

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
 Supplemental Information  
 2nd HALF - 1984

Facility B.V.P.S. Unit No. 1 Licensee Duquesne Light Company

1. Regulatory Limits

- a. Fission and activation gases:
  - b. Iodines:
  - c. Particulates, half-lives >8 days:
  - d. Liquid effluents:
- } Technical Specifications, Article 3/4.11

2. Maximum Permissible Concentrations

Provide the MPC's used in determining allowable release rates or concentrations.

- a. Fission and activation gases:
  - b. Iodines:
  - c. Particulates, half-lives >8 days:
  - d. Liquid effluents:
- } 10 CFR 20, Appendix B, Table II

3. Average Energy

Provide the average energy ( $\bar{E}$ ) of the radionuclide mixture in releases of fission and activation gases, if applicable. NOT APPLICABLE

4. Measurements and Approximations of Total Radioactivity

Provide the methods used to measure or approximate the total radioactivity in effluents and the methods used to determine radionuclide composition.

- a. Fission and activation gases: GeLi Gamma Spectrometry, Liquid Scintillation Counter
- b. Iodines: GeLi Gamma Spectrometry
- c. Particulates: GeLi Gamma Spectrometry, Low Background Proportional Counter
- d. Liquid effluents: GeLi Gamma Spectrometry, Liquid Scintillation Counter

5. Batch Releases

Provide the following information relating to batch releases of radioactive materials in liquid and gaseous effluents.

a. Liquid	3rd Quarter	4th Quarter
1. Number of batch releases:	29	22
2. Total time period for batch releases:	23,711 minutes	13,346 minutes
3. Maximum time period for a batch release:	1,210 minutes	1,184 minutes
4. Average time period for batch releases:	818 minutes	607 minutes
5. Minimum time period for a batch release:	63 minutes	51 minutes
6. Average river flow during periods of release:	26,833 cu.ft/sec	40,933 cu.ft/sec

b. Gaseous	3rd Quarter	4th Quarter
1. Number of batch releases:	14	26
2. Total time period for batch releases:	9,016 minutes	21,686 minutes
3. Maximum time period for a batch release:	963 minutes	1,255 minutes
4. Average time period for batch releases:	644 minutes	834 minutes
5. Minimum time period for a batch release:	30 minutes	77 minutes

6. Abnormal Releases

a. Liquid	3rd Quarter	4th Quarter
1. Number of releases:	NONE	NONE
2. Total activity released:	--	--

b. Gaseous	3rd Quarter	4th Quarter
1. Number of releases:	2	NONE
2. Total activity released:	2.30 E + 0 Ci	--

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TABLE 1A  
2nd HALF - 1984

EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
GASEOUS EFFLUENTS - SUMMATION OF ALL RELEASES

	Unit	Quarter	Quarter	Est. Total Error, %
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A. Fission & activation gases

		3rd	4th	
1. Total release	Ci	1.69 E+2	9.25 E+2	2.65 E+1
2. Average release rate for period	μCi/sec	2.14 E+1	1.17 E+2	
3. Percent of technical specification limit	%	N/A	N/A	

B. Iodines

1. Total iodine-131	Ci	6.88 E-4	2.28 E-3	2.83 E+1
2. Average release rate for period	μCi/sec	8.73 E-5	2.89 E-4	
3. Percent of technical specification limit	%	2.75 E-1	9.13 E-1	

C. Particulates

1. Particulates with half-lives >8 days	Ci	2.41 E-5	8.53 E-4	3.00 E+1
2. Average release rate for period	μCi/sec	3.06 E-6	1.08 E-4	
3. Percent of technical specification limit	%	N/A	N/A	
4. Gross alpha radioactivity	Ci	7.74 E-7	1.87 E-5	

D. Tritium

1. Total release	Ci	3.51 E+0	3.02 E+0	3.29 E+1
2. Average release rate for period	μCi/sec	4.45 E-1	3.83 E-1	
3. Percent of technical specification limit	%	N/A	N/A	

N/A = NOT APPLICABLE

The amount of time (in seconds) used to calculate the release rates specified in A.2, B.2, C.2 and D.2 is the average amount of seconds per calendar quarter (7.88 E+6 seconds).

B.3 is based on a nominal limit of 0.25 Ci/quarter (10 CFR 50 Appendix I, RM-50-2, C.2 limits this value to 1 Ci/year).

The tritium activity total for the third quarter includes estimated values. This is due to three missed tritium samples from batch discharges of the gaseous waste decay tanks.

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EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

GASEOUS EFFLUENTS - ELEVATED RELEASE

CONTINUOUS MODE

BATCH MODE

Nuclides Released	Unit	Quarter	Quarter	Quarter	Quarter
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1. Fission gases

		3rd	4th	3rd	4th
krypton-85	Ci	1.79 E-2	2.27 E+0	6.67 E-1	7.53 E-1
krypton-85m	Ci	5.33 E+0	LLD	3.52 E-6	1.09 E-5
krypton-87	Ci	LLD	LLD	LLD	LLD
krypton-88	Ci	LLD	LLD	LLD	LLD
xenon-133	Ci	3.45 E+1	1.14 E+1	7.58 E-6	2.23 E-1
xenon-133m	Ci	3.08 E-1	LLD	LLD	1.21 E-3
xenon-135	Ci	8.37 E-1	2.47 E-2	LLD	LLD
xenon-135m	Ci	LLD	LLD	LLD	LLD
xenon-138	Ci	LLD	LLD	LLD	LLD
xenon-131m	Ci	LLD	5.62 E+0	LLD	1.14 E-2
argon-41	Ci	LLD	LLD	LLD	5.57 E-5
unidentified	Ci	NONE	NONE	NONE	NONE
Total for period	Ci	4.10 E+1	1.93 E+1	6.67 E-1	9.89 E-1

2. Iodines

iodine-131	Ci	7.93 E-6	4.71 E-5	LLD	LLD
iodine-133	Ci	1.84 E-6	1.77 E-6	LLD	LLD
iodine-135	Ci	LLD	LLD	LLD	LLD
Total for period	Ci	9.77 E-6	4.89 E-5	---	---

3. Particulates

manganese-54	Ci	1.08 E-7	4.30 E-7	LLD	LLD
iron-59	Ci	LLD	LLD	LLD	LLD
cobalt-58	Ci	LLD	LLD	LLD	1.02 E-6
cobalt-60	Ci	9.70 E-6	1.28 E-5	LLD	LLD
zinc-65	Ci	LLD	LLD	LLD	LLD
strontium-89	Ci	9.23 E-9	1.30 E-8	LLD	LLD
strontium-90	Ci	6.77 E-8	1.31 E-6	LLD	LLD
molybdenum-99	Ci	LLD	LLD	LLD	LLD
cesium-134	Ci	LLD	LLD	LLD	LLD
cesium-137	Ci	1.46 E-7	5.74 E-7	LLD	LLD
cerium-141	Ci	LLD	LLD	LLD	LLD
cerium-144	Ci	LLD	LLD	LLD	LLD
	Ci				
	Ci				
Total for period	Ci	1.00 E-5	1.51 E-5	---	1.02 E-6

LLD = Below the lower limit of detectability, in uCi/cc (Table 4)

TABLE 1C  
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EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

GASEOUS EFFLUENTS - GROUND-LEVEL RELEASES

CONTINUOUS MODE

BATCH MODE

Nuclides Released	Unit	Quarter	Quarter	Quarter	Quarter
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1. Fission gases

		3rd	4th	3rd	4th
krypton-85	Ci	5.28 E-1	2.43 E-1	LLD	6.94 E+0
krypton-85m	Ci	LLD	LLD	LLD	LLD
krypton-87	Ci	LLD	LLD	LLD	LLD
krypton-88	Ci	LLD	LLD	LLD	LLD
xenon-133	Ci	1.25 E+2	6.67 E+2	1.79 E+0	2.16 E+2
xenon-133m	Ci	LLD	6.71 E+0	LLD	2.93 E+0
xenon-135	Ci	5.27 E-1	LLD	LLD	1.27 E+0
xenon-135m	Ci	LLD	LLD	LLD	LLD
xenon-138	Ci	LLD	LLD	LLD	LLD
xenon-131m	Ci	LLD	LLD	LLD	3.53 E+0
	Ci				
unidentified	Ci	NONE	NONE	NONE	NONE
Total for period	Ci	1.26 E+2	6.74 E+2	1.79 E+0	2.31 E+2

2. Iodines

iodine-131	Ci	6.80 E-4	2.17 E-3	LLD	6.46 E-5
iodine-133	Ci	9.74 E-4	4.22 E-5	LLD	LLD
iodine-135	Ci	LLD	LLD	LLD	LLD
Total for period	Ci	1.65 E-3	2.21 E-3	---	6.46 E-5

3. Particulates

manganese-54	Ci	LLD	LLD	LLD	LLD
iron-59	Ci	LLD	LLD	LLD	LLD
cobalt-58	Ci	LLD	3.60 E-4	LLD	8.01 E-6
cobalt-60	Ci	2.51 E-6	2.41 E-4	LLD	9.23 E-6
zinc-65	Ci	LLD	LLD	LLD	LLD
strontium-89	Ci	4.12 E-6	1.06 E-6	LLD	LLD
strontium-90	Ci	2.79 E-6	3.76 E-5	LLD	LLD
molybdenum-99	Ci	LLD	LLD	LLD	LLD
cesium-134	Ci	LLD	2.65 E-5	LLD	LLD
cesium-137	Ci	4.67 E-6	7.60 E-5	LLD	1.51 E-6
cerium-141	Ci	LLD	LLD	LLD	LLD
cerium-144	Ci	LLD	LLD	LLD	LLD
chromium-51	Ci	LLD	7.56 E-5	LLD	LLD
	Ci				
Total for period	Ci	1.41 E-5	8.18 E-4	---	1.88 E-5

LLD = Below the lower limit of detectability, in uCi/cc (Table 4).

The batch columns of this table include the activity determinations of the 2 Abnormal Releases indicated on the Supplemental Information Page.

TABLE 2A  
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EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT  
LIQUID EFFLUENTS - SUMMATION OF ALL RELEASES

Unit	Quarter	Quarter	Est. Total Error, %
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A. Fission & activation products

		3rd	4th	
1. Total release (not including tritium, gases, alpha)	Ci	1.99 E-2	8.52 E-2	2.60 E+1
2. Average diluted concentration during period	uCi/ml	1.14 E-8	1.78 E-7	
3. Percent of applicable limit	%	1.59 E+0	6.82 E+0	

B. Tritium

1. Total release	Ci	1.06 E+2	2.54 E+1	2.50 E+1
2. Average diluted concentration during period	uCi/ml	6.06 E-5	5.31 E-5	
3. Percent of applicable limit	%	2.02 E+0	1.77 E+0	

C. Dissolved and entrained gases

1. Total release	Ci	1.14 E-1	5.06 E-3	2.70 E+1
2. Average diluted concentration during period	uCi/ml	6.51 E-8	1.06 E-8	
3. Percent of applicable limit	%	3.26 E-2	5.29 E-3	

D. Gross alpha radioactivity

1. Total release	Ci	1.90 E-6	3.19 E-4	2.89 E+1
E. Volume of waste released (prior to dilution)	liters	2.33 E+6	1.31 E+6	1.12 E+1
F. Volume of dilution water used during period	liters	1.75 E+9	4.77 E+8	2.29 E+1

LLD = Below the lower limit of detectability, in uCi/cc (Table 4).

N/A = NOT APPLICABLE

A.3 is based on a nominal limit of 1.25 Ci/quarter (10 CFR 50 Appendix I, RM-50-2, A.2 limits this value to 5 Ci/year).

B.3 is based on a limit of 3.00 E-3 uCi/ml.

C.3 is based on a limit of 2.00 E-4 uCi/ml.

TABLE 2B  
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EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

LIQUID EFFLUENTS

Nuclides Released	Unit	CONTINUOUS MODE		BATCH MODE	
		Quarter 3rd	Quarter 4th	Quarter 3rd	Quarter 4th
strontium-89	Ci	N/A	N/A	4.30 E-6	2.74 E-5
strontium-90	Ci	N/A	N/A	5.15 E-7	6.90 E-6
cesium-134	Ci	N/A	N/A	8.63 E-4	1.12 E-3
cesium-137	Ci	N/A	N/A	1.79 E-3	2.13 E-3
iodine-131	Ci	N/A	N/A	2.04 E-4	9.65 E-4
cobalt-57	Ci	N/A	N/A	LLD	LLD
cobalt-58	Ci	N/A	N/A	1.42 E-3	1.40 E-2
cobalt-60	Ci	N/A	N/A	1.55 E-2	2.61 E-2
iron-59	Ci	N/A	N/A	LLD	LLD
zinc-65	Ci	N/A	N/A	LLD	LLD
manganese-54	Ci	N/A	N/A	7.85 E-5	2.15 E-4
chromium-51	Ci	N/A	N/A	LLD	2.76 E-4
iron-55	Ci	N/A	N/A	LLD	3.36 E-2
zirconium-niobium-95	Ci	N/A	N/A	LLD	8.80 E-5
molybdenum-99	Ci	N/A	N/A	LLD	LLD
technetium-99M	Ci	N/A	N/A	LLD	LLD
barium-lanthanum-140	Ci	N/A	N/A	LLD	LLD
cerium-141	Ci	N/A	N/A	LLD	LLD
sodium-24	Ci	N/A	N/A	LLD	1.86 E-5
strontium-92	Ci	N/A	N/A	1.61 E-5	6.48 E-5
niobium-97	Ci	N/A	N/A	6.21 E-5	1.94 E-4
silver-110m	Ci	N/A	N/A	LLD	7.02 E-5
antimony-124	Ci	N/A	N/A	LLD	1.76 E-3
antimony-125	Ci	N/A	N/A	LLD	4.60 E-3
unidentified	Ci	N/A	N/A	NONE	NONE
Total for period (above)	Ci	N/A	N/A	1.99 E-2	8.52 E-2
xenon-133	Ci	N/A	N/A	1.13 E-1	4.99 E-3
xenon-135	Ci	N/A	N/A	1.65 E-4	1.66 E-5
xenon-131m	Ci	N/A	N/A	6.44 E-5	5.70 E-5
xenon-133m	Ci	N/A	N/A	4.49 E-4	LLD
	Ci	N/A	N/A		
	Ci	N/A	N/A		
	Ci	N/A	N/A		

LLD = Below the lower limit of detectability in uCi/cc (Table 4).

N/A = NOT APPLICABLE (liquids not discharged in a continuous mode).

TABLE 1  
EFFLUENT AND WASTE DISPOSAL SEMI-ANNUAL REPORT  
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

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

		TYPE OF WASTE			Est. Total Error, %
		Spent resins filter sludges evaporator bottoms	Dry compressible waste contaminated equipment * etc.	Irradiated Components control rods etc.	
Container Volume(m <sup>3</sup> )		2.91 E+1	4.61 E+1		3.0 E+1
Total Activity (Ci)		6.40 E+2	1.04 E+0		3.0 E+1
Principal Radionuclide Composition (%)	H-3	4.41 E+0	2.54 E+1		
	C-14	1.07 E-1	4.47 E-1		
	P-32	1.07 E-2	2.67 E-2		
	Mn-54	2.76 E+0	4.55 E-1		
	Fe-55	1.74 E+1	1.39 E+1		
	Co-57	4.00 E-1	3.06 E-2		
	Co-58	5.76 E+0	1.75 E+0		
	Co-60	3.46 E+1	9.84 E+0		
	Ni-59	1.27 E-1	7.17 E-1		
	Ni-63	1.21 E+1	1.39 E+1		
	Zn-65	7.33 E-1	-----		
	Sr-89	1.11 E-1	4.41 E-2		
	Sr-90	5.91 E-2	6.83 E-2		
	Nb-94	3.30 E-4	-----		
	Nb-95	2.03 E-1	8.06 E-2		
	Zr-95	1.04 E-1	7.74 E-2		
	Yc-99	1.35 E-3	8.97 E-1		
	Ag-110m	7.78 E-2	-----		
	Sb-124	-----	-----		
	Sb-125	1.49 E-1	-----		
	I-129	9.18 E-4	7.04 E-1		
	I-131	1.98 E-3	1.62 E-3		
	Cs-134	7.45 E+0	1.21 E+1		
	Cs-137	1.38 E+1	1.92 E+1		
	Ce-144/Pr-144	6.99 E-2	-----		
	Np-237/Pu-242	3.64 E-5	-----		
	Pu-238	6.61 E-4	1.17 E-3		
	Pu-239/240	3.31 E-4	1.08 E-3		
Pu-241	4.29 E-2	2.09 E-1			
Am-241	3.39 E-4	8.10 E-4			
Cm-242	1.04 E-3	5.34 E-4			
Cm-243/244	8.09 E-4	2.97 E-4			
NUMBER OF SHIPMENTS	Type of Container				
	LSA	2	3		
	TYPE A	7	NONE		
	TYPE B	NONE	NONE		
	LARGE QUANTITY	NONE	NONE		
	OTHER	NONE	NONE		
	Solid. Agent				
	CEMENT	3	1		
	UREA FORMALDEHYDE	NONE	NONE		
	NONE	6	2		
	OTHER	NONE	NONE		
	Mode of Trans.				
TRUCK	9	3			
RAIL	NONE	NONE			
OTHER	NONE	NONE			
Destin- ation					
Carnwell, SC	9	2			
Richland, WA	NONE	1			
OTHER	NONE	NONE			

Total No. of Shipments 12

B. IRRADIATED FUEL SHIPMENTS NONE

\* The Dry Compressible Waste column of this table includes one shipment of solidified oil.

TABLE 4

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## EFFLUENT AND WASTE DISPOSAL SEMIANNUAL REPORT

## LOWER LIMITS OF DETECTABILITY

NUCLIDE	uCi/cc	
	** GAS	LIQUID
H-3	1.00 E-6	1.00 E-6
Na-24	-----	2.06 E-8
Ar-41	5.41 E-8	-----
Cr-51	2.50 E-7	1.48 E-7
Mn-54	1.18 E-8	1.39 E-8
Fe-55	-----	* 5.00 E-7
Fe-59	4.70 E-8	4.62 E-8
Co-57	2.00 E-8	2.00 E-8
Co-58	4.40 E-8	4.40 E-8
Co-60	4.35 E-8	1.83 E-8
Zn-65	6.50 E-8	8.50 E-8
Kr-85	* 2.00 E-10	3.75 E-7
Kr-85m	6.67 E-9	-----
Kr-87	2.01 E-8	-----
Kr-88	1.73 E-8	-----
Sr-89	1.00 E-6	1.30 E-9
Sr-90	6.20 E-6	3.10 E-9
Sr-92	-----	1.17 E-7
Nb-95	-----	3.92 E-8
Nb-97	-----	3.00 E-9
Zr-95	-----	3.92 E-8
Mo-99	2.10 E-8	1.45 E-8
Tc-99m	-----	7.36 E-9
Ag-110m	-----	6.18 E-8
Sb-124	-----	1.00 E-8
Sb-125	-----	5.00 E-9
I-131	9.60 E-7	1.76 E-8
I-133	2.17 E-6	-----
I-135	1.16 E-5	-----
Xe-131m	1.59 E-8	7.70 E-8
Xe-133	4.15 E-8	5.44 E-8
Xe-133m	9.98 E-8	1.00 E-8
Xe-135	9.96 E-9	1.56 E-8
Xe-135m	1.58 E-8	-----
Xe-137	-----	7.90 E-8
Xe-138	4.10 E-8	-----
Cs-134	1.29 E-8	1.70 E-8
Cs-137	1.12 E-8	1.43 E-8
Ba-139	-----	7.70 E-8
Ba-140	2.02 E-8	6.60 E-8
La-140	2.02 E-8	2.38 E-8
Ce-141	4.50 E-8	8.56 E-8
Ce-144	5.43 E-8	-----
Gross Alpha	4.90 E-8	7.10 E-10

All LLDs listed above meet the minimum requirements listed in Tables 4.11-1 and 4.11-2 of the Technical Specifications.

All sample analyses use a minimum one hour count time.

\*Sample analyses performed by a contractor laboratory.

\*\*The values listed in this column are for grab samples. Appropriate values in this column change to smaller values when continuous samples are involved.



TABLE 5

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## ASSESSMENT OF RADIATION DOSES

## Liquid Effluents (Batch)

		3rd Quarter		4th Quarter	
		Dose	% of Tech. Spec. Limit	Dose	% of Tech. Spec. Limit
ORGAN (1)	BONE	0.0756	1.51	0.2580	5.16
	LIVER	0.1270	2.54	0.4300	8.60
	TOTAL BODY	0.0927	6.18	0.3130	20.87
	THYROID	0.0036	0.07	0.0147	0.30
	KIDNEY	0.0439	0.88	0.1440	2.88
	LUNG	0.0164	0.33	0.0492	0.99
	GI-LLI	0.0113	0.23	0.0593	1.19

## Gaseous Effluents (Batch and Continuous)

		3rd Quarter		4th Quarter	
		Dose	% of Tech. Spec. Limit	Dose	% of Tech. Spec. Limit
	BETA AIR (2)	4.64E-3	0.0928	0.582	11.64
	GAMMA AIR (2)	1.28E-2	0.1280	1.757	17.57
ORGAN (3)	BONE	1.01E-3	0.0135	8.36E-5	0.0011
	LIVER	1.77E-2	0.2360	7.13E-3	0.0951
	TOTAL BODY	1.71E-2	0.2280	7.13E-3	0.0951
	THYROID	1.70E-2	0.2267	8.48E-3	0.1131
	KIDNEY	1.72E-2	0.2293	7.12E-3	0.0949
	LUNG	1.71E-2	0.2280	7.14E-3	0.0952
	GI-LLI	1.70E-2	0.2267	7.12E-3	0.0949

- (1) These doses are listed in mrem; they are calculated for the maximum individual for all batch liquid effluents.
- (2) These doses are listed in mrad, they are calculated for the maximum individual at the site boundary for all batch and continuous gaseous effluents (0.4 miles NW).
- (3) These doses are listed in mrem, they are calculated for the likely most exposed real individual (child) via all real pathways at 1.1 miles NW.

