

OCTOBER 2008
MONTHLY DATA REPORT

FOR THE
WARREN COUNTY AIR MONITORING PROJECT

Prepared For:

Pollution Control Financing Authority of Warren County
Mt. Pisgah Avenue, Quarry Road
P.O. Box 587
Oxford, NJ 07863

Prepared By:

Enviroplan Consulting
Edgewater Commons II
81 Two Bridges Road
Fairfield, NJ 07004

Ref. No. 7047.08
December 3, 2008

Table of Contents

1. Introduction.....	1-1
2. Maximum Averages and Data Recovery.....	2-1

List of Tables

Table 1-1:	Data Quality Objectives.....	1-3
Table 2-1:	Maximum Hourly and Five-Minute SO ₂ Averages- Belvidere High School.....	2-2
Table 2-2:	Maximum Hourly and Five-Minute SO ₂ Averages – Demeter Farm....	2-5
Table 2-3	Data Recovery Rates.....	2-8
Table 2-4	Missing Data Report.....	2-9

List of Appendices

Appendix A: Hourly and Five-Minute SO₂ Averages

Appendix B: Hourly Meteorological Data

List of Abbreviations and Terms Used in This Report

- ACO** – Administrative Consent Order
- AMP** – Air Monitoring Plan – The document that presents the overall scope of work for the monitoring program.
- DQOs** - Data Quality Objectives – Established criteria defining data quality goals (i.e., data accuracy, precision, completeness, and representativeness) for the WCAMP. These criteria presented in Table 1-1 of this report
- NJDEP** - New Jersey Department of Environmental Protection
- NAAQS** – National Ambient Air Quality Standards set by the U.S. EPA for specific “criteria” pollutants.
- PCFA**- Pollution Control Financing Authority of Warren County
- QAPP** – Quality Assurance Project Plan – The document that presents the quality assurance and quality control procedures that will be used in the monitoring program to ensure that high quality, representative data are being measured.
- WCAMP** – Warren County Air Monitoring Project
- SO₂** – Sulfur dioxide – A gas formed from the burning of fossil fuels.
- Precision** - The degree of mutual agreement among a series of individual measurements, values, or results; expressed by the standard deviation.
- Accuracy** - Accuracy refers to the closeness of measurements to the correct or accepted value of the quantity measured.
- Completeness** – The number of data values collected and reported over a given time interval compared to the total number of possible data values for that time interval.
- Null Data Codes** – The United States Environmental Protection Agency’s designated coding system used to replace invalid or missing data values. Typical null data codes that may appear in the tabular data are:
- 9991 - Level 1 Zero/Span Check
 - 9995 – Multipoint Calibration
 - 9986- Meteorological calibration; Zero/Span Check
 - 9980 – Analyzer/Sensor Malfunction or Failure
- ppm** – parts per million; a unit of measurement specifying a concentration
- mph** – miles per hour; a unit of measurement for wind speed
- °C** – degrees Celsius (or centigrade); a unit of measurement for temperature

1. Introduction

As a condition of an Administrative Consent Order (ACO) between Pollution Control Financing Authority of Warren County (PCFA) and the New Jersey Department of Environmental Protection (NJDEP), PCFA has elected to establish an ambient air monitoring program in the vicinity of the town of Belvidere in Warren County, New Jersey. Specifically, the Supplemental Environmental Project mandated under the ACO and described in the associated Air Monitoring Plan (AMP) and Quality Assurance Project Plan (QAPP) calls for the monitoring of Sulfur Dioxide (SO₂), and specified meteorological parameters.

The project has been designated the Warren County Air Monitoring Project (WCAMP). The primary purpose of the WCAMP is to obtain and report air quality information from Belvidere and surrounding areas and, where possible, to compare such air quality concentrations to appropriate federal or state standards.

Under the terms of the ACO, PCFA has retained and oversees a qualified contractor, Enviroplan Consulting, to set up and operate the monitoring program. PCFA is required to coordinate these activities through the New Jersey Department of Environmental Protection (NJDEP).

This report provides the monthly data tabulations and analysis required for the WCAMP air quality and meteorological monitoring network. Procedures governing operation, maintenance, calibration, data reduction, processing, validation and reporting activities as well as attendant quality control, quality assurance and auditing activities conform to the technical guidance contained in the WCAMP AMP and QAPP. These documents have been reviewed and received conditional approval from the NJDEP.

Section 2 of this report provides an analysis of the pollutant and meteorological data collected during the month. Tables 2-1 and 2-2 present the maximum hourly averages for continuously - measured pollutants. Table 2-3 presents the data recovery rates by parameter and Table 2-4 presents explanations for missing data.

Additionally, two appendices are included in this report. Appendix A presents the hourly-averaged and five-minute measurement data for SO₂. Appendix B presents the hourly-averaged meteorological data.

Table 1-1: Data Quality Objectives

Parameter	Precision (%)	Accuracy	Completeness (%)
SO ₂	≤ ±15	Within ±15% of Observed	≥75
Wind Speed	n/a	Within ± 0.2 m/s + 5% of Observed	≥90
Wind Direction	n/a	Within ±5 degrees azimuth of Observed	≥90
Air Temperature	n/a	Within ±5°C of Observed	≥90
Solar Radiation	n/a	Within ±10% of Observed	≥90

n/a – not applicable

2 Maximum Averages and Data Recovery

This section provides a summary of the relevant maximum hourly averages for continuously-measured pollutants as they apply to the NAAQS.

Additionally, this section presents the monthly data recovery percentages and the explanations of missing data.

Table 2-1: Maximum Hourly and Five-Minute SO2 Averages – Belvidere High School

NAAQS - National Ambient Air Quality Standards			
Pollutant	Average Time	Primary Standard	Secondary Standard
Sulfur Dioxide (SO2)	Annual Arithmetic Mean	0.03 ppm	-
	24-Hour	0.14 ppm	-
	3-Hour	-	0.50 ppm

Belvidere High School										
Parameter/Units	Maximum Running 3-Hour Conc.	Date (Hour)	2nd Highest Running 3-Hour Conc.	Date (Hour)	Maximum Running 24-Hour Conc.	Date (Hour)	2nd Highest Running 24-Hour Conc.	Date (Hour)	Monthly Arith. Mean	Annual Arith. Mean
SO2 ppm	.044	10/15 (11)	.042	10/ 5 (13)	.010	10/28 (5)	.008	10/ 7 (13)	.001	.000
					Maximum 24-Hour Block Conc.	Date	2nd Highest 24-Hour Block Conc.	Date		
					.008	10/ 7, 10/28	.006	10/15		

Belvidere High School					
Parameter/Units	Maximum 5-Minute Conc.	Date (Time)	5-Minute Averages of 0.3 ppm or Greater	1-Hour Average Preceding the 0.3 ppm Average	1-Hour Average Following the 0.3 ppm Average
SO2 ppm	.143	10/ 7 (10:00)	None	-	-

Maximum Hourly Averages Report - SO2 Validated DataBase
3-Hour Running, Non-Overlapping Averages

October 2008

Logger Id : HS
Logger Name : Belvidere HS
Avg Interval: 03 hour
Parameter : SO2
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.044	10/15/08	11
2	.042	10/05/08	13
3	.039	10/07/08	12
4	.036	10/28/08	02
5	.030	10/28/08	05
6	.016	10/27/08	21
7	.014	10/07/08	15
8	.013	10/23/08	12
9	.012	10/10/08	11
10	.012	10/16/08	22

Table 2-2: Maximum Hourly and Five-Minute SO2 Averages – Demeter Farm

NAAQS - National Ambient Air Quality Standards			
Pollutant	Average Time	Primary Standard	Secondary Standard
Sulfur Dioxide (SO2)	Annual Arithmetic Mean	0.03 ppm	-
	24-Hour	0.14 ppm	-
	3-Hour	-	0.50 ppm

Demeter Farm										
Parameter/ Units	Maximum Running 3-Hour Conc.	Date (Hour)	2 nd Highest Running 3-Hour Conc.	Date (Hour)	Maximum Running 24-Hour Conc.	Date (Hour)	2 nd Highest Running 24-Hour Conc.	Date (Hour)	Monthly Arith. Mean	Annual Arith. Mean to Date
SO2 ppm	.070	10/20 (7)	.028	10/ 7 (3)	.013	10/21 (1)	.011	10/7 (17)	.003	.003
					Maximum 24-Hour Block Conc	Date	2 nd Highest 24-Hour Block Conc.	Date		
					.012	10/20	.009	10/ 7		

Demeter Farm					
Parameter/Units	Maximum 5-Minute Conc.	Date (Time)	5-Minute Averages of 0.3 ppm or Greater	1-Hour Average Preceding the 0.3 ppm Average	1-Hour Average Following the 0.3 ppm Average
SO2 ppm	.224	10/20 (06:45)	None	-	-

Maximum Hourly Averages Report - SO2 Validated DataBase
3-Hour Running, Non-Overlapping Averages

October 2008

Logger Id : DF
Logger Name : Demeter Farm
Avg Interval: 03 hour
Parameter : SO2
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.070	10/20/08	07
2	.028	10/07/08	03
3	.021	10/10/08	22
4	.016	10/07/08	06
5	.016	10/10/08	11
6	.016	10/20/08	23
7	.014	10/28/08	03
8	.013	10/08/08	06
9	.012	10/04/08	21
10	.012	10/05/08	04

Maximum Hourly Averages Report - SO2 Validated DataBase
24-Hour Running, Non-Overlapping Averages

October 2008

Logger Id : DF
Logger Name : Demeter Farm
Avg Interval: 24 hour
Parameter : SO2
Units : PPM
Avg Type : Backward

Rank	Average	Date	Hour
1	.013	10/21/08	01
2	.011	10/07/08	17
3	.007	10/10/08	21
4	.006	10/05/08	07
5	.005	10/31/08	21
6	.004	10/08/08	18
7	.003	10/02/08	04
8	.003	10/03/08	13
9	.003	10/12/08	07
10	.003	10/28/08	03

Table 2-3: Data Recovery Rates

Site	Parameter	Data Recovery Rate (%)
Belvidere High School	SO2	99.3
	Horizontal Wind Speed	99.3
	Horizontal Wind Direction	99.3
	Standard Deviation	99.3
Demeter Farm	SO2	80.7
	Horizontal Wind Speed	98.1
	Horizontal Wind Direction	98.1
	Standard Deviation	98.1
	Temperature	98.1
	Solar Radiation	98.7

General Notes:

Data collection efficiencies are based on the number of valid data values reported from a given monitor divided by the total number of possible data values in the reporting period. For continuously-measured parameters, the total number of possible data values is the number of hours in the reporting period; for episodic monitors, the total number of possible data values is the number of scheduled sample events in the reporting period. The resulting ratio is expressed as a percentage.

