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Docket # 50-272
Control # 782480101
Date 8/28/78 of Document
REGULATORY DOCKET FILE

1978

SEMIANNUAL RADIOACTIVE
EFFLUENT RELEASE REPORT
RERR-4

SALEM NUCLEAR GENERATING STATION
STATION-UNIT NO.1

DOCKET NO. 50-272
OPERATING LICENSE NO. DPR-70

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REPORT NO. RERR-4

UNIT NO. 1
RADIOACTIVE EFFLUENT RELEASE REPORT
JANUARY - JUNE 1978

SALEM NUCLEAR GENERATING STATION
Public Service Electric and Gas Company

SALEM NUCLEAR GENERATING STATION
50-272

UNIT NO. 1
RADIOACTIVE EFFLUENT RELEASE REPORT
January 1, 1978 to June 30, 1978

Introduction

The Salem Nuclear Generating Station went critical on December 11, 1976, and has continued in operation through June 1978. This report, RERR-4, summarizes the release of radioactive materials in liquid, gaseous and solid form during the period from January 1, 1978 to June 30, 1978. During the period from March 16 through June 14, 1978 the station was not in operation. This report was prepared in the format specified in USNRC Regulatory Guide 1.21.

Release of radioactive materials from the Salem station during the reporting period were within the limits set forth in the Environmental Technical Specifications. Calculated radiation exposures to off-site individuals were small fractions of the limits set forth in 10CFR20 and within Appendix I to 10CFR50 requirements.

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1978)

A. SUMMARY INFORMATION

1.0 Regulatory Limits

Symbols utilized in the equations listed below under Sections 1.1 and 1.2 are the same as those used in the Salem Environmental Technical Specifications (ETS). The symbol Q as explained in Section 2.3.3 of the ETS is the release rate of the gaseous activity in units of curies per second. The F, L, M and N terms are actually site dependent dose conversion factors. The equations listed below in Sections 1.1 and 1.2 take into consideration the release point location, building wake effects and physical characteristics of the radionuclides released.

1.1 Fission and Activation Gases -

Gaseous releases from the nuclear units are limited such that at no time will releases of gaseous radioactive materials cause a member of the general public to be exposed to an annual dose rate in excess of 500 mrem to his entire body or 3 rem to his skin in conformance with the requirements of 10CFR20.

Gaseous releases from the units are further restricted such that when releases are averaged over a calendar quarter no member of the general public will be exposed to an annual dose rate in excess of 20 millirads of gamma radiation or 40 millirads of beta radiation.

In addition, it is required that air doses averaged over a twelve month period be less than 40 and 80 millirad for gamma and beta radiation respectively.

At any instant the release rate of radioactive gases must satisfy the following equations whose basis is 10CFR20.

$$2.0 Q_{tv} * K_v \leq 1$$

$$0.33 Q_{tv} * (L_v + 1.1 N_v) \leq 1$$

The release limit Q is therefore calculated to be $1.43E+6$ and $3.57E+5$ microcuries/sec for the 1st and 2nd quarter respectively.

When averaged over a calendar quarter the release rate for radioactive gases must satisfy the following equation. The basis for these equations is 10CFR50 Appendix I.

$$13 Q_{tv} * N_v \leq 1$$

$$6.3 Q_{tv} * M_v \leq 1$$

The release limit Q is therefore calculated to be 5.67E4 and 2.65E4 microcuries/sec for the 1st and 2nd quarter respectively.

When averaged over any twelve consecutive month period, the release rate for radioactive gases must satisfy the following equation. The basis for this equation is 10CFR50 Appendix I.

$$25 Q_{tv} * N_v \leq 1$$

$$13 Q_{tv} * M_v \leq 1$$

The release limits of radioactive gases for the Salem Nuclear Generating Station are not fixed numbers, but depend upon the radioactive isotopes present in the effluent.

1.2 Iodine and Particulates, Half Life > 8 days

The regulatory limits for iodines and particulates are listed below.

Releases of iodine and particulates are restricted such that no member of the general public will receive a dose rate in excess of 1.5 rem to the thyroid.

Releases of iodines and particulates are further restricted to prevent any member of the general public from receiving a dose rate in excess of 30 mrem in a calendar quarter or 60 mrem in any twelve month period. The equations which govern these conditions are listed below.

At any instant of time the release rate for radioactive iodines and particulates material with a half life greater than 8 days is limited by the equation below. The basis for this equation is 10CFR20.

$$(1.5 \times 10^5) Q_v \leq 1$$

During any calendar quarter the release limit is governed by the equations listed below. The basis for these equations is 10CFR50 Appendix I.

$$\begin{array}{c} 2 \text{ curies of I-131} \\ \text{and} \\ Q_v \times 13 \times (1.5 \times 10^5) \leq 1 \end{array}$$

During any twelve month period radioactive releases should conform to the following constraints as prescribed by 10CFR50 Appendix I.

$$\begin{array}{c} 25 \times (1.5 \times 10^5) \times Q_v \leq 1 \\ \text{and} \\ 4 \text{ curies of I-131} \end{array}$$

1.3 Liquid Effluents

The regulatory limits for radioactive liquids released from the plant are governed by 10CFR20, Appendix B, Table II, Column 2.

In addition, the following limits apply:

The cumulative release of radioactive effluents, excluding tritium and dissolved gases, shall be less than 10 Ci in a calendar quarter for each unit.

The cumulative release of radioactive effluents, excluding tritium and dissolved gases, shall be less than 20 Ci in any twelve consecutive months.

2.0 Maximum Permissible Concentrations

Regulatory Guide 1.21 requires that the licensee provide the MPC's used in determining allowable release rates for radioactive releases. We have addressed this question below.

- a. Fission Gases - MPC values were not used to determine the maximum release rates.
- b. Iodines - MPC values were not used to determine the maximum release rates.
- c. Particulates, Half Lives > 8 days - MPC limits were not used to determine the maximum release rates.
- d. Liquid effluents - MPC values as stated in 10CFR20, Appendix B, Table II, Column 2 were used.

3.0 Average Energy

Regulatory Guide 1.21 requires that the licensee provide the average energy of the radionuclide mixture in releases of fission and activation gases, if applicable.

Release limits for the SNGS are not based upon average energy, hence, this section does not apply.

4.0 Measurements and Approximation of Total Radioactivity

4.1 Liquid effluents are monitored in accordance with Table 2.3-3 of the Environmental Technical Specifications. During the period of record, all wastes from the chemical drain tank and the laundry and hot shower tanks were routed to the hold-up tanks for monitoring. These tanks were then recirculated the equivalent of two tank volumes to produce uniform mixing and a sample was extracted and analyzed before any release was made. Batch releases included releases from the waste monitor tanks, waste monitor hold-up tanks, and the chemical and volume control tanks. Continuous releases included releases from intermittent blowdown of the steam generators. The predominate isotope detected continued to be cobalt 58. Other isotopes detected included Co60, Mn54, and H3 (tritium). At no time did releases exceed limits.

