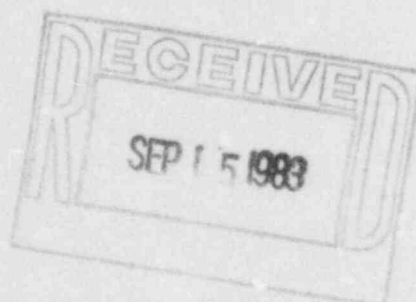


DmB

NEBRASKA PUBLIC POWER DISTRICT

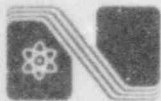
**COOPER NUCLEAR STATION
SEMI-ANNUAL OPERATING REPORT
RADIOACTIVE EFFLUENTS
DOCKET NUMBER 50-298**

January 1, 1983 through June 30, 1983



8407050045 840630
PDR ADOCK 05000298
R PDR

IE-25
11



Nebraska Public Power District

GENERAL OFFICE
P.O. BOX 499, COLUMBUS, NEBRASKA 68601-0499
TELEPHONE (402) 564-8561

LQA8300212

September 6, 1983

Mr. John T. Collins
Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011

Subject: Semi-Annual Operating Report - Radioactive Effluents
Cooper Nuclear Station
January 1, 1983 through June 30, 1983
NRC Docket No. 50-298, DPR-46

Dear Mr. Collins:

In accordance with Paragraph 5.4.1.b of the Cooper Nuclear Station Environmental Technical Specifications, the Nebraska Public Power District submits the Cooper Nuclear Station Semi-Annual Operating Report - Radioactive Effluents for the period January 1, 1983 through June 30, 1983.

In accordance with Reg Guide 10.1, Revision 4, we are enclosing one signed original of the report for your use and one copy to the Document Control Desk.

Should you have any questions or comments regarding this report, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Jay M. Pilant".

Jay M. Pilant
Technical Staff Manager
Nuclear Power Group

KMK:cmk
Enclosure

cc: Document Control Desk w/enc.
U.S. Nuclear Regulatory Commission
Washington, DC 20555

NEBRASKA PUBLIC POWER DISTRICT
COOPER NUCLEAR STATION

SEMIANNUAL OPERATING REPORT
RADIOACTIVE EFFLUENTS
January 1, 1983, through June 30, 1983

USNRC Docket 50-298

Contents

Introduction

Appendix A: Source Terms

Appendix B: Meteorology

Appendix C: Dose Calculations

INTRODUCTION

This report summarizes meteorological data and doses from radioactive effluents for the Cooper Nuclear Station for the period January through June 1983. The data presented meet the reporting requirements of Regulatory Guide 1.21 of the U.S. Nuclear Regulatory Commission (Revision 1, June 1974).

The report is organized into three parts. Appendix A presents the effluent and waste disposal source term data. Appendix B presents a summary of onsite meteorological data for the report period, including atmospheric diffusion estimates and a description of the atmospheric diffusion model. Appendix C presents the doses from liquid and gaseous radioactive effluents. Also included in Appendix C are isopleth figures for atmospheric diffusion estimates and doses, and a description of the dose calculation models.

APPENDIX A
SOURCE TERMS

CONTENTS

EFFLUENT AND WASTE DISPOSAL REPORTS

EFFLUENT AND WASTE DISPOSAL (January through June 1983)

Cooper Nuclear Station effluent and waste disposal data are presented below in the format prescribed by Regulatory Guide 1.21.

Facility: Cooper Nuclear Station License: DPR-46

1. Regulatory Limits

a. Fission and activation gases

Restrictions on gaseous activity release:

Maximum release rate of noble gases and tritium (except for halogens and particulates with half-lives greater than 8 days):

$$Q_s (2.5\bar{E}_{\gamma s} + 1.25\bar{E}_{\beta s}) + Q_v (7.3\bar{E}_{\gamma v} + 77\bar{E}_{\beta v}) \leq 0.16$$

when averaged over a calendar quarter.

γ - gamma
 β - beta

Where Q_s and Q_v are the quarterly release rates in curies/second of radioisotopes from the stack, reactor building, turbine building, and augmented radwaste building vents; $\bar{E}_{\gamma s}$ and $\bar{E}_{\gamma v}$ are the average gamma energies per disintegration of stack and vent effluents; $\bar{E}_{\beta s}$ and $\bar{E}_{\beta v}$ are the average beta energies from stack and vent effluents.

b.&c. Iodines and particulates with half-lives of greater than 8 days. The release rates of I-131 and particulates with half-lives greater than 8 days released to the environs as part of airborne effluents shall not exceed:

$$\frac{Q_s}{7.7E-06} + \frac{Q_v}{2.1E-06} \leq 0.08$$

when averaged over a calendar quarter.

Where Q_s and Q_v are the quarterly release rates in curies per second of I-131 and particulates with half-lives greater than 8 days from the stack, reactor building, turbine, and augmented radwaste building vents.

d. Liquid Effluents

Maximum calendar quarter release rate of radioactive liquid effluents (excluding tritium and noble gases): 25 curies.

Maximum activity of discharged liquid radwaste tank (sample tank only): 10 curies.

Maximum radioactivity release concentration of discharge channel liquid effluents shall not exceed the values specified in 10 CFR 20, Appendix B, Table II, Column 2, for unrestricted areas.

2. Maximum Permissible Concentrations

No MPC values are required specifically in Cooper Nuclear Station Environmental Technical Specifications for:

- a. Fission and activation gases,
- b. Iodines, or
- c. Particulates with half lives of greater than 8 days.

The equation presented in Section 1a. under Regulatory Limits provides a method to be used in summing the gaseous airborne effluents from the main stack and vents, which will assure that the release rate does not exceed 10 CFR Part 20 for unrestricted areas.

The equation presented in 1b. and 1c. under Regulatory Limits provides a method to be used in summing airborne halogens and particulates with half-lives greater than 8 days released from the stack and vents to assure that the release rate does not exceed 10 CFR Part 20, Appendix B, Table II, Column 1, for unrestricted areas.

d. Liquid Effluents

The maximum permissible concentrations (MPC) used to calculate permissible liquid release rates are from 10 CFR 20 Appendix B, Table II, Column 2, and applicable notes to Appendix B.

3. Average Energy

The average energy (\bar{E}) of the radionuclide mixtures of fission and activation gases released is as follows:

<u>1st Quarter</u>	<u>2nd Quarter</u>
$\bar{E}_{\beta s} = 0.215$ Mev/disintegration	$\bar{E}_{\beta s} = 0.215$ Mev/disintegration
$\bar{E}_{\gamma s} = 0.18$ Mev/disintegration	$\bar{E}_{\gamma s} = 0.18$ Mev/disintegration
$\bar{E}_{\beta v}(Rx) = 0.41$ Mev/disintegration	$\bar{E}_{\beta v}(Rx) = 0.405$ Mev/disintegration
$\bar{E}_{\gamma v}(Rx) = 0.78$ Mev/disintegration	$\bar{E}_{\gamma v}(Rx) = 0.78$ Mev/disintegration
$\bar{E}_{\beta v}(TG) = 0.38$ Mev/disintegration	$\bar{E}_{\beta v}(TG) = 0.38$ Mev/disintegration
$\bar{E}_{\gamma v}(TG) = 0.75$ Mev/disintegration	$\bar{E}_{\gamma v}(TG) = 0.75$ Mev/disintegration
$\bar{E}_{\beta v}(ARW) = 0.47$ Mev/disintegration	$\bar{E}_{\beta v}(ARW) = 0.38$ Mev/disintegration
$\bar{E}_{\gamma v}(ARW) = 0.81$ Mev/disintegration	$\bar{E}_{\gamma v}(ARW) = 0.75$ Mev/disintegration

4. Measurements and Approximations of Total Radioactivity

The methods used to measure or approximate the total radioactivity in effluents and to determine radionuclide composition are as follows:

a. Fission and activation gases

Radioactivity and radionuclide composition is determined by laboratory GeLi detector analysis in correlation with continuous gross radioactivity monitoring by a gaseous channel detector in the release pathway.

b. Iodines

Charcoal cartridges provide continuous sample collection. These cartridges are analyzed for radioactivity and radionuclide composition in the laboratory by a GeLi detector gamma spectrometer. Continuous radioactivity monitoring of the charcoal cartridge is also provided by a NaI detector in-line with the vent release pathways.

c. Particulates

Particulate filters provide continuous sample collection. These filters are analyzed for radioactivity and radionuclide composition in the laboratory by a GeLi detector gamma spectrometer. Continuous gross radioactivity monitoring the particulate filter is also provided by a NaI detector in-line with the vent release pathways.

d. Liquid effluents

Each batch of liquid effluent is analyzed for radioactivity and radionuclide composition in the laboratory by a GeLi detector gamma spectrometer. Each batch is also analyzed for gross radioactivity by both gross beta and gamma. In addition, each batch is monitored for gross radioactivity by a NaI detector in-line with the release pathway.

5. Batch Releases

The following information relates to batch releases of radioactive materials in liquid and gaseous effluents:

a. Liquid

1. Number of batch releases: 115
2. Total time period of batch releases: $2.86 \text{ E}+04$ minutes
3. Maximum time period of batch release: $7.87 \text{ E}+02$ minutes
4. Average time period of batch releases: $2.48 \text{ E}+02$ minutes
5. Minimum time period for a batch release: $2.80 \text{ E}+01$ minutes
6. Average stream flow during periods of release of effluent into a flowing stream: $5.94 \text{ E}+07$ liters/minute

b. Gaseous

1. Number of batch releases: None
2. Total time period for batch releases: N/A
3. Maximum time period for a batch release: N/A

4. Average time period for batch releases: N/A
5. Minimum time period for batch release: N/A

6. Abnormal Release

a. Liquid

1. Number of releases: 0
2. Total activity released: None

b. Gaseous

1. Number of releases: 0
2. Total activity released: None

Table 1A. Effluent and Waste Disposal Semiannual Report
Gaseous Effluents - Summation of All Releases

	<u>Unit</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>Est. Total Error %</u>
<u>Fission & activation gases</u>				
1. Total release	Ci	6.59 E+02	7.61 E+01	2.0 E+01
2. Average release rate for period	μ Ci/sec	8.47 E+01	9.68 E+00	
3. Percent of Technical Specification limit	%	*	*	
<u>Iodines</u>				
1. Total Iodine-131	Ci	\leq 2.43 E-03	\leq 1.27 E-02	3.0 E+01
2. Average release rate for period	μ Ci/sec	\leq 3.12 E-04	\leq 1.62 E-03	
3. Percent of Technical Specification limit	%	**	**	
<u>Particulates</u>				
1. Particulates with half-lives > 8 days	Ci	\leq 8.24 E-04	\leq 2.64 E-03	5.0 E+01
2. Average release rate for period	μ Ci/sec	\leq 1.06 E-04	\leq 3.36 E-04	
3. Percent of Technical Specification limit	%	**	**	
4. Gross alpha radioactivity	Ci	\leq 4.93 E-06	\leq 1.09 E-05	
<u>Tritium</u>				
1. Total release	Ci	1.38 E+00	2.92 E-01	3.0 E+01
2. Average release rate for period	μ Ci/sec	1.77 E-01	3.71 E-02	
3. Percent of Technical Specification limit	%	*	*	

*The noble gases and tritium are combined in the Technical Specification discharge limit. The first quarter releases were 5.12 E-01% of the allowable limit, while the second quarter releases were 2.19 E-01% of the allowable limit.

**The Iodine-131 and particulates with half-lives longer than 8 days are combined into one Technical Specification. The first quarter releases were 9.11 E-02% of the allowable limit, while the second quarter releases were 8.60 E-01% of the allowable limit.

Table 1B. Effluent and Waste Disposal Semiannual Report
Gaseous Effluent - Elevated Release

<u>Nuclides Released</u>	<u>Unit</u>	<u>Continuous Mode</u>		<u>Batch Mode*</u>
		<u>1st Quarter</u>	<u>2nd Quarter</u>	
<u>Fission gases:</u>				
Krypton-85	Ci	1.23 E+01	9.92 E-04	
Krypton-85m	Ci	3.13 E+02	2.52 E-02	
Krypton-87	Ci	7.96 E-02	6.40 E-06	
Krypton-88	Ci	7.96 E+01	6.40 E-03	
Xenon-133	Ci	9.48 E+01	7.61 E-03	
Xenon-135	Ci	---	---	
Xenon-135m	Ci	---	---	
Xenon-138	Ci	---	---	
Krypton-89	Ci	---	---	
Krypton-83m	Ci	1.02 E+00	8.18 E-05	
Xenon-137	Ci	---	---	
Xenon-133m	Ci	3.36 E-03	2.70 E-07	
Xenon-131m	Ci	3.19 E+00	2.56 E-04	
Total for period	Ci	5.04 E+02	4.05 E-02	
<u>Iodines:</u>				
Iodine-131	Ci	2.22 E-03	3.52 E-03	
Iodine-133	Ci	3.51 E-03	≤ 7.82 E-04	
Iodine-135	Ci	3.33 E-03	≤ 7.74 E-04	
Total for period	Ci	9.06 E-03	≤ 5.08 E-03	
<u>Particulates:</u>				
Strontium-89	Ci	1.45 E-05	5.44 E-06	
Strontium-90	Ci	1.50 E-06	2.70 E-06	
Cesium-134	Ci	≤ 1.44 E-06	≤ 2.31 E-06	
Cesium-137	Ci	≤ 7.79 E-05	≤ 1.01 E-05	
Barium-lanthanum-140	Ci	≤ 3.54 E-04	≤ 1.63 E-03	
Iodine-131	Ci	≤ 5.05 E-06	≤ 3.55 E-05	
Cobalt-58	Ci	---	6.00 E-07	
Cobalt-60	Ci	1.61 E-05	6.87 E-06	
Manganese-54	Ci	---	6.80 E-07	
Total for period	Ci	≤ 4.70 E-04	≤ 1.69 E-03	

*No batch discharges were made.

Table 1C. Effluent and Waste Disposal Semiannual Report
Gaseous Effluents - Building Vent Releases

<u>Nuclides Released</u>	<u>Unit</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>
<u>Fission gases:</u>			
Krypton-85	Ci	9.55 E-03	5.31 E-03
Krypton-85m	Ci	9.56 E+00	5.22 E+00
Krypton-87	Ci	2.17 E+01	1.13 E+01
Krypton-88	Ci	2.96 E+01	1.60 E+01
Xenon-133	Ci	1.40 E+01	7.79 E+00
Xenon-135	Ci	3.80 E+01	2.10 E+01
Xenon-135m	Ci	5.44 E+00	1.97 E+00
Xenon-138	Ci	3.11 E+01	9.91 E+00
Krypton-89	Ci	7.75 E-01	1.31 E-02
Krypton-83m	Ci	4.72 E+00	2.51 E+00
Xenon-137	Ci	1.95 E+00	6.73 E-02
Xenon-133m	Ci	5.48 E-01	3.04 E-01
Xenon-131m	Ci	2.49 E-02	1.39 E-02
Total for period	Ci	1.55 E+02	7.61 E+01
<u>Iodines:</u>			
Iodine-131	Ci	≤ 2.07 E-04	≤ 9.22 E-03
Iodine-133	Ci	≤ 7.29 E-04	≤ 1.05 E-03
Iodine-135	Ci	≤ 4.34 E-03	≤ 3.68 E-03
Total for period	Ci	≤ 5.28 E-03	≤ 1.40 E-02
<u>Particulates:</u>			
Strontium-89	Ci	3.31 E-05	7.40 E-06
Strontium-90	Ci	7.65 E-06	3.65 E-05
Cesium-134	Ci	≤ 1.90 E-05	≤ 3.39 E-05
Cesium-137	Ci	≤ 2.21 E-05	≤ 3.79 E-05
Barium-lanthanum-140	Ci	≤ 1.96 E-04	≤ 2.44 E-04
Iodine-131	Ci	≤ 2.88 E-05	≤ 5.82 E-05
Cobalt-58	Ci	---	2.59 E-05
Cobalt-60	Ci	4.71 E-05	4.09 E-04
Manganese-54	Ci	7.40 E-07	5.49 E-05
Chromium-51	Ci	---	4.10 E-05
Zinc-65	Ci	---	4.15 E-06
Total for period	Ci	≤ 3.54 E-04	≤ 9.53 E-04

Table 2A. Effluent and Waste Disposal Semiannual Report
Liquid Effluents - Summation of All Releases

	<u>Unit</u>	<u>1st Quarter</u>	<u>2nd Quarter</u>	<u>Est. Total Error %</u>
<u>Fission & activation products</u>				
1. Total release (not including tritium, gases, alpha)	Ci	≤ 1.91 E+00	≤ 5.38 E+00	2.0 E+01
2. Average diluted concentration during period	μCi/ml	≤ 1.11 E-07	≤ 3.30 E-07	
3. Percent of applicable limit	%	7.64 E+00	2.15 E+01	
<u>Tritium</u>				
1. Total release	Ci	≤ 2.50 E+00	≤ 2.56 E+00	2.0 E+01
2. Average diluted concentration during period	μCi/ml	≤ 1.45 E-07	≤ 1.57 E-07	
3. Percent of applicable limit	%	4.83 E-03	5.23 E-03	
<u>Dissolved and entrained gases</u>				
1. Total release	Ci	≤ 7.65 E-03	≤ 4.19 E-02	5.0 E+01
2. Average diluted concentration during period	μCi/ml	≤ 4.45 E-10	≤ 2.74 E-09	
3. Percent of applicable limit	%	*	*	
<u>Gross alpha radioactivity</u>				
1. Total release	Ci	≤ 2.06 E-03	≤ 3.37 E-03	5.0 E+01
Volume of waste released (prior to dilution)	liters	2.78 E+06	4.90 E+06	1.0 E+01
Volume of dilution water used during period	liters	1.72 E+10	1.63 E+10	1.0 E+01

*None applicable

Table 2B. Effluent and Waste Disposal Semiannual Report
Liquid Effluents

<u>Nuclides Released</u>	<u>Unit</u>	<u>Continuous Mode*</u>	<u>Batch Mode</u>	
		<u>1st Quarter</u>	<u>2nd Quarter</u>	
Strontium-89	Ci	1.18 E-01		3.21 E-03
Strontium-90	Ci	1.39 E-03		1.81 E-03
Strontium-92	Ci			2.98 E-05
Cesium-134	Ci	2.05 E-01		≤ 8.45 E-01
Cesium-136	Ci			1.19 E-02
Cesium-137	Ci	3.66 E-01		≤ 9.77 E-01
Iodine-131	Ci	≤ 1.04 E-02		≤ 2.63 E-01
Cobalt-58	Ci	≤ 1.42 E-02		≤ 3.65 E-01
Cobalt-60	Ci	5.63 E-01		≤ 1.71 E+00
Iron-59	Ci	≤ 3.88 E-03		≤ 9.75 E-03
Zinc-65	Ci	≤ 1.62 E-02		≤ 2.81 E-02
Manganese-54	Ci	5.58 E-02		≤ 5.63 E-01
Chromium-51	Ci	1.06 E-01		≤ 8.00 E-02
Antimony-124	Ci	---		≤ 3.73 E-02
Zirconium-niobium-95	Ci	≤ 9.25 E-03		≤ 2.31 E-02
Molybdenum-99	Ci	≤ 1.01 E-02		≤ 6.00 E-02
Technetium-99m	Ci	≤ 4.33 E-03		≤ 8.54 E-03
Barium-lanthanum-140	Ci	≤ 1.08 E-02		≤ 3.53 E-02
Cerium-141	Ci	≤ 5.05 E-03		≤ 1.34 E-02
Silver-110m	Ci	3.37 E-02		1.62 E-02
Sodium-24	Ci	3.62 E-02		9.86 E-04
Unidentified	Ci	≤ 3.42 E-01		≤ 3.27 E-01
Total for period above	Ci	≤ 1.91 E+00		≤ 5.38 E+00
Xenon-133	Ci	≤ 4.87 E-03		≤ 3.38 E-02
Xenon-135	Ci	≤ 2.78 E-03		≤ 8.12 E-03

*No continuous mode discharges made.

Table 3. Effluent and Waste Disposal Semiannual Report
 Solid Waste and Irradiated Fuel Shipments
 Period January 1, 1983, to June 30, 1983

A. SOLID WASTE SHIPPED OFFSITE FOR BURIAL OR DISPOSAL (not irradiated fuel)

1. Type of waste	Unit	6-Month Period	Est. Total Error %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m ³	1.17 E+02	15
	Ci	4.52 E+02	
b. Dry compressible waste, contaminated equipment, etc.	m ³	1.70 E+02	25
	Ci	4.45 E-01	
c. Irradiated components, control rods, etc.	m ³	None	
	Ci		
d. Other	m ³	None	
	Ci		

2. Estimate of major nuclide composition (by type of waste), percent

a.	Chromium-51	2.24 E+01
	Cobalt-60	3.39 E+01
	Cobalt-58	4.89 E+00
	Manganese-54	1.06 E+01
	Zinc-65	1.54 E+00
	Silver-110m	1.36 E+00
	Iodine-131	9.97 E-01
	Cesium-137	1.32 E+01
	Cesium-134	1.02 E+01
	Zirconium-niobium-95	6.60 E-02
	Barium-lanthanum-140	7.95 E-01
	Cerium-141	2.24 E-02
	Cesium-136	1.64 E-02
b.	Chromium-51	2.64 E+00
	Cobalt-60	4.96 E+01
	Cobalt-58	4.67 E+00
	Manganese-54	1.45 E+01
	Zinc-65	1.10 E+00
	Silver-110m	1.69 E+00
	Iodine-131	1.20 E+00
	Cesium-137	1.39 E+01
	Cesium-134	9.88 E+00
	Zirconium-niobium-95	1.60 E-01
	Barium-lanthanum-140	6.50 E-01

Table 3. Effluent and Waste Disposal Semiannual Report
 Solid Waste and Irradiated Fuel Shipments
 Period January 1, 1983, to June 30, 1983
 (Continued)

3. Solid waste disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
50	Sole-use vehicle	Beatty, Nevada

B. IRRADIATED FUEL SHIPMENTS (Disposition)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None	---	---

APPENDIX B

METEOROLOGY

CONTENTS

METEOROLOGICAL DATA SUMMARIES

MONTHLY SUMMARY TABLES OF HOURLY METEOROLOGICAL DATA

JOINT FREQUENCY DISTRIBUTION TABLES

ATMOSPHERIC DIFFUSION ESTIMATES

ATMOSPHERIC DIFFUSION MODEL

METEOROLOGICAL DATA SUMMARIES

Meteorological data collected onsite for the period January 1, 1983, through June 30, 1983, were reduced, validated, summarized for analysis, and included in appropriate dose calculations. Hourly data summaries are provided for all collected parameters and for the joint frequency distributions (JFDs) of wind speed by wind direction by atmospheric stability class.

First Quarter (January through March 1983)

Data Recovery: Data recovery statistics are provided in Table 1 for pertinent meteorological parameters. Major data losses occurred with the 35-foot ambient temperature during the first quarter due to irregular variability in the recorder trace, which could not be quantified. Data were, therefore, assumed invalid. Data losses for other parameters were due to inking or timing problems.

Wind: Predominant wind directions at the 35-foot level were from the north and north-northeast (14 and 10 percent, respectively) and south (11 percent). The quarterly mean wind speed was 8.7 miles per hour with 45 percent of the occurrences below 7.5 miles per hour. The maximum hourly average wind speed was 30 miles per hour on January 11.

The predominant wind directions at the 318-foot level were from the north (12 percent), north-northwest (10 percent), and south (12 percent). The quarterly mean wind speed was 13.7 miles per hour with 46 percent of the speeds less than 12.5 miles per hour. The maximum hourly average wind speed was 39 miles per hour on January 11.

Temperature: Due to problems with the ambient temperature monitoring system, no data were recovered for this quarter.

Precipitation: Total precipitation for this quarter was 1.89 inches. The maximum daily precipitation total for the first quarter was 0.67 inches, which occurred on February 1. The maximum one-hour total precipitation was 0.17 inches on March 15.

Atmospheric Stability: Atmospheric stability is determined through the classification of differential temperature data between the 318-foot and 35-foot levels. During the quarter, unstable stability conditions (Classes A through C) occurred approximately 22 percent of the time, neutral conditions (Class D) approximately 54 percent of the time, and stable conditions (Classes E through G) approximately 24 percent of the time (based on the JFD of 318-foot wind and delta T (318 ft - 35 ft) stability data).

Second Quarter (April through June 1983)

Data Recovery: Data recovery statistics are provided in Table 1 for pertinent meteorological parameters. Larger than normal data losses occurred with the 35-foot wind direction and precipitation due to various recorder problems.

Table 1. Meteorological Data Recovery

<u>Parameter</u>	<u>Data Recovery (% of total observations)</u>		
	<u>January-March 1983</u>	<u>April-June 1983</u>	<u>January-June 1983</u>
318-ft wind speed	96	98	97
318-ft wind direction	96	97	96
35-ft wind speed	94	96	95
35-ft wind direction	97	88	92
35-ft ambient temperature	0	99	50
318- thru 35-ft delta T	99	98	99
Precipitation	99	89	94
318-ft JFD*	94	95	95
35-ft JFD*	90	85	88

*Joint occurrence of wind speed and direction measured at the height indicated and atmospheric stability (based on 318- to 35-ft delta T).

Wind: Predominant wind directions at the 35-foot level were from the north (12 percent) and from the southeast through south (a total of 35 percent). The quarterly mean wind speed was 9.5 miles per hour with 44 percent of the observations having wind speeds of less than 7.5 miles per hour. The maximum hourly average wind speed was 33 miles per hour on April 2.

The predominant wind directions at the 318-foot level were from the northwest through north (a total of 30 percent) and southeast through south (a total of 33 percent). The quarterly mean wind speed was 13.9 miles per hour with 45 percent of the observations having wind speeds of less than 12.5 miles per hour. The maximum hourly average wind speed was 44 miles per hour on April 2.

Temperature: The mean hourly average temperature for the quarter was 59°F with a maximum of 89.5°F on June 30 and a minimum of 28.5°F on April 18. The quarter averaged approximately 5°F below the expected normal for the area with April approximately 8°F lower, May approximately 5°F lower, and June approximately 2°F lower.

Precipitation: Total precipitation for the second quarter was 5.27 inches. The maximum daily precipitation was 0.76 inches on June 17. The maximum hourly precipitation total was 0.37 inches, also on June 17.

Atmospheric Stability: Atmospheric stability is determined by the classification of differential temperature data between the 318-foot and 35-foot levels. During the quarter, unstable stability conditions (Classes A through C) occurred approximately 23 percent of the time, neutral conditions (Class D) approximately 47 percent of the time, and stable conditions approximately 30 percent of the time (based on the JFD of 318-foot wind and delta T (318 ft - 35 ft) stability data).

1.3 First Semiannual Period (January through June 1983)

Data Recovery: Data recovery was greater than 90 percent for all individual parameters for the semiannual period except 35-foot ambient temperature (no data recovered during the first quarter). Due to recorder problems during the second quarter with 35-foot wind direction, the joint occurrence of 35-foot wind speed, wind direction, and atmospheric stability was 88 percent.

Wind: Predominant wind directions for the semiannual period were from the southeast through south (32 percent) and north and north-northeast (22 percent) at the 35-foot level and southeast through south (30 percent) and northwest through north (30 percent) at the 318-foot level. Mean wind speeds were 9.1 miles per hour at 35 feet and 13.8 miles per hour at 318 feet. The maximum hourly average speeds were 33 miles per hour and 44 miles per hour at the 35-foot and 318-foot levels, respectively.

Temperature: Due to the large data losses during the first quarter, temperature statistics for the semiannual period will not be discussed.

Precipitation: The total precipitation for January through June 1983 was 7.16 inches. The maximum daily total was 0.76 inches and the maximum hourly total was 0.37 inches, both occurring on June 17.

Atmospheric Stability: Based on 318-foot to 35-foot delta T to classify atmospheric stability, neutral conditions (Class D) predominated, occurring approximately 50 percent of the time during the semiannual period. Stable conditions (Classes E through G) and unstable conditions (Classes A through C) occurred approximately 27 percent and 23 percent of the time, respectively. These values are based on the JFD of 318-foot wind and delta T (318 ft -35 ft) data.

MONTHLY SUMMARY TABLES OF HOURLY METEOROLOGICAL DATA

The tables presented in this section provide a summary of hourly averages of measured meteorological parameters. The tables provide summaries by month for the semiannual period January through June 1983. The parameters provided are listed below.

- o 35-foot ambient temperature (note that tabular listings are also provided for averages of ambient humidity, which is not measured at the Cooper Nuclear Station). No valid data were recorded for January, February, or March and therefore, no tables are provided for these months or for the semiannual period.
- o Wind direction frequencies at 35 feet and 318 feet
- o Precipitation.

Any missing or non-measured data are indicated by a field of 9's.

35-Foot Ambient Temperature

No valid 35-foot ambient temperature data were recovered for the months of January, February, and March 1983.

NFPD-COOPER STATION 35FT TEMPERATURE SUMMARY JANUARY-JUNE, 1983
 MONTHLY HOUR AVERAGES FOR THE PERIOD 1/ 1/83 TO 6/30/83

APRIL

35.0 FEET LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		MET RULB	
	NUMRE OBS	(DEG F)	NUMBER OBS	NO DATA	NUMBER OBS	NO DATA	NUMBER OBS	NO DATA	NUMBER OBS	NO DATA
1	30	42.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
2	30	42.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
3	30	41.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
4	30	41.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
5	30	40.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
6	30	40.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
7	30	40.8	0	-999.0	0	-999.0	0	-999.0	0	-999.0
8	30	42.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
9	30	44.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
10	30	45.9	0	-999.0	0	-999.0	0	-999.0	0	-999.0
11	30	47.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
12	30	49.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
13	30	50.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
14	30	51.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
15	30	51.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
16	30	51.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
17	30	51.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
18	30	50.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
19	30	48.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
20	30	47.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
21	30	46.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
22	30	45.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
23	30	44.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
24	30	43.4	0	-999.0	0	-999.0	0	-999.0	0	-999.0
HOURLY MEAN		45.7		-999.0		-999.0		-999.0		-999.0
AVG DAILY MAX		52.6		-999.0		-999.0		-999.0		-999.0
AVG DAILY MIN		38.8		999.0		999.0		999.0		999.0
ABSOLUTE MAX		78.5		-999.0		-999.0		-999.0		-999.0
ABSOLUTE MIN		29.5		999.0		999.0		999.0		999.0
TOTAL OBS		720		0		0		0		0

NFSD-COOPER STATION 35FT TEMPERATURE SUMMARY JANUARY-JUNE, 1983
 MONTHLY HOUR AVERAGES FOR THE PERIOD 1/ 1/83 TO 6/30/83

MAY

35.0 FEET LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER OBS	(DEG F)	NUMBER OBS	NO DATA	NUMBER OBS	NO DATA	NUMBER OBS	NO DATA	NUMBER OBS	NO DATA
1	31	54.7	0	-999.0	0	-999.0	0	-999.0	0	-999.0
2	31	53.8	0	-999.0	0	-999.0	0	-999.0	0	-999.0
3	31	53.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
4	30	52.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
5	30	51.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
6	31	51.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
7	31	53.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
8	31	55.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
9	30	57.4	0	-999.0	0	-999.0	0	-999.0	0	-999.0
10	30	59.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
11	31	61.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
12	31	63.4	0	-999.0	0	-999.0	0	-999.0	0	-999.0
13	31	65.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
14	31	66.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
15	31	66.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
16	31	66.8	0	-999.0	0	-999.0	0	-999.0	0	-999.0
17	31	66.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
18	31	64.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
19	31	62.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
20	31	60.7	0	-999.0	0	-999.0	0	-999.0	0	-999.0
21	31	58.8	0	-999.0	0	-999.0	0	-999.0	0	-999.0
22	31	57.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
23	31	56.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
24	31	55.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
HOURLY MEAN		58.9		-999.0		-999.0		-999.0		-999.0
AVG DAILY MAX		67.7		-999.0		-999.0		-999.0		-999.0
AVG DAILY MIN		49.7		999.0		999.0		999.0		999.0
ABSOLUTE MAX		86.0		-999.0		-999.0		-999.0		-999.0
ABSOLUTE MIN		39.0		999.0		999.0		999.0		999.0
TOTAL OBS	740		0		0		0		0	

NPPD-COOPER STATION 35FT TEMPERATURE SUMMARY JANUARY-JUNE, 1983

MONTHLY HOUR AVERAGES FOR THE PERIOD 1/ 1/83 TO 6/30/83

JUNE

35.0 FEET LEVEL

HOUR	TEMPERATURE		DEW POINT		RELATIVE HUM		ABSOLUTE HUM		WET BULB	
	NUMBER ORS	(DEG F)	NUMBER OPS	NO DATA	NUMBER ORS	NO DATA	NUMBER ORS	NO DATA	NUMBER ORS	NO DATA
1	30	65.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
2	30	65.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
3	30	64.4	0	-999.0	0	-999.0	0	-999.0	0	-999.0
4	30	64.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
5	30	63.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
6	30	63.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
7	30	65.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
8	30	67.8	0	-999.0	0	-999.0	0	-999.0	0	-999.0
9	30	70.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
10	30	72.7	0	-999.0	0	-999.0	0	-999.0	0	-999.0
11	30	74.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
12	30	75.8	0	-999.0	0	-999.0	0	-999.0	0	-999.0
13	30	77.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
14	30	78.0	0	-999.0	0	-999.0	0	-999.0	0	-999.0
15	30	78.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
16	30	78.8	0	-999.0	0	-999.0	0	-999.0	0	-999.0
17	30	78.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
18	30	77.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
19	30	75.3	0	-999.0	0	-999.0	0	-999.0	0	-999.0
20	30	73.4	0	-999.0	0	-999.0	0	-999.0	0	-999.0
21	30	71.6	0	-999.0	0	-999.0	0	-999.0	0	-999.0
22	30	70.1	0	-999.0	0	-999.0	0	-999.0	0	-999.0
23	29	69.2	0	-999.0	0	-999.0	0	-999.0	0	-999.0
24	30	67.5	0	-999.0	0	-999.0	0	-999.0	0	-999.0
HOURLY MEAN		71.2		-999.0		-999.0		-999.0		-999.0
AVG DAILY MAX		79.6		-999.0		-999.0		-999.0		-999.0
AVG DAILY MIN		62.2		999.0		999.0		999.0		999.0
ABSOLUTE MAX		89.5		-999.0		-999.0		-999.0		-999.0
ABSOLUTE MIN		44.5		999.0		999.0		999.0		999.0
TOTAL ORS	719		0		0		0		0	

Wind Direction Frequencies,
35-Foot Level

NPPC-COOPER STATION 35FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

JANUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	CNE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	7.7	11.5	7.7	7.7	0.0	0.0	0.0	15.4	11.5	11.5	11.5	0.0	0.0	7.7	7.7	0.0	0.0	100.
2	11.1	7.4	0.0	3.7	7.4	3.7	7.4	7.4	19.5	3.7	11.1	3.7	3.7	3.7	7.4	0.0	0.0	100.
3	19.2	3.8	0.0	0.0	7.7	3.8	7.7	3.8	11.5	11.5	11.5	0.0	3.8	7.7	3.8	3.8	0.0	100.
4	11.5	7.7	3.8	0.0	7.7	7.7	7.7	3.8	15.4	15.4	7.7	0.0	0.0	7.7	11.5	0.0	0.0	100.
5	7.7	7.7	7.7	3.8	0.0	0.0	11.5	7.7	23.1	3.8	7.7	0.0	0.0	3.8	15.4	0.0	0.0	100.
6	7.7	11.5	0.0	3.8	3.8	0.0	11.5	3.8	19.2	19.2	3.8	0.0	0.0	0.0	11.5	3.8	0.0	100.
7	7.7	11.5	0.0	3.8	3.8	0.0	11.5	11.5	19.2	19.2	7.7	0.0	0.0	3.8	3.8	11.5	0.0	100.
8	17.9	10.7	0.0	3.6	3.6	0.0	7.1	10.7	3.6	10.7	3.6	7.1	7.1	0.0	7.1	7.1	0.0	100.
9	7.4	14.8	0.0	0.0	7.4	7.4	7.4	7.4	11.1	11.1	3.7	7.4	11.1	0.0	7.4	3.7	3.7	100.
10	13.0	13.0	0.0	0.0	0.0	0.0	8.7	17.4	13.0	0.0	8.7	4.3	4.3	4.3	4.3	8.7	0.0	100.
11	14.3	14.3	0.0	0.0	0.0	0.0	14.2	0.0	14.3	4.9	14.3	0.0	0.0	0.0	9.5	14.3	0.0	100.
12	4.3	21.7	0.0	0.6	0.0	0.0	8.7	8.7	4.3	17.4	8.7	8.7	0.0	0.0	8.7	8.7	0.0	100.
13	4.3	8.7	8.7	4.3	0.0	0.0	8.7	4.3	4.3	13.0	8.7	4.3	4.3	0.0	13.0	13.0	0.0	100.
14	13.6	13.6	9.1	0.0	0.0	4.5	9.1	0.0	9.1	4.5	9.1	9.1	0.0	0.0	13.6	4.5	0.0	100.
15	9.1	9.1	13.6	0.0	0.0	4.5	9.1	0.0	0.0	18.2	4.5	4.5	4.5	4.5	9.1	9.1	0.0	100.
16	8.3	12.5	8.3	4.2	8.3	4.2	4.2	4.2	8.3	12.5	4.2	4.2	0.0	0.0	8.3	8.3	0.0	100.
17	8.3	8.3	16.7	0.0	4.2	8.3	0.0	4.2	0.0	16.7	4.2	4.2	0.0	0.0	4.2	16.7	0.0	100.
18	13.6	4.5	13.6	0.0	0.0	4.5	4.5	4.5	4.5	3.1	4.5	4.5	4.5	4.5	4.5	13.6	4.5	100.
19	15.4	11.5	11.5	0.0	0.0	3.8	3.8	3.8	11.5	7.7	0.0	3.8	11.5	0.0	3.8	7.7	3.8	100.
20	20.0	4.0	8.0	4.0	0.0	4.0	8.0	0.0	16.0	4.0	0.0	0.0	16.0	4.0	4.0	8.0	0.0	100.
21	12.5	12.5	4.2	4.2	4.2	0.0	12.5	0.0	8.3	12.5	0.0	0.0	12.5	4.2	4.2	8.3	0.0	100.
22	4.0	8.0	12.0	8.0	4.0	0.0	8.0	4.0	4.0	8.0	12.0	0.0	4.0	8.0	4.0	12.0	0.0	100.
23	11.5	7.7	7.7	11.5	0.0	0.0	15.4	3.8	7.7	11.5	7.7	0.0	3.8	0.0	7.7	3.8	0.0	100.
24	7.4	7.4	7.4	7.4	0.0	0.0	11.1	7.4	11.1	7.4	7.4	0.0	7.4	0.0	7.4	7.4	0.0	100.
ALL	13.8	10.1	5.7	3.0	2.2	2.4	8.1	5.7	9.9	10.5	6.7	2.7	4.2	2.9	7.6	7.1	0.5	100.

NUMBER OF HRS = 595

NPPC-COOPER STATION 35FT WIND DIRECTION PERSISTENCE JANUARY-JUNE 1983

HOURLY WIND ROSES (PERCENT)

FEBRUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	14.3	7.1	7.1	3.6	0.0	3.0	3.6	7.1	21.4	7.1	3.6	0.0	0.0	3.6	10.7	3.6	7.1	100.
2	14.8	11.1	11.1	3.7	0.0	0.0	11.1	7.4	14.8	11.1	3.7	0.0	0.0	3.7	3.7	3.7	0.0	100.
3	7.4	22.2	7.4	0.0	3.7	0.0	7.4	3.7	22.2	3.7	3.7	0.0	0.0	0.0	7.4	7.4	3.7	100.
4	11.5	11.5	15.4	0.0	0.0	3.8	0.0	11.5	30.8	3.4	0.0	0.0	3.8	3.8	0.0	3.8	0.0	100.
5	12.0	16.0	8.0	0.0	0.0	0.0	8.0	12.0	24.0	0.0	4.0	4.0	0.0	4.0	0.0	8.0	4.0	100.
6	8.0	16.0	16.0	4.0	0.0	4.0	12.0	4.0	20.0	8.0	0.0	4.0	4.0	0.0	0.0	0.0	0.0	100.
7	4.0	20.0	8.0	0.0	4.0	0.0	4.0	8.0	20.0	4.0	0.0	8.0	0.0	0.0	0.0	12.0	4.0	100.
8	11.5	11.5	11.5	3.8	3.8	0.0	7.7	11.5	15.4	11.5	3.8	0.0	0.0	0.0	0.0	3.8	3.8	100.
9	11.5	11.5	0.0	0.0	0.0	7.7	3.8	15.4	11.5	11.5	3.8	3.8	0.0	0.0	3.8	7.7	7.7	100.
10	11.1	7.4	3.7	0.0	3.7	3.7	3.7	3.7	18.5	22.2	7.4	0.0	0.0	0.0	3.7	7.4	3.7	100.
11	7.4	7.4	0.0	0.0	0.0	3.7	7.4	7.4	18.5	18.5	7.4	3.7	3.7	0.0	0.0	14.8	0.0	100.
12	11.1	7.4	0.0	0.0	0.0	0.0	18.5	0.0	14.8	22.2	3.7	11.1	0.0	0.0	0.0	11.1	0.0	100.
13	14.8	7.4	0.0	0.0	0.0	3.7	7.4	7.4	18.5	18.5	3.7	11.1	0.0	0.0	3.7	3.7	0.0	100.
14	14.8	3.7	0.0	0.0	0.0	7.4	3.7	7.4	14.8	18.5	7.4	0.0	11.1	0.0	7.4	3.7	0.0	100.
15	14.3	3.6	0.0	0.0	3.6	3.6	0.0	10.7	17.9	17.9	3.6	0.0	0.0	0.0	17.9	7.1	0.0	100.
16	14.8	3.7	3.7	0.0	3.7	3.7	7.4	3.7	14.8	14.8	3.7	0.0	0.0	3.7	14.8	3.7	3.7	100.
17	7.4	11.1	0.0	0.0	3.7	3.7	0.0	11.1	18.5	11.1	3.7	3.7	0.0	3.7	11.1	7.4	3.7	100.
18	11.1	11.1	0.0	0.0	7.4	0.0	0.0	14.8	11.1	18.5	0.0	0.0	0.0	3.7	11.1	11.1	0.0	100.
19	18.5	11.1	0.0	3.7	0.0	3.7	3.1	14.8	18.5	3.7	3.7	0.0	0.0	3.7	3.7	11.1	0.0	100.
20	7.4	14.8	0.0	0.0	3.7	3.7	7.4	14.8	18.5	3.7	3.7	0.0	0.0	0.0	14.8	3.7	3.7	100.
21	11.1	7.4	7.4	0.0	0.0	3.7	7.4	14.8	7.4	14.8	3.7	0.0	0.0	0.0	11.1	7.4	3.7	100.
22	11.1	11.1	3.7	3.7	0.0	7.4	7.4	11.1	11.1	7.4	7.4	0.0	0.0	0.0	11.1	7.4	0.6	100.
23	3.8	7.7	15.4	0.0	3.8	0.0	7.7	3.8	11.5	19.2	0.0	0.0	0.0	0.0	15.4	3.8	7.7	100.
24	7.7	11.5	11.5	3.8	0.0	0.0	11.5	7.7	7.7	19.2	0.0	0.0	0.0	3.8	3.8	7.7	3.8	100.
ALL	11.0	10.5	5.3	1.1	1.7	2.8	6.3	9.9	16.7	12.2	3.5	2.0	0.9	1.4	6.4	6.9	2.5	100.

NUMBER OF OBS = 639

NPPC-COOPER STATION 35FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

MARCH

Hrs. OF DAY	WIND DIRECTION																CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
1	16.1	16.1	3.2	0.0	0.0	9.7	12.9	12.9	6.5	9.7	0.0	0.0	0.0	0.0	3.2	9.7	0.0	100.
2	22.6	6.5	6.5	0.0	0.0	6.5	16.1	16.1	6.5	3.2	0.0	0.0	0.0	0.0	9.7	6.5	0.0	100.
3	25.8	3.2	3.2	0.0	3.2	3.2	16.1	16.1	3.2	3.2	3.2	0.0	0.0	0.0	6.5	9.7	3.2	100.
4	22.6	9.7	3.2	0.0	0.0	3.2	16.1	9.7	9.7	9.7	0.0	0.0	0.0	0.0	6.5	6.5	3.2	100.
5	22.5	6.5	0.0	0.0	0.0	3.2	12.9	19.4	6.5	3.2	0.0	0.0	0.0	3.2	6.5	12.9	3.2	100.
6	16.1	12.9	3.2	0.0	3.2	3.2	12.9	16.1	6.5	3.2	0.0	0.0	0.0	0.0	6.5	12.9	3.2	100.
7	22.6	6.5	3.2	3.2	0.0	3.2	22.6	3.2	9.7	6.5	0.0	0.0	0.0	0.0	6.5	6.5	3.2	100.
8	22.6	9.7	3.2	0.0	3.2	0.0	19.4	6.5	9.7	3.2	6.5	0.0	0.0	0.0	6.5	6.5	3.2	100.
9	19.4	9.7	0.0	0.0	6.5	3.2	9.7	16.1	6.5	3.2	3.2	0.0	0.0	0.0	9.7	9.7	0.0	100.
10	16.1	12.9	3.2	0.0	0.0	9.7	6.5	6.5	16.1	0.0	9.7	0.0	0.0	0.0	9.7	6.5	0.0	100.
11	19.4	12.9	0.0	0.0	0.0	9.7	9.7	6.5	6.5	3.2	6.5	0.0	0.0	3.2	6.5	9.7	0.0	100.
12	19.4	12.9	3.2	0.0	3.2	6.5	6.5	12.9	3.2	6.5	3.2	0.0	0.0	3.2	6.5	6.5	0.0	100.
13	16.1	16.1	3.2	3.2	0.0	9.7	3.2	9.7	6.5	9.7	0.0	0.0	0.0	3.2	9.7	9.7	0.0	100.
14	22.3	3.2	0.0	0.0	0.0	6.5	9.7	9.7	6.5	9.7	0.0	0.0	0.0	0.0	6.5	12.9	0.0	100.
15	23.0	3.2	6.5	0.0	3.2	3.2	16.1	3.2	6.5	9.7	0.0	0.0	0.0	3.2	6.5	9.7	0.0	100.
16	22.6	9.7	0.0	0.0	3.2	6.5	16.1	3.2	6.5	6.5	3.2	0.0	0.0	3.2	6.5	12.9	0.0	100.
17	25.8	6.5	3.2	3.2	0.0	12.9	12.5	6.5	6.5	6.5	0.0	0.0	0.0	0.0	9.7	6.5	0.0	100.
18	17.4	6.5	3.2	3.2	3.2	16.1	9.7	3.2	9.7	3.2	0.0	0.0	0.0	0.0	6.5	16.1	0.0	100.
19	12.9	12.9	3.2	9.7	0.0	12.9	9.7	12.9	3.2	3.2	0.0	0.0	0.0	0.0	6.5	12.9	0.0	100.
20	12.9	12.9	6.5	3.2	6.5	9.7	12.9	9.7	6.5	0.0	0.0	0.0	0.0	0.0	3.2	16.1	0.0	100.
21	19.4	9.7	9.7	0.0	0.0	12.9	22.6	6.5	3.2	0.0	0.0	0.0	0.0	0.0	6.5	9.7	0.0	100.
22	16.1	16.1	3.2	3.2	3.2	0.0	22.6	9.7	6.5	0.0	0.0	0.0	0.0	0.0	3.2	12.9	3.2	100.
23	22.6	9.7	6.5	0.0	3.2	6.5	12.5	6.5	6.5	6.5	0.0	0.0	0.0	0.0	6.5	6.5	6.5	100.
24	9.7	22.6	3.2	0.0	6.5	3.2	9.7	12.9	9.7	0.1	3.2	0.0	0.0	0.0	9.7	6.5	3.2	100.
ALL	20.2	10.3	3.4	1.2	2.0	6.7	13.2	9.8	7.0	4.5	1.6	0.5	0.7	0.7	6.9	9.8	1.3	100.

NUMBER OF OBS = 744

NPPC-COOPER STATION 35FT WIND DIRECTION PERSISTENCE JANUARY-JUNE 1983

HOURLY WIND ROSES (PERCENT)

APRIL

WIND DIRECTION

HR. OF DAY	M	ANE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	M	MNM	NM	MNM	CALM	TOTAL
1	25.0	7.1	14.3	0.0	0.0	0.0	17.5	7.1	0.0	3.6	3.6	0.0	3.6	3.6	10.7	3.6	0.0	100.
2	17.9	17.9	3.6	3.6	0.0	3.6	7.1	10.7	3.6	7.1	0.0	0.0	3.6	3.6	10.7	0.0	0.0	100.
3	17.9	17.9	7.1	3.6	7.1	3.6	10.7	7.1	0.0	3.6	0.0	0.0	3.6	0.0	10.7	7.1	0.0	100.
4	23.6	11.1	7.4	7.4	0.0	3.7	18.2	0.0	0.0	3.7	0.0	0.0	3.7	0.0	14.8	0.0	0.0	100.
5	23.1	26.9	0.0	0.0	3.8	0.0	15.4	3.8	7.7	0.0	3.8	0.0	0.0	7.7	3.8	3.8	0.0	100.
6	22.2	22.2	3.7	0.0	3.7	0.0	11.1	7.4	3.7	3.7	0.0	3.7	0.0	11.1	7.4	0.0	0.0	100.
7	17.9	25.0	3.6	0.0	3.6	0.0	10.7	7.1	0.0	7.1	3.6	0.0	0.0	7.1	10.7	3.6	0.0	100.
8	14.8	18.5	3.7	7.4	3.7	0.0	18.5	0.0	0.0	3.7	3.7	0.0	0.0	0.0	18.5	7.4	0.0	100.
9	22.2	0.0	11.1	3.7	7.4	0.0	11.1	11.1	0.0	3.7	3.7	0.0	0.0	3.7	18.5	3.7	0.0	100.
10	25.9	3.7	11.1	3.7	0.0	7.4	7.4	14.8	0.0	7.4	3.7	0.0	0.0	0.0	11.1	3.7	0.0	100.
11	22.2	7.4	14.8	0.0	0.0	7.4	7.4	7.4	14.8	0.0	3.7	0.0	0.0	0.0	11.1	3.7	0.0	100.
12	14.8	3.7	7.4	11.1	0.0	7.4	7.4	3.7	18.5	0.0	0.0	0.0	3.7	0.0	7.4	14.8	0.0	100.
13	18.5	7.4	11.1	3.7	3.7	3.7	14.8	3.7	11.1	0.0	0.0	0.0	0.0	7.4	7.4	7.4	0.0	100.
14	23.1	3.8	3.8	3.8	3.8	11.5	3.6	7.7	7.7	3.9	3.8	0.0	0.0	0.0	15.4	7.7	0.0	100.
15	23.1	3.8	3.8	0.0	11.5	0.0	19.2	3.0	7.7	0.0	7.7	0.0	0.0	0.0	7.7	15.4	0.0	100.
16	14.3	7.1	7.1	0.0	10.7	3.6	14.2	0.0	7.1	7.1	3.6	0.0	0.0	3.6	10.7	10.7	0.0	100.
17	17.9	7.1	3.6	7.1	7.1	0.0	14.3	3.6	0.0	7.1	7.1	0.0	3.6	0.0	10.7	10.7	0.0	100.
18	14.3	7.1	0.0	7.1	3.6	3.6	10.7	7.1	3.6	3.6	7.1	3.6	0.0	0.0	10.7	17.9	0.0	100.
19	3.7	18.5	7.4	3.7	0.0	3.7	14.8	3.7	7.4	7.4	3.7	7.4	0.0	0.0	11.1	7.4	0.0	100.
20	7.4	11.1	11.1	7.4	3.7	11.1	11.1	3.7	11.1	0.0	0.0	3.7	0.0	0.0	14.8	3.7	0.0	100.
21	7.4	14.8	11.1	7.4	7.4	7.4	3.7	7.4	11.1	3.7	0.0	3.7	0.0	0.0	14.8	0.0	0.0	100.
22	11.1	11.1	11.1	7.4	3.7	7.4	14.8	7.4	7.4	0.0	0.0	3.7	0.0	0.0	11.1	3.7	0.0	100.
23	14.8	18.5	0.0	7.4	7.4	3.7	14.8	3.7	7.4	0.0	3.7	3.7	0.0	3.7	11.1	0.0	0.0	100.
24	22.2	14.8	0.0	7.4	7.4	0.0	18.2	3.7	7.4	0.0	0.0	3.7	0.0	3.7	7.4	3.7	0.0	100.
ALL	18.3	12.0	6.6	4.3	4.1	3.7	12.4	5.5	5.7	3.2	2.6	1.4	0.9	2.3	11.2	5.8	0.0	100.

NUMBER OF OBS = 652

MPPD-COOPER STATION 35FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

MAY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	MSW	M	MNW	NU	NNW	CALM	TOTAL
1	17.9	7.1	0.0	7.1	3.6	3.6	21.4	3.6	3.6	7.1	0.0	0.0	3.6	7.1	7.1	3.6	0.0	100.
2	20.7	6.9	6.9	0.0	6.9	13.8	6.9	6.9	6.9	3.4	3.4	0.0	3.4	10.3	10.3	0.0	0.0	100.
3	10.0	13.3	6.7	0.0	0.0	16.7	13.3	6.7	0.0	3.3	3.3	3.3	0.0	6.7	6.7	6.7	0.0	100.
4	6.7	6.7	3.3	6.7	3.3	3.3	23.3	10.0	3.3	0.0	0.0	0.0	0.0	6.7	10.0	13.3	0.0	100.
5	10.0	6.7	6.7	3.3	0.0	6.7	20.0	0.0	6.7	0.0	0.0	0.0	0.0	10.0	13.3	10.0	0.0	100.
6	13.9	3.4	0.0	6.9	10.3	10.3	10.3	10.3	10.3	0.0	0.0	0.0	3.4	6.9	10.3	6.9	0.0	100.
7	21.4	7.1	0.0	3.6	0.0	7.1	3.6	21.4	14.3	0.0	0.0	0.0	0.0	3.6	10.7	7.1	0.0	100.
8	19.2	11.5	0.0	0.0	7.7	7.7	15.4	11.5	7.7	7.7	0.0	0.0	0.0	0.0	7.7	7.7	0.0	100.
9	25.0	0.0	0.0	3.6	10.7	10.7	17.9	0.0	3.6	0.0	3.6	0.0	0.0	3.6	7.1	10.7	0.0	100.
10	21.4	3.6	0.0	3.6	0.0	0.0	14.3	17.9	3.6	0.0	0.0	0.0	0.0	3.6	7.1	14.3	0.0	100.
11	11.5	7.7	0.0	3.8	0.0	11.5	3.8	7.7	19.2	3.8	3.8	0.0	3.8	0.0	3.8	19.2	0.0	100.
12	22.2	3.7	0.0	3.7	3.7	3.7	7.4	25.9	0.0	7.4	0.0	0.0	0.0	0.0	7.4	11.1	0.0	100.
13	19.2	3.8	3.8	3.8	0.0	3.8	7.7	3.8	23.1	3.8	3.8	3.8	3.8	3.8	3.8	11.5	0.0	100.
14	15.4	3.8	3.8	3.8	0.0	3.8	3.8	3.8	23.1	7.7	3.8	3.8	3.8	3.8	7.7	7.7	0.0	100.
15	11.5	7.7	0.0	3.8	0.0	7.7	7.7	11.5	7.7	7.7	7.7	3.8	3.8	0.0	19.2	3.8	0.0	100.
16	7.7	11.5	0.0	3.8	0.0	3.8	0.0	3.8	15.4	0.0	15.4	7.7	0.0	0.0	19.2	3.8	0.0	100.
17	14.8	11.1	0.0	3.7	0.0	7.4	3.7	18.5	3.7	7.4	7.4	3.7	3.7	11.1	7.4	3.7	0.0	100.
18	11.1	11.1	0.0	3.7	0.0	7.4	7.4	14.8	3.7	0.0	0.0	11.1	3.7	0.0	7.4	14.8	0.0	100.
19	7.1	10.7	3.6	7.1	0.0	0.0	10.7	7.1	10.7	3.6	3.6	7.1	3.6	3.6	7.1	14.3	0.0	100.
20	11.1	11.1	0.0	11.1	0.0	0.0	11.1	11.1	18.5	0.0	3.7	0.0	7.4	7.4	7.4	0.0	0.0	100.
21	11.1	11.1	3.7	0.0	0.0	0.0	18.5	11.1	7.4	3.7	3.7	0.0	7.4	3.7	3.7	14.8	0.0	100.
22	11.5	7.7	3.8	0.0	0.0	3.8	19.2	11.5	7.7	3.8	0.0	3.8	7.7	3.8	11.5	3.8	0.0	100.
23	14.8	3.7	7.4	0.0	3.7	0.0	3.7	14.8	18.5	3.7	0.0	3.7	7.4	7.4	11.1	0.0	0.0	100.
24	18.2	9.1	0.0	0.0	4.5	0.0	9.1	13.6	9.1	9.1	0.0	0.0	0.0	13.6	9.1	4.5	0.0	100.
ALL	14.7	7.5	2.1	3.5	2.1	3.7	8.1	11.6	13.3	3.5	2.9	2.1	2.8	4.9	9.0	8.1	0.0	100.

NUMBER OF OBS = 654

APPO-COOPER STATION 35FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

JUNE

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	8.0	0.0	0.0	4.0	8.0	8.0	20.0	12.0	16.0	4.3	4.0	4.0	0.0	4.0	0.0	0.0	0.0	100.
2	7.7	0.0	3.8	3.8	3.8	15.4	15.4	11.5	19.2	7.7	3.8	0.0	0.0	3.8	0.0	3.8	0.0	100.
3	0.0	0.0	8.0	4.0	4.0	12.0	8.0	16.0	20.0	4.0	8.0	4.0	0.0	0.0	4.0	0.0	0.0	100.
4	4.2	0.0	0.0	0.0	4.2	8.3	20.8	12.5	12.5	12.5	8.3	4.2	4.2	0.0	0.0	0.0	4.2	100.
5	4.0	0.0	0.0	4.0	0.0	8.0	12.0	12.0	8.0	4.0	8.0	16.0	0.0	0.0	4.0	0.0	0.0	100.
6	3.0	8.3	4.2	4.2	0.0	0.0	12.5	33.3	20.8	0.0	12.5	4.2	0.0	0.0	0.0	0.0	0.0	100.
7	4.5	0.0	4.5	0.0	0.0	13.6	13.6	18.2	27.3	0.0	4.5	0.0	13.6	0.0	0.0	0.0	0.0	100.
8	0.0	4.0	0.0	0.0	0.0	0.0	12.0	20.0	28.0	16.0	4.0	4.0	0.0	4.0	4.0	4.0	0.0	100.
9	4.3	0.0	0.0	0.0	0.0	0.0	6.7	13.0	26.1	13.0	13.0	4.3	4.3	8.7	4.3	0.0	0.0	100.
10	4.5	0.0	0.0	0.0	0.0	4.5	13.6	9.1	18.2	22.7	13.6	0.0	4.5	4.5	4.5	0.0	0.0	100.
11	4.8	0.0	0.0	0.0	0.0	4.8	9.5	19.0	14.3	23.8	9.5	4.8	4.8	4.8	4.8	0.0	0.0	100.
12	4.8	0.0	0.0	0.0	0.0	14.3	4.8	14.3	19.0	14.3	9.5	4.8	4.8	4.8	4.8	0.0	0.0	100.
13	4.8	0.0	0.0	0.0	0.0	4.8	4.8	14.3	33.3	9.5	14.3	4.8	4.8	4.8	4.8	0.0	0.0	100.
14	5.0	0.0	5.0	0.0	0.0	10.0	5.0	5.0	30.0	20.0	0.0	10.0	0.0	5.0	5.0	0.0	0.0	100.
15	0.0	4.3	0.0	0.0	4.3	4.3	8.7	8.7	26.1	13.0	4.3	8.7	0.0	8.7	4.3	4.3	0.0	100.
16	6.7	0.0	4.3	0.0	8.7	0.0	8.7	8.7	34.8	13.0	4.3	0.0	4.3	0.0	4.3	0.0	0.0	100.
17	8.3	0.0	4.2	0.0	0.0	8.3	4.2	16.7	25.0	16.7	8.3	0.0	0.0	4.2	4.2	4.2	0.0	100.
18	4.0	4.0	0.0	4.0	0.0	4.0	8.0	12.0	24.0	16.0	8.0	8.0	4.0	4.0	0.0	4.0	0.0	100.
19	4.0	4.0	0.0	0.0	0.0	12.0	16.0	12.0	28.0	4.0	8.0	0.0	0.0	0.0	0.0	12.0	0.0	100.
20	7.7	7.7	3.8	3.8	3.8	11.5	11.5	23.1	15.4	0.0	7.7	0.0	0.0	0.0	0.0	3.8	0.0	100.
21	0.0	12.0	8.0	0.0	4.0	8.0	16.0	16.0	20.0	0.0	12.0	0.0	0.0	0.0	0.0	4.0	0.0	100.
22	0.0	4.0	8.0	4.0	4.0	8.0	20.0	8.0	16.0	8.0	12.0	0.0	4.0	0.0	0.0	4.0	0.0	100.
23	0.0	3.8	3.8	3.8	3.8	3.8	15.4	19.2	23.1	0.0	7.7	0.0	0.0	0.0	3.8	11.5	0.0	100.
24	7.7	7.7	0.0	11.5	7.7	0.0	15.4	15.4	23.1	3.3	3.8	0.0	0.0	3.8	0.0	0.0	0.0	100.
ALL	4.3	3.5	2.4	2.1	2.4	6.8	12.1	15.6	21.9	9.1	7.9	3.3	1.9	1.9	2.3	2.6	0.2	100.

NUMBER OF OBS = 572

NPPN-COOPER STATION 35FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

SEMI-ANNUAL

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	MNW	NW	NNW	CALM	TOTAL
1	15.1	9.6	5.4	3.6	2.4	3.6	9.6	12.7	9.6	7.2	3.6	0.6	1.2	4.2	6.6	3.6	1.2	100.
2	17.3	8.3	5.4	2.4	1.8	6.0	11.9	10.1	11.3	6.3	3.6	0.6	1.8	4.2	7.1	2.4	0.0	100.
3	13.8	11.4	5.4	1.2	4.2	4.2	11.4	10.2	10.2	4.2	4.8	1.2	1.2	3.0	6.6	6.0	1.2	100.
4	14.6	8.5	5.5	2.4	1.2	4.9	11.0	10.4	12.8	7.7	2.4	0.6	1.8	3.0	7.3	4.3	1.2	100.
5	13.5	10.4	3.7	1.8	0.6	3.1	11.0	16.0	11.0	3.1	3.1	3.1	0.6	4.3	7.4	6.1	1.2	100.
6	11.7	12.3	4.3	3.1	3.1	3.1	11.7	12.3	13.0	5.6	2.5	1.9	1.2	3.1	6.2	4.3	0.6	100.
7	13.7	11.9	3.1	1.9	1.9	4.4	11.2	11.2	11.9	6.3	2.5	1.9	1.9	2.5	5.6	6.9	1.2	100.
8	14.7	11.0	3.1	2.5	3.1	1.2	12.3	10.4	11.0	8.6	3.7	1.8	1.2	0.6	7.4	6.1	1.2	100.
9	15.4	6.2	1.9	1.2	3.1	3.7	8.0	12.3	11.7	6.8	4.9	3.1	3.1	1.9	8.6	6.2	1.9	100.
10	15.8	7.0	3.2	1.3	1.9	5.1	6.3	10.8	13.9	8.9	7.0	0.6	1.3	2.5	7.0	7.0	0.6	100.
11	13.7	8.5	2.6	0.7	0.0	6.5	8.5	7.8	14.4	8.3	7.2	2.6	2.0	0.7	5.9	10.5	0.0	100.
12	13.5	8.3	1.9	2.6	1.3	5.1	8.3	7.7	14.1	9.6	5.1	3.8	1.9	1.3	5.8	9.6	0.0	100.
13	13.5	7.7	4.5	2.6	0.6	4.5	7.7	7.1	15.5	9.3	4.5	3.9	1.3	2.6	7.1	7.7	0.0	100.
14	18.4	4.6	3.3	1.3	0.7	7.2	5.5	5.9	14.5	10.5	3.9	3.3	3.3	1.3	9.2	6.6	0.0	100.
15	15.4	5.1	3.8	0.6	4.5	2.6	10.3	5.1	11.5	10.9	4.5	2.6	1.9	1.9	10.9	8.3	0.0	100.
16	13.2	7.5	3.8	1.3	6.3	3.1	9.4	4.4	13.3	8.8	5.7	1.9	0.6	1.9	10.7	6.9	0.6	100.
17	14.3	7.5	4.3	2.5	2.5	5.6	6.8	7.5	11.2	9.9	5.0	1.9	1.2	3.1	8.1	8.1	0.6	100.
18	12.5	7.5	2.5	3.1	2.5	5.6	6.9	8.1	11.2	8.7	3.1	4.4	1.9	1.2	6.9	13.1	0.6	100.
19	10.4	11.6	4.3	4.3	0.0	6.1	9.8	9.1	12.8	4.9	3.0	3.0	2.4	1.2	5.5	11.0	0.6	100.
20	11.0	10.4	4.9	4.9	3.1	6.7	10.4	10.4	14.1	1.2	2.5	0.6	3.7	1.8	7.4	6.1	0.6	100.
21	10.6	11.2	7.5	1.9	2.5	5.6	13.7	9.3	9.3	5.6	3.1	0.6	3.1	1.2	6.8	7.5	0.6	100.
22	9.3	9.9	6.8	4.3	2.5	4.3	15.5	8.7	8.7	4.3	5.0	1.2	2.5	1.9	6.2	8.1	0.6	100.
23	11.7	8.6	6.7	3.7	3.7	2.5	11.7	8.6	12.3	6.7	3.1	1.2	1.8	1.8	9.2	4.3	2.5	100.
24	11.3	12.6	3.8	5.0	5.0	0.6	12.6	10.1	11.3	6.3	2.5	0.6	1.3	3.8	6.3	5.0	1.3	100.
ALL	13.5	3.1	4.3	2.5	2.4	4.4	10.1	9.5	12.1	7.0	4.0	1.9	1.8	2.3	7.3	6.9	0.8	100.