When monitoring operations begin other than on the first day and hour of the reporting period, or in instances where agency approval for suspension of monitoring for a portion of the reporting period has occurred, calculation of data collection efficiencies for the reporting period is as described above except that the total number of possible data values is pro-rated in accordance with the actual active monitoring interval.

n/a – not applicable

Table 2-4: Missing Data Report

The following table describes periods of invalid data due to instrument malfunction, power outages and weather related data loss. Periods of routine instrument testing are not included in explanations of missing data.

Site	Date (Hours)	Parameter	Explanation
Belvidere HS	10/21 (21-22)	All parameters	Power outage
Demeter Farm	10/6 (0-23), 10/15 (0)-10/19 (10)	SO2	Intermittent flashlamp malfunction and subsequent failure
	10/25 (15-19)	All parameters	Power outage

Appendix A: Hourly and Five Minute SO2 Averages

Definitions of Null Data Codes for the Hourly Missing Data:

- 9975 – Data Can Not be Calculated
- 9979 – Miscellaneous Void
- 9980 – Analyzer Malfunction or Failure
- 9991 – Level 1 Zero/Span Check
- 9992 – Independent Audit
- 9993 - Maintenance
- 9995 – Multipoint Calibration
- 9996 – Auto Calibration
- 9998 – Precision/ Zero/Span Check

Note that the five-minute data will have the symbol “ < ” indicating missing data for the period.

Monthly Parameter Report -SO2 3-Hour Averages

10/08

Logger Id : HS
 Site Name : Belvidere HS
 Parameter : SO2
 Units : PPM
 Avg Interval : 03

Hours

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Max	Avg	Rds				
01	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24			
02	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24		
03	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	.000	24		
04	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	.001	.000	.000	24		
05	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.022	.039	.042	.020	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.042	.005	.000	24		
06	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.005	.005	.001	.002	.005	.007	.004	.001	.000	.000	.000	.000	.000	.007	.001	.000	24		
07	.000	.000	.000	.000	.000	.000	.000	.000	.000	.011	.034	.037	.039	.023	.027	.014	.010	.004	.004	.001	.000	.000	.000	.000	.000	.039	.008	.000	24		
08	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.002	.002	.002	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	24		
09	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	20	
10	.000	.000	.000	.000	.000	.000	.000	.000	.000	.006	.007	.012	.007	.006	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.012	.001	.000	24		
11	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24	
12	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24	
13	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.004	.007	.009	.008	.006	.003	.002	.001	.000	.000	.000	.000	.000	.000	.000	.009	.001	.000	.000	24	
14	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.002	.003	.002	.001	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	24	
15	.000	.000	.000	.000	.000	.000	.000	.000	.000	.006	.029	.040	.044	.022	.012	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.044	.006	.000	.000	24	
16	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.002	.001	.000	.000	.002	.002	.002	.001	.008	.012	.010	.012	.001	.000	.000	.000	24	
17	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.003	.006	.006	.004	.001	.000	.000	.000	.000	.000	.000	.000	.000	.006	.001	.000	.000	24	
18	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24	
19	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24
20	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.004	.005	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005	.000	.000	.000	24	
21	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.003	.004	.002	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004	.000	.000	.000	21	
22		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.001	.001	.002	.003	.003	.001				.000	.003	.000	.000	.000	.000	20	
23	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.011	.013	.012	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.013	.001	.000	.000	.000	24	
24	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24
25	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24
26	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.002	.003	.003	.004	.004	.007	.006	.004	.001	.000	.000	.000	.000	.000	.007	.001	.000	.000	.000	24
27	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.006	.016	.014	.012	.016	.002	.000	.000	.000	.000	24
28	.013	.025	.036	.036	.031	.030	.018	.011	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.036	.008	.000	.000	.000	24	
29	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24
30	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	24
31	.000	.000	.000	.000	.000	.000	.000	.000	.002	.005	.008	.009	.008	.009	.009	.008	.005	.004	.003	.002	.002	.002	.002	.003	.009	.003	.000	.000	.000	.000	24
Max	.013	.025	.036	.036	.031	.030	.018	.011	.006	.029	.040	.044	.039	.042	.027	.014	.010	.007	.004	.002	.006	.016	.014	.012	.044						
Avg	.000	.000	.001	.001	.000	.000	.000	.000	.000	.001	.003	.005	.005	.004	.002	.001	.001	.000	.000	.000	.000	.000	.000	.000		.001					
Rds	30	31	31	31	31	31	31	31	31	30	30	30	30	31	31	31	31	31	31	31	30	29	29	30							733

10/14/08 22:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	C	C	C
10/14/08 23:00	C	C	C	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 00:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 01:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 02:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 03:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 04:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 05:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 06:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 07:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/15/08 08:00	.000	.000	.000	.005	.010	.018	.026	.026	.030	.043	.041	.038	
10/15/08 09:00	.035	.022	.019	.063	.035	.061	.094	.132	.129	.116	.061	.034	
10/15/08 10:00	.022	.024	.003	.023	.033	.043	.041	.034	.042	.041	.040	.046	
10/15/08 11:00	.045	.052	.049	.042	.038	.034	.030	.033	.030	.012	.011	.006	
10/15/08 12:00	.000	.000	.002	.003	.002	.002	.003	.004	.006	.006	.006	.006	
10/15/08 13:00	.005	.002	.003	.003	.003	.001	.001	.000	.000	.000	.000	.000	
10/15/08 14:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 15:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 16:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 17:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 18:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 19:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 20:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 21:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
10/15/08 22:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	C	C	C
10/15/08 23:00	C	C	C	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 00:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 01:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 02:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 03:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 04:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 05:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 06:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 07:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 08:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 09:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 10:00	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.001
10/16/08 11:00	.001	.001	.001	.002	.001	.001	.001	.001	.002	.002	.002	.002	.003
10/16/08 12:00	.003	.003	.003	.004	.004	.004	.004	.004	.005	.004	.004	.004	.003
10/16/08 13:00	.003	.002	.002	.002	.002	.001	.000	.000	.000	.000	.000	.000	.000
10/16/08 14:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 15:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/16/08 16:00	.000	.000	.000	.006	.018	.012	.005	.000	.000	.000	.000	.000	.000
10/16/08 17:00	.000	.000	.000	.023	.021	.017	.014	.008	.001	.000	.000	.000	.000

10/31/08 06:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/31/08 07:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/31/08 08:00	.000	.000	.000	.000	.001	.003	.005	.009	.013	.016	.014	.014	.014
10/31/08 09:00	.012	.012	.011	.012	.014	.010	.007	.007	.008	.008	.007	.008	.008
10/31/08 10:00	.008	.008	.008	.007	.007	.008	.008	.009	.009	.009	.008	.008	.008
10/31/08 11:00	.009	.009	.009	.009	.010	.010	.010	.010	.010	.009	.008	.007	.007
10/31/08 12:00	.007	.007	.008	.009	.008	.008	.009	.009	.010	.010	.011	.011	.011
10/31/08 13:00	.011	.012	.012	.012	.012	.011	.011	.011	.011	.011	.010	.010	.010
10/31/08 14:00	.009	.009	.008	.008	.008	.008	.008	.008	.007	.007	.007	.007	.007
10/31/08 15:00	.006	.006	.006	.006	.006	.006	.005	.005	.005	.005	.005	.005	.005
10/31/08 16:00	.005	.005	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004
10/31/08 17:00	.004	.004	.003	.003	.004	.003	.003	.003	.003	.003	.002	.002	.003
10/31/08 18:00	.003	.003	.003	.002	.002	.005	.002	.002	.002	.003	.002	.002	.002
10/31/08 19:00	.003	.002	.002	.001	.000	.001	.001	.001	.002	.002	.002	.002	.002
10/31/08 20:00	.002	.002	.001	.001	.001	.001	.001	.000	.000	.001	.001	.001	.002
10/31/08 21:00	.002	.003	.003	.003	.003	.004	.004	.004	.002	.002	.002	.002	.003
10/31/08 22:00	.003	.003	.003	.003	.004	.004	.004	.004	.004				
10/31/08 23:00	C	C	C	.005	.004	.002	.004	.003	.003	.003	.004	.003	.003

Max .143
 Min .000
 Mean .001
 Records 8,695

Status : '<' - Less than ##% Data, 'P' - Power Fail, 'D' - Disabled, 'T' - Out-of-Control, 'F' - Boiler Off-Line,
 Flags : 'B' - Bad Status, 'C' - Calibration, 'M' - Maintenance, 'O' - Analog Overage, 'U' - Analog Underrange,
 'A' - Arithmetic Error, '+' - Maximum, '-' - Minimum, 'R' - Rate of Change, 'H' - High-High Alarm,
 'L' - Low-Low Alarm, 'h' - High Alarm, 'l' - Low Alarm, 'J' - High Rate of Change, 'j' - Low Rate of Change,
 'V' - DIS #1 Obs, 'W' - DIS #2 Obs, 'X' - DIS #3 Obs, 'Y' - DIS #4 Obs, 'Z' - DIS #5 Obs.