4.2 Gaseous effluent streams are monitored in accordance with Table 2.3-4 of the Environmental Technical Specifications. The plant vent is the final release point of all planned gaseous effluents and is continually monitored by four very sensitive GeigerMueller tubes. The vent is also sampled for iodine and particulates with a charcoal cartridge and Cesco filter paper connected in series to a low volume air sampler. The filter and charcoal are changed weekly and analyzed on a multichannel analyzer in the laboratory. Sampling is also performed on all gas decay tanks prior to release to the environment. The results of these analyses are used as the basis for the cumulative release of gaseous effluents into the environment. All tritium samples were taken by bubbling gas through water and then counting the tritiated water on a liquid scintillation counter.

- 4.3 The estimated total error of the reported continuous gaseous releases is within 50%. This error is due primarily to variability of waste stream flow rates and changes in isotopic distributions of waste streams between sampling periods. The estimated total error of the reported batch gaseous releases is within 10%.

The estimated total error of reported liquid releases is within 25%.

5.0 Batch Releases

In order to maintain releases as low as practical as releases approached 1.25 ci, liquid radwaste was processed through a licensed contractor's demineralizers prior to discharge. The resins from these demineralizers were transported to an offsite burial facility.

Batch releases of gaseous and liquid effluent are provided in Tables 4A - 4B.

6.0 Unplanned Releases

There were no abnormal releases to an unrestricted area during this reporting period.

Part B. Gaseous Effluents

See Summary Tables 1A - 1C.

Part C. Liquid Effluents

See Summary Tables 2A and 2B.

Part D. Solid Waste

See Summary Table 3.

Part E. Radiological Impact on Man

The calculated individual doses in this section are based on actual locations of nearby residents and farms. The population dose impact is based on the projected 1980 population and historical site specific data i.e., food production, milk production, feed for milch animals and seafood production.

The doses were calculated using methods described in Regulatory Guide 1.109 and represent calculations for the six month reporting interval.

Liquid Pathways

Doses to individuals in the population from liquid releases are primarily from the seafood ingestion pathway. The total body dose to an individual was calculated to be $7.95\text{E-}3$ mrem. The calculated population total body dose was $3.96\text{E-}2$ man-rem. The highest organ dose from liquid releases was $2.78\text{E-}2$ mrem to the gastrointestinal tract.

Air Pathways

The resulting whole body and skin doses to an individual were calculated to be $1.01\text{E-}3$ mrem and $1.01\text{E-}3$ mrem respectively. The calculated population total body dose was $1.05\text{E-}1$ man-rem.

Direct Radiation

Direct radiation may be estimated by TLD measurements. One method for comparing TLD measurements is by comparison with preoperational data. Direct radiation measurements of on site locations averaged only 4.46 mrem/month. This value is not statistically different from the preoperational value of 4.42 mrem/month.

Maximum Organ Doses

The maximum organ doses from radioactive iodines and particulates was $2.85\text{E-}2$ mrem to the GI-Tract.

Part F. Meteorological Data

Cumulative joint wind frequency distribution by atmospheric stability class are provided for the first and second quarters of 1977 as Table 5 and 6. Tables 7 and 8 provide joint wind frequencies during batch releases.

TABLE 1A
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1978)
GASEOUS EFFLUENTS-SUMMATION OF ALL RELEASES

	Unit	1st Quarter	2nd Quarter	Est. Total(2) Error %
A. Fission & activation gases				
1. Total release	Ci	1.85E00	4.49E-04	2.50E+01
2. Average release rate for period	uCi/sec.	2.38E-01	5.71E-05	
3. Percent of technical specification limit	%	4.19E-04	2.16E-07	
(See ETS Spec. 2.3.3.b)				
(1)				
B. Iodines				
1. Total iodine-131	Ci	-	6.11E-05	2.50E+01
2. Average release rate for period	uCi/sec.	-	7.77E-06	
3. Percent of technical specification limit	%	-	1.51E-03	
C. Particulates				
1. Particulates with half-lives > 8 days	Ci	3.12E-05	0	2.50E+01
2. Average release rate for period	uCi/sec.	4.01E-06	0	
3. Percent of technical specification limit	%	7.82E-04	0	
4. Gross alpha radioactivity	Ci	4.98E-08	3.07E-06	2.50E+01
D. Tritium				
1. Total release	Ci	1.29E+02	0	2.50E+01
2. Average release rate for period	uCi/sec.	1.66E+01	0	
3. Percent of technical specification limit	%	N/A	0	

(1) No detectable levels of iodine 131 were present in releases for the period from January - March 1978.

(2) For batch releases the estimated overall error is within 10%.

TABLE 1B
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1978)
GASEOUS EFFLUENTS-ELEVATED RELEASES

		CONTINUOUS MODE		BATCH MODE	
Nuclides Released	Unit	1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
1. Fission gases (1)					
Krypton-85	Ci				
Krypton-85m	Ci			1.38E-03	
Krypton-87	Ci				
Krypton-88	Ci				
Xenon-133	Ci			1.78E+00	
Xenon-135	Ci		2.96E-05	6.45E-02	4.19E-04
Xenon-135M	Ci				
Xenon-138	Ci				
Xe133m	Ci			2.66E-03	
Argon-41	Ci			1.28E-03	
Fluorine-18	Ci				
Unidentified	Ci				
Total for period	Ci				
2. Iodines					
Iodine-131	Ci	LLD	6.11E-05	LLD	
Iodine-133	Ci	LLD	6.68E-05		
Iodine-135	Ci				
Total for period				LLD	
3. Particles					
Strontium-89	Ci	3.09E-05			
Strontium-90	Ci			2.50E-07	-
Cesium-134	Ci				
Cesium-137	Ci				
Barium-lanthanum-140	Ci				
Others	Ci				
Rubidium 88	Ci				-
Gross Alpha	Ci	4.98E-08	1.24E-07		2.95E-06
Unidentified	Ci				

TABLE 1B
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1978)
GASEOUS EFFLUENTS-ELEVATED RELEASES
(CONTINUED)

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
4. Tritium	Ci	1.29E+02	LLD	3.86E-01	1.97E-01

Other fission gases were below the detectable level (LLD) (Approximately less than 6.67 E-7 uCi/ml).

TABLE 1C
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1978
GASEOUS EFFLUENTS--GROUND-LEVEL RELEASES

Nuclides Releases	Unit	1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
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There were no Ground Level Releases for the Period
of Record.

