3.84E-05	3.69E-05	6.69E-04	3.22E-05	3.17E-05
TEEN	3.33E-05	2.93E-05	9.85E-06	3.72E-05	4.01E-05	5.36E-04	2.93E-05	2.84E-05
CHILD	4.92E-05	4.46E-05	1.80E-05	5.79E-05	3.20E-05	8.29E-04	4.54E-05	4.41E-05
MEAT								
ADULT	4.91E-06	4.62E-06	3.49E-07	5.06E-06	4.87E-06	3.95E-05	4.60E-06	4.36E-06
TEEN	2.31E-06	2.16E-06	2.75E-07	2.52E-06	2.89E-06	2.62E-05	2.17E-06	2.13E-06
CHILD	2.74E-06	2.59E-06	4.81E-07	3.08E-06	1.82E-06	3.89E-05	2.62E-06	2.57E-06
INFAL								
ADULT	1.12E-05	1.13E-05	9.06E-07	1.19E-05	1.28E-05	2.90E-04	1.08E-05	1.07E-05
TEEN	6.36E-06	6.35E-06	7.84E-07	7.12E-06	8.93E-06	2.51E-04	6.03E-06	5.89E-06
CHILD	6.61E-06	6.26E-06	1.22E-06	7.36E-06	4.73E-06	3.55E-04	6.11E-06	5.97E-06
INFANT	7.21E-06	6.57E-06	1.81E-06	8.78E-06	3.33E-06	6.00E-04	6.60E-06	6.35E-06

TABLE VII-A-2

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 3 VEG, RES
 AT 1.52 MILES NE

SEMI-ANNUAL BETA AIR DOSE = 6.92E-03 MILLRADS
 SEMI-ANNUAL GAMMA AIR DOSE = 2.70E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.68E-03	4.37E-03
GROUND	7.18E-06	7.18E-06	7.18E-06	7.18E-06	7.18E-06	7.18E-06	7.18E-06	8.42E-06
VEGET								
ADULT	6.74E-05	6.17E-05	9.85E-06	6.96E-05	6.75E-05	9.53E-04	6.10E-05	6.02E-05
TEEN	6.08E-05	5.52E-05	1.38E-05	6.63E-05	7.42E-05	7.65E-04	5.53E-05	5.40E-05
CHILD	9.10E-05	8.45E-05	2.52E-05	1.03E-04	5.94E-05	1.18E-03	8.55E-05	8.37E-05
INHAL								
ADULT	2.12E-05	2.14E-05	1.73E-06	2.27E-05	2.43E-05	5.51E-04	2.05E-05	2.02E-05
TEEN	1.21E-05	1.21E-05	1.49E-06	1.35E-05	1.70E-05	4.78E-04	1.15E-05	1.12E-05
CHILD	1.26E-05	1.19E-05	2.32E-06	1.40E-05	8.98E-06	6.75E-04	1.16E-05	1.13E-05
INFANT	1.37E-05	1.25E-05	3.44E-06	1.67E-05	6.32E-06	1.15E-03	1.25E-05	1.21E-05

TABLE VII-A-3

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 4 VEG, RES
 AT 4.75 MILES ENE

SEMI-ANNUAL BETA AIR DOSE = 5.23E-04 MILLRADS
 SEMI-ANNUAL GAMMA AIR DOSE = 2.04E-04 MILLRADS

PATHWAY	1. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.122E-04	1.122E-04	1.122E-04	1.122E-04	1.122E-04	1.122E-04	1.127E-04	3.30E-04
GROUND	4.79E-07	4.79E-07	4.79E-07	4.79E-07	4.79E-07	4.79E-07	4.79E-07	5.51E-07
VEGET								
ADULT	5.11E-06	4.73E-06	6.56E-07	5.26E-06	5.11E-06	6.41E-05	4.68E-06	4.53E-06
TEEN	4.60E-06	4.23E-06	9.19E-07	4.97E-06	5.64E-06	5.16E-05	4.23E-06	4.15E-06
CHILD	6.92E-06	6.48E-06	1.68E-06	7.72E-06	4.57E-06	7.97E-05	6.55E-06	6.43E-06
INHAL								
ADULT	1.63E-06	1.64E-06	1.22E-07	1.73E-06	1.84E-06	3.95E-05	1.57E-06	1.56E-06
TEEN	9.23E-07	9.22E-07	1.06E-07	1.03E-06	1.29E-06	3.42E-05	8.78E-07	8.59E-07
CHILD	9.59E-07	9.11E-07	1.65E-07	1.06E-06	6.82E-07	4.83E-05	8.90E-07	8.71E-07
INFANT	1.04E-06	9.57E-07	2.44E-07	1.26E-06	4.80E-07	8.24E-05	9.59E-07	9.27E-07

TABLE VII-A-4

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 5 RES
 AT 4.68 MILES E

SEMI-ANNUAL BETA AIR DOSE = $1.11\text{E}-03$ MILLRADS
 SEMI-ANNUAL GAMMA AIR DOSE = $4.30\text{E}-04$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$2.58\text{E}-04$	$2.58\text{E}-04$	$2.58\text{E}-04$	$2.58\text{E}-04$	$2.58\text{E}-04$	$2.58\text{E}-04$	$2.69\text{E}-04$	$6.98\text{E}-04$
GROUND	$8.89\text{E}-07$	$8.89\text{E}-07$	$8.89\text{E}-07$	$8.89\text{E}-07$	$8.89\text{E}-07$	$8.89\text{E}-07$	$8.89\text{E}-07$	$1.04\text{E}-06$
INHAL								
ADULT	$3.56\text{E}-06$	$3.58\text{E}-06$	$2.65\text{E}-07$	$3.79\text{E}-06$	$4.03\text{E}-06$	$8.53\text{E}-05$	$3.45\text{E}-06$	$3.41\text{E}-06$
TEEN	$2.02\text{E}-06$	$2.02\text{E}-06$	$2.30\text{E}-07$	$2.25\text{E}-06$	$2.82\text{E}-06$	$7.38\text{E}-05$	$1.93\text{E}-06$	$1.88\text{E}-06$
CHILD	$2.10\text{E}-06$	$1.99\text{E}-06$	$3.57\text{E}-07$	$2.32\text{E}-06$	$1.49\text{E}-06$	$1.04\text{E}-04$	$1.95\text{E}-06$	$1.91\text{E}-06$
INFANT	$2.28\text{E}-06$	$2.10\text{E}-06$	$5.29\text{E}-07$	$2.74\text{E}-06$	$1.05\text{E}-06$	$1.78\text{E}-04$	$2.10\text{E}-06$	$2.03\text{E}-06$

TABLE VII-A-5

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 6 VEG. RES
AT 4.20 MILES ESE

SEMI-ANNUAL BETA AIR DOSE = 1.69E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 6.60E-04 MILLRADS

PATHWAY	T-BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.95E-04	3.95E-04	3.95E-04	3.95E-04	3.95E-04	3.95E-04	4.12E-04	1.07E-03
GROUND	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.44E-06	1.58E-06
VEGET								
ADULT	1.66E-05	1.55E-05	1.57E-06	1.71E-05	1.67E-05	1.94E-04	1.54E-05	1.52E-05
TEEN	1.50E-05	1.39E-05	2.76E-06	1.61E-05	1.64E-05	1.56E-04	1.39E-05	1.37E-05
CHILD	2.26E-05	2.13E-05	5.05E-06	2.50E-05	1.48E-05	2.41E-04	2.15E-05	2.11E-05
INFANT								
ADULT	5.35E-06	5.38E-06	4.02E-07	5.69E-06	6.06E-06	1.30E-04	5.17E-06	5.11E-06
TEEN	3.04E-06	3.03E-06	3.48E-07	3.38E-06	4.23E-06	1.12E-04	2.89E-06	2.83E-06
CHILD	3.15E-06	2.99E-06	5.41E-07	3.49E-06	2.24E-06	1.58E-04	2.93E-06	2.86E-06
INFANT	3.43E-06	3.15E-06	8.02E-07	4.13E-06	1.58E-06	2.70E-04	3.15E-06	3.05E-06

TABLE VII-A-6

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 7 VEG, RES
AT 1.66 MILES SE

SEMI-ANNUAL BETA AIR DOSE = $1.10\text{E-}02$ MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = $4.30\text{E-}03$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$2.58\text{E-}03$	$2.58\text{E-}03$	$2.58\text{E-}03$	$2.58\text{E-}03$	$2.58\text{E-}03$	$2.58\text{E-}03$	$2.69\text{E-}03$	$6.97\text{E-}03$
GROUND	$2.57\text{E-}05$	$2.57\text{E-}05$	$2.57\text{E-}05$	$2.57\text{E-}05$	$2.57\text{E-}05$	$2.57\text{E-}05$	$2.57\text{E-}05$	$3.01\text{E-}05$
VEGET								
ADULT	$1.21\text{E-}04$	$1.00\text{E-}04$	$3.52\text{E-}05$	$1.29\text{E-}04$	$1.21\text{E-}04$	$3.28\text{E-}03$	$9.77\text{E-}05$	$9.51\text{E-}05$
TEEN	$1.09\text{E-}04$	$8.94\text{E-}05$	$4.92\text{E-}05$	$1.29\text{E-}04$	$1.29\text{E-}04$	$2.62\text{E-}03$	$8.97\text{E-}05$	$8.53\text{E-}05$
CHILD	$1.58\text{E-}04$	$1.35\text{E-}04$	$9.02\text{E-}05$	$2.01\text{E-}04$	$1.02\text{E-}04$	$4.06\text{E-}03$	$1.39\text{E-}04$	$1.32\text{E-}04$
INHAL								
ADULT	$3.36\text{E-}05$	$3.38\text{E-}05$	$2.77\text{E-}06$	$3.59\text{E-}05$	$3.84\text{E-}05$	$8.82\text{E-}04$	$3.24\text{E-}05$	$3.20\text{E-}05$
TEEN	$1.91\text{E-}05$	$1.91\text{E-}05$	$2.39\text{E-}06$	$2.14\text{E-}05$	$2.69\text{E-}05$	$7.64\text{E-}04$	$1.81\text{E-}05$	$1.77\text{E-}05$
CHILD	$1.99\text{E-}05$	$1.88\text{E-}05$	$3.71\text{E-}06$	$2.22\text{E-}05$	$1.42\text{E-}05$	$1.08\text{E-}03$	$1.83\text{E-}05$	$1.79\text{E-}05$
INFANT	$2.17\text{E-}05$	$1.97\text{E-}05$	$5.50\text{E-}06$	$2.65\text{E-}05$	$1.00\text{E-}05$	$1.84\text{E-}03$	$1.98\text{E-}05$	$1.91\text{E-}05$