Monthly Parameter Report -SO2 1- Hour Block Averages

10/08

Logger Id : DF
 Site Name : Demeter Farm
 Parameter : SO2
 Units : PPM
 Avg Interval : 01

Day	Hours																							Max	Avg	Rds		
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
01	.001	.001	.001	.001	.002	.002	.002	.002	.003	.004	.003	.003	9998	.002	.002	.002	.002	.003	.003	.003	.003	.003	.003	.004	.002	23		
02	.005	.005	.003	.004	.004	.002	.002	.001	.001	.001	.001	.001	.001	.001	.002	.002	.002	.002	.002	.005	.004	.002	.002	.003	.005	.002	24	
03	.003	.003	.004	.004	.003	.003	.002	.003	.002	.003	.003	.004	.005	.005	.003	.002	.002	.001	.001	.001	.002	.006	.011	.004	.011	.003	24	
04	.002	.002	.002	.001	.001	.002	.002	.001	.002	.002	.005	.003	.004	.003	.003	.004	.004	.004	.004	.008	.017	.012	.004	.006	.017	.004	24	
05	.005	.005	.011	.018	.009	.004	.004	.003	.002	.003	.002	.010	.017	.006	.004	.003	.003	.002	.001	.001	.001	.001	.001	.001	.018	.004	24	
06	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	00	
07	.009	.022	.046	.016	.016	.032	.000	.000	.000	.010	.017	.003	.013	.011	.008	.003	.002	.003	.002	.001	.001	.001	.001	.002	.046	.009	24	
08	.002	.001	.001	.000	.010	.020	.009	.004	.004	.004	.005	9992	9992	.004	.004	.004	.004	.003	.003	.002	.003	.002	.002	.002	.020	.004	22	
09	.002	.002	.002	.002	.002	.002	.002	.002	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.005	.005	.006	.004	.009	.008	.009	.003	24	
10	.006	.004	.003	.003	.003	.003	.003	.003	.006	.024	.011	.014	.002	.001	.001	.001	.001	.001	.001	.001	.017	.042	.004	.001	.042	.006	24	
11	.001	.001	.001	.001	.001	.001	.001	.001	.002	.002	.002	.001	.001	.001	.001	.001	.001	.001	.001	.001	.002	.007	.003	.003	.007	.001	24	
12	.003	.006	.005	.014	.005	.003	.004	.002	.001	.001	.001	.001	.001	.001	.001	.001	.000	.000	.000	.002	.001	.001	.002	.001	.014	.002	24	
13	.002	.002	.004	.005	.005	.004	.004	.004	.002	.001	.000	.000	.002	.005	.005	.002	.004	.004	.004	.003	.001	.000	.000	.000	.005	.002	24	
14	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.002	.004	.004	.006	.006	.005	.006	.001	24	
15	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	00	
16	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	00	
17	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	00	
18	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	00	
19	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9980	9993	9995	9995	.000	.000	.000	.000	.000	.000	.000	.000	.000	.013	.013	.001	10	
20	.000	.000	.000	.000	.001	.013	.112	.085	.014	.001	.000	.000	.001	.001	.001	.001	.001	.001	.002	.003	.003	.009	.010	.016	.024	.112	.012	24
21	.007	.007	.005	.004	.005	.004	.006	.004	.004	.004	.006	.005	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.013	.013	.003	24	
22	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.004	.002	9991	.000	.000	.000	.000	.000	.004	.000	23	
23	.000	.000	.000	.000	.000	.000	.001	.001	.000	.000	.000	.010	.007	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.010	.000	24	
24	.000	.001	.001	.001	.000	.001	.001	.001	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	24	
25	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	9988	9988	9988	9988	9988	.000	.000	.000	19	
26	.000	.000	.000	.000	.000	.000	.000	.000	.000	.004	.001	.003	.004	.002	.004	.006	.007	.005	.002	.001	.001	.001	.001	.001	.007	.001	24	
27	.001	.002	.001	.001	.001	.002	.003	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005	.004	.013	.000	.001	.013	.001	24	
28	.010	.016	.013	.013	.006	.008	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.016	.002	24	
29	.000	.000	.000	.000	.001	.001	9998	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	23	
30	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.002	.002	.000	24	
31	.001	.002	.004	.002	.001	.006	.009	.005	.004	.006	.007	.007	.008	.008	.006	.005	.004	.004	.004	.010	.012	.008	.005	.004	.012	.005	24	
Max	.010	.022	.046	.018	.016	.032	.112	.085	.014	.024	.017	.014	.017	.011	.008	.006	.007	.005	.005	.010	.017	.042	.016	.024	.112			
Avg	.002	.003	.004	.003	.003	.004	.006	.004	.002	.002	.002	.002	.003	.002	.001	.001	.001	.001	.001	.002	.003	.004	.002	.003		.003		
Rds	25	25	25	25	25	25	24	25	25	25	25	24	23	25	26	25	25	25	24	25	26	26	26	26		600		

10/02/08 09:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/02/08 10:00	.001	.001	.001	.001	.001	.001	.001	.001	.002	.001	.001	.001	.001
10/02/08 11:00	.001	.001	.002	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/02/08 12:00	.002	.001	.001	.001	.001	.001	.001	.002	.001	.001	.001	.002	.001
10/02/08 13:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.002	.002
10/02/08 14:00	.002	.002	.001	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002
10/02/08 15:00	.002	.002	.003	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002
10/02/08 16:00	.002	.002	.002	.002	.002	.002	.002	.002	.001	.001	.001	.002	.002
10/02/08 17:00	.002	.002	.002	.002	.002	.002	.002	.001	.001	.002	.001	.002	.002
10/02/08 18:00	.002	.002	.002	.002	.002	.002	.002	.002	.003	.002	.002	.002	.001
10/02/08 19:00	.002	.002	.003	.002	.002	.002	.002	.005	.007	.007	.007	.007	.019
10/02/08 20:00	.010	.007	.005	.004	.003	.002	.002	.002	.002	.002	.003	.003	.002
10/02/08 21:00	.002	.003	.002	.003	.003	.003	.001	.003	.002	.002	.001	.001	.002
10/02/08 22:00	.002	.002	.001	.002	.002	.002	.002	.002	.003	.003			
10/02/08 23:00		C	C	C	.003	.003	.003	.003	.003	.003	.003	.003	.003
10/03/08 00:00	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003
10/03/08 01:00	.003	.003	.003	.003	.003	.003	.003	.003	.002	.003	.003	.002	.002
10/03/08 02:00	.003	.003	.003	.002	.002	.003	.004	.004	.005	.006	.006	.006	.005
10/03/08 03:00	.005	.005	.005	.005	.004	.005	.004	.004	.004	.004	.004	.004	.004
10/03/08 04:00	.004	.003	.003	.003	.004	.003	.003	.003	.003	.003	.003	.003	.003
10/03/08 05:00	.003	.003	.003	.003	.003	.003	.003	.003	.003	.002	.002	.003	.003
10/03/08 06:00	.003	.002	.003	.002	.002	.002	.003	.002	.002	.002	.003	.002	.002
10/03/08 07:00	.003	.003	.003	.003	.002	.003	.003	.003	.003	.002	.003	.003	.003
10/03/08 08:00	.003	.003	.002	.002	.002	.002	.003	.003	.002	.002	.002	.002	.002
10/03/08 09:00	.003	.002	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003
10/03/08 10:00	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003
10/03/08 11:00	.003	.003	.003	.003	.003	.004	.005	.004	.004	.004	.005	.005	.005
10/03/08 12:00	.005	.005	.005	.005	.005	.005	.006	.005	.005	.005	.004	.004	.004
10/03/08 13:00	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.004	.005	.004
10/03/08 14:00	.004	.003	.003	.002	.003	.002	.003	.003	.002	.002	.002	.002	.002
10/03/08 15:00	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	.002	.001
10/03/08 16:00	.002	.002	.002	.002	.001	.001	.002	.002	.002	.002	.001	.002	.001
10/03/08 17:00	.002	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/03/08 18:00	.001	.002	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/03/08 19:00	.001	.001	.001	.001	.001	.001	.001	.001	.002	.002	.001	.002	.001
10/03/08 20:00	.002	.002	.002	.002	.002	.002	.002	.002	.003	.002	.002	.002	.001
10/03/08 21:00	.002	.002	.003	.003	.004	.009	.009	.009	.008	.009	.009	.007	.007
10/03/08 22:00	.007	.008	.010	.011	.012	.011	.010	.012	.014		C	C	C
10/03/08 23:00		C	C	C	.006	.004	.004	.003	.003	.003	.003	.003	.003
10/04/08 00:00	.003	.003	.002	.002	.002	.002	.002	.002	.001	.002	.002	.001	.002
10/04/08 01:00	.001	.002	.002	.001	.002	.002	.002	.001	.002	.002	.002	.002	.002
10/04/08 02:00	.001	.001	.002	.002	.002	.002	.002	.002	.002	.002	.001	.002	.002

10/05/08 23:00	C	C	C	.001	.001	.001	.000	.001	.001	.001	.001	.002
10/06/08 00:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 01:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 02:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 03:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 04:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 05:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 06:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 07:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 08:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 09:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 10:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 11:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 12:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 13:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 14:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 15:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 16:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 17:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 18:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 19:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 20:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 21:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 22:00	<	<	<	<	<	<	<	<	<	<	<	<
10/06/08 23:00	<	<	<	<	<	<	<	<	<	<	<	<

10/07/08 00:00	.002	.001	.005	.022	.019	.013	.008	.007	.004	.004	.008	.013
10/07/08 01:00	.013	.021	.030	.033	.032	.032	.026	.022	.018	.013	.013	.011
10/07/08 02:00	.013	.027	.045	.086	.075	.056	.053	.047	.040	.040	.036	.037
10/07/08 03:00	.040	.040	.026	.015	.011	.012	.007	.005	.006	.009	.012	.008
10/07/08 04:00	.013	.023	.019	.026	.032	.025	.021	.012	.005	.004	.005	.010
10/07/08 05:00	.067	.091	.059	.062	.047	.032	.019	.006	.002	.001	.000	.000
10/07/08 06:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/07/08 07:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/07/08 08:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005	.011
10/07/08 09:00	.009	.027	.003	.000	.000	.000	.003	.007	.013	.021	.023	.023
10/07/08 10:00	.022	.020	.025	.026	.027	.023	.017	.009	.012	.008	.007	.008
10/07/08 11:00	.008	.008	.003	.004	.003	.002	.000	.000	.000	.002	.002	.000
10/07/08 12:00	.001	.000	.005	.012	.010	.014	.013	.016	.019	.021	.017	.021
10/07/08 13:00	.023	.016	.014	.014	.012	.009	.009	.007	.007	.006	.007	.008
10/07/08 14:00	.009	.010	.009	.008	.007	.007	.009	.009	.007	.006	.006	.005
10/07/08 15:00	.004	.002	.004	.004	.005	.003	.002	.002	.002	.001	.003	.002
10/07/08 16:00	.001	.002	.002	.002	.002	.002	.003	.003	.003	.003	.003	.003
10/07/08 17:00	.003	.002	.003	.003	.003	.005	.005	.004	.003	.003	.004	.003
10/07/08 18:00	.003	.003	.003	.002	.002	.002	.002	.002	.001	.001	.001	.001