TABLE 2A

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1978)

LIQUID EFFLUENTS-SUMMATION OF ALL RELEASES

	Units	1st Quarter	2nd Quarter	Est. Total Error, %
A. Fission and activation products				
1. Total release (not including tritium, gases, alpha)	Ci	8.61E-01	7.96E-01	2.50E+01
2. Average diluted concentration during period	uCi/ml	3.93E-08	5.07E-08	
3. Percent of applicable limit Tech Spec App. B 2.3.1.b	%	8.61E+00	7.96E-00	
B. Tritium				
1. Total release	Ci	1.13E+02	6.90E+01	2.50E+01
2. Average diluted concentration during period	uCi/ml	5.16E-06	4.39E-06	
3. Percent of applicable limit	%	N/A	N/A	
C. Dissolved and entrained gases				
1. Total release	Ci	3.34E-02	2.04E-03	2.50E+01
2. Average diluted concentration during period	uCi/ml	1.55E-08	1.27E-10	
3. Percent of applicable limit	%	N/A	N/A	
D. Gross alpha radioactivity				
1. Total release	Ci	2.00E-07	1.58E-05	2.50E+01
E. Volume of waste release (prior to dilution - Batch Release)				
	liters	3.56E+06	2.29E+06	1.00E+01
F. Volume of dilution water used during period - Batch Release				
	liters	2.19E+10	1.57E+10	2.50E+01

N/A - Not Applicable

LLD - Lower Limit of detection

TABLE 2B
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT (1978)
LIQUID EFFLUENTS (1)

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		1st Quarter	2nd Quarter	1st Quarter	2nd Quarter
Strontium-89	Ci	9.27E-05	. E	6.26E-05	1.30E-04
Strontium-90	Ci	. E	. E		
Cesium-134	Ci	. E	. E		
Cesium-137	Ci	. E	. E		
Iodine-131	Ci	. E	. E	1.38E-03	2.87E-04
Iodine-133	Ci	. E	. E	4.00E-03	3.35E-03
Cobalt-58	Ci	. E	. E	5.18E-01	4.67E-01
Cobalt-60	Ci	. E	. E	2.42E-01	2.06E-01
Iron-59	Ci	. E	. E		
Zinc-65	Ci	. E	. E		
Manganese-54	Ci	. E	. E	5.54E-02	8.16E-02
Chromium-51	Ci	. E	. E	8.99E-04	6.53E-03
Zirconium-niobium-95	Ci	. E	. E	1.08E-03	1.37E-03
Molybdenum-99	Ci	. E	. E		
Cerium-144	Ci	. E	. E		
Barium-Lanthanum-140	Ci	. E	. E		
Cerium-141	Ci	. E	. E		
Tungsten-187	Ci	. E	. E		
Others (specify)	Ci	. E	. E		
Na 24	Ci	. E	. E	3.79E-02	2.86E-02
Tritium	Ci	9.86E-03	. E	1.13E+02	6.90E+01
	Ci	. E	. E	. E	
	Ci	. E	. E	. E	. E
(Gross Alpha)	Ci	.E	. E	2.00E-07	1.58E-05
Total for period (above) excluding H3	Ci	9.95E-03		8.61E-01	7.96E-01
Xenon-133m	Ci	.	. E	E	E
Xenon-133	Ci	.	. E	3.15E-02	1.03E-03
Xenon-135	Ci	.	. E	1.94E-03	1.01E-03

(1) Analyses are sufficiently sensitive to detect an activity concentration for the principal gamma emitting isotopes of at least 5.0 E-07 uCi/ml.

TABLE 3
EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT 1978
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

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

1. Type of waste	Unit	6-month Period	Est. Total Error, %
a. Spent resins, filter sludges, evaporator bottoms, etc.	m ³ Ci	8.50E-00 2.27E-02	10
b. Dry compressible water, contaminated equip., etc.	m ³ Ci	1.00E+02 4.27E-01	10
c. Irradiated components, control rods, etc.	m ³ Ci	. E . E	. E
d. Other (describe)	m ³ Ci	. E . E	. E

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

a. Iodine 131	%	1.60E+01
Iodine 133	%	1.50E+01
Cobalt 58	%	1.90E+01
Others		5.00E+01
b. Cobalt 58	%	6.87E+01
Cobalt 60	%	2.94E+01
Manganese 54	%	1.92E+00
Others	%	. E
c.	%	. E
d.	%	. E
	%	. E
	%	. E
	%	. E

3. Solid Waste Disposition

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
4	Truck	Barnsell South Carolina

B. IRRADIATED FUEL SHIPMENTS (Disposition)

<u>Number of Shipments</u>	<u>Mode of Transportation</u>	<u>Destination</u>
None	N/A	N/A

TABLE 4A

SALEM NUCLEAR GENERATING STATION (1978)

SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE

BATCH RELEASES ONLY

1. Dates January 1 - March 31, 1978
2. Type of release (Gas)
3. Number of releases during the 1st Quarter 1.30E + 01
4. Total time duration for all releases of type listed above
2.09E + 03
minutes
5. Maximum duration for releases of type listed above 4.60E + 02
minutes
6. Average duration for all releases of type listed above
1.61E + 02
minutes
7. Minimum duration for release of type listed above 8.90E + 01
minutes
8. For liquid batch releases only, provide the average stream
flow (dilution flow) during the period of release. N/A

TABLE 4A (Cont'd)

SALEM NUCLEAR GENERATING STATION (1978)

SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE

BATCH RELEASES ONLY

1. Dates April 1 - June 30, 1978
2. Type of release (Gas)
3. Number of releases during the 2nd Quarter 5
4. Total time duration for all releases of type listed above
1.95E + 03
minutes
5. Maximum duration for releases of type listed above 1.20E + 03
minutes
6. Average duration for all releases of type listed above
3.90E + 02
minutes
7. Minimum duration for release of type listed above 1.18E + 02
minutes
8. For liquid batch releases only, provide the average stream
flow (dilution flow) during the period of release. N/A

TABLE 4B

SALEM NUCLEAR GENERATING STATION (1978)

SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE

BATCH RELEASES ONLY

1. Dates January 1 - March 31, 1978
2. Type of release (Liquid)
3. Number of releases during the 1st Quarter 55
4. Total time duration for all releases of type listed above
2.75E + 04
minutes
5. Maximum duration for releases of type listed above 1.07E + 03
minutes
6. Average duration for all releases of type listed above
4.99E + 02
minutes
7. Minimum duration for release of type listed above 2.30E + 01
minutes
8. For liquid batch releases only, provide the average stream
flow (dilution flow) during the period of release. 2.12E + 05
gpm

TABLE 4B (Cont'd)