Limits used for calculation of % are from Section 3/4.11, Article 3.11.1.2, 3.11.2.1, 3.11.2.2 and 3.11.2.3 of the Technical Specifications.

TABLE 6

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## TECHNICAL SPECIFICATION EFFLUENT MONITORING INSTRUMENTATION CHANNELS NOT RETURNED TO OPERABLE STATUS WITHIN 30 DAYS

## (RM-GW-101) - Waste Gas Decay Tanks Radiation Monitor

This monitor has been modified to eliminate the presence of water in the sample lines. Also, the original sample pump design specified air cooling. A replacement pump of this type could not be located, therefore, a water cooled pump was purchased. Design Change Package No. 653 was subsequently issued to supply cooling lines to the pump. Further discussion with the vendor revealed that the pump could be operated (without water cooling) as long as the sample is returned to the tank from which it was drawn. At present, all maintenance work is complete on this monitor, with the exception of installing the flow indicator (rotameter). This installation and subsequent calibration are pending the arrival of the rotameter from a vendor.

## (RM-RW-100) - Component Cooling Recirculation Spray Heat Exchangers River Water Monitor

This monitor could not draw a sample from the river water line. An investigation indicated that a high flow past the sample line take off draws an undesirable vacuum on the line and prevents flow into the monitor. Design Change Package No. 432 was subsequently issued to install new sample lines. All maintenance work under this DCP was complete on December 30, 1984. This monitor was returned to service in January of 1985.

## (RM-DA-100) - Auxiliary Feed Pump Bay Drain Monitor

The present design of this monitor, as installed by Design Change Package No. 268 does not meet the Channel Functional Test requirements of Technical Specification Table 4.3-12. The design does not permit automatic isolation of the Auxiliary Feed Pump drains for the following two conditions:

1. Downscale failure.
2. Instrument controls are not set in operate mode.

Technical Specification Change Request No. 99 has been prepared in response to this. This change delineates Control Room Alarm Annunciation only for the above two conditions. At present, this change request is at Region I of the NRC undergoing their safety evaluation.

ATTACHMENT 1

2nd HALF - 1984

The attached pages are the licensee initiated changes made to the Offsite Dose Calculation Manual during the second six months of 1984.

The changed pages to the Offsite Dose Calculation Manual are identified as ISSUE 1, REVISION 1. The reflected pages are as follows:

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1-17 thru 1-19  
2-12 thru 2-15  
2-27 thru 2-37  
2-51

The above pages and all support calculations were reviewed by the Radiation Safety Committee (a working group of the Onsite Safety Committee) at Meeting No. BVPS-RSC-4-84 on September 24, 1984. This data was then reviewed and approved by the Onsite Safety Committee at Meeting No. BV-OSC-62-84 on September 28, 1984.

A description of the revisions that resulted in the ODCM changes are as follows:

- 1) ODCM Table 1.3-1 was revised to include liquid dose factors for nuclides presently identified at BVPS and not included in the original table.
- 2) ODCM equations 2.1-19 and 2.1-22 were revised as approved at RSC Meeting No. BVPS-RSC-1-84 on January 31, 1984. The equations were revised to clarify flow rate terminology.
- 3) ODCM Section 2.2.2 was revised to delete the food and ground pathways for gaseous dose rate calculations of I-131, tritium, and radionuclides in particulate form with half lives greater than 8 days.
- 4) ODCM Table 2.2-13 was revised to include 7 organs rather than only the maximum organ. Also, the receptor was changed from infant to child, and addition/deletion of nuclides to be consistent with the Technical Specifications and nuclides identified at BVPS-1.

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TABLE 1.3-1  
Air VALUES FOR THE ADULT FOR THE  
BEAVER VALLEY UNIT 1  
(MREM/HR PER MICRO-CI/ML)

NUCLIDE	BONE	LIVER	T.BODY	THYROID	KIDNEY	LUNG	GI-LLI
H-3	0.00E-01	2.70E-01	2.70E-01	2.70E-01	2.70E-01	2.70E-01	2.70E-01
C-14	3.13E 04	6.26E 03	6.26E 03	6.26E 03	6.26E 03	6.26E 03	6.26E 03
NA-24	4.08E 02	4.08E 02	4.08E 02	4.08E 02	4.08E 02	4.08E 02	4.08E 02
P-32	4.62E 07	2.87E 06	1.79E 06	0.00E-01	0.00E-01	0.00E-01	5.19E 06
CR-51	0.00E-01	0.00E-01	1.27E 00	7.62E-01	2.81E-01	1.69E 00	3.21E 02
MN-54	0.00E-01	4.38E 03	8.35E 02	0.00E-01	1.30E 03	0.00E-01	1.34E 04
MN-56	0.00E-01	1.10E 02	1.95E 01	0.00E-01	1.40E 02	0.00E-01	3.52E 03
FE-55	6.59E 02	4.56E 02	1.06E 02	0.00E-01	0.00E-01	2.54E 02	2.61E 02
FE-59	1.04E 03	2.45E 03	9.38E 02	0.00E-01	0.00E-01	6.83E 02	8.15E 03
CO-57	0.00E-01	2.10E 01	3.50E 01	0.00E-01	0.00E-01	0.00E-01	5.33E 02
CO-58	0.00E-01	8.95E 01	2.01E 02	0.00E-01	0.00E-01	0.00E-01	1.81E 03
CO-60	0.00E-01	2.57E 02	5.67E 02	0.00E-01	0.00E-01	0.00E-01	4.83E 03
NI-63	3.12E 04	2.16E 03	1.05E 03	0.00E-01	0.00E-01	0.00E-01	4.51E 02
NI-65	1.27E 02	1.65E 01	7.51E 00	0.00E-01	0.00E-01	0.00E-01	4.17E 02
CU-64	0.00E-01	1.00E 01	4.70E 00	0.00E-01	2.52E 01	0.00E-01	8.53E 02
ZN-65	2.32E 04	7.37E 04	3.33E 04	0.00E-01	4.93E 04	0.00E-01	4.64E 04
ZN-69	4.93E 01	7.43E 01	6.56E 00	0.00E-01	6.13E 01	0.00E-01	1.29E 01
BR-83	0.00E-01	0.00E-01	4.04E 01	0.00E-01	0.00E-01	0.00E-01	5.82E 01
BR-84	0.00E-01	0.00E-01	5.24E 01	0.00E-01	0.00E-01	0.00E-01	4.11E-04
BR-85	0.00E-01	0.00E-01	2.15E 00	0.00E-01	0.00E-01	0.00E-01	0.00E-01
RB-86	0.00E-01	1.01E 05	4.71E 04	0.00E-01	0.00E-01	0.00E-01	1.99E 04
RB-88	0.00E-01	2.90E 02	1.54E 02	0.00E-01	0.00E-01	0.00E-01	4.00E-09
RB-89	0.00E-01	1.92E 02	1.35E 02	0.00E-01	0.00E-01	0.00E-01	1.12E-11
SR-89	2.22E 04	0.00E-01	6.39E 02	0.00E-01	0.00E-01	0.00E-01	3.57E 03
SR-90	5.48E 05	0.00E-01	1.34E 05	0.00E-01	0.00E-01	0.00E-01	1.58E 04
SR-91	4.10E 02	0.00E-01	1.65E 01	0.00E-01	0.00E-01	0.00E-01	1.95E 03
SR-92	1.55E 02	0.00E-01	6.72E 00	0.00E-01	0.00E-01	0.00E-01	3.08E 03
Y-90	5.80E-01	0.00E-01	1.55E-02	0.00E-01	0.00E-01	0.00E-01	6.15E 03
Y-91M	5.48E-03	0.00E-01	2.12E-04	0.00E-01	0.00E-01	0.00E-01	1.61E-02
Y-91	8.50E 00	0.00E-01	2.27E-01	0.00E-01	0.00E-01	0.00E-01	4.68E 03

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TABLE 1.3-1 (CONT)  
A<sub>i</sub> VALUES FOR THE ADULT FOR THE  
BEAVER VALLEY UNIT 1  
(MREM/HR PER MICRO-CI/ML)

NUCLIDE	BONE	LIVER	T.BODY	THYROID	KIDNEY	LUNG	GI-LLI
Y-92	5.09E-02	0.00E-01	1.49E-03	0.00E-01	0.00E-01	0.00E-01	8.92E 02
Y-93	1.62E-01	0.00E-01	4.46E-03	0.00E-01	0.00E-01	0.00E-01	5.12E 03
ZR-95	2.53E-01	8.11E-02	5.49E-02	0.00E-01	1.27E-01	0.00E-01	2.57E 02
ZR-97	1.40E-02	2.82E-03	1.29E-03	0.00E-01	4.26E-03	0.00E-01	8.73E 02
NB-95	4.47E 02	2.48E 02	1.34E 02	0.00E-01	2.46E 02	0.00E-01	1.51E 06
NB-97	3.75E 00	9.48E-01	3.46E-01	0.00E-01	1.11E 00	0.00E-01	3.50E 03
MO-99	0.00E-01	1.05E 02	2.00E 01	0.00E-01	2.38E 02	0.00E-01	2.43E 02
TC-99M	8.97E-03	2.54E-02	3.23E-01	0.00E-01	3.85E-01	1.24E-02	1.50E 01
TC-101	9.23E-03	1.33E-02	1.30E-01	0.00E-01	2.39E-01	6.79E-03	4.00E-14
RU-103	4.51E 00	0.00E-01	1.94E 00	0.00E-01	1.72E 01	0.00E-01	5.26E 02
RU-105	3.75E-01	0.00E-01	1.48E-01	0.00E-01	4.85E 00	0.00E-01	2.29E 02
RU-106	6.70E 01	0.00E-01	8.48E 00	0.00E-01	1.29E 02	0.00E-01	4.34E 03
AD-110M	9.48E-01	8.77E-01	5.21E-01	0.00E-01	1.72E 00	0.00E-01	3.58E 02
SB-124	6.11E 02	1.15E 01	2.42E 02	1.48E 00	0.00E-01	4.76E 02	1.74E 04
SB-125	3.91E 02	4.37E 00	9.30E 01	3.97E-01	0.00E-01	3.01E 02	4.30E 03
TE-125M	2.57E 03	9.30E 02	3.44E 02	7.72E 02	1.04E 04	0.00E-01	1.03E 04
TE-127M	6.49E 03	2.32E 03	7.90E 02	1.66E 03	2.63E 04	0.00E-01	2.17E 04
TE-127	1.05E 02	3.78E 01	2.28E 01	7.81E 01	4.29E 02	0.00E-01	8.32E 03
TE-129M	1.10E 04	4.11E 03	1.74E 03	3.78E 03	4.60E 04	0.00E-01	5.55E 04
TE-129	3.01E 01	1.13E 01	7.33E 00	2.31E 01	1.26E 02	0.00E-01	2.27E 01
TE-131M	1.66E 03	8.10E 02	6.75E 02	1.28E 03	8.21E 03	0.00E-01	8.05E 04
TE-131	1.89E 01	7.88E 00	5.96E 00	1.55E 01	8.27E 01	0.00E-01	2.67E 00
TE-132	2.41E 03	1.56E 03	1.47E 03	1.72E 03	1.50E 04	0.00E-01	7.39E 04
TE-134	3.10E 01	2.03E 01	1.25E 01	2.71E 01	1.96E 02	0.00E-01	3.44E-02
I-129	1.19E 02	1.02E 02	3.35E 02	2.63E 05	2.19E 02	0.00E-01	1.61E 01
I-130	2.75E 01	8.10E 01	3.20E 01	6.87E 03	1.26E 02	0.00E-01	6.97E 01
I-131	1.51E 02	2.16E 02	1.24E 02	7.08E 04	3.71E 02	0.00E-01	5.70E 01
I-132	7.37E 00	1.97E 01	6.90E 00	6.90E 02	3.14E 01	0.00E-01	3.71E 00
I-133	5.16E 01	8.97E 01	2.74E 01	1.32E 04	1.57E 02	0.00E-01	8.06E 01
I-134	3.85E 00	1.05E 01	3.74E 00	1.81E 02	1.66E 01	0.00E-01	9.12E-03

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TABLE 1.3-1 (CONT)  
Air VALUES FOR THE ADULT FOR THE  
BEAVER VALLEY UNIT 1  
(MREM/HR PER MICRO-CI/ML)

NUCLIDE	BONE	LIVER	T.BODY	THYROID	KIDNEY	LUNG	GI-LLI
I-135	1.61E 01	4.21E 01	1.55E 01	2.78E 03	6.76E 01	0.00E-01	4.76E 01
CS-134	2.98E 05	7.09E 05	5.79E 05	0.00E-01	2.29E 05	7.61E 04	1.24E 04
CS-136	3.12E 04	1.23E 05	8.86E 04	0.00E-01	6.85E 04	9.39E 03	1.40E 04
CS-137	3.82E 05	5.22E 05	3.42E 05	0.00E-01	1.77E 05	5.89E 04	1.01E 04
CS-138	2.64E 02	5.22E 02	2.59E 02	0.00E-01	3.84E 02	3.79E 01	2.23E-03
BA-139	9.69E-01	6.90E-04	2.84E-02	0.00E-01	6.45E-04	3.92E-04	1.72E 00
BA-140	2.03E 02	2.55E-01	1.33E 01	0.00E-01	8.66E-02	1.46E-01	4.18E 02
BA-141	4.71E-01	3.56E-04	1.59E-02	0.00E-01	3.31E-04	2.02E-04	2.22E-10
BA-142	2.13E-01	2.19E-04	1.34E-02	0.00E-01	1.85E-04	1.24E-04	3.00E-19
LA-140	1.51E-01	7.59E-02	2.01E-02	0.00E-01	0.00E-01	0.00E-01	5.57E 03
LA-142	7.71E-03	3.51E-03	8.74E-04	0.00E-01	0.00E-01	0.00E-01	2.56E 01
CE-141	2.63E-02	1.78E-02	2.02E-03	0.00E-01	8.26E-03	0.00E-01	6.80E 01
CE-143	4.64E-03	3.43E 00	3.79E-04	0.00E-01	1.51E-03	0.00E-01	1.28E 02
CE-144	1.37E 00	5.73E-01	7.36E-02	0.00E-01	3.40E-01	0.00E-01	4.64E 02
PR-143	5.64E-01	2.22E-01	2.75E-02	0.00E-01	1.28E-01	0.00E-01	2.43E 03
PR-144	1.81E-03	7.53E-04	9.22E-05	0.00E-01	4.25E-04	0.00E-01	2.61E-10
ND-147	3.79E-01	4.38E-01	2.62E-02	0.00E-01	2.56E-01	0.00E-01	2.10E 03
W-187	2.96E 02	2.47E 02	8.65E 01	0.00E-01	0.00E-01	0.00E-01	8.10E 04
NP-239	2.90E-02	2.85E-03	1.57E-03	0.00E-01	8.89E-03	0.00E-01	5.85E 02

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$L_i$  = The skin dose factor due to beta emissions from noble gas radionuclide "i" (mrem/year/ $\mu\text{Ci}/\text{m}^3$ ) from Table 2.2-11.

$M_i$  = The air dose factor due to gamma emissions from noble gas radionuclide "i" (mrad/year/ $\mu\text{Ci}/\text{m}^3$ ) from Table 2.2-11.

- c. The flow rate (f) is determined by selecting the smaller of the calculated (f) values based on the whole body exposure limit (Section 2.1.3.1.a) and based on the skin exposure limit (Section 2.1.3.1.b). The actual purge flow rate in the cfm must be maintained at or below this calculated (f) value or the discharge cannot be made from the vent.

2.1.3.2 The monitor alarm setpoints above background are determined as follows:

- a. The calculated monitor high-high alarm setpoint (HHSP) above background (ncpm) attributed to the noble gas radionuclides is determined by:

$$\text{HHSP} = \frac{f \sum_i C_i E_i}{F'} \quad (2.1-19)$$

f = The maximum acceptable gaseous discharge flow rate (cfm) determined in Section 2.1.3.1.

F' = The maximum actual or design effluent flow rate (cfm) at the point of release.

= 92,000 cfm (Ventilation Vent -- design).<sup>(1)</sup>

= 49,300 cfm (Containment Building Vent -- design).<sup>(1)</sup>



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$C_i$  = The radioactivity concentration of noble gas radionuclide "i" in the gaseous effluent ( $\mu\text{Ci/cc}$ ) from the analysis of the gaseous effluent to be released.

$E_i$  = The detection efficiency of the monitor for noble gas radionuclide "i" (cpm/ $\mu\text{Ci/cc}$ ) from Table 2.1-2.

- b. The monitor high alarm setpoint above background (ncpm) is determined by:

$$\text{HSP} = 0.125 \times \text{HHSP}$$

2.1.4 Setpoint Determination Based on Analysis Prior to Release for Process Vent Releases (Elevated Releases)

The following calculation method applies to gaseous releases via the Process Vent when the "conservative mix" does not provide adequate operational flexibility. This method is used to determine the setpoint for the maximum acceptable discharge flow rate and the associated high-high alarm setpoint based on this flow rate for the Gaseous Waste Gas Monitor (GW-108B) during the following operational conditions:

- Batch release of waste gas via the Process Vent

NOTE: If the radioactivity of a noble gas radionuclide is below the LLD value specified in the BVPS Technical Specifications, the noble gas radionuclide should not be included as a source term in this setpoint calculation.

2.1.4.1 Determine the maximum acceptable discharge flow rate from the waste gas tanks.

- a. The maximum acceptable gaseous discharge flow rate (in cfm) from the waste gas tanks ( $f$ ) based upon the whole body exposure limit is determined by:

$$f = \frac{0.848}{\sum_i V_i C_i} \quad (2.1-20)$$

$V_i$  = The constant for noble gas radionuclide "i" accounting for the gamma radiation from the elevated plume (mrem/year/ $\mu\text{Ci/sec}$ ) from Table 2.1-3.

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$C_i$  = The radioactivity concentration of noble gas radionuclide "i" in the gaseous effluent ( $\mu\text{Ci}/\text{cc}$ ) from the analysis of the gaseous effluent to be released.

b. Based upon the skin exposure limit, (f) is calculated by:

$$f = \frac{5.09}{\sum_i (L_i (\chi/Q_s) + 1.1 B_i) C_i} \quad (2.1-21)$$

$L_i$  = The skin dose factor due to beta emissions from noble gas radionuclide "i" ( $\text{mrem}/\text{year}/\mu\text{Ci}/\text{m}^3$ ) from Table 2.2-11.

$(\chi/Q_s)$  = The highest calculated annual average relative concentration of effluents released via the Process Vent for any area at or beyond the unrestricted area boundary for all sectors ( $\text{sec}/\text{m}^3$ ) from Table 2.2-8.

=  $1.2 \text{ E}-6 \text{ sec}/\text{m}^3$ .

$B_i$  = The constant for long-term releases (greater than 500 hrs/year) for noble gas radionuclide "i" accounting for the gamma radiation from the elevated finite plum ( $\text{m}-\text{ad}/\text{year}/\mu\text{Ci}/\text{sec}$ ) from Table 2.1-3.

c. Select the smaller of the calculated f values based on the whole body exposure limit (Section 2.1.4.1.a) and based on the skin exposure limit (Section 2.1.4.1.b). The actual discharge flow rate in (cfm) must be maintained at or below this f value.

2.1.4.2 The monitor alarm setpoints above background are determined as follows:

a. The calculated monitor high-high alarm setpoint (HHSP) above background (ncpm) attributed to the noble gas radionuclides is determined by:

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$$\text{HHSP} = \frac{f \sum_i C_i E_i}{F'} \quad (2.1-22)$$

$f$  = The maximum acceptable gaseous discharge flow rate (cfm) determined in Section 2.1.4.1.

$F'$  = The maximum actual or design effluent flow rate (cfm) at the point of release.

= 1200 cfm (Process Vent -- design).<sup>(3)</sup>

$C_i$  = The radioactivity of noble gas radionuclide "i" in the gaseous effluent ( $\mu\text{Ci}/\text{cc}$ ) from the analysis of the gas to be released.

$E_i$  = The detection efficiency of the monitor for noble gas radionuclide "i" (cpm/ $\mu\text{Ci}/\text{cc}$ ) from Table 2.1-2.

- b. The monitor high alarm setpoint (HSP) above background (ncpm) is determined by:

$$\text{HSP} = 0.125 \times \text{HHSP}$$

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2.2.2 Iodine-131, Tritium, and Radionuclides in Particulate Form

The dose rate in unrestricted areas resulting from the inhalation of I-131, tritium, and all radionuclides in particulate form (excluding C-14) with half lives greater than 8 days released in gaseous effluents shall be limited to 1500 mrem/yr to any organ. Based upon NUREG-0133, the following basic expression is used to show compliance with BVTS 3.11.2.1.b:

$$\sum_i P_{i\tau} \left[ \overline{(X/Q)}_s \dot{Q}_{is} + \overline{(X/Q)}_v \dot{Q}_{iv} \right] \leq 1500 \text{ mrem/yr} \quad (2.2-11)$$

where

$P_{i\tau}$  = the dose parameter for any organ  $\tau$  for each identified radionuclide  $i$ , mrem/yr per  $\mu\text{Ci}/\text{m}^3$ ;

$\dot{Q}_{is}$  = the release rate of radionuclide  $i$ , in gaseous effluents from elevated releases,  $\mu\text{Ci}/\text{sec}$ ;

$\dot{Q}_{iv}$  = the release rate of radionuclide  $i$  in gaseous effluents from ground level or mixed mode releases,  $\mu\text{Ci}/\text{sec}$ ;

$\overline{(X/Q)}_s$  = The highest calculated annual average relative concentration for any area at or beyond the unrestricted area boundary for elevated releases,  $\text{sec}/\text{m}^3$ ;

$\overline{(X/Q)}_v$  = The highest calculated annual average relative concentration for any area at or beyond the unrestricted area boundary for ground level or mixed mode releases,  $\text{sec}/\text{m}^3$ .