10/09/08 15:00	.003	.003	.003	.003	.003	.004	.004	.004	.003	.003	.003	.003
10/09/08 16:00	.003	.003	.004	.004	.003	.004	.003	.003	.004	.003	.003	.003
10/09/08 17:00	.003	.003	.004	.003	.004	.003	.003	.003	.003	.003	.003	.003
10/09/08 18:00	.004	.004	.004	.004	.003	.003	.004	.006	.006	.005	.007	.007
10/09/08 19:00	.005	.005	.004	.004	.003	.003	.004	.004	.004	.006	.006	.005
10/09/08 20:00	.005	.003	.004	.005	.003	.005	.005	.005	.007	.011	.008	.007
10/09/08 21:00	.005	.004	.004	.004	.004	.004	.005	.005	.004	.005	.005	.005
10/09/08 22:00	.007	.009	.009	.010	.010	.009	.008	.008	.008	C	C	C
10/09/08 23:00	C	C	C	.008	.008	.008	.008	.008	.007	.007	.007	.007
10/10/08 00:00	.007	.007	.007	.007	.007	.006	.005	.006	.006	.005	.005	.005
10/10/08 01:00	.006	.005	.005	.005	.005	.004	.004	.004	.004	.004	.003	.005
10/10/08 02:00	.004	.004	.004	.004	.003	.003	.003	.003	.003	.003	.003	.003
10/10/08 03:00	.003	.004	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003
10/10/08 04:00	.003	.003	.003	.004	.003	.003	.003	.003	.003	.003	.003	.003
10/10/08 05:00	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003
10/10/08 06:00	.003	.003	.003	.003	.003	.003	.003	.002	.003	.002	.003	.003
10/10/08 07:00	.003	.003	.003	.002	.003	.002	.003	.003	.002	.003	.002	.002
10/10/08 08:00	.001	.001	.001	.002	.002	.002	.002	.002	.002	.002	.008	.011
10/10/08 09:00	.047	.037	.029	.025	.023	.022	.019	.018	.016	.016	.017	.017
10/10/08 10:00	.018	.013	.012	.011	.008	.008	.008	.007	.006	.009	.014	.016
10/10/08 11:00	.019	.018	.019	.019	.019	.019	.016	.016	.014	.008	.004	.002
10/10/08 12:00	.002	.002	.004	.004	.003	.001	.001	.001	.001	.001	.002	.001
10/10/08 13:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.000
10/10/08 14:00	.001	.001	.001	.001	.001	.001	.002	.001	.001	.001	.001	.001
10/10/08 15:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/10/08 16:00	.001	.001	.001	.001	.001	.000	.001	.001	.000	.000	.000	.002
10/10/08 17:00	.002	.003	.003	.003	.003	.003	.003	.002	.002	.002	.002	.001
10/10/08 18:00	.002	.001	.001	.001	.001	.002	.001	.001	.001	.001	.001	.001
10/10/08 19:00	.001	.001	.002	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/10/08 20:00	.001	.002	.001	.003	.028	.013	.022	.063	.045	.014	.008	.005
10/10/08 21:00	.006	.005	.015	.036	.055	.058	.039	.079	.073	.095	.023	.015
10/10/08 22:00	.009	.006	.003	.003	.003	.003	.001	.002	.001	C	C	C
10/10/08 23:00	C	C	C	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08 00:00	.001	.001	.001	.001	.001	.002	.001	.001	.001	.002	.001	.001
10/11/08 01:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08 02:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.002	.001	.001
10/11/08 03:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08 04:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08 05:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08 06:00	.001	.001	.001	.001	.002	.002	.001	.001	.001	.001	.001	.001
10/11/08 07:00	.001	.001	.001	.002	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08 08:00	.001	.001	.001	.001	.001	.001	.001	.002	.002	.002	.002	.003
10/11/08 09:00	.003	.003	.002	.002	.002	.002	.002	.002	.001	.002	.002	.002
10/11/08 10:00	.002	.002	.002	.002	.001	.001	.001	.002	.002	.001	.001	.001

10/11/08	11:00	.001	.001	.002	.002	.001	.001	.001	.001	.001	.001	.001	.002
10/11/08	12:00	.002	.001	.001	.001	.002	.001	.001	.001	.001	.001	.001	.001
10/11/08	13:00	.001	.001	.002	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08	14:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08	15:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08	16:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08	17:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08	18:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/11/08	19:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.002
10/11/08	20:00	.002	.001	.001	.001	.001	.002	.002	.002	.003	.003	.003	.004
10/11/08	21:00	.010	.015	.011	.007	.005	.006	.007	.007	.005	.005	.005	.004
10/11/08	22:00	.004	.004	.003	.003	.003	.003	.003	.003	.003			
10/11/08	23:00				.003	.004	.003	.003	.003	.004			
10/12/08	00:00	.003	.003	.003	.003	.003	.003	.003	.003	.004	.004	.003	.003
10/12/08	01:00	.004	.005	.005	.005	.006	.006	.007	.007	.007	.007	.007	.006
10/12/08	02:00	.004	.005	.005	.005	.005	.005	.005	.004	.005	.006	.007	.007
10/12/08	03:00	.006	.007	.008	.010	.014	.022	.021	.022	.017	.012	.012	.012
10/12/08	04:00	.009	.007	.005	.004	.004	.003	.004	.004	.004	.004	.004	.004
10/12/08	05:00	.005	.004	.003	.003	.003	.003	.003	.003	.003	.003	.003	.003
10/12/08	06:00	.003	.004	.004	.005	.004	.003	.004	.003	.004	.004	.004	.004
10/12/08	07:00	.004	.003	.004	.004	.003	.003	.002	.001	.000	.000	.000	.001
10/12/08	08:00	.001	.001	.001	.001	.001	.001	.001	.002	.001	.001	.000	.001
10/12/08	09:00	.001	.002	.001	.001	.001	.001	.001	.001	.002	.002	.002	.001
10/12/08	10:00	.001	.001	.002	.002	.001	.001	.001	.001	.001	.001	.001	.001
10/12/08	11:00	.001	.001	.001	.001	.001	.002	.001	.001	.001	.002	.001	.001
10/12/08	12:00	.001	.002	.001	.001	.001	.001	.001	.001	.001	.001	.002	.002
10/12/08	13:00	.001	.001	.001	.001	.001	.001	.001	.001	.000	.001	.001	.001
10/12/08	14:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/12/08	15:00	.001	.002	.001	.001	.001	.001	.001	.001	.001	.002	.001	.001
10/12/08	16:00	.001	.001	.000	.000	.001	.000	.000	.000	.000	.001	.000	.000
10/12/08	17:00	.000	.001	.001	.000	.001	.000	.000	.000	.000	.000	.000	.000
10/12/08	18:00	.000	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.001
10/12/08	19:00	.001	.001	.002	.002	.002	.002	.002	.002	.001	.002	.002	.002
10/12/08	20:00	.001	.002	.001	.001	.001	.001	.002	.001	.001	.001	.001	.001
10/12/08	21:00	.001	.001	.001	.001	.001	.001	.001	.001	.001	.002	.002	.001
10/12/08	22:00	.002	.002	.002	.002	.002	.002	.002	.001	.001			
10/12/08	23:00				.001	.001	.000	.001	.001	.001	.002	.001	.001
10/13/08	00:00	.002	.001	.002	.002	.002	.001	.002	.001	.001	.001	.002	.001
10/13/08	01:00	.002	.002	.002	.002	.002	.002	.002	.002	.002	.003	.003	.004
10/13/08	02:00	.003	.003	.003	.004	.004	.004	.005	.004	.004	.004	.005	.005
10/13/08	03:00	.005	.005	.005	.005	.006	.007	.006	.006	.005	.004	.004	.003
10/13/08	04:00	.003	.004	.003	.004	.003	.003	.003	.005	.006	.007	.008	.007

10/18/08 17:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/18/08 18:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/18/08 19:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/18/08 20:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/18/08 21:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/18/08 22:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/18/08 23:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 00:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 01:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 02:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 03:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 04:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 05:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 06:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 07:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 08:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 09:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 10:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 11:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 12:00	D	D	D	D	D	D	D	D	D	D	D	D	D
10/19/08 13:00	D	D	D	D	D	D	D	D	D	D	D	.000	.000
10/19/08 14:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 15:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 16:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 17:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 18:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 19:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 20:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 21:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 22:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/19/08 23:00	C	C	C	.122	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/20/08 00:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/20/08 01:00	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/20/08 02:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/20/08 03:00	.000	.000	.000	.001	.000	.000	.000	.001	.001	.001	.001	.001	.001
10/20/08 04:00	.001	.001	.001	.000	.001	.001	.001	.001	.001	.001	.001	.001	.001
10/20/08 05:00	.001	.001	.001	.001	.001	.002	.006	.014	.025	.032	.034	.034	.034
10/20/08 06:00	.079	.098	.102	.100	.057	.044	.045	.055	.120	.224	.208	.207	.207
10/20/08 07:00	.174	.092	.077	.083	.086	.077	.088	.089	.103	.057	.052	.047	.047
10/20/08 08:00	.027	.035	.024	.020	.016	.012	.010	.007	.005	.004	.003	.002	.002
10/20/08 09:00	.001	.001	.001	.001	.001	.001	.000	.000	.001	.000	.001	.000	.000
10/20/08 10:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/20/08 11:00	.000	.000	.001	.000	.000	.001	.000	.000	.000	.000	.001	.001	.001

