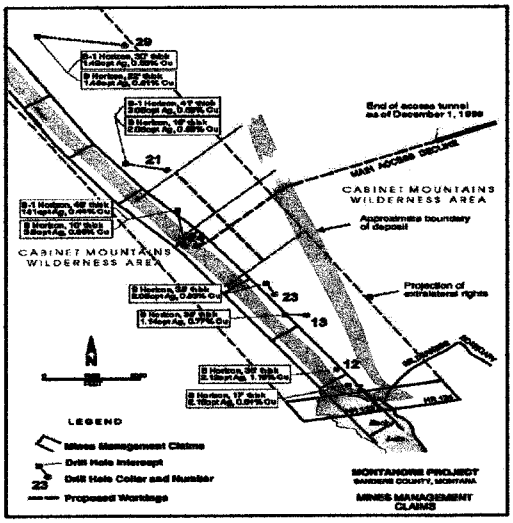
V22D01

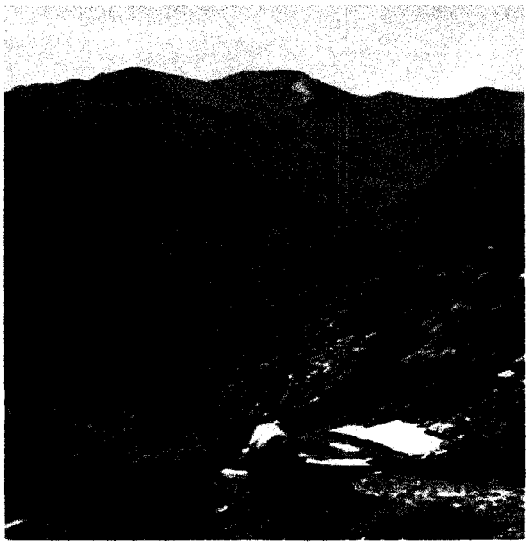
MONTANORE PROJECT

AMENDED APPLICATION

HARD ROCK OPERATING PERMIT

AMENDED PLAN OF OPERATIONS





Appendix A

Air Quality

December 2004

Mines Management, Inc.

AIR QUALITY

Annual Summary
Aerometric Data Report
July 1988 Through June 1989

Air Quality and Meteorological Baseline Data Collection Montana Project Lincoln County, Montana

Prepared for

Noranda Minerals Corporation
Libby, Montana

August 1989

Woodward-Clyde Consultants

Consulting Engineers, Geologists and Environmental Scientists

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Project No. 22134

EXECUTIVE SUMMARY

Meteorological conditions and air quality parameters were monitored at two sites on the Montana Project in Lincoln County, Montana for a period of one year (July 1, 1988 through June 30, 1989). This program was conducted by Woodward-Clyde Consultants for Noranda Minerals Corp.

Results of the study are presented and discussed in detail in the report. Pertinent results and conclusions are summarized below:

- Winds at both sites were predominantly from the south-southeast through southwest, approximately 52.9 percent of the time. Wind speeds averaged 5.0 mph at the Ramsey Creek site and 2.4 mph at the Little Cherry Creek site.

- The maximum and minimum temperatures at the Ramsey Creek site were 32.8°C (91.0°F) in August and -31.3°C (-24.3°F) in February. The maximum and minimum temperatures at the Little Cherry Creek site were 34.8°C (94.6°F) in September and -32.3°C (-26.1°F) in February.

- Total annual precipitation (recorded at the Little Cherry Creek site) was very low at 9.50 inches.

- Relative humidity and solar radiation (recorded at the Little Cherry Creek site) averaged 61.6 percent and 0.16 LPM, respectively.

- Evaporation (calculated from concurrent wind speed, temperature, relative humidity, and solar radiation data) totaled 34.377 inches for the year.

- PM 10 and TSP levels collected at both sites were relatively low. At the Ramsey Creek site, the annual arithmetic means for the two PM 10 samplers were 12 and 13 $\mu g/m^3$, respectively. At the Little Cherry Creek site the arithmetic mean for the PM 10 sampler was 14 $\mu g/m^3$ and the geometric mean for the TSP sampler was 33 $\mu g/m^3$.

- The data collected in this study adequately characterize the existing condition of the air resources of the Montana project study area, and provide a credible and defensible data base for permitting activities required for the implementation of the mining project.

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1.0 INTRODUCTION

This report presents an annual summary of the baseline meteorological and air quality data collected at the Montana Project Study Area during the period July 1, 1988 through June 30, 1989. The purpose of this report is to provide information pertaining to the existing meteorology and air quality of the Study Area. The report was prepared to describe the baseline air quality and meteorology of the study area as defined in the approved Plan of Study for the Montana Project. The two monitoring locations in the Study Area are at the head of Ramsey Creek near an alternative process facility and near Little Cherry Creek adjacent to an alternative tailing disposal area.

The following parameters are being monitored at the Montana Project sites:

Ramsey Creek Site	Little Cherry Creek Site
Meteorological Parameters	Meteorological Parameters
Wind Speed at 10 meters	Wind Speed at 10 meters
Wind Direction at 10 meters	Wind Direction at 10 meters
Sigma Theta at 10 meters	Sigma Theta at 10 meters
Temperature at 4 meters	Temperature at 4 meters
	Precipitation at 2 meters
	Relative Humidity at 9 meters
	Solar Radiation at 9 meters
	Evaporation

Air Quality Parameters	Air Quality Parameters
	Total Suspended Particulates (TSP)
Particulate Matter - 10 microns or less (PM 10)	Particulate Matter - 10 microns or less (PM 10)
	Trace Element Analysis

A project description is presented in Section 2.0. A brief description of the aerometric monitoring network is provided in Section 3.0 of this report. Summaries of meteorological and air quality data are presented in Sections 4.0 and 5.0, respectively.

This baseline study was initiated by U.S. Borax as part of the licensing requirements for the development and mining of a silver/copper deposit located underneath the Cabinet Mountain Wilderness Area in the Kootenai National Forest, Sanders and Lincoln Counties, Montana. Whereas the State of Montana, Department of State Lands and the Kootenai National Forest have primary responsibility for permitting these activities, the two agencies and U.S. Borax developed a Plan of Study that defined the nature and extent of the baseline work. This work was initiated in the Spring of 1988 and has been conducted in accordance with the terms of the Plan of Study.

A number of alternative sites were identified for portals, processing plant, tailing disposal and ancillary facilities. The area encompassing and adjacent to these sites then became the focus of the baseline work (Figure 2-1).

In September of 1988 Noranda Minerals Corp. and Montana Reserves formed a venture and purchased the silver/copper deposit from U.S. Borax and continued with project development under the "Montana Project" name. Noranda Minerals Corp. (Noranda) was designated the project manager.

Noranda continued to build from the data and information that had been generated by U.S. Borax and after reviewing the many alternative sites developed the proposed mining program detailed in the Application for a Hard Rock Operating Permit from the Montana Department of State Lands. The application also serves as a proposed Plan of Operation to the Kootenai National Forest. Basically, the application describes a 20,000 ton per day operation accessed from two (twin) portals in Ramsey Creek, a mill site located adjacent to the Ramsey portals, a portal in Libby Creek, two portals in the Rock Creek drainage for ventilation and emergency access, and a tailing impoundment in the Little Cherry Creek drainage. Access to the Ramsey Creek mine site would be over the existing Bear Creek Road. A

new transmission line from Pleasant Valley to the mine site would provide electrical energy for the operation. The total labor force is expected to number approximately 400 people. These positions would be filled by hiring locally as much as possible.

The Montana Project is monitoring air quality and meteorological parameters at two locations; at the head of Ramsey Creek near an alternative process facility and near Little Cherry Creek adjacent to an alternative tailing disposal area. The exact location of the mine, process and tailing disposal sites has not been determined; however, these two monitoring sites will provide representative air quality and meteorological data for these areas. The Montana Air Quality Bureau participated in the monitoring sites selection process and verbal approval of the sites was granted at the time of selection (Driscoll, 1988).

The Ramsey Creek site is located approximately 1.6 km (1.0 mi) from the head of Ramsey Creek T27N, R31W, along the north side of the road (Figure 3-1). The site is located on a gentle hillside where the forest has been clear cut allowing an unobstructed area for monitoring.

The Ramsey Creek site consists of a 10 m (32.8 ft) tower, mounted on a 61 cm (24 in) by 61 cm (24 in) by 15.2 cm (6 in) precast concrete base, guyed at the 10 m (32.8 ft) level with three braided cables attached to buried anchors, a propane powered generator and co-located (2) PM 10 (particulate matter less than 10 microns in diameter) hi-volume samplers. Sensors for measuring wind speed and direction are mounted at the 10 m (32.8 ft) level of the tower and the temperature sensor is mounted at the four meter (13.1 ft) level of the tower, rather than the two meter (6.6 ft) level, to prevent burial during periods of deep snow. Since the temperature sensor is mounted on the tower, exposure of the sensor at 4 m (13.1 ft) is acceptable to the MAQB, per Section 1.92, page 11, of the Quality Assurance Policy. A digital data logger with strip chart backup records meteorological data and computes standard deviation of the horizontal wind direction (sigma theta). The site is powered by a propane generator set on the ground and anchored down. A scaffold is assembled around the generator, metal siding is attached to three sides and reinforced plywood is attached

to the top of the scaffold providing shelter for the generator. A canvas tarp is attached to the fourth side of the scaffold allowing access to the shelter. The PM 10 high volume samplers are co-located on top of the shelter, with the sampler inlets located approximately 2.5 meters (8 ft) above ground level. The samplers are located two meters (6.6 ft) apart in accordance with PSD sampling criteria.

The Little Cherry Creek site is located approximately 215 m (705 ft) north and 90 m (295 ft) east of the end of road 6212H, T28N, R31W (Figure 3-2). The site is in a flat area where the forest has been cleared, again allowing an unobstructed area for monitoring.

The site is constructed similarly to the Ramsey Creek Site and monitors wind speed, wind direction, and sigma theta at the 10 m (32.8 ft) level and temperature at the four meter (13.1 ft) level. In addition, relative humidity and solar radiation are monitored at the 9 meter (29.5 ft) level on the tower. A heated precipitation gauge is mounted on a separate scaffold with the opening at approximately two meters (6.6 ft). Solar radiation and relative humidity data are used with concurrent wind speed and temperature to calculate daily evaporation (based on Penman, 1947). PM 10 and total suspended particulate (TSP) data are also collected at the Little Cherry Creek site. The PM 10 and TSP high volume samplers are co-located and mounted on top of a generator shelter, similar in structure and specifications to the Ramsey Creek site.

The meteorological parameters monitored at the Ramsey Creek site are wind speed, wind direction, sigma theta (standard deviation of the horizontal wind direction fluctuations), and temperature. At the Little Cherry Creek site, the meteorological parameters monitored are wind speed, wind direction, sigma theta, temperature, precipitation, relative humidity, and solar radiation. Stability classifications for the period are determined from sigma theta in the following manner:

- Hourly sigma theta values, modified by surface roughness length, are converted to Pasquill-Gifford stability classes as recommended by NRC Safety Guide 1.23.

- Daytime hourly observations initially determined as E or F stability are shifted to less stable categories if the wind speeds are above the cut points suggested in EPA's Dispersion Estimate Suggestion #8 (Irwin 1980).

- For nighttime hourly observations, a scheme developed by Mitchell and Timbre (1979) is incorporated to modify the NRC stability class by wind speed.

Table 4-1 outlines stability classifications based on Pasquill using sigma theta, time of day, and wind speed criteria.

Evaporation at the Little Cherry Creek site is calculated using concurrent wind speed, temperature, relative humidity, and solar radiation data.

A complete listing of all meteorological parameters is given in the four quarterly reports (WCC, 1989a, WCC, 1989b, WCC, 1989c, WCC, 1989d). The listing includes composite day analyses for each month and the hourly meteorological conditions recorded for each day of each month.

4.1 RAMSEY CREEK SITE

4.1.1 Data Recovery

The annual data recovery rate for the meteorological parameters at the Ramsey Creek site is 94.9 percent. Data loss throughout the year was caused by failures of the Data Acquisition System and the backup strip chart recorder.

4.1.2 Wind Speed

The maximum wind speed for the monitoring year at the Ramsey Creek site was 28.4 miles per hour (mph) and was recorded on December 13, 1988. The minimum, maximum and average wind speeds for each quarter and for the monitoring year are presented in Table 4-2.

4.1.3 Wind Direction

Figure 4-1 presents the wind rose at the Ramsey Creek site for the monitoring year. The wind rose depicts the percentage of time that the wind blows from a particular direction in a certain wind speed class. The most persistent wind directions at the Ramsey Creek site for the monitoring year were from the south-southeast through the southwest. Winds from these directions occurred 60.7 percent of the time. Maximum wind speeds were associated with south-southeast winds during the monitoring year. Quarterly summaries of wind speed and direction are presented as tabular stability wind roses in Appendix C of each quarterly report.

4.1.4 Atmospheric Stability

A summary of percent occurrence of atmospheric stability as determined by sigma theta is presented in Table 4-3. Annual JFDs for the baseline

monitoring year for the Ramsey Creek site are contained in Table 4-4. Unstable atmospheric conditions (stability categories A, B, and C) were recorded 31.3 percent of the time, neutral conditions (stability category D) 24.1 percent of the time, and stable conditions (stability, categories E and F) 44.6 percent of the time during the monitoring year. The relatively large percentage of stable conditions can be attributed to light wind speeds and limited solar radiation during the monitoring year.

4.1.5 Temperature

The minimum, maximum, and average temperatures recorded at the Ramsey Creek site for each quarter and the monitoring year are presented in Table 4-5. The maximum hourly average temperature of 32.8°C (91.0°F) occurred on August 24, 1988. The minimum hourly average temperature of -31.3°C (-24.3°F) occurred on February 3, 1989.

4.2 LITTLE CHERRY CREEK SITE

4.2.1 Data Recovery

Meteorological data recovery at the Little Cherry Creek site was 76.3 percent during the monitoring year. Data loss throughout the year was caused by Data Acquisition System failures.

4.2.2 Wind Speed

The maximum wind speed for the monitoring year at the Little Cherry Creek site was 19.7 mph and was recorded on July 5, 1988. The minimum, maximum, and average wind speeds for each quarter and for the monitoring year are presented in Table 4-6.

4.2.3 Wind Direction

Figure 4-2 presents the wind rose at the Little Cherry Creek site for the monitoring year. The most persistent wind directions at this location for the monitoring year were from the south-southeast through southwest. Winds from these directions occurred 45.0 percent of the time. Maximum wind speeds were associated with south-southwest winds.

Quarterly summaries of wind speed and direction are presented as tabular stability wind roses in Appendix C of each quarterly report.

4.2.4 Atmospheric Stability

A summary of percent occurrence of atmospheric stability as determined by sigma theta is presented in Table 4-7. Annual JFDs for the baseline monitoring year for the Little Cherry Creek site are contained in Table 4-8. Unstable atmospheric conditions (stability categories A, B, and C) were recorded 37.6 percent of the time, neutral conditions (stability category D) 10.3 percent of the time, and stable conditions (stability categories E and F) 52.1 percent of the time during the monitoring year. The relatively large percentage of stable conditions can be attributed to the light wind speeds during the monitoring year.

4.2.5 Temperature

The minimum, maximum, and average temperatures recorded at the Little Cherry Creek site for each quarter and for the monitoring year are presented in Table 4-9. The maximum hourly average temperature of 34.8°C (94.6°F) occurred on September 2, 1988. The minimum hourly average temperature of -32.3°C (-26.1°F) occurred on February 4, 1989.

4.2.6 Precipitation

Quarterly precipitation totals and the total precipitation for the baseline monitoring year at the Little Cherry Creek site are presented in Table 4-10. The largest monthly precipitation total was 3.25 inches, recorded in November. October was the driest month with 0.08 inches. Total precipitation for the baseline monitoring year was 9.56 inches. The annual climatological normal precipitation for northwest Montana is 19.04 inches (U.S. Department of Commerce, 1968).

4.2.7 Relative Humidity

The minimum, maximum, and average relative humidity for each quarter and for the monitoring year are presented in Table 4-11. The average relative humidity during the monitoring year was 61.4 percent. Climatological averages (U.S. Department of Commerce, 1968) indicate average annual relative humidities in the range of 65 to 75 percent in northwest Montana.

4.2.8 Solar Radiation

The minimum, maximum, and averaged solar radiation for each quarter and for the baseline monitoring year are presented in Table 4-12. The average solar radiation for the monitoring year was 0.16 Langleys per minute (LPM) where a Langley is equivalent to one calorie per square centimeters. The maximum hourly average solar radiation was 1.36 LPM. To compare these values to climatological normals, mean daily solar radiation values were calculated by multiplying the monthly average solar radiation (LPM) by 24 hours (1,440 minutes). Mean daily solar radiation at the Little Cherry Creek site for the monitoring year was 230 Langleys. The annual climatological normal for northwest Montana is 312 Langleys (U.S. Department of Commerce, 1968).

4.2.9 Evaporation

Daily evaporation totals were calculated using concurrent wind speed, temperature, relative humidity, and solar radiation data. The calculation was based on a method developed by Penman (1947). Refer to Appendix D of the quarterly reports for a detailed explanation of this calculation method. Evaporation totals by quarter and for the monitoring year are presented in Table 4-13. The annual total of evaporation was 34.377 inches. The annual climatological normal Class A pan evaporation for northwest Montana is 35 inches (U.S. Department of Commerce, 1968).

The air quality parameters measured at the project sites are particulate matter, 10 microns or less (PM 10), total suspended particulate matter (TSP), antimony, arsenic, cadmium, chromium, copper, iron, lead, and zinc concentrations. The samplers are mounted atop scaffolds such that the sample inlets are at approximately 2.5 meters above ground level. EPA guidelines (EPA, 1980) state that sample intakes should be between 2 to 15 meters above ground level. Samples are collected for 24 hours every sixth day according to the EPA Air Sampling Schedule (CFR 40, 1975).

5.1 RAMSEY CREEK SITE

5.1.1 Data Recovery

The annual data recovery at each sampling station is presented in Table 5-1. The data recoveries for the Ramsey Creek site Samplers No. 1 and 2 were 80.3 and 82.0 percent respectively. Data loss throughout the year was attributable to generator and timer problems and occasional site inaccessibility in the winter. The data recoveries for all samplers were above the 80 percent recovery criteria for pollutants established for Prevention of Significant Deterioration (PSD) monitoring networks.

5.1.2 PM 10 Concentrations

PM 10 concentrations measured at the Ramsey Creek site during the monitoring year are presented in Table 5-2 and 5-3. In addition to the individual (24-hour) concentrations measured at each sampling location, monthly and annual arithmetic means, geometric means, and maximum concentrations are presented. The highest PM 10 concentration for the monitoring year was 157 $\mu g/m^3$ measured at Sampler No. 1 on September 6, 1988. The annual arithmetic means for Samplers No. 1 and 2 were 12 $\mu g/m^3$ and 13 $\mu g/m^3$,

respectively. The values are well below the annual PM 10 standard of 50 $\mu g/m^3$ (FR52, 1987).

5.2 LITTLE CHERRY CREEK SITE

5.2.1 Data Recovery

The annual data recovery at each sampling location is presented in Table 5-1. The data recoveries for the Little Cherry Creek site Samplers No. 3 and 4 were 83.6 and 85.2 percent, respectively. Data loss throughout the year was attributable to generator and timer problems and occasional site inaccessibility during the winter.

5.2.2 TSP and PM 10 Concentrations

TSP and PM 10 concentrations measured at the Little Cherry Creek site during the monitoring year are presented in Tables 5-4 and 5-5. In addition to the individual (24-hour) concentrations measured at each sampling location, monthly and annual arithmetic means, geometric means, and maximum concentrations are presented. The highest PM 10 concentration was 189 $\mu g/m^3$ measured at Sampler No. 4 on September 6, 1988. The highest TSP concentration was 267 $\mu g/m^3$ measured on October 6, 1988. A comparison of the TSP and the PM 10 data reveals that the PM 10 concentrations average approximately 29.5 percent of the TSP concentrations. This calculation is based on the average (arithmetic mean) percent ratio of each PM 10 to TSP sample. The annual arithmetic mean for the PM 10 sampler was 14 $\mu g/m^3$. The annual geometric mean for the TSP sampler was 33 $\mu g/m^3$. These values are well below the annual secondary standard of 60 $\mu g/m^3$ for TSP samples (CFR 40, 1979) and the annual standard of 50 $\mu g/m^3$ for PM 10 samples (FR52, 1987).

The 157)g/m^3, 153)g/m^3 and 189)g/m^3 measured at Samplers No. 1, 2 and 4, respectively, on September 6, 1988 do exceed the 24-hour PM 10 standard of 150)g/m^3. These data points have been reviewed and are believed to be valid. However, review of Tables 5-2, 5-3 and 5-5 and performance of a one-sided T-Test indicate that these values are statistical outliers. Results of the T-Test indicate that these values are representative of an anomalous event and not representative of background conditions. As discussed in the quarterly report for July-September 1988 these values are believed to reflect particulate fallout from the numerous forest fires in the region. The 267)g/m^3 measured at the TSP sampler (No. 3) exceeded both the Federal primary 24-hour standard of 250)g/m^3 and the Montana 24-hour standard of 200)g/m^3, however, one exceedence per year is permitted.

5.2.3 Trace Element Analysis

Results of the chemical analysis of the TSP filters (Sampler No. 3) for trace metals for the monitoring year are presented in Table 5-6. The maximum concentrations for each trace metal and the corresponding sample date are presented in Table 5-7.

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Code of Federal Regulation 40, Part 50.11, Appendix B, July 1, 1975.

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Penman, H. L. 1948, Natural Evaporation from Open Water, Bare Soil and Grass, Proceedings of the Royal Society, Volume 193, pp. 120 - 146, London, England.

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U.S. Department of Commerce, 1968, Climatic Atlas of the United States, Asheville, North Carolina, June, 1968.

Woodward-Clyde Consultants, 1989a, Third Quarter Aerometric Data Report, Air Quality and Meteorological Baseline Data Collection, Lincoln County, Montana, March 1989.

Woodward-Clyde Consultants, 1989b, Fourth Quarter Aerometric Data Report, Air Quality and Meteorological Baseline Data Collection, Lincoln County, Montana, April 1989.

Woodward-Clyde Consultants, 1989c, First Quarter Aerometrics Data Report, Air Quality and Meteorological Baseline Data Collection, Lincoln County, Montana, July 1989.

Woodward-Clyde Consultants, 1989d, Second Quarter Aerometric Data Report, Air Quality and Meteorological Baseline Data Collection, Lincoln County, Montana, August 1989.

TABLE 4-1

STABILITY CLASSIFICATION CRITERIA

Stability Classification	Pasquill Stability Category	Standard Deviation of the Horizontal Wind Direction Fluctuations (in degrees)	If the Nighttime Wind Speed is (mph):	Then the Nighttime Stability Category is:
Extremely Unstable	A[1]	>22.5°	<6.5	F
			6.5 to 8.1	E
			≥8.1	D
Moderately Unstable	B[1]	17.5° to 22.5°	<5.4	F
			5.4 to 6.7	E
			≥6.7	D
Slightly Unstable	C[1]	12.5° to 17.5°	<5.4	E
			≥5.4	D
Neutral	D	7.6° to 12.5°	No restrictions	D
Slightly Stable	E[1]	3.8° to 7.6°	>11.2	D
Moderately Stable	F[1]	<3.8°	≥11.2	D
			6.7 to 11.2	E

[1] All unstable categories are shifted to neutral during the daytime hours when the wind speed is greater than 13.4 mph.

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TABLE 4-2

MONTANA PROJECT
RAMSEY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE WIND SPEEDS
BY QUARTER AND FOR THE RECORDING PERIOD
1 JULY 1988 - 30 JUNE 1989

Time Period	Wind Speed (mph) Minimum Hourly Average	Maximum Hourly Average	Quarterly Average
Quarter 3, 1988	0.0	20.0	4.6
Quarter 4, 1988	0.0	28.4	5.0
Quarter 1, 1989	0.0	27.0	5.7
Quarter 2, 1989	0.1	18.0	4.6
Period of Record	0.0	28.4	5.0

TABLE 4-3

MONTANA PROJECT
RAMSEY CREEK SITE
PERCENT OCCURRENCE OF STABILITY CLASS FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 JUNE 1989

Stability Class	Percent Occurrence
A	12.5
B	9.9
C	8.9
D	24.1
E	16.7
F	27.9

TABLE 4-4

MONTANA PROJECT
RAMSEY CREEK

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX A

FROM JULY 1 1988 THROUGH JUNE 30 1989

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00402	.00134	.00000	.00000	.00000	.00000	.00536	2.56
NNE	.00402	.00122	.00000	.00000	.00000	.00000	.00524	2.68
NE	.00292	.00061	.00000	.00000	.00000	.00000	.00353	2.39
ENE	.00207	.00000	.00024	.00000	.00000	.00000	.00231	3.01
E	.00292	.00146	.00012	.00000	.00000	.00000	.00451	3.56
ESE	.00292	.00414	.00134	.00000	.00000	.00000	.00841	4.70
SE	.00573	.00877	.00609	.00024	.00000	.00000	.02083	5.68
SSE	.00548	.01450	.00743	.00024	.00000	.00000	.02765	5.72
S	.00670	.00987	.00439	.00024	.00000	.00000	.02120	5.21
SSW	.00548	.00231	.00049	.00000	.00000	.00000	.00828	3.48
SW	.00305	.00097	.00000	.00000	.00000	.00000	.00402	2.84
WSW	.00146	.00049	.00000	.00000	.00000	.00000	.00195	2.86
W	.00256	.00037	.00012	.00000	.00000	.00000	.00305	2.45
WNW	.00158	.00024	.00000	.00000	.00000	.00000	.00183	2.59
NW	.00219	.00012	.00012	.00000	.00000	.00000	.00244	2.53
NNW	.00378	.00061	.00000	.00000	.00000	.00000	.00439	2.53
TOTAL	.05689	.04702	.02034	.00073	.00000	.00000	.12498	
AVG SPD	2.37427	5.26244	8.36814	11.40580	.00000	.00000		4.49

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 1026

TABLE 4-4
(Continued)

MONTANA PROJECT
RAMSEY CREEK

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX B

FROM JULY 1 1988 THROUGH JUNE 30 1989

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00390	.00097	.00024	.00000	.00000	.00000	.00512	2.81
NNE	.00585	.00365	.00037	.00000	.00000	.00000	.00987	3.50
NE	.00341	.00061	.00037	.00000	.00000	.00000	.00439	3.08
ENE	.00110	.00024	.00012	.00000	.00000	.00000	.00146	2.34
E	.00110	.00012	.00012	.00000	.00000	.00000	.00134	2.01
ESE	.00085	.00037	.00061	.00012	.00000	.00000	.00195	5.02
SE	.00158	.00268	.00256	.00024	.00000	.00000	.00707	6.08
SSE	.00244	.00841	.00792	.00134	.00000	.00000	.02010	6.88
S	.00390	.00694	.01255	.00110	.00000	.00000	.02449	7.10
SSW	.00414	.00292	.00231	.00012	.00000	.00000	.00950	4.82
SW	.00597	.00049	.00037	.00000	.00000	.00000	.00682	2.47
WSW	.00171	.00024	.00000	.00000	.00000	.00000	.00195	2.22
W	.00097	.00012	.00000	.00000	.00000	.00000	.00110	2.40
WNW	.00097	.00012	.00000	.00000	.00000	.00000	.00110	1.93
NW	.00110	.00000	.00000	.00000	.00000	.00000	.00110	2.21
NNW	.00171	.00024	.00000	.00000	.00000	.00000	.00195	2.01
TOTAL	.04069	.02814	.02753	.00292	.00000	.00000	.09928	
AVG SPD	2.01328	5.47751	8.71297	12.14493	.00000	.00000		5.15

NUMBER OF CALM HOURS - 2
NUMBER OF HOURS OF DATA - 815

TABLE 4-4
(Continued)

MONTANA PROJECT
RAMSEY CREEK

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX C

FROM JULY 1 1988 THROUGH JUNE 30 1989

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.00341	.00073	.00037	.00000	.00000	.00000	.00451	2.59
NNE	.00962	.00305	.00256	.00012	.00000	.00000	.01535	3.96
NE	.00414	.00207	.00073	.00000	.00000	.00000	.00694	3.72
ENE	.00207	.00012	.00000	.00000	.00000	.00000	.00219	1.23
E	.00122	.00037	.00012	.00000	.00000	.00000	.00171	3.06
ESE	.00158	.00073	.00073	.00012	.00000	.00000	.00317	4.20
SE	.00158	.00158	.00207	.00012	.00000	.00000	.00536	5.97
SSE	.00268	.00353	.00365	.00231	.00000	.00000	.01218	7.11
S	.00244	.00329	.00451	.00158	.00000	.00000	.01182	6.93
SSW	.00670	.00317	.00097	.00037	.00000	.00000	.01121	3.86
SW	.00694	.00085	.00037	.00000	.00000	.00000	.00816	2.50
WSW	.00158	.00012	.00012	.00012	.00000	.00000	.00195	2.82
W	.00110	.00000	.00000	.00000	.00000	.00000	.00110	1.28
WNW	.00134	.00000	.00000	.00000	.00000	.00000	.00134	1.21
NW	.00122	.00000	.00000	.00000	.00000	.00000	.00122	1.88
NNW	.00085	.00000	.00000	.00000	.00000	.00000	.00085	1.68
TOTAL	.04848	.01961	.01620	.00475	.00000	.00000	.08905	
AVG SPD	1.83308	5.28653	8.89310	12.47046	.00000	.00000		4.45

NUMBER OF CALM HOURS - 4
NUMBER OF HOURS OF DATA - 731

TABLE 4-4
(Continued)

MONTANA PROJECT
RAMSEY CREEK

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX D

FROM JULY 1 1988 THROUGH JUNE 30 1989

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.00292	.00097	.00000	.00000	.00000	.00000	.00390	2.36
NNE	.00609	.00268	.00268	.00000	.00000	.00000	.01145	4.20
NE	.00231	.00122	.00061	.00000	.00000	.00000	.00414	3.63
ENE	.00110	.00012	.00024	.00000	.00000	.00000	.00146	2.70
E	.00097	.00037	.00110	.00012	.00000	.00000	.00256	5.33
ESE	.00256	.00085	.00499	.00037	.00012	.00000	.00889	6.35
SE	.00280	.00158	.01425	.00962	.00073	.00061	.02960	9.97
SSE	.00792	.00341	.02570	.02071	.00341	.00037	.06152	9.73
S	.00341	.00536	.01900	.01511	.00097	.00000	.04385	9.63
SSW	.02436	.00353	.00573	.00183	.00000	.00000	.03545	4.13
SW	.02509	.00122	.00085	.00073	.00000	.00000	.02790	2.70
WSW	.00365	.00085	.00158	.00037	.00000	.00000	.00646	4.72
W	.00134	.00000	.00000	.00000	.00000	.00000	.00134	1.45
WNW	.00110	.00000	.00000	.00000	.00000	.00000	.00110	1.28
NW	.00061	.00012	.00000	.00000	.00000	.00000	.00073	2.36
NNW	.00049	.00000	.00000	.00000	.00000	.00000	.00049	1.65
TOTAL	.08673	.02229	.07675	.04885	.00524	.00097	.24083	
AVG SPD	1.87738	5.71822	8.60482	13.27833	18.80081	23.21739		7.14

NUMBER OF CALM HOURS - 5
NUMBER OF HOURS OF DATA - 1977

TABLE 4-4
(Continued)

MONTANA PROJECT
RAMSEY CREEK

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX E

FROM JULY 1 1988 THROUGH JUNE 30 1989

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.00731	.00183	.00000	.00000	.00000	.00000	.00914	2.24
NNE	.00694	.00207	.00012	.00000	.00000	.00000	.00914	2.48
NE	.00171	.00134	.00024	.00000	.00000	.00000	.00329	3.91
ENE	.00037	.00122	.00000	.00000	.00000	.00000	.00158	4.85
E	.00073	.00280	.00000	.00000	.00000	.00000	.00353	4.96
ESE	.00158	.00353	.00012	.00000	.00000	.00000	.00524	4.70
SE	.00402	.01096	.00110	.00012	.00000	.00000	.01620	5.24
SSE	.01267	.01364	.00305	.00012	.00000	.00000	.02948	4.06
S	.00560	.01109	.00134	.00012	.00000	.00000	.01815	4.82
SSW	.02668	.00487	.00024	.00012	.00000	.00000	.03192	2.60
SW	.02802	.00158	.00000	.00000	.00000	.00000	.02960	2.00
WSW	.00426	.00000	.00000	.00000	.00000	.00000	.00426	1.85
W	.00195	.00012	.00000	.00000	.00000	.00000	.00207	1.85
WNW	.00085	.00000	.00000	.00000	.00000	.00000	.00085	2.32
NW	.00097	.00000	.00000	.00000	.00000	.00000	.00097	1.92
NNW	.00171	.00000	.00000	.00000	.00000	.00000	.00171	1.29
TOTAL	.10537	.05506	.00621	.00049	.00000	.00000	.16713	
AVG SPD	1.71742	5.80723	8.20461	12.43478	.00000	.00000		3.34

NUMBER OF CALM HOURS - 5
NUMBER OF HOURS OF DATA - 1372

TABLE 4-4
(Continued)

MONTANA PROJECT
RAMSEY CREEK

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX F

FROM JULY 1 1988 THROUGH JUNE 30 1989

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.01291	.00195	.00000	.00000	.00000	.00000	.01486	2.45
NNE	.00987	.00219	.00000	.00000	.00000	.00000	.01206	2.68
NE	.00670	.00122	.00000	.00000	.00000	.00000	.00792	2.42
ENE	.00365	.00134	.00000	.00000	.00000	.00000	.00499	2.44
E	.00524	.00195	.00000	.00000	.00000	.00000	.00719	2.35
ESE	.00341	.00378	.00000	.00000	.00000	.00000	.00719	3.61
SE	.00975	.00536	.00000	.00000	.00000	.00000	.01511	3.16
SSE	.01218	.00865	.00000	.00000	.00000	.00000	.02083	3.20
S	.02034	.01084	.00000	.00000	.00000	.00000	.03119	3.03
SSW	.05884	.00463	.00000	.00000	.00000	.00000	.06347	1.93
SW	.04739	.00085	.00000	.00000	.00000	.00000	.04824	1.54
WSW	.01559	.00024	.00000	.00000	.00000	.00000	.01584	1.52
W	.00865	.00024	.00000	.00000	.00000	.00000	.00889	1.56
WNW	.00609	.00012	.00000	.00000	.00000	.00000	.00621	1.69
NW	.00694	.00061	.00000	.00000	.00000	.00000	.00755	1.71
NNW	.00658	.00061	.00000	.00000	.00000	.00000	.00719	1.91
TOTAL	.23413	.04459	.00000	.00000	.00000	.00000	.27872	
AVG SPD	1.76370	4.72630	.00000	.00000	.00000	.00000		2.24

NUMBER OF CALM HOURS - 33
NUMBER OF HOURS OF DATA - 2288

TABLE 4-4
(Continued)

MONTANA PROJECT
RAMSEY CREEK

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX ALL

FROM JULY 1 1988 THROUGH JUNE 30 1989

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.03447	.00780	.00061	.00000	.00000	.00000	.04288	2.47
NNE	.04239	.01486	.00573	.00012	.00000	.00000	.06310	3.37
NE	.02120	.00707	.00195	.00000	.00000	.00000	.03021	3.14
ENE	.01035	.00305	.00061	.00000	.00000	.00000	.01401	2.63
E	.01218	.00707	.00146	.00012	.00000	.00000	.02083	3.46
ESE	.01291	.01340	.00780	.00061	.00012	.00000	.03484	4.87
SE	.02546	.03094	.02607	.01035	.00073	.00061	.09416	6.60
SSE	.04337	.05214	.04775	.02473	.00341	.00037	.17176	6.80
S	.04239	.04739	.04178	.01815	.00097	.00000	.15069	6.44
SSW	.12620	.02144	.00975	.00244	.00000	.00000	.15982	2.94
SW	.11646	.00597	.00158	.00073	.00000	.00000	.12474	2.06
WSW	.02826	.00195	.00171	.00049	.00000	.00000	.03240	2.40
W	.01657	.00085	.00012	.00000	.00000	.00000	.01754	1.77
WNW	.01194	.00049	.00000	.00000	.00000	.00000	.01243	1.80
NW	.01303	.00085	.00012	.00000	.00000	.00000	.01401	1.96
NNW	.01511	.00146	.00000	.00000	.00000	.00000	.01657	2.00
TOTAL	.57230	.21671	.14703	.05774	.00524	.00097	1.00000	
AVG SPD	1.85672	5.36755	8.60718	13.12365	18.80081	23.21739		4.37

NUMBER OF CALM HOURS - 49
NUMBER OF MISSING HOURS - 551
NUMBER OF HOURS OF DATA - 8209

TABLE 4-5

MONTANA PROJECT
RAMSEY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE TEMPERATURES
BY QUARTER AND FOR THE RECORDING PERIOD
1 JULY 1988 - 30 JUNE 1989

Time Period	Temperature (°C) Minimum Hourly Average	Maximum Hourly Average	Quarterly Average
Quarter 3, 1988	-2.1	32.8	14.8
Quarter 4, 1988	-18.5	17.2	0.2
Quarter 1, 1989	-31.3	12.0	-4.6
Quarter 2, 1989	-13.5	26.7	6.7
Period of Record	-31.3	32.8	4.3

TABLE 4-6

MONTANA PROJECT
LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE WIND SPEEDS
BY QUARTER AND FOR THE RECORDING PERIOD
1 JULY 1988 - 30 JUNE 1989

Time Period	Wind Speed (mph) Minimum Hourly Average	Wind Speed (mph) Maximum Hourly Average	Wind Speed (mph) Quarterly Average
Quarter 3, 1988	0.2	19.7	2.2
Quarter 4, 1988	0.0	12.5	2.3
Quarter 1, 1989	0.0	13.0	2.5
Quarter 2, 1989	0.3	11.1	2.6
Period of Record	0.0	19.7	2.4

TABLE 4-7

MONTANA PROJECT
LITTLE CHERRY CREEK SITE
PERCENT OCCURRENCE OF STABILITY CLASS FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 JUNE 1989

Stability Class	Percent Occurrence
A	17.8
B	10.1
C	9.7
D	10.3
E	11.3
F	40.8

TABLE 4-8

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX A

FROM JULY 1 1988 THROUGH JUNE 30 1989

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.01084	.00031	.00015	.00000	.00000	.00000	.01129	2.37
NNE	.00443	.00046	.00000	.00000	.00000	.00000	.00488	2.41
NE	.00397	.00000	.00000	.00000	.00000	.00000	.00397	2.19
ENE	.00305	.00015	.00000	.00000	.00000	.00000	.00321	2.12
E	.00153	.00000	.00000	.00000	.00000	.00000	.00153	2.33
ESE	.00366	.00046	.00000	.00000	.00000	.00000	.00412	2.61
SE	.00733	.00168	.00000	.00000	.00000	.00000	.00900	2.72
SSE	.00855	.00259	.00000	.00000	.00000	.00000	.01114	3.06
S	.01526	.00565	.00122	.00000	.00000	.00000	.02213	3.19
SSW	.01389	.01053	.00153	.00000	.00000	.00000	.02595	3.80
SW	.01236	.01893	.00076	.00000	.00000	.00000	.03205	4.23
WSW	.00733	.00458	.00000	.00000	.00000	.00000	.01190	3.41
W	.00748	.00168	.00000	.00000	.00000	.00000	.00916	2.77
WNW	.00641	.00061	.00000	.00000	.00000	.00000	.00702	2.22
NW	.01023	.00092	.00000	.00000	.00000	.00000	.01114	2.25
NNW	.00916	.00061	.00000	.00000	.00000	.00000	.00977	2.24
TOTAL	.12546	.04915	.00366	.00000	.00000	.00000	.17827	
AVG SPD	2.26351	5.03024	7.89493	.00000	.00000	.00000		3.14

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 1168

TABLE 4-8
(Continued)

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX B

FROM JULY 1 1988 THROUGH JUNE 30 1989

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.01190	.00092	.00000	.00000	.00000	.00000	.01282	2.30
NNE	.00504	.00092	.00000	.00000	.00000	.00000	.00595	2.25
NE	.00458	.00046	.00000	.00000	.00000	.00000	.00504	2.43
ENE	.00107	.00000	.00000	.00000	.00000	.00000	.00107	2.31
E	.00107	.00015	.00000	.00000	.00000	.00000	.00122	2.47
ESE	.00046	.00015	.00000	.00000	.00000	.00000	.00061	2.48
SE	.00275	.00046	.00015	.00000	.00000	.00000	.00336	3.09
SSE	.00397	.00031	.00000	.00000	.00000	.00000	.00427	2.30
S	.00580	.00168	.00031	.00015	.00000	.00000	.00794	3.07
SSW	.00870	.00290	.00092	.00000	.00000	.00000	.01252	3.24
SW	.00748	.00412	.00061	.00000	.00000	.00000	.01221	3.41
WSW	.00687	.00076	.00000	.00000	.00000	.00000	.00763	2.38
W	.00382	.00031	.00000	.00000	.00000	.00000	.00412	2.19
WNW	.00488	.00015	.00000	.00000	.00000	.00000	.00504	2.06
NW	.00595	.00061	.00000	.00000	.00000	.00000	.00656	2.25
NNW	.00946	.00076	.00000	.00000	.00000	.00000	.01023	2.20
TOTAL	.08379	.01465	.00198	.00015	.00000	.00000	.10058	
AVG SPD	2.01347	5.24638	8.24749	11.30435	.00000	.00000		2.62

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 659

TABLE 4-8
(Continued)

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX C

FROM JULY 1 1988 THROUGH JUNE 30 1989

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.01175	.00107	.00000	.00000	.00000	.00000	.01282	2.19
NNE	.00611	.00092	.00000	.00000	.00000	.00000	.00702	1.81
NE	.00443	.00031	.00000	.00000	.00000	.00000	.00473	2.02
ENE	.00275	.00015	.00000	.00000	.00000	.00000	.00290	2.94
E	.00214	.00000	.00000	.00000	.00000	.00000	.00214	1.76
ESE	.00153	.00015	.00000	.00000	.00000	.00000	.00168	2.23
SE	.00183	.00031	.00000	.00000	.00000	.00000	.00214	2.70
SSE	.00412	.00107	.00000	.00000	.00000	.00000	.00519	2.61
S	.00717	.00198	.00046	.00000	.00000	.00000	.00962	2.64
SSW	.00839	.00214	.00092	.00000	.00000	.00000	.01145	2.83
SW	.00824	.00092	.00000	.00000	.00000	.00000	.00916	2.00
WSW	.00412	.00046	.00000	.00000	.00000	.00000	.00458	2.36
W	.00259	.00031	.00000	.00000	.00000	.00000	.00290	1.79
WNW	.00290	.00015	.00000	.00000	.00000	.00000	.00305	1.98
NW	.00412	.00061	.00000	.00000	.00000	.00000	.00473	2.42
NNW	.01282	.00046	.00000	.00000	.00000	.00000	.01328	2.11
TOTAL	.08501	.01099	.00137	.00000	.00000	.00000	.09737	
AVG SPD	1.85216	4.98913	8.00000	.00000	.00000	.00000		2.29

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 638

TABLE 4-8
(Continued)

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX D

FROM JULY 1 1988 THROUGH JUNE 30 1989

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.00900	.00107	.00015	.00000	.00000	.00000	.01023	1.97
NNE	.00794	.00076	.00000	.00000	.00000	.00000	.00870	1.50
NE	.00443	.00000	.00000	.00000	.00000	.00000	.00443	1.21
ENE	.00198	.00015	.00000	.00000	.00000	.00000	.00214	1.83
E	.00198	.00000	.00000	.00000	.00000	.00000	.00198	1.89
ESE	.00259	.00000	.00000	.00000	.00000	.00000	.00259	1.66
SE	.00305	.00046	.00000	.00000	.00000	.00000	.00351	1.60
SSE	.00595	.00031	.00046	.00000	.00015	.00000	.00687	2.64
S	.00870	.00198	.00305	.00000	.00000	.00000	.01374	3.73
SSW	.01114	.00198	.00244	.00000	.00000	.00000	.01557	3.22
SW	.00962	.00076	.00046	.00000	.00000	.00000	.01084	2.18
WSW	.00473	.00046	.00000	.00000	.00000	.00000	.00519	2.16
W	.00305	.00015	.00000	.00000	.00000	.00000	.00321	1.95
WNW	.00229	.00000	.00015	.00000	.00000	.00000	.00244	1.97
NW	.00519	.00031	.00000	.00000	.00000	.00000	.00549	1.58
NNW	.00565	.00046	.00015	.00000	.00000	.00000	.00626	2.18
TOTAL	.08730	.00885	.00687	.00000	.00015	.00000	.10317	
AVG SPD	1.59745	4.92054	8.47536	.00000	17.13044	.00000		2.36

NUMBER OF CALM HOURS - 1
NUMBER OF HOURS OF DATA - 676

TABLE 4-8
(Continued)

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX E

FROM JULY 1 1988 THROUGH JUNE 30 1989

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00641	.00168	.00000	.00000	.00000	.00000	.00809	1.76
NNE	.00611	.00076	.00000	.00000	.00000	.00000	.00687	1.52
NE	.00473	.00000	.00000	.00000	.00000	.00000	.00473	1.36
ENE	.00290	.00000	.00000	.00000	.00000	.00000	.00290	.88
E	.00427	.00000	.00000	.00000	.00000	.00000	.00427	1.21
ESE	.00397	.00000	.00000	.00000	.00000	.00000	.00397	1.43
SE	.00611	.00015	.00000	.00000	.00000	.00000	.00626	1.43
SSE	.00870	.00137	.00000	.00000	.00000	.00000	.01007	2.09
S	.01252	.00305	.00031	.00000	.00000	.00000	.01587	2.61
SSW	.01084	.00382	.00046	.00000	.00000	.00000	.01511	2.96
SW	.00870	.00153	.00000	.00000	.00000	.00000	.01023	2.23
WSW	.00305	.00046	.00000	.00000	.00000	.00000	.00351	1.78
W	.00214	.00015	.00015	.00000	.00000	.00000	.00244	2.18
WNW	.00290	.00000	.00000	.00000	.00000	.00000	.00290	1.45
NW	.00611	.00046	.00000	.00000	.00000	.00000	.00656	1.91
NNW	.00763	.00153	.00000	.00000	.00000	.00000	.00916	1.98
TOTAL	.09707	.01496	.00092	.00000	.00000	.00000	.11294	
AVG SPD	1.46527	5.36202	8.21739	.00000	.00000	.00000		2.04

NUMBER OF CALM HOURS - 2
NUMBER OF HOURS OF DATA - 740

TABLE 4-8
(Continued)

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX F

FROM JULY 1 1988 THROUGH JUNE 30 1989

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.01129	.00061	.00000	.00000	.00000	.00000	.01190	1.23
NNE	.01190	.00015	.00000	.00000	.00000	.00000	.01206	1.12
NE	.00778	.00000	.00000	.00000	.00000	.00000	.00778	.84
ENE	.00962	.00046	.00000	.00000	.00000	.00000	.01007	1.27
E	.01999	.00000	.00000	.00000	.00000	.00000	.01999	.90
ESE	.02198	.00015	.00000	.00000	.00000	.00000	.02213	.97
SE	.03846	.00046	.00000	.00000	.00000	.00000	.03892	1.06
SSE	.05235	.00153	.00000	.00000	.00000	.00000	.05388	1.33
S	.05342	.00443	.00000	.00000	.00000	.00000	.05784	1.65
SSW	.04029	.00259	.00000	.00000	.00000	.00000	.04289	1.62
SW	.03098	.00275	.00000	.00000	.00000	.00000	.03373	1.54
WSW	.02137	.00061	.00000	.00000	.00000	.00000	.02198	1.31
W	.02091	.00015	.00000	.00000	.00000	.00000	.02106	1.12
WNW	.01664	.00061	.00000	.00000	.00000	.00000	.01725	1.23
NW	.01770	.00015	.00000	.00000	.00000	.00000	.01786	1.17
NNW	.01755	.00076	.00000	.00000	.00000	.00000	.01832	1.38
TOTAL	.39225	.01542	.00000	.00000	.00000	.00000	.40766	
AVG SPD	1.18410	4.64572	.00000	.00000	.00000	.00000		1.31

NUMBER OF CALM HOURS - 9
NUMBER OF HOURS OF DATA - 2671

TABLE 4-8
(Continued)

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX ALL

FROM JULY 1 1988 THROUGH JUNE 30 1989

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.06120	.00565	.00031	.00000	.00000	.00000	.06716	1.98
NNE	.04151	.00397	.00000	.00000	.00000	.00000	.04548	1.65
NE	.02991	.00076	.00000	.00000	.00000	.00000	.03068	1.59
ENE	.02137	.00092	.00000	.00000	.00000	.00000	.02228	1.66
E	.03098	.00015	.00000	.00000	.00000	.00000	.03114	1.19
ESE	.03419	.00092	.00000	.00000	.00000	.00000	.03510	1.35
SE	.05952	.00351	.00015	.00000	.00000	.00000	.06319	1.53
SSE	.08364	.00717	.00046	.00000	.00015	.00000	.09142	1.84
S	.10287	.01877	.00534	.00015	.00000	.00000	.12714	2.43
SSW	.09325	.02396	.00626	.00000	.00000	.00000	.12347	2.72
SW	.07738	.02900	.00183	.00000	.00000	.00000	.10821	2.71
WSW	.04747	.00733	.00000	.00000	.00000	.00000	.05479	2.11
W	.03999	.00275	.00015	.00000	.00000	.00000	.04289	1.74
WNW	.03602	.00153	.00015	.00000	.00000	.00000	.03770	1.65
NW	.04930	.00305	.00000	.00000	.00000	.00000	.05235	1.78
NNW	.06227	.00458	.00015	.00000	.00000	.00000	.06700	1.93
TOTAL	.87088	.11401	.01480	.00015	.00015	.00000	1.00000	
AVG SPD	1.55738	5.03708	8.24115	11.30435	17.13044	.00000		2.06

NUMBER OF CALM HOURS - 12
NUMBER OF MISSING HOURS - 2208
NUMBER OF HOURS OF DATA - 6552

TABLE 4-9

MONTANA PROJECT
LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE TEMPERATURES
BY QUARTER AND FOR THE RECORDING PERIOD
1 JULY 1988 - 30 JUNE 1989

Time Period	Temperature (°C) Minimum Hourly Average	Maximum Hourly Average	Quarterly Average
Quarter 3, 1988	-5.0	34.8	13.1
Quarter 4, 1988	-23.3	27.0	1.0
Quarter 1, 1989	-32.3	14.5	-4.0
Quarter 2, 1989	-8.3	29.6	8.5
Period of Record	-32.3	34.8	4.7

TABLE 4-10

MONTANA PROJECT
LITTLE CHERRY CREEK SITE
PRECIPITATION TOTALS BY QUARTER AND FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 JUNE 1989

Time Period	Precipitation (inches)
Quarter 3, 1988	1.00
Quarter 4, 1988	3.85
Quarter 1, 1989	2.48
Quarter 2, 1989	2.23
Period of Record	9.56

TABLE 4-11

MONTANA PROJECT
LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE RELATIVE HUMIDITY
BY QUARTER AND FOR THE RECORDING PERIOD
1 JULY 1988 - 30 JUNE 1989

Time Period	Relative Humidity Percent Minimum	Maximum	Average
Quarter 3, 1988	16.5	100.0	58.6
Quarter 4, 1988	21.0	99.0	65.9
Quarter 1, 1989	15.2	93.3	64.2
Quarter 2, 1989	11.7	96.8	57.0
Period of Record	11.7	100.0	61.4

22134 (22134r9411 08-24-89) (RPT)

TABLE 4-12

MONTANA PROJECT
LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE SOLAR RADIATION
BY QUARTER AND FOR THE RECORDING PERIOD
1 JULY 1988 - 30 JUNE 1989

Time Period	Solar Radiation (Langleys/min) Minimum	Maximum	Average
Quarter 3, 1988	0.00	1.36	0.28
Quarter 4, 1988	0.00	0.61	0.04
Quarter 1, 1989	0.00	1.11	0.09
Quarter 2, 1989	0.00	1.35	0.23
Period of Record	0.00	1.36	0.16

22134 (22134r9412 08-24-89) (RPT)

TABLE 4-13

MONTANA PROJECT
LITTLE CHERRY CREEK SITE
EVAPORATION TOTALS BY QUARTER AND FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 JUNE 1989

Time Period	Evaporation (inches)
Quarter 3, 1988	14.648
Quarter 4, 1988	2.945
Quarter 1, 1989	6.351
Quarter 2, 1989	10.433
Period of Record	34.377

22134 (22134r9413 08-24-89) (RPT)

TABLE 5-1

MONTANA PROJECT
DATA RECOVERY FOR AIR QUALITY PARAMETERS AT THE
RAMSEY CREEK AND LITTLE CHERRY CREEK SITES,
1 JULY 1988 - 30 JUNE 1989

Parameter	Percent Recovery
Ramsey PM 10 #1	80.3
Ramsey PM 10 #2	82.0
Little Cherry TSP #3	83.6
Little Cherry PM 10 #4	85.2
TOTAL	82.8

TABLE 5-2 - PM 10 CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: PM 10
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: RAMSEY CREEK #1
UNITS: MICROGRAMS/(CU.M)
PERIOD: JULY 1988 TO JUNE 1989

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								18					1	18	18	18
02							***						0	***	***	***
03		***				13							1	13	13	13
04	5			3	9								3	5	9	5
05			14								6	6	3	8	14	8
06									157	***			1	157	157	157
07								7					1	7	7	7
08							***						0	***	***	***
09		6				***							1	6	6	6
10	4			***	5								2	4	5	4
11			7								13	3	3	7	13	6
12									5	15			2	10	15	9
13								14					1	14	14	14
14							***						0	***	***	***
15		6				6							2	6	6	6
16	1			***	13								2	7	13	4
17			***								10	8	2	9	10	9
18									9	12			2	10	12	10
19								12					1	12	12	12
20							11						1	11	11	11
21		7				6							2	6	7	6
22	3			***	***								1	3	3	3
23			4								5	4	3	4	5	4
24									***	10			1	10	10	10
25								24					1	24	24	24
26							8						1	8	8	8
27		3				19							2	11	19	8
28	2			20	5								3	9	20	6
29			5								4	3	3	4	5	4
30									8	14			2	11	14	11
31								13					1	13	13	13
NO.	5	4	4	2	4	4	2	6	4	4	5	5	49			
MEAN	3	6	8	12	8	11	10	15	45	13	8	5		12		
MAX	5	7	14	20	13	19	11	24	157	15	13	8			157	
GEO MEAN	3	5	7	8	7	10	9	14	15	13	7	4				7

TABLE 5-3 - PM 10 CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: PM 10
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: RAMSEY CREEK #2
UNITS: MICROGRAMS/(CU.M)
PERIOD: JULY 1988 TO JUNE 1989

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								35					1	35	35	35
02							***						0	***	***	***
03		***				13							1	13	13	13
04	4			3	9								3	5	9	5
05			6								6	6	3	6	6	6
06									153	***			1	153	153	153
07								11					1	11	11	11
08							***						0	***	***	***
09		9				24							2	16	24	15
10	4			***	8								2	6	8	6
11			7								12	3	3	7	12	6
12									8	17			2	12	17	12
13								14					1	14	14	14
14							***						0	***	***	***
15		6				5							2	5	6	5
16	1			12	14								3	9	14	6
17			***								8	7	2	7	8	7
18									32	13			2	22	32	20
19								12					1	12	12	12
20							13						1	13	13	13
21		5				22							2	13	22	10
22	4			***	***								1	4	4	4
23			8								5	6	3	6	8	6
24									***	11			1	11	11	11
25								23					1	23	23	23
26							13						1	13	13	13
27		3				24							2	13	24	8
28	3			13	5								3	7	13	6
29			5								5	4	3	4	5	5
30									***	15			1	15	15	15
31								25					1	25	25	25
NO.	5	4	4	3	4	5	2	6	3	4	5	5	50			
MEAN	3	6	7	9	9	18	13	20	64	14	7	5		13		
MAX	4	9	8	13	14	24	13	35	153	17	12	7			153	
GEO MEAN	3	5	6	8	8	15	13	18	34	14	7	5				9

TABLE 5-4 - TOTAL SUSPENDED PARTICULATE (TSP) CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: TOTAL SUSPENDED PARTICULATE
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: LITTLE CHERRY CREEK #3
UNITS: MICROGRAMS/(CU.M)
PERIOD: JULY 1988 TO JUNE 1989

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								45					1	45	45	45
02							***						0	***	***	***
03		***				27							1	27	27	27
04	***			13	23								2	18	23	17
05			43								73	30	3	48	73	45
06									***	267			1	267	267	267
07								26					1	26	26	26
08							27						1	27	27	27
09		64				67							2	65	67	65
10	33			12	49								3	31	49	27
11			48								13	53	3	38	53	32
12									20	***			1	20	20	20
13								31					1	31	31	31
14							14						1	14	14	14
15		31				24							2	27	31	27
16	***			18	46								2	32	46	29
17			***								15	51	2	33	51	28
18									22	145			2	83	145	56
19								***					0	***	***	***
20							35						1	35	35	35
21		60				31							2	45	60	43
22	***			7	***								1	7	7	7
23			21								12	24	3	19	24	18
24									26	23			2	24	26	24
25								79					1	79	79	79
26							17						1	17	17	17
27		74				59							2	66	74	66
28	22			23	27								3	24	27	24
29			37								21	47	3	35	47	33
30									57	197			2	127	197	106
31								40					1	40	40	40
NO.	2	4	4	5	4	5	4	5	4	4	5	5	51			
MEAN	28	57	37	15	36	42	23	44	31	158	27	41		44		
MAX	33	74	48	23	49	67	35	79	57	267	73	53			267	
GEO MEAN	27	54	36	14	34	38	22	41	28	115	20	39				33

TABLE 5-5 - PM 10 CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: PM 10
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: LITTLE CHERRY CREEK #4
UNITS: MICROGRAMS/(CU.M)
PERIOD: JULY 1988 TO JUNE 1989

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								16					1	16	16	16
02							***						0	***	***	***
03		***				6							1	6	6	6
04	***			4	6								2	5	6	5
05			6								26	9	3	13	26	11
06									189	31			2	110	189	77
07								9					1	9	9	9
08							***						0	***	***	***
09		9				24							2	16	24	15
10	9			4	7								3	6	9	6
11			4								9	5	3	6	9	6
12									6	18			2	12	18	10
13								18					1	18	18	18
14							***						0	***	***	***
15		10				5							2	7	10	7
16	3			10	13								3	8	13	7
17			***								13	6	2	9	13	9
18									5	28			2	16	28	12
19								***					0	***	***	***
20							16						1	16	16	16
21		6				6							2	6	6	6
22	4			3	***								2	3	4	3
23			4								5	***	2	4	5	4
24									7	10			2	8	10	8
25								28					1	28	28	28
26							12						1	12	12	12
27		5				24							2	14	24	11
28	5			4	4								3	4	5	4
29			4								4	6	3	4	6	5
30									11	20			2	15	20	15
31								15					1	15	15	15
NO.	4	4	4	5	4	5	2	5	5	5	5	4	52			
MEAN	5	8	5	5	8	13	14	17	44	21	11	7		14		
MAX	9	10	6	10	13	24	16	28	189	31	26	9			189	
GEO MEAN	5	7	4	5	7	10	14	16	13	20	9	6				9