SALEM NUCLEAR GENERATING STATION (1978)

SUMMARY SHEET FOR RADIOACTIVE EFFLUENTS RELEASED
IN A BATCH MODE

BATCH RELEASES ONLY

1. Dates April 1 - June 30, 1978
2. Type of release (Liquid)
3. Number of releases during the 2nd Quarter 35
4. Total time duration for all releases of type listed above
2.09E+04
minutes
5. Maximum duration for releases of type listed above 1.75E+03
minutes
6. Average duration for all releases of type listed above
5.97E+02
minutes
7. Minimum duration for release of type listed above 1.50E+01
minutes
8. For liquid batch releases only, provide the average stream
flow (dilution flow) during the period of release. 2.00E+05
gpm

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300=30FT)

LE=1.9

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	3	.2	2	.1	0	0.0	0	0.0	0	0.0	5	.3
45.0	0	0.0	3	.2	2	.1	7	.4	5	.3	2	.1	19	1.0
67.5	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
90.0	0	0.0	0	0.0	2	.1	0	0.0	0	0.0	0	0.0	2	.1
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
157.5	0	0.0	4	.2	0	0.0	0	0.0	1	.1	0	0.0	5	.3
180.0	1	.1	1	.1	1	.1	0	0.0	0	0.0	0	0.0	3	.2
202.5	4	.2	3	.2	1	.1	0	0.0	0	0.0	0	0.0	8	.4
225.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
247.5	0	0.0	2	.1	2	.1	1	.1	0	0.0	0	0.0	5	.3
270.0	2	.1	9	.5	4	.2	7	.4	1	.1	3	.2	21	1.1
292.5	0	0.0	5	.3	6	.3	7	.4	1	.1	2	.1	21	1.1
315.0	0	0.0	1	.1	3	.2	5	.3	2	.1	4	.2	15	.8
337.5	1	.1	3	.2	0	0.0	5	.3	0	0.0	0	0.0	9	.5
360.0	1	.1	1	.1	0	0.0	3	.2	0	0.0	0	0.0	5	.3
	9	.5	38	2.0	23	1.2	35	1.8	10	.5	11	.6	126	6.5

MEAN WIND SPEED 11.9

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

-1.6/ -1.7

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	2	.1	0	0.0	0	0.0	0	0.0	2	.1
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	1	.1
90.0	0	0.0	2	.1	1	.1	0	0.0	0	0.0	0	0.0	3	.2
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	1	.1	1	.1	0	0.0	0	0.0	0	0.0	2	.1
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
247.5	0	0.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	1	.1
270.0	0	0.0	1	.1	7	.4	7	.4	2	.1	4	.2	21	1.1
292.5	0	0.0	0	0.0	5	.3	7	.4	6	.3	0	0.0	18	.9
315.0	0	0.0	1	.1	0	0.0	11	.6	8	.4	2	.1	22	1.1
337.5	0	0.0	1	.1	1	.1	5	.3	0	0.0	1	.1	8	.4
360.0	0	0.0	1	.1	3	.2	0	0.0	0	0.0	0	0.0	4	.2
	0	0.0	8	.4	22	1.1	30	1.6	16	.8	7	.4	63	4.3

MEAN WIND SPEED 15.1

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

-1.6/ -1.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	2	.1	1	.1	0	0.0	0	0.0	0	0.0	3	.2
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	1	.1
90.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
112.5	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
135.0	0	0.0	0	0.0	0	0.0	0	0.0	1	.1	0	0.0	1	.1
157.5	0	0.0	0	0.0	0	0.0	0	0.0	1	.1	0	0.0	1	.1
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	.1	1	.1
270.0	0	0.0	0	0.0	1	.1	2	.1	3	.2	0	0.0	6	.3
292.5	0	0.0	1	.1	3	.2	2	.1	8	.4	0	0.0	14	.7
315.0	0	0.0	0	0.0	0	0.0	4	.2	3	.2	3	.2	10	.5
337.5	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
360.0	0	0.0	3	.2	1	.1	1	.1	1	.1	0	0.0	6	.3
	0	0.0	9	.5	7	.4	9	.5	17	.9	4	.2	46	2.4

MEAN WIND SPEED 15.7

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300=30FT)

=1.4/ =0.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR)		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		8-12		SUM PERCENT		SUM PERCENT		SUM PERCENT			
22.5	0	0.0	13	.7	32	1.7	19	1.0	0	0.0	0	0.0	64	3.3
45.0	1	.1	11	.6	14	.7	8	.4	1	.1	0	0.0	35	1.8
67.5	0	0.0	8	.4	14	.7	14	.7	2	.1	1	.1	39	2.0
90.0	1	.1	7	.4	10	.5	2	.1	3	.2	1	.1	24	1.2
112.5	1	.1	0	0.0	5	.3	0	0.0	0	0.0	0	0.0	6	.3
135.0	0	0.0	1	.1	3	.2	1	.1	3	.2	0	0.0	8	.4
157.5	0	0.0	9	.5	4	.2	0	0.0	2	.1	0	0.0	13	.6
180.0	1	.1	1	.1	5	.3	1	.1	1	.1	3	.2	12	.6
202.5	0	0.0	4	.2	4	.2	1	.1	0	0.0	0	0.0	9	.5
225.0	3	.2	2	.1	6	.3	2	.1	0	0.0	2	.1	15	.8
247.5	2	.1	8	.4	6	.3	6	.3	2	.1	23	1.2	47	2.4
270.0	3	.2	6	.3	13	.7	45	2.3	27	1.4	31	1.6	125	6.5
292.5	1	.1	3	.2	24	1.2	70	3.6	37	1.9	20	1.0	153	8.0
315.0	0	0.0	7	.4	12	.6	46	2.4	20	1.0	21	1.1	106	5.5
337.5	1	.1	6	.3	25	1.3	14	.7	1	.1	3	.2	50	2.6
360.0	0	0.0	5	.3	26	1.3	34	1.8	6	.3	3	.2	74	3.8
	14	.7	91	4.7	203	10.5	263	13.6	105	5.4	108	5.6	784	40.6