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 8 PORK
AT 1.97 MILES SE

SEMI-ANNUAL BETA AIR DOSE = $7.38\text{E-}03$ MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = $2.87\text{E-}03$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$1.72\text{E-}03$	$1.72\text{E-}03$	$1.72\text{E-}03$	$1.72\text{E-}03$	$1.72\text{E-}03$	$1.72\text{E-}03$	$1.79\text{E-}03$	$4.66\text{E-}03$
MEAT								
ADULT	$1.12\text{E-}05$	$1.02\text{E-}05$	$1.14\text{E-}06$	$1.17\text{E-}05$	$1.11\text{E-}05$	$1.24\text{E-}04$	$1.02\text{E-}05$	$1.00\text{E-}05$
TEEN	$5.28\text{E-}06$	$4.80\text{E-}06$	$8.99\text{E-}07$	$5.96\text{E-}06$	$6.53\text{E-}06$	$8.32\text{E-}05$	$4.81\text{E-}06$	$4.59\text{E-}06$
CHILD	$6.19\text{E-}06$	$5.72\text{E-}06$	$1.57\text{E-}06$	$7.31\text{E-}06$	$4.12\text{E-}06$	$1.24\text{E-}04$	$5.81\text{E-}06$	$5.66\text{E-}06$

TABLE VII-A-7

PORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 9 VEG. RES
AT 0.90 MILES SSE

SEMI-ANNUAL BETA AIR DOSE = 3.24E-02 MILLRAUS
SEMI-ANNUAL GAMMA AIR DOSE = 1.26E-02 MILLRAUS

PATHWAY	T-BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLURE	7.56E-03	7.56E-03	7.56E-03	7.56E-03	7.56E-03	7.56E-03	7.80E-03	2.04E-02
GROUND	1.06E-04	1.06E-04	1.06E-04	1.06E-04	1.06E-04	1.06E-04	1.06E-04	1.24E-04
VEGET								
ADULT	3.84E-04	3.01E-04	1.45E-04	4.18E-04	3.86E-04	1.35E-02	2.90E-04	2.79E-04
TEEN	3.50E-04	2.67E-04	2.04E-04	4.31E-04	4.03E-04	1.07E-02	2.68E-04	2.50E-04
CHILD	4.95E-04	3.99E-04	3.73E-04	6.73E-04	3.17E-04	1.66E-02	4.14E-04	3.88E-04
INFANT								
ADULT	5.85E-05	9.92E-05	8.23E-06	1.05E-04	1.13E-04	2.61E-03	9.50E-05	9.37E-05
TEEN	5.61E-05	5.60E-05	7.09E-06	6.30E-05	7.89E-05	2.26E-03	5.32E-05	5.18E-05
CHILD	5.83E-05	5.51E-05	1.10E-05	6.51E-05	4.18E-05	3.20E-03	5.39E-05	5.25E-05
INFANT	6.36E-05	5.79E-05	1.63E-05	7.78E-05	2.94E-05	5.47E-03	5.82E-05	5.59E-05

TABLE VII-A-8

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 10 PORK
AT 1.11 MILES SSE

SEMI-ANNUAL BETA AIR DOSE = $1.91\text{E}-02$ MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = $7.46\text{E}-03$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$4.47\text{E}-03$	$4.47\text{E}-03$	$4.47\text{E}-03$	$4.47\text{E}-03$	$4.47\text{E}-03$	$4.47\text{E}-03$	$4.66\text{E}-03$	$1.21\text{E}-02$
MEAT								
ADULT	$2.77\text{E}-05$	$2.45\text{E}-05$	$3.96\text{E}-06$	$2.94\text{E}-05$	$2.73\text{E}-05$	$4.20\text{E}-04$	$2.42\text{E}-05$	$2.37\text{E}-05$
TEEN	$1.31\text{E}-05$	$1.15\text{E}-05$	$3.12\text{E}-06$	$1.55\text{E}-05$	$1.61\text{E}-05$	$2.84\text{E}-04$	$1.15\text{E}-05$	$1.11\text{E}-05$
CHILD	$1.52\text{E}-05$	$1.36\text{E}-05$	$5.45\text{E}-06$	$1.91\text{E}-05$	$1.02\text{E}-05$	$4.25\text{E}-04$	$1.39\text{E}-05$	$1.34\text{E}-05$

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 14 COW
AT 2.77 MILES SSE

SEMI-ANNUAL BETA AIR DOSE = $2.35\text{E}-03$ MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = $9.18\text{E}-04$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$5.50\text{E}-04$	$5.50\text{E}-04$	$5.50\text{E}-04$	$5.50\text{E}-04$	$5.50\text{E}-04$	$5.50\text{E}-04$	$5.73\text{E}-04$	$1.49\text{E}-03$
COW MILK								
ADULT	$1.19\text{E}-05$	$8.23\text{E}-06$	$5.28\text{E}-06$	$1.48\text{E}-05$	$1.49\text{E}-05$	$1.24\text{E}-03$	$7.29\text{E}-06$	$6.85\text{E}-06$
TEEN	$1.36\text{E}-05$	$8.76\text{E}-06$	$9.11\text{E}-06$	$2.06\text{E}-05$	$1.93\text{E}-05$	$1.87\text{E}-03$	$7.86\text{E}-06$	$6.99\text{E}-06$
CHILD	$2.16\text{E}-05$	$1.25\text{E}-05$	$2.16\text{E}-05$	$3.43\text{E}-05$	$1.59\text{E}-05$	$3.75\text{E}-03$	$1.24\text{E}-05$	$1.10\text{E}-05$
INFANT	$3.46\text{E}-05$	$1.83\text{E}-05$	$4.48\text{E}-05$	$7.22\text{E}-05$	$1.59\text{E}-05$	$9.04\text{E}-03$	$1.99\text{E}-05$	$1.57\text{E}-05$

TABLE VII-A-8
Continued

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 11 VEG.RES
AT 0.80 MILES S

SEMI-ANNUAL BETA AIR DOSE = $2.43\text{E-}02$ MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = $9.46\text{E-}03$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$5.67\text{E-}03$	$5.67\text{E-}03$	$5.67\text{E-}03$	$5.67\text{E-}03$	$5.67\text{E-}03$	$5.67\text{E-}03$	$5.91\text{E-}03$	$1.53\text{E-}02$
GROUND	$5.47\text{E-}05$	$5.47\text{E-}05$	$5.47\text{E-}05$	$5.47\text{E-}05$	$5.47\text{E-}05$	$5.47\text{E-}05$	$5.47\text{E-}05$	$6.41\text{E-}05$
VEGET								
ADULT	$2.64\text{E-}04$	$2.21\text{E-}04$	$7.50\text{E-}05$	$2.81\text{E-}04$	$2.64\text{E-}04$	$7.01\text{E-}03$	$2.15\text{E-}04$	$2.09\text{E-}04$
TEEN	$2.39\text{E-}04$	$1.96\text{E-}04$	$1.05\text{E-}04$	$2.81\text{E-}04$	$2.82\text{E-}04$	$5.61\text{E-}03$	$1.97\text{E-}04$	$1.88\text{E-}04$
CHILD	$3.46\text{E-}04$	$2.97\text{E-}04$	$1.92\text{E-}04$	$4.38\text{E-}04$	$2.23\text{E-}04$	$8.66\text{E-}03$	$3.05\text{E-}04$	$2.91\text{E-}04$
INHAL								
ADULT	$7.39\text{E-}05$	$7.44\text{E-}05$	$6.14\text{E-}06$	$7.91\text{E-}05$	$8.47\text{E-}05$	$1.95\text{E-}03$	$7.12\text{E-}05$	$7.03\text{E-}05$
TEEN	$4.20\text{E-}05$	$4.20\text{E-}05$	$5.29\text{E-}06$	$4.72\text{E-}05$	$5.91\text{E-}05$	$1.69\text{E-}03$	$3.99\text{E-}05$	$3.89\text{E-}05$
CHILD	$4.37\text{E-}05$	$4.13\text{E-}05$	$8.22\text{E-}06$	$4.88\text{E-}05$	$3.13\text{E-}05$	$2.39\text{E-}03$	$4.04\text{E-}05$	$3.94\text{E-}05$
INFANT	$4.77\text{E-}05$	$4.34\text{E-}05$	$1.22\text{E-}05$	$5.83\text{E-}05$	$2.20\text{E-}05$	$4.08\text{E-}03$	$4.36\text{E-}05$	$4.19\text{E-}05$

TABLE VII-A-9

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 12 PORK
AT 0.97 MILES S

SEMI-ANNUAL BETA AIR DOSE = $1.47\text{E-}02$ MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = $5.73\text{E-}03$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$3.44\text{E-}03$	$3.44\text{E-}03$	$3.44\text{E-}03$	$3.44\text{E-}03$	$3.44\text{E-}03$	$3.44\text{E-}03$	$3.58\text{E-}03$	$9.29\text{E-}03$
MEAT								
ADULT	$2.05\text{E-}05$	$1.87\text{E-}05$	$2.19\text{E-}06$	$2.14\text{E-}05$	$2.02\text{E-}05$	$2.37\text{E-}04$	$1.85\text{E-}05$	$1.82\text{E-}05$
TEEN	$9.65\text{E-}06$	$8.73\text{E-}06$	$1.73\text{E-}06$	$1.10\text{E-}05$	$1.19\text{E-}05$	$1.59\text{E-}04$	$8.76\text{E-}06$	$8.52\text{E-}06$
CHILD	$1.13\text{E-}05$	$1.04\text{E-}05$	$3.01\text{E-}06$	$1.35\text{E-}05$	$7.53\text{E-}06$	$2.38\text{E-}04$	$1.06\text{E-}05$	$1.03\text{E-}05$

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 13 COW
AT 2.77 MILES S

SEMI-ANNUAL BETA AIR DOSE = $1.32\text{E-}03$ MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = $5.16\text{E-}04$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$3.09\text{E-}04$	$3.09\text{E-}04$	$3.09\text{E-}04$	$3.09\text{E-}04$	$3.09\text{E-}04$	$3.09\text{E-}04$	$3.23\text{E-}04$	$8.36\text{E-}04$
COW MILK								
ADULT	$5.72\text{E-}06$	$4.36\text{E-}06$	$1.93\text{E-}06$	$6.77\text{E-}06$	$6.82\text{E-}06$	$4.56\text{E-}04$	$4.02\text{E-}06$	$3.85\text{E-}06$
TEEN	$6.35\text{E-}06$	$4.58\text{E-}06$	$3.34\text{E-}06$	$8.91\text{E-}06$	$8.80\text{E-}06$	$6.89\text{E-}04$	$4.25\text{E-}06$	$3.93\text{E-}06$
CHILD	$1.01\text{E-}05$	$6.76\text{E-}06$	$7.90\text{E-}06$	$1.47\text{E-}05$	$7.26\text{E-}06$	$1.38\text{E-}03$	$6.69\text{E-}06$	$6.21\text{E-}06$
INFANT	$1.60\text{E-}05$	$9.99\text{E-}06$	$1.64\text{E-}05$	$2.96\text{E-}05$	$7.26\text{E-}06$	$3.32\text{E-}03$	$1.06\text{E-}05$	$9.40\text{E-}06$

TABLE VII-A-9
Continued

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 14 VEG-RES
AT 0.64 MILES SSW