NUMBER OF OBS = 3856

B18

Wind Direction Frequencies,
318-Foot Level

NPPC-COOPER STATION 318FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

JANUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	3.2	12.9	0.0	6.5	3.2	0.0	6.5	3.2	6.5	3.2	12.9	3.2	6.5	9.7	6.5	3.2	12.9	100.
2	12.9	6.5	0.0	3.2	3.2	3.2	6.5	3.2	6.5	9.7	6.5	6.5	3.2	3.2	9.7	3.2	12.9	100.
3	6.5	9.7	0.0	3.2	3.2	3.2	6.5	3.2	3.2	12.9	9.7	6.5	3.2	9.7	6.5	6.5	6.5	100.
4	6.5	6.5	6.5	0.0	3.2	3.2	6.5	3.2	6.5	16.1	3.2	6.5	3.2	6.5	12.9	6.5	3.2	100.
5	9.7	3.2	9.7	0.0	6.5	0.0	9.7	3.2	12.9	9.7	6.5	0.0	6.5	3.2	12.9	3.2	3.2	100.
6	6.7	6.7	6.7	0.0	6.7	0.0	6.7	6.7	6.7	13.3	10.0	0.0	3.3	6.7	13.3	6.7	0.0	100.
7	6.7	3.3	6.7	0.0	3.3	3.3	6.7	10.0	0.0	10.0	13.3	3.3	0.0	3.3	13.3	13.3	3.3	100.
8	10.0	13.3	0.0	0.0	3.3	3.3	10.0	6.7	3.3	6.7	6.7	6.7	3.3	3.3	10.0	10.0	3.3	100.
9	10.0	6.7	6.7	0.0	0.0	6.7	6.7	10.0	3.3	10.0	3.3	3.3	3.3	10.0	10.0	6.7	3.3	100.
10	10.0	10.0	0.0	3.3	0.0	3.3	13.3	3.3	10.0	6.7	6.7	0.0	0.0	3.3	10.0	16.7	3.3	100.
11	16.7	10.0	0.0	0.0	3.3	0.0	16.7	3.3	10.0	6.7	6.7	0.0	0.0	3.3	3.3	13.3	6.7	100.
12	13.3	6.7	3.3	0.0	0.0	0.0	16.7	3.3	13.3	6.7	6.7	0.0	0.0	0.0	6.7	16.7	6.7	100.
13	10.0	0.0	6.7	0.0	0.0	3.3	10.0	10.0	6.7	6.7	3.3	3.3	0.0	0.0	6.7	20.0	13.3	100.
14	6.7	10.0	0.0	0.0	3.3	0.0	13.3	0.0	10.0	10.0	3.3	3.3	0.0	0.0	6.7	16.7	16.7	100.
15	3.3	10.0	3.3	0.0	3.3	3.3	10.0	0.0	13.3	6.7	3.3	3.3	0.0	3.3	3.3	16.7	16.7	100.
16	3.3	10.0	10.0	0.0	3.3	3.3	10.0	0.0	10.0	10.0	3.3	6.7	0.0	3.3	10.0	16.7	0.0	100.
17	13.3	6.7	3.3	3.3	3.3	3.3	6.7	6.7	10.0	6.7	3.3	3.3	0.0	3.3	6.7	16.7	3.3	100.
18	10.0	6.7	3.3	3.3	6.7	0.0	6.7	3.3	13.3	3.3	3.3	6.7	0.0	3.3	3.3	20.0	6.7	100.
19	16.1	0.0	12.9	3.2	3.2	0.0	6.5	3.2	12.9	0.0	3.2	3.2	9.7	0.0	3.2	16.1	6.5	100.
20	12.9	3.2	6.5	6.5	0.0	3.2	9.7	6.5	9.7	0.0	3.2	0.0	12.9	0.0	3.2	19.4	3.2	100.
21	9.7	6.5	9.7	3.2	6.5	0.0	12.9	0.0	9.7	3.2	3.2	0.0	3.2	12.9	9.7	6.5	3.2	100.
22	3.2	6.5	9.7	6.5	6.5	3.2	6.5	3.2	9.7	0.0	6.5	0.0	3.2	12.9	9.7	6.5	6.5	100.
23	3.2	6.5	6.5	9.7	6.5	0.0	9.7	3.2	6.5	6.5	6.5	0.0	3.2	12.9	9.7	6.5	3.2	100.
24	3.2	12.9	3.2	3.2	9.7	0.0	6.5	3.2	6.5	3.2	9.7	0.0	9.7	3.2	9.7	3.2	12.9	100.
ALL	8.5	7.3	4.8	2.3	3.7	1.9	3.2	4.1	8.3	7.3	6.0	2.7	3.1	4.9	8.2	11.2	6.6	100.

NUMBER OF OBS = 731

B20

WPPD-COOPER STATION 319FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

FEBRUARY

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	16.0	4.0	8.0	0.0	4.0	0.0	0.0	8.0	20.0	12.0	4.0	0.0	0.0	0.0	12.0	8.0	4.0	100.
2	15.4	7.7	3.8	0.0	0.0	3.8	0.0	7.7	11.5	19.2	3.8	0.0	3.8	0.0	3.8	11.5	7.7	100.
3	7.7	15.4	3.8	3.8	0.0	0.0	3.8	3.8	15.4	11.5	3.8	0.0	0.0	3.8	3.8	7.7	15.4	100.
4	15.4	3.8	11.5	3.8	0.0	0.0	3.8	11.5	11.5	19.2	0.0	3.8	0.0	3.8	0.0	3.8	7.7	100.
5	11.5	15.4	3.8	0.0	0.0	0.0	3.8	11.5	19.2	7.7	7.7	0.0	0.0	3.8	3.8	3.8	7.7	100.
6	8.0	12.0	4.0	4.0	0.0	0.0	4.0	12.0	20.0	8.0	4.0	4.0	8.0	0.0	0.0	4.0	8.0	100.
7	4.0	16.0	0.0	0.0	4.0	4.0	4.0	8.0	24.0	4.0	12.0	4.0	0.0	0.0	0.0	8.0	8.0	100.
8	8.0	0.0	8.0	0.0	0.0	8.0	0.0	8.0	20.0	8.0	12.0	4.0	0.0	0.0	0.0	8.0	16.0	100.
9	7.7	7.7	3.8	3.8	0.0	3.8	3.8	7.7	19.2	7.7	15.4	3.8	0.0	0.0	3.8	3.8	7.7	100.
10	11.5	0.0	7.7	0.0	3.8	3.8	3.8	7.7	15.4	11.5	15.4	0.0	0.0	0.0	0.0	7.7	11.5	100.
11	7.7	3.8	3.8	0.0	0.0	7.7	3.8	3.8	23.1	19.2	3.8	3.8	0.0	0.0	0.0	11.5	7.7	100.
12	7.7	3.8	3.8	0.0	0.0	3.8	7.7	3.8	23.1	15.4	3.8	7.7	0.0	0.0	0.0	11.5	7.7	100.
13	15.4	0.0	3.8	0.0	0.0	3.8	7.7	3.8	23.1	15.4	3.8	3.8	0.0	0.0	0.0	7.7	11.5	100.
14	11.5	3.8	0.0	0.0	3.8	3.8	3.8	7.7	11.5	15.2	3.8	0.0	3.8	3.8	3.8	7.7	11.5	100.
15	3.8	7.7	0.0	0.0	3.8	3.8	3.8	3.8	19.2	15.4	3.8	0.0	0.0	3.8	15.4	7.7	7.7	100.
16	3.8	11.5	0.0	0.0	3.8	3.8	7.7	3.8	26.9	3.8	7.7	0.0	0.0	0.0	19.2	3.8	3.8	100.
17	7.7	3.8	3.8	0.0	3.8	0.0	11.5	3.8	19.2	15.4	0.0	0.0	0.0	3.8	11.5	7.7	7.7	100.
18	7.7	7.7	0.0	0.0	7.7	0.0	3.8	15.4	7.7	19.2	0.0	0.0	0.0	3.8	11.5	11.5	3.8	100.
19	8.0	8.0	0.0	0.0	4.0	4.0	12.0	4.0	20.0	12.0	0.0	0.0	0.0	4.0	16.0	8.0	0.0	100.
20	4.0	12.0	0.0	0.0	4.0	4.0	8.0	12.0	20.0	8.0	0.0	0.0	0.0	4.0	12.0	12.0	0.0	100.
21	12.0	8.0	0.0	0.0	4.0	4.0	8.0	4.0	28.0	0.0	8.0	0.0	0.0	4.0	16.0	4.0	0.0	100.
22	8.0	8.0	0.0	4.0	0.0	0.0	8.0	12.0	20.0	8.0	4.0	0.0	0.0	0.0	8.0	16.0	4.0	100.
23	12.0	8.0	0.0	0.0	4.0	0.0	8.0	4.0	20.0	12.0	12.0	0.0	0.0	0.0	8.0	12.0	0.0	100.
24	16.0	4.0	4.0	0.0	0.0	4.0	4.0	12.0	16.0	16.0	8.0	0.0	0.0	0.0	8.0	8.0	0.0	100.
ALL	9.6	7.2	3.1	0.8	2.1	2.8	5.2	7.5	18.9	12.1	5.7	1.5	0.7	1.6	6.5	8.1	6.7	100.

NUMBER OF OBS = 614

B21

APPD-COOPER STATION, 318FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

MARCH

HR. OF DAY	WIND DIRECTION																CALM	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	MNW	NW	NNW		
1	16.7	10.0	0.0	9.0	0.0	10.0	16.7	10.0	10.0	6.7	0.0	0.0	0.0	0.0	13.3	6.7	0.0	100.
2	17.4	9.7	0.0	0.0	3.2	6.5	19.4	9.7	6.5	6.5	0.0	0.0	0.0	0.0	12.9	6.5	0.0	100.
3	22.6	3.2	0.0	0.0	0.0	12.9	9.7	16.1	3.2	6.5	3.2	0.0	0.0	0.0	9.7	9.7	3.2	100.
4	25.8	3.2	0.0	0.0	0.0	6.5	12.9	12.9	9.7	0.0	3.2	0.0	0.0	3.2	6.5	12.9	3.2	100.
5	19.4	0.0	6.5	0.0	0.0	6.5	6.5	12.9	12.9	3.2	3.2	0.0	0.0	0.0	9.7	12.9	6.5	100.
6	10.0	10.0	3.2	0.0	0.0	6.7	13.3	6.7	16.7	6.7	0.0	0.0	0.0	0.0	6.7	16.7	3.3	100.
7	16.7	3.3	3.3	3.3	0.0	3.3	16.7	6.7	16.7	6.7	0.0	0.0	0.0	0.0	6.7	13.3	3.3	100.
8	20.0	3.3	3.3	0.0	3.3	3.3	16.7	3.3	10.0	3.3	10.0	0.0	0.0	0.0	6.7	10.0	6.7	100.
9	20.0	3.3	0.0	0.0	3.3	3.3	13.2	10.0	10.0	3.3	6.7	3.3	0.0	3.3	6.7	10.0	3.3	100.
10	17.2	3.4	0.0	0.0	3.4	10.3	6.9	10.3	10.3	3.4	6.9	0.0	0.0	3.4	10.3	10.3	3.4	100.
11	16.7	6.7	0.0	0.0	3.3	10.0	10.0	10.0	0.0	6.7	3.3	6.7	0.0	6.7	3.3	13.3	3.3	100.
12	10.0	6.7	6.7	0.0	3.3	6.7	10.0	10.0	0.0	10.0	0.0	0.0	0.0	3.3	6.7	10.0	3.3	100.
13	22.0	6.7	0.0	0.0	10.0	0.0	6.7	13.3	6.7	3.3	0.0	0.0	0.0	3.3	6.7	13.3	6.7	100.
14	17.2	3.4	0.0	0.0	3.4	10.3	10.3	6.9	10.3	0.0	0.0	0.0	0.0	3.4	6.9	20.7	6.9	100.
15	23.3	3.3	0.0	0.0	6.7	6.7	13.3	3.3	6.7	6.7	0.0	0.0	0.0	3.3	6.7	16.7	3.3	100.
16	16.7	13.3	0.0	3.3	6.7	6.7	13.3	3.3	10.0	3.3	0.0	0.0	0.0	3.3	6.7	13.3	0.0	100.
17	20.0	3.3	0.0	3.3	3.3	16.7	6.7	3.3	10.0	3.3	0.0	0.0	0.0	3.3	6.7	13.3	6.7	100.
18	20.0	3.3	0.0	6.7	0.0	16.7	10.0	6.7	3.3	3.3	0.0	0.0	0.0	0.0	10.0	13.3	6.7	100.
19	20.0	3.3	3.3	6.7	10.0	13.3	6.7	3.3	6.7	3.3	0.0	0.0	0.0	0.0	6.7	16.7	0.0	100.
20	20.0	6.7	3.2	0.0	10.0	16.7	10.0	3.3	10.0	0.0	0.0	0.0	0.0	0.0	6.7	13.3	0.0	100.
21	16.7	13.3	0.0	3.3	3.3	20.0	6.7	10.0	6.7	0.0	0.0	0.0	0.0	0.0	6.7	13.3	0.0	100.
22	16.7	10.0	3.3	3.3	10.0	10.0	13.3	6.7	10.0	0.0	0.0	0.0	0.0	0.0	6.7	10.0	0.0	100.
23	20.0	16.7	0.0	0.0	6.7	13.3	13.3	6.7	6.7	3.3	0.0	0.0	0.0	0.0	6.7	6.7	0.0	100.
24	15.7	16.7	0.0	0.0	0.0	13.3	13.3	10.0	10.0	3.3	0.0	0.0	0.0	0.0	10.0	6.7	0.0	100.
ALL	19.4	6.8	1.4	1.2	3.7	9.6	11.5	8.2	8.4	3.9	1.5	0.4	0.7	1.2	7.9	12.2	2.9	100.

NUMBER OF OBS = 722

NPPC-COOPER STATION 318FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

APRIL

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	21.4	3.6	14.2	0.0	7.1	0.0	17.9	3.6	3.6	3.6	0.0	0.0	0.0	3.6	17.9	0.0	0.0	100.
2	10.7	7.1	14.3	3.6	0.0	0.0	14.3	7.1	0.0	7.1	0.0	0.0	0.0	3.6	14.3	10.7	3.6	100.
3	19.7	14.3	10.7	0.0	3.6	3.6	14.3	3.6	0.0	7.1	0.0	0.0	0.0	3.6	21.4	3.6	0.0	100.
4	14.3	7.1	10.7	3.6	3.6	0.0	10.7	7.1	3.6	3.6	0.0	0.0	0.0	3.6	0.0	7.1	0.0	100.
5	14.3	14.3	7.1	0.0	3.6	3.6	3.6	10.7	7.1	0.0	0.0	0.0	0.0	3.6	17.9	10.7	0.0	100.
6	6.9	17.2	10.3	0.0	3.4	0.0	10.3	3.4	6.9	3.4	0.0	0.0	0.0	10.3	13.8	13.8	0.0	100.
7	10.3	13.8	13.8	0.0	3.4	0.0	13.8	3.4	3.4	3.4	0.0	0.0	0.0	6.9	17.2	10.3	0.0	100.
8	6.9	10.3	13.8	0.0	6.9	0.0	13.8	3.4	0.0	6.9	0.0	0.0	0.0	0.0	24.1	13.8	0.0	100.
9	7.1	3.6	14.3	0.0	7.1	0.0	14.3	7.1	3.6	0.0	3.6	0.0	0.0	0.0	10.7	21.4	7.1	100.
10	3.6	3.6	14.3	0.0	3.6	3.6	14.3	7.1	3.6	0.0	3.6	0.0	0.0	3.6	3.6	28.6	7.1	100.
11	13.3	3.3	13.3	0.0	3.3	0.0	16.7	13.3	3.3	6.0	3.3	0.0	0.0	0.0	13.3	16.7	0.0	100.
12	13.3	0.0	10.0	10.0	0.0	3.3	13.2	10.0	6.7	0.0	0.0	3.3	0.0	0.0	16.7	13.3	0.0	100.
13	13.3	3.3	6.7	10.0	3.3	3.3	16.7	6.7	3.3	0.0	0.0	0.0	0.0	6.7	10.0	16.7	0.0	100.
14	16.7	2.3	3.3	3.3	10.0	10.0	6.7	3.3	3.3	3.3	3.3	0.0	0.0	3.3	16.7	13.3	0.0	100.
15	16.7	3.3	3.3	10.0	0.0	10.0	10.0	3.3	3.3	3.3	3.3	0.0	0.0	3.3	20.0	10.0	0.0	100.
16	13.3	10.0	0.0	6.7	6.7	6.7	10.0	3.3	3.3	3.3	3.3	0.0	0.0	3.3	16.7	13.3	0.0	100.
17	21.4	0.0	3.6	10.7	3.6	7.1	10.7	0.0	7.1	0.0	0.0	0.0	0.0	3.6	17.9	7.1	3.6	100.
18	20.7	6.9	0.0	10.3	0.0	10.3	10.2	0.0	6.9	0.0	5.9	0.0	0.0	0.0	13.8	10.3	3.4	100.
19	20.7	2.4	10.3	3.4	3.4	10.3	10.2	0.0	6.9	0.0	6.9	3.4	0.0	0.0	17.2	3.4	0.0	100.
20	13.3	3.4	17.2	3.4	3.4	17.2	6.9	3.4	3.4	3.4	0.0	3.4	0.0	0.0	13.8	6.9	0.0	100.
21	14.3	7.1	7.1	10.7	7.1	3.6	7.1	10.7	3.6	3.6	0.0	3.6	0.0	0.0	14.3	7.1	0.0	100.
22	3.6	14.3	10.7	3.6	2.6	3.6	14.2	10.7	0.0	3.6	0.0	3.6	0.0	0.0	7.1	17.9	0.0	100.
23	10.7	10.7	19.3	3.6	0.0	7.1	14.2	3.6	0.0	3.6	0.0	3.6	0.0	0.0	3.6	7.1	3.6	100.
24	17.9	7.1	3.6	3.6	7.1	7.1	17.9	0.0	7.1	0.0	0.0	3.6	0.0	0.0	14.3	7.1	0.0	100.
ALL	13.2	7.1	9.4	4.1	3.9	4.6	12.2	5.2	3.8	2.5	1.4	1.0	0.9	2.8	15.5	11.3	1.2	100.

NUMBER OF OBS = 690

NIPPO-COOPER STATION 318FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983
 HOURLY WIND ROSES (PERCENT)

MAY

HR. OF DAY	WIND DIRECTION																CALC	TOTAL
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW		
1	12.9	3.2	3.2	0.0	3.2	6.5	16.1	12.9	3.2	3.2	6.5	3.2	6.5	3.2	9.7	6.5	0.0	100.
2	12.9	3.2	0.0	3.2	0.0	6.5	12.9	9.7	3.2	6.5	3.2	0.0	3.2	6.5	12.9	3.2	6.5	100.
3	12.9	0.0	3.2	3.2	3.2	6.5	9.7	12.9	6.5	3.2	0.0	0.0	0.0	16.1	16.1	0.0	3.2	100.
4	9.7	0.0	0.0	9.7	0.0	6.5	6.5	19.4	6.5	3.2	0.0	0.0	0.0	6.5	19.4	6.5	3.2	100.
5	6.5	3.2	6.5	0.0	6.5	0.0	12.9	12.9	6.5	3.2	0.0	0.0	0.0	3.2	16.1	3.2	6.5	100.
6	16.1	3.2	6.5	3.2	3.2	9.7	16.1	9.7	3.2	3.2	0.0	0.0	0.0	3.2	16.1	3.2	6.5	100.
7	12.9	6.5	3.2	3.2	0.0	9.7	9.7	6.5	6.5	3.2	0.0	0.0	0.0	9.7	16.1	16.1	6.5	100.
8	16.1	0.0	6.5	0.0	6.5	6.5	6.5	6.5	12.9	3.2	0.0	3.2	0.0	0.0	9.7	16.1	6.5	100.
9	19.4	0.0	3.2	3.2	3.2	9.7	6.5	6.5	12.9	0.0	3.2	0.0	0.0	0.0	9.7	12.9	9.7	100.
10	19.4	0.0	3.2	3.2	3.2	0.0	12.9	6.5	6.5	3.2	3.2	0.0	0.0	0.0	6.5	16.1	6.5	100.
11	16.1	3.2	3.2	0.0	3.2	6.5	3.2	19.4	6.5	0.0	6.5	0.0	0.0	3.2	16.1	12.9	0.0	100.
12	9.7	9.7	0.0	3.2	6.5	3.2	0.0	16.1	12.9	3.2	3.2	0.0	0.0	3.2	6.5	19.4	3.2	100.
13	9.7	12.9	0.0	0.0	6.5	0.0	6.5	6.5	16.1	0.0	6.5	3.2	3.2	3.2	6.5	22.6	0.0	100.
14	12.9	6.5	3.2	6.5	0.0	3.2	6.5	6.5	16.1	3.2	6.5	0.0	3.2	3.2	6.5	16.1	3.2	100.
15	19.4	0.0	0.0	6.5	3.2	6.5	9.7	9.7	6.5	3.2	3.2	6.5	0.0	3.2	12.9	12.9	3.2	100.
16	9.7	6.5	0.0	3.2	6.5	0.0	9.7	9.7	3.2	3.2	6.5	6.5	0.0	9.7	6.5	16.1	3.2	100.
17	19.4	3.2	0.0	6.5	0.0	0.0	5.7	6.5	9.7	3.2	6.5	3.2	3.2	3.2	6.5	12.9	0.0	100.
18	12.9	0.0	9.7	0.0	0.0	3.2	6.5	9.7	6.5	0.0	9.7	3.2	3.2	3.2	12.9	12.9	9.7	100.
19	6.5	12.9	3.2	6.5	0.0	3.2	6.5	9.7	6.5	6.5	3.0	6.5	6.5	0.0	12.9	12.9	0.0	100.
20	16.1	6.5	0.0	3.2	6.5	3.2	6.5	12.9	6.5	0.0	3.2	3.2	3.2	6.5	9.7	3.2	9.7	100.
21	6.5	9.7	0.0	0.0	3.2	6.5	16.1	9.7	3.2	0.0	0.0	3.2	9.7	3.2	9.7	9.7	9.7	100.
22	13.0	6.7	0.0	0.0	0.0	3.3	20.0	10.0	3.3	3.3	0.0	6.7	13.3	3.3	6.7	10.0	3.3	100.
23	16.7	6.7	0.0	0.0	0.0	3.3	13.3	13.3	10.0	0.0	0.0	6.7	16.7	3.3	10.0	0.0	0.0	100.
24	16.7	3.3	3.3	0.0	0.0	3.3	13.3	10.0	6.7	6.7	0.0	3.3	10.0	10.0	6.7	3.3	3.3	100.
ALL	13.4	4.5	2.4	2.6	3.1	3.9	9.4	10.9	7.7	2.8	2.0	3.0	4.0	4.9	10.5	10.8	4.0	100.

NUMBER OF OBS = 741

WPP-COOPER STATION: 118FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

JUNE

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	10.7	3.6	0.0	0.0	0.0	7.1	10.7	28.6	10.7	0.0	7.1	3.6	7.1	7.1	0.0	3.6	0.0	100.
2	10.7	0.0	0.0	0.0	3.6	7.1	7.1	25.0	14.3	0.0	7.1	0.0	3.6	10.7	3.6	0.0	7.1	100.
3	3.5	7.1	3.6	0.0	3.6	0.0	17.9	7.1	25.0	0.0	7.1	0.0	10.7	3.6	0.0	3.6	7.1	100.
4	0.0	0.0	3.6	0.0	0.0	3.6	25.0	7.1	10.7	14.3	3.6	3.6	10.7	3.6	0.0	7.1	7.1	100.
5	3.6	0.0	0.0	3.6	0.0	0.0	7.1	25.0	14.3	10.7	3.6	7.1	10.7	3.6	0.0	7.1	3.6	100.
6	3.6	10.7	0.0	0.0	3.6	0.0	10.7	21.4	17.9	0.0	7.1	7.1	10.7	0.0	3.6	3.6	3.6	100.
7	7.1	0.0	0.0	0.0	0.0	14.3	7.1	25.0	14.3	0.0	7.1	0.0	14.3	0.0	3.6	3.6	3.6	100.
8	7.4	0.0	0.0	0.0	0.0	14.8	14.8	14.8	29.6	7.4	11.1	0.0	7.4	0.0	3.7	3.7	7.4	100.
9	7.4	0.0	0.0	0.0	0.0	7.4	14.8	14.8	33.3	7.4	11.1	0.0	7.4	0.0	3.7	0.0	7.4	100.
10	3.7	0.0	0.0	0.0	3.7	3.7	11.1	11.1	25.9	11.1	7.4	3.7	7.4	3.7	3.7	3.7	3.7	100.
11	3.7	0.0	0.0	0.0	0.0	0.0	14.8	14.8	25.9	7.4	7.4	3.7	7.4	3.7	3.7	3.7	3.7	100.
12	3.7	0.3	0.3	0.0	0.0	0.0	18.5	11.1	25.9	7.4	3.7	7.4	7.4	7.4	3.7	3.7	0.0	100.
13	3.7	0.0	0.0	0.0	0.0	0.0	7.4	18.5	22.2	14.8	11.1	0.0	3.7	14.8	0.0	3.7	0.0	100.
14	0.0	0.0	0.0	0.0	3.6	0.0	7.1	17.9	21.4	14.3	3.6	3.6	3.6	14.3	0.0	7.1	3.6	100.
15	3.0	7.7	0.0	0.3	7.4	0.0	7.4	22.2	11.1	11.1	11.1	0.0	3.7	14.8	0.0	7.4	0.0	100.
16	3.6	0.0	3.6	0.0	7.1	0.0	7.1	25.0	14.3	10.7	7.1	0.0	7.1	0.0	7.1	7.1	0.0	100.
17	6.9	0.0	3.4	0.0	3.4	3.4	10.3	13.8	20.7	17.2	3.4	3.4	0.0	3.4	3.4	6.9	0.0	100.
18	3.4	3.4	0.0	3.4	0.0	6.3	0.0	24.1	31.0	3.4	3.4	6.9	0.0	0.0	10.3	3.4	0.0	100.
19	3.4	0.0	3.4	0.0	6.9	3.4	10.3	24.1	13.8	6.9	10.3	0.0	0.0	0.0	3.4	10.3	3.4	100.
20	10.3	0.0	3.4	0.0	3.4	3.4	17.2	27.6	13.8	0.0	6.9	0.0	3.4	0.0	3.4	3.4	3.4	100.
21	6.9	3.4	3.4	0.0	0.0	6.9	17.2	27.6	10.3	6.9	6.9	3.4	0.0	0.0	0.0	6.9	0.0	100.
22	6.9	0.0	0.0	3.4	0.0	0.0	20.7	24.1	13.8	6.3	3.4	3.4	6.9	0.0	3.4	6.9	0.0	100.
23	7.1	3.6	0.0	3.6	3.6	3.6	7.1	25.0	14.3	10.7	3.6	0.0	0.0	0.0	3.6	7.1	7.1	100.
24	14.3	0.0	0.0	0.0	3.6	0.0	14.3	21.4	10.7	7.1	10.7	0.0	0.0	3.6	0.0	3.6	10.7	100.
ALL	5.5	1.5	1.0	0.6	2.2	2.7	11.6	20.0	18.5	7.2	6.5	2.4	5.1	3.7	2.8	4.9	3.4	100.

NUMBER OF OBS = 671

NPPC-COOPER STATION 318FT WIND DIRECTION PERSISTENCE JANUARY-JUNE, 1983

HOURLY WIND ROSES (PERCENT)

SEMI-ANNUAL

WIND DIRECTION

HR. OF DAY	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
1	13.3	6.4	4.0	1.2	2.9	4.0	11.6	11.0	8.7	4.6	4.6	2.3	3.5	4.6	9.8	4.6	2.9	100.
2	13.7	5.7	2.9	1.7	1.7	4.6	10.3	10.3	6.9	8.0	2.9	1.7	3.4	4.6	9.7	5.7	6.3	100.
3	19.9	8.0	3.4	1.7	2.3	4.6	10.3	8.0	8.6	6.3	4.0	1.1	3.4	6.3	9.7	5.1	5.7	100.
4	12.0	3.4	5.1	2.9	1.1	2.9	10.9	10.3	8.0	9.1	1.7	2.3	4.6	3.4	10.9	7.4	4.0	100.
5	10.9	5.7	5.7	0.6	2.9	1.7	7.4	12.6	12.0	5.7	3.4	1.1	4.0	3.4	10.3	8.6	4.0	100.
6	8.7	9.8	5.2	0.6	3.5	1.7	9.2	11.0	11.6	5.8	3.5	1.7	3.5	3.5	9.2	8.1	3.5	100.
7	9.8	6.9	4.6	1.2	1.7	5.8	9.8	10.4	10.4	5.2	5.2	1.2	2.3	2.3	8.7	11.0	3.5	100.
8	11.6	4.7	5.2	0.0	3.5	3.5	10.5	7.0	12.2	5.2	6.4	2.3	1.2	0.6	9.3	10.5	6.4	100.
9	12.2	3.5	4.7	1.2	2.3	4.1	8.7	9.3	13.4	4.7	7.0	1.7	1.7	2.3	7.6	9.3	6.4	100.
10	11.1	2.9	4.1	1.2	4.1	4.1	10.5	7.6	11.7	5.9	7.0	0.6	1.2	1.8	6.4	14.0	5.8	100.
11	12.6	4.6	3.4	0.0	2.3	4.0	10.9	10.9	10.9	6.3	5.2	2.3	1.1	2.9	6.9	12.1	3.4	100.
12	9.8	4.5	4.0	2.3	1.7	2.9	10.9	9.2	13.2	6.9	2.9	2.9	1.7	2.9	7.5	13.2	3.4	100.
13	12.1	4.0	2.9	1.7	3.4	1.7	9.2	9.8	13.2	6.3	3.4	1.7	1.1	4.6	4.6	14.4	5.2	100.
14	10.9	4.6	1.1	1.7	4.0	4.6	8.0	6.9	12.1	7.5	3.4	1.1	2.3	4.0	6.9	13.8	6.9	100.
15	11.5	4.6	1.1	2.9	4.0	4.6	8.6	6.9	9.8	7.5	4.0	1.7	1.1	4.6	9.8	12.1	5.2	100.
16	8.6	8.6	2.3	2.3	5.7	3.4	9.7	7.4	10.9	5.7	4.6	2.3	1.1	3.4	10.9	12.0	1.1	100.
17	14.9	2.9	2.3	4.0	2.9	5.2	9.2	5.7	12.6	7.5	2.3	1.7	1.1	4.6	8.6	10.9	3.4	100.
18	12.6	4.6	2.3	4.0	2.3	6.3	6.3	9.7	11.4	4.6	2.3	4.0	0.6	1.7	10.3	12.0	5.1	100.
19	12.6	4.6	5.7	3.4	4.6	5.7	8.6	7.4	10.9	4.6	3.4	2.3	2.9	0.6	9.7	11.4	1.7	100.
20	13.1	5.1	5.1	2.3	4.6	8.0	9.7	10.9	10.3	1.7	2.3	1.1	3.4	1.7	8.0	9.7	2.9	100.
21	10.9	8.0	3.4	2.9	4.0	6.9	11.5	10.3	9.8	2.3	2.9	1.7	2.3	3.4	9.2	8.0	2.3	100.
22	8.1	7.5	4.0	3.5	3.5	3.5	13.9	11.0	9.2	3.5	2.3	2.3	4.0	3.5	6.9	11.0	2.3	100.
23	11.6	8.7	3.5	2.9	3.5	4.7	11.0	9.3	9.3	5.9	3.5	1.7	3.5	3.5	8.7	6.4	2.3	100.
24	14.0	7.6	2.3	1.2	3.5	4.7	11.6	9.3	9.3	5.9	4.7	1.2	3.5	3.5	8.1	5.2	4.7	100.
ALL	11.6	5.7	3.7	2.0	3.2	4.3	9.5	9.3	10.7	5.7	3.9	1.8	2.4	3.2	8.7	9.9	4.1	100.

NUMBER OF OBS = 4169

B26

Precipitation

YR	MON	DAY	14M 1PM	24M 2PM	34M 3PM	44M 4PM	54M 5PM	64M 6PM	74M 7PM	84M 8PM	94M 9PM	104M 10PM	114M 11PM	124M 12MONT	TOTAL
83	1	1	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
83	1	2	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
83	1	3	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
83	1	4	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
83	1	5	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
83	1	6	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
83	1	7	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
83	1	8	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
83	1	9	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
83	1	10	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
83	1	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
83	1	12	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
83	1	13	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
83	1	14	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
83	1	15	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
83	1	16	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
83	1	17	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

MPD - COOPER STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION # 2P

MONTH OF JANUARY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 18
TOTAL HOURS OF PRECIPITATION - 13
TOTAL DAYS WITH PRECIPITATION - 5
TOTAL AMOUNT OF PRECIPITATION - 0.18 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 0.02 INCHES
MAXIMUM DAILY PRECIPITATION - 0.07 INCHES
1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 29 HOUR 8 - 0.02 INCHES
5 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - 0.07 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - 0.07 INCHES
19 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - 0.07 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 1 - 0.07 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES
MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)			
	1	6	12	18
0.31	13	43	72	24
0.02	5	28	51	120
0.03	3	16	37	67
0.04	3	11	24	73
0.05	0	5	15	42
0.07	0	2	8	51
0.10	0	0	0	20
0.15	0	0	0	0
0.23	0	0	0	0
0.25	0	0	0	0
0.30	0	0	0	0
0.35	0	0	0	0
0.40	0	0	0	0
0.45	0	0	0	0
0.50	0	0	0	0
0.60	0	0	0	0
0.70	0	0	0	0
0.80	0	0	0	0
0.90	0	0	0	0
1.00	0	0	0	0
1.10	0	0	0	0
1.20	0	0	0	0
1.30	0	0	0	0
1.40	0	0	0	0
1.50	0	0	0	0
1.60	0	0	0	0
1.70	0	0	0	0
1.80	0	0	0	0
1.90	0	0	0	0
2.00	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

WPC - COOP - R STATION PRECIPITATION DATA FOR JANUARY-JUNE 1973

PAIN VERSION # 2P

YR	MO	DAY	1M 1PM	2M 2PM	3M 3PM	4M 4PM	5M 5PM	6M 6PM	7M 7PM	8M 8PM	9M 9PM	10M 10PM	11M 11PM	12M 12MONT	TOTAL
P3	2	1	0.00 0.07	0.00 0.04	0.00 0.02	0.00 0.03	0.00 0.03	0.00 0.01	0.03 0.03	0.04 0.01	0.04 0.00	0.10 0.00	0.13 0.01	0.08 0.00	0.67
P3	2	2	0.00 0.00	0.00 0.03	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01
P3	2	3	0.00 0.00	0.01 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
H3	2	4	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
P3	2	5	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
H3	2	6	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
G3	2	7	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
H3	2	8	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
H3	2	9	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
G3	2	10	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
H3	2	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	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
H3	2	12	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
H3	2	13	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
H3	2	14	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
H3	2	15	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
H3	2	16	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
H3	2	17	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

00
04
13

RAIN VERSION # 2P

WPO - COOP-1R STATION PRECIPITATION DATA FOR JANUARY-JUNE 1963

YR	MO	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MONT	TOTAL
63	2	19	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
63	2	19	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
63	2	20	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
63	2	21	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
63	2	22	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
63	2	23	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
63	2	24	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
63	2	25	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
63	2	26	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
63	2	27	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
63	2	28	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

NPPD - COOPER STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION # 2P

MONTH OF FEBRUARY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 672
NUMBER OF MISSING HOURS - 6
TOTAL HOURS OF PRECIPITATION - 16
TOTAL DAYS WITH PRECIPITATION - 2
TOTAL AMOUNT OF PRECIPITATION - 0.68 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 0.13 INCHES
MAXIMUM DAILY PRECIPITATION - 0.67 INCHES
1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 11 - 0.13 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 9 - 0.46 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 8 - 0.62 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 7 - 0.67 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 1 HOUR 7 - 0.67 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES
MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

MONTH OF FEBRUARY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	16	28	32	32	24
0.02	12	19	23	23	32
0.03	11	18	19	20	23
0.04	7	17	19	19	20
0.05	4	17	19	19	19
0.07	4	15	17	18	18
0.10	2	13	16	17	17
0.15	0	10	14	15	15
0.20	0	9	13	13	15
0.25	0	7	13	13	13
0.30	0	6	12	12	12
0.35	0	5	11	11	11
0.40	0	4	11	11	11
0.45	0	2	10	11	11
0.50	0	0	8	10	11
0.60	0	0	3	9	10
0.70	0	0	0	9	10
0.80	0	0	0	0	9
0.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

EMPHASIS INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

WPC - COOP. R. STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION # 2P

YR	MCA	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12M 12MONT	TOTAL
83	3	1	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
83	3	2	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
83	3	3	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
83	3	4	0.01 0.00	0.01 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.06	0.00 0.02	0.00 0.09	0.00 0.01	0.00 0.00	0.00 0.01	0.21
83	3	5	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	0.09
83	3	6	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
83	3	7	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
83	3	8	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
83	3	9	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
83	3	10	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
83	3	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	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
83	3	12	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
83	3	13	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
83	3	14	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
83	3	15	0.00 0.00	0.00 0.00	0.00 0.00	0.17 0.00	0.04 0.00	0.00 0.00	0.00 0.05	0.00 0.01	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.27
83	3	16	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
83	3	17	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

NPPD - COOPER STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION # 2P

YR	MCN	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MONT	TOTAL
83	3	18	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
83	3	19	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
83	3	20	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
83	3	21	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
83	3	22	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
83	3	23	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
83	3	24	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
83	3	25	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
83	3	26	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
83	3	27	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
83	3	29	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
83	3	29	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
83	3	30	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
83	3	31	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

NPPD - COGPER STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION # 2P

MONTH OF MARCH

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
NUMBER OF MISSING HOURS - 4
TOTAL HOURS OF PRECIPITATION - 24
TOTAL DAYS WITH PRECIPITATION - 6
TOTAL AMOUNT OF PRECIPITATION - 1.03 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 0.17 INCHES
MAXIMUM DAILY PRECIPITATION - 0.40 INCHES
1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 15 HOUR 4 - 0.17 INCHES
6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 19 - 0.33 INCHES
12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 17 - 0.45 INCHES
18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 17 - 0.45 INCHES
24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 26 HOUR 17 - 0.45 INCHES

B58

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
NUMBER OF MISSING HOURS - 0
TOTAL HOURS OF PRECIPITATION - 0
TOTAL DAYS WITH PRECIPITATION - 0
TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES
MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES
MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

MONTH OF MARCH

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)			
	1	6	12	24
0.01	24	58	94	24
0.02	17	48	78	149
0.03	16	42	67	122
0.04	14	42	67	105
0.05	8	39	65	105
0.07	3	30	50	104
0.10	2	24	44	88
0.15	1	20	40	82
0.20	0	12	29	76
0.25	0	5	13	69
0.30	0	2	9	46
0.35	0	0	7	21
0.40	0	0	6	19
0.45	0	0	3	16
0.50	0	0	0	15
0.50	0	0	0	0
0.70	0	0	0	0
0.80	0	0	0	0
0.90	0	0	0	0
1.00	0	0	0	0
1.10	0	0	0	0
1.20	0	0	0	0
1.33	0	0	0	0
1.40	0	0	0	0
1.53	0	0	0	0
1.60	0	0	0	0
1.70	0	0	0	0
1.82	0	0	0	0
1.90	0	0	0	0
2.03	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPPD - COOPER STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION # 2P

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MONT	TOTAL
83	4	1	0.00 0.00	0.00 0.00	0.01 0.00	0.00 0.00	0.02 0.00	0.00 0.00	0.02 0.00	0.00 0.00	0.00 0.00	0.01 0.00	0.00 0.00	0.00 0.00	0.06
83	4	2	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
83	4	3	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
83	4	4	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
83	4	5	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.01 0.01	0.02 0.00	0.00 0.00	0.00 0.00	0.02 0.00	0.01 0.00	0.00 0.00	0.09
83	4	6	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
83	4	7	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
83	4	8	0.00 0.00	0.00 0.02	0.00 0.03	0.00 0.03	0.00 0.00	0.00 0.02	0.00 0.02	0.00 0.01	0.00 0.00	0.00 0.01	0.00 0.01	0.00 0.00	0.15
83	4	9	0.00 0.00	0.00 0.01	0.00 0.00	0.01 0.00	0.00 0.00	0.00 0.01	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.03
83	4	10	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
83	4	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	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
83	4	12	0.00 0.00	0.00 0.00	0.21 0.00	0.06 0.00	0.01 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	0.31
83	4	13	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
83	4	14	0.01 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	0.01
83	4	15	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	0.01 0.00	0.01 0.00	0.17 0.00	0.00 0.00	0.19
83	4	16	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
83	4	17	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

YR	MN	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MDNT	TOTAL
83	4	18	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
83	4	19	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
83	4	20	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
83	4	21	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
83	4	22	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
83	4	23	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
83	4	24	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
83	4	25	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
83	4	26	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
83	4	27	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
83	4	28	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
83	4	29	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
83	4	30	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

MONTH OF APRIL

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
 NUMBER OF MISSING HOURS - 2
 TOTAL HOURS OF PRECIPITATION - 35
 TOTAL DAYS WITH PRECIPITATION - 8
 TOTAL AMOUNT OF PRECIPITATION - 1.06 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.21 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.31 INCHES
 1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 3 - 0.21 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 2 - 0.31 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 2 - 0.31 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 2 - 0.31 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 12 HOUR 2 - 0.31 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 25
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 1
 TOTAL DAYS WITH PRECIPITATION - 1
 TOTAL AMOUNT OF PRECIPITATION - 0.01 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.01 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.01 INCHES

B42

MONTH OF APRIL

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	1	6	DURATION (HOURS)	18	24
0.01	35	96	12	172	208
0.02	18	67	135	141	171
0.03	10	59	106	128	159
0.04	7	43	93	111	142
0.05	6	42	77	107	140
0.07	2	28	55	85	116
0.10	2	21	47	71	95
0.15	2	16	38	62	87
0.20	1	6	17	29	41
0.25	0	5	11	17	23
0.30	0	4	10	16	22
0.35	0	0	0	0	0
0.40	0	0	0	0	0
0.45	0	0	0	0	0
0.50	0	0	0	0	0
0.60	0	0	0	0	0
0.70	0	0	0	0	0
0.83	0	0	0	0	0
0.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

YIPPO - COOPER STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION N 2P

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MONT	TOTAL
83	5	1	0.00 0.00	0.00 0.03	0.00 0.01	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	0.04
83	5	2	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 0.02	0.00 0.02	0.00 0.06	0.10
83	5	3	0.06 0.00	0.03 0.00	0.01 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	0.10
83	5	4	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
83	5	5	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
83	5	5	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.01	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	0.01
83	5	7	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
83	5	9	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
83	5	9	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
83	5	13	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
83	5	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	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
83	5	12	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
83	5	13	0.00 0.00	0.00 0.00	0.02 0.00	0.10 0.00	0.02 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.01	0.00 0.04	0.00 0.05	0.00 0.05	0.29
83	5	14	0.06 0.00	0.10 0.00	0.05 0.00	0.00 0.03	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	0.24
83	5	15	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
83	5	16	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
83	5	17	0.00 0.00	0.00 0.00	0.00 0.00	0.05 0.00	0.07 0.00	0.06 0.00	0.02 0.00	0.01 0.00	0.00 0.00	0.01 0.00	0.00 0.00	0.00 0.01	0.23

YR	MON	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12N 12MNT	TOTAL
83	5	19	0.00 0.01	0.00 0.02	0.00 0.01	0.00 0.01	0.00 0.12	0.00 0.03	0.00 0.00	0.05 0.01	0.02 0.01	0.00 0.00	0.00 0.00	0.00 0.00	0.29
83	5	19	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
83	5	20	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
83	5	21	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
83	5	22	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
83	5	23	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
83	5	24	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
83	5	25	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
83	5	26	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
83	5	27	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
83	5	28	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.04	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.04
83	5	29	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
83	5	30	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
83	5	31	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

MONTH OF MAY

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 744
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 39
 TOTAL DAYS WITH PRECIPITATION - 9
 TOTAL AMOUNT OF PRECIPITATION - 1.34 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.12 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.29 INCHES
 1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 18 HOUR 17 - 0.12 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 22 - 0.35 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 21 - 0.36 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 21 - 0.36 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 13 HOUR 4 - 0.48 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 0
 TOTAL DAYS WITH PRECIPITATION - 0
 TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

B46

MONTH OF MAY

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	1	6	DURATION (HOURS)	19	24
0.01	38	93	12	18	24
0.02	26	75	149	188	218
0.03	19	65	123	163	191
0.04	15	62	117	157	187
0.05	13	47	104	143	173
0.07	4	40	78	109	133
0.10	3	35	73	105	130
0.15	0	24	68	98	123
0.20	0	11	48	72	99
0.25	0	4	37	61	87
0.30	0	3	12	25	39
0.35	0	1	9	15	25
0.40	0	0	7	13	21
0.45	0	0	0	0	2
0.50	0	0	0	0	2
0.50	0	0	0	0	0
0.70	0	0	0	0	0
0.80	0	0	0	0	0
0.90	0	0	0	0	0
1.00	0	0	0	0	0
1.10	0	0	0	0	0
1.20	0	0	0	0	0
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

NPP3 - COOPER STATION PRECIPITATION DATA FOR JANUARY-JUNE 1983

RAIN VERSION # 2P

TR	MCN	DAY	1AM 1PM	2AM 2PM	3AM 3PM	4AM 4PM	5AM 5PM	6AM 6PM	7AM 7PM	8AM 8PM	9AM 9PM	10AM 10PM	11AM 11PM	12M 12MONT	TOTAL
83	6	1	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
83	6	2	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
83	6	3	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
83	6	4	0.00 0.10	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	0.10
83	6	5	0.04 0.00	0.05 0.00	0.03 0.00	0.02 0.00	0.02 0.00	0.14 0.00	0.19 0.00	0.03 0.00	0.04 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.56
83	6	6	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
83	6	7	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
83	6	8	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
83	6	9	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
83	6	10	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
83	6	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	0.04 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00
83	6	12	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
83	6	13	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.10	0.00 0.00	0.00 0.07	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.53
83	6	14	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
83	6	15	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
83	6	16	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
83	6	17	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	0.76

TR	HCH	DAY	1AM	2PM	3PM	4AM	5AM	6AM	7AM	8AM	9AM	10AM	11AM	12N	TOTAL
83	6	18	9.99	0.20	9.99	9.99	3.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.48
83	6	19	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	20	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	21	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	22	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	23	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	24	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	25	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	26	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	27	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	28	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00
83	6	29	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.07
83	6	29	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.33
83	6	30	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	9.99	0.00

B7D

MONTH OF JUNE

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 720
 NUMBER OF MISSING HOURS - 235
 TOTAL HOURS OF PRECIPITATION - 24
 TOTAL DAYS WITH PRECIPITATION - 8
 TOTAL AMOUNT OF PRECIPITATION - 2.97 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.37 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.76 INCHES
 1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 17 HOUR 24 - 0.37 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 17 HOUR 22 - 1.24 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 17 HOUR 22 - 1.24 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 17 HOUR 22 - 1.24 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS DAY 17 HOUR 22 - 1.24 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 0
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 0
 TOTAL DAYS WITH PRECIPITATION - 0
 TOTAL AMOUNT OF PRECIPITATION - 0.00 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.00 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.00 INCHES

BS0

MONTH OF JUNE

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

AMOUNT INCHES	DURATION (HOURS)		
	1	6	12
0.01	24	61	18
0.02	21	57	131
0.03	19	98	128
0.04	17	56	127
0.05	14	56	127
0.07	12	48	108
0.10	10	44	108
0.15	7	38	94
0.20	5	29	80
0.25	5	27	104
0.30	4	27	78
0.35	2	26	102
0.40	0	19	100
0.45	0	18	74
0.50	0	13	98
0.60	0	10	87
0.70	0	6	82
0.80	0	6	68
0.90	0	5	65
1.00	0	4	29
1.10	0	4	18
1.20	0	3	24
1.30	0	2	23
1.40	0	2	22
1.50	0	0	22
1.60	0	0	21
1.70	0	0	20
1.80	0	0	0
1.90	0	0	0
2.00	0	0	0

ENTRIES INDICATE NUMBER OF DURATION PERIODS WITH RAINFALL GREATER THAN OR EQUAL TO AMOUNT SHOWN

FOR ALL TEMPERATURES

TOTAL NUMBER OF HOURS - 4344
 NUMBER OF MISSING HOURS - 265
 TOTAL HOURS OF PRECIPITATION - 150
 TOTAL DAYS WITH PRECIPITATION - 38
 TOTAL AMOUNT OF PRECIPITATION - 7.16 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.37 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.76 INCHES
 1 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 17 HOUR 24 - 0.37 INCHES
 6 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 17 HOUR 22 - 1.24 INCHES
 12 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 17 HOUR 22 - 1.24 INCHES
 18 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 17 HOUR 22 - 1.24 INCHES
 24 HOUR PERIOD IN MONTH WITH GREATEST AMOUNT PRECIPITATION STARTS MONTH 6 DAY 17 HOUR 22 - 1.24 INCHES

FOR TEMPERATURES LESS THAN OR EQUAL TO 32 DEGREES

TOTAL NUMBER OF HOURS - 25
 NUMBER OF MISSING HOURS - 0
 TOTAL HOURS OF PRECIPITATION - 1
 TOTAL DAYS WITH PRECIPITATION - 1
 TOTAL AMOUNT OF PRECIPITATION - 0.01 INCHES
 MAXIMUM 1-HOUR PRECIPITATION - 0.01 INCHES
 MAXIMUM DAILY PRECIPITATION - 0.01 INCHES

PRECIPITATION INTENSITY - DURATION
(NUMBER OF OCCURRENCES)

BS3

AMOUNT INCHES	DURATION (HOURS)				
	1	6	12	18	24
0.01	158	382	598	774	936
0.12	99	295	491	656	798
0.23	75	261	442	602	747
0.04	60	231	379	553	698
0.05	45	198	346	483	612
0.07	25	157	288	410	520
0.10	19	131	246	352	450
0.15	10	99	175	295	395
0.20	6	65	149	236	326
0.25	5	48	101	166	234
0.30	4	41	71	139	191
0.35	2	25	63	106	150
0.40	0	22	53	87	125
0.45	0	15	45	75	107
0.50	0	10	36	60	85
0.60	0	6	15	28	45
0.70	0	6	12	18	24
0.80	0	5	11	17	23
0.90	0	4	10	16	22
1.00	0	4	10	16	22
1.10	0	3	9	15	21
1.20	0	2	9	14	20
1.30	0	0	0	0	0
1.40	0	0	0	0	0
1.50	0	0	0	0	0
1.60	0	0	0	0	0
1.70	0	0	0	0	0
1.80	0	0	0	0	0
1.90	0	0	0	0	0
2.00	0	0	0	0	0

JOINT FREQUENCY DISTRIBUTION TABLES

The tables presented in this section are results obtained from processing of the hourly meteorological data collected at the Cooper Nuclear Station. The joint frequency distribution (JFD) tables represent the frequency of occurrence, in number of observations, that a particular wind speed and wind direction occurred simultaneously. On a quarterly and semi-annual basis, the JFDs were produced for: wind speed and wind direction for all stability categories; wind speed and wind direction by atmospheric stability corresponding to the seven Pasquill stability classes. Atmospheric stability was classified using 318-foot to 35-foot delta T per Regulatory Guide 1.23.

JFDs of 35-Foot Wind vs. Delta T,
January-March 1983

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'--35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	1	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7.51-12.50	20	9	0	0	0	0	0	0	0	0	0	0	1	0	1	12	43
12.51-18.50	15	1	0	0	0	0	0	2	2	1	0	0	0	0	12	9	40
18.51-24.00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	11
24.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
TOTAL	40	12	0	0	0	1	1	2	1	1	0	0	1	0	13	33	104

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
3.51-7.50	0	2	0	0	1	2	0	0	0	0	0	0	0	0	2	1	3
7.51-12.50	29	7	2	0	0	1	0	0	2	5	1	1	3	2	1	1	8
12.51-18.50	12	6	0	0	0	0	0	0	2	3	0	0	0	0	6	4	33
18.51-24.00	5	0	0	0	0	0	0	1	0	3	0	0	0	0	0	10	19
24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTAL	47	15	3	0	1	3	0	1	4	11	1	1	3	2	10	17	119

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-MARCH 1983

SITE IDENTIFIER: NPCS1

DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01-3.50	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3.51-7.50	6	3	3	0	0	8	5	0	1	0	0	1	0	0	1	2	30
7.51-12.50	32	17	1	0	0	1	3	5	4	3	2	0	0	1	11	6	86
12.51-18.50	19	16	0	0	0	0	0	0	3	3	6	2	0	0	7	8	64
18.51-24.00	8	1	0	0	0	0	0	0	0	1	0	0	0	0	0	3	13
>24.00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	67	38	4	0	0	9	8	5	8	7	8	3	0	1	19	19	196

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	9
1.01-3.50	5	7	20	12	6	2	9	4	5	1	1	6	5	3	4	1	91
3.51-7.50	51	45	34	14	20	41	32	29	20	22	8	5	3	8	40	22	394
7.51-12.50	24	47	16	1	5	11	75	36	53	48	28	9	2	1	23	20	399
12.51-18.50	12	9	0	0	0	3	11	8	19	27	11	2	4	1	5	14	126
18.51-24.00	4	0	0	0	0	0	2	0	0	1	1	0	1	0	14	18	41
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4
TOTAL	96	108	70	27	31	57	129	77	97	99	49	22	15	13	87	78	1064

PROGRAM: JFD VERSION: 5P

NFPD-COOPER STATION LTD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPCS1
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	8	8	5	1	4	1	10	11	7	7	1	2	1	1	0	1	4
3.51-7.50	8	12	10	3	2	6	5	21	31	18	5	2	5	4	0	1	68
7.51-12.50	0	0	0	2	0	0	10	13	30	19	8	0	4	3	4	0	133
12.51-18.50	0	0	0	0	0	0	1	0	5	2	0	2	1	5	4	0	93
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	16	20	15	6	6	7	26	45	73	46	14	6	11	13	8	2	318

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	4	1	0	0	1	3	10	16	7	1	0	0	2	0	0	1	48
3.51-7.50	0	1	0	0	0	0	7	11	10	7	0	0	1	0	0	0	37
7.51-12.50	0	0	0	0	0	0	0	0	2	1	1	1	1	1	0	0	7
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	2	0	0	1	5	17	27	19	9	1	1	6	2	0	1	103

PROGRAM: JFD VERSION: 5P

MPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'--35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPFC51
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	
1 01- 3 50	1	4	1	1	0	1	5	8	11	1	0	0	0	0	0	0	0	33
3 51- 7 50	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	5
7 51-12 50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 51-18 50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18 51-24 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24 00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	4	1	1	0	1	5	8	15	2	0	0	0	0	0	0	0	46

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1 01- 3 50	20	21	27	14	11	9	34	39	30	10	2	8	8	4	5	3	245
3 51- 7 50	66	65	47	17	23	57	50	62	66	48	13	8	9	12	43	26	612
7 51-12 50	105	80	19	3	5	13	88	54	91	76	40	11	11	8	40	39	683
12 51-18 50	58	32	0	0	0	3	12	8	31	36	17	6	7	7	34	35	286
18 51-24 00	20	1	0	0	0	0	2	1	0	5	1	0	1	0	14	39	84
>24 00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	11
TOTAL	271	199	93	34	39	62	186	164	218	175	73	33	36	31	137	150	1950

MFD-COOPER STATION JFD: 35FT WIND VS DELTA T (318-35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2160
 TOTAL NUMBER OF VALID OBSERVATIONS: 1950
 TOTAL NUMBER OF MISSING OBSERVATIONS: 210
 PERCENT DATA RECOVERY FOR THIS PERIOD: 70.31
 MEAN WIND SPEED FOR THIS PERIOD: 6.7 MPH
 TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
3.33	6.10	10.05	54.56	16.31	5.28	2.36

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	40	12	0	0	0	1	1	1	2	1	0	0	1	0	13	33	0
B	47	15	3	0	1	3	0	1	4	11	1	1	3	2	10	17	0
C	67	38	4	0	0	9	8	5	8	7	8	3	0	1	19	19	0
D	96	108	70	27	31	57	129	77	97	99	49	22	15	13	87	78	9
E	16	20	15	6	6	7	26	45	73	46	14	6	11	13	8	2	4
F	4	2	0	0	1	5	17	27	19	9	1	1	6	2	0	1	8
G	1	4	1	1	0	1	5	8	15	2	0	0	0	0	0	0	6
TOTAL	271	199	93	34	39	82	186	164	218	175	73	33	36	71	137	150	29

JFDs of 35-Foot Wind vs. Delta T,
April-June 1983

*** * NUS CORPORATION - ENVIRONMENTAL SERVICES * ***
 PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	8	3	1	4	3	4	0	0	0	1	1	0	0	3	1	1	30
7.51-12.50	23	9	0	1	0	0	0	0	1	0	0	1	1	2	9	8	55
12.51-18.50	18	0	0	0	0	0	0	0	4	0	0	0	1	1	10	8	42
18.51-24.00	1	0	0	0	0	0	0	1	9	1	2	0	0	0	1	6	21
>24.00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	5	1	8
TOTAL	50	12	1	9	3	4	0	1	15	3	3	1	2	6	26	24	156

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	3	1	0	1	0	5	0	0	2	1	1	1	1	1	1	0	18
7.51-12.50	10	1	0	0	1	1	0	1	2	0	1	3	1	2	6	3	31
12.51-18.50	2	1	0	0	0	0	0	0	4	2	3	1	1	1	3	7	25
18.51-24.00	1	0	0	0	0	0	0	0	7	4	0	0	0	0	3	0	15
>24.00	3	0	0	0	0	0	0	0	2	1	2	0	0	0	1	0	9
TOTAL	19	3	0	1	1	6	0	1	17	8	7	5	2	4	14	10	98

*** * NUS CORPORATION - ENVIRONMENTAL SERVICES * ***

PROGRAM: JFD VERSION: 5P

MPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPCS1
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	1	0	0	2	2	3	3	5	2	1	0	0	1	2	2	1	23
7.51-12.50	15	2	6	4	2	2	2	5	9	1	3	1	1	1	5	6	65
12.51-18.50	5	1	0	1	0	1	0	5	14	5	8	1	1	0	10	9	61
18.51-24.00	5	0	0	0	0	0	0	2	1	1	0	0	0	0	0	3	12
>24.00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
TOTAL	29	3	6	6	4	5	5	15	27	8	12	2	3	3	17	20	165

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.01-3.50	2	4	4	6	4	6	2	2	1	2	1	0	0	1	1	3	39
3.51-7.50	27	38	21	14	16	27	36	31	26	15	11	2	5	5	6	6	286
7.51-12.50	33	41	18	9	5	9	44	42	42	8	9	4	2	7	14	10	297
12.51-18.50	6	6	0	0	1	4	26	13	35	13	3	7	4	4	24	8	154
18.51-24.00	7	1	0	0	0	0	5	0	9	5	3	8	3	6	10	3	60
>24.00	12	0	0	0	0	0	0	1	1	0	1	1	1	0	8	2	27
TOTAL	87	90	43	29	26	46	113	89	114	43	28	22	15	23	63	32	863

PROGRAM: JFD VERSION: 5P
 NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPCS1
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
1.01-3.50	7	14	6	5	8	8	6	13	10	1	3	1	0	0	0	2	84
3.51-7.50	31	9	5	8	5	9	45	28	19	6	7	3	5	0	6	12	198
7.51-12.50	3	3	0	0	1	3	16	26	16	4	8	2	1	9	15	2	109
12.51-18.50	0	0	0	0	0	1	2	10	2	6	1	0	1	0	2	0	25
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	41	26	11	13	14	21	69	69	55	17	19	7	7	9	23	17	418

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	1
1.01-3.50	2	4	7	8	5	2	9	14	11	3	1	0	0	2	0	1	69
3.51-7.50	1	1	1	0	0	0	0	0	4	11	4	1	1	3	0	2	29
7.51-12.50	0	0	0	0	0	0	0	0	0	0	6	0	3	5	0	0	14
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	5	8	8	5	2	9	14	15	14	11	1	4	10	0	3	113

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	1	4	2	1	2	3	6	10	4	0	0	0	0	0	0	0	0
3.51-7.50	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	33
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	4	2	1	2	3	6	11	5	1	1	0	0	0	0	0	37

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	12	26	19	20	19	19	23	39	26	6	5	1	0	3	1	6	225
3.51-7.50	71	52	28	28	26	47	84	65	54	36	24	7	13	14	16	22	587
7.51-12.50	84	56	24	14	9	15	62	74	70	13	28	11	8	26	49	29	572
12.51-18.50	31	8	0	1	1	6	28	20	67	26	15	9	8	6	49	32	307
18.51-24.00	14	1	0	0	0	0	5	1	27	11	6	9	3	6	14	13	110
>24.00	18	0	0	0	0	0	0	1	4	2	3	1	1	0	14	4	48
TOTAL	230	143	71	63	55	87	202	200	248	94	81	38	33	55	143	106	1850

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2184

TOTAL NUMBER OF VALID OBSERVATIONS: 1850

TOTAL NUMBER OF MISSING OBSERVATIONS: 334

PERCENT DATA RECOVERY FOR THIS PERIOD: 84.7 %

MEAN WIND SPEED FOR THIS PERIOD: 9.5 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

B06

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

	A	B	C	D	E	F	G
	8.43	5.30	8.92	46.65	22.59	6.11	2.00

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	50	12	1	5	3	4	0	1	15	3	3	1	2	6	26	24	0
B	19	3	0	1	1	6	0	1	17	8	7	5	2	4	14	10	0
C	29	3	6	6	4	5	5	15	27	8	12	2	3	3	17	20	0
D	87	90	43	29	26	46	113	89	114	43	28	22	15	23	63	32	0
E	41	26	11	13	14	21	69	69	55	17	19	7	7	9	23	17	0
F	3	5	8	8	5	2	9	14	15	14	11	1	4	10	0	3	1
G	1	4	2	1	2	3	6	11	5	1	1	0	0	0	0	0	0
TOTAL	230	143	71	63	55	87	202	200	248	94	81	38	33	55	143	106	1

JFDs of 35-Foot Wind vs. Delta T,
January-June 1983

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPCS1
 DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	9	5	1	4	3	4	1	1	0	1	1	0	0	3	1	1	35
7.51-12.50	43	18	0	1	0	0	0	0	1	0	0	1	2	2	10	20	98
12.51-18.50	33	1	0	0	0	0	0	0	6	1	0	0	1	1	22	17	82
18.51-24.00	4	0	0	0	0	0	0	1	9	1	2	0	0	0	1	14	32
>24.00	1	0	0	0	0	0	0	0	1	1	0	0	0	0	5	5	13
TOTAL	90	24	1	5	3	4	1	2	17	4	3	1	3	6	39	57	260

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	3
3.51-7.50	3	3	0	1	1	7	0	0	2	1	1	1	1	1	3	1	26
7.51-12.50	39	8	2	0	1	2	0	1	4	5	2	4	3	4	7	4	86
12.51-18.50	14	7	0	0	0	0	0	0	6	5	3	1	1	1	9	11	58
18.51-24.00	6	0	0	0	0	0	0	1	7	7	0	0	0	0	3	10	34
>24.00	3	0	0	0	0	0	0	0	2	1	2	0	0	0	1	1	10
TOTAL	65	18	3	1	2	9	0	2	21	19	8	6	5	6	24	27	217

PROGRAM: JFD VERSION: 5P
 MPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	7	3	3	1	2	10	8	5	3	1	0	1	1	2	3	3	2
7.51-12.50	47	19	7	4	2	3	9	10	13	4	5	1	1	2	16	12	53
12.51-18.50	24	17	0	1	0	1	0	5	17	8	14	3	1	0	17	17	151
18.51-24.00	13	1	0	0	0	0	0	0	2	2	1	0	0	0	0	6	129
>24.00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
TOTAL	96	41	10	6	4	14	13	20	35	15	20	5	3	4	36	39	361

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	7	11	24	18	10	8	11	6	6	3	2	6	5	4	5	4	130
3.51-7.50	78	83	55	28	36	68	68	60	46	37	19	7	8	13	46	28	680
7.51-12.50	57	88	34	10	10	20	119	78	95	56	37	13	4	8	37	30	696
12.51-18.50	18	15	0	0	1	7	37	21	54	40	14	9	8	5	29	22	280
18.51-24.00	11	1	0	0	0	0	7	0	9	6	4	8	4	6	24	21	101
>24.00	12	0	0	0	0	0	0	1	1	0	1	1	1	0	9	5	31
TOTAL	183	198	113	56	57	103	242	166	211	142	77	44	30	36	150	110	1927

TIME OF DAY: 10:23:50

PROGRAM: JFD VERSION: 5P

MPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	15	22	11	6	12	9	16	24	17	8	4	3	1	1	0	3	152
3.51-7.50	39	21	15	11	7	15	50	49	50	24	12	5	10	4	6	13	331
7.51-12.50	3	3	0	2	1	3	26	39	46	23	16	2	9	12	19	2	202
12.51-18.50	0	0	0	0	0	1	3	2	15	8	1	2	2	5	6	0	45
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	57	46	26	19	20	28	95	114	128	63	33	13	18	22	31	19	736

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
1.01-3.50	6	5	7	8	6	7	19	30	18	4	1	0	2	2	0	2	117
3.51-7.50	1	2	1	0	0	0	7	11	14	18	4	1	2	3	0	2	66
7.51-12.50	0	0	0	0	0	0	0	0	2	1	7	1	4	6	0	0	21
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7	7	8	8	6	7	26	41	34	23	12	2	10	12	0	4	216

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPC51
 DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
1.01-3.50	2	8	3	2	2	4	11	18	15	1	0	0	0	0	0	0	66
3.51-7.50	0	0	0	0	0	0	0	1	5	2	0	0	0	0	0	0	8
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	8	3	2	2	4	11	19	20	3	1	0	0	0	0	0	83

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 35.0 FEET
 WIND THRESHOLD AT: 1.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 35.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
1.01-3.50	32	47	46	34	30	28	57	78	56	16	7	9	8	7	6	9	470
3.51-7.50	137	117	75	45	49	104	134	127	120	84	37	15	22	26	59	48	1199
7.51-12.50	189	136	43	17	14	28	150	128	161	89	68	22	19	34	89	68	1255
12.51-18.50	89	40	0	1	1	9	40	28	98	62	32	15	15	13	83	67	593
18.51-24.00	34	2	0	0	0	0	7	2	27	16	7	9	4	6	28	52	194
>24.00	20	0	0	0	0	0	0	1	4	2	3	1	1	0	15	12	59
TOTAL	501	342	164	97	94	169	388	364	466	269	154	71	69	86	280	256	3800

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

WIND MEASURED AT: 35.0 FEET

WIND THRESHOLD AT: 1.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4344

TOTAL NUMBER OF VALID OBSERVATIONS: 3800

TOTAL NUMBER OF MISSING OBSERVATIONS: 544

PERCENT DATA RECOVERY FOR THIS PERIOD: 87.5 %

MEAN WIND SPEED FOR THIS PERIOD: 9.1 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

B72

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
6.84	5.71	9.50	50.71	19.37	5.68	2.18

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	90	24	1	5	3	4	1	2	17	4	3	1	3	6	39	57	0
B	66	18	3	1	2	9	0	2	21	19	8	6	5	6	24	27	0
C	96	41	10	6	4	14	13	20	35	15	20	5	3	4	36	39	0
D	183	198	113	56	57	103	242	166	211	142	77	44	30	36	150	110	9
E	57	46	26	19	20	28	95	114	128	63	33	13	18	22	31	19	4
F	7	7	8	8	6	7	26	41	34	23	12	2	10	12	0	4	9
G	2	8	3	2	2	4	11	19	20	3	1	0	0	0	0	0	8
TOTAL	501	342	164	97	94	169	388	364	466	269	154	71	69	86	280	256	30