10/22/08 07:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 08:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 09:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 10:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 11:00	.000	.001	.000	.000	.000	.000	.001	.001	.000	.000	.003	.000
10/22/08 12:00	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000
10/22/08 13:00	.000	.001	.001	.000	.003	.004	.003	.002	.001	.000	.002	.002
10/22/08 14:00	.003	.005	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 15:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 16:00	.000	.001	.001	.001	.001	.000	.004	.006	.006	.006	.011	.010
10/22/08 17:00	.008	.005	.003	.002	.001	.001	.003	.003	.003	.001	.000	.000
10/22/08 18:00	.000	.000	.000	.000	D	D	D	D	D	D	D	D
10/22/08 19:00	D	D	D	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 20:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 21:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/22/08 22:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	C	C	C
10/22/08 23:00	C	C	C	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 00:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 01:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 02:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 03:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 04:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 05:00	.000	.000	.000	.000	.000	.001	.000	.001	.001	.001	.001	.000
10/23/08 06:00	.000	.001	.001	.003	.003	.002	.001	.001	.000	.000	.000	.001
10/23/08 07:00	.001	.002	.002	.002	.001	.000	.001	.000	.000	.000	.000	.000
10/23/08 08:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 09:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 10:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.006
10/23/08 11:00	.009	.012	.010	.006	.005	.005	.010	.017	.020	.011	.006	.009
10/23/08 12:00	.018	.019	.010	.008	.009	.007	.008	.003	.001	.001	.001	.001
10/23/08 13:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 14:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 15:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 16:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 17:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 18:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 19:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 20:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 21:00	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000
10/23/08 22:00	.000	.000	.000	.000	.000	.000	.000	.000	.000	C	C	C
10/23/08 23:00	C	C	C	.000	.000	.000	.000	.000	.000	.000	.000	.000
10/24/08 00:00	.000	.000	.001	.000	.000	.000	.000	.001	.001	.001	.001	.000
10/24/08 01:00	.001	.001	.001	.001	.001	.001	.001	.000	.001	.001	.001	.000
10/24/08 02:00	.000	.001	.001	.000	.001	.001	.000	.001	.000	.000	.001	.001

10/31/08 09:00	.005	.005	.005	.005	.005	.006	.007	.007	.006	.007	.007	.007
10/31/08 10:00	.007	.006	.007	.007	.007	.007	.007	.007	.007	.007	.007	.007
10/31/08 11:00	.007	.007	.008	.007	.008	.008	.008	.007	.008	.007	.008	.007
10/31/08 12:00	.007	.007	.008	.008	.008	.008	.008	.008	.008	.008	.008	.009
10/31/08 13:00	.009	.008	.008	.009	.009	.008	.008	.008	.008	.008	.008	.007
10/31/08 14:00	.007	.006	.007	.006	.006	.006	.006	.006	.006	.006	.005	.005
10/31/08 15:00	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.004	.004
10/31/08 16:00	.005	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004
10/31/08 17:00	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004	.004
10/31/08 18:00	.004	.004	.004	.003	.004	.004	.004	.004	.004	.004	.004	.004
10/31/08 19:00	.004	.004	.005	.008	.009	.010	.011	.013	.014	.014	.015	.016
10/31/08 20:00	.014	.013	.013	.012	.012	.011	.011	.012	.012	.011	.010	.010
10/31/08 21:00	.011	.010	.010	.009	.009	.008	.007	.007	.007	.007	.007	.006
10/31/08 22:00	.006	.005	.005	.005	.005	.004	.004	.004	.004	C	C	C
10/31/08 23:00	C	C	C	.004	.005	.004	.004	.004	.004	.004	.004	.004

Max	.224
Min	.000
Mean	.003
Records	7,054

Status : '<' - Less than ##% Data, 'P' - Power Fail, 'D' - Disabled, 'T' - Out-of-Control, 'F' - Boiler Off-Line,
Flags : 'B' - Bad Status, 'C' - Calibration, 'M' - Maintenance, 'O' - Analog Overage, 'U' - Analog Underrange,
'A' - Arithmetic Error, '+' - Maximum, '-' - Minimum, 'R' - Rate of Change, 'H' - High-High Alarm,
'L' - Low-Low Alarm, 'h' - High Alarm, 'l' - Low Alarm, 'J' - High Rate of Change, 'j' - Low Rate of Change,
'V' - DIS #1 Obs, 'W' - DIS #2 Obs, 'X' - DIS #3 Obs, 'Y' - DIS #4 Obs, 'Z' - DIS #5 Obs.

Appendix B: Hourly Meteorological Data

Definitions of Null Data Codes for Missing Data:

9975 – Data Can Not be Calculated

9979 – Miscellaneous Void

9980 – Sensor Malfunction or Failure

9986 – Calibration, Meteorological Zero/Span Check

9992 – Independent Audit

9993 – Maintenance

Monthly Parameter Report - Horizontal Wind Speed 1-Hour Averages

10/08

Logger Id : HS
 Site Name : Belvidere HS
 Parameter : WSA
 Units : MPH
 Avg Interval : 01

		Hours																							Max	Avg	Rds
Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23			
01	1.1	1.8	1.6	1.4	1.0	1.0	2.2	2.0	2.6	3.2	3.5	4.2	4.3	4.3	5.7	2.2	1.9	1.6	2.0	1.9	1.6	1.2	1.2	2.3	5.7	2.3	24
02	2.4	1.4	2.3	2.9	3.0	2.4	2.8	6.2	7.4	8.1	9.4	9.4	8.2	8.1	7.5	5.3	6.5	6.1	1.8	.9	1.1	.9	1.0	1.1	9.4	4.4	24
03	.9	1.0	1.3	1.4	1.0	1.3	1.0	1.4	2.8	3.7	4.0	5.7	6.6	7.0	7.0	7.8	5.1	3.2	1.2	.8	1.2	.9	1.3	1.2	7.8	2.8	24
04	1.2	1.0	.8	.9	1.4	1.6	1.3	1.2	1.8	1.7	2.5	3.8	4.5	4.9	5.1	4.9	4.5	1.9	.8	.9	1.1	1.5	1.3	1.1	5.1	2.1	24
05	.9	1.5	2.3	1.7	2.7	2.3	1.4	2.6	2.0	2.4	2.8	2.9	2.6	2.6	3.8	2.7	2.2	1.6	1.3	1.2	1.1	1.1	1.3	1.3	3.8	2.0	24
06	1.5	1.2	1.2	1.1	1.3	1.5	1.1	1.2	1.6	2.3	2.3	2.7	3.8	6.0	7.9	6.6	4.6	1.7	1.0	1.0	1.3	1.0	1.2	1.1	7.9	2.3	24
07	1.5	1.4	1.1	1.2	1.1	.9	1.1	.9	1.7	3.0	3.9	3.5	3.0	3.6	2.9	3.0	1.6	1.4	1.1	1.1	1.0	.9	.8	.7	3.9	1.7	24
08	1.0	1.1	1.4	1.0	1.2	1.4	1.7	1.4	1.5	1.6	2.7	4.9	4.2	5.4	5.9	4.8	3.7	1.9	1.9	2.2	2.6	2.5	3.7	3.9	5.9	2.6	24
09	5.3	4.1	3.3	4.1	3.5	3.3	2.0	2.1	4.3	9992	9992	6.4	6.7	7.4	6.3	6.2	4.3	1.1	1.2	.9	.8	1.1	1.0	.9	7.4	3.4	22
10	.8	.9	1.2	.9	1.0	.9	1.0	.9	1.2	3.5	3.5	2.9	3.8	3.3	2.9	.8	1.7	1.0	1.4	1.3	1.1	1.0	1.4	.9	3.8	1.6	24
11	.6	.9	.8	1.3	1.4	1.0	1.2	1.4	1.6	2.4	3.1	3.8	3.7	3.5	3.3	2.1	1.8	1.1	1.1	.9	.8	.9	.8	.9	3.8	1.6	24
12	1.1	.9	1.1	.9	1.2	1.1	1.0	1.0	1.8	2.6	3.3	3.0	2.1	2.8	2.7	2.6	2.1	1.0	1.0	.8	.9	.8	.7	.8	3.3	1.5	24
13	.7	1.0	1.3	1.2	1.3	1.3	1.6	1.9	2.0	2.2	3.2	3.0	2.8	2.7	2.4	2.1	.9	1.0	.8	1.0	1.1	1.0	1.1	1.2	3.2	1.6	24
14	1.3	1.3	1.5	1.2	1.3	.9	1.3	1.0	1.2	2.8	4.2	5.3	5.5	5.1	5.0	4.8	2.9	1.7	.9	1.0	1.0	1.3	.9	1.2	5.5	2.2	24
15	1.3	1.5	1.6	1.3	1.4	1.1	1.1	.9	1.8	2.5	3.8	3.6	3.0	2.4	3.4	3.4	3.5	1.3	1.2	1.1	1.2	1.1	1.2	1.1	3.8	1.9	24
16	.9	.9	1.0	1.1	1.0	1.0	.9	.9	1.2	2.2	3.6	4.1	6.2	5.9	7.1	4.8	6.7	6.5	4.1	2.4	2.7	3.6	3.1	2.8	7.1	3.1	24
17	1.2	1.7	1.1	1.2	1.1	1.1	1.3	2.3	4.7	5.8	5.0	4.9	4.6	4.5	4.2	4.0	2.5	1.0	1.3	1.2	.8	1.0	.5	.7	5.8	2.4	24
18	1.0	1.3	1.3	1.7	1.7	1.7	1.9	2.1	4.0	6.4	6.7	6.7	5.7	6.1	5.8	5.6	3.8	2.8	1.7	1.3	1.3	1.0	.9	.8	6.7	3.0	24
19	.7	1.1	1.3	1.3	1.4	1.9	1.4	1.5	3.4	6.6	6.3	6.8	6.1	6.0	4.9	3.8	3.3	1.5	.9	1.2	1.5	1.3	1.0	.9	6.8	2.7	24
20	1.3	1.5	1.4	1.2	1.2	1.2	1.1	1.2	1.4	2.0	2.7	2.8	3.4	3.7	4.5	3.8	3.5	1.3	.8	.6	1.1	1.3	1.1	.7	4.5	1.8	24
21	.7	.9	.8	.9	.8	.7	1.1	1.4	2.3	4.3	3.5	5.5	9.9	9.9	11.6	11.7	10.1	10.6	10.4	8.4	8.8	9988	9988	6.5	11.7	5.4	22
22	5.2	4.8	6.2	7.9	6.2	4.0	4.5	5.6	10.2	9.9	9.3	8.0	9.1	8.5	7.1	7.9	6.3	5.2	3.3	2.8	9986	1.8	1.7	1.2	10.2	5.9	23
23	1.3	1.4	1.4	1.6	1.4	1.3	1.5	1.5	3.5	3.8	3.4	3.3	3.6	3.6	3.6	2.8	3.1	1.6	1.3	1.3	1.5	1.4	1.2	1.4	3.8	2.1	24
24	1.3	1.1	1.2	1.2	1.2	1.1	1.2	.8	2.1	1.9	2.1	2.7	4.3	7.1	6.7	4.5	2.5	1.8	1.5	1.0	1.7	1.6	1.5	1.7	7.1	2.2	24
25	2.1	2.2	2.2	3.0	3.7	8.0	10.4	9.3	8.6	8.7	8.9	10.2	10.3	9.5	10.5	15.7	13.1	12.8	4.4	2.5	2.5	2.0	1.3	1.4	15.7	6.8	24
26	1.3	1.0	.9	.9	1.0	1.0	1.0	1.0	2.6	4.8	5.2	6.7	7.0	6.8	7.6	7.6	5.0	1.5	1.1	1.1	1.0	1.0	.6	1.1	7.6	2.8	24
27	1.0	.9	1.0	1.7	1.3	1.5	1.5	1.2	1.1	1.3	1.5	1.1	1.2	1.4	4.3	5.9	4.4	3.6	2.3	3.6	3.0	4.3	3.5	4.8	5.9	2.3	24
28	4.0	3.4	4.1	5.2	6.5	6.6	4.9	5.9	6.8	6.5	7.6	9.4	7.6	10.0	9.6	9.6	9.7	10.5	11.3	11.9	8.8	10.5	9.4	8.3	11.9	7.8	24
29	8.7	7.3	4.5	6.2	7.8	7.0	6.7	4.9	4.9	7.3	7.9	7.6	7.2	8.7	8.9	8.3	7.0	5.2	3.9	4.3	4.6	4.1	2.4	2.0	8.9	6.1	24
30	3.7	3.4	2.7	1.4	1.1	1.1	1.0	1.5	2.8	7.2	8.6	6.6	7.0	6.6	6.7	5.3	4.4	2.5	1.5	1.3	1.1	1.2	1.2	.9	8.6	3.3	24
31	1.0	1.1	1.1	.9	1.1	.9	.7	1.1	3.4	6.4	6.6	6.5	6.6	6.8	7.0	6.7	5.8	2.8	1.2	1.7	1.1	1.2	1.9	1.7	7.0	3.1	24
Max	8.7	7.3	6.2	7.9	7.8	8.0	10.4	9.3	10.2	9.9	9.4	10.2	10.3	10.0	11.6	15.7	13.1	12.8	11.3	11.9	8.8	10.5	9.4	8.3	15.7		
Avg	1.8	1.7	1.7	1.9	2.0	2.0	2.0	2.2	3.1	4.2	4.7	5.0	5.3	5.6	5.8	5.3	4.4	3.1	2.2	2.0	1.9	1.8	1.6	1.8		3.0	
Rds	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	30	30	30	31		739