SEMI-ANNUAL BETA AIR DOSE = 5.81E-02 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 2.27E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	1.36E-02	3.67E-02
GROUND	8.21E-05	8.21E-05	8.21E-05	8.21E-05	8.21E-05	8.21E-05	8.21E-05	9.52E-05
VEGET								
ADULT	5.83E-04	5.18E-04	1.13E-04	6.08E-04	5.83E-04	1.07E-02	5.09E-04	5.01E-04
TEEN	5.27E-04	4.62E-04	1.58E-04	5.89E-04	6.35E-04	8.58E-03	4.63E-04	4.49E-04
CHILD	7.79E-04	7.05E-04	2.69E-04	9.17E-04	5.07E-04	1.33E-02	7.17E-04	6.96E-04
INFANT								
ADULT	1.77E-04	1.78E-04	1.50E-05	1.90E-04	2.03E-04	4.75E-03	1.71E-04	1.68E-04
TEEN	1.01E-04	1.01E-04	1.24E-05	1.13E-04	1.42E-04	4.12E-03	9.55E-05	9.30E-05
CHILD	1.05E-04	9.90E-05	2.01E-05	1.17E-04	7.52E-05	5.82E-03	9.68E-05	9.43E-05
INFANT	1.14E-04	1.04E-04	2.97E-05	1.40E-04	5.29E-05	9.94E-03	1.05E-04	1.00E-04

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 15 COW,BEEF
AT 0.65 MILES SSW

SEMI-ANNUAL BETA AIR DOSE = 5.67E-02 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 2.21E-02 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.32E-02	1.32E-02	1.32E-02	1.32E-02	1.32E-02	1.32E-02	1.32E-02	3.58E-02
MEAT								
ADULT	7.59E-05	7.13E-05	5.59E-06	7.82E-05	7.52E-05	6.29E-04	7.09E-05	7.02E-05
TEEN	3.57E-05	3.33E-05	4.40E-06	3.90E-05	4.44E-05	4.18E-04	3.34E-05	3.28E-05
CHILD	4.22E-05	3.99E-05	7.69E-06	4.77E-05	2.80E-05	6.20E-04	4.03E-05	3.96E-05
COW MILK								
ADULT	2.33E-04	1.83E-04	7.04E-05	2.71E-04	2.73E-04	1.66E-02	1.71E-04	1.65E-04
TEEN	2.56E-04	1.92E-04	1.21E-04	3.49E-04	3.52E-04	2.51E-02	1.60E-04	1.58E-04
CHILD	4.06E-04	2.86E-04	2.87E-04	5.76E-04	2.90E-04	5.01E-02	2.63E-04	2.66E-04
INFANT	6.41E-04	4.23E-04	5.98E-04	1.14E-03	2.90E-04	1.21E-01	4.44E-04	4.02E-04

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 16 RES
 AT 0.74 MILES SW

SEMI-ANNUAL BETA AIR DOSE = $2.94\text{E}-02$ MILLRADS
 SEMI-ANNUAL GAMMA AIR DOSE = $1.15\text{E}-02$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$6.88\text{E}-03$	$6.88\text{E}-03$	$6.88\text{E}-03$	$6.88\text{E}-03$	$6.88\text{E}-03$	$6.88\text{E}-03$	$7.17\text{E}-03$	$1.86\text{E}-02$
GROUND	$6.84\text{E}-05$	$6.84\text{E}-05$	$6.84\text{E}-05$	$6.84\text{E}-05$	$6.84\text{E}-05$	$6.84\text{E}-05$	$6.84\text{E}-05$	$8.02\text{E}-05$
INHAL								
ADULT	$8.95\text{E}-05$	$9.01\text{E}-05$	$7.43\text{E}-06$	$9.58\text{E}-05$	$1.03\text{E}-04$	$2.36\text{E}-03$	$8.63\text{E}-05$	$8.52\text{E}-05$
TEEN	$5.09\text{E}-05$	$5.09\text{E}-05$	$6.40\text{E}-06$	$5.72\text{E}-05$	$7.17\text{E}-05$	$2.05\text{E}-03$	$4.83\text{E}-05$	$4.71\text{E}-05$
CHILD	$5.30\text{E}-05$	$5.01\text{E}-05$	$9.94\text{E}-06$	$5.91\text{E}-05$	$3.79\text{E}-05$	$2.89\text{E}-03$	$4.89\text{E}-05$	$4.77\text{E}-05$
INFANT	$5.78\text{E}-05$	$5.26\text{E}-05$	$1.47\text{E}-05$	$7.06\text{E}-05$	$2.67\text{E}-05$	$4.94\text{E}-03$	$5.28\text{E}-05$	$5.06\text{E}-05$

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 1 VEG
 AT 0.84 MILES SW

SEMI-ANNUAL BETA AIR DOSE = $2.21\text{E}-02$ MILLRADS
 SEMI-ANNUAL GAMMA AIR DOSE = $8.60\text{E}-03$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$5.16\text{E}-03$	$5.16\text{E}-03$	$5.16\text{E}-03$	$5.16\text{E}-03$	$5.16\text{E}-03$	$5.16\text{E}-03$	$5.38\text{E}-03$	$1.39\text{E}-02$
VEGET								
ADULT	$2.41\text{E}-04$	$2.01\text{E}-04$	$7.03\text{E}-05$	$2.57\text{E}-04$	$2.42\text{E}-04$	$6.57\text{E}-03$	$1.95\text{E}-04$	$1.90\text{E}-04$
TEEN	$2.19\text{E}-04$	$1.79\text{E}-04$	$9.85\text{E}-05$	$2.58\text{E}-04$	$2.58\text{E}-04$	$5.25\text{E}-03$	$1.79\text{E}-04$	$1.71\text{E}-04$
CHILD	$3.16\text{E}-04$	$2.70\text{E}-04$	$1.80\text{E}-04$	$4.03\text{E}-04$	$2.04\text{E}-04$	$8.11\text{E}-03$	$2.77\text{E}-04$	$2.54\text{E}-04$

TABLE VII-A-11

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 2 COW-BEEF
 AT 1.66 MILES SW

SEMI-ANNUAL BETA AIR DOSE = 4.27E-03 MILLRADS
 SEMI-ANNUAL GAMMA AIR DOSE = 1.66E-03 MILLRADS

PATHWAY	T-BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.97E-04	9.97E-04	9.97E-04	9.97E-04	9.97E-04	9.97E-04	1.04E-03	2.69E-03
MEAT								
ADULT	5.86E-06	5.39E-06	5.59E-07	6.09E-06	5.79E-06	6.12E-05	5.36E-06	5.29E-06
TEEN	2.76E-06	2.53E-06	4.40E-07	3.09E-06	3.42E-06	4.09E-05	2.53E-06	2.47E-06
CHILD	3.25E-06	3.02E-06	7.69E-07	3.79E-06	2.16E-06	6.10E-05	3.06E-06	2.96E-06
COW MILK								
ADULT	1.92E-05	1.43E-05	7.04E-06	2.30E-05	2.32E-05	1.66E-03	1.30E-05	1.24E-05
TEEN	2.15E-05	1.50E-05	1.21E-05	3.06E-05	2.99E-05	2.50E-03	1.38E-05	1.27E-05
CHILD	3.41E-05	2.20E-05	2.87E-05	5.10E-05	2.47E-05	5.00E-03	2.15E-05	2.00E-05
INFANT	5.42E-05	3.24E-05	5.98E-05	1.04E-04	2.47E-05	1.21E-02	3.45E-05	3.03E-05

TABLE VII-A-11
 Continued

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS B-03-79
SPECIAL LOCATION # 3 RES
AT 1.10 MILES WSW

SEMI-ANNUAL BETA AIR DOSE = 7.21E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 2.81E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.68E-03	1.68E-03	1.68E-03	1.68E-03	1.68E-03	1.68E-03	1.76E-03	4.55E-03
GROUND	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.23E-05	1.44E-05
INHAL	1	1	1	1	1	1	1	1
ADULT	2.19E-05	2.21E-05	1.82E-06	2.35E-05	2.51E-05	5.79E-04	2.12E-05	2.09E-05
TEEN	1.25E-05	1.25E-05	1.57E-06	1.40E-05	1.76E-05	5.02E-04	1.18E-05	1.15E-05
CHILD	1.36E-05	1.23E-05	2.44E-06	1.45E-05	9.30E-06	7.09E-04	1.20E-05	1.17E-05
INFANT	1.42E-05	1.29E-05	3.62E-06	1.73E-05	6.54E-06	1.21E-03	1.29E-05	1.24E-05

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS B-03-79
SPECIAL LOCATION # 5 COW
AT 4.12 MILES WSW

SEMI-ANNUAL BETA AIR DOSE = 4.27E-04 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 1.66E-04 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	9.97E-05	9.97E-05	9.97E-05	9.97E-05	9.97E-05	9.97E-05	1.04E-04	2.70E-04
COW MILK	1	1	1	1	1	1	1	1
ADULT	1.63E-06	1.36E-06	3.81E-07	1.84E-06	1.85E-06	9.04E-05	1.29E-06	1.26E-06
TEEN	1.77E-06	1.42E-06	6.58E-07	2.27E-06	2.38E-06	1.36E-04	1.35E-06	1.29E-06
CHILD	2.80E-06	2.15E-06	1.56E-06	3.72E-06	1.97E-06	2.72E-04	2.13E-06	2.04E-06
INFANT	4.37E-06	3.20E-06	3.24E-06	7.09E-06	1.97E-06	6.55E-04	3.31E-06	3.08E-06

TABLE VII-A-12

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 4 BEEF, VEG
 AT 2.45 MILES WSW

SEMI-ANNUAL BETA AIR DOSE = $1.18\text{E}-03$ MILLRADS

SEMI-ANNUAL GAMMA AIR DOSE = $4.59\text{E}-04$ MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	$2.75\text{E}-04$	$2.75\text{E}-04$	$2.75\text{E}-04$	$2.75\text{E}-04$	$2.75\text{E}-04$	$2.75\text{E}-04$	$2.87\text{E}-04$	$7.45\text{E}-04$
VEGET								
ADULT	$1.23\text{E}-05$	$1.11\text{E}-05$	$2.11\text{E}-06$	$1.28\text{E}-05$	$1.23\text{E}-05$	$2.02\text{E}-04$	$1.09\text{E}-05$	$1.08\text{E}-05$
TEEN	$1.11\text{E}-05$	$9.91\text{E}-06$	$2.95\text{E}-06$	$1.23\text{E}-05$	$1.35\text{E}-05$	$1.62\text{E}-04$	$9.93\text{E}-06$	$9.57\text{E}-06$
CHILD	$1.65\text{E}-05$	$1.51\text{E}-05$	$5.41\text{E}-06$	$1.91\text{E}-05$	$1.08\text{E}-05$	$2.50\text{E}-04$	$1.54\text{E}-05$	$1.50\text{E}-05$
MEAT								
ADULT	$1.66\text{E}-06$	$1.57\text{E}-06$	$1.05\text{E}-07$	$1.70\text{E}-06$	$1.64\text{E}-06$	$1.20\text{E}-05$	$1.56\text{E}-06$	$1.55\text{E}-06$
TEEN	$7.78\text{E}-07$	$7.34\text{E}-07$	$8.26\text{E}-08$	$8.41\text{E}-07$	$9.71\text{E}-07$	$7.94\text{E}-06$	$7.36\text{E}-07$	$7.24\text{E}-07$
CHILD	$9.24\text{E}-07$	$8.81\text{E}-07$	$1.44\text{E}-07$	$1.03\text{E}-06$	$6.13\text{E}-07$	$1.18\text{E}-05$	$8.88\text{E}-07$	$8.75\text{E}-07$