TABLE 5-6

MONTANA PROJECT
MONTHLY AVERAGE[1] TRACE ELEMENT CONCENTRATIONS
(ng/m^3) AT THE LITTLE CHERRY CREEK SITE
1 JULY 1988 THROUGH 30 JUNE 1989

Month	Sb	As	Cd	Cr	Cu	Fe	Pb	Zn
July 1988	0.1	0.8	ND	ND	45.0	148.3	ND	8.1
August 1988	0.1	0.5	ND	ND	47.1	481.2	ND	6.2
September 1988	0.2	0.3	ND	ND	57.9	1204.9	3.8	8.2
October 1988	0.7	1.1	ND	4.0	78.9	70.7	12.7	6.3
November 1988	2.1	1.2	ND	ND	76.3	62.1	7.6	5.9
December 1988	0.7	0.3	ND	ND	90.6	16.3	7.6	23.8
January 1989	0.3	0.3	ND	ND	119.8	20.9	ND	5.1
February 1989	0.3	0.5	ND	ND	110.0	19.6	9.0	4.7
March 1989	0.8	0.4	ND	ND	81.9	25.8	ND	7.2
April 1989	0.3	0.4	ND	ND	52.9	42.3	ND	ND
May 1989	0.3	1.1	ND	ND	95.3	96.9	ND	ND
June 1989	0.3	1.3	ND	ND	98.6	262.9	7.4	ND
Annual Arithmetic Mean	0.5	0.7	ND	3.2	79.5	204.3	5.6	7.1
Annual Geometric Mean	0.3	0.4	ND	3.1	64.52	42.31	4.3	5.2

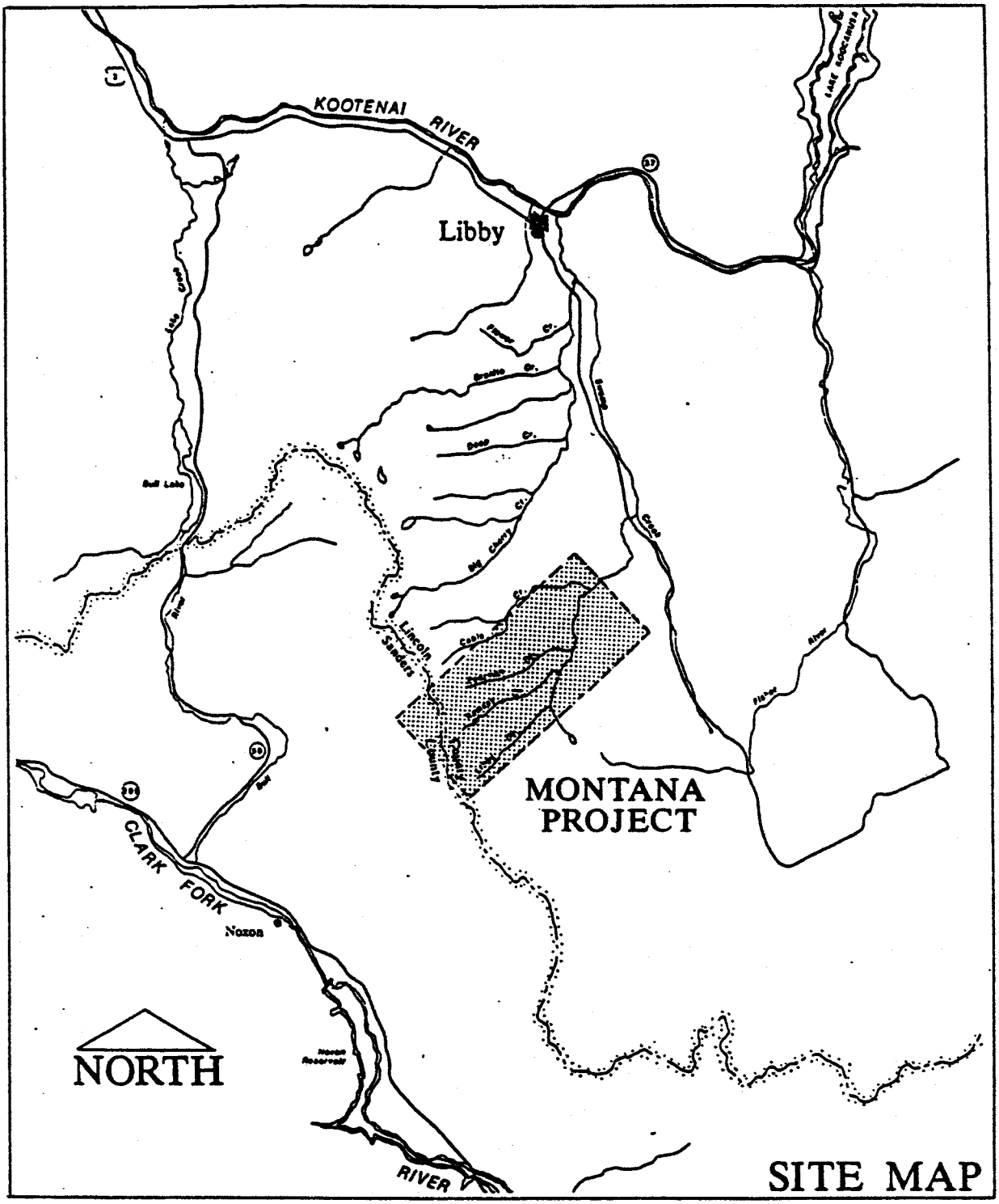
ND = Not detected

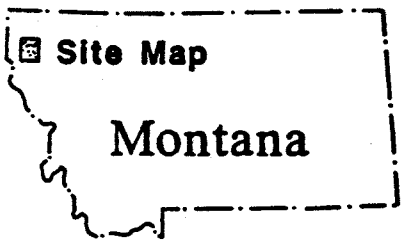
[1] Half of the detection limit is used for the ND samples in the monthly average calculations

TABLE 5-7

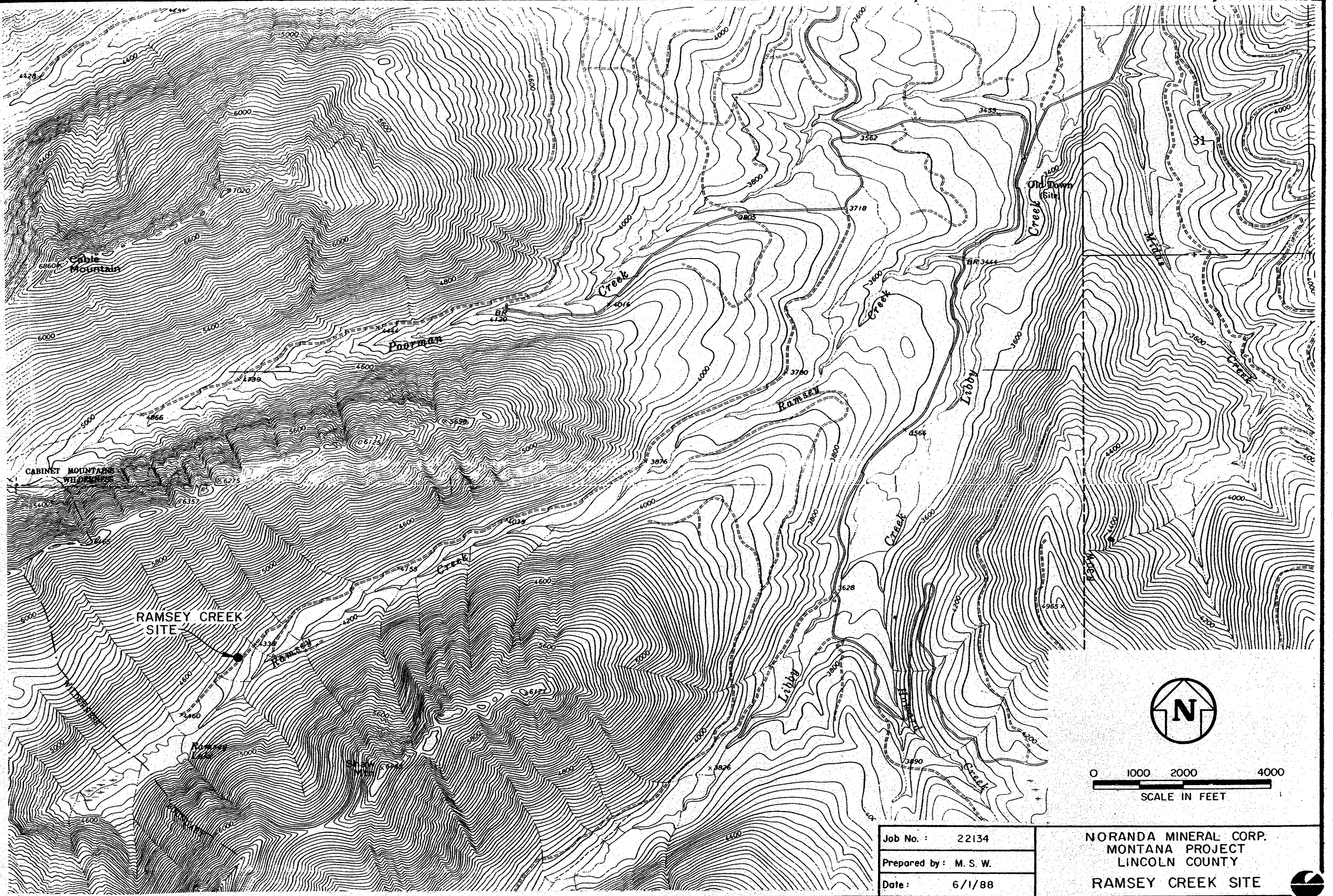
MONTANA PROJECT
MAXIMUM TRACE ELEMENT CONCENTRATIONS (ng/m^3) AT THE
LITTLE CHERRY CREEK SITE, 1 JULY 1988 THROUGH 30 JUNE 1989

Element	Maximum Concentration	Sample Date
Sb	3.27	11/23/88
As	2.57	06/27/89
Cd	ND	--
Cr	6.63	10/06/88
Cu	138.36	06/21/89
Fe	5646.77	09/06/88
Pb	28.87	10/30/88
Zn	96.67	12/05/88





Job No. 22134	LOCATION MAP
Prepared by: K. B. E.	
Date: 1/31/89	



Job No. :	22134
Prepared by :	M. S. W.
Date :	6/1/88

NORANDA MINERAL CORP.
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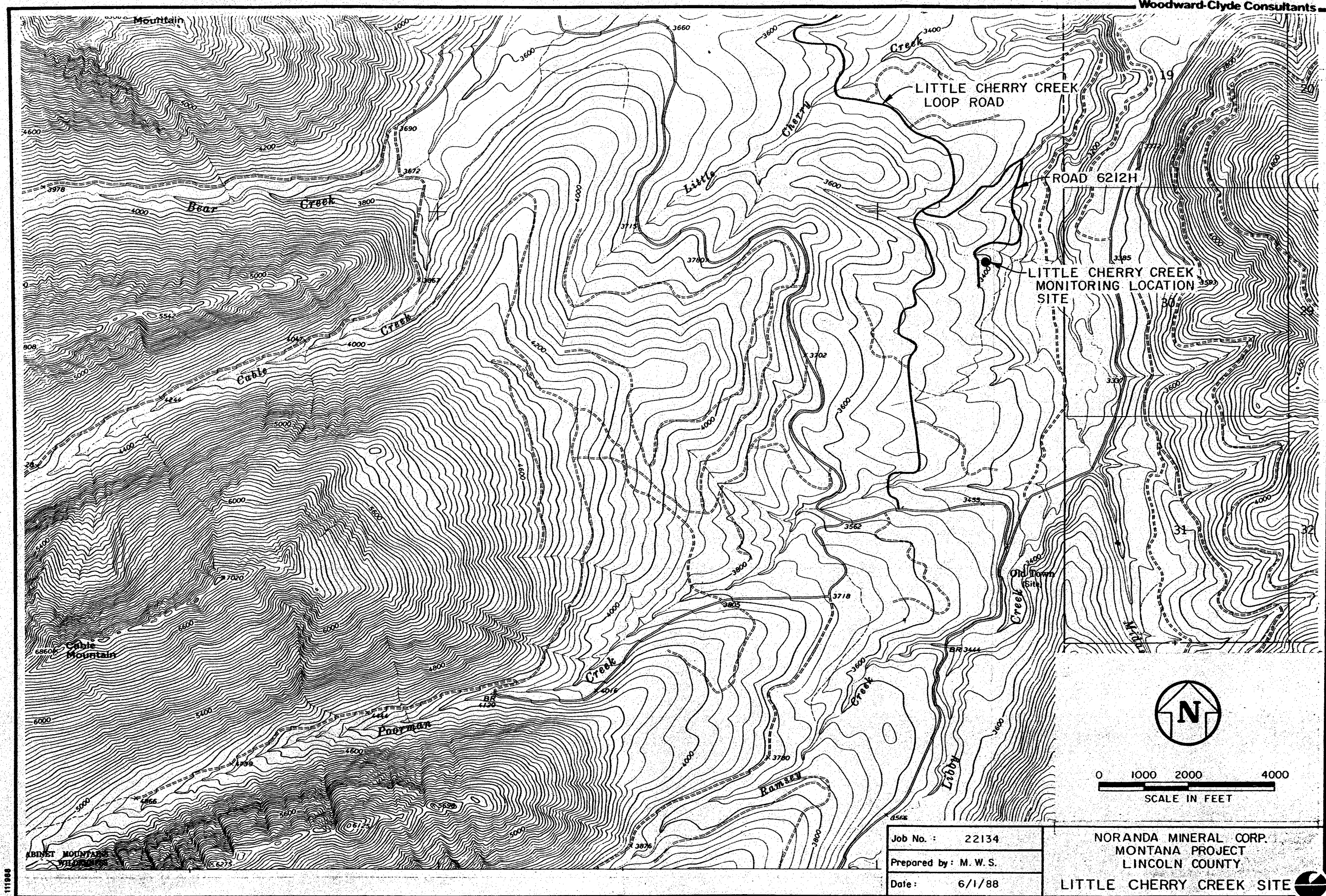
LINCOLN COUNTY

RAMSEY CREEK SITE

FIG. 3-1



Job No. :	22134
Prepared by :	M. W. S.
Date :	6/1/88

NORANDA MINERAL CORP.
MONTANA PROJECT
LINCOLN COUNTY

LITTLE CHERRY CREEK SITE

FIG. 3-2

FIG. 4-1. RAMSEY CREEK WIND ROSE - 7/1/88 - 6/30/89

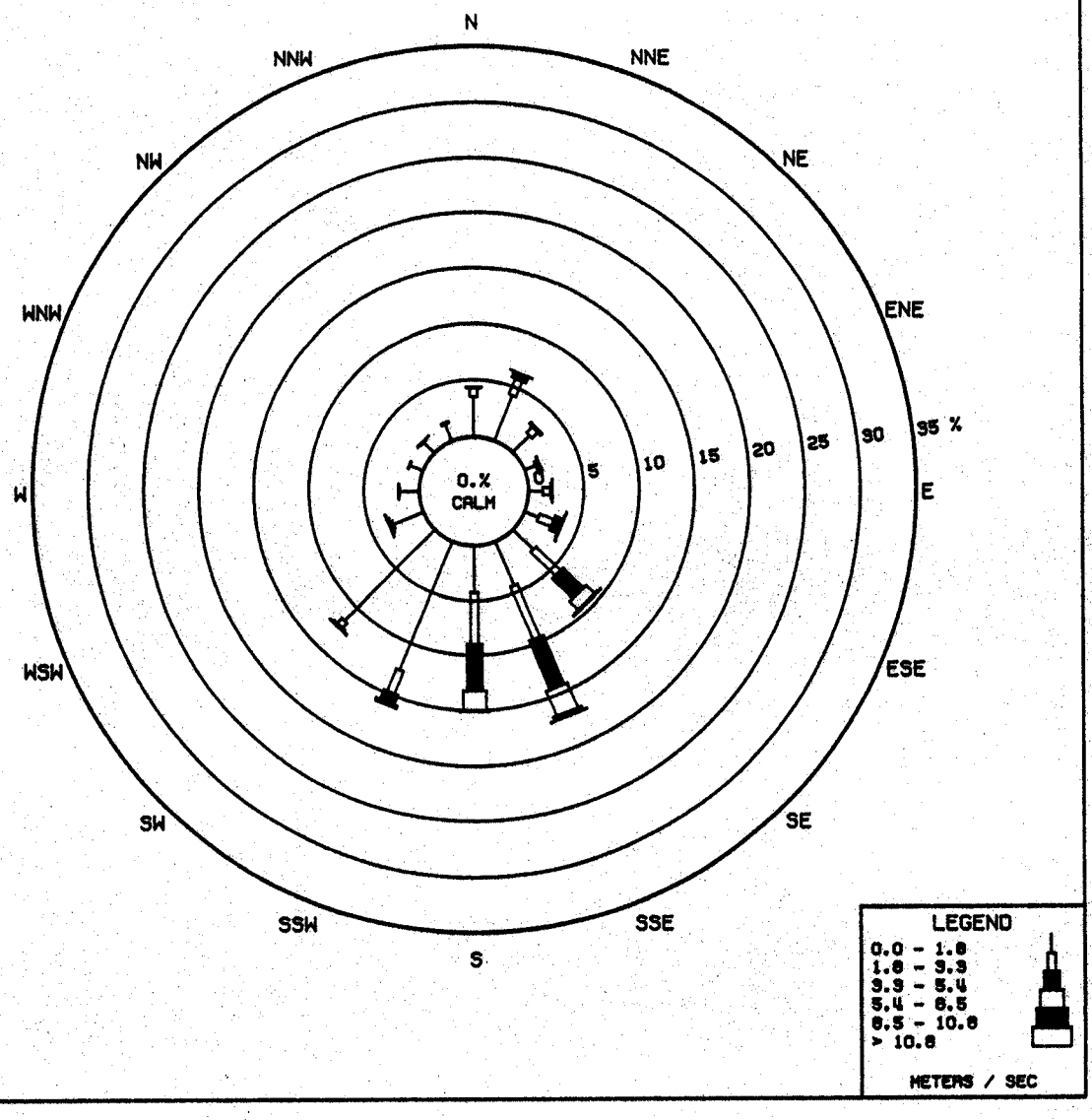
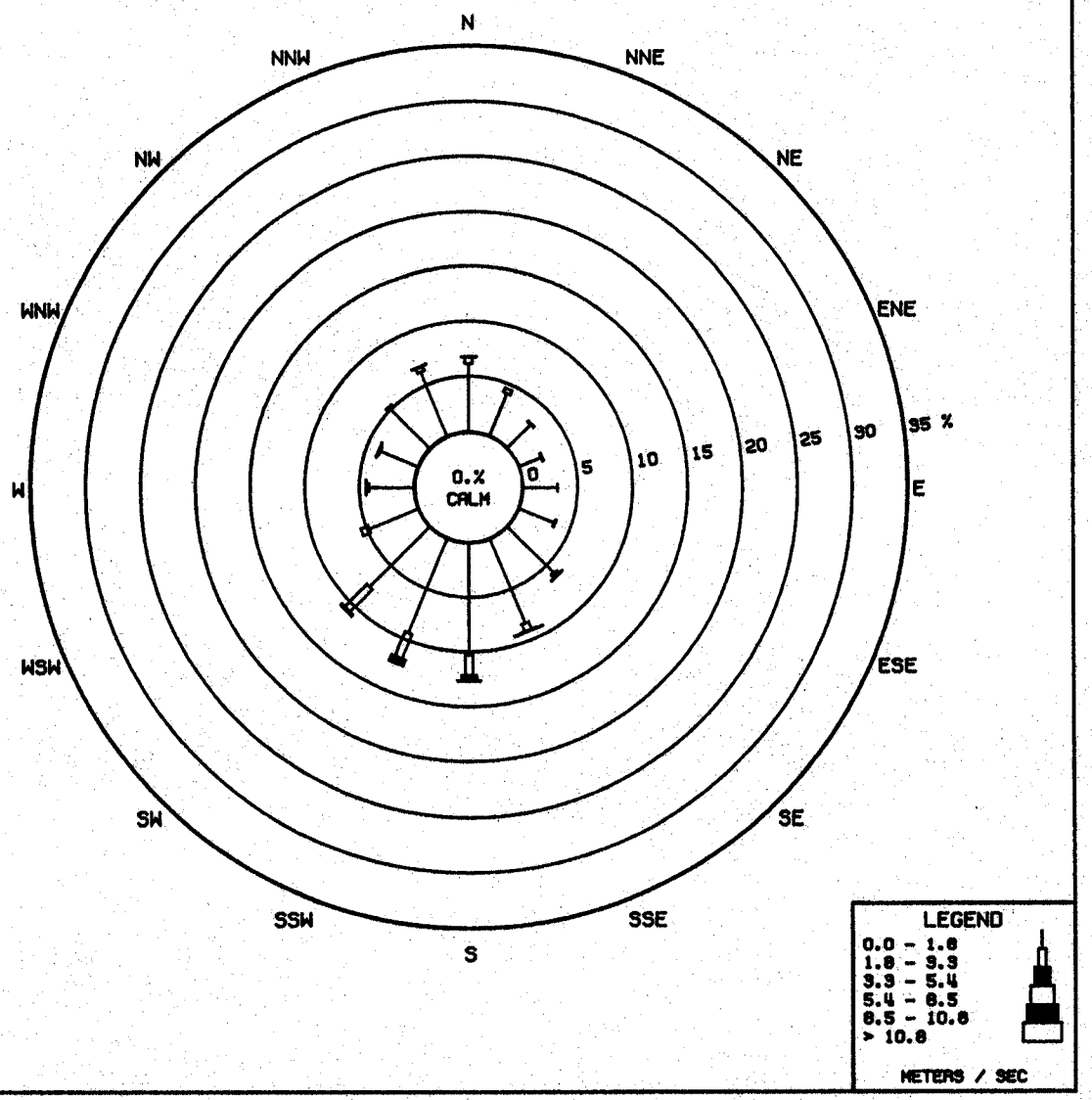


FIG. 4-2. LITTLE CHERRY WIND ROSE - 7/1/88 - 6/30/89



Baseline Air Quality and Meteorology Studies
Montana Project
Lincoln County, Montana

Prepared for

Noranda Minerals Corp
Libby, Montana

February 1989

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Project No. 22134

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SUMMARY

The climate of northwestern Montana is classified as continental highlands. Annual temperature variations are extreme, with summer highs in excess of 37°C (99°F) and winter lows below -25°C (13°F). Precipitation is fairly evenly distributed throughout the year with June and December receiving the greatest amounts and August receiving the least. The mean annual precipitation at Libby is 48.4 cm (19.1 in). Prevailing winds are east to southeast with an average annual wind speed at Libby of 2.7 m/sec (6.0 miles per hour) (U.S. Dept. of Commerce, 1968).

The terrain in the immediate vicinity of the proposed facilities is mountainous with large changes in elevation occurring over short distances. Elevations range from 1067 m (3500 ft) in the valley floors to mountain peaks reaching 2713 m (8900 ft). Local climatic conditions are greatly influenced by the mountainous terrain.

The Montana Project began monitoring meteorological parameters on July 1, 1988 at two locations, Ramsey Creek and Little Cherry Creek. The Montana Air Quality Bureau participated in the monitoring site selection process and verbal approval of the sites was granted at the time of selection (Driscoll, 1988).

The Ramsey Creek site is located approximately 1.6 km (1.0 mi) from the head of Ramsey Creek (T27N, R31W), along the north side of the access road. The site is located on a gentle hillside where the forest has been clear cut allowing an unobstructed area for monitoring.

Parameters measured at the Ramsey Creek site include wind speed, wind direction and atmospheric stability (sigma theta) at 10 m (32.8 ft) and temperature at four meters (13.1 ft).

Meteorological conditions presented herein were recorded at the Ramsey Creek site during the third quarter of 1988 (July 1, 1988 - September 30, 1988). The average wind speed measured for the period was 2.1 m/sec (4.6 mph), with a maximum hourly average of 8.9 m/sec (20.0 mph) recorded on August 30, 1988.

The most persistent wind directions were from the southeast through southwest with winds from these directions occurring 68.5 percent of the time. Maximum wind speeds were associated with south-southeast winds.

Unstable atmospheric conditions (stability Categories A, B and C) were recorded 16.9 percent of the time, neutral conditions (stability Category D) 22.4 percent of the time, and stable conditions (stability Categories E and F) 60.7 percent of the time during the quarter.

The average hourly temperature recorded during the third quarter of 1988 at Ramsey Creek station was 14.8°C (56.8°F). The maximum hourly average temperature recorded during the quarter was 32.8°C (91.0°F) occurring on August 24, 1988. The minimum hourly average temperature recorded was -2.1°C (28.2°F) on September 18, 1988.

The Little Cherry Creek site is located approximately 215 m (705 ft) north and 90 m (295 ft) east of the end of the road 6212H, T28N, R31W. The site is located in a flat area where the forest has been clear cut, allowing an unobstructed area for monitoring. Parameters measured at the Little Cherry Creek site include wind speed, wind direction and sigma theta at 10 m (32.8 ft), relative humidity and solar radiation at 9.1 m (30 ft), and temperature at four meters (13.1 ft). In addition, precipitation is measured at approximately two meters (6.6 ft). The relative humidity, solar radiation, wind speed and temperature data are used to calculate daily evaporation (Penman, 1947).

Meteorological conditions presented herein were recorded at the Little Cherry Creek site during the third quarter of 1988 (July 1, 1988 through September 30, 1988). The average wind speed for the period was 1.0 m/sec (2.2 mph) with a maximum hourly average of 8.8 m/sec (19.7 mph) recorded on July 5, 1988.

The most prominent wind directions, which occurred 41.9 percent of the time, were from the south through southwest. Maximum wind speeds were associated with west-southwest winds.

Unstable atmospheric conditions (stability Categories A, B and C) were recorded 43.5 percent of the time, neutral conditions (stability Category D) 8.7 percent of the time, and stable conditions (stability Categories E and F) 47.8 percent of the time.

The average hourly temperature during the third quarter was 13.1°C (55.6°F). The maximum hourly average temperature was 34.8°C (94.6°F) recorded on September 2, 1988. The minimum hourly average temperature was -5.0°C (23.0°F) recorded on both September 28 and 29, 1988.

The total precipitation recorded during the third quarter of 1988 was 1.00 inch. The largest monthly precipitation total was 0.59 inches, recorded in September. August was the driest month with 0.05 inches.

The average relative humidity for the quarter was 58.6 percent. The maximum humidity was 100 percent recorded in July and August and the minimum was 16.5 percent recorded in July 1988.

The average solar radiation for the quarter was 0.28 Langleys per minute (LPM). The maximum hourly average solar radiation was 1.36 LPM. The mean daily solar radiation was calculated by multiplying the monthly average solar radiation (LPM) by 24 hours (1440 minutes). The mean daily solar radiation values for July, August and September were 504, 461 and 259 Langleys, respectively.

Daily evaporation totals were calculated using concurrent wind speed, temperature, relative humidity and solar radiation data. Calculations are based on methods developed by Penman (1947). The total evaporation calculated for the third quarter was 14.65 inches. The annual climatological normal Class A pan evaporation for northwestern Montana is 35 inches (U.S. Department of Commerce, 1968).

The air quality parameters measured at the Montana Project sites include particulate matter 10 microns or less in diameter (PM 10), total suspended particulate matter (TSP), antimony, arsenic, cadmium, chromium, copper, iron, lead, and zinc concentrations. Samplers are co-located with the meteorological monitoring equipment at the Ramsey Creek and Little Cherry Creek sites. Two co-located PM 10 samplers are located at the Ramsey Creek site. A PM 10 sampler and a TSP sampler are located at the Little Cherry Creek site. Samples from the TSP sampler are the only samples analyzed for trace elements.

The maximum PM 10 concentration reported for the period at the Ramsey Creek site was 157 micrograms per cubic meter (ug/m^3) on September 6, 1988. This concentration exceeds the 24-hour federal standard of 150 ug/m^3 for PM 10 samples (FR 52, 1987). The quarterly geometric means for Sampler No. 1 and 2 were 13 ug/m^3 and 20 ug/m^3, respectively. These values were well below the annual standard of 50 ug/m^3 for PM 10 samples (FR 52, 1987).

At the Little Cherry Creek site, the maximum PM 10 concentration recorded for the period was 189 ug/m^3 on September 6, 1988. This concentration exceeds the 24-hour state and federal standard of 150 ug/m^3 for PM 10 (FR 52, 1987). The maximum TSP concentration was 79 ug/m^3, recorded on August 25, 1988. A comparison of the TSP to the PM 10 data reveals that PM 10 concentrations are approximately 38 percent of the TSP concentrations. The quarterly geometric mean was 15 ug/m^3 for the PM 10 sampler and 30 ug/m^3 for the TSP sampler. These values are well below the

annual secondary standard of 60 ug/m^3 for TSP samples (CFR 40, 1978) and the annual standard of 50 ug/m^3 for PM 10 samples (CFR 52, 1987).

The trace element concentrations from analysis of the TSP filters collected at the Little Cherry Creek site during the third quarter of 1988 were well below the standards for metals in air.

1.0 INTRODUCTION

This report summarizes the baseline meteorological and air quality data collected at the Montana Project Study Area. The purpose of this report is to provide information pertaining to the existing meteorology and air quality of the Study Area. The study was prepared to describe the baseline air quality and meteorology of the study area as defined in the approved Plan of Study for the Montana Project. A copy of Section 3.1 of the approved Plan of Study is presented in Appendix A. The two monitoring locations in the Study Area are at the head of Ramsey Creek near a process facility alternative site, and near Little Cherry Creek adjacent to an alternative tailing disposal area. The period of record for this report is July 1, 1988 through September 30, 1988. However, the monitoring program will continue through June 1989 so that one full year of baseline data will have been collected. The data will be submitted for agency review, as it becomes available, on a quarterly basis.

The following parameters are being monitored at the Montana Project sites:

Ramsey Creek Site	Little Cherry Creek Site
Meteorological Parameters	Meteorological Parameters
Wind Speed at 10 meters	Wind Speed at 10 meters
Wind Direction at 10 meters	Wind Direction at 10 meters
Sigma Theta at 10 meters	Sigma Theta at 10 meters
Temperature at 4 meters	Temperature at 4 meters
	Precipitation at 2 meters
	Relative Humidity at 9 meters
	Solar Radiation at 9 meters
	Evaporation

Air Quality Parameters	Air Quality Parameters
	Total Suspended Particulates (TSP)
Particulate Matter - 10 microns or less (PM 10)	Particulate Matter - 10 microns or less (PM 10)
	Trace Element Analysis

The project description is provided as Section 2.0. A brief description of the aerometric monitoring network is provided in Section 3.0 of this report. A summary of meteorological and air quality data are presented in Sections 4.0 and 5.0, respectively. The composite day analyses and meteorological data collected during the third quarter of 1988 are presented in Appendix B. Appendix C presents the joint frequency distributions (JFD's) of wind speed and direction by stability class for the period. QA/QC precision calculations are presented in Appendix D. Calibration and audit data appear in Appendix E and Appendix F contains a precision assessment between the two co-located PM 10 samples at the Ramsey Creek site and precision calculations for the analysis of trace elements collected at the Little Cherry Creek site TSP sampler.

2.0 PROJECT DESCRIPTION

This baseline study was initiated by U.S. Borax as part of the licensing requirements for the development and mining of a silver/copper deposit located underneath the Cabinet Mountain Wilderness Area in the Kootenai National Forest, Sanders and Lincoln Counties, Montana. Whereas the State of Montana, Department of State Lands and the Kootenai National Forest have primary responsibility for permitting these activities, the two agencies and U.S. Borax developed a Plan of Study that defined the nature and extent of the baseline work. This work was initiated in the Spring of 1988 and has been conducted in accordance with the terms of the Plan of Study.

A number of alternative sites were identified for portals, processing plant, tailing disposal and ancillary facilities. The area encompassing and adjacent to these sites then became the focus of the baseline work (Figure 2-1).

In September of 1988 Noranda Minerals Corp. and Montana Reserves formed a venture and purchased the silver/copper deposit from U.S. Borax and continued with project development under the "Montana Project" name. Noranda Minerals Corp. (Noranda) was designated the project manager.

Noranda continued to build from the data and information that had been generated by U.S. Borax and after reviewing the many alternative sites developed the proposed mining program detailed in the Application for a Hard Rock Operating Permit from the Montana Department of State Lands. The application also serves as a proposed Plan of Operation to the Kootenai National Forest. Basically, the application describes a 20,000 ton per day operation accessed from two (twin) portals in Ramsey Creek, a mill site located adjacent to the Ramsey portals, a portal in Libby Creek, two portals in the Rock Creek drainage for ventilation and emergency access, and a tailing impoundment in the Little Cherry Creek drainage. Access to the Ramsey Creek mine site would be over the existing Bear Creek Road. A

new transmission line from Pleasant Valley to the mine site would provide electrical energy for the operation. The total labor force is expected to number approximately 400 people. These positions would be filled by hiring locally as much as possible.

3.0 AEROMETRIC MONITORING NETWORK

The Montana Project is monitoring air quality and meteorological parameters at two locations: at the head of Ramsey Creek near an alternative process facility location and near Little Cherry Creek adjacent to an alternative tailing disposal area. The exact location of the mine, process and tailing disposal sites has not been determined; however, these two monitoring sites will provide representative air quality and meteorological data for these areas. The Montana Air Quality Bureau participated in the monitoring sites selection process and verbal approval of the sites was granted at the time of selection (Driscoll, 1988).

The Ramsey Creek site is located approximately 1.6 km (1.0 mi) from the head of Ramsey Creek T27N, R31W, along the north side of the road (Figure 3-1). The site is located on a gentle hillside where the forest has been clear cut allowing an unobstructed area for monitoring.

The Ramsey Creek site consists of a 10 m (32.8 ft) tower, mounted on a 61 cm (24 in) by 61 cm (24 in) by 15.2 cm (6 in) precast concrete base, guyed at the 10 m (32.8 ft) level with three braided cables attached to buried anchors, a propane powered generator and the co-located (2) PM 10 (particulate matter less than 10 microns in diameter) hi-volume samplers. Sensors for measuring wind speed and direction are mounted at the 10 m (32.8 ft) level of the tower and the temperature sensor is mounted at the four meter (13.1 ft) level of the tower, as opposed the the two meter (6.6 ft) level, to prevent burial during periods of deep snow. Since the temperature sensor is mounted on the tower, exposure of the sensor at 4 m (13.1 ft) is acceptable to the MAQB, per Section 1.92, page 11, of the Quality Assurance Policy. A digital data logger with strip chart backup records meteorological data and computes standard deviation of the horizontal wind direction (sigma theta). The site is powered by a propane generator set on the ground and anchored down. A scaffold is assembled around the generator, metal siding is attached to three sides and

reinforced plywood is attached to the top of the scaffold providing shelter for the generator. A plywood door is attached to the fourth side of the scaffold allowing access to the shelter. The PM 10 high volume samplers are co-located on top of the shelter, with the sampler inlets located approximately 2.5 meters (8 ft) above ground level. The samplers are located two meters (6.6 ft) apart in accordance with PSD sampling criteria.

The Little Cherry Creek site is located approximately 215 m (705 ft) north and 90 m (295 ft) east of the end of road 6212H, T28N, R31W (Figure 3-2). The site is located in a flat area where the forest has been cleared, again allowing an unobstructed area for monitoring.

The site is constructed similarly to the Ramsey Creek Site and monitors wind speed, wind direction, and sigma theta at the 10 m (32.8 ft) level and temperature at the four meter (13.1 ft) level. In addition, relative humidity and solar radiation are monitored at the 9 meter (29.5 ft) level on the tower. A heated precipitation gauge is mounted on a separate scaffold with the opening at approximately two meters (6.6 ft). The solar radiation sensor and the relative humidity sensor provide data that are used with concurrent wind speed, temperature, relative humidity, and solar radiation to calculate daily evaporation (based on Penman, 1947). PM 10 and total suspended particulate (TSP) data are also collected at the Little Cherry Creek site. The PM 10 and TSP high volume samplers are co-located and mounted on top of a generator shelter, similar in structure and specifications to the Ramsey Creek site.

If the Rock Creek alternative plant site is selected, Asarco's Rock Creek Baseline Study (Asarco, 1987) will be used for representative air quality and meteorological baseline data.

4.0 METEOROLOGICAL DATA

The meteorological parameters monitored at the Ramsey Creek site are wind speed, wind direction, sigma theta (standard deviation of the horizontal wind direction fluctuations), and temperature. At the Little Cherry Creek site, the meteorological parameters monitored are wind speed, wind direction, sigma theta, temperature, precipitation, relative humidity, and solar radiation. Stability classifications for the period are determined from sigma theta in the following manner:

- Hourly sigma theta values, modified by surface roughness length, are converted to Pasquill-Gifford stability classes as recommended by NRC Safety Guide 1.23.

- Daytime hourly observations initially determined as E or F stability are shifted to less stable categories if the wind speeds are above the cut points suggested in EPA's Dispersion Estimate Suggestion #8 (Irwin 1980).

- For nighttime hourly observations, a scheme developed by Mitchell and Timbre (1979) is incorporated to modify the NRC stability class by wind speed.

Table 4-1 outlines stability classifications based on Pasquill using sigma theta, time of day, and wind speed criteria.

Evaporation at the Little Cherry Creek site is calculated using concurrent wind speed, temperature, relative humidity, and solar radiation data.

A complete listing of all meteorological parameters is given in Appendix B. The listing includes composite day analyses for each month and the hourly meteorological conditions recorded for each day of each month. Appendix C contains joint frequency distributions (JFD's) of wind speed and direction by stability class for the period of record.

4.1 RAMSEY CREEK SITE

4.1.1 Data Recovery

The data recovery rate for the meteorological parameters at the Ramsey Creek monitoring site during the third quarter of 1988 was 93.1 percent. In July, 172 hours of wind direction and sigma theta data were lost due to broken signal cables. In August, 81 hours of wind speed data and 63 hours of wind direction, sigma theta, and temperature data were lost due to battery voltage problems. These problems were corrected by September 1988.

4.1.2 Wind Speed

The maximum hourly average wind speed for the third quarter of 1988 was 20.0 miles per hour (mph) and was recorded on August 30, 1988. The minimum, maximum, and average wind speeds for each month and for the quarter are presented in Table 4-2.

4.1.3 Wind Direction

Figure 4-1 presents the wind rose at the Ramsey Creek site for the third quarter of 1988. The wind rose depicts the percentage of time that the wind blows from a particular direction in a certain wind speed class. The most persistent wind directions during the third quarter of 1988 were from the southeast through south-southwest. Winds from these directions occurred 68.5 percent of the time. Maximum wind speeds were associated with south-southeast winds during the quarter. Appendix C presents quarterly summaries of wind speed and direction for the third quarter of 1988 in the form of tabular stability wind roses (JFD's).

4.1.4 Atmospheric Stability

Atmospheric stability as determined by sigma theta (described in Section 4.0) is presented in the JFD's for the third quarter of 1988 (see Appendix C). A summary of the percent occurrence of each stability class for the quarter is presented in Table 4-3. Unstable atmospheric conditions (stability Categories A, B and C) were recorded 16.9 percent of the time, neutral conditions (stability Category D) 22.4 percent of the time, and stable conditions (stability Categories E and F) 60.7 percent of the time during the quarter.

4.1.5 Temperature

The maximum hourly average temperature for the quarter was 32.8°C (91.0°F); this occurred on August 24, 1988. The minimum hourly average temperature, -2.1°C (28.2°F), occurred on September 18, 1988. The minimum, maximum, and average temperatures for each month of the quarter and for the recording period are presented in Table 4-4.

4.2 LITTLE CHERRY CREEK SITE

4.2.1 Data Recovery

Meteorological data recovery at the Little Cherry Creek site was 71.0 percent for the quarter. The data losses were due to battery voltage problems and were corrected in September.

4.2.2 Wind Speed

The maximum hourly average wind speed for the third quarter of 1988 was 19.7 miles per hour (mph). This value was recorded on July 5, 1988. The minimum, maximum, and average wind speed for each month and for the quarter are presented in Table 4-5.

4.2.3 Wind Direction

Figure 4-2 presents the wind rose at the Little Cherry Creek site for the third quarter of 1988. The most prominent wind directions were from the south through southwest during the third quarter of 1988. These wind directions occurred 41.9 percent of the time. Maximum wind speeds were associated with west-southwest winds during the quarter. Appendix C presents quarterly summaries of wind speed and direction for the third quarter of 1988 in the form of tabular stability wind roses (JFD's).

4.2.4 Atmospheric Stability

Atmospheric stability as determined by sigma theta (described in Section 4.0) is presented in the JFD's for the third quarter of 1988 (see Appendix C). A summary of the percent occurrence of each stability class for the quarter is presented in Table 4-6. Unstable atmospheric conditions (stability Categories A, B and C) were recorded 43.5 percent of the time, neutral conditions (stability Category D) 8.7 percent of the time, and stable conditions (stability Categories E and F) 47.8 percent of the time during the quarter.

4.2.5 Temperature

The maximum hourly average temperature for the quarter was 34.8°C (94.6°F) which occurred on September 2, 1988. The minimum hourly average temperature was -5.0°C (23.0°F) which occurred on September 28 and 29, 1988. The minimum, maximum, and average temperatures for each month of the quarter and for the recording period are presented in Table 4-7.

4.2.6 Precipitation

Monthly totals and the quarterly total of precipitation at the Little Cherry Creek Site are presented in Table 4-8. The largest monthly precipitation total was 0.59 inches, recorded in September. August was the driest month with 0.05 inches. Total precipitation for the quarter was 1.00 inch.

4.2.7 Relative Humidity

The minimum, maximum, and average relative humidity for each month of the quarter and for the recording period are presented in Table 4-9. The average relative humidity for the quarter was 58.6 percent. Climatological averages (U.S. Department of Commerce, 1968) indicate average relative humidities in the range of 50 to 60 percent during the summer.

4.2.8 Solar Radiation

The average solar radiation for the quarter was 0.28 Langleys per minute (LPM). The maximum hourly average solar radiation was 1.36 LPM. Minimum, maximum, and average solar radiation by month and for the quarter are presented in Table 4-10. To compare these values to climatological normals, mean daily solar radiation values were calculated by multiplying the monthly average solar radiation (LPM) by 24 hours (1440 minutes). Mean daily solar radiation at the Little Cherry Creek site for July, August, and September were 504, 461, and 259 Langleys, respectively. Monthly climatological normals for northwest Montana are 560, 510, and 354 Langleys, respectively (U.S. Department of Commerce, 1968).

4.2.9 Evaporation

Daily evaporation totals were calculated using concurrent wind speed, temperature, relative humidity and solar radiation data. The calculation was based on a method developed by Penman (1947). Refer to Appendix D for

a detailed explanation of this calculation method. Evaporation totals by month and for the recording period are presented in Table 4-11. During the quarter, monthly evaporation ranged from 2.58 inches in September to 7.25 inches in July. The annual climatological normal Class A pan evaporation for northwest Montana is 35 inches (U.S. Department of Commerce, 1968).

4.3 QUALITY ASSURANCE

Data quality assurance procedures included a 10 percent independent recheck of all reduced data. This was accomplished by an independent random sample check of 10 percent of the strip chart data versus printouts of data collected by the digital data acquisition system. Data quality assurance records are kept in the project files. In addition to the quality assurance procedures for data reduction and entry, a calibration of the meteorological instrumentation was performed during the quarter to assure instrument precision and accuracy. Records of the calibration results are presented in Appendix E.

The air quality parameters measured at the Montana Project sites are particulate matter 10 microns or less in diameter (PM 10), total suspended particulate matter (TSP), antimony, arsenic, cadmium, chromium, copper, iron, lead, and zinc concentrations. The samplers are mounted atop scaffolds such that the sample inlets are at approximately 2.5 meters above ground level. Environmental Protection Agency (EPA) guidelines (EPA, 1980) state that sample intakes should be between 2 to 15 meters above ground level. Samples are collected for 24 hours every sixth day according to the EPA Air Sampling Schedule (CFR 40, 1975).

5.1 RAMSEY CREEK SITE

5.1.1 Data Recovery

The quarterly data recoveries at each sampling station are presented in Table 5-1. The data recoveries for the Ramsey Creek site Samplers No. 1 and 2 were 75.0 and 68.8 percent, respectively. The first three samples in July were invalidated because of timer malfunctions. The problem was corrected by the July 20 sample date. In addition, three samples were invalidated in September due to incomplete sample times. No mechanical problems were found and subsequent samples were valid.

5.1.2 PM 10 Concentrations

The PM 10 concentrations measured at the Ramsey Creek site are presented in Tables 5-2 and 5-3. In addition to the individual (24-hour) concentrations measured at each sampling location, monthly and year-to-date arithmetic means, geometric means and maximum concentrations are presented. The highest PM 10 concentration was 157 micrograms per cubic meter ($\mu g/m^3$) measured at Sampler No. 1 on September 6, 1988. This concentration exceeds the 24-hour federal PM 10 standard of 150 $\mu g/m^3$ (FR 52, 1987). It is

believed that this concentration reflects particulate fallout from fires burning in the region during this time period. The quarterly geometric means for Samplers No. 1 and 2 were 13 $\mu g/m^3$ and 20 $\mu g/m^3$, respectively. These values are well below the annual PM 10 standard of 50 $\mu g/m^3$ (FR 52, 1987).

5.2 LITTLE CHERRY CREEK SITE

The quarterly data recoveries at each sampling station are presented in Table 5-1. The data recoveries for the Little Cherry Creek site Samplers No. 3 and 4 were 81.3 and 75.0 percent, respectively. One sample at Sampler No. 3 and three samples at Sampler No. 4 collected in July were invalidated due to malfunctioning timers. The problem was corrected by the July 20 sample date. One sample was invalidated at Samplers No. 3 and 4 in August due to incomplete run times. The September 6 sample at Sampler No. 3 was invalidated for total mass because of a damaged filter. However, the trace element analysis on this filter was valid.

5.2.1 TSP and PM 10 Concentrations

The TSP and PM 10 concentrations measured at the Little Cherry Creek site are presented in Tables 5-4 and 5-5. In addition to the individual (24-hour) concentrations measured at each sampling location, monthly and year-to-date arithmetic means, geometric means and maximum concentrations are presented. One PM 10 concentration exceeded the 24-hour state and federal PM 10 standard of 150 $\mu g/m^3$ (FR 52, 1987). The highest PM 10 concentration was 189 $\mu g/m^3$ measured at Sampler No. 4 on September 6, 1988. Again, this value is believed to reflect particulate fallout from fires in the area. The highest 24-hour TSP concentration was 79 $\mu g/m^3$ measured at Sampler No. 3 on August 25, 1988. This is well below the federal primary and secondary 24-hour TSP standards of 260 $\mu g/m^3$ and 150 $\mu g/m^3$, respectively. A comparison of the TSP to the PM 10 data reveals that the PM 10 concentrations are approximately 38 percent of the TSP

concentrations. This calculation is based on the average percent difference between each PM 10 and TSP sample. The quarterly geometric mean was 15 $\mu g/m^3$ for the PM 10 sampler and 30 $\mu g/m^3$ for the TSP sampler. These values are well below the annual secondary standard of 60 $\mu g/m^3$ for TSP samples (CFR 40, 1979) and the annual PM 10 standard of 50 $\mu g/m^3$ (FR 52, 1987).

5.2.2 Trace Element Analysis

Results of the chemical analysis of the TSP filters (Sampler No. 3) for trace metals for the period July 1, 1988 through September 30, 1988 are presented in Table 5-6. The trace element analysis presented herein deviates somewhat from the POS in that metals concentrations are presented for each sample day, rather than developing a monthly composite concentration. This allows for a better understanding of temporal variations in concentrations. The analytical methods used and the detection limits were as follows:

Element	Analytical Method	Detection Limit (μg/filter)
Antimony	Furnace Atomic Absorption (AA) (Method 7041)	0.1
Arsenic	Hydride/AA (Method 7061)	0.1
Cadmium	Furnace AA (Method 7131)	10
Chromium	Flame AA (Method 7190)	10
Copper	Flame AA (Method 7210)	10
Iron	Flame AA (Method 7380)	10
Lead	Furnace AA (Method 7421)	10
Zinc	Flame AA (Method 7950)	10

These methods are summarized in "Test Methods for Evaluating Solid Waste" (EPA, 1986). Antimony concentrations ranged from below the detection limit

to 0.43 nanograms per cubic meter (ng/m^3), measured on September 6. Arsenic concentrations ranged from below the detection limit to 1.71 ng/m^3, measured on July 8. Cadmium concentrations were all below the detection limit. Chromium concentrations were all below the detection limit with the exception of the September 6 sample (5.33 ng/m^3). Copper concentrations ranged from 33.34 ng/m^3 to a maximum of 62.77 ng/m^3 measured on September 24. Iron concentrations ranged from 34.74 ng/m^3 to a maximum of 5646.77 ng/m^3 measured on September 6. Lead concentrations were all below the detection limit with the exception of the September 6 sample (6.39 ng/m^3). Zinc concentrations ranged from below the detection limit to 20.12 ng/m^3, measured on September 6.

5.3 QUALITY ASSURANCE

TSP and PM 10 Quality Assurance procedures include reweighing 10 percent of pre-exposed and 10 percent of exposed filters. If the weights do not agree to within 0.005 grams, all filters in the group are reweighed and verified again. In addition, 10 percent of the particulate concentrations are recalculated, and if the concentrations do not agree to within round-off errors, (1.0 $\mu g/m^3$) all concentrations are recalculated. For the trace element analyses, 10 percent of the samples were reanalyzed. Relative percent differences (RPD) were calculated to determine the precision of the analytical methods. The RPD calculations are presented in Appendix F. A precision assessment was performed on the co-located PM 10 samplers. Results of this precision assessment are also presented in Appendix F. A calibration of the air quality instrumentation was performed during the quarter to assure instrument precision and accuracy. Records of calibration results are presented in Appendix E.

The precision assessment indicated a greater disparity between the co-located PM 10 samples than is expected. For the majority of the samples, this is a result of a difference of a few micrograms per cubic meter between samples with relatively low concentrations, which results in a

large percent difference between samples. However, the differences observed on August 1 and 31 and September 18, 1988 were large enough to warrant further investigation. For the three sample sets collected on these dates, the six filters were reweighed and the flow rates and all other calculations rechecked. No inconsistencies were found and the data are assumed to be correct. Discussions with EPA Region VIII personnel indicate that disparity between co-located PM 10 samples has been observed at other locations in Region VIII (McCray, 1989). Additional investigations are being pursued.

6.0 REFERENCES

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Code of Federal Regulation 40, Part 50.11, Appendix B, July 1, 1975.

Code of Federal Regulation 40, Part 50.7, Subchapter C, July 27, 1979.

Code of Federal Regulation 43, No. 194, Appendix G, October 5, 1978.

Federal Register Vol. 52, No. 105, June 3, 1987. Ambient Air Quality Standards for Particulate Matter (PM 10).

Irwin, John S. 1980, Dispersion Estimate #8. U.S. EPA, July 31, 1980.

McCray, Gordon, 1989, Personnel Communication, January 31, 1989

Mitchell, A. Edgar, Jr. and K.O. Timbre 1979, Atmospheric Stability Class from Horizontal Wind Fluctuation, 72nd Annual Meeting APCA, Cincinnati, Ohio, June 24, 1979.

U.S. Environmental Protection Agency, 1980, Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), Research Triangle Park, North Carolina, November, 1980.

U.S. Department of Commerce, 1968, Climatic Atlas of the United States, Asheville, North Carolina, June, 1968.

TABLE 4-1

STABILITY CLASSIFICATION CRITERIA

Stability Classification	Pasquill Stability Category	Standard Deviation of the Horizontal Wind Direction Fluctuations (in degrees)	If the Nighttime Wind Speed is (mph):	Then the Nighttime Stability Category is:
Extremely Unstable	A[1]	>22.5°	<6.5	F
			6.5 to 8.1	E
			≥8.1	D
Moderately Unstable	B[1]	17.5° to 22.5°	<5.4	F
			5.4 to 6.7	E
			≥6.7	D
Slightly Unstable	C[1]	12.5° to 17.5°	<5.4	E
			≥5.4	D
Neutral	D	7.6° to 12.5°	No restrictions	D
Slightly Stable	E[1]	3.8° to 7.6°	>11.2	D
Moderately Stable	F[1]	<3.8°	≥11.2	D
			6.7 to 11.2	E

[1] All unstable categories are shifted to neutral during the daytime hours when the wind speed is greater than 13.4 mph.