Monthly Parameter Report - Horizontal Wind Direction 1-Hour Averages

10/08

Logger Id : HS
 Site Name : Belvidere HS
 Parameter : WDA
 Units : DEG
 Avg Interval : 01

Day	Hours																							Max	Avg	Rds		
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
01	7	158	51	134	76	214	234	269	260	236	223	254	245	227	260	182	279	195	192	219	124	191	210	244	279	218	24	
02	230	171	193	228	218	207	234	256	264	268	273	278	275	270	263	262	267	265	263	78	93	21	53	94	278	247	24	
03	81	88	87	89	73	75	37	130	231	232	221	222	243	252	277	273	266	279	260	27	52	59	58	46	279	57	24	
04	63	41	72	53	134	51	16	112	173	225	238	215	203	221	211	214	219	200	20	41	38	56	87	39	238	108	24	
05	16	43	53	3	83	354	22	16	24	2	39	299	333	270	226	353	327	9	69	38	42	34	32	55	354	16	24	
06	29	49	34	39	52	89	63	42	73	77	136	108	293	334	331	335	351	343	48	47	72	44	60	65	351	42	24	
07	71	34	21	47	27	38	54	294	116	351	4	358	289	346	308	261	179	94	32	10	47	37	37	46	358	23	24	
08	34	20	106	61	52	96	65	69	33	120	239	248	219	195	196	200	183	165	211	188	196	210	208	218	248	165	24	
09	209	225	227	229	227	234	255	242	231	9992	9992	262	245	238	230	233	252	22	48	49	39	38	56	69	262	244	22	
10	51	37	54	51	39	64	79	62	1	330	9	340	310	234	324	270	309	59	31	34	49	44	33	48	340	23	24	
11	45	46	45	44	47	27	74	22	13	297	46	68	48	38	102	18	169	79	49	39	38	40	44	44	297	45	24	
12	36	62	29	33	49	31	48	49	6	25	24	301	245	270	260	225	199	61	38	32	36	30	37	44	301	25	24	
13	65	66	54	86	61	44	75	60	279	266	243	235	209	227	233	229	217	70	55	68	24	16	44	38	279	52	24	
14	44	36	19	22	251	318	189	84	139	226	240	235	232	232	216	200	183	122	37	84	47	30	35	28	318	87	24	
15	6	27	78	72	72	18	31	91	81	347	320	335	38	216	207	179	174	91	28	11	46	57	57	55	347	47	24	
16	47	46	83	35	28	45	45	13	141	181	236	236	226	236	329	356	334	333	340	349	346	4	355	304	356	356	24	
17	156	66	199	54	88	28	103	67	3	357	359	333	333	315	3	4	9	53	60	53	45	36	52	49	359	34	24	
18	52	74	53	48	41	38	26	44	43	29	38	34	40	35	55	42	47	53	23	40	30	101	131	179	179	49	24	
19	36	30	50	45	46	45	35	100	64	31	33	56	51	45	50	52	57	57	50	43	32	36	33	70	100	47	24	
20	32	87	49	24	89	50	53	112	142	138	191	205	207	168	191	215	220	136	41	51	18	25	25	24	220	91	24	
21	23	37	32	22	63	33	65	63	215	231	235	229	257	269	258	282	283	288	293	288	295	9988	9988	272	295	300	22	
22	266	251	289	312	313	297	307	304	325	334	332	330	326	342	0	359	353	5	26	39	9986	53	35	63	359	337	23	
23	67	38	31	41	14	57	37	25	45	63	2	339	340	66	61	89	115	74	33	43	18	33	27	57	340	41	24	
24	24	52	45	22	53	39	57	31	58	16	223	221	179	167	186	171	140	103	27	34	16	17	38	18	223	55	24	
25	3	36	19	10	24	107	112	108	116	118	126	129	129	139	152	157	159	172	232	222	221	240	227	227	240	141	24	
26	257	308	153	3	98	355	53	103	222	220	217	224	213	221	233	234	231	84	37	21	48	25	35	72	355	217	24	
27	33	35	67	72	64	70	81	347	266	241	190	17	220	312	311	300	310	323	284	339	359	312	315	337	359	340	24	
28	359	331	353	355	5	339	299	328	315	294	301	299	301	294	286	273	263	261	267	267	268	272	269	262	359	299	24	
29	263	259	246	252	247	256	263	264	248	252	286	250	241	275	276	274	288	293	277	278	255	251	241	240	293	261	24	
30	277	260	252	253	106	65	71	217	286	310	315	317	319	309	314	321	310	261	75	42	36	5	43	38	321	327	24	
31	48	88	48	75	43	57	106	51	224	222	221	216	220	215	217	222	228	220	28	77	55	25	18	27	228	88	24	
Max	359	331	353	355	313	355	307	347	325	357	359	358	340	346	331	359	353	343	340	349	359	312	355	337	359			
Avg	31	44	50	38	55	38	52	48	349	294	276	276	261	258	261	259	250	55	21	32	34	28	37	39		19		
Rds	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	30	30	30	31			739

Monthly Parameter Report - Standard Deviation 1-Hour Averages

10/08

Logger Id : HS
 Site Name : Belvidere HS
 Parameter : SIG-T
 Units : DEG
 Avg Interval : 01