TABLE VII-A-12
 Continued

FORT CALHOUN 1 RECEPTORS IN ALL SECTIONS B-03-79
SPECIAL LOCATION # 6 VEG. RES.
AT 1.20 MILES W

SEMI-ANNUAL BETA AIR DOSE = 7.30E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 2.07E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.72E-03	1.72E-03	1.72E-03	1.72E-03	1.72E-03	1.72E-03	1.79E-03	4.55E-03
GROUND	1.20E-05	1.20E-05	1.20E-05	1.20E-05	1.20E-05	1.20E-05	1.20E-05	1.40E-05
WEGT	1	1	1	1	1	1	1	1
ADULT	7.53E-05	6.59E-05	1.64E-05	7.91E-05	7.54E-05	1.55E-03	6.46E-05	6.34E-05
TEEN	6.81E-05	5.88E-05	2.30E-05	7.73E-05	8.17E-05	1.24E-03	5.89E-05	5.69E-05
CHILD	1.00E-04	8.94E-05	4.21E-05	1.20E-04	6.50E-05	1.92E-03	9.11E-05	8.31E-05
INFANT	1	1	1	1	1	1	1	1
ADULT	2.24E-05	2.25E-05	1.85E-06	2.39E-05	2.56E-05	5.89E-04	2.16E-05	2.13E-05
TEEN	1.27E-05	1.27E-05	1.60E-06	1.43E-05	1.79E-05	5.10E-04	1.21E-05	1.18E-05
CHILD	1.32E-05	1.25E-05	2.46E-06	1.48E-05	9.48E-06	7.21E-04	1.22E-05	1.19E-05
INFANT	1.44E-05	1.32E-05	3.67E-06	1.76E-05	6.67E-06	1.23E-03	1.32E-05	1.27E-05

FORT CALHOUN 1 RECEPTORS IN ALL SECTIONS B-03-79
SPECIAL LOCATION # 7 PORK
AT 1.23 MILES W

SEMI-ANNUAL BETA AIR DOSE = 7.06E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 2.75E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.65E-03	1.65E-03	1.65E-03	1.65E-03	1.65E-03	1.65E-03	1.72E-03	4.46E-03
WEGT	1	1	1	1	1	1	1	1
ADULT	9.51E-06	8.89E-06	7.45E-07	9.82E-06	9.42E-06	8.33E-05	8.84E-06	8.75E-06
TEEN	4.47E-06	4.16E-06	5.87E-07	4.92E-06	5.27E-06	5.24E-05	4.17E-06	4.09E-06
CHILD	5.29E-06	4.98E-06	1.03E-06	6.02E-06	3.51E-06	8.23E-05	5.04E-06	4.94E-06

TABLE VII-A-13

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
 SPECIAL LOCATION # 8 HELF, VEG, RES, PRK
 AT 2.03 MILES WNW

SEMI-ANNUAL BETA AIR DOSE = 5.30E-03 MILLRADS
 SEMI-ANNUAL GAMMA AIR DOSE = 2.06E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUNE	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.29E-03	3.35E-03
GROUND	7.87E-06	7.87E-06	7.87E-06	7.87E-06	7.87E-06	7.87E-06	7.87E-06	9.22E-06
VEGET								
ADULT	5.41E-05	4.79E-05	1.08E-05	5.66E-05	5.42E-05	1.02E-03	4.71E-05	4.63E-05
TEEN	4.89E-05	4.28E-05	1.51E-05	5.49E-05	5.89E-05	6.20E-04	4.29E-05	4.15E-05
CHILD	7.23E-05	6.52E-05	2.77E-05	8.55E-05	4.70E-05	1.27E-03	6.63E-05	6.43E-05
MEAT								
ADULT	7.20E-06	6.76E-06	5.35E-07	7.42E-06	7.13E-06	6.03E-05	6.72E-06	6.55E-06
TEEN	3.39E-06	3.16E-06	4.22E-07	3.71E-06	4.22E-06	4.00E-05	3.17E-06	3.11E-06
CHILD	4.01E-06	3.79E-06	7.37E-07	4.53E-06	2.66E-06	5.94E-05	3.83E-06	3.76E-06
INHAL								
ADULT	1.63E-05	1.64E-05	1.30E-06	1.74E-05	1.86E-05	4.16E-04	1.57E-05	1.56E-05
TEEN	9.27E-06	9.26E-06	1.12E-06	1.04E-05	1.30E-05	3.60E-04	8.81E-06	8.59E-06
CHILD	9.64E-06	9.13E-06	1.75E-06	1.07E-05	6.86E-06	5.09E-04	8.92E-06	8.71E-06
INFANT	1.05E-05	9.59E-06	2.59E-06	1.28E-05	4.84E-06	8.70E-04	9.62E-06	9.27E-06

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS B-03-79
SPECIAL LOCATION # 9 VEG.PES
AT 2.56 MILES NW

SEMI-ANNUAL BETA AIR DOSE = 4.71E-03 MILLIRADS
SEMI-ANNUAL GAMMA AIR DOSE = 1.04E-03 MILLIRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.10E-03	1.15E-03	2.97E-03
GOAT	7.53E-06	7.53E-06	7.53E-06	7.53E-06	7.53E-06	7.53E-06	7.53E-06	8.86E-06
VEGET								
ADULT	4.87E-05	4.28E-05	1.03E-05	5.11E-05	4.88E-05	9.77E-04	4.20E-05	4.12E-05
TEEN	4.41E-05	3.82E-05	1.44E-05	4.98E-05	5.29E-05	7.82E-04	3.83E-05	3.70E-05
CHILD	6.49E-05	5.81E-05	2.65E-05	7.76E-05	4.21E-05	1.21E-03	5.92E-05	5.73E-05
INFANT								
ADULT	1.45E-05	1.46E-05	1.14E-06	1.55E-05	1.65E-05	3.66E-04	1.40E-05	1.36E-05
TEEN	8.25E-06	8.24E-06	9.67E-07	9.21E-06	1.16E-05	3.17E-04	7.89E-06	7.65E-06
CHILD	8.57E-06	8.12E-06	1.53E-06	9.52E-06	6.11E-06	4.48E-04	7.94E-06	7.76E-06
INFANT	9.34E-06	8.54E-06	2.27E-05	1.13E-05	4.30E-06	7.64E-04	8.56E-06	8.26E-06

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS B-03-79
SPECIAL LOCATION # 10 COW.PORK
AT 3.50 MILES NW

SEMI-ANNUAL BETA AIR DOSE = 2.58E-03 MILLIRADS
SEMI-ANNUAL GAMMA AIR DOSE = 1.00E-03 MILLIRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	6.02E-04	6.02E-04	6.02E-04	6.02E-04	6.02E-04	6.02E-04	6.27E-04	1.53E-03
MEAT								
ADULT	3.54E-06	3.33E-06	2.56E-07	3.65E-06	3.51E-06	2.89E-05	3.31E-06	3.28E-06
TEEN	1.67E-06	1.56E-06	2.02E-07	1.82E-06	2.07E-06	1.92E-05	1.56E-06	1.53E-06
CHILD	1.97E-06	1.87E-06	3.52E-07	2.22E-06	1.31E-06	2.85E-05	1.89E-06	1.55E-06
COW MILK								
ADULT	1.08E-05	8.55E-06	3.22E-06	1.26E-05	1.27E-05	7.62E-04	7.98E-06	7.71E-06
TEEN	1.19E-05	8.95E-06	5.57E-06	1.62E-05	1.63E-05	1.15E-03	8.40E-06	7.36E-06
CHILD	1.89E-05	1.33E-05	1.32E-05	2.66E-05	1.35E-05	2.30E-03	1.32E-05	1.24E-05
INFANT	2.97E-05	1.98E-05	2.74E-05	5.27E-05	1.35E-05	5.53E-03	2.07E-05	1.88E-05

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 11 VEG. RES
AT 2.05 MILES NNW

SEMI-ANNUAL BETA AIR DOSE = 4.76E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 1.66E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.12E-03	1.12E-03	1.12E-03	1.12E-03	1.12E-03	1.12E-03	1.16E-03	3.02E-03
GROUND	9.58E-06	9.58E-06	9.58E-06	9.58E-06	9.58E-06	9.58E-06	9.58E-06	1.12E-05
VLGET								
ADULT	5.14E-05	4.38E-05	1.31E-05	5.44E-05	5.15E-05	1.23E-03	4.28E-05	4.19E-05
TEEN	4.66E-05	3.91E-05	1.64E-05	5.39E-05	5.53E-05	9.86E-04	3.92E-05	3.75E-05
CHILD	6.78E-05	5.92E-05	3.37E-05	8.40E-05	4.39E-05	1.52E-03	6.06E-05	5.82E-05
INHAL								
ADULT	1.47E-05	1.48E-05	1.18E-06	1.58E-05	1.68E-05	3.78E-04	1.42E-05	1.41E-05
TEEN	8.39E-06	8.37E-06	1.02E-06	9.39E-06	1.18E-05	3.28E-04	7.96E-06	7.77E-06
CHILD	5.72E-06	8.26E-06	1.59E-06	9.70E-06	6.23E-06	4.63E-04	8.07E-06	7.58E-06
INFANT	9.50E-06	8.67E-06	2.36E-06	1.16E-05	4.38E-06	7.90E-04	8.70E-06	8.38E-06

FORT CALHOUN 1 RECEPTORS IN ALL SECTORS 8-03-79
SPECIAL LOCATION # 12 BEEF
AT 2.28 MILES NNW

SEMI-ANNUAL BETA AIR DOSE = 3.75E-03 MILLRADS
SEMI-ANNUAL GAMMA AIR DOSE = 1.46E-03 MILLRADS

PATHWAY	T.BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	8.77E-04	8.77E-04	8.77E-04	8.77E-04	8.77E-04	8.77E-04	9.14E-04	2.37E-03
MEAT								
ADULT	5.26E-06	4.84E-06	5.12E-07	5.47E-06	5.20E-06	5.60E-05	4.80E-06	4.74E-06
TEEN	2.48E-06	2.27E-06	4.04E-07	2.79E-06	3.07E-06	3.75E-05	2.27E-06	2.22E-06
CHILD	2.92E-06	2.70E-06	7.05E-07	3.42E-06	1.94E-06	5.59E-05	2.74E-06	2.58E-06