TABLE 4-2

MONTANA PROJECT

RAMSEY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE WIND SPEEDS
BY MONTH AND FOR RECORDING PERIOD
1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Wind Speed (mph) Minimum Hourly Average	Maximum Hourly Average	Monthly Average
July	0.1	16.0	4.9
August	0.1	20.0	4.6
September	0.0	17.5	4.4
Period of Record	0.0	20.0	4.6

TABLE 4-3

MONTANA PROJECT

RAMSEY CREEK SITE
PERCENT OCCURRENCE OF STABILITY CLASS FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 SEPTEMBER 1988

Stability Class	Percent Occurrence
A	10.3
B	3.7
C	2.9
D	22.4
E	20.8
F	39.9

TABLE 4-4

MONTANA PROJECT

RAMSEY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE TEMPERATURES
BY MONTH AND FOR RECORDING PERIOD
1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Temperature (°C) Minimum Hourly Average	Maximum Hourly Average	Monthly Average
July	1.9	30.8	16.5
August	0.5	32.8	16.9
September	-2.1	32.7	11.0
Period of Record	-2.1	32.8	14.8

TABLE 4-5

MONTANA PROJECT

LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE WIND SPEEDS
BY MONTH AND FOR RECORDING PERIOD
1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Wind Speed (mph) Minimum Hourly Average	Maximum Hourly Average	Monthly Average
July	0.2	19.7	2.3
August	0.2	8.4	2.2
September	0.0	12.4	2.2
Period of Record	0.0	19.7	2.2

TABLE 4-6

MONTANA PROJECT

LITTLE CHERRY CREEK SITE
PERCENT OCCURRENCE OF STABILITY CLASS FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 SEPTEMBER 1988

Stability Class	Percent Occurrence
A	25.8
B	9.5
C	8.2
D	8.7
E	9.5
F	38.3

TABLE 4-7

MONTANA PROJECT

LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE TEMPERATURES
BY MONTH AND FOR RECORDING PERIOD
1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Temperature (°C) Minimum Hourly Average	Maximum Hourly Average	Monthly Average
July	-0.7	34.1	16.4
August	0.9	32.4	14.6
September	-5.0	34.8	8.2
Period of Record	-5.0	34.8	13.1

TABLE 4-8

MONTANA PROJECT

LITTLE CHERRY CREEK SITE
PRECIPITATION TOTALS BY MONTH AND FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Precipitation (inches)
July	0.36
August	0.05
September	0.59
Period of Record	1.00

TABLE 4-9

MONTANA PROJECT

LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE RELATIVE HUMIDITY
BY MONTH AND FOR RECORDING PERIOD
1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Relative Humidity Percent Minimum	Maximum	Average
July	16.5	100.0	55.0
August	18.9	100.0	55.4
September	16.7	99.1	65.5
Period of Record	16.5	100.0	58.6

TABLE 4-10

MONTANA PROJECT

LITTLE CHERRY CREEK SITE
MINIMUM, MAXIMUM, AND AVERAGE SOLAR RADIATION
BY MONTH AND FOR RECORDING PERIOD
1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Solar Radiation (Langleys/min) Minimum	Maximum	Average
July	0.00	1.36	0.35
August	0.00	1.24	0.32
September	0.00	1.05	0.18
Period of Record	0.00	1.36	0.28

TABLE 4-11

MONTANA PROJECT

LITTLE CHERRY CREEK SITE
EVAPORATION TOTALS BY MONTH AND FOR THE RECORDING
PERIOD 1 JULY 1988 - 30 SEPTEMBER 1988

Time Period	Evaporation (inches)
July	7.249
August	4.821
September	2.578
Period of Record	14.648

TABLE 5-1

MONTANA PROJECT

DATA RECOVERY FOR AIR QUALITY PARAMETERS AT THE
RAMSEY CREEK AND LITTLE CHERRY CREEK SITES,
1 JULY 1988 - 30 SEPTEMBER 1988

Parameter	Percent Recovery
Ramsey PM 10 #1	75.0
Ramsey PM 10 #2	68.8
Little Cherry TSP #3	81.3
Little Cherry PM 10 #4	75.0
TOTAL	75.0

TABLE 5-2 - PARTICULATE MATTER, 10 MICRONS OR LESS (PM 10) CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: PM 10
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: RAMSEY CREEK #1
UNITS: MICROGRAMS/(CU.M)
YEAR: 1988

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								18					1	18	18	18
02							***						0	***	***	***
03													0	***	***	***
04													0	***	***	***
05													0	***	***	***
06									157				1	157	157	157
07								7					1	7	7	7
08							***						0	***	***	***
09													0	***	***	***
10													0	***	***	***
11													0	***	***	***
12									5				1	5	5	5
13								14					1	14	14	14
14							***						0	***	***	***
15													0	***	***	***
16													0	***	***	***
17													0	***	***	***
18									9				1	9	9	9
19								12					1	12	12	12
20							11						1	11	11	11
21													0	***	***	***
22													0	***	***	***
23													0	***	***	***
24									***				0	***	***	***
25								24					1	24	24	24
26							8						1	8	8	8
27													0	***	***	***
28													0	***	***	***
29													0	***	***	***
30									8				1	8	8	8
31								13					1	13	13	13
NO.	0	0	0	0	0	0	2	6	4	0	0	0	12			
MEAN	***	***	***	***	***	***	10	15	45	***	***	***		24		
MAX	***	***	***	***	***	***	11	24	157	***	***	***			157	
GEO MEAN	***	***	***	***	***	***	9	14	15	***	***	***				13

TABLE 5-3 - PARTICULATE MATTER, 10 MICRONS OR LESS (PM 10) CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: PM 10
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: RAMSEY CREEK #2
UNITS: MICROGRAMS/(CU.M)
YEAR: 1988

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								35					1	35	35	35
02							***						0	***	***	***
03													0	***	***	***
04													0	***	***	***
05													0	***	***	***
06									153				1	153	153	153
07								11					1	11	11	11
08							***						0	***	***	***
09													0	***	***	***
10													0	***	***	***
11													0	***	***	***
12									8				1	8	8	8
13								14					1	14	14	14
14							***						0	***	***	***
15													0	***	***	***
16													0	***	***	***
17													0	***	***	***
18									32				1	32	32	32
19								12					1	12	12	12
20							13						1	13	13	13
21													0	***	***	***
22													0	***	***	***
23													0	***	***	***
24									***				0	***	***	***
25								23					1	23	23	23
26							13						1	13	13	13
27													0	***	***	***
28													0	***	***	***
29													0	***	***	***
30									***				0	***	***	***
31								25					1	25	25	25
NO.	0	0	0	0	0	0	2	6	3	0	0	0	11			
MEAN	***	***	***	***	***	***	13	20	64	***	***	***		31		
MAX	***	***	***	***	***	***	13	35	153	***	***	***			153	
GEO MEAN	***	***	***	***	***	***	13	18	34	***	***	***				20

TABLE 5-4 - TOTAL SUSPENDED PARTICULATE (TSP) CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: TOTAL SUSPENDED PARTICULATE
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: LITTLE CHERRY CREEK #3
UNITS: MICROGRAMS/(CU.M)
YEAR: 1988

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								45					1	45	45	45
02							***						0	***	***	***
03													0	***	***	***
04													0	***	***	***
05													0	***	***	***
06									***				0	***	***	***
07								26					1	26	26	26
08							27						1	27	27	27
09													0	***	***	***
10													0	***	***	***
11													0	***	***	***
12									20				1	20	20	20
13								31					1	31	31	31
14							14						1	14	14	14
15													0	***	***	***
16													0	***	***	***
17													0	***	***	***
18									22				1	22	22	22
19								***					0	***	***	***
20							35						1	35	35	35
21													0	***	***	***
22													0	***	***	***
23													0	***	***	***
24									26				1	26	26	26
25								79					1	79	79	79
26							17						1	17	17	17
27													0	***	***	***
28													0	***	***	***
29													0	***	***	***
30									57				1	57	57	57
31								40					1	40	40	40
NO.	0	0	0	0	0	0	4	5	4	0	0	0	13			
MEAN	***	***	***	***	***	***	23	44	31	***	***	***		34		
MAX	***	***	***	***	***	***	35	79	57	***	***	***			79	
GEO MEAN	***	***	***	***	***	***	22	41	28	***	***	***				30

TABLE 5-5 - PARTICULATE MATTER, 10 MICRONS OR LESS (PM 10) CONCENTRATIONS

CONSULTANT: WOODWARD-CLYDE CONSULTANTS, INC.
STATE: MONTANA
NAME OF FACILITY: MONTANA PROJECT
PARAMETER: PM 10
SAMPLING INTERVAL: ONCE EVERY SIX DAYS FOR 24 HOURS

PROJECT: NORANDA
COUNTY: LINCOLN
SITE: LITTLE CHERRY CREEK #4
UNITS: MICROGRAMS/(CU.M)
YEAR: 1988

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	NO.	MEAN	MAX	GEO MEAN
01								16					1	16	16	16
02							***						0	***	***	***
03													0	***	***	***
04													0	***	***	***
05													0	***	***	***
06									189				1	189	189	189
07								9					1	9	9	9
08							***						0	***	***	***
09													0	***	***	***
10													0	***	***	***
11													0	***	***	***
12									6				1	6	6	6
13								18					1	18	18	18
14							***						0	***	***	***
15													0	***	***	***
16													0	***	***	***
17													0	***	***	***
18									5				1	5	5	5
19								***					0	***	***	***
20							16						1	16	16	16
21													0	***	***	***
22													0	***	***	***
23													0	***	***	***
24									7				1	7	7	7
25								28					1	28	28	28
26							12						1	12	12	12
27													0	***	***	***
28													0	***	***	***
29													0	***	***	***
30									11				1	11	11	11
31								15					1	15	15	15
NO.	0	0	0	0	0	0	2	5	5	0	0	0	12			
MEAN	***	***	***	***	***	***	14	17	44	***	***	***		28		
MAX	***	***	***	***	***	***	16	28	189	***	***	***			189	
GEO MEAN	***	***	***	***	***	***	14	16	13	***	***	***				15

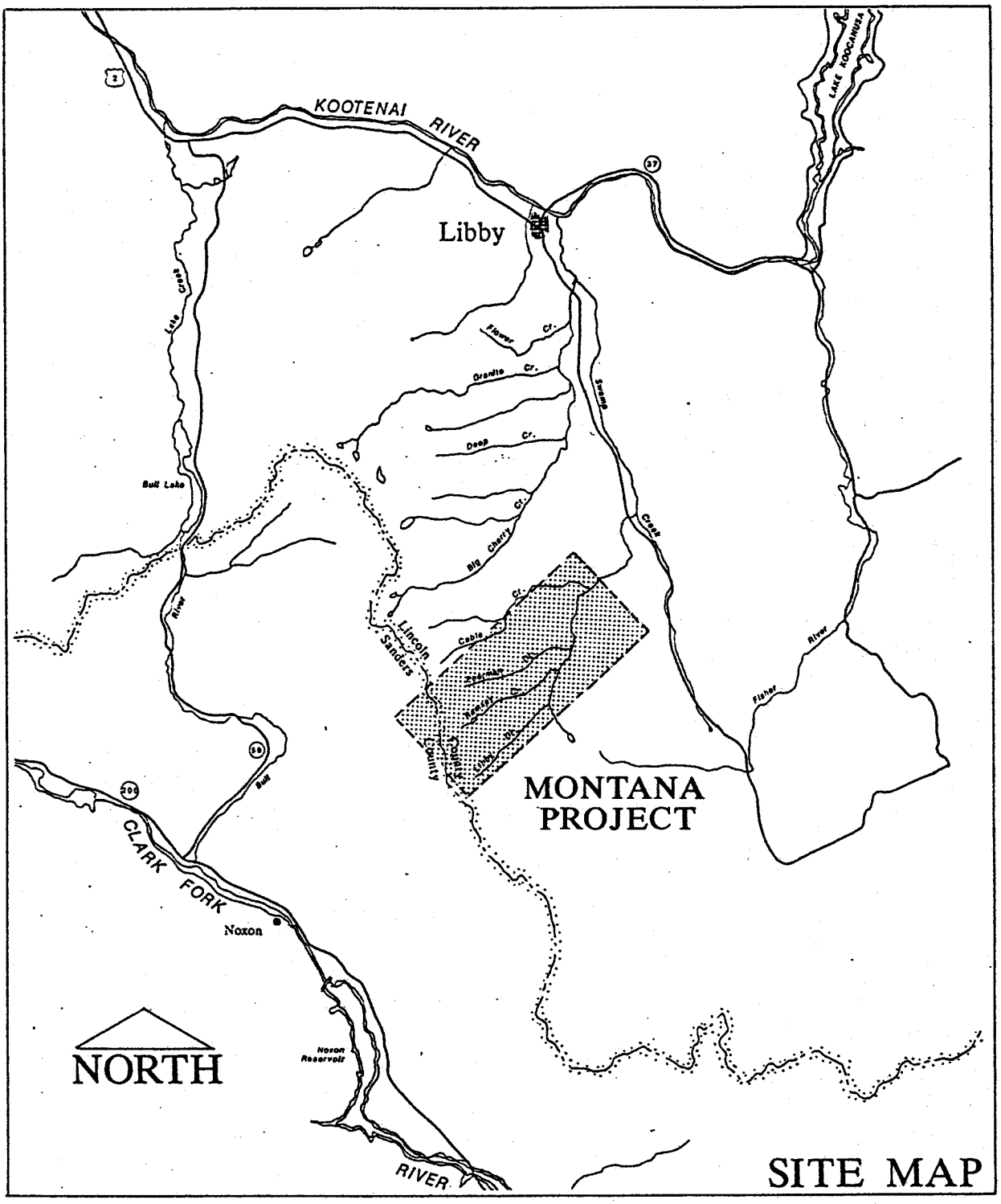
TABLE 5-6

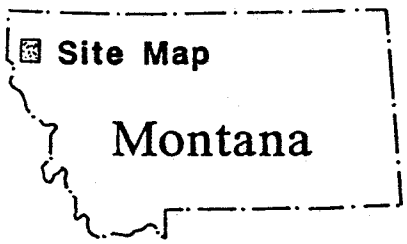
MONTANA PROJECT

TRACE ELEMENT CONCENTRATIONS (ng/m^3) AT THE
LITTLE CHERRY CREEK SITE
1 JULY 1988 THROUGH 30 SEPTEMBER 1988

Sample Date	Sb	As	Cd	Cr	Cu	Fe	Pb	Zn
7/02/88	***	***	***	***	***	***	***	***
7/08/88	0.33	1.71	ND	ND	49.69	197.67	ND	15.36
7/14/88	0.16	0.71	ND	ND	49.94	34.74	ND	10.79
7/20/88	ND	0.31	ND	ND	37.62	177.63	ND	ND
7/26/88	ND	0.57	ND	ND	42.65	183.09	ND	ND
8/01/88	0.16	1.24	ND	ND	33.34	580.76	ND	12.83
8/07/88	ND	0.11	ND	ND	52.03	281.82	ND	ND
8/13/88	0.16	0.38	ND	ND	47.62	386.41	ND	6.45
8/19/88	***	***	***	***	***	***	***	***
8/25/88	0.33	0.27	ND	ND	49.32	832.92	ND	5.45
8/31/88	ND	0.33	ND	ND	53.12	324.15	ND	ND
9/06/88	0.43	0.85	ND	5.33	61.79	5646.77	6.39	20.12
9/12/88	0.11	0.06	ND	ND	55.23	119.30	ND	ND
9/18/88	0.17	ND	ND	ND	53.64	37.66	ND	ND
9/24/88	ND	0.17	ND	ND	62.77	151.31	ND	5.57
9/30/88	ND	0.17	ND	ND	55.97	69.68	ND	9.08
Quarterly								
Arithmetic Mean [1]	0.14	0.49	2.92	3.11	50.34	644.57	3.19	7.46
Geometric Mean	0.09	0.30	2.86	3.01	49.96	227.91	3.05	5.87

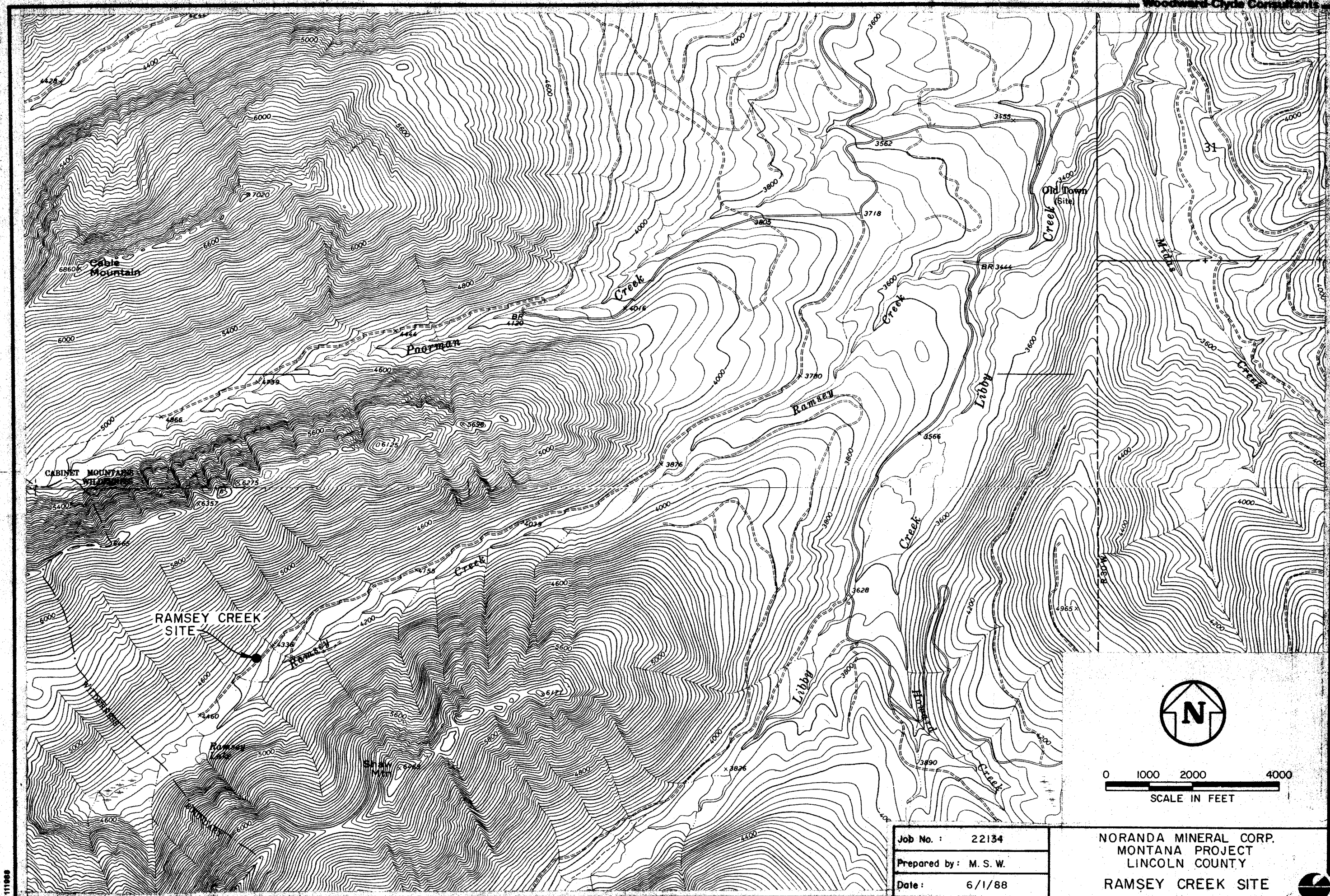
ND Less than analytical detection limit
*** Missing sample
[1] Half of the detection limit is used for the ND samples in the quarterly average calculations.





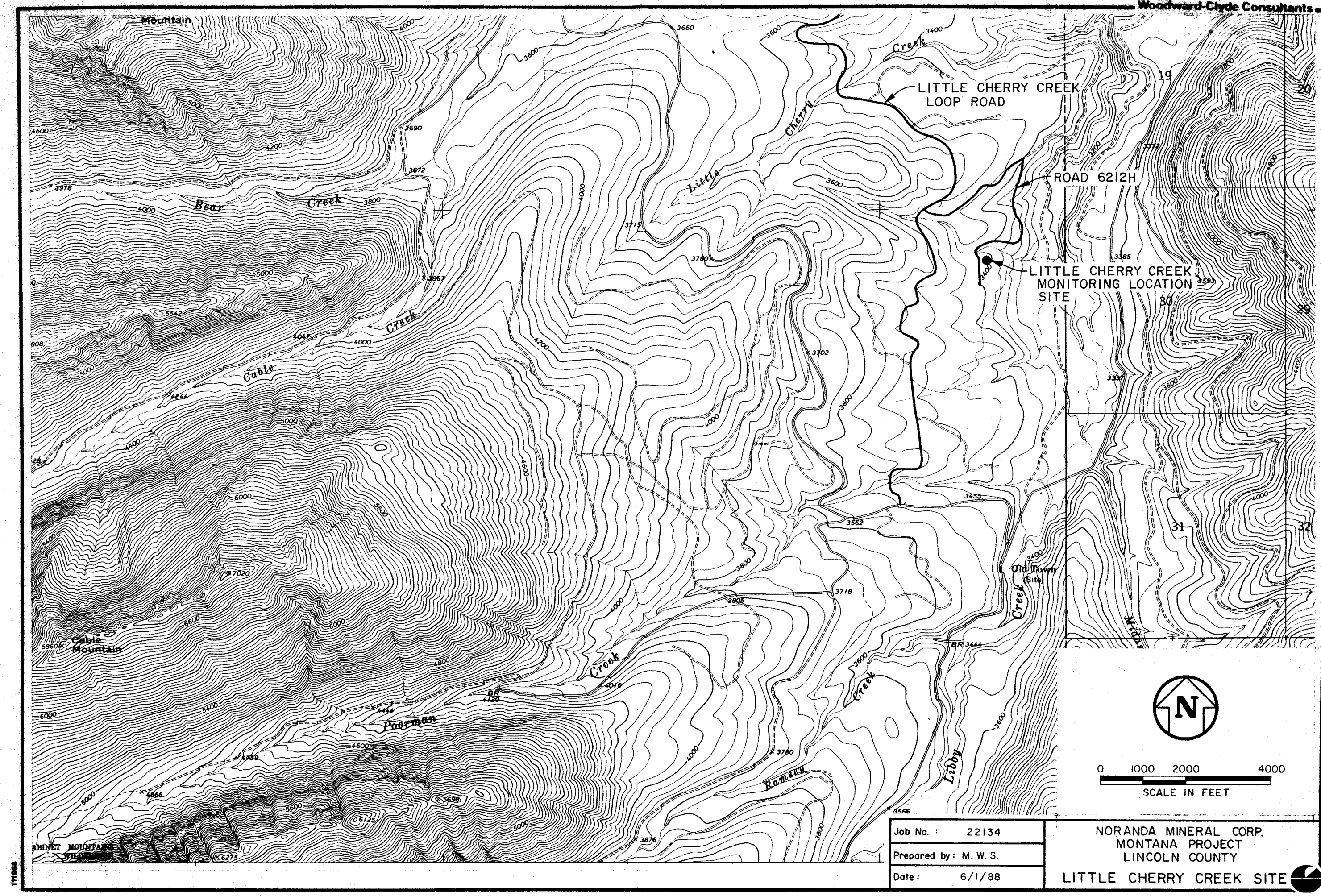
Job No. 22134	LOCATION MAP
Prepared by: K. B. E.	
Date: 1/31/89	

FIG. 2-1



Job No. : 22134	NORANDA MINERAL CORP. MONTANA PROJECT LINCOLN COUNTY
Prepared by: M. S. W.	RAMSEY CREEK SITE
Date: 6/1/88	

FIG. 3-1



Job No. :	22134
Prepared by :	M. W. S.
Date :	6/1/88

NORANDA MINERAL CORP.
MONTANA PROJECT
LINCOLN COUNTY

LITTLE CHERRY CREEK SITE

FIG. 3-2

FIG. 4-1. RAMSEY CREEK WIND ROSE - 7/01/88 - 9/30/88

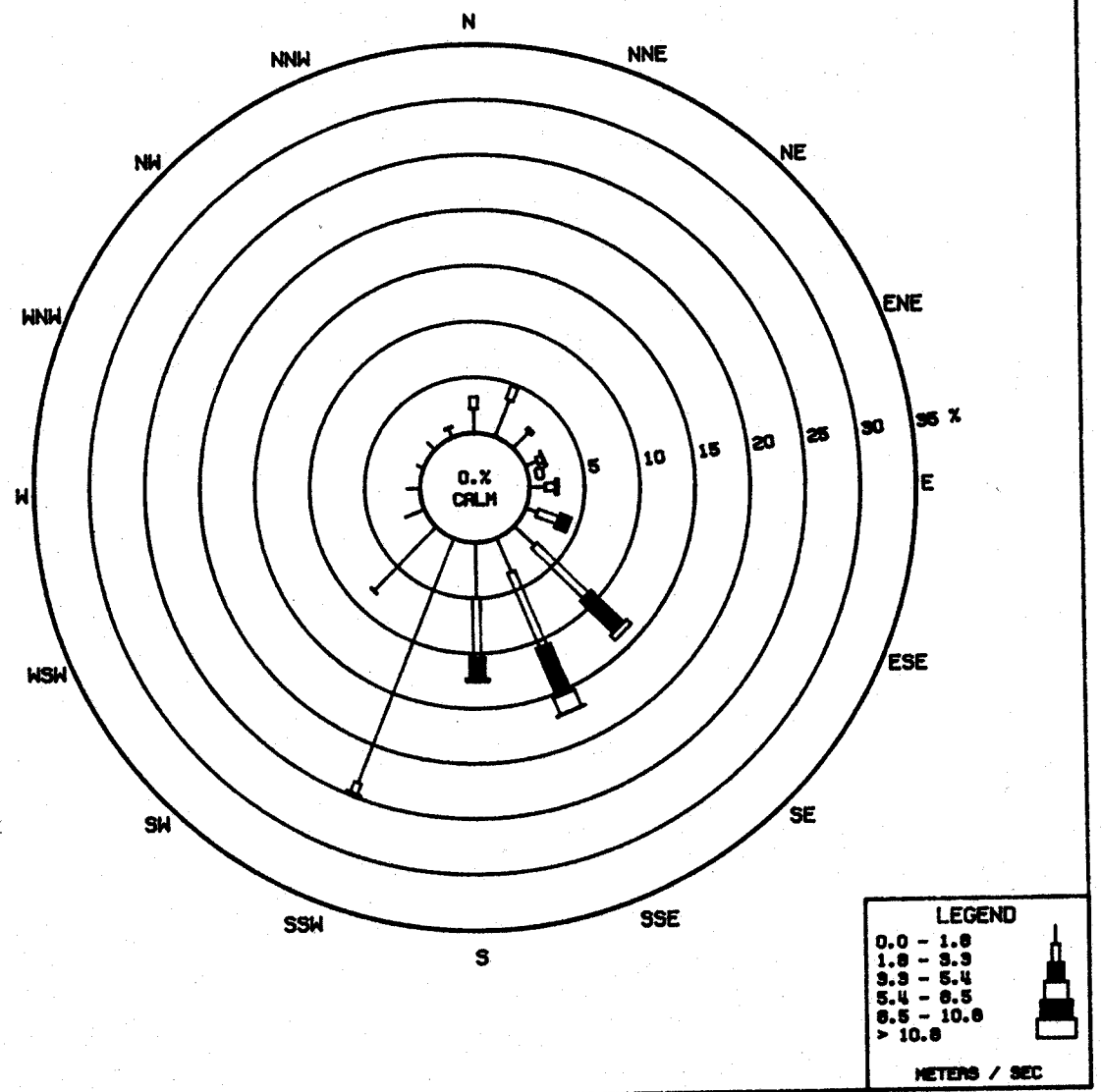
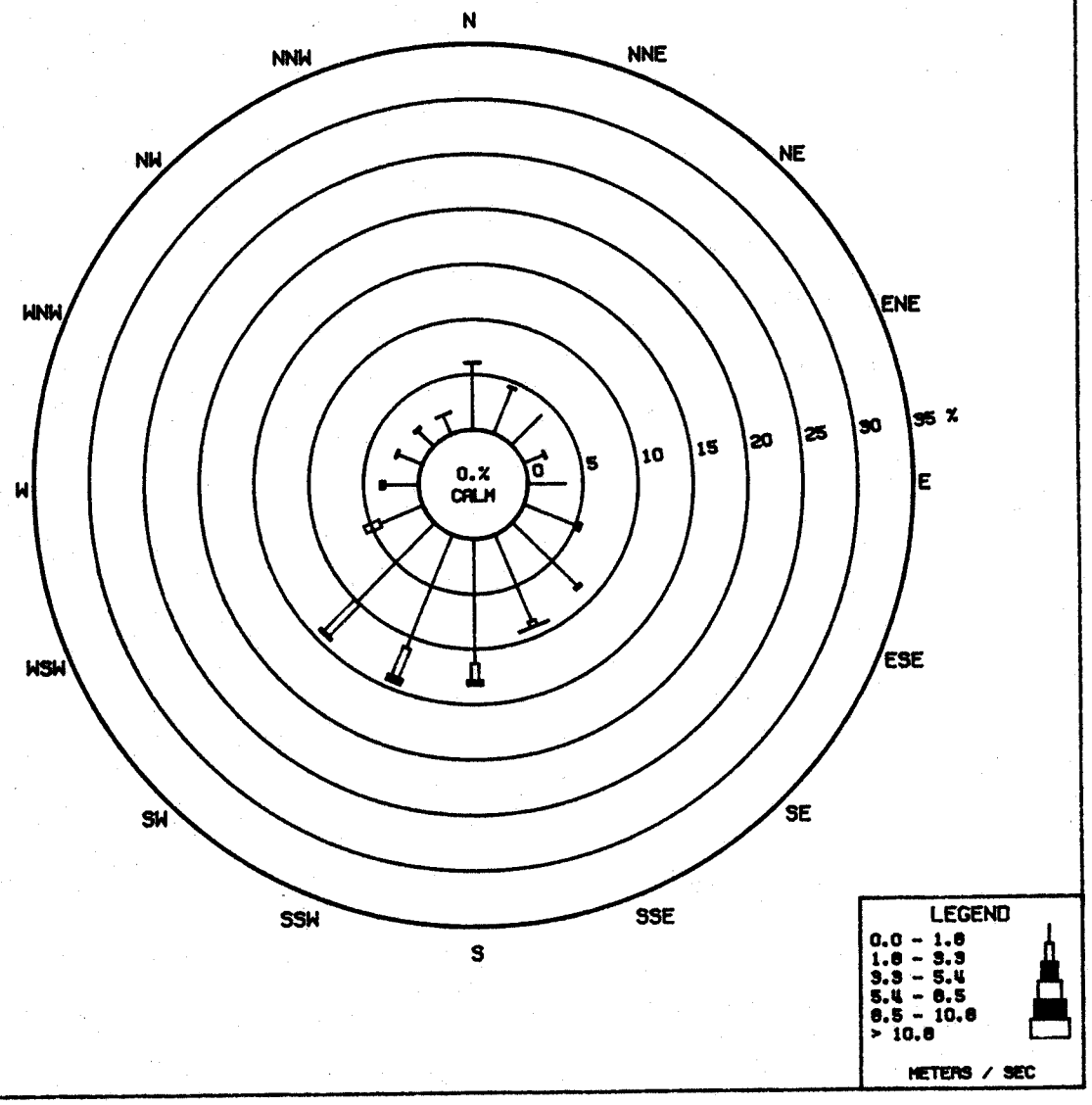


FIG. 4-2. L. CHERRY CREEK WIND ROSE - 7/1/88 - 9/30/88



APPENDIX A
PLAN OF STUDY, AIR QUALITY AND METEOROLOGY DISCIPLINES

Woodward-Clyde Consultants

PLAN OF STUDY

FOR

COLLECTION OF ENVIRONMENTAL BASELINE DATA
MONTANA SILVER VENTURE PROJECT
LINCOLN AND SANDERS COUNTIES
MONTANA

Prepared For

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By

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June, 1988

SIGNATURE PAGE

The U.S. Forest Service (USFS) and Montana Department of State Lands (MDSL) have reviewed the Draft Plan of Study (POS) issued January 20, 1988 and made comments to clarify and correct the Draft POS. U.S. Borax has incorporated the changes and submits this Final POS to the USFS and MDSL.

There are three plant site alternatives and two tailings disposal site alternatives to be studied in the collection of environmental baseline data. These alternatives appear to be practical, economic, and environmentally acceptable at this early phase of the evaluation. If, during the course of this study, it is determined that one or more of the alternatives have become unacceptable, they may be dropped and others added. The dropping and/or adding of alternatives would require review and modification where appropriate of this Plan of Study by the agencies and U.S. Borax to insure adequate collection of environmental baseline data. It is also understood that based on baseline data findings, the Plan of Study may be modified by the agencies and U.S. Borax.

The affixed signatures document acceptance of this Final POS. All substantial changes to the POS will require a new Signature Page.

Kenneth M. Reim Date: 6/16/88
Kenneth M. Reim
Manager, Mining Development
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James F. Rathbun Date: 6/23/88
James F. Rathbun
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Kit Walther, Chief
Hard Rock Bureau
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Capitol Station
Helena, Montana 59620

Section 3

AIR QUALITY

U.S.Borax is presently developing plans to construct an underground silver-copper mine, processing plant and ancillary facilities. It is expected the new mine/plant will be sufficiently large that U.S.Borax will need to obtain a Montana Air Quality Permit to Construct prior to commencing construction. Baseline ambient air quality data and meteorological data will be collected to supplement existing data as needed and submitted to the Montana Department of State Lands, Air Quality Bureau (MDSL, AQB) in support of this permit application.

This Plan of Study outlines a proposed air quality baseline data collection program; and explains which air quality data will be gathered, how the data will be gathered, analyzed, summarized and reported to the MDSL, AQB. In addition, the anticipated use of the data is discussed, with emphasis on explaining how each parameter will eventually be used to quantify the potential air quality impacts of the proposed mine, processing plant and ancillary facilities.

U.S.Borax is submitting this Plan of Study to the MDSL, and to the U.S. Forest Service to:

- Define the intended air quality baseline data collection effort; and
- To solicit comments, suggestions, and approval from participating agencies.

3.1 AIR EMISSION SOURCES AND LOCATIONS

This section describes the proposed mine/processing plant emission sources and discusses alternative plant locations.

3.1.1 Description of Emission Sources

The project will use conventional mining, milling, and concentrating methods to produce concentrates that will be shipped off site for subsequent smelting. The project will consist of three related facilities:

- An underground silver/copper mine;

- A processing plant in which ore will be crushed, ground, and concentrated by flotation; and

- A tailings disposal pond

The process plant ore throughput is expected to be a nominal 3.5 million tons per year.

Pollutant emissions from the proposed project will be well controlled. Gaseous products of combustion from underground diesel vehicles and mining equipment will be minimized by use of low-emission engines, and by preventive maintenance of the engines. Particulate matter generated by drilling, blasting, loading of the ore, hauling the ore to and dumping the ore in the primary crusher will be controlled by the natural wetness of the ore and water sprays where necessary. Particulate matter generated by primary crushing of ore underground will be controlled with water sprays, settling chambers, cyclones, and/or high-efficiency wet venturi scrubbers. Control of particulate matter at conveyor transfer points will be by water sprays and covers. Underground mining emissions will be emitted from the mine vents.

Crushed ore will be conveyed from underground to the processing plant, transferred to secondary crushers, fed into the wet grinding section of the concentrator, and from there to flotation cells. After vacuum filtration of the concentrate, it will be hauled by truck to a rail siding. Pollutant emissions from the ore crushing, handling, and storage activities will be minimal due to the high moisture content of the ore. The secondary crushers will be controlled with high-energy wet venturi scrubbers, and ore conveyors and transfers will be enclosed and controlled by baghouses.

Dust emissions from the tailings pond are also expected to be small because the tailings will be wet. Water sprays will be used as needed to ensure that windblown dust from the tailings pond is minimized, and reclamation will be ongoing.

3.1.2 Emission Source Locations

There are several alternative locations for the proposed project, as indicated on the enclosed map. The currently preferred alternative would be to locate the mine and processing plant on the east side of the Cabinet Mountains, either in Ramsey Creek or Libby Creek, and establish the tailings pond northeast of the processing plant, as shown on Figure 2-1. Another alternative would be to build the processing plant on the west side of the Cabinet Mountains, in the upper Rock Creek drainage, with the tailings impoundment possibly somewhere in the lower Rock Creek drainage basin.

The alternative locations are within Class II PSD areas, but located adjacent to the Cabinet Mountains Wilderness Class I area, where visibility has been deemed an important value. The alternative locations are in an air shed that is "attainment" for all criteria pollutants. The nearest nonattainment area is at Columbia Falls, 120 kilometers east-northeast of the proposed alternative locations. Libby, 40 kilometers to the north-northeast, has been designated Group I for PM-10, indicating that there is a high probability that PM-10 ambient air quality standards may be exceeded there.

ASARCO, Inc. has proposed to construct a silver-copper mine and processing plant along the West Fork of Rock Creek. An extensive environmental baseline study, performed in support of the ASARCO project, has recently been completed. The baseline study includes a year long collection of air quality and meteorological parameters, and adequately represents air quality and meteorological conditions in the Rock Creek drainage.

3.2 APPLICABLE REGULATIONS

The only air pollutants that will be emitted in significant amounts from the mine and processing plant are particulate matter and nitrogen dioxide (NO_2). Particulate matter will be emitted from the coarse ore silo, primary and secondary crushers, conveyor system and tailings area. NO_2, generated from the combustion of diesel fuel in underground mining equipment, will be emitted from the mine adits and vents. For the purposes of determining whether or not a proposed source is subject to the monitoring provisions of the Prevention of Significant Deterioration (PSD) regulations, one must determine the "potential to emit" of the source. Potential to emit is defined as (ARM 16.8.921 [27]):

> "...the capability of a source at maximum design capacity to emit any air pollutant after the application of air pollution control equipment. Any enforceable permit condition or regulation which limits hours of operation, the type or amount of material combusted, stored, or processed."

Because underground mines, haul roads, and tailings areas are not listed as sources for which fugitive emissions count in determining potential to emit, only the non-fugitive particulate emissions count in determining potential to emit. The non-fugitive particulate emissions are quantified in Table 3-1, using emission factors from the EPA's <u>Compilation of Air Pollutant Emission Factors</u> (EPA, 1985), and from Montana AQB's Hardrock Mining Emission Factors (Driscoll, 1986). Assuming a maximum ore production rate of 3.5×10^6 tons per year, non-fugitive particulate emissions of 57.4 tons per year are expected.

The monitoring requirements appearing in the PSD Regulations (ARM 16.8.921, et seq.) apply only to "major stationary sources," where major stationary source is one whose potential to emit exceeds 100 tons per year for a select group of specified sources, or 250 tons per year for all other sources.

TABLE 3-1

NON-FUGITIVE PARTICULATE MATTER EMISSION RATES
FROM U.S. BORAX MONTANA SILVER VENTURE

MATERIAL AND THROUGHPUT DATA:

Ore Throughput: 512 tons per hour
Fuel Consumption (No. 2 Diesel):
500,000 gallons/year (underground)
100,000 gallons/year (surface)

Wet scrubber volume flow: approx. 70,000 cfm (33.04 m^3/sec)

1. PARTICULATE EMISSIONS

The dominant source of particulate emissions will be the wet venturi scrubbers used to control emissions from the secondary and tertiary crushers at the crushing plant. The scrubbers will comply with the Metallic Minerals Processing NSPS of 0.05 grams/cubic meter.

E = volume flow x dust loading

= 33.04 m^3/sec x 0.05 grams/cubic meter

= 1.65 grams/sec
= 13.11 pounds/hour
= 57.4 tons per year

2. NITROGEN DIOXIDE EMISSIONS

The major source of NOx emissions will be the combustion of No. 2 Diesel fuel in underground and surface vehicles. Roughly 600,000 gallons per year of fuel will be consumed at the project. Using an emissions factor of 171.4 lb/10^3 gallons, total NOx emissions are given by:

E = (171.4 lb/1000 gal) x (600,000 gallons)
= 102,840 lb/year
= 51.4 tons per year

Clearly, the proposed U.S.Borax project will not be a major stationary source, and consequently is not subject to PSD monitoring requirements, since its potential to emit is 57.4 tons per year.

However, in the interest of better quantifying the air quality impact of the project, U.S.Borax proposes to provide representative measures of background pollutant concentrations and meteorological parameters in the vicinity of the proposed project. If it is decided that the project will be located on the east of the Cabinet Mountains, then PM-10 concentrations and meteorological parameters will be gathered at a site near the proposed processing plant and tailings disposal area. If it is decided that the project will be located in the upper Rock Creek drainage, then U.S. Borax proposes to use the baseline data collected by ASARCO as a representative measure of baseline air quality and meteorology.

3.3 AIR QUALITY BASELINE DATA COLLECTION PROGRAM

The following sections of this Plan of Study discuss the baseline data collection effort that will be performed if U.S.Borax locates its project on the east of the Cabinet Mountains.

An air quality specialist will be responsible for the design, installation, and audits of an air quality and meteorological baseline monitoring stations in the vicinity of the proposed facilities, supplementing existing data as necessary. The instrumentation, data reporting, and quality assurance program that will be implemented are described below.

3.3.1 Monitoring Stations Location and Duration

There will be two air quality and meteorological stations located at the project site. The first station will be at the proposed plantsite in Ramsey Creek and will consist of collocated PM-10 samplers operated on an every sixth day schedule. Additionally, a meteorological monitoring station, consisting of wind speed, wind direction, sigma-theta, and temperature will be installed adjacent to the PM-10 samplers. The second station will be located in the vicinity of the proposed tailings disposal site, in a clearing, unobstructed by trees. The station will have one PM-10 sampler and one Hi-Vol sampler, operated on a once every six day schedule. The meteorological station will include wind speed, wind direction, sigma-theta and temperature. Two additional items will also be installed, a continuous precipitation gauge and an evaporation pan. These instruments will be operated for a one-year period beginning in the spring of 1988. Continuation of the monitoring program will be discussed with the State after a review of the baseline data and the company's development schedule.

3.3.2 Instrumentation

The instrumentation that will be used in the baseline monitoring program is summarized in Tables 3.2 and 3.3. Briefly, the PM-10 sampler will be model RFPS-1087-062, Wedding and Associates, which were deemed EPA equivalent method samplers October 6, 1987 (EPA, 1987). PM-10 filters will be gravimetrically analyzed to determine ambient PM-10 concentrations. If background concentrations in excess of 150 ug/m^3 are detected at any time during the sampling program, then the sampling frequency will be increased from once-every-sixth day to once-every-third day, in order to improve resolution in computing the number of expected exceedances for comparison with EPA's new PM-10 ambient air quality standard.

TABLE 3.2

INSTRUMENTATION AT THE PROPOSED
PLANT SITE AIR QUALITY MONITORING STATIONS

PARAMETER	MONITOR[a]	COMMENTS
PM-10 (2)	RFPS-1087-062 WEDDING with CRITICAL FLOW DEVICE	EPA Equivalent Method
WIND SPEED	CLIMATRONICS EWS/WM-III	Meets EPA PSD Specs
WIND DIRECTION	CLIMATRONICS EWS/WM-III	Meets EPA PSD Specs
TEMPERATURE	CLIMATRONICS EWS/thermistor	Meets EPA PSD Specs
SIGMA-THETA	CLIMATRONICS	No EPA Specs for sigma-theta
DATA LOGGER	CLIMATRONICS IMP 803	Digital, Self Contained

(a) Or equivalent equipment

TABLE 3.3

INSTRUMENTATION AT THE PROPOSED TAILINGS DISPOSAL SITE
AIR QUALITY MONITORING STATION

PARAMETER	MONITOR[a]	COMMENTS
PM-10		
HI-VOL		
WIND SPEED		
SIGMA-THETA		
TEMPERATURE		
DATA LOGGER		
PRECIPITATION GAUGE	BELL FORT TIPPING, BUCKET	No EPA Specs
EVAPORATION PAN	CLIMATRONICS #6821 " #6844-A	No EPA Specs

(a) Or equivalent equipment

A 10-meter meteorological tower will be erected near the proposed plantsite and proposed tailings disposal site to continuously measure wind speed, wind direction, and temperature at the 10-meter level. Additionally, sigma-theta (standard deviation of wind direction) will be computed from the 10-meter wind direction. All meteorological parameters (wind speed, wind direction, temperature, and sigma-theta) will be polled and recorded on cassette tape by a digital data acquisition system, with strip chart backup. The precipitation gauge and evaporation pan will be located at the proposed tailings disposal site. Precipitation data will be collected continuously. The evaporation pan data will be collected May-September.

All instrumentation and data collection procedures will comply with EPA PSD requirements appearing in Ambient Monitoring Guidelines for Prevention of Significant Deterioration (EPA, 1980).

3.3.3 Data Reduction and Reporting

Strip charts and digital cassettes will be sent from the monitoring station to the air quality specialist every two weeks. Data cassettes will be electronically read and input to a disk file. If necessary, hourly average data values determined from strip charts will be coded on specially prepared

keypunch forms, keypunched, and input to computer disk file to fill in digital gaps.

PM-10 filters will also be sent to the air quality specialist for analysis every two weeks. Filters will be equilibrated and weighed to determine sampler mass, and mass concentration of PM-10 will be determined by dividing sample mass by corrected volume flow rate.

Ambient air metals concentrations will be determined once a month by assaying the metal constituents from the Hi-Vol filters. A batch composite made up of a strip 3/4" x 8" of each Hi-Vol filter will be assayed, and the mass of each metal constituent (arsenic, lead, cadmium, chromium, zinc, copper, iron and antimony) will be divided by corrected volume flow rate to yield airborne metals concentrations.

A computer program will be used to perform appropriate data averaging, error checking, and report printing for the PM-10, Hi-Vol and meteorological data. Raw data and data summary reports will be generated quarterly, and will include the following:

- Chronological meteorological data in EPA approved format.
- Summaries of individual twenty-four hour PM-10 concentrations and average PM-10 concentrations.
- Summaries of monthly average metals concentrations.
- Data retrieval summary.

The final report shall be suitable for inclusion in U.S. Borax's permit application as a technical appendix.

3.3.4 Quality Assurance Program

At the outset of the monitoring program, a comprehensive Quality Assurance Plan will be developed in accordance with the EPA Quality Assurance Handbook for Air Pollution Measurement Systems - Volume I, and the Montana AQB Quality Assurance Manual. The Quality Assurance Plan will incorporate the requirements of the EPA's Ambient Monitoring Guidelines for PSD, as well as the air quality specialist's own Quality Assurance Program. Specific elements that will be detailed in the plan include:

- Training of project personnel.
- Equipment and parts control.
- Installation, calibration, and preventive maintenance procedures.

- Data collection.
- System and performance audit program.

The Plan will also define procedural aspects of the data collection and data reduction effort, including these items:

- Quarterly performance audits of the PM-10 and Hi-Vol samplers using independent audit calibrators.
- Monthly comparison of digital data with analog strip chart data, and with calibration data.
- Quarterly audit of filter weighing procedures to check particulate weighing precision.
- Semi-annual checks of meteorological sensors.

3.4 UTILIZATION OF DATA

The objective of the air quality baseline data collection program is to gather data which will allow U.S.Borax and the Montana AQB to accurately assess the air quality impact of the proposed mine and processing plant.

Meteorological data will be averaged over consecutive one-hour time intervals for input to air quality dispersion models. Wind speed, wind direction, and temperature averages are used directly in the models. The sigma-theta data will be processed along with the wind speed data and time of sunrise/sunset, using the Irwin method, to determine hourly atmospheric stability classification which is also input to the models. These procedures comply with EPA's Guideline on Air Quality Models (EPA, 1986).

The ambient air PM-10 concentrations will be used as a measure of background, to which modeled PM-10 concentrations must be added to determine compliance with 1987 promulgated PM-10 national ambient air quality standards. The annual average background arithmetic PM-10 concentration will be added to the maximum modeled PM-10 concentration expected to result from operation of the proposed mine and plant. This sum will be compared to the annual average PM-10 ambient air quality standard. The background 24-hour PM-10 concentration measured during meteorological conditions similar to those that prompt the maximum modeled PM-10 contribution will be added to the maximum modeled concentration to determine compliance with the 24-hour PM-10 standard.

Background metals concentrations will be added to modeled metals concentrations, and the sum compared to Montana AQB Acceptable Ambient Concentrations (AACs) for metals. These AACs are used as guidelines in determining approvability of air quality permit applications.

REFERENCES

Driscoll, 1986, "Hardrock Mining Emission Factors," compiled by Pat Driscoll, Montana Air Quality Bureau, June 1986.

EPA, 1980, Ambient Monitoring Guidelines for Prevention of Significant Deterioration (PSD), U.S. Environmental Protection Agency, OAQPS,Research Triangle Park, NC, 27711, November 1980.

EPA, 1985, Compilation of Air Pollutant Emission Factors, Vol I, Fourth Edition, U.S. EPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, September 1985.

EPA, 1986, Guideline on Air Quality Models (Revised), EPA-450/2-78-027R, U.S. EPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27711, July 1986.

EPA, 1987, Federal Register, Vol. 52, No. 193, October 6, 1987.

APPENDIX B
COMPOSITE DAY ANALYSIS AND METEOROLOGICAL DATA

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: RAMSEY CREEK SELECTED PERIOD: 1 JUL 88 THRU 31 JUL 88

MONTH AND YEAR OF RECORD: JUL 88

	WND SPD (MPH) AT 10 METERS				WND DIR (DEG) AT 10 METERS				SIGMA-T (DEG) AT 10 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	1.4	13.0	3.8	31	138.	292.	201.	24	8.	43.	21.	24
2	1.0	9.5	3.6	31	90.	225.	191.	24	9.	46.	20.	24
3	1.6	11.5	4.0	31	144.	226.	191.	24	8.	46.	20.	24
4	1.8	10.8	3.8	31	18.	230.	196.	24	6.	51.	20.	24
5	1.4	10.8	3.5	31	145.	322.	205.	24	7.	45.	21.	24
6	1.2	10.6	3.6	31	125.	342.	195.	24	7.	39.	21.	24
7	.8	10.1	3.4	31	127.	264.	192.	24	7.	47.	22.	24
8	.1	9.9	3.4	31	11.	241.	160.	24	9.	43.	28.	24
9	.6	10.5	3.5	31	0.	344.	112.	23	16.	51.	29.	23
10	.9	11.8	4.3	31	0.	347.	119.	23	14.	38.	23.	23
11	1.2	12.0	5.2	31	10.	334.	142.	23	15.	38.	24.	23
12	.9	11.7	5.9	31	6.	267.	150.	23	14.	45.	24.	23
13	1.1	10.8	6.0	31	0.	195.	149.	23	14.	34.	24.	23
14	2.4	10.8	6.2	31	19.	256.	151.	24	17.	47.	28.	24
15	1.3	13.4	6.6	31	57.	309.	142.	24	19.	46.	29.	24
16	2.6	16.0	6.8	31	11.	187.	146.	24	18.	46.	27.	24
17	1.7	12.2	6.3	31	103.	319.	153.	24	18.	48.	26.	24
18	2.1	14.4	6.5	31	66.	249.	145.	24	17.	53.	29.	24
19	.2	13.4	6.4	31	87.	340.	152.	24	16.	42.	26.	24
20	1.8	9.9	5.6	31	51.	335.	153.	24	17.	44.	27.	24
21	1.8	12.3	5.2	31	12.	255.	176.	24	10.	56.	23.	24
22	1.8	12.6	4.9	31	133.	298.	186.	24	7.	39.	21.	24
23	1.5	11.6	4.6	31	138.	272.	197.	24	7.	43.	22.	24
24	1.2	13.6	4.1	31	132.	307.	204.	24	8.	38.	21.	24
COMPOSITE VALUES FOR THIS MONTH -												
	.1	16.0	4.9	744	0.	347.	171.	571	6.	56.	24.	571

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: RAMSEY CREEK SELECTED PERIOD: 1 JUL 88 THRU 31 JUL 88

MONTH AND YEAR OF RECORD: JUL 88

HR	TEMP (CEL) AT 4 METERS MINIMUM	MAXIMUM	AVERAGE	TLY
1	3.8	21.8	12.4	31
2	3.2	19.9	11.8	31
3	2.8	19.7	11.8	31
4	2.7	20.9	11.8	31
5	2.4	19.6	11.4	31
6	1.9	20.3	11.2	31
7	3.4	20.6	11.5	31
8	5.4	21.9	14.2	31
9	5.4	25.5	16.9	31
10	5.8	26.8	18.3	31
11	5.7	28.0	19.1	31
12	6.1	29.0	19.9	31
13	6.2	29.8	20.8	31
14	5.7	29.1	21.5	31
15	5.7	30.0	21.9	31
16	6.5	30.7	22.0	31
17	6.8	30.8	21.1	31
18	7.2	29.9	21.4	31
19	7.7	28.9	20.6	31
20	7.8	26.4	18.1	31
21	7.3	26.4	16.5	31
22	6.0	26.4	15.2	31
23	5.0	26.4	14.3	31
24	4.4	26.4	13.5	31
COMPOSITE VALUES FOR THIS MONTH -				
	1.9	30.8	16.5	744

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"**" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: RAMSEY CREEK SELECTED PERIOD: 1 AUG 88 THRU 31 AUG 88

MONTH AND YEAR OF RECORD: AUG 88

	WND SPD (MPH) AT 10 METERS				WND DIR (DEG) AT 10 METERS				SIGMA-T (DEG) AT 10 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	1.4	17.6	4.4	27	111.	328.	197.	28	8.	52.	20.	28
2	1.0	20.0	4.2	27	99.	296.	198.	28	7.	41.	21.	28
3	1.0	15.8	4.0	28	137.	273.	194.	28	8.	45.	21.	28
4	1.4	11.8	3.9	27	111.	321.	194.	28	7.	42.	20.	28
5	1.4	12.1	4.1	27	98.	331.	184.	28	6.	52.	20.	28
6	1.1	9.8	3.5	27	131.	328.	200.	28	5.	41.	19.	28
7	1.3	10.7	3.7	27	119.	325.	200.	28	8.	41.	20.	28
8	.9	9.7	3.3	27	65.	327.	189.	28	7.	51.	24.	28
9	1.0	10.9	3.3	27	5.	327.	185.	28	7.	44.	22.	28
10	.7	11.8	3.2	27	12.	352.	133.	28	8.	58.	27.	28
11	.8	10.6	3.7	27	15.	317.	98.	28	13.	34.	24.	28
12	1.3	10.1	4.6	26	23.	328.	88.	28	11.	42.	22.	28
13	1.5	10.5	5.3	26	12.	332.	114.	28	11.	45.	25.	28
14	1.6	11.4	6.2	26	3.	313.	138.	28	15.	38.	24.	28
15	.2	9.6	6.0	28	4.	356.	133.	28	2.	43.	24.	28
16	.1	11.0	6.4	29	13.	358.	131.	29	3.	51.	23.	29
17	2.3	10.3	6.4	29	13.	340.	133.	29	14.	49.	27.	29
18	2.3	11.5	6.0	29	9.	237.	136.	29	14.	50.	27.	29
19	1.7	10.2	5.2	29	7.	349.	147.	29	14.	42.	28.	29
20	.2	13.3	5.2	29	0.	242.	154.	29	4.	40.	23.	29
21	.8	13.4	4.9	29	0.	307.	170.	29	6.	36.	21.	29
22	1.3	10.7	4.6	29	118.	230.	184.	29	7.	37.	20.	29
23	1.8	13.1	4.3	28	131.	250.	196.	29	7.	39.	20.	29
24	1.5	15.8	4.3	28	136.	327.	190.	29	7.	50.	21.	29
COMPOSITE VALUES FOR THIS MONTH -												
	.1	20.0	4.6	663	0.	358.	170.	681	2.	58.	23.	681

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"**" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: RAMSEY CREEK SELECTED PERIOD: 1 AUG 88 THRU 31 AUG 88

MONTH AND YEAR OF RECORD: AUG 88

HR	TEMP (CEL) AT 4 METERS MINIMUM	MAXIMUM	AVERAGE	TLY
1	5.1	20.0	14.1	28
2	4.6	19.1	13.9	28
3	4.2	18.6	13.6	28
4	3.5	19.1	13.2	28
5	3.2	19.2	12.9	28
6	2.9	18.1	12.1	28
7	2.9	17.8	11.6	28
8	2.2	18.1	11.2	28
9	2.6	19.3	11.7	28
10	.7	23.5	14.2	28
11	7.2	26.5	18.2	28
12	11.8	27.0	19.9	28
13	13.9	28.6	21.1	28
14	13.3	29.2	22.5	28
15	.5	30.8	22.5	28
16	.6	31.7	22.6	29
17	10.2	32.8	23.5	29
18	10.5	32.7	23.3	29
19	3.0	30.0	21.8	29
20	1.3	25.5	19.4	29
21	6.1	23.2	17.1	29
22	6.5	22.3	16.3	29
23	5.4	21.6	15.0	29
24	5.3	20.6	14.4	29
COMPOSITE VALUES FOR THIS MONTH -				
	.5	32.8	16.9	681

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: RAMSEY CREEK SELECTED PERIOD: 1 SEP 88 THRU 30 SEP 88

MONTH AND YEAR OF RECORD: SEP 88

	WND SPD (MPH) AT 10 METERS				WND DIR (DEG) AT 10 METERS				SIGMA-T (DEG) AT 10 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	1.0	14.2	4.2	30	95.	249.	187.	30	7.	34.	20.	27
2	.9	17.3	4.3	30	135.	350.	191.	30	6.	51.	20.	27
3	.5	17.3	3.9	30	108.	330.	191.	30	7.	52.	22.	27
4	.9	14.5	3.7	30	47.	293.	194.	30	7.	41.	22.	27
5	.5	13.6	3.4	30	9.	354.	194.	30	8.	47.	23.	27
6	.9	13.1	3.3	30	3.	281.	190.	30	7.	40.	22.	27
7	1.0	11.7	3.3	30	22.	232.	181.	30	6.	48.	23.	27
8	.5	11.3	3.5	30	122.	307.	188.	30	6.	44.	22.	27
9	.7	12.8	3.7	30	110.	316.	190.	30	5.	43.	21.	27
10	.4	10.1	3.5	30	45.	214.	171.	30	7.	43.	24.	27
11	.7	10.1	3.8	30	18.	270.	129.	30	13.	48.	25.	27
12	.6	14.1	4.5	30	20.	357.	106.	30	16.	44.	24.	27
13	1.1	16.2	5.6	30	5.	258.	97.	30	14.	38.	23.	27
14	1.0	17.5	6.1	30	3.	340.	104.	30	12.	43.	21.	27
15	1.1	15.9	6.0	30	0.	356.	110.	30	14.	49.	23.	27
16	1.4	16.0	6.0	30	1.	345.	120.	30	15.	46.	23.	27
17	1.4	17.4	6.1	30	6.	352.	112.	30	12.	47.	23.	27
18	1.0	16.1	5.6	30	0.	215.	118.	30	12.	48.	24.	27
19	.8	15.5	4.7	30	61.	351.	155.	30	18.	48.	30.	26
20	.4	13.3	4.7	30	3.	318.	178.	30	7.	47.	22.	26
21	.0	15.6	4.1	30	108.	306.	175.	30	6.	52.	22.	26
22	.3	14.6	3.9	30	6.	236.	189.	30	5.	50.	21.	26
23	.8	13.5	3.9	30	91.	330.	188.	30	5.	42.	20.	26
24	.8	16.4	4.2	30	127.	312.	183.	30	5.	48.	20.	26
COMPOSITE VALUES FOR THIS MONTH -												
	.0	17.5	4.4	720	0.	357.	170.	720	5.	52.	22.	642

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: RAMSEY CREEK SELECTED PERIOD: 1 SEP 88 THRU 30 SEP 88

MONTH AND YEAR OF RECORD: SEP 88

HR	TEMP (CEL) AT 4 METERS MINIMUM	MAXIMUM	AVERAGE	TLY
1	.8	20.3	9.6	30
2	.8	20.4	9.2	30
3	.7	20.6	8.9	30
4	.2	22.3	8.5	30
5	-.4	21.5	8.1	30
6	-1.1	21.6	7.9	30
7	-1.8	21.2	7.7	30
8	-2.1	20.7	7.4	30
9	-1.7	20.4	7.2	30
10	-1.0	19.1	7.5	30
11	.6	20.7	10.1	30
12	3.5	24.4	12.7	30
13	4.5	26.8	14.0	30
14	4.6	28.9	14.8	30
15	5.3	32.1	15.4	30
16	4.0	32.7	15.6	30
17	3.5	32.7	15.7	30
18	3.8	31.8	15.4	30
19	3.0	30.5	14.5	30
20	2.0	27.8	12.2	30
21	2.0	25.4	11.2	30
22	1.7	22.4	10.5	30
23	1.9	19.9	10.0	30
24	1.5	20.2	9.8	30
COMPOSITE VALUES FOR THIS MONTH -	-2.1	32.7	11.0	720

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 1 JUL 88 (JULIAN DAY 183)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.5	222.	28.	7.4
2	2.6	218.	22.	6.4
3	3.0	207.	25.	6.2
4	2.8	220.	23.	5.8
5	2.7	229.	24.	6.0
6	2.4	221.	33.	6.7
7	2.3	226.	30.	7.9
8	2.4	112.	32.	11.8
9	2.7	8.	24.	13.3
10	4.0	158.	26.	17.6
11	4.0	197.	26.	18.9
12	4.4	184.	30.	19.9
13	3.8	191.	34.	20.8
14	4.7	167.	35.	20.9
15	4.6	155.	25.	20.8
16	3.6	172.	30.	20.9
17	3.2	227.	26.	19.7
18	2.1	249.	42.	20.8
19	.2	340.	25.	22.8
20	1.8	278.	32.	17.3
21	2.0	220.	29.	14.2
22	2.1	207.	24.	12.3
23	2.8	206.	21.	11.2
24	2.6	200.	20.	10.3

MINIMUM OBSERVED VALUES:

**	.2	8.	20.	5.8

MAXIMUM OBSERVED VALUES:

**	4.7	340.	42.	22.8

AVERAGE OBSERVED VALUES:

**	2.9	207.	27.	14.2

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 2 JUL 88 (JULIAN DAY 184)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.6	210.	27.	10.5
2	2.8	198.	22.	9.8
3	2.9	204.	38.	10.9
4	2.5	209.	30.	10.7
5	3.0	207.	31.	11.3
6	4.0	177.	27.	14.5
7	4.5	165.	26.	14.8
8	6.7	169.	25.	15.7
9	9.2	174.	19.	16.7
10	7.2	166.	25.	18.4
11	7.0	185.	22.	19.2
12	5.8	188.	23.	18.0
13	5.3	171.	26.	18.2
14	4.8	185.	26.	18.1
15	4.6	154.	28.	17.5
16	6.5	152.	26.	18.0
17	4.4	169.	34.	16.0
18	5.4	159.	25.	16.5
19	6.1	167.	27.	16.6
20	9.9	133.	26.	17.1
21	10.3	146.	22.	17.1
22	10.1	148.	18.	16.8
23	8.8	159.	23.	16.5
24	9.3	132.	20.	16.2
MINIMUM OBSERVED VALUES:				
**	2.5	132.	18.	9.8
MAXIMUM OBSERVED VALUES:				
**	10.3	210.	38.	19.2
AVERAGE OBSERVED VALUES:				
**	6.0	172.	25.	15.6

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 3 JUL 88 (JULIAN DAY 185)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	8.3	153.	23.	15.7
2	9.5	147.	23.	15.4
3	11.5	147.	18.	14.9
4	10.8	149.	19.	14.4
5	10.8	153.	18.	14.0
6	10.6	147.	20.	13.6
7	10.1	152.	19.	13.6
8	8.0	167.	21.	12.9
9	6.1	166.	22.	13.3
10	5.2	135.	22.	13.4
11	4.0	153.	25.	14.9
12	5.5	162.	25.	17.0
13	4.7	195.	27.	17.7
14	3.3	128.	43.	17.7
15	4.0	176.	28.	19.0
16	6.3	146.	26.	19.1
17	6.1	146.	20.	17.5
18	3.9	73.	35.	17.4
19	6.5	126.	25.	16.3
20	7.2	139.	21.	14.4
21	4.8	165.	25.	13.5
22	3.7	136.	37.	12.4
23	1.5	219.	27.	10.4
24	2.0	209.	15.	8.3
MINIMUM OBSERVED VALUES:				
**	1.5	73.	15.	8.3
MAXIMUM OBSERVED VALUES:				
**	11.5	219.	43.	19.1
AVERAGE OBSERVED VALUES:				
**	6.4	154.	24.	14.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 4 JUL 88 (JULIAN DAY 186)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.2	205.	14.	7.8
2	2.0	203.	14.	6.9
3	2.4	211.	17.	6.4
4	2.3	217.	21.	5.9
5	2.3	203.	21.	5.6
6	1.6	203.	15.	4.6
7	2.0	199.	17.	6.1
8	1.0	198.	22.	8.3
9	.8	103.	40.	11.2
10	3.0	0.	21.	14.4
11	4.3	15.	15.	14.8
12	3.0	9.	22.	16.1
13	2.5	18.	29.	18.5
14	2.8	19.	25.	17.8
15	1.3	98.	46.	19.6
16	2.6	85.	46.	20.1
17	3.6	191.	21.	16.3
18	3.7	202.	26.	16.4
19	1.7	199.	24.	15.6
20	2.8	196.	22.	14.8
21	1.8	255.	27.	12.8
22	2.3	221.	24.	11.0
23	2.1	235.	34.	9.8
24	2.5	199.	26.	9.5
MINIMUM OBSERVED VALUES:				
**	.8	0.	14.	4.6
MAXIMUM OBSERVED VALUES:				
**	4.3	255.	46.	20.1
AVERAGE OBSERVED VALUES:				
**	2.4	200.	24.	12.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 5 JUL 88 (JULIAN DAY 187)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.8	160.	43.	9.5
2	1.7	224.	31.	9.2
3	1.9	149.	44.	8.9
4	1.8	130.	51.	8.6
5	1.6	237.	36.	8.3
6	1.2	171.	39.	8.0
7	1.8	183.	30.	7.5
8	1.9	202.	36.	7.6
9	2.0	0.	51.	8.0
10	1.0	295.	38.	8.3
11	1.2	165.	38.	8.7
12	1.1	150.	33.	9.1
13	6.7	187.	16.	8.1
14	5.6	179.	21.	7.5
15	7.2	164.	23.	7.2
16	5.4	143.	38.	7.1
17	7.6	179.	20.	6.9
18	10.3	171.	18.	7.2
19	8.8	164.	22.	8.0
20	9.7	146.	20.	8.0
21	7.1	143.	20.	8.0
22	3.0	298.	39.	6.4
23	2.9	213.	29.	5.4
24	3.1	228.	25.	6.4
MINIMUM OBSERVED VALUES:				
**	1.0	0.	16.	5.4
MAXIMUM OBSERVED VALUES:				
**	10.3	298.	51.	9.5
AVERAGE OBSERVED VALUES:				
**	4.0	180.	32.	7.8