MEAN WIND SPEED 15.6

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

-0.4/ 1.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	3	.2	5	.3	19	1.0	14	.7	4	.2	0	0.0	45	2.3
45.0	1	.1	5	.3	19	1.0	4	.2	1	.1	0	0.0	30	1.6
67.5	0	0.0	4	.2	7	.4	0	0.0	0	0.0	0	0.0	11	.6
90.0	2	.1	10	.5	9	.5	1	.1	1	.1	3	.2	26	1.3
112.5	2	.1	3	.2	3	.2	10	.5	7	.4	2	.1	27	1.4
135.0	3	.2	5	.3	1	.1	5	.3	9	.5	7	.4	30	1.6
157.5	1	.1	4	.2	4	.2	2	.1	3	.2	1	.1	15	.8
180.0	0	0.0	3	.2	5	.3	2	.1	4	.2	0	0.0	14	.7
202.5	2	.1	1	.1	9	.5	6	.3	2	.1	5	.3	25	1.3
225.0	0	0.0	6	.3	7	.4	6	.3	1	.1	2	.1	22	1.1
247.5	0	0.0	7	.4	7	.4	2	.1	1	.1	0	0.0	17	.9
270.0	1	.1	5	.3	17	.9	29	1.5	1	.1	1	.1	54	2.8
292.5	4	.2	6	.3	30	1.6	30	1.6	10	.5	8	.4	88	4.6
315.0	3	.2	7	.4	49	2.5	37	1.9	22	1.1	25	1.3	143	7.4
337.5	1	.1	4	.2	23	1.2	28	1.5	4	.2	1	.1	61	3.2
360.0	4	.2	11	.6	39	2.0	29	1.5	3	.2	0	0.0	86	4.5
	27	1.4	66	4.5	248	12.8	205	10.6	73	3.8	55	2.8	694	36.0

MEAN WIND SPEED 13.3

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 1/76-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

1.6 / 4.0

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	1	.1	0	0.0	5	.3	3	.2	0	0.0	0	0.0	9	.3
45.0	0	0.0	7	.4	4	.2	0	0.0	0	0.0	0	0.0	11	.4
67.5	0	0.0	3	.2	4	.2	0	0.0	0	0.0	0	0.0	7	.3
90.0	2	.1	2	.1	1	.1	0	0.0	0	0.0	0	0.0	5	.2
112.5	0	0.0	1	.1	10	0.0	1	.1	0	0.0	0	0.0	15	.5
135.0	1	.1	0	0.0	4	.2	5	.3	1	.1	4	.2	12	.4
157.5	0	0.0	2	.1	2	.1	7	.4	1	.1	0	0.0	14	.5
180.0	0	0.0	0	0.0	2	.1	5	.3	1	.1	6	.3	14	.5
202.5	1	.1	1	.1	2	.1	2	.1	0	0.0	1	.1	7	.3
225.0	0	0.0	1	.1	2	.1	5	.3	0	0.0	0	0.0	8	.3
247.5	1	.1	2	.1	1	.1	1	.1	0	0.0	0	0.0	7	.3
270.0	1	.1	3	.2	13	.7	3	.2	0	0.0	0	0.0	20	.7
292.5	3	.2	4	.2	5	.3	4	.2	0	0.0	0	0.0	16	.6
315.0	0	0.0	3	.2	5	.3	10	.4	0	0.0	0	0.0	18	.7
337.5	0	0.0	0	0.0	3	.2	4	.2	2	.1	0	0.0	13	.5
360.0	0	0.0	1	.1	1	.1	3	.2	0	0.0	0	0.0	5	.2
	10	.5	30	1.6	56	2.9	57	3.0	5	.3	11	.6	169	6.8

MEAN WIND SPEED 12.2

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

GT. 4.0

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-16		17-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	4	.2	0	0.0	2	.1	6	.3
157.5	0	0.0	2	.1	1	.1	1	.1	0	0.0	10	.5	14	.7
180.0	0	0.0	1	.1	0	0.0	1	.1	0	0.0	1	.1	3	.2
202.5	0	0.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	1	.1
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	1	.1	0	0.0	0	0.0	1	.1
270.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	0	0.0	1	.1
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	1	.1	0	0.0	0	0.0	0	0.0	1	.1
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	5	.3	3	.2	7	.4	0	0.0	13	.7	28	1.5

MEAN WIND SPEED 22.6

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

ALL STABILITIES

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	4	.2	24	1.2	61	3.2	36	1.9	4	.2	0	0.0	129	6.7
45.0	2	.1	26	1.3	39	2.0	19	1.0	7	.4	2	.1	95	4.9
67.5	0	0.0	16	.8	27	1.4	14	.7	2	.1	1	.1	60	3.1
90.0	5	.3	22	1.1	23	1.2	3	.2	4	.2	4	.2	61	3.2
112.5	3	.2	5	.3	8	.4	11	.6	7	.4	2	.1	36	1.9
135.0	4	.2	7	.4	8	.4	15	.8	14	.7	13	.7	61	3.2
157.5	1	.1	22	1.1	12	.6	10	.5	8	.4	11	.6	64	3.3
180.0	2	.1	6	.3	13	.7	9	.5	6	.3	10	.5	46	2.4
202.5	7	.4	9	.5	17	.9	9	.5	2	.1	6	.3	50	2.6
225.0	3	.2	11	.6	15	.8	13	.7	1	.2	4	.2	47	2.4
247.5	3	.2	19	1.0	19	1.0	11	.6	3	.2	24	1.2	79	4.1
270.0	7	.4	25	1.3	53	2.8	93	4.8	34	1.8	39	2.0	253	13.1
292.5	8	.4	19	1.0	73	3.8	120	6.2	62	3.2	30	1.6	312	16.3
315.0	3	.2	19	1.0	70	3.6	113	5.9	59	2.8	55	2.8	315	16.3
337.5	3	.2	15	.8	52	2.7	60	3.1	7	.4	5	.3	142	7.4
360.0	5	.3	22	1.1	70	3.6	70	3.6	10	.5	3	.2	180	9.3
	60	3.1	267	13.8	562	29.1	606	31.4	226	11.7	209	10.8	1930	100.0
													MISSING HOURS	230

MEAN WIND SPEED 14.3

TOTAL NUMBER OF UNINTERPRETABLE HOURS 0

TOTAL NUMBER OF CALM HOURS 2 PERCENT .1

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

LE=1.9

DIRECTION	0-3		4-7		8 SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
43.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	1	0.0	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0	3	0.1
292.5	0	0.0	0	0.0	0	0.0	3	0.1	3	0.1	1	0.0	7	0.3
315.0	0	0.0	0	0.0	0	0.0	4	0.2	8	0.4	1	0.0	13	0.6
337.5	0	0.0	0	0.0	1	0.0	6	0.3	5	0.2	0	0.0	12	0.6
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1	0.0	0	0.0	2	0.1	14	0.7	16	0.8	3	0.1	36	1.7

MEAN WIND SPEED 18.5

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DES C/100H
(300-30FT)