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Releases may occur from any of the BVPS vents in the release modes listed in Table 2.2-1. To show compliance with BVTS 3.11.2.1.b, Expression 2.2-11 is now expressed in terms of the actual release points for the BVPS:

$$\sum_i P_{it} \left[ \overline{(X/Q)}_{pv} \dot{Q}_{i_{pv}} + \overline{(X/Q)}_{cv} \dot{Q}_{i_{cv}} + \overline{(X/Q)}_{vv} \dot{Q}_{i_{vv}} \right] \leq 1500 \text{ mrem/yr} \quad (2.2-12)$$

where

$\overline{(X/Q)}_{pv}$  = highest calculated annual average relative concentration for releases from the process vent, sec/m<sup>3</sup>;

$\overline{(X/Q)}_{cv}$  = highest calculated annual average relative concentration for releases from the containment vent, sec/m<sup>3</sup>;

$\overline{(X/Q)}_{vv}$  = highest calculated annual average relative concentration for releases from the ventilation vent, sec/m<sup>3</sup>;

$\dot{Q}_{i_{pv}}$  = long-term release of radionuclide i from the process vent,  $\mu\text{Ci/sec}$ ;

$\dot{Q}_{i_{cv}}$  = long-term release of radionuclide i from the containment vent,  $\mu\text{Ci/sec}$ ;

$\dot{Q}_{i_{vv}}$  = long-term release of radionuclide i from the ventilation  $\mu\text{Ci/sec}$ .

All other terms are the same as those defined previously.

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Values of the organ dose parameters,  $P_{i\tau}$  for nuclide  $i$ , were calculated using methodology given in NUREG-0133. For the child age group, the following equation was used for all nuclides. The  $P_{i\tau}$  values are presented in Table 2.2-13.

$$P_{i\tau} = 3.7 \times 10^9 \text{ DFA}_{i\tau} \quad (2.2-14)$$

where:

$3.7 \times 10^9$  = Breathing rate of a child (3700 m<sup>3</sup>/yr)  
x unit conversion factor (10<sup>6</sup> pCi/  
μCi)

$\text{DFA}_{i\tau}$  = The organ inhalation dose factor for a  
child from Table E-9 of Regulatory Guide  
1.109 for organ  $\tau$ , nuclide  $i$ , in units  
of mrem/pCi.

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OFFSITE DOSE CALCULATION MANUAL

To show compliance with BVTS 3.11.2.1.b, Expression 2.2-12 is evaluated at the controlling locations.

For Release modes 1 and 2 the controlling location is 0.4 miles NW of Unit No. 1's containment building. Inserting the appropriate  $\chi/Q_s$  from Tables 2.2-5 through 2.2-7 for this location, Expression 2.2-12 becomes:

$$\sum P_{i\tau} \left[ 2.2 \times 10^{-9} \dot{Q}_{i_{pv}} + 5.0 \times 10^{-8} \dot{Q}_{i_{cv}} + 5.3 \times 10^{-5} \dot{Q}_{i_{vv}} \right] \leq 1500$$

(2.2-22)

OFFSITE DOSE CALCULATION MANUAL

For release mode 3 the controlling location is 0.75 miles NNW. Inserting the appropriate  $\chi/Q$ s from Tables 2.2-8 through 2.2-10 for this location, Expression 2.2-12 becomes:

$$\sum_i P_{ir} \left[ 9.8 \times 10^{-7} \dot{Q}_{i_{pv}} + 1.3 \times 10^{-5} \dot{Q}_{i_{cv}} + 9.1 \times 10^{-6} \dot{Q}_{i_{vv}} \right] \leq 1500$$

(2.2-26)

OFFSITE DOSE CALCULATION MANUAL

The determination of controlling location for implementation of BVTS 3.11.2.1.b for iodine-131, tritium, and radionuclides in particulate form with half-lives greater than 8 days is a function of the same three parameters as for noble gases. The incorporation of these parameters into Expression 2.2-12 resulted in the expressions for the controlling locations as presented in Expressions 2.2-22 and 2.2-26. The radionuclide mix was again based upon the source terms calculated using the GALE Code. GALE inputs are presented in Appendix B. The mix and the source terms are presented in Table 2.2-2 as a function of release type and release point.

ATTACHMENT 1  
2nd HALF - 1984

OFFSITE DOSE CALCULATION MANUAL

A description of the derivation of the  $\chi/Q$  values is provided in Appendix A.

OFFSITE DOSE CALCULATION MANUAL

TABLE 2.2-13

Pit VALUES FOR THE CHILD FOR THE BEAVER VALLEY POWER STATION  
(MREM/YR PER MICRO-CI/CUBIC METER)

NUCLIDE	BONE	LIVER	T.BODY	THYROID	KIDNEY	LUNG	GI-LLI
H-3	0.00E-01	1.12E 03	1.12E 03	1.12E 03	1.12E 03	1.12E 03	1.12E 03
CR-51	0.00E-01	0.00E-01	1.54E 02	8.55E 01	2.43E 01	1.70E 04	1.08E 03
MN-54	0.00E-01	4.29E 04	9.51E 03	0.00E-01	1.00E 04	1.58E 06	2.29E 04
FE-59	2.07E 04	3.34E 04	1.67E 04	0.00E-01	0.00E-01	1.27E 06	7.07E 04
CO-57	0.00E-01	9.03E 02	1.07E 03	0.00E-01	0.00E-01	5.07E 05	1.32E 04
CO-58	0.00E-01	1.77E 03	3.16E 03	0.00E-01	0.00E-01	1.11E 06	3.44E 04
CO-60	0.00E-01	1.31E 04	2.26E 04	0.00E-01	0.00E-01	7.07E 06	9.62E 04
ZN-65	4.26E 04	1.13E 05	7.03E 04	0.00E-01	7.14E 04	9.95E 05	1.63E 04
SR-89	5.99E 05	0.00E-01	1.72E 04	0.00E-01	0.00E-01	2.16E 06	1.67E 05
SR-90	1.01E 08	0.00E-01	6.44E 06	0.00E-01	0.00E-01	1.48E 07	3.43E 05
ZR-95	1.90E 05	4.18E 04	3.70E 04	0.00E-01	5.96E 04	2.23E 06	6.11E 04
NB-95	2.33E 04	9.13E 03	6.55E 03	0.00E-01	8.62E 03	6.14E 05	3.70E 04
NB-97	4.29E-01	7.70E-02	3.60E-02	0.00E-01	8.55E-02	3.42E 03	2.78E 04
MO-99	0.00E-01	1.72E 02	4.25E 01	0.00E-01	3.92E 02	1.35E 05	1.27E 05
TC-99	4.96E 02	5.51E 02	1.98E 02	0.00E-01	6.48E 03	1.25E 06	2.87E 04
AG-110M	1.69E 04	1.14E 04	9.14E 03	0.00E-01	2.12E 04	5.48E 06	1.00E 05
SB-124	5.74E 04	7.40E 02	2.00E 04	1.26E 02	0.00E-01	3.24E 06	1.64E 05
SB-125	9.84E 04	7.59E 02	2.07E 04	9.10E 01	0.00E-01	2.32E 06	4.03E 04
I-131	4.81E 04	4.81E 04	2.73E 04	1.62E 07	7.88E 04	0.00E-01	2.84E 03
CS-134	6.51E 05	1.01E 06	2.25E 05	0.00E-01	3.30E 05	1.21E 05	3.85E 03
CS-137	9.07E 05	8.25E 05	1.28E 05	0.00E-01	2.82E 05	1.04E 05	3.62E 03
BA-140	7.40E 04	6.48E 01	4.33E 03	0.00E-01	2.11E 01	1.74E 06	1.02E 05
LA-140	6.44E 02	2.25E 02	7.55E 01	0.00E-01	0.00E-01	1.83E 05	2.26E 05
CE-141	3.92E 04	1.95E 04	2.90E 03	0.00E-01	8.55E 03	5.44E 05	5.66E 04
CE-144	6.77E 06	2.12E 06	3.61E 05	0.00E-01	1.17E 06	1.20E 07	3.89E 05

BEAVER VALLEY  
JOINT FREQUENCY DISTRIBUTION TABLES  
FOR  
CONTINUOUS RELEASE

FOR  
 $\Delta T$  (150-35 FT) AND 35-FT WIND  
AND  
 $\Delta T$  (500-35 FT) AND 500-FT WIND

(July 1, 1984 - September 30, 1984)



PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	17	15	11	19	12	9	4	4	8	10	3	21	21	15	11	25	205
3.51- 7.50	23	7	5	4	2	6	1	2	7	36	46	42	43	15	13	19	271
7.51-12.50	0	0	0	0	0	0	0	0	0	2	8	4	5	0	0	0	19
12.51-18.50	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	40	22	16	24	14	15	5	6	15	49	57	67	69	30	24	44	497

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	8	2	4	1	4	1	1	1	2	2	4	2	4	4	7	6	53
3.51- 7.50	2	0	0	0	0	0	0	1	0	5	9	9	7	3	1	5	42
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3
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	10	2	4	1	4	1	1	2	2	7	14	12	12	7	8	11	98

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE  
SITE IDENTIFIER: DL8V2  
DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
WIND MEASURED AT: 35.0 FEET  
WIND THRESHOLD AT: 0.75 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
0.76-3.50	7	5	9	1	2	0	0	0	2	5	1	2	0	5	4	5	48
3.51-7.50	1	1	0	0	0	0	0	0	0	1	6	5	6	2	3	4	29
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	2	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	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	8	6	9	1	2	0	0	0	2	6	8	9	6	7	7	9	80

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
WIND MEASURED AT: 35.0 FEET  
WIND THRESHOLD AT: 0.75 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
0.76-3.50	22	18	14	12	13	14	10	13	22	23	25	21	19	27	22	25	300
3.51-7.50	5	0	2	0	1	0	1	0	1	13	13	13	10	6	8	11	84
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
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	27	18	16	12	14	14	11	13	23	36	39	35	29	33	30	36	403

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE  
 SITE IDENTIFIER: DLRV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS E

BETWEEN 150.0 AND 35.0 FEET

STABILITY BASED ON: DELTA T  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76-3.50	10	11	15	20	34	45	53	43	52	43	16	7	7	10	10	10	28
3.51-7.50	0	0	0	0	0	0	0	0	0	10	10	2	1	1	9	3	386
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	36
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	10	11	15	20	34	45	53	43	52	53	27	10	8	11	19	13	452

STABILITY CLASS F

BETWEEN 150.0 AND 35.0 FEET

STABILITY BASED ON: DELTA T  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76-3.50	1	1	10	15	35	64	86	59	31	8	2	1	3	1	2	1	37
3.51-7.50	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	320
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	1	1	10	15	35	64	86	59	32	9	2	1	3	1	2	1	359

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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																	14
0.76- 3.50	0	0	1	9	25	43	110	30	6	3	0	0	0	1	2	0	230
3.51- 7.50	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
7.51-12.50	0	0	0	0	0	0	1	0	0	0	0	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	0	0	1	9	25	43	111	31	8	3	0	0	0	1	2	0	248

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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																	96
0.76- 3.50	65	52	64	77	125	176	264	150	123	94	51	54	54	63	58	72	1542
3.51- 7.50	31	8	7	4	3	6	2	4	11	66	84	71	67	27	34	42	467
7.51-12.50	0	0	0	0	0	0	1	0	0	2	12	9	6	0	0	0	30
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	1	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL	96	60	71	82	128	182	267	154	134	163	147	134	127	90	92	114	2137

PROGRAM JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 350 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 2208

TOTAL NUMBER OF VALID OBSERVATIONS: 2137

TOTAL NUMBER OF MISSING OBSERVATIONS: 71

PERCENT DATA RECOVERY FOR THIS PERIOD: 96.8 %

MEAN WIND SPEED FOR THIS PERIOD: 2.6 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

	A	B	C	D	E	F	G
	23.26	4.59	3.74	18.86	21.15	16.60	11.61

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	22	16	24	14	15	5	6	15	49	57	67	69	30	24	44	0
B	10	2	4	1	4	1	1	2	2	7	14	12	12	7	8	11	0
C	8	6	9	1	2	0	0	0	2	6	8	9	6	7	7	9	0
D	27	18	16	12	14	14	11	13	23	36	39	35	29	33	30	36	17
E	10	11	15	20	34	45	53	43	52	53	27	10	8	11	19	13	28
F	1	1	10	15	35	64	86	59	32	9	2	1	3	1	2	1	37
G	0	0	1	9	25	43	111	31	8	3	0	0	0	1	2	0	14
TOTAL	96	60	71	82	128	182	267	154	134	163	147	134	127	90	92	114	96

PROGRAM JFE VERSION 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER '984 \*\*\*

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.76- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7.51-12.50	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	3
12.51-18.50	0	0	0	1	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	0	0	0	2	1	1	0	0	0	1	0	0	0	0	0	0	5

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.76- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
3.51- 7.50	0	0	0	0	0	2	1	0	0	1	0	1	0	0	0	0	6
7.51-12.50	0	0	0	0	0	3	0	2	0	1	0	0	0	0	0	0	11
12.51-18.50	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
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	0	0	0	6	0	5	1	3	0	2	0	1	2	0	0	0	20

\*\*\* \* NPS CORPORATION - ENVIRONMENTAL SERVICES \* \*\*\*  
 PROGRAM JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
0.76- 3.50	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0
3.51- 7.50	1	2	1	3	0	1	2	4	3	3	1	2	2	3	1	1	29
7.51-12.50	2	1	2	2	2	3	0	0	5	8	6	6	1	0	0	2	40
12.51-18.50	0	0	1	0	0	0	0	2	0	5	0	0	1	0	0	0	9
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	1	0	0	0	0	0	0	0	0	1
TOTAL	3	3	5	5	4	3	1	5	10	16	8	8	4	3	1	3	82

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
0.76- 3.50	5	4	6	11	9	4	5	2	5	3	2	3	8	7	5	7	86
3.51- 7.50	28	14	22	15	19	10	6	5	13	24	21	25	32	21	20	19	294
7.51-12.50	43	14	6	9	17	10	2	1	13	33	65	44	67	28	40	50	442
12.51-18.50	7	5	0	1	0	0	0	1	3	3	30	10	25	18	12	11	126
18.51-24.00	0	0	0	2	0	0	0	0	0	0	2	3	3	0	1	1	12
24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	83	37	34	38	45	24	13	9	34	63	120	85	135	74	78	88	960

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

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE  
 SITE IDENTIFIER: DL8V2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL	
CALM																		
0.76-3.50	13	7	13	13	10	10	8	5	9	11	18	16	15	15	11	9	183	
3.51-7.50	8	9	21	16	9	5	8	10	19	23	32	33	44	17	9	2	265	
7.51-12.50	10	3	11	12	6	5	2	2	15	32	25	10	18	17	6	14	188	
12.51-18.50	6	2	4	4	0	0	1	0	10	17	23	2	1	1	3	2	76	
18.51-24.00	0	0	0	0	0	0	1	2	3	0	2	0	0	0	0	0	9	
24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL	37	21	49	45	26	20	20	19	56	83	100	61	78	50	29	27	723	

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
0.76-3.50	8	8	4	4	13	5	5	4	7	11	23	22	7	4	4	9	138
3.51-7.50	5	2	12	11	13	9	3	13	13	13	13	13	4	11	8	2	143
7.51-12.50	4	1	0	0	0	2	3	6	7	10	6	0	1	1	1	2	44
12.51-18.50	1	1	0	0	0	1	1	3	10	1	5	0	0	0	0	0	23
18.51-24.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2
24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	18	12	16	15	26	18	12	27	37	35	47	35	12	16	13	13	354



\*\*\* RPS CORPORATION - ENVIRONMENTAL SERVICES \* \*\*\*

PROGRAM JFD VERSION 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS 0

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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	1	0	0	0	0	0	0	0	0	0	0
0.76-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
3.51-7.50	0	0	0	0	3	0	0	1	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
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	0	0	0	0	3	0	1	1	1	0	0	0	0	0	0	0	6

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	26	19	24	28	32	19	19	11	22	25	44	41	31	26	20	25	412
0.76-3.50	42	27	56	46	46	26	19	31	50	64	67	74	83	52	38	24	745
3.51-7.50	59	19	19	28	26	24	7	11	40	85	102	60	87	46	47	68	728
7.51-12.50	14	8	5	7	0	1	2	7	23	26	58	12	27	19	15	13	237
12.51-18.50	0	0	0	2	1	1	1	3	3	0	4	3	3	0	1	1	23
18.51-24.00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	141	73	104	111	105	71	48	64	138	200	275	190	231	143	121	131	2150

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 2208

TOTAL NUMBER OF VALID OBSERVATIONS: 2150

TOTAL NUMBER OF MISSING OBSERVATIONS: 58

PERCENT DATA RECOVERY FOR THIS PERIOD: 97.4 %

MEAN WIND SPEED FOR THIS PERIOD: 7.5 MPH

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

	A	B	C	D	E	F	G
	0.23	0.93	3.81	44.65	33.63	16.47	0.28

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	2	1	1	0	0	0	1	0	0	0	0	0	0	0
B	0	0	0	6	0	5	1	3	0	2	0	1	2	0	0	0	0
C	3	3	5	5	4	3	1	5	10	16	8	8	4	3	1	3	0
D	83	37	34	38	45	24	13	9	34	63	120	85	135	74	78	88	0
E	37	21	49	45	26	20	20	19	56	83	100	61	78	50	29	27	2
F	18	12	16	15	26	18	12	27	37	35	47	35	12	16	13	13	2
G	0	0	0	0	3	0	1	1	1	0	0	0	0	0	0	0	0
TOTAL	141	73	104	111	105	71	48	64	138	200	275	190	231	143	121	131	4

BEAVER VALLEY  
JOINT FREQUENCY DISTRIBUTION TABLES  
FOR  
BATCH RELEASES

THIRD QUARTER 1984



\*\*\* RUS CORPORATION - ENVIRONMENTAL SERVICES \* \*\*  
 PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL BATCH RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	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
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS D

STABILITY BASED ON DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7.51-12.50	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
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2



\*\*\* \* EPA COMPUTATION - ENVIRONMENTAL SERVICES \* \*\*\*  
 PROGRAM JFD VERSION 3P

BEAVER VALLEY JFD - GROUND LEVEL BATCH RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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	
0 76- 3 50	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
3 51- 7 50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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	
0 76- 3 50	0	0	0	0	1	1	0	1	1	0	0	0	0	0	0	0	0	1
3 51- 7 50	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	4
7 51-12 50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	0	0	0	0	1	1	0	1	1	1	1	0	0	0	0	0	0	7

PROGRAM JFD VERSION 5P

BEAVER VALLEY JFD - GROUND LEVEL BATCH RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 7  
 TOTAL NUMBER OF VALID OBSERVATIONS: 7  
 TOTAL NUMBER OF MISSING OBSERVATIONS: 0  
 PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %  
 MEAN WIND SPEED FOR THIS PERIOD: 2.4 MPH  
 TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

	A	B	C	D	E	F	G
	14.29	0.00	0.00	28.57	0.00	14.29	42.86

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
G	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL	0	0	0	0	1	1	0	1	1	1	1	0	0	0	0	0	1





BEAVER VALLEY JFD - ELEVATED BATCH RELEASE  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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
0.76-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7.51-12.50	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	5
12.51-18.50	0	0	1	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	1	2	1	1	0	0	0	0	0	0	0	0	0	0	1	7

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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
0.76-3.50	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	1	4
3.51-7.50	1	3	3	1	1	0	0	0	0	0	0	1	0	1	3	1	15
7.51-12.50	7	1	0	3	1	0	0	0	0	1	4	6	2	2	9	7	43
12.51-18.50	0	1	0	0	0	0	0	0	0	0	2	0	3	2	0	0	8
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	8	5	3	4	3	0	0	0	0	1	6	8	4	5	12	9	70

PROGRAM JFD VERSION SP

BEAVER VALLEY JFD - ELEVATED BATCH RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
0.76-3.50	0	0	2	0	0	0	0	0	0	0	1	0	1	3	1	1	9
3.51-7.50	3	3	7	1	0	0	0	0	0	0	0	0	3	1	2	0	20
7.51-12.50	1	2	4	1	0	0	0	1	0	0	0	0	0	2	1	3	15
12.51-18.50	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	4
18.51-24.00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	6	13	2	0	0	0	1	0	1	2	1	4	6	4	4	49

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	
0.76-3.50	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	4	7
3.51-7.50	1	0	3	6	1	0	0	0	0	0	0	0	1	2	1	0	15
7.51-12.50	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
12.51-18.50	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
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	0	4	6	1	0	0	1	0	1	2	0	2	2	1	4	26

PROGRAM JFD VERSION 5P

BEAVER VALLEY JFD - ELEVATED BATCH RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY CLASS 0

STABILITY BASED ON DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNN	NW	NNW	TOTAL
0.75- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS ALL

STABILITY BASED ON DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNN	NW	NNW	TOTAL
0.75- 3.50	0	0	3	0	1	0	0	0	0	1	2	1	2	3	1	6	20
3.51- 7.50	5	6	13	9	2	0	0	0	0	0	0	1	4	4	6	1	51
7.51-12.50	10	4	5	6	2	0	0	1	0	1	4	6	3	4	10	11	67
12.51-18.50	1	2	1	1	0	0	0	1	0	1	3	1	3	2	0	0	16
18.51-24.00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	16	12	22	16	5	0	0	2	0	3	10	9	12	13	17	18	155

PROGRAM JFD VERSION 5P

BEAVER VALLEY JFD - ELEVATED BATCH RELEASE  
 SITE IDENTIFIER DLBV2  
 DATA PERIOD EXAMINED 7/ 1/84 - 9/30/84

\*\*\* THIRD QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 350.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 155  
 TOTAL NUMBER OF VALID OBSERVATIONS: 155  
 TOTAL NUMBER OF MISSING OBSERVATIONS: 0  
 PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %  
 MEAN WIND SPEED FOR THIS PERIOD: 8.1 MPH  
 TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