Stability Classes by Hour of Day,
35-Foot Wind vs. Delta T,
January-June 1983

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES

HOURS

YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
83	1	1	E	E	E	E	E	E	F	F	F	E	D	D	B	D	C	D	D	D	E	E	E	E	D	D	
83	1	2	D	D	D	D	D	D	C	C	B	A	A	A	A	A	B	D	D	D	E	E	-	G	G	G	
83	1	3	Q	Q	Q	F	F	F	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	F	E	E	D
83	1	4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D	D
83	1	5	D	D	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
83	1	6	E	E	E	E	F	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
83	1	7	E	E	E	E	E	F	F	F	F	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	1	8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	-	E	E	E	E	E	E
83	1	9	E	E	E	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	1	10	D	D	D	D	D	D	D	D	D	C	A	A	A	A	D	C	D	E	E	E	F	E	E	F	
83	1	11	E	E	E	E	D	D	D	D	B	A	A	A	A	A	B	C	D	D	D	D	D	D	D	D	D
83	1	12	E	E	E	E	E	E	D	D	D	C	C	C	C	D	D	D	E	E	F	F	F	F	F	F	F
83	1	13	F	Q	-	Q	Q	Q	Q	Q	Q	F	-	D	D	D	D	E	E	-	F	F	E	E	E	E	E
83	1	14	E	E	E	E	E	D	D	D	D	D	D	-	B	A	-	C	D	D	D	D	D	D	D	D	D
83	1	15	D	D	C	D	C	C	D	C	A	-	A	-	D	-	D	-	D	D	D	E	-	-	E	E	E
83	1	16	E	E	E	E	E	E	E	E	E	-	A	A	A	A	A	A	D	D	E	E	D	D	D	D	D
83	1	17	D	-	D	D	D	-	-	D	C	B	A	-	B	B	C	D	D	-	E	E	E	E	D	D	D
83	1	18	D	D	D	-	-	D	D	D	C	C	C	-	-	-	-	D	D	D	D	D	D	D	D	D	D
83	1	19	-	D	D	D	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	D	D	D	D
83	1	20	D	D	D	D	D	D	D	-	D	-	-	-	-	D	D	D	D	-	-	-	-	-	-	-	-
83	1	21	-	-	-	E	E	D	D	D	D	B	A	A	-	-	-	B	C	D	D	D	D	D	D	D	C
83	1	22	C	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	D	D	D	D	D
83	1	23	D	D	D	D	D	D	D	D	D	D	D	-	D	D	D	-	-	-	-	-	-	-	-	-	-
83	1	24	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	1	25	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	1	26	D	D	C	C	B	C	B	C	B	A	A	A	A	A	B	A	C	D	C	C	C	C	D	D	D
83	1	27	D	D	D	D	D	D	D	D	D	D	D	-	D	D	-	D	D	D	D	D	D	D	D	D	D
83	1	28	D	D	D	D	D	D	D	D	D	D	D	D	D	-	-	-	-	-	D	D	D	-	-	D	D
83	1	29	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	1	30	-	-	-	-	-	-	-	-	-	-	-	-	-	D	D	D	D	D	D	-	-	D	D	D	D
83	1	31	D	D	D	D	D	D	D	D	D	C	C	B	C	B	D	D	D	D	E	E	D	D	D	D	D
83	2	1	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	C	C	C
83	2	2	B	C	C	C	C	D	D	D	D	C	B	B	A	C	B	C	D	D	D	D	D	D	D	D	D
83	2	3	D	D	D	-	-	-	D	D	C	A	A	A	A	A	A	A	-	-	-	-	-	-	-	-	-
83	2	4	Q	Q	Q	Q	Q	F	F	Q	F	E	E	D	D	D	D	-	E	E	E	D	E	D	D	D	D
83	2	5	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	2	6	D	-	-	-	-	-	-	C	A	A	A	A	A	C	D	D	E	E	E	F	G	G	G	G	G
83	2	7	G	F	F	F	F	F	F	E	E	D	A	A	D	D	D	D	E	E	E	E	E	E	-	-	-
83	2	8	D	D	D	E	-	-	-	D	E	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D
83	2	9	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	2	10	D	D	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	2	11	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	2	12	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	2	13	D	D	D	D	D	D	E	E	D	D	D	D	E	D	E	E	E	E	E	E	E	E	E	E	E
83	2	14	E	E	E	F	E	F	E	E	E	E	D	D	D	D	D	D	D	E	E	G	G	C	G	G	G

B74

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPCS1

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318 0 AND 35 0 FEET

HOURLY STABILITIES

HOURS

YR	MO	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
83	2	15	F	E	E	D	D	D	D	D	D	D	D	D	C	C	C	D	D	D	D	D	D	D	D	D	
83	2	16	D	D	D	D	D	D	D	-	-	D	D	E	E	E	D	B	B	D	E	G	G	F	G	G	
83	2	17	Q	Q	Q	Q	F	F	E	E	E	D	C	D	D	D	D	D	D	D	D	D	D	D	D	E	
83	2	18	E	F	E	F	F	F	F	F	E	E	D	C	C	C	D	D	D	E	E	E	F	E	E	F	
83	2	19	F	E	E	E	E	E	E	E	D	D	C	C	C	D	D	D	E	E	E	F	F	F	F	F	
83	2	20	F	F	F	F	E	E	F	E	E	D	C	B	C	C	C	D	B	C	C	C	D	D	D	D	
83	2	21	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	2	22	D	D	D	D	D	D	D	D	D	D	D	D	C	A	A	A	D	D	D	D	D	D	D	D	
83	2	23	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	E	E	F	E	F	E	E	
83	2	24	E	D	D	D	D	D	D	-	-	-	-	-	A	B	C	D	D	D	D	D	D	D	D	D	
83	2	25	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	E	E	E	E	E	E	E	
83	2	26	D	D	D	D	D	D	D	D	D	D	B	B	C	C	D	D	E	E	E	E	E	E	E	D	
83	2	27	D	D	D	E	D	E	-	D	D	D	D	C	B	B	C	D	C	E	E	E	E	E	F	F	
83	2	28	F	F	E	E	F	F	E	E	D	D	C	B	B	B	C	D	D	E	E	F	F	F	F	F	
83	3	1	E	E	F	F	F	F	F	F	D	C	B	A	B	B	B	D	D	D	E	E	E	F	F	F	
83	3	2	Q	Q	Q	Q	Q	Q	Q	F	E	D	C	B	B	B	C	C	D	E	E	F	F	F	E	E	
83	3	3	F	F	F	F	Q	Q	F	F	E	C	C	B	A	B	B	D	D	D	E	E	E	E	D	E	
83	3	4	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	B	
83	3	5	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D	E
83	3	6	E	E	E	D	E	E	E	D	D	D	C	B	B	A	A	A	C	C	D	D	C	D	D	D	
83	3	7	D	D	C	C	C	C	C	C	B	B	A	A	B	A	B	B	C	C	C	C	C	C	C	C	
83	3	8	C	C	C	B	C	C	C	B	A	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	
83	3	9	C	B	C	B	B	B	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
83	3	10	-	-	-	-	-	-	-	-	A	A	A	A	A	A	A	A	B	D	D	D	D	D	D	D	
83	3	11	D	D	D	D	D	D	D	D	D	D	D	D	C	B	B	C	D	D	D	D	D	D	D	D	
83	3	12	E	E	E	E	E	E	E	D	D	C	B	A	B	A	B	D	D	D	E	E	F	F	F	F	
83	3	13	F	F	F	F	F	F	F	E	D	D	D	A	A	A	A	A	C	D	D	E	E	E	E	E	
83	3	14	E	E	E	E	F	E	E	D	D	C	B	C	B	D	D	D	D	D	E	E	D	D	D	E	
83	3	15	E	D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	B	C	B	B	B	B	
83	3	16	B	C	C	C	B	C	B	C	B	C	D	C	B	B	B	B	C	C	C	C	C	C	C	C	
83	3	17	C	B	B	B	C	B	B	C	D	D	C	C	C	C	A	B	B	C	C	C	C	B	C	B	
83	3	18	B	B	B	B	B	B	B	B	B	A	A	B	A	B	B	B	B	B	B	B	C	C	D	D	D
83	3	19	D	D	D	D	D	C	D	D	-	-	-	C	C	C	D	C	D	D	D	D	D	D	C	C	
83	3	20	D	D	D	D	D	D	D	C	B	A	A	A	A	A	A	A	B	B	C	C	C	C	C	C	D
83	3	21	D	D	D	D	D	D	D	C	A	A	A	A	A	A	A	A	A	C	D	E	D	D	D	D	
83	3	22	D	E	E	E	E	E	E	D	D	D	B	B	C	B	C	C	D	D	D	E	E	E	E	E	
83	3	23	E	D	D	D	E	D	D	D	D	D	C	C	D	C	D	D	D	D	E	E	E	E	E	D	
83	3	24	D	D	D	D	D	D	D	D	C	C	C	D	C	D	D	D	D	D	D	D	D	D	D	D	
83	3	25	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D
83	3	26	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	D	D	D	D	D	
83	3	27	D	D	D	D	D	D	D	D	C	C	C	C	C	D	D	C	D	D	D	D	D	D	D	D	
83	3	28	D	D	D	D	D	D	D	D	D	D	D	C	D	C	D	C	B	C	D	D	D	D	D	D	
83	3	29	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	3	30	D	D	D	E	E	E	E	E	E	E	D	D	D	D	C	D	D	D	D	E	E	D	D	D	
83	3	31	D	D	D	D	D	E	E	D	D	D	B	C	B	D	D	D	D	E	E	E	E	E	E	E	

875

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPCSI

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES

HOURS

YR	MN	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
83	4	1	E	E	E	D	D	D	B	A	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D
83	4	2	D	D	D	D	D	D	D	D	D	B	B	C	C	B	C	C	C	D	-	-	-	-	-	-
83	4	3	-	-	-	-	-	-	C	C	A	A	A	A	A	A	B	B	D	D	D	D	E	E	E	E
83	4	4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	-	-	-	-	-	-	-
83	4	5	-	D	D	-	-	D	D	D	-	-	D	D	D	D	-	-	-	-	-	-	-	-	-	-
83	4	6	D	-	-	-	-	-	-	-	B	B	B	C	A	B	C	B	C	D	D	D	D	D	E	E
83	4	7	E	E	E	D	E	E	E	D	D	D	A	A	A	A	A	C	C	D	D	E	E	E	D	D
83	4	8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D
83	4	9	D	D	C	D	D	C	B	C	C	B	B	C	C	B	C	B	C	D	D	D	D	D	D	C
83	4	10	C	D	D	D	C	D	D	C	C	B	B	A	B	A	A	A	A	D	D	E	E	E	E	F
83	4	11	F	F	F	F	-	-	-	-	-	-	-	-	-	-	-	D	D	D	E	E	E	E	D	D
83	4	12	D	E	E	D	D	D	D	D	D	D	D	D	D	B	D	D	D	D	D	D	D	D	D	D
83	4	13	D	D	D	D	D	D	D	D	C	C	B	B	B	B	C	C	C	D	D	D	D	D	D	D
83	4	14	D	D	D	D	D	D	D	D	D	D	B	A	A	A	A	A	C	D	D	D	D	D	E	E
83	4	15	E	E	E	E	E	E	D	D	C	A	A	A	B	-	-	B	D	D	D	E	E	E	E	E
83	4	16	E	E	E	E	E	E	D	D	A	-	-	-	-	A	A	A	B	D	E	E	E	E	E	E
83	4	17	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D
83	4	18	D	D	D	D	D	E	D	D	D	C	C	C	-	C	C	C	D	D	D	E	E	E	E	E
83	4	19	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E
83	4	20	E	E	E	E	E	E	E	D	D	D	D	C	D	D	D	D	D	D	D	D	E	D	E	E
83	4	21	E	E	E	E	E	E	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D
83	4	22	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	E	E	E	E
83	4	23	D	D	D	D	E	D	C	A	A	A	A	A	A	A	A	B	C	D	D	D	D	E	E	D
83	4	24	E	E	E	E	E	E	D	-	-	A	-	-	-	-	-	-	-	D	E	F	G	F	F	F
83	4	25	F	F	F	F	F	F	E	D	C	B	A	A	A	A	A	B	D	D	E	E	E	E	E	E
83	4	26	E	E	E	E	E	E	E	D	C	A	A	A	A	A	A	A	A	D	D	D	-	-	-	-
83	4	27	-	-	-	-	-	-	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	4	28	D	D	D	D	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	F	E
83	4	29	E	D	D	D	D	D	D	D	D	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D
83	4	30	D	D	D	D	D	D	D	C	C	C	C	B	C	D	D	D	D	D	D	E	E	E	E	D
83	5	1	D	D	D	D	D	D	D	D	D	D	D	A	D	E	D	D	D	D	D	D	D	D	D	D
83	5	2	D	D	D	D	D	D	D	D	C	B	A	A	A	A	B	B	B	C	D	D	D	D	D	D
83	5	3	D	D	D	D	D	D	D	D	B	C	A	A	-	-	-	-	-	-	-	-	-	-	-	-
83	5	4	F	F	F	E	E	D	D	C	B	A	A	A	A	A	A	B	D	D	E	F	F	F	F	F
83	5	5	F	F	F	F	F	E	E	D	D	D	D	B	A	B	D	D	D	D	E	E	E	E	E	-
83	5	6	-	-	-	-	-	-	-	C	B	A	A	B	B	B	D	D	D	D	E	D	D	D	D	D
83	5	7	D	D	D	D	D	-	-	-	D	C	C	B	-	-	-	D	D	D	D	E	E	E	E	E
83	5	8	F	E	E	E	E	F	E	D	D	C	B	B	B	C	C	D	D	D	D	E	E	E	E	E
83	5	9	E	E	E	D	E	E	D	D	C	B	A	A	A	A	B	B	D	D	D	E	E	E	E	E
83	5	10	E	E	E	E	E	E	D	D	C	A	B	A	B	D	D	C	D	D	D	E	E	E	E	E
83	5	11	E	E	E	E	E	E	E	E	D	D	D	C	D	D	D	D	D	D	D	E	E	E	D	D
83	5	12	E	E	D	D	D	D	D	D	D	C	C	B	A	C	C	D	D	D	D	D	D	D	D	-
83	5	13	D	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D
83	5	14	D	D	D	C	D	C	D	D	C	C	C	B	C	D	D	D	D	D	D	E	E	F	F	E
83	5	15	E	E	D	D	D	D	D	A	B	A	A	A	A	A	A	A	C	E	E	F	G	G	-	-

B76

PROGRAM JFD VERSION: 5P

TIME OF DAY: 10:23:50

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPCSI

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES

HOURS

YR	MO	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
83	5	16	G	G	G	G	G	G	F	E	D	D	D	D	C	C	D	D	D	D	E	E	E	E	E	E
83	5	17	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
83	5	18	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D	E	E	E	D
83	5	19	D	D	D	D	D	D	D	D	D	D	D	D	C	A	A	B	C	D	D	E	F	F	F	G
83	5	20	F	F	G	G	G	G	F	E	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D	E
83	5	21	D	L	D	E	E	D	D	D	D	D	-	-	-	-	-	-	-	-	D	D	D	E	E	-
83	5	22	-	-	E	E	F	F	E	-	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	5	23	-	F	F	E	F	D	D	D	-	-	A	B	A	A	B	D	D	E	F	F	F	F	F	F
83	5	24	F	F	F	F	F	E	E	D	-	-	-	-	C	C	C	D	E	F	E	E	E	E	E	D
83	5	25	D	D	D	D	D	C	B	A	A	A	A	A	A	A	A	A	C	D	E	E	F	F	-	-
83	5	26	G	G	G	F	F	E	D	D	D	D	C	C	B	B	C	D	D	D	E	E	-	-	-	-
83	5	27	D	E	E	E	E	E	D	D	D	D	C	C	B	B	C	D	D	D	E	E	-	-	-	-
83	5	28	E	E	F	F	F	E	D	C	A	A	A	A	A	A	A	A	B	C	D	D	D	E	E	E
83	5	29	G	F	F	F	E	E	D	-	A	A	A	A	A	A	A	A	B	C	D	D	D	E	E	E
83	5	30	E	E	E	E	E	E	D	B	A	A	A	A	A	A	A	A	C	D	D	D	E	E	E	E
83	5	31	E	E	E	E	E	D	D	B	-	A	A	A	A	A	A	B	B	C	D	-	-	-	-	-
83	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	E	E	E	E	E
83	6	2	D	E	E	E	E	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	6	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	6	4	G	G	G	G	G	-	-	-	B	C	D	E	-	-	-	-	D	E	E	E	E	E	D	D
83	6	5	E	E	D	D	C	D	D	D	D	D	D	D	E	D	C	C	A	D	D	D	E	E	E	E
83	6	6	E	E	E	-	E	-	D	C	B	A	A	A	A	A	B	A	D	D	E	F	G	G	G	G
83	6	7	G	G	G	G	G	G	F	E	D	C	C	A	A	A	B	C	D	E	F	F	F	F	F	F
83	6	8	F	E	E	E	E	E	D	D	C	-	-	-	-	-	-	-	D	E	E	F	F	F	F	F
83	6	9	F	F	E	E	E	E	D	D	C	C	B	B	B	C	C	C	D	-	-	-	-	-	-	-
83	6	10	-	E	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	6	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	6	12	D	D	D	D	D	D	D	D	D	D	B	A	A	B	B	D	D	D	D	D	D	D	D	D
83	6	13	D	D	D	D	D	D	D	D	D	C	B	C	C	B	D	D	D	D	D	D	D	-	-	-
83	6	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	F	G	G	G	F
83	6	15	G	F	F	F	F	G	E	D	D	C	-	-	-	-	-	A	A	A	D	D	E	E	E	E
83	6	16	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	6	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	D	D	D	L	E	E	E	D	D
83	6	18	D	D	D	D	D	D	E	D	A	D	B	A	A	C	A	A	D	D	D	D	D	D	D	D
83	6	19	D	D	D	D	D	D	D	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	6	20	E	E	E	E	E	E	D	D	D	C	C	C	C	C	D	D	D	D	D	D	D	D	D	D
83	6	21	E	E	E	E	E	E	D	D	D	D	C	C	C	C	D	D	D	D	E	E	E	E	E	E
83	6	22	E	E	E	E	E	E	-	D	D	C	C	C	C	C	D	D	D	D	E	E	F	F	F	F
83	6	23	F	F	F	F	F	E	E	D	D	D	C	B	C	D	B	C	D	D	E	E	F	F	F	F
83	6	24	F	F	F	F	F	E	E	D	D	D	C	B	C	D	B	C	D	D	E	E	-	F	F	F
83	6	25	E	E	E	E	E	E	D	D	D	C	C	B	C	C	C	D	D	D	E	E	E	E	E	E
83	6	26	E	E	E	E	E	D	D	D	B	D	D	D	D	D	D	D	A	D	D	D	D	D	D	D
83	6	27	E	E	E	E	E	E	D	E	D	A	B	A	B	B	B	D	D	D	D	D	D	D	D	D
83	6	28	D	D	D	D	D	D	D	D	D	C	B	B	B	C	C	D	D	D	D	D	D	D	D	D
83	6	29	D	D	D	E	D	D	D	D	C	D	D	D	A	C	C	D	D	D	E	E	F	F	E	E

877

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 35FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES

HOURS

YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
83	6	30	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E

JFDs of 318-Foot Wind vs. Delta T,
January-March 1983

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	5
7.51-12.50	11	3	0	0	0	0	0	0	0	0	0	0	1	0	0	8	23
12.51-18.50	11	4	0	0	0	0	0	2	0	0	0	0	0	0	4	13	34
18.51-24.00	9	0	0	0	0	0	0	0	1	0	0	0	0	0	7	7	24
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	14	15
TOTAL	33	7	0	0	0	0	0	4	1	0	0	0	1	0	12	43	101

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	3
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	6
7.51-12.50	2	4	1	0	0	0	0	0	2	1	0	0	2	3	1	2	18
12.51-18.50	26	7	0	0	1	0	0	2	3	4	0	1	1	0	3	2	50
18.51-24.00	18	1	1	0	0	0	0	0	2	0	0	0	0	0	3	5	30
>24.00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	17	23
TOTAL	49	12	2	0	2	1	0	3	8	6	0	1	3	3	7	30	130

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: MPCS1
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 318 0 AND 35 0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
3 01- 3 50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 51- 7 50	1	0	0	0	3	1	3	0	0	0	0	1	0	0	1	3	13
7 51-12 50	8	3	2	0	3	2	7	1	2	1	1	0	0	1	6	2	39
12 51-18 50	43	11	0	0	0	0	4	1	5	3	3	1	0	0	14	9	94
18 51-24 00	19	9	0	0	0	0	0	1	1	1	3	0	0	0	10	7	51
>> 24 00	3	2	0	0	0	0	0	0	2	0	0	0	0	0	0	7	14
TOTAL	74	25	2	0	6	3	14	3	10	5	7	2	0	1	31	28	216

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 318 0 AND 35 0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
3 01- 3 50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 51- 7 50	15	18	12	6	17	15	7	6	9	9	7	5	1	10	24	10	171
7 51-12 50	21	27	12	10	23	28	40	28	30	21	24	7	1	6	28	19	325
12 51-18 50	21	18	12	2	5	9	71	22	52	30	9	2	3	2	19	33	310
18 51-24 00	9	18	7	1	4	16	19	14	27	11	5	0	1	0	4	12	148
>> 24 00	6	0	2	0	0	11	1	1	4	8	0	0	1	1	21	17	73
TOTAL	72	81	45	19	49	79	138	71	122	79	45	14	7	19	96	91	1098

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
3.51-7.50	1	3	1	3	2	1	3	6	2	2	5	4	2	4	1	2	42
7.51-12.50	4	11	9	4	7	6	11	11	12	7	7	1	3	3	0	3	99
12.51-18.50	3	1	3	2	0	6	5	20	24	7	7	3	4	11	3	3	127
18.51-24.00	0	0	0	2	0	1	5	5	6	5	5	1	3	0	1	0	44
>24.00	0	0	0	0	0	1	1	0	2	0	0	0	0	2	4	0	13
TOTAL	8	15	13	11	9	16	19	39	66	44	24	9	12	23	9	8	343

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
3.51-7.50	2	1	1	1	1	1	0	0	0	3	1	0	2	3	2	1	19
7.51-12.50	1	1	1	0	0	0	1	6	13	3	5	1	1	0	0	0	33
12.51-18.50	1	0	0	0	0	0	5	7	14	9	2	1	0	2	0	0	41
18.51-24.00	0	0	0	0	0	0	2	0	0	1	2	0	2	0	0	0	7
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
TOTAL	4	2	2	1	1	1	8	13	27	16	10	2	6	6	2	1	104

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
3.51-7.50	5	0	0	0	0	1	0	0	0	0	2	4	2	2	0	3	19
7.51-12.50	3	0	0	0	0	0	1	1	4	1	1	0	1	0	0	0	12
12.51-18.50	0	0	0	0	0	0	0	1	0	2	1	0	0	1	0	0	5
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	8	0	0	0	0	0	2	2	4	3	4	4	3	3	0	3	47

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
3.51-7.50	28	22	14	10	24	20	12	11	15	14	15	14	7	19	28	22	275
7.51-12.50	50	49	25	14	33	36	56	47	62	39	38	9	9	13	35	34	549
12.51-18.50	103	41	15	4	6	15	85	55	106	72	22	8	8	16	43	60	661
18.51-24.00	55	28	8	3	4	17	26	20	46	19	15	1	6	0	25	31	304
TOTAL	248	142	64	31	67	100	181	135	238	153	90	32	32	55	157	204	2039

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-MARCH 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/ 1/83 - 3/31/83

*** QUARTER 1 ***

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2160

TOTAL NUMBER OF VALID OBSERVATIONS: 2039

TOTAL NUMBER OF MISSING OBSERVATIONS: 121

PERCENT DATA RECOVERY FOR THIS PERIOD: 94.4 %

MEAN WIND SPEED FOR THIS PERIOD: 13.7 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

B84

A	B	C	D	E	F	G
4.95	6.38	10.59	53.85	16.82	5.10	2.31

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	33	7	0	0	0	0	0	4	1	0	0	0	1	0	12	43	0
B	49	12	2	0	2	1	0	3	8	6	0	1	3	3	7	30	3
C	74	25	2	0	6	3	14	3	10	5	7	2	0	1	31	28	5
D	72	81	45	19	49	79	138	71	122	79	45	14	7	19	96	91	71
E	8	15	13	11	9	16	19	39	66	44	24	9	12	23	9	8	18
F	4	2	2	1	1	1	8	13	27	16	10	2	6	6	2	1	2
G	8	0	0	0	0	0	2	2	4	3	4	4	3	3	0	3	11
TOTAL	248	142	64	31	67	100	181	135	238	153	90	32	32	55	157	204	110

JFDs of 318-Foot Wind vs. Delta T,
April-June 1983

PROGRAM: JFD VERSION: 5P
 NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPC51
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	2	2	1	4	1	0	0	0	0	1	0	0	0	5	3	3	22
7.51-12.50	17	2	1	0	0	0	0	0	1	0	1	1	6	10	6	15	60
12.51-18.50	9	2	0	0	0	0	0	1	2	0	0	0	0	1	11	24	50
18.51-24.00	11	0	0	0	0	0	0	4	0	0	0	0	0	0	8	16	43
>24.00	1	0	0	0	0	0	0	1	7	0	2	1	0	1	6	2	21
TOTAL	40	6	2	4	1	0	0	6	14	1	3	2	6	17	34	60	196

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	1	0	0	0	4	0	1	1	1	0	1	1	1	2	2	1	16
7.51-12.50	3	0	0	2	0	0	1	1	1	1	2	2	3	2	4	4	25
12.51-18.50	5	0	0	0	0	0	0	1	5	2	4	1	1	3	2	10	34
18.51-24.00	1	0	0	0	0	0	0	4	3	0	0	0	0	0	0	5	18
>24.00	3	0	0	0	0	0	0	0	10	1	1	0	0	0	2	3	20
TOTAL	13	0	0	2	4	0	2	7	19	4	8	4	5	7	15	23	113

TIME OF DAY: 11:05:54

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPC51
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
3.51-7.50	1	0	1	0	2	0	3	3	0	1	0	0	2	1	0	0	16
7.51-12.50	7	1	4	2	2	3	8	4	4	1	1	1	0	1	6	2	49
12.51-18.50	7	0	2	3	0	0	2	6	2	1	8	2	0	0	13	10	56
18.51-24.00	6	0	0	1	1	0	0	3	4	4	2	0	0	0	3	2	26
>24.00	5	0	0	0	0	0	0	0	3	0	1	0	0	0	0	7	16
TOTAL	26	1	7	6	5	3	10	20	13	10	12	3	2	2	22	21	167

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
3.51-7.50	13	7	8	9	15	6	14	23	13	6	6	2	4	3	4	9	144
7.51-12.50	25	23	29	16	18	13	46	34	20	7	8	3	0	0	13	3	258
12.51-18.50	48	32	24	5	7	20	39	39	32	5	4	4	5	11	33	11	319
18.51-24.00	13	2	2	1	1	9	18	14	21	8	3	7	6	1	18	10	134
>24.00	11	0	0	0	1	6	2	1	13	1	2	3	2	4	17	20	83
TOTAL	110	64	63	31	42	54	119	111	99	29	23	19	17	19	85	53	969

PROGRAM: JFD VERSION: 5P

MPPD-COOPER STATION JFD: 315FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	
CALM																		13
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	3	2	4	3	3	1	5	8	2	3	2	1	11	0	7	2	57	
7.51-12.50	6	9	6	5	8	6	22	23	7	5	2	3	5	1	8	7	123	
12.51-18.50	14	6	4	0	1	7	49	39	21	4	8	1	0	4	19	17	194	
18.51-24.00	3	0	0	0	0	3	13	12	10	2	0	0	2	7	3	0	55	
>24.00	2	2	0	0	0	1	0	0	4	4	1	0	0	0	0	0	12	
TOTAL	26	17	14	8	12	18	89	84	44	18	13	5	18	12	37	26	454	

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	
CALM																		3
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	1	1	0	0	1	2	1	4	0	4	0	0	4	3	2	1	24	
7.51-12.50	3	0	1	0	0	2	6	17	9	4	1	3	0	3	2	2	53	
12.51-18.50	1	0	0	0	0	0	0	2	7	10	3	1	5	2	2	2	35	
18.51-24.00	0	0	0	0	0	0	0	0	0	2	4	0	0	2	0	0	8	
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	5	1	1	1	1	4	7	23	16	20	8	4	9	10	6	5	123	

NFPD-CODPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
3.51-7.50	3	1	0	0	0	3	0	0	1	1	0	1	4	3	1	0	18
7.51-12.50	0	0	0	0	0	0	0	0	1	0	1	2	5	2	0	1	12
12.51-18.50	0	0	0	0	0	0	0	0	1	1	1	3	0	0	0	0	5
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3	1	0	0	0	3	0	0	2	2	6	9	9	5	1	1	45

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61
3.51-7.50	24	13	14	16	26	9	29	39	17	18	9	5	26	17	19	16	297
7.51-12.50	61	35	41	25	28	24	78	83	42	21	16	15	19	19	39	34	580
12.51-18.50	84	40	30	8	8	27	90	88	69	23	28	12	11	21	80	74	693
18.51-24.00	34	2	2	2	2	12	31	37	42	16	9	7	8	10	37	33	284
>24.00	20	0	0	0	1	7	2	4	37	6	7	4	2	3	25	32	152
TOTAL	223	90	87	51	65	79	230	251	207	84	69	43	66	72	200	189	2067

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR APRIL-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 4/ 1/83 - 6/30/83

*** QUARTER 2 ***

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 2184

TOTAL NUMBER OF VALID OBSERVATIONS: 2067

TOTAL NUMBER OF MISSING OBSERVATIONS: 117

PERCENT DATA RECOVERY FOR THIS PERIOD: 94.6 %

MEAN WIND SPEED FOR THIS PERIOD: 13.9 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

B90

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
9.48	3.47	8.08	46.88	21.96	5.95	2.18

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	40	6	2	4	1	0	0	6	14	1	3	2	6	17	34	60	0
B	13	0	0	2	4	0	2	7	19	4	8	4	5	7	15	23	0
C	26	1	7	6	5	3	10	20	13	10	12	3	2	2	22	21	4
D	110	64	63	31	42	54	119	111	99	29	23	19	17	19	85	53	31
E	26	17	14	8	12	18	89	84	44	18	13	5	18	12	37	26	13
F	5	1	1	0	1	4	7	23	16	20	8	4	9	10	6	5	3
G	3	1	0	0	0	0	3	0	2	2	2	6	9	5	1	1	10
TOTAL	223	90	87	51	65	79	230	251	207	84	69	43	66	72	200	189	61

JFDs of 318-Foot Wind vs. Delta T,
January-June 1983

PROGRAM: JFD VERSION: 5P

MPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPCS1
 DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	4	2	1	4	1	0	0	2	0	1	0	0	0	5	3	4	27
7.51-12.50	28	5	1	0	0	0	0	0	1	0	1	1	7	10	6	23	83
12.51-18.50	20	6	0	0	0	0	0	3	2	0	0	0	0	1	15	37	84
18.51-24.00	20	0	0	0	0	0	0	4	5	0	0	0	0	0	15	23	67
24.00	1	0	0	0	0	0	0	1	7	0	2	1	0	1	7	16	36
TOTAL	73	13	2	4	1	0	0	10	15	1	3	2	7	17	46	103	297

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	3	0	0	0	5	1	1	1	1	0	1	1	1	2	2	3	22
7.51-12.50	5	4	1	2	0	0	1	1	2	2	2	2	5	5	5	6	43
12.51-18.50	31	7	0	0	1	0	0	3	8	6	4	2	2	3	5	12	84
18.51-24.00	19	1	1	0	0	0	0	4	5	0	0	0	0	0	8	10	48
24.00	4	0	0	0	0	0	0	1	11	2	1	0	0	0	2	22	43
TOTAL	62	12	2	2	6	1	2	10	27	10	8	5	8	10	22	53	243

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
3.51-7.50	2	0	1	0	5	1	8	3	0	1	0	1	2	1	1	3	29
7.51-12.50	15	4	6	2	5	5	10	9	6	5	2	1	0	2	12	4	88
12.51-18.50	50	11	2	3	0	0	6	7	7	4	11	3	0	0	27	19	150
18.51-24.00	25	9	0	1	1	0	0	4	5	5	5	0	0	0	13	9	77
>24.00	8	2	0	0	0	0	0	0	5	0	1	0	0	0	0	0	30
TOTAL	100	26	9	6	11	6	24	23	23	15	19	5	2	3	53	49	383

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	28	25	20	15	32	21	21	29	22	17	13	7	5	13	28	19	315
7.51-12.50	46	50	41	26	41	41	86	62	50	28	32	10	1	6	41	22	583
12.51-18.50	69	50	36	7	12	29	110	61	84	35	13	6	8	13	52	44	629
18.51-24.00	22	20	9	2	5	25	37	28	48	19	8	7	7	1	22	22	282
>24.00	17	0	2	0	1	17	3	2	17	9	2	3	3	5	38	37	156
TOTAL	182	145	108	50	91	133	257	182	221	108	68	33	24	38	181	144	2067

PROGRAM: JFD VERSION: 5P
 NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPCS1
 DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
3.01-3.50	4	5	5	6	3	6	11	8	5	5	7	5	13	4	8	4	99
3.51-7.50	10	20	15	9	15	12	29	18	17	9	9	4	18	4	8	10	222
7.51-12.50	17	7	7	2	1	13	14	53	28	15	15	4	4	15	22	20	321
12.51-18.50	3	0	0	2	0	4	18	17	8	5	1	1	5	7	4	0	99
18.51-24.00	0	0	0	0	0	2	1	2	4	1	0	0	0	3	4	0	25
TOTAL	34	32	27	19	21	34	109	123	110	62	37	14	30	35	46	34	797

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
3.01-3.50	3	2	1	1	2	3	1	4	0	7	1	0	6	6	4	2	43
3.51-7.50	4	1	2	0	0	2	7	23	22	7	6	4	1	3	2	2	86
7.51-12.50	2	0	0	0	0	0	5	9	21	19	5	2	5	4	2	2	76
12.51-18.50	0	0	0	0	0	0	2	0	0	3	0	0	2	2	0	0	15
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
TOTAL	9	3	3	1	2	5	15	36	43	36	18	6	15	16	8	6	227

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983
 SITE IDENTIFIER: NPCSI
 DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
3.51- 7.50	8	1	0	0	0	4	0	0	1	1	2	5	6	5	1	3	37
7.51-12.50	3	0	0	0	0	1	0	1	3	1	2	2	6	2	0	1	24
12.51-18.50	0	0	0	0	0	0	0	1	0	3	2	3	0	1	0	0	10
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11	1	0	0	0	5	0	2	6	5	6	10	12	8	1	4	92

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET
 WIND MEASURED AT: 318.0 FEET
 WIND THRESHOLD AT: 3.00 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 318.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
3.01- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	52	35	28	26	50	29	41	50	32	32	24	19	33	36	47	38	572
7.51-12.50	111	84	66	39	61	134	130	130	104	60	54	24	28	32	74	68	1129
12.51-18.50	189	81	45	12	14	42	175	143	175	95	50	20	19	37	123	134	1354
18.51-24.00	89	30	10	5	6	29	57	57	88	39	24	8	14	10	62	64	588
>24.00	30	2	2	0	1	19	4	6	46	15	7	4	4	12	51	87	292
TOTAL	471	232	151	82	132	179	411	386	445	237	159	75	98	127	357	393	4106

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

*** JAN-JUN ***

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

WIND MEASURED AT: 318.0 FEET

WIND THRESHOLD AT: 3.00 MPH

TOTAL NUMBER OF OBSERVATIONS: 4344

TOTAL NUMBER OF VALID OBSERVATIONS: 4106

TOTAL NUMBER OF MISSING OBSERVATIONS: 238

PERCENT DATA RECOVERY FOR THIS PERIOD: 94.5 %

MEAN WIND SPEED FOR THIS PERIOD: 13.8 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

896

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
7.23	5.92	9.33	50.34	19.41	5.53	2.24

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	73	13	2	4	1	0	0	10	15	1	3	2	7	17	46	103	0
B	62	12	2	2	6	1	2	10	27	10	8	5	8	10	22	53	3
C	100	26	9	6	11	6	24	23	23	15	19	5	2	3	53	49	9
D	182	145	108	50	91	133	257	182	221	108	68	33	24	38	181	144	102
E	34	32	27	19	21	34	108	123	110	62	37	14	30	35	46	34	31
F	9	3	3	1	2	5	15	36	43	36	18	6	15	16	8	6	5
G	11	1	0	0	0	0	5	2	6	5	6	10	12	8	1	4	21
TOTAL	471	232	151	82	132	179	411	386	445	237	159	75	98	127	357	393	171

Stability Classes by Hour of Day,
318-Foot Wind vs. Delta T,
January-June 1983

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES
HOURS

YR	MN	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
83	1	1	E	E	E	E	E	F	F	F	E	D	D	B	D	C	D	D	D	E	E	E	E	D	D	
83	1	2	D	D	D	D	D	C	C	B	A	A	A	A	A	B	D	D	D	E	E	F	G	G	G	
83	1	3	G	G	G	F	F	F	E	E	D	D	D	D	D	D	D	D	E	E	E	F	E	E	D	
83	1	4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D	D	
83	1	5	D	D	D	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	
83	1	6	E	E	E	E	F	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	E	E	E	
83	1	7	E	E	E	E	E	F	F	F	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	9	E	E	E	D	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	10	D	D	D	D	D	D	D	D	C	A	A	A	A	D	C	D	E	E	E	F	E	E	F	
83	1	11	E	E	E	E	D	D	D	D	B	A	A	A	A	B	C	D	D	D	D	D	D	D	D	
83	1	12	E	E	E	E	E	D	D	D	D	C	C	C	D	D	D	E	E	F	F	F	F	F	F	
83	1	13	F	G	G	G	G	G	G	G	F	D	D	D	D	D	E	E	G	F	F	E	E	E	E	
83	1	14	E	E	E	E	E	D	D	D	D	D	D	B	A	B	C	D	D	D	D	D	D	D	D	
83	1	15	D	D	C	D	C	C	D	C	A	A	A	A	C	D	D	D	D	D	E	E	E	E	E	
83	1	16	E	E	E	E	E	E	E	E	C	A	A	A	A	A	A	D	D	E	E	D	D	D	D	
83	1	17	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	E	E	E	E	D	
83	1	18	D	D	D	D	D	D	D	D	C	C	C	C	C	C	D	D	D	D	D	D	D	D	D	
83	1	19	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	20	D	D	D	D	D	D	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	21	E	E	E	E	E	D	D	D	D	B	A	A	C	B	B	B	C	D	D	D	D	D	C	
83	1	22	C	C	C	C	B	C	C	C	D	D	C	C	C	B	A	A	C	D	C	C	D	D	D	
83	1	23	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	D	
83	1	24	D	D	D	D	C	D	D	C	B	C	C	A	A	A	B	B	C	D	D	D	D	D	D	
83	1	25	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	26	D	D	C	C	B	C	B	C	B	A	A	A	A	B	A	C	D	C	C	C	D	D	D	
83	1	27	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	28	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	D	D	
83	1	29	D	D	D	D	D	E	D	D	D	D	C	C	B	B	C	C	C	C	C	D	E	E	E	
83	1	30	E	E	E	E	E	D	D	E	D	C	B	D	D	D	D	D	D	D	D	D	D	D	D	
83	1	31	D	D	D	D	D	D	D	D	D	C	C	B	C	B	D	D	D	D	E	E	D	D	D	
83	2	1	D	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	C	C	C	
83	2	2	B	C	C	C	C	D	D	D	D	C	B	B	A	C	B	C	D	D	D	D	D	D	D	
83	2	3	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
83	2	4	-	G	G	G	G	F	F	G	F	E	E	D	D	D	D	E	E	E	E	D	E	D	D	
83	2	5	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	2	6	D	C	B	B	C	D	D	D	C	A	A	A	A	A	C	D	D	E	E	F	G	G	G	
83	2	7	G	F	F	F	F	F	F	E	E	D	A	A	D	D	D	D	E	E	E	F	E	E	D	
83	2	8	D	D	D	E	D	D	D	E	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	
83	2	9	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	2	10	D	D	D	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	2	11	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	2	12	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	2	13	D	D	D	D	D	E	E	D	D	D	D	E	D	E	E	E	E	E	E	E	E	E	E	
83	2	14	E	E	E	F	E	F	E	E	E	E	D	D	D	D	D	D	E	E	G	G	G	G	G	

898

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES
HOURS

YR	MN	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
83	2	15	F	E	E	D	D	D	D	D	D	D	D	D	D	C	C	C	D	D	D	D	D	D	D	D		
83	2	16	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	D	B	B	D	E	G	G	F	G	G	
83	2	17	G	G	G	G	F	F	E	E	E	D	C	D	D	C	D	D	D	D	D	D	D	D	D	D	E	
83	2	18	E	F	E	F	F	F	F	F	E	D	C	C	C	D	D	D	E	E	E	E	F	E	E	F		
83	2	19	F	E	E	E	E	E	E	E	D	D	C	C	C	D	D	D	E	E	E	F	F	F	F	F		
83	2	20	F	F	F	F	E	E	F	E	E	D	C	B	C	C	C	D	B	C	-	-	-	-	-	-		
83	2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
83	2	22	-	-	-	-	-	-	-	D	D	D	D	D	D	C	A	A	A	D	D	D	D	D	D	D	D	
83	2	23	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	E	E	F	E	F	E	
83	2	24	E	D	D	D	D	D	-	D	D	D	D	C	B	B	A	B	C	D	D	D	D	D	D	D	D	
83	2	25	D	D	D	D	D	D	D	D	D	D	D	C	D	C	C	D	D	D	E	E	E	E	E	E	E	
83	2	26	D	D	D	D	D	D	D	D	D	D	D	B	B	C	C	D	D	E	E	E	E	E	E	E	D	
83	2	27	D	D	D	E	D	E	E	D	D	D	D	C	B	B	C	D	D	E	E	E	E	E	F	F	F	
83	2	28	F	F	E	E	F	E	E	D	D	D	C	B	B	B	C	D	D	E	E	F	F	F	F	F	F	
83	3	1	E	E	F	F	F	F	F	F	D	C	B	A	B	B	B	D	D	D	E	E	E	F	F	F	F	
83	3	2	G	G	G	G	G	G	G	F	E	D	C	B	B	B	C	C	D	E	E	F	F	F	E	E	E	
83	3	3	F	F	F	F	G	G	F	F	E	C	C	B	A	B	B	D	D	D	D	E	E	E	E	D	E	
83	3	4	E	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	3	5	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D	D	E	E	D	E	
83	3	6	E	E	E	D	E	E	E	D	D	D	C	B	B	A	A	A	C	C	D	D	C	D	D	D	D	
83	3	7	D	D	C	C	C	C	C	C	B	B	A	A	B	A	B	B	C	C	C	C	C	C	C	C	C	
83	3	8	C	C	C	B	C	C	C	C	B	A	A	A	A	A	A	A	B	B	B	B	B	B	B	B	B	
83	3	9	C	B	C	B	B	B	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
83	3	10	-	-	-	-	-	-	-	-	A	-	A	A	A	-	A	-	-	-	-	-	-	-	-	-	-	
83	3	11	-	D	D	D	D	D	D	D	D	D	D	D	C	B	B	C	D	D	D	D	D	D	D	D	D	
83	3	12	E	E	E	E	E	E	E	D	D	C	B	A	B	A	B	D	D	D	E	E	F	F	F	F	F	
83	3	13	F	F	F	F	F	F	F	E	D	D	D	A	A	A	A	A	C	D	D	E	E	E	E	E	E	
83	3	14	E	E	E	E	F	E	E	D	D	C	B	C	B	D	D	D	D	D	E	E	D	D	D	D	E	
83	3	15	E	D	D	D	D	D	D	D	D	D	D	D	D	C	C	C	C	C	C	C	B	B	B	B	B	
83	3	16	B	C	C	C	B	C	C	B	C	B	C	D	C	B	B	B	C	C	C	C	C	C	C	C	C	
83	3	17	C	B	B	B	C	B	B	C	D	D	C	C	C	C	A	B	B	C	C	C	C	C	B	C	B	
83	3	18	B	B	B	B	B	B	B	B	B	A	A	B	A	B	B	B	B	B	B	B	C	C	D	D	D	
83	3	19	D	D	D	D	D	C	D	D	-	-	-	C	C	C	D	C	D	D	D	D	D	D	D	D	C	C
83	3	20	D	D	D	D	D	D	D	C	B	A	A	A	A	A	A	A	B	B	C	C	C	C	C	C	C	D
83	3	21	D	D	D	D	D	D	C	A	A	A	A	A	A	A	A	A	A	C	D	E	D	D	D	D	D	
83	3	22	D	E	E	E	E	E	E	D	D	D	B	B	C	B	C	C	D	D	D	E	E	E	E	E	E	
83	3	23	E	D	D	D	E	E	D	D	D	D	C	C	C	D	C	D	D	D	D	E	E	E	E	E	D	
83	3	24	D	D	D	D	D	D	D	D	C	C	C	D	C	D	D	D	D	D	D	D	D	D	D	D	D	
83	3	25	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	D	D	D	
83	3	26	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	D	D	D	D	D	
83	3	27	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	C	D	D	D	D	D	D	D	D	D	
83	3	28	D	D	D	D	D	D	D	D	D	D	C	D	C	B	C	C	D	D	D	D	D	D	D	D	D	
83	3	29	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	
83	3	30	D	D	D	E	E	E	E	E	E	E	D	D	D	C	D	D	D	D	E	E	E	D	D	D	D	
83	3	31	D	D	D	D	D	E	E	D	D	D	B	C	B	D	D	D	D	E	E	E	E	E	E	E	E	

B99

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPCSI

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES

HOURS

YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
83	4	1	E	E	E	D	D	D	B	A	C	C	C	C	D	D	D	D	D	D	D	D	D	D	D	D
83	4	2	D	D	D	D	D	D	D	D	D	B	B	C	C	B	C	C	C	D	D	D	D	D	D	D
83	4	3	D	D	D	D	D	D	C	C	A	A	A	A	A	A	B	B	D	D	D	D	D	E	E	E
83	4	4	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	4	5	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	4	6	D	D	D	D	D	D	D	B	B	B	C	A	B	C	B	C	D	D	D	D	D	E	E	E
83	4	7	E	E	E	D	E	E	E	D	D	D	A	A	A	A	A	C	C	D	D	E	E	E	D	D
83	4	8	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	D	D
83	4	9	D	D	C	D	D	C	B	C	C	B	B	C	C	B	C	B	C	D	D	D	D	D	D	C
83	4	10	C	D	D	D	C	D	C	C	B	B	A	B	A	A	A	A	D	D	E	E	E	E	E	F
83	4	11	F	F	F	F	F	F	F	E	E	D	D	D	D	D	D	D	D	D	E	E	-	-	-	-
83	4	12	-	-	-	-	-	-	-	-	-	-	D	D	D	B	D	D	-	D	D	D	D	D	D	D
83	4	13	D	D	D	D	D	D	D	C	C	B	B	B	B	C	C	C	C	D	D	D	D	D	D	D
83	4	14	D	D	D	D	D	D	D	-	-	D	B	A	A	A	A	A	C	D	D	D	D	D	E	E
83	4	15	E	E	E	E	E	E	D	D	C	A	A	A	B	A	A	B	D	D	D	E	E	E	E	E
83	4	16	E	E	E	E	E	E	D	D	A	A	A	A	A	A	A	A	B	D	E	E	E	E	F	E
83	4	17	E	E	D	D	D	D	D	D	D	D	D	D	D	D	C	C	D	D	D	D	D	D	D	D
83	4	18	D	D	D	D	D	E	D	D	C	C	C	-	C	C	C	D	D	D	E	E	E	E	E	E
83	4	19	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E
83	4	20	E	E	E	E	E	E	E	D	D	D	D	C	D	D	D	D	D	D	D	D	D	E	E	E
83	4	21	E	E	E	E	E	E	D	D	D	D	D	C	D	D	D	D	D	D	D	D	D	D	D	D
83	4	22	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	D	D	E	E	E	E	E
83	4	23	D	D	D	D	E	D	C	A	A	A	A	A	A	A	B	C	D	D	D	D	D	E	E	D
83	4	24	E	E	E	E	E	E	D	B	A	A	A	A	A	B	A	D	D	E	F	F	G	F	F	F
83	4	25	F	F	F	F	F	F	E	D	C	B	A	A	A	A	B	D	D	E	E	E	E	E	E	E
83	4	26	E	E	E	E	E	E	D	C	A	A	A	A	A	A	A	A	D	D	D	-	-	-	-	-
83	4	27	-	-	-	-	-	-	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	4	28	D	D	D	D	E	E	D	D	D	D	D	D	D	D	D	-	-	-	-	-	-	-	-	-
83	4	29	-	-	-	-	-	D	D	D	D	C	C	C	C	C	D	D	D	D	D	D	D	D	D	D
83	4	30	D	D	D	D	D	D	C	C	C	C	B	C	D	D	D	D	D	D	D	E	E	E	E	D
83	5	1	D	D	D	D	D	D	D	D	D	D	D	A	D	E	D	D	D	D	D	D	D	D	D	D
83	5	2	D	D	D	D	D	D	D	C	B	A	A	A	A	B	B	B	C	D	D	D	D	D	D	D
83	5	3	D	D	D	D	D	D	D	B	C	A	A	A	A	A	B	D	E	F	G	G	G	G	G	G
83	5	4	F	F	F	E	E	D	D	C	B	A	A	A	A	A	B	D	D	E	F	F	F	F	F	F
83	5	5	F	F	F	F	F	E	E	D	D	D	D	B	A	B	D	D	D	E	E	E	E	E	E	E
83	5	6	E	E	E	E	E	E	D	C	B	A	A	B	B	B	D	D	E	D	E	D	D	D	D	D
83	5	7	D	D	D	D	D	D	D	D	C	C	C	B	A	C	B	D	D	D	D	D	E	E	E	E
83	5	8	F	E	E	E	E	F	E	D	D	C	B	B	B	C	C	D	D	D	D	E	E	E	E	E
83	5	9	E	E	E	D	E	E	D	D	C	B	A	A	A	A	B	B	D	D	D	E	E	E	E	E
83	5	10	E	E	E	E	E	E	D	D	C	A	B	A	B	D	D	C	D	D	D	D	E	E	E	E
83	5	11	E	E	E	E	E	E	E	D	D	D	C	D	D	D	D	D	D	D	D	E	E	E	D	D
83	5	12	E	E	D	D	D	D	D	D	D	C	C	B	A	C	C	D	D	D	D	D	D	D	D	D
83	5	13	D	D	D	D	D	D	D	D	D	A	D	D	D	D	C	D	D	D	D	D	E	D	D	D
83	5	14	D	D	D	C	B	C	D	C	D	C	C	C	B	C	D	D	D	D	D	E	F	F	F	E
83	5	15	E	E	D	D	D	D	D	A	B	A	A	A	A	A	A	A	C	E	E	F	-	-	-	-

B100

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES

HOURS

YR	MN	DY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
83	5	16	G	G	G	G	G	G	F	E	D	D	D	D	C	C	D	D	D	D	D	E	E	E	E	E
83	5	17	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E
83	5	18	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	D	E	E	D
83	5	19	D	D	D	D	D	D	D	D	C	D	C	A	A	A	B	C	D	D	D	E	F	F	F	G
83	5	20	F	F	G	G	G	G	F	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E
83	5	21	D	D	D	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E
83	5	22	E	F	E	E	F	F	E	D	B	A	A	A	A	A	B	B	D	D	E	E	E	E	E	E
83	5	23	E	F	F	E	F	F	D	D	C	B	A	B	A	A	B	D	D	E	F	F	F	F	F	F
83	5	24	F	F	F	F	F	E	E	D	D	C	B	B	C	C	C	D	E	F	E	E	E	E	E	D
83	5	25	D	D	D	D	D	C	B	A	A	A	A	A	A	A	A	C	D	E	E	E	E	E	F	G
83	5	26	G	G	G	F	F	E	D	D	D	D	C	C	B	B	C	D	D	D	E	E	E	E	E	D
83	5	27	D	E	E	E	E	E	D	D	D	D	C	C	B	B	C	C	D	D	E	F	F	F	F	E
83	5	28	E	E	F	F	F	E	D	C	A	A	A	A	A	A	A	A	D	D	E	E	E	E	E	E
83	5	29	G	F	F	F	E	E	D	C	A	A	A	A	A	A	A	A	B	C	D	D	D	E	E	E
83	5	30	E	E	E	E	E	E	D	B	A	A	A	A	A	A	A	C	D	D	D	E	E	E	E	E
83	5	31	E	E	E	E	E	D	D	B	A	A	A	A	A	A	A	B	B	C	D	E	E	E	E	F
83	6	1	F	G	G	F	G	E	D	D	C	C	D	D	D	-	-	D	D	E	E	E	E	E	E	E
83	6	2	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D	D
83	6	3	D	D	D	D	D	D	B	A	A	A	A	A	A	A	A	A	D	D	E	F	F	F	G	D
83	6	4	G	G	G	G	G	-	-	-	-	B	C	D	E	D	D	D	E	E	E	E	E	E	D	D
83	6	5	E	E	D	D	C	D	D	D	D	D	D	D	E	D	C	C	A	D	D	D	E	E	E	D
83	6	6	E	E	E	E	E	E	D	D	C	B	A	A	A	A	B	A	D	D	E	F	G	G	G	G
83	6	7	G	G	G	G	G	G	F	E	D	C	C	A	A	A	A	B	C	D	E	F	F	F	F	F
83	6	8	F	E	E	E	E	E	D	D	C	B	B	A	A	A	A	B	B	D	E	E	F	F	F	F
83	6	9	F	F	E	E	E	E	D	D	C	C	B	B	B	C	C	C	D	D	D	E	E	E	E	E
83	6	10	E	E	E	E	E	D	D	D	D	D	D	D	B	A	D	D	D	D	D	D	D	D	D	D
83	6	11	E	E	E	E	E	D	D	D	D	D	D	D	B	A	D	D	D	D	D	D	D	D	D	D
83	6	12	D	D	D	D	D	D	D	D	D	D	B	A	B	B	B	D	D	D	D	D	D	D	D	D
83	6	13	D	D	D	D	D	D	D	D	C	B	C	B	C	B	D	D	D	D	D	D	D	D	D	D
83	6	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A	A	C	E	F	G	G	G	F
83	6	15	G	F	F	F	F	G	E	D	D	C	A	A	A	A	A	A	A	D	D	E	E	E	E	E
83	6	16	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	D	C	D	D	D	E	E	D	D
83	6	17	D	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	D
83	6	18	D	D	D	D	D	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
83	6	19	-	-	-	-	-	-	-	-	-	-	-	-	-	D	D	D	D	D	D	D	D	D	-	-
83	6	20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D	D	D	D	E	E	E	E	E
83	6	21	E	E	E	E	E	E	D	D	D	C	C	C	C	C	C	D	D	D	D	E	E	E	E	E
83	6	22	E	E	E	E	E	E	D	D	D	C	C	C	C	C	C	D	D	D	D	E	E	F	F	F
83	6	23	F	F	F	F	F	E	E	D	D	D	C	B	C	D	B	C	D	D	E	E	-	F	F	F
83	6	24	F	F	F	F	F	E	E	D	D	D	C	B	C	B	C	D	D	D	D	E	E	F	F	F
83	6	25	E	E	E	E	E	E	D	D	D	C	B	C	B	C	C	D	D	D	D	E	E	E	E	E
83	6	26	E	E	E	E	D	D	D	D	B	D	D	D	D	D	D	A	D	D	D	D	D	D	D	D
83	6	27	E	E	E	E	E	E	D	E	D	A	B	A	B	B	B	D	D	D	D	D	D	D	D	D
83	6	28	D	D	D	D	D	D	D	D	D	C	B	B	B	C	C	D	D	D	D	D	D	D	D	D
83	6	29	D	D	D	E	D	D	D	D	C	D	D	D	A	C	C	D	D	D	E	E	F	F	F	E

1010

PROGRAM: JFD VERSION: 5P

NPPD-COOPER STATION JFD: 318FT WIND VS DELTA T (318'-35') FOR JANUARY-JUNE 1983

SITE IDENTIFIER: NPC51

DATA PERIOD EXAMINED: 1/ 1/83 - 6/30/83

STABILITY BASED ON: DELTA T BETWEEN 318.0 AND 35.0 FEET

HOURLY STABILITIES

HOURS

YR	MN	DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
83	6	30	E	E	E	E	E	E	D	D	D	D	D	D	D	D	D	D	D	E	E	E	E	E	E	E

8102

ATMOSPHERIC DIFFUSION ESTIMATES

The tables of atmospheric diffusion estimates in this section were generated using the computer code XOQDOQ. Data are given for 22 distances and 16 compass points centered on the Cooper Nuclear Station. Tables are presented for the ground-level (vent stack) and elevated release options separately, and for the following time periods: January-March, April-June, and January-June 1983.

Atmospheric Diffusion Estimates
Ground-Level Releases
January-March 1983

VENTS GROUND LEVEL RELEASES
 NO DECAY, UNDEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CH1/O (SEC/METER CUBED)			DISTANCE IN MILES									
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500		
S	4.917E-05	1.339E-05	7.062E-06	3.487E-06	1.350E-06	7.129E-07	4.435E-07	3.050E-07	2.243E-07	1.732E-07	1.286E-07		
SSW	4.390E-05	1.477E-05	7.703E-06	3.797E-06	1.501E-06	8.041E-07	5.057E-07	3.504E-07	2.599E-07	2.019E-07	1.624E-07		
SW	3.023E-05	1.043E-05	5.763E-06	2.848E-06	1.101E-06	5.802E-07	3.599E-07	2.467E-07	1.810E-07	1.393E-07	1.111E-07		
WSW	1.496E-05	5.270E-06	2.774E-06	1.369E-06	5.349E-07	2.839E-07	1.771E-07	1.220E-07	8.983E-08	6.938E-08	5.553E-08		
W	1.293E-05	4.644E-06	2.520E-06	1.259E-06	4.886E-07	2.589E-07	1.603E-07	1.100E-07	8.076E-08	6.220E-08	4.966E-08		
WNW	2.423E-05	8.001E-06	4.288E-06	2.152E-06	8.543E-07	4.586E-07	2.887E-07	2.004E-07	1.485E-07	1.154E-07	9.244E-08		
NW	6.324E-05	2.871E-05	1.106E-05	5.562E-06	2.245E-06	1.219E-06	7.745E-07	5.415E-07	4.038E-07	3.153E-07	2.548E-07		
NVW	7.909E-05	2.508E-05	1.342E-05	6.795E-06	2.794E-06	1.536E-06	9.649E-07	6.958E-07	5.207E-07	4.088E-07	3.319E-07		
N	4.006E-05	2.556E-05	1.337E-05	6.683E-06	2.753E-06	1.517E-06	9.741E-07	6.872E-07	5.163E-07	4.058E-07	3.298E-07		
NNE	3.153E-05	1.097E-05	5.935E-06	2.972E-06	1.174E-06	6.285E-07	3.948E-07	2.735E-07	2.024E-07	1.571E-07	1.262E-07		
NE	9.199E-06	3.346E-06	1.805E-06	8.952E-07	3.442E-07	1.805E-07	1.116E-07	7.630E-08	5.583E-08	4.287E-08	3.414E-08		
ENE	8.312E-06	3.029E-06	1.630E-06	8.083E-07	3.194E-07	1.626E-07	1.004E-07	6.858E-08	5.013E-08	3.846E-08	3.060E-08		
E	1.001E-05	3.671E-06	2.916E-06	1.021E-06	4.045E-07	2.167E-07	1.361E-07	9.434E-08	6.982E-08	5.416E-08	4.352E-08		
ESE	6.461E-06	2.346E-06	1.274E-06	6.349E-07	2.458E-07	1.296E-07	8.042E-08	5.516E-08	4.048E-08	3.116E-08	2.487E-08		
SE	1.614E-05	5.734E-06	3.013E-06	1.474E-06	5.560E-07	2.876E-07	1.759E-07	1.191E-07	8.647E-08	6.595E-08	5.219E-08		
SSE	1.322E-05	4.506E-06	2.372E-06	1.167E-06	4.460E-07	2.331E-07	1.437E-07	9.809E-08	7.168E-08	5.499E-08	4.375E-08		

BEARING	ANNUAL AVERAGE CH1/O (SEC/METER CUBED)			DISTANCE IN MILES									
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000		
S	1.141E-07	5.763E-08	3.693E-08	2.093E-08	1.413E-08	1.044E-08	8.171E-09	6.648E-09	5.564E-09	4.759E-09	4.139E-09		
SSW	1.343E-07	6.887E-08	4.460E-08	2.561E-08	1.746E-08	1.293E-08	1.016E-08	8.294E-09	6.964E-09	5.972E-09	5.208E-09		
SW	9.118E-08	4.531E-08	2.866E-08	1.588E-08	1.049E-08	7.620E-09	5.876E-09	4.722E-09	3.909E-09	3.311E-09	2.855E-09		
WSW	4.569E-08	2.294E-08	1.463E-08	8.198E-09	5.459E-09	3.991E-09	3.095E-09	2.499E-09	2.078E-09	1.767E-09	1.529E-09		
W	4.072E-08	2.029E-08	1.284E-08	7.116E-09	4.695E-09	3.406E-09	2.623E-09	2.105E-09	1.740E-09	1.472E-09	1.268E-09		
WNW	7.676E-08	3.930E-08	2.541E-08	1.454E-08	9.846E-09	7.293E-09	5.714E-09	4.654E-09	3.899E-09	3.337E-09	2.905E-09		
NW	2.115E-07	1.099E-07	7.176E-08	4.162E-08	2.841E-08	2.117E-08	1.667E-08	1.363E-08	1.146E-08	9.038E-09	8.587E-09		
NVW	2.767E-07	1.460E-07	9.634E-08	5.668E-08	3.904E-08	2.930E-08	2.320E-08	1.906E-08	1.609E-08	1.386E-08	1.213E-08		
N	2.752E-07	1.458E-07	9.649E-08	5.702E-08	3.941E-08	2.966E-08	2.354E-08	1.938E-08	1.638E-08	1.413E-08	1.239E-08		
NNE	1.042E-07	5.315E-08	3.425E-08	1.949E-08	1.312E-08	9.669E-09	7.546E-09	6.125E-09	5.115E-09	4.366E-09	3.790E-09		
NE	2.797E-08	1.379E-08	8.676E-09	4.769E-09	3.135E-09	2.268E-09	1.742E-09	1.395E-09	1.152E-09	9.727E-10	8.366E-10		
ENE	2.505E-08	1.232E-08	7.726E-09	4.228E-09	2.768E-09	1.996E-09	1.529E-09	1.221E-09	1.006E-09	8.479E-10	7.280E-10		
E	3.594E-08	1.831E-08	1.178E-08	6.691E-09	4.494E-09	3.306E-09	2.576E-09	2.088E-09	1.741E-09	1.484E-09	1.287E-09		
ESE	2.942E-08	1.016E-08	6.431E-09	3.564E-09	2.353E-09	1.708E-09	1.316E-09	1.056E-09	8.733E-10	7.389E-10	6.365E-10		
SE	4.253E-08	2.059E-08	1.278E-08	6.896E-09	4.485E-09	3.218E-09	2.456E-09	1.956E-09	1.607E-09	1.352E-09	1.159E-09		
SSE	3.584E-08	1.771E-08	1.116E-08	6.175E-09	4.092E-09	2.982E-09	2.506E-09	1.857E-09	1.541E-09	1.309E-09	1.131E-09		

CH1/O (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.880E-06	1.542E-06	4.599E-07	2.279E-07	1.397E-07	6.097E-08	2.146E-08	1.052E-08	6.670E-09	4.768E-09
SSW	7.537E-06	1.701E-06	5.233E-07	2.638E-07	1.637E-07	7.263E-08	2.618E-08	1.301E-08	8.320E-09	5.983E-09
SW	5.594E-06	1.258E-06	3.734E-07	1.839E-07	1.121E-07	4.810E-08	1.632E-08	7.688E-09	4.742E-09	3.319E-09
WSW	2.704E-06	6.087E-07	1.735E-07	9.122E-08	5.599E-08	2.430E-08	8.409E-09	4.024E-09	2.509E-09	1.771E-09
W	2.431E-06	5.573E-07	1.662E-07	8.205E-08	5.098E-08	2.153E-08	7.313E-09	3.436E-09	2.114E-09	1.476E-09
WNW	4.164E-06	9.668E-07	2.987E-07	1.507E-07	9.357E-08	4.145E-08	1.487E-08	7.342E-09	4.669E-09	3.343E-09
NW	1.076E-05	2.526E-06	7.999E-07	4.094E-07	2.567E-07	1.155E-07	4.245E-08	2.130E-08	1.367E-08	9.855E-09
NVW	1.397E-05	3.124E-06	1.015E-06	5.275E-07	3.342E-07	1.529E-07	5.765E-08	2.946E-08	1.911E-08	1.388E-08
N	1.311E-05	3.177E-06	1.004E-06	5.230E-07	3.321E-07	1.526E-07	5.796E-08	2.911E-08	1.942E-08	1.415E-08
NNE	5.737E-06	1.331E-06	4.086E-07	2.055E-07	1.272E-07	5.610E-08	1.994E-08	9.739E-09	6.146E-09	4.375E-09
NE	1.743E-05	3.939E-07	1.159E-07	5.674E-08	3.444E-08	1.467E-08	4.911E-09	2.289E-09	1.492E-09	9.753E-10
ENE	1.576E-05	3.553E-07	1.043E-07	5.396E-08	3.048E-08	1.311E-08	4.357E-09	2.015E-09	1.277E-09	8.503E-10
E	1.942E-05	4.581E-07	1.409E-07	7.086E-08	4.387E-08	1.933E-08	6.846E-09	3.331E-09	2.095E-09	1.488E-09
ESE	1.228E-05	2.806E-07	8.342E-08	4.112E-08	2.509E-08	1.078E-08	3.662E-09	1.723E-09	1.061E-09	7.408E-10
SE	2.933E-05	6.407E-07	1.890E-07	4.799E-08	5.269E-08	2.200E-08	7.132E-09	3.251E-09	1.966E-09	1.356E-09
SSE	2.411E-05	5.117E-07	1.493E-07	7.287E-08	4.415E-08	1.883E-08	6.358E-09	3.088E-09	1.865E-09	1.312E-09

VENTS GROUND LEVEL RELEASES
2.260 DAY DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)			DISTANCE IN MILES								
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	4.010E-05	1.335E-05	7.926E-06	3.462E-06	1.335E-06	7.023E-07	4.351E-07	2.980E-07	2.183E-07	1.678E-07	1.337E-07	
SSW	4.381E-05	1.471E-05	7.658E-06	2.767E-06	1.483E-06	7.997E-07	4.950E-07	3.418E-07	2.521E-07	1.949E-07	1.560E-07	
SW	3.017E-05	1.079E-05	5.726E-06	2.824E-06	1.087E-06	5.704E-07	3.522E-07	2.434E-07	1.756E-07	1.345E-07	1.069E-07	
WSW	1.492E-05	5.243E-06	2.753E-06	1.355E-06	5.269E-07	2.782E-07	1.726E-07	1.183E-07	8.665E-08	6.657E-08	5.301E-08	
W	1.290E-05	4.625E-06	2.504E-06	1.248E-06	4.825E-07	2.537E-07	1.569E-07	1.073E-07	7.840E-08	6.013E-08	4.780E-08	
WNW	2.418E-05	7.968E-06	4.261E-06	2.134E-06	8.434E-07	4.506E-07	2.823E-07	1.950E-07	1.459E-07	1.112E-07	8.904E-08	
NW	6.308E-05	2.061E-05	1.098E-05	5.508E-06	2.212E-06	1.195E-06	7.550E-07	5.250E-07	3.894E-07	3.025E-07	2.431E-07	
NVW	7.886E-05	2.495E-05	1.331E-05	6.722E-06	2.748E-06	1.502E-06	9.577E-07	6.708E-07	5.004E-07	3.936E-07	3.153E-07	
N	7.985E-05	2.544E-05	1.327E-05	6.620E-06	2.713E-06	1.487E-06	9.497E-07	6.664E-07	4.989E-07	3.893E-07	3.148E-07	
NNE	3.149E-05	1.094E-05	5.912E-06	2.957E-06	1.165E-06	6.219E-07	3.895E-07	2.691E-07	1.986E-07	1.536E-07	1.231E-07	
NE	9.192E-06	3.341E-06	1.801E-06	8.925E-07	3.426E-07	1.794E-07	1.108E-07	7.560E-08	5.523E-08	4.235E-08	3.367E-08	
EVE	8.295E-06	3.017E-06	1.620E-06	8.018E-07	3.067E-07	1.608E-07	9.844E-08	6.697E-08	4.876E-08	3.727E-08	2.954E-08	
E	1.078E-05	3.655E-06	2.003E-06	1.012E-06	3.991E-07	2.128E-07	1.331E-07	9.184E-08	6.766E-08	5.226E-08	4.189E-08	
FSE	6.451E-06	2.339E-06	1.268E-06	6.312E-07	2.437E-07	1.281E-07	7.928E-08	5.424E-08	3.969E-08	3.047E-08	2.426E-08	
SE	1.612E-05	5.724E-06	3.005E-06	1.468E-06	5.530E-07	2.856E-07	1.743E-07	1.179E-07	8.540E-08	6.502E-08	5.136E-08	
SSE	1.320E-05	4.497E-06	2.365E-06	1.162E-06	4.431E-07	2.310E-07	1.421E-07	9.674E-08	7.051E-08	5.396E-08	4.283E-08	

HEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)			DISTANCE IN MILES							
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.096E-07	5.422E-08	3.463E-08	1.851E-08	1.202E-08	8.561E-09	6.462E-09	5.079E-09	4.113E-09	3.407E-09	2.875E-09
SSW	1.284E-07	6.428E-08	4.064E-08	2.226E-08	1.445E-08	1.026E-08	7.725E-09	6.051E-09	4.881E-09	4.027E-09	3.383E-09
SW	8.730E-08	4.245E-08	2.628E-08	1.396E-08	8.854E-09	6.183E-09	4.590E-09	3.555E-09	2.841E-09	2.325E-09	1.939E-09
WSW	4.339E-08	2.125E-08	1.319E-08	7.022E-09	4.450E-09	3.101E-09	2.295E-09	1.772E-09	1.410E-09	1.150E-09	9.554E-10
W	3.908E-08	1.904E-08	1.180E-08	6.277E-09	3.980E-09	2.779E-09	2.062E-09	1.596E-09	1.274E-09	1.042E-09	8.687E-10
WNW	7.326E-08	3.660E-08	2.308E-08	1.257E-08	8.129E-09	5.752E-09	4.313E-09	3.366E-09	2.706E-09	2.226E-09	1.865E-09
NW	2.007E-07	1.015E-07	6.452E-08	3.549E-08	2.381E-08	1.632E-08	1.225E-08	9.567E-09	7.693E-09	6.327E-09	5.299E-09
NVW	2.613E-07	1.339E-07	8.588E-08	4.776E-08	3.116E-08	2.219E-08	1.670E-08	1.307E-08	1.052E-08	8.665E-09	7.262E-09
N	2.612E-07	1.347E-07	8.683E-08	4.870E-08	3.201E-08	2.295E-08	1.738E-08	1.368E-08	1.108E-08	9.172E-09	7.727E-09
NNE	1.014E-07	5.096E-08	3.237E-08	1.790E-08	1.172E-08	8.415E-09	6.400E-09	5.066E-09	4.139E-09	3.444E-09	2.923E-09
NE	2.754E-08	1.348E-08	8.416E-09	4.554E-09	2.955E-09	2.108E-09	1.598E-09	1.263E-09	1.030E-09	8.588E-10	7.297E-10
EVE	2.409E-08	1.162E-08	7.159E-09	3.782E-09	2.395E-09	1.672E-09	1.243E-09	9.640E-10	7.720E-10	6.334E-10	5.297E-10
E	3.437E-08	1.713E-08	1.079E-08	5.882E-09	3.798E-09	2.691E-09	2.023E-09	1.584E-09	1.278E-09	1.056E-09	8.883E-10
FSE	1.986E-08	9.756E-09	6.098E-09	3.300E-09	2.130E-09	1.413E-09	1.143E-09	8.994E-10	7.300E-10	6.066E-10	5.135E-10
SE	4.179E-08	2.006E-08	1.234E-08	6.556E-09	4.199E-09	2.969E-09	2.234E-09	1.756E-09	1.423E-09	1.182E-09	1.001E-09
SSE	3.499E-08	1.707E-08	1.063E-08	5.734E-09	3.711E-09	2.643E-09	1.999E-09	1.576E-09	1.282E-09	1.067E-09	9.048E-10

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.847E-06	1.527E-06	4.515E-07	2.218E-07	1.349E-07	5.755E-08	1.998E-08	8.644E-09	5.106E-09	3.419E-09
SSW	7.496E-06	1.683E-06	5.125E-07	2.559E-07	1.573E-07	6.803E-08	2.287E-08	1.036E-08	6.084E-09	4.042E-09
SW	5.561E-06	1.243E-06	3.657E-07	1.785E-07	1.078E-07	4.523E-08	1.443E-08	6.258E-09	3.579E-09	2.335E-09
WSW	2.695E-06	6.004E-07	1.790E-07	8.804E-08	5.347E-08	2.258E-08	7.248E-09	3.138E-09	1.784E-09	1.155E-09
W	2.417E-06	5.510E-07	1.628E-07	7.968E-08	4.822E-08	2.020E-08	6.884E-09	2.812E-09	1.637E-09	1.047E-09
WNW	4.140E-06	9.557E-07	2.923E-07	1.460E-07	8.477E-08	3.874E-08	1.294E-08	5.810E-09	3.385E-09	2.234E-09
NW	1.069E-05	2.492E-06	7.803E-07	3.950E-07	2.450E-07	1.071E-07	3.640E-08	1.648E-08	9.620E-09	6.351E-09
NVW	1.297E-05	3.078E-06	9.882E-07	5.072E-07	3.176E-07	1.409E-07	4.885E-08	2.238E-08	1.314E-08	8.696E-09
N	1.302E-05	3.036E-06	9.796E-07	5.047E-07	3.170E-07	1.415E-07	4.976E-08	2.314E-08	1.375E-08	9.202E-09
NNE	5.717E-06	1.322E-06	4.033E-07	2.016E-07	1.241E-07	5.391E-08	1.837E-08	8.491E-09	5.091E-09	3.454E-09
NE	1.739E-05	3.923E-07	1.150E-07	5.614E-08	3.397E-08	1.436E-08	4.703E-09	2.130E-09	1.270E-09	8.616E-10
EVE	1.567E-05	3.515E-07	1.023E-07	4.959E-08	2.981E-08	1.241E-08	3.916E-09	1.693E-09	9.704E-10	6.361E-10
E	1.930E-05	4.526E-07	1.379E-07	6.870E-08	4.215E-08	1.814E-08	6.247E-09	2.719E-09	1.593E-09	1.060E-09
FSE	1.223E-06	2.704E-07	8.228E-08	4.033E-08	2.447E-08	1.038E-08	3.402E-09	1.530E-09	9.043E-10	6.087E-10
SE	2.926E-06	6.376E-07	1.814E-07	8.691E-08	5.186E-08	2.146E-08	6.795E-09	3.303E-09	1.766E-09	1.186E-09
SSE	2.304E-06	5.086E-07	1.477E-07	7.170E-08	4.322E-08	1.819E-08	5.922E-09	2.670E-09	1.545E-09	1.071E-09

B106

VENTS GROUND LEVEL RELEASES
 8,000 DAY DECAY, DEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SLC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.900E-05	1.222E-05	6.284E-06	3.046E-06	1.143E-06	5.878E-07	3.573E-07	2.406E-07	1.737E-07	1.317E-07	1.037E-07
SSW	4.153E-05	1.347E-05	6.851E-06	3.316E-06	1.270E-06	6.626E-07	4.071E-07	2.766E-07	2.011E-07	1.534E-07	1.214E-07
SW	2.859E-05	9.882E-06	5.126E-06	2.487E-06	9.321E-07	4.791E-07	2.897E-07	1.945E-07	1.400E-07	1.058E-07	8.307E-08
WSW	1.415E-05	4.805E-06	2.467E-06	1.195E-06	4.524E-07	2.337E-07	1.424E-07	9.505E-08	6.937E-08	5.263E-08	4.143E-08
W	1.223E-05	4.236E-06	2.242E-06	1.099E-06	4.135E-07	2.126E-07	1.290E-07	8.675E-08	6.248E-08	4.729E-08	3.714E-08
WNW	2.292E-05	7.298E-06	3.814E-06	1.979E-06	7.229E-07	3.778E-07	2.324E-07	1.579E-07	1.148E-07	8.765E-08	6.936E-08
NW	5.981E-05	1.888E-05	9.835E-06	4.855E-06	1.899E-06	1.004E-06	6.228E-07	4.263E-07	3.118E-07	2.392E-07	1.901E-07
NNW	7.479E-05	2.287E-05	1.193E-05	5.930E-06	2.361E-06	1.264E-06	7.915E-07	5.458E-07	4.017E-07	3.097E-07	2.473E-07
N	7.571E-05	2.331E-05	1.189E-05	5.834E-06	2.328E-06	1.249E-06	7.834E-07	5.411E-07	3.987E-07	3.078E-07	2.461E-07
NNE	2.983E-05	1.001E-05	5.283E-06	2.598E-06	9.951E-07	5.188E-07	3.185E-07	2.163E-07	1.571E-07	1.190E-07	9.475E-08
NE	8.705E-06	3.055E-06	1.607E-06	7.830E-07	2.919E-07	1.492E-07	9.021E-08	6.045E-08	4.343E-08	3.280E-08	2.571E-08
ENE	7.462E-06	2.763E-06	1.450E-06	7.059E-07	2.627E-07	1.340E-07	8.088E-08	5.410E-08	3.881E-08	2.926E-08	2.291E-08
E	1.022E-05	3.348E-06	1.794E-06	8.919E-07	3.422E-07	1.785E-07	1.096E-07	7.436E-08	5.400E-08	4.115E-08	3.253E-08
ESE	6.112E-06	2.140E-06	1.134E-06	5.548E-07	2.082E-07	1.069E-07	6.498E-08	4.361E-08	3.141E-08	2.377E-08	1.867E-08
SE	1.527E-05	5.233E-06	2.683E-06	1.289E-06	4.715E-07	2.377E-07	1.421E-07	9.434E-08	6.724E-08	5.042E-08	3.928E-08
SSE	1.251E-05	4.112E-06	2.112E-06	1.020E-06	3.781E-07	1.925E-07	1.160E-07	7.761E-08	5.567E-08	4.199E-08	3.288E-08

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CURED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	8.487E-08	3.991E-08	2.422E-08	1.255E-08	7.858E-09	5.436E-09	4.005E-09	3.081E-09	2.447E-09	1.992E-09	1.653E-09
SSW	9.885E-08	4.759E-08	2.916E-08	1.527E-08	9.686E-09	6.664E-09	4.918E-09	3.788E-09	3.011E-09	2.451E-09	2.033E-09
SW	6.712E-08	3.134E-08	1.877E-08	9.504E-09	5.821E-09	3.956E-09	2.871E-09	2.180E-09	1.712E-09	1.379E-09	1.134E-09
WSW	3.356E-08	1.581E-08	9.534E-09	4.869E-09	2.998E-09	2.045E-09	1.488E-09	1.132E-09	8.906E-10	7.182E-10	5.907E-10
W	3.002E-08	1.404E-08	8.419E-09	4.264E-09	2.609E-09	1.771E-09	1.284E-09	9.746E-10	7.646E-10	6.154E-10	5.054E-10
WNW	5.646E-08	2.714E-08	1.660E-08	8.662E-09	5.426E-09	3.751E-09	2.760E-09	2.120E-09	1.681E-09	1.365E-09	1.130E-09
NW	1.553E-07	7.570E-08	4.674E-08	2.469E-08	1.557E-08	1.081E-08	7.987E-09	6.154E-09	4.890E-09	3.979E-09	3.300E-09
NNW	2.029E-07	1.004E-07	6.259E-08	3.350E-08	2.130E-08	1.489E-08	1.105E-08	8.545E-09	6.812E-09	5.557E-09	4.618E-09
N	2.021E-07	1.004E-07	6.285E-08	3.383E-08	2.161E-08	1.516E-08	1.129E-08	8.758E-09	7.091E-09	5.727E-09	4.771E-09
NNE	7.709E-08	3.701E-08	2.263E-08	1.182E-08	7.404E-09	5.126E-09	3.780E-09	2.911E-09	2.315E-09	1.886E-09	1.567E-09
NE	2.076E-08	9.661E-09	5.778E-09	2.927E-09	1.799E-09	1.228E-09	8.953E-10	6.835E-10	5.395E-10	4.370E-10	3.612E-10
ENE	1.846E-08	8.538E-09	5.077E-09	2.544E-09	1.548E-09	1.046E-09	7.563E-10	5.726E-10	4.485E-10	3.605E-10	2.958E-10
E	2.645E-08	1.266E-08	7.716E-09	4.004E-09	2.494E-09	1.717E-09	1.260E-09	9.655E-10	7.643E-10	6.200E-10	5.129E-10
ESE	1.510E-08	7.079E-09	4.234E-09	2.166E-09	1.334E-09	9.107E-10	6.642E-10	5.070E-10	4.001E-10	3.239E-10	2.676E-10
SE	3.154E-08	1.441E-08	8.499E-09	4.225E-09	2.568E-09	1.738E-09	1.259E-09	9.554E-10	7.506E-10	6.055E-10	4.987E-10
SSE	2.653E-08	1.235E-08	7.392E-09	3.755E-09	2.320E-09	1.589E-09	1.163E-09	8.898E-10	7.040E-10	5.713E-10	4.729E-10

CHI/Q (SEC/METER CURED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.164E-06	1.319E-06	3.721E-07	1.768E-07	1.047E-07	4.275E-08	1.306E-08	5.509E-09	3.104E-09	2.001E-09
SSW	6.752E-06	1.455E-06	4.230E-07	2.045E-07	1.225E-07	5.079E-08	1.584E-08	6.750E-09	3.815E-09	2.462E-09
SW	5.010E-06	1.076E-06	3.019E-07	1.426E-07	8.391E-08	3.371E-08	9.927E-09	4.019E-09	2.199E-09	1.387E-09
WSW	2.421E-06	5.262E-07	1.482E-07	7.062E-08	4.183E-08	1.697E-08	5.974E-09	2.076E-09	1.142E-09	7.221E-10
W	2.177E-06	4.766E-07	1.344E-07	6.363E-08	3.751E-08	1.509E-08	4.452E-09	1.800E-09	9.831E-10	6.189E-10
WNW	3.720E-06	8.265E-07	2.414E-07	1.168E-07	7.000E-08	2.897E-08	8.987E-09	3.802E-09	2.136E-09	1.372E-09
NW	9.633E-06	2.158E-06	6.458E-07	3.169E-07	1.918E-07	8.052E-08	2.553E-08	1.095E-08	6.196E-09	3.997E-09
NNW	1.170E-05	2.667E-06	8.192E-07	4.078E-07	2.493E-07	1.064E-07	3.454E-08	1.506E-08	8.600E-09	5.581E-09
N	1.174E-05	2.628E-06	8.126E-07	4.048E-07	2.481E-07	1.063E-07	3.485E-08	1.533E-08	8.812E-09	5.751E-09
NNE	5.140E-06	1.140E-06	3.310E-07	1.598E-07	9.563E-08	3.953E-08	1.226E-08	5.195E-09	2.932E-09	1.895E-09
NE	1.562E-06	3.376E-07	9.405E-08	4.424E-08	2.598E-08	1.048E-08	3.059E-09	1.287E-09	6.892E-10	4.393E-10
ENE	1.411E-06	3.040E-07	8.435E-08	3.954E-08	2.314E-08	9.205E-09	2.664E-09	1.064E-09	5.778E-10	3.626E-10
E	1.738E-06	3.916E-07	1.139E-07	5.492E-08	3.203E-08	1.353E-08	4.158E-09	1.741E-09	9.729E-10	6.231E-10
ESE	1.100E-06	2.402E-07	6.759E-08	3.178E-08	1.886E-08	7.606E-09	2.260E-09	9.249E-10	5.112E-10	3.256E-10
SE	2.630E-06	5.492E-07	1.485E-07	6.857E-08	3.972E-08	1.559E-08	4.438E-09	1.768E-09	9.641E-10	6.089E-10
SSE	2.071E-06	4.384E-07	1.211E-07	5.672E-08	3.323E-08	1.330E-08	3.726E-09	1.613E-09	8.970E-10	5.742E-10

B107

VENTS GROUND LEVEL RELEASES

CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****											
DIRECTION FROM SITE	DISTANCES IN MILES										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	3.241E-07	1.676E-07	5.627E-08	2.675E-08	9.609E-09	4.766E-09	2.836E-09	1.837E-09	1.293E-09	9.581E-10	7.384E-10
SSW	2.391E-07	8.085E-08	4.151E-08	1.974E-08	7.389E-09	3.516E-09	2.070E-09	1.355E-09	9.537E-10	7.068E-10	5.447E-10
SW	1.134E-07	3.836E-08	1.976E-08	9.364E-09	3.364E-09	1.668E-09	9.822E-10	6.431E-10	4.525E-10	3.354E-10	2.588E-10
WSW	4.215E-08	1.425E-08	7.318E-09	3.479E-09	1.250E-09	6.198E-10	3.649E-10	2.390E-10	1.681E-10	1.246E-10	9.603E-11
W	4.750E-08	1.606E-08	8.248E-09	3.921E-09	1.408E-09	6.985E-10	4.113E-10	2.693E-10	1.895E-10	1.494E-10	1.082E-10
WNW	9.897E-08	3.347E-08	1.718E-08	8.170E-09	2.935E-09	1.455E-09	8.569E-10	5.611E-10	3.948E-10	2.926E-10	2.255E-10
NW	2.261E-07	7.645E-08	3.925E-08	1.866E-08	6.704E-09	3.324E-09	1.957E-09	1.282E-09	9.019E-10	6.684E-10	5.151E-10
NNW	2.015E-07	6.814E-08	3.498E-08	1.663E-08	5.974E-09	2.963E-09	1.745E-09	1.142E-09	8.038E-10	5.957E-10	4.590E-10
N	2.645E-07	8.946E-08	4.593E-08	2.184E-08	7.844E-09	3.890E-09	2.290E-09	1.508E-09	1.055E-09	7.821E-10	6.027E-10
NNE	2.089E-07	7.065E-08	3.628E-08	1.725E-08	6.195E-09	3.072E-09	1.899E-09	1.185E-09	8.335E-10	6.177E-10	4.760E-10
NE	8.689E-08	2.938E-08	1.509E-08	7.172E-09	2.576E-09	1.278E-09	7.523E-10	4.926E-10	3.466E-10	2.569E-10	1.980E-10
ENE	4.004E-08	1.354E-08	6.952E-09	3.305E-09	1.187E-09	5.887E-10	3.467E-10	2.270E-10	1.597E-10	1.184E-10	9.122E-11
E	4.381E-08	1.481E-08	7.607E-09	3.616E-09	1.299E-09	6.442E-10	3.793E-10	2.484E-10	1.748E-10	1.295E-10	9.981E-11
ESE	3.724E-08	1.259E-08	6.466E-09	3.074E-09	1.104E-09	5.476E-10	3.224E-10	2.111E-10	1.486E-10	1.101E-10	8.484E-11
SE	1.632E-07	5.518E-08	2.833E-08	1.347E-08	4.838E-09	2.400E-09	1.413E-09	9.251E-10	6.510E-10	4.824E-10	3.718E-10
SSE	1.785E-07	6.038E-08	3.100E-08	1.474E-08	5.294E-09	2.625E-09	1.546E-09	1.012E-09	7.122E-10	5.278E-10	4.068E-10

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	5.866E-10	2.606E-10	1.578E-10	7.978E-11	4.829E-11	3.238E-11	2.320E-11	1.742E-11	1.354E-11	1.082E-11	8.831E-12
SSW	4.327E-10	1.922E-10	1.164E-10	5.886E-11	3.562E-11	2.388E-11	1.711E-11	1.285E-11	9.992E-12	7.982E-12	6.515E-12
SW	2.053E-10	9.121E-11	5.525E-11	2.793E-11	1.670E-11	1.133E-11	8.121E-12	6.098E-12	4.741E-12	3.787E-12	3.091E-12
WSW	7.629E-11	3.389E-11	2.053E-11	1.038E-11	6.280E-12	4.211E-12	3.017E-12	2.266E-12	1.762E-12	1.407E-12	1.149E-12
W	8.598E-11	3.819E-11	2.314E-11	1.169E-11	7.078E-12	4.745E-12	3.400E-12	2.553E-12	1.985E-12	1.586E-12	1.294E-12
WNW	1.791E-10	7.958E-11	4.820E-11	2.436E-11	1.475E-11	9.887E-12	7.085E-12	5.320E-12	4.136E-12	3.304E-12	2.697E-12
NW	4.092E-10	1.818E-10	1.101E-10	5.566E-11	3.369E-11	2.259E-11	1.618E-11	1.215E-11	9.449E-12	7.548E-12	6.161E-12
NNW	3.647E-10	1.620E-10	9.814E-11	4.960E-11	3.002E-11	2.013E-11	1.442E-11	1.083E-11	8.421E-12	6.727E-12	5.490E-12
N	4.788E-10	2.127E-10	1.288E-10	6.513E-11	3.942E-11	2.643E-11	1.894E-11	1.422E-11	1.106E-11	8.832E-12	7.209E-12
NNE	3.782E-10	1.680E-10	1.018E-10	5.144E-11	3.113E-11	2.087E-11	1.496E-11	1.123E-11	8.732E-12	6.975E-12	5.693E-12
NE	1.573E-10	6.986E-11	4.232E-11	2.139E-11	1.295E-11	8.680E-12	6.220E-12	4.670E-12	3.631E-12	2.901E-12	2.368E-12
ENE	7.247E-11	3.219E-11	1.950E-11	9.857E-12	5.966E-12	4.000E-12	2.866E-12	2.152E-12	1.673E-12	1.337E-12	1.091E-12
E	7.929E-11	3.522E-11	2.134E-11	1.079E-11	6.528E-12	4.377E-12	3.136E-12	2.355E-12	1.831E-12	1.463E-12	1.194E-12
ESE	6.740E-11	2.994E-11	1.814E-11	9.168E-12	5.549E-12	3.720E-12	2.666E-12	2.002E-12	1.556E-12	1.243E-12	1.015E-12
SE	2.953E-10	1.312E-10	7.948E-11	4.017E-11	2.431E-11	1.630E-11	1.168E-11	8.771E-12	6.820E-12	5.448E-12	4.447E-12
SSE	3.231E-10	1.436E-10	8.696E-11	4.395E-11	2.660E-11	1.784E-11	1.278E-11	9.597E-12	7.462E-12	5.960E-12	4.865E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****										
DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.500E-08	1.127E-08	2.941E-09	1.321E-09	7.473E-10	2.874E-10	8.313E-11	3.295E-11	1.760E-11	1.089E-11
SSW	4.057E-08	8.311E-09	2.170E-09	9.744E-10	5.513E-10	2.120E-10	6.133E-11	2.431E-11	1.298E-11	8.034E-12
SW	1.925E-08	3.943E-09	1.029E-09	4.624E-10	2.616E-10	1.306E-10	2.910E-11	1.153E-11	6.159E-12	3.812E-12
WSW	7.153E-09	1.465E-09	3.825E-10	1.718E-10	9.718E-11	3.737E-11	1.081E-11	4.285E-12	2.288E-12	1.416E-12
W	8.062E-09	1.651E-09	4.311E-10	1.936E-10	1.095E-10	4.212E-11	1.218E-11	4.829E-12	2.579E-12	1.596E-12
WNW	1.688E-08	3.441E-09	8.982E-10	4.034E-10	2.282E-10	8.776E-11	2.539E-11	1.006E-11	5.373E-12	3.326E-12
NW	3.837E-08	7.859E-09	2.052E-09	9.215E-10	5.213E-10	2.005E-10	5.799E-11	2.299E-11	1.227E-11	7.597E-12
NNW	3.419E-08	7.004E-09	1.824E-09	8.212E-10	4.646E-10	1.787E-10	5.168E-11	2.046E-11	1.094E-11	6.771E-12
N	4.490E-08	9.196E-09	2.401E-09	1.078E-09	6.100E-10	2.346E-10	6.786E-11	2.690E-11	1.436E-11	8.890E-12
NNE	3.546E-08	7.263E-09	1.896E-09	8.516E-10	4.818E-10	1.853E-10	5.360E-11	2.124E-11	1.134E-11	7.021E-12
NE	1.475E-08	3.020E-09	7.885E-10	3.541E-10	2.003E-10	7.704E-11	2.229E-11	8.834E-12	4.717E-12	2.920E-12
ENE	6.795E-09	1.392E-09	3.633E-10	1.632E-10	9.232E-11	3.550E-11	1.027E-11	4.071E-12	2.174E-12	1.345E-12
E	7.435E-09	1.523E-09	3.976E-10	1.786E-10	1.010E-10	3.885E-11	1.124E-11	4.454E-12	2.378E-12	1.472E-12
ESE	6.320E-09	1.295E-09	3.390E-10	1.518E-10	8.587E-11	3.302E-11	9.553E-12	3.786E-12	2.022E-12	1.251E-12
SE	2.769E-08	5.673E-09	1.481E-09	6.651E-10	3.763E-10	1.447E-10	4.186E-11	1.659E-11	8.859E-12	5.484E-12
SSE	3.033E-08	6.206E-09	1.620E-09	7.277E-10	4.117E-10	1.580E-10	4.580E-11	1.815E-11	9.693E-12	6.000E-12

B108

VENTS GROUND LEVEL RELEASES
 CORRECTED FOR OPEN TERRAIN RECIRCULATION
 SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q
			(MILES)	(METERS)	(SEC/CUB.METER) NO OFCAY	(SEC/CUB.METER) 2.260 DAY DECAY	(SEC/CUB.METER) R.000 DAY DECAY	
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.89	1430.	4.652E-06	4.623E-06	4.096E-06	3.631E-08
A	SITE BOUNDARY	SSW	0.92	1489.	4.659E-06	4.616E-06	4.094E-06	2.450E-08
A	SITE BOUNDARY	SW	1.09	1750.	2.329E-06	2.398E-06	2.022E-06	7.549E-09
A	SITE BOUNDARY	WSW	0.94	1510.	1.596E-06	1.582E-06	1.470E-06	4.100E-09
A	SITE BOUNDARY	W	0.93	1500.	1.491E-06	1.479E-06	1.308E-06	4.701E-09
A	SITE BOUNDARY	WNW	0.96	1540.	2.387E-06	2.368E-06	2.091E-06	9.149E-09
A	SITE BOUNDARY	NW	0.72	1160.	1.174E-05	1.166E-05	1.047E-05	4.196E-08
A	SITE BOUNDARY	NNW	0.62	1000.	1.782E-05	1.770E-05	1.601E-05	4.798E-08
A	SITE BOUNDARY	N	0.65	1050.	1.663E-05	1.652E-05	1.490E-05	5.804E-08
A	SITE BOUNDARY	NNE	0.63	1010.	7.779E-06	7.754E-06	6.993E-06	4.893E-08
A	SITE BOUNDARY	NE	0.64	1030.	2.303E-06	2.298E-06	2.069E-06	1.969E-08
A	SITE BOUNDARY	ENE	0.62	1000.	2.177E-06	2.167E-06	1.957E-06	9.534E-09
A	SITE BOUNDARY	E	0.61	980.	2.733E-06	2.718E-06	2.460E-06	1.373E-08
A	SITE BOUNDARY	ESE	0.61	980.	1.745E-06	1.739E-06	1.572E-06	9.122E-09
A	SITE BOUNDARY	SE	1.06	1700.	1.287E-06	1.282E-06	1.121E-06	1.169E-08
A	SITE BOUNDARY	SSE	0.91	1460.	1.481E-06	1.476E-06	1.304E-06	1.895E-08

Atmospheric Diffusion Estimates
Ground-Level Releases
April-June 1983

VENTS GROUND LEVEL RELEASES
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.459E-05	1.055E-05	5.651E-06	2.807E-06	1.794E-06	5.803E-07	3.622E-07	2.497E-07	1.841E-07	1.423E-07	1.140E-07
SSW	3.580E-05	1.231E-05	6.601E-06	3.298E-06	1.309E-06	7.027E-07	4.424E-07	3.072E-07	2.277E-07	1.769E-07	1.423E-07
SW	2.339E-05	7.794E-06	4.221E-06	2.130E-06	8.518E-07	4.596E-07	2.905E-07	2.022E-07	1.503E-07	1.170E-07	9.432E-08
WSW	2.157E-05	7.160E-06	3.906E-06	1.978E-06	7.902E-07	4.260E-07	2.691E-07	1.873E-07	1.391E-07	1.083E-07	8.726E-08
W	2.016E-05	6.775E-06	3.663E-06	1.844E-06	7.378E-07	3.183E-07	2.519E-07	1.755E-07	1.305E-07	1.016E-07	8.196E-08
WNW	2.424E-05	8.315E-06	4.426E-06	2.201E-06	8.703E-07	4.662E-07	2.931E-07	2.032E-07	1.505E-07	1.169E-07	9.397E-08
NW	4.965E-05	1.692E-05	9.128E-06	4.584E-06	1.833E-06	9.892E-07	6.253E-07	4.355E-07	3.238E-07	2.521E-07	2.033E-07
N	6.112E-05	2.019E-05	1.082E-05	5.437E-06	2.209E-06	1.197E-06	7.615E-07	5.332E-07	3.981E-07	3.112E-07	2.518E-07
NNE	4.787E-05	1.598E-05	8.625E-06	4.337E-06	1.734E-06	9.326E-07	5.890E-07	4.100E-07	3.047E-07	2.372E-07	1.912E-07
NW	1.754E-05	5.807E-06	3.168E-06	1.605E-06	6.385E-07	3.432E-07	2.163E-07	1.503E-07	1.115E-07	8.663E-08	6.973E-08
NE	1.368E-05	4.653E-06	2.540E-06	1.279E-06	5.045E-07	2.697E-07	1.693E-07	1.172E-07	8.673E-08	6.726E-08	5.404E-08
E	4.192E-06	1.474E-06	7.955E-07	3.956E-07	1.530E-07	8.067E-08	5.010E-08	3.440E-08	2.527E-08	1.948E-08	1.556E-08
ESE	4.509E-06	1.549E-06	8.408E-07	4.213E-07	1.646E-07	8.741E-08	5.458E-08	3.764E-08	2.775E-08	2.145E-08	1.719E-08
E	8.908E-06	2.880E-06	1.571E-06	7.967E-07	3.169E-07	1.704E-07	1.074E-07	7.462E-08	5.536E-08	4.304E-08	3.465E-08
SE	1.138E-05	3.961E-06	2.095E-06	1.029E-06	3.925E-07	2.050E-07	1.264E-07	8.630E-08	6.309E-08	4.842E-08	3.854E-08
SSE	1.255E-05	4.295E-06	2.307E-06	1.147E-06	4.450E-07	2.353E-07	1.464E-07	1.007E-07	7.412E-08	5.722E-08	4.578E-08

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.397E-08	4.753E-08	3.047E-08	1.724E-08	1.159E-08	8.534E-09	6.656E-09	5.399E-09	4.508E-09	3.846E-09	3.339E-09
SSW	1.177E-07	5.022E-08	3.891E-08	2.223E-08	1.500E-08	1.109E-08	8.669E-09	7.048E-09	5.895E-09	5.039E-09	4.381E-09
SW	7.810E-08	4.020E-08	2.608E-08	1.498E-08	1.016E-08	7.531E-09	5.905E-09	4.811E-09	4.032E-09	3.452E-09	3.005E-09
WSW	7.224E-08	3.715E-08	2.409E-08	1.383E-08	9.372E-09	6.944E-09	5.442E-09	4.533E-09	3.713E-09	3.177E-09	2.765E-09
W	6.799E-08	3.501E-08	2.274E-08	1.309E-08	8.891E-09	6.598E-09	5.178E-09	4.223E-09	3.541E-09	3.033E-09	2.642E-09
WNW	7.768E-08	3.974E-08	2.568E-08	1.468E-08	9.923E-09	7.339E-09	5.745E-09	4.674E-09	3.913E-09	3.347E-09	2.911E-09
NW	1.684E-07	8.675E-08	5.632E-08	3.238E-08	2.196E-08	1.628E-08	1.277E-08	1.041E-08	8.723E-09	7.468E-09	6.507E-09
N	2.092E-07	1.091E-07	7.140E-08	4.156E-08	2.844E-08	2.123E-08	1.674E-08	1.371E-08	1.154E-08	9.913E-09	8.658E-09
NNE	5.768E-08	2.957E-08	1.914E-08	1.095E-08	2.074E-08	1.540E-08	1.209E-08	9.863E-09	8.273E-09	7.089E-09	6.176E-09
NW	4.463E-08	2.275E-08	1.466E-08	8.351E-09	5.632E-09	4.158E-09	3.249E-09	2.639E-09	2.206E-09	1.884E-09	1.637E-09
NE	1.280E-08	6.431E-09	4.101E-09	2.300E-09	1.534E-09	1.122E-09	8.703E-10	7.027E-10	5.842E-10	4.966E-10	4.296E-10
E	1.416E-08	7.159E-09	4.586E-09	2.590E-09	1.738E-09	1.278E-09	9.951E-10	8.062E-10	6.722E-10	5.730E-10	4.969E-10
ESE	2.867E-08	1.473E-08	9.445E-09	5.478E-09	3.714E-09	2.753E-09	2.159E-09	1.759E-09	1.474E-09	1.262E-09	1.098E-09
E	3.159E-08	1.566E-08	9.898E-09	5.496E-09	3.654E-09	2.669E-09	2.068E-09	1.668E-09	1.386E-09	1.178E-09	1.019E-09
SE	3.768E-08	1.897E-08	1.212E-08	6.835E-09	4.589E-09	3.377E-09	2.632E-09	2.134E-09	1.781E-09	1.519E-09	1.318E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.475E-06	1.246E-06	3.754E-07	1.869E-07	1.150E-07	5.027E-08	1.767E-08	8.597E-09	5.419E-09	3.854E-09
SSW	6.492E-06	1.482E-06	4.577E-07	2.311E-07	1.434E-07	6.352E-08	2.272E-08	1.116E-08	7.072E-09	5.049E-09
SW	4.086E-06	9.614E-07	3.003E-07	1.525E-07	9.504E-08	4.235E-08	1.530E-08	7.581E-09	4.827E-09	3.459E-09
WSW	3.772E-06	8.922E-07	2.782E-07	1.411E-07	8.793E-08	3.915E-08	1.413E-08	6.991E-09	4.447E-09	3.183E-09
W	3.546E-06	8.327E-07	2.604E-07	1.323E-07	8.258E-08	3.687E-08	1.337E-08	6.642E-09	4.236E-09	3.039E-09
WNW	4.341E-06	9.864E-07	3.033E-07	1.528E-07	9.472E-08	4.192E-08	1.501E-08	7.391E-09	4.690E-09	3.353E-09
NW	8.840E-06	2.969E-06	6.464E-07	3.284E-07	2.048E-07	9.136E-08	3.307E-08	1.639E-08	1.044E-08	7.482E-09
N	1.051E-05	2.474E-06	7.863E-07	4.036E-07	2.536E-07	1.146E-07	4.236E-08	2.136E-08	1.375E-08	9.929E-09
NNE	8.355E-06	1.955E-06	6.091E-07	3.090E-07	1.926E-07	8.594E-08	3.117E-08	1.550E-08	9.894E-09	7.102E-09
NW	3.053E-06	7.220E-07	2.237E-07	1.131E-07	7.027E-08	3.118E-08	1.120E-08	5.519E-09	3.503E-09	2.594E-09
NE	2.449E-06	5.722E-07	1.752E-07	8.933E-08	5.447E-08	2.402E-08	8.546E-09	4.187E-09	2.648E-09	1.808E-09
E	7.685E-07	1.747E-07	5.197E-08	2.567E-08	1.570E-08	6.810E-09	2.369E-09	1.131E-09	7.055E-10	4.978E-10
ESE	8.116E-07	1.873E-07	5.456E-08	2.818E-08	1.733E-08	7.972E-09	2.655E-09	1.287E-09	8.092E-10	5.742E-10
E	1.514E-06	3.584E-07	1.111E-07	5.617E-08	3.492E-08	1.552E-08	5.598E-09	2.772E-09	1.765E-09	1.264E-09
SE	2.036E-06	4.506E-07	1.313E-07	6.413E-08	3.889E-08	1.664E-08	5.656E-09	2.691E-09	1.675E-09	1.181E-09
SSE	2.233E-06	5.078E-07	1.518E-07	7.527E-08	4.617E-08	2.009E-08	7.012E-09	3.402E-09	2.142E-09	1.522E-09

BT11

VENTS GROUND LEVEL RELEASES
 2-250 DAY DECAY, UNOCCUPIED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.957E-05	1.053E-05	5.637E-06	2.799E-06	1.389E-06	5.766E-07	3.592E-07	2.473E-07	1.820E-07	1.405E-07	1.123E-07
SSW	3.576E-05	1.229E-05	6.580E-06	3.284E-06	1.301E-06	6.966E-07	4.376E-07	3.031E-07	2.242E-07	1.738E-07	1.395E-07
SW	2.336E-05	7.779E-06	4.206E-06	2.119E-06	8.455E-07	4.550E-07	2.468E-07	1.992E-07	1.476E-07	1.146E-07	9.217E-08
MSW	2.154E-05	7.142E-06	3.891E-06	1.968E-06	7.840E-07	4.215E-07	2.655E-07	1.843E-07	1.365E-07	1.060E-07	8.516E-08
W	2.014E-05	6.758E-06	3.649E-06	1.835E-06	7.321E-07	3.942E-07	2.486E-07	1.727E-07	1.281E-07	9.950E-08	8.002E-08
WNW	2.421E-05	8.297E-06	4.412E-06	2.192E-06	8.646E-07	4.620E-07	2.898E-07	2.005E-07	1.482E-07	1.148E-07	9.206E-08
NW	4.960E-05	1.689E-05	9.103E-06	4.567E-06	1.822E-06	9.815E-07	6.192E-07	4.304E-07	3.193E-07	2.481E-07	1.996E-07
NNW	6.105E-05	2.015E-05	1.078E-05	5.413E-06	2.185E-06	1.186E-06	7.527E-07	5.258E-07	3.916E-07	3.054E-07	2.465E-07
N	4.782E-05	1.595E-05	8.600E-06	4.320E-06	1.720E-06	9.250E-07	5.830E-07	4.049E-07	3.002E-07	2.332E-07	1.875E-07
NNE	1.753E-05	5.793E-06	3.161E-06	1.620E-06	6.354E-07	3.416E-07	2.145E-07	1.488E-07	1.102E-07	8.548E-08	6.869E-08
NE	1.367E-05	4.647E-06	2.534E-06	1.275E-06	5.022E-07	2.681E-07	1.680E-07	1.162E-07	8.582E-08	6.646E-08	5.331E-08
ENE	4.190E-06	1.472E-06	7.941E-07	3.947E-07	1.524E-07	8.029E-08	4.981E-08	3.416E-08	2.506E-08	1.929E-08	1.540E-08
E	4.507E-06	1.547E-06	8.396E-07	4.205E-07	1.641E-07	8.717E-08	5.432E-08	3.742E-08	2.756E-08	2.129E-08	1.704E-08
ESE	9.901E-06	2.876E-06	1.567E-06	7.947E-07	3.154E-07	1.693E-07	1.065E-07	7.390E-08	5.474E-08	4.249E-08	3.415E-08
SE	1.137E-05	3.958E-06	2.093E-06	1.027E-06	3.915E-07	2.043E-07	1.259E-07	8.588E-08	6.272E-08	4.810E-08	3.826E-08
SSE	1.254E-05	4.289E-06	2.302E-06	1.143E-06	4.429E-07	2.337E-07	1.452E-07	9.975E-08	7.328E-08	5.647E-08	4.511E-08

HEATING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	9.240E-08	4.634E-08	2.945E-08	1.637E-08	1.081E-08	7.27E-09	6.900E-09	4.785E-09	3.927E-09	3.295E-09	2.812E-09
SSW	1.151E-07	5.820E-08	3.716E-08	2.073E-08	1.366E-08	9.858E-09	7.527E-09	5.975E-09	4.880E-09	4.073E-09	3.458E-09
SW	7.613E-08	3.866E-08	2.475E-08	1.385E-08	9.142E-09	6.599E-09	5.039E-09	4.009E-09	3.265E-09	2.723E-09	2.310E-09
MSW	7.331E-08	3.567E-08	2.281E-08	1.274E-08	8.398E-09	6.355E-09	4.618E-09	3.661E-09	2.986E-09	2.488E-09	2.109E-09
W	6.611E-08	3.363E-08	2.155E-08	1.207E-08	7.978E-09	5.762E-09	4.402E-09	3.494E-09	2.852E-09	2.374E-09	2.017E-09
WNW	7.592E-08	3.839E-08	2.452E-08	1.369E-08	9.030E-09	6.521E-09	4.983E-09	3.959E-09	3.236E-09	2.703E-09	2.296E-09
NW	1.650E-07	8.409E-08	5.401E-08	3.039E-08	2.016E-08	1.463E-08	1.122E-08	8.947E-09	7.336E-09	6.146E-09	5.236E-09
NNW	2.043E-07	1.052E-07	6.802E-08	3.862E-08	2.578E-08	1.877E-08	1.444E-08	1.154E-08	9.473E-09	7.942E-09	6.769E-09
N	1.550E-07	7.899E-08	5.073E-08	2.856E-08	1.898E-08	1.378E-08	1.058E-08	8.442E-09	6.927E-09	5.807E-09	4.950E-09
NNE	5.672E-08	2.884E-08	1.850E-08	1.041E-08	6.927E-09	5.041E-09	3.881E-09	3.197E-09	2.559E-09	2.153E-09	1.843E-09
NE	4.396E-08	2.225E-08	1.423E-08	7.983E-09	5.306E-09	3.860E-09	2.973E-09	2.381E-09	1.962E-09	1.652E-09	1.415E-09
ENE	1.265E-08	6.315E-09	4.002E-09	2.217E-09	1.460E-09	1.055E-09	8.083E-10	6.446E-10	5.294E-10	4.446E-10	3.799E-10
E	1.403E-08	7.057E-09	4.499E-09	2.517E-09	1.672E-09	1.218E-09	9.395E-10	7.544E-10	6.227E-10	5.257E-10	4.516E-10
ESE	2.821E-08	1.437E-08	9.238E-09	5.215E-09	3.479E-09	2.538E-09	1.959E-09	1.571E-09	1.296E-09	1.093E-09	9.369E-10
SE	3.133E-08	1.547E-08	9.735E-09	5.362E-09	3.536E-09	2.562E-09	1.969E-09	1.576E-09	1.299E-09	1.095E-09	9.399E-10
SSE	3.706E-08	1.850E-08	1.173E-08	6.502E-09	4.295E-09	3.110E-09	2.386E-09	1.904E-09	1.564E-09	1.314E-09	1.122E-09

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.463E-06	1.241E-06	3.724E-07	1.848E-07	1.133E-07	4.907E-08	1.681E-08	7.893E-09	4.805E-09	3.383E-09
SSW	6.383E-06	1.473E-06	4.529E-07	2.275E-07	1.406E-07	6.149E-08	2.124E-08	9.940E-09	6.001E-09	4.084E-09
SW	4.072E-06	9.550E-07	2.966E-07	1.498E-07	9.289E-08	4.083E-08	1.418E-08	6.653E-09	4.017E-09	2.730E-09
MSW	3.758E-06	8.859E-07	2.746E-07	1.385E-07	8.583E-08	3.765E-08	1.305E-08	6.105E-09	3.677E-09	2.495E-09
W	3.534E-06	8.269E-07	2.571E-07	1.299E-07	8.064E-08	3.548E-08	1.236E-08	5.809E-09	3.509E-09	2.385E-09
WNW	4.288E-06	9.896E-07	3.000E-07	1.504E-07	9.281E-08	4.056E-08	1.402E-08	6.575E-09	3.976E-09	2.710E-09
NW	8.817E-06	2.058E-06	6.403E-07	3.239E-07	2.012E-07	8.870E-08	3.109E-08	1.474E-08	8.983E-09	6.162E-09
NNW	1.048E-05	2.458E-06	7.775E-07	3.971E-07	2.483E-07	1.107E-07	3.944E-08	1.891E-08	1.158E-08	7.961E-09
N	8.332E-06	1.944E-06	6.030E-07	3.046E-07	1.890E-07	8.332E-08	2.923E-08	1.389E-08	8.476E-09	5.822E-09
NNE	3.052E-06	7.184E-07	2.220E-07	1.118E-07	6.923E-08	3.044E-08	1.066E-08	5.880E-09	3.119E-09	2.158E-09
NE	2.444E-06	5.699E-07	1.740E-07	8.712E-08	5.375E-08	2.351E-08	8.181E-09	3.890E-09	2.390E-09	1.656E-09
ENE	7.672E-07	1.742E-07	5.168E-08	2.546E-08	1.553E-08	6.694E-09	2.277E-09	1.064E-09	6.475E-10	4.458E-10
E	8.186E-07	1.868E-07	5.630E-08	2.799E-08	1.718E-08	7.469E-09	2.582E-09	1.228E-09	7.570E-10	5.270E-10
ESE	1.515E-06	3.569E-07	1.192E-07	5.555E-08	3.442E-08	1.517E-08	5.337E-09	2.557E-09	1.573E-09	1.095E-09
SE	2.334E-06	4.946E-07	1.378E-07	6.377E-08	3.861E-08	1.644E-08	5.523E-09	2.585E-09	1.583E-09	1.088E-09
SSE	2.279E-06	5.956E-07	1.506E-07	7.444E-08	4.549E-08	1.962E-08	6.682E-09	3.136E-09	1.912E-09	1.317E-09

B112

WENTS GROUND LEVEL RELEASES
 4,000 DAY DECAY, DEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	2.894E-05	9.630E-06	5.032E-06	2.455E-06	9.278E-07	4.797E-07	2.927E-07	1.977E-07	1.432E-07	1.089E-07	8.586E-08
SSW	3.387E-05	1.124E-05	5.877E-06	2.883E-06	1.110E-06	5.804E-07	3.573E-07	2.431E-07	1.769E-07	1.351E-07	1.070E-07
SW	2.213E-05	7.116E-06	3.758E-06	1.862E-06	7.219E-07	3.795E-07	2.344E-07	1.600E-07	1.167E-07	8.930E-08	7.085E-08
WSW	2.040E-05	6.534E-06	3.477E-06	1.729E-06	6.696E-07	3.517E-07	2.171E-07	1.481E-07	1.080E-07	8.262E-08	6.552E-08
W	1.908E-05	6.183E-06	3.261E-06	1.612E-06	6.252E-07	3.288E-07	2.033E-07	1.388E-07	1.013E-07	7.755E-08	6.155E-08
WNW	2.293E-05	7.588E-06	3.941E-06	1.924E-06	7.377E-07	3.850E-07	2.366E-07	1.608E-07	1.169E-07	8.925E-08	7.064E-08
NW	4.698E-05	1.544E-05	8.128E-06	4.008E-06	1.554E-06	8.173E-07	5.051E-07	3.448E-07	2.516E-07	1.927E-07	1.529E-07
NW	5.782E-05	1.843E-05	9.629E-06	4.753E-06	1.865E-06	9.886E-07	6.148E-07	4.218E-07	3.092E-07	2.376E-07	1.892E-07
N	4.524E-05	1.459E-05	7.680E-06	3.792E-06	1.467E-06	7.705E-07	4.758E-07	3.245E-07	2.367E-07	1.812E-07	1.438E-07
NNE	1.660E-05	5.296E-06	2.821E-06	1.404E-06	5.415E-07	2.837E-07	1.748E-07	1.190E-07	8.668E-08	6.625E-08	5.250E-08
NE	1.295E-05	4.248E-06	2.262E-06	1.119E-06	4.279E-07	2.229E-07	1.368E-07	9.288E-08	6.747E-08	5.146E-08	4.070E-08
ENE	3.967E-06	1.345E-06	7.085E-07	3.460E-07	1.298E-07	6.671E-08	4.052E-08	2.727E-08	1.967E-08	1.491E-08	1.173E-08
E	4.267E-06	1.414E-06	7.490E-07	3.686E-07	1.397E-07	7.230E-08	4.415E-08	2.985E-08	2.161E-08	1.643E-08	1.297E-08
ESE	8.429E-06	2.629E-06	1.399E-06	6.968E-07	2.688E-07	1.488E-07	8.679E-08	5.911E-08	4.306E-08	3.292E-08	2.609E-08
SE	1.077E-05	3.616E-06	1.867E-06	9.003E-07	3.331E-07	1.696E-07	1.023E-07	6.846E-08	4.915E-08	3.710E-08	2.908E-08
SSE	1.187E-05	3.921E-06	2.055E-06	1.003E-06	3.774E-07	1.944E-07	1.183E-07	7.980E-08	5.765E-08	4.376E-08	3.447E-08

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)											
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	6.971E-08	3.327E-08	2.029E-08	1.057E-08	6.636E-09	4.607E-09	3.407E-09	2.633E-09	2.101E-09	1.717E-09	1.431E-09	
SSW	8.717E-08	4.204E-08	2.580E-08	1.355E-08	8.532E-09	5.931E-09	4.391E-09	3.394E-09	2.708E-09	2.213E-09	1.844E-09	
SW	5.780E-08	2.803E-08	1.726E-08	9.109E-09	5.756E-09	4.012E-09	2.975E-09	2.303E-09	1.839E-09	1.504E-09	1.254E-09	
WSW	5.344E-08	2.589E-08	1.594E-08	8.400E-09	5.304E-09	3.694E-09	2.737E-09	2.117E-09	1.690E-09	1.382E-09	1.151E-09	
W	5.023E-08	2.440E-08	1.505E-08	7.956E-09	5.034E-09	3.512E-09	2.607E-09	2.019E-09	1.613E-09	1.320E-09	1.101E-09	
WNW	5.753E-08	2.774E-08	1.703E-08	8.950E-09	5.642E-09	3.927E-09	2.909E-09	2.251E-09	1.797E-09	1.470E-09	1.225E-09	
NW	1.248E-07	6.062E-08	3.739E-08	1.977E-08	1.252E-08	8.737E-09	6.489E-09	5.030E-09	4.023E-09	3.295E-09	2.751E-09	
NW	1.549E-07	7.609E-08	4.731E-08	2.531E-08	1.615E-08	1.134E-08	8.462E-09	6.585E-09	5.284E-09	4.341E-09	3.632E-09	
N	1.173E-07	5.700E-08	3.517E-08	1.867E-08	1.181E-08	8.252E-09	6.135E-09	4.760E-09	3.810E-09	3.123E-09	2.608E-09	
NNE	4.279E-08	2.070E-08	1.273E-08	6.714E-09	4.244E-09	2.961E-09	2.198E-09	1.704E-09	1.363E-09	1.117E-09	9.330E-10	
NE	3.313E-08	1.594E-08	9.768E-09	5.127E-09	3.234E-09	2.252E-09	1.670E-09	1.293E-09	1.034E-09	8.467E-10	7.069E-10	
ENE	9.508E-09	4.510E-09	2.736E-09	1.415E-09	8.932E-10	6.101E-10	4.494E-10	3.461E-10	2.754E-10	2.246E-10	1.869E-10	
E	1.053E-08	5.327E-09	3.064E-09	1.598E-09	1.004E-09	6.975E-10	5.164E-10	3.994E-10	3.190E-10	2.611E-10	2.179E-10	
ESE	2.127E-08	1.031E-08	6.353E-09	3.359E-09	2.128E-09	1.488E-09	1.107E-09	8.590E-10	6.881E-10	5.646E-10	4.720E-10	
SE	2.349E-08	1.100E-08	6.619E-09	3.394E-09	2.114E-09	1.460E-09	1.076E-09	8.288E-10	6.599E-10	5.388E-10	4.487E-10	
SSE	2.796E-08	1.328E-08	8.068E-09	4.190E-09	2.630E-09	1.825E-09	1.349E-09	1.042E-09	8.316E-10	6.799E-10	5.667E-10	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	4.978E-06	1.068E-06	3.046E-07	1.457E-07	8.649E-08	3.559E-08	1.098E-08	4.668E-09	2.651E-09	1.725E-09
SSW	5.738E-06	1.269E-06	3.711E-07	1.799E-07	1.080E-07	4.485E-08	1.404E-08	6.008E-09	3.417E-09	2.223E-09
SW	3.661E-06	8.230E-07	2.433E-07	1.186E-07	7.148E-08	2.986E-08	9.431E-09	4.062E-09	2.318E-09	1.511E-09
WSW	3.379E-06	7.637E-07	2.254E-07	1.098E-07	6.611E-08	2.759E-08	8.698E-09	3.740E-09	2.132E-09	1.388E-09
W	3.177E-06	7.127E-07	2.109E-07	1.029E-07	6.210E-08	2.598E-08	8.233E-09	3.556E-09	2.032E-09	1.326E-09
WNW	3.855E-06	8.447E-07	2.459E-07	1.189E-07	7.130E-08	2.960E-08	9.275E-09	3.977E-09	2.266E-09	1.476E-09
NW	7.923E-06	1.772E-06	5.242E-07	2.558E-07	1.543E-07	6.455E-08	2.046E-08	8.845E-09	5.063E-09	3.309E-09
NW	9.417E-06	2.117E-06	6.373E-07	3.141E-07	1.999E-07	8.091E-08	2.613E-08	1.147E-08	6.626E-09	4.358E-09
N	7.487E-06	1.674E-06	4.939E-07	2.497E-07	1.451E-07	6.070E-08	1.927E-08	8.353E-09	4.791E-09	3.136E-09
NNE	2.741E-06	6.195E-07	1.815E-07	8.814E-08	5.298E-08	2.207E-08	6.954E-09	2.998E-09	1.715E-09	1.122E-09
NE	2.195E-06	4.993E-07	1.422E-07	6.863E-08	4.108E-08	1.702E-08	5.317E-09	2.781E-09	1.302E-09	8.504E-10
ENE	6.889E-07	1.498E-07	4.220E-08	2.003E-08	1.185E-08	4.832E-09	1.472E-09	6.186E-10	3.487E-10	2.257E-10
E	7.276E-07	1.606E-07	4.594E-08	2.199E-08	1.309E-08	5.377E-09	1.660E-09	7.768E-10	4.022E-10	2.623E-10
ESE	1.360E-06	3.070E-07	9.012E-08	4.378E-08	2.633E-08	1.099E-08	3.477E-09	1.506E-09	8.646E-10	5.669E-10
SE	1.876E-06	3.865E-07	1.067E-07	5.038E-08	2.939E-08	1.183E-08	3.542E-09	1.481E-09	8.340E-10	5.413E-10
SSE	2.002E-06	4.352E-07	1.232E-07	5.869E-08	3.481E-08	1.422E-08	4.359E-09	1.849E-09	1.050E-09	6.829E-10

B115

VENTS GROUND LEVEL RELEASES
CORRECTED FOR OPEN TERRAIN RECIRCULATION

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M ² -2) AT FIXED POINTS BY DOWNWIND SECTORS										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	2.880E-07	9.738E-08	5.000E-08	2.477E-08	8.530E-09	4.234E-09	2.493E-09	1.633E-09	1.149E-09	8.513E-10	6.561E-10
SSW	1.791E-07	6.056E-08	3.110E-08	1.478E-08	5.310E-09	2.633E-09	1.551E-09	1.015E-09	7.144E-10	5.295E-10	4.380E-10
SW	8.901E-08	3.010E-08	1.545E-08	7.347E-09	2.639E-09	1.309E-09	7.737E-10	5.046E-10	3.551E-10	2.632E-10	2.028E-10
MSW	7.902E-08	2.672E-08	1.372E-08	6.522E-09	2.343E-09	1.162E-09	6.841E-10	4.480E-10	3.152E-10	2.336E-10	1.800E-10
W	6.895E-08	2.331E-08	1.197E-08	5.691E-09	2.044E-09	1.014E-09	5.969E-10	3.909E-10	2.750E-10	2.038E-10	1.571E-10
WNW	1.090E-07	3.684E-08	1.892E-08	8.993E-09	3.230E-09	1.602E-09	9.433E-10	6.177E-10	4.346E-10	3.221E-10	2.482E-10
NW	2.530E-07	8.557E-08	4.394E-08	2.089E-08	7.503E-09	3.721E-09	2.191E-09	1.435E-09	1.009E-09	7.481E-10	5.765E-10
NNW	2.506E-07	8.475E-08	4.352E-08	2.069E-08	7.431E-09	3.685E-09	2.170E-09	1.421E-09	9.998E-10	7.413E-10	5.710E-10
N	3.107E-07	1.051E-07	5.394E-08	2.564E-08	9.211E-09	4.568E-09	2.690E-09	1.761E-09	1.239E-09	9.185E-10	7.078E-10
NNE	1.177E-07	3.981E-08	2.044E-08	9.718E-09	3.491E-09	1.731E-09	1.019E-09	6.675E-10	4.697E-10	3.461E-10	2.682E-10
NE	1.014E-07	3.430E-08	1.761E-08	8.372E-09	3.007E-09	1.491E-09	8.781E-10	5.753E-10	4.046E-10	2.998E-10	2.311E-10
ENE	4.757E-08	1.609E-08	8.260E-09	3.927E-09	1.411E-09	6.995E-10	4.119E-10	2.697E-10	1.898E-10	1.406E-10	1.084E-10
E	4.131E-08	1.397E-08	7.173E-09	3.410E-09	1.225E-09	6.075E-10	3.577E-10	2.342E-10	1.648E-10	1.221E-10	9.412E-11
ESE	6.889E-08	2.330E-08	1.196E-08	5.687E-09	2.043E-09	1.013E-09	5.965E-10	3.986E-10	2.748E-10	2.037E-10	1.569E-10
SE	1.790E-07	6.054E-08	3.108E-08	1.478E-08	5.308E-09	2.632E-09	1.550E-09	1.015E-09	7.141E-10	5.295E-10	4.079E-10
SSE	1.327E-07	4.488E-08	2.304E-08	1.096E-08	3.935E-09	1.952E-09	1.149E-09	7.524E-10	5.294E-10	3.924E-10	3.024E-10

DIRECTIONS FROM SITE

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	5.212E-10	2.315E-10	1.403E-10	7.089E-11	4.291E-11	2.877E-11	2.061E-11	1.548E-11	1.204E-11	9.614E-12	7.847E-12
SSW	3.241E-10	1.440E-10	8.723E-11	4.409E-11	2.668E-11	1.789E-11	1.282E-11	9.627E-12	7.485E-12	5.979E-12	4.880E-12
SW	1.611E-10	7.157E-11	4.335E-11	2.191E-11	1.326E-11	8.892E-12	6.372E-12	4.785E-12	3.720E-12	2.972E-12	2.426E-12
MSW	1.430E-10	6.353E-11	3.848E-11	1.945E-11	1.177E-11	7.894E-12	5.656E-12	4.247E-12	3.302E-12	2.630E-12	2.153E-12
W	1.248E-10	5.543E-11	3.358E-11	1.697E-11	1.027E-11	6.888E-12	4.935E-12	3.706E-12	2.881E-12	2.302E-12	1.879E-12
WNW	1.972E-10	8.760E-11	5.306E-11	2.682E-11	1.623E-11	1.088E-11	7.799E-12	5.856E-12	4.553E-12	3.637E-12	2.969E-12
NW	4.580E-10	2.035E-10	1.232E-10	6.229E-11	3.770E-11	2.528E-11	1.811E-11	1.360E-11	1.058E-11	8.488E-12	6.895E-12
NNW	4.536E-10	2.015E-10	1.221E-10	6.170E-11	3.734E-11	2.504E-11	1.794E-11	1.347E-11	1.047E-11	8.367E-12	6.830E-12
N	5.623E-10	2.498E-10	1.513E-10	7.648E-11	4.629E-11	3.104E-11	2.224E-11	1.670E-11	1.298E-11	1.037E-11	8.466E-12
NNE	2.131E-10	9.466E-11	5.734E-11	2.898E-11	1.754E-11	1.176E-11	8.428E-12	6.328E-12	4.920E-12	3.930E-12	3.208E-12
NE	1.836E-10	8.155E-11	4.940E-11	2.497E-11	1.511E-11	1.013E-11	7.260E-12	5.452E-12	4.239E-12	3.386E-12	2.764E-12
ENE	8.610E-11	3.825E-11	2.317E-11	1.171E-11	7.088E-12	4.752E-12	3.405E-12	2.557E-12	1.988E-12	1.588E-12	1.296E-12
E	7.477E-11	3.322E-11	2.012E-11	1.017E-11	6.155E-12	4.127E-12	2.957E-12	2.221E-12	1.727E-12	1.379E-12	1.126E-12
ESE	1.247E-10	5.539E-11	3.355E-11	1.696E-11	1.026E-11	6.882E-12	4.931E-12	3.703E-12	2.879E-12	2.300E-12	1.877E-12
SE	3.240E-10	1.439E-10	8.719E-11	4.407E-11	2.667E-11	1.788E-11	1.281E-11	9.623E-12	7.482E-12	5.977E-12	4.878E-12
SSE	2.402E-10	1.067E-10	6.464E-11	3.267E-11	1.977E-11	1.326E-11	9.500E-12	7.134E-12	5.547E-12	4.431E-12	3.617E-12

B114

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M ² -2) BY DOWNWIND SECTORS										
	SEGMENT BOUNDARIES IN MILES										
	1-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	4.887E-08	1.801E-08	2.613E-09	1.174E-09	6.640E-10	2.553E-10	7.387E-11	2.928E-11	1.563E-11	9.677E-12	
SSW	3.039E-08	6.226E-09	1.625E-09	7.299E-10	4.129E-10	1.588E-10	4.594E-11	1.821E-11	9.723E-12	6.018E-12	
SW	1.511E-08	3.094E-09	8.078E-10	3.628E-10	2.052E-10	7.892E-11	2.283E-11	9.049E-12	4.833E-12	2.991E-12	
MSW	1.341E-08	2.747E-09	7.171E-10	3.220E-10	1.822E-10	7.006E-11	2.027E-11	8.033E-12	4.290E-12	2.655E-12	
W	1.170E-08	2.397E-09	6.257E-10	2.810E-10	1.590E-10	6.113E-11	1.769E-11	7.009E-12	3.743E-12	2.317E-12	
WNW	1.849E-08	3.787E-09	9.887E-10	4.441E-10	2.512E-10	9.660E-11	2.795E-11	1.108E-11	5.915E-12	3.661E-12	
NW	4.294E-08	8.796E-09	2.296E-09	1.031E-09	5.835E-10	2.244E-10	6.491E-11	2.573E-11	1.374E-11	8.503E-12	
NNW	4.253E-08	8.713E-09	2.274E-09	1.022E-09	5.779E-10	2.222E-10	6.429E-11	2.548E-11	1.361E-11	8.422E-12	
N	5.272E-08	1.080E-08	2.819E-09	1.266E-09	7.163E-10	2.755E-10	7.969E-11	3.158E-11	1.687E-11	1.044E-11	
NNE	1.994E-08	4.093E-09	1.068E-09	4.798E-10	2.715E-10	1.044E-10	3.020E-11	1.197E-11	6.392E-12	3.956E-12	
NE	1.721E-08	3.526E-09	9.204E-10	4.134E-10	2.338E-10	8.993E-11	2.602E-11	1.031E-11	5.506E-12	3.408E-12	
ENE	8.073E-09	1.654E-09	4.317E-10	1.939E-10	1.097E-10	4.218E-11	1.220E-11	4.836E-12	2.599E-12	1.599E-12	
E	7.011E-09	1.436E-09	3.749E-10	1.684E-10	9.525E-11	3.663E-11	1.060E-11	4.200E-12	2.243E-12	1.388E-12	
ESE	1.169E-08	2.395E-09	6.252E-10	2.808E-10	1.588E-10	6.108E-11	1.767E-11	7.004E-12	3.740E-12	2.315E-12	
SE	3.038E-08	6.223E-09	1.625E-09	7.296E-10	4.129E-10	1.587E-10	4.592E-11	1.820E-11	9.719E-12	6.016E-12	
SSE	2.252E-08	4.614E-09	1.204E-09	5.404E-10	3.060E-10	1.177E-10	3.404E-11	1.349E-11	7.205E-12	4.460E-12	

VENTS GROUND LEVEL RELEASES
CORRECTED FOR OPEN TERRAIN RECIRCULATION
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q
			(MILFS)	(METERS)	(SEC/CUP.METER)	(SEC/CUP.METER)	(SEC/CUP.METER)	(PER SQ.METER)
					NO DECAY		NO DECAY	
					2.260 DAY DECAY		8.000 DAY DECAY	
					UNDEPLETED		DEPLETED	
A	SITE BOUNDARY	S	0.89	1430.	3.735E-06	3.724E-06	3.272E-06	3.227E-08
A	SITE BOUNDARY	SSW	0.92	1480.	4.027E-06	4.011E-06	3.540E-06	1.835E-08
A	SITE BOUNDARY	SW	1.09	1750.	1.754E-06	1.744E-06	1.524E-06	5.923E-09
A	SITE BOUNDARY	WSW	0.94	1510.	2.296E-06	2.285E-06	2.015E-06	7.685E-09
A	SITE BOUNDARY	W	0.93	1500.	2.176E-06	2.166E-06	1.911E-06	6.823E-09
A	SITE BOUNDARY	WNW	0.96	1540.	2.443E-06	2.433E-06	2.142E-06	1.007E-08
A	SITE BOUNDARY	NW	0.72	1160.	9.692E-06	9.666E-06	8.649E-06	4.696E-08
A	SITE BOUNDARY	NNW	0.62	1000.	1.441E-05	1.437E-05	1.296E-05	5.968E-08
A	SITE BOUNDARY	N	0.65	1050.	1.064E-05	1.062E-05	9.550E-06	6.816E-08
A	SITE BOUNDARY	NNE	0.63	1010.	4.117E-06	4.108E-06	3.702E-06	2.757E-08
A	SITE BOUNDARY	NE	0.64	1030.	3.217E-06	3.211E-06	2.890E-06	2.298E-08
A	SITE BOUNDARY	ENE	0.62	1000.	1.061E-06	1.060E-06	9.551E-07	1.133E-08
A	SITE BOUNDARY	E	0.61	980.	1.149E-06	1.147E-06	1.036E-06	1.012E-08
A	SITE BOUNDARY	ESE	0.61	980.	2.131E-06	2.128E-06	1.921E-06	1.687E-08
A	SITE BOUNDARY	SE	1.06	1700.	9.000E-07	8.984E-07	7.844E-07	1.283E-08
A	SITE BOUNDARY	SSE	0.91	1460.	1.451E-06	1.447E-06	1.277E-06	1.409E-08

Atmospheric Diffusion Estimates
Ground-Level Releases
January-June 1983

WINDS GROUND LEVEL RELEASES
 NO DECAY, UNDEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.492E-05	1.183E-05	6.273E-06	3.102E-06	1.293E-06	6.362E-07	3.961E-07	2.726E-07	2.006E-07	1.549E-07	1.240E-07
SSW	4.050E-05	1.375E-05	7.264E-06	3.605E-06	1.428E-06	7.659E-07	4.820E-07	3.345E-07	2.489E-07	1.926E-07	1.550E-07
SW	2.786E-05	9.611E-06	5.151E-06	2.571E-06	1.012E-06	5.401E-07	3.384E-07	2.339E-07	1.729E-07	1.334E-07	1.074E-07
WSW	1.939E-05	6.561E-06	3.534E-06	1.775E-06	7.043E-07	3.779E-07	2.378E-07	1.650E-07	1.222E-07	9.492E-08	7.633E-08
W	1.790E-05	6.119E-06	3.302E-06	1.657E-06	6.579E-07	3.532E-07	2.223E-07	1.543E-07	1.144E-07	8.885E-08	7.140E-08
WNW	2.496E-05	8.406E-06	4.472E-06	2.230E-06	8.840E-07	4.743E-07	2.985E-07	2.072E-07	1.536E-07	1.193E-07	9.598E-08
WV	5.599E-05	1.865E-05	9.980E-06	5.016E-06	2.017E-06	1.043E-06	6.927E-07	4.836E-07	3.602E-07	2.810E-07	2.269E-07
NVW	6.998E-05	2.259E-05	1.207E-05	6.085E-06	2.485E-06	1.361E-06	8.699E-07	6.114E-07	4.579E-07	3.589E-07	2.910E-07
N	6.171E-05	2.013E-05	1.069E-05	5.364E-06	2.177E-06	1.107E-06	7.569E-07	5.307E-07	3.968E-07	3.105E-07	2.515E-07
NNE	2.430E-05	8.344E-06	4.535E-06	2.281E-06	9.024E-07	4.833E-07	3.037E-07	2.105E-07	1.554E-07	1.209E-07	9.720E-08
NE	1.161E-05	4.058E-06	2.204E-06	1.104E-06	4.304E-07	2.207E-07	1.427E-07	9.832E-08	7.243E-08	5.596E-08	4.481E-08
ENE	6.073E-06	2.186E-06	1.178E-06	5.844E-07	2.250E-07	1.181E-07	7.304E-08	5.001E-08	3.661E-08	2.814E-08	2.242E-08
E	7.178E-06	2.458E-06	1.344E-06	6.778E-07	2.669E-07	1.424E-07	8.925E-08	6.172E-08	4.560E-08	3.532E-08	2.834E-08
ESE	7.846E-06	2.658E-06	1.448E-06	7.298E-07	2.873E-07	1.533E-07	9.606E-08	6.643E-08	4.908E-08	3.802E-08	3.051E-08
SE	1.377E-05	4.852E-06	2.556E-06	1.252E-06	4.746E-07	2.465E-07	1.512E-07	1.027E-07	7.480E-08	5.719E-08	4.537E-08
SSE	1.304E-05	4.464E-06	2.372E-06	1.173E-06	4.513E-07	2.371E-07	1.468E-07	1.006E-07	7.372E-08	5.672E-08	4.525E-08