=1.6/ =1.7

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
22.5	0	0.0	0	0.0	1	.0	0	0.0	0	0.0	0	0.0	1	.0
45.0	0	0.0	0	0.0	1	.0	1	.0	0	0.0	0	0.0	2	.1
67.5	0	0.0	0	0.0	0	0.0	1	.0	0	0.0	0	0.0	1	.0
90.0	0	0.0	0	0.0	1	.0	1	.0	0	0.0	0	0.0	2	.1
112.5	0	0.0	0	0.0	1	.0	0	0.0	0	0.0	0	0.0	1	.0
135.0	0	0.0	0	0.0	0	0.0	1	.0	1	.0	3	.1	5	.2
157.5	0	0.0	0	0.0	0	0.0	0	0.0	1	.0	0	0.0	1	.0
180.0	0	0.0	3	.1	1	.0	0	0.0	0	0.0	0	0.0	4	.2
202.5	0	0.0	1	.0	1	.0	0	0.0	0	0.0	0	0.0	2	.1
225.0	0	0.0	1	.0	0	0.0	0	0.0	0	0.0	0	0.0	1	.0
247.5	0	0.0	1	.0	1	.0	1	.0	0	0.0	0	0.0	3	.1
270.0	0	0.0	1	.0	1	.0	3	.1	0	0.0	0	0.0	5	.2
292.5	0	0.0	0	0.0	3	.1	3	.1	4	.2	4	.2	12	.6
315.0	0	0.0	0	0.0	3	.1	15	.7	12	.6	2	.1	32	1.5
337.5	0	0.0	0	0.0	3	.1	11	.5	3	.1	1	.0	18	.9
360.0	0	0.0	0	0.0	0	0.0	2	.1	0	0.0	0	0.0	2	.1
	0	0.0	7	.3	15	.7	39	1.9	21	1.0	10	.5	92	4.4

MEAN WIND SPEED 16.1

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 4/75-6/75

LOCATION 150FT

DEG C/100M
(300=30FT)

-1.6/ -1.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 6-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT	
22.5	0	0.0	0	0.0	0	0.0	2	.1	0	0.0	0	0.0	2	.1
45.0	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	0.0
67.5	0	0.0	0	0.0	0	0.0	2	.1	2	.1	0	0.0	4	.2
90.0	0	0.0	0	0.0	0	0.0	1	.0	0	0.0	0	0.0	1	.0
112.5	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	1	.0
135.0	0	0.0	0	0.0	1	0.0	1	.0	0	0.0	1	.0	3	.1
157.5	0	0.0	0	0.0	0	0.0	0	0.0	3	.1	0	0.0	2	.1
180.0	1	.0	0	0.0	0	0.0	1	.0	0	0.0	0	0.0	1	.0
202.5	0	0.0	0	0.0	1	0.0	0	0.0	0	0.0	0	0.0	2	.1
225.0	0	0.0	2	.1	0	0.0	0	0.0	0	0.0	0	0.0	2	.1
247.5	0	0.0	0	0.0	4	.2	0	0.0	0	0.0	0	0.0	4	.2
270.0	0	0.0	1	.0	1	0.0	3	.1	0	0.0	0	0.0	4	.2
292.5	0	0.0	1	.0	0	0.0	3	.1	0	0.0	0	0.0	4	.2
315.0	0	0.0	0	0.0	1	.0	3	.1	8	.4	1	.0	13	.6
337.5	0	0.0	2	.1	1	.0	7	.3	1	.0	0	0.0	11	.5
360.0	0	0.0	0	0.0	3	.1	2	.1	0	0.0	0	0.0	5	.2
	1	.0	6	.3	14	.7	25	1.2	16	.8	2	.1	64	3.1

MEAN WIND SPEED 14.3

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

=1.4/ =0.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	14	.7	17	.8	6	.3	3	.1	1	.0	41	2.0
45.0	2	.1	5	.2	15	.7	30	1.4	14	.7	1	.0	67	3.2
67.5	1	.0	8	.4	17	.8	31	1.5	13	.6	4	.2	74	3.5
90.0	0	0.0	13	.6	8	.4	9	.4	11	.5	0	0.0	41	2.0
112.5	1	.0	3	.1	9	.4	10	.5	0	0.0	0	0.0	23	1.1
135.0	1	.0	4	.2	11	.5	32	1.5	40	1.9	38	1.8	126	6.0
157.5	0	0.0	19	.9	17	.8	21	1.0	13	.6	3	.1	73	3.5
180.0	5	.2	21	1.0	15	.7	4	.2	0	0.0	0	0.0	45	2.2
202.5	2	.1	14	.7	10	.5	1	.0	0	0.0	0	0.0	27	1.3
225.0	0	0.0	12	.6	8	.4	2	.1	4	.2	0	0.0	26	1.2
247.5	2	.1	7	.3	10	.5	12	.6	11	.5	1	.0	43	2.1
270.0	1	.0	4	.2	12	.6	21	1.0	5	.2	1	.0	44	2.1
292.5	0	0.0	5	.2	20	1.0	14	.7	4	.2	1	.0	44	2.1
315.0	0	0.0	6	.3	13	.6	40	1.9	21	1.0	5	.2	85	4.1
337.5	0	0.0	9	.4	36	1.7	31	1.5	8	.4	3	.1	67	3.2
360.0	1	.0	8	.4	24	1.2	5	.2	2	.1	1	.0	41	2.0
	16	.8	152	7.3	242	11.6	269	12.9	149	7.1	59	2.8	887	42.5

MEAN WIND SPEED 13.7

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

-0.4/ 1.5

DIRECTION	0-3		4-7		SPEEDS(MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT			
22.5	4	.2	8	.4	18	.9	9	.4	0	0.0	0	0.0	39	1.9
45.0	1	.0	10	.5	17	.8	11	.5	1	.0	0	0.0	40	1.9
67.5	1	.0	7	.3	11	.5	2	.1	0	0.0	0	0.0	21	1.0
90.0	2	.1	9	.4	9	.2	3	.1	0	0.0	0	0.0	19	.9
112.5	2	.1	4	.2	18	.9	4	.2	0	0.0	0	0.0	28	1.3
135.0	2	.1	8	.4	16	.8	35	1.7	16	.8	10	.5	67	4.2
157.5	2	.1	13	.6	25	1.2	14	.7	6	.3	2	.1	62	3.0
180.0	3	.1	13	.6	27	1.3	8	.4	7	.3	1	.0	59	2.8
202.5	3	.1	6	.3	16	.8	16	.8	10	.5	1	.0	52	2.5
225.0	1	.0	10	.5	24	1.2	13	.6	8	.4	2	.1	58	2.8
247.5	4	.2	13	.6	24	1.2	11	.5	4	.2	0	0.0	56	2.7
270.0	2	.1	8	.4	20	1.0	15	.7	5	.2	1	.0	51	2.4
292.5	0	0.0	6	.3	15	.7	17	.8	2	.1	0	0.0	40	1.9
315.0	2	.1	1	.0	30	1.4	25	1.2	11	.5	6	.3	75	3.6
337.5	2	.1	4	.2	16	.8	15	.7	17	.8	2	.1	56	2.7
360.0	1	.0	12	.6	17	.8	28	1.3	4	.2	0	0.0	62	3.0
	32	1.5	132	6.3	299	14.3	226	10.8	91	4.4	25	1.2	805	38.6