	A	B	C	D	E	F	G
	0.65	1.29	4.52	45.16	31.61	16.77	0.00

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
C	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
D	8	5	3	4	3	0	0	0	0	1	6	8	6	5	12	9	0
E	5	6	13	2	0	0	0	1	0	1	2	1	4	6	4	4	0
F	2	0	4	6	1	0	0	1	0	1	2	0	2	2	1	4	0
G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	16	12	22	16	5	0	0	2	0	3	10	9	12	13	17	18	0

BEAVER VALLEY  
LISTINGS OF METEOROLOGICAL DATA  
FOR  
PERIODS OF GASEOUS EFFLUENT RELEASES  
AT  
THE 150-FT LEVEL  
(GROUND-LEVEL)

PROGRAM LIST VERSION 2P

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
 35FT-LEVEL BATCH REVO

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	35 FT			150 FT			500 FT			AMB. TEMP 35F	DEW POINT 35F	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL (IN)
				WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (DEG) SC	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (DEG) SC	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (DEG) SC					
84	7	10	14	2.8	190	68.2 A	5.8	220	38.3 A	10.0	258	30.5 A	69.8	68.6	-0.4 D	-3.0 D	0.05
84	9	7	16	4.3	214	22.3 B	6.8	223	15.6 C	8.6	221	12.8 C	74.4	47.9	-1.2 A	-3.2 D	0.00
84	9	7	17	3.8	201	23.5 A	5.8	222	17.9 B	7.4	227	11.8 D	73.2	50.0	-0.6 D	-2.4 D	0.00
84	9	7	18	2.0	150	16.5 C	4.5	185	8.2 D	8.8	200	5.2 E	68.7	56.0	2.1 F	1.2 E	0.00
84	9	7	19	1.7	89	15.7 C	4.4	171	7.9 D	11.8	186	2.4 F	64.1	55.7	5.0 G	3.8 E	0.00
84	9	7	20	1.4	113	22.8 A	3.2	153	22.8 A	14.5	176	2.1 F	60.3	55.0	6.1 G	7.6 F	0.00
84	9	7	21	0.6	103	54.1 A	2.2	320	50.8 A	14.8	172	3.3 F	58.5	55.0	4.5 G	8.1 F	0.00

BEAVER VALLEY  
LISTINGS OF METEOROLOGICAL DATA  
FOR  
PERIODS OF GASEOUS EFFLUENT RELEASES  
AT  
THE 500-FT LEVEL  
(ELEVATED)



PROGRAM LIST VERSION: 2P

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REVO

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	WIND			WIND			WIND			AMB TEMP 35F	DEW POINT 35F	DELTA T 150-35	DELTA T 500-35	RAIN FALL
				(MPH)	(DEG)	SC	(MPH)	(DEG)	SC	(DEG)	SC	(MPH)					
84	7	20	20	1.5	184	17.2 C	2.2	179	17.2 C	3.0	317	87.3 A	69.6	63.2	2.7 G	2.5 E	0.00
84	7	20	21	1.4	147	33.7 A	2.6	157	34.3 A	2.2	229	44.4 A	68.3	62.0	2.0 F	3.4 E	0.00
84	7	20	22	0.8	126	36.1 A	1.3	347	60.9 A	1.1	228	81.8 A	67.0	62.2	1.2 F	5.0 F	0.00
84	7	20	23	1.6	126	51.4 A	1.6	4	8.9 D	2.5	196	8.0 D	66.4	62.3	0.7 E	4.4 F	0.00
84	7	20	24	0.8	159	20.5 B	1.7	351	17.7 B	2.4	264	16.6 C	64.5	62.5	1.6 F	3.5 E	0.00
84	7	21	1	0.9	139	19.6 B	0.8	211	67.2 A	2.9	295	3.6 F	63.5	62.0	1.9 F	3.1 E	0.00
84	7	21	2	1.0	140	24.0 A	1.4	197	9.1 D	2.6	288	10.4 D	63.0	62.1	2.0 F	2.4 E	0.00
84	7	21	3	1.1	117	35.8 A	2.0	179	23.3 A	2.5	303	12.1 D	62.5	61.7	1.8 F	2.6 E	0.00
84	7	21	4	1.6	145	18.0 B	2.5	191	17.7 B	4.0	305	11.8 D	61.4	61.2	2.0 F	2.4 E	0.00
84	7	21	5	0.7	130	16.3 C	2.2	179	16.1 C	3.4	340	12.0 D	60.1	60.1	2.1 F	4.9 F	0.00
84	7	21	6	0.7	169	16.5 C	2.3	207	13.7 C	3.8	1	6.3 E	59.9	59.9	1.6 F	3.8 E	0.00
84	7	21	7	2.4	195	13.1 C	2.8	222	12.8 C	4.5	13	8.7 D	62.5	61.9	-0.1 E	1.5 E	0.00
84	7	21	8	1.8	284	24.3 A	1.8	267	48.0 A	2.4	44	23.8 A	66.9	62.4	-0.9 D	-1.1 E	9.99
84	7	21	9	2.1	304	47.9 A	2.8	354	33.1 A	4.8	33	19.1 B	71.0	62.0	-1.0 C	-2.3 D	0.00
84	7	21	10	2.8	32	46.8 A	3.9	28	21.1 B	3.6	47	26.5 A	75.2	60.7	-1.4 A	-2.9 D	0.00
84	7	21	11	4.0	39	55.1 A	5.7	77	34.1 A	5.9	80	18.5 B	77.8	60.5	-1.5 A	-3.8 D	0.00
84	7	21	12	3.2	86	38.0 A	6.5	71	10.0 D	5.9	73	13.9 C	79.8	61.3	-2.2 A	-4.3 C	9.99
84	7	21	13	99.9	999	99.9 -	99.9	999	99.9 -	5.0	45	99.9 -	999.9	999.9	999.9 -	-3.6 D	9.99
84	7	21	14	2.4	324	36.8 A	3.9	335	12.6 C	5.6	333	20.7 B	79.4	59.7	-1.5 A	-3.2 D	0.00
84	7	21	15	2.2	25	51.9 A	2.8	46	76.9 A	3.5	79	68.0 A	80.3	59.7	-1.2 A	-3.2 D	0.00
84	7	21	16	1.3	353	69.6 A	1.9	331	41.7 A	3.7	29	33.6 A	80.0	61.3	-0.8 D	-2.5 D	0.00
84	7	21	17	1.6	69	82.9 A	2.4	54	69.7 A	3.9	76	18.1 B	81.6	60.9	-1.4 A	-3.2 D	0.00
84	7	21	18	1.4	42	87.4 A	3.2	352	26.4 A	8.3	9	3.2 F	80.0	61.6	-1.1 B	-2.1 D	0.00
84	7	21	19	0.7	102	55.1 A	1.3	41	38.9 A	3.2	41	41.6 A	77.3	64.1	0.9 E	-0.7 E	0.00
84	8	20	12	6.6	8	32.1 A	12.5	31	20.0 B	14.5	34	17.6 B	70.7	41.2	-2.2 A	-4.3 C	0.00
84	8	20	13	4.3	1	33.8 A	8.5	35	21.7 B	10.3	30	24.1 A	71.9	39.8	-2.1 A	-4.2 C	0.00
84	8	20	14	5.1	335	44.2 A	8.5	348	38.1 A	9.6	346	24.2 A	72.3	44.3	-1.9 A	-3.9 C	0.00
84	8	20	15	3.7	345	46.2 A	6.0	360	27.7 A	8.6	359	12.4 D	73.0	46.4	-1.9 A	-4.2 C	0.00
84	8	20	16	5.0	353	38.0 A	8.5	4	17.8 B	10.5	359	8.0 D	72.9	48.3	-1.7 A	-3.8 D	0.00
84	8	20	17	4.3	6	31.5 A	8.8	17	12.8 C	10.0	10	7.5 D	72.8	48.2	-1.6 A	-3.5 D	0.00
84	8	20	18	4.2	354	21.6 B	7.9	6	10.5 D	10.9	3	4.7 E	72.5	48.0	-1.5 A	-3.3 D	0.00
84	8	20	19	1.6	23	46.7 A	8.6	349	4.8 E	14.5	9	5.8 E	66.4	51.1	1.0 F	1.2 E	0.00
84	8	20	20	1.5	58	70.7 A	4.9	30	18.2 B	14.1	21	5.0 E	64.2	50.8	0.7 E	0.0 E	0.00
84	8	20	21	1.5	130	99.9 -	3.8	28	14.8 C	9.0	31	14.6 C	62.0	51.3	0.4 E	-0.1 E	0.00
84	8	20	22	1.0	125	99.9 -	1.5	68	18.6 B	4.9	62	20.3 B	55.8	52.8	3.7 G	3.9 F	0.00
84	8	20	23	1.0	130	99.9 -	1.3	64	29.3 A	5.2	49	15.1 C	53.2	52.3	3.4 G	5.7 F	0.00
84	8	20	24	1.0	130	99.9 -	2.0	37	2.4 F	5.9	79	4.3 E	51.4	51.4	3.2 G	6.4 F	0.00
84	8	21	1	1.0	130	99.9 -	2.7	26	6.5 E	5.3	76	5.4 E	50.4	50.4	2.6 G	6.3 F	0.00
84	8	21	2	1.0	130	99.9 -	1.8	22	4.0 E	6.6	60	4.1 E	49.6	49.6	2.7 G	6.4 F	0.00
84	9	2	9	2.3	258	43.6 A	3.1	266	30.3 A	5.0	245	21.9 B	71.8	60.1	-1.1 B	-2.8 D	0.00
84	9	2	10	3.5	257	32.6 A	5.0	262	24.4 A	9.2	250	13.1 C	75.9	62.8	-1.1 B	-2.7 D	0.00
84	9	2	11	5.6	246	18.8 B	7.3	247	15.0 C	9.6	238	13.5 C	79.3	64.5	-1.2 A	-3.1 D	0.00
84	9	2	12	6.1	251	22.0 B	8.5	256	17.5 B	10.8	253	14.6 C	81.9	65.5	-1.5 A	-3.6 D	0.00
84	9	2	13	5.3	253	30.7 A	8.0	256	21.0 B	10.5	254	17.7 B	84.0	65.8	-1.7 A	-3.8 D	0.00
84	9	2	14	5.7	243	23.9 A	8.3	248	16.5 C	11.2	243	12.0 D	85.4	67.4	-1.4 A	-3.4 D	0.00
84	9	2	15	6.3	229	24.0 A	8.6	226	17.4 C	10.7	222	13.0 C	86.9	67.7	-1.3 A	-3.4 D	0.00
84	9	2	16	5.7	216	18.3 B	8.1	217	12.8 C	12.5	225	10.1 D	87.4	68.4	-1.0 C	-3.0 D	0.00
84	9	2	17	3.5	202	20.1 B	5.8	218	11.6 D	9.6	229	8.2 D	87.0	70.1	-0.1 E	-1.6 D	0.00



LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REVO

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	WIND 35 FT			WIND 150 FT			WIND 500 FT			AMB TEMP 35F (F)	DEW POINT 35F (F)	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL (IN)
				WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)					
84	9	5	24	2.1	149	36.6 A	4.0	211	12.9 C	3.2	328	16.5 C	46.0	45.8	2.2 F	5.7 F	0.00
84	9	8	18	1.7	129	35.5 A	5.2	154	13.3 C	11.8	168	3.3 F	74.2	56.2	0.6 E	-0.6 E	0.00
84	9	8	19	1.5	136	24.3 A	4.7	144	11.5 D	14.7	165	2.2 F	66.6	58.7	5.6 G	6.0 F	0.00
84	9	11	10	6.0	223	20.0 B	8.2	213	14.9 C	9.5	214	12.3 D	76.9	63.7	-1.4 A	-3.3 D	0.00
84	9	11	11	6.8	214	20.8 B	9.7	210	13.9 C	12.0	213	9.3 D	78.7	64.5	-1.3 A	-3.2 D	0.00
84	9	11	12	7.2	206	25.9 A	10.1	211	17.0 C	12.9	218	14.4 C	81.0	65.4	-1.6 A	-3.8 D	0.00
84	9	11	13	6.8	215	21.7 B	10.2	215	18.9 B	13.3	218	12.7 C	82.2	65.5	-1.3 A	-3.4 D	0.00
84	9	11	14	4.5	237	36.6 A	7.5	243	22.0 B	12.2	249	15.1 C	78.4	68.2	-0.8 D	-1.9 D	0.02
84	9	11	15	4.5	237	37.6 A	6.2	246	38.2 A	11.1	259	14.0 C	77.5	69.5	-0.9 D	-2.4 D	0.00
84	9	11	16	3.8	256	20.2 B	6.8	255	14.0 C	10.8	262	11.0 D	78.8	68.4	-0.9 D	-2.7 D	0.00
84	9	11	17	2.1	287	28.2 A	7.5	287	13.0 C	11.3	287	8.0 D	79.4	68.5	-0.7 D	-2.3 D	0.00
84	9	11	18	3.2	339	29.8 A	6.3	335	13.8 C	10.9	337	9.3 D	77.4	67.4	-0.6 D	-2.3 D	0.00
84	9	11	19	2.7	278	35.1 A	4.8	309	21.9 B	9.1	341	12.8 C	74.0	66.7	-0.3 E	-1.9 D	0.00
84	9	11	20	3.0	303	35.6 A	4.7	311	22.9 A	8.7	341	11.5 D	71.8	64.9	-0.5 D	-2.2 D	0.00
84	9	11	21	2.5	350	32.4 A	5.0	3	21.0 B	7.6	3	13.4 C	70.5	64.6	-0.5 D	-2.2 D	0.00
84	9	11	22	3.9	354	28.3 A	6.9	357	17.5 B	10.5	2	10.2 D	68.8	63.3	-0.5 D	-2.2 D	0.00
84	9	11	23	2.4	341	36.0 A	6.2	343	18.3 B	11.1	2	7.6 D	66.6	62.5	-0.4 D	-2.0 D	0.00
84	9	11	24	1.4	316	64.1 A	2.1	48	68.1 A	7.0	17	24.9 A	64.7	61.9	-0.4 D	-1.9 D	0.00
84	9	12	3	1.4	169	45.0 A	2.0	33	44.8 A	9.3	46	14.2 C	59.6	58.9	0.3 E	0.1 E	0.00
84	9	12	4	1.1	72	40.9 A	2.1	63	19.8 B	10.7	48	10.8 D	58.4	57.7	0.7 E	0.8 E	0.00
84	9	12	5	0.9	140	13.1 C	3.0	81	14.6 C	9.9	53	8.3 D	56.4	56.1	1.5 F	1.9 E	0.00
84	9	12	6	1.5	142	19.2 B	3.3	100	10.1 D	8.4	56	4.3 E	55.0	54.8	2.6 G	2.6 E	0.00
84	9	12	7	0.7	117	2.5 F	1.6	34	18.6 B	4.6	37	16.3 C	55.9	55.7	1.9 F	1.4 E	0.00
84	9	12	8	2.1	46	54.2 A	4.4	70	21.4 B	4.3	51	18.5 B	61.6	56.8	-0.7 D	-2.7 D	0.00
84	9	12	9	3.5	79	33.8 A	6.9	80	12.5 C	8.7	69	7.8 D	65.7	57.5	-1.7 A	-3.6 D	0.00
84	9	12	10	3.9	24	26.8 A	7.1	51	10.9 D	8.7	62	10.6 D	69.3	57.5	-1.6 A	-3.6 D	0.00
84	9	12	11	4.6	27	38.5 A	9.2	56	16.0 C	10.8	54	6.6 E	73.0	54.9	-2.1 A	-4.2 C	0.00
84	9	12	12	4.9	45	53.2 A	11.0	64	13.2 C	13.6	57	5.3 E	76.1	51.6	-2.7 A	-5.2 A	0.00
84	9	12	13	4.5	67	55.1 A	8.8	68	13.9 C	9.9	67	10.2 D	77.2	51.0	-2.5 A	-4.8 B	0.99
84	9	12	14	4.4	60	46.0 A	8.8	65	16.6 C	10.0	58	11.2 D	77.7	49.9	-2.2 A	-4.4 B	0.99
84	9	12	15	3.4	25	85.4 A	7.1	94	30.6 A	8.2	82	23.2 A	77.7	50.7	-2.0 A	-4.2 C	0.99
84	9	12	16	3.6	46	68.8 A	10.1	64	9.0 D	10.5	65	7.2 E	76.4	54.1	-1.5 A	-3.4 D	0.99
84	9	12	17	2.2	105	19.8 B	6.7	76	11.9 D	10.5	81	7.5 D	73.8	54.8	-0.3 E	-1.8 D	0.00
84	9	20	16	7.7	265	22.6 A	12.5	276	14.0 C	17.0	279	10.6 D	84.2	58.4	-1.1 B	-2.9 D	0.00
84	9	20	17	5.5	280	27.5 A	11.7	286	12.0 D	16.7	285	5.2 E	83.4	59.3	-0.8 D	-2.4 D	0.00
84	9	20	18	2.0	304	29.9 A	4.8	296	17.0 C	10.2	295	6.7 E	79.9	61.6	0.4 E	-0.4 E	0.00
84	9	20	19	1.4	274	69.7 A	5.4	317	19.3 B	11.0	314	9.8 D	74.5	63.0	2.5 F	1.9 E	0.00
84	9	20	20	2.6	47	56.8 A	5.7	35	16.4 C	10.1	16	7.2 E	72.4	62.5	0.0 E	-1.2 E	0.00
84	9	20	21	2.9	349	39.8 A	6.4	5	17.0 C	13.3	15	5.3 E	69.8	62.3	0.0 E	-1.4 D	0.00
84	9	20	22	1.1	182	98.7 A	2.3	320	28.8 A	8.4	10	13.3 C	66.9	61.8	0.3 E	-0.2 E	0.99
84	9	20	23	1.0	105	99.9 -	1.5	340	99.9 -	6.0	40	99.9 -	63.5	999.9	0.7 E	0.3 E	0.00
84	9	20	24	1.0	120	99.9 -	1.5	75	99.9 -	5.5	60	99.9 -	60.0	999.9	2.5 F	2.6 E	0.00
84	9	21	1	1.5	95	99.9 -	1.5	65	99.9 -	7.5	55	99.9 -	59.0	999.9	2.4 F	3.5 E	0.00
84	9	21	2	1.5	110	99.9 -	2.5	90	99.9 -	8.0	65	99.9 -	58.0	999.9	2.8 G	3.5 E	0.00
84	9	21	3	1.5	135	99.9 -	2.5	35	99.9 -	6.0	65	99.9 -	57.5	999.9	2.9 G	3.9 F	0.00
84	9	21	4	1.0	150	99.9 -	1.5	60	99.9 -	4.5	45	99.9 -	57.0	999.9	2.8 G	3.3 E	0.00
84	9	21	5	1.5	140	99.9 -	2.0	45	99.9 -	4.5	50	99.9 -	55.5	999.9	3.6 G	3.6 E	0.00
84	9	21	6	1.5	145	99.9 -	1.5	95	99.9 -	4.5	45	99.9 -	55.0	999.9	3.0 G	3.5 E	0.00

PROGRAM LIST VERSION 2P

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REVO

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	35 FT			150 FT			500 FT			AMB	DEW	DELTA T		RAIN
				WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV SC (DEG)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV SC (DEG)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV SC (DEG)	TEMP 35F (F)	POINT 35F (F)	150-35 (F)	500-35 (F)	SC (F)
84	9	29	18	1.1	144	31.4 A	2.9	283	53.2 A	7.3	356	9.1 D	53.9	47.4	0.7 E	0.2 E	0.00
84	9	29	19	1.6	125	23.5 A	1.8	103	36.8 A	2.6	341	47.0 A	51.5	46.7	1.9 F	1.0 E	0.00
84	9	29	20	1.2	139	24.2 A	2.2	54	22.5 A	6.3	10	22.0 B	50.2	46.8	2.2 F	1.2 E	0.00
84	9	29	21	1.6	103	35.5 A	2.8	65	31.3 A	6.3	28	17.6 B	49.8	46.3	2.0 F	0.9 E	0.00
84	9	29	22	1.6	130	24.4 A	3.2	34	38.1 A	6.7	34	14.1 C	48.3	45.6	2.4 F	1.7 E	0.00
84	9	29	23	1.7	157	34.2 A	2.0	174	32.9 A	4.1	22	41.8 A	46.4	44.7	2.9 G	2.2 E	0.00
84	9	29	24	1.0	102	25.2 A	1.2	102	37.3 A	3.0	45	49.2 A	43.7	43.5	3.5 G	4.0 F	0.00
84	9	30	1	1.0	133	22.0 B	1.5	26	37.9 A	4.7	43	24.2 A	42.3	42.3	3.2 G	4.8 F	0.00
84	9	30	2	1.0	130	12.1 D	1.3	41	13.4 C	3.9	47	23.6 A	41.1	41.1	3.3 G	4.9 F	0.00
84	9	30	3	0.7	127	5.9 E	2.4	34	8.9 D	5.3	57	7.4 E	40.7	40.7	3.3 G	4.6 F	0.00
84	9	30	4	1.2	124	5.6 E	3.1	28	8.3 D	7.0	61	4.0 E	40.4	40.4	3.4 G	4.3 F	0.00

BEAVER VALLEY

JOINT FREQUENCY DISTRIBUTION TABLES  
FOR  
BATCH RELEASES

FOURTH QUARTER 1984



TIME OF DAY: 13:14:30

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.75- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.75- 3.50	0	0	1	1	0	0	3	1	0	2	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	8
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
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	0	0	1	1	0	0	3	1	0	2	2	0	1	0	0	0	11

PROGRAM: JFD VERSION: 5P  
 BEAVER VALLEY JFD - GROUND LEVEL BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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	1	1	1	0	0	0	0	0	0	0	0	0	0
0.75- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7.51-12.50	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	3
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	0	0	0	0	1	1	1	0	0	1	1	0	1	1	0	0	7

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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	2	0	0	0	0	0	0	0	0	0	0
0.75- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
7.51-12.50	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
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	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	3



PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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	
0.75- 3.50	0	0	3	2	5	1	2	0	0	0	0	0	0	0	0	0	0	13
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	3	2	5	1	2	0	0	0	0	0	0	0	0	0	0	13