TABLE VII-A-16

PORT CALHOUN 1 SEMI-ANNUAL 1/79- 6/79 TRI-EX TOWER DATA
SEMI-ANNUAL ALARA INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.20E-02 92.65%	1.20E-02 93.35%	1.20E-02 97.64%	1.20E-02 91.98%	1.20E-02 92.67%	1.20E-02 26.24%	1.27E-02 93.80%	3.92E-02 97.91%
GROUND	8.09E-05 0.63%	8.09E-05 0.63%	8.09E-05 0.66%	8.09E-05 0.62%	8.09E-05 0.63%	8.09E-05 0.18%	8.09E-05 0.60%	9.48E-05 0.24%
INHAL	2.01E-04 1.56%	2.01E-04 1.56%	1.68E-05 0.14%	2.15E-04 1.65%	2.19E-04 1.70%	5.35E-03 11.71%	1.94E-04 1.43%	1.92E-04 0.49%
VEGET	4.61E-04 3.56%	3.96E-04 3.08%	1.37E-04 1.11%	5.09E-04 3.91%	4.44E-04 3.43%	1.91E-02 41.72%	3.90E-04 2.88%	3.62E-04 0.95%
COW MILK	1.15E-04 0.89%	8.88E-05 0.69%	4.73E-05 0.39%	1.44E-04 1.10%	1.14E-04 0.88%	8.40E-03 18.39%	8.75E-05 0.65%	8.36E-05 0.21%
MEAT	9.29E-05 0.72%	8.78E-05 0.68%	7.86E-06 0.06%	9.71E-05 0.74%	8.99E-05 0.69%	8.11E-04 1.77%	8.76E-05 0.65%	8.56E-05 0.22%
TOTAL	1.29E-02	1.28E-02	1.23E-02	1.30E-02	1.29E-02	4.57E-02	1.35E-02	4.01E-02

TABLE VII-B-1

FORT CALHOUN 1 SEMI-ANNUAL RELEASES FOR JAN 1,1979 THRU JUN 30,1979

DISCHARGE=8.02E+02 CFS SOURCE TERM MULTIPLIER=1.00E+00

50-MILE POPULATION=8.36E+05 FRACTION --- ADULT=0.66
TEENAGER=0.14
CHILD=0.20

FRESHWATER SITE

STANDARD FIXUP TAKEN • EXECUTION CONTINUING
FT. CALHOUN S. TERMS 1/79-06/79

NO RECONCENTRATION OF NUCLIDES

* * * ADULT DOSE FACTORS * * *

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)										SHORELINE (MREM/HR) / (PCI/Mo*2)		
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	RECON			
3HRSR 89	2.34E-04	3.09E-04	0.0	8.85E-06	0.0	0.0	0.0	4.94E-05	6.50E-13	5.60E-13	1.00E+00			
3HRSR 90	7.75E-05	7.61E-03	0.0	1.86E-03	0.0	0.0	0.0	1.02E-04	0.0	0.0	1.00E+00			
27CO 57	9.54E-04	0.0	1.75E-07	2.91E-07	0.0	0.0	0.0	4.44E-06	1.00E-09	9.10E-10	1.00E+00			
42MO 99	3.60E-04	0.0	4.31E-06	8.20E-07	0.0	9.77E-06	0.0	9.99E-06	2.20E-09	1.90E-09	1.00E+00			
43TC 99M	1.75E-04	2.47E-10	6.98E-10	8.90E-09	0.0	1.06E-08	3.42E-10	4.13E-07	1.10E-09	9.60E-10	1.00E+00			
58CE 141	1.72E-03	9.37E-09	6.34E-09	7.18E-10	0.0	2.94E-09	0.0	2.42E-05	6.20E-10	5.50E-10	1.00E+00			
24CR 51	8.88E-04	0.0	0.0	2.66E-09	1.59E-09	5.87E-10	3.53E-09	6.69E-07	2.60E-10	2.20E-10	1.00E+00			
531 131	7.26E-03	4.16E-06	5.96E-06	3.41E-06	1.95E-03	1.02E-05	0.0	1.57E-06	3.40E-09	2.80E-09	1.00E+00			
531 133	1.36E-03	1.43E-06	2.48E-06	7.57E-07	4.77E-04	4.33E-06	0.0	2.18E-06	4.50E-09	3.70E-09	1.00E+00			
56BA 140	1.72E-03	2.03E-05	2.55E-08	1.34E-06	0.0	8.68E-09	1.46E-08	4.18E-05	2.40E-09	2.10E-09	1.00E+00			
44RU 103	8.68E-04	1.85E-07	0.0	7.98E-08	0.0	7.07E-07	0.0	2.16E-05	4.20E-09	3.60E-09	1.00E+00			
55CS 137	5.07E-02	7.98E-05	1.09E-04	7.15E-05	0.0	3.71E-05	1.23E-05	2.10E-06	4.90E-09	4.20E-09	1.00E+00			
40ZR 95	1.02E-03	3.04E-08	9.76E-09	6.61E-09	0.0	1.54E-08	0.0	3.03E-05	5.80E-09	5.00E-09	1.00E+00			
41NH 95	5.90E-04	6.23E-09	3.46E-09	1.36E-09	0.0	3.43E-09	0.0	2.10E-05	6.00E-09	5.10E-09	1.00E+00			
55CS 134	3.23E-02	6.22E-05	1.48E-04	1.21E-04	0.0	4.80E-05	1.59E-05	2.59E-06	1.40E-08	1.20E-08	1.00E+00			
27CO 58	8.33E-03	0.0	7.46E-07	1.67E-06	0.0	0.0	0.0	1.51E-05	8.20E-09	7.00E-09	1.00E+00			
25MN 54	2.32E-03	0.0	4.57E-06	8.73E-07	0.0	1.36E-06	0.0	1.40E-05	6.80E-09	5.80E-09	1.00E+00			
55CS 136	7.06E-04	6.51E-06	2.57E-05	1.85E-05	0.0	1.43E-05	1.96E-06	2.92E-06	1.70E-08	1.50E-08	1.00E+00			
26FE 59	9.44E-04	4.34E-06	1.03E-05	3.92E-06	0.0	0.0	2.86E-06	3.40E-05	9.40E-09	8.00E-09	1.00E+00			
30ZN 65	1.10E-03	4.85E-06	1.54E-05	6.97E-06	0.0	1.03E-05	0.0	9.70E-06	4.60E-09	4.00E-09	1.00E+00			
27CO 60	2.10E-03	0.0	2.15E-06	4.72E-06	0.0	0.0	0.0	4.02E-05	2.00E-08	1.70E-08	1.00E+00			
57LA 140	5.15E-04	2.50E-09	1.26E-09	3.34E-10	0.0	0.0	0.0	9.25E-05	1.70E-08	1.50E-08	1.00E+00			
51SR 124	1.05E-01	2.81E-06	5.30E-08	1.11E-06	6.79E-09	0.0	2.18E-06	7.95E-05	1.50E-08	1.30E-08	1.00E+00			
1H 3	1.05E+02	0.0	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	1.34E-07	0.0	0.0	1.00E+00			

* * * TEENAGER DOSE FACTORS * * *

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)		
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	RECON
38SR 89	2.34E-04	4.60E-04	0.0	1.32E-05	0.0	0.0	0.0	4.99E-05			
38SR 90	7.75E-05	1.04E-02	0.0	2.57E-03	0.0	0.0	0.0	2.20E-04			
58CE 141	1.72E-03	1.26E-08	8.46E-09	9.70E-10	0.0	2.94E-09	0.0	2.29E-05			
53I 131	7.25E-03	5.57E-06	7.87E-06	4.69E-06	2.27E-03	1.02E-05	0.0	1.49E-06			
53I 133	1.36E-03	2.03E-06	3.44E-06	1.06E-06	6.25E-04	4.33E-06	0.0	2.50E-06			
56BA 140	1.72E-03	2.83E-05	3.48E-08	1.82E-06	0.0	8.68E-09	2.33E-08	4.14E-06			
44RU 103	8.68E-04	2.37E-07	0.0	1.06E-07	0.0	7.07E-07	0.0	1.85E-05			
55CS 137	5.07E-02	1.07E-04	1.44E-04	5.05E-05	0.0	3.71E-05	1.91E-05	1.92E-06			
40ZR 95	1.02E-03	3.72E-08	1.24E-08	8.66E-09	0.0	1.54E-08	0.0	2.68E-05			
41NB 95	5.90E-04	7.24E-09	4.36E-09	2.46E-09	0.0	3.43E-09	0.0	1.78E-05			
55CS 134	3.23E-02	8.05E-05	1.94E-04	9.06E-05	0.0	4.80E-05	2.35E-05	2.24E-06			
27CO 58	8.33E-03	0.0	9.92E-07	2.26E-06	0.0	0.0	0.0	1.34E-05			
27CO 60	2.10E-03	0.0	2.76E-06	6.30E-06	0.0	0.0	0.0	3.31E-05			
57LA 140	5.15E-04	3.48E-09	1.72E-09	4.55E-10	0.0	0.0	0.0	9.48E-05			
IH 3	1.05E+02	0.0	1.06E-07	1.06E-07	1.06E-07	1.34E-07	1.06E-07	1.06E-07			

* * * CHILD DOSE FACTORS * * *

NUCLIDE	CURIE/.5YR	INGESTION DOSE FACTORS (MREM/PCI INTAKE)							SHORELINE (MREM/HR)/(PCI/M**2)		
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	SKIN	TOTAL BODY	RECON
38SR 89	2.34E-04	1.38E-03	0.0	3.95E-05	0.0	0.0	0.0	5.15E-05			
38SR 90	7.75E-05	1.72E-02	0.0	4.36E-03	0.0	0.0	0.0	2.29E-04			
58CE 141	1.72E-03	3.76E-08	1.88E-08	2.80E-09	0.0	2.94E-09	0.0	2.36E-05			
53I 131	7.26E-03	1.63E-05	1.67E-05	1.26E-05	5.43E-03	1.02E-05	0.0	1.43E-06			
53I 133	1.36E-03	5.98E-06	7.38E-06	2.90E-06	1.78E-03	4.33E-06	0.0	2.99E-06			
56BA 140	1.72E-03	8.26E-05	7.25E-08	4.85E-06	0.0	8.68E-09	4.32E-08	4.21E-06			
44RU 103	8.68E-04	6.78E-07	0.0	2.74E-07	0.0	7.07E-07	0.0	1.78E-05			
55CS 137	5.07E-02	3.12E-04	3.02E-04	4.50E-05	0.0	3.71E-05	3.54E-05	1.84E-06			
40ZR 95	1.02E-03	1.04E-07	2.42E-08	2.20E-08	0.0	1.54E-08	0.0	2.50E-05			
41NB 95	5.90E-04	1.95E-08	8.32E-09	6.11E-09	0.0	3.43E-09	0.0	1.44E-05			
55CS 134	3.23E-02	2.24E-04	3.77E-04	8.02E-05	0.0	4.80E-05	4.19E-05	2.04E-06			
27CO 58	8.33E-03	0.0	1.85E-06	5.58E-06	0.0	0.0	0.0	1.10E-05			
27CO 60	2.10E-03	0.0	5.17E-06	1.55E-05	0.0	0.0	0.0	2.66E-05			
57LA 140	5.15E-04	1.01E-08	3.52E-09	1.19E-09	0.0	0.0	0.0	1.00E-04			
IH 3	1.05E+02	0.0	2.03E-07	2.03E-07	2.03E-07	1.34E-07	2.03E-07	2.03E-07			