BEARING	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	1.021E-07	5.156E-08	3.303E-08	1.869E-08	1.259E-08	9.287E-09	7.254E-09	5.893E-09	4.926E-09	4.208E-09	3.657E-09
SSW	1.282E-07	6.567E-08	4.249E-08	2.435E-08	1.650E-08	1.223E-08	9.586E-09	7.812E-09	6.548E-09	5.607E-09	4.885E-09
SW	8.857E-08	4.489E-08	2.881E-08	1.638E-08	1.093E-08	8.039E-09	6.261E-09	5.073E-09	4.231E-09	3.607E-09	3.129E-09
WSW	6.308E-08	3.221E-08	2.078E-08	1.185E-08	7.986E-09	5.894E-09	4.695E-09	3.741E-09	3.127E-09	2.672E-09	2.321E-09
W	5.908E-08	3.021E-08	1.951E-08	1.113E-08	7.510E-09	5.546E-09	4.335E-09	3.523E-09	2.946E-09	2.517E-09	2.187E-09
WNW	7.936E-07	4.066E-08	2.630E-08	1.506E-08	1.020E-08	7.553E-09	5.918E-09	4.820E-09	4.039E-09	3.457E-09	3.009E-09
NVW	1.802E-07	9.743E-08	6.349E-08	3.678E-08	2.499E-08	1.859E-08	1.461E-08	1.194E-08	1.002E-08	8.594E-09	7.497E-09
N	2.422E-07	1.272E-07	8.372E-08	4.906E-08	3.372E-08	2.526E-08	1.997E-08	1.639E-08	1.382E-08	1.189E-08	1.040E-08
NNE	2.091E-07	1.094E-07	7.184E-08	4.197E-08	2.800E-08	2.155E-08	1.702E-08	1.396E-08	1.176E-08	1.012E-08	8.847E-09
NE	8.029E-08	4.096E-08	2.641E-08	1.504E-08	1.013E-08	7.478E-09	5.832E-09	4.735E-09	3.955E-09	3.377E-09	2.932E-09
ENE	3.689E-08	1.858E-08	1.187E-08	6.672E-09	4.459E-09	3.268E-09	2.539E-09	2.052E-09	1.708E-09	1.453E-09	1.258E-09
E	1.838E-08	9.186E-09	5.746E-09	3.172E-09	2.091E-09	1.515E-09	1.166E-09	9.356E-10	7.733E-10	6.540E-10	5.631E-10
ESE	2.517E-08	1.278E-08	8.213E-09	4.654E-09	3.126E-09	2.388E-09	1.792E-09	1.453E-09	1.212E-09	1.033E-09	8.965E-10
SE	3.786E-08	1.812E-08	1.133E-08	6.192E-09	4.066E-09	2.948E-09	2.259E-09	1.810E-09	1.495E-09	1.263E-09	1.087E-09
SSE	3.714E-08	1.851E-08	1.174E-08	6.554E-09	4.378E-09	3.198E-09	2.482E-09	2.006E-09	1.669E-09	1.428E-09	1.229E-09

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	1-5	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.898E-06	1.375E-06	4.107E-07	2.038E-07	1.251E-07	5.456E-08	1.917E-08	9.354E-09	5.913E-09	4.217E-09
SSW	7.878E-06	1.617E-06	4.987E-07	2.516E-07	1.562E-07	6.926E-08	2.489E-08	1.231E-08	7.577E-09	5.618E-09
SW	4.996E-06	1.149E-06	3.504E-07	1.754E-07	1.083E-07	4.745E-08	1.670E-08	8.108E-09	5.092E-09	3.615E-09
WSW	3.425E-06	7.971E-07	2.460E-07	1.240E-07	7.693E-08	3.349E-08	1.212E-08	5.936E-09	3.754E-09	2.677E-09
W	3.197E-06	7.446E-07	2.300E-07	1.161E-07	7.203E-08	3.187E-08	1.138E-08	5.585E-09	3.535E-09	2.522E-09
WNW	4.358E-06	1.001E-06	3.088E-07	1.558E-07	9.673E-08	4.288E-08	1.540E-08	7.604E-09	4.836E-09	3.463E-09
NVW	9.702E-06	2.273E-06	7.157E-07	3.653E-07	2.286E-07	1.025E-07	3.745E-08	1.871E-08	1.197E-08	8.613E-09
N	1.175E-05	2.786E-06	8.974E-07	4.640E-07	2.931E-07	1.534E-07	4.994E-08	2.540E-08	1.643E-08	1.191E-08
NNE	1.047E-05	2.446E-06	7.813E-07	4.022E-07	2.533E-07	1.149E-07	4.276E-08	2.167E-08	1.400E-08	1.013E-08
NE	4.379E-06	1.022E-06	3.143E-07	1.582E-07	9.797E-08	4.524E-08	1.538E-08	7.524E-09	4.751E-09	3.383E-09
ENE	2.127E-06	4.905E-07	1.479E-07	7.355E-08	4.518E-08	1.967E-08	6.842E-09	3.294E-09	2.066E-09	1.456E-09
E	1.138E-06	2.574E-07	7.586E-08	3.721E-08	2.262E-08	9.674E-09	3.263E-09	1.529E-09	9.397E-10	6.557E-10
ESE	1.296E-06	3.024E-07	9.242E-08	4.629E-08	2.857E-08	1.254E-08	4.816E-09	2.142E-09	1.346E-09	9.542E-10
SE	1.398E-06	3.261E-07	9.947E-08	4.905E-08	3.076E-08	1.351E-08	4.766E-09	2.317E-09	1.458E-09	1.036E-09
SSE	2.447E-06	5.460E-07	1.572E-07	7.608E-08	4.588E-08	1.931E-08	6.389E-09	2.488E-09	1.417E-09	1.066E-09

0117

VFNTS GROUND LEVEL RELEASES
 2.250 DAY DECAY: UNDEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	3.488E-05	1.180E-05	6.249E-06	3.088E-06	1.194E-06	6.296E-07	3.939E-07	2.682E-07	1.969E-07	1.516E-07	1.210E-07	
SSW	4.043E-05	1.370E-05	7.229E-06	3.581E-06	1.414E-06	7.555E-07	4.737E-07	3.276E-07	2.419E-07	1.872E-07	1.501E-07	
SW	2.781E-05	9.575E-06	5.122E-06	2.552E-06	1.001E-06	5.318E-07	3.319E-07	2.285E-07	1.581E-07	1.297E-07	1.037E-07	
WSW	1.935E-05	6.533E-06	3.512E-06	1.760E-06	6.954E-07	3.715E-07	2.327E-07	1.608E-07	1.166E-07	9.169E-08	7.342E-08	
W	1.787E-05	6.095E-06	3.283E-06	1.644E-06	6.502E-07	3.476E-07	2.179E-07	1.506E-07	1.112E-07	8.600E-08	6.890E-08	
WNW	2.491E-05	8.377E-06	4.450E-06	2.215E-06	8.748E-07	4.676E-07	2.932E-07	2.027E-07	1.497E-07	1.158E-07	9.281E-08	
NW	5.588E-05	1.838E-05	9.937E-06	4.982E-06	1.996E-06	1.077E-06	6.803E-07	4.731E-07	3.580E-07	2.727E-07	2.194E-07	
NVW	6.983E-05	2.250E-05	1.208E-05	6.038E-06	2.455E-06	1.339E-06	8.521E-07	5.962E-07	4.444E-07	3.469E-07	2.801E-07	
N	6.159E-05	2.006E-05	1.064E-05	5.328E-06	2.155E-06	1.171E-06	7.433E-07	5.192E-07	3.867E-07	3.015E-07	2.432E-07	
NNE	2.435E-05	8.326E-06	4.520E-06	2.271E-06	8.966E-07	4.791E-07	3.099E-07	2.078E-07	1.535E-07	1.188E-07	9.528E-08	
NE	1.168E-05	4.051E-06	2.199E-06	1.100E-06	4.287E-07	2.271E-07	1.414E-07	9.229E-08	7.155E-08	5.518E-08	4.411E-08	
ENE	6.065E-06	2.180E-06	1.173E-06	5.813E-07	2.231E-07	1.169E-07	7.210E-08	4.821E-08	3.593E-08	2.754E-08	2.189E-08	
E	7.168E-06	2.452E-06	1.339E-06	6.741E-07	2.647E-07	1.409E-07	8.893E-08	6.071E-08	4.473E-08	3.455E-08	2.765E-08	
ESE	7.836E-06	2.652E-06	1.443E-06	7.263E-07	2.852E-07	1.518E-07	9.491E-08	6.547E-08	4.826E-08	3.729E-08	2.985E-08	
SE	1.376E-05	4.846E-06	2.551E-06	1.249E-06	4.726E-07	2.451E-07	1.502E-07	1.019E-07	7.409E-08	5.658E-08	4.483E-08	
SSE	1.303E-05	4.455E-06	2.365E-06	1.168E-06	4.485E-07	2.351E-07	1.453E-07	9.930E-08	7.263E-08	5.576E-08	4.338E-08	

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	9.932E-08	4.944E-08	3.122E-08	1.717E-08	1.126E-08	8.086E-09	6.156E-09	4.877E-09	3.979E-09	3.320E-09	2.820E-09	
SSW	1.236E-07	6.215E-08	3.945E-08	2.177E-08	1.422E-08	1.017E-08	7.698E-09	6.063E-09	4.917E-09	4.077E-09	3.440E-09	
SW	8.515E-08	4.230E-08	2.661E-08	1.448E-08	9.350E-09	6.524E-09	4.977E-09	3.893E-09	3.138E-09	2.588E-09	2.173E-09	
WSW	6.041E-08	3.018E-08	1.906E-08	1.041E-08	6.738E-09	4.779E-09	3.592E-09	2.811E-09	2.265E-09	1.868E-09	1.568E-09	
W	5.672E-08	2.840E-08	1.797E-08	9.844E-09	6.382E-09	4.534E-09	3.413E-09	2.674E-09	2.157E-09	1.780E-09	1.495E-09	
WNW	7.645E-08	3.841E-08	2.437E-08	1.342E-08	8.753E-09	6.245E-09	4.725E-09	3.717E-09	3.011E-09	2.493E-09	2.102E-09	
NW	1.812E-07	9.204E-08	5.882E-08	3.272E-08	2.146E-08	1.539E-08	1.168E-08	9.216E-09	7.484E-09	6.213E-09	5.248E-09	
NVW	2.322E-07	1.193E-07	7.682E-08	4.319E-08	2.844E-08	2.046E-08	1.556E-08	1.230E-08	9.993E-09	8.300E-09	7.012E-09	
N	2.015E-07	1.034E-07	6.658E-08	3.746E-08	2.477E-08	1.788E-08	1.364E-08	1.082E-08	8.824E-09	7.355E-09	6.237E-09	
NNE	7.853E-08	3.961E-08	2.525E-08	1.406E-08	9.265E-09	6.689E-09	5.115E-09	4.070E-09	3.333E-09	2.791E-09	2.378E-09	
NE	3.625E-08	1.810E-08	1.146E-08	6.333E-09	4.163E-09	3.002E-09	2.296E-09	1.828E-09	1.498E-09	1.256E-09	1.072E-09	
EVE	1.790E-08	8.755E-09	5.456E-09	2.941E-09	1.894E-09	1.343E-09	1.012E-09	7.952E-10	6.443E-10	5.344E-10	4.515E-10	
E	2.275E-08	1.139E-08	7.221E-09	3.986E-09	2.610E-09	1.874E-09	1.427E-09	1.131E-09	9.237E-10	7.707E-10	6.551E-10	
ESE	2.457E-08	1.233E-08	7.831E-09	4.339E-09	2.852E-09	2.055E-09	1.570E-09	1.248E-09	1.022E-09	8.554E-10	7.290E-10	
SE	3.657E-08	1.777E-08	1.104E-08	5.959E-09	3.868E-09	2.765E-09	2.102E-09	1.666E-09	1.361E-09	1.139E-09	9.701E-10	
SSE	3.635E-08	1.792E-08	1.125E-08	6.147E-09	4.016E-09	2.883E-09	2.195E-09	1.741E-09	1.423E-09	1.190E-09	1.013E-09	

B118

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	6.077E-06	1.364E-06	4.055E-07	2.080E-07	1.220E-07	5.243E-08	1.766E-08	8.159E-09	4.901E-09	3.330E-09
SSW	7.046E-06	1.603E-06	4.964E-07	2.455E-07	1.513E-07	6.572E-08	2.234E-08	1.026E-08	6.093E-09	4.090E-09
SW	4.969E-06	1.137E-06	3.475E-07	1.708E-07	1.045E-07	4.485E-08	1.490E-08	6.692E-09	3.915E-09	2.597E-09
WSW	3.495E-06	7.880E-07	2.410E-07	1.204E-07	7.401E-08	3.196E-08	1.070E-08	4.827E-09	2.826E-09	1.874E-09
W	3.190E-06	7.366E-07	2.256E-07	1.129E-07	6.945E-08	3.006E-08	1.011E-08	4.578E-09	2.688E-09	1.786E-09
WNW	4.329E-06	9.916E-07	3.035E-07	1.519E-07	9.357E-08	4.062E-08	1.378E-08	6.307E-09	3.756E-09	2.501E-09
NW	9.656E-06	2.251E-06	7.032E-07	3.561E-07	2.211E-07	9.710E-08	3.352E-08	1.552E-08	9.260E-09	6.232E-09
NVW	1.168E-05	2.755E-06	8.795E-07	4.597E-07	2.822E-07	1.255E-07	4.489E-08	2.263E-08	1.235E-08	8.325E-09
N	1.037E-05	2.422E-06	7.677E-07	3.921E-07	2.459E-07	1.088E-07	3.829E-08	1.802E-08	1.087E-08	7.376E-09
NNE	4.367E-06	1.017E-06	3.110E-07	1.558E-07	9.605E-08	4.188E-08	1.441E-08	6.747E-09	4.088E-09	2.799E-09
NE	2.122E-06	4.882E-07	1.466E-07	7.267E-08	4.448E-08	1.918E-08	6.507E-09	3.029E-09	1.836E-09	1.260E-09
ENE	1.134E-06	2.555E-07	7.488E-08	3.653E-08	2.209E-08	9.371E-09	3.035E-09	1.358E-09	7.997E-10	5.362E-10
E	1.271E-06	3.396E-07	9.119E-08	4.542E-08	2.788E-08	1.266E-08	4.094E-09	1.891E-09	1.176E-09	7.730E-10
ESE	1.393E-06	3.239E-07	9.831E-08	4.900E-08	3.010E-08	1.305E-08	4.454E-09	2.074E-09	1.254E-09	8.579E-10
SE	2.482E-06	5.440E-07	1.562E-07	7.537E-08	4.525E-08	1.876E-08	6.159E-09	2.794E-09	1.674E-09	1.142E-09
SSE	2.298E-06	5.136E-07	1.508E-07	7.302E-08	4.478E-08	1.905E-08	6.334E-09	2.910E-09	1.750E-09	1.193E-09

VENTS GROUND LEVEL RELEASES
 R.000 DAY DECAY. DEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	3.304E-05	1.079E-05	5.584E-06	2.711E-06	1.020E-06	5.253E-07	3.197E-07	2.155E-07	1.557E-07	1.182E-07	9.309E-08	
SSW	3.831E-05	1.254E-05	6.465E-06	3.149E-06	1.209E-06	6.317E-07	3.885E-07	2.641E-07	1.921E-07	1.467E-07	1.161E-07	
SW	2.635E-05	8.767E-06	4.583E-06	2.246E-06	8.569E-07	4.452E-07	2.726E-07	1.846E-07	1.338E-07	1.018E-07	8.038E-08	
WSW	1.834E-05	5.984E-06	3.144E-06	1.550E-06	5.960E-07	3.114E-07	1.914E-07	1.301E-07	9.456E-08	7.215E-08	5.707E-08	
W	1.693E-05	5.581E-06	2.938E-06	1.448E-06	5.569E-07	2.911E-07	1.791E-07	1.217E-07	8.853E-08	6.757E-08	5.348E-08	
WNW	2.361E-05	7.689E-06	3.980E-06	1.948E-06	7.485E-07	3.911E-07	2.406E-07	1.635E-07	1.189E-07	9.080E-08	7.187E-08	
NW	5.296E-05	1.701E-05	8.888E-06	4.382E-06	1.708E-06	9.011E-07	5.582E-07	3.817E-07	2.790E-07	2.139E-07	1.649E-07	
NVW	6.519E-05	2.061E-05	1.074E-05	5.315E-06	2.104E-06	1.122E-06	7.005E-07	4.821E-07	3.543E-07	2.728E-07	2.176E-07	
N	5.837E-05	1.836E-05	9.516E-06	4.686E-06	1.944E-06	9.793E-07	6.190E-07	4.189E-07	3.073E-07	2.364E-07	1.883E-07	
NNE	2.306E-05	7.615E-06	4.037E-06	1.994E-06	7.650E-07	3.992E-07	2.452E-07	1.666E-07	1.211E-07	9.236E-08	7.307E-08	
NE	1.099E-05	3.704E-06	1.963E-06	9.659E-07	3.654E-07	1.890E-07	1.153E-07	7.786E-08	5.632E-08	4.279E-08	3.373E-08	
EVE	5.746E-06	1.995E-06	1.048E-06	5.108E-07	1.906E-07	9.751E-08	5.897E-08	3.954E-08	2.842E-08	2.147E-08	1.684E-08	
E	6.791E-06	2.243E-06	1.196E-06	5.924E-07	2.261E-07	1.176E-07	7.201E-08	4.879E-08	3.538E-08	2.694E-08	2.128E-08	
ESE	7.423E-06	2.426E-06	1.289E-06	6.379E-07	2.435E-07	1.266E-07	7.755E-08	5.255E-08	3.811E-08	2.903E-08	2.293E-08	
SE	1.303E-05	4.429E-06	2.277E-06	1.095E-06	4.026E-07	2.038E-07	1.222E-07	8.143E-08	5.821E-08	4.377E-08	3.419E-08	
SSE	1.234E-05	4.074E-06	2.112E-06	1.025E-06	3.826E-07	1.958E-07	1.186E-07	7.959E-08	5.728E-08	4.333E-08	3.402E-08	

BEARING	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	7.551E-08	3.591E-08	2.183E-08	1.134E-08	7.110E-09	4.928E-09	3.638E-09	2.806E-09	2.234E-09	1.823E-09	1.516E-09	
SSW	9.456E-08	4.556E-08	2.794E-08	1.465E-08	9.214E-09	6.396E-09	4.725E-09	3.644E-09	2.901E-09	2.365E-09	1.965E-09	
SW	6.528E-08	3.111E-08	1.891E-08	9.789E-09	6.094E-09	4.195E-09	3.078E-09	2.360E-09	1.868E-09	1.516E-09	1.254E-09	
WSW	4.644E-08	2.229E-08	1.361E-08	7.092E-09	4.433E-09	3.061E-09	2.251E-09	1.729E-09	1.371E-09	1.114E-09	9.226E-10	
W	4.353E-08	2.092E-08	1.280E-08	6.677E-09	4.178E-09	2.888E-09	2.125E-09	1.633E-09	1.296E-09	1.054E-09	8.731E-10	
WNW	5.853E-08	2.820E-08	1.728E-08	9.053E-09	5.689E-09	3.946E-09	2.913E-09	2.245E-09	1.785E-09	1.454E-09	1.208E-09	
NW	1.388E-07	6.756E-08	4.171E-08	2.236E-08	1.394E-08	9.710E-09	7.192E-09	5.558E-09	4.431E-09	3.617E-09	3.009E-09	
NVW	1.784E-07	8.803E-08	5.485E-08	2.937E-08	1.871E-08	1.311E-08	9.754E-09	7.565E-09	6.049E-09	4.950E-09	4.127E-09	
N	1.542E-07	7.589E-08	4.721E-08	2.523E-08	1.607E-08	1.126E-08	8.383E-09	6.505E-09	5.205E-09	4.263E-09	3.557E-09	
NNE	5.947E-08	2.860E-08	1.751E-08	9.167E-09	5.769E-09	3.998E-09	2.955E-09	2.282E-09	1.818E-09	1.495E-09	1.236E-09	
NE	2.736E-08	1.300E-08	7.892E-09	4.086E-09	2.552E-09	1.763E-09	1.299E-09	1.000E-09	7.957E-10	6.488E-10	5.394E-10	
EVE	1.360E-08	6.347E-09	3.803E-09	1.929E-09	1.186E-09	8.087E-10	5.892E-10	4.494E-10	3.544E-10	2.867E-10	2.367E-10	
E	1.729E-08	8.267E-09	5.039E-09	2.620E-09	1.638E-09	1.132E-09	8.341E-10	6.420E-10	5.103E-10	4.157E-10	3.453E-10	
ESE	1.864E-08	8.918E-09	5.441E-09	2.835E-09	1.776E-09	1.230E-09	9.076E-10	6.997E-10	5.570E-10	4.544E-10	3.780E-10	
SE	2.752E-08	1.279E-08	7.557E-09	3.808E-09	2.340E-09	1.598E-09	1.166E-09	8.913E-10	7.046E-10	5.716E-10	4.732E-10	
SSE	2.752E-08	1.293E-08	7.792E-09	3.999E-09	2.489E-09	1.715E-09	1.261E-09	9.694E-10	7.700E-10	6.271E-10	5.208E-10	

B119

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.465E-06	1.176E-06	3.328E-07	1.585E-07	9.402E-08	3.845E-08	1.179E-08	4.994E-09	2.826E-09	1.831E-09
SSW	6.342E-06	1.384E-06	4.036E-07	1.954E-07	1.172E-07	4.862E-08	1.519E-08	6.479E-09	3.670E-09	2.376E-09
SW	4.474E-06	9.826E-07	2.834E-07	1.361E-07	8.114E-08	3.328E-08	1.017E-08	4.255E-09	2.378E-09	1.524E-09
WSW	3.067E-06	6.815E-07	1.909E-07	9.617E-08	5.763E-08	2.380E-08	7.360E-09	3.103E-09	1.742E-09	1.119E-09
W	2.863E-06	6.367E-07	1.860E-07	9.094E-08	5.397E-08	2.233E-08	6.926E-09	2.927E-09	1.645E-09	1.059E-09
WNW	3.897E-06	8.563E-07	2.499E-07	1.210E-07	7.254E-08	3.009E-08	9.386E-09	3.997E-09	2.260E-09	1.461E-09
NW	8.691E-06	1.944E-06	5.791E-07	2.835E-07	1.714E-07	7.189E-08	2.282E-08	9.831E-09	5.595E-09	3.633E-09
NVW	1.952E-05	2.381E-06	7.255E-07	3.598E-07	2.194E-07	9.337E-08	3.830E-08	1.326E-08	7.613E-09	4.971E-09
N	9.335E-06	2.091E-06	6.320E-07	3.122E-07	1.899E-07	8.055E-08	2.694E-08	1.139E-08	6.546E-09	4.281E-09
NNE	3.924E-06	8.756E-07	2.548E-07	1.231E-07	7.375E-08	3.053E-08	9.507E-09	4.051E-09	2.298E-09	1.492E-09
NE	1.906E-06	4.202E-07	1.200E-07	5.732E-08	3.405E-08	1.392E-08	4.250E-09	1.788E-09	1.008E-09	6.518E-10
EVE	1.329E-06	2.204E-07	6.148E-08	2.895E-08	1.791E-08	6.827E-09	2.015E-09	8.214E-10	4.531E-10	2.882E-10
E	1.161E-06	2.593E-07	7.407E-08	3.600E-08	2.148E-08	8.838E-09	2.721E-09	1.148E-09	6.467E-10	4.177E-10
ESE	1.252E-06	2.792E-07	8.763E-08	3.878E-08	2.314E-08	9.532E-09	2.944E-09	1.247E-09	7.047E-10	4.565E-10
SE	2.210E-06	4.682E-07	1.277E-07	5.934E-08	3.454E-08	1.371E-08	3.988E-09	1.623E-09	8.988E-10	5.746E-10
SSE	2.065E-06	4.425E-07	1.236E-07	5.834E-08	3.437E-08	1.389E-08	4.171E-09	1.740E-09	9.768E-10	6.301E-10

VENTS GROUND LEVEL RELEASES
CORRECTED FOR OPEN TERRAIN RECIRCULATION

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M ² -2) AT FIXED POINTS BY DOWNWIND SECTORS										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	3.063E-07	1.036E-07	5.318E-08	2.528E-08	9.282E-09	4.564E-09	2.652E-09	1.737E-09	1.222E-09	9.056E-10	6.978E-10
SS	2.101E-07	7.104E-08	3.649E-08	1.734E-08	6.229E-09	3.089E-09	1.819E-09	1.191E-09	8.381E-10	6.211E-10	4.786E-10
SSW	1.017E-07	3.439E-08	1.766E-08	8.394E-09	3.015E-09	1.495E-09	8.805E-10	5.765E-10	4.057E-10	3.006E-10	2.317E-10
WSW	6.050E-08	2.046E-08	1.050E-08	4.994E-09	1.794E-09	8.896E-10	5.238E-10	3.430E-10	2.413E-10	1.789E-10	1.378E-10
W	5.833E-08	1.973E-08	1.013E-08	4.815E-09	1.750E-09	8.578E-10	5.051E-10	3.307E-10	2.327E-10	1.725E-10	1.329E-10
WNW	1.041E-07	3.520E-08	1.808E-08	8.594E-09	3.087E-09	1.531E-09	9.014E-10	5.902E-10	4.153E-10	3.078E-10	2.372E-10
NW	2.389E-07	8.079E-08	4.148E-08	1.972E-08	7.083E-09	3.513E-09	2.068E-09	1.354E-09	9.530E-10	7.063E-10	5.443E-10
NNW	2.252E-07	7.616E-08	3.911E-08	1.859E-08	6.678E-09	3.312E-09	1.950E-09	1.277E-09	8.985E-10	6.658E-10	5.131E-10
N	2.865E-07	9.688E-08	4.974E-08	2.365E-08	8.495E-09	4.213E-09	2.481E-09	1.624E-09	1.143E-09	8.478E-10	6.527E-10
NNE	1.645E-07	5.562E-08	2.856E-08	1.358E-08	4.876E-09	2.418E-09	1.424E-09	9.324E-10	6.561E-10	4.862E-10	3.747E-10
NE	9.406E-08	3.181E-08	1.633E-08	7.764E-09	2.789E-09	1.383E-09	8.143E-10	5.332E-10	3.752E-10	2.781E-10	2.143E-10
ENE	4.357E-08	1.474E-08	7.566E-09	3.597E-09	1.292E-09	6.407E-10	3.773E-10	2.470E-10	1.738E-10	1.288E-10	9.927E-11
E	4.238E-08	1.433E-08	7.357E-09	3.498E-09	1.256E-09	6.231E-10	3.669E-10	2.402E-10	1.690E-10	1.253E-10	9.654E-11
ESE	5.269E-08	1.782E-08	9.149E-09	4.350E-09	1.562E-09	7.748E-10	4.562E-10	2.987E-10	2.102E-10	1.558E-10	1.200E-10
SE	1.709E-07	5.778E-08	2.967E-08	1.416E-08	5.066E-09	2.512E-09	1.479E-09	9.687E-10	6.816E-10	5.051E-10	3.893E-10
SSE	1.563E-07	5.287E-08	2.714E-08	1.290E-08	4.635E-09	2.299E-09	1.354E-09	8.863E-10	6.237E-10	4.622E-10	3.562E-10

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	5.544E-10	2.463E-10	1.492E-10	7.541E-11	4.564E-11	3.060E-11	2.193E-11	1.646E-11	1.280E-11	1.023E-11	8.347E-12
SS	3.802E-10	1.689E-10	1.023E-10	5.172E-11	3.130E-11	2.089E-11	1.504E-11	1.129E-11	8.780E-12	7.014E-12	5.725E-12
SSW	1.841E-10	8.176E-11	4.953E-11	2.503E-11	1.515E-11	1.016E-11	7.280E-12	5.466E-12	4.250E-12	3.395E-12	2.771E-12
WSW	1.095E-10	4.864E-11	2.947E-11	1.489E-11	9.014E-12	6.044E-12	4.331E-12	3.252E-12	2.528E-12	2.020E-12	1.649E-12
W	1.056E-10	4.690E-11	2.841E-11	1.436E-11	8.692E-12	5.828E-12	4.176E-12	3.136E-12	2.438E-12	1.947E-12	1.590E-12
WNW	1.884E-10	8.371E-11	5.070E-11	2.563E-11	1.551E-11	1.040E-11	7.452E-12	5.596E-12	4.351E-12	3.476E-12	2.837E-12
NW	4.324E-10	1.921E-10	1.164E-10	5.881E-11	3.560E-11	2.387E-11	1.710E-11	1.284E-11	9.984E-12	7.976E-12	6.510E-12
NNW	4.076E-10	1.811E-10	1.097E-10	5.544E-11	3.356E-11	2.250E-11	1.612E-11	1.211E-11	9.413E-12	7.519E-12	6.137E-12
N	5.185E-10	2.303E-10	1.395E-10	7.054E-11	4.269E-11	2.862E-11	2.051E-11	1.540E-11	1.197E-11	9.564E-12	7.807E-12
NNE	2.977E-10	1.322E-10	8.010E-11	4.049E-11	2.450E-11	1.643E-11	1.177E-11	8.840E-12	6.874E-12	5.491E-12	4.482E-12
NE	1.702E-10	7.562E-11	4.581E-11	2.315E-11	1.401E-11	9.396E-12	6.733E-12	5.056E-12	3.931E-12	3.140E-12	2.563E-12
ENE	7.887E-11	3.503E-11	2.122E-11	1.073E-11	6.492E-12	4.353E-12	3.119E-12	2.342E-12	1.821E-12	1.455E-12	1.187E-12
E	7.669E-11	3.407E-11	2.064E-11	1.043E-11	6.314E-12	4.233E-12	3.033E-12	2.278E-12	1.771E-12	1.415E-12	1.155E-12
ESE	9.537E-11	4.237E-11	2.566E-11	1.297E-11	7.851E-12	5.264E-12	3.772E-12	2.832E-12	2.202E-12	1.759E-12	1.436E-12
SE	3.092E-10	1.374E-10	8.322E-11	4.206E-11	2.546E-11	1.707E-11	1.223E-11	9.184E-12	7.141E-12	5.704E-12	4.656E-12
SSE	2.830E-10	1.257E-10	7.614E-11	3.849E-11	2.329E-11	1.562E-11	1.119E-11	8.403E-12	6.534E-12	5.219E-12	4.260E-12

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M ² -2) BY DOWNWIND SECTORS									
	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	5.198E-08	1.065E-08	2.780E-09	1.248E-09	7.063E-10	2.716E-10	7.857E-11	3.114E-11	1.663E-11	1.025E-11
SS	3.565E-08	7.303E-09	1.906E-09	8.562E-10	4.844E-10	1.863E-10	5.389E-11	2.136E-11	1.141E-11	7.060E-12
SSW	1.726E-08	3.535E-09	9.229E-10	4.145E-10	2.345E-10	9.017E-11	2.609E-11	1.034E-11	5.521E-12	3.417E-12
WSW	1.027E-08	2.103E-09	5.490E-10	2.466E-10	1.395E-10	5.364E-11	1.552E-11	6.151E-12	3.284E-12	2.033E-12
W	9.900E-09	2.028E-09	5.294E-10	2.378E-10	1.345E-10	5.172E-11	1.496E-11	5.931E-12	3.167E-12	1.960E-12
WNW	1.767E-08	3.619E-09	9.448E-10	4.243E-10	2.400E-10	9.231E-11	2.670E-11	1.058E-11	5.652E-12	3.498E-12
NW	4.054E-08	8.305E-09	2.168E-09	9.737E-10	5.508E-10	2.118E-10	6.128E-11	2.429E-11	1.297E-11	8.028E-12
NNW	3.822E-08	7.829E-09	2.044E-09	9.180E-10	5.193E-10	1.997E-10	5.777E-11	2.290E-11	1.223E-11	7.568E-12
N	4.862E-08	9.959E-09	2.600E-09	1.168E-09	6.606E-10	2.540E-10	7.349E-11	2.913E-11	1.555E-11	9.627E-12
NNE	2.791E-08	5.717E-09	1.493E-09	6.703E-10	3.792E-10	1.458E-10	4.219E-11	1.672E-11	8.929E-12	5.527E-12
NE	1.596E-08	3.270E-09	8.535E-10	3.833E-10	2.169E-10	8.340E-11	2.413E-11	9.562E-12	5.106E-12	3.161E-12
ENE	7.395E-09	1.515E-09	3.954E-10	1.776E-10	1.005E-10	3.864E-11	1.118E-11	4.430E-12	2.366E-12	1.464E-12
E	7.191E-09	1.473E-09	3.845E-10	1.727E-10	9.770E-11	3.757E-11	1.087E-11	4.308E-12	2.301E-12	1.424E-12
ESE	8.943E-09	1.832E-09	4.782E-10	2.148E-10	1.215E-10	4.672E-11	1.352E-11	5.357E-12	2.861E-12	1.771E-12
SE	2.900E-09	5.940E-09	1.551E-09	6.940E-10	3.940E-10	1.515E-10	4.383E-11	1.737E-11	9.276E-12	5.742E-12
SSE	2.653E-09	5.435E-09	1.419E-09	6.372E-10	3.635E-10	1.386E-10	4.010E-11	1.589E-11	8.488E-12	5.253E-12

VENTS GROUND LEVEL RELEASES
CORRECTED FOR OPEN TERRAIN RECIRCULATION
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/O	
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)		(PER SQ.METER)
					NO DECAY	2.260 DAY DECAY	8.000 DAY DECAY		
					UNDEPLETED	UNDEPLETED	DEPLETED		
A	SITE BOUNDARY	S	0.89	1430.	4.136E-06	4.117E-06	3.644E-06	3.432E-08	
A	SITE BOUNDARY	SSW	0.92	1480.	4.408E-06	4.381E-06	3.873E-06	2.153E-08	
A	SITE BOUNDARY	SW	1.09	1750.	2.111E-06	2.093E-06	1.833E-06	6.767E-09	
A	SITE BOUNDARY	WSW	0.94	1510.	2.763E-06	2.747E-06	1.809E-06	5.884E-09	
A	SITE BOUNDARY	W	0.93	1500.	1.958E-06	1.944E-06	1.718E-06	5.773E-09	
A	SITE BOUNDARY	WNW	0.96	1540.	2.474E-06	2.458E-06	2.168E-06	9.623E-09	
A	SITE BOUNDARY	NW	0.72	1160.	1.061E-05	1.055E-05	9.459E-06	4.434E-08	
A	SITE BOUNDARY	NNW	0.62	1000.	1.606E-05	1.598E-05	1.444E-05	5.363E-08	
A	SITE BOUNDARY	N	0.65	1050.	1.325E-05	1.319E-05	1.188E-05	6.286E-08	
A	SITE BOUNDARY	NNE	0.63	1010.	5.922E-06	5.907E-06	5.325E-06	3.851E-08	
A	SITE BOUNDARY	NE	0.64	1030.	2.808E-06	2.794E-06	2.515E-06	2.131E-08	
A	SITE BOUNDARY	ENE	0.62	1000.	1.572E-06	1.567E-06	1.414E-06	1.038E-08	
A	SITE BOUNDARY	E	0.61	980.	1.828E-06	1.822E-06	1.647E-06	1.038E-08	
A	SITE BOUNDARY	ESE	0.61	980.	1.972E-06	1.966E-06	1.777E-06	1.291E-08	
A	SITE BOUNDARY	SE	1.06	1700.	1.094E-06	1.091E-06	9.536E-07	1.224E-08	
A	SITE BOUNDARY	SSE	0.91	1460.	1.486E-06	1.481E-06	1.308E-06	1.668E-08	

B121

Atmospheric Diffusion Estimates
Elevated Releases
January-March 1983

ERP ELEVATED STACK RELEASE
NO DECAY, UNDEPLETED
CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.124E-07	3.958E-07	3.448E-07	2.264E-07	1.245E-07	8.047E-08	5.684E-08	4.258E-08	3.328E-08	3.205E-08	3.113E-08
SSW	7.241E-08	1.134E-07	1.194E-07	1.073E-07	7.745E-08	5.959E-08	4.647E-08	4.530E-08	4.227E-08	3.534E-08	3.005E-08
SW	3.218E-09	1.485E-08	4.325E-08	8.071E-08	1.685E-07	6.967E-08	4.836E-08	3.565E-08	2.750E-08	2.196E-08	1.803E-08
WSW	2.493E-16	3.412E-10	1.711E-08	4.840E-08	7.032E-08	4.895E-08	3.325E-08	2.418E-08	1.849E-08	1.468E-08	1.200E-08
W	1.199E-08	1.148E-07	2.512E-07	2.553E-07	1.850E-07	1.076E-07	7.044E-08	4.992E-08	3.742E-08	2.924E-08	2.359E-08
WNW	4.661E-09	3.713E-08	1.604E-07	2.942E-07	2.367E-07	1.362E-07	8.861E-08	6.411E-08	4.874E-08	3.784E-08	3.037E-08
NW	4.845E-10	3.801E-08	1.894E-07	3.501E-07	3.949E-07	2.203E-07	1.411E-07	9.996E-08	7.507E-08	5.824E-08	4.675E-08
NVW	4.766E-09	3.120E-08	5.342E-08	8.897E-08	1.225E-07	1.129E-07	9.786E-08	8.217E-08	6.919E-08	5.409E-08	4.358E-08
N	1.643E-08	5.303E-08	7.489E-08	8.256E-08	8.129E-08	7.100E-08	5.970E-08	4.929E-08	4.132E-08	3.519E-08	3.041E-08
NNE	8.942E-09	3.492E-08	4.814E-08	5.391E-08	5.427E-08	4.661E-08	3.869E-08	3.219E-08	2.712E-08	2.318E-08	2.009E-08
NE	2.084E-10	1.235E-08	2.882E-08	3.578E-08	3.694E-08	3.178E-08	2.638E-08	2.194E-08	1.848E-08	1.579E-08	1.369E-08
EVE	1.529E-09	9.759E-09	1.539E-08	1.611E-08	1.518E-08	1.286E-08	1.065E-08	8.858E-09	7.465E-09	6.381E-09	5.530E-09
E	1.473E-08	1.925E-08	1.330E-08	9.041E-09	7.010E-09	6.064E-09	5.261E-09	4.580E-09	4.018E-09	3.557E-09	3.181E-09
ESE	6.981E-09	2.116E-08	2.186E-08	2.139E-08	2.127E-08	1.881E-08	1.600E-08	1.356E-08	1.159E-08	1.002E-08	8.769E-09
SE	7.059E-08	1.025E-07	1.273E-07	1.134E-07	8.886E-08	6.750E-08	5.190E-08	4.086E-08	3.297E-08	2.720E-08	2.286E-08
SSE	2.878E-07	2.271E-07	1.807E-07	1.291E-07	8.539E-08	6.107E-08	4.570E-08	3.549E-08	2.843E-08	3.156E-08	3.379E-08

BEARING	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	2.718E-08	1.892E-08	1.238E-08	7.235E-09	5.300E-09	4.140E-09	3.273E-09	2.692E-09	2.298E-09	1.995E-09	1.746E-09
SSW	2.638E-08	1.550E-08	9.749E-09	5.363E-09	3.570E-09	2.593E-09	1.994E-09	1.598E-09	1.321E-09	1.117E-09	9.617E-10
SW	1.580E-08	4.397E-09	5.961E-09	3.305E-09	2.205E-09	1.608E-09	1.242E-09	9.939E-10	8.201E-10	6.925E-10	5.955E-10
WSW	1.030E-08	5.829E-09	3.831E-09	2.174E-09	1.433E-09	1.040E-09	8.005E-10	6.422E-10	5.310E-10	4.491E-10	3.868E-10
W	1.953E-08	9.912E-09	6.446E-09	3.652E-09	2.435E-09	1.756E-09	1.346E-09	1.075E-09	8.859E-10	7.471E-10	6.416E-10
WNW	2.515E-08	1.279E-08	8.133E-09	4.506E-09	2.955E-09	2.131E-09	1.634E-09	1.305E-09	1.073E-09	9.037E-10	7.751E-10
NW	3.877E-08	1.993E-08	1.286E-08	7.289E-09	4.806E-09	3.487E-09	2.711E-09	2.180E-09	1.803E-09	1.526E-09	1.315E-09
NVW	3.656E-08	1.947E-08	1.246E-08	7.012E-09	4.683E-09	3.431E-09	2.673E-09	2.168E-09	1.813E-09	1.543E-09	1.335E-09
N	2.667E-08	1.636E-08	1.308E-08	9.794E-09	7.690E-09	6.270E-09	4.738E-09	3.834E-09	3.193E-09	2.718E-09	2.355E-09
NNE	2.132E-08	2.274E-08	1.455E-08	8.200E-09	5.483E-09	4.022E-09	3.126E-09	2.528E-09	2.105E-09	1.792E-09	1.552E-09
NE	1.447E-08	1.725E-08	1.111E-08	6.326E-09	4.263E-09	3.146E-09	2.488E-09	2.035E-09	1.704E-09	1.455E-09	1.263E-09
EVE	5.682E-09	8.009E-09	5.343E-09	3.180E-09	2.206E-09	1.663E-09	1.409E-09	1.202E-09	1.013E-09	8.768E-10	7.613E-10
E	3.644E-09	6.881E-09	4.625E-09	2.775E-09	1.932E-09	1.461E-09	1.163E-09	9.639E-10	8.451E-10	7.482E-10	6.549E-10
ESE	9.101E-09	1.051E-08	6.972E-09	4.103E-09	2.918E-09	2.107E-09	1.662E-09	1.361E-09	1.144E-09	9.828E-10	8.578E-10
SE	1.955E-08	1.090E-08	7.574E-09	4.627E-09	3.150E-09	2.331E-09	1.821E-09	1.475E-09	1.219E-09	1.031E-09	8.874E-10
SSE	2.863E-08	1.601E-08	1.022E-08	5.767E-09	3.884E-09	2.866E-09	2.241E-09	1.822E-09	1.525E-09	1.304E-09	1.134E-09

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.735E-07	1.276E-07	5.744E-08	3.547E-08	2.994E-08	1.785E-08	7.518E-09	4.103E-09	2.708E-09	1.993E-09
SSW	1.075E-07	7.458E-08	4.950E-08	4.049E-08	3.025E-08	1.536E-08	5.541E-09	2.614E-09	1.606E-09	1.120E-09
SW	5.358E-08	8.505E-08	4.846E-08	2.772E-08	1.937E-08	9.293E-09	3.406E-09	1.621E-09	9.985E-10	6.944E-10
WSW	2.729E-08	5.895E-08	3.811E-08	1.867E-08	1.217E-08	5.935E-09	2.213E-09	1.249E-09	6.450E-10	4.503E-10
W	2.227E-07	1.662E-07	7.214E-08	3.788E-08	2.76E-08	1.051E-08	3.732E-09	1.773E-09	1.080E-09	7.491E-10
WNW	1.703E-07	1.937E-07	9.150E-08	4.898E-08	3.065E-08	1.347E-08	4.623E-09	2.152E-09	1.310E-09	9.163E-10
NW	2.272E-07	3.073E-07	1.458E-07	7.577E-08	4.720E-08	2.098E-08	7.424E-09	3.528E-09	2.188E-09	1.530E-09
NVW	6.428E-08	1.108E-07	9.559E-08	6.711E-08	4.406E-08	2.015E-08	7.187E-09	3.462E-09	2.177E-09	1.546E-09
N	7.344E-08	7.700E-08	5.855E-08	4.126E-08	3.044E-08	1.719E-08	9.588E-09	5.969E-09	3.844E-09	2.724E-09
NNE	4.777E-08	5.079E-08	3.220E-08	2.707E-08	2.146E-08	1.878E-08	8.494E-09	4.053E-09	2.538E-09	1.796E-09
NE	2.825E-08	3.439E-08	2.405E-08	1.845E-08	1.460E-08	1.390E-08	6.473E-09	3.181E-09	2.038E-09	1.458E-09
EVE	1.446E-08	1.436E-08	1.052E-08	7.450E-09	5.838E-09	6.307E-09	3.228E-09	1.706E-09	1.189E-09	8.722E-10
E	1.273E-08	7.041E-09	5.203E-09	4.083E-09	3.464E-09	5.159E-09	2.812E-09	1.467E-09	9.754E-10	7.424E-10
ESE	2.149E-08	2.020E-08	1.577E-08	1.156E-08	9.263E-09	8.625E-09	4.169E-09	2.119E-09	1.164E-09	9.844E-10
SE	1.156E-07	8.481E-08	5.165E-08	3.393E-08	2.292E-08	1.134E-08	4.625E-09	2.345E-09	1.476E-09	1.033E-09
SSE	1.641E-07	8.429E-08	4.571E-08	3.164E-08	2.122E-08	1.624E-08	5.920E-09	2.887E-09	1.828E-09	1.307E-09

B125

ERP ELEVATED STACK RELEASE
 2.260 DAY DECAY, UNDEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)				DISTANCE IN MILES						
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.124E-07	3.956E-07	3.446E-07	2.262E-07	1.243E-07	8.022E-08	5.667E-08	4.241E-08	3.313E-08	3.188E-08	3.093E-08
SSW	7.239E-08	1.133E-07	1.193E-07	1.001E-07	7.729E-08	5.943E-08	4.631E-08	4.510E-08	4.205E-08	3.513E-08	2.984E-08
SW	3.217E-09	1.484E-08	4.320E-08	8.059E-08	1.682E-07	6.945E-08	4.817E-08	3.544E-08	2.735E-08	2.183E-08	1.791E-08
WSW	2.492E-16	3.410E-10	1.709E-08	4.832E-08	7.912E-08	4.879E-08	3.311E-08	2.496E-08	1.838E-08	1.458E-08	1.191E-08
W	1.198E-08	1.147E-07	2.509E-07	2.548E-07	1.845E-07	1.072E-07	7.013E-08	4.965E-08	3.719E-08	2.904E-08	2.341E-08
WNW	4.658E-09	3.710E-08	1.602E-07	2.439E-07	2.362E-07	1.358E-07	8.822E-08	6.382E-08	4.848E-08	3.761E-08	3.017E-08
NW	4.943E-10	3.799E-08	1.892E-07	3.497E-07	3.942E-07	2.198E-07	1.407E-07	9.962E-08	7.477E-08	5.797E-08	4.651E-08
NVW	4.764E-08	3.118E-08	5.337E-08	8.887E-08	1.222E-07	1.126E-07	9.756E-08	8.188E-08	6.890E-08	5.374E-08	4.334E-08
N	1.643E-08	5.300E-08	7.483E-08	8.247E-08	8.115E-08	7.083E-08	5.953E-08	4.912E-08	4.115E-08	3.503E-08	3.026E-08
NNE	8.940E-09	3.490E-08	4.810E-08	5.385E-08	5.417E-08	4.650E-08	3.857E-08	3.207E-08	2.700E-08	2.306E-08	1.998E-08
NE	2.084E-10	1.235E-08	2.879E-08	3.573E-08	3.686E-08	3.170E-08	2.629E-08	2.185E-08	1.839E-08	1.570E-08	1.360E-08
EVE	1.528E-09	9.752E-09	1.537E-08	1.609E-08	1.514E-08	1.281E-08	1.060E-08	8.811E-09	7.419E-09	6.336E-09	5.486E-09
E	1.473E-08	1.924E-08	1.328E-08	9.330E-09	6.997E-09	6.048E-09	5.244E-09	4.562E-09	3.999E-09	3.538E-09	3.161E-09
ESE	6.079E-09	2.114E-08	2.184E-08	2.135E-08	2.121E-08	1.874E-08	1.593E-08	1.349E-08	1.152E-08	9.952E-09	8.701E-09
SE	7.058E-08	1.024E-07	1.272E-07	1.133E-07	8.862E-08	6.731E-08	5.171E-08	4.068E-08	3.280E-08	2.703E-08	2.271E-08
SSE	2.877E-07	2.270E-07	1.806E-07	1.290E-07	8.524E-08	6.092E-08	4.556E-08	3.536E-08	2.831E-08	2.140E-08	1.635E-08

BEARING	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)				DISTANCE IN MILES						
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	2.699E-08	1.870E-08	1.218E-08	7.061E-09	5.124E-09	3.972E-09	3.114E-09	2.540E-09	2.150E-09	1.851E-09	1.606E-09
SSW	2.618E-08	1.532E-08	9.599E-09	5.239E-09	3.461E-09	2.494E-09	1.904E-09	1.514E-09	1.242E-09	1.042E-09	8.907E-10
SW	1.568E-08	9.287E-09	5.868E-09	3.229E-09	2.137E-09	1.546E-09	1.185E-09	9.410E-10	7.704E-10	6.455E-10	5.508E-10
WSW	1.021E-08	5.754E-09	3.764E-09	2.117E-09	1.384E-09	9.948E-10	7.593E-10	6.038E-10	4.949E-10	4.149E-10	3.542E-10
W	1.936E-08	9.782E-09	6.333E-09	3.556E-09	2.359E-09	1.680E-09	1.276E-09	1.011E-09	8.252E-10	6.897E-10	5.872E-10
WNW	2.496E-08	1.264E-08	8.011E-09	4.405E-09	2.866E-09	2.052E-09	1.561E-09	1.237E-09	1.010E-09	8.439E-10	7.184E-10
NW	3.855E-08	1.976E-08	1.271E-08	7.159E-09	4.692E-09	3.383E-09	2.615E-09	2.089E-09	1.717E-09	1.444E-09	1.237E-09
NVW	3.634E-08	1.929E-08	1.231E-08	6.888E-09	4.573E-09	3.330E-09	2.580E-09	2.079E-09	1.729E-09	1.463E-09	1.258E-09
N	2.652E-08	1.622E-08	1.293E-08	9.625E-09	7.513E-09	5.897E-09	4.576E-09	3.682E-09	3.048E-09	2.580E-09	2.222E-09
NNE	2.119E-08	2.253E-08	1.437E-08	8.048E-09	5.348E-09	3.898E-09	3.011E-09	2.421E-09	2.003E-09	1.695E-09	1.459E-09
NE	1.437E-08	1.705E-08	1.094E-08	6.182E-09	4.134E-09	3.028E-09	2.375E-09	1.928E-09	1.602E-09	1.356E-09	1.169E-09
EVE	5.632E-09	7.893E-09	5.240E-09	3.087E-09	2.120E-09	1.582E-09	1.327E-09	1.120E-09	9.338E-10	7.949E-10	6.878E-10
E	3.619E-09	6.795E-09	4.548E-09	2.705E-09	1.868E-09	1.399E-09	1.104E-09	9.075E-10	7.883E-10	6.916E-10	6.001E-10
ESE	9.024E-09	1.038E-08	6.851E-09	3.996E-09	2.720E-09	2.016E-09	1.576E-09	1.279E-09	1.066E-09	9.077E-10	7.853E-10
SE	1.940E-08	1.078E-08	7.458E-09	4.520E-09	3.052E-09	2.241E-09	1.737E-09	1.396E-09	1.145E-09	9.605E-10	8.206E-10
SSE	2.843E-08	1.583E-08	1.007E-08	5.634E-09	3.764E-09	2.755E-09	2.137E-09	1.724E-09	1.431E-09	1.214E-09	1.048E-09

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	3.033E-07	1.274E-07	5.726E-08	3.530E-08	2.975E-08	1.764E-08	7.349E-09	3.937E-09	2.555E-09	1.849E-09
SSW	1.095E-07	7.443E-08	4.932E-08	4.028E-08	3.005E-08	1.519E-08	5.418E-09	2.516E-09	1.522E-09	1.045E-09
SW	5.351E-08	8.485E-08	4.877E-08	2.757E-08	1.824E-08	9.188E-09	3.330E-09	1.559E-09	9.456E-10	6.475E-10
WSW	2.724E-08	5.879E-08	3.367E-08	1.856E-08	1.207E-08	5.861E-09	2.157E-09	1.004E-09	6.067E-10	4.161E-10
W	2.224E-07	1.658E-07	7.183E-08	3.765E-08	2.358E-08	1.038E-08	3.637E-09	1.697E-09	1.016E-09	6.919E-10
WNW	1.701E-07	1.933E-07	9.117E-08	4.872E-08	3.045E-08	1.332E-08	4.522E-09	2.073E-09	1.243E-09	8.466E-10
NW	2.267E-07	3.068E-07	1.454E-07	7.547E-08	4.696E-08	2.080E-08	7.296E-09	3.425E-09	2.098E-09	1.448E-09
NVW	6.472E-08	1.105E-07	9.530E-08	6.683E-08	4.383E-08	1.998E-08	7.063E-09	3.361E-09	2.089E-09	1.466E-09
N	7.338E-08	7.686E-08	5.838E-08	4.110E-08	3.029E-08	1.784E-08	9.420E-09	5.799E-09	3.696E-09	2.586E-09
NNE	4.772E-08	5.069E-08	3.898E-08	2.695E-08	2.134E-08	1.860E-08	8.253E-09	3.930E-09	2.430E-09	1.699E-09
NE	2.822E-08	3.431E-08	2.596E-08	1.836E-08	1.451E-08	1.374E-08	6.330E-09	3.062E-09	1.731E-09	1.350E-09
EVE	1.444E-08	1.432E-08	1.047E-08	7.404E-09	5.792E-09	4.212E-09	3.136E-09	1.623E-09	1.108E-09	7.964E-10
E	1.272E-08	7.827E-09	5.185E-09	3.984E-09	3.442E-09	5.090E-09	2.742E-09	1.496E-09	9.183E-10	6.864E-10
ESE	2.147E-08	2.615E-08	1.570E-08	1.149E-08	9.191E-09	8.579E-09	4.063E-09	2.928E-09	1.283E-09	9.094E-10
SE	1.155E-07	9.463E-08	5.146E-08	3.295E-08	2.276E-08	1.122E-08	4.520E-09	2.756E-09	1.398E-09	9.633E-10
SSE	1.640E-07	8.415E-08	4.558E-08	3.150E-08	3.102E-08	1.607E-08	5.787E-09	2.777E-09	1.730E-09	1.217E-09

B124

ERP ELEVATED STACK RELEASE
 8.000 DAY DFCAY, DEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)	DISTANCE IN MILES										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.124E-07	3.922E-07	3.368E-07	2.194E-07	1.195E-07	7.671E-08	5.380E-08	4.091E-08	3.105E-08	2.985E-08	2.900E-08
SSW	7.240E-08	1.124E-07	1.170E-07	9.811E-08	7.556E-08	5.779E-08	4.475E-08	4.341E-08	4.032E-08	3.349E-08	2.831E-08
SW	3.219E-09	1.472E-08	4.287E-08	8.333E-08	1.069E-07	6.788E-08	4.667E-08	3.412E-08	2.613E-08	2.074E-08	1.693E-08
WSW	2.493E-16	3.412E-10	1.710E-08	4.832E-08	7.831E-08	4.789E-08	3.229E-08	2.334E-08	1.775E-08	1.402E-08	1.141E-08
W	1.199E-08	1.131E-07	2.477E-07	2.502E-07	1.793E-07	1.029E-07	6.668E-08	4.683E-08	3.482E-08	2.701E-08	2.165E-08
WNW	4.660E-09	3.687E-08	1.594E-07	2.414E-07	2.309E-07	1.311E-07	8.431E-08	6.043E-08	4.556E-08	3.507E-08	2.792E-08
NW	4.844E-10	3.768E-08	1.876E-07	3.465E-07	3.860E-07	2.123E-07	1.343E-07	9.423E-08	7.018E-08	5.400E-08	4.300E-08
NVW	4.765E-08	3.092E-08	5.291E-08	8.852E-08	1.210E-07	1.187E-07	9.550E-08	7.989E-08	6.706E-08	5.204E-08	4.174E-08
N	1.643E-08	5.256E-08	7.376E-08	8.156E-08	8.003E-08	6.948E-08	5.807E-08	4.766E-08	3.974E-08	3.368E-08	2.898E-08
NNE	8.942E-09	3.461E-08	4.743E-08	5.330E-08	5.347E-08	4.563E-08	3.763E-08	3.112E-08	2.607E-08	2.217E-08	1.914E-08
NE	2.084E-10	1.225E-08	2.842E-08	3.536E-08	3.636E-08	3.109E-08	2.563E-08	2.119E-08	1.775E-08	1.500E-08	1.301E-08
EVE	1.529E-09	9.671E-09	1.512E-08	1.585E-08	1.489E-08	1.254E-08	1.032E-08	8.543E-09	7.163E-09	6.093E-09	5.257E-09
E	1.473E-09	1.907E-08	1.301E-08	8.833E-09	6.861E-09	5.931E-09	5.136E-09	4.462E-09	3.907E-09	3.458E-09	3.084E-09
ESE	6.880E-09	2.096E-08	2.147E-08	2.107E-08	2.093E-08	1.841E-08	1.558E-08	1.314E-08	1.118E-08	9.621E-09	8.387E-09
SE	7.059E-08	1.016E-07	1.248E-07	1.110E-07	8.659E-08	6.537E-08	4.986E-08	3.894E-08	3.116E-08	2.551E-08	2.128E-08
SSE	2.878E-07	2.251E-07	1.769E-07	1.258E-07	8.279E-08	5.884E-08	4.371E-08	3.369E-08	2.679E-08	2.069E-08	1.858E-08

ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)	DISTANCE IN MILES										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	2.523E-08	1.738E-08	1.103E-08	6.062E-09	4.154E-09	3.950E-09	2.304E-09	1.813E-09	1.494E-09	1.257E-09	1.069E-09
SSW	2.473E-08	1.415E-08	8.620E-09	4.474E-09	2.816E-09	1.961E-09	1.454E-09	1.127E-09	9.030E-10	7.421E-10	6.220E-10
SW	1.478E-08	8.575E-09	5.268E-09	2.751E-09	1.725E-09	1.194E-09	8.981E-10	6.872E-10	5.496E-10	4.508E-10	3.772E-10
WSW	9.762E-09	5.376E-09	3.420E-09	1.838E-09	1.156E-09	8.060E-10	5.992E-10	4.657E-10	3.740E-10	3.078E-10	2.584E-10
W	1.780E-08	8.793E-09	5.586E-09	2.997E-09	1.897E-09	1.313E-09	9.697E-10	7.495E-10	5.988E-10	4.908E-10	4.104E-10
WNW	2.294E-08	1.125E-08	6.929E-09	3.620E-09	2.741E-09	1.543E-09	1.138E-09	8.780E-10	6.996E-10	5.719E-10	4.771E-10
NW	3.540E-08	1.760E-08	1.101E-08	5.901E-09	3.696E-09	2.566E-09	1.923E-09	1.496E-09	1.200E-09	9.869E-10	8.280E-10
NVW	3.480E-08	1.794E-08	1.110E-08	5.840E-09	3.620E-09	2.490E-09	1.841E-09	1.434E-09	1.160E-09	9.581E-10	8.054E-10
N	2.532E-08	1.529E-08	1.217E-08	9.083E-09	6.969E-09	5.261E-09	3.943E-09	3.136E-09	2.546E-09	2.118E-09	1.795E-09
NNE	2.031E-08	2.157E-08	1.334E-08	7.094E-09	4.512E-09	3.171E-09	2.374E-09	1.857E-09	1.500E-09	1.241E-09	1.046E-09
NE	1.377E-08	1.641E-08	1.021E-08	5.470E-09	3.478E-09	2.443E-09	1.858E-09	1.472E-09	1.196E-09	9.935E-10	8.408E-10
EVE	5.400E-09	7.681E-09	4.958E-09	2.753E-09	1.764E-09	1.243E-09	9.912E-10	8.059E-10	6.570E-10	5.481E-10	4.656E-10
E	3.543E-09	6.716E-09	4.358E-09	2.427E-09	1.550E-09	1.089E-09	8.135E-10	6.370E-10	5.298E-10	4.477E-10	3.769E-10
ESE	8.705E-09	1.009E-08	6.472E-09	3.559E-09	2.262E-09	1.584E-09	1.180E-09	9.167E-10	7.351E-10	6.039E-10	5.057E-10
SE	1.807E-08	9.777E-09	6.636E-09	3.911E-09	2.582E-09	1.863E-09	1.425E-09	1.128E-09	9.096E-10	7.519E-10	6.333E-10
SSE	2.682E-08	1.454E-08	8.953E-09	4.733E-09	2.990E-09	2.089E-09	1.556E-09	1.211E-09	9.725E-10	8.007E-10	6.721E-10

B125

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.969E-07	1.227E-07	5.439E-08	3.315E-08	2.786E-08	1.630E-08	6.318E-09	3.049E-09	1.832E-09	1.257E-09
SSW	1.076E-07	7.267E-08	4.769E-08	3.860E-08	2.852E-08	1.404E-08	4.658E-09	1.986E-09	1.135E-09	7.453E-10
SW	5.326E-08	8.364E-08	4.731E-08	2.636E-08	1.726E-08	8.483E-09	2.854E-09	1.213E-09	6.921E-10	4.528E-10
WSW	2.725E-08	5.813E-08	3.287E-08	1.793E-08	1.157E-08	5.481E-09	1.887E-09	8.167E-10	4.689E-10	3.091E-10
W	2.189E-07	1.610E-07	6.840E-08	3.521E-08	2.181E-08	9.369E-09	3.084E-09	1.332E-09	7.550E-10	4.731E-10
WNW	1.686E-07	1.889E-07	8.722E-08	4.581E-08	2.819E-08	1.193E-08	3.742E-09	1.567E-09	8.844E-10	5.746E-10
NW	2.249E-07	3.000E-07	1.391E-07	7.089E-08	4.344E-08	1.862E-08	6.056E-09	2.610E-09	1.505E-09	9.911E-10
NVW	6.385E-08	1.092E-07	9.331E-08	6.508E-08	4.222E-08	1.865E-08	6.122E-09	2.532E-09	1.446E-09	9.614E-10
N	7.252E-08	7.568E-08	5.695E-08	3.969E-08	2.902E-08	1.613E-08	8.820E-09	5.205E-09	3.153E-09	2.125E-09
NNE	4.719E-08	4.995E-08	3.716E-08	2.693E-08	2.047E-08	1.763E-08	7.333E-09	3.210E-09	1.869E-09	1.245E-09
NE	2.791E-08	3.380E-08	2.531E-08	1.772E-08	1.391E-08	1.387E-08	5.639E-09	2.485E-09	1.477E-09	9.971E-10
EVE	1.423E-08	1.406E-08	1.020E-08	7.150E-09	5.558E-09	5.964E-09	2.803E-09	1.281E-09	8.021E-10	5.498E-10
E	1.250E-08	6.886E-09	5.079E-09	3.893E-09	3.364E-09	4.963E-09	2.466E-09	1.102E-09	6.466E-10	4.458E-10
ESE	2.118E-08	1.984E-08	1.536E-08	1.114E-08	8.879E-09	8.173E-09	3.630E-09	1.693E-09	9.226E-10	6.064E-10
SE	1.135E-07	8.259E-08	4.963E-08	3.123E-08	2.134E-08	1.822E-08	3.926E-09	1.880E-09	1.130E-09	7.597E-10
SSE	1.647E-07	8.170E-08	4.573E-08	2.986E-08	2.935E-08	1.479E-08	4.896E-09	2.116E-09	1.219E-09	8.049E-10

ERP ELEVATED STACK RELEASE
CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	4.302E-08	3.134E-08	2.122E-08	1.154E-08	4.369E-09	2.356E-09	1.478E-09	1.018E-09	7.454E-10	5.874E-10	4.997E-10
SSW	1.222E-08	9.355E-09	7.085E-09	4.395E-09	1.744E-09	1.142E-09	7.538E-10	5.346E-10	4.752E-10	3.591E-10	2.812E-10
SW	1.164E-09	1.171E-09	1.326E-09	1.106E-09	1.146E-09	6.201E-10	3.824E-10	2.594E-10	1.872E-10	1.415E-10	1.107E-10
WSW	2.695E-11	1.617E-11	3.443E-10	7.558E-10	4.416E-10	2.403E-10	1.486E-10	1.008E-10	7.275E-11	5.498E-11	4.391E-11
W	2.270E-09	6.018E-09	4.818E-09	2.913E-09	1.351E-09	7.221E-10	4.429E-10	2.986E-10	2.147E-10	1.614E-10	1.263E-10
WNW	1.213E-09	1.460E-09	5.673E-09	4.137E-09	2.527E-09	1.270E-09	7.490E-10	4.906E-10	3.531E-10	2.616E-10	2.031E-10
NW	4.747E-09	3.932E-09	4.288E-09	7.728E-09	4.864E-09	2.412E-09	1.411E-09	9.172E-10	6.425E-10	4.762E-10	3.697E-10
NNW	2.852E-09	2.574E-09	2.563E-09	1.986E-09	1.903E-09	1.027E-09	6.335E-10	5.097E-10	3.665E-10	2.813E-10	2.279E-10
N	5.400E-09	4.788E-09	4.636E-09	3.531E-09	1.860E-09	1.177E-09	8.087E-10	5.858E-10	4.406E-10	3.410E-10	2.700E-10
NNE	3.138E-09	2.839E-09	2.836E-09	2.201E-09	1.175E-09	7.473E-10	5.147E-10	3.733E-10	2.809E-10	2.175E-10	1.722E-10
NE	1.990E-09	1.762E-09	1.709E-09	1.302E-09	6.857E-10	4.341E-10	2.982E-10	2.160E-10	1.625E-10	1.258E-10	9.957E-11
ENE	8.452E-10	7.100E-10	6.367E-10	4.587E-10	2.314E-10	1.445E-10	9.847E-11	7.103E-11	5.331E-11	4.122E-11	3.264E-11
E	1.110E-09	8.474E-10	6.375E-10	3.927E-10	1.724E-10	1.009E-10	6.651E-11	4.712E-11	3.563E-11	2.699E-11	2.136E-11
ESE	1.127E-09	9.495E-10	8.549E-10	6.179E-10	3.131E-10	1.953E-10	1.331E-10	9.606E-11	7.211E-11	5.576E-11	4.415E-11
SE	1.389E-08	1.066E-08	8.123E-09	5.068E-09	2.255E-09	1.329E-09	8.786E-10	6.236E-10	4.642E-10	3.577E-10	2.832E-10
SSE	2.792E-08	2.067E-08	1.454E-08	8.306E-09	3.349E-09	1.875E-09	1.203E-09	8.399E-10	6.197E-10	5.440E-10	4.431E-10