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 6 JUL 88 (JULIAN DAY 188)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	6.1	157.	25.	7.4
2	7.7	146.	22.	7.2
3	7.3	151.	21.	6.0
4	2.5	230.	39.	5.9
5	3.2	250.	38.	5.5
6	4.9	170.	32.	5.5
7	5.0	163.	28.	5.7
8	9.2	169.	20.	5.4
9	9.6	171.	23.	5.4
10	7.4	173.	23.	5.8
11	7.4	171.	23.	5.7
12	8.3	159.	25.	6.1
13	8.1	155.	24.	6.2
14	10.7	138.	22.	5.7
15	13.4	154.	19.	5.7
16	16.0	159.	18.	6.5
17	12.2	140.	18.	6.8
18	14.4	168.	17.	7.2
19	13.4	168.	17.	7.7
20	8.9	163.	22.	7.8
21	2.6	223.	27.	7.3
22	2.3	198.	25.	6.0
23	1.9	272.	38.	5.0
24	1.2	250.	35.	4.4
MINIMUM OBSERVED VALUES:				
**	1.2	138.	17.	4.4
MAXIMUM OBSERVED VALUES:				
**	16.0	272.	39.	7.8
AVERAGE OBSERVED VALUES:				
**	7.7	176.	25.	6.2

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 7 JUL 88 (JULIAN DAY 189)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.4	215.	30.	3.8
2	1.6	206.	26.	3.2
3	1.6	200.	24.	2.8
4	2.3	198.	25.	2.7
5	1.4	194.	21.	2.4
6	1.3	202.	17.	1.9
7	1.4	197.	14.	3.4
8	1.1	69.	29.	8.2
9	1.9	26.	16.	10.7
10	2.6	19.	17.	13.0
11	3.9	13.	16.	14.3
12	2.5	267.	45.	12.6
13	2.3	141.	22.	16.5
14	3.5	142.	29.	20.2
15	4.0	138.	36.	20.4
16	4.4	173.	30.	20.7
17	3.7	127.	32.	21.2
18	4.1	73.	39.	20.7
19	3.0	115.	42.	20.1
20	2.5	273.	31.	15.1
21	2.8	209.	17.	11.6
22	2.7	220.	12.	10.5
23	3.0	215.	9.	9.7
24	3.3	210.	9.	8.9
MINIMUM OBSERVED VALUES:				
**	1.1	13.	9.	1.9
MAXIMUM OBSERVED VALUES:				
**	4.4	273.	45.	21.2
AVERAGE OBSERVED VALUES:				
**	2.6	181.	24.	11.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 8 JUL 88 (JULIAN DAY 190)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.5	222.	14.	8.9
2	2.3	210.	17.	7.7
3	2.7	210.	12.	7.7
4	2.8	212.	10.	7.8
5	1.7	218.	11.	7.3
6	2.1	218.	10.	7.3
7	1.6	197.	21.	7.3
8	.7	154.	37.	12.5
9	1.0	36.	17.	16.9
10	2.4	34.	14.	17.7
11	3.3	16.	16.	19.5
12	5.1	11.	17.	20.5
13	3.1	9.	24.	22.5
14	3.7	139.	23.	24.8
15	4.4	167.	21.	24.6
16	3.6	170.	34.	24.9
17	4.9	164.	23.	25.1
18	3.5	149.	28.	25.4
19	2.8	189.	35.	22.7
20	2.3	234.	27.	17.4
21	2.5	216.	11.	16.0
22	3.3	216.	8.	14.3
23	3.6	202.	7.	12.8
24	2.5	217.	10.	13.0
MINIMUM OBSERVED VALUES:				
**	.7	9.	7.	7.3
MAXIMUM OBSERVED VALUES:				
**	5.1	234.	37.	25.4
AVERAGE OBSERVED VALUES:				
**	2.9	193.	18.	16.0

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 9 JUL 88 (JULIAN DAY 191)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.9	209.	9.	12.5
2	3.2	204.	9.	12.0
3	2.8	219.	8.	11.8
4	1.8	215.	9.	11.7
5	1.8	219.	10.	11.4
6	2.0	217.	8.	11.0
7	1.7	215.	11.	12.0
8	.1	149.	37.	17.4
9	1.2	31.	17.	19.6
10	2.2	21.	15.	20.8
11	2.8	10.	19.	22.1
12	5.4	10.	14.	23.2
13	5.1	22.	14.	24.6
14	2.7	36.	31.	26.6
15	3.5	57.	45.	27.2
16	3.9	164.	24.	27.9
17	2.9	171.	33.	27.9
18	2.7	155.	31.	28.1
19	1.7	255.	26.	23.6
20	2.5	226.	18.	19.2
21	2.8	213.	12.	17.1
22	2.9	213.	7.	16.4
23	2.8	214.	10.	15.2
24	2.7	206.	9.	14.3
MINIMUM OBSERVED VALUES:				
**	.1	10.	7.	11.0
MAXIMUM OBSERVED VALUES:				
**	5.4	255.	45.	28.1
AVERAGE OBSERVED VALUES:				
**	2.7	203.	18.	18.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 10 JUL 88 (JULIAN DAY 192)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.6	217.	12.	14.3
2	2.7	203.	12.	13.7
3	2.1	201.	19.	13.5
4	2.3	213.	10.	13.3
5	2.3	209.	11.	12.6
6	1.6	220.	12.	12.7
7	1.6	215.	12.	12.6
8	.8	164.	41.	17.8
9	.6	76.	31.	22.7
10	2.4	26.	16.	22.9
11	3.0	12.	18.	23.7
12	3.7	6.	17.	25.2
13	4.0	0.	30.	27.3
14	4.3	256.	47.	27.6
15	3.8	144.	37.	29.2
16	3.7	187.	26.	29.6
17	3.8	159.	38.	29.3
18	2.4	212.	32.	29.5
19	1.9	236.	28.	26.2
20	2.6	227.	18.	21.3
21	2.7	202.	14.	19.0
22	2.1	212.	10.	17.8
23	3.2	204.	11.	16.3
24	2.4	203.	16.	16.2
MINIMUM OBSERVED VALUES:				
**	.6	0.	10.	12.6
MAXIMUM OBSERVED VALUES:				
**	4.3	256.	47.	29.6
AVERAGE OBSERVED VALUES:				
**	2.6	206.	21.	20.6

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 11 JUL 88 (JULIAN DAY 193)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.5	209.	11.	15.4
2	1.6	205.	12.	14.9
3	3.1	211.	12.	15.3
4	3.5	210.	8.	14.2
5	1.6	201.	22.	13.9
6	3.6	196.	25.	15.8
7	2.4	264.	37.	16.4
8	2.1	241.	36.	15.6
9	2.0	143.	51.	17.4
10	6.1	185.	23.	17.6
11	9.3	157.	19.	17.3
12	8.5	159.	18.	17.6
13	9.9	177.	19.	19.7
14	10.8	182.	17.	21.1
15	10.2	159.	20.	19.6
16	6.7	145.	26.	17.5
17	5.8	162.	24.	16.9
18	5.5	128.	31.	16.3
19	7.4	129.	29.	16.2
20	7.4	125.	28.	15.1
21	9.5	147.	25.	14.3
22	8.8	192.	24.	13.8
23	10.5	165.	27.	13.5
24	13.6	158.	19.	12.7
MINIMUM OBSERVED VALUES:				
**	1.6	125.	8.	12.7
MAXIMUM OBSERVED VALUES:				
**	13.6	264.	51.	21.1
AVERAGE OBSERVED VALUES:				
**	6.4	176.	23.	16.2

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 12 JUL 88 (JULIAN DAY 194)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	13.0	173.	19.	11.7
2	8.7	174.	20.	10.9
3	9.5	177.	19.	10.5
4	7.1	145.	25.	10.1
5	6.8	163.	31.	9.8
6	6.5	125.	29.	9.1
7	8.7	127.	27.	8.8
8	7.0	116.	34.	8.8
9	8.4	112.	31.	8.7
10	9.7	139.	27.	9.2
11	9.1	118.	31.	9.6
12	11.0	145.	20.	11.1
13	6.8	167.	23.	10.7
14	7.6	170.	25.	10.6
15	10.1	159.	22.	9.8
16	9.1	187.	21.	8.9
17	9.1	191.	19.	8.8
18	8.4	177.	20.	8.8
19	8.7	178.	19.	8.6
20	6.7	164.	23.	8.7
21	5.2	142.	37.	8.6
22	7.7	149.	22.	9.0
23	10.4	147.	18.	9.3
24	11.7	147.	17.	9.5
MINIMUM OBSERVED VALUES:				
**	5.2	112.	17.	8.6
MAXIMUM OBSERVED VALUES:				
**	13.0	191.	37.	11.7
AVERAGE OBSERVED VALUES:				
**	8.6	154.	24.	9.6

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 13 JUL 88 (JULIAN DAY 195)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	8.7	138.	24.	9.9
2	9.4	150.	18.	10.2
3	8.0	168.	19.	10.1
4	8.8	162.	17.	10.3
5	9.0	161.	19.	10.6
6	9.7	158.	19.	10.7
7	5.6	167.	23.	10.4
8	6.1	157.	24.	11.3
9	4.5	148.	27.	11.5
10	4.1	161.	23.	11.7
11	5.1	176.	26.	11.8
12	6.3	173.	23.	13.0
13	6.8	172.	23.	13.6
14	4.9	199.	29.	14.4
15	5.7	197.	23.	13.8
16	6.1	187.	21.	14.1
17	6.1	171.	27.	13.6
18	8.2	149.	24.	12.9
19	6.1	169.	22.	13.1
20	5.6	165.	24.	12.9
21	5.9	139.	26.	11.4
22	3.3	204.	32.	8.8
23	2.6	229.	31.	8.6
24	1.6	240.	36.	8.3
MINIMUM OBSERVED VALUES:				
**	1.6	138.	17.	8.3
MAXIMUM OBSERVED VALUES:				
**	9.7	240.	36.	14.4
AVERAGE OBSERVED VALUES:				
**	6.2	172.	24.	11.5

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 14 JUL 88 (JULIAN DAY 196)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.9	292.	39.	7.9
2	1.0	90.	46.	7.5
3	1.7	176.	46.	7.2
4	2.0	18.	23.	7.0
5	2.2	322.	36.	7.0
6	2.1	342.	33.	6.9
7	1.9	199.	47.	7.0
8	2.1	11.	31.	7.4
9	2.6	344.	37.	9.1
10	6.4	152.	24.	10.1
11	8.3	154.	18.	9.7
12	10.4	159.	18.	9.4
13	7.1	138.	26.	10.1
14	8.4	127.	23.	12.2
15	8.8	132.	23.	13.1
16	10.2	138.	19.	13.6
17	10.2	136.	20.	14.6
18	9.5	136.	20.	14.1
19	7.0	129.	29.	15.4
20	3.6	335.	31.	12.1
21	2.4	228.	18.	8.8
22	2.2	221.	21.	7.6
23	2.2	220.	14.	6.5
24	2.4	213.	16.	6.4
MINIMUM OBSERVED VALUES:				
**	1.0	11.	14.	6.4
MAXIMUM OBSERVED VALUES:				
**	10.4	344.	47.	15.4
AVERAGE OBSERVED VALUES:				
**	4.9	160.	27.	9.6

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 15 JUL 88 (JULIAN DAY 197)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.2	223.	11.	6.0
2	1.8	225.	16.	5.6
3	2.3	226.	11.	5.9
4	1.9	230.	13.	5.2
5	1.9	223.	13.	5.2
6	1.6	218.	17.	4.8
7	1.6	216.	15.	5.9
8	1.2	195.	17.	8.5
9	.6	158.	50.	10.7
10	.9	347.	37.	11.6
11	1.4	334.	37.	12.8
12	4.1	98.	39.	14.3
13	6.7	153.	23.	17.2
14	7.2	124.	29.	18.3
15	6.0	118.	30.	18.4
16	8.4	132.	25.	19.2
17	7.9	141.	22.	19.2
18	8.4	138.	20.	18.9
19	9.7	134.	19.	18.4
20	7.8	97.	29.	16.2
21	5.2	72.	29.	15.0
22	3.2	143.	35.	13.3
23	3.3	204.	43.	12.4
24	2.8	229.	36.	12.2
MINIMUM OBSERVED VALUES:				
**	.6	72.	11.	4.8
MAXIMUM OBSERVED VALUES:				
**	9.7	347.	50.	19.2
AVERAGE OBSERVED VALUES:				
**	4.1	171.	25.	12.3

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 16 JUL 88 (JULIAN DAY 198)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.7	166.	34.	12.9
2	5.6	158.	20.	13.4
3	8.5	144.	18.	13.9
4	5.6	124.	33.	13.6
5	2.9	212.	45.	11.2
6	2.3	250.	38.	9.5
7	3.1	196.	34.	9.7
8	8.2	131.	23.	14.9
9	6.9	166.	17.	15.9
10	5.9	156.	22.	16.9
11	3.8	160.	28.	18.9
12	4.4	174.	28.	19.9
13	4.8	172.	28.	20.6
14	5.5	156.	22.	21.3
15	6.6	154.	23.	21.5
16	7.0	142.	22.	21.8
17	5.9	137.	29.	22.0
18	7.3	143.	23.	21.1
19	6.7	124.	28.	20.3
20	4.4	101.	43.	17.5
21	6.6	150.	20.	16.4
22	9.3	133.	29.	15.9
23	4.7	189.	28.	15.0
24	2.3	225.	38.	13.1
MINIMUM OBSERVED VALUES:				
**	2.3	101.	17.	9.5
MAXIMUM OBSERVED VALUES:				
**	9.3	250.	45.	22.0
AVERAGE OBSERVED VALUES:				
**	5.5	159.	28.	16.5

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 17 JUL 88 (JULIAN DAY 199)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.2	224.	24.	10.9
2	2.8	209.	20.	10.6
3	4.9	206.	17.	13.2
4	3.3	213.	15.	11.7
5	2.5	212.	15.	10.7
6	2.9	204.	17.	8.7
7	2.8	199.	19.	8.6
8	2.5	198.	23.	11.4
9	1.8	99.	37.	16.8
10	3.8	87.	33.	19.9
11	6.7	151.	22.	20.0
12	9.4	163.	21.	19.5
13	9.5	136.	29.	19.7
14	9.0	140.	22.	20.8
15	10.5	133.	21.	20.7
16	9.6	143.	19.	20.6
17	9.2	131.	22.	20.3
18	8.6	124.	23.	20.7
19	9.1	117.	24.	20.1
20	5.6	51.	35.	17.8
21	2.0	227.	32.	13.2
22	2.9	206.	16.	11.1
23	3.5	214.	10.	10.4
24	3.6	213.	9.	10.0

MINIMUM OBSERVED VALUES:

**	1.8	51.	9.	8.6

MAXIMUM OBSERVED VALUES:

**	10.5	227.	37.	20.8

AVERAGE OBSERVED VALUES:

**	5.4	171.	22.	15.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 18 JUL 88 (JULIAN DAY 200)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.5	213.	9.	9.9
2	3.3	210.	10.	10.2
3	2.6	216.	9.	10.1
4	2.5	210.	17.	10.2
5	2.4	207.	11.	10.1
6	1.7	200.	16.	8.8
7	2.0	215.	11.	9.0
8	.8	92.	43.	14.0
9	.8	98.	33.	18.1
10	2.5	26.	14.	18.2
11	4.0	39.	17.	19.8
12	5.7	15.	20.	20.3
13	3.9	28.	23.	20.4
14	2.4	191.	35.	21.5
15	4.1	309.	44.	23.5
16	4.6	11.	25.	23.6
17	1.7	319.	48.	22.5
18	2.5	149.	53.	21.8
19	2.3	247.	16.	17.8
20	2.7	216.	17.	15.4
21	2.8	213.	10.	13.4
22	3.6	209.	8.	12.4
23	2.7	203.	14.	11.9
24	2.7	206.	17.	11.0
MINIMUM OBSERVED VALUES:				
**	.8	11.	8.	8.8
MAXIMUM OBSERVED VALUES:				
**	5.7	319.	53.	23.6
AVERAGE OBSERVED VALUES:				
**	2.8	210.	21.	15.6

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 19 JUL 88 (JULIAN DAY 201)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.9	204.	14.	11.0
2	2.5	208.	12.	10.2
3	2.8	205.	10.	9.7
4	2.8	207.	10.	9.6
5	2.8	213.	7.	9.5
6	2.8	218.	7.	9.3
7	2.6	215.	7.	9.9
8	1.8	203.	9.	13.4
9	1.0	*****	*****	18.5
10	4.3	*****	*****	18.8
11	7.2	*****	*****	19.0
12	8.4	*****	*****	19.8
13	7.6	*****	*****	21.1
14	6.9	*****	*****	21.7
15	7.3	*****	*****	22.6
16	6.2	*****	*****	23.5
17	6.4	*****	*****	23.8
18	4.1	*****	*****	23.8
19	2.9	*****	*****	21.6
20	3.1	*****	*****	17.9
21	3.0	*****	*****	15.5
22	2.7	*****	*****	13.6
23	3.0	*****	*****	13.1
24	3.1	*****	*****	12.5
MINIMUM OBSERVED VALUES:				
**	1.0	203.	7.	9.3
MAXIMUM OBSERVED VALUES:				
**	8.4	218.	14.	23.8
AVERAGE OBSERVED VALUES:				
**	4.1	209.	9.	16.2

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 20 JUL 88 (JULIAN DAY 202)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.2	*****	*****	12.3
2	3.1	*****	*****	11.7
3	3.2	*****	*****	11.7
4	2.8	*****	*****	11.6
5	2.9	*****	*****	10.9
6	2.5	*****	*****	11.1
7	2.1	*****	*****	11.0
8	1.4	*****	*****	14.8
9	.6	*****	*****	19.8
10	1.1	*****	*****	22.5
11	2.2	*****	*****	22.9
12	3.0	*****	*****	24.4
13	3.9	*****	*****	25.7
14	4.7	*****	*****	28.0
15	4.2	*****	*****	28.7
16	5.0	*****	*****	28.3
17	4.3	*****	*****	28.4
18	4.0	*****	*****	28.6
19	3.7	*****	*****	27.2
20	4.1	*****	*****	22.6
21	6.0	*****	*****	22.1
22	4.0	*****	*****	19.8
23	3.1	*****	*****	17.3
24	3.1	*****	*****	15.3
MINIMUM OBSERVED VALUES:				
**	.6	*****	*****	10.9
MAXIMUM OBSERVED VALUES:				
**	6.0	*****	*****	28.7
AVERAGE OBSERVED VALUES:				
**	3.3	*****	*****	19.9

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 21 JUL 88 (JULIAN DAY 203)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.2	*****	*****	14.8
2	3.8	*****	*****	14.6
3	4.3	*****	*****	15.0
4	4.5	*****	*****	15.2
5	4.2	*****	*****	15.7
6	3.9	*****	*****	15.1
7	3.8	*****	*****	15.9
8	2.4	*****	*****	18.5
9	1.6	*****	*****	23.0
10	4.3	*****	*****	26.8
11	8.9	*****	*****	26.2
12	6.6	*****	*****	27.1
13	8.1	*****	*****	27.3
14	8.4	*****	*****	27.8
15	8.1	*****	*****	28.3
16	6.3	*****	*****	27.1
17	7.0	*****	*****	26.8
18	9.4	*****	*****	26.7
19	11.1	*****	*****	25.1
20	9.2	*****	*****	24.7
21	12.3	*****	*****	23.9
22	12.6	*****	*****	23.4
23	11.6	*****	*****	23.2
24	7.9	*****	*****	22.5

MINIMUM OBSERVED VALUES:

**	1.6	*****	*****	14.6

MAXIMUM OBSERVED VALUES:

**	12.6	*****	*****	28.3

AVERAGE OBSERVED VALUES:

**	6.8	*****	*****	22.3

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 22 JUL 88 (JULIAN DAY 204)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	5.5	*****	*****	21.8
2	2.6	*****	*****	16.7
3	3.5	*****	*****	16.0
4	7.1	*****	*****	20.9
5	4.2	*****	*****	19.6
6	6.8	*****	*****	20.3
7	6.6	*****	*****	20.6
8	9.9	*****	*****	21.2
9	10.5	*****	*****	22.0
10	11.8	*****	*****	22.4
11	12.0	*****	*****	22.8
12	11.7	*****	*****	23.4
13	10.8	*****	*****	24.1
14	8.5	*****	*****	25.1
15	10.1	*****	*****	25.0
16	10.0	*****	*****	25.2
17	4.3	*****	*****	9.0
18	9.9	*****	*****	24.4
19	10.0	*****	*****	23.7
20	9.3	*****	*****	21.8
21	8.0	*****	*****	21.0
22	4.8	*****	*****	19.5
23	2.5	*****	*****	15.7
24	2.9	*****	*****	14.2
MINIMUM OBSERVED VALUES:				
**	2.5	*****	*****	9.0
MAXIMUM OBSERVED VALUES:				
**	12.0	*****	*****	25.2
AVERAGE OBSERVED VALUES:				
**	7.6	*****	*****	20.7

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 23 JUL 88 (JULIAN DAY 205)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.1	*****	*****	13.5
2	1.6	*****	*****	13.5
3	2.5	*****	*****	13.0
4	3.1	*****	*****	12.5
5	2.3	*****	*****	11.6
6	2.4	*****	*****	11.1
7	1.8	*****	*****	11.4
8	2.4	*****	*****	14.7
9	2.2	*****	*****	18.0
10	2.3	*****	*****	19.8
11	2.4	*****	*****	21.7
12	2.7	*****	*****	23.9
13	5.1	*****	*****	24.8
14	6.0	*****	*****	24.9
15	5.0	*****	*****	25.2
16	5.3	*****	*****	25.7
17	7.0	*****	*****	25.2
18	7.1	*****	*****	24.2
19	9.1	*****	*****	23.2
20	8.1	*****	*****	21.0
21	10.6	*****	*****	20.0
22	10.0	*****	*****	19.2
23	8.1	*****	*****	18.9
24	4.6	*****	*****	17.9
MINIMUM OBSERVED VALUES:				
**	1.6	*****	*****	11.1
MAXIMUM OBSERVED VALUES:				
**	10.6	*****	*****	25.7
AVERAGE OBSERVED VALUES:				
**	4.8	*****	*****	19.0

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 24 JUL 88 (JULIAN DAY 206)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.0	*****	*****	15.5
2	3.0	*****	*****	14.2
3	3.4	*****	*****	14.9
4	3.7	*****	*****	17.2
5	2.4	*****	*****	14.7
6	3.5	*****	*****	12.7
7	3.3	*****	*****	12.9
8	2.0	*****	*****	16.3
9	2.3	*****	*****	22.5
10	4.1	*****	*****	23.8
11	6.8	*****	*****	23.9
12	9.2	*****	*****	24.0
13	9.6	*****	*****	24.9
14	9.3	*****	*****	26.0
15	7.9	*****	*****	26.6
16	8.6	*****	*****	27.2
17	8.8	*****	*****	27.1
18	8.4	*****	*****	26.8
19	9.3	*****	*****	26.0
20	5.4	*****	*****	22.9
21	3.8	*****	*****	20.6
22	1.8	*****	*****	18.7
23	2.6	*****	*****	17.8
24	2.2	*****	*****	16.7

MINIMUM OBSERVED VALUES:

**	1.8	*****	*****	12.7

MAXIMUM OBSERVED VALUES:

**	9.6	*****	*****	27.2

AVERAGE OBSERVED VALUES:

**	5.2	*****	*****	20.6

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 25 JUL 88 (JULIAN DAY 207)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.6	*****	*****	16.0
2	2.6	*****	*****	15.8
3	3.0	*****	*****	15.4
4	4.1	*****	*****	15.2
5	4.1	*****	*****	15.2
6	3.1	*****	*****	15.3
7	2.6	*****	*****	15.6
8	2.0	*****	*****	17.5
9	2.1	*****	*****	24.1
10	2.1	*****	*****	24.6
11	4.0	*****	*****	28.0
12	5.1	*****	*****	29.0
13	4.0	*****	*****	29.8
14	7.1	*****	*****	29.1
15	8.7	*****	*****	28.9
16	8.8	*****	*****	28.8
17	8.5	*****	*****	28.6
18	7.6	*****	*****	28.5
19	7.0	*****	*****	27.0
20	3.6	*****	*****	23.3
21	2.2	*****	*****	20.2
22	3.2	*****	*****	17.1
23	3.8	*****	*****	16.8
24	3.7	*****	*****	16.6

MINIMUM OBSERVED VALUES:

**	2.0	*****	*****	15.2

MAXIMUM OBSERVED VALUES:

**	8.8	*****	*****	29.8

AVERAGE OBSERVED VALUES:

**	4.4	*****	*****	21.9

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 26 JUL 88 (JULIAN DAY 208)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.5	*****	*****	16.3
2	3.2	*****	*****	15.5
3	3.7	*****	*****	16.1
4	2.5	*****	*****	16.1
5	2.5	*****	*****	15.4
6	1.7	*****	*****	13.9
7	2.2	*****	*****	14.3
8	1.6	*****	*****	17.8
9	1.3	*****	*****	22.3
10	1.8	*****	*****	24.2
11	2.1	*****	*****	25.6
12	.9	*****	*****	26.0
13	1.1	*****	*****	27.0
14	4.7	208.	32.	28.7
15	6.7	168.	20.	30.0
16	5.0	156.	24.	30.7
17	4.5	103.	35.	30.8
18	4.5	159.	28.	29.9
19	5.1	124.	30.	28.9
20	3.5	112.	44.	24.6
21	3.0	199.	15.	19.4
22	3.3	201.	15.	18.0
23	3.8	212.	7.	17.2
24	4.0	212.	8.	16.9
MINIMUM OBSERVED VALUES:				
**	.9	103.	7.	13.9
MAXIMUM OBSERVED VALUES:				
**	6.7	212.	44.	30.8
AVERAGE OBSERVED VALUES:				
**	3.2	170.	23.	21.9

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 27 JUL 88 (JULIAN DAY 209)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.8	213.	8.	16.7
2	3.4	211.	10.	16.1
3	3.7	215.	9.	15.8
4	4.2	214.	8.	16.2
5	3.6	213.	10.	15.8
6	3.2	201.	20.	14.9
7	3.0	197.	26.	16.0
8	3.7	160.	24.	21.9
9	4.2	129.	29.	25.5
10	5.6	141.	25.	26.5
11	4.5	169.	28.	27.9
12	6.6	178.	24.	28.0
13	8.4	161.	23.	27.9
14	8.1	129.	32.	27.7
15	11.1	75.	42.	26.9
16	12.6	131.	22.	27.0
17	10.9	122.	24.	27.3
18	9.3	66.	33.	26.9
19	7.9	87.	34.	26.1
20	8.3	121.	27.	23.9
21	8.5	116.	29.	23.1
22	8.0	146.	23.	21.8
23	10.6	153.	17.	21.1
24	10.1	143.	19.	20.7
MINIMUM OBSERVED VALUES:				
**	3.0	66.	8.	14.9
MAXIMUM OBSERVED VALUES:				
**	12.6	215.	42.	28.0
AVERAGE OBSERVED VALUES:				
**	6.8	155.	23.	22.6

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 28 JUL 88 (JULIAN DAY 210)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	8.7	156.	19.	20.2
2	4.9	165.	30.	19.9
3	6.9	170.	25.	19.7
4	7.4	168.	25.	19.5
5	7.7	145.	23.	19.1
6	4.6	180.	26.	17.9
7	4.8	177.	21.	17.0
8	5.1	168.	23.	16.6
9	5.3	174.	24.	16.9
10	5.8	160.	23.	19.2
11	5.9	124.	31.	20.0
12	5.8	113.	31.	21.2
13	7.3	157.	22.	20.5
14	7.7	115.	23.	20.7
15	6.9	138.	29.	23.4
16	7.4	96.	33.	23.4
17	9.3	141.	21.	22.5
18	9.0	143.	23.	21.1
19	10.0	141.	20.	21.4
20	6.7	88.	32.	19.5
21	6.7	124.	21.	18.5
22	8.9	159.	18.	18.1
23	6.7	145.	30.	18.0
24	2.4	216.	25.	13.9

MINIMUM OBSERVED VALUES:

**	2.4	88.	18.	13.9

MAXIMUM OBSERVED VALUES:

**	10.0	216.	33.	23.4

AVERAGE OBSERVED VALUES:

**	6.7	149.	25.	19.5

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 29 JUL 88 (JULIAN DAY 211)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.4	202.	18.	12.1
2	3.1	209.	12.	12.0
3	3.7	212.	9.	11.9
4	3.7	219.	6.	12.1
5	4.1	210.	9.	12.7
6	3.8	204.	10.	12.8
7	.8	192.	28.	12.4
8	.7	190.	27.	16.5
9	1.4	63.	36.	20.6
10	1.7	90.	29.	24.6
11	3.7	189.	26.	24.5
12	3.5	161.	31.	25.6
13	4.0	120.	30.	26.5
14	5.4	114.	28.	26.3
15	4.7	116.	34.	27.0
16	5.0	120.	39.	27.2
17	4.5	129.	33.	27.3
18	5.3	102.	38.	26.5
19	7.2	138.	25.	25.2
20	7.1	155.	22.	22.3
21	9.2	152.	17.	21.7
22	7.9	150.	18.	21.0
23	5.4	138.	28.	20.2
24	2.9	307.	37.	18.7

MINIMUM OBSERVED VALUES:

**	.7	63.	6.	11.9

MAXIMUM OBSERVED VALUES:

**	9.2	307.	39.	27.3

AVERAGE OBSERVED VALUES:

**	4.3	158.	24.	20.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 30 JUL 88 (JULIAN DAY 212)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.6	263.	33.	17.4
2	3.2	162.	38.	17.7
3	3.2	146.	41.	17.8
4	3.6	173.	31.	17.6
5	3.7	162.	28.	17.4
6	7.7	146.	17.	19.6
7	9.4	136.	17.	19.7
8	8.4	140.	19.	20.5
9	7.8	136.	20.	21.8
10	6.5	133.	24.	23.1
11	6.6	155.	25.	24.2
12	7.6	163.	18.	25.2
13	8.5	166.	21.	25.6
14	7.2	158.	24.	26.5
15	6.0	126.	29.	27.3
16	7.6	129.	24.	27.6
17	6.9	146.	23.	27.5
18	6.8	120.	33.	26.9
19	6.7	124.	29.	26.1
20	5.1	108.	34.	23.2
21	4.0	12.	56.	20.7
22	3.7	176.	29.	19.7
23	2.5	213.	22.	17.1
24	3.1	195.	21.	15.1
MINIMUM OBSERVED VALUES:				
**	2.5	12.	17.	15.1
MAXIMUM OBSERVED VALUES:				
**	9.4	263.	56.	27.6
AVERAGE OBSERVED VALUES:				
**	5.8	151.	27.	21.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 31 JUL 88 (JULIAN DAY 213)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.8	196.	21.	13.9
2	3.2	196.	22.	13.9
3	2.8	193.	23.	13.5
4	2.8	201.	23.	13.4
5	3.2	208.	15.	12.7
6	2.9	197.	18.	12.7
7	2.8	183.	26.	13.8
8	2.7	142.	34.	19.6
9	4.9	172.	24.	22.7
10	5.6	166.	23.	23.6
11	5.6	160.	23.	24.5
12	5.7	153.	24.	25.5
13	5.3	147.	26.	26.2
14	5.1	140.	27.	26.4
15	5.1	140.	27.	26.4
16	5.1	140.	27.	26.4
17	5.1	140.	27.	26.4
18	5.1	140.	27.	26.4
19	5.1	140.	27.	26.4
20	5.1	140.	27.	26.4
21	5.1	140.	27.	26.4
22	5.1	140.	27.	26.4
23	5.1	140.	27.	26.4
24	5.1	140.	27.	26.4
MINIMUM OBSERVED VALUES:				
**	2.7	140.	15.	12.7
MAXIMUM OBSERVED VALUES:				
**	5.7	208.	34.	26.4
AVERAGE OBSERVED VALUES:				
**	4.4	160.	25.	21.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 1 AUG 88 (JULIAN DAY 214)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	*****	*****	*****	*****
2	*****	*****	*****	*****
3	*****	*****	*****	*****
4	*****	*****	*****	*****
5	*****	*****	*****	*****
6	*****	*****	*****	*****
7	*****	*****	*****	*****
8	*****	*****	*****	*****
9	*****	*****	*****	*****
10	*****	*****	*****	*****
11	*****	*****	*****	*****
12	*****	*****	*****	*****
13	*****	*****	*****	*****
14	*****	*****	*****	*****
15	*****	*****	*****	*****
16	*****	*****	*****	*****
17	*****	*****	*****	*****
18	*****	*****	*****	*****
19	*****	*****	*****	*****
20	*****	*****	*****	*****
21	*****	*****	*****	*****
22	*****	*****	*****	*****
23	*****	*****	*****	*****
24	*****	*****	*****	*****

MINIMUM OBSERVED VALUES:

**	*****	*****	*****	*****

MAXIMUM OBSERVED VALUES:

**	*****	*****	*****	*****

AVERAGE OBSERVED VALUES:

**	*****	*****	*****	*****

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 2 AUG 88 (JULIAN DAY 215)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	*****	*****	*****	*****
2	*****	*****	*****	*****
3	*****	*****	*****	*****
4	*****	*****	*****	*****
5	*****	*****	*****	*****
6	*****	*****	*****	*****
7	*****	*****	*****	*****
8	*****	*****	*****	*****
9	*****	*****	*****	*****
10	*****	*****	*****	*****
11	*****	*****	*****	*****
12	*****	*****	*****	*****
13	*****	*****	*****	*****
14	*****	*****	*****	*****
15	*****	*****	*****	*****
16	*****	*****	*****	*****
17	*****	*****	*****	*****
18	*****	*****	*****	*****
19	*****	*****	*****	*****
20	*****	*****	*****	*****
21	*****	*****	*****	*****
22	*****	*****	*****	*****
23	*****	*****	*****	*****
24	*****	*****	*****	*****

MINIMUM OBSERVED VALUES:
** ***** ***** ***** *****

MAXIMUM OBSERVED VALUES:
** ***** ***** ***** *****

AVERAGE OBSERVED VALUES:
** ***** ***** ***** *****

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 3 AUG 88 (JULIAN DAY 216)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	*****	*****	*****	*****
2	*****	*****	*****	*****
3	*****	*****	*****	*****
4	*****	*****	*****	*****
5	*****	*****	*****	*****
6	*****	*****	*****	*****
7	*****	*****	*****	*****
8	*****	*****	*****	*****
9	*****	*****	*****	*****
10	*****	*****	*****	*****
11	*****	*****	*****	*****
12	*****	*****	*****	*****
13	*****	*****	*****	*****
14	*****	*****	*****	*****
15	*****	*****	*****	*****
16	11.0	162.	27.	23.9
17	4.5	131.	29.	24.7
18	5.2	165.	21.	23.5
19	5.5	176.	19.	22.2
20	4.7	167.	16.	21.2
21	2.6	219.	23.	17.2
22	2.2	224.	26.	15.4
23	1.9	201.	22.	14.0
24	1.5	219.	28.	13.6

MINIMUM OBSERVED VALUES:

**	1.5	131.	16.	13.6

MAXIMUM OBSERVED VALUES:

**	11.0	224.	29.	24.7

AVERAGE OBSERVED VALUES:

**	4.3	185.	23.	19.5

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 4 AUG 88 (JULIAN DAY 217)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.2	208.	26.	13.9
2	3.0	204.	17.	13.0
3	3.6	198.	19.	13.8
4	4.1	206.	17.	15.0
5	7.4	185.	16.	16.8
6	6.5	196.	16.	16.4
7	8.1	179.	17.	17.0
8	9.3	172.	16.	17.7
9	10.9	165.	15.	18.9
10	11.8	162.	15.	19.9
11	10.6	164.	15.	21.5
12	10.1	181.	21.	23.1
13	9.5	186.	17.	24.4
14	8.1	174.	17.	25.2
15	6.3	176.	22.	26.5
16	5.7	158.	23.	27.0
17	6.9	163.	23.	27.2
18	5.4	139.	32.	27.4
19	5.7	126.	33.	26.8
20	6.7	137.	25.	25.5
21	5.6	101.	36.	22.3
22	4.2	162.	28.	21.1
23	2.3	214.	37.	18.6
24	2.7	201.	44.	19.0

MINIMUM OBSERVED VALUES:

**	2.2	101.	15.	13.0

MAXIMUM OBSERVED VALUES:

**	11.8	214.	44.	27.4

AVERAGE OBSERVED VALUES:

**	6.5	174.	23.	20.8

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 5 AUG 88 (JULIAN DAY 218)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.0	209.	37.	19.4
2	2.8	186.	38.	18.1
3	2.5	225.	37.	16.0
4	2.4	263.	41.	16.0
5	2.5	205.	30.	14.2
6	2.9	193.	17.	12.9
7	3.6	201.	21.	12.9
8	3.0	206.	17.	14.2
9	2.3	184.	24.	17.4
10	3.5	145.	25.	23.5
11	4.4	157.	26.	26.5
12	*****	141.	27.	27.0
13	*****	330.	13.	28.6
14	*****	250.	38.	29.2
15	5.9	182.	27.	29.4
16	5.0	185.	24.	29.2
17	5.2	184.	24.	28.0
18	7.7	187.	21.	25.0
19	6.6	169.	22.	24.2
20	9.4	162.	22.	23.8
21	6.7	167.	21.	22.8
22	4.5	202.	21.	21.8
23	7.5	189.	23.	21.6
24	10.6	142.	19.	20.6
MINIMUM OBSERVED VALUES:				
**	2.3	141.	13.	12.9
MAXIMUM OBSERVED VALUES:				
**	10.6	330.	41.	29.4
AVERAGE OBSERVED VALUES:				
**	4.9	189.	25.	21.8

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 6 AUG 88 (JULIAN DAY 219)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	8.5	122.	21.	19.8
2	5.8	120.	22.	18.9
3	4.4	137.	27.	18.5
4	2.5	180.	42.	18.1
5	2.6	163.	40.	17.7
6	5.8	181.	25.	18.1
7	8.5	171.	28.	14.0
8	4.8	147.	46.	11.1
9	4.6	210.	34.	11.2
10	6.3	192.	25.	11.9
11	6.3	178.	27.	12.1
12	7.1	143.	33.	14.3
13	7.5	154.	28.	15.0
14	9.0	132.	24.	15.3
15	9.2	126.	29.	15.8
16	8.8	129.	24.	15.2
17	10.3	138.	20.	16.0
18	9.6	126.	28.	17.2
19	7.9	145.	24.	15.7
20	7.6	139.	21.	15.2
21	6.0	166.	21.	14.6
22	7.6	149.	18.	14.2
23	6.4	154.	20.	13.9
24	3.8	147.	36.	12.8
MINIMUM OBSERVED VALUES:				
**	2.5	120.	18.	11.1
MAXIMUM OBSERVED VALUES:				
**	10.3	210.	46.	19.8
AVERAGE OBSERVED VALUES:				
**	6.7	152.	27.	15.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 7 AUG 88 (JULIAN DAY 220)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.5	234.	31.	10.6
2	2.0	243.	39.	10.5
3	2.6	167.	45.	11.0
4	3.0	215.	23.	10.5
5	4.1	197.	18.	11.6
6	2.2	194.	24.	11.2
7	1.7	286.	41.	10.1
8	1.1	238.	42.	9.1
9	1.6	295.	41.	10.6
10	1.4	122.	45.	10.3
11	3.0	15.	17.	14.3
12	5.4	24.	11.	16.4
13	3.7	247.	45.	17.6
14	5.8	156.	18.	19.1
15	6.3	166.	18.	21.5
16	7.1	144.	22.	22.2
17	6.1	114.	26.	19.9
18	4.9	69.	35.	21.5
19	5.2	335.	39.	18.2
20	2.7	3.	34.	15.0
21	2.2	0.	15.	13.7
22	1.3	208.	21.	11.1
23	2.5	214.	9.	9.0
24	2.4	195.	16.	8.2
MINIMUM OBSERVED VALUES:				
**	1.1	0.	9.	8.2
MAXIMUM OBSERVED VALUES:				
**	7.1	335.	45.	22.2
AVERAGE OBSERVED VALUES:				
**	3.4	208.	28.	13.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 8 AUG 88 (JULIAN DAY 221)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.6	212.	11.	7.8
2	2.0	195.	18.	7.4
3	1.7	193.	22.	7.3
4	2.1	202.	26.	7.3
5	2.2	202.	24.	7.3
6	1.7	190.	31.	7.3
7	1.5	193.	31.	7.6
8	1.5	195.	49.	9.2
9	2.1	5.	20.	11.7
10	2.9	12.	15.	14.2
11	4.1	68.	33.	18.7
12	5.7	132.	23.	20.7
13	5.7	137.	27.	21.3
14	6.9	155.	21.	22.0
15	6.3	153.	22.	23.0
16	6.8	141.	22.	23.6
17	7.3	66.	49.	22.9
18	7.7	139.	23.	23.0
19	6.7	119.	28.	23.0
20	8.8	122.	19.	21.7
21	7.6	110.	25.	20.2
22	7.6	123.	18.	19.5
23	7.7	133.	18.	19.0
24	7.0	150.	22.	18.8
MINIMUM OBSERVED VALUES:				
**	1.5	5.	11.	7.3
MAXIMUM OBSERVED VALUES:				
**	8.8	212.	49.	23.6
AVERAGE OBSERVED VALUES:				
**	4.8	148.	25.	16.0

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 9 AUG 88 (JULIAN DAY 222)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.8	150.	33.	17.5
2	5.6	134.	30.	18.2
3	3.7	162.	33.	17.4
4	6.1	119.	28.	17.8
5	5.7	98.	31.	17.8
6	3.1	325.	41.	15.7
7	7.7	119.	24.	17.8
8	6.3	124.	27.	18.1
9	7.7	153.	25.	19.3
10	8.3	173.	20.	20.5
11	7.7	174.	20.	20.4
12	7.8	165.	21.	22.6
13	8.2	160.	24.	23.1
14	9.0	138.	26.	23.9
15	9.6	91.	43.	23.8
16	8.8	133.	28.	24.1
17	10.2	99.	31.	25.1
18	10.4	133.	28.	25.4
19	10.2	117.	33.	25.0
20	10.3	101.	30.	23.7
21	5.9	76.	32.	21.7
22	6.8	118.	30.	20.9
23	3.9	181.	26.	19.5
24	6.3	154.	25.	19.7
MINIMUM OBSERVED VALUES:				
**	3.1	76.	20.	15.7
MAXIMUM OBSERVED VALUES:				
**	10.4	325.	43.	25.4
AVERAGE OBSERVED VALUES:				
**	7.2	133.	28.	20.8

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 10 AUG 88 (JULIAN DAY 223)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	8.0	137.	19.	19.7
2	4.8	99.	34.	19.0
3	4.5	140.	26.	18.1
4	3.1	148.	29.	16.9
5	3.3	103.	41.	16.9
6	2.7	193.	32.	15.5
7	2.3	210.	27.	14.8
8	3.2	200.	35.	16.2
9	2.9	145.	32.	19.3
10	4.1	153.	29.	20.9
11	4.7	148.	27.	21.5
12	5.5	149.	26.	20.3
13	5.1	91.	44.	20.9
14	5.0	162.	30.	23.9
15	7.0	177.	26.	23.4
16	7.4	160.	24.	23.3
17	7.4	160.	19.	22.9
18	4.5	134.	30.	22.1
19	4.7	95.	34.	23.6
20	3.8	88.	40.	22.8
21	4.1	115.	26.	19.3
22	2.3	216.	25.	15.9
23	3.4	205.	11.	13.5
24	3.3	215.	7.	13.1
MINIMUM OBSERVED VALUES:				
**	2.3	88.	7.	13.1
MAXIMUM OBSERVED VALUES:				
**	8.0	216.	44.	23.9
AVERAGE OBSERVED VALUES:				
**	4.5	152.	28.	19.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 11 AUG 88 (JULIAN DAY 224)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.4	218.	9.	12.7
2	2.9	214.	9.	12.3
3	3.0	210.	8.	12.1
4	2.9	210.	7.	11.7
5	2.5	209.	10.	11.3
6	2.6	210.	10.	10.8
7	1.9	219.	9.	10.0
8	1.2	212.	13.	9.1
9	1.5	191.	11.	11.8
10	1.2	113.	33.	17.0
11	2.0	29.	14.	19.1
12	2.1	28.	20.	21.5
13	4.1	24.	17.	23.1
14	3.4	18.	33.	25.1
15	3.5	137.	39.	26.1
16	3.4	211.	35.	26.4
17	3.9	170.	33.	27.1
18	3.2	96.	39.	27.0
19	2.4	310.	42.	26.8
20	2.2	221.	25.	23.1
21	3.2	206.	11.	17.1
22	2.8	207.	7.	15.2
23	3.4	207.	8.	14.6
24	3.6	205.	8.	14.6
MINIMUM OBSERVED VALUES:				
**	1.2	18.	7.	9.1
MAXIMUM OBSERVED VALUES:				
**	4.1	310.	42.	27.1
AVERAGE OBSERVED VALUES:				
**	2.7	199.	18.	17.7

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 12 AUG 88 (JULIAN DAY 225)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.4	205.	11.	14.1
2	3.3	206.	9.	13.6
3	3.3	211.	9.	13.5
4	2.1	203.	15.	12.1
5	2.3	197.	17.	11.8
6	2.5	203.	13.	11.6
7	2.1	206.	14.	11.3
8	2.6	203.	11.	10.9
9	2.1	189.	13.	13.2
10	1.0	129.	36.	18.0
11	1.8	35.	20.	20.5
12	2.1	23.	18.	21.1
13	3.6	12.	15.	21.8
14	3.1	3.	23.	22.4
15	4.6	15.	16.	24.3
16	5.0	13.	17.	26.0
17	5.0	13.	17.	27.7
18	4.3	48.	50.	28.5
19	4.6	141.	24.	28.0
20	2.9	174.	27.	24.9
21	.8	307.	28.	6.1
22	2.8	215.	21.	19.3
23	*****	217.	24.	16.9
24	*****	327.	13.	15.9
MINIMUM OBSERVED VALUES:				
**	.8	3.	9.	6.1
MAXIMUM OBSERVED VALUES:				
**	5.0	327.	50.	28.5
AVERAGE OBSERVED VALUES:				
**	2.9	206.	19.	18.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 13 AUG 88 (JULIAN DAY 226)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	*****	328.	13.	15.0
2	*****	250.	29.	15.8
3	3.8	209.	19.	17.0
4	*****	216.	30.	19.1
5	*****	331.	12.	19.2
6	*****	328.	13.	16.9
7	*****	325.	14.	14.0
8	*****	327.	13.	11.6
9	*****	327.	13.	12.8
10	*****	330.	12.	17.5
11	*****	317.	20.	21.7
12	*****	328.	12.	19.6
13	*****	332.	11.	20.3
14	*****	313.	24.	24.3
15	7.9	185.	28.	25.7
16	7.4	184.	18.	25.8
17	5.5	164.	25.	25.2
18	6.0	135.	24.	24.8
19	4.6	107.	35.	23.9
20	5.4	77.	32.	23.3
21	5.9	137.	18.	21.0
22	2.8	146.	31.	18.9
23	2.7	222.	25.	16.4
24	3.1	190.	28.	16.8
MINIMUM OBSERVED VALUES:				
**	2.7	77.	11.	11.6
MAXIMUM OBSERVED VALUES:				
**	7.9	332.	35.	25.8
AVERAGE OBSERVED VALUES:				
**	5.0	270.	21.	19.4

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 14 AUG 88 (JULIAN DAY 227)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	4.4	202.	19.	18.8
2	6.1	182.	20.	18.6
3	9.1	173.	19.	18.0
4	10.0	160.	18.	17.0
5	10.5	159.	16.	16.5
6	9.3	142.	18.	15.9
7	7.0	156.	25.	15.5
8	4.9	163.	40.	15.2
9	3.1	9.	27.	14.3
10	3.7	88.	29.	17.1
11	2.7	149.	34.	18.6
12	4.2	158.	21.	18.8
13	5.1	169.	22.	19.3
14	6.7	169.	22.	21.5
15	7.2	178.	22.	22.1
16	7.5	141.	26.	21.6
17	8.8	140.	23.	23.0
18	7.6	135.	27.	22.0
19	4.5	69.	40.	21.7
20	5.0	119.	30.	21.2
21	4.7	136.	29.	18.7
22	5.4	169.	20.	18.0
23	3.9	153.	37.	17.2
24	2.3	192.	33.	14.4
MINIMUM OBSERVED VALUES:				
**	2.3	9.	16.	14.3
MAXIMUM OBSERVED VALUES:				
**	10.5	202.	40.	23.0
AVERAGE OBSERVED VALUES:				
**	6.0	152.	26.	18.5

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 15 AUG 88 (JULIAN DAY 228)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.2	193.	32.	12.2
2	2.5	197.	24.	10.9
3	2.0	198.	22.	10.2
4	2.8	197.	19.	10.0
5	2.7	201.	21.	9.9
6	3.5	210.	10.	10.5
7	3.5	197.	16.	12.5
8	2.2	74.	39.	12.4
9	2.0	190.	19.	12.0
10	1.2	101.	42.	15.3
11	1.8	54.	27.	19.8
12	2.5	23.	21.	22.3
13	4.0	81.	36.	22.2
14	4.1	134.	26.	24.8
15	6.0	167.	18.	22.7
16	6.1	161.	19.	19.8
17	9.9	166.	20.	18.9
18	7.6	183.	21.	17.0
19	6.4	186.	17.	16.1
20	4.9	185.	22.	17.3
21	2.4	190.	22.	16.2
22	5.5	174.	19.	16.1
23	2.0	250.	29.	14.0
24	2.0	138.	50.	12.0
MINIMUM OBSERVED VALUES:				
**	1.2	23.	10.	9.9
MAXIMUM OBSERVED VALUES:				
**	9.9	250.	50.	24.8
AVERAGE OBSERVED VALUES:				
**	3.7	170.	24.	15.6

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 16 AUG 88 (JULIAN DAY 229)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.6	202.	19.	10.8
2	2.2	206.	21.	10.6
3	2.0	201.	19.	10.9
4	2.0	207.	32.	11.1
5	3.3	161.	38.	11.1
6	2.4	199.	25.	8.8
7	2.1	185.	24.	8.0
8	2.6	189.	22.	7.1
9	2.3	171.	26.	9.1
10	2.7	163.	29.	15.3
11	3.6	179.	21.	15.8
12	4.6	203.	27.	16.2
13	1.9	160.	34.	17.0
14	4.6	177.	31.	19.8
15	5.3	177.	26.	19.9
16	5.9	188.	22.	21.1
17	3.6	141.	36.	20.6
18	3.2	237.	37.	21.9
19	3.0	204.	30.	21.3
20	1.6	242.	24.	18.4
21	2.4	205.	17.	14.8
22	2.6	199.	13.	12.8
23	2.8	200.	13.	11.6
24	2.3	212.	11.	11.0
MINIMUM OBSERVED VALUES:				
**	1.6	141.	11.	7.1
MAXIMUM OBSERVED VALUES:				
**	5.9	242.	38.	21.9
AVERAGE OBSERVED VALUES:				
**	3.0	192.	25.	14.4

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 17 AUG 88 (JULIAN DAY 230)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.3	210.	11.	11.7
2	2.2	216.	10.	12.0
3	2.2	210.	10.	11.8
4	2.3	219.	8.	10.8
5	1.4	211.	10.	9.7
6	2.2	217.	7.	9.1
7	2.1	213.	8.	9.3
8	2.2	214.	7.	9.4
9	1.3	173.	21.	9.9
10	1.1	142.	22.	15.0
11	1.6	25.	18.	17.6
12	1.3	36.	32.	19.2
13	1.5	14.	35.	18.4
14	1.6	86.	37.	23.2
15	1.8	73.	35.	26.1
16	3.8	17.	17.	26.4
17	3.6	340.	46.	26.5
18	4.7	196.	23.	27.4
19	4.8	198.	18.	25.2
20	7.9	169.	17.	21.3
21	9.7	170.	17.	19.1
22	10.7	172.	17.	17.9
23	11.0	179.	16.	17.1
24	10.4	168.	19.	16.9
MINIMUM OBSERVED VALUES:				
**	1.1	14.	7.	9.1
MAXIMUM OBSERVED VALUES:				
**	11.0	340.	46.	27.4
AVERAGE OBSERVED VALUES:				
**	3.9	182.	19.	17.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 18 AUG 88 (JULIAN DAY 231)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	12.1	171.	19.	16.2
2	7.5	173.	22.	15.1
3	5.5	186.	27.	14.3
4	8.4	163.	21.	13.6
5	8.6	149.	19.	13.0
6	8.7	152.	19.	12.5
7	10.7	153.	19.	12.3
8	9.7	148.	18.	11.8
9	9.4	115.	29.	11.9
10	.7	352.	8.	.7
11	6.3	194.	34.	9.1
12	6.2	150.	22.	14.2
13	5.9	131.	29.	15.3
14	7.5	156.	23.	15.8
15	9.1	121.	27.	17.6
16	10.7	136.	21.	17.9
17	9.1	140.	20.	17.8
18	7.0	162.	23.	17.0
19	7.1	128.	24.	15.5
20	8.1	111.	26.	15.5
21	5.8	92.	29.	14.0
22	2.5	203.	37.	11.8
23	2.7	209.	14.	8.9
24	2.8	195.	20.	7.7
MINIMUM OBSERVED VALUES:				
**	.7	92.	8.	.7
MAXIMUM OBSERVED VALUES:				
**	12.1	352.	37.	17.9
AVERAGE OBSERVED VALUES:				
**	7.2	153.	23.	13.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 19 AUG 88 (JULIAN DAY 232)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.8	208.	8.	7.4
2	3.4	202.	12.	7.9
3	2.7	210.	10.	7.7
4	2.4	210.	10.	7.1
5	2.1	216.	9.	7.0
6	2.7	208.	10.	7.0
7	2.0	202.	21.	5.9
8	2.0	202.	18.	5.6
9	2.7	193.	17.	5.8
10	1.1	96.	36.	12.5
11	1.6	58.	25.	16.3
12	2.6	30.	18.	18.2
13	4.0	120.	37.	20.7
14	4.7	166.	32.	21.0
15	5.1	151.	27.	21.6
16	5.0	144.	23.	20.9
17	4.5	156.	31.	20.6
18	5.0	181.	24.	19.6
19	5.1	169.	23.	18.5
20	4.5	156.	22.	18.5
21	4.9	170.	22.	16.9
22	5.1	157.	22.	15.8
23	5.8	131.	21.	15.7
24	5.7	162.	24.	15.4
MINIMUM OBSERVED VALUES:				
**	1.1	30.	8.	5.6
MAXIMUM OBSERVED VALUES:				
**	5.8	216.	37.	21.6
AVERAGE OBSERVED VALUES:				
**	3.7	169.	21.	13.9