TABLE VII-C-2

NUCLIDE	CURIE/.SYR	INGESTION DOSE FACTORS							SHORELINE		
		BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI	(MREM/HR) / (PCI/M ²)		
									SKIN	TOTAL BODY	
38SR 89	2.34E-04	2.93E-03	0.0	8.42E-05	0.0	0.0	0.0	5.48E-05		RECON	
38SR 90	7.75E-05	2.51E-02	0.0	6.40E-03	0.0	0.0	0.0	2.43E-04			
58CE 141	1.72E-03	6.00E-08	4.91E-08	5.75E-09	0.0	2.94E-09	0.0	2.38E-05			
53I 131	7.26E-03	3.42E-05	4.07E-05	2.38E-05	1.31E-02	1.02E-05	0.0	1.53E-06			
53I 133	1.36E-03	1.26E-05	1.84E-05	5.58E-06	4.35E-03	4.33E-06	0.0	3.27E-06			
56BA 140	1.72E-03	1.74E-04	1.75E-07	8.99E-06	0.0	8.68E-09	1.07E-07	4.43E-06			
44RU 103	8.68E-04	1.41E-06	0.0	4.85E-07	0.0	7.07E-07	0.0	1.76E-05			
55CS 137	5.07E-02	6.53E-04	7.31E-04	4.20E-05	0.0	3.71E-05	8.81E-05	1.89E-06			
40ZR 95	1.02E-03	2.11E-07	5.32E-08	3.78E-08	0.0	1.54E-08	0.0	2.38E-05			
41NB 95	5.90E-04	3.89E-08	1.75E-08	1.03E-08	0.0	3.43E-09	0.0	1.40E-05			
55CS 134	3.23E-02	4.58E-04	8.24E-04	6.97E-05	0.0	4.80E-05	9.42E-05	1.96E-06			
27CO 58	8.33E-03	0.0	3.78E-06	9.26E-06	0.0	0.0	0.0	9.79E-06			
27CO 60	2.10E-03	0.0	1.07E-05	2.56E-05	0.0	0.0	0.0	2.64E-05			
57LA 140	5.15E-04	2.12E-08	8.37E-09	2.16E-09	0.0	0.0	0.0	1.04E-04			
1H 3	1.05E+02	0.0	3.07E-07	3.07E-07	3.07E-07	1.34E-07	3.07E-07	3.07E-07			
TOTAL NUMBER IN SOURCE TERM IS		24							TOTAL RELEASE IS 1.0542E+02		

TABLE VII-C-3

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

A D U L T D O S E S

DOSE (MREM PER .SYR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.56E-01	6.06E-01	4.43E-01	6.21E-03	2.03E-01	6.71E-02	2.40E-02
DRINKING		2.34E-04	8.11E-04	7.26E-04	9.16E-04	5.83E-04	5.11E-04	7.64E-04
SHORELINE	4.32E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04
SWIMMING	0.0	9.55E-06	9.55E-06	9.55E-06	9.55E-06	9.55E-06	9.55E-06	9.55E-06
BOATING	0.0	4.78E-06	4.78E-06	4.78E-06	4.78E-06	4.78E-06	4.78E-06	4.78E-06
TOTAL	4.32E-04	3.57E-01	6.08E-01	4.44E-01	7.51E-03	2.04E-01	6.80E-02	2.52E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	21.0	1.0	24.00	
DRINKING	730.0	30.8	18.60	
SHORELINE	12.0	1.0	0.0	
SWIMMING	12.0	1.0	0.0	
BOATING	12.0	1.0	0.0	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
FISH VII-32			CS 137	66%	CS 137	53%	CS 137	47%	I 131	91%	CS 137	54%	CS 137	54%	CS 137	25%
			CS 134	33%	CS 134	46%	CS 134	51%	I 133	2%	CS 134	44%	CS 134	44%	NB 95	44%
									H 3	5%					CS 134	20%
															MN 54	1%
															ZN 65	2%
															SB 124	1%
															H 3	1%
DRINKING			SR 89	1%	CS 137	22%	CS 137	16%	I 131	47%	CS 137	10%	CS 137	4%	SB 124	35%
			SR 90	8%	CS 134	19%	CS 134	17%	I 133	1%	CS 134	8%	CS 134	3%	H 3	61%
			CS 137	57%	H 3	57%	H 3	64%	H 3	50%	H 3	79%	SB 124	1%		
			CS 134	28%									H 3	91%		
			SB 124	4%												
SHORELINE	CS 137	60%	CS 137	60%												
	CS 134	25%	CS 134	25%												
	CO 60	5%	CO 60	5%												
	SB 124	7%	SB 124	7%												
SWIM			CS 137	8%												
			CS 134	16%												
			CO 58	2%												
			CO 60	1%												
			SB 124	66%												

TABLE VII-C-4

TABLE VII-C-4

VII-32

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

TEENAGER DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LL I
FISH		3.59E-01	6.07E-01	2.46E-01	5.42E-03	1.54E-01	7.74E-02	1.61E-02
DRINKING		2.16E-04	5.74E-04	3.94E-04	6.24E-04	4.07E-04	3.03E-04	4.63E-04
SHORELINE	2.41E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03
SWIMMING	0.0	5.33E-05	5.33E-05	5.33E-05	5.33E-05	5.33E-05	5.33E-05	5.33E-05
BOATING	0.0	2.67E-05	2.67E-05	2.67E-05	2.67E-05	2.67E-05	2.67E-05	2.67E-05
TOTAL	2.41E-03	3.62E-01	6.10E-01	2.49E-01	8.19E-03	1.57E-01	7.99E-02	1.87E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	16.0	1.0	24.00	
DRINKING	510.0	30.8	18.60	
SHORELINE	67.0	1.0	0.0	
SWIMMING	67.0	1.0	0.0	
BOATING	67.0	1.0	0.0	

* * * ISOTOPE CONTRIBUTION * * *

VII-33

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LL I
FISH		CS 137 67% CS 134 32%	CS 137 53% CS 134 46%	CS 137 46% CS 134 53%	I 131 93% I 133 2% H 3 4%	CS 137 54% CS 134 44%	CS 137 55% CS 134 43%	CS 137 27% NB 95 42% CS 134 20% MN 54 1% ZN 65 2% SB 124 1% H 3 1%
DRINKING		SR 89 1% SR 90 8% CS 137 58% CS 134 27% SB 124 3%	CS 137 29% CS 134 25% H 3 44%	SR 90 1% CS 137 15% CS 134 17% H 3 65%	I 131 57% I 133 1% H 3 41%	CS 137 10% CS 134 8% H 3 79%	CS 137 7% CS 134 5% SB 124 1% H 3 85%	SR 124 41% H 3 55%
SHORELINE	CS 137 60% CS 134 25% CO 60 5% SB 124 7%	CS 137 60% CS 134 25% CO 60 5% SB 124 7%						
SWIM		CS 137 8% CS 134 16% CO 58 2% CO 60 1% SB 124 66%						

TABLE VII-C-5

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

C H I L D D O S E S

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		4.45E-01	5.30E-01	9.45E-02	5.57E-03	6.66E-02	6.08E-02	6.23E-03
DRINKING		5.84E-04	1.13E-03	6.21E-04	1.38E-03	4.07E-04	5.71E-04	6.98E-04
SHORELINE	5.04E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04
SWIMMING	0.0	1.11E-05	1.11E-05	1.11E-05	1.11E-05	1.11E-05	1.11E-05	1.11E-05
BOATING	0.0	5.57E-06	5.57E-06	5.57E-06	5.57E-06	5.57E-06	5.57E-06	5.57E-06
TOTAL	5.04E-04	4.46E-01	5.32E-01	9.56E-02	7.39E-03	6.75E-02	6.18E-02	7.37E-03

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	6.9	1.0	24.00	
DRINKING	510.0	30.8	18.60	
SHORELINE	14.0	1.0	0.0	
SWIMMING	14.0	1.0	0.0	
BOATING	14.0	1.0	0.0	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI		
FISH			CS 137	68%	CS 137	55%	CS 137	46%	I	131	93%	CS 137	54%	CS 137	56%	CS 137	28%
			CS 134	31%	CS 134	44%	CS 134	52%	I	133	2%	CS 134	44%	CS 134	42%	NB	95 38%
									H	3	3%					CS 134	20%
																MN	54 2%
																ZN	65 3%
																SB	124 1%
																H	3 2%
DRINKING			SR	89 1%	CS 137	31%	SR	90 1%	I	131	61%	CS 137	10%	CS 137	7%	SB	124 27%
			SR	90 5%	CS 134	24%	CS 137	8%	I	133	2%	CS 134	8%	CS 134	5%	H	3 70%
			CS 137	62%	H	3 43%	CS 134	9%	H	3	35%	H	3 79%	H	3 86%		
			CS 134	28%			H	3 79%									
			SB	124 1%													
SHORELINE		CS 137	60%	CS 137	60%												
		CS 134	25%	CS 134	25%												
		CO	60 5%	CO	60 5%												
		SB	124 7%	SB	124 7%												
SWIM			CS 137	8%													
			CS 134	16%													
			CO	58 2%													
			CO	60 1%													
			SB	124 66%													

TABLE VII-C-6

TABLE VII-C-6

* * * AS LOW AS REASONABLY ACHIEVABLE * * *

I N F A N T D O S E S

	DOSE (MREM PER .5YR INTAKE)							
PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		0.0	0.0	0.0	0.0	0.0	0.0	0.0
DRINKING		1.19E-03	2.23E-03	8.70E-04	2.88E-03	4.07E-04	9.25E-04	9.50E-04
SHORELINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	1.19E-03	2.23E-03	8.70E-04	2.88E-03	4.07E-04	9.25E-04	9.50E-04

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	0.0	1.0	24.00	
DRINKING	510.0	30.8	18.60	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING		SR 89 1%	CS 137 38%	SR 90 1%	I 131 71%	CS 137 10%	CS 137 11%	SR 124 20%
		SR 90 3%	CS 134 27%	CS 137 5%	I 133 2%	CS 134 8%	CS 134 7%	H 3 78%
		CS 137 64%	H 3 33%	CS 134 5%	H 3 25%	H 3 79%	H 3 80%	
		CS 134 28%		H 3 85%				