Day	Hours																							Max	Avg	Rds		
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
01	60	34	39	56	45	47	32	56	34	31	32	27	32	34	19	44	29	46	35	49	47	48	50	21	60	39	24	
02	22	47	35	23	28	36	30	18	20	18	22	21	20	21	20	20	17	17	46	27	44	43	35	26	47	27	24	
03	33	29	37	59	42	32	24	44	24	24	26	27	26	21	20	21	21	19	55	26	52	45	42	34	59	32	24	
04	37	36	25	56	54	39	69	60	51	41	34	33	30	27	28	26	26	31	50	34	53	76	40	40	76	41	24	
05	55	32	69	46	71	52	39	29	49	39	52	58	64	61	33	34	22	20	37	32	31	35	42	20	71	42	24	
06	20	33	40	22	31	27	32	30	28	47	60	51	56	28	24	26	30	36	52	51	34	53	42	59	60	38	24	
07	57	55	23	38	35	22	28	56	38	59	41	66	64	69	77	32	63	53	56	43	61	33	33	45	77	47	24	
08	37	22	51	59	31	42	28	45	48	47	39	24	26	30	26	25	20	34	39	27	30	30	31	26	59	34	24	
09	23	24	23	19	21	19	34	36	23	9992	9992	16	21	19	21	17	20	37	33	38	36	56	46	69	69	29	22	
10	58	76	69	50	66	62	59	66	59	36	45	84	47	41	66	58	26	41	36	21	33	57	16	38	84	50	24	
11	20	18	23	23	17	32	18	41	54	40	50	70	65	67	58	71	30	63	50	26	34	33	36	36	71	40	24	
12	36	34	24	58	25	16	21	29	46	56	58	61	68	51	48	26	28	34	19	24	30	24	31	42	68	37	24	
13	52	61	25	66	61	72	67	62	35	31	21	29	38	24	22	25	59	46	45	40	64	47	59	55	72	46	24	
14	46	51	54	72	90	78	56	83	54	65	30	23	22	23	22	23	27	19	43	41	43	39	55	62	90	46	24	
15	86	43	52	61	43	37	47	67	65	54	53	69	65	65	39	28	14	23	40	42	48	44	37	48	86	48	24	
16	32	36	51	48	53	22	43	71	66	31	18	16	20	19	25	46	28	23	38	37	68	47	44	42	71	38	24	
17	79	53	57	61	80	60	54	46	39	32	35	33	45	46	46	38	31	50	29	35	56	25	26	28	80	45	24	
18	31	30	50	24	26	28	15	29	28	25	23	26	34	37	33	25	24	18	18	21	25	37	44	42	50	28	24	
19	53	34	26	27	22	23	31	55	31	29	28	27	33	33	42	32	24	15	78	22	42	25	30	67	78	34	24	
20	40	39	24	39	17	48	25	42	71	58	50	62	48	32	29	20	14	29	54	30	33	29	38	36	71	37	24	
21	26	22	26	24	63	36	51	48	35	19	17	25	17	17	17	21	18	19	19	20	21	9988	9988	24	63	26	22	
22	22	21	22	17	21	33	29	31	20	23	23	24	27	23	26	19	27	26	31	30	9986	21	33	50	50	26	23	
23	50	54	31	26	26	34	14	26	36	46	55	54	61	58	59	56	34	24	15	30	35	44	44	25	61	39	24	
24	47	33	29	47	28	35	16	53	38	62	60	45	48	23	16	17	22	29	36	54	29	34	40	30	62	36	24	
25	14	31	27	27	47	13	12	14	17	15	16	14	15	19	18	15	14	22	27	53	28	47	60	25	60	24	24	
26	30	42	69	64	53	62	47	44	47	16	23	19	20	23	16	14	12	25	20	43	43	29	47	51	69	35	24	
27	40	55	54	52	48	48	44	51	52	27	35	32	53	48	25	18	31	39	34	30	39	38	32	36	55	40	24	
28	37	42	38	33	27	33	29	30	27	32	23	24	28	20	19	19	18	14	14	16	16	17	17	17	42	24	24	
29	18	14	15	14	13	16	20	16	19	18	24	15	19	20	18	19	21	20	17	18	17	16	31	46	46	19	24	
30	19	19	23	51	63	56	60	37	47	25	22	36	25	31	30	26	16	36	32	68	46	55	36	58	68	38	24	
31	54	45	37	60	47	43	55	20	30	13	14	18	18	17	16	16	10	20	57	58	41	43	14	19	60	31	24	
Max	86	76	69	72	90	78	69	83	71	65	60	84	68	69	77	71	63	63	78	68	68	76	60	69	90			
Avg	39	37	37	42	41	38	36	43	39	35	34	36	37	33	30	28	25	29	37	35	39	39	37	39		36		
Rds	31	31	31	31	31	31	31	31	31	30	30	31	31	31	31	31	31	31	31	31	31	30	30	30	31		739	

Monthly Parameter Report - Horizontal Wind Direction 1-Hour Averages

10/08

Logger Id : DF
 Site Name : Demeter Farm
 Parameter : WDA
 Units : DEG
 Avg Interval : 24

Day	Hours																							Max	Avg	Rds	
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22				23
01	146	151	142	138	148	157	167	169	177	183	188	195	199	200	204	210	216	221	227	233	239	244	248	253	253	193	24
02	258	263	268	269	269	269	268	275	275	275	275	276	277	277	277	277	277	277	278	278	276	274	273	272	278	273	24
03	270	269	266	264	262	260	257	255	252	249	247	245	243	243	243	244	245	245	245	246	246	247	248	252	270	251	24
04	256	260	266	272	275	279	282	285	289	291	292	293	292	291	289	288	285	282	280	279	279	273	267	258	293	279	24
05	247	235	222	210	198	187	179	167	155	145	147	151	153	155	160	163	168	173	177	168	157	153	149	146	247	172	24
06	145	145	147	147	149	148	147	147	148	148	149	148	148	150	148	149	149	149	149	163	176	191	204	217	217	155	24
07	228	240	252	262	273	284	297	309	321	334	333	334	335	335	334	334	321	311	304	298	292	288	283	280	335	300	24
08	277	274	273	271	268	265	260	255	250	245	241	237	233	228	223	217	224	228	227	225	223	220	216	211	277	241	24
09	207	202	198	195	192	190	192	194	197	199	203	205	208	210	212	214	218	222	225	229	233	237	241	245	245	211	24
10	250	255	259	264	269	273	277	280	284	288	291	294	296	299	301	303	305	304	307	310	313	317	306	295	317	289	24
11	283	271	259	246	233	220	207	195	182	169	157	146	133	120	109	97	88	85	80	74	71	68	80	90	283	139	24
12	103	117	116	116	118	117	118	120	122	124	126	129	130	141	152	160	164	167	167	166	163	160	158	155	167	137	24
13	152	148	159	168	178	189	198	206	215	224	233	240	253	254	254	257	260	264	268	272	275	274	265	255	275	230	24
14	250	244	239	233	228	222	217	212	207	201	196	191	185	181	178	173	170	167	164	161	159	162	172	184	250	195	24
15	193	201	210	219	228	237	245	253	260	268	274	280	285	289	292	294	294	294	295	295	294	293	290	286	295	267	24
16	281	275	269	263	256	250	244	238	233	228	224	220	217	216	220	224	229	235	239	244	249	254	260	265	281	242	24
17	270	276	281	286	291	296	302	307	313	318	324	314	317	320	321	322	308	297	283	284	271	257	258	244	324	294	24
18	232	219	206	193	181	170	156	144	131	117	102	103	90	77	65	52	54	54	56	43	45	47	35	36	232	98	24
19	37	38	39	40	38	37	37	36	35	34	35	37	37	37	36	37	37	37	37	36	35	34	33	33	40	36	24
20	31	30	29	29	29	28	28	41	53	66	79	90	101	111	119	127	135	142	151	160	170	180	188	198	198	93	24
21	207	217	226	235	245	255	265	262	259	257	253	252	251	253	255	257	260	262	264	266	268	269	271	273	273	253	24
22	276	278	281	285	288	291	294	297	301	304	307	310	311	312	315	317	319	321	322	324	325	327	330	317	330	306	24
23	305	292	280	267	256	244	232	220	207	194	195	196	182	170	157	146	135	125	114	105	96	87	79	86	305	178	24
24	93	101	109	115	121	127	132	138	145	151	142	134	140	144	150	153	155	157	158	159	160	160	159	156	160	140	24
25	153	149	145	144	141	139	137	134	132	131	130	130	129	128	127	126	126	126	126	126	134	144	153	162	162	136	24
26	172	182	192	201	211	220	229	238	247	254	260	267	273	278	284	282	280	276	273	270	266	262	258	255	284	248	24
27	252	247	242	238	237	236	237	239	241	243	246	249	252	256	258	261	264	270	275	281	286	291	295	300	300	257	24
28	305	311	318	323	325	327	327	327	327	327	326	325	325	325	324	324	323	321	319	317	315	313	312	310	327	320	24
29	308	306	304	301	298	296	295	294	291	289	287	286	285	283	283	283	283	284	285	287	287	288	288	288	308	290	24
30	289	290	291	293	295	296	297	298	300	302	304	305	307	309	310	311	312	312	312	312	312	313	311	308	313	303	24
31	303	301	298	296	293	291	289	287	285	282	280	278	275	272	268	265	261	259	256	253	250	250	251	252	303	274	24
Max	308	311	318	323	325	327	327	327	327	334	333	334	335	335	334	334	323	321	322	324	325	327	330	317	335		
Avg	246	244	243	242	241	241	241	241	240	239	240	240	241	242	244	247	249	250	251	255	255	255	255	252		246	
Rds	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31		744	

Monthly Parameter Report - Ambient Temperature 1-Hour Averages

10/08

Logger Id : DF
 Site Name : Demeter Farm
 Parameter : TEMP
 Units : DEGC
 Avg Interval : 24