DIRECTIONS FROM SITE

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	4.031E-10	2.029E-10	1.279E-10	7.101E-11	4.707E-11	3.567E-11	2.558E-11	1.922E-11	1.508E-11	1.204E-11	9.831E-12
SSW	2.265E-10	1.176E-10	7.379E-11	4.006E-11	2.982E-11	2.102E-11	1.506E-11	1.131E-11	8.792E-12	7.023E-12	5.733E-12
SW	8.902E-11	5.302E-11	3.449E-11	1.913E-11	1.199E-11	9.075E-12	6.911E-12	5.190E-12	4.035E-12	3.223E-12	2.631E-12
WSW	3.626E-11	2.579E-11	1.782E-11	1.142E-11	6.912E-12	4.634E-12	3.321E-12	2.493E-12	1.939E-12	1.549E-12	1.264E-12
W	1.015E-10	4.557E-11	3.437E-11	1.861E-11	1.467E-11	9.835E-12	7.048E-12	5.292E-12	4.115E-12	3.287E-12	2.683E-12
WNW	1.652E-10	8.020E-11	5.063E-11	2.724E-11	1.897E-11	1.390E-11	1.044E-11	7.836E-12	6.093E-12	4.967E-12	3.972E-12
NW	3.004E-10	1.453E-10	9.156E-11	6.308E-11	3.829E-11	2.571E-11	1.861E-11	1.397E-11	1.086E-11	8.678E-12	7.083E-12
NNW	1.938E-10	1.113E-10	7.760E-11	4.582E-11	2.917E-11	1.951E-11	1.390E-11	1.075E-11	8.417E-12	6.723E-12	5.488E-12
N	2.178E-10	1.036E-10	6.345E-11	3.373E-11	5.992E-11	3.962E-11	2.839E-11	2.132E-11	1.658E-11	1.324E-11	1.081E-11
NNE	1.389E-10	1.787E-10	1.091E-10	5.575E-11	3.385E-11	2.268E-11	1.623E-11	1.217E-11	9.456E-12	7.548E-12	6.158E-12
NE	8.033E-11	1.026E-10	6.377E-11	3.323E-11	2.030E-11	1.358E-11	9.649E-12	7.245E-12	5.633E-12	4.500E-12	3.673E-12
ENE	2.634E-11	2.726E-11	1.956E-11	1.183E-11	7.585E-12	5.073E-12	3.599E-12	2.483E-12	1.935E-12	1.552E-12	1.272E-12
E	1.728E-11	2.743E-11	2.115E-11	1.352E-11	8.780E-12	5.860E-12	4.130E-12	3.048E-12	2.328E-12	1.648E-12	1.336E-12
ESE	3.563E-11	4.720E-11	3.532E-11	2.205E-11	1.420E-11	9.452E-12	6.662E-12	4.902E-12	3.744E-12	2.950E-12	2.379E-12
SE	2.290E-10	1.097E-10	6.766E-11	3.670E-11	2.324E-11	1.641E-11	1.242E-11	1.118E-11	8.943E-12	7.376E-12	6.190E-12
SSE	3.576E-10	2.206E-10	1.348E-10	6.899E-11	4.203E-11	2.825E-11	2.028E-11	1.525E-11	1.187E-11	9.501E-12	7.766E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES										
	4-5	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50	
S	1.917E-08	5.068E-09	1.528E-09	7.630E-10	4.899E-10	2.140E-10	7.300E-11	3.467E-11	1.946E-11	1.212E-11	
SSW	6.394E-09	2.132E-09	7.696E-10	4.479E-10	2.840E-10	1.223E-10	4.301E-11	2.098E-11	1.142E-11	7.069E-12	
SW	1.194E-09	9.033E-10	3.967E-10	1.904E-10	1.118E-10	5.278E-11	1.937E-11	8.988E-12	5.242E-12	3.244E-12	
WSW	4.866E-10	4.220E-10	1.539E-10	7.398E-11	4.406E-11	2.457E-11	1.084E-11	4.716E-12	2.518E-12	1.559E-12	
W	4.238E-09	1.419E-09	4.597E-10	2.185E-10	1.277E-10	5.393E-11	2.036E-11	1.001E-11	5.345E-12	3.308E-12	
WNW	4.054E-09	2.326E-09	7.845E-10	3.575E-10	2.064E-10	8.594E-11	2.876E-11	1.387E-11	7.915E-12	4.899E-12	
NW	5.738E-09	4.411E-09	1.480E-09	6.576E-10	3.756E-10	1.559E-10	5.839E-11	2.622E-11	1.411E-11	8.735E-12	
NNW	2.304E-09	1.532E-09	6.890E-10	3.750E-10	2.311E-10	1.147E-10	4.548E-11	1.984E-11	1.076E-11	6.767E-12	
N	4.177E-09	1.928E-09	9.178E-10	4.441E-10	2.717E-10	1.111E-10	5.197E-11	4.056E-11	2.153E-11	1.333E-11	
NNE	2.544E-09	1.213E-09	5.201E-10	2.831E-10	1.733E-10	1.389E-10	5.788E-11	2.598E-11	1.230E-11	7.598E-12	
NE	1.543E-09	7.108E-10	3.016E-10	1.638E-10	1.002E-10	8.040E-11	3.427E-11	1.380E-11	7.318E-12	4.529E-12	
ENE	5.739E-10	2.435E-10	9.976E-11	5.377E-11	3.285E-11	2.363E-11	1.166E-11	5.153E-12	2.592E-12	1.562E-12	
E	5.753E-10	1.896E-10	6.793E-11	3.542E-11	2.152E-11	2.234E-11	1.311E-11	5.953E-12	3.085E-12	1.734E-12	
ESE	7.796E-10	3.285E-10	1.349E-10	7.272E-11	4.444E-11	3.935E-11	2.151E-11	4.602E-12	4.964E-12	2.973E-12	
SE	7.330E-09	2.468E-09	8.966E-10	4.692E-10	2.852E-10	1.175E-10	3.760E-11	1.664E-11	1.068E-11	7.401E-12	
SSE	1.331E-08	3.795E-09	1.247E-09	6.538E-10	4.413E-10	2.129E-10	7.163E-11	2.874E-11	1.540E-11	9.562E-12	

B126

ERP ELEVATED STACK RELEASE
CORRECTED FOR OPEN TERRAIN RECIRCULATION
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q (PER SQ.METER)
			(MILES)	(METERS)	(SEC/CUB.METER) NO DECAY	(SEC/CUB.METER) 2.260 DAY DECAY	(SEC/CUB.METER) 8.000 DAY DECAY	
					UNDEPLETED	UNDEPLETED	DEPLETED	
A	SITE BOUNDARY	S	0.84	1350.	2.934E-07	2.932E-07	2.856E-07	1.693E-08
A	SITE BOUNDARY	SSW	0.85	1370.	1.100E-07	1.099E-07	1.077E-07	5.622E-09
A	SITE BOUNDARY	SW	1.01	1620.	8.157E-08	8.145E-08	8.123E-08	1.156E-09
A	SITE BOUNDARY	WSW	1.00	1610.	4.847E-08	4.839E-08	4.839E-08	7.551E-10
A	SITE BOUNDARY	W	0.99	1590.	2.563E-07	2.559E-07	2.513E-07	2.977E-09
A	SITE BOUNDARY	WNW	1.01	1620.	2.455E-07	2.451E-07	2.425E-07	4.088E-09
A	SITE BOUNDARY	NW	0.80	1290.	2.278E-07	2.276E-07	2.259E-07	4.172E-09
A	SITE BOUNDARY	NNW	0.70	1130.	4.493E-08	4.489E-08	4.444E-08	2.541E-09
A	SITE BOUNDARY	N	0.70	1130.	6.941E-08	6.936E-08	6.837E-08	4.618E-09
A	SITE BOUNDARY	NNE	0.65	1050.	4.140E-08	4.137E-08	4.080E-08	2.794E-09
A	SITE BOUNDARY	NE	0.64	1030.	2.118E-08	2.117E-08	2.090E-08	1.704E-09
A	SITE BOUNDARY	ENE	0.58	930.	1.160E-08	1.159E-08	1.144E-08	6.763E-10
A	SITE BOUNDARY	E	0.54	870.	1.805E-08	1.804E-08	1.784E-08	8.546E-10
A	SITE BOUNDARY	ESE	0.55	880.	2.102E-08	2.100E-08	2.077E-08	9.214E-10
A	SITE BOUNDARY	SE	1.03	1660.	1.119E-07	1.117E-07	1.095E-07	4.768E-09
A	SITE BOUNDARY	SSE	0.85	1370.	1.539E-07	1.537E-07	1.502E-07	1.150E-08

Atmospheric Diffusion Estimates
Elevated Releases
April-June 1983

ERP ELEVATED STACK RELEASE
 NO DECAY, UNDEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.137E-07	1.957E-07	1.584E-07	1.247E-07	9.393E-08	7.145E-08	5.543E-08	4.410E-08	3.597E-08	3.781E-08	3.811E-08
SSW	6.139E-08	2.294E-08	2.663E-08	3.704E-08	4.192E-08	3.631E-08	2.991E-08	3.091E-08	2.982E-08	2.526E-08	2.171E-08
SW	2.487E-08	2.592E-08	7.173E-08	1.181E-07	1.451E-07	9.163E-08	6.290E-08	4.598E-08	3.524E-08	2.799E-08	2.288E-08
WSW	6.623E-08	4.436E-08	6.247E-08	9.341E-08	1.137E-07	6.749E-08	4.479E-08	3.192E-08	2.407E-08	1.889E-08	1.530E-08
W	4.754E-08	1.477E-07	2.337E-07	2.314E-07	1.705E-07	9.981E-08	6.564E-08	4.668E-08	3.510E-08	2.750E-08	2.224E-08
WNW	3.018E-10	1.875E-08	9.927E-08	1.551E-07	1.628E-07	9.573E-08	6.329E-08	4.678E-08	3.621E-08	2.834E-08	2.291E-08
NW	5.355E-09	4.776E-08	1.842E-07	3.788E-07	5.594E-07	3.213E-07	2.097E-07	1.513E-07	1.152E-07	9.020E-08	7.296E-08
NNW	3.875E-08	8.703E-08	1.544E-07	1.981E-07	2.421E-07	2.220E-07	1.938E-07	1.633E-07	1.371E-07	1.069E-07	8.622E-08
N	8.665E-08	1.046E-07	1.002E-07	8.727E-08	7.307E-08	6.015E-08	4.902E-08	3.971E-08	3.283E-08	2.766E-08	2.369E-08
NNE	2.161E-08	4.223E-08	4.930E-08	4.123E-08	3.135E-08	2.443E-08	1.947E-08	1.592E-08	1.331E-08	1.136E-08	9.868E-09
NE	2.995E-08	6.568E-08	6.198E-08	4.465E-08	2.937E-08	2.154E-08	1.659E-08	1.323E-08	1.085E-08	9.102E-09	7.781E-09
ENE	2.091E-08	3.636E-08	3.120E-08	2.255E-08	1.542E-08	1.150E-08	8.922E-09	7.141E-09	5.869E-09	4.931E-09	4.222E-09
E	6.490E-08	5.690E-08	4.265E-08	2.912E-08	2.031E-08	1.633E-08	1.364E-08	1.161E-08	1.004E-08	8.794E-09	7.802E-09
ESE	1.922E-07	1.075E-07	6.179E-08	3.683E-08	2.223E-08	1.580E-08	1.203E-08	9.579E-09	7.884E-09	6.656E-09	5.731E-09
SE	2.492E-07	1.832E-07	1.451E-07	1.050E-07	7.249E-08	5.424E-08	4.223E-08	3.391E-08	2.794E-08	2.352E-08	2.014E-08
SSE	4.411E-07	2.532E-07	1.581E-07	9.814E-08	5.974E-08	4.243E-08	3.221E-08	2.549E-08	2.083E-08	2.606E-08	2.936E-08

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.521E-08	2.071E-08	1.333E-08	7.580E-09	5.270E-09	3.964E-09	3.093E-09	2.508E-09	2.109E-09	1.808E-09	1.569E-09
SSW	1.928E-08	1.223E-08	7.785E-09	4.343E-09	2.954E-09	2.167E-09	1.671E-09	1.343E-09	1.112E-09	9.418E-10	8.122E-10
SW	1.984E-08	1.132E-08	7.132E-09	3.921E-09	2.597E-09	1.884E-09	1.449E-09	1.158E-09	9.543E-10	8.048E-10	6.913E-10
WSW	1.292E-08	6.918E-09	4.440E-09	2.466E-09	1.619E-09	1.171E-09	8.995E-10	7.205E-10	5.949E-10	4.325E-10	3.255E-10
W	1.845E-08	9.468E-09	6.216E-09	3.564E-09	2.392E-09	1.734E-09	1.333E-09	1.069E-09	8.828E-10	7.464E-10	6.425E-10
WNW	1.913E-08	1.003E-08	6.507E-09	3.707E-09	2.465E-09	1.799E-09	1.391E-09	1.120E-09	9.274E-10	7.854E-10	6.770E-10
NW	6.102E-08	3.236E-08	2.131E-08	1.239E-08	8.265E-09	6.050E-09	4.733E-09	3.838E-09	3.195E-09	2.716E-09	2.350E-09
NNW	7.222E-08	3.819E-08	2.440E-08	1.371E-08	9.165E-09	6.716E-09	5.224E-09	4.228E-09	3.521E-09	3.013E-09	2.606E-09
N	2.063E-08	1.236E-08	9.589E-09	6.915E-09	5.341E-09	4.198E-09	3.271E-09	2.649E-09	2.206E-09	1.877E-09	1.626E-09
NNE	1.085E-08	1.548E-08	1.002E-08	5.744E-09	3.896E-09	2.889E-09	2.266E-09	1.847E-09	1.549E-09	1.326E-09	1.155E-09
NE	8.030E-09	8.523E-09	5.461E-09	3.093E-09	2.084E-09	1.538E-09	1.207E-09	9.844E-10	8.246E-10	7.053E-10	6.127E-10
ENE	4.290E-09	6.669E-09	4.458E-09	2.661E-09	1.850E-09	1.398E-09	1.155E-09	9.793E-10	8.446E-10	7.288E-10	6.378E-10
E	8.698E-09	1.588E-08	1.068E-08	6.416E-09	4.477E-09	3.389E-09	2.701E-09	2.230E-09	1.890E-09	1.749E-09	1.532E-09
ESE	5.841E-09	3.972E-09	6.153E-09	3.787E-09	2.683E-09	2.053E-09	1.650E-09	1.372E-09	1.169E-09	1.015E-09	8.952E-10
SE	1.753E-08	1.051E-08	7.901E-09	5.400E-09	3.876E-09	2.993E-09	2.399E-09	1.941E-09	1.694E-09	1.452E-09	1.263E-09
SSE	2.481E-08	1.350E-08	8.669E-09	4.931E-09	3.334E-09	2.469E-09	1.934E-09	1.576E-09	1.321E-09	1.131E-09	9.854E-10

B129

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.517E-07	9.078E-08	5.517E-08	3.899E-08	3.621E-08	2.021E-08	7.832E-09	3.965E-09	2.523E-09	1.809E-09
SSW	3.943E-08	3.834E-08	3.202E-08	2.840E-08	2.186E-08	1.182E-08	4.490E-09	2.178E-09	1.349E-09	9.442E-10
SW	8.216E-08	1.153E-07	6.379E-08	3.555E-08	2.327E-08	1.135E-08	4.946E-09	1.900E-09	1.164E-09	8.071E-10
WSW	7.220E-08	8.866E-08	4.567E-08	2.434E-08	1.548E-08	7.151E-09	2.528E-09	1.182E-09	7.238E-10	5.004E-10
W	2.113E-07	1.526E-07	6.717E-08	3.552E-08	2.240E-08	1.002E-08	3.633E-09	1.749E-09	1.073E-09	7.483E-10
WNW	1.062E-07	1.313E-07	6.534E-08	3.624E-08	2.312E-08	1.049E-08	3.776E-09	1.814E-09	1.124E-09	7.873E-10
NW	2.494E-07	4.134E-07	2.161E-07	1.160E-07	7.365E-08	3.382E-08	1.254E-08	6.114E-09	3.849E-09	2.722E-09
NNW	1.598E-07	2.234E-07	1.891E-07	1.331E-07	8.716E-08	3.962E-08	1.497E-08	6.772E-09	4.238E-09	3.013E-09
N	9.542E-08	7.849E-08	4.827E-08	3.283E-08	2.373E-08	1.297E-08	6.810E-09	4.132E-09	2.658E-09	1.882E-09
NNE	4.414E-08	3.947E-08	1.937E-08	1.331E-08	1.068E-08	1.202E-08	5.872E-09	2.909E-09	1.853E-09	1.329E-09
NE	5.510E-08	2.929E-08	1.657E-08	1.087E-08	8.265E-09	7.053E-09	3.171E-09	1.551E-09	9.873E-10	7.064E-10
ENE	2.859E-08	1.526E-08	8.897E-09	5.875E-09	4.457E-09	5.157E-09	2.700E-09	1.421E-09	9.783E-10	7.294E-10
E	3.980E-08	2.850E-08	1.355E-08	1.002E-08	8.429E-09	1.197E-08	6.502E-09	3.404E-09	2.235E-09	1.711E-09
ESE	6.984E-08	2.261E-08	1.295E-08	7.909E-09	6.946E-09	7.023E-09	3.822E-09	2.860E-09	1.374E-09	1.016E-09
SE	1.358E-07	7.161E-08	4.211E-08	2.796E-08	2.017E-08	1.091E-08	5.278E-09	2.994E-09	1.994E-09	1.454E-09
SSE	1.526E-07	6.058E-08	3.225E-08	2.415E-08	2.670E-08	1.387E-08	5.852E-09	2.486E-09	1.581E-09	1.134E-09

ERP ELEVATED STACK RELEASE
 2.250 DAY DECAY, UNDEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.136E-07	1.956E-07	1.583E-07	1.244E-07	9.376E-08	7.12PE-08	5.526E-08	4.394E-08	3.581E-08	3.761E-08	3.789E-08
SSW	6.137E-08	2.292E-08	2.660E-08	3.699E-08	4.184E-08	3.622E-08	2.581E-08	3.079E-08	2.968E-08	2.513E-08	2.158E-08
SW	2.486E-08	2.590E-08	7.165E-08	1.179E-07	1.418E-07	9.137E-08	6.267E-08	4.578E-08	3.506E-08	2.783E-08	2.273E-08
WSW	6.619E-08	4.432E-08	6.249E-08	9.327E-08	1.134E-07	6.726E-08	4.451E-08	3.176E-08	2.393E-08	1.877E-08	1.518E-08
W	4.751E-08	1.376E-07	2.334E-07	2.310E-07	1.700E-07	9.946E-08	6.535E-08	4.644E-08	3.489E-08	2.731E-08	2.206E-08
WNW	3.017E-10	1.874E-08	9.918E-08	1.550E-07	1.625E-07	9.548E-08	6.509E-08	4.660E-08	3.605E-08	2.819E-08	2.278E-08
NW	5.052E-09	4.772E-08	1.839E-07	3.783E-07	5.583E-07	3.294E-07	2.096E-07	1.507E-07	1.147E-07	8.973E-08	7.254E-08
NVW	3.874E-08	8.608E-08	1.543E-07	1.578E-07	2.416E-07	2.214E-07	1.932E-07	1.626E-07	1.364E-07	1.063E-07	8.567E-08
N	8.663E-08	1.046E-07	1.001E-07	8.717E-08	7.294E-08	6.001E-08	4.887E-08	3.957E-08	3.269E-08	2.752E-08	2.356E-08
NVE	2.160E-08	4.220E-08	4.925E-08	4.118E-08	3.129E-08	2.436E-08	1.940E-08	1.584E-08	1.324E-08	1.129E-08	9.800E-09
VE	2.794E-08	6.564E-08	6.193E-08	4.460E-08	2.931E-08	2.149E-08	1.654E-08	1.318E-08	1.080E-08	9.050E-09	7.730E-09
EVE	2.090E-08	3.633E-08	3.117E-08	2.253E-08	1.539E-08	1.147E-08	8.894E-09	7.114E-09	5.843E-09	4.906E-09	4.198E-09
E	6.488E-08	5.685E-08	4.260E-08	2.907E-08	2.025E-08	1.628E-08	1.358E-08	1.155E-08	9.979E-09	8.736E-09	7.739E-09
ESE	1.921E-07	1.074E-07	6.162E-08	3.677E-08	2.218E-08	1.575E-08	1.199E-08	9.540E-09	7.847E-09	6.621E-09	5.697E-09
SE	2.491E-07	1.830E-07	1.450E-07	1.049E-07	7.238E-08	5.412E-08	4.211E-08	3.380E-08	2.783E-08	2.341E-08	2.003E-08
SSE	4.409E-07	2.530E-07	1.580E-07	9.804E-08	5.964E-08	4.233E-08	3.211E-08	2.540E-08	2.074E-08	2.593E-08	2.919E-08

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.300E-08	2.049E-08	1.315E-08	7.419E-09	5.119E-09	3.824E-09	2.958E-09	2.381E-09	1.986E-09	1.690E-09	1.455E-09
SSW	1.915E-08	1.210E-08	7.672E-09	4.247E-09	2.866E-09	2.086E-09	1.596E-09	1.273E-09	1.046E-09	8.789E-10	7.520E-10
SW	1.979E-08	1.120E-08	7.028E-09	3.835E-09	2.521E-09	1.815E-09	1.386E-09	1.100E-09	8.994E-10	7.529E-10	6.420E-10
WSW	1.281E-08	6.830E-09	4.364E-09	2.403E-09	1.564E-09	1.121E-09	8.541E-10	6.782E-10	5.551E-10	4.650E-10	3.967E-10
W	1.829E-08	9.343E-09	6.106E-09	3.470E-09	2.109E-09	1.658E-09	1.263E-09	1.004E-09	8.219E-10	6.886E-10	5.875E-10
WNW	1.900E-08	9.929E-09	6.418E-09	3.627E-09	2.398E-09	1.738E-09	1.334E-09	1.066E-09	8.769E-10	7.374E-10	6.312E-10
NW	6.062E-08	3.204E-08	2.102E-08	1.214E-08	8.041E-09	5.845E-09	4.540E-09	3.656E-09	3.022E-09	2.550E-09	2.190E-09
NVW	7.171E-08	3.779E-08	2.405E-08	1.343E-08	8.910E-09	6.484E-09	5.009E-09	4.025E-09	3.329E-09	2.828E-09	2.430E-09
N	2.050E-08	1.225E-08	9.475E-09	6.792E-09	5.213E-09	4.071E-09	3.152E-09	2.537E-09	2.100E-09	1.776E-09	1.529E-09
NVE	1.077E-08	1.530E-08	9.864E-09	5.613E-09	3.778E-09	2.781E-09	2.164E-09	1.751E-09	1.457E-09	1.238E-09	1.070E-09
NE	7.972E-09	8.440E-09	5.391E-09	3.034E-09	2.032E-09	1.490E-09	1.163E-09	9.425E-10	7.848E-10	6.672E-10	5.763E-10
EVE	4.262E-09	6.602E-09	4.398E-09	2.607E-09	1.801E-09	1.351E-09	1.109E-09	9.337E-10	7.997E-10	6.853E-10	5.957E-10
E	8.619E-09	1.565E-08	1.048E-08	6.239E-09	4.313E-09	3.234E-09	2.554E-09	2.089E-09	1.754E-09	1.608E-09	1.395E-09
ESE	5.803E-09	8.869E-09	6.058E-09	3.698E-09	2.599E-09	1.972E-09	1.572E-09	1.296E-09	1.095E-09	9.430E-10	8.245E-10
SE	1.743E-08	1.042E-08	7.804E-09	5.297E-09	3.776E-09	2.895E-09	2.305E-09	1.898E-09	1.604E-09	1.365E-09	1.180E-09
SSE	2.465E-08	1.337E-08	8.558E-09	4.836E-09	3.250E-09	2.391E-09	1.862E-09	1.507E-09	1.256E-09	1.069E-09	9.251E-10

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	.5-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.516E-07	9.061E-08	5.500E-08	3.882E-08	3.599E-08	2.001E-08	7.669E-09	3.823E-09	2.395E-09	1.691E-09
SSW	3.940E-08	3.826E-08	3.191E-08	2.826E-08	2.173E-08	1.170E-08	4.395E-09	2.098E-09	1.279E-09	8.813E-10
SW	8.206E-08	1.151E-07	6.357E-08	3.537E-08	2.312E-08	1.123E-08	3.961E-09	1.832E-09	1.105E-09	7.552E-10
WSW	7.210E-08	8.843E-08	4.548E-08	2.420E-08	1.536E-08	7.063E-09	2.466E-09	1.132E-09	6.816E-10	4.664E-10
W	2.110E-07	1.522E-07	6.688E-08	3.530E-08	2.222E-08	9.892E-09	3.540E-09	1.674E-09	1.009E-09	6.907E-10
WNW	1.061E-07	1.310E-07	6.513E-08	3.607E-08	2.298E-08	1.038E-08	3.791E-09	1.752E-09	1.071E-09	7.194E-10
NW	2.471E-07	4.126E-07	2.154E-07	1.155E-07	7.322E-08	3.350E-08	1.229E-08	5.908E-09	3.667E-09	2.557E-09
NVW	1.887E-07	2.229E-07	1.885E-07	1.324E-07	8.661E-08	3.922E-08	1.778E-08	6.541E-09	4.041E-09	2.429E-09
N	9.534E-08	7.076E-08	4.812E-08	3.269E-08	2.350E-08	1.285E-08	6.687E-09	4.608E-09	2.546E-09	1.741E-09
NVE	4.410E-08	3.041E-08	1.930E-08	1.324E-08	1.060E-08	1.188E-08	5.742E-09	2.800E-09	1.757E-09	1.240E-09
NE	5.575E-08	2.923E-08	1.651E-08	1.081E-08	8.211E-09	6.981E-09	3.112E-09	1.504E-09	9.454E-10	6.684E-10
EVE	2.847E-08	1.523E-08	8.870E-09	5.849E-09	4.832E-09	5.103E-09	2.647E-09	1.374E-09	9.327E-10	6.860E-10
E	3.975E-08	2.044E-08	1.349E-08	9.955E-09	8.367E-09	1.179E-08	6.325E-09	3.250E-09	2.094E-09	1.573E-09
ESE	6.076E-08	2.257E-08	1.201E-08	7.864E-09	6.010E-09	6.938E-09	3.734E-09	1.979E-09	1.298E-09	9.441E-10
SE	1.356E-07	7.149E-08	4.198E-08	2.785E-08	2.377E-08	1.081E-08	5.178E-09	2.894E-09	1.702E-09	1.367E-09
SSE	1.525E-07	6.048E-08	3.215E-08	2.405E-08	2.654E-08	1.374E-08	4.958E-09	2.408E-09	1.513E-09	1.071E-09

B150

ERP ELEVATED STACK RELEASE
 4.000 DAY DECAY DELETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	3.137E-07	1.940E-07	1.552E-07	1.219E-07	9.151E-08	6.918E-08	5.329E-08	4.210E-08	3.410E-08	3.579E-08	3.603E-08	
SSW	6.139E-08	2.274E-08	2.638E-08	3.684E-08	4.141E-08	3.557E-08	2.905E-08	2.984E-08	2.865E-08	2.911E-08	2.961E-08	
SW	2.487E-08	2.569E-08	7.091E-08	1.172E-07	1.427E-07	8.906E-08	6.053E-08	4.387E-08	3.337E-08	2.633E-08	2.138E-08	
WSW	6.622E-08	4.395E-08	6.158E-08	9.252E-08	1.116E-07	6.552E-08	4.297E-08	3.043E-08	2.277E-08	1.775E-08	1.428E-08	
W	4.753E-08	1.353E-07	2.300E-07	2.267E-07	1.653E-07	9.576E-08	6.240E-08	4.403E-08	3.287E-08	2.559E-08	2.057E-08	
WNW	3.017E-10	1.864E-08	9.869E-08	1.533E-07	1.593E-07	9.258E-08	6.067E-08	4.455E-08	3.429E-08	2.666E-08	2.140E-08	
NW	5.054E-09	4.713E-08	1.823E-07	3.755E-07	5.510E-07	3.135E-07	2.032E-07	1.457E-07	1.105E-07	8.690E-08	6.915E-08	
NVW	3.875E-08	8.625E-08	1.520E-07	1.956E-07	2.386E-07	2.175E-07	1.892E-07	1.589E-07	1.330E-07	1.032E-07	8.274E-08	
N	8.665E-08	1.037E-07	9.827E-08	8.567E-08	7.158E-08	5.860E-08	4.746E-08	3.821E-08	3.140E-08	2.631E-08	2.242E-08	
NNE	2.169E-08	4.184E-08	4.827E-08	4.026E-08	3.053E-08	2.368E-08	1.878E-08	1.527E-08	1.272E-08	1.081E-08	9.356E-09	
NE	2.994E-08	6.508E-08	6.061E-08	4.346E-08	2.847E-08	2.080E-08	1.594E-08	1.265E-08	1.032E-08	8.616E-09	7.334E-09	
EVE	2.090E-08	3.602E-08	3.954E-08	2.200E-08	1.500E-08	1.114E-08	8.591E-09	6.837E-09	5.589E-09	4.673E-09	3.924E-09	
E	6.489E-08	5.637E-08	4.170E-08	2.833E-08	1.972E-08	1.584E-08	1.321E-08	1.123E-08	9.693E-09	8.479E-09	7.507E-09	
ESE	1.921E-07	1.065E-07	6.028E-08	3.576E-08	2.146E-08	1.517E-08	1.149E-08	9.104E-09	7.456E-09	6.267E-09	5.374E-09	
SE	2.492E-07	1.815E-07	1.420E-07	1.024E-07	7.040E-08	5.244E-08	4.062E-08	3.246E-08	2.661E-08	2.230E-08	1.901E-08	
SSE	4.410E-07	2.509E-07	1.545E-07	9.530E-08	5.767E-08	4.076E-08	3.078E-08	2.423E-08	1.970E-08	1.603E-08	1.310E-08	

BEARING	ANNUAL AVERAGE CH1/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	3.127E-08	1.908E-08	1.191E-08	6.369E-09	4.153E-09	2.960E-09	2.205E-09	1.717E-09	1.394E-09	1.159E-09	9.779E-10	
SSW	1.822E-08	1.131E-08	6.966E-09	3.658E-09	2.343E-09	1.650E-09	1.227E-09	9.538E-10	7.661E-10	6.310E-10	5.300E-10	
SW	1.845E-08	1.026E-08	6.258E-09	3.245E-09	2.027E-09	1.399E-09	1.036E-09	8.002E-10	6.391E-10	5.236E-10	4.376E-10	
WSW	1.290E-08	6.226E-09	3.870E-09	2.034E-09	1.272E-09	8.825E-10	6.536E-10	5.064E-10	4.055E-10	3.330E-10	2.790E-10	
W	1.697E-08	8.501E-09	5.459E-09	2.958E-09	1.881E-09	1.308E-09	9.696E-10	7.519E-10	6.026E-10	4.952E-10	4.151E-10	
WNW	1.775E-08	9.006E-09	5.657E-09	3.022E-09	1.880E-09	1.304E-09	9.704E-10	7.544E-10	6.054E-10	4.979E-10	4.174E-10	
NW	5.748E-08	2.952E-08	1.981E-08	1.028E-08	6.486E-09	4.528E-09	3.407E-09	2.672E-09	2.157E-09	1.782E-09	1.501E-09	
NVW	6.889E-08	3.527E-08	2.177E-08	1.143E-08	7.075E-09	4.860E-09	3.574E-09	2.759E-09	2.208E-09	1.829E-09	1.536E-09	
N	1.943E-08	1.143E-08	8.798E-09	6.299E-09	4.754E-09	3.580E-09	2.704E-09	2.129E-09	1.728E-09	1.436E-09	1.216E-09	
NNE	1.033E-08	1.483E-08	9.276E-09	5.001E-09	3.196E-09	2.254E-09	1.692E-09	1.325E-09	1.071E-09	8.873E-10	7.488E-10	
NE	7.578E-09	8.051E-09	4.986E-09	2.669E-09	1.713E-09	1.213E-09	9.192E-10	7.266E-10	5.916E-10	4.927E-10	4.176E-10	
EVE	4.047E-09	6.396E-09	4.137E-09	2.305E-09	1.481E-09	1.046E-09	8.147E-10	6.546E-10	5.429E-10	4.544E-10	3.865E-10	
E	4.401E-09	1.546E-08	1.004E-08	5.602E-09	3.586E-09	2.524E-09	1.888E-09	1.472E-09	1.184E-09	1.044E-09	8.783E-10	
ESE	5.493E-09	8.623E-09	5.721E-09	3.283E-09	2.146E-09	1.533E-09	1.160E-09	9.125E-10	7.392E-10	6.124E-10	5.165E-10	
SE	1.648E-08	9.724E-09	7.244E-09	4.890E-09	3.464E-09	2.646E-09	2.101E-09	1.724E-09	1.444E-09	1.210E-09	1.030E-09	
SSE	2.360E-08	1.242E-08	7.691E-09	4.117E-09	2.641E-09	1.869E-09	1.408E-09	1.107E-09	8.978E-10	7.458E-10	6.312E-10	

B131

CH1/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.490E-07	8.835E-08	5.305E-08	3.703E-08	3.419E-08	1.860E-08	6.614E-09	2.976E-09	1.733E-09	1.162E-09
SSW	3.022E-08	3.780E-08	3.111E-08	2.726E-08	2.977E-08	1.091E-08	3.809E-09	1.666E-09	9.603E-10	6.336E-10
SW	8.146E-08	1.132E-07	6.148E-08	3.369E-08	2.176E-08	1.030E-08	3.373E-09	1.421E-09	8.061E-10	5.260E-10
WSW	7.141E-08	8.689E-08	4.397E-08	2.305E-08	1.446E-08	6.462E-09	2.103E-09	8.948E-10	5.100E-10	3.345E-10
W	2.075E-07	1.480E-07	6.395E-08	3.328E-08	2.072E-08	9.031E-09	3.055E-09	1.326E-09	7.572E-10	4.974E-10
WNW	1.052E-07	1.283E-07	6.273E-08	3.431E-08	2.161E-08	9.461E-09	3.100E-09	1.324E-09	7.594E-10	5.000E-10
NW	2.382E-07	4.064E-07	2.996E-07	1.112E-07	6.982E-08	3.097E-08	1.049E-08	4.602E-09	2.686E-09	1.789E-09
NVW	1.568E-07	2.197E-07	1.846E-07	1.291E-07	8.367E-08	3.674E-08	1.179E-08	4.937E-09	2.782E-09	1.833E-09
N	9.387E-08	6.894E-08	4.673E-08	3.141E-08	2.247E-08	1.204E-08	6.168E-09	3.543E-09	2.141E-09	1.441E-09
NNE	4.328E-08	2.965E-08	1.868E-08	1.272E-08	1.015E-08	1.136E-08	5.149E-09	2.290E-09	1.333E-09	8.906E-10
NE	5.398E-08	2.839E-08	1.592E-08	1.034E-08	7.894E-09	6.584E-09	2.759E-09	1.229E-09	7.302E-10	4.942E-10
EVE	2.796E-08	1.484E-08	8.569E-09	5.597E-09	4.211E-09	4.870E-09	2.346E-09	1.970E-09	6.578E-10	4.555E-10
E	3.932E-08	1.991E-08	1.312E-08	9.669E-09	8.126E-09	1.148E-08	5.692E-09	2.583E-09	1.481E-09	1.024E-09
ESE	5.966E-08	2.185E-08	1.152E-08	7.474E-09	5.683E-09	6.638E-09	3.319E-09	1.547E-09	9.171E-10	6.145E-10
SE	1.332E-07	6.952E-08	4.051E-08	2.664E-08	1.905E-08	1.012E-08	4.779E-09	2.646E-09	1.725E-09	1.213E-09
SSE	1.496E-07	5.852E-08	3.082E-08	2.295E-08	2.547E-08	1.280E-08	4.255E-09	1.891E-09	1.113E-09	7.484E-10

FRP ELEVATED STACK RELEASE
CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	2.159E-08	1.627E-08	1.192E-08	7.127E-09	3.035E-09	1.747E-09	1.141E-09	8.042E-10	5.965E-10	4.768E-10	4.178E-10
SSW	1.989E-09	1.897E-09	2.026E-09	1.636E-09	8.962E-10	5.755E-10	3.943E-10	2.896E-10	2.719E-10	2.055E-10	1.608E-10
SW	2.531E-09	2.277E-09	2.260E-09	1.746E-09	1.663E-09	8.977E-10	5.537E-10	3.749E-10	2.705E-10	2.044E-10	1.600E-10
WSW	3.300E-09	2.592E-09	2.065E-09	2.020E-09	9.964E-10	5.328E-10	3.275E-10	2.213E-10	1.596E-10	1.206E-10	9.444E-11
W	2.773E-09	5.932E-09	4.503E-09	2.665E-09	1.204E-09	6.436E-10	3.951E-10	2.666E-10	1.920E-10	1.448E-10	1.132E-10
WNW	8.897E-10	1.036E-09	4.121E-09	2.905E-09	1.751E-09	8.753E-10	5.157E-10	3.389E-10	2.436E-10	1.830E-10	1.446E-10
NW	3.423E-09	3.330E-09	3.638E-09	6.571E-09	4.142E-09	2.060E-09	1.217E-09	8.062E-10	5.822E-10	4.495E-10	3.668E-10
NNW	9.111E-09	7.343E-09	6.140E-09	4.182E-09	3.344E-09	1.796E-09	1.105E-09	8.795E-10	6.370E-10	4.936E-10	4.037E-10
N	1.262E-08	9.768E-09	7.563E-09	4.797E-09	2.170E-09	1.288E-09	8.558E-10	6.089E-10	4.538E-10	3.499E-10	2.770E-10
NNE	4.111E-09	3.158E-09	2.407E-09	1.504E-09	6.697E-10	3.947E-10	2.611E-10	1.854E-10	1.380E-10	1.063E-10	8.417E-11
NE	6.274E-09	4.662E-09	3.308E-09	1.908E-09	7.786E-10	4.388E-10	2.828E-10	1.978E-10	1.461E-10	1.123E-10	8.885E-11
ENE	2.464E-09	1.908E-09	1.473E-09	9.317E-10	4.203E-10	2.492E-10	1.654E-10	1.176E-10	8.766E-11	6.759E-11	5.350E-11
E	3.552E-09	2.668E-09	1.941E-09	1.152E-09	4.863E-10	2.790E-10	1.817E-10	1.279E-10	9.479E-11	7.292E-11	5.771E-11
ESE	7.083E-09	5.211E-09	3.614E-09	2.027E-09	7.992E-10	4.417E-10	2.813E-10	1.955E-10	1.439E-10	1.164E-10	8.733E-11
SE	1.939E-08	1.451E-08	1.046E-08	6.149E-09	2.565E-09	1.463E-09	9.476E-10	6.670E-10	4.938E-10	3.797E-10	3.005E-10
SSE	2.830E-08	2.065E-08	1.404E-08	7.683E-09	2.931E-09	1.588E-09	9.693E-10	6.893E-10	5.054E-10	4.337E-10	3.667E-10

DIRECTION FROM SITE

DIRECTION FROM SITE	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	3.366E-10	1.823E-10	1.165E-10	6.451E-11	4.158E-11	3.246E-11	2.327E-11	1.748E-11	1.371E-11	1.095E-11	8.939E-12
SSW	1.293E-10	7.441E-11	4.789E-11	2.631E-11	1.938E-11	1.341E-11	9.607E-12	7.214E-12	5.609E-12	4.480E-12	3.657E-12
SW	1.287E-10	7.082E-11	4.493E-11	2.438E-11	1.526E-11	1.270E-11	9.239E-12	6.938E-12	5.394E-12	4.309E-12	3.517E-12
WSW	7.608E-11	4.122E-11	2.620E-11	1.791E-11	1.084E-11	7.270E-12	5.209E-12	3.912E-12	3.041E-12	2.429E-12	1.983E-12
W	9.107E-11	4.101E-11	3.397E-11	1.888E-11	1.410E-11	9.452E-12	6.773E-12	5.086E-12	3.954E-12	3.159E-12	2.578E-12
WNW	1.199E-10	6.286E-11	4.165E-11	2.348E-11	1.643E-11	1.122E-11	8.148E-12	6.118E-12	4.757E-12	3.800E-12	3.102E-12
NW	3.143E-10	1.853E-10	1.308E-10	8.154E-11	4.969E-11	3.337E-11	2.405E-11	1.806E-11	1.404E-11	1.122E-11	9.154E-12
NNW	3.462E-10	2.042E-10	1.444E-10	8.648E-11	5.548E-11	3.729E-11	2.647E-11	1.962E-11	1.507E-11	1.225E-11	9.995E-12
N	2.240E-10	1.071E-10	6.606E-11	3.567E-11	4.717E-11	3.287E-11	2.355E-11	1.768E-11	1.375E-11	1.098E-11	8.965E-12
NNE	6.808E-11	9.328E-11	5.810E-11	3.039E-11	1.863E-11	1.249E-11	8.934E-12	6.694E-12	5.194E-12	4.145E-12	3.380E-12
NE	7.200E-11	7.699E-11	4.696E-11	2.397E-11	1.457E-11	9.781E-12	6.926E-12	5.386E-12	4.188E-12	3.345E-12	2.736E-12
ENE	4.326E-11	3.581E-11	2.467E-11	1.452E-11	9.338E-12	6.340E-12	4.573E-12	3.681E-12	2.670E-12	2.120E-12	1.734E-12
E	4.673E-11	5.546E-11	4.125E-11	2.576E-11	1.674E-11	1.128E-11	8.042E-12	5.988E-12	4.613E-12	3.474E-12	2.817E-12
ESE	7.083E-11	5.978E-11	4.206E-11	2.535E-11	1.658E-11	1.140E-11	8.311E-12	6.328E-12	4.957E-12	4.013E-12	3.311E-12
SE	2.434E-10	1.169E-10	7.244E-11	3.968E-11	2.547E-11	1.825E-11	1.404E-11	1.125E-11	1.224E-11	1.099E-11	9.144E-12
SSE	3.017E-10	2.045E-10	1.244E-10	6.328E-11	3.845E-11	2.583E-11	1.854E-11	1.395E-11	1.086E-11	8.687E-12	7.100E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS									
	1-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.076E-08	3.371E-09	1.168E-09	6.102E-10	4.052E-10	1.875E-10	6.586E-11	3.122E-11	1.770E-11	1.102E-11
SSW	1.824E-09	9.181E-10	4.021E-10	2.517E-10	1.624E-10	7.483E-11	2.803E-11	1.348E-11	7.286E-12	4.516E-12
SW	2.035E-09	1.341E-09	5.739E-10	2.752E-10	1.616E-10	7.217E-11	2.490E-11	1.200E-11	7.007E-12	4.337E-12
WSW	2.162E-09	1.018E-09	3.398E-10	1.624E-10	9.540E-11	4.229E-11	1.661E-11	7.398E-12	3.951E-12	2.445E-12
W	4.004E-09	1.280E-09	4.100E-10	1.954E-10	1.144E-10	4.901E-11	2.011E-11	9.619E-12	5.137E-12	3.179E-12
WNW	2.851E-09	1.596E-09	5.409E-10	2.478E-10	1.468E-10	6.611E-11	2.439E-11	1.138E-11	6.180E-12	3.825E-12
NW	4.873E-09	3.757E-09	1.277E-09	5.957E-10	3.719E-10	1.897E-10	7.833E-11	3.399E-11	1.824E-11	1.129E-11
NNW	5.537E-09	2.844E-09	1.199E-09	6.516E-10	4.090E-10	2.092E-10	8.557E-11	3.782E-11	1.984E-11	1.225E-11
N	6.824E-09	2.362E-09	8.724E-10	4.585E-10	2.790E-10	1.148E-10	4.754E-11	3.296E-11	1.786E-11	1.106E-11
NNE	2.172E-09	7.328E-10	2.664E-10	1.395E-10	8.478E-11	7.204E-11	3.132E-11	1.270E-11	6.763E-12	4.172E-12
NE	2.986E-09	8.785E-10	2.904E-10	1.480E-10	8.955E-11	6.253E-11	2.490E-11	9.917E-12	5.369E-12	3.367E-12
ENE	1.329E-09	4.579E-10	1.687E-10	8.858E-11	5.388E-11	3.252E-11	1.447E-11	6.433E-12	3.551E-12	2.140E-12
E	1.752E-09	5.422E-10	1.861E-10	9.592E-11	5.815E-11	4.720E-11	2.519E-11	1.144E-11	6.051E-12	3.568E-12
ESE	3.264E-09	4.132E-10	2.897E-10	1.458E-10	8.804E-11	5.436E-11	2.517E-11	1.155E-11	6.372E-12	4.033E-12
SE	9.444E-09	2.872E-09	9.735E-10	4.998E-10	3.028E-10	1.253E-10	4.065E-11	1.849E-11	1.242E-11	1.068E-11
SSE	1.269E-08	3.398E-09	1.032E-09	5.306E-10	3.625E-10	1.985E-10	6.582E-11	2.628E-11	1.408E-11	8.742E-12

B152

ERP ELEVATED STACK RELEASE
CORRECTED FOR OPEN TERRAIN RECIRCULATION
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q (PER SQ.METER)	
			(MILES)	(METERS)	(SEC/CUB.METER) NO DECAY	(SEC/CUB.METER) 2.260 DAY DECAY	(SEC/CUB.METER) R.000 DAY DECAY		
					UNDEPLETED	UNDEPLETED	DEPLETED		
A	SITE BOUNDARY	S	0.84	1350.	1.419E-07	1.418E-07	1.388E-07	9.871E-09	
A	SITE BOUNDARY	SSW	0.85	1370.	3.099E-08	3.096E-08	3.077E-08	1.904E-09	
A	SITE BOUNDARY	SW	1.01	1620.	1.191E-07	1.190E-07	1.183E-07	1.729E-09	
A	SITE BOUNDARY	WSW	1.00	1610.	9.348E-08	9.334E-08	9.259E-08	2.017E-09	
A	SITE BOUNDARY	W	0.99	1590.	2.323E-07	2.319E-07	2.277E-07	2.726E-09	
A	SITE BOUNDARY	WNW	1.01	1620.	1.560E-07	1.558E-07	1.541E-07	2.772E-09	
A	SITE BOUNDARY	NW	0.80	1290.	2.231E-07	2.229E-07	2.212E-07	3.541E-09	
A	SITE BOUNDARY	NNW	0.70	1130.	1.387E-07	1.385E-07	1.365E-07	6.293E-09	
A	SITE BOUNDARY	N	0.70	1130.	9.927E-08	9.921E-08	9.748E-08	7.878E-09	
A	SITE BOUNDARY	NNE	0.65	1050.	4.739E-08	4.735E-08	4.656E-08	2.646E-09	
A	SITE BOUNDARY	NE	0.64	1030.	6.462E-08	6.458E-08	6.349E-08	3.817E-09	
A	SITE BOUNDARY	ENE	0.58	930.	3.478E-08	3.475E-08	3.429E-08	1.742E-09	
A	SITE BOUNDARY	E	0.54	870.	5.394E-08	5.390E-08	5.330E-08	2.523E-09	
A	SITE BOUNDARY	ESE	0.55	880.	9.505E-08	9.496E-08	9.388E-08	4.851E-09	
A	SITE BOUNDARY	SE	1.03	1660.	1.021E-07	1.019E-07	9.948E-08	5.759E-09	
A	SITE BOUNDARY	SSE	0.85	1370.	1.250E-07	1.249E-07	1.217E-07	1.089E-08	

Atmospheric Diffusion Estimates
Elevated Releases
January-June 1983

ERP ELEVATED STACK RELEASE
 NO DECAY, UNDEPLETFD
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	3.131E-07	2.951E-07	2.510E-07	1.752E-07	1.091E-07	7.593E-08	5.613E-08	4.334E-08	3.463E-08	3.495E-08	3.464E-08	
SSW	6.686E-08	6.786E-08	7.269E-08	6.643E-08	5.956E-08	4.787E-08	3.814E-08	3.005E-08	3.600E-08	3.027E-08	2.585E-08	
SW	1.412E-08	2.042E-08	5.758E-08	9.954E-08	1.269E-07	8.072E-08	5.568E-08	4.085E-08	3.139E-08	2.509E-08	2.047E-08	
WSW	3.334E-08	2.250E-08	1.994E-08	7.106E-08	9.664E-08	5.828E-08	3.901E-08	2.808E-08	2.130E-08	1.680E-08	1.366E-08	
W	2.988E-08	1.264E-07	2.424E-07	2.432E-07	1.777E-07	1.037E-07	6.802E-08	4.829E-08	3.625E-08	2.837E-08	2.291E-08	
WNW	2.467E-09	2.788E-08	1.296E-07	1.994E-07	1.995E-07	1.158E-07	7.586E-08	5.539E-08	4.243E-08	3.306E-08	2.662E-08	
WW	2.785E-09	4.292E-08	1.867E-07	3.645E-07	4.777E-07	2.711E-07	1.756E-07	1.258E-07	9.529E-08	7.433E-08	5.995E-08	
NW	4.517E-08	5.931E-08	1.043E-07	1.439E-07	1.827E-07	1.678E-07	1.462E-07	1.230E-07	1.034E-07	8.063E-08	6.504E-08	
N	5.178E-08	7.099E-08	8.761E-08	8.493E-08	7.715E-08	6.554E-08	5.432E-08	4.447E-08	3.705E-08	3.140E-08	2.703E-08	
NNE	1.532E-08	3.860E-08	4.872E-08	4.753E-08	4.273E-08	3.545E-08	2.901E-08	2.400E-08	2.017E-08	1.723E-08	1.495E-08	
NE	1.518E-08	3.920E-08	4.551E-08	4.024E-08	3.313E-08	2.663E-08	2.145E-08	1.756E-08	1.464E-08	1.242E-08	1.071E-08	
EYE	1.128E-08	2.315E-08	2.335E-08	1.936E-08	1.530E-08	1.218E-08	9.778E-09	7.994E-09	6.662E-09	5.651E-09	4.871E-09	
E	3.999E-08	3.820E-08	2.807E-08	1.915E-08	1.370E-08	1.123E-08	9.478E-09	8.120E-09	7.050E-09	6.106E-09	5.507E-09	
ESE	9.976E-08	6.463E-08	4.192E-08	2.916E-08	2.175E-08	1.729E-08	1.400E-08	1.156E-08	9.725E-09	8.327E-09	7.239E-09	
SE	1.605E-07	1.431E-07	1.363E-07	1.092E-07	8.059E-08	6.083E-08	4.703E-08	3.736E-08	3.044E-08	2.534E-08	2.149E-08	
SSE	3.650E-07	2.402E-07	1.693E-07	1.135E-07	7.248E-08	5.169E-08	3.891E-08	3.046E-08	2.460E-08	2.079E-08	1.756E-08	

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)				DISTANCE IN MILES							
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	3.722E-08	1.982E-08	1.286E-08	7.469E-09	5.285E-09	4.054E-09	3.182E-09	2.601E-09	2.203E-09	1.901E-09	1.657E-09	
SSW	2.280E-08	1.386E-08	8.760E-09	4.849E-09	3.260E-09	2.378E-09	1.831E-09	1.470E-09	1.216E-09	1.029E-09	8.865E-10	
SW	1.784E-08	1.037E-08	6.550E-09	3.615E-09	2.402E-09	1.747E-09	1.346E-09	1.077E-09	8.277E-10	7.491E-10	6.438E-10	
WSW	1.162E-08	6.777E-09	4.137E-09	2.321E-09	1.527E-09	1.106E-09	8.503E-10	6.816E-10	5.631E-10	4.761E-10	4.098E-10	
W	1.898E-08	9.688E-09	6.330E-09	3.688E-09	2.414E-09	1.745E-09	1.339E-09	1.072E-09	8.843E-10	7.467E-10	6.421E-10	
WNW	2.212E-08	1.140E-08	7.314E-09	4.102E-09	2.708E-09	1.964E-09	1.513E-09	1.212E-09	9.999E-10	8.441E-10	7.257E-10	
WW	4.997E-08	2.619E-08	1.711E-08	9.857E-09	6.547E-09	4.777E-09	3.737E-09	3.018E-09	2.504E-09	2.125E-09	1.836E-09	
NW	5.451E-08	2.889E-08	1.847E-08	1.039E-08	6.939E-09	5.085E-09	3.960E-09	3.210E-09	2.682E-09	2.283E-09	1.975E-09	
N	2.363E-08	1.435E-08	1.132E-08	8.344E-09	6.507E-09	5.128E-09	4.001E-09	3.238E-09	2.696E-09	2.295E-09	1.988E-09	
NNE	1.605E-08	1.908E-08	1.227E-08	6.963E-09	4.684E-09	3.452E-09	2.693E-09	2.186E-09	1.825E-09	1.558E-09	1.352E-09	
NE	1.123E-08	1.285E-08	8.267E-09	4.698E-09	3.166E-09	2.337E-09	1.845E-09	1.508E-09	1.262E-09	1.077E-09	9.357E-10	
EYE	4.981E-09	7.334E-09	4.897E-09	2.918E-09	2.027E-09	1.529E-09	1.294E-09	1.102E-09	9.289E-10	7.993E-10	6.991E-10	
E	6.188E-09	1.141E-08	7.672E-09	4.608E-09	3.214E-09	2.432E-09	1.937E-09	1.698E-09	1.412E-09	1.252E-09	1.097E-09	
ESE	7.460E-09	9.737E-09	6.560E-09	3.944E-09	2.759E-09	2.080E-09	1.656E-09	1.366E-09	1.157E-09	9.992E-10	8.766E-10	
SE	1.853E-08	1.071E-08	7.739E-09	5.016E-09	3.515E-09	2.664E-09	2.126E-09	1.752E-09	1.459E-09	1.243E-09	1.077E-09	
SSE	2.671E-08	1.475E-08	9.441E-09	5.346E-09	3.687E-09	2.666E-09	2.087E-09	1.698E-09	1.422E-09	1.217E-09	1.059E-09	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.271E-07	1.091E-07	5.630E-08	3.724E-08	3.309E-08	1.904E-08	7.676E-09	4.034E-09	2.615E-09	1.900E-09
SSW	6.972E-08	5.634E-08	4.070E-08	3.440E-08	2.683E-08	1.558E-08	5.012E-09	2.395E-09	1.476E-09	1.031E-09
SW	6.777E-08	1.003E-07	5.642E-08	3.166E-08	2.084E-08	1.033E-08	3.728E-09	1.761E-09	1.082E-09	7.511E-10
WSW	4.989E-08	7.391E-08	3.978E-08	2.152E-08	1.384E-08	6.547E-09	2.372E-09	1.116E-09	6.847E-10	4.773E-10
W	2.170E-07	1.594E-07	6.964E-08	3.669E-08	2.397E-08	1.026E-08	3.682E-09	1.761E-09	1.077E-09	7.487E-10
WNW	1.380E-07	1.623E-07	7.933E-08	4.256E-08	2.686E-08	1.197E-08	4.196E-09	1.982E-09	1.217E-09	8.464E-10
NW	2.338E-07	3.607E-07	1.812E-07	9.602E-08	6.051E-08	2.744E-08	9.998E-09	4.833E-09	3.028E-09	2.130E-09
NW	1.119E-07	1.675E-07	1.427E-07	1.993E-07	6.576E-08	2.995E-08	1.065E-08	5.129E-09	3.223E-09	2.287E-09
N	8.450E-08	7.372E-08	5.337E-08	3.732E-08	2.766E-08	1.506E-08	8.197E-09	5.045E-09	3.250E-09	2.308E-09
NNE	4.598E-08	4.056E-08	2.872E-08	2.014E-08	1.603E-08	1.538E-08	7.129E-09	3.477E-09	2.193E-09	1.561E-09
NE	4.177E-08	3.182E-08	2.128E-08	1.463E-08	1.141E-08	1.045E-08	4.810E-09	2.361E-09	1.510E-09	1.080E-09
EYE	2.153E-08	1.481E-08	9.703E-09	6.657E-09	5.143E-09	5.728E-09	2.962E-09	1.568E-09	1.091E-09	8.006E-10
E	2.636E-08	1.381E-08	9.483E-09	7.030E-09	5.963E-09	4.588E-09	4.669E-09	2.442E-09	1.627E-09	1.245E-09
ESE	4.129E-08	2.142E-08	1.390E-08	9.716E-09	7.643E-09	7.819E-09	3.995E-09	2.489E-09	1.369E-09	1.000E-09
SE	1.254E-07	7.816E-08	4.684E-08	3.048E-08	2.154E-08	1.113E-08	4.954E-09	2.676E-09	1.747E-09	1.245E-09
SSE	1.693E-07	7.236E-08	3.894E-08	2.787E-08	2.894E-08	1.505E-08	5.483E-09	2.685E-09	1.704E-09	1.219E-09

B135

ERP ELEVATED STACK RELEASE
 2.250 DAY DECAY, UNDEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

ANNUAL AVERAGE CH1/G (SEC/METER CUBED)	DISTANCE IN MILES										
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500
S	3.130E-07	2.949E-07	2.504E-07	1.750E-07	1.089E-07	7.575E-08	5.596E-08	4.318E-08	3.448E-08	3.476E-08	3.443E-08
SSW	6.684E-08	6.782E-08	7.262E-08	6.835E-08	5.945E-08	4.774E-08	3.800E-08	3.789E-08	3.582E-08	3.009E-08	2.568E-08
SW	1.411E-08	2.041E-08	5.752E-08	9.940E-08	1.266E-07	1.648E-07	5.547E-08	4.067E-08	3.123E-08	2.485E-08	2.034E-08
WSW	3.332E-08	2.248E-08	3.990E-08	7.094E-08	9.640E-08	5.800E-08	3.885E-08	2.794E-08	2.117E-08	1.669E-08	1.356E-08
W	2.987E-08	1.262E-07	2.421E-07	2.428E-07	1.772E-07	1.033E-07	6.772E-08	4.804E-08	3.603E-08	2.817E-08	2.273E-08
WNW	2.465E-09	2.786E-08	1.295E-07	1.991E-07	1.991E-07	1.155E-07	7.560E-08	5.515E-08	4.222E-08	3.287E-08	2.645E-08
NW	2.784E-09	4.288E-08	1.865E-07	3.641E-07	4.768E-07	2.705E-07	1.751E-07	1.253E-07	9.488E-08	7.396E-08	5.961E-08
N	4.316E-08	5.927E-08	1.042E-07	1.437E-07	1.823E-07	1.673E-07	1.457E-07	1.225E-07	1.029E-07	8.020E-08	6.465E-08
NE	5.177E-08	7.896E-08	8.755E-08	8.484E-08	7.702E-08	6.539E-08	5.417E-08	4.431E-08	3.689E-08	3.125E-08	2.688E-08
NNE	1.531E-08	3.858E-08	4.868E-08	4.747E-08	4.265E-08	3.535E-08	2.892E-08	2.390E-08	2.008E-08	1.714E-08	1.486E-08
ENE	1.517E-08	3.917E-08	4.588E-08	4.020E-08	3.306E-08	2.655E-08	2.138E-08	1.749E-08	1.457E-08	1.235E-08	1.064E-08
E	1.128E-08	2.313E-08	2.333E-08	1.938E-08	1.527E-08	1.214E-08	9.740E-09	7.957E-09	6.626E-09	5.616E-09	4.837E-09
ESE	3.998E-08	3.817E-08	2.804E-08	1.912E-08	1.367E-08	1.120E-08	9.440E-09	8.081E-09	7.010E-09	6.155E-09	5.466E-09
SE	9.972E-08	6.458E-08	4.866E-08	2.912E-08	2.178E-08	1.724E-08	1.394E-08	1.150E-08	9.672E-09	8.275E-09	7.188E-09
SSE	1.605E-07	1.430E-07	1.362E-07	1.091E-07	8.044E-08	6.067E-08	4.688E-08	3.722E-08	3.030E-08	2.521E-08	2.136E-08
SSE	3.649E-07	2.401E-07	1.692E-07	1.134E-07	7.235E-08	5.156E-08	3.879E-08	3.035E-08	2.450E-08	2.864E-08	3.137E-08

ANNUAL AVERAGE CH1/G (SEC/METER CUBED)	DISTANCE IN MILES										
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000
S	3.001E-08	1.960E-08	1.267E-08	7.241E-09	5.123E-09	3.898E-09	3.036E-09	2.461E-09	2.068E-09	1.770E-09	1.530E-09
SSW	2.264E-08	1.370E-08	8.629E-09	4.740E-09	3.162E-09	2.289E-09	1.749E-09	1.393E-09	1.143E-09	9.600E-10	8.209E-10
SW	1.770E-08	1.025E-08	6.452E-09	3.534E-09	2.330E-09	1.682E-09	1.286E-09	1.021E-09	8.353E-10	6.996E-10	5.977E-10
WSW	1.152E-08	6.295E-09	4.066E-09	2.261E-09	1.475E-09	1.058E-09	8.070E-10	6.413E-10	5.252E-10	4.401E-10	3.756E-10
W	1.882E-08	9.561E-09	6.219E-09	3.513E-09	2.329E-09	1.669E-09	1.270E-09	1.007E-09	8.235E-10	6.892E-10	5.874E-10
WNW	2.196E-08	1.128E-08	7.209E-09	4.013E-09	2.631E-09	1.894E-09	1.448E-09	1.152E-09	9.430E-10	7.903E-10	6.745E-10
NW	4.966E-08	2.594E-08	1.690E-08	9.666E-09	6.378E-09	4.623E-09	3.592E-09	2.880E-09	2.374E-09	2.001E-09	1.717E-09
N	5.414E-08	2.860E-08	1.822E-08	1.018E-08	6.756E-09	4.918E-09	3.805E-09	3.063E-09	2.543E-09	2.150E-09	1.848E-09
NNE	2.349E-08	1.422E-08	1.119E-08	8.199E-09	6.355E-09	4.977E-09	3.861E-09	3.106E-09	2.571E-09	2.176E-09	1.873E-09
ENE	1.595E-08	1.889E-08	1.210E-08	6.822E-09	4.558E-09	3.336E-09	2.585E-09	2.083E-09	1.728E-09	1.465E-09	1.263E-09
E	1.115E-08	1.272E-08	8.148E-09	4.597E-09	3.076E-09	2.254E-09	1.766E-09	1.433E-09	1.191E-09	1.009E-09	8.705E-10
ESE	4.942E-09	7.243E-09	4.816E-09	2.845E-09	1.959E-09	1.466E-09	1.229E-09	1.038E-09	8.671E-10	7.397E-10	6.415E-10
E	6.136E-09	1.126E-08	7.534E-09	4.884E-09	3.099E-09	2.323E-09	1.834E-09	1.508E-09	1.312E-09	1.153E-09	1.000E-09
ESE	7.402E-09	9.617E-09	6.452E-09	3.846E-09	2.659E-09	1.994E-09	1.574E-09	1.287E-09	1.081E-09	9.255E-10	8.050E-10
SE	1.441E-08	1.060E-08	7.632E-09	4.911E-09	3.417E-09	2.570E-09	2.036E-09	1.665E-09	1.377E-09	1.164E-09	1.001E-09
SSE	2.653E-08	1.459E-08	9.307E-09	5.232E-09	3.505E-09	2.572E-09	1.998E-09	1.615E-09	1.343E-09	1.141E-09	9.859E-10

B136

CH1/G (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.267E-07	1.089E-07	5.612E-08	3.707E-08	3.289E-08	1.883E-08	7.506E-09	3.880E-09	2.475E-09	1.769E-09
SSW	6.966E-08	5.622E-08	4.056E-08	3.423E-08	2.586E-08	1.343E-08	4.903E-09	2.306E-09	1.399E-09	9.628E-10
SW	6.789E-08	1.991E-07	5.622E-08	3.150E-08	2.677E-08	1.022E-08	3.648E-09	1.696E-09	1.026E-09	7.017E-10
WSW	4.983E-08	7.371E-08	3.061E-08	2.140E-08	1.373E-08	6.466E-09	2.313E-09	1.069E-09	6.444E-10	4.414E-10
W	2.147E-07	1.590E-07	6.034E-08	3.647E-08	2.299E-08	1.313E-08	3.588E-09	1.605E-09	1.012E-09	6.213E-10
WNW	1.379E-07	1.620E-07	7.804E-08	4.235E-08	2.669E-08	1.184E-08	4.179E-09	1.912E-09	1.157E-09	7.927E-10
NW	2.335E-07	3.601E-07	1.806E-07	9.561E-08	6.018E-08	2.719E-08	9.811E-09	4.678E-09	2.891E-09	2.006E-09
N	1.118E-07	1.671E-07	1.422E-07	9.855E-08	6.537E-08	2.966E-08	1.345E-08	4.963E-09	3.077E-09	2.155E-09
NNE	8.043E-08	7.359E-08	5.322E-08	3.686E-08	2.692E-08	1.493E-08	8.044E-09	4.998E-09	3.118E-09	2.181E-09
ENE	4.590E-08	4.948E-08	2.863E-08	2.095E-08	1.594E-08	1.522E-08	6.999E-09	3.361E-09	2.991E-09	1.468E-09
E	4.173E-08	3.175E-08	2.120E-08	1.456E-08	1.134E-08	1.034E-08	4.710E-09	2.278E-09	1.436E-09	1.012E-09
ESE	2.151E-08	1.478E-08	9.666E-09	6.621E-09	5.197E-09	5.653E-09	2.890E-09	1.503E-09	1.027E-09	7.411E-10
E	2.633E-08	1.378E-08	9.365E-09	6.990E-09	5.918E-09	8.464E-09	4.546E-09	2.334E-09	1.527E-09	1.144E-09
ESE	4.125E-08	2.136E-08	1.385E-08	9.663E-09	7.590E-09	7.718E-09	3.898E-09	2.003E-09	1.291E-09	9.269E-10
SE	1.257E-07	7.802E-08	4.669E-08	3.034E-08	2.141E-08	1.191E-08	4.852E-09	2.582E-09	1.661E-09	1.167E-09
SSE	1.672E-07	7.223E-08	3.882E-08	2.775E-08	2.877E-08	1.489E-08	5.370E-09	2.591E-09	1.621E-09	1.183E-09

ERP ELEVATED STACK RELEASE
 8.100 DAY DECAY, DEPLETED
 CORRECTED FOR OPEN TERRAIN RECIRCULATION

SECTOR	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)											
	0.250	0.500	0.750	1.000	1.500	2.000	2.500	3.000	3.500	4.000	4.500	
S	3.130E-07	2.924E-07	2.454E-07	1.703E-07	1.054E-07	7.292E-08	5.354E-08	4.106E-08	3.259E-08	3.284E-08	3.254E-08	
SSW	6.686E-08	6.725E-08	7.137E-08	6.726E-08	5.837E-08	4.660E-08	3.685E-08	3.658E-08	3.444E-08	2.877E-08	2.443E-08	
SW	1.412E-08	2.024E-08	5.698E-08	9.692E-08	1.249E-07	7.854E-08	5.365E-08	3.903E-08	2.977E-08	2.355E-08	1.917E-08	
WSW	3.333E-08	2.229E-08	3.949E-08	7.057E-08	9.509E-08	5.677E-08	3.767E-08	2.691E-08	2.928E-08	1.594E-08	1.286E-08	
W	2.988E-08	1.242E-07	2.388E-07	2.393E-07	1.721E-07	9.932E-08	6.453E-08	4.542E-08	3.384E-08	2.629E-08	2.110E-08	
WSW	2.466E-09	2.769E-08	1.289E-07	1.970E-07	1.948E-07	1.117E-07	7.241E-08	5.244E-08	3.999E-08	3.083E-08	2.464E-08	
NW	2.785E-09	4.254E-08	1.849E-07	3.611E-07	4.691E-07	2.632E-07	1.690E-07	1.202E-07	9.047E-08	7.911E-08	5.616E-08	
NNW	4.317E-08	5.878E-08	1.928E-07	1.424E-07	1.802E-07	1.645E-07	1.427E-07	1.197E-07	1.003E-07	7.779E-08	6.238E-08	
N	5.178E-08	7.828E-08	8.610E-08	8.363E-08	7.578E-08	6.409E-08	5.273E-08	4.290E-08	3.554E-08	2.997E-08	2.568E-08	
NNE	1.532E-08	3.825E-08	4.785E-08	4.674E-08	4.192E-08	3.458E-08	2.814E-08	2.314E-08	1.935E-08	1.645E-08	1.421E-08	
NE	1.518E-08	3.884E-08	4.463E-08	3.944E-08	3.239E-08	2.591E-08	2.075E-08	1.689E-08	1.401E-08	1.183E-08	1.015E-08	
ENE	1.128E-08	2.294E-08	2.788E-08	1.895E-08	1.494E-08	1.184E-08	9.452E-09	7.684E-09	6.371E-09	5.378E-09	4.615E-09	
E	3.998E-08	3.785E-08	2.745E-08	1.865E-08	1.333E-08	1.092E-08	9.201E-09	7.869E-09	6.820E-09	5.983E-09	5.310E-09	
ESE	9.975E-08	6.403E-08	4.101E-08	2.847E-08	2.120E-08	1.678E-08	1.352E-08	1.111E-08	9.304E-09	7.933E-09	6.870E-09	
SE	1.605E-07	1.418E-07	1.335E-07	1.167E-07	7.844E-08	5.886E-08	4.521E-08	3.567E-08	2.887E-08	2.389E-08	2.014E-08	
SSE	3.649E-07	2.380E-07	1.656E-07	1.104E-07	7.015E-08	4.974E-08	3.720E-08	2.893E-08	2.322E-08	2.724E-08	2.996E-08	