TABLE VII-C-7

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

A D U L T D O S E S

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.56E-01	6.06E-01	4.43E-01	6.21E-03	2.03E-01	6.71E-02	2.40E-02
DRINKING		7.22E-03	2.50E-02	2.24E-02	2.86E-02	1.80E-02	1.58E-02	2.36E-02
SHORELINE	4.32E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04	3.70E-04
SWIMMING	0.0	9.55E-06	9.55E-06	9.55E-06	9.55E-06	9.55E-06	9.55E-06	9.55E-06
BOATING	0.0	4.78E-06	4.78E-06	4.78E-06	4.78E-06	4.78E-06	4.78E-06	4.78E-06
TOTAL	4.32E-04	3.64E-01	6.32E-01	4.66E-01	3.52E-02	2.21E-01	8.32E-02	4.80E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	21.0	1.0	24.00	
DRINKING	730.0	1.0	12.00	
SHORELINE	12.0	1.0	0.0	
SWIMMING	12.0	1.0	0.0	
BOATING	12.0	1.0	0.0	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 66%	CS 137 53%	CS 137 47%	I 131 91%	CS 137 54%	CS 137 54%	CS 137 25%
		CS 134 33%	CS 134 46%	CS 134 51%	I 133 2%	CS 134 44%	CS 134 44%	NB 95 44%
					H 3 5%			CS 134 20%
								MN 54 1%
								ZN 65 2%
DRINKING								SB 124 1%
								H 3 1%
		SR 89 1%	CS 137 22%	CS 137 16%	I 131 48%	CS 137 10%	CS 137 4%	SB 124 35%
		SR 90 8%	CS 134 19%	CS 134 17%	I 133 1%	CS 134 8%	CS 134 3%	H 3 60%
		CS 137 57%	H 3 57%	H 3 64%	H 3 50%	H 3 79%	SB 124 1%	
SHORELINE		CS 134 28%					H 3 91%	
		SB 124 4%						
	CS 137 60%	CS 137 60%						
	CS 134 25%	CS 134 25%						
	CO 60 5%	CO 60 5%						
SWIM		SB 124 7%						
		CS 137 8%						
		CS 134 16%						
		CO 58 2%						

TABLE VII-C-8

VII-36

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

TEENAGER DOSES

DOSE (MREM PER .5YR INTAKE)

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		3.59E-01	6.07E-01	2.46E-01	5.42E-03	1.54E-01	7.74E-02	1.61E-02
DRINKING		6.64E-03	1.77E-02	1.21E-02	1.96E-02	1.25E-02	9.33E-03	1.43E-02
SHORELINE	2.41E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03	2.07E-03
SWIMMING	0.0	5.33E-05	5.33E-05	5.33E-05	5.33E-05	5.33E-05	5.33E-05	5.33E-05
BOATING	0.0	2.67E-05	2.67E-05	2.67E-05	2.67E-05	2.67E-05	2.67E-05	2.67E-05
TOTAL	2.41E-03	3.68E-01	6.27E-01	2.61E-01	2.71E-02	1.69E-01	8.89E-02	3.25E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	16.0	1.0	24.00	
DRINKING	510.0	1.0	12.00	
SHORELINE	67.0	1.0	0.0	
SWIMMING	67.0	1.0	0.0	
BOATING	67.0	1.0	0.0	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 67%	CS 137 53%	CS 137 46%	I 131 93%	CS 137 54%	CS 137 55%	CS 137 27%
		CS 134 32%	CS 134 46%	CS 134 53%	I 133 2%	CS 134 44%	CS 134 43%	NB 95 42%
					H 3 4%			CS 134 20%
								MN 54 1%
								ZN 65 2%
DRINKING								SB 124 1%
								H 3 1%
		SR 89 1%	CS 137 29%	SR 90 1%	I 131 57%	CS 137 10%	CS 137 7%	SB 124 41%
		SR 90 8%	CS 134 25%	CS 137 15%	I 133 2%	CS 134 8%	CS 134 5%	H 3 55%
		CS 137 58%	H 3 44%	CS 134 17%	H 3 40%	H 3 79%	SB 124 1%	
SHORELINE		CS 134 27%		H 3 65%			H 3 85%	
		SB 124 3%						
	CS 137 60%	CS 137 60%						
	CS 134 25%	CS 134 25%						
	CO 60 5%	CO 60 5%						
SWIM		SR 124 7%	SB 124 7%					
		CS 137 8%						
		CS 134 16%						
		CO 56 2%						

TABLE VII-C-9

VII-37

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

C H I L D D O S E S

	DOSE (MREM PER .5YR INTAKE)							
PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		4.45E-01	5.30E-01	9.45E-02	5.57E-03	6.66E-02	6.08E-02	6.23E-03
DRINKING		1.80E-02	3.49E-02	1.91E-02	4.32E-02	1.25E-02	1.76E-02	2.15E-02
SHORELINE	5.04E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04	4.32E-04
SWIMMING	0.0	1.11E-05	1.11E-05	1.11E-05	1.11E-05	1.11E-05	1.11E-05	1.11E-05
BOATING	0.0	5.57E-06	5.57E-06	5.57E-06	5.57E-06	5.57E-06	5.57E-06	5.57E-06
TOTAL	5.04E-04	4.63E-01	5.65E-01	1.14E-01	4.92E-02	7.96E-02	7.89E-02	2.82E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	6.9	1.0	24.00	
DRINKING	510.0	1.0	12.00	
SHORELINE	14.0	1.0	0.0	
SWIMMING	14.0	1.0	0.0	
BOATING	14.0	1.0	0.0	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		CS 137 68%	CS 137 55%	CS 137 46%	I 131 93%	CS 137 54%	CS 137 56%	CS 137 28%
		CS 134 31%	CS 134 44%	CS 134 52%	I 133 2%	CS 134 44%	CS 134 42%	NB 95 38%
					H 3 3%			CS 134 20%
								MN 54 2%
								ZN 65 3%
DRINKING		SR 89 1%	CS 137 31%	SR 90 1%	I 131 62%	CS 137 10%	CS 137 7%	SB 124 27%
		SR 90 5%	CS 134 24%	CS 137 8%	I 133 2%	CS 134 8%	CS 134 5%	H 3 70%
		CS 137 62%	H 3 43%	CS 134 9%	H 3 35%	H 3 79%	H 3 86%	
		CS 134 28%		H 3 79%				
		SB 124 1%						
SHORELINE	CS 137 60%	CS 137 60%						
	CS 134 25%	CS 134 25%						
	CO 60 5%	CO 60 5%						
	SB 124 7%	SB 124 7%						
SWIM		CS 137 8%						
		CS 134 16%						
		CO 58 2%						
		CO 60 1%						
		SB 124 66%						

TABLE VII-C-10

VII-38

* * * SELECTED LOCATION * * *

LOCATION IS SITE DISCHG.

I N F A N T D O S E S

PATHWAY	DOSE (MREM PER .5YR INTAKE)							
	SKIN	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH		0.0	0.0	0.0	0.0	0.0	0.0	0.0
DRINKING		3.66E-02	6.86E-02	2.68E-02	9.06E-02	1.25E-02	2.85E-02	2.93E-02
SHORELINE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	0.0	3.66E-02	6.86E-02	2.68E-02	9.06E-02	1.25E-02	2.85E-02	2.93E-02

	USAGE (KG/YR,HR/YR)	DILUTION	TIME (HR)	SHOREWIDTH FACTOR=0.2
FISH	0.0	1.0	24.00	
DRINKING	510.0	1.0	12.00	

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	SKIN		BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
DRINKING	SR	89	1%		CS	137	38%	SR	90	1%	I	131	71%	CS	137	10%
	SR	90	3%		CS	134	27%	CS	137	5%	I	133	3%	CS	134	8%
	CS	137	64%		H	3	33%	CS	134	5%	H	3	25%	H	3	79%
	CS	134	28%					H	3	85%						

VII-39

TABLE VII-C-11

* * * FISH CONSUMPTION POPULATION DOSES * * *

MAN-REM

SPORTFISH HARVEST

-----DOSE (MAN-REM)-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	5.81E+04	1.32E-01	2.25E-01	1.64E-01	1.40E-03	7.52E-02	2.49E-02	8.45E-03
FISH	TEENAGER	9.29E+03	2.80E-02	4.73E-02	1.92E-02	2.53E-04	1.20E-02	6.03E-03	1.19E-03
FISH	CHILD	5.61E+03	4.86E-02	5.79E-02	1.03E-02	3.61E-04	7.27E-03	6.64E-03	6.48E-04
FISH	TOTAL	7.30E+04	2.09E-01	3.30E-01	1.94E-01	2.02E-03	9.45E-02	3.76E-02	1.03E-02

DILUTION CATCH TIME (HR)-INCLUDES FOOD PROCESSING TIME OF 1.68E+02 HR POPULATION=1.28E+04
7.30E+00 7.30E+04 1.69E+02

AVERAGE INDIVIDUAL CONSUMPTION (KG/YR) ADULT=6.90E+00 TEEN=5.20E+00 CHILD=2.20E+00

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
ADULT	CS 137	66%	CS 137	53%	CS 137	46%	I 131	90%	CS 137	54%	CS 137	54%	CS 137	27%
	CS 134	32%	CS 134	46%	CS 134	51%	H 3	9%	CS 134	44%	CS 134	44%	NB 95	41%
													CS 134	21%
													MN 54	1%
													ZN 65	2%
													H 3	1%
TEENAGER	CS 137	67%	CS 137	53%	CS 137	46%	I 131	93%	CS 137	54%	CS 137	56%	CS 137	28%
	CS 134	32%	CS 134	45%	CS 134	52%	H 3	6%	CS 134	44%	CS 134	43%	NB 95	40%
													CS 134	21%
													MN 54	1%
													ZN 65	3%
													SB 124	1%
													H 3	1%
CHILD	CS 137	68%	CS 137	55%	CS 137	46%	I 131	94%	CS 137	54%	CS 137	56%	CS 137	30%
	CS 134	31%	CS 134	44%	CS 134	52%	H 3	5%	CS 134	44%	CS 134	42%	NB 95	36%
													CS 134	21%
													MN 54	2%
													ZN 65	3%
													SB 124	1%
													H 3	3%

TABLE VII-D-1

* * * FISH CONSUMPTION POPULATION DOSES * * *
MAN-REM

-----COMMERCIAL HARVEST-----

-----DOSE (MAN-REM)-----									
PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	3.81E+06	1.44E-02	2.44E-02	1.79E-02	1.21E-04	8.17E-03	2.71E-03	8.94E-04
FISH	TEENAGER	6.09E+05	3.04E-03	5.14E-03	2.08E-03	2.17E-05	1.31E-03	6.55E-04	1.26E-04
FISH	CHILD	3.68E+05	5.28E-03	6.29E-03	1.12E-03	3.08E-05	7.89E-04	7.22E-04	6.88E-05
FISH	TOTAL	4.78E+06	2.27E-02	3.59E-02	2.11E-02	1.74E-04	1.03E-02	4.08E-03	1.09E-03