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 20 AUG 88 (JULIAN DAY 233)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	8.2	171.	18.	15.9
2	9.2	182.	19.	15.6
3	9.9	145.	20.	15.3
4	7.4	126.	24.	14.9
5	7.5	143.	22.	14.7
6	4.0	194.	25.	14.2
7	5.0	192.	26.	13.6
8	8.8	164.	23.	11.8
9	7.3	166.	22.	11.2
10	6.6	183.	25.	11.5
11	7.8	138.	28.	10.6
12	6.1	113.	32.	12.3
13	10.5	148.	19.	13.9
14	11.4	148.	19.	13.3
15	6.7	157.	28.	12.1
16	4.2	55.	51.	9.0
17	6.7	84.	35.	10.2
18	3.9	9.	46.	10.5
19	3.3	146.	42.	6.8
20	1.8	215.	36.	7.9
21	2.0	247.	35.	7.7
22	2.6	203.	20.	6.5
23	2.3	209.	25.	5.4
24	2.0	203.	27.	5.3
MINIMUM OBSERVED VALUES:				
**	1.8	9.	18.	5.3
MAXIMUM OBSERVED VALUES:				
**	11.4	247.	51.	15.9
AVERAGE OBSERVED VALUES:				
**	6.1	163.	28.	11.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 21 AUG 88 (JULIAN DAY 234)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.4	252.	34.	5.1
2	1.0	267.	38.	4.6
3	1.0	273.	39.	4.2
4	1.4	188.	24.	3.5
5	1.5	199.	19.	3.2
6	1.4	186.	24.	2.9
7	1.3	257.	41.	2.9
8	.9	82.	51.	2.2
9	1.0	66.	41.	2.6
10	1.8	56.	32.	4.4
11	3.1	32.	21.	7.2
12	6.0	89.	39.	11.8
13	6.9	145.	19.	14.2
14	8.0	140.	20.	16.2
15	7.7	142.	20.	17.5
16	8.7	143.	20.	18.0
17	9.3	148.	18.	17.9
18	8.2	156.	21.	17.5
19	10.0	149.	17.	16.7
20	9.4	125.	22.	15.8
21	8.9	132.	22.	14.5
22	7.5	138.	22.	14.3
23	2.8	163.	39.	11.5
24	2.5	204.	29.	8.9
MINIMUM OBSERVED VALUES:				
**	.9	32.	17.	2.2
MAXIMUM OBSERVED VALUES:				
**	10.0	273.	51.	18.0
AVERAGE OBSERVED VALUES:				
**	4.7	153.	28.	9.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 22 AUG 88 (JULIAN DAY 235)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.0	208.	52.	9.6
2	3.8	296.	41.	11.6
3	9.2	145.	22.	14.4
4	8.5	158.	19.	13.9
5	6.0	154.	25.	12.8
6	2.0	240.	33.	9.7
7	3.2	212.	12.	7.6
8	1.5	217.	28.	6.6
9	1.8	200.	12.	5.4
10	1.5	46.	31.	10.8
11	2.7	31.	13.	15.4
12	3.3	30.	15.	17.6
13	5.6	154.	24.	19.3
14	7.1	166.	18.	20.0
15	7.2	156.	19.	21.0
16	8.3	160.	17.	21.5
17	6.9	167.	18.	22.5
18	7.3	163.	16.	22.6
19	5.1	161.	22.	22.4
20	2.7	206.	22.	18.3
21	3.0	206.	19.	14.3
22	2.6	225.	26.	15.0
23	2.2	233.	22.	14.7
24	2.4	232.	18.	15.0
MINIMUM OBSERVED VALUES:				
**	1.5	30.	12.	5.4
MAXIMUM OBSERVED VALUES:				
**	9.2	296.	52.	22.6
AVERAGE OBSERVED VALUES:				
**	4.5	186.	23.	15.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 23 AUG 88 (JULIAN DAY 236)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.3	225.	18.	15.0
2	2.3	249.	19.	14.1
3	1.7	241.	22.	12.3
4	1.6	212.	20.	11.6
5	2.4	209.	17.	12.2
6	1.1	220.	27.	10.8
7	1.5	205.	13.	8.9
8	1.5	213.	12.	8.4
9	2.5	207.	8.	8.5
10	2.2	176.	13.	12.7
11	1.4	148.	16.	20.6
12	3.3	28.	13.	21.6
13	3.0	21.	22.	23.7
14	3.4	24.	19.	25.6
15	3.2	22.	20.	26.9
16	3.3	42.	31.	28.1
17	4.3	142.	21.	29.0
18	3.3	145.	24.	29.3
19	2.7	182.	20.	27.9
20	2.9	214.	9.	22.0
21	4.0	212.	6.	17.3
22	3.0	210.	9.	16.4
23	3.0	211.	10.	15.7
24	2.9	204.	9.	15.1
MINIMUM OBSERVED VALUES:				
**	1.1	21.	6.	8.4
MAXIMUM OBSERVED VALUES:				
**	4.3	249.	31.	29.3
AVERAGE OBSERVED VALUES:				
**	2.6	200.	16.	18.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 24 AUG 88 (JULIAN DAY 237)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.1	203.	11.	15.2
2	2.6	214.	10.	15.0
3	2.6	208.	11.	14.7
4	2.4	209.	11.	15.0
5	2.7	213.	10.	14.5
6	2.3	205.	12.	14.5
7	1.7	207.	18.	13.8
8	1.7	216.	10.	12.7
9	1.1	203.	11.	11.4
10	1.8	169.	19.	14.4
11	1.7	117.	32.	22.4
12	2.1	33.	13.	25.0
13	2.5	21.	19.	27.4
14	4.2	19.	18.	28.7
15	2.8	28.	29.	30.8
16	2.7	50.	29.	31.7
17	2.3	90.	43.	32.8
18	2.3	53.	36.	32.7
19	1.9	264.	37.	30.0
20	.2	0.	4.	1.3
21	3.6	214.	6.	19.6
22	3.4	210.	8.	18.5
23	3.8	213.	7.	17.9
24	3.1	210.	9.	17.4

MINIMUM OBSERVED VALUES:

**	.2	0.	4.	1.3

MAXIMUM OBSERVED VALUES:

**	4.2	264.	43.	32.8

AVERAGE OBSERVED VALUES:

**	2.4	196.	17.	19.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"***" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 25 AUG 88 (JULIAN DAY 238)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.4	207.	11.	17.4
2	2.8	200.	14.	17.9
3	3.2	204.	12.	16.5
4	3.1	200.	18.	16.3
5	3.0	205.	13.	16.3
6	2.2	197.	25.	15.7
7	2.4	190.	24.	15.5
8	2.8	194.	24.	15.5
9	3.1	216.	33.	14.9
10	2.8	79.	58.	15.7
11	2.5	18.	26.	21.4
12	6.2	105.	42.	24.2
13	7.8	152.	20.	26.1
14	8.8	151.	18.	26.8
15	7.6	146.	21.	27.4
16	8.7	148.	18.	27.3
17	8.6	152.	21.	26.9
18	7.7	123.	29.	26.5
19	6.9	109.	34.	25.7
20	6.5	135.	28.	23.8
21	8.1	155.	21.	21.7
22	8.9	168.	20.	20.5
23	9.8	160.	23.	19.9
24	8.9	136.	25.	19.4
MINIMUM OBSERVED VALUES:				
**	2.2	18.	11.	14.9
MAXIMUM OBSERVED VALUES:				
**	9.8	216.	58.	27.4
AVERAGE OBSERVED VALUES:				
**	5.7	161.	24.	20.8

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 26 AUG 88 (JULIAN DAY 239)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	6.3	111.	26.	18.7
2	4.9	134.	29.	18.0
3	2.6	197.	34.	17.0
4	2.4	321.	29.	15.8
5	2.5	113.	52.	14.1
6	2.6	194.	25.	12.5
7	2.1	209.	21.	13.4
8	2.0	65.	46.	13.4
9	2.1	211.	29.	14.3
10	3.0	116.	45.	15.7
11	1.7	73.	31.	20.3
12	4.6	35.	18.	21.2
13	6.3	27.	15.	21.6
14	5.4	31.	26.	22.7
15	5.4	29.	23.	22.4
16	6.2	23.	18.	21.9
17	5.7	20.	14.	20.6
18	5.8	11.	14.	20.3
19	5.2	7.	14.	21.3
20	4.5	30.	11.	19.4
21	2.4	177.	26.	15.3
22	2.4	189.	20.	12.6
23	2.5	201.	17.	11.7
24	2.9	202.	13.	11.2
MINIMUM OBSERVED VALUES:				
**	1.7	7.	11.	11.2
MAXIMUM OBSERVED VALUES:				
**	6.3	321.	52.	22.7
AVERAGE OBSERVED VALUES:				
**	3.8	88.	25.	17.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 27 AUG 88 (JULIAN DAY 240)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.9	204.	10.	10.8
2	3.0	204.	7.	10.7
3	2.7	206.	9.	10.3
4	2.9	204.	8.	10.1
5	3.0	207.	6.	9.6
6	2.9	209.	5.	9.8
7	2.6	207.	8.	9.7
8	1.8	216.	9.	9.1
9	2.3	204.	9.	8.4
10	2.2	180.	14.	11.0
11	1.3	71.	28.	18.5
12	2.0	31.	26.	20.8
13	2.6	45.	25.	23.2
14	5.4	24.	15.	23.8
15	5.8	26.	18.	24.7
16	4.6	41.	27.	25.7
17	4.0	21.	45.	26.5
18	3.7	28.	25.	26.6
19	3.2	349.	38.	25.8
20	2.8	210.	13.	20.8
21	3.5	207.	8.	16.6
22	3.3	207.	8.	15.6
23	3.0	205.	14.	14.6
24	3.8	203.	13.	14.2
MINIMUM OBSERVED VALUES:				
**	1.3	21.	5.	8.4
MAXIMUM OBSERVED VALUES:				
**	5.8	349.	45.	26.6
AVERAGE OBSERVED VALUES:				
**	3.1	197.	16.	16.5

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 28 AUG 88 (JULIAN DAY 241)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.3	200.	10.	14.3
2	3.4	203.	11.	13.6
3	3.5	192.	16.	13.2
4	3.2	205.	9.	13.1
5	2.8	209.	8.	13.2
6	2.6	206.	9.	12.5
7	2.8	205.	9.	12.5
8	2.6	210.	9.	12.3
9	3.1	205.	7.	12.0
10	2.2	186.	11.	13.6
11	.8	106.	30.	22.0
12	1.7	126.	17.	25.0
13	2.7	69.	28.	26.8
14	7.9	3.	19.	26.4
15	4.4	356.	26.	28.0
16	4.5	351.	33.	28.7
17	3.6	330.	35.	29.2
18	2.9	151.	35.	29.8
19	2.2	164.	36.	28.8
20	3.3	205.	10.	22.0
21	3.6	205.	9.	17.8
22	3.4	205.	8.	16.8
23	2.8	196.	9.	16.9
24	2.4	194.	9.	16.7
MINIMUM OBSERVED VALUES:				
**	.8	3.	7.	12.0
MAXIMUM OBSERVED VALUES:				
**	7.9	356.	36.	29.8
AVERAGE OBSERVED VALUES:				
**	3.2	192.	16.	19.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 29 AUG 88 (JULIAN DAY 242)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.4	199.	11.	17.0
2	2.6	204.	9.	16.5
3	2.3	214.	9.	16.2
4	2.4	209.	10.	15.2
5	3.0	207.	12.	14.7
6	2.5	208.	17.	13.8
7	2.6	205.	16.	13.3
8	3.1	196.	22.	12.8
9	2.4	186.	36.	13.4
10	2.7	66.	48.	18.5
11	5.9	148.	20.	24.4
12	6.2	140.	22.	26.0
13	5.7	160.	26.	27.3
14	7.1	164.	23.	27.7
15	7.2	157.	24.	28.6
16	8.0	159.	20.	28.6
17	5.8	143.	28.	28.9
18	6.8	114.	25.	27.5
19	9.0	128.	26.	26.1
20	5.4	92.	39.	24.5
21	8.3	105.	32.	23.2
22	10.6	161.	24.	22.3
23	13.1	159.	19.	21.5
24	15.8	152.	21.	20.6
MINIMUM OBSERVED VALUES:				
**	2.3	66.	9.	12.8
MAXIMUM OBSERVED VALUES:				
**	15.8	214.	48.	28.9
AVERAGE OBSERVED VALUES:				
**	5.9	163.	22.	21.2

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 30 AUG 88 (JULIAN DAY 243)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	17.6	158.	17.	20.0
2	20.0	161.	17.	19.1
3	15.8	148.	24.	18.6
4	11.8	111.	26.	17.8
5	12.1	151.	19.	16.5
6	9.8	131.	24.	15.1
7	6.6	174.	24.	13.8
8	3.5	201.	22.	12.4
9	3.0	179.	14.	10.1
10	7.5	178.	16.	11.9
11	7.5	170.	22.	15.9
12	7.4	168.	20.	17.1
13	6.2	175.	25.	18.2
14	6.5	181.	27.	19.2
15	9.4	153.	20.	19.5
16	10.5	150.	20.	19.8
17	9.3	150.	20.	20.5
18	11.5	151.	17.	19.9
19	1.7	328.	23.	3.0
20	13.3	172.	18.	15.8
21	13.4	159.	16.	16.3
22	6.5	126.	34.	15.3
23	2.8	225.	31.	12.2
24	2.6	206.	23.	10.5
MINIMUM OBSERVED VALUES:				
**	1.7	111.	14.	3.0
MAXIMUM OBSERVED VALUES:				
**	20.0	328.	34.	20.5
AVERAGE OBSERVED VALUES:				
**	9.0	165.	21.	15.8

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 31 AUG 88 (JULIAN DAY 244)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.0	198.	17.	9.3
2	2.4	183.	38.	9.8
3	1.9	213.	23.	10.6
4	2.3	197.	16.	8.4
5	2.4	192.	18.	7.8
6	1.7	212.	14.	7.2
7	2.5	202.	13.	7.2
8	3.0	199.	15.	8.0
9	1.7	133.	44.	7.6
10	1.4	175.	25.	8.1
11	1.8	38.	27.	16.3
12	4.7	28.	16.	18.2
13	7.4	141.	23.	20.5
14	7.5	154.	17.	21.9
15	.2	4.	2.	.5
16	.1	358.	3.	.6
17	6.1	170.	20.	22.9
18	6.6	171.	19.	21.8
19	5.2	174.	17.	20.8
20	2.7	199.	18.	17.2
21	1.8	219.	33.	15.1
22	1.3	230.	25.	13.5
23	1.8	222.	20.	12.7
24	2.2	221.	21.	11.9
MINIMUM OBSERVED VALUES:				
**	.1	4.	2.	.5
MAXIMUM OBSERVED VALUES:				
**	7.5	358.	44.	22.9
AVERAGE OBSERVED VALUES:				
**	3.0	189.	20.	12.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 1 SEP 88 (JULIAN DAY 245)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.3	212.	21.	11.3
2	2.7	210.	11.	11.0
3	1.8	208.	16.	9.9
4	2.7	209.	8.	10.4
5	2.6	211.	11.	10.0
6	2.6	212.	8.	9.8
7	2.0	214.	9.	9.3
8	2.6	210.	9.	8.8
9	2.5	209.	10.	8.7
10	1.7	182.	23.	9.5
11	1.4	52.	24.	17.0
12	2.1	32.	17.	19.8
13	2.7	32.	17.	22.4
14	3.1	19.	20.	24.6
15	3.3	11.	24.	26.0
16	3.4	17.	20.	27.2
17	4.5	16.	18.	28.0
18	4.7	22.	15.	28.0
19	2.3	316.	45.	27.5
20	3.2	209.	7.	19.9
21	3.2	205.	8.	17.2
22	3.0	212.	8.	16.6
23	3.5	210.	8.	16.0
24	3.2	208.	8.	15.6
MINIMUM OBSERVED VALUES:				
**	1.4	11.	7.	8.7
MAXIMUM OBSERVED VALUES:				
**	4.7	316.	45.	28.0
AVERAGE OBSERVED VALUES:				
**	2.8	220.	15.	16.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 2 SEP 88 (JULIAN DAY 246)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.9	210.	9.	15.5
2	3.0	211.	10.	15.1
3	2.2	213.	10.	15.0
4	2.7	210.	9.	14.5
5	2.2	212.	9.	14.3
6	1.9	214.	9.	13.4
7	2.2	213.	11.	12.3
8	1.4	218.	8.	11.3
9	2.2	216.	5.	11.5
10	2.5	195.	9.	11.7
11	1.3	143.	18.	20.7
12	1.8	47.	20.	24.2
13	2.6	31.	16.	26.1
14	4.9	25.	15.	27.8
15	5.7	15.	15.	28.9
16	6.6	10.	16.	29.7
17	6.1	11.	16.	30.6
18	5.1	2.	16.	30.8
19	2.8	351.	23.	29.8
20	3.3	204.	8.	22.9
21	3.6	207.	7.	20.3
22	3.8	216.	5.	19.3
23	3.9	209.	7.	18.8
24	3.9	212.	5.	18.4
MINIMUM OBSERVED VALUES:				
**	1.3	2.	5.	11.3
MAXIMUM OBSERVED VALUES:				
**	6.6	351.	23.	30.8
AVERAGE OBSERVED VALUES:				
**	3.3	218.	11.	20.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 3 SEP 88 (JULIAN DAY 247)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.6	209.	7.	18.1
2	3.5	212.	8.	17.7
3	3.1	212.	8.	17.4
4	3.4	212.	8.	17.0
5	3.0	213.	8.	16.3
6	3.2	211.	8.	16.0
7	3.3	213.	7.	15.6
8	3.1	215.	6.	15.4
9	3.0	215.	6.	15.1
10	3.2	203.	7.	15.9
11	2.0	187.	13.	19.0
12	.6	124.	23.	23.8
13	1.9	59.	27.	26.1
14	5.2	28.	12.	27.0
15	5.7	17.	16.	28.1
16	6.5	4.	16.	29.1
17	7.3	6.	13.	29.2
18	5.7	0.	12.	29.5
19	2.4	334.	34.	29.1
20	3.1	204.	8.	23.1
21	3.0	200.	9.	20.6
22	3.5	210.	7.	19.2
23	3.9	213.	5.	18.5
24	3.9	212.	6.	18.5
MINIMUM OBSERVED VALUES:				
**	.6	0.	5.	15.1
MAXIMUM OBSERVED VALUES:				
**	7.3	334.	34.	29.5
AVERAGE OBSERVED VALUES:				
**	3.6	214.	11.	21.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 4 SEP 88 (JULIAN DAY 248)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.4	212.	7.	18.0
2	2.8	212.	9.	17.9
3	2.9	211.	9.	17.4
4	2.3	213.	8.	16.8
5	2.9	209.	8.	16.4
6	2.9	208.	7.	16.4
7	2.9	210.	6.	16.0
8	2.6	211.	7.	15.7
9	2.6	212.	5.	15.4
10	1.9	198.	15.	15.4
11	1.4	173.	18.	19.2
12	1.3	34.	20.	24.0
13	2.3	34.	14.	25.3
14	2.6	29.	15.	27.5
15	3.0	21.	19.	29.3
16	3.7	20.	16.	30.7
17	3.7	23.	15.	31.2
18	3.1	17.	14.	30.7
19	2.1	267.	44.	29.1
20	2.9	204.	7.	23.2
21	3.1	209.	6.	20.8
22	3.5	210.	5.	19.6
23	3.3	206.	7.	19.0
24	3.2	207.	7.	19.0
MINIMUM OBSERVED VALUES:				
**	1.3	17.	5.	15.4
MAXIMUM OBSERVED VALUES:				
**	3.7	267.	44.	31.2
AVERAGE OBSERVED VALUES:				
**	2.8	213.	12.	21.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 5 SEP 88 (JULIAN DAY 249)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.1	206.	13.	18.6
2	3.0	215.	6.	17.9
3	3.0	210.	7.	17.6
4	2.3	214.	9.	17.1
5	2.0	198.	16.	15.7
6	1.6	204.	14.	14.7
7	2.7	193.	17.	13.9
8	2.3	194.	19.	13.5
9	2.0	201.	14.	14.0
10	1.8	146.	39.	14.2
11	1.2	53.	26.	19.7
12	1.5	45.	28.	24.4
13	2.4	31.	17.	26.8
14	4.1	23.	15.	28.9
15	4.1	356.	49.	32.1
16	6.3	151.	19.	32.7
17	5.8	144.	22.	32.7
18	6.8	148.	20.	31.8
19	7.8	141.	18.	30.5
20	7.4	142.	16.	27.8
21	4.4	169.	27.	25.4
22	3.7	214.	17.	22.4
23	4.1	206.	11.	19.9
24	3.1	191.	19.	20.2
MINIMUM OBSERVED VALUES:				
**	1.2	23.	6.	13.5
MAXIMUM OBSERVED VALUES:				
**	7.8	356.	49.	32.7
AVERAGE OBSERVED VALUES:				
**	3.6	175.	19.	22.2

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 6 SEP 88 (JULIAN DAY 250)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.7	203.	14.	20.3
2	3.6	195.	15.	20.4
3	3.4	202.	17.	20.6
4	5.9	189.	19.	22.3
5	5.0	192.	18.	21.5
6	5.8	183.	27.	21.6
7	5.6	179.	29.	21.2
8	5.7	176.	26.	20.7
9	8.4	175.	21.	20.4
10	10.1	182.	20.	19.1
11	8.5	193.	21.	17.9
12	8.5	175.	25.	19.7
13	8.8	134.	27.	21.0
14	8.7	158.	27.	21.4
15	8.8	145.	26.	21.8
16	13.8	163.	20.	22.1
17	13.3	148.	22.	21.8
18	16.1	143.	20.	20.9
19	15.5	144.	22.	19.7
20	13.3	166.	19.	19.1
21	15.6	158.	19.	19.1
22	14.6	157.	19.	18.5
23	13.5	154.	21.	18.0
24	16.4	149.	22.	17.2

MINIMUM OBSERVED VALUES:

**	3.4	134.	14.	17.2

MAXIMUM OBSERVED VALUES:

**	16.4	203.	29.	22.3

AVERAGE OBSERVED VALUES:

**	9.7	169.	21.	20.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 7 SEP 88 (JULIAN DAY 251)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	14.0	170.	20.	15.7
2	16.6	166.	19.	14.6
3	14.2	174.	20.	13.6
4	14.3	149.	17.	13.0
5	13.6	159.	17.	12.1
6	13.1	138.	20.	11.2
7	11.7	133.	21.	10.4
8	11.3	125.	22.	10.2
9	9.3	110.	27.	9.5
10	9.0	101.	27.	9.7
11	7.5	84.	27.	11.9
12	14.1	141.	17.	13.3
13	15.3	140.	17.	13.8
14	14.0	158.	18.	14.0
15	15.9	152.	17.	13.3
16	16.0	150.	18.	13.4
17	15.6	142.	19.	13.2
18	13.2	152.	17.	13.3
19	12.5	143.	19.	13.5
20	12.6	139.	18.	13.7
21	10.6	140.	19.	13.5
22	8.6	116.	25.	13.2
23	6.0	91.	27.	12.8
24	6.6	149.	16.	11.8
MINIMUM OBSERVED VALUES:				
**	6.0	84.	16.	9.5
MAXIMUM OBSERVED VALUES:				
**	16.6	174.	27.	15.7
AVERAGE OBSERVED VALUES:				
**	12.3	139.	20.	12.7

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 8 SEP 88 (JULIAN DAY 252)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	4.5	151.	23.	10.3
2	2.5	189.	29.	8.4
3	2.8	201.	15.	6.1
4	2.8	204.	12.	5.5
5	2.0	197.	21.	4.4
6	2.4	215.	9.	4.2
7	2.4	213.	9.	3.7
8	2.5	209.	10.	3.5
9	2.2	214.	10.	3.8
10	1.9	192.	17.	3.5
11	2.0	86.	36.	9.1
12	4.4	140.	29.	16.4
13	7.1	158.	22.	16.9
14	6.1	171.	23.	18.1
15	5.9	92.	32.	19.0
16	6.6	58.	42.	19.3
17	8.7	115.	27.	19.7
18	8.3	81.	36.	19.4
19	8.3	169.	21.	18.2
20	6.9	144.	21.	16.6
21	7.0	134.	21.	15.6
22	6.8	173.	18.	14.7
23	7.5	162.	18.	14.3
24	6.5	131.	20.	14.2
MINIMUM OBSERVED VALUES:				
**	1.9	58.	9.	3.5
MAXIMUM OBSERVED VALUES:				
**	8.7	215.	42.	19.7
AVERAGE OBSERVED VALUES:				
**	4.9	162.	21.	11.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 9 SEP 88 (JULIAN DAY 253)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.2	171.	34.	11.6
2	3.2	202.	18.	8.7
3	3.3	201.	19.	8.2
4	2.3	199.	16.	7.3
5	2.5	200.	14.	7.2
6	2.1	203.	14.	7.6
7	2.3	202.	14.	7.4
8	1.9	204.	17.	6.9
9	2.3	199.	16.	6.5
10	2.0	171.	30.	8.1
11	2.5	51.	37.	13.1
12	4.3	277.	40.	17.8
13	6.2	179.	21.	18.8
14	6.5	170.	23.	19.4
15	7.5	139.	27.	18.0
16	6.7	146.	26.	19.6
17	6.9	118.	30.	17.4
18	7.2	133.	22.	17.4
19	6.7	120.	28.	18.0
20	6.9	137.	25.	16.3
21	5.9	163.	24.	15.3
22	5.3	191.	21.	14.7
23	5.2	191.	19.	13.9
24	5.5	188.	19.	13.8
MINIMUM OBSERVED VALUES:				
**	1.9	51.	14.	6.5
MAXIMUM OBSERVED VALUES:				
**	7.5	277.	40.	19.6
AVERAGE OBSERVED VALUES:				
**	4.5	175.	23.	13.0

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 10 SEP 88 (JULIAN DAY 254)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	5.6	193.	19.	13.1
2	4.7	185.	20.	12.1
3	3.0	174.	35.	10.9
4	1.5	208.	36.	8.6
5	2.6	189.	24.	8.0
6	3.8	198.	21.	10.4
7	4.9	178.	18.	9.9
8	7.3	172.	20.	8.1
9	10.1	175.	18.	6.8
10	8.2	158.	21.	6.4
11	7.4	163.	18.	6.9
12	7.1	162.	18.	7.2
13	5.5	64.	33.	8.2
14	5.7	21.	15.	6.4
15	3.2	3.	15.	5.3
16	3.4	7.	15.	4.0
17	4.4	7.	12.	3.5
18	2.3	6.	28.	3.8
19	2.4	129.	39.	4.2
20	2.1	242.	38.	4.0
21	2.1	223.	35.	3.8
22	2.2	196.	26.	3.4
23	2.0	194.	24.	3.1
24	2.8	200.	22.	2.5
MINIMUM OBSERVED VALUES:				
**	1.5	3.	12.	2.5
MAXIMUM OBSERVED VALUES:				
**	10.1	242.	39.	13.1
AVERAGE OBSERVED VALUES:				
**	4.3	179.	24.	6.7

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 11 SEP 88 (JULIAN DAY 255)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.5	193.	22.	1.6
2	2.6	196.	24.	.8
3	2.6	201.	22.	1.3
4	2.3	199.	22.	1.9
5	2.0	207.	30.	2.0
6	2.3	207.	27.	1.2
7	2.3	232.	31.	1.9
8	2.0	212.	25.	1.7
9	1.9	201.	23.	2.2
10	1.7	182.	40.	4.2
11	6.1	37.	15.	6.4
12	6.9	42.	16.	7.6
13	6.2	39.	16.	9.7
14	4.4	42.	18.	9.2
15	3.9	40.	23.	11.5
16	3.6	19.	20.	12.2
17	3.5	8.	28.	13.0
18	4.0	4.	24.	13.3
19	3.1	308.	39.	12.6
20	2.2	200.	14.	7.2
21	2.6	208.	10.	5.5
22	2.4	213.	9.	4.5
23	2.1	214.	11.	3.7
24	2.4	203.	16.	3.3
MINIMUM OBSERVED VALUES:				
**	1.7	4.	9.	.8
MAXIMUM OBSERVED VALUES:				
**	6.9	308.	40.	13.3
AVERAGE OBSERVED VALUES:				
**	3.1	208.	22.	5.8

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 12 SEP 88 (JULIAN DAY 256)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.0	215.	11.	3.1
2	1.9	217.	7.	2.9
3	1.9	213.	12.	2.5
4	1.8	212.	12.	2.2
5	2.0	205.	13.	2.0
6	1.7	199.	19.	1.7
7	1.7	200.	20.	1.4
8	1.8	203.	14.	1.1
9	1.6	193.	19.	1.2
10	1.2	190.	20.	1.9
11	.8	105.	32.	6.1
12	2.0	42.	23.	12.2
13	3.1	44.	28.	15.0
14	5.3	24.	16.	16.1
15	5.4	15.	16.	17.4
16	4.7	18.	18.	18.5
17	3.5	21.	20.	20.0
18	4.7	14.	16.	19.7
19	3.4	200.	48.	18.6
20	3.1	214.	7.	12.1
21	2.6	207.	11.	10.7
22	2.8	202.	13.	9.8
23	2.7	207.	10.	9.3
24	2.6	212.	11.	9.1
MINIMUM OBSERVED VALUES:				
**	.8	14.	7.	1.1
MAXIMUM OBSERVED VALUES:				
**	5.4	217.	48.	20.0
AVERAGE OBSERVED VALUES:				
**	2.7	199.	17.	8.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 13 SEP 88 (JULIAN DAY 257)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.7	215.	8.	9.3
2	2.3	219.	7.	9.2
3	2.1	214.	10.	9.1
4	2.5	210.	12.	8.6
5	2.3	209.	10.	8.5
6	1.7	197.	20.	7.8
7	1.4	209.	14.	6.6
8	1.7	209.	14.	5.9
9	1.6	218.	8.	6.3
10	1.3	202.	15.	6.5
11	1.4	152.	24.	10.6
12	1.5	51.	23.	19.0
13	2.5	39.	21.	21.1
14	7.0	3.	20.	21.5
15	6.7	8.	18.	22.7
16	5.8	345.	27.	23.4
17	4.1	352.	35.	24.3
18	4.0	2.	20.	23.9
19	2.4	296.	44.	22.6
20	3.4	208.	7.	15.4
21	3.3	210.	7.	14.0
22	3.0	213.	8.	13.2
23	3.0	211.	9.	12.6
24	2.9	212.	7.	12.4
MINIMUM OBSERVED VALUES:				
**	1.3	2.	7.	5.9
MAXIMUM OBSERVED VALUES:				
**	7.0	352.	44.	24.3
AVERAGE OBSERVED VALUES:				
**	2.9	224.	16.	13.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 14 SEP 88 (JULIAN DAY 258)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.2	205.	7.	12.3
2	2.9	208.	8.	12.2
3	2.8	208.	7.	12.0
4	2.9	207.	7.	11.6
5	2.0	207.	17.	11.0
6	1.7	206.	12.	9.8
7	1.8	208.	11.	8.9
8	1.7	203.	15.	8.1
9	1.7	198.	15.	8.5
10	1.0	198.	18.	8.7
11	1.1	144.	32.	12.0
12	2.8	28.	16.	19.1
13	4.9	63.	32.	22.6
14	7.4	154.	14.	24.5
15	7.2	157.	17.	25.0
16	6.0	158.	22.	25.4
17	4.3	148.	26.	26.0
18	5.7	154.	23.	25.2
19	4.9	138.	22.	23.8
20	6.0	143.	19.	20.5
21	4.8	172.	23.	19.1
22	3.8	215.	22.	17.7
23	4.3	209.	23.	17.6
24	4.7	204.	21.	17.4
MINIMUM OBSERVED VALUES:				
**	1.0	28.	7.	8.1
MAXIMUM OBSERVED VALUES:				
**	7.4	215.	32.	26.0
AVERAGE OBSERVED VALUES:				
**	3.7	180.	18.	16.6

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 15 SEP 88 (JULIAN DAY 259)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	7.7	168.	18.	18.0
2	8.4	165.	17.	18.3
3	6.0	145.	25.	17.8
4	2.3	229.	31.	13.8
5	2.6	199.	24.	11.7
6	2.5	182.	37.	12.8
7	3.4	156.	38.	15.2
8	4.4	134.	32.	15.7
9	3.2	192.	25.	13.6
10	4.3	195.	20.	16.1
11	5.0	174.	20.	18.3
12	2.8	191.	30.	17.7
13	4.5	258.	38.	21.2
14	4.8	158.	30.	23.3
15	8.3	159.	20.	22.6
16	7.6	145.	24.	22.8
17	7.6	148.	23.	22.8
18	9.5	136.	20.	22.2
19	9.8	131.	22.	20.8
20	10.1	146.	18.	19.1
21	9.3	147.	17.	18.1
22	10.6	135.	15.	17.6
23	8.1	133.	16.	17.0
24	8.1	159.	18.	16.5
MINIMUM OBSERVED VALUES:				
**	2.3	131.	15.	11.7
MAXIMUM OBSERVED VALUES:				
**	10.6	258.	38.	23.3
AVERAGE OBSERVED VALUES:				
**	6.3	164.	24.	18.0

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 16 SEP 88 (JULIAN DAY 260)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	6.3	163.	26.	16.2
2	4.6	182.	24.	15.3
3	6.0	171.	20.	14.3
4	7.6	167.	21.	13.9
5	9.3	170.	21.	13.2
6	9.1	157.	22.	12.4
7	3.5	81.	48.	11.4
8	5.0	208.	36.	10.2
9	4.2	201.	29.	9.6
10	7.9	175.	19.	8.9
11	9.8	176.	18.	8.1
12	11.2	161.	20.	8.3
13	7.4	141.	21.	9.1
14	7.7	141.	26.	10.3
15	8.3	146.	29.	9.9
16	6.5	167.	26.	9.4
17	7.7	166.	19.	8.9
18	6.8	180.	19.	8.8
19	4.4	163.	26.	8.5
20	4.3	177.	20.	8.2
21	4.5	182.	20.	7.8
22	3.0	210.	24.	7.2
23	5.4	181.	19.	7.4
24	6.3	178.	17.	7.4
MINIMUM OBSERVED VALUES:				
**	3.0	81.	17.	7.2
MAXIMUM OBSERVED VALUES:				
**	11.2	210.	48.	16.2
AVERAGE OBSERVED VALUES:				
**	6.5	170.	24.	10.2

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 17 SEP 88 (JULIAN DAY 261)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	4.0	198.	28.	7.3
2	4.2	188.	28.	7.4
3	3.9	189.	28.	7.1
4	2.2	293.	40.	6.8
5	2.4	354.	32.	6.5
6	3.0	207.	32.	6.3
7	3.1	209.	23.	5.8
8	4.3	182.	18.	5.1
9	4.7	195.	19.	4.4
10	5.1	181.	22.	2.5
11	4.7	173.	23.	2.9
12	3.3	180.	26.	3.8
13	5.9	156.	18.	5.1
14	4.9	170.	18.	5.5
15	4.8	179.	21.	7.1
16	4.8	168.	21.	6.7
17	5.4	158.	18.	6.2
18	4.1	169.	22.	5.5
19	6.1	350.	22.	3.7
20	.4	237.	37.	3.0
21	.0	109.	6.	2.8
22	.3	188.	25.	2.3
23	.8	194.	22.	2.0
24	.8	191.	23.	2.1
MINIMUM OBSERVED VALUES:				
**	.0	109.	6.	2.0
MAXIMUM OBSERVED VALUES:				
**	6.1	354.	40.	7.4
AVERAGE OBSERVED VALUES:				
**	3.5	187.	24.	4.9

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 18 SEP 88 (JULIAN DAY 262)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.2	249.	29.	1.7
2	.9	208.	26.	1.1
3	1.2	206.	35.	.7
4	1.2	208.	22.	.2
5	1.2	125.	45.	-.4
6	1.9	226.	29.	-1.1
7	1.8	222.	24.	-1.8
8	.5	263.	36.	-2.1
9	.7	316.	40.	-1.7
10	1.4	171.	18.	-1.0
11	1.4	112.	37.	.6
12	1.7	36.	22.	3.5
13	2.1	60.	24.	5.9
14	2.9	33.	15.	5.9
15	3.7	122.	24.	8.7
16	3.4	144.	21.	8.9
17	2.9	157.	25.	7.7
18	2.7	176.	23.	7.6
19	2.0	155.	27.	6.7
20	1.8	195.	27.	5.2
21	1.1	193.	52.	2.8
22	1.7	222.	36.	1.7
23	2.4	172.	31.	2.2
24	2.3	312.	36.	3.2

MINIMUM OBSERVED VALUES:

**	.5	33.	15.	-2.1

MAXIMUM OBSERVED VALUES:

**	3.7	316.	52.	8.9

AVERAGE OBSERVED VALUES:

**	1.8	185.	29.	2.8

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 19 SEP 88 (JULIAN DAY 263)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.8	140.	34.	4.7
2	4.0	350.	25.	4.9
3	4.0	306.	33.	5.7
4	4.3	281.	31.	4.6
5	5.5	9.	15.	3.4
6	5.2	3.	14.	3.2
7	4.3	22.	24.	3.3
8	2.7	307.	44.	3.2
9	.8	228.	30.	3.2
10	2.2	45.	25.	3.4
11	2.1	41.	25.	3.9
12	2.8	20.	18.	4.2
13	3.8	9.	15.	4.5
14	6.5	3.	12.	4.6
15	5.6	0.	14.	5.3
16	4.7	1.	19.	5.6
17	3.3	345.	21.	5.4
18	1.0	67.	48.	5.9
19	1.1	214.	34.	5.6
20	2.8	318.	38.	5.1
21	.8	244.	43.	4.5
22	.9	226.	33.	4.3
23	.8	227.	36.	3.7
24	1.0	169.	41.	3.8
MINIMUM OBSERVED VALUES:				
**	.8	0.	12.	3.2
MAXIMUM OBSERVED VALUES:				
**	6.5	350.	48.	5.9
AVERAGE OBSERVED VALUES:				
**	3.1	341.	28.	4.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 20 SEP 88 (JULIAN DAY 264)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.0	201.	32.	3.5
2	1.0	200.	27.	3.0
3	.5	209.	26.	3.2
4	.9	264.	31.	2.9
5	1.0	198.	28.	2.7
6	.9	215.	22.	1.7
7	1.0	214.	20.	1.8
8	1.3	202.	16.	2.0
9	1.0	197.	20.	2.5
10	.4	169.	43.	3.7
11	.7	18.	25.	4.9
12	.8	161.	20.	6.0
13	1.1	24.	33.	6.1
14	1.0	340.	43.	6.8
15	1.1	48.	26.	7.7
16	1.4	95.	46.	8.8
17	1.5	55.	30.	10.0
18	3.6	137.	24.	9.1
19	2.3	216.	21.	6.5
20	2.2	226.	25.	4.3
21	1.9	211.	21.	2.9
22	2.2	208.	19.	2.3
23	2.4	213.	17.	1.9
24	2.2	206.	19.	1.6
MINIMUM OBSERVED VALUES:				
**	.4	18.	16.	1.6
MAXIMUM OBSERVED VALUES:				
**	3.6	340.	46.	10.0
AVERAGE OBSERVED VALUES:				
**	1.4	197.	26.	4.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 21 SEP 88 (JULIAN DAY 265)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.3	192.	25.	.8
2	2.5	224.	29.	1.4
3	2.3	232.	38.	2.5
4	2.7	158.	41.	4.0
5	2.8	296.	47.	4.4
6	6.3	127.	26.	5.8
7	5.8	121.	27.	5.9
8	7.5	122.	25.	6.1
9	6.3	114.	29.	6.3
10	9.2	138.	19.	6.3
11	10.1	134.	20.	6.7
12	7.8	148.	22.	7.4
13	10.7	143.	17.	8.6
14	9.1	136.	22.	11.2
15	9.1	139.	19.	10.8
16	7.2	122.	22.	8.3
17	6.4	115.	23.	8.7
18	7.6	121.	23.	8.5
19	6.0	126.	23.	8.0
20	8.5	160.	18.	7.5
21	7.0	108.	31.	7.6
22	2.4	6.	44.	6.6
23	1.1	241.	37.	5.4
24	2.1	229.	24.	5.0
MINIMUM OBSERVED VALUES:				
**	1.1	6.	17.	.8
MAXIMUM OBSERVED VALUES:				
**	10.7	296.	47.	11.2
AVERAGE OBSERVED VALUES:				
**	6.0	147.	27.	6.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 22 SEP 88 (JULIAN DAY 266)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.4	223.	19.	4.2
2	2.1	215.	19.	3.8
3	1.8	198.	26.	3.8
4	1.5	204.	24.	4.4
5	2.0	209.	23.	5.3
6	1.5	245.	22.	4.9
7	3.8	192.	18.	4.5
8	1.5	241.	32.	3.1
9	2.5	208.	23.	3.0
10	3.0	200.	24.	3.9
11	5.8	137.	18.	8.1
12	7.9	140.	16.	10.8
13	9.5	150.	16.	11.7
14	9.5	149.	17.	12.7
15	8.7	147.	20.	13.0
16	7.8	142.	20.	10.9
17	9.6	138.	17.	10.5
18	9.8	154.	22.	10.9
19	9.5	121.	20.	10.6
20	9.2	124.	19.	10.0
21	7.7	126.	23.	9.6
22	5.3	152.	25.	9.3
23	3.3	134.	42.	8.4
24	3.9	173.	34.	8.3
MINIMUM OBSERVED VALUES:				
**	1.5	121.	16.	3.0
MAXIMUM OBSERVED VALUES:				
**	9.8	245.	42.	13.0
AVERAGE OBSERVED VALUES:				
**	5.4	170.	22.	7.7

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 23 SEP 88 (JULIAN DAY 267)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.9	180.	30.	8.0
2	3.3	195.	29.	7.9
3	5.6	175.	28.	8.2
4	5.6	165.	29.	8.3
5	5.1	172.	29.	8.1
6	4.4	167.	39.	8.6
7	5.8	114.	34.	9.1
8	6.0	140.	32.	9.1
9	6.6	139.	26.	8.9
10	4.7	153.	33.	9.2
11	5.1	107.	48.	10.5
12	7.8	159.	24.	11.7
13	9.9	176.	22.	11.1
14	9.9	172.	21.	11.3
15	5.8	168.	22.	9.7
16	4.6	145.	31.	9.8
17	6.1	136.	31.	9.5
18	5.4	130.	31.	10.3
19	5.4	61.	36.	9.9
20	4.5	3.	47.	9.9
21	4.7	165.	33.	10.0
22	5.9	156.	33.	10.1
23	6.7	182.	29.	9.6
24	9.2	133.	28.	9.7
MINIMUM OBSERVED VALUES:				
**	3.3	3.	21.	7.9
MAXIMUM OBSERVED VALUES:				
**	9.9	195.	48.	11.7
AVERAGE OBSERVED VALUES:				
**	5.9	152.	31.	9.5

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 24 SEP 88 (JULIAN DAY 268)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	11.8	140.	23.	10.0
2	17.3	154.	17.	9.7
3	17.3	163.	17.	9.0
4	14.5	146.	26.	8.3
5	9.8	102.	31.	7.7
6	5.0	81.	39.	7.0
7	5.9	170.	24.	6.3
8	5.3	137.	26.	5.8
9	4.2	163.	30.	5.8
10	3.0	179.	24.	5.7
11	3.7	152.	25.	8.3
12	3.7	90.	44.	11.1
13	4.8	232.	36.	11.9
14	4.1	205.	31.	10.6
15	4.2	223.	29.	11.8
16	4.4	187.	30.	13.7
17	4.5	182.	23.	12.9
18	3.0	179.	29.	12.4
19	2.5	215.	27.	11.1
20	2.7	203.	30.	10.1
21	2.0	166.	38.	9.8
22	2.2	236.	50.	9.5
23	2.5	330.	39.	8.2
24	1.5	185.	48.	6.7
MINIMUM OBSERVED VALUES:				
**	1.5	81.	17.	5.7
MAXIMUM OBSERVED VALUES:				
**	17.3	330.	50.	13.7
AVERAGE OBSERVED VALUES:				
**	5.8	172.	30.	9.3

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 25 SEP 88 (JULIAN DAY 269)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	2.1	221.	26.	5.7
2	1.9	192.	37.	5.9
3	1.7	108.	52.	6.3
4	2.8	47.	34.	6.2
5	3.1	268.	47.	6.1
6	3.6	33.	38.	5.6
7	3.6	39.	42.	5.1
8	8.0	146.	26.	8.3
9	12.8	161.	18.	6.5
10	6.5	174.	28.	6.3
11	4.7	182.	34.	7.7
12	7.7	164.	29.	9.9
13	7.2	194.	29.	9.1
14	7.8	155.	36.	8.0
15	8.2	168.	27.	7.4
16	6.8	159.	32.	7.9
17	8.4	150.	29.	8.6
18	5.3	171.	44.	8.7
19	6.1	146.	35.	8.2
20	8.3	156.	29.	7.7
21	4.9	163.	39.	8.0
22	8.1	167.	28.	8.0
23	11.0	175.	23.	8.3
24	13.6	163.	19.	8.6
MINIMUM OBSERVED VALUES:				
**	1.7	33.	18.	5.1
MAXIMUM OBSERVED VALUES:				
**	13.6	268.	52.	9.9
AVERAGE OBSERVED VALUES:				
**	6.4	161.	32.	7.4

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 26 SEP 88 (JULIAN DAY 270)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	14.2	152.	18.	8.7
2	15.2	137.	18.	9.2
3	11.5	110.	24.	9.2
4	7.8	99.	26.	9.1
5	5.9	69.	35.	8.9
6	3.0	49.	40.	8.3
7	4.4	62.	42.	8.2
8	4.4	129.	26.	8.3
9	2.3	176.	43.	6.6
10	1.6	214.	33.	6.4
11	1.6	270.	42.	7.2
12	1.2	357.	37.	7.5
13	2.9	5.	17.	8.6
14	2.8	331.	33.	9.6
15	3.6	168.	34.	10.4
16	3.5	189.	25.	9.8
17	1.4	135.	47.	9.2
18	2.8	215.	34.	9.6
19	2.1	272.	35.	8.5
20	2.8	206.	45.	6.8
21	1.9	306.	40.	6.0
22	1.6	193.	27.	5.8
23	1.9	207.	27.	5.7
24	2.0	191.	34.	5.6
MINIMUM OBSERVED VALUES:				
**	1.2	5.	17.	5.6
MAXIMUM OBSERVED VALUES:				
**	15.2	357.	47.	10.4
AVERAGE OBSERVED VALUES:				
**	4.3	167.	32.	8.1

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 27 SEP 88 (JULIAN DAY 271)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.7	193.	30.	5.4
2	2.1	160.	51.	5.7
3	1.8	330.	41.	5.8
4	1.5	184.	37.	5.7
5	1.4	266.	38.	5.8
6	1.6	281.	37.	5.8
7	2.1	220.	42.	5.9
8	1.7	244.	31.	5.7
9	2.1	257.	41.	5.6
10	2.8	91.	41.	5.9
11	7.3	162.	20.	6.2
12	10.7	147.	20.	6.2
13	16.2	147.	19.	5.8
14	17.5	153.	21.	5.8
15	14.2	135.	19.	5.7
16	15.6	146.	16.	6.4
17	17.4	144.	18.	7.5
18	9.5	105.	32.	6.0
19	1.9	95.	*****	3.0
20	1.4	122.	*****	2.0
21	1.3	153.	*****	2.0
22	1.4	126.	*****	2.0
23	1.2	156.	*****	2.0
24	1.0	157.	*****	1.5
MINIMUM OBSERVED VALUES:				
**	1.0	91.	16.	1.5
MAXIMUM OBSERVED VALUES:				
**	17.5	330.	51.	7.5
AVERAGE OBSERVED VALUES:				
**	5.6	161.	31.	5.0

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 28 SEP 88 (JULIAN DAY 272)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.4	169.	*****	1.5
2	1.3	161.	*****	1.0
3	1.5	151.	*****	1.0
4	1.4	163.	*****	1.0
5	1.2	167.	*****	1.0
6	1.0	171.	*****	.5
7	1.0	167.	*****	1.0
8	1.1	167.	*****	.5
9	1.8	161.	*****	2.0
10	2.3	141.	*****	3.0
11	2.6	120.	*****	4.5
12	2.7	120.	*****	6.0
13	4.0	122.	*****	5.0
14	3.0	121.	*****	6.7
15	3.0	126.	*****	7.0
16	3.0	124.	*****	7.0
17	4.0	128.	*****	8.5
18	3.0	117.	*****	6.5
19	1.9	149.	*****	6.0
20	2.5	140.	*****	6.0
21	2.0	158.	*****	6.0
22	1.9	178.	*****	5.5
23	1.4	162.	*****	5.5
24	1.0	144.	*****	5.3
MINIMUM OBSERVED VALUES:				
**	1.0	117.	*****	.5
MAXIMUM OBSERVED VALUES:				
**	4.0	178.	*****	8.5
AVERAGE OBSERVED VALUES:				
**	2.1	147.	*****	4.1

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 29 SEP 88 (JULIAN DAY 273)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	1.5	95.	*****	5.0
2	1.0	135.	*****	3.4
3	1.0	167.	*****	2.0
4	1.0	144.	*****	2.3
5	.5	162.	*****	2.0
6	1.0	162.	*****	1.8
7	1.0	144.	*****	1.3
8	1.0	159.	*****	1.0
9	1.0	160.	*****	1.0
10	1.0	154.	*****	1.0
11	1.2	127.	*****	4.5
12	1.5	54.	*****	7.0
13	2.5	124.	*****	9.3
14	3.5	127.	*****	12.0
15	3.3	137.	*****	12.5
16	2.5	152.	*****	13.0
17	3.0	141.	*****	12.5
18	2.5	125.	*****	11.7
19	2.0	128.	*****	10.5
20	2.6	139.	*****	10.0
21	2.3	133.	*****	8.0
22	2.8	137.	*****	7.9
23	2.7	133.	*****	8.0
24	3.0	127.	*****	8.0

MINIMUM OBSERVED VALUES:

**	.5	54.	*****	1.0

MAXIMUM OBSERVED VALUES:

**	3.5	167.	*****	13.0

AVERAGE OBSERVED VALUES:

**	1.9	137.	*****	6.5

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: RAMSEY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 30 SEP 88 (JULIAN DAY 274)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL
1	3.5	118.	*****	8.0
2	2.4	149.	*****	7.8
3	1.3	140.	*****	8.0
4	3.0	158.	*****	7.3
5	2.8	142.	*****	7.3
6	2.9	129.	*****	8.0
7	2.4	140.	*****	8.0
8	2.5	140.	*****	9.2
9	4.0	138.	*****	10.0
10	2.6	125.	*****	10.0
11	2.8	126.	*****	10.8
12	3.3	126.	*****	11.8
13	3.9	123.	*****	12.1
14	2.8	119.	*****	13.0
15	2.5	123.	*****	13.0
16	2.3	123.	*****	13.0
17	2.8	114.	*****	12.3
18	2.0	122.	*****	11.5
19	.8	134.	*****	9.0
20	.8	158.	*****	7.8
21	.8	164.	*****	7.8
22	.8	168.	*****	7.8
23	.8	169.	*****	7.0
24	.8	169.	*****	6.8
MINIMUM OBSERVED VALUES:				
**	.8	114.	*****	6.8
MAXIMUM OBSERVED VALUES:				
**	4.0	169.	*****	13.0
AVERAGE OBSERVED VALUES:				
**	2.3	138.	*****	9.5

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 JUL 88 THRU 31 JUL 88

MONTH AND YEAR OF RECORD: JUL 88

	WND SPD (MPH) AT 10 METERS				WND DIR (DEG) AT 10 METERS				SIGMA-T (DEG) AT 10 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	.5	4.6	1.2	29	116.	334.	190.	29	16.	54.	32.	29
2	.4	2.8	1.0	29	100.	271.	171.	29	22.	56.	34.	29
3	.4	2.6	1.0	29	29.	242.	166.	29	15.	57.	36.	29
4	.4	4.3	1.1	29	83.	273.	164.	29	13.	48.	34.	29
5	.3	2.9	.9	29	13.	231.	149.	29	14.	55.	36.	29
6	.3	3.7	1.0	29	0.	289.	153.	29	18.	58.	39.	29
7	.3	2.3	.9	29	54.	249.	136.	29	17.	56.	36.	29
8	.3	3.6	.9	28	26.	359.	113.	28	23.	49.	36.	28
9	.4	3.7	.9	27	3.	162.	48.	27	18.	45.	28.	27
10	.6	3.1	1.7	23	0.	356.	43.	23	18.	46.	28.	23
11	.8	11.5	3.0	22	0.	345.	357.	22	11.	49.	30.	22
12	.7	19.7	4.0	23	0.	359.	333.	23	18.	47.	29.	23
13	1.0	8.7	3.9	23	0.	359.	11.	23	21.	44.	30.	23
14	1.9	8.4	4.6	23	2.	347.	214.	23	19.	58.	32.	23
15	1.3	8.3	5.0	24	0.	349.	213.	24	20.	48.	28.	24
16	2.3	7.9	5.1	24	0.	312.	223.	24	20.	50.	27.	24
17	2.2	7.4	4.6	23	0.	330.	224.	23	20.	47.	28.	23
18	1.5	6.9	4.5	24	0.	356.	216.	24	20.	51.	28.	24
19	1.4	8.2	4.0	24	0.	339.	214.	24	18.	43.	27.	24
20	1.1	5.0	3.1	24	24.	274.	211.	24	14.	44.	26.	24
21	1.3	3.6	2.3	24	144.	322.	207.	24	11.	52.	24.	24
22	.8	3.9	1.7	24	150.	233.	201.	24	10.	46.	24.	24
23	.2	3.1	1.5	26	158.	306.	204.	26	12.	42.	25.	26
24	.7	4.7	1.4	26	0.	231.	193.	26	14.	47.	27.	26
COMPOSITE VALUES FOR THIS MONTH -												
	.2	19.7	2.3	615	0.	359.	182.	615	10.	58.	30.	615

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 JUL 88 THRU 31 JUL 88

MONTH AND YEAR OF RECORD: JUL 88

	TEMP (CEL) AT 4 METERS				PRECIP (IN.) AT 2 METERS				REL HUM (PCT) AT 9 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	3.7	19.0	11.0	29	.00	.03	.03*	29	37.6	97.0	66.7	29
2	2.5	18.5	9.8	29	.00	.04	.04*	29	37.9	99.3	70.9	29
3	1.2	18.7	9.0	29	.00	.05	.05*	29	37.6	99.9	73.9	29
4	.5	20.7	8.3	29	.00	.04	.04*	29	35.4	99.9	76.4	29
5	-.1	20.9	7.7	29	.00	.02	.02*	29	34.0	100.0	78.5	29
6	-.5	19.9	7.3	29	.00	.11	.11*	29	34.9	100.0	80.0	29
7	-.7	22.4	7.3	29	.00	.00	.00*	29	27.8	100.0	80.5	29
8	2.9	22.7	9.5	29	.00	.01	.01*	28	36.8	100.0	80.3	28
9	7.5	21.7	14.9	28	.00	.00	.00*	27	47.9	99.4	66.7	27
10	9.4	26.8	18.5	24	.00	.00	.00*	24	35.6	97.8	51.9	23
11	9.8	29.2	20.4	22	.00	.01	.02*	22	28.1	96.2	44.3	21
12	9.2	31.7	22.1	24	.00	.00	.00*	23	21.8	91.7	37.6	23
13	11.1	32.3	23.8	24	.00	.00	.00*	23	20.6	85.3	34.7	23
14	10.7	33.5	24.1	25	.00	.01	.01*	24	19.7	81.4	34.9	24
15	10.2	33.6	24.7	25	.00	.01	.01*	24	19.0	77.1	33.6	24
16	10.1	34.0	25.3	25	.00	.00	.00*	24	17.1	72.9	32.3	24
17	10.5	34.1	24.9	24	.00	.01	.01*	23	16.5	70.9	32.6	23
18	10.4	33.8	25.4	25	.00	.00	.00*	24	17.1	73.9	32.2	24
19	11.7	32.8	24.8	25	.00	.00	.00*	24	16.7	63.5	31.9	24
20	13.3	32.0	23.7	25	.00	.00	.00*	24	19.0	56.5	32.6	24
21	9.0	27.2	19.8	25	.00	.00	.00*	24	27.6	67.4	38.7	24
22	7.2	22.9	16.3	25	.00	.00	.00*	24	33.3	83.8	49.3	24
23	5.5	19.3	14.0	25	.00	.00	.00*	26	20.5	92.0	55.7	26
24	4.9	18.2	12.4	26	.00	.01	.01*	26	43.6	94.0	62.7	26
COMPOSITE VALUES FOR THIS MONTH -												
	-.7	34.1	16.4	629	.00	.11	.36*	617	16.5	100.0	55.0	615

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 JUL 88 THRU 31 JUL 88

MONTH AND YEAR OF RECORD: JUL 88

	SOL RAD (LPM) AT 9 METERS				EVAP (IN.) AT 2 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	.00	.00	.00	29	.000	.002	.001	29
2	.00	.00	.00	29	.000	.002	.000	29
3	.00	.00	.00	29	.000	.002	.000	29
4	.00	.00	.00	29	.000	.003	.000	29
5	.00	.00	.00	29	.000	.002	.000	29
6	.00	.00	.00	29	.000	.002	.000	29
7	.00	.38	.03	29	.000	.014	.001	29
8	.03	.21	.12	28	.001	.007	.004	28
9	.05	.44	.34	28	.001	.014	.010	27
10	.09	.69	.51	25	.003	.023	.016	23
11	.12	.93	.69	24	.004	.033	.022	21
12	.16	1.13	.83	25	.005	.039	.027	22
13	.18	1.23	.96	25	.006	.044	.032	22
14	.24	1.29	.93	26	.007	.049	.032	23
15	.26	1.36	.98	26	.008	.049	.034	24
16	.20	1.30	.98	26	.006	.045	.034	24
17	.18	1.27	.84	25	.006	.039	.029	23
18	.16	.95	.74	26	.005	.035	.027	24
19	.22	.72	.53	26	.008	.026	.020	24
20	.07	.47	.31	26	.003	.019	.013	24
21	.03	.15	.08	26	.001	.007	.005	24
22	.00	.02	.00	26	.000	.003	.001	24
23	.00	.00	.00	27	.000	.002	.001	25
24	.00	.00	.00	27	.000	.002	.001	26
COMPOSITE VALUES FOR THIS MONTH -								
	.00	1.36	.35	645	.000	.049	7.249*	611

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 AUG 88 THRU 31 AUG 88

MONTH AND YEAR OF RECORD: AUG 88

	WND SPD (MPH) AT 10 METERS				WND DIR (DEG) AT 10 METERS				SIGMA-T (DEG) AT 10 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	.4	3.9	.9	24	6.	234.	152.	24	22.	52.	36.	24
2	.3	2.6	.9	25	57.	355.	154.	25	25.	48.	36.	25
3	.4	2.9	.9	26	43.	276.	144.	26	20.	49.	39.	26
4	.4	4.0	1.1	26	79.	326.	151.	26	24.	53.	37.	26
5	.4	3.3	1.0	26	7.	359.	144.	26	18.	60.	37.	26
6	.2	3.2	1.0	26	18.	356.	141.	26	18.	54.	37.	26
7	.4	5.4	1.2	26	7.	306.	51.	26	18.	49.	28.	26
8	.4	6.4	1.6	25	2.	250.	29.	25	14.	40.	26.	25
9	1.0	6.6	3.0	20	2.	358.	17.	20	8.	43.	24.	20
10	.8	7.6	4.1	17	4.	356.	28.	17	13.	50.	28.	17
11	1.6	7.5	4.3	17	8.	357.	293.	17	12.	37.	27.	17
12	2.9	7.5	5.3	16	7.	320.	240.	16	20.	39.	27.	16
13	2.9	8.4	5.2	17	4.	352.	239.	17	10.	39.	27.	17
14	1.0	7.1	4.7	17	9.	353.	246.	17	22.	51.	30.	17
15	.8	6.9	4.4	15	4.	353.	227.	15	18.	39.	26.	15
16	1.0	6.9	4.6	14	169.	340.	225.	14	12.	37.	25.	14
17	1.7	5.0	3.6	14	8.	309.	219.	14	18.	43.	24.	14
18	1.1	4.0	2.6	14	167.	339.	217.	14	17.	39.	25.	14
19	1.1	3.2	1.7	14	6.	246.	198.	14	16.	38.	24.	14
20	1.0	2.8	1.6	14	140.	331.	198.	14	12.	38.	24.	14
21	.4	4.9	1.3	17	135.	299.	205.	17	20.	43.	31.	17
22	.3	4.6	1.1	21	10.	307.	197.	21	18.	45.	31.	21
23	.3	4.1	1.0	22	53.	288.	169.	22	21.	51.	34.	22
24	.4	3.5	.9	23	79.	258.	164.	23	24.	55.	36.	23
COMPOSITE VALUES FOR THIS MONTH -												
	.2	8.4	2.2	476	2.	359.	178.	476	8.	60.	31.	476