BEARING	ANNUAL AVERAGE CHI/Q (SEC/METER CUBED)											
	5.000	7.500	10.000	15.000	20.000	25.000	30.000	35.000	40.000	45.000	50.000	
S	2.827E-08	1.824E-08	1.147E-08	6.216E-09	4.154E-09	3.009E-09	2.254E-09	1.766E-09	1.444E-09	1.108E-09	1.023E-09	
SSW	2.145E-08	1.272E-08	7.788E-09	4.063E-09	2.578E-09	1.805E-09	1.339E-09	1.040E-09	8.341E-10	6.862E-10	5.757E-10	
SW	1.663E-08	9.422E-09	5.766E-09	2.999E-09	1.877E-09	1.297E-09	9.627E-10	7.442E-10	5.948E-10	4.875E-10	4.077E-10	
WSW	1.089E-08	5.804E-09	3.647E-09	1.936E-09	1.215E-09	8.445E-10	6.266E-10	4.862E-10	3.898E-10	3.295E-10	2.688E-10	
W	1.738E-08	8.646E-09	5.522E-09	2.978E-09	1.889E-09	1.310E-09	9.697E-10	7.507E-10	6.007E-10	4.930E-10	4.128E-10	
WSW	2.033E-08	1.012E-08	6.280E-09	3.319E-09	2.059E-09	1.423E-09	1.055E-09	8.163E-10	6.523E-10	5.347E-10	4.471E-10	
NW	4.652E-08	2.369E-08	1.494E-08	8.174E-09	5.100E-09	3.554E-09	2.677E-09	2.091E-09	1.683E-09	1.388E-09	1.168E-09	
NNW	5.196E-08	2.666E-08	1.647E-08	8.653E-09	5.359E-09	3.683E-09	2.718E-09	2.112E-09	1.706E-09	1.408E-09	1.184E-09	
N	2.235E-08	1.335E-08	1.047E-08	7.682E-09	5.854E-09	4.415E-09	3.341E-09	2.630E-09	2.134E-09	1.774E-09	1.503E-09	
NNE	1.529E-08	1.818E-08	1.129E-08	6.041E-09	3.850E-09	2.710E-09	2.031E-09	1.589E-09	1.284E-09	1.063E-09	8.966E-10	
NE	1.065E-08	1.220E-08	7.582E-09	4.060E-09	2.590E-09	1.824E-09	1.387E-09	1.098E-09	8.925E-10	7.416E-10	6.279E-10	
ENE	4.719E-09	7.034E-09	4.505E-09	2.528E-09	1.621E-09	1.144E-09	9.111E-10	7.413E-10	6.049E-10	5.051E-10	4.295E-10	
E	5.989E-09	1.112E-08	7.218E-09	4.926E-09	2.575E-09	1.812E-09	1.354E-09	1.062E-09	8.847E-10	7.451E-10	6.296E-10	
ESE	7.088E-09	9.340E-09	6.074E-09	3.420E-09	2.204E-09	1.558E-09	1.169E-09	9.146E-10	7.372E-10	6.082E-10	5.111E-10	
SE	1.727E-08	9.750E-09	6.942E-09	4.404E-09	3.026E-09	2.258E-09	1.779E-09	1.441E-09	1.171E-09	9.749E-10	8.264E-10	
SSE	2.520E-08	1.347E-08	8.318E-09	4.423E-09	2.814E-09	1.979E-09	1.481E-09	1.158E-09	9.349E-10	7.730E-10	6.515E-10	

CHI/Q (SEC/METER CUBED) FOR EACH SEGMENT

DIRECTION FROM SITE	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	2.225E-07	1.054E-07	5.372E-08	3.511E-08	3.105E-08	1.746E-08	6.467E-09	3.012E-09	1.783E-09	1.210E-09
SSW	6.863E-08	5.512E-08	3.934E-08	3.289E-08	2.461E-08	1.247E-08	4.231E-09	1.825E-09	1.047E-09	6.891E-10
SW	6.746E-08	9.852E-08	5.444E-08	3.705E-08	1.953E-08	9.398E-09	3.115E-09	1.318E-09	7.497E-10	4.898E-10
WSW	4.948E-08	7.261E-08	3.844E-08	2.050E-08	1.303E-08	5.975E-09	1.996E-09	8.560E-10	4.896E-10	3.219E-10
W	2.131E-07	1.545E-07	6.616E-08	3.427E-08	2.126E-08	9.199E-09	3.059E-09	1.329E-09	7.561E-10	4.952E-10
WSW	1.367E-07	1.584E-07	7.889E-08	4.072E-08	2.488E-08	1.069E-08	3.419E-09	1.445E-09	8.219E-10	5.371E-10
NW	2.316E-07	7.536E-07	1.746E-07	9.120E-08	5.672E-08	2.484E-08	8.287E-09	3.616E-09	2.103E-09	1.394E-09
NNW	1.176E-07	6.48E-07	1.343E-07	9.725E-08	6.309E-08	2.776E-08	8.926E-09	3.744E-09	2.130E-09	1.413E-09
N	8.327E-08	7.729E-08	5.180E-08	3.552E-08	2.572E-08	1.467E-08	7.489E-09	4.369E-09	2.644E-09	1.781E-09
NNE	4.522E-08	3.973E-08	2.786E-08	1.933E-08	1.527E-08	1.448E-08	6.234E-09	2.742E-09	1.599E-09	1.067E-09
NE	4.103E-08	3.107E-08	2.058E-08	1.400E-08	1.083E-08	9.804E-09	4.189E-09	1.653E-09	1.102E-09	7.442E-10
ENE	2.114E-08	1.445E-08	9.381E-09	6.368E-09	4.888E-09	5.413E-09	2.573E-09	1.178E-09	7.379E-10	5.467E-10
E	2.585E-08	1.344E-08	9.177E-09	6.801E-09	5.761E-09	8.244E-09	4.090E-09	1.832E-09	1.078E-09	7.447E-10
ESE	4.055E-08	2.805E-08	1.343E-08	9.297E-09	7.266E-09	7.409E-09	3.474E-09	1.575E-09	9.198E-10	6.105E-10
SE	1.244E-07	7.601E-08	4.503E-08	2.892E-08	2.019E-08	1.817E-08	4.355E-09	2.271E-09	1.435E-09	9.789E-10
SSE	1.572E-07	7.803E-08	3.723E-08	2.618E-08	2.739E-08	1.379E-08	4.574E-09	2.803E-09	1.166E-09	7.769E-10

B137

ERP ELEVATED STACK RELEASE

CORRECTED FOR OPEN TERRAIN RECIRCULATION

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS										
	DISTANCES IN MILES										
	0.25	0.50	0.75	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
S	3.223E-08	2.375E-08	1.654E-08	9.320E-09	3.696E-09	2.050E-09	1.308E-09	9.102E-10	6.704E-10	5.317E-10	4.585E-10
SSW	7.370E-09	5.601E-09	4.538E-09	3.006E-09	1.416E-09	8.567E-10	5.744E-10	4.112E-10	3.729E-10	2.818E-10	2.206E-10
SW	1.852E-09	1.728E-09	1.796E-09	1.428E-09	1.406E-09	7.598E-10	4.689E-10	3.175E-10	2.292E-10	1.732E-10	1.355E-10
WSW	1.675E-09	1.385E-09	1.211E-09	1.392E-09	7.211E-10	3.875E-10	2.386E-10	1.615E-10	1.165E-10	8.802E-11	6.890E-11
W	2.523E-09	5.975E-09	4.659E-09	2.788E-09	1.277E-09	6.826E-10	4.188E-10	2.825E-10	2.033E-10	1.533E-10	1.198E-10
WNW	1.050E-09	1.247E-09	4.891E-09	3.466E-09	2.137E-09	1.071E-09	6.315E-10	4.142E-10	2.980E-10	2.220E-10	1.737E-10
NW	3.733E-09	3.629E-09	3.961E-09	7.145E-09	4.502E-09	2.235E-09	1.313E-09	8.613E-10	6.121E-10	4.628E-10	3.682E-10
NNW	6.003E-09	4.975E-09	4.364E-09	3.091E-09	2.631E-09	1.414E-09	8.709E-10	6.958E-10	5.027E-10	3.882E-10	3.164E-10
N	9.036E-09	7.291E-09	6.109E-09	4.168E-09	2.316E-09	1.233E-09	8.324E-10	5.974E-10	4.872E-10	3.455E-10	2.735E-10
NNE	3.628E-09	2.999E-09	2.620E-09	1.850E-09	9.205E-10	5.698E-10	3.870E-10	2.787E-10	2.090E-10	1.615E-10	1.279E-10
NE	4.147E-09	3.221E-09	2.514E-09	1.507E-09	7.325E-10	4.364E-10	2.905E-10	2.069E-10	1.543E-10	1.190E-10	9.418E-11
ENE	1.663E-09	1.313E-09	1.058E-09	6.969E-10	3.268E-10	1.972E-10	1.322E-10	9.450E-11	7.060E-11	5.449E-11	4.314E-11
E	2.339E-09	1.764E-09	1.294E-09	7.752E-10	3.705E-10	1.906E-10	1.245E-10	8.779E-11	6.512E-11	5.011E-11	3.966E-11
ESE	4.125E-09	3.095E-09	2.244E-09	1.327E-09	5.578E-10	3.193E-10	2.077E-10	1.461E-10	1.082E-10	8.325E-11	6.589E-11
SE	1.666E-08	1.260E-08	9.300E-09	5.612E-09	2.411E-09	1.396E-09	9.143E-10	6.455E-10	4.791E-10	3.688E-10	2.919E-10
SSE	2.811E-08	2.066E-08	1.429E-08	7.992E-09	3.138E-09	1.731E-09	1.101E-09	7.641E-10	5.622E-10	4.885E-10	4.046E-10

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M**2) AT FIXED POINTS BY DOWNWIND SECTORS										
	DISTANCES IN MILES										
	5.00	7.50	10.00	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00
S	3.696E-10	1.925E-10	1.221E-10	6.774E-11	4.431E-11	3.405E-11	2.442E-11	1.835E-11	1.439E-11	1.149E-11	9.382E-12
SSW	1.776E-10	9.585E-11	6.075E-11	3.514E-11	2.457E-11	1.719E-11	1.231E-11	9.247E-12	7.190E-12	5.743E-12	4.688E-12
SW	1.090E-10	6.198E-11	3.975E-11	2.178E-11	1.364E-11	1.090E-11	8.083E-12	6.069E-12	4.719E-12	3.770E-12	3.077E-12
WSW	5.630E-11	3.356E-11	2.204E-11	1.469E-11	8.891E-12	5.961E-12	4.271E-12	3.207E-12	2.494E-12	1.992E-12	1.626E-12
W	9.626E-11	4.328E-11	3.417E-11	1.874E-11	1.438E-11	9.642E-12	6.909E-12	5.188E-12	4.034E-12	3.222E-12	2.630E-12
WNW	1.424E-10	7.147E-11	4.611E-11	2.535E-11	1.769E-11	1.255E-11	9.283E-12	6.971E-12	5.420E-12	4.329E-12	3.534E-12
NW	3.074E-10	1.654E-10	1.113E-10	7.237E-11	4.403E-11	2.957E-11	2.134E-11	1.603E-11	1.246E-11	9.955E-12	8.125E-12
NNW	2.705E-10	1.581E-10	1.112E-10	6.629E-11	4.241E-11	2.846E-11	2.012E-11	1.511E-11	1.190E-11	9.505E-12	7.758E-12
N	2.209E-10	1.054E-10	6.476E-11	3.471E-11	5.350E-11	3.622E-11	2.596E-11	1.949E-11	1.515E-11	1.211E-11	9.880E-12
NNE	1.032E-10	1.357E-10	8.345E-11	4.299E-11	2.619E-11	1.755E-11	1.256E-11	9.415E-12	7.311E-12	5.835E-12	4.759E-12
NE	7.614E-11	8.972E-11	5.531E-11	2.857E-11	1.742E-11	1.167E-11	8.400E-12	6.308E-12	4.904E-12	3.918E-12	3.198E-12
ENE	3.486E-11	3.156E-11	2.213E-11	1.318E-11	8.467E-12	5.711E-12	4.147E-12	2.946E-12	2.297E-12	1.840E-12	1.506E-12
E	3.211E-11	4.154E-11	3.127E-11	1.968E-11	1.279E-11	8.586E-12	6.103E-12	4.528E-12	3.478E-12	2.566E-12	2.081E-12
ESE	5.335E-11	5.353E-11	3.871E-11	2.371E-11	1.540E-11	1.043E-11	7.492E-12	5.620E-12	4.355E-12	3.485E-12	2.848E-12
SE	2.363E-10	1.133E-10	7.007E-11	3.820E-11	2.436E-11	1.734E-11	1.324E-11	1.395E-11	1.108E-11	9.091E-12	7.593E-12
SSE	3.295E-10	2.125E-10	1.295E-10	6.611E-11	4.023E-11	2.703E-11	1.941E-11	1.460E-11	1.136E-11	9.091E-12	7.431E-12

***** RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS *****

DIRECTION FROM SITE	RELATIVE DEPOSITION PER UNIT AREA (M**2) BY DOWNWIND SECTORS									
	SEGMENT BOUNDARIES IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
S	1.493E-08	4.214E-09	1.347E-09	6.861E-10	4.473E-10	2.906E-10	6.941E-11	3.293E-11	1.857E-11	1.157E-11
SSW	4.093E-09	1.521E-09	5.846E-10	3.491E-10	2.228E-10	9.841E-11	3.547E-11	1.721E-11	9.340E-12	5.781E-12
SW	1.617E-09	1.124E-09	4.859E-10	2.331E-10	1.368E-10	6.254E-11	2.215E-11	1.050E-11	6.130E-12	3.794E-12
WSW	1.330E-09	7.219E-10	2.475E-10	1.185E-10	6.990E-11	3.349E-11	1.374E-11	6.066E-12	3.239E-12	2.005E-12
W	4.123E-09	1.349E-09	4.346E-10	2.069E-10	1.210E-10	5.100E-11	2.023E-11	9.813E-12	5.240E-12	3.243E-12
WNW	3.448E-09	1.959E-09	6.618E-10	3.023E-10	1.764E-10	7.596E-11	2.656E-11	1.261E-11	7.041E-12	4.356E-12
NW	5.302E-09	4.982E-09	1.378E-09	6.264E-10	3.737E-10	1.729E-10	6.843E-11	3.013E-11	1.619E-11	1.002E-11
NNW	3.934E-09	2.192E-09	9.457E-10	5.142E-10	3.207E-10	1.623E-10	6.566E-11	2.885E-11	1.532E-11	9.568E-12
N	5.549E-09	2.146E-09	8.453E-10	4.514E-10	2.754E-10	1.130E-10	4.974E-11	3.672E-11	1.969E-11	1.218E-11
NNE	2.362E-09	9.712E-10	3.924E-10	2.108E-10	1.287E-10	1.053E-10	4.451E-11	1.786E-11	9.512E-12	5.874E-12
NE	2.268E-09	7.952E-10	2.959E-10	1.558E-10	9.484E-11	7.141E-11	2.955E-11	1.189E-11	6.371E-12	3.943E-12
ENE	9.541E-10	3.514E-10	1.344E-10	7.129E-11	4.344E-11	2.811E-11	1.308E-11	5.820E-12	3.042E-12	1.852E-12
E	1.168E-09	3.671E-10	1.274E-10	6.588E-11	3.996E-11	3.488E-11	1.919E-11	8.714E-12	4.578E-12	2.657E-12
ESE	2.026E-09	6.228E-10	2.128E-10	1.095E-10	6.639E-11	4.691E-11	2.335E-11	1.658E-11	5.673E-12	3.507E-12
SE	8.394E-09	2.671E-09	9.353E-10	4.846E-10	2.941E-10	1.214E-10	3.913E-11	1.757E-11	1.265E-11	9.127E-12
SSE	1.291E-08	3.591E-09	1.134E-09	5.918E-10	4.016E-10	2.016E-10	6.871E-11	2.750E-11	1.474E-11	9.149E-12

B138

ERP ELEVATED STACK RELEASE
CORRECTED FOR OPEN TERRAIN RECIRCULATION
SPECIFIC POINTS OF INTEREST

RELEASE ID	TYPE OF LOCATION	DIRECTION	DISTANCE		X/Q			D/Q
			(MILES)	(METERS)	(SEC/CUB.METER)	(SEC/CUB.METER)	(SEC/CUB.METER)	
			NO DECAY			2.260 DAY DECAY	8.000 DAY DECAY	
			UNDEPLETED		UNDEPLETED		DEPLETED	
A	SITE BOUNDARY	S	0.84	1350.	2.172E-07	2.170E-07	2.117E-07	1.338E-08
A	SITE BOUNDARY	SSW	0.85	1370.	7.024E-08	7.618E-08	6.897E-08	3.850E-09
A	SITE BOUNDARY	SW	1.01	1620.	1.005E-07	1.003E-07	9.986E-08	1.444E-09
A	SITE BOUNDARY	WSW	1.00	1610.	7.113E-08	7.102E-08	7.064E-08	1.399E-09
A	SITE BOUNDARY	W	0.99	1590.	2.442E-07	2.438E-07	2.394E-07	2.851E-09
A	SITE BOUNDARY	WNW	1.01	1620.	2.005E-07	2.002E-07	1.980E-07	3.425E-09
A	SITE BOUNDARY	NW	0.80	1290.	2.255E-07	2.252E-07	2.235E-07	3.854E-09
A	SITE BOUNDARY	NNW	0.70	1130.	9.212E-08	9.204E-08	9.076E-08	4.430E-09
A	SITE BOUNDARY	N	0.70	1130.	8.444E-08	8.439E-08	8.302E-08	6.259E-09
A	SITE BOUNDARY	NNE	0.65	1050.	4.441E-08	4.438E-08	4.370E-08	2.719E-09
A	SITE BOUNDARY	NE	0.64	1030.	4.305E-08	4.302E-08	4.234E-08	2.768E-09
A	SITE BOUNDARY	ENE	0.58	930.	2.327E-08	2.325E-08	2.294E-08	1.213E-09
A	SITE BOUNDARY	E	0.54	870.	3.612E-08	3.609E-08	3.569E-08	1.670E-09
A	SITE BOUNDARY	ESE	0.55	880.	5.829E-08	5.824E-08	5.757E-08	2.900E-09
A	SITE BOUNDARY	SE	1.03	1660.	1.069E-07	1.068E-07	1.045E-07	5.267E-09
A	SITE BOUNDARY	SSE	0.85	1370.	1.393E-07	1.392E-07	1.358E-07	1.119E-08

ATMOSPHERIC DIFFUSION MODEL

Onsite meteorological data for the period January 1, 1983, through June 30, 1983, were used to determine long-term (routine) diffusion estimates for evaluating normal atmospheric releases from the Cooper Nuclear Station. Atmospheric dispersion parameters (X/Q values) were determined for the site boundary distances from each release point and the standard population distances using the methodology presented in U.S. NRC Regulatory Guide 1.111 (Ref. 1) and the computer code XOQDOQ (Ref. 2). Two release modes were analyzed. Releases from the 99-meter freestanding stack were considered 100 percent elevated, while releases from the reactor building, turbine-generator building, radwaste building, and augmented radwaste building vents were considered as a 100-percent ground-level release (one combined source term was assumed to apply for these vents).

Winds were obtained from measurements at the 35-foot level (for ground-level releases) and 318-foot level (for elevated releases), and the stability class was based on the vertical temperature gradient between 318 feet and 35 feet. In accordance with Regulatory Guide 1.111, calm periods were distributed directionally in proportion to the directional distribution within a stability class of the lowest wind speed group. For the calculations, calm periods were assigned a speed of one-half the threshold wind speed of the wind vane or anemometer, whichever is higher.

The Gaussian straight-line trajectory model, which assumes that the air flow transports and diffuses effluents along a straight line through the entire region of interest in the airflow direction at the release point, is modified to account for various modes of effluent releases. In the case of an elevated release, plume rise due to momentum effects is incorporated into the calculation. For ground-level releases, building wake effects were considered.

The mathematical equation used in the Gaussian straight-line trajectory model is:

$$(X/Q)_i = 2.032 \sum_{jk} \frac{f_{ijk}}{x_{u,jk} \Sigma_{zk}} \exp \left[\frac{-\frac{1}{2} h^2}{c_{zk}^2} \right] \quad (\text{Eq. 1})$$

and

$$\Sigma_{zk} = (\sigma_{zk}^2 + 0.5 D_z^2/\pi)^{1/2} \leq \sqrt{3} \sigma_{zk} \quad (\text{Eq. 2})$$

where

- i = index identifying downwind direction sector;
- j = index identifying wind speed class;
- k = index identifying atmospheric stability class;
- $\frac{X}{Q}$ = average effluent concentration normalized by source strength at the specific downwind distance;
- f = joint frequency distribution of wind direction, wind speed class, and atmospheric stability class;
- x = distance from the release point to a receptor;
- u = wind speed;
- Σ_z = vertical plume spread with a volumetric building wake correction for a release within the building wake cavity;
- σ_z = vertical plume spread without volumetric building wake correction;
- D_z = maximum adjacent building height either up or downwind of the release point (44.5 m for ground-level releases); and
- h_e = effective plume height.

The term Σ_{zk} given in Equations 1 and 2 is used for ground-level release ($h_e = 0$) within the building wake cavity. For an elevated release, no volumetric building wake correction needs to be considered, i.e., $\Sigma_{zk} = \sigma_{zk}$. For all building wake determinations, the reactor building was considered to be the dominating structure in the modification of air flows within the building complex.

Since this model does not directly consider the effects of spatial and temporal variation in airflow due to terrain, appropriate adjustments were made to the calculated X/Q values, using the default values of Regulatory Guide 1.111, Rev. 0 (Ref. 3).

APPENDIX C

DOSE CALCULATIONS

CONTENTS

LIQUID EFFLUENT DOSE CALCULATIONS

GASEOUS EFFLUENT DOSE CALCULATIONS

DOSE CALCULATION MODELS

ISOPLETHS OF ATMOSPHERIC DIFFUSION ESTIMATES AND GAMMA AIR DOSE

LIQUID EFFLUENT DOSE CALCULATIONS

Doses to the maximum individual and 0- to 50-mile population resulting from the release of radioactive material in liquid effluents from Cooper Nuclear Station were calculated using the LADTAP II computer program. The LADTAP II program implements the radiological dose models of Regulatory Guide 1.109 for determining the radiation exposure to man from three principal exposure pathways in the aquatic environment--potable water, aquatic foods, and recreational water use. Doses to both the maximum individual and the general population are calculated as a function of age group and pathway for significant body organs, and are presented in Tables 1 and 2, respectively.

Assumptions and data sources used for input to the LADTAP II code are described in a separate section of this appendix.

Table 1. Doses to Individual at the Site Boundary, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, January-June 1983, Cooper Nuclear Station

Period and Pathway	Dose to Individual, mrem ^a							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>1st Quarter</u>								
Drinking water Shoreline	2.43E-04	9.40E-02 2.07E-04	7.65E-02 2.07E-04	6.10E-02 2.07E-04	2.08E-02 2.07E-04	2.55E-02 2.07E-04	8.52E-03 2.07E-04	3.75E-02 2.07E-04
Totals	2.43E-04	9.42E-02	7.67E-02	6.11E-02	2.10E-02	2.57E-02	8.73E-03	3.77E-02
<u>2nd Quarter</u>								
Eating fish Drinking water Shoreline	4.22E-04	1.20E-01 3.60E-04	2.13E-01 3.60E-04	1.58E-01 3.60E-04	3.22E-03 3.60E-04	7.08E-02 3.60E-04	2.33E-02 3.60E-04	7.38E-03 3.60E-04
Totals	4.22E-04	2.92E-01	4.93E-01	3.75E-01	5.75E-01	1.66E-01	5.39E-02	1.22E-01
Totals for 1st and 2nd Quarters	6.65E-04	3.86E-01	5.70E-01	4.36E-01	5.96E-01	1.92E-01	6.26E-02	1.60E-01

^a Calculated doses are based on the following periods of exposures:
 Fishing and boating: from April through November
 Drinking water and shoreline: from January through December
 Swimming: from June through September.

Table 2. Doses to Population Within a 50-Mile Radius, Resulting From Exposure to Radioactivity Discharged in Liquid Effluents, January-June 1983, Cooper Nuclear Station

Period and Pathway	Dose to Population, manrem ^a							
	Skin	Bone	Liver	Total Body	Thyroid	Kidney	Lung	GI-LLI
<u>1st Quarter</u>								
Drinking water ^b		3.58E-01	2.60E-01	1.58E-01	6.32E-02	8.50E-02	2.95E-02	9.52E-02
Shoreline	3.65E-02	3.10E-02	3.10E-02	3.10E-02	3.10E-02	3.10E-02	3.10E-02	3.10E-02
Totals	3.65E-02	3.89E-01	2.91E-02	1.89E-01	9.42E-02	1.16E-01	6.05E-02	1.26E-01
<u>2nd Quarter</u>								
Eating fish ^b		5.63E-03	9.98E-03	7.40E-03	3.83E-05	3.30E-03	1.09E-03	3.40E-04
Drinking water		3.35E-01	4.88E-01	2.85E-01	8.92E-01	1.62E-01	5.38E-02	1.48E-01
Shoreline	6.35E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02	5.40E-02
Swimming	0.00E+00	3.80E-04	3.80E-04	3.80E-04	3.80E-04	3.80E-04	3.80E-04	3.80E-04
Boating	0.00E+00	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03	1.40E-03
Totals	6.35E-02	3.96E-01	5.54E-01	3.49E-01	9.48E-01	2.21E-01	1.11E-01	2.04E-01
Totals for 1st and 2nd Quarters	1.00E-01	7.88E-01	5.83E-01	5.37E-01	1.04E+00	3.37E-01	1.71E-01	3.30E-01

^a Calculated doses are based on the following periods of exposures:
 Fishing and boating: from April through November
 Drinking water and shoreline: from January through December
 Swimming: from June through September.

^b Exposure from drinking water is calculated for the city of St. Joseph, Missouri, nearest public water intake from the Missouri River, 84 river miles down the river.

GASEOUS EFFLUENT DOSE CALCULATIONS

Doses to the maximum individual and 0- to 50-mile population resulting from the release of radioactive material in gaseous effluents from the Cooper Nuclear Station were calculated using the GASPAR computer program. The site selected for maximum individual dose calculation is the site boundary. GASPAR implements the radiological dose models of Regulatory Guide 1.109 for determining the radiation exposure to man from four principal atmospheric exposure pathways: plume, ground, inhalation, and ingestion. Doses to the maximum individual and the population are calculated as a function of age group and pathway for significant body organs. Tables 3 and 4 present, respectively, the maximum individual and population dose summaries for the first and second quarters. Table 5 summarizes maximum individual and population doses for the semiannual period. Because of differences in the amount of valid meteorological data recovered in the first and second quarters, dose contributions from each quarter cannot be summed to provide the semiannual doses.

Assumptions and data sources used for input to the GASPAR code are described in a separate section of this appendix.

Table 3. Doses to Maximum Individual at the Site Boundary Resulting from the Release of Radioactivity in Gaseous Effluents, January-March and April-June 1983; Cooper Nuclear Station

COOPER NUCLEAR STATION JANUARY-MARCH, 1983
 SPECIAL LOCATION # 1 SITE BOUNDARY
 AT 0.62 MILESNNW

ANNUAL BETA AIR DOSE = 2.27E-01 MILLIRADS
 ANNUAL GAMMA AIR DOSE = 3.68E-01 MILLIRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	2.47E-01	2.47E-01	2.47E-01	2.47E-01	2.47E-01	2.47E-01	2.50E-01	4.75E-01
GROUND	2.17E-03	2.17E-03	2.17E-03	2.17E-03	2.17E-03	2.17E-03	2.17E-03	2.55E-03
VEGET	5.26E-03	1.31E-03	1.89E-02	2.54E-03	1.40E-03	8.06E-03	1.03E-03	8.39E-04
MEAT	8.78E-05	7.07E-05	1.36E-04	1.07E-04	7.06E-05	7.44E-04	5.65E-05	5.06E-05
COW MILK	8.60E-04	3.98E-04	2.17E-03	1.77E-03	1.02E-03	5.51E-02	4.83E-04	3.39E-04
INHAL	4.76E-04	4.59E-04	4.40E-04	4.73E-04	4.69E-04	4.04E-03	8.80E-04	4.40E-04

COOPER NUCLEAR STATION APRIL-JUNE, 1983
 SPECIAL LOCATION # 1 SITE BOUNDARY
 AT 0.62 MILESNNW

ANNUAL BETA AIR DOSE = 1.11E-01 MILLIRADS
 ANNUAL GAMMA AIR DOSE = 1.80E-01 MILLIRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.21E-01	1.21E-01	1.21E-01	1.21E-01	1.21E-01	1.21E-01	1.22E-01	2.33E-01
GROUND	1.82E-02	1.82E-02	1.82E-02	1.82E-02	1.82E-02	1.82E-02	1.82E-02	2.15E-02
VEGET	2.57E-02	3.22E-03	9.73E-02	4.54E-03	2.40E-03	2.36E-01	5.23E-04	1.45E-04
MEAT	2.67E-04	1.95E-04	6.03E-04	2.19E-04	1.62E-04	2.35E-02	2.07E-05	8.71E-06
COW MILK	4.88E-03	7.62E-04	1.22E-02	8.16E-03	9.93E-03	1.82E+00	3.48E-04	5.84E-05
INHAL	2.96E-04	1.24E-04	1.75E-03	3.10E-04	4.19E-04	6.74E-02	1.73E-03	7.57E-05

Table 4. Doses to Population Within a 50-Mile Radius Resulting from the Release of Radioactivity in Gaseous Effluents, January-March and April-June 1983; Cooper Nuclear Station

COOPER NUCLEAR STATION JANUARY-MARCH, 1983
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.25E-02	1.25E-02	1.25E-02	1.25E-02	1.25E-02	1.25E-02	1.27E-02	2.75E-02
GROUND	1.88E-04	1.88E-04	1.88E-04	1.88E-04	1.88E-04	1.88E-04	1.88E-04	2.21E-04
INHAL	8.75E-05	8.73E-05	4.33E-05	8.78E-05	8.87E-05	9.44E-04	1.24E-04	8.22E-05
VEGET	3.86E-04	1.58E-04	1.25E-03	2.37E-04	1.61E-04	1.09E-02	7.32E-05	5.64E-05
COW MILK	1.74E-04	5.73E-05	3.02E-04	2.91E-04	1.84E-04	1.50E-02	6.25E-05	3.87E-05
MEAT	2.24E-05	2.00E-05	2.54E-05	2.43E-05	1.62E-05	3.40E-04	1.17E-05	1.03E-05
TOTAL	1.34E-02	1.30E-02	1.43E-02	1.33E-02	1.32E-02	3.99E-02	1.32E-02	2.79E-02

COOPER NUCLEAR STATION APRIL-JUNE, 1983
ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.26E-03	3.26E-03	3.26E-03	3.26E-03	3.26E-03	3.26E-03	3.31E-03	7.26E-03
GROUND	8.97E-04	8.97E-04	8.97E-04	8.97E-04	8.97E-04	8.97E-04	8.97E-04	1.05E-03
INHAL	3.58E-05	2.97E-05	1.54E-04	3.73E-05	4.96E-05	6.56E-03	1.81E-04	1.45E-05
VEGET	1.32E-03	4.50E-04	4.65E-03	4.38E-04	5.11E-04	8.69E-02	2.65E-05	1.02E-05
COW MILK	4.36E-04	1.17E-04	8.97E-04	6.29E-04	7.56E-04	1.30E-01	3.14E-05	6.93E-06
MEAT	3.92E-05	7.23E-05	7.88E-05	2.86E-05	2.20E-05	2.94E-03	3.33E-06	1.84E-06
TOTAL	5.99E-03	4.83E-03	9.94E-03	5.29E-03	5.50E-03	2.31E-01	4.45E-03	8.34E-03

Table 5. Summary of Maximum Individual and Population Doses Resulting from the Release of Radioactivity in Gaseous Effluents, January-March and April-June 1983; Cooper Nuclear Station

COOPER NUCLEAR STATION JANUARY-JUNE, 1983
 SPECIAL LOCATION # 1 SITE BOUNDARY
 AT 0.62 MILES NNW

ANNUAL BETA AIR DOSE = 3.36E-01 MILLIRADS
 ANNUAL GAMMA AIR DOSE = 5.44E-01 MILLIRADS

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	3.66E-01	3.66E-01	3.66E-01	3.66E-01	3.66E-01	3.66E-01	3.69E-01	7.04E-01
GROUND	3.86E-03	3.86E-03	3.86E-03	3.86E-03	3.86E-03	3.86E-03	3.86E-03	4.53E-03
VEGET	2.81E-02	2.80E-03	1.09E-01	6.60E-03	3.60E-03	2.21E-01	1.48E-03	9.19E-04
MEAT	2.52E-04	9.93E-05	6.96E-04	2.84E-04	2.16E-04	2.19E-02	7.31E-05	5.54E-05
COW MILK	5.24E-03	9.78E-04	1.34E-02	9.29E-03	1.00E-02	1.69E+00	8.00E-04	3.71E-04
INHAL	7.55E-04	5.34E-04	2.35E-03	7.70E-04	8.90E-04	7.87E-02	1.39E-03	4.81E-04

COOPER NUCLEAR STATION JANUARY-JUNE, 1983
 ALARA ANNUAL INTEGRATED POPULATION DOSE SUMMARY (MANREM)

PATHWAY	T. BODY	GI-TRACT	BONE	LIVER	KIDNEY	THYROID	LUNG	SKIN
PLUME	1.63E-02	1.63E-02	1.63E-02	1.63E-02	1.63E-02	1.63E-02	1.66E-02	3.59E-02
GROUND	3.17E-04	3.17E-04	3.17E-04	3.17E-04	3.17E-04	3.17E-04	3.17E-04	3.72E-04
INHAL	1.20E-04	1.08E-04	2.15E-04	1.22E-04	1.37E-04	8.22E-03	2.05E-04	9.10E-05
VEGET	1.68E-03	4.45E-04	5.92E-03	6.60E-04	6.68E-04	9.76E-02	9.66E-05	6.34E-05
COW MILK	6.04E-04	1.54E-04	1.20E-03	9.17E-04	9.37E-04	1.45E-01	9.18E-05	4.34E-05
MEAT	5.24E-05	3.29E-05	1.04E-04	4.87E-05	3.76E-05	3.27E-03	1.45E-05	1.15E-05
TOTAL	1.91E-02	1.74E-02	2.41E-02	1.84E-02	1.84E-02	2.71E-01	1.73E-02	3.65E-02

COOPER NUCLEAR STATION JANUARY-MARCH, 1983
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

DIR	DISTANCE IN MILES									
	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	5.799E-01	4.812E-02	1.529E-02	7.328E-03	4.270E-03	1.463E-03	4.798E-04	2.151E-04	1.092E-04	6.330E-05
NNE	2.795E-01	2.591E-02	8.394E-03	4.229E-03	2.561E-03	1.496E-03	3.980E-04	1.442E-04	7.126E-05	4.049E-05
NE	9.316E-02	9.630E-03	3.534E-03	1.870E-03	1.189E-03	9.149E-04	2.632E-04	9.797E-05	4.795E-05	2.610E-05
ENE	7.167E-02	6.075E-03	1.937E-03	9.541E-04	5.706E-04	4.089E-04	1.129E-04	4.026E-05	2.044E-05	1.073E-05
E	8.537E-02	7.022E-03	2.093E-03	9.790E-04	5.641E-04	3.990E-04	1.100E-04	4.023E-05	1.970E-05	1.133E-05
ESE	5.953E-02	5.745E-03	2.065E-03	1.116E-03	7.154E-04	5.361E-04	1.541E-04	5.670E-05	2.694E-05	1.469E-05
SE	1.608E-01	1.655E-02	5.815E-03	3.024E-03	1.863E-03	7.237E-04	2.159E-04	7.799E-05	3.697E-05	1.976E-05
SSE	1.317E-01	1.352E-02	4.763E-03	2.464E-03	2.164E-03	8.629E-04	2.342E-04	8.462E-05	4.062E-05	2.222E-05
S	3.538E-01	2.997E-02	9.187E-03	4.340E-03	2.876E-03	1.187E-03	3.047E-04	1.193E-04	5.759E-05	3.235E-05
SSW	3.509E-01	2.956E-02	9.215E-03	4.982E-03	2.935E-03	1.062E-03	2.430E-04	8.154E-05	3.800E-05	2.051E-05
SW	2.592E-01	2.382E-02	7.258E-03	3.380E-03	1.929E-03	6.810E-04	1.554E-04	5.132E-05	2.367E-05	1.267E-05
WSW	1.164E-01	1.239E-02	3.827E-03	1.792E-03	1.022E-03	3.600E-04	8.699E-05	2.867E-05	1.308E-05	6.889E-06
W	1.142E-01	1.737E-02	5.576E-03	2.682E-03	1.564E-03	5.394E-04	1.391E-04	4.716E-05	2.147E-05	1.108E-05
WNW	1.882E-01	2.611E-02	8.180E-03	3.972E-03	2.267E-03	7.642E-04	1.893E-04	6.474E-05	3.000E-05	1.623E-05
NW	4.664E-01	5.555E-02	1.674E-02	7.780E-03	4.378E-03	1.439E-03	3.515E-04	1.239E-04	6.106E-05	3.441E-05
NNW	5.540E-01	4.871E-02	1.666E-02	8.361E-03	4.668E-03	1.516E-03	3.566E-04	1.265E-04	6.294E-05	3.661E-05

INDIVIDUAL ANNUAL BETA AIR DOSE (MILLIRADS)
DISTANCE IN MILES

DIR	DISTANCE IN MILES									
	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	3.580E-01	2.939E-02	9.197E-03	4.408E-03	2.596E-03	9.523E-04	3.509E-04	1.665E-04	8.939E-05	5.507E-05
NNE	1.723E-01	1.598E-02	5.137E-03	2.572E-03	1.552E-03	9.252E-04	2.650E-04	1.059E-04	5.664E-05	3.463E-05
NE	5.752E-02	5.925E-03	2.174E-03	1.150E-03	7.324E-04	5.746E-04	1.739E-04	7.035E-05	3.775E-05	2.268E-05
ENE	4.421E-02	3.728E-03	1.177E-03	5.779E-04	3.474E-04	2.615E-04	7.986E-05	3.218E-05	1.836E-05	1.088E-05
E	5.268E-02	4.301E-03	1.263E-03	5.879E-04	3.409E-04	2.548E-04	7.817E-05	3.194E-05	1.718E-05	1.093E-05
ESE	3.668E-02	3.538E-03	1.264E-03	6.824E-04	4.384E-04	3.379E-04	1.050E-04	4.298E-05	2.271E-05	1.374E-05
SE	9.913E-02	1.017E-02	3.573E-03	1.858E-03	1.146E-03	4.494E-04	1.418E-04	5.623E-05	2.937E-05	1.733E-05
SSE	8.100E-02	8.302E-03	2.917E-03	1.505E-03	1.331E-03	5.402E-04	1.572E-04	6.282E-05	3.320E-05	2.000E-05
S	2.178E-01	1.838E-02	5.574E-03	2.622E-03	1.749E-03	7.512E-04	2.159E-04	9.425E-05	4.998E-05	3.083E-05
SSW	2.164E-01	1.813E-02	5.575E-03	3.013E-03	1.788E-03	6.792E-04	1.781E-04	6.704E-05	3.402E-05	2.003E-05
SW	1.599E-01	1.459E-02	4.397E-03	2.044E-03	1.172E-03	4.332E-04	1.127E-04	4.200E-05	2.117E-05	1.236E-05
WSW	7.192E-02	7.555E-03	2.315E-03	1.088E-03	6.274E-04	2.337E-04	6.438E-05	2.374E-05	1.190E-05	6.922E-06
W	7.037E-02	1.061E-02	3.396E-03	1.638E-03	9.613E-04	3.442E-04	9.846E-05	3.733E-05	1.874E-05	1.077E-05
WNW	1.161E-01	1.593E-02	4.963E-03	2.414E-03	1.388E-03	4.893E-04	1.355E-04	5.120E-05	2.587E-05	1.522E-05
NW	2.880E-01	3.383E-02	1.010E-02	4.700E-03	2.671E-03	9.286E-04	2.576E-04	9.876E-05	5.173E-05	3.114E-05
NNW	3.422E-01	2.965E-02	1.002E-02	5.053E-03	2.862E-03	9.993E-04	2.716E-04	1.046E-04	5.508E-05	3.391E-05

COOPER NUCLEAR STATION APRIL-JUNE, 1983
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

DIR	DISTANCE IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
N	2.086E-01	1.898E-02	5.621E-03	2.593E-03	1.471E-03	4.879E-04	1.019E-04	2.678E-05	1.003E-05	4.679E-06
NNE	7.711E-02	7.259E-03	2.179E-03	1.023E-03	5.915E-04	2.040E-04	4.748E-05	1.399E-05	5.638E-06	2.734E-06
NE	6.277E-02	5.809E-03	1.740E-03	8.208E-04	4.738E-04	1.658E-04	3.982E-05	1.225E-05	5.130E-06	2.532E-06
ENE	1.981E-02	1.809E-03	5.495E-04	2.547E-04	1.481E-04	5.091E-05	1.273E-05	4.051E-06	1.731E-06	8.704E-07
E	2.089E-02	2.026E-03	6.229E-04	2.932E-04	1.711E-04	6.172E-05	1.668E-05	5.787E-06	2.671E-06	1.414E-06
ESE	3.863E-02	3.621E-03	1.080E-03	5.142E-04	2.972E-04	1.021E-04	2.432E-05	7.298E-06	2.984E-06	1.466E-06
SE	5.514E-02	4.949E-03	1.492E-03	6.901E-04	4.165E-04	1.420E-04	3.815E-05	1.370E-05	6.520E-06	3.342E-06
SSE	5.758E-02	5.087E-03	1.481E-03	6.861E-04	4.309E-04	1.306E-04	3.996E-05	8.813E-06	3.573E-06	1.741E-06
S	1.376E-01	1.298E-02	3.633E-03	1.701E-03	9.671E-04	3.256E-04	7.322E-05	2.095E-05	8.289E-06	3.954E-06
SSW	1.629E-01	1.419E-02	4.147E-03	1.911E-03	1.088E-03	3.495E-04	7.024E-05	1.768E-05	6.472E-06	2.964E-06
SW	9.887E-02	8.836E-03	2.595E-03	1.191E-03	6.759E-04	2.132E-04	4.146E-05	1.004E-05	3.640E-06	1.676E-06
WSW	9.043E-02	8.079E-03	2.367E-03	1.085E-03	6.094E-04	1.915E-04	3.622E-05	8.726E-06	3.148E-06	1.463E-06
W	8.559E-02	7.573E-03	2.230E-03	1.025E-03	5.770E-04	1.819E-04	3.479E-05	8.443E-06	3.051E-06	1.413E-06
WNW	1.069E-01	9.289E-03	2.718E-03	1.266E-03	7.085E-04	2.288E-04	4.642E-05	1.164E-05	4.254E-06	1.955E-06
NW	2.221E-01	1.995E-02	6.040E-03	2.813E-03	1.603E-03	5.321E-04	1.134E-04	2.998E-05	1.108E-05	5.139E-06
NNW	2.621E-01	2.326E-02	7.008E-03	3.271E-03	1.870E-03	6.073E-04	1.243E-04	3.161E-05	1.170E-05	5.427E-06

INDIVIDUAL ANNUAL BETA AIR DOSE (MILLIRADS)

DIR	DISTANCE IN MILES									
	0-1	1-2	2-3	3-4	4-5	5-10	10-20	20-30	30-40	40-50
N	1.291E-01	1.176E-02	3.460E-03	1.580E-03	8.883E-04	2.914E-04	6.570E-05	2.154E-05	1.018E-05	5.741E-06
NNE	4.770E-02	4.502E-03	1.346E-03	6.279E-04	3.603E-04	1.223E-04	2.907E-05	9.751E-06	4.676E-06	2.685E-06
NE	3.881E-02	3.609E-03	1.076E-03	5.050E-04	2.895E-04	9.968E-05	2.409E-05	8.166E-06	3.947E-06	2.271E-06
ENE	1.225E-02	1.122E-03	3.406E-04	1.573E-04	9.116E-05	3.082E-05	7.616E-06	2.565E-06	1.221E-06	6.981E-07
E	1.292E-02	1.256E-03	3.853E-04	1.815E-04	1.056E-04	3.765E-05	9.975E-06	3.524E-06	1.726E-06	9.978E-07
ESE	2.389E-02	2.249E-03	6.671E-04	3.158E-04	1.813E-04	6.122E-05	1.484E-05	5.025E-06	2.425E-06	1.402E-06
SE	3.403E-02	3.066E-03	9.254E-04	4.277E-04	2.485E-04	8.706E-05	2.287E-05	8.234E-06	4.062E-06	2.348E-06
SSE	3.561E-02	3.155E-03	9.148E-04	4.213E-04	2.383E-04	7.829E-05	1.831E-05	6.099E-06	2.919E-06	1.675E-06
S	8.517E-02	7.804E-03	2.257E-03	1.044E-03	5.891E-04	1.951E-04	4.497E-05	1.479E-05	7.022E-06	3.991E-06
SSW	1.008E-01	8.792E-03	2.549E-03	1.163E-03	6.563E-04	2.089E-04	4.593E-05	1.474E-05	6.870E-06	3.820E-06
SW	6.123E-02	5.467E-03	1.389E-03	7.212E-04	4.060E-04	1.279E-04	2.816E-05	9.034E-06	4.209E-06	2.338E-06
WSW	5.602E-02	4.995E-03	1.447E-03	6.562E-04	3.655E-04	1.151E-04	2.503E-05	8.058E-06	3.742E-06	2.084E-06
W	5.302E-02	4.683E-03	1.364E-03	6.200E-04	3.462E-04	1.092E-04	2.393E-05	7.736E-06	3.600E-06	2.003E-06
WNW	6.620E-02	5.753E-03	1.669E-03	7.706E-04	4.271E-04	1.367E-04	3.034E-05	9.725E-06	4.533E-06	2.527E-06
NW	1.375E-01	1.236E-02	3.721E-03	1.717E-03	9.702E-04	3.179E-04	7.227E-05	2.356E-05	1.102E-05	6.194E-06
NNW	1.623E-01	1.440E-02	4.301E-03	1.987E-03	1.126E-03	3.633E-04	8.253E-05	2.712E-05	1.283E-05	7.207E-06

COOPER NUCLEAR STATION JANUARY-JUNE, 1983
INDIVIDUAL ANNUAL GAMMA AIR DOSE (MILLIRADS)

	DISTANCE IN MILES									
DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	7.333E-01	6.415E-02	1.983E-02	9.463E-03	5.470E-03	1.856E-03	5.198E-04	2.050E-04	9.999E-05	5.703E-05
NNE	3.290E-01	3.057E-02	9.641E-03	4.769E-03	2.816E-03	1.516E-03	3.946E-04	1.374E-04	6.464E-05	3.580E-05
NE	1.657E-01	1.603E-02	5.125E-03	2.588E-03	1.566E-03	9.153E-04	2.480E-04	8.897E-05	4.277E-05	2.356E-05
ENE	8.378E-02	7.338E-03	2.318E-03	1.133E-03	6.738E-04	4.432E-04	1.242E-04	4.559E-05	2.357E-05	1.276E-05
E	9.657E-02	8.535E-03	2.696E-03	1.339E-03	8.118E-04	6.452E-04	1.838E-04	6.692E-05	3.197E-05	1.839E-05
ESE	1.068E-01	9.824E-03	3.192E-03	1.602E-03	9.706E-04	6.118E-04	1.747E-04	6.401E-05	3.057E-05	1.678E-05
SE	2.099E-01	2.057E-02	7.028E-03	3.564E-03	2.193E-03	8.628E-04	2.757E-04	1.054E-04	5.195E-05	2.857E-05
SSE	1.889E-01	1.798E-02	5.957E-03	2.984E-03	2.468E-03	9.487E-04	2.561E-04	9.268E-05	4.472E-05	2.488E-05
S	4.678E-01	4.184E-02	1.283E-02	6.160E-03	4.077E-03	1.585E-03	3.928E-04	1.407E-04	6.550E-05	3.601E-05
SSW	4.973E-01	4.289E-02	1.296E-02	6.595E-03	3.852E-03	1.337E-03	2.889E-04	9.082E-05	4.046E-05	2.147E-05
SW	3.442E-01	3.368E-02	1.016E-02	4.718E-03	2.693E-03	9.161E-04	2.002E-04	6.346E-05	2.855E-05	1.525E-05
WSW	2.291E-01	2.293E-02	6.879E-03	3.177E-03	1.779E-03	5.761E-04	1.231E-04	3.719E-05	1.649E-05	8.558E-06
W	2.228E-01	2.614E-02	8.100E-03	3.795E-03	2.160E-03	7.084E-04	1.658E-04	5.288E-05	2.332E-05	1.215E-05
WNW	3.064E-01	3.421E-02	1.049E-02	4.993E-03	2.835E-03	9.418E-04	2.163E-04	7.046E-05	3.242E-05	1.736E-05
NW	6.678E-01	7.923E-02	2.436E-02	1.154E-02	6.596E-03	2.228E-03	5.375E-04	1.801E-04	8.520E-05	4.723E-05
NNW	7.995E-01	7.411E-02	2.580E-02	1.318E-02	7.496E-03	2.508E-03	5.726E-04	1.922E-04	9.169E-05	5.143E-05

INDIVIDUAL ANNUAL BETA AIR DOSE (MILLIRADS)
DISTANCE IN MILES

	DISTANCE IN MILES									
DIR	0.0-1.	1.-2.	2.-3.	3.-4.	4.-5.	5.-10.	10.-20.	20.-30.	30.-40.	40.-50.
N	4.530E-01	3.949E-02	1.203E-02	5.696E-03	3.291E-03	1.156E-03	3.711E-04	1.636E-04	8.614E-05	5.240E-05
NNE	2.031E-01	1.888E-02	5.924E-03	2.914E-03	1.711E-03	9.321E-04	2.590E-04	1.009E-04	5.275E-05	3.199E-05
NE	1.023E-01	9.894E-03	3.155E-03	1.589E-03	9.594E-04	5.657E-04	1.611E-04	6.345E-05	3.370E-05	2.043E-05
ENE	5.172E-02	4.524E-03	1.419E-03	6.891E-04	4.092E-04	2.772E-04	8.407E-05	3.448E-05	1.985E-05	1.196E-05
E	5.959E-02	5.265E-03	1.650E-03	8.141E-04	4.926E-04	4.057E-04	1.258E-04	5.162E-05	2.763E-05	1.772E-05
ESE	6.589E-02	6.062E-03	1.959E-03	9.778E-04	5.908E-04	3.817E-04	1.175E-04	4.824E-05	2.574E-05	1.570E-05
SE	1.296E-01	1.266E-02	4.326E-03	2.194E-03	1.351E-03	5.338E-04	1.771E-04	7.303E-05	3.928E-05	2.363E-05
SSE	1.164E-01	1.107E-02	3.657E-03	1.823E-03	1.512E-03	5.888E-04	1.688E-04	6.741E-05	3.578E-05	2.180E-05
S	2.886E-01	2.580E-02	7.849E-03	3.744E-03	2.475E-03	9.799E-04	2.671E-04	1.092E-04	5.679E-05	3.447E-05
SSW	3.072E-01	2.641E-02	7.878E-03	3.982E-03	2.327E-03	8.360E-04	2.095E-04	7.707E-05	3.834E-05	2.234E-05
SW	2.127E-01	2.068E-02	6.163E-03	2.848E-03	1.629E-03	5.773E-04	1.460E-04	5.345E-05	2.660E-05	1.550E-05
WSW	1.416E-01	1.404E-02	4.163E-03	1.919E-03	1.080E-03	3.680E-04	9.324E-05	3.314E-05	1.636E-05	5.413E-06
W	1.376E-01	1.600E-02	4.923E-03	2.303E-03	1.318E-03	4.505E-04	1.213E-04	4.462E-05	2.201E-05	1.271E-05
WNW	1.893E-01	2.097E-02	6.379E-03	3.023E-03	1.720E-03	5.901E-04	1.550E-04	5.770E-05	2.917E-05	1.705E-05
NW	4.126E-01	4.855E-02	1.479E-02	6.975E-03	3.994E-03	1.392E-03	3.816E-04	1.449E-04	7.486E-05	4.475E-05
NNW	4.941E-01	4.543E-02	1.562E-02	7.956E-03	4.545E-03	1.588E-03	4.212E-04	1.603E-04	8.297E-05	4.998E-05

DOSE CALCULATION MODELS

To evaluate the radiological consequences of the routine release of liquid and gaseous effluents from the Cooper Nuclear Station, two computer codes were used: LADTAP II for liquid doses and GASPAR for gaseous doses (Ref. 1 and 2). Both of these computer codes implemented the dose calculational methodologies of U.S. NRC Regulatory Guide 1.109, Revision 1 (Ref. 1).

Source terms for each quarter and for the semiannual period are combined with station-specific demographic data and either hydrological dilution factors, for liquid dose calculations, or atmospheric diffusion estimates, for gaseous dose calculations.

For liquid dose calculations, the hydrological dilution factors used for input to LADTAP II, as well as other input parameters, are listed in Table 6. Other inputs not specifically listed in this table are taken from Regulatory Guide 1.109, Revision 1.

For gaseous dose calculations, atmospheric diffusion estimates are obtained from the reduction and processing of onsite meteorological data, as described in Appendix B. Additional input to GASPAR includes the following station-supplied data:

- o 0- to 50-mile population distribution
- o 0- to 50-mile meat, milk, and vegetable production distributions
- o Absolute humidity at the Cooper Nuclear Station (14.61 g/m^3)
- o The fraction of the year that vegetables are grown (0.5)
- o The fraction of the daily feed intake derived from pasture for milk and meat animals (0.5).

Other values used for input to GASPAR are default values from Regulatory Guide 1.109, Rev. 1.

Table 6. Values of Parameters Used to Make Dose Estimates Resulting from Liquid Discharges
January - June 1983, Cooper Nuclear Station

Parameter	Values Assigned		Reference Source
	Individual	Population	
Cooling flow rate (cfs)	773; 700 ^a	773; 700 ^a	Station data
Dilution factor	1	37.64; 73.35 ^a	Station data
Holding time:			
Drinking water	12 hr ^c	22.4 ^b hr _D	Station data
Shoreline exposure	0 hr ^c	22.4 hr _b	Station data
Swimming	0 hr ^c	22.4 hr _b	Station data
Boating	0 hr ^c	22.4 hr	Station data

^a First and second quarters for 1983, respectively.

^b Based on an average Missouri River water flow of 5.5 ft/sec, 84 miles down the river.

^c Values from Regulatory Guide 1.109, Revision 1.

References

1. U.S. Nuclear Regulatory Commission, NUREG-0597, "User's Guide to GASPAR Code," June 1980.
2. U.S. Nuclear Regulatory Commission, NUREG/CR-1276, "User's Manual for LADTAP II: A Computer Code for Calculating Radiation Exposure to Man from Routine Release of Nuclear Reactor Liquid Effluents," 1980.
3. U.S. Nuclear Regulatory Commission, Regulatory Guide 1.109, "Calculation of Annual Doses to Man from Routine Release of Reactor Effluents for the Purpose of Evaluating Compliance with 10 CFR 50, Appendix I," Revision 1, 1977.

ISOPLETH FIGURES

The average atmospheric diffusion estimate isopleths presented in this section were generated from output of the computer code XOQDOQ. These figures present relative concentrations for undepleted and undecayed atmospheric releases. Isopleth fields are presented for both a 0- to 5-mile area and a 0- to 50-mile area centered on the Cooper Nuclear Station. The periods covered by the isopleths are January through March, April through June, and January through June 1983. Separate figures are given for the ground-level (vent stack) and elevated release points. The isopleths of gamma radiation dose were generated from output of the GASPARG computer code. The isopleths are for a combined ground-level (vent stack) and elevated release, and cover the same area and time periods given for the atmospheric diffusion estimates. These figures are presented for purposes of displaying general data trends only. Due to the inaccuracies introduced by smoothing of the gridded data fields by the plotting routines, these plots should not be used to extract absolute values of the parameters for given distances and directions. Exact values of these parameters can be obtained from the tables of atmospheric diffusion estimates provided in Appendix B and doses provided in Appendix C.

List of Figures

<u>No.</u>	<u>Title</u>
1.	Cooper Nuclear Station and Surrounding Area from 0-5 miles
2.	Cooper Nuclear Station and Surrounding Area from 0-50 miles
3.	Atmospheric Diffusion Estimate Isopleths, 0-5 Miles, Ground-Level Releases, January-March 1983 (sec/m ³)
4.	Atmospheric Diffusion Estimate Isopleths, 0-50 Miles, Ground-Level Releases, January-March 1983 (sec/m ³)
5.	Atmospheric Diffusion Estimate Isopleths, 0- $\frac{5}{3}$ Miles, Elevated Releases, January-March 1983 (sec/m ³)
6.	Atmospheric Diffusion Estimate Isopleths, 0- $\frac{50}{3}$ Miles, Elevated Releases, January-March 1983 (sec/m ³)
7.	Atmospheric Diffusion Estimate Isopleths, 0- $\frac{5}{3}$ Miles, Ground-Level Releases, April-June 1983 (sec/m ³)
8.	Atmospheric Diffusion Estimate Isopleths, 0- $\frac{50}{3}$ Miles, Ground-Level Releases, April-June 1983 (sec/m ³)
9.	Atmospheric Diffusion Estimate Isopleths, $\frac{3}{3}$ 0-5 Miles, Elevated Releases, April-June 1983 (sec/m ³)
10.	Atmospheric Diffusion Estimate Isopleths, $\frac{3}{3}$ 0-50 Miles, Elevated Releases, April-June 1983 (sec/m ³)
11.	Atmospheric Diffusion Estimate Isopleths, 0-5 Miles, Ground-Level Releases, January-June 1983 (sec/m ³)
12.	Atmospheric Diffusion Estimate Isopleths, 0-50 Miles, Ground-Level Releases, January-June 1983 (sec/m ³)
13.	Atmospheric Diffusion Estimate Isopleths, 0- $\frac{5}{3}$ Miles, Elevated Releases, January-June 1983 (sec/m ³)
14.	Atmospheric Diffusion Estimate Isopleths, 0- $\frac{50}{3}$ Miles, Elevated Releases, January-June 1983 (sec/m ³)
15.	Gamma Air Dose Isopleths, 0-5 Miles, January-March 1983 (millirad)
16.	Gamma Air Dose Isopleths, 0-50 Miles, January-March 1983 (millirad)

List of Figures (Continued)

<u>No.</u>	<u>Title</u>
17.	Gamma Air Dose Isopleths, 0-5 Miles, April-June 1983 (millirad)
18.	Gamma Air Dose Isopleths, 0-50 Miles, April-June 1983 (millirad)
19.	Gamma Air Dose Isopleths, 0-5 Miles, January-June 1983 (millirad)
20.	Gamma Air Dose Isopleths, 0-50 Miles, January-June 1983 (millirad)

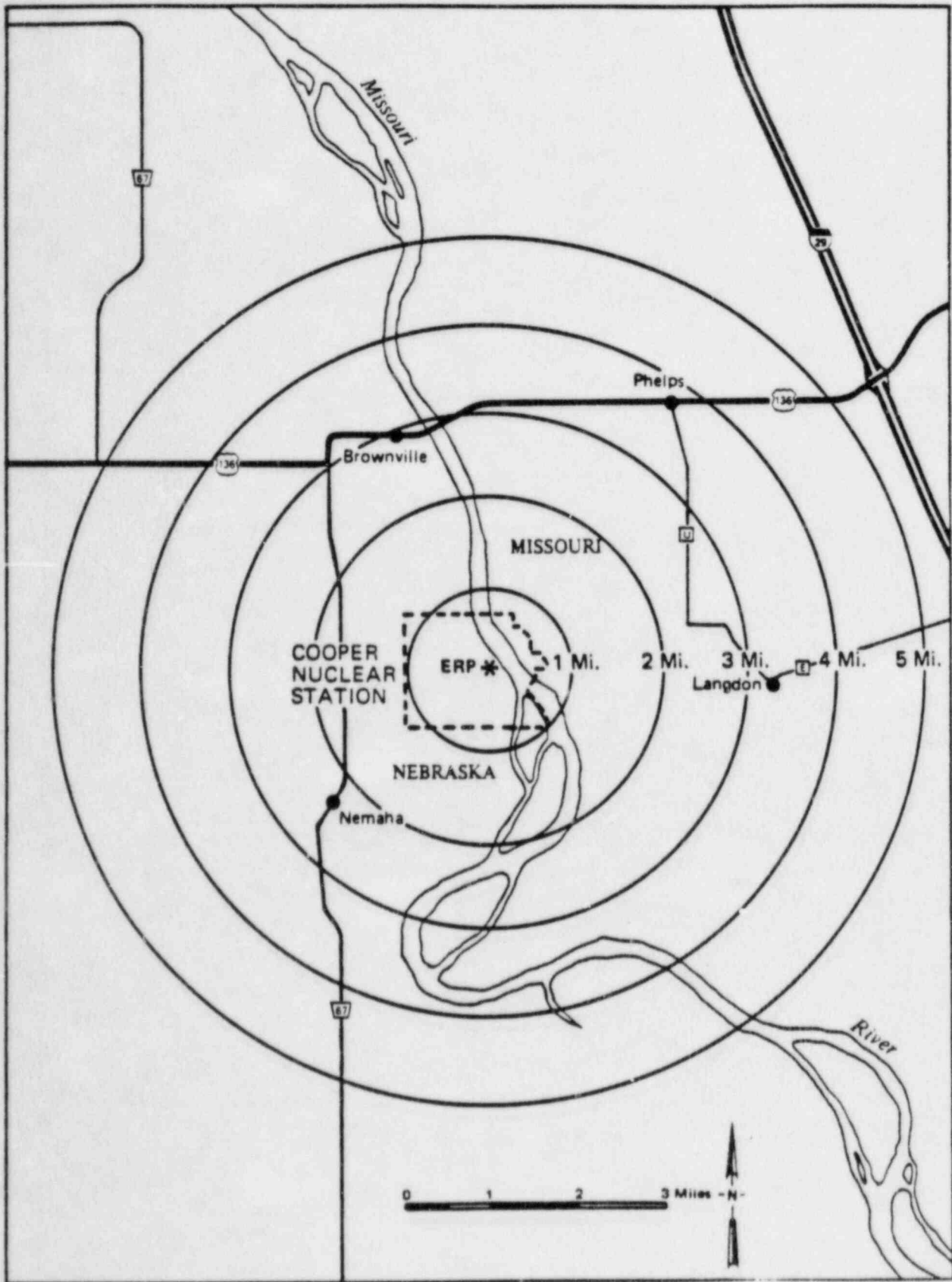


Figure 1 Cooper Nuclear Station and Surrounding Area from 0-5 Miles

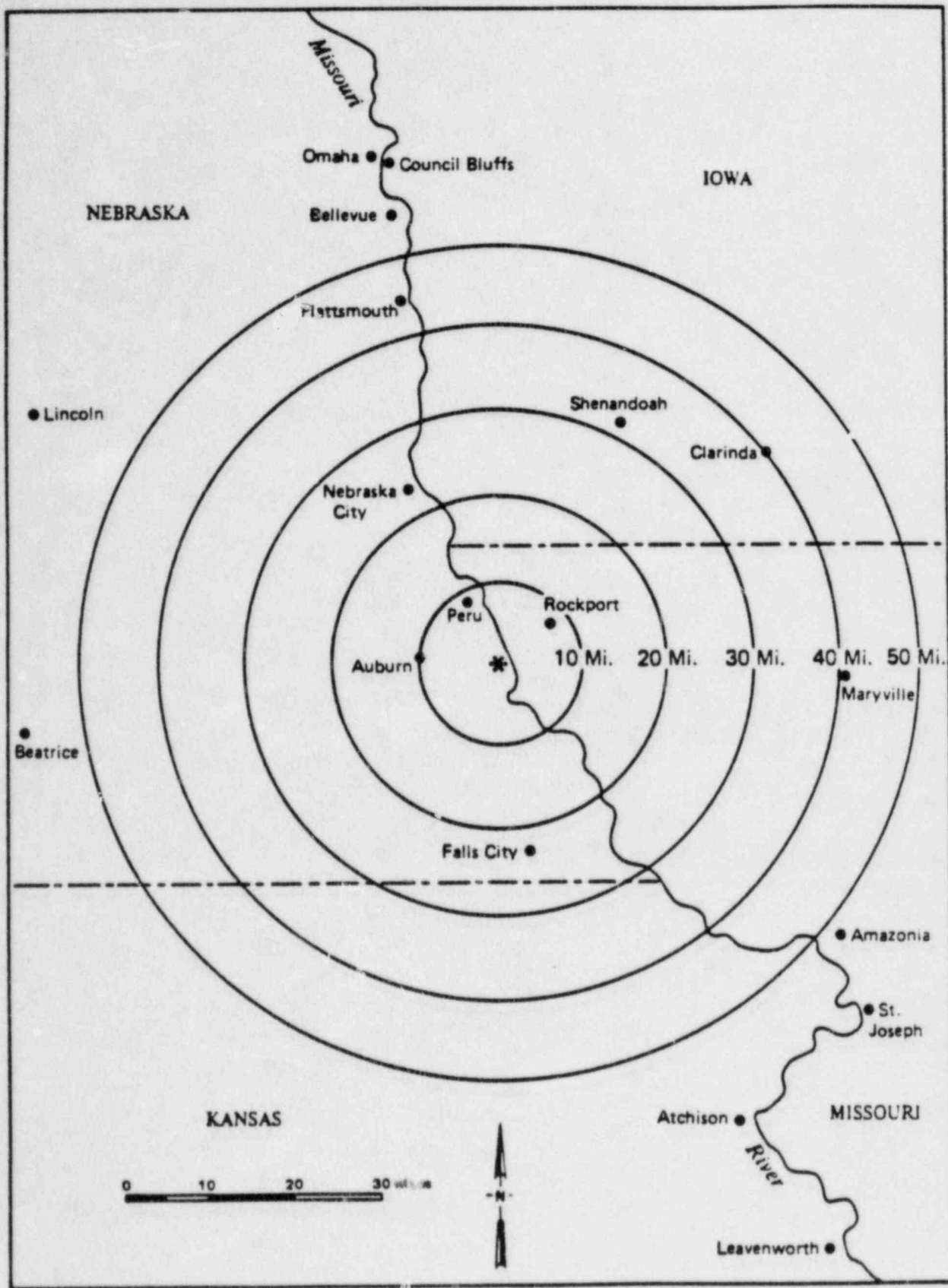


Figure 2 Cooper Nuclear Station and Surrounding Area from 0-50 Miles

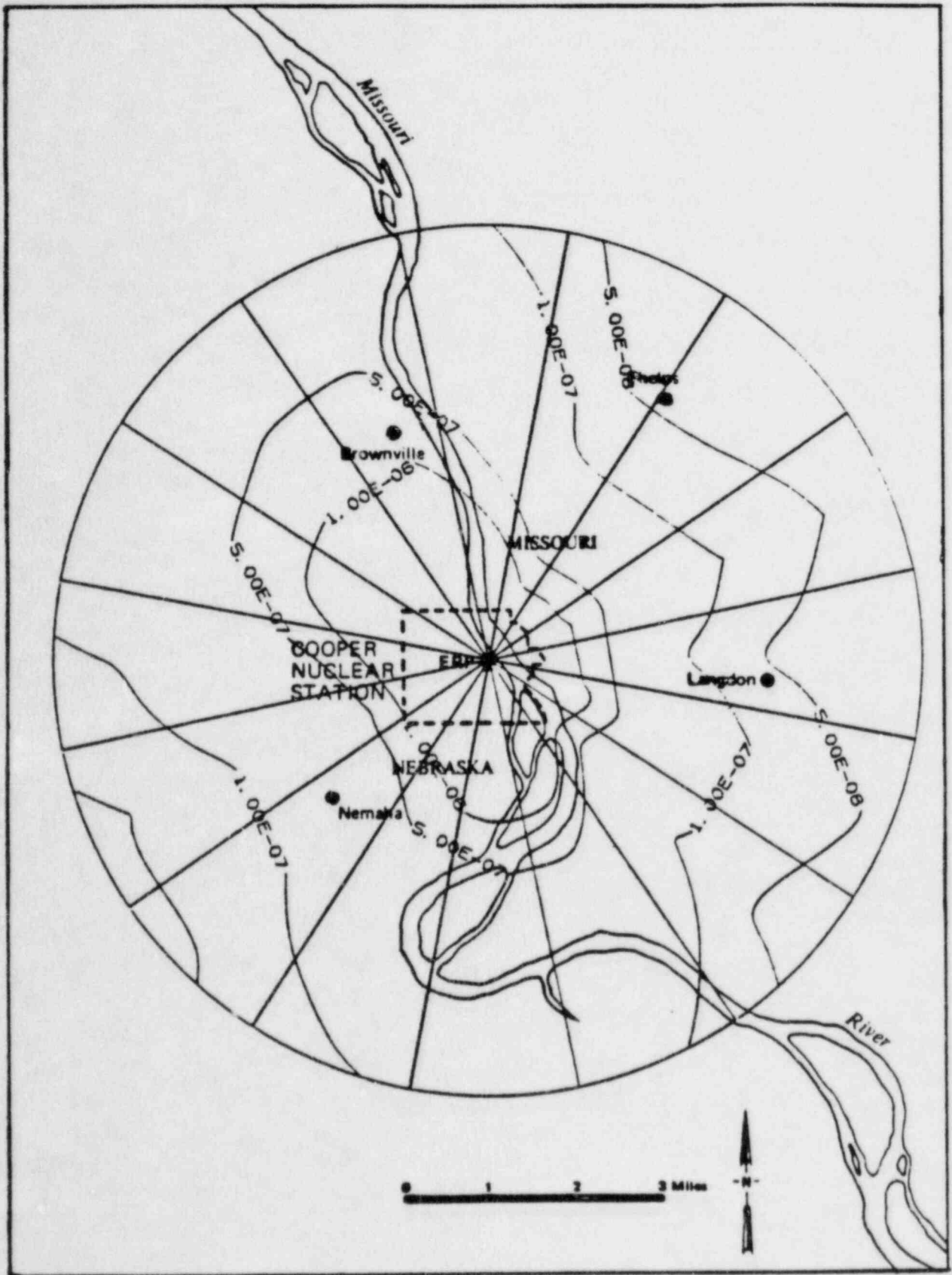


Figure 3 Atmospheric Diffusion Estimate Isopleths, 0-5 Miles Ground-Level Releases, January-March 1983 (sec/m^3)