MEAN WIND SPEED 12.3

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

1.6 / 4.0

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-16		19-23		24 PLUS		SUM	PERCENT
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
22.5	0	0.0	0	0.0	2	.1	1	.0	0	0.0	0	0.0	3	.1
45.0	0	0.0	2	.1	3	.1	0	0.0	0	0.0	0	0.0	5	.2
67.5	1	.0	1	.0	1	.0	2	.1	0	0.0	0	0.0	3	.2
90.0	0	0.0	3	.1	0	0.0	0	0.0	0	0.0	0	0.0	3	.1
112.5	1	.0	1	.0	0	0.0	0	0.0	0	0.0	0	0.0	2	.1
135.0	0	0.0	1	.0	5	.2	1	.0	5	.2	0	0.0	12	.6
157.5	0	0.0	5	.2	8	.4	6	.3	2	.1	0	0.0	21	1.0
180.0	0	0.0	0	0.0	6	.4	2	.1	1	.0	0	0.0	11	.5
202.5	1	.0	1	.0	2	.1	6	.3	1	.0	0	0.0	13	.6
225.0	0	0.0	2	.1	6	.3	2	.1	1	.0	3	.1	14	.7
247.5	1	.0	1	.0	6	.3	4	.2	3	.1	1	.0	16	.8
270.0	0	0.0	0	0.0	6	.3	5	.2	2	.1	0	0.0	13	.6
292.5	0	0.0	1	.0	4	.2	7	.3	0	0.0	0	0.0	12	.6
315.0	0	0.0	1	.0	7	.3	9	.4	1	.0	0	0.0	18	.9
337.5	0	0.0	2	.1	7	.3	9	.4	0	0.0	0	0.0	18	.9
360.0	0	0.0	6	.3	6	.3	7	.3	0	0.0	0	0.0	19	.9
	4	.2	27	1.3	71	3.4	61	2.9	18	.9	4	.2	185	8.9

MEAN WIND SPEED 12.4

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

GT. 4.0

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM	PERCENT
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	2	.1	0	0.0	0	0.0	0	0.0	2	.1
180.0	0	0.0	1	.0	2	.1	0	0.0	1	.0	0	0.0	4	.2
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	.1	2	.1
247.5	1	.0	0	0.0	0	0.0	0	0.0	1	.0	0	0.0	2	.1
270.0	0	0.0	1	.0	0	0.0	0	0.0	0	0.0	0	0.0	1	.0
292.5	0	0.0	1	.0	0	0.0	1	.0	0	0.0	0	0.0	2	.1
315.0	0	0.0	0	0.0	2	.1	1	.0	0	0.0	0	0.0	3	.1
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1	.0	3	.1	6	.3	2	.1	2	.1	2	.1	16	.8

MEAN WIND SPEED 13.0

NUMBER OF UNINTERPRETABLE HOURS 0

LARGE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

ALL STABILITIES

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM	PERCENT
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
22.5	4	.2	22	1.1	38	1.8	18	.9	3	.1	1	.0	86	4.1
45.0	3	.1	17	.8	37	1.8	42	2.0	15	.7	1	.0	118	5.5
67.5	3	.1	16	.8	29	1.4	38	1.8	15	.7	4	.2	105	5.0
90.0	2	.1	25	1.2	14	.7	14	.7	11	.5	0	.0	66	3.2
112.5	4	.2	8	.4	29	1.4	14	.7	0	.0	0	.0	55	2.6
135.0	3	.1	13	.6	33	1.6	70	3.4	62	3.0	0	.0	233	11.2
157.5	2	.1	37	1.8	52	2.5	41	2.0	25	1.2	6	.3	163	7.8
180.0	9	.4	38	1.8	53	2.5	15	.7	9	.4	1	.0	125	6.0
202.5	6	.3	22	1.1	30	1.4	23	1.1	13	.6	1	.0	95	4.6
225.0	1	.0	27	1.3	38	1.8	17	.8	13	.6	7	.3	103	4.9
247.5	8	.4	22	1.1	45	2.2	28	1.3	19	.9	2	.1	124	5.9
270.0	4	.2	15	.7	41	2.0	48	2.3	14	.7	2	.1	124	5.9
292.5	0	0.0	14	.7	40	1.9	48	2.3	13	.6	6	.3	121	5.8
315.0	2	.1	8	.4	56	2.7	97	4.7	61	2.9	15	.7	239	11.5
337.5	2	.1	17	.8	64	3.1	79	3.8	34	1.6	6	.3	202	9.7
360.0	2	.1	26	1.2	50	2.4	44	2.1	6	.3	1	.0	129	6.2
	55	2.6	327	15.7	649	31.1	636	30.5	313	15.0	105	5.0	2085	100.0

MISSING HOURS 99

MEAN WIND SPEED 13.3

TOTAL NUMBER OF UNINTERPRETABLE HOURS 0

TOTAL NUMBER OF CALM HOURS 0 PERCENT 0.0

BATCH

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300=30FT)

LE=1.9

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT	
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS . 0

BATCH

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

-1.8/ -1.7

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	2.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	2.0

MEAN WIND SPEED 8.0

NUMBER OF UNINTERPRETABLE HOURS 0

BATCH

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 1/76-3/78

LOCATION 150FT

DEG C/100H
(300-30FT)

=1.6/ =1.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT	
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/76-3/76

LOCATION 150FT

DEG C/100M
(300-30FT)

-1.4/ -0.3

DIRECTION	0-3		4-7		SPEEDS(MI/HR) 8-12		13-16		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	2.0
135.0	0	0.0	0	0.0	0	0.0	1	2.0	1	2.0	0	0.0	2	4.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	1	2.0	1	2.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	2	4.0	3	6.0
270.0	0	0.0	5	10.0	0	0.0	1	2.0	0	0.0	0	0.0	6	12.0
292.5	0	0.0	0	0.0	0	0.0	1	2.0	2	4.0	0	0.0	3	6.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	1	2.0	7	14.0	1	2.0	3	6.0	4	8.0	2	4.0	18	36.0

MEAN WIND SPEED 14.3

NUMBER OF UNINTERPRETABLE HOURS 0

BATCH

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300=30FT)