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 AUG 88 THRU 31 AUG 88

MONTH AND YEAR OF RECORD: AUG 88

	TEMP (CEL) AT 4 METERS				PRECIP (IN.) AT 2 METERS				REL HUM (PCT) AT 9 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	2.9	16.7	8.3	24	.00	.00	.00*	24	41.7	99.7	70.1	24
2	2.1	16.2	7.4	25	.00	.00	.00*	25	45.1	99.9	73.6	25
3	1.9	15.1	7.0	26	.00	.00	.00*	26	44.7	99.9	74.5	26
4	1.2	15.1	6.4	26	.00	.00	.00*	26	45.5	99.9	76.5	26
5	.9	14.0	6.1	26	.00	.03	.03*	26	52.5	100.0	80.3	26
6	1.4	14.6	7.2	26	.00	.00	.00*	26	51.4	99.9	80.5	26
7	6.3	19.3	13.6	26	.00	.00	.00*	26	47.3	98.9	67.4	26
8	6.9	24.1	16.9	25	.00	.00	.00*	25	35.1	93.9	53.0	25
9	9.2	28.6	21.0	20	.00	.00	.00*	20	25.5	83.5	41.6	20
10	12.9	30.7	22.4	17	.00	.00	.00*	17	21.6	46.9	33.3	17
11	14.5	30.5	23.5	17	.00	.00	.00*	17	21.0	43.3	29.4	17
12	18.6	32.2	24.9	16	.00	.00	.00*	16	19.8	43.1	28.7	16
13	12.6	32.4	24.7	17	.00	.00	.00*	17	19.7	49.1	27.9	17
14	16.4	32.1	24.7	17	.00	.00	.00*	17	20.1	42.2	27.9	17
15	13.4	31.7	25.6	15	.00	.00	.00*	15	18.9	51.0	27.8	15
16	11.9	31.0	24.6	14	.00	.00	.00*	14	20.4	61.6	29.5	14
17	9.9	29.4	23.3	14	.00	.01	.01*	14	21.6	88.6	33.2	14
18	10.4	26.6	20.8	14	.00	.00	.00*	14	23.9	88.1	35.8	14
19	8.2	23.0	16.9	14	.00	.00	.00*	14	26.7	93.8	44.0	14
20	6.7	20.0	14.2	14	.00	.01	.01*	14	31.6	97.7	52.0	14
21	5.7	21.4	12.5	17	.00	.00	.00*	17	29.6	99.2	57.3	17
22	4.9	19.9	11.0	21	.00	.00	.00*	21	28.8	99.5	61.3	21
23	4.5	18.4	10.0	22	.00	.00	.00*	22	32.4	99.7	64.0	22
24	3.8	17.8	9.1	23	.00	.00	.00*	23	37.3	99.7	67.0	23
COMPOSITE VALUES FOR THIS MONTH -												
	.9	32.4	14.6	476	.00	.03	.05*	476	18.9	100.0	55.4	476

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 AUG 88 THRU 31 AUG 88

MONTH AND YEAR OF RECORD: AUG 88

	SOL RAD (LPM) AT 9 METERS				EVAP (IN.) AT 2 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	.00	.00	.00	29	.000	.002	.000	24
2	.00	.00	.00	29	.000	.001	.000	25
3	.00	.00	.00	29	.000	.001	.000	26
4	.00	.01	.00	29	.000	.002	.000	26
5	.00	.01	.00	29	.000	.001	.000	26
6	.00	.11	.05	29	.000	.004	.002	26
7	.06	.44	.29	29	.002	.014	.009	26
8	.14	.74	.52	29	.005	.023	.016	25
9	.29	.98	.73	29	.010	.033	.023	20
10	.33	1.09	.86	29	.013	.039	.030	17
11	.61	1.18	.99	29	.021	.042	.033	17
12	.51	1.22	1.02	29	.018	.044	.034	16
13	.28	1.24	.93	30	.010	.042	.032	17
14	.33	1.12	.82	30	.013	.040	.028	17
15	.09	1.01	.70	30	.005	.035	.025	15
16	.04	.74	.51	30	.005	.028	.019	14
17	.01	.47	.29	30	.003	.020	.012	14
18	.00	.19	.08	30	.002	.010	.005	14
19	.00	.10	.00	30	.000	.004	.002	14
20	.00	.00	.00	30	.000	.002	.001	14
21	.00	.00	.00	30	.000	.003	.001	17
22	.00	.00	.00	30	.000	.003	.001	21
23	.00	.00	.00	30	.000	.002	.001	22
24	.00	.00	.00	30	.000	.002	.000	23
COMPOSITE VALUES FOR THIS MONTH -								
	.00	1.24	.32	708	.000	.044	4.821*	476

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 SEP 88 THRU 30 SEP 88

MONTH AND YEAR OF RECORD: SEP 88

	WND SPD (MPH) AT 10 METERS				WND DIR (DEG) AT 10 METERS				SIGMA-T (DEG) AT 10 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	.0	8.8	1.6	21	15.	306.	186.	21	13.	50.	33.	21
2	.0	7.7	1.4	21	6.	295.	190.	21	17.	51.	35.	21
3	.0	4.8	1.2	22	63.	270.	193.	22	16.	46.	30.	22
4	.2	4.4	1.2	22	34.	349.	189.	21	14.	51.	32.	21
5	.3	4.7	1.2	22	100.	315.	176.	21	15.	50.	36.	21
6	.2	3.2	1.2	22	22.	355.	208.	21	13.	47.	34.	21
7	.3	3.9	1.2	22	7.	333.	187.	21	15.	46.	33.	21
8	.3	5.1	1.5	20	9.	352.	214.	20	16.	47.	29.	20
9	.3	4.3	1.7	20	9.	340.	52.	20	0.	41.	25.	20
10	.8	5.8	2.1	18	13.	354.	9.	18	14.	43.	25.	18
11	1.2	5.8	2.8	18	5.	349.	58.	18	12.	53.	26.	18
12	1.5	6.5	3.6	19	8.	357.	270.	19	8.	39.	23.	19
13	1.3	7.6	3.8	19	0.	335.	234.	19	11.	47.	25.	19
14	1.1	8.2	3.8	18	32.	327.	212.	18	13.	45.	26.	18
15	1.5	9.1	3.8	19	45.	337.	223.	19	12.	41.	25.	19
16	1.5	9.5	3.2	19	41.	318.	221.	19	11.	51.	25.	19
17	1.4	8.4	2.9	19	66.	360.	239.	19	11.	42.	25.	19
18	1.1	9.0	2.2	19	46.	316.	201.	19	13.	55.	28.	19
19	.6	9.7	2.4	19	95.	280.	208.	19	14.	42.	25.	19
20	.9	12.4	2.5	19	151.	297.	216.	19	13.	47.	22.	19
21	.5	9.0	1.9	20	147.	333.	200.	20	14.	64.	26.	20
22	.5	6.9	1.7	20	139.	266.	198.	20	15.	41.	29.	20
23	.5	9.3	1.8	20	100.	350.	190.	20	18.	49.	32.	20
24	.5	11.2	1.8	20	84.	352.	180.	20	20.	54.	32.	20
COMPOSITE VALUES FOR THIS MONTH -												
	.0	12.4	2.2	478	0.	360.	202.	474	0.	64.	29.	474

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 SEP 88 THRU 30 SEP 88

MONTH AND YEAR OF RECORD: SEP 88

	TEMP (CEL) AT 4 METERS				PRECIP (IN.) AT 2 METERS				REL HUM (PCT) AT 9 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	-3.5	15.9	4.5	21	.00	.00	.00*	14	16.7	98.1	71.6	21
2	-4.0	15.1	4.1	21	.00	.00	.00*	14	25.6	98.5	74.1	21
3	-4.2	14.1	3.6	22	.00	.00	.00*	15	29.3	98.2	74.9	22
4	-5.0	13.2	3.3	22	.00	.01	.01*	15	43.8	99.1	77.6	22
5	-5.0	12.9	3.2	22	.00	.02	.02*	15	45.2	98.5	79.9	22
6	-4.5	12.7	3.2	22	.00	.00	.00*	15	44.1	97.7	81.1	22
7	-4.3	15.0	5.0	22	.00	.01	.01*	15	43.5	97.3	78.2	22
8	-5.0	19.2	6.1	20	.00	.03	.03*	13	37.8	95.9	76.2	20
9	-2.8	23.4	8.2	20	.00	.05	.05*	13	33.5	95.0	73.0	20
10	2.9	26.3	9.5	18	.00	.02	.02*	11	31.3	93.5	68.6	18
11	4.1	29.6	11.6	18	.00	.01	.01*	11	25.7	91.5	58.9	18
12	5.9	31.7	14.1	19	.00	.01	.01*	12	22.8	89.9	48.9	19
13	6.5	32.9	14.8	19	.00	.01	.01*	12	22.4	88.7	46.6	19
14	7.5	34.8	15.5	18	.00	.02	.02*	11	22.2	83.9	44.8	18
15	4.8	34.7	15.2	19	.00	.00	.00*	11	22.5	76.6	43.4	19
16	3.0	33.5	14.4	19	.00	.03	.03*	11	21.8	87.0	45.5	19
17	2.0	31.0	13.3	19	.00	.18	.18*	11	21.6	92.0	49.2	19
18	.5	25.0	11.6	19	.00	.12	.12*	11	22.2	88.5	53.7	19
19	.0	21.8	9.7	19	.00	.04	.04*	11	24.2	94.0	58.6	19
20	.0	21.2	7.9	19	.00	.02	.02*	11	28.4	95.5	64.5	19
21	-1.7	20.2	7.1	20	.00	.00	.00*	12	32.6	96.5	67.7	20
22	-2.3	18.8	6.2	20	.00	.00	.00*	12	37.9	97.3	70.6	20
23	-3.3	17.8	5.1	20	.00	.00	.00*	12	42.2	97.5	73.3	20
24	-4.0	16.8	4.4	20	.00	.01	.01*	12	44.7	97.6	75.5	20
COMPOSITE VALUES FOR THIS MONTH -												
	-5.0	34.8	8.2	478	.00	.18	.59*	300	16.7	99.1	65.5	478

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM

COMPOSITE DAY ANALYSIS

SELECTED STATION: LITTLE CHERRY CREEK SELECTED PERIOD: 1 SEP 88 THRU 30 SEP 88

MONTH AND YEAR OF RECORD: SEP 88

	SOL RAD (LPM) AT 9 METERS				EVAP (IN.) AT 2 METERS			
HR	MINIMUM	MAXIMUM	AVERAGE	TLY	MINIMUM	MAXIMUM	AVERAGE	TLY
1	.00	.01	.00	23	.000	.003	.000	21
2	.00	.00	.00	23	.000	.002	.000	21
3	.00	.00	.00	23	.000	.002	.000	22
4	.00	.00	.00	23	.000	.001	.000	22
5	.00	.00	.00	23	.000	.001	.000	22
6	.00	.04	.01	23	.000	.002	.000	22
7	.00	.26	.06	23	.000	.009	.002	22
8	.00	.52	.15	23	.000	.015	.004	20
9	.04	.75	.27	23	.001	.023	.007	20
10	.09	.92	.40	22	.003	.029	.010	18
11	.18	1.03	.53	22	.005	.034	.014	18
12	.14	1.05	.63	23	.004	.036	.019	19
13	.15	1.03	.66	23	.005	.035	.020	19
14	.08	.91	.63	22	.003	.032	.020	18
15	.08	.81	.49	23	.003	.029	.016	19
16	.05	.65	.29	23	.002	.024	.010	19
17	.00	.44	.13	23	.000	.018	.005	19
18	.00	.21	.04	23	.000	.010	.003	19
19	.00	.02	.00	23	.000	.005	.001	19
20	.00	.00	.00	23	.000	.006	.001	19
21	.00	.00	.00	23	.000	.004	.001	20
22	.00	.00	.00	23	.000	.003	.000	20
23	.00	.00	.00	23	.000	.004	.000	20
24	.00	.00	.00	23	.000	.004	.000	20
COMPOSITE VALUES FOR THIS MONTH -								
	.00	1.05	.18	549	.000	.036	2.578*	478

NOTE: "******" INDICATES INDETERMINATE REPORT VALUES.
"*" INDICATES TOTAL RATHER THAN AVERAGE PRECIPITATION OR EVAPORATION.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 1 JUL 88 (JULIAN DAY 183)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	131.	45.	6.9	.00	84.5	.00	.000
2	.8	173.	35.	5.6	.00	90.6	.00	.000
3	.6	162.	27.	4.7	.00	95.8	.00	.000
4	.5	185.	32.	3.7	.00	98.8	.00	.000
5	.8	124.	37.	3.1	.00	100.0	.00	.000
6	.8	200.	35.	2.3	.00	100.0	.00	.000
7	.7	156.	44.	2.3	.00	100.0	.02	.001
8	.6	74.	35.	6.5	.00	96.2	.21	.006
9	1.0	28.	27.	11.3	.00	66.0	.37	.011
10	1.4	38.	21.	15.2	.00	47.5	.54	.017
11	1.2	0.	11.	18.2	.01	41.3	.57	.018
12	*****	*****	*****	25.6	.00	26.1	.98	*****
13	*****	*****	*****	23.6	.00	22.8	1.01	*****
14	*****	*****	*****	25.6	.00	26.6	1.12	*****
15	1.3	349.	40.	25.1	.00	27.2	1.06	.034
16	2.9	160.	37.	26.3	.00	27.0	.98	.032
17	3.1	184.	36.	25.7	.00	27.1	.71	.025
18	3.0	193.	27.	24.7	.00	29.9	.52	.019
19	3.1	187.	24.	23.9	.00	31.6	.37	.014
20	2.1	157.	29.	25.4	.00	31.4	.39	.014
21	2.3	247.	11.	21.0	.00	33.5	.15	.007
22	1.6	191.	21.	15.9	.00	53.2	.01	.001
23	1.9	205.	15.	13.4	.00	63.6	.00	.001
24	.9	213.	15.	12.0	.00	65.9	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	0.	11.	2.3	.00	22.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.1	349.	45.	26.3	.01	100.0	1.12	.034
AVERAGE OBSERVED VALUES:								
**	1.5	168.	28.	15.3	.01*	57.8	.38	.200*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 2 JUL 88 (JULIAN DAY 184)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.3	211.	16.	10.7	.00	69.5	.00	.000
2	1.0	209.	22.	9.4	.00	73.3	.00	.000
3	.8	114.	51.	8.3	.00	78.7	.00	.000
4	.8	139.	44.	7.3	.00	84.6	.00	.000
5	.8	161.	39.	6.8	.00	89.4	.00	.000
6	.8	130.	49.	7.4	.00	87.8	.00	.000
7	.6	137.	42.	8.5	.00	86.7	.02	.001
8	.7	124.	39.	11.4	.00	81.9	.14	.004
9	1.1	162.	45.	15.0	.00	71.7	.17	.005
10	1.4	238.	23.	17.7	.00	66.0	.33	.010
11	2.5	190.	41.	20.7	.00	51.8	.38	.013
12	2.2	68.	47.	21.5	.00	50.0	.38	.013
13	3.1	121.	38.	21.9	.00	49.0	.41	.014
14	3.9	150.	41.	22.3	.00	47.3	.48	.017
15	3.9	152.	28.	24.5	.00	45.5	.79	.026
16	5.3	180.	28.	24.6	.00	44.3	.87	.029
17	4.3	161.	28.	21.8	.01	55.9	.68	.022
18	5.5	148.	28.	23.4	.00	50.2	.71	.024
19	2.5	186.	39.	21.9	.00	49.0	.30	.011
20	3.3	115.	44.	21.8	.00	47.7	.26	.010
21	3.6	202.	36.	20.4	.00	48.6	.08	.004
22	2.1	178.	40.	19.1	.00	49.9	.01	.002
23	3.1	173.	32.	18.6	.00	49.8	.00	.002
24	3.4	155.	34.	18.2	.00	49.6	.00	.002
MINIMUM OBSERVED VALUES:								
**	.6	68.	16.	6.8	.00	44.3	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.5	238.	51.	24.6	.01	89.4	.87	.029
AVERAGE OBSERVED VALUES:								
**	2.4	159.	36.	16.8	.01*	61.6	.25	.210*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 3 JUL 88 (JULIAN DAY 185)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.4	229.	35.	15.2	.00	55.9	.00	.001
2	1.7	117.	42.	14.0	.00	61.0	.00	.001
3	1.9	104.	50.	15.6	.00	57.1	.00	.001
4	4.3	187.	27.	17.0	.00	52.9	.00	.002
5	2.9	177.	33.	16.2	.00	51.5	.00	.001
6	2.3	198.	30.	17.3	.11	50.8	.00	.001
7	1.9	187.	17.	22.4	.00	27.8	.38	.014
8	*****	*****	*****	22.7	*****	*****	*****	*****
9	*****	*****	*****	21.7	*****	*****	*****	*****
10	*****	*****	*****	21.3	*****	*****	*****	*****
11	*****	*****	*****	22.4	*****	*****	*****	*****
12	*****	*****	*****	23.9	*****	*****	*****	*****
13	*****	*****	*****	21.0	*****	*****	*****	*****
14	*****	*****	*****	22.0	*****	*****	*****	*****
15	*****	*****	*****	21.7	*****	*****	*****	*****
16	*****	*****	*****	22.2	*****	*****	*****	*****
17	*****	*****	*****	22.6	*****	*****	*****	*****
18	*****	*****	*****	23.5	*****	*****	*****	*****
19	*****	*****	*****	20.1	*****	*****	*****	*****
20	*****	*****	*****	18.0	*****	*****	*****	*****
21	*****	*****	*****	16.6	*****	*****	*****	*****
22	*****	*****	*****	16.3	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	1.4	104.	17.	14.0	.00	27.8	.00	.001
MAXIMUM OBSERVED VALUES:								
**	4.3	229.	50.	23.9	.11	61.0	.38	.014
AVERAGE OBSERVED VALUES:								
**	2.3	173.	33.	19.7	.11*	51.0	.05	.021*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 4 JUL 88 (JULIAN DAY 186)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 5 JUL 88 (JULIAN DAY 187)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	11.5	334.	34.	*****	*****	*****	*****	*****
12	19.7	156.	24.	*****	*****	*****	*****	*****
13	1.0	86.	44.	*****	*****	*****	*****	*****
14	2.0	328.	43.	10.7	.01	81.4	.24	.007
15	2.7	211.	26.	10.2	.01	77.1	.26	.008
16	2.5	250.	24.	10.2	.00	72.9	.20	.006
17	2.5	208.	22.	10.5	.00	70.9	.18	.006
18	1.5	207.	37.	10.4	.00	73.9	.16	.005
19	1.9	339.	29.	11.7	.00	63.5	.29	.009
20	1.7	215.	33.	14.5	.00	44.7	.39	.012
21	1.5	230.	20.	9.0	.00	65.7	.07	.002
22	1.7	197.	27.	7.2	.00	83.8	.01	.000
23	1.9	182.	36.	5.5	.00	92.0	.00	.000
24	1.5	214.	30.	5.2	.00	94.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.0	86.	20.	5.2	.00	44.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	19.7	339.	44.	14.5	.01	94.0	.39	.012
AVERAGE OBSERVED VALUES:								
**	3.8	220.	30.	9.6	.02*	74.5	.16	.057*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 6 JUL 88 (JULIAN DAY 188)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	2.1	296.	41.	5.2	.00	95.4	.00	.000
2	.9	206.	38.	5.3	.00	95.6	.00	.000
3	1.1	242.	30.	5.4	.00	95.4	.00	.000
4	1.3	209.	29.	4.9	.00	94.7	.00	.000
5	1.9	231.	14.	4.8	.00	93.0	.00	.000
6	2.0	207.	18.	5.2	.00	83.8	.00	.000
7	1.2	231.	36.	5.1	.00	81.8	.02	.001
8	2.4	177.	46.	6.8	.00	72.3	.07	.002
9	2.7	162.	30.	9.1	.00	60.0	.24	.008
10	3.1	152.	29.	9.4	.00	52.7	.25	.008
11	2.3	165.	43.	9.8	.00	47.6	.27	.009
12	2.5	190.	29.	10.0	.00	44.9	.30	.010
13	2.4	165.	29.	11.1	.00	41.8	.36	.012
14	3.0	155.	29.	11.4	.00	42.5	.43	.014
15	3.3	140.	30.	11.1	.00	45.8	.43	.014
16	5.2	230.	26.	10.1	.00	47.5	.22	.008
17	4.2	216.	35.	10.6	.00	46.3	.24	.008
18	4.8	185.	36.	12.2	.00	44.5	.47	.015
19	8.2	212.	21.	13.2	.00	43.4	.63	.021
20	5.0	209.	44.	13.3	.00	41.5	.47	.016
21	2.8	219.	31.	11.6	.00	44.5	.06	.003
22	1.6	166.	31.	9.7	.00	52.8	.01	.001
23	1.7	179.	25.	6.7	.00	70.5	.00	.000
24	1.0	174.	32.	4.9	.00	85.6	.00	.000
MINIMUM OBSERVED VALUES:								
**	.9	140.	14.	4.8	.00	41.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	8.2	296.	46.	13.3	.00	95.6	.63	.021
AVERAGE OBSERVED VALUES:								
**	2.8	195.	31.	8.6	.00*	63.5	.19	.149*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 7 JUL 88 (JULIAN DAY 189)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	133.	47.	3.7	.00	92.3	.00	.000
2	1.1	175.	34.	2.5	.00	95.3	.00	.000
3	.6	150.	42.	1.2	.00	96.6	.00	.000
4	.5	247.	46.	.5	.00	97.5	.00	.000
5	.6	13.	55.	-.1	.00	98.1	.00	.000
6	.6	82.	38.	-.5	.00	98.6	.00	.000
7	.4	55.	39.	-.7	.00	99.0	.02	.001
8	.5	185.	37.	2.9	.00	97.0	.20	.006
9	.9	35.	19.	8.2	.00	89.5	.44	.013
10	1.9	19.	25.	13.0	.00	52.1	.69	.021
11	2.7	29.	26.	16.0	.00	40.8	.93	.029
12	2.7	338.	32.	18.8	.00	32.9	1.13	.035
13	2.7	39.	32.	21.4	.00	25.9	1.20	.038
14	2.4	108.	37.	23.1	.00	23.5	1.13	.036
15	5.9	152.	42.	23.6	.00	20.2	1.33	.044
16	5.0	217.	25.	24.0	.00	17.1	1.20	.040
17	3.8	215.	27.	24.5	.00	16.5	1.05	.035
18	5.5	229.	20.	23.7	.00	17.7	.85	.030
19	3.9	245.	25.	23.6	.00	19.5	.63	.023
20	2.3	248.	22.	23.0	.00	21.3	.37	.014
21	2.5	236.	14.	18.2	.00	27.6	.10	.005
22	1.1	227.	21.	13.6	.00	47.3	.01	.001
23	1.1	234.	12.	11.2	.00	63.3	.00	.000
24	1.1	214.	14.	9.1	.00	74.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	.4	13.	12.	-.7	.00	16.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.9	338.	55.	24.5	.00	99.0	1.33	.044
AVERAGE OBSERVED VALUES:								
**	2.1	195.	30.	12.7	.00*	56.8	.47	.372*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 8 JUL 88 (JULIAN DAY 190)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	170.	28.	7.1	.00	83.3	.00	.000
2	.8	142.	36.	5.9	.00	91.3	.00	.000
3	.6	148.	34.	4.8	.00	94.9	.00	.000
4	.8	118.	41.	3.6	.00	97.3	.00	.000
5	.7	162.	35.	2.8	.00	98.8	.00	.000
6	.8	125.	48.	2.1	.00	99.4	.00	.000
7	1.7	86.	34.	2.2	.00	99.6	.04	.001
8	.6	119.	41.	5.1	.00	99.1	.19	.006
9	.8	22.	19.	12.3	.00	84.1	.44	.013
10	1.8	36.	18.	17.4	.00	42.3	.69	.022
11	2.4	45.	23.	20.7	.00	33.4	.92	.029
12	2.6	7.	29.	23.5	.00	25.1	1.10	.035
13	4.1	0.	23.	24.1	.00	20.6	1.22	.040
14	3.8	51.	25.	26.5	.00	19.7	1.27	.042
15	3.2	100.	48.	27.7	.00	19.0	1.24	.041
16	3.1	312.	50.	28.7	.00	18.6	1.16	.039
17	3.6	0.	33.	28.4	.00	18.2	1.02	.035
18	4.5	241.	22.	28.2	.00	17.1	.83	.031
19	4.0	227.	19.	27.7	.00	16.7	.61	.024
20	2.5	236.	16.	26.0	.00	19.0	.30	.013
21	2.0	227.	25.	20.5	.00	28.6	.13	.006
22	1.6	217.	16.	17.1	.00	43.2	.02	.002
23	1.6	233.	17.	13.8	.00	54.3	.00	.001
24	1.0	200.	22.	11.8	.00	64.5	.00	.000
MINIMUM OBSERVED VALUES:								
**	.6	0.	16.	2.1	.00	16.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.5	312.	50.	28.7	.00	99.6	1.27	.042
AVERAGE OBSERVED VALUES:								
**	2.1	136.	29.	16.2	.00*	53.7	.47	.380*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 9 JUL 88 (JULIAN DAY 191)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.1	208.	17.	10.0	.00	70.4	.00	.000
2	.7	139.	35.	8.4	.00	79.7	.00	.000
3	.7	162.	33.	7.5	.00	85.0	.00	.000
4	.9	83.	41.	6.6	.00	90.4	.00	.000
5	.5	138.	22.	5.9	.00	94.2	.00	.000
6	.3	253.	40.	5.3	.00	97.4	.00	.000
7	.3	124.	21.	5.1	.00	98.8	.02	.001
8	.3	26.	26.	9.4	.00	96.1	.19	.006
9	.6	21.	19.	16.1	.00	60.1	.44	.014
10	1.7	35.	19.	20.5	.00	40.8	.66	.021
11	2.4	35.	21.	23.3	.00	33.4	.90	.029
12	3.2	0.	18.	25.4	.00	29.2	1.10	.036
13	3.6	338.	26.	27.1	.00	23.8	1.12	.037
14	3.8	23.	21.	27.9	.00	23.0	1.03	.035
15	3.6	0.	24.	29.0	.00	21.9	1.19	.040
16	3.1	108.	29.	31.0	.00	21.9	1.13	.039
17	2.9	261.	39.	29.9	.00	22.0	.87	.031
18	3.2	0.	22.	30.5	.00	20.4	.87	.031
19	2.4	328.	33.	30.2	.00	19.9	.63	.023
20	2.8	253.	14.	28.5	.00	20.7	.35	.015
21	1.9	215.	19.	22.4	.00	28.8	.11	.006
22	1.5	201.	18.	18.0	.00	43.0	.00	.001
23	.8	213.	20.	15.2	.00	54.1	.00	.001
24	.8	205.	25.	13.5	.00	61.7	.00	.001
MINIMUM OBSERVED VALUES:								
**	.3	0.	14.	5.1	.00	19.9	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.8	338.	41.	31.0	.00	98.8	1.19	.040
AVERAGE OBSERVED VALUES:								
**	1.8	34.	25.	18.6	.00*	51.5	.44	.366*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 10 JUL 88 (JULIAN DAY 192)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	138.	34.	11.4	.00	70.0	.00	.000
2	.4	162.	35.	10.4	.00	75.8	.00	.000
3	.4	191.	34.	9.3	.00	82.1	.00	.000
4	.4	199.	33.	8.5	.00	86.1	.00	.000
5	.3	127.	32.	7.9	.00	90.4	.00	.000
6	.3	150.	31.	7.2	.00	93.6	.00	.000
7	.3	128.	32.	7.3	.00	96.0	.03	.001
8	.4	48.	33.	10.9	.00	85.3	.16	.005
9	.5	32.	22.	18.0	.00	58.1	.42	.013
10	1.5	39.	20.	22.6	.00	39.6	.67	.021
11	2.2	8.	29.	25.4	.00	33.7	.90	.029
12	2.8	356.	28.	27.7	.00	30.0	1.09	.036
13	2.8	310.	30.	29.5	.00	25.6	1.22	.040
14	3.2	316.	49.	31.8	.00	23.9	1.26	.043
15	3.2	2.	29.	30.8	.00	23.6	.92	.032
16	2.3	282.	29.	30.4	.00	24.1	.66	.024
17	2.2	274.	29.	31.3	.00	22.7	.62	.023
18	2.9	294.	36.	31.2	.00	23.2	.79	.029
19	1.4	232.	35.	32.3	.00	23.0	.54	.020
20	2.3	258.	20.	30.6	.00	23.5	.40	.016
21	1.4	191.	37.	26.5	.00	29.8	.15	.007
22	1.1	170.	26.	21.4	.00	44.9	.01	.002
23	1.3	211.	21.	18.0	.00	57.0	.00	.001
24	1.1	207.	21.	15.9	.00	64.8	.00	.001
MINIMUM OBSERVED VALUES:								
**	.3	2.	20.	7.2	.00	22.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.2	356.	49.	32.3	.00	96.0	1.26	.043
AVERAGE OBSERVED VALUES:								
**	1.5	221.	30.	20.7	.00*	51.1	.41	.344*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 11 JUL 88 (JULIAN DAY 193)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	224.	33.	13.9	.00	71.0	.00	.000
2	.8	100.	56.	12.8	.00	77.0	.00	.000
3	.9	29.	53.	11.8	.00	81.8	.00	.000
4	.9	137.	42.	10.3	.00	86.7	.00	.000
5	.7	164.	33.	9.6	.00	89.8	.00	.000
6	1.4	0.	48.	9.7	.00	89.6	.00	.000
7	1.5	166.	35.	10.9	.00	86.8	.01	.000
8	2.4	168.	49.	11.7	.00	85.5	.05	.002
9	1.7	103.	36.	14.7	.00	78.3	.20	.006
10	2.1	149.	46.	16.2	.00	74.2	.20	.006
11	2.0	269.	44.	20.6	.00	57.4	.43	.014
12	4.1	284.	31.	22.6	.00	42.3	.66	.022
13	5.2	211.	27.	22.2	.00	43.0	.58	.020
14	5.6	206.	27.	21.9	.00	42.2	.47	.017
15	5.7	212.	24.	21.9	.00	42.8	.55	.020
16	6.1	187.	24.	23.3	.00	41.9	.86	.029
17	6.0	175.	28.	22.9	.00	40.5	.74	.026
18	5.0	176.	25.	22.9	.00	40.7	.67	.023
19	3.5	215.	26.	21.7	.00	39.3	.41	.015
20	3.6	175.	33.	20.6	.00	39.2	.29	.011
21	3.0	182.	28.	18.5	.00	42.1	.12	.005
22	3.9	150.	33.	16.9	.00	44.7	.01	.002
23	2.8	164.	34.	16.3	.00	45.0	.00	.002
24	4.7	159.	36.	15.8	.00	43.6	.00	.002
MINIMUM OBSERVED VALUES:								
**	.6	0.	24.	9.6	.00	39.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.1	284.	56.	23.3	.00	89.8	.86	.029
AVERAGE OBSERVED VALUES:								
**	3.1	177.	35.	17.1	.00*	59.4	.26	.224*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 12 JUL 88 (JULIAN DAY 194)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	4.6	150.	37.	14.8	.00	42.3	.00	.002
2	2.0	231.	33.	13.7	.00	43.0	.00	.001
3	1.8	185.	32.	12.7	.00	44.9	.00	.001
4	1.7	186.	35.	11.8	.00	47.2	.00	.001
5	1.7	201.	36.	10.9	.00	51.1	.00	.001
6	3.7	169.	39.	11.3	.00	49.5	.00	.001
7	2.0	146.	36.	11.4	.00	49.1	.03	.002
8	3.6	109.	45.	13.1	.00	48.6	.20	.007
9	3.7	155.	28.	13.5	.00	47.9	.25	.009
10	2.0	179.	43.	13.1	.00	48.1	.16	.006
11	3.5	166.	31.	13.1	.00	48.4	.15	.006
12	1.8	233.	35.	13.8	.00	46.8	.21	.007
13	2.0	144.	36.	14.1	.00	47.3	.20	.007
14	2.3	94.	39.	14.6	.00	46.9	.24	.008
15	4.2	108.	29.	14.4	.00	51.0	.42	.014
16	3.4	64.	34.	14.8	.00	49.3	.54	.017
17	3.3	320.	47.	16.8	.00	45.3	.73	.023
18	3.7	103.	32.	15.6	.00	50.8	.51	.016
19	2.6	36.	30.	14.3	.00	53.0	.28	.009
20	1.2	24.	37.	13.4	.00	56.5	.11	.004
21	1.3	177.	38.	11.9	.00	67.4	.03	.001
22	.8	229.	46.	11.5	.00	73.7	.00	.000
23	1.2	247.	27.	11.1	.00	76.4	.00	.000
24	1.6	100.	33.	11.3	.00	76.1	.00	.000
MINIMUM OBSERVED VALUES:								
**	.8	24.	27.	10.9	.00	42.3	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.6	320.	47.	16.8	.00	76.4	.73	.023
AVERAGE OBSERVED VALUES:								
**	2.5	156.	36.	13.2	.00*	52.5	.17	.144*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 13 JUL 88 (JULIAN DAY 195)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.1	334.	48.	11.6	.00	74.3	.00	.000
2	1.2	258.	35.	11.5	.00	74.9	.00	.000
3	1.3	193.	38.	11.6	.00	75.2	.00	.000
4	1.0	273.	34.	11.1	.00	77.1	.00	.000
5	.8	166.	47.	11.0	.00	78.7	.00	.000
6	.8	224.	42.	10.9	.00	80.2	.00	.000
7	1.3	225.	41.	10.6	.00	82.9	.00	.000
8	.8	252.	41.	11.3	.00	84.6	.05	.002
9	.6	143.	31.	12.7	.00	81.8	.08	.003
10	.9	121.	44.	13.6	.00	76.3	.10	.003
11	1.4	236.	49.	14.2	.00	69.0	.12	.004
12	1.3	2.	32.	15.1	.00	66.1	.16	.005
13	1.1	312.	32.	16.1	.00	59.7	.25	.008
14	3.3	245.	42.	17.8	.00	50.4	.50	.016
15	3.9	133.	28.	19.1	.00	47.1	.62	.020
16	3.6	144.	31.	20.1	.00	44.1	.67	.022
17	3.1	176.	36.	18.9	.00	44.0	.43	.015
18	1.8	237.	51.	17.2	.00	48.9	.23	.008
19	1.9	66.	28.	17.3	.00	46.1	.22	.008
20	1.1	255.	25.	15.6	.00	52.3	.07	.003
21	1.5	322.	52.	13.9	.00	62.0	.03	.002
22	2.3	204.	22.	11.1	.00	81.0	.00	.000
23	2.1	158.	33.	10.7	.00	83.6	.00	.000
24	1.9	0.	47.	10.3	.01	88.8	.00	.000
MINIMUM OBSERVED VALUES:								
**	.6	0.	22.	10.3	.00	44.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.9	334.	52.	20.1	.01	88.8	.67	.022
AVERAGE OBSERVED VALUES:								
**	1.7	222.	38.	13.9	.01*	67.9	.15	.121*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 14 JUL 88 (JULIAN DAY 196)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	3.2	210.	18.	10.2	.03	92.3	.00	.000
2	2.0	172.	27.	9.6	.04	94.0	.00	.000
3	2.4	217.	15.	9.2	.05	95.9	.00	.000
4	2.1	222.	13.	8.9	.04	97.5	.00	.000
5	.9	212.	46.	8.7	.02	98.8	.00	.000
6	.8	264.	34.	8.6	.00	99.5	.00	.000
7	.9	180.	41.	8.7	.00	99.9	.00	.000
8	.8	77.	42.	9.0	.01	99.9	.03	.001
9	.9	3.	25.	9.4	.00	99.4	.05	.001
10	.8	259.	39.	10.1	.00	97.8	.09	.003
11	2.0	139.	28.	11.1	.01	96.2	.17	.005
12	1.6	170.	40.	12.3	.00	91.7	.22	.007
13	2.0	0.	23.	12.4	.00	85.3	.18	.006
14	1.9	170.	45.	13.2	.00	77.5	.29	.009
15	2.5	247.	21.	14.2	.00	63.8	.33	.010
16	3.9	222.	21.	15.8	.00	55.6	.55	.018
17	2.3	186.	25.	17.5	.00	49.2	.55	.017
18	3.6	178.	29.	20.2	.00	39.7	.83	.027
19	3.2	168.	36.	20.4	.00	36.7	.67	.022
20	2.6	234.	22.	14.9	.00	43.7	.12	.005
21	2.3	207.	17.	11.5	.00	60.1	.04	.002
22	2.0	233.	10.	9.0	.00	78.3	.00	.000
23	1.6	231.	15.	7.3	.00	87.6	.00	.000
24	1.6	213.	21.	6.3	.00	93.2	.00	.000
MINIMUM OBSERVED VALUES:								
**	.8	0.	10.	6.3	.00	36.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.9	264.	46.	20.4	.05	99.9	.83	.027
AVERAGE OBSERVED VALUES:								
**	2.0	207.	27.	11.6	.20*	80.6	.17	.133*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 15 JUL 88 (JULIAN DAY 197)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.0	217.	20.	5.1	.00	97.0	.00	.000
2	.9	152.	39.	3.9	.00	99.3	.00	.000
3	1.0	177.	29.	3.2	.00	99.9	.00	.000
4	.9	256.	35.	2.4	.00	99.9	.00	.000
5	.5	228.	34.	1.8	.00	100.0	.00	.000
6	.7	289.	37.	1.8	.00	100.0	.00	.000
7	.7	152.	33.	1.4	.00	100.0	.02	.001
8	.4	359.	31.	4.4	.00	100.0	.15	.004
9	.5	141.	35.	7.5	.00	99.3	.23	.007
10	.6	95.	32.	10.4	.00	90.9	.28	.008
11	.8	345.	27.	12.7	.00	72.0	.31	.009
12	.7	142.	42.	15.5	.00	55.4	.41	.013
13	2.8	108.	44.	19.9	.00	42.2	1.08	.034
14	3.6	229.	25.	19.4	.00	36.5	.57	.019
15	4.5	252.	27.	21.6	.00	32.4	1.13	.036
16	6.8	214.	28.	23.1	.00	29.0	1.30	.043
17	6.5	237.	29.	22.7	.00	29.4	1.11	.037
18	5.1	245.	22.	23.4	.00	29.3	.95	.032
19	5.8	229.	26.	22.8	.00	30.3	.72	.026
20	3.6	148.	38.	21.4	.00	32.4	.32	.012
21	2.6	218.	24.	18.2	.00	37.3	.08	.004
22	2.0	206.	21.	14.3	.00	47.8	.01	.001
23	1.5	193.	35.	11.7	.00	62.6	.00	.001
24	.9	205.	33.	9.7	.00	73.2	.00	.000
MINIMUM OBSERVED VALUES:								
**	.4	95.	20.	1.4	.00	29.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.8	359.	44.	23.4	.00	100.0	1.30	.043
AVERAGE OBSERVED VALUES:								
**	2.3	204.	31.	12.4	.00*	66.5	.36	.289*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 16 JUL 88 (JULIAN DAY 198)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	176.	29.	8.1	.00	80.9	.00	.000
2	.9	166.	36.	7.0	.00	86.1	.00	.000
3	1.1	179.	32.	6.1	.00	90.5	.00	.000
4	.8	201.	34.	5.4	.00	93.5	.00	.000
5	1.1	174.	28.	5.3	.00	92.3	.00	.000
6	.7	157.	45.	4.5	.00	93.6	.00	.000
7	.6	54.	56.	4.1	.00	95.5	.02	.001
8	.8	86.	39.	6.6	.00	90.2	.15	.004
9	.8	18.	29.	13.4	.00	63.0	.43	.013
10	2.8	326.	38.	18.6	.00	43.3	.67	.021
11	5.2	233.	27.	20.8	.00	32.4	.91	.030
12	6.7	250.	21.	21.8	.00	28.3	1.10	.037
13	7.4	232.	21.	22.6	.00	26.6	1.23	.042
14	8.3	231.	19.	23.6	.00	24.1	1.28	.044
15	8.3	224.	20.	24.2	.00	23.2	1.27	.044
16	7.9	227.	20.	24.8	.00	21.8	1.19	.042
17	7.4	230.	20.	24.7	.00	23.6	1.04	.037
18	6.7	223.	21.	24.6	.00	24.9	.85	.031
19	5.7	227.	20.	24.2	.00	25.6	.62	.023
20	4.7	217.	20.	23.2	.00	28.2	.39	.016
21	2.9	144.	26.	20.3	.00	30.3	.10	.005
22	1.5	206.	26.	15.8	.00	37.2	.00	.001
23	2.2	200.	21.	13.2	.00	46.1	.00	.001
24	1.5	179.	30.	11.5	.00	53.4	.00	.001
MINIMUM OBSERVED VALUES:								
**	.6	18.	19.	4.1	.00	21.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	8.3	326.	56.	24.8	.00	95.5	1.28	.044
AVERAGE OBSERVED VALUES:								
**	3.6	203.	28.	15.6	.00*	52.3	.47	.395*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 17 JUL 88 (JULIAN DAY 199)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	213.	28.	9.6	.00	62.4	.00	.000
2	1.0	189.	34.	8.7	.00	68.4	.00	.000
3	.8	186.	39.	8.2	.00	71.2	.00	.000
4	1.0	119.	43.	7.6	.00	75.3	.00	.000
5	1.6	155.	33.	7.7	.00	76.6	.00	.000
6	.7	58.	48.	7.4	.00	78.5	.00	.000
7	.9	129.	42.	7.4	.00	79.2	.03	.001
8	1.1	157.	25.	11.1	.00	73.1	.15	.005
9	.6	102.	26.	19.3	.00	54.7	.39	.012
10	1.6	86.	28.	23.8	.00	35.6	.68	.022
11	2.4	270.	31.	24.1	.00	28.1	.79	.026
12	4.4	223.	26.	21.4	.00	29.2	.57	.020
13	5.4	224.	27.	22.7	.00	27.7	1.10	.037
14	7.2	237.	24.	23.9	.00	27.0	1.28	.043
15	7.8	209.	23.	24.5	.00	27.5	1.27	.044
16	7.8	220.	22.	24.6	.00	26.9	1.19	.041
17	7.3	199.	23.	24.8	.00	25.5	1.05	.037
18	6.9	190.	22.	24.5	.00	26.0	.85	.031
19	5.7	200.	22.	24.1	.00	26.6	.61	.023
20	4.4	188.	20.	23.4	.00	27.8	.36	.015
21	2.4	190.	20.	19.4	.00	29.9	.08	.005
22	1.2	206.	19.	14.8	.00	38.5	.00	.001
23	1.3	224.	13.	12.3	.00	48.1	.00	.001
24	.9	224.	22.	10.4	.00	55.1	.00	.001
MINIMUM OBSERVED VALUES:								
**	.6	58.	13.	7.4	.00	25.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.8	270.	48.	24.8	.00	79.2	1.28	.044
AVERAGE OBSERVED VALUES:								
**	3.1	190.	27.	16.9	.00*	46.6	.43	.366*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 18 JUL 88 (JULIAN DAY 200)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.2	198.	32.	8.8	.00	59.6	.00	.000
2	.8	221.	32.	7.3	.00	64.7	.00	.000
3	1.1	160.	39.	6.2	.00	70.1	.00	.000
4	1.4	142.	34.	5.9	.00	72.8	.00	.000
5	1.2	164.	35.	5.3	.00	76.3	.00	.000
6	.8	153.	35.	4.2	.00	82.2	.00	.000
7	.6	85.	44.	3.8	.00	87.4	.02	.001
8	.5	105.	23.	7.1	.00	83.8	.14	.004
9	.5	50.	23.	14.7	.00	58.6	.41	.013
10	1.4	24.	26.	19.2	.00	41.1	.67	.021
11	2.4	18.	33.	21.6	.00	33.4	.91	.029
12	3.3	43.	28.	23.9	.00	28.4	1.09	.035
13	4.3	28.	21.	24.3	.00	25.4	1.22	.040
14	4.4	2.	28.	25.3	.00	24.8	1.29	.042
15	4.1	310.	29.	26.0	.00	23.0	1.28	.042
16	5.1	262.	30.	26.8	.00	23.2	1.24	.042
17	3.8	330.	32.	26.6	.00	23.0	.95	.033
18	4.1	275.	38.	27.6	.00	23.4	.92	.032
19	4.0	0.	21.	26.6	.00	22.9	.64	.024
20	3.6	274.	23.	24.4	.00	25.2	.29	.012
21	1.4	213.	23.	18.7	.00	34.9	.03	.002
22	1.4	205.	19.	14.9	.00	47.7	.00	.001
23	1.4	194.	24.	12.3	.00	55.4	.00	.001
24	1.2	203.	21.	10.0	.00	63.3	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	0.	19.	3.8	.00	22.9	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.1	330.	44.	27.6	.00	87.4	1.29	.042
AVERAGE OBSERVED VALUES:								
**	2.3	199.	29.	16.3	.00*	47.9	.46	.377*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 19 JUL 88 (JULIAN DAY 201)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.1	180.	30.	8.8	.00	66.5	.00	.000
2	.7	171.	28.	7.3	.00	71.5	.00	.000
3	.7	242.	38.	6.5	.00	76.4	.00	.000
4	.6	168.	34.	5.8	.00	79.9	.00	.000
5	.7	122.	34.	5.1	.00	83.7	.00	.000
6	.6	91.	45.	4.5	.00	87.8	.00	.000
7	.5	202.	24.	4.6	.00	91.3	.02	.001
8	.4	66.	35.	7.2	.00	86.8	.13	.004
9	.4	61.	25.	15.6	.00	59.9	.40	.012
10	1.5	49.	20.	20.5	.00	43.0	.65	.021
11	2.6	8.	30.	23.4	.00	35.3	.88	.028
12	2.8	22.	28.	25.1	.00	30.8	1.07	.035
13	4.1	98.	41.	26.3	.00	28.7	1.21	.040
14	4.7	182.	58.	26.6	.00	27.4	1.18	.040
15	3.8	295.	44.	28.2	.00	25.4	1.27	.042
16	4.0	0.	27.	28.5	.00	24.7	1.19	.040
17	3.5	2.	31.	28.4	.00	25.2	.88	.031
18	3.9	356.	26.	28.3	.00	25.0	.81	.029
19	2.1	105.	43.	29.3	.00	25.6	.59	.021
20	2.2	104.	33.	27.4	.00	26.9	.34	.014
21	1.9	229.	16.	21.6	.00	31.5	.08	.005
22	1.0	216.	16.	17.1	.00	42.9	.00	.001
23	1.1	223.	16.	14.4	.00	53.5	.00	.001
24	1.1	203.	20.	12.3	.00	59.9	.00	.001
MINIMUM OBSERVED VALUES:								
**	.4	0.	16.	4.5	.00	24.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.7	356.	58.	29.3	.00	91.3	1.27	.042
AVERAGE OBSERVED VALUES:								
**	1.9	128.	31.	17.6	.00*	50.4	.45	.365*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 20 JUL 88 (JULIAN DAY 202)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.0	175.	30.	10.5	.00	66.0	.00	.000
2	1.2	183.	32.	9.0	.00	71.6	.00	.000
3	.5	119.	25.	7.6	.00	77.2	.00	.000
4	.6	152.	32.	6.6	.00	82.0	.00	.000
5	.7	152.	33.	6.0	.00	83.4	.00	.000
6	.6	186.	40.	5.4	.00	87.4	.00	.000
7	.5	110.	31.	5.1	.00	89.2	.01	.000
8	.4	98.	34.	7.9	.00	86.1	.13	.004
9	.5	37.	18.	15.4	.00	61.5	.40	.012
10	1.1	40.	27.	22.2	.00	42.1	.66	.021
11	2.4	20.	23.	24.7	.00	33.5	.90	.029
12	2.3	359.	36.	28.2	.00	29.6	1.09	.036
13	3.8	359.	31.	28.6	.00	28.0	1.21	.040
14	3.8	347.	36.	31.4	.00	25.8	1.27	.043
15	4.8	122.	35.	33.5	.00	21.4	1.25	.045
16	5.6	236.	25.	32.5	.00	23.1	1.17	.043
17	*****	*****	*****	*****	*****	*****	*****	*****
18	3.8	244.	32.	33.0	.00	23.6	.83	.031
19	3.9	217.	24.	32.6	.00	24.3	.60	.024
20	3.9	235.	20.	30.6	.00	24.7	.36	.017
21	2.4	214.	19.	25.6	.00	27.9	.08	.006
22	1.0	201.	30.	19.7	.00	40.4	.00	.001
23	.7	213.	23.	16.4	.00	50.3	.00	.001
24	.9	197.	23.	14.3	.00	56.4	.00	.001
MINIMUM OBSERVED VALUES:								
**	.4	20.	18.	5.1	.00	21.4	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.6	359.	40.	33.5	.00	89.2	1.27	.045
AVERAGE OBSERVED VALUES:								
**	2.0	172.	28.	19.4	.00*	50.2	.43	.356*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 21 JUL 88 (JULIAN DAY 203)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	183.	26.	12.5	.00	61.1	.00	.000
2	.8	108.	40.	10.8	.00	66.6	.00	.000
3	.6	128.	38.	10.1	.00	70.4	.00	.000
4	.6	112.	32.	8.9	.00	74.5	.00	.000
5	.4	106.	40.	8.1	.00	79.6	.00	.000
6	.4	156.	38.	7.4	.00	82.3	.00	.000
7	.3	87.	33.	7.1	.00	84.3	.02	.001
8	.5	111.	32.	9.7	.00	80.9	.12	.004
9	.4	11.	25.	17.5	.00	59.2	.39	.012
10	1.2	35.	25.	24.1	.00	39.9	.65	.021
11	2.1	18.	38.	29.2	.00	34.4	.89	.030
12	5.5	210.	26.	31.7	.00	26.7	1.07	.039
13	4.8	198.	34.	32.3	.00	26.1	1.19	.042
14	5.9	212.	27.	30.6	.00	27.0	.72	.029
15	7.5	214.	24.	30.7	.00	28.2	.87	.034
16	7.2	221.	23.	32.8	.00	27.3	1.17	.044
17	5.6	216.	22.	31.0	.00	27.9	.78	.030
18	4.9	185.	28.	32.8	.00	28.0	.93	.035
19	3.0	187.	31.	31.1	.00	28.6	.47	.019
20	2.9	193.	31.	31.4	.00	27.7	.46	.019
21	3.4	203.	22.	27.2	.00	29.6	.10	.007
22	1.7	194.	29.	22.9	.00	33.3	.01	.003
23	1.4	200.	39.	19.3	.00	39.9	.00	.001
24	1.3	184.	30.	17.1	.00	45.1	.00	.001
MINIMUM OBSERVED VALUES:								
**	.3	11.	22.	7.1	.00	26.1	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.5	221.	40.	32.8	.00	84.3	1.19	.044
AVERAGE OBSERVED VALUES:								
**	2.6	170.	30.	21.5	.00*	47.0	.41	.372*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 22 JUL 88 (JULIAN DAY 204)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.5	188.	34.	15.3	.00	49.2	.00	.001
2	.8	114.	39.	13.6	.00	54.2	.00	.001
3	.8	193.	43.	12.5	.00	57.0	.00	.001
4	1.3	148.	34.	11.0	.00	60.8	.00	.001
5	.9	125.	43.	9.6	.00	64.6	.00	.000
6	.9	138.	41.	8.9	.00	67.5	.00	.000
7	1.2	98.	43.	8.6	.00	68.6	.01	.001
8	1.6	146.	38.	10.5	.00	69.2	.11	.004
9	.9	18.	40.	19.2	.00	57.8	.39	.012
10	2.4	356.	31.	26.8	.00	39.3	.67	.023
11	6.0	196.	29.	28.1	.00	31.0	.91	.033
12	5.3	180.	28.	29.4	.00	29.1	1.09	.038
13	6.9	200.	24.	29.0	.00	28.0	1.22	.043
14	6.8	213.	30.	29.6	.00	27.2	1.27	.045
15	7.4	241.	26.	29.5	.00	27.1	1.25	.045
16	5.5	221.	30.	30.5	.00	26.7	1.17	.042
17	6.5	203.	27.	29.5	.00	29.1	1.02	.037
18	5.2	199.	25.	29.6	.00	29.4	.82	.030
19	5.8	199.	27.	28.4	.00	29.1	.60	.024
20	4.1	211.	25.	27.6	.00	28.4	.35	.015
21	2.6	187.	28.	23.9	.00	30.3	.07	.005
22	2.2	182.	23.	19.2	.00	36.1	.00	.002
23	1.7	196.	20.	16.3	.00	43.5	.00	.001
24	1.2	220.	31.	14.4	.00	48.5	.00	.001
MINIMUM OBSERVED VALUES:								
**	.8	18.	20.	8.6	.00	26.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.4	356.	43.	30.5	.00	69.2	1.27	.045
AVERAGE OBSERVED VALUES:								
**	3.3	183.	31.	20.9	.00*	43.0	.46	.405*