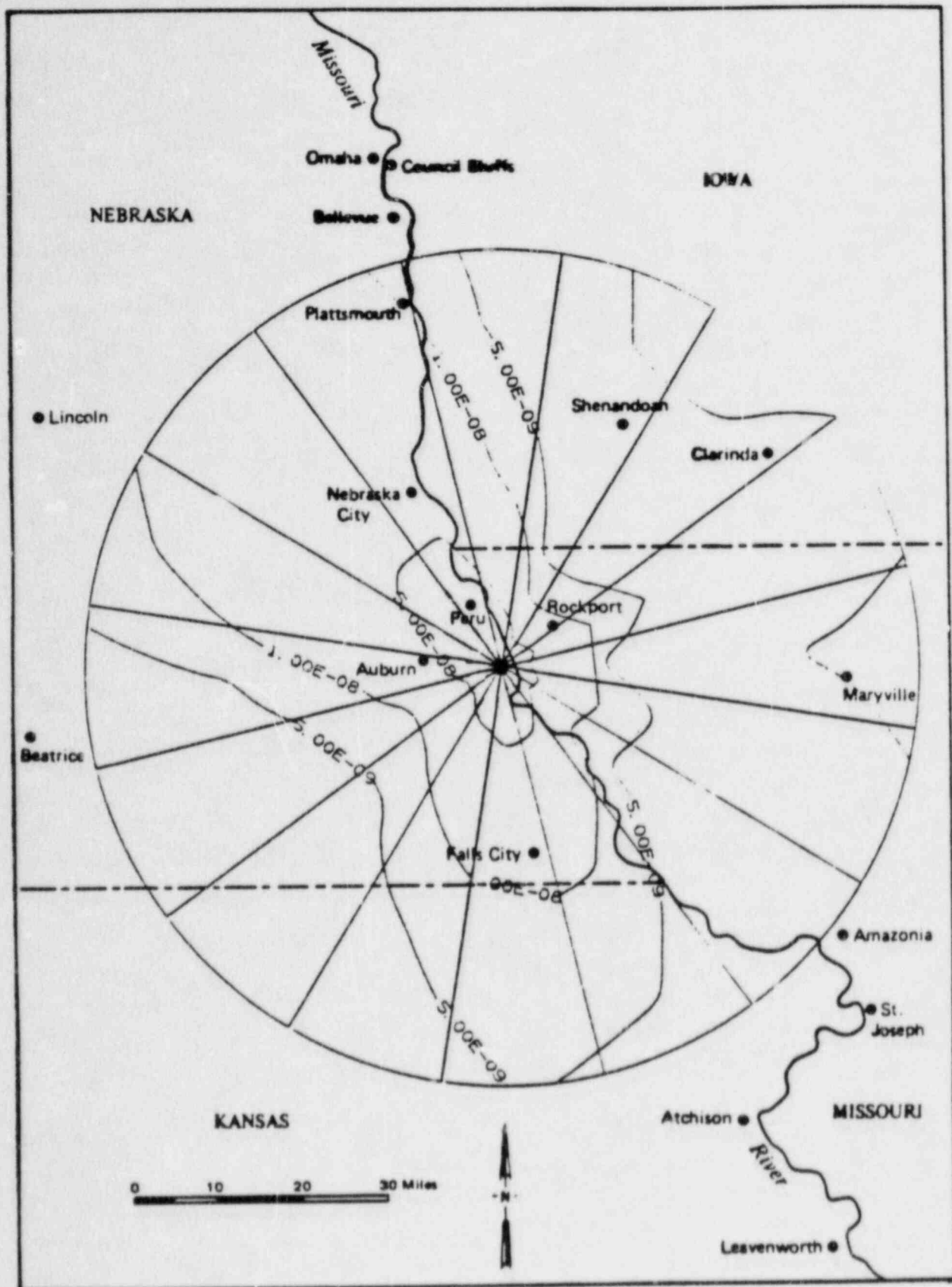


Figure 4 Atmospheric Diffusion Estimate Isopleths, 0-50 Miles Ground-Level Releases, January-March 1983 (sec/m^3)

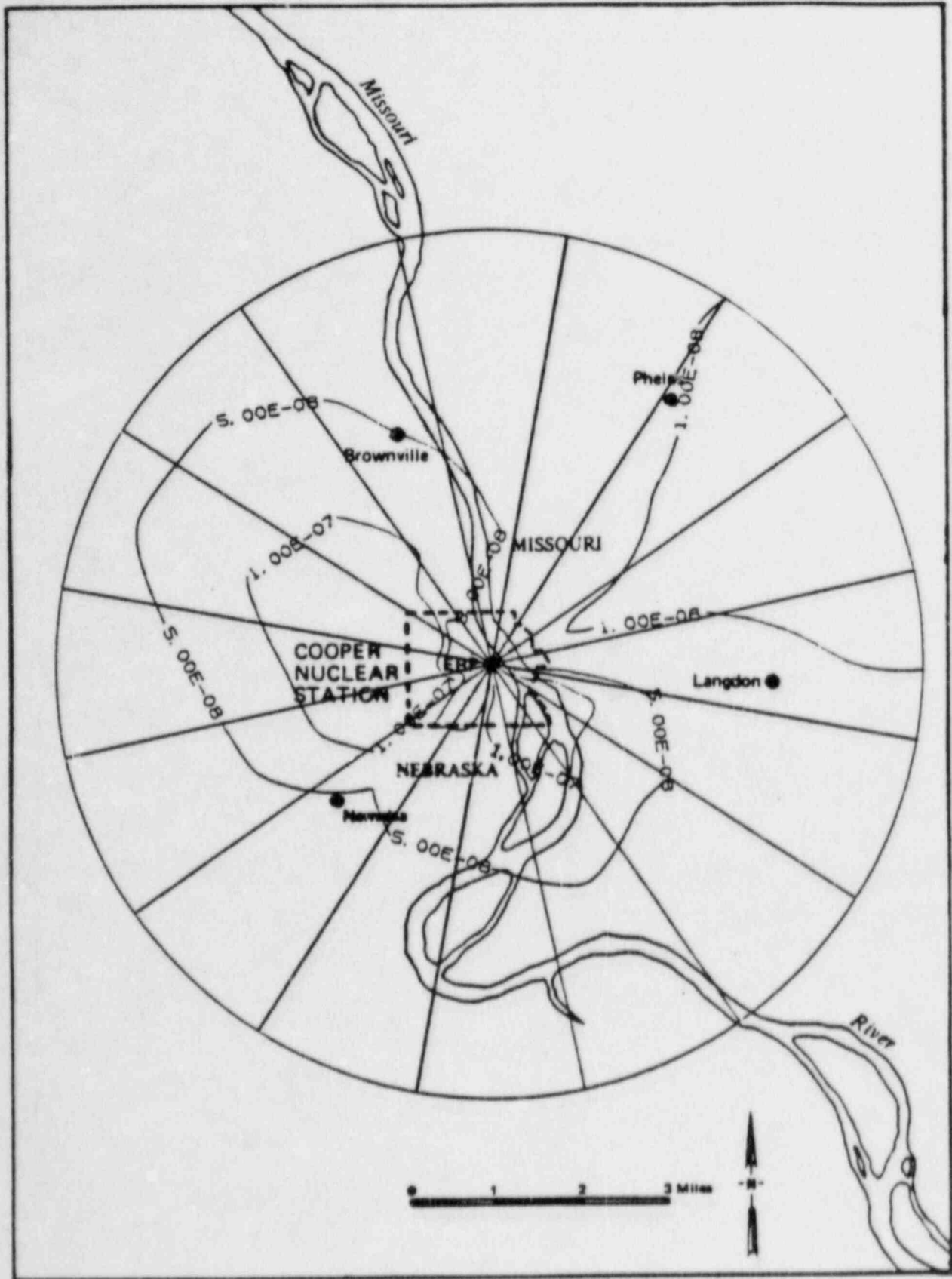


Figure 5 Atmospheric Diffusion Estimate Isopleths, 0-5 Miles Elevated Releases, January-March 1983 (sec/m^3)

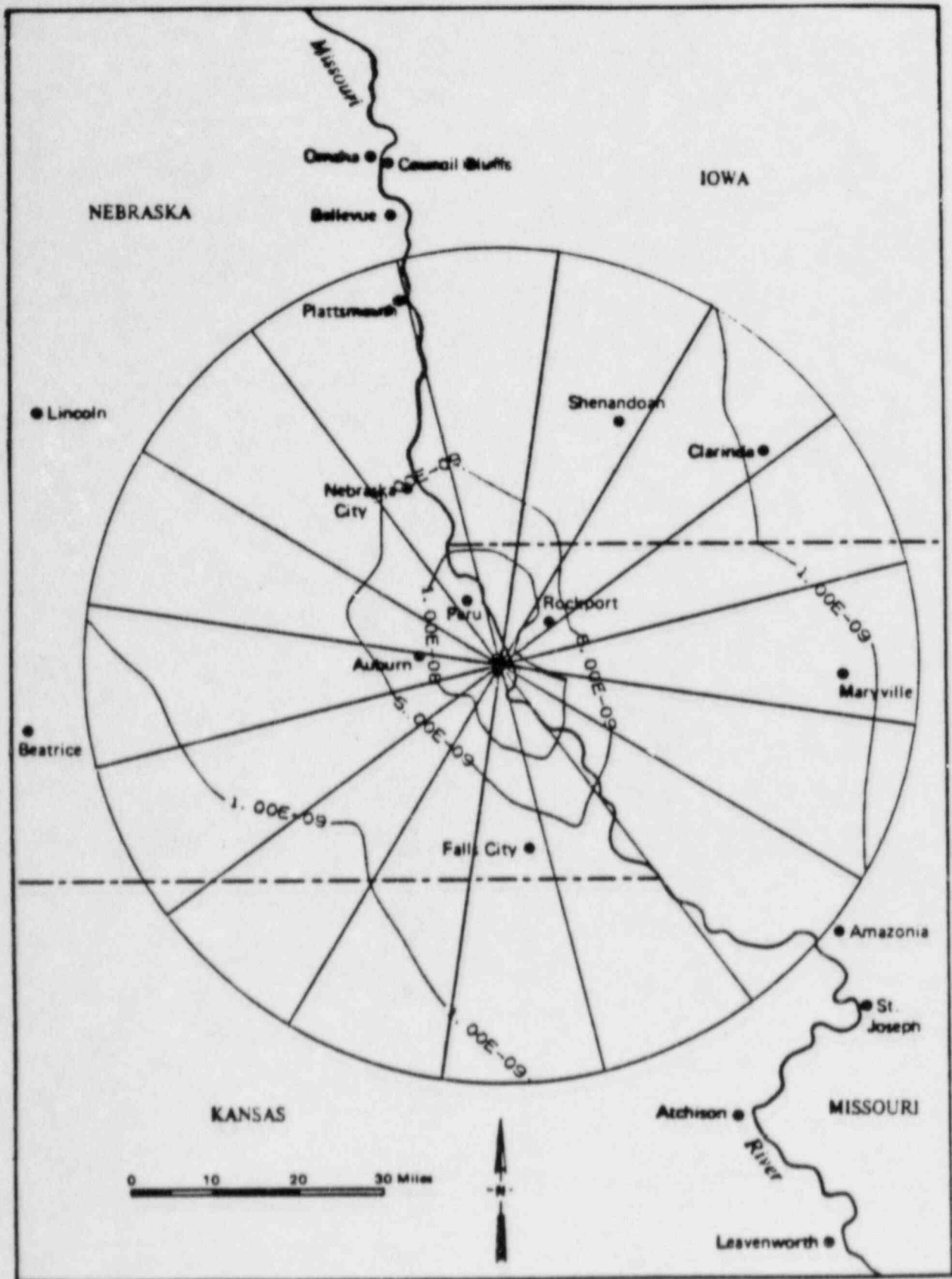


Figure 6 Atmospheric Diffusion Estimate Isopleths, 0-50 Miles Elevated Releases, January-March 1983 (sec/m^3)

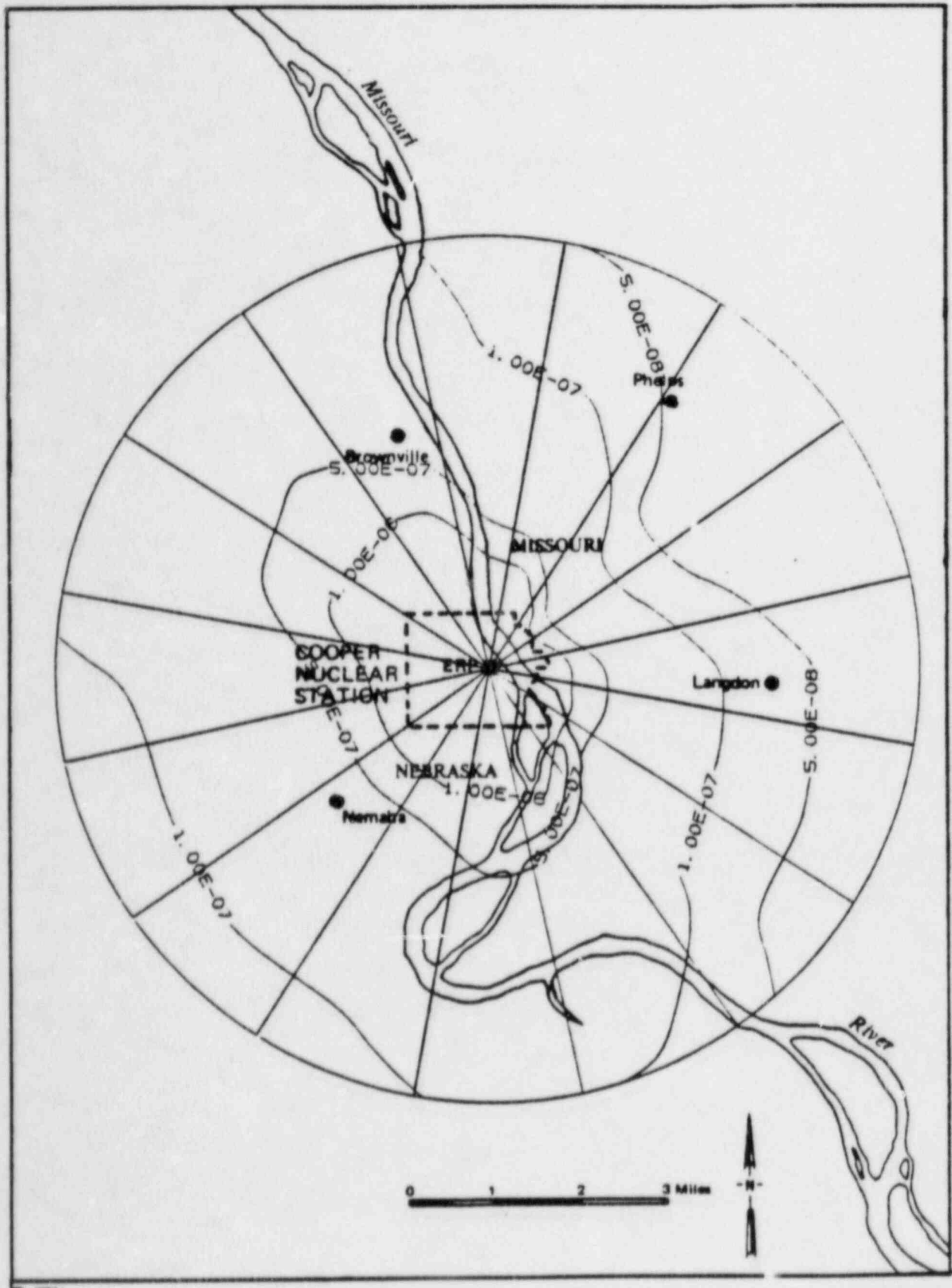


Figure 7 Atmospheric Diffusion Estimate Isopleths, 0-5 Miles Ground-Level Releases, April-June 1983 (sec/m^3)

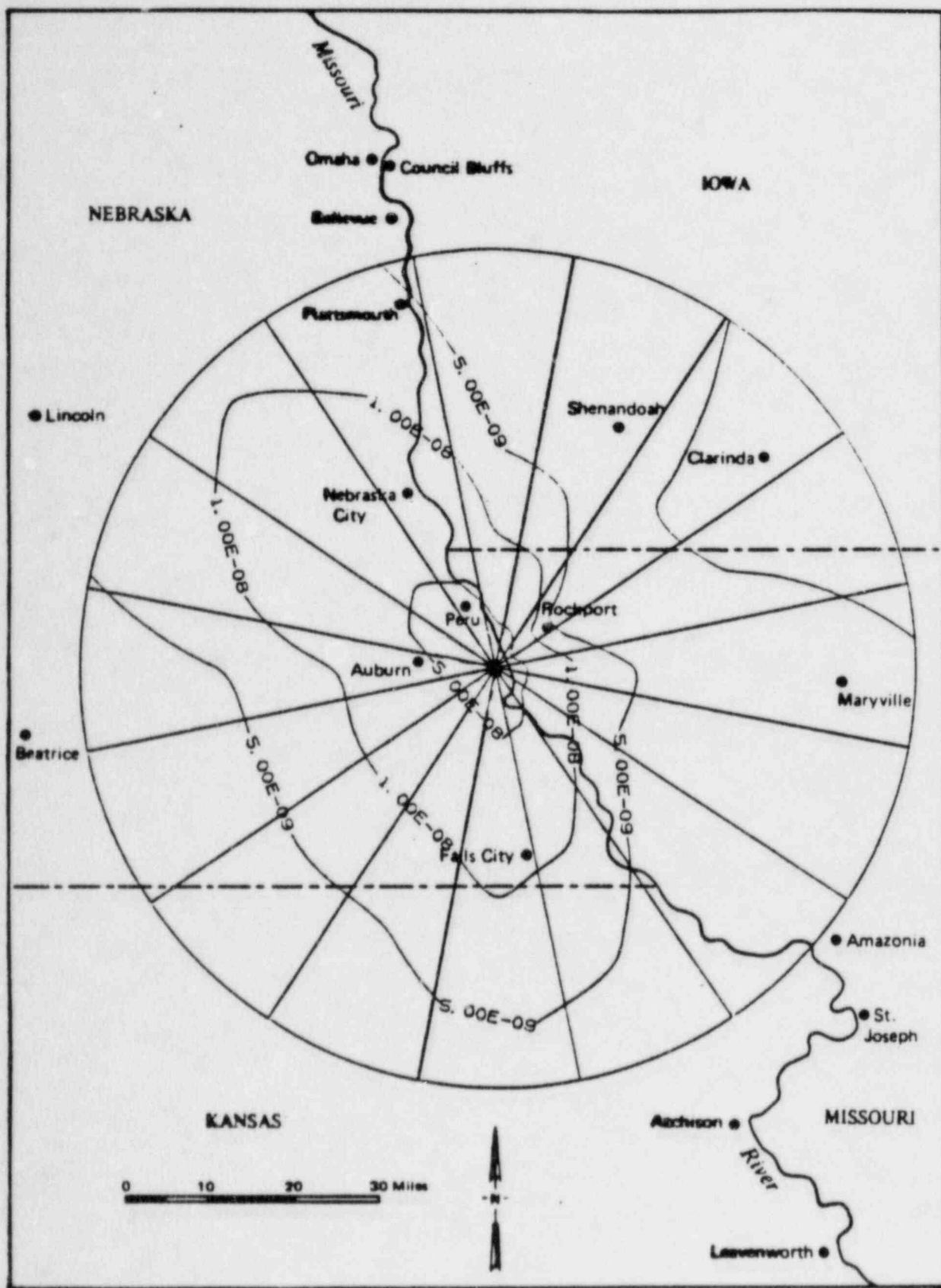


Figure 8 Atmospheric Diffusion Estimate Isopleths, 0-50 Miles Ground-Level Releases, April-June 1983 (sec/m^3)

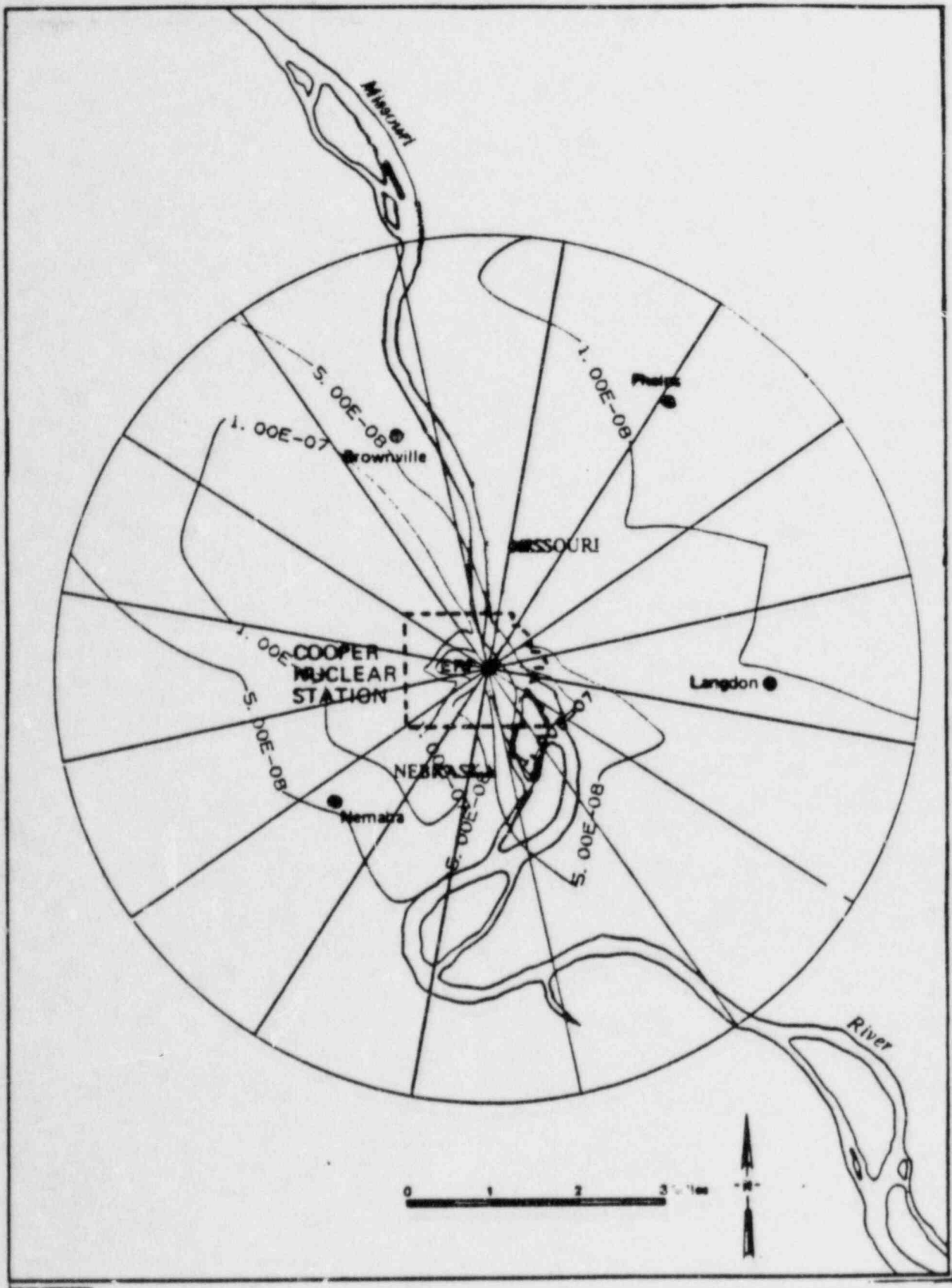


Figure 9 Atmospheric Diffusion Estimate Isopleths, 0-5 Miles Elevated Releases, April-June 1983 (sec/m^3)

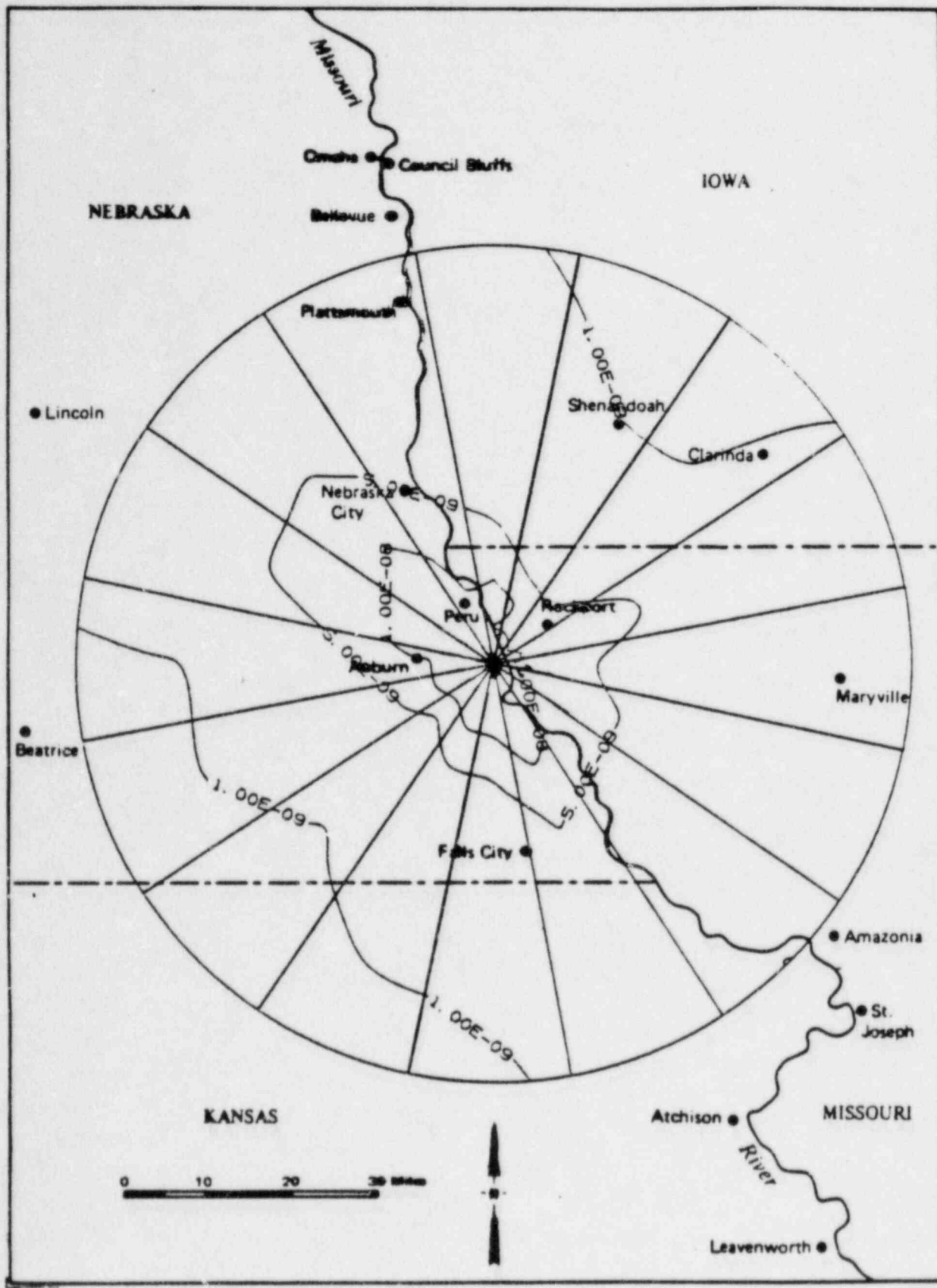


Figure 10 Atmospheric Diffusion Estimate Isopleths, 0-50 Miles Elevated Releases, April-June 1983 (sec/m^3)

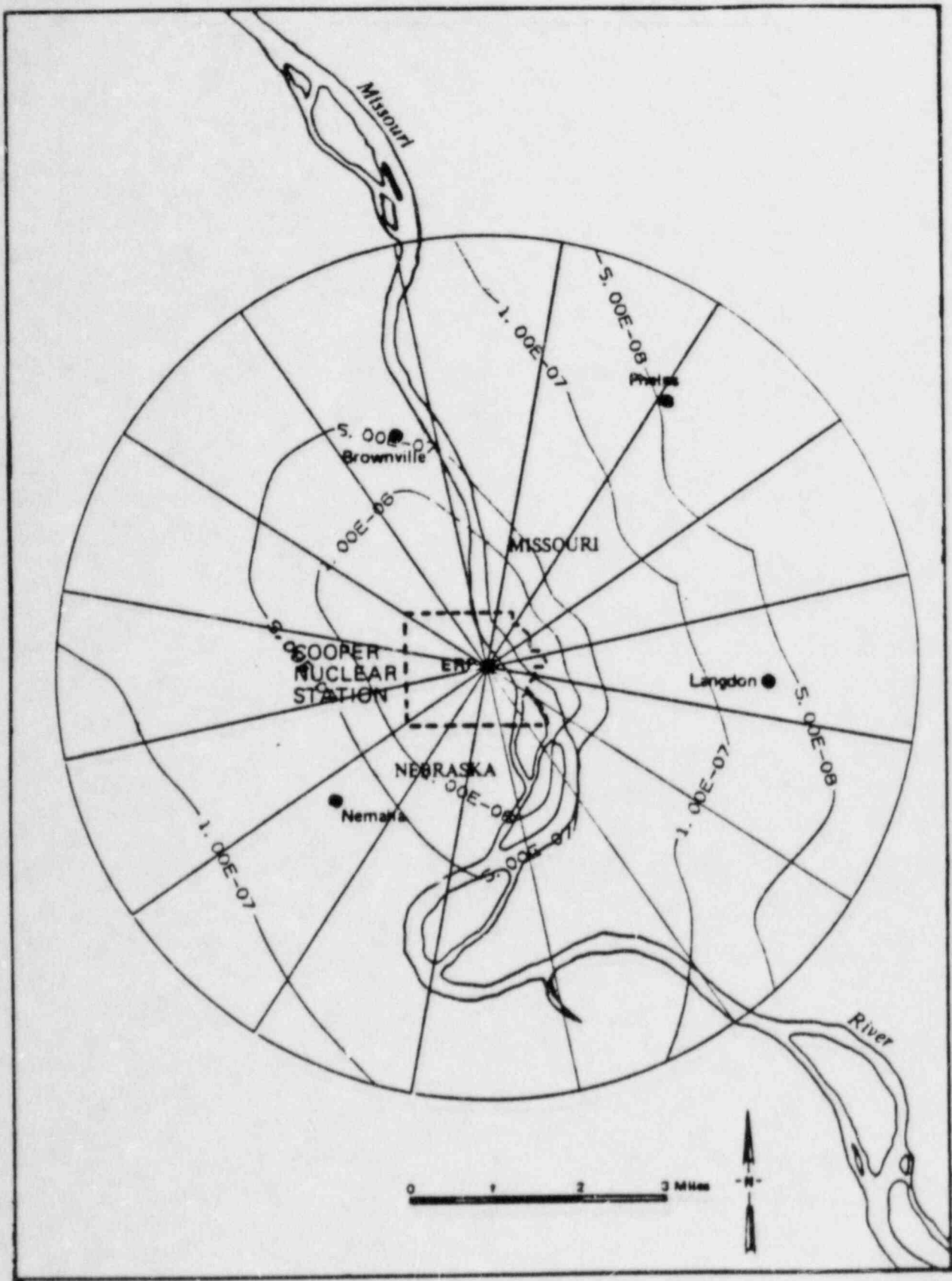


Figure 11 Atmospheric Diffusion Estimate Isopleths, 0-5 Miles Ground-Level Releases, January-June 1983 (sec/m^3)

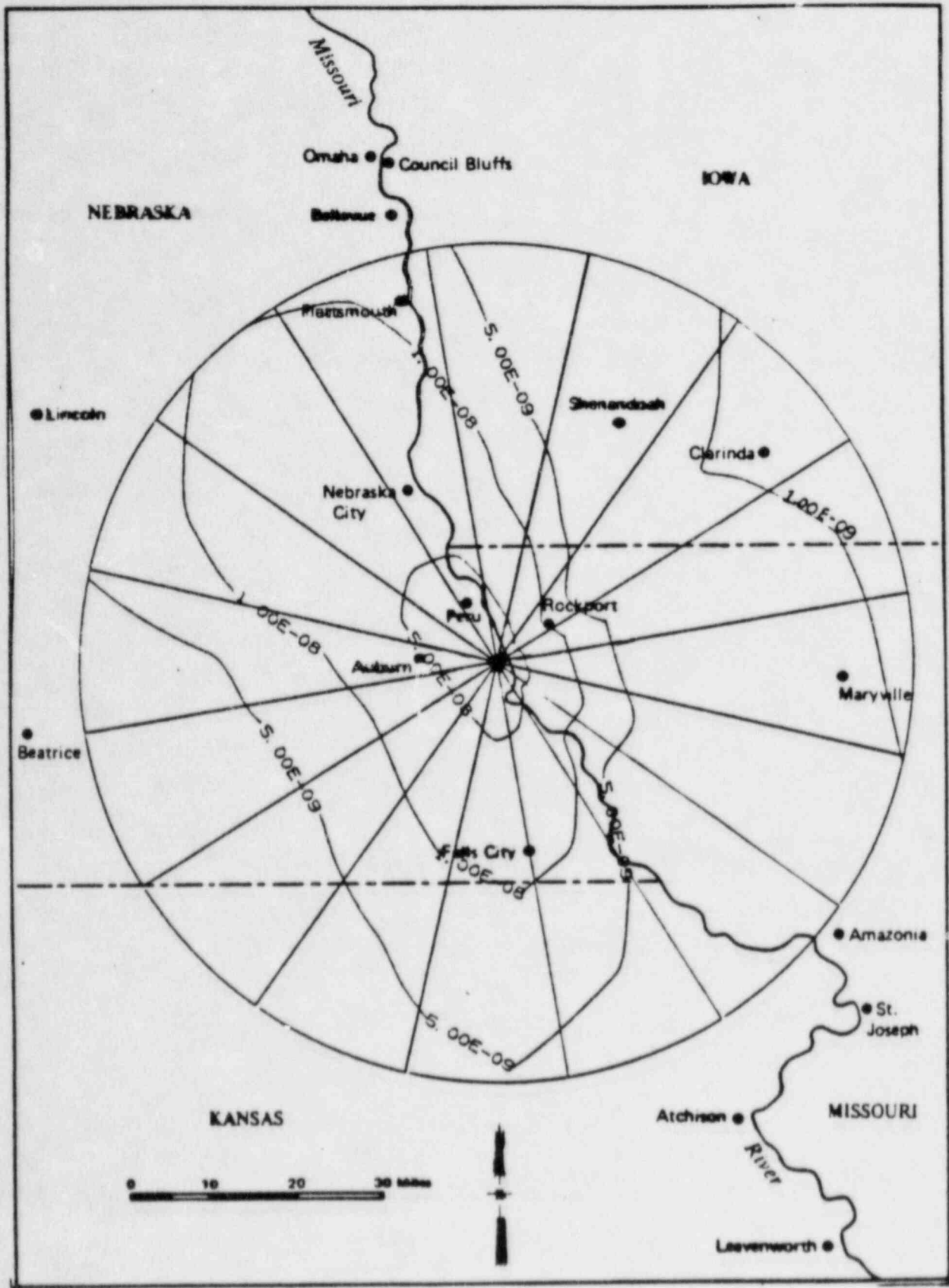


Figure 12 Atmospheric Diffusion Estimate Isopleths, 0-50 Miles Ground-Level Releases, January-June 1983 (sec/m³)

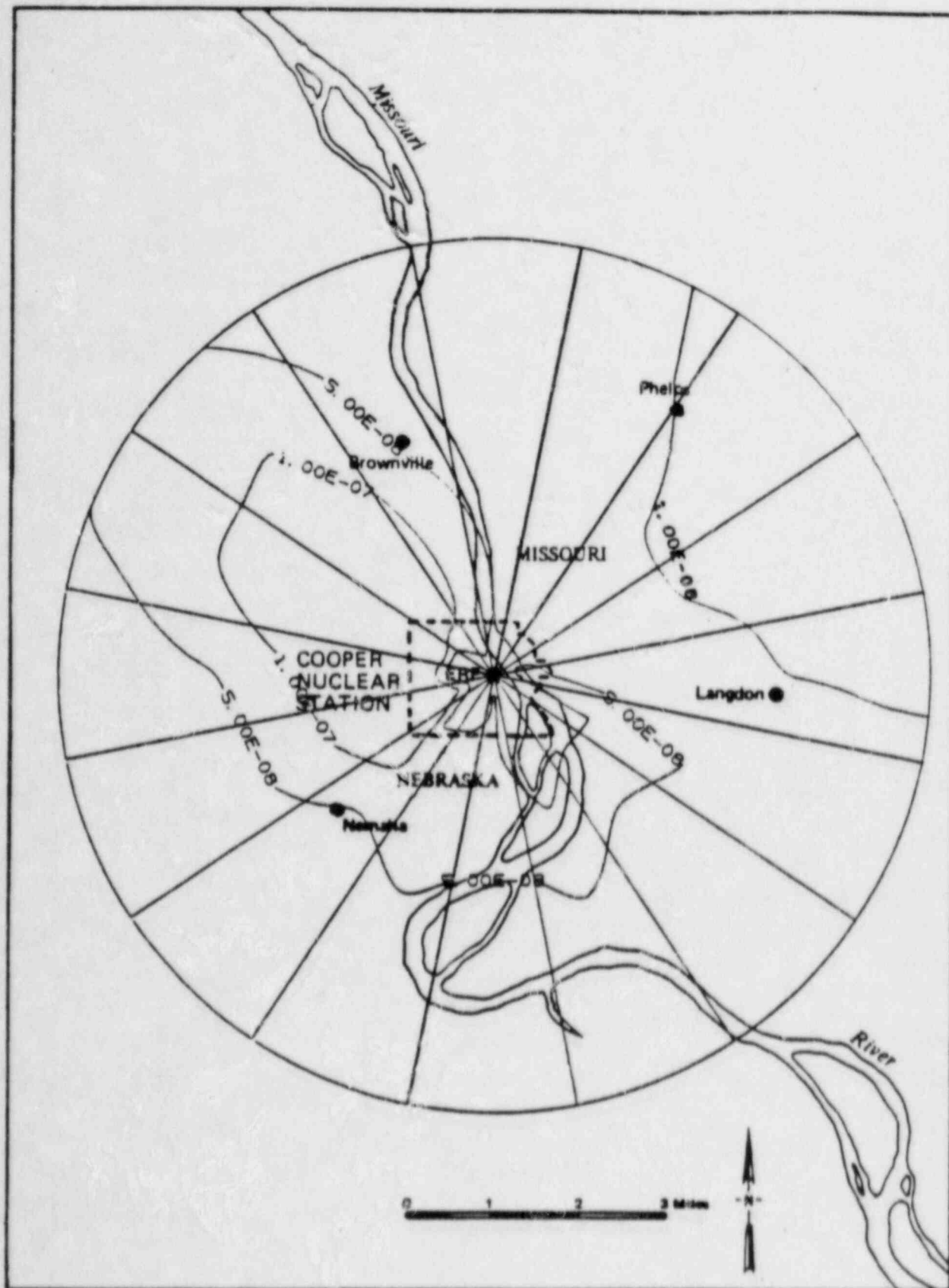


Figure 13 Atmospheric Diffusion Estimate Isopleths, 0-5 Miles Elevated Releases, January-June 1983 (sec/m^3)

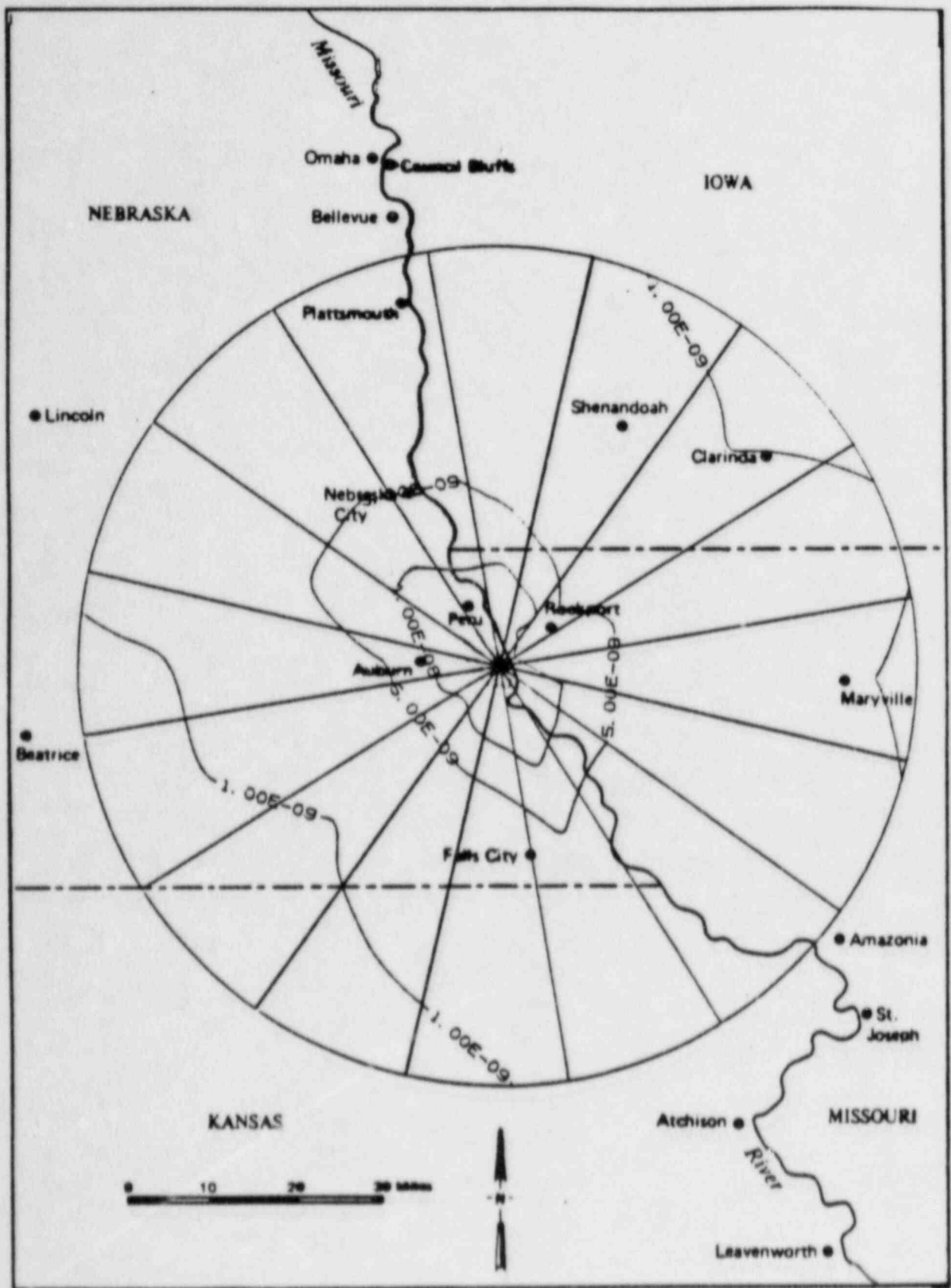


Figure 14 Atmospheric Diffusion Estimate Isopleths, 0-50 Miles Elevated Releases, January-June 1983 (sec/m^3)

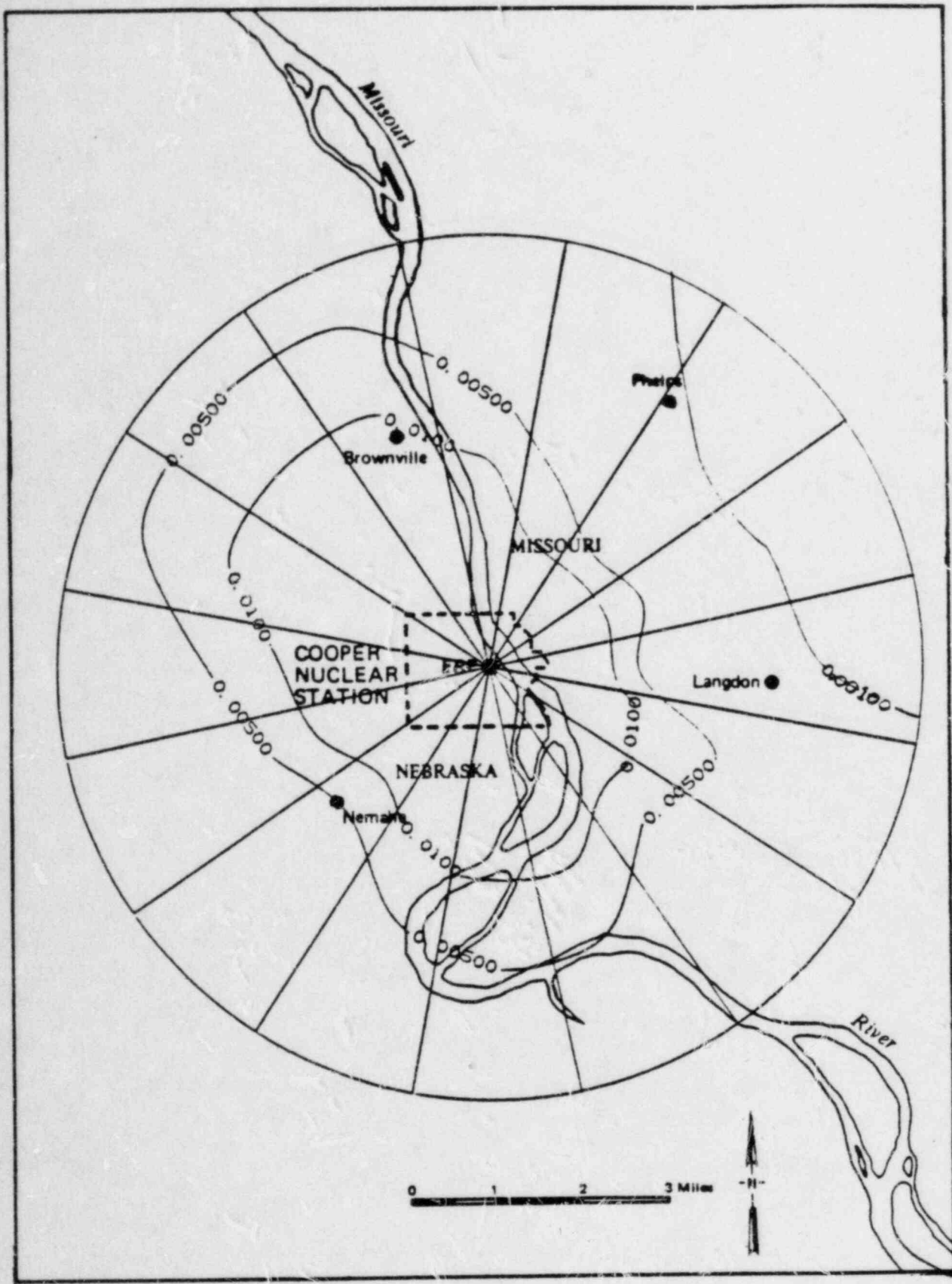


Figure 15 Gamma Air Dose Isopleths, 0-5 Miles
January-March 1983 (millirad)

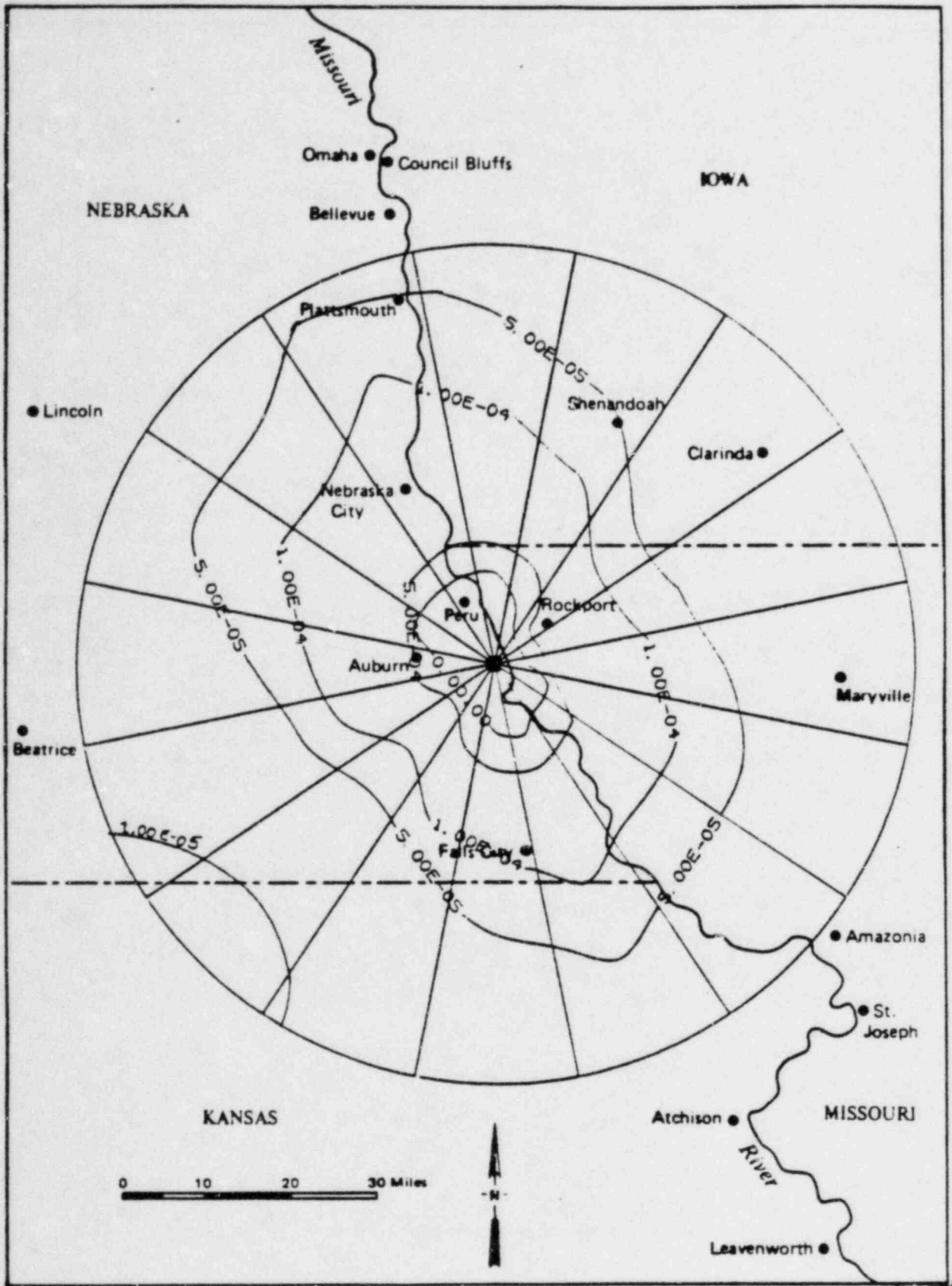


Figure 16 Gamma Air Dose Isopleths, 0-50 Miles
January-March 1983 (millirad)

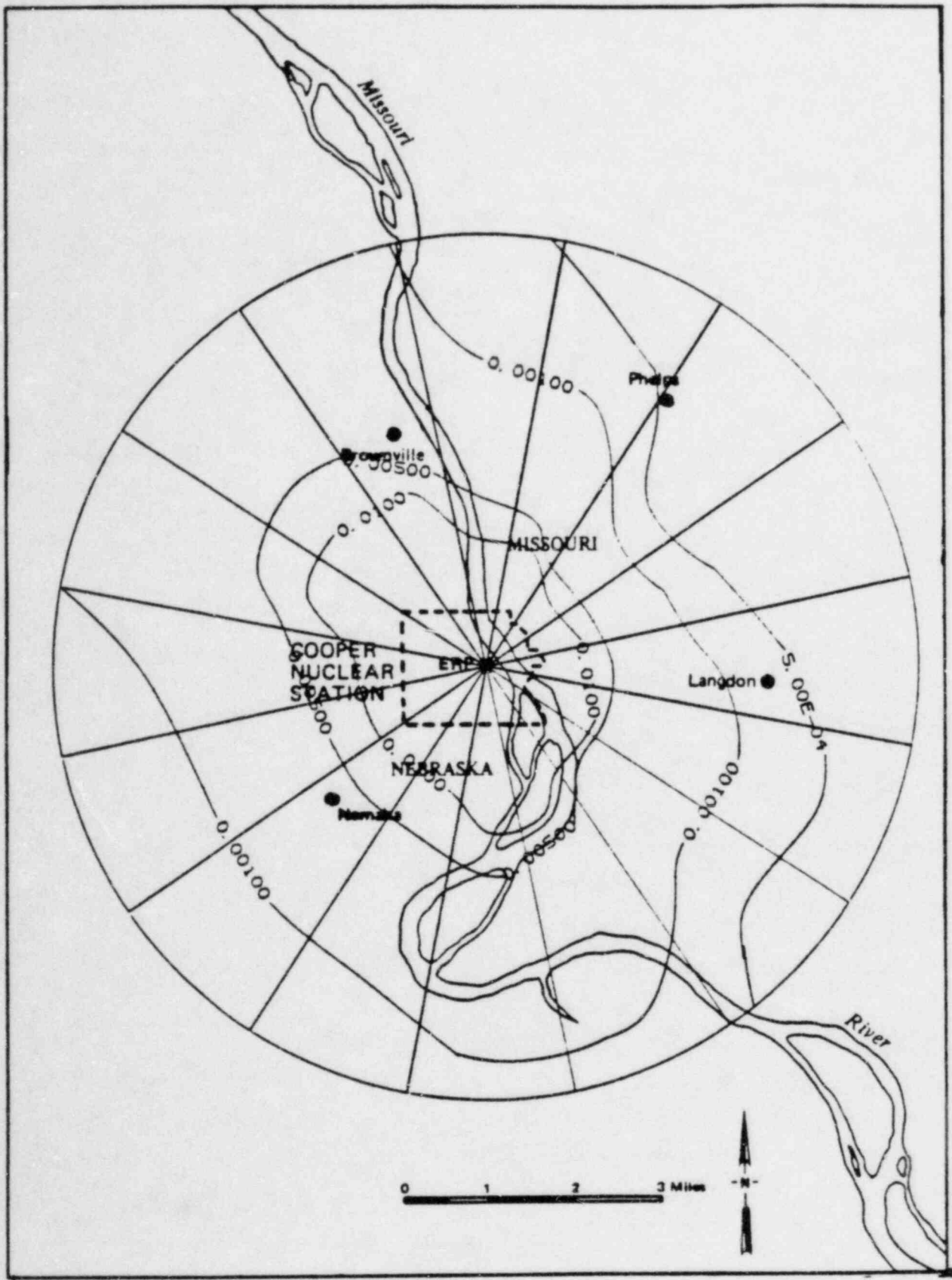


Figure 17 Gamma Air Dose Isopleths, 0-5 Miles
April-June 1983 (millirad)

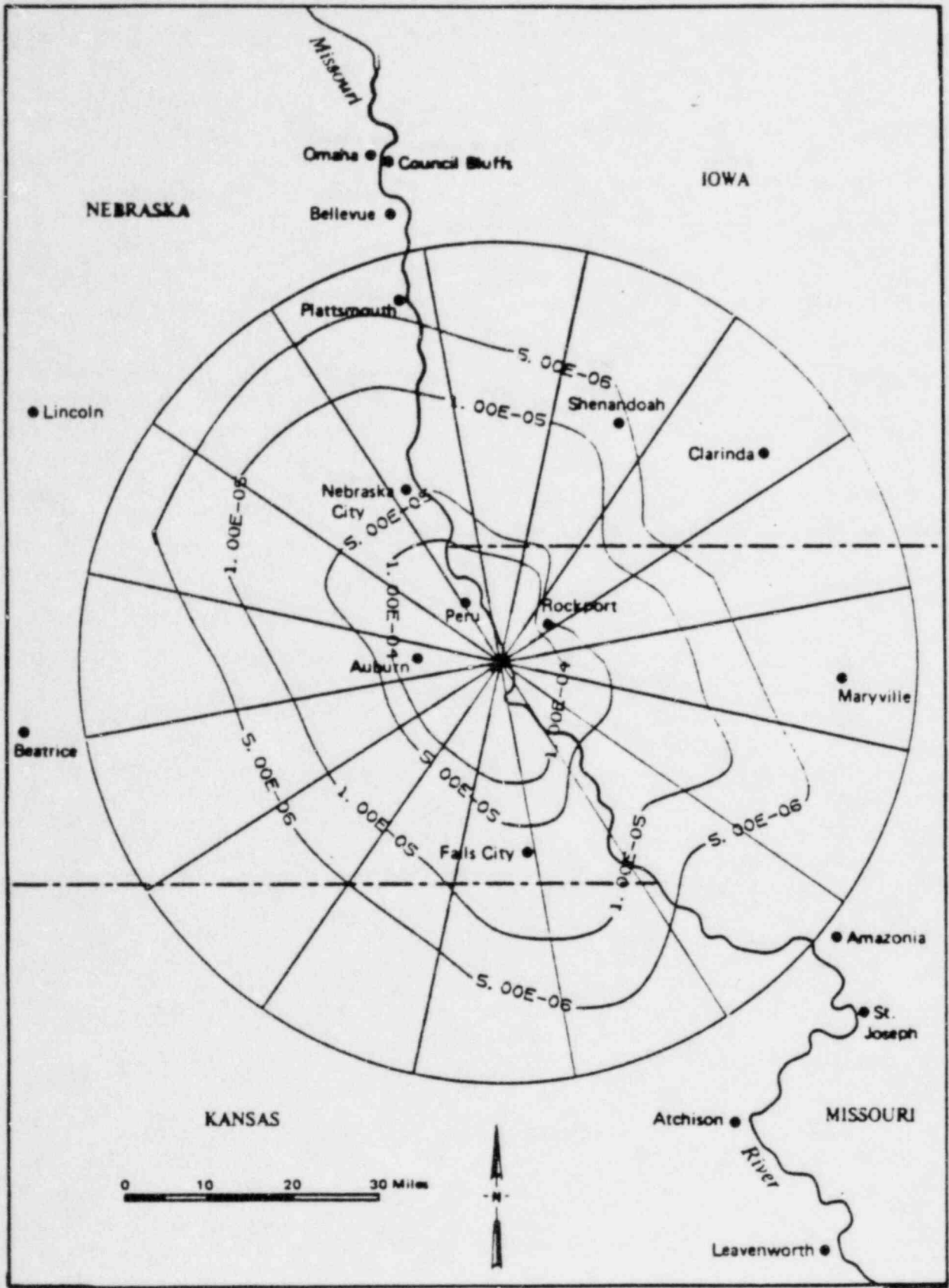


Figure 18 Gamma Air Dose Isopleths, 0-50 Miles
April-June 1983 (millirad)

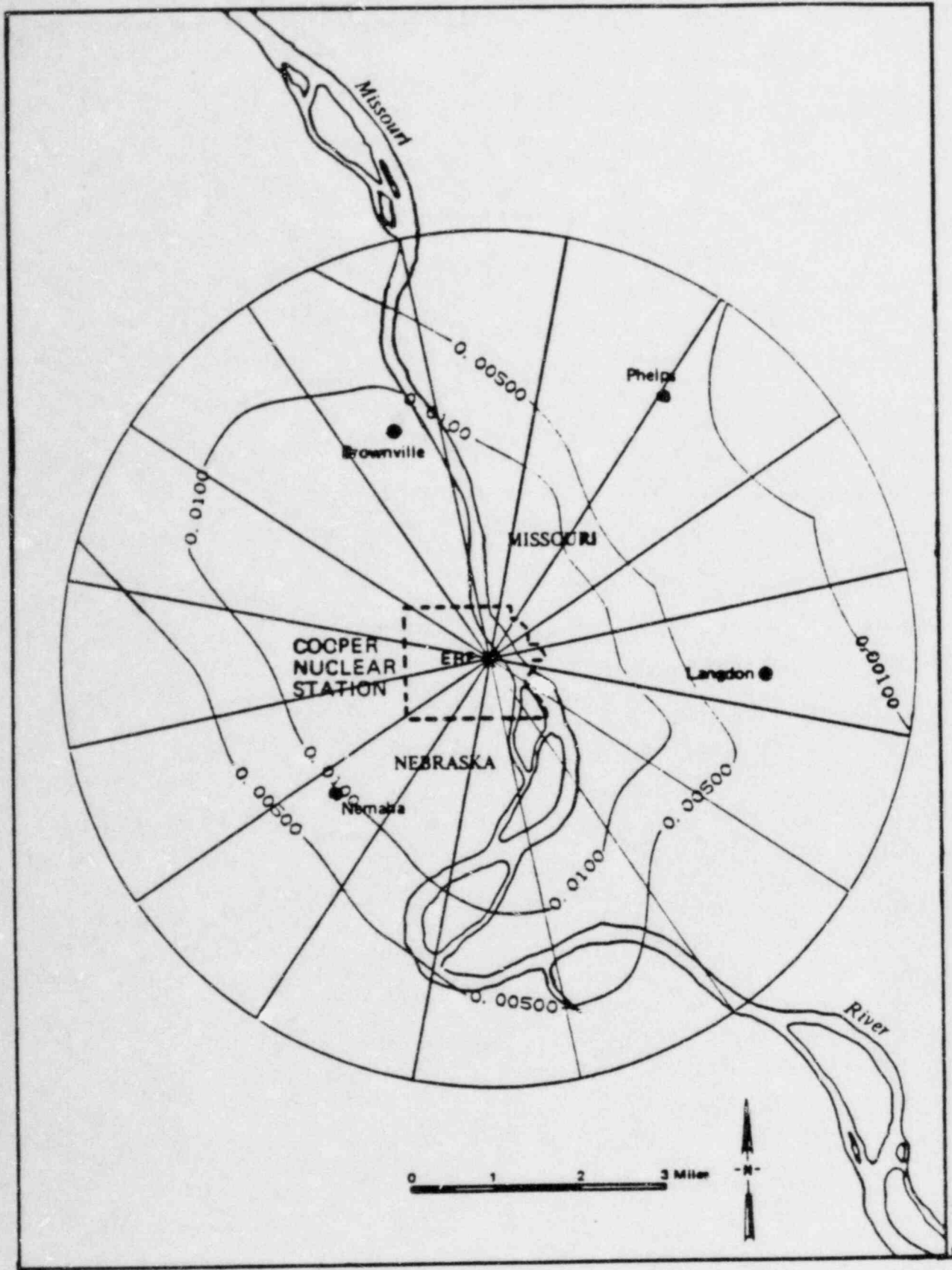


Figure 19 Gamma Air Dose Isopleths, 0-5 Miles
January-June 1983 (millirad)

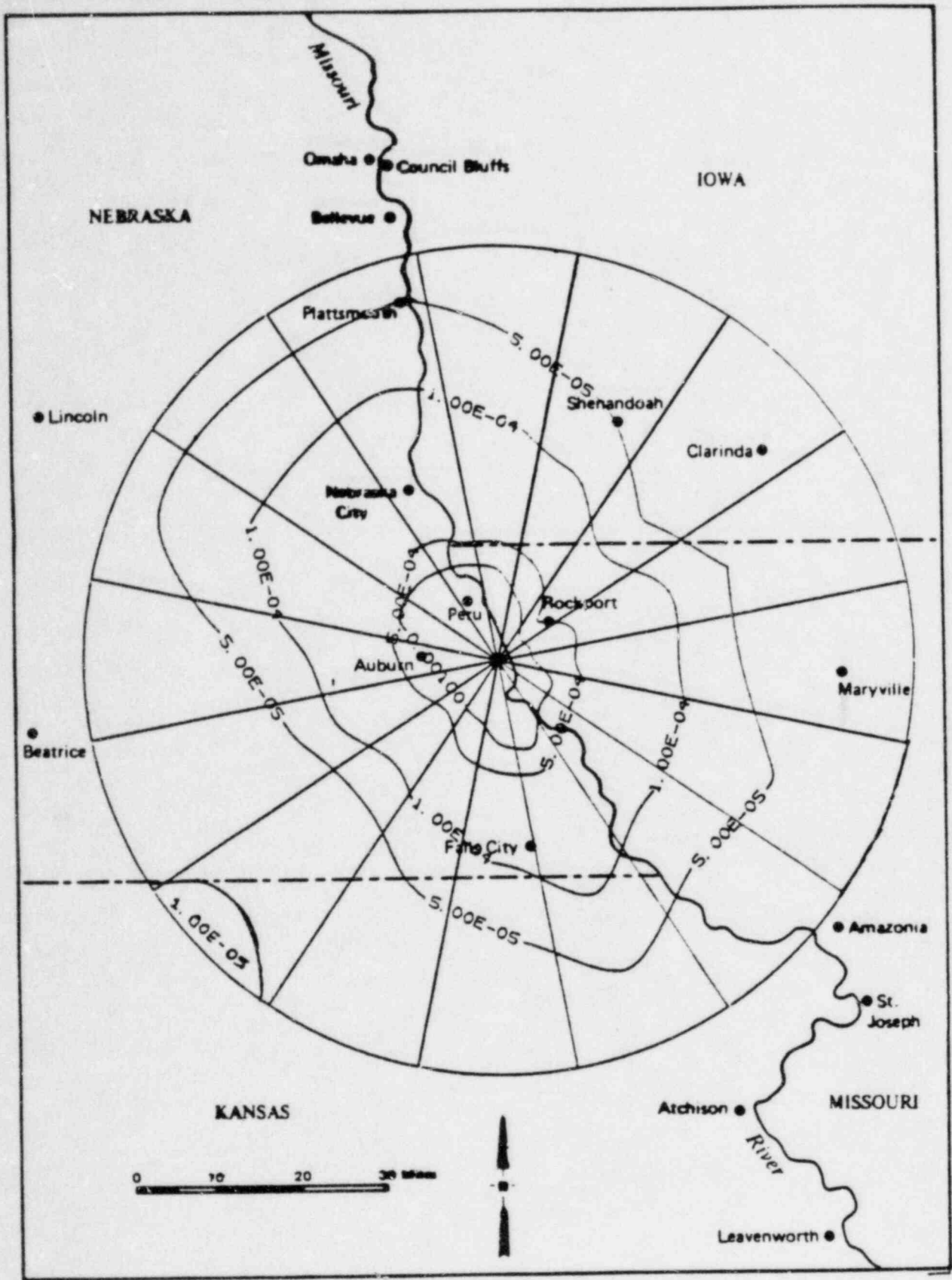


Figure 20 Gamma Air Dose Isopleths, 0-50 Miles
January-June 1983 (millirad)