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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	
0.75- 3.50	0	0	4	4	6	4	8	1	0	4	0	0	1	1	0	0	0	33
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	0	4
7.51-12.50	0	0	0	0	0	0	0	0	0	1	2	0	2	0	0	0	0	5
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	0	0	4	4	6	4	8	1	0	5	4	0	4	2	0	0	0	42

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 42  
 TOTAL NUMBER OF VALID OBSERVATIONS: 42  
 TOTAL NUMBER OF MISSING OBSERVATIONS: 0  
 PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %  
 MEAN WIND SPEED FOR THIS PERIOD: 3.0 MPH  
 NUMBER OF OBSERVATIONS WITH BACKUP STABILITY: 0  
 TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

	A	B	C	D	E	F	G
	11.90	4.76	2.38	26.19	16.67	7.14	30.95

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	1	0	0	0	2	0	0	1	1	0	0	0
B	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
D	0	0	1	1	0	0	3	1	0	2	2	0	1	0	0	0	0
E	0	0	0	0	1	1	1	0	0	1	1	0	1	1	0	0	0
F	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0
G	0	0	3	2	5	1	2	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	4	4	6	4	8	1	0	5	4	0	4	2	0	0	0



BEAVER VALLEY JFD - ELEVATED BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.76- 3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51- 7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	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
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.76- 3.50	2	5	1	2	1	2	0	1	1	2	1	4	4	0	3	3	32
3.51- 7.50	5	6	7	4	12	4	2	1	0	0	0	0	1	1	2	8	53
7.51-12.50	20	3	0	3	3	0	2	0	1	1	6	2	1	5	2	3	51
12.51-18.50	0	0	0	0	0	0	0	0	0	4	7	0	4	4	0	0	19
18.51-24.00	0	0	0	0	0	0	0	0	0	0	3	1	0	8	0	0	12
TOTAL	27	14	8	9	16	6	4	2	1	7	17	7	10	18	7	14	167

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
0.76- 3.50	2	3	6	1	2	2	3	3	3	3	1	0	6	4	0	0	39
3.51- 7.50	2	1	5	4	12	6	1	2	3	3	3	6	6	6	2	3	65
7.51-12.50	3	1	0	2	2	1	0	1	0	2	6	10	7	3	2	0	40
12.51-18.50	0	0	0	0	0	0	0	0	0	5	2	4	1	1	0	0	13
18.51-24.00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7	5	11	7	16	9	4	6	7	13	12	20	21	14	4	3	159

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
0.76- 3.50	0	0	1	3	0	0	1	0	0	0	0	0	0	1	0	0	6
3.51- 7.50	0	0	1	0	7	5	4	0	0	0	0	0	1	4	2	0	24
7.51-12.50	0	0	0	2	1	0	1	0	1	3	0	0	0	1	0	0	9
12.51-18.50	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4
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	0	0	2	5	8	5	6	0	3	5	0	0	1	6	2	0	43

PROGRAM: JFD VERSION: 5P  
 BEAVER VALLEY JFD - ELEVATED BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.76-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
0.76-3.50	4	8	8	6	3	4	4	4	4	5	2	4	10	5	3	3	77
3.51-7.50	7	7	13	8	31	15	7	3	3	3	3	6	8	11	6	11	142
7.51-12.50	23	4	0	7	6	1	3	1	1	6	12	12	8	9	4	3	100
12.51-18.50	0	0	0	0	0	0	0	0	2	11	9	4	5	5	0	0	36
18.51-24.00	0	0	0	0	0	0	0	0	1	0	3	1	1	8	0	0	14
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	34	19	21	21	40	20	14	8	11	25	29	27	32	38	13	17	369

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED BATCH RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 369

TOTAL NUMBER OF VALID OBSERVATIONS: 369

TOTAL NUMBER OF MISSING OBSERVATIONS: 0

PERCENT DATA RECOVERY FOR THIS PERIOD: 100.0 %

MEAN WIND SPEED FOR THIS PERIOD: 7.5 MPH

NUMBER OF OBSERVATIONS WITH BACKUP STABILITY: 0

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 0

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
0.00	0.00	0.00	45.26	43.09	11.65	0.00

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
D	27	14	8	9	16	6	4	2	1	7	17	7	10	18	7	14	0
E	7	5	11	7	16	9	4	6	7	13	12	20	21	14	4	3	0
F	0	0	2	5	8	5	6	0	3	5	0	0	1	6	2	0	0
G	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	34	19	21	21	40	20	14	8	11	25	29	27	32	38	13	17	0

BEAVER VALLEY  
JOINT FREQUENCY DISTRIBUTION TABLES  
FOR  
CONTINUOUS RELEASE

FOR  
 $\Delta T$  (150FT-35FT) AND 35-FT WIND  
AND  
 $\Delta T$  (500FT-35FT) AND 500-FT WIND

(OCTOBER 1, 1984 - DECEMBER 31, 1984)



PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	2	3	1	6	8	3	2	0	0	3	2	6	12	8	4	1	61
3.51- 7.50	4	1	1	0	2	1	0	3	3	3	2	10	9	13	1	4	57
7.51-12.50	0	0	0	0	0	0	0	0	3	1	1	4	2	2	5	0	18
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	6	4	2	6	10	4	2	3	6	7	5	20	23	23	10	5	136

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	4	0	0	4	0	1	2	0	0	2	3	0	5	2	5	1	29
3.51- 7.50	1	2	0	0	0	4	0	2	3	0	3	5	3	2	2	1	28
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	2	2	0	1	0	6
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	5	2	0	4	0	5	2	2	3	2	7	7	10	4	8	2	63

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	1	1	3	2	2	1	0	1	1	1	1	1	1	2	6	0	26
3.51- 7.50	5	1	0	0	0	2	0	0	0	2	8	6	3	5	0	3	35
7.51-12.50	0	0	0	0	0	0	0	0	0	1	7	5	2	0	0	0	15
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	6	2	5	2	2	3	0	1	1	4	16	12	6	7	6	3	76

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76- 3.50	18	33	25	28	17	11	4	10	15	10	7	12	13	10	12	24	249
3.51- 7.50	14	5	3	0	1	0	1	0	2	15	32	47	52	24	17	17	230
7.51-12.50	0	0	0	0	0	0	0	0	0	2	27	38	53	5	1	0	126
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	1	1	0	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	32	38	28	28	18	11	5	10	17	27	67	98	119	39	30	41	606

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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																	10
0.76- 3.50	14	26	34	59	38	46	15	34	30	39	24	16	19	13	9	11	427
3.51- 7.50	4	3	4	1	3	1	2	1	0	28	57	25	13	10	6	6	164
7.51-12.50	0	0	0	0	0	0	0	0	0	3	19	23	8	0	0	0	53
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	1	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	18	29	38	60	41	47	17	35	30	70	100	65	40	23	15	17	655

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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																	19
0.76- 3.50	0	6	6	10	30	63	60	32	34	4	7	2	2	1	2	0	259
3.51- 7.50	1	0	0	0	0	0	0	0	2	8	3	0	1	0	0	0	15
7.51-12.50	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
12.51-18.50	0	0	0	0	0	0	0	0	0	0	0	1	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	6	6	10	30	63	60	32	36	13	11	3	3	1	2	0	296

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76-3.50	1	2	8	7	37	58	92	38	10	3	2	0	1	2	1	1	5
3.51-7.50	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	263
7.51-12.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
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	3	8	8	37	58	92	38	11	3	2	0	1	2	1	1	272

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 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
0.76-3.50	40	71	79	116	132	183	175	115	90	62	46	37	53	38	39	38	1314
3.51-7.50	30	13	8	2	6	8	3	6	11	56	105	93	81	54	26	31	533
7.51-12.50	0	0	0	0	0	0	0	0	3	8	56	72	67	7	7	0	220
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	3	1	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	70	84	87	118	138	191	178	121	104	126	208	205	202	99	72	69	2106

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - GROUND LEVEL CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 150.0 AND 35.0 FEET  
 WIND MEASURED AT: 35.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 2208

TOTAL NUMBER OF VALID OBSERVATIONS: 2106

TOTAL NUMBER OF MISSING OBSERVATIONS: 102

PERCENT DATA RECOVERY FOR THIS PERIOD: 95.4 %

MEAN WIND SPEED FOR THIS PERIOD: 3.6 MPH

NUMBER OF OBSERVATIONS WITH BACKUP STABILITY: 71

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 71

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
6.46	2.99	3.61	28.87	31.10	14.06	12.92

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	6	4	2	6	10	4	2	3	6	7	5	20	23	23	10	5	0
B	5	2	0	4	0	5	7	2	3	2	7	7	10	4	8	2	0
C	6	2	5	2	2	3	0	1	1	4	16	12	6	7	6	3	0
D	32	38	28	28	18	11	5	10	17	27	67	98	119	39	30	41	0
E	18	29	38	60	41	47	17	35	30	70	100	65	40	23	15	17	10
F	1	6	6	10	30	63	60	32	36	13	11	3	3	1	2	0	19
G	2	3	8	8	37	58	92	38	11	3	2	0	1	2	1	1	5
TOTAL	70	84	87	118	138	191	178	121	104	126	208	205	202	99	72	69	34

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

TOTAL NUMBER OF OBSERVATIONS: 2208

TOTAL NUMBER OF VALID OBSERVATIONS: 2110

TOTAL NUMBER OF MISSING OBSERVATIONS: 98

PERCENT DATA RECOVERY FOR THIS PERIOD: 95.6 %

MEAN WIND SPEED FOR THIS PERIOD: 9.4 MPH

NUMBER OF OBSERVATIONS WITH BACKUP STABILITY: 47

TOTAL NUMBER OF OBSERVATIONS WITH BACKUP DATA: 47

PERCENTAGE OCCURRENCE OF STABILITY CLASSES

A	B	C	D	E	F	G
0.00	0.05	0.57	47.77	35.21	14.27	2.13

DISTRIBUTION OF WIND DIRECTION VS STABILITY

	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
C	0	0	0	0	3	4	0	0	0	1	3	1	0	0	0	0	0
D	80	36	32	32	39	33	25	22	35	57	132	99	183	111	47	45	0
E	23	25	31	44	53	48	46	40	39	76	87	86	67	48	18	12	0
F	4	2	7	26	12	29	47	22	27	34	50	13	7	10	5	6	0
G	0	0	0	0	0	8	11	9	3	6	5	3	0	0	0	0	0
TOTAL	107	63	70	102	107	122	129	93	104	174	277	203	257	169	70	63	0

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS A

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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
0.76-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

STABILITY CLASS B

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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
0.76-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.51-12.50	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	1	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	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1

PROGRAM: JFD VERSION: 5P  
 BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS C

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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
0.76-3.50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.51-7.50	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
7.51-12.50	0	0	0	0	2	3	0	0	0	1	2	0	0	0	0	0	8
12.51-18.50	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
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	0	0	0	0	3	4	0	0	0	1	3	1	0	0	0	0	12

STABILITY CLASS D

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM	5	11	13	17	23	18	15	1	1	3	5	6	10	1	5	5	70
0.76-3.50	15	13	9	9	13	12	6	7	4	9	7	6	22	14	4	21	220
3.51-7.50	48	9	3	3	13	12	6	7	22	25	34	42	35	41	24	17	347
7.51-12.50	12	3	1	1	0	0	3	3	5	16	61	32	62	40	14	2	255
12.51-18.50	0	0	0	0	0	0	0	1	3	4	25	13	44	15	0	0	106
18.51-24.00	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10
TOTAL	80	36	32	32	39	33	25	22	35	57	132	99	183	111	47	45	1008



PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS E

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
0.76- 3.50	11	9	15	12	6	4	9	7	12	8	5	7	12	9	3	2	131
3.51- 7.50	5	12	10	13	37	24	15	16	5	14	16	24	31	21	8	7	258
7.51-12.50	6	4	1	15	9	19	10	11	16	31	27	31	17	12	5	2	216
12.51-18.50	1	0	0	1	1	1	7	4	5	22	31	19	4	6	2	1	105
18.51-24.00	0	0	5	3	0	0	5	2	1	1	7	3	3	0	0	0	30
>24.00	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	3
TOTAL	23	25	31	44	53	48	46	40	39	76	87	86	67	48	18	12	743

STABILITY CLASS F

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 FEET

SPEED (MPH)	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
CALM																	0
0.76- 3.50	3	2	2	5	1	3	2	4	2	9	4	1	2	2	0	3	45
3.51- 7.50	1	0	4	12	9	14	31	9	14	7	18	9	2	4	4	1	134
7.51-12.50	0	0	1	9	2	12	10	8	6	13	22	3	1	4	1	2	94
12.51-18.50	0	0	0	0	0	0	3	1	5	5	6	0	2	0	0	0	22
18.51-24.00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
>24.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	2	7	26	12	29	47	22	27	34	50	13	7	10	5	6	301

PROGRAM: JFD VERSION: 5P

BEAVER VALLEY JFD - ELEVATED CONTINUOUS RELEASE 4TH QTR 1984  
 SITE IDENTIFIER: DLBV2  
 DATA PERIOD EXAMINED: 10/ 1/84 - 12/31/84

\*\*\* FOURTH QUARTER 1984 \*\*\*

STABILITY CLASS G

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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	1	0	2	1	1	0	0	0	0	0	0	0
0.76- 3.50	0	0	0	0	0	6	6	7	2	4	3	0	0	0	0	0	28
3.51- 7.50	0	0	0	0	0	1	5	0	0	1	1	1	0	0	0	0	9
7.51-12.50	0	0	0	0	0	0	0	0	0	0	1	2	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	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	0	0	0	0	0	8	11	9	3	6	5	3	0	0	0	0	45

STABILITY CLASS ALL

STABILITY BASED ON: DELTA T BETWEEN 500.0 AND 35.0 FEET  
 WIND MEASURED AT: 500.0 FEET  
 WIND THRESHOLD AT: 0.75 MPH

JOINT FREQUENCY DISTRIBUTION OF WIND SPEED AND DIRECTION IN HOURS AT 500.00 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
0.76- 3.50	19	22	22	22	10	11	12	14	16	21	14	14	24	12	8	10	251
3.51- 7.50	21	25	36	42	70	63	67	42	25	34	44	39	55	39	16	29	647
7.51-12.50	54	13	5	33	26	47	31	26	44	71	86	77	53	57	30	21	674
12.51-18.50	13	3	1	2	1	1	13	8	15	43	100	55	68	46	16	3	388
18.51-24.00	0	0	6	3	0	0	6	3	4	5	32	16	47	15	0	0	137
>24.00	0	0	0	0	0	0	0	0	0	0	1	2	10	0	0	0	13
TOTAL	107	63	70	102	107	122	129	93	104	174	277	203	257	169	70	63	2110

BEAVER VALLEY

LISTING OF METEOROLOGICAL DATA  
FOR  
PERIODS OF GASEOUS EFFLUENT RELEASES  
AT  
THE 35-FT LEVEL  
(ELEVATED)

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
35FT-LEVEL BATCH    REV0

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	WIND			WIND			WIND			AMB. TEMP 35F (F)	DEW POINT 35F (F)	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL (IN)
				SPEED (MPH)	DIR (DEG)	SC (DEG)	SPEED (MPH)	DIR (DEG)	SC (DEG)	SPEED (MPH)	DIR (DEG)	SC (DEG)					
84	10	14	4	1.2	76	23.7 A	4.2	150	6.7 E	2.3	201	12.2 D	52.1	52.1	-0.5 D	-1.1 E	0.00
84	10	14	5	1.5	125	31.1 A	4.8	171	10.7 D	2.5	208	11.0 D	51.9	51.9	-0.5 D	-1.2 E	0.00
84	10	14	6	1.7	142	33.0 A	5.5	156	9.9 D	2.8	186	17.6 B	51.8	51.8	-0.5 D	-1.1 E	0.00
84	10	14	7	1.5	140	56.3 A	4.9	137	17.4 C	5.1	134	9.0 C	51.6	51.6	-0.6 D	-1.4 D	0.00
84	10	14	8	1.8	153	33.2 A	4.4	160	13.1 C	3.4	162	11.7 D	51.7	51.7	-0.7 D	-1.2 E	0.00
84	10	14	9	2.3	203	27.5 A	3.3	172	22.6 A	3.0	165	17.9 B	52.4	52.0	-0.9 D	-0.8 E	0.00
84	10	14	10	1.8	194	48.8 A	3.1	166	25.3 A	2.6	180	14.5 C	53.8	52.3	-1.3 A	-0.8 E	0.00
84	10	14	11	2.5	276	33.2 A	3.4	267	28.1 A	2.8	245	23.1 A	54.8	53.0	-1.3 A	-0.7 E	0.00
84	10	14	12	1.9	301	47.9 A	2.6	290	44.9 A	2.6	225	42.8 A	56.1	53.5	-1.5 A	-0.8 E	0.00
84	10	14	13	2.2	202	58.8 A	3.5	181	31.8 A	3.2	188	30.3 A	57.6	54.0	-1.3 A	-1.2 E	0.00
84	10	14	14	2.3	110	26.3 A	4.5	115	26.1 A	4.4	125	14.0 C	58.4	54.2	-1.1 B	-2.0 D	0.00
84	10	14	15	2.6	118	55.0 A	4.9	116	24.8 A	4.0	130	18.4 B	59.6	54.3	-1.4 A	-0.6 E	0.00
84	10	14	16	1.9	77	72.1 A	3.4	95	56.1 A	3.0	114	35.4 A	61.0	54.1	-1.1 B	-0.9 E	0.00
84	10	14	17	2.0	42	31.6 A	5.0	52	16.5 C	3.8	96	10.6 C	59.4	54.4	-0.6 D	-3.1 D	0.00
84	10	14	18	1.2	80	13.8 C	3.6	102	8.7 D	5.2	85	4.8 E	55.7	54.0	0.7 E	-1.0 E	0.00
84	10	14	19	1.5	135	10.2 D	2.2	115	16.2 C	3.6	92	8.3 D	53.3	52.9	2.0 F	1.0 E	0.00
84	10	14	20	1.2	125	23.0 A	2.3	56	23.4 A	3.1	114	4.4 E	52.6	52.4	1.4 F	1.8 E	0.00
84	11	14	20	1.5	142	15.5 C	3.4	29	9.0 D	6.7	166	7.6 D	34.7	28.2	3.4 G	7.7 F	0.00
84	11	14	21	1.4	141	14.8 C	2.8	32	15.4 C	6.1	174	8.0 D	34.3	28.1	3.2 G	7.2 F	0.00
84	11	14	22	1.8	100	49.6 A	3.7	46	15.1 C	8.2	167	5.4 E	34.8	27.5	2.9 G	6.5 F	0.00
84	11	14	23	2.2	73	49.4 A	3.7	59	27.4 A	9.3	160	8.1 D	36.4	28.8	3.3 G	4.8 F	0.00
84	11	14	24	1.6	90	49.2 A	4.0	53	14.3 C	7.7	164	12.4 D	36.2	27.4	4.1 G	4.5 F	0.00
84	11	15	1	2.1	51	20.8 B	5.6	61	9.4 D	8.0	152	8.0 C	36.8	28.3	3.2 G	4.3 F	0.00
84	11	15	2	2.0	70	57.2 A	5.9	62	14.8 C	8.3	160	13.6 C	35.0	25.9	4.6 G	6.2 F	0.00
84	11	15	3	1.8	80	49.5 A	5.3	57	9.7 D	6.6	165	17.8 B	34.6	25.8	5.1 G	6.0 F	0.00
84	11	15	4	1.9	42	38.7 A	4.7	14	20.5 B	10.3	176	18.2 B	36.9	27.6	4.1 G	5.4 F	0.00
84	11	15	5	1.7	85	45.0 A	2.5	219	37.6 A	10.0	194	7.9 D	38.4	26.7	4.9 G	5.4 F	0.00
84	11	15	6	1.4	102	26.7 A	1.8	342	67.3 A	10.0	192	4.9 E	38.1	28.3	5.7 G	7.6 F	0.00
84	11	15	7	1.6	85	31.6 A	2.1	310	76.2 A	11.3	193	6.6 E	37.9	29.3	7.5 G	9.5 F	0.00
84	11	15	8	1.9	51	28.8 A	2.8	256	40.5 A	14.7	193	7.2 E	40.0	29.7	7.3 G	9.2 F	0.00
84	11	15	9	4.7	260	36.3 A	8.6	212	21.6 B	17.6	203	9.4 D	51.5	23.0	1.3 F	0.6 E	0.00
84	11	15	10	8.3	227	19.7 B	11.5	228	17.5 B	18.5	223	12.5 C	53.1	27.5	-0.3 E	-1.8 D	0.02
84	11	15	11	7.4	216	18.1 B	12.3	221	13.9 C	19.5	215	10.3 C	48.6	38.5	-0.4 D	-2.0 D	0.04
84	11	15	12	8.2	212	14.8 C	13.8	219	12.8 C	21.4	217	9.4 D	45.7	42.7	0.3 E	-0.9 E	0.04
84	12	22	17	9.2	276	17.8 B	16.8	281	9.9 D	22.7	281	6.5 E	40.7	18.6	-0.3 E	-1.9 D	0.00
84	12	22	18	6.3	290	20.7 B	11.5	289	9.6 D	17.4	290	4.5 E	37.5	17.6	-0.3 E	-1.9 D	0.00
84	12	22	19	8.9	272	17.6 B	15.5	277	8.6 D	20.7	278	4.5 E	35.6	15.0	-0.4 D	-2.0 D	0.00
84	12	23	10	3.4	200	30.9 A	4.5	192	19.7 B	7.3	262	12.1 D	31.3	17.1	-0.9 D	-2.5 D	0.00
84	12	23	11	6.9	218	13.3 C	8.2	210	11.7 D	10.6	204	10.2 D	34.8	15.5	-0.9 D	-2.6 D	0.00
84	12	23	12	8.2	218	17.9 B	10.1	215	13.6 C	12.5	217	11.9 D	38.0	15.8	-1.0 C	-2.8 D	0.00
84	12	27	9	1.2	136	42.5 A	1.7	291	42.0 A	5.8	159	24.6 A	33.9	31.1	-0.1 E	1.4 E	0.00
84	12	27	10	1.2	116	55.9 A	1.2	13	51.0 A	5.0	155	21.0 B	35.0	32.1	0.4 E	1.6 E	0.00