REMARK: ******* INDICATES MISSING OBSERVATIONS.
*** INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 23 JUL 88 (JULIAN DAY 205)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.3	227.	29.	12.5	.00	53.8	.00	.001
2	1.0	162.	27.	10.8	.00	59.8	.00	.001
3	.9	150.	37.	9.3	.00	63.7	.00	.000
4	.6	139.	39.	8.5	.00	67.1	.00	.000
5	.6	145.	31.	7.8	.00	70.4	.00	.000
6	.6	158.	33.	7.2	.00	73.8	.00	.000
7	.5	146.	25.	6.7	.00	77.7	.02	.001
8	.5	126.	36.	9.0	.00	77.6	.10	.003
9	.6	26.	27.	16.1	.00	62.2	.38	.012
10	2.2	39.	18.	20.7	.00	47.7	.64	.020
11	2.6	9.	25.	23.4	.00	39.4	.88	.028
12	3.2	0.	25.	25.5	.00	34.2	1.06	.034
13	3.4	1.	31.	27.6	.00	32.1	1.19	.039
14	6.8	245.	22.	28.5	.00	29.7	1.24	.043
15	8.0	239.	20.	28.8	.00	29.9	1.24	.045
16	6.8	243.	22.	29.0	.00	29.8	1.14	.041
17	6.4	246.	22.	28.9	.00	30.8	1.00	.036
18	6.1	229.	23.	28.7	.00	32.1	.78	.029
19	5.4	238.	19.	27.6	.00	34.3	.55	.022
20	4.1	224.	24.	25.5	.00	36.1	.21	.010
21	2.2	199.	21.	23.4	.00	38.0	.09	.005
22	2.5	231.	20.	20.5	.00	42.2	.00	.002
23	2.2	165.	25.	17.8	.00	48.6	.00	.001
24	1.6	172.	27.	15.1	.00	55.5	.00	.001
MINIMUM OBSERVED VALUES:								
**	.5	0.	18.	6.7	.00	29.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	8.0	246.	39.	29.0	.00	77.7	1.24	.045
AVERAGE OBSERVED VALUES:								
**	2.9	194.	26.	19.1	.00*	48.6	.44	.375*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 24 JUL 88 (JULIAN DAY 206)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	167.	38.	12.6	.00	61.5	.00	.001
2	1.1	271.	42.	11.0	.00	65.7	.00	.000
3	.6	141.	40.	9.5	.00	67.6	.00	.000
4	.8	123.	48.	8.8	.00	69.0	.00	.000
5	.9	137.	40.	8.2	.00	69.2	.00	.000
6	.6	121.	39.	6.9	.00	71.2	.00	.000
7	.6	249.	39.	6.4	.00	74.1	.01	.001
8	.6	130.	36.	8.6	.00	72.8	.09	.003
9	.6	45.	27.	15.9	.00	59.5	.38	.012
10	2.1	0.	24.	21.6	.00	42.6	.65	.021
11	2.6	7.	30.	25.6	.00	38.1	.89	.029
12	8.1	216.	20.	28.0	.00	31.7	1.08	.039
13	8.7	207.	21.	28.7	.00	30.3	1.21	.044
14	8.4	204.	20.	29.7	.00	29.3	1.26	.046
15	7.4	199.	22.	30.9	.00	28.9	1.25	.045
16	7.5	218.	23.	31.3	.00	26.9	1.17	.044
17	6.2	207.	23.	32.1	.00	24.0	1.03	.039
18	6.8	219.	21.	31.5	.00	22.2	.84	.034
19	6.0	209.	20.	30.8	.00	23.5	.60	.026
20	4.4	204.	21.	29.7	.00	26.8	.35	.016
21	1.9	158.	20.	24.3	.00	31.8	.07	.005
22	1.4	190.	30.	19.9	.00	38.8	.00	.002
23	.9	176.	42.	16.5	.00	45.2	.00	.001
24	1.1	130.	38.	14.0	.00	50.2	.00	.001
MINIMUM OBSERVED VALUES:								
**	.6	0.	20.	6.4	.00	22.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	8.7	271.	48.	32.1	.00	74.1	1.26	.046
AVERAGE OBSERVED VALUES:								
**	3.3	182.	30.	20.1	.00*	45.9	.45	.409*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 25 JUL 88 (JULIAN DAY 207)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.5	234.	34.	12.0	.00	53.4	.00	.001
2	.8	184.	26.	10.7	.00	55.6	.00	.001
3	.7	48.	57.	8.8	.00	58.7	.00	.000
4	.5	185.	30.	7.9	.00	62.9	.00	.000
5	.4	151.	24.	7.1	.00	66.1	.00	.000
6	.5	81.	41.	6.2	.00	69.4	.00	.000
7	.5	107.	31.	6.0	.00	70.9	.01	.001
8	.5	88.	40.	7.4	.00	70.7	.07	.002
9	.5	21.	21.	15.8	.00	57.9	.39	.012
10	1.3	38.	24.	21.5	.00	44.3	.60	.019
11	*****	*****	*****	*****	*****	*****	*****	*****
12	1.9	9.	21.	9.2	.00	21.8	1.08	.033
13	5.6	258.	26.	32.3	.00	24.9	1.18	.043
14	7.7	225.	21.	32.8	.00	23.0	1.28	.049
15	7.3	206.	23.	33.6	.00	23.1	1.29	.049
16	6.9	217.	24.	33.7	.00	23.0	1.18	.045
17	5.9	219.	24.	33.1	.00	23.5	.97	.038
18	5.1	211.	30.	33.2	.00	22.1	.83	.033
19	4.2	204.	26.	32.6	.00	21.8	.60	.025
20	3.3	209.	19.	30.8	.00	26.0	.33	.015
21	2.7	221.	16.	25.3	.00	30.2	.07	.005
22	1.3	219.	21.	20.6	.00	36.6	.00	.002
23	1.1	220.	19.	18.2	.00	43.1	.00	.001
24	1.0	165.	37.	16.1	.00	48.4	.00	.001
MINIMUM OBSERVED VALUES:								
**	.4	9.	16.	6.0	.00	21.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.7	258.	57.	33.7	.00	70.9	1.29	.049
AVERAGE OBSERVED VALUES:								
**	2.6	192.	27.	19.8	.00*	42.5	.43	.375*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 26 JUL 88 (JULIAN DAY 208)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	116.	54.	14.0	.00	54.5	.00	.001
2	.8	119.	37.	12.8	.00	58.0	.00	.001
3	.5	161.	33.	11.7	.00	61.6	.00	.000
4	.7	187.	27.	11.3	.00	64.6	.00	.000
5	.4	56.	53.	10.4	.00	67.9	.00	.000
6	.7	26.	58.	9.5	.00	72.4	.00	.000
7	.6	93.	46.	9.1	.00	75.6	.01	.001
8	.4	107.	30.	10.9	.00	75.9	.07	.002
9	.6	10.	27.	18.8	.00	61.7	.37	.012
10	*****	*****	*****	*****	.00	*****	.64	*****
11	*****	*****	*****	*****	.00	*****	.87	*****
12	3.4	0.	19.	29.3	.00	35.1	1.05	.035
13	2.9	24.	39.	31.8	.00	32.7	1.18	.039
14	3.9	209.	44.	33.5	.00	31.9	1.24	.043
15	4.7	290.	26.	33.1	.00	30.4	1.22	.043
16	4.6	260.	28.	34.0	.00	28.8	1.15	.041
17	4.8	232.	21.	34.1	.00	29.0	1.00	.037
18	4.9	221.	21.	33.8	.00	29.4	.81	.032
19	5.5	218.	18.	32.8	.00	30.3	.58	.025
20	3.2	207.	18.	32.0	.00	31.6	.33	.015
21	1.6	180.	19.	25.5	.00	37.6	.06	.004
22	2.2	203.	15.	20.9	.00	46.2	.00	.002
23	1.6	219.	19.	18.6	.00	50.9	.00	.001
24	1.6	209.	15.	16.7	.00	52.6	.00	.001
MINIMUM OBSERVED VALUES:								
**	.4	0.	15.	9.1	.00	28.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.5	290.	58.	34.1	.00	75.9	1.24	.043
AVERAGE OBSERVED VALUES:								
**	2.3	186.	30.	22.0	.00*	48.1	.44	.336*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 27 JUL 88 (JULIAN DAY 209)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	195.	27.	14.1	.00	57.0	.00	.001
2	.6	182.	28.	12.5	.00	62.0	.00	.000
3	.8	230.	29.	11.6	.00	63.9	.00	.000
4	.5	98.	44.	10.8	.00	65.5	.00	.000
5	.5	118.	41.	9.6	.00	68.7	.00	.000
6	.7	132.	39.	8.8	.00	71.4	.00	.000
7	1.6	132.	42.	8.4	.00	73.6	.01	.001
8	1.0	108.	43.	11.0	.00	72.7	.08	.003
9	.7	15.	38.	18.2	.00	61.2	.39	.012
10	1.4	15.	31.	24.8	.00	47.0	.61	.020
11	*****	*****	*****	*****	*****	*****	.85	*****
12	*****	*****	*****	*****	*****	*****	.64	*****
13	*****	*****	*****	*****	*****	*****	1.07	*****
14	*****	*****	*****	*****	*****	*****	1.21	*****
15	*****	*****	*****	*****	*****	*****	1.36	*****
16	*****	*****	*****	*****	*****	*****	1.18	*****
17	*****	*****	*****	*****	*****	*****	1.02	*****
18	*****	*****	*****	*****	*****	*****	.80	*****
19	*****	*****	*****	*****	*****	*****	.55	*****
20	*****	*****	*****	*****	*****	*****	.29	*****
21	*****	*****	*****	*****	*****	*****	.07	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.5	15.	27.	8.4	.00	47.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	1.6	230.	44.	24.8	.00	73.6	1.36	.020
AVERAGE OBSERVED VALUES:								
**	.8	128.	36.	13.0	.00*	64.3	.42	.038*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 28 JUL 88 (JULIAN DAY 210)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	2.1	170.	28.	19.0	.00	37.6	.00	.002
2	2.8	170.	22.	18.5	.00	37.9	.00	.002
3	2.6	179.	22.	18.7	.00	37.6	.00	.002
4	3.2	185.	22.	20.7	.00	35.4	.00	.003
5	2.9	180.	22.	20.9	.00	34.0	.00	.002
6	3.1	194.	24.	19.9	.00	34.9	.00	.002
7	2.3	191.	25.	18.6	.00	36.1	.00	.002
8	2.0	211.	27.	19.2	.00	36.8	.12	.005
9	*****	*****	*****	*****	*****	*****	.37	*****
10	*****	*****	*****	*****	*****	*****	.22	*****
11	*****	*****	*****	*****	*****	*****	.77	*****
12	*****	*****	*****	*****	*****	*****	.98	*****
13	*****	*****	*****	*****	*****	*****	.85	*****
14	*****	*****	*****	*****	*****	*****	.63	*****
15	*****	*****	*****	*****	*****	*****	.48	*****
16	*****	*****	*****	*****	*****	*****	.97	*****
17	*****	*****	*****	*****	*****	*****	1.27	*****
18	*****	*****	*****	*****	*****	*****	.90	*****
19	*****	*****	*****	*****	*****	*****	.56	*****
20	*****	*****	*****	*****	*****	*****	.26	*****
21	*****	*****	*****	*****	*****	*****	.07	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	1.8	182.	32.	14.4	.00	43.8	.00	.001
24	1.4	231.	22.	12.6	.00	49.9	.00	.001
MINIMUM OBSERVED VALUES:								
**	1.4	170.	22.	12.6	.00	34.0	.00	.001
MAXIMUM OBSERVED VALUES:								
**	3.2	231.	32.	20.9	.00	49.9	1.27	.005
AVERAGE OBSERVED VALUES:								
**	2.4	189.	24.	18.3	.00*	38.4	.35	.022*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 29 JUL 88 (JULIAN DAY 211)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.0	216.	20.	11.5	.00	51.7	.00	.001
2	.9	235.	32.	10.0	.00	54.3	.00	.001
3	.6	179.	34.	8.8	.00	56.9	.00	.000
4	.8	125.	32.	7.9	.00	59.5	.00	.000
5	.8	162.	32.	6.9	.00	62.6	.00	.000
6	.8	117.	40.	6.1	.00	66.1	.00	.000
7	.6	108.	41.	5.7	.00	69.1	.01	.001
8	.4	87.	33.	7.0	.00	70.5	.06	.002
9	.6	52.	26.	15.4	.00	59.2	.37	.011
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	.4	52.	20.	5.7	.00	51.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	1.0	235.	41.	15.4	.00	70.5	.37	.011
AVERAGE OBSERVED VALUES:								
**	.7	140.	32.	8.8	.00*	61.1	.05	.017*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 30 JUL 88 (JULIAN DAY 212)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	173.	38.	11.9	.00	61.7	.00	.000
2	.9	129.	45.	11.3	.00	65.6	.00	.000
3	.7	167.	37.	10.1	.00	69.1	.00	.000
4	.6	148.	38.	8.7	.00	72.8	.00	.000
5	.6	83.	47.	7.9	.00	76.4	.00	.000
6	.7	122.	37.	7.4	.00	78.2	.00	.000
7	.8	127.	42.	7.0	.00	80.2	.01	.000
8	.7	134.	34.	8.3	.00	80.2	.05	.002
9	.8	57.	31.	16.5	.00	65.9	.36	.011
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	.2	306.	35.	*****	.00	20.5	.00	*****
24	.7	185.	26.	14.2	.00	56.1	.00	.001
MINIMUM OBSERVED VALUES:								
**	.2	57.	26.	7.0	.00	20.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.9	306.	47.	16.5	.00	80.2	.36	.011
AVERAGE OBSERVED VALUES:								
**	.7	135.	37.	10.3	.00*	66.1	.04	.016*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 JUL 88 THRU 31 JUL 88
PERIOD OF RECORD: 31 JUL 88 (JULIAN DAY 213)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	175.	28.	12.4	.00	60.6	.00	.001
2	.7	160.	34.	10.9	.00	64.0	.00	.000
3	.5	138.	37.	9.9	.00	67.8	.00	.000
4	.9	152.	29.	9.4	.00	69.1	.00	.000
5	.6	89.	43.	8.5	.00	71.6	.00	.000
6	.5	288.	52.	8.0	.00	74.0	.00	.000
7	.5	131.	32.	7.6	.00	74.6	.01	.001
8	.4	118.	34.	9.0	.00	74.4	.05	.002
9	.8	7.	38.	17.1	.00	61.7	.36	.011
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
[illegible]	*****	*****	*****	*****	*****	*****	*****	*****
[illegible]	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	.4	7.	28.	7.6	.00	60.6	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.9	288.	52.	17.1	.00	74.6	.36	.011
AVERAGE OBSERVED VALUES:								
**	.6	135.	36.	10.3	.00*	68.6	.05	.016*

REMARK: ******* INDICATES MISSING OBSERVATIONS.
*** INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 1 AUG 88 (JULIAN DAY 214)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 2 AUG 88 (JULIAN DAY 215)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	8.4	352.	10.	18.4	.00	30.2	.92	.031
14	5.6	307.	24.	18.7	.00	30.0	.79	.027
15	3.5	353.	18.	19.9	.00	26.5	.69	.023
16	2.2	317.	29.	20.1	.00	26.1	.44	.015
17	2.0	242.	29.	20.5	.00	26.0	.38	.013
18	2.5	226.	22.	18.9	.00	27.5	.18	.008
19	1.5	211.	27.	16.2	.00	39.8	.10	.004
20	1.4	140.	26.	12.7	.00	58.1	.00	.001
21	.7	174.	27.	9.6	.00	75.6	.00	.000
22	.6	196.	28.	7.7	.00	82.7	.00	.000
23	.8	192.	21.	6.4	.00	89.7	.00	.000
24	.5	188.	31.	5.1	.00	93.2	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	140.	10.	5.1	.00	26.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	8.4	353.	31.	20.5	.00	93.2	.92	.031
AVERAGE OBSERVED VALUES:								
**	2.5	228.	24.	14.5	.00*	50.5	.29	.123*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 3 AUG 88 (JULIAN DAY 216)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	170.	38.	4.0	.00	95.6	.00	.000
2	.7	160.	32.	3.1	.00	97.0	.00	.000
3	.8	122.	40.	2.6	.00	97.6	.00	.000
4	1.5	313.	33.	1.9	.00	97.6	.01	.000
5	.5	7.	47.	1.3	.00	98.5	.01	.000
6	.4	289.	40.	3.4	.00	98.1	.11	.003
7	.7	43.	18.	10.4	.00	92.7	.43	.013
8	1.7	28.	21.	16.2	.00	50.2	.66	.020
9	2.5	35.	24.	20.3	.00	35.0	.90	.029
10	2.9	18.	28.	23.2	.00	26.3	1.09	.035
11	3.0	294.	37.	25.0	.00	21.1	1.10	.036
12	4.4	206.	39.	25.6	.00	19.8	.99	.034
13	4.7	229.	29.	27.2	.00	19.7	1.24	.042
14	5.1	192.	29.	26.9	.00	20.5	1.12	.039
15	4.5	220.	31.	27.4	.00	18.9	1.01	.035
16	5.8	217.	21.	24.5	.00	20.4	.47	.019
17	3.5	198.	23.	23.8	.00	22.5	.30	.013
18	2.0	221.	17.	22.2	.00	25.3	.13	.006
19	1.2	187.	20.	17.4	.00	37.5	.01	.002
20	1.4	207.	18.	14.3	.00	48.0	.00	.001
21	1.0	219.	21.	12.6	.00	54.2	.00	.001
22	.8	172.	34.	10.8	.00	61.2	.00	.000
23	.5	185.	31.	9.4	.00	66.8	.00	.000
24	.4	166.	38.	8.3	.00	72.8	.00	.000
MINIMUM OBSERVED VALUES:								
**	.4	7.	17.	1.3	.00	18.9	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.8	313.	47.	27.4	.00	98.5	1.24	.042
AVERAGE OBSERVED VALUES:								
**	2.1	204.	29.	15.1	.00*	54.1	.40	.330*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 4 AUG 88 (JULIAN DAY 217)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.5	190.	38.	7.7	.00	77.6	.00	.000
2	1.1	57.	48.	7.4	.00	79.8	.00	.000
3	.9	137.	44.	6.7	.00	81.0	.00	.000
4	.9	107.	45.	6.3	.00	82.7	.00	.000
5	1.0	284.	47.	6.0	.00	84.0	.01	.000
6	.9	75.	44.	7.5	.00	82.1	.11	.003
7	1.0	22.	32.	15.5	.00	58.7	.41	.013
8	1.7	37.	27.	20.9	.00	41.9	.67	.021
9	6.6	218.	30.	25.8	.00	25.6	.90	.033
10	5.6	210.	25.	27.4	.00	21.8	1.07	.038
11	6.0	216.	24.	28.1	.00	21.0	1.18	.042
12	6.4	229.	26.	28.9	.00	21.0	1.22	.044
13	5.3	220.	29.	30.1	.00	20.9	1.18	.042
14	6.9	245.	26.	29.4	.00	21.2	1.08	.040
15	5.3	196.	25.	30.5	.00	21.7	.92	.035
16	5.9	229.	26.	29.3	.00	21.9	.70	.028
17	5.0	221.	23.	28.8	.00	22.5	.47	.020
18	3.9	215.	19.	26.6	.00	24.1	.19	.010
19	1.9	179.	26.	21.2	.00	29.8	.01	.003
20	2.0	184.	21.	17.3	.00	40.7	.00	.001
21	1.1	201.	36.	15.1	.00	47.3	.00	.001
22	1.0	232.	31.	13.1	.00	53.9	.00	.001
23	.7	136.	38.	11.1	.00	61.0	.00	.000
24	.8	155.	31.	9.7	.00	65.3	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	22.	19.	6.0	.00	20.9	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.9	284.	48.	30.5	.00	84.0	1.22	.044
AVERAGE OBSERVED VALUES:								
**	3.0	194.	31.	18.8	.00*	46.1	.42	.376*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 5 AUG 88 (JULIAN DAY 218)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	164.	29.	8.8	.00	67.5	.00	.000
2	.7	133.	27.	7.7	.00	70.9	.00	.000
3	.7	190.	38.	7.1	.00	72.9	.00	.000
4	.7	115.	48.	6.8	.00	74.5	.00	.000
5	.6	164.	30.	6.5	.00	75.6	.01	.001
6	.6	80.	39.	8.3	.00	73.1	.11	.003
7	.8	58.	28.	17.6	.00	54.5	.41	.013
8	1.4	18.	24.	24.1	.00	35.1	.67	.022
9	4.7	71.	32.	28.6	.00	25.5	.89	.032
10	6.1	121.	21.	30.7	.00	21.6	1.06	.039
11	5.1	122.	22.	30.5	.00	21.4	.96	.036
12	6.2	118.	23.	32.2	.00	21.0	1.17	.044
13	4.7	165.	33.	32.4	.00	20.8	1.02	.038
14	5.1	179.	28.	32.1	.00	21.2	.90	.035
15	5.4	227.	24.	28.4	.00	21.6	.35	.017
16	4.9	204.	29.	29.1	.00	21.8	.50	.021
17	3.8	201.	24.	27.5	.00	23.6	.30	.014
18	3.8	214.	26.	25.8	.00	24.5	.11	.008
19	1.1	220.	23.	23.0	.00	26.7	.03	.003
20	1.4	191.	38.	20.0	.00	31.6	.00	.002
21	3.1	242.	28.	21.4	.00	29.6	.00	.003
22	1.9	185.	28.	19.9	.00	28.8	.00	.002
23	2.0	160.	25.	17.1	.00	32.4	.00	.002
24	1.4	123.	51.	15.0	.00	37.3	.00	.001
MINIMUM OBSERVED VALUES:								
**	.6	18.	21.	6.5	.00	20.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.2	242.	51.	32.4	.00	75.6	1.17	.044
AVERAGE OBSERVED VALUES:								
**	2.8	159.	30.	20.9	.00*	38.9	.35	.335*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
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WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 6 AUG 88 (JULIAN DAY 219)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	223.	38.	14.0	.00	41.7	.00	.001
2	1.2	221.	38.	12.9	.00	45.1	.00	.001
3	1.3	222.	31.	13.6	.00	44.7	.00	.001
4	4.0	172.	28.	15.1	.00	45.5	.00	.002
5	3.0	193.	23.	10.8	.03	80.2	.00	.000
6	2.0	177.	36.	10.9	.00	88.1	.03	.001
7	2.5	213.	19.	11.9	.00	83.0	.06	.002
8	2.3	212.	23.	13.6	.00	74.7	.14	.005
9	3.5	153.	30.	17.4	.00	57.3	.56	.018
10	3.9	173.	27.	19.4	.00	40.7	.84	.027
11	6.3	189.	35.	19.2	.00	34.2	.89	.030
12	5.9	213.	28.	20.6	.00	31.1	1.07	.035
13	5.2	249.	23.	18.9	.00	33.9	.55	.019
14	3.7	181.	33.	19.5	.00	36.8	.52	.018
15	4.5	196.	32.	20.2	.00	33.8	.53	.019
16	4.2	174.	33.	20.4	.00	34.5	.50	.018
17	3.8	206.	23.	18.8	.00	36.2	.18	.008
18	3.2	186.	24.	17.6	.00	37.7	.07	.004
19	1.9	179.	22.	13.9	.00	44.1	.00	.001
20	1.5	184.	30.	11.4	.00	53.1	.00	.001
21	1.6	138.	41.	9.4	.00	60.5	.00	.001
22	1.4	206.	18.	8.1	.00	67.1	.00	.000
23	1.4	200.	24.	7.4	.00	69.6	.00	.000
24	1.0	224.	40.	6.0	.00	76.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	.7	138.	18.	6.0	.00	31.1	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.3	249.	41.	20.6	.03	88.1	1.07	.035
AVERAGE OBSERVED VALUES:								
**	2.9	195.	29.	14.6	.03*	52.1	.25	.210*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
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WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 7 AUG 88 (JULIAN DAY 220)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.0	12.	52.	5.0	.00	80.8	.00	.000
2	.9	147.	36.	4.5	.00	82.7	.00	.000
3	.9	145.	39.	4.5	.00	83.0	.00	.000
4	1.2	200.	32.	3.9	.00	85.0	.00	.000
5	.9	95.	40.	3.4	.00	87.3	.00	.000
6	.7	171.	38.	5.2	.00	85.7	.07	.002
7	.9	33.	23.	11.2	.00	67.5	.35	.011
8	1.7	26.	24.	16.3	.00	45.6	.58	.018
9	3.6	348.	22.	19.1	.00	36.3	.93	.030
10	4.4	326.	27.	20.4	.00	32.3	1.01	.033
11	4.2	350.	22.	21.3	.00	30.4	.81	.027
12	4.0	320.	24.	20.4	.00	33.4	.51	.018
13	4.6	313.	24.	20.0	.00	33.6	.34	.013
14	5.1	273.	23.	21.9	.00	31.5	.71	.025
15	5.6	223.	22.	23.8	.00	28.8	.88	.031
16	6.9	269.	36.	21.7	.00	29.9	.55	.021
17	3.5	8.	18.	16.7	.00	41.2	.04	.003
18	2.3	288.	35.	14.5	.00	54.8	.06	.003
19	1.7	218.	16.	11.9	.00	73.6	.00	.000
20	2.4	216.	16.	10.0	.00	77.8	.00	.000
21	1.1	245.	22.	7.9	.00	81.2	.00	.000
22	1.1	208.	20.	6.6	.00	88.0	.00	.000
23	.6	97.	36.	4.7	.00	93.5	.00	.000
24	.7	104.	43.	4.0	.00	96.9	.00	.000
MINIMUM OBSERVED VALUES:								
**	.6	8.	16.	3.4	.00	28.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.9	350.	52.	23.8	.00	96.9	1.01	.033
AVERAGE OBSERVED VALUES:								
**	2.5	281.	29.	12.5	.00*	61.7	.29	.235*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 8 AUG 88 (JULIAN DAY 221)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.5	139.	32.	3.2	.00	98.3	.00	.000
2	1.0	92.	41.	2.6	.00	99.2	.00	.000
3	.6	114.	49.	1.9	.00	99.7	.00	.000
4	.5	135.	42.	1.2	.00	99.8	.00	.000
5	.6	132.	35.	.9	.00	100.0	.00	.000
6	.6	117.	41.	2.3	.00	99.9	.08	.002
7	.6	16.	24.	8.1	.00	98.1	.31	.009
8	1.4	35.	19.	13.6	.00	70.7	.48	.015
9	1.8	21.	32.	19.6	.00	41.3	.85	.026
10	4.3	106.	50.	24.5	.00	27.7	1.03	.034
11	5.9	236.	25.	24.4	.00	22.8	1.13	.039
12	5.5	226.	27.	25.6	.00	22.3	1.14	.039
13	5.6	192.	39.	26.7	.00	22.3	1.13	.039
14	5.5	240.	30.	19.8	.00	22.9	.98	.033
15	*****	*****	*****	*****	*****	*****	.73	*****
16	*****	*****	*****	*****	*****	*****	.56	*****
17	*****	*****	*****	*****	*****	*****	.35	*****
18	*****	*****	*****	*****	*****	*****	.17	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	1.2	142.	21.	12.0	.00	47.2	.00	.001
22	1.0	167.	38.	12.3	.00	47.6	.00	.001
23	.9	149.	38.	11.1	.00	50.3	.00	.001
24	1.1	164.	32.	10.9	.00	52.3	.00	.001
MINIMUM OBSERVED VALUES:								
**	.5	16.	19.	.9	.00	22.3	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.9	240.	50.	26.7	.00	100.0	1.14	.039
AVERAGE OBSERVED VALUES:								
**	2.1	139.	34.	12.3	.00*	62.4	.37	.239*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 9 AUG 88 (JULIAN DAY 222)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	2.1	177.	22.	11.3	.00	52.2	.00	.001
2	1.9	177.	27.	11.2	.00	52.4	.00	.001
3	1.0	162.	30.	10.1	.00	54.8	.00	.001
4	1.0	326.	46.	9.3	.00	59.1	.00	.000
5	1.5	172.	44.	8.8	.00	62.3	.01	.001
6	1.2	105.	43.	10.3	.00	61.7	.06	.002
7	1.6	125.	38.	18.8	.00	49.9	.44	.014
8	1.6	204.	35.	13.9	.00	44.9	.74	.023
9	*****	*****	*****	*****	*****	*****	.98	*****
10	*****	*****	*****	*****	*****	*****	.33	*****
11	*****	*****	*****	*****	*****	*****	.92	*****
12	*****	*****	*****	*****	*****	*****	1.00	*****
13	*****	*****	*****	*****	*****	*****	1.14	*****
14	*****	*****	*****	*****	*****	*****	1.02	*****
15	*****	*****	*****	*****	*****	*****	.89	*****
16	*****	*****	*****	*****	*****	*****	.66	*****
17	*****	*****	*****	*****	*****	*****	.41	*****
18	*****	*****	*****	*****	*****	*****	.12	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	1.0	105.	22.	8.8	.00	44.9	.00	.000
MAXIMUM OBSERVED VALUES:								
**	2.1	326.	46.	18.8	.00	62.3	1.14	.023
AVERAGE OBSERVED VALUES:								
**	1.5	164.	36.	11.7	.00*	54.7	.36	.042*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 10 AUG 88 (JULIAN DAY 223)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	129.	40.	10.1	.00	62.0	.00	.000
2	.9	280.	40.	9.3	.00	62.8	.00	.000
3	.9	276.	41.	8.4	.00	65.1	.00	.000
4	.7	115.	35.	7.7	.00	69.5	.00	.000
5	.8	210.	38.	7.4	.00	74.6	.00	.000
6	.7	67.	52.	9.3	.00	75.5	.07	.002
7	.6	45.	28.	17.5	.00	57.1	.34	.011
8	*****	*****	*****	*****	*****	*****	.61	*****
9	*****	*****	*****	*****	*****	*****	.80	*****
10	*****	*****	*****	*****	*****	*****	.99	*****
11	*****	*****	*****	*****	*****	*****	1.14	*****
12	*****	*****	*****	*****	*****	*****	1.19	*****
13	*****	*****	*****	*****	*****	*****	1.17	*****
14	*****	*****	*****	*****	*****	*****	.79	*****
15	*****	*****	*****	*****	*****	*****	.86	*****
16	*****	*****	*****	*****	*****	*****	.66	*****
17	*****	*****	*****	*****	*****	*****	.41	*****
18	*****	*****	*****	*****	*****	*****	.12	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	.5	192.	34.	9.0	.00	55.2	.00	.000
24	.5	127.	33.	8.1	.00	69.1	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	45.	28.	7.4	.00	55.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.9	280.	52.	17.5	.00	75.5	1.19	.011
AVERAGE OBSERVED VALUES:								
**	.7	146.	38.	9.6	.00*	65.7	.38	.015*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 11 AUG 88 (JULIAN DAY 224)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.4	106.	36.	7.1	.00	73.8	.00	.000
2	.5	140.	27.	6.1	.00	77.9	.00	.000
3	.5	130.	33.	5.5	.00	82.9	.00	.000
4	.4	223.	35.	4.7	.00	87.9	.00	.000
5	.4	103.	28.	4.2	.00	91.6	.00	.000
6	.2	18.	29.	5.9	.00	90.7	.00	.000
7	.6	42.	18.	13.9	.00	63.0	.32	.010
8	.4	5.	16.	16.4	.00	49.2	.60	.018
9	1.3	7.	8.	21.7	.00	37.6	.83	.026
10	3.4	356.	22.	25.0	.00	29.3	1.01	.033
11	4.1	345.	28.	26.4	.00	24.8	1.11	.037
12	3.2	7.	33.	28.9	.00	23.4	1.15	.039
13	3.4	89.	35.	30.6	.00	22.5	1.11	.038
14	3.3	9.	51.	31.3	.00	20.1	1.02	.036
15	3.6	19.	39.	30.7	.00	19.2	.86	.031
16	3.8	231.	26.	30.0	.00	21.0	.64	.025
17	3.3	225.	21.	29.2	.00	21.6	.40	.017
18	2.2	207.	25.	25.4	.00	23.9	.12	.007
19	1.6	199.	19.	18.9	.00	35.0	.00	.002
20	1.4	221.	12.	15.7	.00	42.9	.00	.001
21	.8	178.	29.	13.1	.00	47.9	.00	.001
22	.9	180.	29.	11.2	.00	53.4	.00	.001
23	.8	154.	33.	9.5	.00	57.6	.00	.000
24	.6	231.	39.	8.2	.00	62.3	.00	.000
MINIMUM OBSERVED VALUES:								
**	.2	5.	8.	4.2	.00	19.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.1	356.	51.	31.3	.00	91.6	1.15	.039
AVERAGE OBSERVED VALUES:								
**	1.7	128.	28.	17.5	.00*	48.3	.38	.323*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 12 AUG 88 (JULIAN DAY 225)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	145.	38.	7.2	.00	64.9	.00	.000
2	.9	160.	30.	7.0	.00	67.4	.00	.000
3	.5	180.	48.	6.8	.00	69.0	.00	.000
4	1.2	163.	30.	6.5	.00	70.1	.00	.000
5	.8	140.	29.	6.1	.00	72.2	.00	.000
6	.6	305.	32.	7.7	.00	72.7	.07	.002
7	.6	88.	32.	15.7	.00	59.2	.30	.009
8	1.2	59.	35.	22.1	.00	44.0	.60	.019
9	2.5	22.	18.	22.3	.00	38.6	.53	.018
10	3.2	339.	20.	23.2	.00	37.8	.53	.018
11	4.4	303.	20.	23.2	.00	39.4	.61	.021
12	4.6	320.	20.	25.6	.00	36.2	.98	.033
13	4.4	306.	21.	28.4	.00	32.2	1.09	.037
14	4.1	353.	24.	30.1	.00	29.2	.99	.035
15	3.5	4.	23.	31.5	.00	26.5	.83	.030
16	1.1	340.	12.	31.0	.00	29.9	.21	.009
17	1.7	309.	27.	29.4	.00	29.2	.38	.015
18	1.4	278.	24.	24.2	.00	28.5	.12	.006
19	1.4	197.	24.	21.8	.00	35.0	.00	.002
20	1.0	219.	24.	18.9	.00	43.1	.00	.001
21	.9	197.	20.	16.9	.00	47.7	.00	.001
22	.8	216.	29.	15.9	.00	50.4	.00	.001
23	.7	248.	50.	15.2	.00	52.2	.00	.001
24	.9	143.	39.	14.1	.00	55.1	.00	.001
MINIMUM OBSERVED VALUES:								
**	.5	4.	12.	6.1	.00	26.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.6	353.	50.	31.5	.00	72.7	1.09	.037
AVERAGE OBSERVED VALUES:								
**	1.8	261.	28.	18.8	.00*	47.1	.30	.261*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 13 AUG 88 (JULIAN DAY 226)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.8	131.	44.	12.6	.00	58.8	.00	.001
2	.9	155.	30.	11.9	.00	61.7	.00	.001
3	1.3	184.	21.	12.5	.00	61.4	.00	.001
4	2.8	203.	42.	7.0	.00	48.7	.00	.001
5	1.8	180.	28.	13.2	.00	58.7	.00	.001
6	1.1	268.	37.	12.7	.00	61.9	.05	.002
7	.6	11.	31.	17.9	.00	56.8	.25	.008
8	1.0	72.	40.	23.3	.00	46.3	.43	.014
9	1.0	127.	22.	24.7	.00	40.7	.29	.010
10	4.2	226.	23.	25.6	.00	32.4	.59	.021
11	5.0	247.	29.	26.1	.00	28.6	.73	.026
12	7.5	247.	22.	28.6	.00	26.0	1.16	.042
13	7.9	231.	23.	28.8	.00	25.5	.98	.037
14	5.7	240.	22.	27.8	.00	27.8	.61	.024
15	6.3	228.	20.	28.5	.00	28.9	.71	.028
16	5.9	219.	19.	27.9	.00	29.3	.58	.023
17	4.6	227.	25.	27.1	.00	30.5	.40	.017
18	4.0	218.	21.	25.1	.00	31.7	.11	.007
19	1.7	200.	21.	21.2	.00	35.5	.00	.002
20	1.8	201.	17.	18.2	.00	42.7	.00	.001
21	.9	222.	42.	16.4	.00	47.9	.00	.001
22	1.0	199.	40.	15.2	.00	52.2	.00	.001
23	1.7	170.	29.	16.1	.00	51.5	.00	.001
24	1.8	133.	39.	17.8	.00	48.5	.00	.001
MINIMUM OBSERVED VALUES:								
**	.6	11.	17.	7.0	.00	25.5	.00	.001
MAXIMUM OBSERVED VALUES:								
**	7.9	268.	44.	28.8	.00	61.9	1.16	.042
AVERAGE OBSERVED VALUES:								
**	3.0	203.	28.	20.3	.00*	43.1	.29	.272*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 14 AUG 88 (JULIAN DAY 227)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.0	127.	36.	16.5	.00	51.2	.00	.001
2	1.9	224.	39.	16.2	.00	51.5	.00	.001
3	1.2	181.	29.	15.1	.00	52.9	.00	.001
4	1.7	185.	26.	14.3	.00	52.9	.00	.001
5	.9	166.	29.	12.6	.00	55.8	.00	.001
6	2.4	151.	18.	12.7	.00	56.8	.04	.002
7	1.8	133.	25.	19.3	.00	50.3	.28	.010
8	2.7	122.	36.	23.1	.00	43.2	.56	.019
9	3.6	240.	36.	24.4	.00	40.2	.58	.020
10	*****	*****	*****	*****	*****	*****	.36	*****
11	*****	*****	*****	*****	*****	*****	.66	*****
12	*****	*****	*****	*****	*****	*****	1.10	*****
13	*****	*****	*****	*****	*****	*****	1.00	*****
14	*****	*****	*****	*****	*****	*****	.93	*****
15	*****	*****	*****	*****	*****	*****	.85	*****
16	*****	*****	*****	*****	*****	*****	.62	*****
17	*****	*****	*****	*****	*****	*****	.37	*****
18	*****	*****	*****	*****	*****	*****	.10	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	.4	299.	36.	11.9	.00	59.1	.00	.000
22	1.0	146.	35.	10.1	.00	60.3	.00	.000
23	.9	237.	44.	8.5	.00	65.4	.00	.000
24	1.1	189.	35.	7.1	.00	68.7	.00	.000
MINIMUM OBSERVED VALUES:								
**	.4	122.	18.	7.1	.00	40.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.6	299.	44.	24.4	.00	68.7	1.10	.020
AVERAGE OBSERVED VALUES:								
**	1.6	179.	32.	14.8	.00*	54.5	.31	.057*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 15 AUG 88 (JULIAN DAY 228)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.0	166.	41.	6.2	.00	71.8	.00	.000
2	1.2	88.	42.	5.6	.00	74.4	.00	.000
3	1.9	138.	40.	5.3	.00	75.4	.00	.000
4	.8	223.	47.	5.4	.00	75.7	.00	.000
5	.9	93.	47.	6.1	.00	75.1	.01	.001
6	1.0	222.	37.	8.0	.00	73.2	.05	.002
7	1.5	306.	49.	12.9	.00	67.0	.26	.008
8	1.4	8.	29.	18.9	.00	57.6	.52	.016
9	2.0	2.	25.	19.6	.00	59.9	.86	.026
10	*****	*****	*****	*****	*****	*****	.86	*****
11	*****	*****	*****	*****	*****	*****	1.13	*****
12	*****	*****	*****	*****	*****	*****	1.09	*****
13	*****	*****	*****	*****	*****	*****	.41	*****
14	*****	*****	*****	*****	*****	*****	.33	*****
15	*****	*****	*****	*****	*****	*****	.09	*****
16	*****	*****	*****	*****	*****	*****	.04	*****
17	*****	*****	*****	*****	*****	*****	.13	*****
18	*****	*****	*****	*****	*****	*****	.02	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	1.4	164.	38.	9.3	.00	76.6	.00	.000
23	.8	191.	29.	7.6	.00	81.2	.00	.000
24	.8	149.	33.	6.7	.00	83.8	.00	.000
MINIMUM OBSERVED VALUES:								
**	.8	2.	25.	5.3	.00	57.6	.00	.000
MAXIMUM OBSERVED VALUES:								
**	2.0	306.	49.	19.6	.00	83.8	1.13	.026
AVERAGE OBSERVED VALUES:								
**	1.2	156.	38.	9.3	.00*	72.6	.24	.055*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 16 AUG 88 (JULIAN DAY 229)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	219.	39.	5.5	.00	89.0	.00	.000
2	.6	83.	44.	5.2	.00	93.3	.00	.000
3	.7	113.	46.	4.9	.00	94.7	.00	.000
4	.5	178.	33.	4.3	.00	96.1	.00	.000
5	.7	212.	34.	4.2	.00	96.3	.00	.000
6	.6	164.	43.	5.7	.00	92.8	.09	.003
7	.6	59.	29.	13.3	.00	67.9	.33	.010
8	1.2	22.	19.	18.0	.00	48.0	.47	.015
9	2.2	91.	43.	21.0	.00	41.0	.63	.020
10	4.0	136.	45.	22.9	.00	36.3	.99	.032
11	4.2	246.	35.	21.6	.00	36.8	.91	.030
12	5.9	124.	28.	25.0	.00	33.2	1.13	.038
13	5.6	130.	26.	24.1	.00	33.6	.82	.029
14	4.7	154.	37.	21.1	.00	29.7	.99	.033
15	*****	*****	*****	*****	*****	*****	.85	*****
16	*****	*****	*****	*****	*****	*****	.55	*****
17	*****	*****	*****	*****	*****	*****	.31	*****
18	*****	*****	*****	*****	*****	*****	.06	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	.5	289.	40.	13.1	.00	62.2	.00	.000
22	1.5	174.	45.	11.1	.00	64.6	.00	.001
23	.7	165.	30.	10.4	.00	66.8	.00	.000
24	1.0	258.	36.	9.4	.00	70.2	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	22.	19.	4.2	.00	29.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.9	289.	46.	25.0	.00	96.3	1.13	.038
AVERAGE OBSERVED VALUES:								
**	2.0	155.	36.	13.4	.00*	64.0	.34	.211*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 17 AUG 88 (JULIAN DAY 230)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	148.	40.	8.0	.00	74.4	.00	.000
2	.5	210.	26.	6.8	.00	81.2	.00	.000
3	.6	137.	31.	6.1	.00	85.4	.00	.000
4	.6	154.	24.	5.4	.00	88.5	.00	.000
5	.6	359.	43.	5.2	.00	91.2	.00	.000
6	.6	128.	35.	6.4	.00	89.4	.06	.002
7	.5	7.	24.	13.3	.00	68.3	.29	.009
8	1.3	19.	26.	18.4	.00	48.8	.46	.015
9	1.2	8.	30.	19.9	.00	44.0	.43	.014
10	.8	76.	44.	22.0	.00	39.9	.40	.013
11	2.1	344.	31.	24.9	.00	32.5	.92	.030
12	2.9	28.	25.	27.6	.00	29.9	.95	.032
13	2.9	4.	30.	30.2	.00	27.4	.92	.032
14	4.0	72.	43.	30.8	.00	26.7	.71	.027
15	4.7	185.	30.	31.7	.00	25.7	.82	.031
16	6.2	226.	20.	29.7	.00	26.9	.51	.022
17	4.7	213.	43.	26.3	.00	31.6	.22	.011
18	3.2	339.	30.	23.4	.00	36.6	.04	.004
19	3.2	6.	29.	21.4	.00	40.1	.00	.002
20	2.8	331.	31.	19.5	.00	43.1	.00	.002
21	4.9	189.	27.	19.6	.00	43.6	.00	.003
22	4.6	224.	22.	19.7	.00	44.3	.00	.003
23	4.1	202.	23.	18.4	.00	46.7	.00	.002
24	3.5	209.	24.	17.7	.00	48.2	.00	.002
MINIMUM OBSERVED VALUES:								
**	.5	4.	20.	5.2	.00	25.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.2	359.	44.	31.7	.00	91.2	.95	.032
AVERAGE OBSERVED VALUES:								
**	2.6	82.	30.	18.9	.00*	50.6	.28	.256*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 18 AUG 88 (JULIAN DAY 231)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	3.9	234.	25.	16.7	.00	50.7	.00	.002
2	2.6	232.	25.	15.8	.00	52.2	.00	.001
3	2.9	227.	20.	14.9	.00	51.9	.00	.001
4	2.5	242.	27.	13.9	.00	53.2	.00	.001
5	3.3	223.	18.	14.0	.00	52.5	.00	.001
6	3.2	217.	24.	14.6	.00	51.4	.08	.004
7	5.4	216.	23.	17.0	.00	47.3	.34	.012
8	6.4	250.	24.	16.3	.00	46.1	.39	.014
9	6.2	247.	21.	18.0	.00	42.2	.69	.023
10	7.6	247.	21.	19.2	.00	38.5	1.01	.033
11	4.9	234.	27.	21.0	.00	34.0	1.14	.037
12	6.8	224.	24.	19.1	.00	35.8	.53	.019
13	3.3	259.	27.	12.6	.00	24.2	.28	.010
14	6.4	231.	22.	18.8	.00	38.6	.33	.013
15	5.8	225.	20.	19.6	.00	37.7	.44	.016
16	5.1	206.	26.	21.1	.00	36.3	.58	.020
17	5.0	199.	18.	20.4	.00	37.2	.34	.013
18	2.6	191.	22.	18.0	.00	38.7	.07	.004
19	1.6	173.	23.	13.1	.00	45.9	.00	.001
20	1.7	206.	18.	10.7	.00	52.7	.00	.001
21	1.0	204.	29.	8.4	.00	58.9	.00	.000
22	.5	244.	37.	7.1	.00	54.8	.00	.000
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.5	173.	18.	7.1	.00	24.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.6	259.	37.	21.1	.00	58.9	1.14	.037
AVERAGE OBSERVED VALUES:								
**	4.0	224.	23.	15.9	.00*	44.6	.26	.228*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 19 AUG 88 (JULIAN DAY 232)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	.00	*****
2	.3	355.	39.	2.1	.00	92.7	.00	.000
3	.6	94.	48.	2.6	.00	94.4	.00	.000
4	.8	118.	39.	1.8	.00	95.1	.00	.000
5	.4	224.	35.	1.2	.00	96.8	.00	.000
6	.5	94.	28.	2.2	.00	97.6	.04	.001
7	.6	52.	23.	10.0	.00	78.2	.28	.008
8	.5	8.	26.	12.3	.00	77.7	.56	.017
9	*****	*****	*****	*****	*****	*****	.80	*****
10	*****	*****	*****	*****	*****	*****	.98	*****
11	*****	*****	*****	*****	*****	*****	1.03	*****
12	*****	*****	*****	*****	*****	*****	1.01	*****
13	*****	*****	*****	*****	*****	*****	.83	*****
14	*****	*****	*****	*****	*****	*****	.73	*****
15	*****	*****	*****	*****	*****	*****	.51	*****
16	*****	*****	*****	*****	*****	*****	.74	*****
17	*****	*****	*****	*****	*****	*****	.19	*****
18	*****	*****	*****	*****	*****	*****	.06	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	.8	236.	38.	10.2	.00	49.2	.00	.001
MINIMUM OBSERVED VALUES:								
**	.3	8.	23.	1.2	.00	49.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.8	355.	48.	12.3	.00	97.6	1.03	.017
AVERAGE OBSERVED VALUES:								
**	.6	72.	34.	5.3	.00*	85.2	.32	.027*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 20 AUG 88 (JULIAN DAY 233)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	169.	36.	10.3	.00	54.7	.00	.001
2	1.1	136.	42.	10.6	.00	55.0	.00	.001
3	1.0	243.	46.	10.4	.00	55.9	.00	.001
4	1.3	235.	39.	10.2	.00	57.1	.00	.001
5	1.8	61.	55.	9.8	.00	58.7	.00	.001
6	2.7	161.	32.	11.8	.00	55.8	.06	.003
7	5.4	204.	25.	16.9	.00	47.9	.40	.014
8	5.4	209.	26.	16.0	.00	48.1	.47	.016
9	5.4	206.	23.	15.8	.00	49.3	.53	.018
10	5.9	178.	35.	17.1	.00	46.7	.73	.024
11	7.5	200.	24.	17.6	.00	43.3	.78	.026
12	6.8	175.	27.	18.6	.00	43.1	.86	.028
13	6.8	125.	19.	18.0	.00	49.1	.92	.030
14	1.0	287.	36.	16.4	.00	42.2	.40	.013
15	2.0	185.	33.	13.4	.00	51.0	.15	.005
16	1.0	169.	37.	11.9	.00	61.6	.14	.005
17	1.8	182.	24.	9.9	.01	88.6	.13	.004
18	1.1	167.	39.	10.4	.00	88.1	.07	.002
19	1.3	246.	38.	8.2	.00	93.8	.00	.000
20	1.3	210.	33.	6.7	.01	97.7	.00	.000
21	1.2	135.	43.	5.7	.00	99.2	.00	.000
22	.9	125.	33.	4.9	.00	99.5	.00	.000
23	.8	94.	45.	4.5	.00	99.7	.00	.000
24	.8	107.	30.	3.8	.00	99.7	.00	.000
MINIMUM OBSERVED VALUES:								
**	.8	61.	19.	3.8	.00	42.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.5	287.	55.	18.6	.01	99.7	.92	.030
AVERAGE OBSERVED VALUES:								
**	2.7	176.	34.	11.6	.02*	66.1	.24	.190*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 21 AUG 88 (JULIAN DAY 234)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.5	6.	45.	2.9	.00	99.7	.00	.000
2	.8	72.	42.	2.3	.00	99.9	.00	.000
3	.9	43.	46.	2.1	.00	99.9	.00	.000
4	.9	96.	39.	2.7	.00	99.9	.00	.000
5	.6	268.	30.	3.4	.00	99.8	.00	.000
6	.8	135.	34.	4.8	.00	99.9	.03	.001
7	1.3	134.	26.	6.3	.00	98.9	.12	.004
8	1.3	68.	26.	7.7	.00	93.9	.26	.008
9	2.1	358.	24.	9.2	.00	83.5	.47	.014
10	1.6	6.	15.	12.9	.00	46.9	.90	.027
11	1.6	349.	22.	14.5	.00	30.5	1.08	.033
12	5.1	263.	27.	20.2	.00	35.9	1.04	.034
13	6.6	233.	24.	20.8	.00	32.6	1.03	.034
14	7.1	218.	22.	21.3	.00	32.3	.99	.034
15	6.9	231.	20.	21.2	.00	31.4	.81	.028
16	6.5	204.	21.	21.2	.00	31.8	.59	.022
17	4.0	203.	22.	21.2	.00	31.7	.34	.013
18	2.6	203.	20.	17.4	.00	34.1	.05	.003
19	2.4	188.	20.	12.6	.00	44.5	.00	.001
20	1.7	194.	23.	10.0	.00	54.6	.00	.001
21	1.8	187.	24.	8.2	.00	61.8	.00	.001
22	1.5	191.	28.	7.5	.00	66.1	.00	.000
23	1.9	166.	27.	7.2	.00	66.3	.00	.000
24	1.3	210.	43.	6.7	.00	68.6	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	6.	15.	2.1	.00	30.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.1	358.	46.	21.3	.00	99.9	1.08	.034
AVERAGE OBSERVED VALUES:								
**	2.6	191.	28.	11.0	.00*	64.4	.32	.257*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 22 AUG 88 (JULIAN DAY 235)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	133.	44.	4.9	.00	75.1	.00	.000
2	1.0	157.	41.	3.7	.00	83.6	.00	.000
3	.9	101.	48.	3.1	.00	88.2	.00	.000
4	.8	79.	43.	2.0	.00	91.2	.00	.000
5	.8	117.	34.	1.2	.00	94.9	.00	.000
6	.7	125.	39.	1.4	.00	96.5	.02	.001
7	.5	70.	26.	9.2	.00	80.4	.30	.009
8	1.1	30.	25.	16.6	.00	48.0	.57	.018
9	2.0	18.	31.	20.3	.00	33.4	.81	.026
10	3.5	9.	40.	21.6	.00	27.2	.98	.032
11	3.4	26.	29.	23.2	.00	25.2	1.09	.035
12	3.8	284.	35.	25.2	.00	22.6	1.12	.037
13	5.3	254.	28.	25.2	.00	22.2	1.08	.037
14	4.2	264.	30.	26.3	.00	21.1	.97	.033
15	4.2	202.	29.	27.2	.00	21.3	.81	.029
16	5.2	228.	20.	26.3	.00	22.2	.59	.023
17	3.4	223.	20.	25.9	.00	22.8	.34	.014
18	2.3	170.	28.	21.3	.00	25.4	.06	.004
19	1.7	163.	28.	16.1	.00	34.1	.00	.001
20	1.2	143.	35.	13.4	.00	41.4	.00	.001
21	.7	263.	43.	11.0	.00	51.0	.00	.001
22	.5	188.	32.	9.2	.00	56.7	.00	.000
23	.6	168.	37.	8.0	.00	60.9	.00	.000
24	.6	139.	33.	6.7	.00	65.7	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	9.	20.	1.2	.00	21.1	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.3	284.	48.	27.2	.00	96.5	1.12	.037
AVERAGE OBSERVED VALUES:								
**	2.1	154.	33.	14.5	.00*	50.5	.36	.303*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 23 AUG 88 (JULIAN DAY 236)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.5	167.	32.	5.7	.00	72.3	.00	.000
2	.4	218.	45.	5.2	.00	76.8	.00	.000
3	.5	139.	48.	4.4	.00	82.2	.00	.000
4	.4	130.	37.	3.8	.00	86.3	.00	.000
5	.5	182.	36.	3.4	.00	90.7	.00	.000
6	1.2	356.	51.	4.0	.00	92.3	.02	.001
7	.6	53.	30.	11.9	.00	71.4	.29	.009
8	1.4	29.	24.	19.1	.00	43.9	.57	.018
9	3.4	7.	15.	21.7	.00	33.7	.80	.026
10	4.2	8.	13.	24.0	.00	29.7	.97	.032
11	2.3	357.	12.	26.5	.00	27.3	1.08	.035
12	*****	*****	*****	*****	*****	*****	1.12	*****
13	*****	*****	*****	*****	*****	*****	1.07	*****
14	*****	*****	*****	*****	*****	*****	.96	*****
15	*****	*****	*****	*****	*****	*****	.80	*****
16	*****	*****	*****	*****	*****	*****	.58	*****
17	*****	*****	*****	*****	*****	*****	.33	*****
18	*****	*****	*****	*****	*****	*****	.06	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	.4	10.	27.	9.9	.00	62.0	.00	.000
23	.5	139.	34.	9.4	.00	62.1	.00	.000
24	.5	79.	55.	8.5	.00	65.1	.00	.000
MINIMUM OBSERVED VALUES:								
**	.4	7.	12.	3.4	.00	27.3	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.2	357.	55.	26.5	.00	92.3	1.12	.035
AVERAGE OBSERVED VALUES:								
**	1.2	68.	33.	11.2	.00*	64.0	.36	.123*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 24 AUG 88 (JULIAN DAY 237)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.4	131.	29.	7.8	.00	66.9	.00	.000
2	.4	168.	34.	7.1	.00	69.9	.00	.000
3	.5	131.	49.	6.5	.00	74.1	.00	.000
4	.6	84.	44.	5.7	.00	76.6	.00	.000
5	.5	118.	32.	5.3	.00	80.1	.00	.000
6	.4	143.	32.	5.6	.00	83.1	.01	.000
7	.4	23.	30.	13.7	.00	66.7	.29	.009
8	.4	9.	28.	16.4	.00	57.2	.56	.017
9	*****	*****	*****	*****	*****	*****	.80	*****
10	*****	*****	*****	*****	*****	*****	.97	*****
11	*****	*****	*****	*****	*****	*****	1.08	*****
12	*****	*****	*****	*****	*****	*****	1.11	*****
13	*****	*****	*****	*****	*****	*****	1.07	*****
14	*****	*****	*****	*****	*****	*****	.96	*****
15	*****	*****	*****	*****	*****	*****	.78	*****
16	*****	*****	*****	*****	*****	*****	.56	*****
17	*****	*****	*****	*****	*****	*****	.30	*****
18	*****	*****	*****	*****	*****	*****	.05	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.4	9.	28.	5.3	.00	57.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.6	168.	49.	16.4	.00	83.1	1.11	.017
AVERAGE OBSERVED VALUES:								
**	.5	108.	34.	8.5	.00*	71.8	.36	.027*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 25 AUG 88 (JULIAN DAY 238)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	.00	*****
2	*****	*****	*****	*****	*****	*****	.00	*****
3	*****	*****	*****	*****	*****	*****	.00	*****
4	*****	*****	*****	*****	*****	*****	.00	*****
5	*****	*****	*****	*****	*****	*****	.00	*****
6	*****	*****	*****	*****	*****	*****	.04	*****
7	*****	*****	*****	*****	*****	*****	.15	*****
8	*****	*****	*****	*****	*****	*****	.41	*****
9	*****	*****	*****	*****	*****	*****	.74	*****
10	*****	*****	*****	*****	*****	*****	.80	*****
11	*****	*****	*****	*****	*****	*****	1.04	*****
12	*****	*****	*****	*****	*****	*****	1.06	*****
13	*****	*****	*****	*****	*****	*****	1.00	*****
14	*****	*****	*****	*****	*****	*****	.89	*****
15	*****	*****	*****	*****	*****	*****	.72	*****
16	*****	*****	*****	*****	*****	*****	.50	*****
17	*****	*****	*****	*****	*****	*****	.26	*****
18	*****	*****	*****	*****	*****	*****	.04	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	.00	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	1.06	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	.32	******

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 26 AUG 88 (JULIAN DAY 239)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	.00	*****
2	*****	*****	*****	*****	*****	*****	.00	*****
3	.8	95.	40.	8.5	.00	44.7	.00	.001
4	1.3	110.	37.	9.1	.00	60.4	.00	.000
5	1.3	117.	55.	9.5	.00	60.7	.00	.001
6	.7	129.	41.	10.0	.00	60.8	.03	.001
7	.6	119.	33.	12.1	.00	60.7	.14	.005
8	1.0	47.	32.	6.9	.00	40.8	.52	.016
9	*****	*****	*****	*****	*****	*****	.75	*****
10	*****	*****	*****	*****	*****	*****	.88	*****
11	*****	*****	*****	*****	*****	*****	.88	*****
12	*****	*****	*****	*****	*****	*****	.93	*****
13	*****	*****	*****	*****	*****	*****	.45	*****
14	*****	*****	*****	*****	*****	*****	.56	*****
15	*****	*****	*****	*****	*****	*****	.66	*****
16	*****	*****	*****	*****	*****	*****	.45	*****
17	*****	*****	*****	*****	*****	*****	.25	*****
18	*****	*****	*****	*****	*****	*****	.03	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	.4	307.	33.	11.5	.00	69.9	.00	.000
23	.7	143.	38.	9.0	.00	72.0	.00	.000
24	.7	175.	30.	7.9	.00	75.2	.00	.000
MINIMUM OBSERVED VALUES:								
**	.4	47.	30.	6.9	.00	40.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	1.3	307.	55.	12.1	.00	75.2	.93	.016
AVERAGE OBSERVED VALUES:								
**	.8	116.	37.	9.4	.00*	60.6	.27	.024*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 27 AUG 88 (JULIAN DAY 240)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	123.	33.	7.2	.00	78.8	.00	.000
2	.5	197.	30.	6.2	.00	83.4	.00	.000
3	.5	100.	37.	5.8	.00	87.3	.00	.000
4	.5	84.	53.	4.9	.00	90.8	.00	.000
5	.4	104.	29.	4.3	.00	95.1	.00	.000
6	.3	290.	54.	5.0	.00	96.5	.01	.000
7	.5	45.	30.	12.4	.00	75.7	.27	.008
8	.5	10.	14.	16.6	.00	66.8	.53	.016
9	*****	*****	*****	*****	*****	*****	.76	*****
10	*****	*****	*****	*****	*****	*****	.93	*****
11	*****	*****	*****	*****	*****	*****	1.04	*****
12	*****	*****	*****	*****	*****	*****	1.08	*****
13	*****	*****	*****	*****	*****	*****	1.02	*****
14	*****	*****	*****	*****	*****	*****	.92	*****
15	*****	*****	*****	*****	*****	*****	.76	*****
16	*****	*****	*****	*****	*****	*****	.53	*****
17	*****	*****	*****	*****	*****	*****	.28	*****
18	*****	*****	*****	*****	*****	*****	.03	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	.3	266.	39.	10.3	.00	47.8	.00	.001
23	.6	53.	51.	9.6	.00	59.7	.00	.000
24	.4	152.	36.	8.3	.00	62.9	.00	.000
MINIMUM OBSERVED VALUES:								
**	.3	10.	14.	4.3	.00	47.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.6	290.	54.	16.6	.00	96.5	1.08	.016
AVERAGE OBSERVED VALUES:								
**	.5	92.	37.	8.2	.00*	76.8	.34	.026*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 28 AUG 88 (JULIAN DAY 241)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	136.	38.	7.6	.00	66.5	.00	.000
2	.7	142.	40.	6.9	.00	69.7	.00	.000
3	.6	139.	34.	6.0	.00	73.7	.00	.000
4	.4	148.	32.	5.4	.00	77.9	.00	.000
5	.5	17.	49.	4.7	.00	83.6	.00	.000
6	.5	171.	41.	5.1	.00	84.7	.01	.000
7	.4	8.	29.	13.5	.00	67.4	.27	.008
8	.6	2.	28.	16.0	.00	56.9	.54	.016
9	*****	*****	*****	*****	*****	*****	.77	*****
10	*****	*****	*****	*****	*****	*****	.94	*****
11	*****	*****	*****	*****	*****	*****	1.08	*****
12	*****	*****	*****	*****	*****	*****	1.11	*****
13	*****	*****	*****	*****	*****	*****	1.03	*****
14	*****	*****	*****	*****	*****	*****	.93	*****
15	*****	*****	*****	*****	*****	*****	.75	*****
16	*****	*****	*****	*****	*****	*****	.53	*****
17	*****	*****	*****	*****	*****	*****	.29	*****
18	*****	*****	*****	*****	*****	*****	.03	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	.3	288.	44.	9.4	.00	47.8	.00	.000
24	.5	140.	27.	8.9	.00	54.9	.00	.000
MINIMUM OBSERVED VALUES:								
**	.3	2.	27.	4.7	.00	47.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.7	288.	49.	16.0	.00	84.7	1.11	.016
AVERAGE OBSERVED VALUES:								
**	.5	120.	36.	8.4	.00*	68.3	.34	.027*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 29 AUG 88 (JULIAN DAY 242)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.5	140.	26.	8.2	.00	58.1	.00	.000
2	.5	121.	36.	7.7	.00	60.4	.00	.000
3	.4	131.	37.	6.8	.00	64.6	.00	.000
4	1.1	139.	37.	6.1	.00	67.6	.00	.000
5	.9	22.	60.	5.4	.00	70.7	.00	.000
6	.7	144.	35.	5.8	.00	72.4	.02	.001
7	.6	7.	41.	13.2	.00	62.9	.26	.008
8	1.2	30.	25.	20.3	.00	45.2	.52	.017
9	2.4	22.	18.	24.2	.00	34.0	.75	.025
10	*****	*****	*****	*****	*****	*****	.92	*****
11	*****	*****	*****	*****	*****	*****	1.03	*****
12	*****	*****	*****	*****	*****	*****	.76	*****
13	*****	*****	*****	*****	*****	*****	1.08	*****
14	*****	*****	*****	*****	*****	*****	.89	*****
15	*****	*****	*****	*****	*****	*****	.65	*****
16	*****	*****	*****	*****	*****	*****	.39	*****
17	*****	*****	*****	*****	*****	*****	.26	*****
18	*****	*****	*****	*****	*****	*****	.02	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.4	7.	18.	5.4	.00	34.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	2.4	144.	60.	24.2	.00	72.4	1.08	.025
AVERAGE OBSERVED VALUES:								
**	.9	88.	35.	10.9	.00*	59.5	.31	.052*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 30 AUG 88 (JULIAN DAY 243)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	.00	*****
2	*****	*****	*****	*****	*****	*****	.00	*****
3	*****	*****	*****	*****	*****	*****	.00	*****
4	*****	*****	*****	*****	*****	*****	.00	*****
5	*****	*****	*****	*****	*****	*****	.00	*****
6	*****	*****	*****	*****	*****	*****	.01	*****
7	*****	*****	*****	*****	*****	*****	.25	*****
8	*****	*****	*****	*****	*****	*****	.51	*****
9	*****	*****	*****	*****	*****	*****	.74	*****
10	*****	*****	*****	*****	*****	*****	.92	*****
11	*****	*****	*****	*****	*****	*****	1.02	*****
12	*****	*****	*****	*****	*****	*****	1.06	*****
13	*****	*****	*****	*****	*****	*****	1.00	*****
14	*****	*****	*****	*****	*****	*****	.92	*****
15	*****	*****	*****	*****	*****	*****	.74	*****
16	*****	*****	*****	*****	*****	*****	.56	*****
17	*****	*****	*****	*****	*****	*****	.01	*****
18	*****	*****	*****	*****	*****	*****	.00	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	.00	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	1.06	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	.32	******