Day	Hours																							Max	Avg	Rds		
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22				23	
01	14.8	14.8	15.0	15.1	15.2	15.3	15.4	15.4	15.3	15.3	15.2	15.1	15.0	14.9	14.8	14.6	14.4	14.3	14.1	14.0	13.8	13.6	13.5	13.3	15.4	14.6	24	
02	13.2	13.0	12.7	12.5	12.2	12.0	11.9	11.7	11.6	11.4	11.2	11.0	10.8	10.9	10.7	10.6	10.6	10.5	10.4	10.3	10.2	10.1	10.0	9.9	13.2	11.2	24	
03	9.8	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.8	9.8	9.9	9.9	9.9	9.9	9.9	10.0	10.0	10.0	10.1	10.1	10.1	10.1	9.8	24	
04	10.1	10.1	10.1	10.1	10.1	10.0	10.0	9.9	9.8	9.6	9.5	9.4	9.3	9.3	9.3	9.3	9.3	9.3	9.4	9.4	9.5	9.5	9.6	9.8	10.1	9.6	24	
05	9.9	10.1	10.1	10.2	10.2	10.4	10.4	10.5	10.6	10.8	10.9	11.0	11.2	11.3	11.4	11.5	11.7	11.8	11.9	11.9	11.9	11.9	11.8	11.7	11.9	11.0	24	
06	11.6	11.5	11.4	11.4	11.4	11.4	11.4	11.3	11.3	11.3	11.3	11.3	11.3	11.2	11.1	11.0	10.8	10.7	10.5	10.4	10.2	10.1	10.0	9.9	11.6	10.9	24	
07	9.7	9.6	9.4	9.2	8.9	8.7	8.5	8.4	8.3	8.1	8.0	8.0	7.9	7.9	7.9	8.0	8.1	8.2	8.3	8.4	8.6	8.7	8.9	9.1	9.7	8.5	24	
08	9.3	9.6	9.8	10.1	10.4	10.7	10.9	11.2	11.4	11.6	11.7	11.8	11.8	11.7	11.6	11.5	11.4	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.0	11.1	24	
09	12.1	12.2	12.3	12.5	12.6	12.8	13.0	13.2	13.4	13.6	13.8	14.1	14.4	14.6	14.9	15.2	15.4	15.7	15.9	16.1	16.3	16.5	16.7	16.8	16.8	14.3	24	
10	16.9	17.1	17.2	17.2	17.2	17.2	17.1	17.1	17.0	17.0	16.9	16.8	16.7	16.6	16.5	16.5	16.5	16.4	16.4	16.3	16.2	16.0	16.0	15.9	17.2	16.6	24	
11	15.8	15.7	15.5	15.5	15.4	15.3	15.2	15.1	15.1	15.1	15.0	15.0	15.0	15.0	15.0	14.9	14.9	14.9	14.8	14.8	14.8	14.9	14.9	15.0	15.8	15.1	24	
12	15.1	15.1	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.3	15.4	15.4	15.5	15.5	15.6	15.6	15.6	15.6	15.7	15.7	15.7	15.7	15.7	15.7	15.7	15.4	24	
13	15.7	15.8	15.8	16.0	16.2	16.3	16.6	16.7	16.9	17.0	17.0	17.0	17.0	17.1	17.1	17.2	17.2	17.3	17.4	17.5	17.6	17.7	17.9	18.0	18.0	16.9	24	
14	18.0	17.9	17.8	17.7	17.5	17.4	17.3	17.2	17.1	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	18.0	17.2	24	
15	17.1	17.3	17.4	17.4	17.4	17.4	17.3	17.3	17.2	17.1	17.0	16.9	16.9	16.8	16.6	16.6	16.5	16.5	16.4	16.3	16.2	16.1	16.0	16.0	17.4	16.8	24	
16	15.9	15.9	15.9	16.0	16.2	16.3	16.5	16.7	17.0	17.2	17.3	17.4	17.6	17.7	17.7	17.6	17.4	17.3	17.0	16.8	16.6	16.3	16.0	15.7	17.7	16.7	24	
17	15.4	15.0	14.7	14.3	13.9	13.6	13.2	12.8	12.3	11.9	11.5	11.2	10.8	10.4	10.1	9.9	9.8	9.7	9.6	9.4	9.3	9.1	9.0	8.8	15.4	11.4	24	
18	8.7	8.5	8.4	8.2	8.0	7.8	7.6	7.5	7.4	7.3	7.2	7.1	7.0	7.0	6.9	6.8	6.6	6.5	6.3	6.2	6.1	6.1	6.0	6.0	8.7	7.1	24	
19	5.9	5.9	5.8	5.8	5.7	5.7	5.6	5.6	5.5	5.5	5.4	5.4	5.4	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.2	5.9	5.4	24	
20	5.2	5.2	5.3	5.3	5.4	5.5	5.6	5.7	5.8	5.8	5.9	6.0	6.1	6.3	6.5	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.2	6.3	24	
21	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.0	10.0	9.9	9.9	9.8	9.7	9.6	9.4	9.2	9.0	8.8	8.6	8.3	8.1	7.8	10.0	9.1	24	
22	7.6	7.4	7.2	7.0	6.8	6.5	6.3	6.1	5.9	5.8	5.8	5.6	5.5	5.3	5.0	4.9	4.7	4.5	4.4	4.3	4.2	4.2	4.1	4.1	7.6	5.5	24	
23	4.0	3.9	3.8	3.7	3.6	3.4	3.3	3.1	3.0	2.9	2.9	2.9	2.9	3.0	3.2	3.4	3.6	3.8	3.9	4.1	4.2	4.3	4.4	4.5	4.5	3.5	24	
24	4.6	4.8	4.9	5.0	5.1	5.3	5.4	5.5	5.7	5.8	5.9	6.0	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.1	6.2	6.3	6.5	6.5	5.7	24	
25	6.6	6.8	7.0	7.3	7.6	7.9	8.2	8.5	8.8	9.1	9.4	9.6	9.9	10.1	10.4	10.4	10.5	10.6	10.8	10.9	11.1	11.2	11.3	11.4	11.4	9.3	24	
26	11.4	11.4	11.4	11.2	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.6	9.5	9.3	9.1	9.3	9.4	9.5	9.5	9.6	9.6	9.6	9.6	9.6	11.4	10.0	24	
27	9.7	9.7	9.7	9.8	9.8	9.8	9.9	9.9	9.9	9.8	9.8	9.7	9.6	9.5	9.3	9.1	8.9	8.6	8.4	8.1	7.9	7.6	7.3	6.9	9.9	9.1	24	
28	6.6	6.3	6.0	5.7	5.6	5.4	5.2	5.1	4.9	4.8	4.7	4.6	4.4	4.3	4.2	4.2	4.3	4.2	4.1	4.0	3.9	3.9	3.9	4.0	6.6	4.7	24	
29	4.0	4.0	4.1	4.1	4.0	4.0	3.9	3.9	3.7	3.6	3.4	3.2	3.1	2.9	2.8	2.6	2.5	2.5	2.5	2.5	2.4	2.3	2.2	2.1	4.1	3.1	24	
30	2.0	1.9	1.8	1.7	1.6	1.4	1.4	1.3	1.3	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.1	2.2	2.4	2.5	2.7	2.9	2.9	1.7	24	
31	3.0	3.2	3.3	3.5	3.7	3.9	4.2	4.3	4.5	4.7	5.0	5.2	5.5	5.9	6.1	6.4	6.7	7.0	7.3	7.6	7.9	8.1	8.4	8.7	8.7	5.5	24	
Max	18.0	17.9	17.8	17.7	17.5	17.4	17.3	17.3	17.2	17.2	17.3	17.4	17.6	17.7	17.7	17.6	17.4	17.3	17.4	17.5	17.6	17.7	17.9	18.0	18.0			
Avg	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.0	10.1	10.1	10.0	10.0	10.0	10.0	10.0		10.1		
Rds	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31		744		

Monthly Parameter Report - Standard Deviation 1-Hour Averages

10/08

Logger Id : DF
 Site Name : Demeter Farm
 Parameter : SIG-T
 Units : DEG
 Avg Interval : 24

Day	Hours																								Max	Avg	Rds		
	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23					
01	17	18	19	21	21	21	22	23	24	24	23	22	22	22	21	21	21	21	21	21	21	21	21	21	21	24	21	24	
02	21	19	17	15	15	15	14	13	12	11	11	11	10	10	10	10	10	10	10	10	10	10	10	10	10	21	12	24	
03	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	10	24		
04	10	10	11	11	13	13	13	13	13	13	13	14	15	15	16	16	16	17	18	19	20	21	21	21	21	21	15	24	
05	21	22	22	22	22	24	23	23	23	24	24	24	24	25	25	26	27	26	25	24	23	22	22	23	27	23	24		
06	23	22	22	21	20	20	20	20	19	19	20	20	20	19	18	17	17	17	17	16	16	16	16	15	23	18	24		
07	15	15	14	14	14	15	14	14	14	14	13	13	12	12	12	13	14	14	14	14	14	14	15	15	16	16	13	24	
08	16	16	16	16	15	16	16	16	16	16	17	17	17	16	15	14	14	13	13	13	13	13	13	12	12	12	17	14	24
09	12	12	12	13	13	11	11	12	12	12	12	12	12	12	12	12	12	13	13	13	13	12	12	12	12	13	12	24	
10	12	12	12	11	11	11	10	10	10	10	11	11	11	12	12	14	15	15	15	15	16	16	16	17	17	17	12	24	
11	17	17	18	18	18	19	19	19	20	20	20	21	21	21	21	21	20	20	19	19	19	19	18	18	18	21	19	24	
12	18	19	19	19	19	19	19	19	19	19	18	19	21	22	23	24	24	23	24	24	23	23	23	23	24	24	20	24	
13	22	21	21	21	20	20	20	19	20	19	19	17	14	12	11	10	9	9	9	9	10	11	13	14	22	15	24		
14	14	14	14	14	14	14	14	14	14	14	14	15	16	16	16	16	16	16	16	16	16	15	14	13	12	16	14	24	
15	12	12	12	12	12	12	12	12	12	12	12	12	14	15	15	16	16	16	16	16	16	16	16	16	16	16	13	24	
16	15	15	15	15	15	14	14	14	14	14	13	13	10	9	9	7	7	7	7	7	7	7	7	7	7	15	10	24	
17	7	7	7	7	7	7	7	7	7	8	8	9	10	10	10	11	12	12	12	12	13	13	13	14	14	9	24		
18	14	15	15	16	17	17	18	19	19	19	19	19	19	19	19	19	19	19	19	20	20	20	20	20	20	20	18	24	
19	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	19	19	20	19	24	
20	19	19	19	19	18	18	18	18	18	19	19	19	21	21	21	21	21	21	21	20	20	20	19	19	21	19	24		
21	19	18	18	17	17	17	16	16	15	14	14	12	11	9	9	9	9	9	9	9	9	9	9	9	19	12	24		
22	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	8	9	9	8	24		
23	9	10	10	11	11	12	12	13	13	14	15	15	16	17	18	18	18	18	18	19	19	19	18	18	19	15	24		
24	18	17	17	17	17	16	16	16	16	16	16	16	16	15	15	14	14	14	14	14	14	14	15	15	18	15	24		
25	15	15	15	15	15	15	14	14	13	13	12	12	11	11	11	11	11	10	10	10	10	10	10	10	15	12	24		
26	10	9	9	9	9	8	8	8	8	9	9	9	10	10	10	11	11	11	11	11	11	10	10	10	11	9	24		
27	10	10	10	11	12	12	12	12	11	11	11	10	10	10	10	9	9	9	9	9	9	9	9	9	12	10	24		
28	9	9	9	8	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	8	8	8	9	7	24		
29	8	8	8	8	8	8	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	24		
30	9	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	8	24		
31	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	8	8	7	7	9	8	24		
Max	23	22	22	22	22	24	23	23	24	24	24	24	24	25	25	26	27	26	25	24	23	23	23	23	27				
Avg	14	14	14	14	14	14	14	14	14	14	14	14	14	13	13	13	13	13	13	13	13	13	13	13	14				
Rds	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31		744			