BEAVER VALLEY

LISTINGS OF METEOROLOGICAL DATA  
FOR  
PERIODS OF GASEOUS EFFLUENT RELEASES  
AT  
THE 500-FT LEVEL  
(ELEVATED)

PROGRAM: LIST VERSION: 2P

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REVE

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	35 FT			150 FT			500 FT			AMB. TEMP 35F (F)	DEW POINT 35F (F)	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL
				WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)					
84	10	12	14	2.8	227	28.5 A	4.5	218	26.4 A	3.4	235	25.7 A	69.7	57.2	-1.1 B	-3.1 D	0.00
84	10	12	15	2.8	220	40.1 A	4.1	207	26.9 A	2.9	233	31.1 A	72.2	54.1	-1.3 A	-3.3 D	0.00
84	10	12	16	2.0	278	40.7 A	2.5	258	25.1 A	1.8	258	33.4 A	72.4	53.4	-0.8 D	-2.7 D	0.00
84	10	12	17	1.5	226	19.2 P	2.6	252	15.3 C	1.8	274	20.0 P	69.0	56.0	1.0 F	0.3 E	0.00
84	10	12	18	1.5	120	33.4 A	6.0	213	7.6 D	5.3	276	4.7 E	62.0	57.3	2.8 G	5.5 F	0.00
84	10	12	19	1.4	131	25.9 A	6.2	202	5.8 E	6.3	290	4.1 E	58.2	55.7	3.4 G	6.7 F	0.00
84	10	12	20	1.7	125	18.4 B	4.6	222	7.4 E	5.7	296	4.9 E	55.8	54.4	3.8 G	7.6 F	0.00
84	10	12	21	1.9	99	26.2 A	5.6	228	8.4 D	8.0	298	7.9 C	54.5	53.9	2.8 G	7.0 F	0.00
84	10	12	22	1.9	162	28.7 A	4.7	232	13.5 C	7.3	252	3.7 F	53.3	52.9	2.8 G	5.2 F	0.00
84	10	12	23	1.9	127	22.1 P	4.9	227	5.2 D	7.4	288	2.2 F	52.0	52.0	2.8 G	5.6 F	0.00
84	10	12	24	2.0	155	18.4 B	3.2	235	11.2 D	5.6	304	2.6 F	51.0	51.0	2.7 G	4.4 F	0.00
84	10	13	1	2.0	154	20.6 E	3.8	232	10.3 D	7.2	301	2.7 F	50.7	50.7	1.5 F	3.0 E	0.00
84	10	13	2	2.2	176	18.1 B	2.9	238	16.4 C	4.1	316	6.3 E	50.1	50.1	0.8 E	3.3 E	0.00
84	10	13	3	2.3	182	13.4 C	3.0	242	16.6 B	4.6	282	7.1 E	49.8	49.8	0.3 E	1.8 E	0.00
84	10	13	4	2.4	175	17.8 B	3.3	211	15.6 C	3.5	279	8.2 D	48.9	48.9	0.5 E	1.7 E	0.00
84	10	13	5	2.8	175	20.4 B	3.8	226	21.2 P	5.7	273	6.1 E	47.9	47.9	0.5 E	0.4 E	0.00
84	10	13	6	2.2	258	28.7 A	4.2	275	20.3 B	5.1	276	5.8 E	48.8	48.8	-0.3 E	-0.9 E	0.00
84	10	13	7	2.0	322	54.7 A	3.5	333	32.0 A	3.4	275	11.0 D	48.6	48.6	-0.3 E	-0.9 E	0.00
84	10	13	8	1.5	95	26.0 A	2.9	86	5.5 D	1.3	15	23.9 A	47.5	47.9	-0.4 D	-0.3 E	0.00
84	10	13	9	1.8	3	52.9 A	3.1	279	30.6 A	3.1	263	25.9 A	49.0	49.0	-0.5 D	-0.6 E	0.00
84	10	13	16	1.8	295	40.0 A	2.2	248	39.7 A	1.5	324	19.4 E	63.5	53.5	-0.9 D	-2.5 D	0.00
84	10	13	17	1.7	61	31.9 A	3.4	34	25.4 A	1.9	121	5.5 E	62.7	54.5	-0.3 E	-1.3 D	0.00
84	10	13	18	0.8	134	6.1 E	2.2	71	43.2 A	1.6	62	5.7 E	56.3	54.6	2.0 F	3.9 F	0.00
84	10	13	19	0.7	105	5.3 E	1.3	353	17.9 B	2.4	55	4.7 E	52.9	52.7	2.3 F	5.8 F	0.00
84	10	13	20	1.8	120	26.2 A	1.8	227	30.7 A	2.7	287	16.8 C	51.6	51.6	2.3 F	4.3 F	0.00
84	10	13	21	2.1	155	21.6 P	4.5	220	12.5 C	5.0	279	3.8 E	50.5	50.5	2.3 F	3.0 E	0.00
84	10	13	22	1.9	164	41.8 A	3.6	221	38.4 A	5.5	282	7.6 E	52.5	52.5	0.3 E	0.1 E	0.00
84	10	13	23	1.7	243	55.6 A	3.9	298	23.9 A	3.8	273	11.8 D	53.4	53.4	-0.4 D	-1.1 E	0.00
84	10	13	24	1.7	263	57.1 A	3.0	287	23.4 A	2.9	297	22.7 A	53.3	53.3	-0.3 E	-1.2 E	0.00
84	10	14	1	1.5	75	26.2 A	2.8	38	24.4 A	1.6	352	36.0 A	53.0	53.0	-0.4 D	-1.1 E	0.00
84	10	14	2	1.3	72	42.8 A	2.7	156	39.3 A	1.7	142	30.4 A	52.8	52.8	-0.4 D	-1.1 E	0.01
84	10	14	3	1.6	174	12.6 C	3.7	128	12.3 D	2.9	152	13.4 C	52.8	52.8	-0.4 D	-1.2 E	0.00
84	10	14	4	1.2	76	23.7 A	4.2	150	6.7 F	2.3	201	12.2 D	52.1	52.1	-0.5 D	-1.1 E	0.00
84	10	14	26	1.2	125	23.0 A	2.3	56	23.4 A	3.1	114	4.4 E	52.6	52.4	1.4 F	1.8 E	0.00
84	10	14	21	1.1	130	5.7 E	1.8	50	8.9 D	3.7	78	6.6 E	52.2	52.2	1.3 F	1.8 E	0.00
84	10	14	22	1.2	71	23.3 A	2.8	61	12.1 C	5.6	57	6.2 E	52.8	52.7	0.9 E	1.2 E	0.00
84	10	14	23	1.3	98	14.2 C	3.1	45	14.3 C	2.9	111	18.4 B	51.8	51.8	1.3 F	1.4 E	0.00
84	10	14	24	2.2	94	11.3 D	4.6	85	9.9 D	4.1	88	14.6 C	51.2	51.2	0.7 E	1.1 E	0.00
84	10	15	1	2.1	104	22.5 A	5.2	98	12.2 D	5.2	101	11.9 C	50.4	50.4	-0.1 E	0.7 E	0.00
84	10	15	2	2.2	81	18.7 B	3.4	91	12.4 D	3.5	132	17.3 C	50.2	50.2	-0.3 E	-0.3 E	0.00
84	10	15	3	1.8	67	32.8 A	5.5	68	10.1 C	4.9	121	10.8 E	50.2	50.2	-0.5 D	-0.7 E	0.00
84	10	15	4	1.9	91	30.4 A	3.5	85	16.9 C	3.4	84	36.9 A	50.4	50.4	-0.4 D	-1.2 E	0.00
84	10	15	5	1.8	70	18.5 B	2.4	98	15.1 C	1.9	147	22.7 A	50.1	50.1	-0.5 D	-1.2 E	0.00
84	10	15	6	1.1	95	29.6 A	2.6	138	12.0 D	2.2	52	12.5 C	49.9	49.9	-0.4 D	-0.6 E	0.00
84	10	15	7	0.8	116	34.7 A	2.8	135	11.2 D	3.0	67	8.1 D	50.1	50.1	-0.5 D	-0.6 E	0.00
84	10	15	8	1.4	97	32.9 A	2.7	112	12.6 C	3.7	42	5.2 E	50.9	50.9	-0.6 D	-0.6 E	0.00
84	10	15	9	1.6	40	63.3 A	2.2	66	31.5 A	3.8	84	10.9 E	54.1	52.1	-1.0 C	-2.0 D	0.00
84	10	15	11	3.1	340	18.7 P	2.8	8	49.1 A	3.3	100	14.9 C	64.6	53.2	-0.3 F	-2.2 D	0.00

PROGRAM: LIST VERSION: 2P

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REV1

-----35 FT-----150 FT-----500 FT-----

YP	MO	DY	HR	WIND			WIND			WIND			AMB. TEMP 35F	DEW POINT 35F	DELTA T 150-35	DELTA T 500-35	RAIN FALL
				SPEED (MPH)	DIR (DEG)	STD DEV (DEG)	SPEED (MPH)	DIR (DEG)	STD DEV (DEG)	SPEED (MPH)	DIR (DEG)	STD DEV (DEG)					
84	17	15	12	2.0	84	62.4 A	4.9	101	29.7 A	4.1	112	22.4 E	70.6	51.7	-1.5 A	-3.4 D	0.00
84	17	15	13	3.2	10	44.4 A	5.0	42	49.0 A	4.5	96	31.5 A	73.1	51.4	-1.0 C	-2.4 D	0.00
84	17	15	14	2.7	129	46.0 A	6.6	118	19.7 B	6.6	125	11.2 D	75.2	47.3	-1.4 A	-3.5 D	0.00
84	17	15	15	2.1	143	54.4 A	5.8	133	14.0 C	6.9	134	10.0 D	74.9	47.7	-1.1 B	-3.0 D	0.00
84	17	15	16	1.0	110	17.2 C	4.4	137	10.2 D	6.3	145	5.9 E	73.3	51.3	-0.1 E	-1.6 D	0.00
84	17	15	17	0.9	140	12.7 C	2.1	128	17.7 B	6.0	157	5.6 E	68.5	56.6	2.5 F	2.6 E	0.00
84	17	15	18	1.1	125	21.9 B	1.7	32	7.7 D	3.9	146	7.4 E	64.7	56.5	2.6 G	5.5 F	0.00
84	17	15	19	1.3	140	21.5 B	2.3	30	42.5 A	4.4	104	7.5 D	62.2	56.0	2.8 G	7.2 F	0.00
84	17	15	20	1.5	148	35.2 A	2.3	185	36.8 A	2.1	128	11.2 D	61.4	54.9	2.7 G	6.0 F	0.00
84	17	15	21	1.5	125	35.6 A	2.4	358	47.6 A	4.6	104	7.9 E	60.4	55.3	2.4 F	6.5 F	0.00
84	17	15	22	1.7	171	24.7 A	2.9	31	43.5 A	4.9	138	10.8 D	59.0	56.1	2.2 F	6.2 F	0.00
84	17	15	23	2.5	122	45.4 A	4.5	267	40.1 A	8.9	221	5.9 C	58.8	56.9	0.6 E	1.7 E	0.17
84	17	15	24	1.6	96	27.8 A	3.0	25	30.2 A	5.1	164	12.6 C	58.3	58.3	0.3 E	0.8 E	0.01
84	17	16	1	1.1	72	22.1 P	4.4	38	12.1 D	5.8	170	10.2 D	58.8	58.8	0.2 E	0.2 E	0.03
84	17	16	2	1.3	84	53.2 A	3.2	17	32.1 A	7.1	175	7.6 C	59.1	59.0	0.3 E	0.4 E	0.00
84	17	16	3	0.9	91	34.9 A	1.7	359	31.3 A	6.4	185	4.1 E	59.1	59.1	0.4 E	0.7 E	0.00
84	17	16	4	1.1	92	28.5 A	3.9	32	7.1 E	3.3	150	28.3 A	59.2	59.2	0.5 E	0.7 E	0.00
84	17	16	5	0.6	120	15.3 C	2.4	20	9.4 D	1.4	208	11.2 D	59.2	59.2	0.4 E	0.6 E	0.00
84	17	16	6	0.9	102	19.7 B	2.2	18	23.3 A	2.7	182	9.9 D	59.5	59.5	0.2 E	0.3 E	0.00
84	17	16	7	1.0	76	23.6 A	3.4	65	9.9 D	2.6	146	12.2 C	59.7	59.7	0.1 E	0.1 E	0.00
84	17	16	8	1.1	33	24.0 A	2.5	48	21.6 B	4.2	124	9.0 D	60.6	60.6	-0.1 E	-0.7 E	0.00
84	17	16	9	1.5	342	37.4 A	1.5	40	58.8 A	3.1	166	21.0 B	62.3	61.0	0.5 E	-0.3 E	0.00
84	17	16	10	2.1	242	43.1 A	3.7	234	38.7 A	3.8	200	23.1 A	64.1	61.8	-0.2 E	-0.8 E	0.00
84	17	16	11	1.8	186	50.9 A	3.5	171	22.8 A	3.1	172	20.5 E	65.8	62.1	-0.5 D	-0.9 E	0.00
84	17	16	12	3.9	10	25.1 A	6.6	20	21.5 B	4.0	75	26.7 A	67.3	62.8	1.0 F	2.3 F	0.00
84	17	16	13	4.9	13	18.5 B	8.4	23	7.4 E	5.0	42	19.2 B	70.6	63.1	-1.9 A	-1.0 E	0.00
84	17	16	14	4.7	13	13.0 C	8.0	25	7.4 E	5.2	53	15.2 C	72.4	62.6	-1.1 B	-1.3 D	0.00
84	17	16	15	4.1	15	16.3 C	7.5	26	10.9 D	5.5	45	12.1 D	73.5	62.6	-1.1 B	-2.6 D	0.00
84	17	16	16	2.3	50	37.2 A	6.5	68	10.4 D	5.7	71	9.6 E	74.3	62.5	-0.8 D	-2.5 D	0.00
84	17	16	17	1.5	35	40.4 A	4.2	58	16.1 C	5.3	76	6.8 E	72.4	62.7	0.3 E	-1.2 E	0.00
84	17	16	18	1.3	53	25.8 A	3.5	71	14.4 C	5.1	75	3.8 E	68.4	63.6	2.0 F	1.5 E	0.00
84	17	16	19	1.0	97	18.4 B	3.2	31	13.6 C	8.1	87	4.7 E	63.9	62.6	3.3 G	4.1 F	0.00
84	17	16	20	0.8	125	9.6 D	2.7	33	22.1 B	6.9	102	4.3 E	61.4	61.1	3.8 G	5.2 F	0.00
84	17	16	21	1.3	123	14.8 C	3.9	47	13.1 C	6.2	108	6.4 E	60.2	60.2	3.3 G	4.9 F	0.00
84	17	16	22	1.0	120	10.9 D	3.1	63	15.5 C	4.5	55	7.3 E	59.2	59.2	3.6 G	4.7 F	0.00
84	17	16	23	1.9	102	13.5 C	5.2	38	5.1 E	6.5	96	4.2 E	58.8	58.8	2.7 G	4.0 F	0.00
84	17	16	24	2.1	104	10.7 D	5.4	36	6.2 E	5.8	101	5.0 E	58.3	58.3	2.2 F	3.2 E	0.00
84	17	17	1	1.7	91	10.5 D	4.6	35	7.7 D	5.5	101	5.4 E	58.0	58.0	1.6 F	2.3 E	0.00
84	17	17	2	1.7	77	20.0 B	5.0	32	6.9 E	6.0	112	8.1 D	57.8	57.8	1.4 F	1.8 E	0.00
84	17	17	3	1.8	80	15.3 C	5.5	35	9.5 D	8.8	122	6.4 E	57.5	57.5	1.4 F	1.8 E	0.00
84	17	17	4	1.8	80	9.4 D	4.1	45	8.5 D	6.6	110	4.1 E	57.2	57.2	1.3 F	1.7 E	0.00
84	17	17	5	1.5	75	17.6 B	3.5	35	11.3 D	5.6	101	5.8 E	56.8	56.8	1.1 F	1.3 E	0.00
84	17	17	6	1.4	76	15.9 C	4.4	46	9.5 D	6.3	97	8.4 D	56.9	56.9	0.9 E	0.7 E	0.00
84	17	17	16	1.8	351	38.8 A	5.9	355	12.8 C	7.1	357	6.5 E	71.4	66.1	-0.3 E	-1.5 D	0.02
84	17	17	17	99.9	999	99.9 -	99.9	999	99.9 -	8.5	350	99.9 -	99.9	999.9	999.9 -	-1.1 E	0.20
84	17	17	18	1.6	247	34.1 A	3.6	273	8.4 D	6.1	324	9.5 D	66.1	66.1	-0.2 E	-0.7 E	0.02
84	17	17	19	2.5	264	15.8 C	6.5	281	9.4 D	6.8	301	10.4 D	65.7	65.4	-0.2 E	-1.1 E	0.02
84	17	17	26	2.6	260	28.1 A	6.0	279	13.8 C	7.8	285	4.8 E	64.6	64.6	-0.2 F	-1.1 E	0.00

PROGRAM: LIST VERSION: DF

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REV1

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	WIND			WIND			WIND			AMB. TEMP 35F (F)	DEW POINT 35F (F)	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL (IN)
				SPEED (MPH)	DIR (DEG)	STD DEV (DEG)	SPEED (MPH)	DIR (DEG)	STD DEV (DEG)	SPEED (MPH)	DIR (DEG)	STD DEV (DEG)					
84	10	17	21	2.9	288	27.0 A	7.2	287	14.4 C	9.6	298	7.6 D	63.7	62.6	-0.2 E	-1.5 D	0.00
84	10	17	22	3.9	281	24.9 A	8.4	294	16.0 C	9.3	314	12.0 D	62.2	60.1	-0.3 E	-1.9 D	0.00
84	10	17	23	1.8	297	38.8 A	5.0	304	24.6 A	6.8	337	16.3 C	59.9	56.9	-0.3 E	-1.5 D	0.00
84	10	17	24	2.9	285	19.9 R	5.7	289	12.1 D	6.6	319	9.7 D	58.9	57.0	-0.2 E	-1.5 D	0.00
84	10	18	1	2.1	303	10.4 D	3.7	291	18.2 B	5.7	338	14.9 C	58.5	55.3	-0.2 E	-1.4 D	0.00
84	10	18	2	2.0	281	23.6 A	6.6	302	4.9 F	7.4	344	5.6 E	57.6	56.2	-0.4 D	-0.9 E	0.00
84	10	18	3	1.8	23	35.4 A	4.9	322	14.5 C	8.1	360	6.8 E	57.6	55.9	-0.5 D	-1.4 D	0.00
84	10	18	4	2.0	14	48.0 A	5.1	338	19.4 B	9.6	1	9.7 D	57.0	55.4	-0.5 D	-1.3 C	0.00
84	10	18	5	1.1	153	12.9 C	1.8	250	26.9 A	1.5	53	45.7 A	55.0	54.5	0.6 E	-0.1 E	0.00
84	10	18	6	1.6	116	30.0 A	1.5	314	36.0 A	3.9	332	15.4 C	52.6	52.6	1.8 F	1.4 E	0.00
84	10	18	7	1.6	166	26.5 A	1.6	175	62.0 A	2.7	295	19.4 B	52.5	52.5	0.4 E	0.2 E	0.00
84	10	18	8	1.3	245	59.1 A	2.5	285	50.9 A	4.3	348	30.9 A	52.7	52.7	-0.5 D	-1.5 D	0.00
84	10	18	9	3.8	344	18.5 P	8.5	346	12.6 C	5.9	351	14.5 C	53.6	51.1	-0.8 D	-2.4 D	0.00
84	10	18	10	4.0	341	25.0 A	6.9	352	15.8 C	6.4	358	15.6 C	55.7	50.7	-1.2 A	-2.7 D	0.00
84	10	18	11	2.6	10	27.0 A	3.6	35	40.0 A	2.4	17	48.9 A	60.2	51.2	-1.1 B	-2.5 D	0.00
84	10	18	12	2.6	269	21.5 R	3.4	275	19.8 R	2.2	306	28.5 A	62.7	51.1	-1.1 B	-2.9 D	0.00
84	10	18	13	3.0	240	99.9 -	4.5	250	99.9 -	3.5	260	99.9 -	66.0	999.9	-1.0 C	-2.8 D	0.00
84	10	18	14	2.5	275	99.9 -	3.5	285	99.9 -	2.5	270	99.9 -	68.0	999.9	-1.1 B	-3.1 D	0.00
84	10	18	15	2.0	290	99.9 -	3.0	290	99.9 -	2.0	245	99.9 -	69.0	999.9	-1.0 C	-3.0 D	0.00
84	10	18	16	2.0	275	99.9 -	3.0	285	99.9 -	3.0	280	99.9 -	69.0	999.9	-0.8 D	-2.9 D	0.00
84	10	18	17	1.0	260	99.9 -	2.0	315	99.9 -	1.5	285	99.9 -	66.0	999.9	1.4 F	0.8 E	0.00
84	10	18	18	1.0	150	99.9 -	2.0	40	99.9 -	2.5	65	99.9 -	59.5	999.9	3.0 G	6.0 F	0.00
84	10	18	19	0.5	140	99.9 -	3.0	20	99.9 -	4.5	85	99.9 -	54.5	999.9	3.6 G	8.9 F	0.00
84	10	18	20	0.5	130	99.9 -	2.5	10	99.9 -	5.0	95	99.9 -	52.5	999.9	2.8 G	9.2 F	0.00
84	10	18	21	0.5	145	99.9 -	2.5	25	99.9 -	5.5	100	99.9 -	51.0	999.9	2.6 G	9.0 F	0.00
84	10	18	22	0.5	110	99.9 -	4.5	45	99.9 -	6.0	95	99.9 -	50.0	999.9	2.8 G	8.1 F	0.00
84	10	18	23	1.0	105	99.9 -	5.5	50	99.9 -	6.5	100	99.9 -	50.0	999.9	2.2 F	6.2 F	0.00
84	10	18	24	1.0	110	99.9 -	4.5	65	99.9 -	6.5	120	99.9 -	50.0	999.9	2.2 F	6.2 F	0.00
84	10	19	1	0.5	95	99.9 -	5.0	50	99.9 -	7.0	125	99.9 -	49.5	999.9	2.0 F	5.7 F	0.00
84	10	19	2	0.5	115	99.9 -	4.5	55	99.9 -	6.5	130	99.9 -	49.5	999.9	2.3 F	7.0 F	0.00
84	10	19	3	1.0	95	99.9 -	5.5	45	99.9 -	8.0	130	99.9 -	50.5	999.9	2.0 F	5.4 F	0.00
84	10	19	11	9.5	215	99.9 -	15.5	225	99.9 -	19.5	225	99.9 -	76.5	999.9	-0.8 D	-2.0 D	0.00
84	10	19	12	10.0	230	99.9 -	18.5	240	99.9 -	19.5	235	99.9 -	78.5	999.9	-0.8 D	-2.8 D	0.00
84	10	19	13	10.5	235	99.9 -	18.0	240	99.9 -	20.0	240	99.9 -	78.5	999.9	-0.6 D	-2.6 D	0.00
84	10	19	14	6.6	210	20.3 R	13.3	223	14.9 C	16.6	237	8.8 D	74.2	64.1	0.0 E	-0.5 L	0.01
84	10	19	15	5.6	220	15.2 P	10.6	228	13.9 C	14.0	230	9.3 D	75.4	63.9	-0.3 E	-1.6 F	0.00
84	10	19	16	7.5	219	14.5 C	13.2	220	12.5 C	15.4	220	10.7 D	76.4	62.6	-0.5 D	-2.2 D	0.00
84	10	19	17	7.5	233	16.5 C	12.6	233	12.7 C	15.4	231	9.7 D	75.9	62.1	-0.4 D	-1.9 D	0.00
84	10	19	18	5.1	213	15.8 C	10.2	227	12.5 C	13.4	235	8.6 D	74.3	61.3	0.3 E	-1.0 E	0.00
84	10	19	19	5.8	212	15.6 C	11.6	230	10.6 D	14.6	239	7.8 D	72.6	60.6	0.7 E	-0.6 E	0.00
84	10	19	20	3.6	211	21.1 E	9.9	249	10.5 D	12.3	260	7.5 E	70.9	60.3	1.1 F	-0.1 E	0.00
84	10	19	21	2.8	208	21.6 P	7.3	257	11.9 D	8.5	265	6.8 E	69.6	60.8	0.8 E	-0.6 E	0.00
84	10	19	22	1.7	168	24.3 A	6.0	253	11.8 D	9.6	277	5.2 F	66.6	61.7	2.0 F	1.1 E	0.00
84	10	19	23	1.9	259	52.0 A	7.1	296	15.5 C	11.0	292	6.7 E	66.6	58.7	0.6 E	-0.5 E	0.00
84	10	19	24	2.0	275	25.8 A	9.5	285	11.8 D	12.7	288	5.9 F	65.9	51.6	-0.1 E	-1.5 D	0.00
84	10	20	1	2.5	261	31.0 A	7.0	277	12.7 C	10.4	282	6.3 E	64.1	48.5	0.0 E	-1.2 E	0.00
84	10	20	2	4.1	287	33.4 A	11.1	292	12.6 C	13.1	297	8.2 D	61.9	44.2	-0.2 E	-1.7 D	0.00
84	10	20	3	1.7	309	27.5 A	9.1	301	15.3 C	10.7	305	5.3 D	59.2	42.6	-0.3 E	-2.0 D	0.00