DILUTION CATCH TIME (HR) - INCLUDES FOOD PROCESSING TIME OF 2.40E+02 HR POPULATION=8.36E+05
7.30E+00 7.30E+04 2.41E+02

AVERAGE INDIVIDUAL CONSUMPTION (KG/YR) ADULT=6.90E+00 TEEN=5.20E+00 CHILD=2.20E+00

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI	
ADULT	CS 137	66%	CS 137	53%	CS 137	48%	I 131	87%	CS 137	54%	CS 137	54%	CS 137	28%
	CS 134	32%	CS 134	45%	CS 134	51%	H 3	12%	CS 134	44%	CS 134	44%	NB 95	40%
													CS 134	22%
													MN 54	1%
													ZN 65	2%
													H 3	1%
TEENAGER	CS 137	67%	CS 137	53%	CS 137	46%	I 131	91%	CS 137	54%	CS 137	56%	CS 137	29%
	CS 134	32%	CS 134	45%	CS 134	52%	H 3	8%	CS 134	44%	CS 134	43%	NB 95	38%
													CS 134	21%
													MN 54	1%
													ZN 65	3%
													SB 124	1%
													H 3	1%
CHILD	CS 137	68%	CS 137	55%	CS 137	46%	I 131	92%	CS 137	54%	CS 137	57%	CS 137	31%
	CS 134	31%	CS 134	44%	CS 134	52%	H 3	7%	CS 134	44%	CS 134	42%	NB 95	34%
													CS 134	21%
													MN 54	2%
													ZN 65	3%
													SB 124	1%
													H 3	3%

-----NEPA DOSES-----

NOTE--TOTAL NEPA DOSE MUST INCLUDE SPORT CATCH; DOSES BELOW ARE FOR COMMERCIAL CATCH ONLY

-----DOSE (MAN-REM)-----									
PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
FISH	ADULT	5.81E+04	1.32E-01	2.25E-01	1.64E-01	1.12E-03	7.51E-02	2.49E-02	8.22E-03
FISH	TEENAGER	9.29E+03	2.80E-02	4.73E-02	1.91E-02	1.99E-04	1.20E-02	6.02E-03	1.16E-03
FISH	CHILD	5.61E+03	4.85E-02	5.78E-02	1.03E-02	2.83E-04	7.26E-03	6.64E-03	6.33E-04
FISH	TOTAL	7.30E+04	2.09E-01	3.30E-01	1.94E-01	1.60E-03	9.44E-02	3.75E-02	1.00E-02

TABLE VII-D-2

* * * POPULATION WATER CONSUMPTION DOSES * * *

-----DOSE (MAN-REM)-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	1.29E+08	4.14E-02	1.43E-01	1.29E-01	1.58E-01	1.03E-01	9.05E-02	1.35E-01
DRINKING	TEENAGER	1.93E+07	8.13E-03	2.17E-02	1.49E-02	2.29E-02	1.54E-02	1.14E-02	1.74E-02
DRINKING	CHILD	2.75E+07	3.15E-02	6.11E-02	3.35E-02	7.17E-02	2.20E-02	3.08E-02	3.76E-02
DRINKING	TOTAL	1.76E+08	8.10E-02	2.26E-01	1.77E-01	2.53E-01	1.40E-01	1.33E-01	1.90E-01

POPULATION=5.29E+05 DILUTION=3.08E+01 TRANSIT TIME=3.06E+01 HR (INCLUDING 24 HR FOR TREATMENT FACILITY)

AVERAGE INDIVIDUAL CONSUMPTION (L/YR) ADULT=3.70E+02 TEEN=2.60E+02 CHILD=2.60E+02

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	BONE			LIVER			TOTAL BODY			THYROID			KIDNEY			LUNG			GI-LLI		
ADULT	SR	89	1%	CS	137	22%	CS	137	16%	I	131	46%	CS	137	10%	CS	137	4%	SB	124	35%
	SR	90	8%	CS	134	19%	CS	134	17%	H	3	52%	CS	134	8%	CS	134	3%	H	3	61%
	CS	137	57%	H	3	57%	H	3	64%				H	3	79%	SB	124	1%			
	CS	134	28%													H	3	91%			
	SB	124	4%																		
TEENAGER	SR	89	1%	CS	137	29%	SR	90	1%	I	131	56%	CS	137	10%	CS	137	7%	SB	124	41%
	SR	90	8%	CS	134	25%	CS	137	15%	I	133	1%	CS	134	8%	CS	134	5%	H	3	55%
	CS	137	58%	H	3	44%	CS	134	17%	H	3	42%	H	3	79%	SB	124	1%			
	CS	134	27%				H	3	65%							H	3	85%			
	SB	124	3%																		
CHILD	SR	89	1%	CS	137	31%	SR	90	1%	I	131	61%	CS	137	10%	CS	137	7%	SB	124	27%
	SR	90	5%	CS	134	24%	CS	137	8%	I	133	1%	CS	134	8%	CS	134	5%	H	3	70%
	CS	137	62%	H	3	43%	CS	134	9%	H	3	37%	H	3	79%	H	3	86%			
	CS	134	28%				H	3	79%												
	SB	124	1%																		

TABLE VII-D-3

-----DOSE (MAN-REM)-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	ADULT	2.12E+07	6.70E-03	2.32E-02	2.08E-02	2.56E-02	1.67E-02	1.46E-02	2.18E-02
DRINKING	TEENAGER	3.17E+06	1.32E-03	3.51E-03	2.41E-03	3.70E-03	2.49E-03	1.85E-03	2.82E-03
DRINKING	CHILD	4.52E+06	5.09E-03	9.89E-03	5.42E-03	1.16E-02	3.55E-03	4.99E-03	6.08E-03
DRINKING	TOTAL	2.89E+07	1.31E-02	3.66E-02	2.86E-02	4.09E-02	2.27E-02	2.15E-02	3.07E-02

POPULATION=8.70E+04 DILUTION=3.13E+01 TRANSIT TIME=3.10E+01 HR (INCLUDING 24 HR FOR TREATMENT FACILITY)

AVERAGE INDIVIDUAL CONSUMPTION (L/YR) ADULT=3.70E+02 TEEN=2.60E+02 CHILD=2.60E+02

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP			BONE		LIVER		TOTAL BODY		THYROID		KIDNEY		LUNG		GI-LLI
ADULT	SR 89	1%	CS 137	22%	CS 137	16%	I 131	46%	CS 137	10%	CS 137	4%	SB 124	35%	
	SR 90	8%	CS 134	19%	CS 134	17%	H 3	52%	CS 134	8%	CS 134	3%	H 3	61%	
	CS 137	57%	H 3	57%	H 3	64%			H 3	79%	SB 124	1%			
	CS 134	28%									H 3	91%			
	SB 124	4%													
TEENAGER	SR 89	1%	CS 137	29%	SR 90	1%	I 131	56%	CS 137	10%	CS 137	7%	SB 124	41%	
	SR 90	8%	CS 134	25%	CS 137	15%	I 133	1%	CS 134	8%	CS 134	5%	H 3	55%	
	CS 137	58%	H 3	44%	CS 134	17%	H 3	42%	H 3	79%	SB 124	1%			
	CS 134	27%			H 3	65%					H 3	85%			
	SB 124	3%													
CHILD	SR 89	1%	CS 137	31%	SR 90	1%	I 131	61%	CS 137	10%	CS 137	7%	SB 124	27%	
	SR 90	5%	CS 134	24%	CS 137	8%	I 133	1%	CS 134	8%	CS 134	5%	H 3	70%	
	CS 137	62%	H 3	43%	CS 134	9%	H 3	37%	H 3	79%	H 3	86%			
	CS 134	28%			H 3	79%									
	SB 124	1%													

-----CUMULATIVE TOTAL-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
DRINKING	CUMUL TOTAL	2.05E+08	9.41E-02	2.63E-01	2.05E-01	2.94E-01	1.63E-01	1.54E-01	2.20E-01

-----HYDROSPHERE INITIUM DOSE-----

PATHWAY	AGE GROUP	USAGE	BONE	LIVER	TOTAL BODY	THYROID	KIDNEY	LUNG	GI-LLI
WATER	TOTAL	2.20E+00	2.45E-09	2.45E-09	2.45E-09	2.45E-09	2.45E-09	2.45E-09	2.45E-09

TABLE VII-D-4

* * * RECREATION POPULATION DOSES * * *

----- DOSE (MAN-REM) -----

PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SHORELINE	TOTAL POPUL	4.10E+07	2.02E-01	1.73E-01	1.73E-01

LOCATION- DOWN STREAM

DILUTION=0.73E+01 TRANSIT TIME=0.67E+00 HR SWF=0.2

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	SKIN	TOTAL BODY
ADULT		
	CS 137 60%	CS 137 60%
	CS 134 25%	CS 134 25%
	CO 60 5%	CO 60 5%
	SB 124 7%	SB 124 7%

IIA

----- DOSE (MAN-REM) -----

PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
SWIMMING	TOTAL POPUL	4.10E+07	0.0	4.47E-03	4.47E-03

LOCATION- DOWN STREAM

DILUTION=0.73E+01 TRANSIT TIME=0.67E+00 HR

* * * ISOTOPE CONTRIBUTION * * *

AGE GROUP	SKIN	TOTAL BODY
ADULT		
		CS 137 8%
		CS 134 16%
		CO 58 2%
		CO 60 1%
		SB 124 66%

----- DOSE (MAN-REM) -----

PATHWAY	AGE GROUP	USAGE	SKIN	TOTAL BODY	THYROID
BOATING	TOTAL POPUL	4.10E+07	0.0	2.23E-03	2.23E-03

LOCATION- DOWN STREAM

DILUTION=0.73E+01 TRANSIT TIME=0.67E+00 HR

* * * DOSE TO BIOTA * * *

MRADS PER .SYR

DILUTION= 1.00E+00 TRANSIT TIME= 0.0 HR

	INTERNAL	EXTERNAL	TOTAL
FISH	1.22E+00	1.36E+00	2.58E+00
INVERTEBRATE	4.22E-01	2.71E+00	3.13E+00
ALGAE	2.50E+00	6.97E-03	2.51E+00
MUSKRAT	7.60E+00	9.04E-01	8.51E+00
RACCOON	3.53E-01	6.76E-01	1.03E+00
HERON	4.17E+01	9.03E-01	4.26E+01
DUCK	6.66E+00	1.35E+00	8.01E+00

* * * ISOTOPE CONTRIBUTION * * *

PATHWAY	BODY					
FISH	CS	137	58%	ALGAE	CE	141 1%
	NR	95	3%		CS	137 7%
	CS	134	35%		CS	134 4%
	H	3	1%		MN	54 1%
					LA	140 1%
INVERTEBRATE					SH	124 80%
	CE	141	1%	MUSKRAT	SR	90 3%
	CS	137	8%		CS	137 50%
	CS	134	5%		CS	134 38%
	MN	54	66%		ZN	65 2%
	FE	59	3%		SR	124 4%
	ZN	65	2%	RACCOON		
	LA	140	2%		SR	90 2%
	SH	124	3%		CS	137 40%
DUCK	H	3	3%		CS	134 34%
					MN	54 13%
	SR	90	3%		FE	59 1%
	CS	137	52%		ZN	65 5%
	CS	134	36%		H	3 1%
	ZN	65	2%	HERON		
	SH	124	3%		CS	137 53%
					CS	134 45%

TABLE VII-D-6