W0.4/ 1.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	2	4.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.0
112.5	0	0.0	2	4.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.0
135.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0
157.5	0	0.0	3	6.0	0	0.0	0	0.0	0	0.0	0	0.0	3	6.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	5	10.0	0	0.0	0	0.0	0	0.0	5	10.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	2.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	1	2.0	1	2.0	0	0.0	0	0.0	2	4.0
315.0	0	0.0	0	0.0	2	4.0	1	2.0	1	2.0	1	2.0	5	10.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	2	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.0
	2	4.0	8	16.0	9	18.0	2	4.0	1	2.0	1	2.0	23	46.0

MEAN WIND SPEED 9.4

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

1.6 / 4.0

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	2.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	1	2.0	0	0.0	4	8.0	5	10.0
157.5	0	0.0	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	1	2.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.0	1	2.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	1	2.0	2	4.0	0	0.0	5	10.0	8	16.0

MEAN WIND SPEED 31.4

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

DEG C/100M
(300-30FT)

GT. 4.0

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS 0

BATCH

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 1/78-3/78

LOCATION 150FT

ALL STABILITIES

SPEEDS(MI/HR)

	0-3		4-7		8-12		13-18		19-23		24 PLUS		SUM PERCENT	
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	2.0
90.0	0	0.0	2	4.0	1	2.0	0	0.0	0	0.0	0	0.0	3	6.0
112.5	0	0.0	2	4.0	1	2.0	0	0.0	0	0.0	0	0.0	3	6.0
135.0	0	0.0	1	2.0	0	0.0	2	4.0	1	2.0	4	8.0	8	16.0
157.5	0	0.0	3	6.0	0	0.0	1	2.0	0	0.0	0	0.0	4	8.0
180.0	0	0.0	1	2.0	0	0.0	0	0.0	0	0.0	1	2.0	2	4.0
202.5	0	0.0	0	0.0	5	10.0	0	0.0	0	0.0	0	0.0	5	10.0
225.0	1	2.0	1	2.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.0
247.5	0	0.0	0	0.0	1	2.0	0	0.0	1	2.0	0	0.0	4	8.0
270.0	0	0.0	5	10.0	0	0.0	1	2.0	0	0.0	0	0.0	6	12.0
292.5	0	0.0	0	0.0	1	2.0	2	4.0	2	4.0	0	0.0	5	10.0
315.0	0	0.0	0	0.0	2	4.0	1	2.0	1	2.0	1	2.0	5	10.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	2	4.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	2	4.0
	3	6.0	15	30.0	12	24.0	7	14.0	5	10.0	8	16.0	50	100.0

MISSING HOURS

0

MEAN WIND SPEED 14.7

TOTAL NUMBER OF UNINTERPRETABLE HOURS 0

TOTAL NUMBER OF CALM HOURS 0 PERCENT 0.0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

LE-1.9

SPEEDS (MI/HR)														
0-3		4-7		8-12		13-18		19-23		24 PLUS		SUM PERCENT		
DIRECTION	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT	SUM PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100H
(300-30FT)

=1.8/ =1.7

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DES C/100M
(300-30FT)

GT, 4.0

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-16		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT	
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEB C/100M
(300-30FT)

-1.6/ -1.5

DIRECTION	0-3		4-7		SPEEDS (MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT	
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

L MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST, FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

-1.4/ -0.5

DIRECTION	0-3		4-7		SPEED3(MI/HR) 6-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	4	10.8	2	5.4	0	0.0	6	16.2
157.5	0	0.0	1	2.7	1	2.7	3	8.1	0	0.0	0	0.0	3	7.5
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	2	5.4	2	5.4	0	0.0	0	0.0	4	10.8
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	1	2.7	3	8.1	9	24.3	2	5.4	0	0.0	15	40.5

MEAN WIND SPEED 14.1

NUMBER OF UNINTERPRETABLE HOURS 0

BATCH

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

#0.4/ 1.5

DIRECTION	0-3		4-7		SPEEDS(MI/HR) 8-12		13-18		19-23		24 PLUS		SUM PERCENT	
	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	1	2.7
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	1	2.7
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	2	5.4	0	0.0	0	0.0	2	5.4
157.5	0	0.0	1	2.7	2	5.4	0	0.0	0	0.0	0	0.0	3	8.1
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.7
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	2	5.4	0	0.0	0	0.0	0	0.0	0	0.0	2	5.4
270.0	0	0.0	1	2.7	1	2.7	0	0.0	0	0.0	0	0.0	2	5.4
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	2	5.4	0	0.0	1	2.7	3	8.1
360.0	0	0.0	0	0.0	2	5.4	3	13.5	0	0.0	0	0.0	7	18.9
	1	2.7	6	16.2	5	13.5	9	24.3	0	0.0	1	2.7	22	59.5

MEAN WIND SPEED 11.8

NUMBER OF UNINTERPRETABLE HOURS 0

BATCH

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

DEG C/100M
(300-30FT)

1.6 / 4.0

SPEEDS (MI/HR)

	0-3		4-7		8-12		13-18		19-23		24 PLUS		SUM PERCENT	
DIRECTION	SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT		SUM PERCENT	
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
157.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
270.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
360.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0

MEAN WIND SPEED 0.0

NUMBER OF UNINTERPRETABLE HOURS 0

LAPSE RATE WIND DIST. FOR ARTIFICIAL ISLAND 4/78-6/78

LOCATION 150FT

ALL STABILITIES

SPEEDS(MI/HR)

	0-3		4-7		8-12		13-18		19-23		24 PLUS		SUM	PERCENT
DIRECTION	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT	SUM	PERCENT		
22.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
45.0	0	0.0	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	1	2.7
67.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
90.0	0	0.0	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	1	2.7
112.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
135.0	0	0.0	0	0.0	0	0.0	6	16.2	2	5.4	0	0.0	8	21.6
157.5	0	0.0	2	5.4	3	8.1	3	8.1	0	0.0	0	0.0	8	21.6
180.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
202.5	1	2.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	2.7
225.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
247.5	0	0.0	2	5.4	0	0.0	0	0.0	0	0.0	0	0.0	2	5.4
270.0	0	0.0	1	2.7	1	2.7	0	0.0	0	0.0	0	0.0	2	5.4
292.5	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
315.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
337.5	0	0.0	0	0.0	2	5.4	4	10.8	0	0.0	1	2.7	7	18.9
360.0	0	0.0	0	0.0	2	5.4	5	13.5	0	0.0	0	0.0	7	18.9
	1	2.7	7	18.9	8	21.6	18	48.6	2	5.4	1	2.7	37	100.0

MISSING HOURS 0

MEAN WIND SPEED 12.7

TOTAL NUMBER OF UNINTERPRETABLE HOURS 0

TOTAL NUMBER OF CALM HOURS 0 PERCENT 0.0