PROGRAM: LIST VERSION: 2P

LISTING FOR BEAVER VALLEY (OURLY METEOROLOGICAL DATA  
SOFT-LEVEL BATCH REV: 1

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	35 FT			150 FT			500 FT			AMB. TEMP (F)	DEW POINT (F)	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL (IN)
				WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (DEG)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (DEG)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (DEG)					
84	10	20	4	1.9	327	45.6 A	5.6	300	18.1 B	9.4	301	6.6 E	56.8	40.6	-0.1 E	-1.5 D	0.00
84	10	21	10	8.8	229	15.3 B	15.1	226	13.9 C	16.7	226	11.5 D	69.9	60.6	-0.5 D	-2.2 D	0.00
84	10	21	11	9.8	218	17.7 B	17.7	215	14.5 C	18.3	218	11.9 D	70.1	60.6	-0.8 D	-2.6 D	0.00
84	10	21	12	99.9	999	99.9 -	99.9	999	99.9 -	21.0	220	99.9 -	999.9	999.9	999.9 -	-2.6 D	9.99
84	10	21	13	5.4	216	17.4 C	15.4	222	15.1 C	17.6	222	12.2 C	69.6	60.6	-0.6 C	-2.3 D	0.01
84	10	21	14	5.7	231	19.2 B	9.9	231	15.3 C	12.1	228	10.7 D	67.3	61.7	-0.5 D	-2.2 D	0.00
84	10	21	15	2.9	243	20.1 B	6.2	240	16.1 C	7.7	225	14.2 C	67.0	62.2	-0.5 D	-2.1 D	0.00
84	10	21	16	2.2	305	25.8 A	3.6	277	27.4 A	5.0	217	16.1 C	66.2	63.3	-0.3 E	-1.0 E	0.00
84	10	21	17	1.2	107	15.7 C	2.3	214	11.9 D	1.9	296	22.0 B	65.7	63.5	-0.2 E	-0.7 E	0.00
84	10	21	18	0.9	91	11.5 D	1.6	333	10.1 D	5.4	192	7.3 E	63.9	63.1	0.7 E	2.8 E	0.00
84	10	21	19	1.9	205	49.1 A	4.1	265	19.6 B	7.0	250	10.7 D	63.7	63.3	0.8 E	2.6 E	0.02
84	10	21	20	2.3	185	20.8 B	7.1	224	13.0 C	9.9	238	8.3 C	63.9	63.5	1.5 F	1.0 E	0.00
84	10	21	21	4.2	205	11.2 D	10.6	219	7.7 D	13.2	232	4.6 F	65.2	63.7	0.6 E	-0.5 E	0.00
84	10	21	22	2.2	205	17.5 F	7.4	234	9.5 D	10.9	256	6.1 E	64.7	63.1	0.7 E	-0.3 E	0.00
84	10	21	23	1.2	136	35.3 A	3.8	220	15.1 C	7.9	258	4.9 E	63.2	62.4	1.1 F	0.6 E	0.00
84	10	21	24	3.2	338	46.2 A	8.1	295	19.7 B	9.3	305	12.2 D	62.6	60.5	0.4 E	-1.0 E	0.00
84	10	22	1	2.6	323	25.6 A	5.2	319	28.4 A	7.1	337	17.6 F	60.7	57.4	-0.5 D	-2.2 D	0.00
84	10	22	6	2.5	24	31.2 A	6.4	10	25.0 A	8.8	12	15.4 C	54.7	52.5	-0.4 D	-1.9 D	0.05
84	10	22	7	2.0	9	54.1 A	4.6	355	33.6 A	8.8	12	9.4 D	53.5	52.6	-0.7 D	-1.8 D	0.06
84	10	22	8	1.8	55	48.1 A	4.6	351	34.0 A	8.4	2	15.7 C	53.4	52.3	-1.0 C	-1.9 D	0.01
84	10	22	9	1.7	79	36.4 A	2.9	16	36.2 A	4.7	17	19.6 F	53.6	52.4	-1.0 C	-2.0 D	0.02
84	10	22	10	2.5	225	99.9 -	5.0	5	99.9 -	7.0	5	99.9 -	53.0	52.6	-0.9 D	-2.1 D	0.06
84	10	22	11	1.5	5	99.9 -	2.5	240	99.9 -	4.0	25	99.9 -	53.0	999.9	-0.9 D	-2.0 D	0.10
84	10	22	12	1.5	350	99.9 -	4.0	345	99.9 -	6.0	360	99.9 -	53.0	999.9	-0.9 D	-2.0 D	0.09
84	10	22	13	2.0	160	99.9 -	4.0	30	99.9 -	5.5	15	99.9 -	53.0	999.9	-1.0 C	-2.1 D	0.23
84	10	22	14	1.6	60	51.2 A	3.5	39	29.9 A	5.4	14	20.0 E	53.2	52.1	-1.0 C	-2.0 D	0.03
84	10	22	15	1.5	195	99.9 -	2.0	265	99.9 -	4.0	335	99.9 -	53.5	999.9	-1.1 B	-2.1 D	0.03
84	10	22	16	1.5	245	99.9 -	3.5	300	99.9 -	5.5	330	99.9 -	53.5	999.9	-1.2 A	-2.0 D	0.04
84	10	22	17	2.5	280	99.9 -	4.5	295	99.9 -	6.5	335	99.9 -	53.5	999.9	-1.2 A	-2.2 D	0.02
84	10	22	18	2.0	280	99.9 -	4.5	310	99.9 -	6.5	350	99.9 -	53.5	999.9	-1.2 A	-2.0 D	0.00
84	10	22	19	2.5	285	99.9 -	5.0	305	99.9 -	8.0	345	99.9 -	53.5	999.9	-1.1 B	-2.0 D	0.00
84	10	22	20	2.5	310	99.9 -	6.5	320	99.9 -	9.5	350	99.9 -	53.5	999.9	-1.1 B	-2.1 D	0.00
84	10	22	21	2.5	325	99.9 -	5.0	335	99.9 -	8.5	355	99.9 -	53.5	999.9	-1.1 B	-2.2 D	0.00
84	10	22	22	2.0	310	99.9 -	5.5	315	99.9 -	9.0	350	99.9 -	53.5	999.9	-1.2 A	-2.3 D	0.00
84	10	22	23	2.5	320	99.9 -	5.5	330	99.9 -	9.0	350	99.9 -	53.5	999.9	-1.1 B	-2.2 D	0.00
84	10	22	24	2.5	315	99.9 -	6.0	335	99.9 -	10.0	360	99.9 -	53.0	999.9	-1.0 C	-2.3 D	0.00
84	10	23	1	3.5	320	99.9 -	7.0	330	99.9 -	10.5	355	99.9 -	53.0	999.9	-1.0 C	-2.3 D	0.00
84	10	23	2	3.5	320	99.9 -	7.0	330	99.9 -	10.5	360	99.9 -	53.0	999.9	-1.1 B	-2.1 D	0.00
84	10	23	3	2.0	315	99.9 -	6.5	325	99.9 -	9.0	5	99.9 -	52.5	999.9	-1.3 A	-2.0 D	0.00
84	10	23	4	2.0	310	99.9 -	6.0	325	99.9 -	9.0	355	99.9 -	52.0	999.9	-0.7 D	-2.0 D	0.00
84	10	23	5	2.0	325	99.9 -	5.5	335	99.9 -	9.5	5	99.9 -	52.0	999.9	-0.5 D	-2.0 D	0.00
84	10	23	6	2.0	65	99.9 -	4.5	355	99.9 -	9.5	10	99.9 -	52.0	999.9	-0.5 D	-2.0 D	0.00
84	10	23	7	1.5	285	99.9 -	3.0	285	99.9 -	4.0	20	99.9 -	51.5	999.9	-0.5 D	-2.1 D	0.00
84	10	23	8	1.5	310	78.1 A	2.9	123	55.3 A	5.3	44	26.4 A	51.8	48.2	-0.6 C	-2.3 D	0.00
84	10	23	9	2.4	29	47.4 A	6.0	57	22.6 A	7.0	56	17.0 C	52.9	46.5	-0.7 D	-2.5 D	0.00
84	10	23	10	2.3	30	53.5 A	5.2	43	26.1 A	5.4	46	18.7 F	53.5	45.1	-0.7 D	-2.5 D	0.00
84	10	23	11	2.6	40	43.0 A	5.4	46	31.5 A	6.0	35	18.5 B	54.1	44.3	-0.8 D	-2.7 D	0.00
84	10	23	12	2.6	34	43.0 A	6.3	38	21.1 B	6.4	38	19.2 F	54.5	43.7	-0.8 D	-2.6 D	0.00

PROGRAM: LIST      VERSION: 2P

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH      REV#

-----35 FT-----      -----150 FT-----      -----500 FT-----

YR	MO	DY	HR	WIND	WIND	STD	WIND	WIND	STD	WIND	WIND	STD	AMB.	DEW	DELTA T		RAIN
				SPEED	DIR	DEV	SPEED	DIR	DEV	SPEED	DIR	DEV	TEMP	POINT	150-35	500-35	FALL
				(MPH)	(DEG)	(F)	(MPH)	(DEG)	(F)	(MPH)	(DEG)	(F)	(F)	(F)	(F)	(F)	(IN)
84	12	23	13	2.3	12	43.4 A	4.7	23	37.3 A	5.6	29	19.0 B	54.6	43.7	-0.7 D	-2.5 D	0.00
84	12	23	14	2.4	91	36.2 A	4.7	334	26.9 A	4.7	321	29.7 A	53.5	46.4	-0.3 E	-1.9 D	0.01
84	12	23	15	1.2	73	33.8 A	2.4	141	29.0 A	1.6	192	47.4 A	51.3	49.9	0.6 E	-0.6 E	0.00
84	12	23	16	1.3	65	33.5 A	1.3	137	30.7 A	1.6	278	38.4 A	51.5	50.5	0.2 E	-0.8 E	0.00
84	12	23	17	1.4	122	28.4 A	1.8	183	12.4 D	1.5	232	33.1 A	50.9	50.4	0.7 E	-0.3 E	0.00
84	12	23	18	1.5	154	28.7 A	1.6	198	41.8 A	1.8	28	60.7 A	50.5	50.0	0.8 E	-0.2 E	0.00
84	12	23	19	1.3	100	40.3 A	2.2	114	40.8 A	2.1	42	43.6 A	51.0	49.2	0.3 E	-1.0 E	0.00
84	12	23	20	1.2	129	33.4 A	1.7	82	35.0 A	2.1	42	46.2 A	50.6	49.1	0.3 E	-0.1 E	0.00
84	12	23	21	1.2	120	14.9 C	2.2	79	14.0 C	2.2	38	33.6 A	50.1	49.2	0.6 E	0.2 E	0.00
84	12	23	22	1.6	141	27.3 A	1.6	73	35.7 A	3.3	90	30.5 A	50.0	48.9	0.6 E	-0.4 E	0.00
84	12	23	23	1.5	116	22.6 A	1.4	101	33.6 A	3.1	50	20.7 F	50.1	48.8	0.2 E	-0.8 E	0.00
84	12	24	1	1.3	78	46.5 A	2.6	57	31.4 A	3.1	32	20.9 F	50.7	44.8	-0.5 D	-1.9 D	0.00
84	12	24	10	1.8	335	37.1 A	2.1	339	38.4 A	2.0	33	36.9 A	52.4	44.3	-0.8 D	-2.4 D	0.00
84	12	24	11	99.9	999	99.9 -	99.9	999	99.9 -	2.0	265	99.9 -	99.9	999.9	999.9 -	-2.5 D	9.99
84	12	24	12	2.4	226	32.6 A	3.1	220	25.4 A	2.1	188	32.2 A	55.6	45.7	-0.9 D	-2.6 D	0.00
84	12	24	13	2.4	212	29.2 A	3.7	206	31.1 A	2.7	211	36.9 A	57.9	44.8	-1.1 B	-2.8 D	0.00
84	12	24	14	2.9	202	39.5 A	4.2	221	23.4 A	3.3	235	22.5 A	59.8	43.4	-1.0 C	-2.9 D	0.00
84	12	24	15	3.8	249	11.7 D	5.6	258	5.0 D	4.7	271	10.6 D	60.5	42.2	-0.8 D	-2.5 D	0.00
84	12	24	16	2.6	278	20.9 B	4.8	282	15.0 C	4.7	301	11.9 C	60.8	42.5	-0.7 D	-2.4 D	0.00
84	12	24	17	2.2	337	39.1 A	5.2	323	19.7 B	5.6	332	8.8 D	60.3	42.9	-0.4 D	-2.1 D	0.00
84	12	24	18	1.4	114	58.0 A	2.8	288	38.5 A	5.1	336	25.2 A	56.9	43.9	0.1 E	-1.0 E	0.00
84	12	24	19	0.8	156	49.1 A	1.2	21	43.6 A	3.0	13	25.8 A	54.8	46.6	1.1 F	0.6 E	0.00
84	12	24	20	1.2	117	19.4 B	2.1	208	10.2 D	5.2	356	5.0 E	53.8	47.9	1.3 F	1.6 E	0.00
84	12	24	21	2.4	44	41.5 A	5.3	307	32.9 A	7.9	354	10.4 D	54.0	45.7	0.4 E	-0.3 E	0.00
84	12	24	22	2.5	19	25.3 A	7.2	13	13.2 C	8.5	16	9.6 D	53.1	43.5	-0.5 D	-2.1 D	0.00
84	12	24	23	1.1	65	54.8 A	4.6	25	18.4 B	6.0	31	13.3 C	50.5	43.3	0.0 E	-1.1 E	0.00
84	12	24	24	1.3	127	22.7 A	2.1	45	23.0 A	5.4	57	15.4 C	46.5	43.8	2.2 F	1.5 E	0.00
84	12	19	4	1.9	63	37.5 A	3.3	61	16.5 C	4.4	92	13.2 C	33.7	29.8	-0.5 D	-1.8 D	0.05
84	12	19	5	1.8	57	30.8 A	4.1	66	15.5 C	6.1	90	8.6 D	32.9	32.2	-0.3 E	-1.6 D	0.01
84	12	19	6	2.1	54	33.0 A	3.6	72	23.2 A	7.2	118	9.8 D	33.5	33.3	-0.3 E	-1.5 D	0.01
84	12	19	7	2.3	49	30.3 A	3.6	79	27.4 A	9.2	127	10.3 D	34.3	34.0	-0.3 E	-1.5 D	0.00
84	12	19	8	2.2	34	26.6 A	3.2	60	31.1 A	7.8	132	11.3 D	35.0	34.8	-0.3 E	-1.3 D	0.00
84	12	19	9	2.1	26	26.1 A	2.7	46	23.2 A	8.1	155	12.8 C	36.3	36.3	-0.3 E	-0.7 E	0.03
84	12	19	10	1.8	64	51.8 A	1.8	286	72.8 A	10.0	220	8.9 D	37.8	37.8	0.1 E	2.2 E	0.10
84	12	19	11	2.6	173	31.2 A	5.6	259	13.7 C	13.5	241	6.8 E	40.7	40.7	1.8 F	3.1 E	0.02
84	12	19	12	5.6	234	16.7 C	9.5	261	10.8 D	18.1	266	5.1 E	44.7	44.7	0.7 E	1.3 E	0.03
84	12	19	13	5.0	274	17.7 B	16.8	278	8.6 D	23.5	274	6.1 E	46.6	45.2	0.2 E	-1.1 E	0.00
84	12	19	14	8.2	277	18.3 B	15.2	281	9.7 D	21.4	282	5.5 F	45.1	42.8	-0.1 E	-1.4 D	0.00
84	12	20	14	5.3	288	26.2 A	9.2	285	15.3 C	11.3	282	8.6 D	42.7	23.7	-1.3 A	-3.2 D	0.00
84	12	20	15	4.5	298	25.0 A	8.6	296	11.8 D	10.6	292	7.1 E	42.4	23.8	-1.0 C	-2.8 D	0.00
84	12	20	16	2.4	296	27.3 A	6.3	301	18.1 B	8.5	294	10.3 C	41.4	24.9	-0.6 D	-2.3 D	0.00
84	12	20	17	1.9	68	27.6 A	3.0	302	40.9 A	6.9	302	6.3 E	39.0	25.7	0.4 E	-0.7 E	0.00
84	12	20	18	1.4	142	16.7 C	1.1	258	48.2 A	6.3	303	3.5 F	34.6	28.0	3.4 G	2.8 E	0.00
84	12	20	19	1.3	136	26.4 A	1.4	73	35.5 A	5.0	326	9.1 D	32.4	28.3	2.7 G	4.1 F	0.00
84	12	20	20	1.4	147	22.1 B	1.6	35	28.0 A	5.5	5	9.1 D	31.5	27.9	2.5 F	3.5 E	0.00
84	12	20	21	1.1	121	30.7 A	3.3	42	11.9 C	5.8	44	9.3 C	31.4	28.0	2.0 F	1.8 E	0.00
84	12	20	22	1.6	120	14.3 C	4.2	68	9.5 D	6.6	67	7.5 D	31.8	27.1	1.5 F	0.2 E	0.00
84	12	20	23	1.6	114	16.3 C	3.8	68	8.5 D	6.7	79	5.5 F	31.7	26.6	1.1 F	-0.2 E	0.00

PROGRAM: LIST VERSION: 2P

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REV C

-----35 FT-----150 FT-----500 FT-----

YR	MO	DY	HR	WIND	WIND	STD	WIND	WIND	STD	WIND	WIND	STD	AMB.	DEW	DELTA T	DELTA T	RAIN
				SPEED	DIP	DEV	SPEED	DIR	DEV	SPEED	DIR	DEV	TEMP	POINT			
				(MPH)	(DEG)	(DEG)	(MPH)	(DEG)	(DEG)	(MPH)	(DEG)	(DEG)	(F)	(F)	(F)	SC (F)	SC (IN)
84	12	20	24	1.7	100	28.0 A	4.9	68	9.2 D	7.1	80	5.8 E	32.3	25.8	0.2 E	-1.1 E	0.00
84	12	21	1	1.6	78	22.9 A	4.5	65	10.3 D	7.4	80	9.2 D	32.5	25.7	-0.1 E	-1.5 D	0.00
84	12	21	2	2.3	67	24.7 A	5.5	65	10.1 D	7.7	86	8.4 D	32.7	25.6	-0.3 E	-1.8 D	0.00
84	12	21	3	2.2	73	31.2 A	4.8	64	15.3 C	6.8	76	11.3 D	33.2	25.6	-0.4 D	-1.9 D	0.00
84	12	21	4	1.6	71	38.8 A	4.5	67	12.3 D	7.0	78	9.1 C	33.6	25.9	-0.4 D	-1.8 D	0.00
84	12	21	5	1.7	78	28.3 A	4.3	71	11.8 D	7.3	85	8.2 D	33.9	26.4	-0.4 D	-1.8 D	0.01
84	12	21	6	2.3	41	26.6 A	5.1	65	11.9 D	7.3	102	6.4 E	34.3	27.5	-0.4 D	-1.8 D	0.00
84	12	21	7	2.2	68	25.7 A	5.7	72	11.2 D	8.8	98	4.9 E	34.3	30.2	-0.3 E	-1.3 D	0.02
84	12	21	8	2.5	84	33.7 A	7.3	70	8.6 D	12.3	86	5.1 E	34.5	32.0	-0.3 E	-1.2 E	0.00
84	12	22	20	6.2	251	12.9 C	8.6	264	10.5 D	12.6	269	7.8 D	34.0	15.7	-0.3 E	-1.8 D	0.00
84	12	22	21	5.2	266	18.5 B	8.9	276	8.7 D	13.4	274	5.6 E	33.1	17.0	-0.3 E	-1.8 D	0.00
84	12	22	22	6.0	263	15.2 C	9.9	272	9.0 D	14.1	274	5.6 E	32.3	17.0	-0.4 D	-2.0 D	0.00
84	12	22	23	6.3	251	16.4 C	8.6	264	12.1 D	12.2	271	7.3 E	31.3	16.9	-0.3 E	-1.9 D	0.00
84	12	22	24	5.0	220	23.1 A	7.0	250	13.2 C	10.4	266	8.0 D	29.5	16.0	0.2 E	-1.1 E	0.00
84	12	23	1	4.1	183	17.3 C	5.9	223	18.6 B	9.3	267	11.7 D	27.8	16.4	1.4 F	0.5 E	0.00
84	12	23	2	4.9	185	8.6 D	6.4	229	11.5 D	9.8	264	8.4 D	26.7	17.8	2.1 F	1.1 E	0.00
84	12	23	3	3.7	180	8.0 D	5.3	223	9.3 D	7.3	258	7.7 D	25.1	18.4	2.8 G	1.9 E	0.00
84	12	23	4	3.1	192	22.0 E	4.4	216	12.5 C	6.5	235	8.8 D	24.9	18.1	1.6 F	0.9 E	0.00
84	12	23	5	2.3	183	17.4 C	4.5	215	11.2 D	7.8	232	9.7 C	24.4	17.9	1.2 F	0.5 E	0.00
84	12	23	6	3.3	211	5.5 D	4.4	201	7.5 D	8.0	224	6.1 E	23.6	18.4	1.8 F	1.1 E	0.00
84	12	23	7	2.0	176	13.7 C	2.4	172	20.5 B	7.1	216	8.0 D	22.8	18.2	2.2 F	1.4 E	0.00
84	12	23	8	1.4	137	36.0 A	1.4	111	49.2 A	5.3	200	13.7 C	22.0	18.7	2.7 G	2.1 E	0.00
84	12	23	9	1.9	148	54.5 A	3.1	180	35.9 A	8.9	192	7.2 E	25.9	18.6	0.4 E	-0.4 E	0.00
84	12	23	16	6.3	209	14.9 C	8.8	206	13.2 C	13.3	205	8.1 C	44.1	19.1	-0.5 D	-2.1 D	0.00
84	12	23	17	3.7	200	15.3 C	6.2	211	9.8 D	14.3	202	5.1 E	41.6	19.8	0.5 E	-0.5 E	0.00
84	12	23	18	1.2	154	26.9 P	2.8	215	21.8 B	10.9	193	5.4 E	36.9	20.8	3.4 G	2.9 E	0.00
84	12	23	19	1.5	119	55.7 A	1.8	276	44.6 A	8.5	190	10.5 D	33.8	21.6	5.9 G	4.9 F	0.00
84	12	23	20	1.7	68	45.0 A	3.8	221	31.6 A	13.8	177	6.2 E	33.2	22.6	4.9 G	5.5 F	0.00
84	12	23	21	1.8	282	75.1 A	5.9	206	15.0 C	14.9	175	5.2 E	34.1	22.8	3.2 G	3.9 F	0.00
84	12	23	22	1.2	118	50.4 A	2.9	247	23.4 A	11.7	198	6.9 E	31.6	23.8	5.5 G	6.1 F	0.00
84	12	23	23	1.4	358	65.3 A	3.5	252	28.3 A	12.1	196	7.4 E	32.6	25.4	4.9 G	5.0 F	0.00
84	12	23	24	3.2	254	47.8 A	6.9	212	15.4 C	18.9	185	4.2 E	35.4	22.5	2.3 F	3.4 E	0.00
84	12	24	1	3.3	226	51.2 A	5.1	213	33.5 A	12.8	195	7.8 C	37.5	21.3	0.9 E	0.4 E	0.00
84	12	24	2	2.3	237	37.0 A	4.9	220	15.6 C	14.1	194	6.5 E	37.1	21.2	1.3 F	1.1 E	0.00
84	12	24	3	0.8	163	14.4 C	1.5	258	22.3 B	11.8	204	5.8 E	31.3	22.2	5.4 G	6.9 F	0.00
84	12	24	4	1.1	119	46.6 A	3.6	237	17.5 B	12.9	208	5.3 E	30.3	21.4	6.4 G	8.0 F	0.00
84	12	24	5	0.9	83	53.5 A	2.8	276	29.3 A	13.3	205	5.2 E	31.7	25.8	4.9 G	8.1 F	0.00
84	12	24	10	5.2	223	31.1 A	7.7	217	14.3 C	13.7	212	10.5 D	43.1	26.8	0.6 E	-0.6 E	0.00
84	12	24	11	9.0	215	17.3 C	10.0	211	15.9 C	13.3	217	12.8 C	47.4	27.7	-0.8 D	-2.6 D	0.00
84	12	24	12	8.1	215	18.9 B	10.0	214	17.1 C	12.7	212	14.1 C	49.6	29.1	-0.8 D	-2.6 D	0.00
84	12	24	13	7.2	201	19.1 B	10.0	198	14.7 C	13.7	193	11.8 D	50.3	29.8	-0.7 D	-2.4 D	0.00
84	12	24	14	6.8	194	19.8 B	9.7	197	12.7 C	13.7	198	8.6 D	50.4	29.3	-0.6 D	-2.2 D	0.00
84	12	24	15	4.6	208	37.8 A	6.6	204	19.2 B	12.2	203	14.4 C	49.2	30.9	-0.3 E	-1.7 D	0.00
84	12	24	16	2.2	185	27.4 A	3.3	246	20.0 B	6.6	221	10.0 D	47.0	36.3	0.6 E	-0.4 E	0.06
84	12	24	17	5.6	215	17.5 B	8.0	210	13.0 C	15.1	208	7.4 E	47.5	37.3	0.3 E	-0.9 E	0.00
84	12	24	18	5.7	239	14.8 C	7.3	232	13.4 C	11.1	227	10.1 D	45.6	41.5	-0.4 D	-2.1 D	0.00
84	12	24	19	4.1	237	12.9 C	5.9	244	11.3 D	9.8	236	8.8 D	43.9	42.9	-0.3 E	-1.6 D	0.00
84	12	24	20	4.3	230	15.7 C	6.0	252	11.1 D	9.4	246	8.4 C	44.0	42.8	-0.4 D	-1.8 D	0.01

PROGRAM: LIST VERSION: 0F

LISTING FOR BEAVER VALLEY HOURLY METEOROLOGICAL DATA  
500FT-LEVEL BATCH REV0

-----35 FT-----150 FT-----500 FT-----

YR	MO	DAY	HR	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	AMB. TEMP (F)	DEW POINT (F)	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL (IN)
84	12	24	21	6.8	252	15.5 C	10.5	260	11.6 D	16.2	263	7.7 C	44.8	42.3	-0.4 D	-2.0 C	0.00
84	12	24	22	5.8	300	20.0 B	16.9	296	11.8 D	23.3	301	6.7 E	42.2	37.1	-0.7 D	-2.6 D	0.00
84	12	24	23	7.1	301	21.0 F	12.2	298	10.9 D	16.0	301	7.4 E	36.7	31.9	-0.7 D	-2.4 D	0.00
84	12	24	24	9.5	306	21.5 P	16.5	300	11.1 D	22.6	303	7.6 D	32.9	24.8	-0.7 D	-2.5 D	0.00
84	12	25	1	8.9	302	19.6 B	16.8	298	9.9 D	21.3	301	6.6 E	30.2	21.0	-0.7 D	-2.5 D	0.00
84	12	25	2	8.2	294	24.3 A	14.2	293	12.9 C	19.0	297	8.5 C	28.5	17.2	-0.8 D	-2.5 D	0.00
84	12	25	3	8.1	290	20.1 F	14.7	290	11.6 D	19.3	290	5.8 E	27.4	16.2	-0.8 D	-2.6 D	0.00
84	12	25	4	8.7	297	22.3 F	15.9	292	10.4 D	21.5	292	5.8 E	25.2	12.3	-0.8 D	-2.8 D	0.00
84	12	25	5	9.1	275	17.6 F	15.2	279	9.3 D	20.3	282	6.5 E	22.6	9.3	-0.8 D	-2.6 D	0.00
84	12	25	6	7.7	277	21.3 F	13.1	280	12.2 D	17.8	282	6.9 E	21.8	7.3	-0.7 D	-2.5 D	0.00
84	12	25	16	7.0	229	17.3 C	8.4	230	15.5 C	11.0	235	13.6 C	25.3	4.4	-0.8 D	-2.6 D	0.00
84	12	25	17	4.7	213	14.8 C	6.4	218	13.0 C	9.5	225	9.3 D	24.7	5.8	-0.4 D	-1.5 D	0.00
84	12	25	18	3.2	199	22.8 A	5.2	232	15.0 B	9.1	235	12.4 D	23.6	7.3	0.2 E	-1.1 E	0.00
84	12	25	19	4.4	213	24.1 A	6.5	245	14.5 C	10.2	244	11.2 D	23.6	8.0	0.2 E	-1.2 E	0.00
84	12	25	20	5.3	227	18.7 B	7.4	251	12.1 C	9.5	248	11.2 D	23.9	8.4	-0.1 E	-1.6 D	0.00
84	12	25	21	4.3	202	20.6 B	6.4	233	14.5 C	9.5	248	12.6 C	22.7	8.5	0.4 E	-0.8 E	0.00
84	12	25	22	4.1	211	20.3 F	6.0	246	13.7 C	9.0	251	10.9 D	22.2	8.9	0.5 E	-0.8 E	0.00
84	12	25	23	3.4	186	23.3 A	5.5	233	15.1 C	9.4	254	11.8 D	21.2	8.9	1.0 F	0.0 E	0.00
84	12	25	24	3.3	186	26.9 B	5.7	235	15.4 C	9.3	252	9.2 D	21.2	8.7	0.7 E	-0.2 E	0.00
84	12	26	1	3.2	172	22.1 B	5.2	226	18.8 B	9.6	254	10.9 C	20.7	8.7	1.2 F	0.4 E	0.00
84	12	26	2	2.8	158	17.9 B	4.1	214	21.9 B	8.2	255	11.0 D	20.4	7.8	1.0 F	0.3 E	0.00
84	12	26	3	2.3	163	25.0 A	3.8	194	20.3 F	6.0	246	23.0 A	20.7	8.1	0.9 E	0.1 E	0.00
84	12	26	4	2.5	168	28.3 A	3.4	195	19.1 B	6.6	245	19.9 F	20.9	7.7	0.3 E	-0.5 E	0.00
84	12	26	5	2.3	161	17.2 C	3.4	192	16.8 C	6.4	240	16.3 C	20.2	8.6	0.9 F	0.2 E	0.00
84	12	26	6	2.8	183	15.3 F	3.9	217	17.0 C	8.0	228	13.3 C	21.0	8.4	0.6 E	-0.4 E	0.00
84	12	26	7	5.9	999	99.9 -	99.9	999	99.9 -	5.4	265	13.8 C	999.9	999.9	999.9 -	-0.4 E	0.00
84	12	26	8	2.5	171	17.2 C	4.2	219	11.2 D	6.3	262	7.8 D	19.6	11.0	2.2 F	1.5 E	0.00
84	12	26	9	2.0	168	24.9 A	3.2	191	12.6 C	3.1	261	11.9 D	22.4	11.0	0.2 E	-0.8 E	0.00
84	12	26	10	1.6	255	36.4 A	1.6	248	36.4 A	2.6	315	22.1 B	25.8	8.7	-0.8 D	-2.2 D	0.00
84	12	26	11	1.9	88	48.4 A	2.3	72	26.6 A	2.6	5	43.4 A	27.9	8.0	-1.0 C	-2.8 D	0.00
84	12	26	12	1.9	219	71.1 A	1.8	8	59.5 A	2.2	155	44.3 A	29.0	7.3	-0.9 D	-2.3 D	0.00
84	12	26	13	1.4	175	46.5 A	1.5	146	40.0 A	2.0	76	37.6 A	29.8	7.7	-0.8 D	-2.4 D	0.00
84	12	26	14	2.3	238	27.1 A	2.9	240	25.9 A	3.1	211	21.5 B	30.7	7.5	-0.7 D	-2.3 D	0.00
84	12	26	15	2.0	354	40.5 A	3.0	352	26.5 A	2.9	340	25.0 A	31.5	7.3	-0.8 D	-2.3 D	0.00
84	12	26	16	1.6	32	53.6 A	2.2	68	36.0 A	2.4	101	30.8 A	31.8	9.3	-0.7 D	-2.3 D	0.00
84	12	26	17	1.9	80	46.9 A	4.0	87	12.1 D	5.3	97	11.4 C	31.6	9.2	-0.6 D	-2.1 D	0.00
84	12	26	18	1.8	90	31.2 A	4.8	83	9.9 D	7.8	85	4.5 E	31.3	9.7	-0.5 D	-1.7 D	0.00
84	12	26	19	1.9	54	53.4 A	4.1	82	14.0 C	6.2	92	7.7 D	31.2	9.6	-0.5 D	-1.9 D	0.00
84	12	26	20	1.7	74	35.7 A	3.9	74	12.8 C	6.6	84	8.3 D	31.3	10.0	-0.5 D	-1.9 D	0.00
84	12	26	21	2.5	69	32.0 A	6.3	70	10.4 D	8.9	71	8.1 D	31.4	11.2	-0.5 D	-1.9 D	0.00
84	12	26	22	2.4	82	34.5 A	5.9	70	10.9 D	7.7	71	8.6 D	31.6	12.0	-0.5 D	-2.0 D	0.00
84	12	26	23	2.6	80	35.9 A	5.5	75	12.1 D	8.4	78	5.5 D	31.7	12.4	-0.6 D	-2.1 D	0.00
84	12	26	24	2.3	66	27.9 A	4.6	80	15.4 C	6.8	102	8.9 D	31.9	13.6	-0.6 D	-2.1 D	0.00
84	12	27	1	2.2	56	38.2 A	4.0	70	16.5 C	5.4	98	10.7 E	32.4	14.1	-0.6 D	-2.1 D	0.00
84	12	27	2	2.9	67	31.6 A	4.2	68	11.7 D	5.4	97	9.5 D	32.4	14.8	-0.4 D	-1.8 D	0.00
84	12	27	3	1.6	110	27.1 A	4.2	73	9.8 D	6.2	84	8.3 C	31.7	22.4	0.6 E	-1.2 E	0.00
84	12	27	4	1.6	64	28.0 A	3.6	63	10.8 D	5.4	91	8.3 D	32.3	23.1	-0.3 E	-1.7 D	0.00
84	12	27	5	1.4	134	32.6 A	3.2	80	12.6 C	5.4	88	8.2 D	32.0	25.3	-0.1 E	-1.1 E	0.01

PROGRAM: LIST VERSION: 2P

LISTING FOR EFAVER VALLEY FOURLY METEOROLOGICAL DATA

500FT-LEVEL PATCH REV C

-----35 FT----- 150 FT----- 500 FT-----

YR	MO	DY	HR	35 FT			150 FT			500 FT			AMB. TEMP 35F	DEW POINT 35F	DELTA T 150-35 (F)	DELTA T 500-35 (F)	RAIN FALL (IN)
				WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)	WIND SPEED (MPH)	WIND DIR (DEG)	STD DEV (SC)					
84	12	27	6	1.8	67	26.6 A	3.3	64	16.5 C	4.7	110	11.7 D	32.5	26.8	-0.4 D	-0.9 E	0.00
84	12	27	7	1.8	61	41.9 A	3.2	76	23.8 A	4.9	105	13.0 C	32.6	28.4	-0.3 E	-1.2 E	0.00
84	12	27	8	1.5	90	26.2 A	2.9	76	16.6 C	6.3	115	7.8 D	33.1	30.3	-0.4 D	-0.7 E	0.00
84	12	29	15	7.3	239	15.2 C	10.0	249	13.4 C	16.4	241	10.2 D	60.4	58.9	0.5 E	-0.7 E	0.12
84	12	29	20	4.3	282	40.3 A	8.0	286	19.5 B	12.6	251	11.2 D	58.6	57.4	0.2 E	-1.0 E	0.22
84	12	29	21	2.1	234	37.0 A	3.9	257	17.4 C	8.0	277	7.7 D	57.1	56.7	0.1 E	-1.0 E	0.03
84	12	29	22	3.6	296	24.4 A	7.1	293	11.2 C	11.0	305	9.4 D	55.9	55.2	0.0 E	-1.2 E	0.01
84	12	29	23	4.8	322	21.6 B	8.0	325	13.5 C	11.8	332	9.7 D	53.1	52.2	-0.1 E	-1.4 D	0.02
84	12	29	24	4.1	353	23.1 A	7.3	347	14.0 C	12.1	345	8.5 D	50.3	49.4	-0.1 E	-1.5 D	0.03
84	12	30	1	5.4	19	15.3 B	9.1	13	10.3 D	12.9	358	6.8 E	47.2	45.9	-0.2 E	-1.5 D	0.02
84	12	30	2	4.7	347	21.7 B	7.3	353	14.4 C	12.4	356	8.6 D	45.1	43.0	-0.4 D	-1.4 D	0.04
84	12	30	3	3.3	346	41.3 A	5.1	344	25.5 A	10.1	345	14.5 C	44.0	42.1	-0.5 D	-1.3 D	0.02
84	12	30	4	4.0	12	29.5 A	7.7	8	15.2 C	10.9	2	10.3 D	42.7	40.6	-0.5 D	-1.5 D	0.01
84	12	30	5	3.0	1	28.3 A	5.9	13	14.2 C	11.2	17	6.8 E	41.3	39.5	-0.6 D	-0.9 E	0.02
84	12	30	6	3.5	339	14.5 C	5.9	355	10.6 D	10.3	2	5.3 E	40.8	39.0	-0.5 D	-1.1 E	0.01
84	12	30	7	2.8	354	26.1 A	4.9	348	15.4 C	8.1	8	6.8 E	40.4	39.0	-0.5 D	-1.3 D	0.03
84	12	30	8	1.6	72	49.5 A	3.4	91	38.0 A	4.4	65	22.0 A	39.3	37.9	-0.6 D	-1.3 D	0.00
84	12	30	9	1.3	76	40.1 A	1.7	49	45.7 A	1.9	36	50.0 A	39.7	37.6	-0.5 D	-1.5 D	0.00
84	12	30	10	1.4	121	62.2 A	1.8	88	55.3 A	2.3	57	53.3 A	40.5	38.1	-0.5 D	-1.8 D	0.00
84	12	30	11	1.3	315	55.7 A	1.8	345	42.3 A	2.3	347	40.3 A	41.0	37.3	-0.4 D	-2.0 D	0.00
84	12	30	12	1.3	27	51.4 A	2.0	27	34.5 A	2.4	22	33.6 A	41.8	36.0	-0.5 D	-2.2 D	0.00
84	12	30	13	1.8	344	28.4 A	2.6	345	22.6 A	2.7	11	31.3 A	41.8	35.7	-0.6 D	-2.1 D	0.00
84	12	30	14	2.2	325	28.0 A	2.6	338	18.9 B	2.4	356	18.0 B	41.3	35.4	0.8 E	-1.2 E	0.00
84	12	30	15	2.2	356	21.3 B	2.9	351	12.6 C	2.1	344	18.0 B	42.4	35.0	-1.1 B	-2.1 D	0.00
84	12	30	16	1.8	356	19.9 B	2.4	5	14.3 C	1.9	360	18.3 B	42.8	35.0	-1.1 B	-2.2 D	0.00
84	12	30	17	1.4	65	24.8 A	2.9	38	14.9 C	3.7	37	13.1 C	40.9	35.8	0.4 E	-0.9 E	0.00
84	12	30	18	1.4	130	24.0 A	2.1	108	15.3 C	4.2	31	10.4 C	35.9	35.1	2.6 G	3.0 E	0.00
84	12	30	19	1.0	137	17.6 B	2.3	28	21.1 B	3.4	43	16.9 C	33.4	33.2	2.4 F	4.9 F	0.00
84	12	30	20	1.2	138	23.3 A	2.0	39	27.4 A	5.6	54	9.9 D	31.8	31.8	2.1 F	5.5 F	0.00
84	12	30	21	1.2	128	19.2 B	1.3	65	54.4 A	7.7	60	5.2 F	30.8	30.7	2.2 F	5.5 F	0.00
84	12	30	22	1.2	105	23.6 A	2.1	37	29.8 A	8.0	68	2.1 F	30.6	30.4	1.1 F	4.7 F	0.00
84	12	30	23	1.7	116	13.3 C	2.1	42	24.1 A	9.3	72	2.2 F	30.8	30.7	0.1 E	3.8 E	0.00
84	12	30	24	1.3	116	21.5 B	2.2	53	18.0 B	7.6	75	3.4 F	30.4	30.2	-0.3 E	3.7 E	0.00