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 AUG 88 THRU 31 AUG 88
PERIOD OF RECORD: 31 AUG 88 (JULIAN DAY 244)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	.00	*****
2	*****	*****	*****	*****	*****	*****	.00	*****
3	*****	*****	*****	*****	*****	*****	.00	*****
4	*****	*****	*****	*****	*****	*****	.00	*****
5	*****	*****	*****	*****	*****	*****	.00	*****
6	*****	*****	*****	*****	*****	*****	.01	*****
7	*****	*****	*****	*****	*****	*****	.25	*****
8	*****	*****	*****	*****	*****	*****	.51	*****
9	1.1	348.	10.	26.2	.00	32.4	.75	.024
10	3.5	4.	27.	22.2	.00	31.5	.92	.030
11	3.3	8.	35.	25.5	.00	26.7	1.02	.034
12	5.0	234.	32.	25.9	.00	25.2	.94	.033
13	4.1	265.	36.	27.1	.00	24.0	.99	.034
14	2.0	288.	37.	28.3	.00	22.0	.62	.022
15	.8	301.	27.	29.5	.00	24.2	.57	.020
16	*****	*****	*****	*****	*****	*****	.35	*****
17	*****	*****	*****	*****	*****	*****	.25	*****
18	*****	*****	*****	*****	*****	*****	.02	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.8	4.	10.	22.2	.00	22.0	.00	.020
MAXIMUM OBSERVED VALUES:								
**	5.0	348.	37.	29.5	.00	32.4	1.02	.034
AVERAGE OBSERVED VALUES:								
**	2.8	311.	29.	26.4	.00*	26.6	.30	.197*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 1 SEP 88 (JULIAN DAY 245)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	.00	*****
2	*****	*****	*****	*****	*****	*****	.00	*****
3	.6	214.	32.	1.5	.00	64.4	.00	.000
4	.7	92.	41.	1.9	.00	71.6	.00	.000
5	.6	232.	47.	1.4	.00	74.3	.00	.000
6	.7	254.	39.	1.6	.00	74.3	.00	.000
7	.5	37.	29.	9.1	.00	62.9	.26	.008
8	*****	*****	*****	*****	*****	*****	.52	*****
9	*****	*****	*****	*****	*****	*****	.75	*****
10	*****	*****	*****	*****	*****	*****	.92	*****
11	*****	*****	*****	*****	*****	*****	1.03	*****
12	*****	*****	*****	*****	*****	*****	1.05	*****
13	*****	*****	*****	*****	*****	*****	1.00	*****
14	*****	*****	*****	*****	*****	*****	.90	*****
15	*****	*****	*****	*****	*****	*****	.73	*****
16	*****	*****	*****	*****	*****	*****	.50	*****
17	*****	*****	*****	*****	*****	*****	.25	*****
18	*****	*****	*****	*****	*****	*****	.01	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	.5	195.	37.	11.2	.00	50.1	.00	.001
22	.7	215.	41.	10.6	.00	53.5	.00	.001
23	.6	121.	42.	9.1	.00	56.4	.00	.000
24	.5	142.	29.	8.1	.00	59.8	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	37.	29.	1.4	.00	50.1	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.7	254.	47.	11.2	.00	74.3	1.05	.008
AVERAGE OBSERVED VALUES:								
**	.6	181.	37.	6.1	.00*	63.0	.33	.011*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 2 SEP 88 (JULIAN DAY 246)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.4	49.	37.	7.5	.00	62.4	.00	.000
2	.4	112.	28.	6.6	.00	65.1	.00	.000
3	.5	142.	27.	6.0	.00	67.7	.00	.000
4	.4	104.	44.	5.4	.00	70.5	.00	.000
5	.4	121.	44.	5.0	.00	72.6	.00	.000
6	.3	122.	42.	5.2	.00	73.4	.01	.000
7	.8	39.	31.	12.2	.00	63.5	.23	.007
8	.7	52.	16.	19.2	.00	45.9	.47	.015
9	2.4	36.	15.	23.4	.00	35.7	.71	.023
10	3.1	20.	19.	26.3	.00	31.3	.87	.029
11	3.2	5.	18.	29.6	.00	27.9	.98	.034
12	3.9	8.	15.	31.7	.00	25.5	1.00	.036
13	3.9	335.	23.	32.9	.00	24.0	.95	.035
14	3.0	297.	32.	34.8	.00	22.9	.85	.032
15	3.6	254.	40.	34.7	.00	23.1	.67	.027
16	3.7	286.	24.	33.5	.00	24.2	.45	.020
17	2.9	281.	17.	31.0	.00	25.1	.20	.011
18	1.4	194.	27.	25.0	.00	29.5	.01	.003
19	1.1	222.	16.	20.2	.00	37.1	.00	.002
20	1.3	203.	20.	17.1	.00	41.5	.00	.001
21	.7	228.	27.	14.5	.00	47.3	.00	.001
22	.5	147.	38.	12.7	.00	50.5	.00	.001
23	.6	156.	32.	11.5	.00	52.6	.00	.001
24	.6	161.	26.	10.6	.00	55.1	.00	.001
MINIMUM OBSERVED VALUES:								
**	.3	5.	15.	5.0	.00	22.9	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.9	335.	44.	34.8	.00	73.4	1.00	.036
AVERAGE OBSERVED VALUES:								
**	1.7	114.	27.	19.0	.00*	44.8	.31	.278*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 3 SEP 88 (JULIAN DAY 247)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.5	138.	29.	9.5	.00	57.2	.00	.000
2	.5	153.	34.	8.9	.00	59.3	.00	.000
3	.5	165.	31.	8.3	.00	61.5	.00	.000
4	.2	221.	32.	7.7	.00	63.5	.00	.000
5	.5	123.	31.	7.3	.00	64.8	.00	.000
6	.5	143.	28.	7.5	.00	65.2	.02	.001
7	.3	26.	42.	11.2	.00	61.9	.12	.004
8	.5	351.	28.	15.9	.00	56.6	.29	.009
9	.6	9.	28.	21.7	.00	45.1	.43	.014
10	1.7	28.	16.	25.1	.00	35.8	.62	.021
11	2.0	7.	19.	24.3	.00	25.7	.79	.026
12	*****	*****	*****	*****	*****	*****	.78	*****
13	*****	*****	*****	*****	*****	*****	.77	*****
14	*****	*****	*****	*****	*****	*****	.74	*****
15	*****	*****	*****	*****	*****	*****	.60	*****
16	*****	*****	*****	*****	*****	*****	.42	*****
17	*****	*****	*****	*****	*****	*****	.19	*****
18	*****	*****	*****	*****	*****	*****	.02	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.2	7.	16.	7.3	.00	25.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	2.0	351.	42.	25.1	.00	65.2	.79	.026
AVERAGE OBSERVED VALUES:								
**	.7	89.	29.	13.4	.00*	54.2	.24	.076*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 4 SEP 88 (JULIAN DAY 248)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	2.1	180.	32.	9.5	.00	55.3	.01	.001
2	.4	141.	34.	9.3	.00	68.1	.00	.000
3	.4	136.	32.	8.6	.00	70.2	.00	.000
4	.2	109.	22.	7.8	.00	72.7	.00	.000
5	.3	100.	30.	7.3	.00	75.3	.00	.000
6	.2	137.	21.	7.8	.00	76.7	.03	.001
7	.3	303.	45.	12.4	.00	70.3	.15	.005
8	.3	34.	25.	17.1	.00	59.5	.28	.009
9	1.0	35.	19.	21.1	.00	46.6	.47	.015
10	*****	*****	*****	*****	*****	*****	.67	*****
11	*****	*****	*****	*****	*****	*****	.80	*****
12	*****	*****	*****	*****	*****	*****	.84	*****
13	*****	*****	*****	*****	*****	*****	.81	*****
14	*****	*****	*****	*****	*****	*****	.69	*****
15	*****	*****	*****	*****	*****	*****	.48	*****
16	*****	*****	*****	*****	*****	*****	.29	*****
17	*****	*****	*****	*****	*****	*****	.13	*****
18	*****	*****	*****	*****	*****	*****	.01	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.2	34.	19.	7.3	.00	46.6	.00	.000
MAXIMUM OBSERVED VALUES:								
**	2.1	303.	45.	21.1	.00	76.7	.84	.015
AVERAGE OBSERVED VALUES:								
**	.6	110.	29.	11.2	.00*	66.1	.24	.032*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 5 SEP 88 (JULIAN DAY 249)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.0	15.	13.	5.6	.00	16.7	.00	.001
2	.0	14.	28.	6.4	.00	25.6	.00	.001
3	.0	63.	18.	6.7	.00	29.3	.00	.000
4	.4	34.	45.	6.6	.00	62.6	.00	.000
5	.8	115.	40.	7.0	.00	77.5	.00	.000
6	.8	22.	47.	7.4	.00	76.9	.02	.001
7	.4	25.	37.	12.3	.00	70.0	.19	.006
8	*****	*****	*****	*****	*****	*****	.41	*****
9	*****	*****	*****	*****	*****	*****	.63	*****
10	*****	*****	*****	*****	*****	*****	.79	*****
11	*****	*****	*****	*****	*****	*****	.90	*****
12	*****	*****	*****	*****	*****	*****	.91	*****
13	*****	*****	*****	*****	*****	*****	.86	*****
14	*****	*****	*****	*****	*****	*****	.74	*****
15	*****	*****	*****	*****	*****	*****	.57	*****
16	*****	*****	*****	*****	*****	*****	.37	*****
17	*****	*****	*****	*****	*****	*****	.16	*****
18	*****	*****	*****	*****	*****	*****	.01	*****
19	*****	*****	*****	*****	*****	*****	.00	*****
20	*****	*****	*****	*****	*****	*****	.00	*****
21	*****	*****	*****	*****	*****	*****	.00	*****
22	*****	*****	*****	*****	*****	*****	.00	*****
23	*****	*****	*****	*****	*****	*****	.00	*****
24	*****	*****	*****	*****	*****	*****	.00	*****
MINIMUM OBSERVED VALUES:								
**	.0	14.	13.	5.6	.00	16.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	.8	115.	47.	12.3	.00	77.5	.91	.006
AVERAGE OBSERVED VALUES:								
**	.3	38.	32.	7.4	.00*	51.2	.27	.009*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 6 SEP 88 (JULIAN DAY 250)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	.00	*****
2	*****	*****	*****	*****	*****	*****	.00	*****
3	*****	*****	*****	*****	*****	*****	.00	*****
4	*****	*****	*****	*****	*****	*****	.00	*****
5	*****	*****	*****	*****	*****	*****	.00	*****
6	*****	*****	*****	*****	*****	*****	.04	*****
7	*****	*****	*****	*****	*****	*****	.06	*****
8	*****	*****	*****	*****	*****	*****	.16	*****
9	*****	*****	*****	*****	*****	*****	.14	*****
10	*****	*****	*****	*****	*****	*****	.50	*****
11	*****	*****	*****	*****	*****	*****	.84	*****
12	4.1	283.	39.	29.0	.00	24.6	.86	.031
13	5.6	150.	34.	27.5	.00	28.1	.80	.029
14	8.2	189.	27.	26.2	.00	28.2	.68	.027
15	9.1	213.	19.	25.1	.00	31.0	.51	.022
16	9.5	177.	27.	23.7	.00	35.3	.25	.014
17	8.4	186.	25.	22.6	.00	39.1	.04	.006
18	9.0	186.	24.	22.3	.00	39.8	.00	.005
19	9.7	191.	25.	21.8	.00	40.2	.00	.005
20	12.4	202.	21.	21.2	.00	41.3	.00	.006
21	9.0	198.	22.	20.2	.00	42.2	.00	.004
22	6.9	190.	22.	18.8	.00	42.5	.00	.003
23	9.3	196.	21.	17.8	.00	44.6	.00	.004
24	11.2	194.	21.	16.8	.00	45.4	.00	.004
MINIMUM OBSERVED VALUES:								
**	4.1	150.	19.	16.8	.00	24.6	.00	.003
MAXIMUM OBSERVED VALUES:								
**	12.4	283.	39.	29.0	.00	45.4	.86	.031
AVERAGE OBSERVED VALUES:								
**	8.6	194.	25.	22.5	.00*	37.1	.20	.162*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 7 SEP 88 (JULIAN DAY 251)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	8.8	191.	22.	15.9	.00	47.1	.00	.003
2	7.7	190.	22.	15.1	.00	49.5	.00	.002
3	4.8	185.	25.	14.1	.00	52.3	.00	.002
4	4.4	146.	44.	13.2	.00	54.6	.00	.001
5	4.7	293.	42.	12.9	.00	55.4	.00	.001
6	3.2	267.	37.	12.7	.00	55.5	.03	.002
7	3.9	162.	40.	15.0	.00	53.2	.26	.009
8	5.1	181.	26.	15.8	.00	51.4	.42	.014
9	4.3	183.	28.	15.0	.00	51.2	.24	.009
10	4.6	182.	32.	15.4	.00	49.9	.25	.009
11	5.8	193.	29.	15.9	.00	49.3	.32	.011
12	6.5	184.	35.	19.1	.00	44.8	.97	.031
13	7.1	171.	32.	20.1	.00	43.4	1.03	.034
14	6.8	192.	29.	20.1	.00	42.5	.90	.030
15	5.0	190.	27.	19.5	.00	42.4	.55	.019
16	4.4	175.	30.	18.1	.00	43.4	.23	.009
17	4.1	203.	31.	17.2	.00	43.9	.07	.004
18	3.4	185.	24.	16.3	.00	44.9	.00	.002
19	1.9	196.	26.	14.2	.00	46.9	.00	.001
20	1.5	239.	33.	11.9	.00	51.1	.00	.001
21	1.8	147.	64.	11.2	.00	51.5	.00	.001
22	1.5	215.	34.	8.9	.00	52.9	.00	.001
23	.7	202.	31.	6.2	.00	57.9	.00	.000
24	.9	150.	32.	4.2	.00	64.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	.7	146.	22.	4.2	.00	42.4	.00	.000
MAXIMUM OBSERVED VALUES:								
**	8.8	293.	64.	20.1	.00	64.0	1.03	.034
AVERAGE OBSERVED VALUES:								
**	4.3	190.	32.	14.5	.00*	50.0	.22	.196*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 8 SEP 88 (JULIAN DAY 252)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.6	204.	44.	2.8	.00	68.5	.00	.000
2	1.0	6.	51.	1.6	.00	73.9	.00	.000
3	.7	119.	36.	.4	.00	77.1	.00	.000
4	.9	191.	35.	-.3	.00	81.1	.00	.000
5	.9	128.	46.	-.8	.00	82.4	.00	.000
6	.7	116.	35.	-1.1	.00	84.4	.00	.000
7	.6	23.	34.	4.9	.00	74.9	.20	.006
8	1.1	28.	22.	12.4	.00	51.1	.48	.015
9	.3	30.	0.	12.9	.00	50.0	.60	.018
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	.3	6.	0.	-1.1	.00	50.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	1.1	204.	51.	12.9	.00	84.4	.60	.018
AVERAGE OBSERVED VALUES:								
**	.8	86.	33.	3.6	.00*	71.5	.14	.040*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 9 SEP 88 (JULIAN DAY 253)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 10 SEP 88 (JULIAN DAY 254)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 11 SEP 88 (JULIAN DAY 255)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 12 SEP 88 (JULIAN DAY 256)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 13 SEP 88 (JULIAN DAY 257)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 14 SEP 88 (JULIAN DAY 258)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	*****	*****	*****	*****	*****	*****	*****	*****
13	*****	*****	*****	*****	*****	*****	*****	*****
14	*****	*****	*****	*****	*****	*****	*****	*****
15	*****	*****	*****	*****	*****	*****	*****	*****
16	*****	*****	*****	*****	*****	*****	*****	*****
17	*****	*****	*****	*****	*****	*****	*****	*****
18	*****	*****	*****	*****	*****	*****	*****	*****
19	*****	*****	*****	*****	*****	*****	*****	*****
20	*****	*****	*****	*****	*****	*****	*****	*****
21	*****	*****	*****	*****	*****	*****	*****	*****
22	*****	*****	*****	*****	*****	*****	*****	*****
23	*****	*****	*****	*****	*****	*****	*****	*****
24	*****	*****	*****	*****	*****	*****	*****	*****
MINIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
MAXIMUM OBSERVED VALUES:								
**	*****	*****	*****	*****	*****	*****	*****	*****
AVERAGE OBSERVED VALUES:								
**	*****	*****	*****	*****	******	*****	*****	******

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 15 SEP 88 (JULIAN DAY 259)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	*****	*****	*****	*****	*****	*****	*****	*****
2	*****	*****	*****	*****	*****	*****	*****	*****
3	*****	*****	*****	*****	*****	*****	*****	*****
4	*****	*****	*****	*****	*****	*****	*****	*****
5	*****	*****	*****	*****	*****	*****	*****	*****
6	*****	*****	*****	*****	*****	*****	*****	*****
7	*****	*****	*****	*****	*****	*****	*****	*****
8	*****	*****	*****	*****	*****	*****	*****	*****
9	*****	*****	*****	*****	*****	*****	*****	*****
10	*****	*****	*****	*****	*****	*****	*****	*****
11	*****	*****	*****	*****	*****	*****	*****	*****
12	4.6	14.	25.	25.7	.00	22.8	.86	.030
13	5.5	239.	23.	26.6	.00	22.4	.89	.032
14	5.7	202.	30.	26.9	.00	22.2	.87	.032
15	4.6	163.	36.	27.6	.00	22.5	.81	.029
16	3.8	199.	30.	27.3	.00	21.8	.65	.024
17	4.8	225.	32.	25.9	.00	21.6	.44	.018
18	2.9	210.	28.	24.6	.00	22.2	.21	.010
19	2.9	225.	16.	20.1	.00	24.2	.02	.003
20	1.9	207.	19.	15.8	.00	28.4	.00	.002
21	1.9	176.	28.	13.4	.00	32.6	.00	.001
22	1.2	175.	37.	11.3	.00	37.9	.00	.001
23	.9	129.	39.	9.6	.00	42.2	.00	.001
24	.8	186.	39.	8.7	.00	44.7	.00	.001
MINIMUM OBSERVED VALUES:								
**	.8	14.	16.	8.7	.00	21.6	.00	.001
MAXIMUM OBSERVED VALUES:								
**	5.7	239.	39.	27.6	.00	44.7	.89	.032
AVERAGE OBSERVED VALUES:								
**	3.2	196.	29.	20.3	.00*	28.1	.37	.184*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 16 SEP 88 (JULIAN DAY 260)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.7	135.	34.	7.9	.00	47.0	.00	.001
2	.9	157.	32.	7.8	.00	47.7	.00	.001
3	1.1	174.	31.	8.9	.00	45.4	.00	.001
4	1.0	216.	35.	10.1	.00	43.8	.00	.001
5	1.0	186.	31.	9.2	.00	45.2	.00	.001
6	2.9	232.	21.	11.5	.00	44.1	.00	.001
7	2.1	235.	33.	11.6	.00	44.4	.00	.001
8	3.4	218.	30.	12.1	.00	45.5	.03	.002
9	2.7	174.	28.	12.9	.00	45.6	.13	.005
10	5.8	194.	22.	12.0	.00	48.6	.17	.007
11	5.5	190.	25.	13.0	.00	47.5	.33	.011
12	4.2	191.	26.	14.3	.00	45.2	.42	.014
13	3.4	258.	29.	13.8	.00	44.4	.25	.009
14	2.6	206.	24.	12.6	.00	47.3	.08	.003
15	1.8	173.	33.	12.8	.00	47.9	.08	.003
16	2.4	124.	51.	12.5	.00	48.9	.06	.003
17	2.3	215.	33.	12.3	.00	49.8	.04	.002
18	1.6	200.	30.	12.4	.00	50.1	.05	.002
19	.6	95.	42.	11.6	.00	51.8	.01	.001
20	.9	231.	34.	9.9	.00	56.4	.00	.001
21	1.2	228.	15.	8.7	.00	60.2	.00	.000
22	1.0	192.	23.	7.1	.00	64.7	.00	.000
23	.9	221.	29.	5.4	.00	72.0	.00	.000
24	1.0	165.	37.	4.0	.00	76.4	.00	.000
MINIMUM OBSERVED VALUES:								
**	.6	95.	15.	4.0	.00	43.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.8	258.	51.	14.3	.00	76.4	.42	.014
AVERAGE OBSERVED VALUES:								
**	2.1	194.	30.	10.6	.00*	50.8	.07	.070*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 17 SEP 88 (JULIAN DAY 261)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	161.	33.	3.1	.00	79.1	.00	.000
2	.9	173.	40.	3.4	.00	78.5	.00	.000
3	.6	72.	42.	3.2	.00	79.5	.00	.000
4	2.0	202.	18.	4.1	.00	77.4	.00	.000
5	2.1	215.	15.	5.1	.00	71.3	.00	.000
6	1.9	223.	17.	5.3	.00	68.0	.00	.000
7	1.9	223.	15.	5.3	.00	65.2	.00	.000
8	2.2	191.	26.	6.5	.00	63.8	.00	.000
9	4.0	204.	27.	6.9	.00	64.7	.10	.004
10	2.0	309.	36.	8.1	.00	59.2	.23	.007
11	3.7	225.	26.	8.9	.00	53.4	.31	.010
12	3.8	238.	28.	9.1	.00	51.4	.30	.010
13	4.3	128.	27.	10.3	.00	50.2	.43	.014
14	4.2	159.	41.	11.4	.00	44.9	.48	.015
15	4.2	221.	31.	10.9	.00	44.5	.40	.013
16	4.6	259.	26.	8.1	.03	51.9	.07	.003
17	2.0	66.	42.	4.2	.18	77.9	.04	.001
18	1.9	46.	49.	3.3	.12	88.5	.00	.000
19	1.5	137.	20.	2.7	.04	94.0	.00	.000
20	1.5	169.	20.	2.1	.02	95.5	.00	.000
21	1.1	150.	22.	2.1	.00	96.5	.00	.000
22	.7	155.	33.	1.8	.00	97.3	.00	.000
23	.7	161.	43.	1.7	.00	97.5	.00	.000
24	.7	84.	34.	2.0	.01	97.6	.00	.000
MINIMUM OBSERVED VALUES:								
**	.6	46.	15.	1.7	.00	44.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.6	309.	49.	11.4	.18	97.6	.48	.015
AVERAGE OBSERVED VALUES:								
**	2.2	178.	29.	5.4	.40*	72.8	.10	.080*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 18 SEP 88 (JULIAN DAY 262)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.1	164.	31.	1.8	.00	98.1	.00	.000
2	1.1	91.	45.	1.1	.00	98.5	.00	.000
3	1.2	269.	31.	.6	.00	98.2	.00	.000
4	1.3	117.	33.	.8	.00	99.1	.00	.000
5	.8	148.	34.	1.2	.00	98.5	.00	.000
6	.8	317.	40.	1.4	.00	97.7	.00	.000
7	.7	299.	46.	1.5	.00	97.3	.00	.000
8	1.1	173.	23.	1.5	.00	95.9	.00	.000
9	1.1	125.	30.	1.9	.00	94.8	.04	.001
10	1.7	156.	33.	2.9	.00	88.7	.18	.005
11	1.9	171.	41.	4.1	.00	80.9	.31	.009
12	2.5	28.	23.	5.9	.00	68.1	.54	.016
13	2.0	304.	47.	8.8	.00	59.8	.76	.023
14	2.6	57.	35.	12.9	.00	47.5	.82	.025
15	3.0	87.	41.	12.0	.00	42.9	.45	.014
16	3.3	149.	27.	12.1	.00	42.8	.35	.012
17	2.2	158.	26.	12.1	.00	42.8	.27	.009
18	1.1	186.	25.	11.0	.00	45.1	.13	.005
19	1.5	224.	15.	8.3	.00	51.3	.02	.001
20	1.9	204.	16.	5.1	.00	65.4	.00	.000
21	1.0	232.	14.	3.7	.00	73.7	.00	.000
22	.9	238.	22.	3.0	.00	79.7	.00	.000
23	1.0	151.	41.	3.0	.00	82.6	.00	.000
24	1.0	88.	54.	3.4	.00	83.1	.00	.000
MINIMUM OBSERVED VALUES:								
**	.7	28.	14.	.6	.00	42.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.3	317.	54.	12.9	.00	99.1	.82	.025
AVERAGE OBSERVED VALUES:								
**	1.5	163.	32.	5.0	.00*	76.4	.16	.122*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 19 SEP 88 (JULIAN DAY 263)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	183.	38.	3.4	.00	83.5	.00	.000
2	1.1	198.	40.	3.3	.00	84.4	.00	.000
3	.7	166.	36.	3.2	.00	86.5	.00	.000
4	.6	138.	38.	3.1	.01	90.5	.00	.000
5	.8	119.	45.	3.3	.02	93.1	.00	.000
6	.8	272.	37.	3.3	.00	94.8	.00	.000
7	1.7	333.	20.	3.2	.01	95.1	.00	.000
8	.7	335.	26.	3.2	.03	95.0	.00	.000
9	.5	338.	27.	3.8	.05	95.0	.04	.001
10	.8	30.	19.	4.5	.02	93.5	.09	.003
11	1.2	21.	16.	5.6	.01	91.5	.18	.005
12	1.5	357.	17.	6.1	.01	89.9	.14	.004
13	1.3	0.	18.	6.5	.00	88.7	.15	.005
14	1.1	319.	39.	8.2	.02	83.9	.35	.010
15	2.0	175.	27.	9.5	.00	76.6	.38	.011
16	1.5	189.	40.	10.6	.00	69.3	.38	.012
17	1.4	351.	34.	8.8	.00	70.9	.06	.002
18	1.3	138.	55.	7.6	.00	79.0	.04	.001
19	1.5	235.	22.	7.3	.00	82.4	.01	.000
20	.9	244.	26.	6.0	.00	89.3	.00	.000
21	.5	333.	33.	6.0	.00	92.3	.00	.000
22	.7	139.	30.	5.8	.00	94.2	.00	.000
23	.5	274.	34.	5.3	.00	94.7	.00	.000
24	.5	292.	39.	4.7	.00	95.5	.00	.000
MINIMUM OBSERVED VALUES:								
**	.5	0.	16.	3.1	.00	69.3	.00	.000
MAXIMUM OBSERVED VALUES:								
**	2.0	357.	55.	10.6	.05	95.5	.38	.012
AVERAGE OBSERVED VALUES:								
**	1.0	285.	31.	5.5	.18*	87.9	.08	.056*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 20 SEP 88 (JULIAN DAY 264)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.0	192.	20.	4.7	.00	96.4	.00	.000
2	.7	265.	39.	5.0	.00	95.9	.00	.000
3	.7	178.	37.	5.1	.00	95.7	.00	.000
4	.5	349.	51.	5.1	.00	95.7	.00	.000
5	.5	267.	38.	5.1	.00	95.7	.00	.000
6	.5	135.	32.	4.8	.00	96.3	.00	.000
7	.5	120.	35.	4.6	.00	96.1	.00	.000
8	.4	178.	47.	4.7	.00	95.8	.01	.000
9	.5	49.	36.	6.3	.00	92.1	.13	.004
10	1.3	13.	31.	7.9	.00	78.9	.27	.008
11	1.9	348.	22.	8.4	.00	75.2	.20	.006
12	2.0	316.	21.	9.1	.00	70.4	.24	.007
13	2.6	304.	25.	10.3	.01	62.8	.37	.011
14	2.6	327.	20.	11.0	.00	55.6	.33	.010
15	2.8	262.	27.	12.8	.00	48.5	.60	.019
16	2.6	318.	25.	13.1	.00	46.0	.48	.015
17	1.5	263.	23.	12.8	.00	47.4	.24	.008
18	1.5	316.	24.	12.6	.00	48.5	.20	.007
19	2.3	235.	23.	8.2	.00	58.7	.00	.001
20	1.2	215.	17.	5.3	.00	81.3	.00	.000
21	.9	197.	29.	3.5	.00	89.1	.00	.000
22	1.0	196.	31.	2.0	.00	93.0	.00	.000
23	.6	212.	28.	.5	.00	94.6	.00	.000
24	.7	123.	38.	-.4	.00	95.8	.00	.000
MINIMUM OBSERVED VALUES:								
**	.4	13.	17.	-.4	.00	46.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	2.8	349.	51.	13.1	.01	96.4	.60	.019
AVERAGE OBSERVED VALUES:								
**	1.3	253.	30.	6.8	.01*	79.4	.13	.098*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 21 SEP 88 (JULIAN DAY 265)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	106.	43.	-1.0	.00	96.5	.00	.000
2	1.0	253.	39.	-1.4	.00	96.4	.00	.000
3	.8	173.	46.	-1.9	.00	95.7	.00	.000
4	1.0	247.	40.	-2.1	.00	95.3	.00	.000
5	.9	118.	50.	-2.4	.00	95.6	.00	.000
6	1.0	171.	37.	-2.7	.00	95.8	.00	.000
7	.9	7.	34.	-2.6	.00	95.5	.00	.000
8	1.0	175.	47.	-1.4	.00	95.2	.03	.001
9	1.6	50.	31.	1.7	.00	94.7	.26	.008
10	2.1	354.	22.	4.3	.00	92.0	.29	.009
11	3.8	118.	53.	10.2	.00	69.3	.44	.014
12	5.0	202.	20.	12.8	.00	48.2	.61	.019
13	5.3	223.	24.	12.6	.00	44.6	.48	.016
14	5.2	216.	21.	13.5	.00	42.9	.59	.019
15	4.8	195.	20.	13.4	.00	43.0	.44	.015
16	3.7	203.	23.	12.9	.00	43.7	.27	.009
17	3.5	177.	25.	12.3	.00	45.3	.15	.006
18	2.0	152.	32.	10.5	.00	48.6	.03	.002
19	2.0	165.	34.	7.8	.00	55.8	.00	.001
20	2.7	151.	24.	6.0	.00	64.1	.00	.000
21	1.9	164.	23.	4.5	.00	71.0	.00	.000
22	1.6	195.	25.	3.6	.00	75.1	.00	.000
23	1.5	137.	41.	2.0	.00	84.2	.00	.000
24	.9	129.	44.	.8	.00	89.3	.00	.000
MINIMUM OBSERVED VALUES:								
**	.8	7.	20.	-2.7	.00	42.9	.00	.000
MAXIMUM OBSERVED VALUES:								
**	5.3	354.	53.	13.5	.00	96.5	.61	.019
AVERAGE OBSERVED VALUES:								
**	2.3	170.	33.	4.7	.00*	74.1	.15	.118*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 22 SEP 88 (JULIAN DAY 266)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	.9	154.	42.	-.1	.00	92.6	.00	.000
2	.8	125.	45.	-.7	.00	94.4	.00	.000
3	.8	74.	41.	-1.3	.00	95.4	.00	.000
4	.8	204.	31.	-1.8	.00	96.0	.00	.000
5	.8	159.	43.	-2.3	.00	95.6	.00	.000
6	1.0	251.	44.	-2.5	.00	95.9	.00	.000
7	.7	192.	45.	-2.9	.00	95.5	.00	.000
8	.8	196.	42.	-2.8	.00	95.8	.00	.000
9	.8	12.	34.	1.0	.00	95.0	.29	.009
10	1.0	38.	22.	7.7	.00	85.6	.49	.014
11	2.0	349.	37.	12.6	.00	54.5	.71	.022
12	6.5	205.	20.	15.0	.00	35.4	.86	.028
13	7.6	216.	21.	15.7	.00	32.8	.94	.031
14	7.9	208.	22.	16.1	.00	32.2	.91	.030
15	7.0	197.	22.	15.4	.00	32.7	.62	.021
16	2.0	170.	33.	15.1	.00	33.7	.26	.009
17	3.4	214.	28.	14.3	.00	35.4	.16	.006
18	2.2	205.	35.	14.5	.00	36.6	.13	.005
19	3.4	171.	37.	12.6	.00	40.0	.00	.001
20	2.6	210.	20.	9.5	.00	46.7	.00	.001
21	1.8	167.	23.	7.6	.00	55.9	.00	.001
22	1.4	170.	26.	6.5	.00	63.2	.00	.000
23	1.1	100.	49.	5.2	.00	68.0	.00	.000
24	1.0	208.	36.	3.8	.00	76.3	.00	.000
MINIMUM OBSERVED VALUES:								
**	.7	12.	20.	-2.9	.00	32.2	.00	.000
MAXIMUM OBSERVED VALUES:								
**	7.9	349.	49.	16.1	.00	96.0	.94	.031
AVERAGE OBSERVED VALUES:								
**	2.4	183.	33.	6.6	.00*	66.0	.22	.179*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 23 SEP 88 (JULIAN DAY 267)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.2	192.	43.	2.9	.00	80.7	.00	.000
2	1.3	161.	29.	2.1	.00	84.5	.00	.000
3	1.0	219.	34.	1.2	.00	87.3	.00	.000
4	1.0	130.	39.	1.0	.00	89.8	.00	.000
5	1.1	152.	42.	.7	.00	91.3	.00	.000
6	1.5	124.	46.	.5	.00	92.6	.00	.000
7	1.2	146.	42.	.5	.00	92.8	.00	.000
8	1.3	215.	34.	1.8	.00	90.9	.02	.001
9	.9	206.	41.	5.6	.00	82.2	.15	.005
10	1.3	297.	43.	9.4	.00	65.8	.17	.005
11	2.2	338.	38.	12.8	.00	52.2	.28	.009
12	3.7	139.	39.	15.3	.00	40.6	.49	.016
13	5.0	129.	38.	16.8	.00	36.4	.74	.024
14	*****	*****	*****	*****	*****	*****	*****	*****
15	4.0	240.	12.	11.3	*****	35.7	.65	.021
16	2.6	263.	20.	10.0	*****	41.3	.12	.005
17	1.8	283.	19.	8.0	*****	55.8	.00	.001
18	2.1	194.	13.	6.0	*****	71.3	.00	.000
19	3.5	208.	21.	7.7	*****	63.8	.00	.001
20	5.0	214.	14.	10.0	*****	50.5	.00	.001
21	4.8	234.	18.	8.6	*****	54.3	.00	.001
22	4.5	238.	20.	10.0	*****	51.8	.00	.001
23	6.1	243.	21.	9.8	*****	49.0	.00	.001
24	5.5	216.	34.	9.0	*****	48.0	.00	.001
MINIMUM OBSERVED VALUES:								
**	.9	124.	12.	.5	.00	35.7	.00	.000
MAXIMUM OBSERVED VALUES:								
**	6.1	338.	46.	16.8	.00	92.8	.74	.024
AVERAGE OBSERVED VALUES:								
**	2.7	205.	30.	7.0	.00*	65.6	.11	.094*

REMARK: "*****" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 24 SEP 88 (JULIAN DAY 268)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	3.1	239.	34.	8.0	*****	44.3	.00	.001
2	2.6	239.	43.	7.8	*****	45.0	.00	.001
3	1.8	270.	34.	5.0	*****	49.5	.00	.001
4	1.8	221.	30.	3.0	*****	57.3	.00	.000
5	1.6	212.	22.	2.0	*****	63.8	.00	.000
6	1.5	225.	44.	4.5	*****	63.0	.00	.000
7	1.9	207.	33.	10.2	*****	43.5	.01	.001
8	2.6	199.	33.	12.0	*****	37.8	.15	.006
9	2.9	197.	28.	12.3	*****	33.5	.38	.013
10	2.5	198.	28.	12.0	*****	34.5	.65	.020
11	2.8	180.	20.	13.5	*****	33.0	.58	.019
12	3.0	176.	28.	14.8	*****	31.8	.39	.013
13	2.5	167.	21.	14.0	*****	32.1	.71	.022
14	1.9	189.	28.	13.3	*****	32.4	.65	.020
15	1.5	266.	12.	10.8	*****	33.4	.43	.014
16	1.5	261.	15.	8.0	*****	33.9	.24	.008
17	1.5	234.	25.	7.8	*****	34.6	.05	.002
18	1.4	198.	26.	7.5	*****	34.3	.00	.001
19	1.5	176.	29.	7.0	*****	35.0	.00	.001
20	1.8	216.	17.	5.5	*****	48.0	.00	.001
21	1.5	153.	23.	4.0	*****	53.3	.00	.000
22	1.5	188.	25.	2.5	*****	66.5	.00	.000
23	1.5	234.	18.	2.0	*****	71.0	.00	.000
24	1.5	194.	26.	2.0	*****	74.5	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.4	153.	12.	2.0	*****	31.8	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.1	270.	44.	14.8	*****	74.5	.71	.022
AVERAGE OBSERVED VALUES:								
**	2.0	209.	27.	7.9	******	45.3	.18	.144*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 25 SEP 88 (JULIAN DAY 269)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.5	207.	26.	2.8	*****	71.0	.00	.000
2	1.5	213.	26.	2.0	*****	73.5	.00	.000
3	1.5	234.	29.	2.0	*****	74.0	.00	.000
4	1.5	230.	30.	2.0	*****	75.5	.00	.000
5	1.5	288.	31.	2.0	*****	80.8	.00	.000
6	1.5	256.	36.	2.0	*****	89.0	.00	.000
7	1.5	189.	22.	2.0	*****	91.0	.00	.000
8	1.8	225.	18.	2.5	*****	93.5	.00	.000
9	1.8	340.	22.	4.0	*****	92.5	.05	.002
10	2.0	221.	26.	6.5	*****	86.8	.40	.012
11	2.9	162.	33.	9.5	*****	76.3	.60	.018
12	4.0	220.	17.	9.3	*****	61.0	.28	.009
13	3.5	212.	15.	7.0	*****	70.0	.20	.006
14	2.8	185.	16.	8.0	*****	72.0	.18	.006
15	2.5	221.	21.	9.8	*****	65.3	.10	.004
16	2.3	171.	21.	8.3	*****	72.3	.05	.002
17	2.7	185.	27.	7.5	*****	74.0	.00	.000
18	2.1	203.	24.	5.8	*****	86.5	.00	.000
19	2.8	194.	14.	7.2	*****	80.8	.00	.000
20	2.6	194.	21.	6.0	*****	77.5	.00	.000
21	2.9	189.	23.	7.5	*****	68.5	.00	.000
22	2.7	187.	35.	8.0	*****	61.0	.00	.001
23	3.4	223.	38.	6.8	*****	65.0	.00	.001
24	2.3	212.	21.	7.8	*****	65.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.5	162.	14.	2.0	*****	61.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.0	340.	38.	9.8	*****	93.5	.60	.018
AVERAGE OBSERVED VALUES:								
**	2.3	211.	25.	5.7	******	76.0	.08	.062*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 26 SEP 88 (JULIAN DAY 270)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	3.0	204.	45.	8.0	*****	61.0	.00	.001
2	2.5	270.	41.	6.8	*****	64.8	.00	.000
3	2.9	266.	18.	7.3	*****	64.8	.00	.001
4	2.0	246.	23.	6.8	*****	63.0	.00	.000
5	1.5	315.	33.	6.5	*****	75.0	.00	.000
6	1.5	355.	13.	4.0	*****	84.8	.00	.000
7	1.5	145.	27.	3.7	*****	87.0	.00	.000
8	1.5	193.	17.	3.0	*****	89.0	.00	.000
9	1.8	256.	15.	3.7	*****	90.0	.05	.002
10	1.5	342.	14.	4.6	*****	86.0	.18	.005
11	1.5	41.	14.	6.2	*****	78.0	.29	.009
12	1.5	20.	8.	6.0	*****	80.0	.19	.006
13	2.0	30.	11.	6.8	*****	78.5	.16	.005
14	2.0	32.	13.	8.0	*****	72.5	.27	.008
15	1.8	45.	20.	9.3	*****	69.5	.13	.004
16	1.5	41.	11.	9.0	*****	69.3	.16	.005
17	1.8	355.	11.	9.5	*****	67.5	.13	.004
18	1.5	270.	18.	8.0	*****	71.3	.05	.002
19	1.8	280.	14.	5.8	*****	82.0	.00	.000
20	1.5	175.	16.	4.5	*****	87.0	.00	.000
21	1.5	243.	23.	4.0	*****	90.0	.00	.000
22	1.3	266.	24.	4.0	*****	91.0	.00	.000
23	1.2	350.	20.	3.8	*****	91.0	.00	.000
24	1.4	186.	22.	3.2	*****	92.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.2	20.	8.	3.0	*****	61.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.0	355.	45.	9.5	*****	92.0	.29	.009
AVERAGE OBSERVED VALUES:								
**	1.7	303.	19.	5.9	******	78.5	.07	.053*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 27 SEP 88 (JULIAN DAY 271)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.3	306.	25.	3.0	*****	92.0	.00	.000
2	1.0	270.	17.	3.0	*****	92.0	.00	.000
3	1.2	234.	16.	3.0	*****	92.0	.00	.000
4	1.2	288.	18.	3.7	*****	92.0	.00	.000
5	1.5	189.	21.	4.0	*****	92.0	.00	.000
6	1.2	293.	24.	3.8	*****	92.0	.00	.000
7	1.5	217.	26.	3.8	*****	92.0	.00	.000
8	1.3	9.	35.	4.2	*****	91.0	.05	.002
9	1.5	27.	24.	5.3	*****	91.0	.08	.002
10	1.6	248.	28.	5.9	*****	88.0	.10	.003
11	2.3	183.	40.	6.0	*****	85.0	.20	.006
12	3.0	227.	31.	7.0	*****	74.0	.60	.018
13	2.8	216.	28.	7.2	*****	68.0	.55	.017
14	2.6	200.	45.	7.5	*****	63.3	.60	.018
15	2.6	337.	24.	4.8	*****	71.5	.10	.003
16	1.8	273.	29.	3.0	*****	87.0	.05	.002
17	2.8	360.	16.	2.0	*****	92.0	.00	.000
18	1.8	216.	17.	.5	*****	85.8	.00	.000
19	2.0	252.	28.	.0	*****	89.0	.00	.000
20	2.3	297.	19.	.0	*****	90.0	.00	.000
21	1.5	207.	27.	-1.7	*****	91.0	.00	.000
22	1.5	212.	15.	-2.3	*****	91.0	.00	.000
23	1.5	239.	21.	-3.3	*****	91.5	.00	.000
24	1.5	352.	24.	-4.0	*****	91.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.0	9.	15.	-4.0	*****	63.3	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.0	360.	45.	7.5	*****	92.0	.60	.018
AVERAGE OBSERVED VALUES:								
**	1.8	257.	25.	2.8	******	86.8	.10	.072*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"*" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 28 SEP 88 (JULIAN DAY 272)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.5	259.	23.	-3.5	*****	91.5	.00	.000
2	1.5	295.	33.	-4.0	*****	91.0	.00	.000
3	1.5	220.	23.	-4.2	*****	91.0	.00	.000
4	1.5	*****	*****	-5.0	*****	90.0	.00	.000
5	1.5	*****	*****	-5.0	*****	91.0	.00	.000
6	1.5	*****	*****	-4.5	*****	91.0	.00	.000
7	1.8	*****	*****	-3.8	*****	91.0	.00	.000
8	1.5	352.	38.	-2.3	*****	90.0	.00	.000
9	1.7	38.	20.	1.0	*****	87.0	.05	.002
10	2.0	41.	18.	4.0	*****	74.0	.20	.006
11	3.2	41.	18.	6.5	*****	54.0	.38	.012
12	2.8	293.	19.	10.0	*****	40.0	.70	.022
13	3.0	257.	17.	10.3	*****	36.5	.80	.025
14	3.2	244.	17.	11.0	*****	37.0	.75	.023
15	3.5	279.	25.	11.3	*****	37.5	.60	.019
16	2.0	235.	19.	10.5	*****	40.0	.25	.008
17	2.0	222.	21.	8.0	*****	49.0	.05	.002
18	2.2	245.	27.	4.1	*****	63.0	.00	.000
19	1.8	230.	36.	2.5	*****	77.0	.00	.000
20	1.8	261.	24.	1.0	*****	84.0	.00	.000
21	1.5	221.	18.	-.5	*****	89.0	.00	.000
22	1.5	207.	36.	-1.0	*****	90.5	.00	.000
23	1.5	185.	27.	-2.0	*****	91.0	.00	.000
24	1.5	254.	28.	-3.0	*****	90.5	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.5	38.	17.	-5.0	*****	36.5	.00	.000
MAXIMUM OBSERVED VALUES:								
**	3.5	352.	38.	11.3	*****	91.5	.80	.025
AVERAGE OBSERVED VALUES:								
**	2.0	255.	24.	1.7	******	73.6	.16	.120*

REMARK: "*******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 29 SEP 88 (JULIAN DAY 273)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.5	226.	29.	-2.0	*****	90.5	.00	.000
2	1.5	186.	27.	-2.0	*****	91.0	.00	.000
3	1.5	260.	21.	-2.5	*****	91.0	.00	.000
4	1.3	212.	19.	-3.7	*****	91.0	.00	.000
5	1.5	207.	40.	-4.0	*****	92.0	.00	.000
6	1.5	180.	35.	-4.0	*****	92.0	.00	.000
7	1.0	176.	35.	-4.3	*****	92.0	.00	.000
8	1.5	288.	16.	-5.0	*****	91.0	.00	.000
9	1.5	76.	17.	-2.8	*****	90.5	.15	.004
10	1.8	69.	19.	3.0	*****	83.3	.40	.012
11	2.0	62.	13.	8.0	*****	64.0	.60	.018
12	2.0	52.	16.	11.0	*****	40.0	.75	.023
13	2.0	53.	17.	13.5	*****	34.0	.80	.025
14	2.2	77.	21.	17.0	*****	30.0	.78	.025
15	3.5	248.	14.	18.0	*****	27.0	.69	.023
16	4.0	256.	17.	18.0	*****	28.0	.55	.019
17	3.2	288.	32.	18.0	*****	29.0	.31	.011
18	1.5	207.	32.	15.0	*****	35.0	.10	.004
19	1.5	248.	16.	9.0	*****	50.0	.00	.001
20	1.8	278.	13.	7.0	*****	61.0	.00	.000
21	1.7	216.	34.	6.0	*****	69.0	.00	.000
22	2.0	198.	33.	6.0	*****	72.0	.00	.000
23	1.8	167.	45.	5.0	*****	74.0	.00	.000
24	1.8	212.	20.	4.0	*****	76.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.0	52.	13.	-5.0	*****	27.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.0	288.	45.	18.0	*****	92.0	.80	.025
AVERAGE OBSERVED VALUES:								
**	1.9	211.	24.	5.3	******	66.4	.21	.166*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

WOODWARD-CLYDE CONSULTANTS INCORPORATED
AERO-METRIC DATA SYSTEM
BASELINE DATA REPORT

SELECTED STATION: LITTLE CHERRY CREEK

SELECTED PERIOD : 1 SEP 88 THRU 30 SEP 88
PERIOD OF RECORD: 30 SEP 88 (JULIAN DAY 274)

HR	WND SPD AT 10 MT MPH	WND DIR AT 10 MT DEG	SIGMA-T AT 10 MT DEG	TEMP AT 4 MT CEL	PRECIP AT 2 MT IN.	REL HUM AT 9 MT PCT	SOL RAD AT 9 MT LPM	EVAP AT 1 MT IN.
1	1.5	198.	50.	4.5	*****	73.0	.00	.000
2	1.9	167.	40.	4.0	*****	76.3	.00	.000
3	1.8	230.	20.	3.8	*****	78.5	.00	.000
4	2.0	221.	14.	4.2	*****	75.0	.00	.000
5	1.9	213.	40.	3.8	*****	74.0	.00	.000
6	1.9	171.	41.	1.8	*****	81.0	.00	.000
7	1.5	194.	34.	1.0	*****	86.0	.00	.000
8	1.5	216.	28.	1.0	*****	89.0	.05	.002
9	1.5	122.	26.	5.8	*****	82.0	.25	.007
10	1.5	50.	32.	11.2	*****	53.0	.42	.013
11	2.5	23.	12.	14.3	*****	42.0	.63	.020
12	3.0	38.	18.	17.3	*****	36.0	.78	.025
13	3.0	312.	21.	20.0	*****	29.0	.80	.026
14	3.3	249.	16.	21.0	*****	29.0	.72	.024
15	4.0	256.	18.	20.5	*****	30.0	.60	.021
16	3.5	259.	15.	20.0	*****	31.0	.32	.012
17	3.0	260.	16.	18.0	*****	33.0	.05	.004
18	1.8	196.	26.	14.0	*****	41.0	.00	.001
19	1.5	212.	40.	10.0	*****	54.0	.00	.001
20	1.5	212.	47.	7.0	*****	66.0	.00	.000
21	1.2	203.	23.	6.8	*****	77.0	.00	.000
22	1.3	234.	37.	4.2	*****	83.0	.00	.000
23	1.5	221.	27.	3.0	*****	87.0	.00	.000
24	1.5	203.	32.	2.0	*****	90.0	.00	.000
MINIMUM OBSERVED VALUES:								
**	1.2	23.	12.	1.0	*****	29.0	.00	.000
MAXIMUM OBSERVED VALUES:								
**	4.0	312.	50.	21.0	*****	90.0	.80	.026
AVERAGE OBSERVED VALUES:								
**	2.1	216.	28.	9.1	******	62.3	.19	.157*

REMARK: "******" INDICATES MISSING OBSERVATIONS.
"**" INDICATES DAILY OBSERVED TOTAL FOR PRECIPITATION AND EVAPORATION ONLY.

APPENDIX C
JOINT FREQUENCY DISTRIBUTIONS

MONTANA PROJECT
RAMSEY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX A

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00102	.00051	.00000	.00000	.00000	.00000	.00154	3.39
NNE	.00154	.00051	.00000	.00000	.00000	.00000	.00205	3.24
NE	.00000	.00051	.00000	.00000	.00000	.00000	.00051	4.87
ENE	.00154	.00000	.00102	.00000	.00000	.00000	.00256	5.55
E	.00205	.00205	.00000	.00000	.00000	.00000	.00409	4.59
ESE	.00205	.00461	.00205	.00000	.00000	.00000	.00870	5.33
SE	.00409	.01689	.01126	.00000	.00000	.00000	.03224	6.18
SSE	.00563	.01228	.00512	.00000	.00000	.00000	.02303	5.17
S	.00716	.00819	.00154	.00000	.00000	.00000	.01689	4.67
SSW	.00256	.00154	.00000	.00000	.00000	.00000	.00409	3.25
SW	.00154	.00000	.00000	.00000	.00000	.00000	.00154	2.14
WSW	.00154	.00000	.00000	.00000	.00000	.00000	.00154	2.35
W	.00154	.00000	.00000	.00000	.00000	.00000	.00154	1.97
WNW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
NW	.00102	.00000	.00000	.00000	.00000	.00000	.00102	2.52
NNW	.00154	.00000	.00000	.00000	.00000	.00000	.00154	1.51
TOTAL	.03480	.04708	.02098	.00000	.00000	.00000	.10287	
AVG SPD	2.79667	5.32798	8.14422	.00000	.00000	.00000		5.05

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 201

MONTANA PROJECT
RAMSEY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX B

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

	+------WIND SPEED CLASSES (KNOTS)-------+							AVERAGE WIND
DIRECTION	0-3	4-6	7-10	11-16	17-21	>21	TOTAL	SPEED
N	.00205	.00051	.00000	.00000	.00000	.00000	.00256	3.06
NNE	.00358	.00000	.00000	.00000	.00000	.00000	.00358	2.53
NE	.00154	.00000	.00000	.00000	.00000	.00000	.00154	2.23
ENE	.00051	.00051	.00000	.00000	.00000	.00000	.00102	2.52
E	.00051	.00000	.00000	.00000	.00000	.00000	.00051	1.48
ESE	.00000	.00000	.00102	.00000	.00000	.00000	.00102	7.35
SE	.00000	.00358	.00205	.00000	.00000	.00000	.00563	6.76
SSE	.00256	.00409	.00307	.00102	.00000	.00000	.01075	6.12
S	.00051	.00102	.00205	.00000	.00000	.00000	.00358	7.24
SSW	.00102	.00000	.00000	.00000	.00000	.00000	.00102	2.52
SW	.00409	.00000	.00000	.00000	.00000	.00000	.00409	2.10
WSW	.00102	.00000	.00000	.00000	.00000	.00000	.00102	1.78
W	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
WNW	.00051	.00000	.00000	.00000	.00000	.00000	.00051	.87
NW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
NNW	.00051	.00000	.00000	.00000	.00000	.00000	.00051	.78
TOTAL	.01842	.00972	.00819	.00102	.00000	.00000	.03736	
AVG SPD	2.20290	5.55149	8.34783	11.65217	.00000	.00000		4.68

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 73

MONTANA PROJECT
RAMSEY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX C

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00102	.00051	.00000	.00000	.00000	.00000	.00154	2.93
NNE	.00205	.00051	.00000	.00000	.00000	.00000	.00256	2.78
NE	.00051	.00000	.00000	.00000	.00000	.00000	.00051	2.09
ENE	.00051	.00000	.00000	.00000	.00000	.00000	.00051	1.22
E	.00102	.00000	.00000	.00000	.00000	.00000	.00102	2.00
ESE	.00051	.00051	.00000	.00000	.00000	.00000	.00102	3.39
SE	.00102	.00154	.00102	.00000	.00000	.00000	.00358	5.38
SSE	.00154	.00307	.00154	.00102	.00000	.00000	.00716	6.50
S	.00051	.00051	.00102	.00000	.00000	.00000	.00205	6.22
SSW	.00461	.00051	.00051	.00000	.00000	.00000	.00563	2.95
SW	.00256	.00000	.00000	.00000	.00000	.00000	.00256	2.12
WSW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
W	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
WNW	.00051	.00000	.00000	.00000	.00000	.00000	.00051	2.61
NW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
NNW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
TOTAL	.01638	.00716	.00409	.00102	.00000	.00000	.02866	
AVG SPD	2.18207	5.36025	8.08696	13.21739	.00000	.00000		4.21

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 56

MONTANA PROJECT
RAMSEY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX D

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00051	.00256	.00000	.00000	.00000	.00000	.00307	4.58
NNE	.00000	.00102	.00000	.00000	.00000	.00000	.00102	4.96
NE	.00000	.00051	.00000	.00000	.00000	.00000	.00051	6.00
ENE	.00051	.00000	.00000	.00000	.00000	.00000	.00051	.96
E	.00102	.00000	.00256	.00000	.00000	.00000	.00358	6.21
ESE	.00461	.00051	.00768	.00000	.00000	.00000	.01279	6.11
SE	.00614	.00358	.02354	.00563	.00000	.00000	.03889	7.97
SSE	.00051	.00614	.03173	.01382	.00051	.00000	.05271	9.36
S	.00205	.00358	.01177	.00205	.00000	.00000	.01945	7.38
SSW	.06858	.00000	.00051	.00000	.00000	.00000	.06909	2.57
SW	.02149	.00000	.00000	.00000	.00000	.00000	.02149	2.05
WSW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
W	.00051	.00000	.00000	.00000	.00000	.00000	.00051	1.65
WNW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
NW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
NNW	.00051	.00000	.00000	.00000	.00000	.00000	.00051	2.26
TOTAL	.10645	.01791	.07779	.02149	.00051	.00000	.22416	
AVG SPD	2.36789	5.82112	8.36728	12.90683	17.39130	.00000		5.77

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 438

MONTANA PROJECT
RAMSEY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX E

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00409	.00512	.00000	.00000	.00000	.00000	.00921	3.91
NNE	.00409	.00512	.00000	.00000	.00000	.00000	.00921	3.86
NE	.00051	.00102	.00000	.00000	.00000	.00000	.00154	4.23
ENE	.00000	.00205	.00000	.00000	.00000	.00000	.00205	5.50
E	.00102	.00358	.00000	.00000	.00000	.00000	.00461	4.79
ESE	.00307	.00768	.00000	.00000	.00000	.00000	.01075	4.83
SE	.00768	.02303	.00205	.00000	.00000	.00000	.03275	5.46
SSE	.00614	.02764	.00358	.00000	.00000	.00000	.03736	5.37
S	.00665	.01535	.00205	.00000	.00000	.00000	.02405	4.94
SSW	.05732	.00154	.00000	.00000	.00000	.00000	.05885	2.32
SW	.01433	.00000	.00000	.00000	.00000	.00000	.01433	2.18
WSW	.00154	.00000	.00000	.00000	.00000	.00000	.00154	1.42
W	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
WNW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
NW	.00051	.00000	.00000	.00000	.00000	.00000	.00051	2.52
NNW	.00102	.00000	.00000	.00000	.00000	.00000	.00102	1.78
TOTAL	.10798	.09212	.00768	.00000	.00000	.00000	.20778	
AVG SPD	2.15743	5.90386	7.54783	.00000	.00000	.00000		4.02

NUMBER OF CALM HOURS - 1
NUMBER OF HOURS OF DATA - 406

MONTANA PROJECT
RAMSEY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX F

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.01177	.00102	.00000	.00000	.00000	.00000	.01279	2.91
NNE	.02252	.00512	.00000	.00000	.00000	.00000	.02764	2.89
NE	.01689	.00102	.00000	.00000	.00000	.00000	.01791	2.12
ENE	.00768	.00256	.00000	.00000	.00000	.00000	.01024	2.67
E	.00819	.00358	.00000	.00000	.00000	.00000	.01177	2.83
ESE	.00665	.00563	.00000	.00000	.00000	.00000	.01228	3.39
SE	.02149	.01382	.00000	.00000	.00000	.00000	.03531	3.22
SSE	.02815	.01689	.00000	.00000	.00000	.00000	.04504	3.25
S	.03327	.02354	.00000	.00000	.00000	.00000	.05681	3.25
SSW	.09365	.00614	.00000	.00000	.00000	.00000	.09980	2.29
SW	.03275	.00051	.00000	.00000	.00000	.00000	.03327	1.92
WSW	.01279	.00000	.00000	.00000	.00000	.00000	.01279	1.68
W	.00819	.00000	.00000	.00000	.00000	.00000	.00819	1.80
WNW	.00358	.00000	.00000	.00000	.00000	.00000	.00358	2.04
NW	.00665	.00000	.00000	.00000	.00000	.00000	.00665	2.05
NNW	.00409	.00102	.00000	.00000	.00000	.00000	.00512	2.76
TOTAL	.31832	.08086	.00000	.00000	.00000	.00000	.39918	
AVG SPD	2.16049	4.67749	.00000	.00000	.00000	.00000		2.67

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 780

MONTANA PROJECT
RAMSEY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX ALL

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.02047	.01024	.00000	.00000	.00000	.00000	.03071	3.42
NNE	.03378	.01228	.00000	.00000	.00000	.00000	.04606	3.11
NE	.01945	.00307	.00000	.00000	.00000	.00000	.02252	2.42
ENE	.01075	.00512	.00102	.00000	.00000	.00000	.01689	3.35
E	.01382	.00921	.00256	.00000	.00000	.00000	.02559	3.88
ESE	.01689	.01894	.01075	.00000	.00000	.00000	.04657	4.92
SE	.04043	.06244	.03992	.00563	.00000	.00000	.14841	5.79
SSE	.04452	.07011	.04504	.01586	.00051	.00000	.17605	6.09
S	.05015	.05220	.01842	.00205	.00000	.00000	.12282	4.60
SSW	.22774	.00972	.00102	.00000	.00000	.00000	.23849	2.41
SW	.07677	.00051	.00000	.00000	.00000	.00000	.07728	2.02
WSW	.01689	.00000	.00000	.00000	.00000	.00000	.01689	1.72
W	.01024	.00000	.00000	.00000	.00000	.00000	.01024	1.82
WNW	.00461	.00000	.00000	.00000	.00000	.00000	.00461	1.97
NW	.00819	.00000	.00000	.00000	.00000	.00000	.00819	2.14
NNW	.00768	.00102	.00000	.00000	.00000	.00000	.00870	2.28
TOTAL	.60235	.25486	.11873	.02354	.00051	.00000	1.00000	
AVG SPD	2.23523	5.37384	8.26387	12.86578	17.39130	.00000		4.01

NUMBER OF CALM HOURS - 1
NUMBER OF MISSING HOURS - 254
NUMBER OF HOURS OF DATA - 1954

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX A

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.01661	.00000	.00000	.00000	.00000	.00000	.01661	2.77
NNE	.00447	.00000	.00000	.00000	.00000	.00000	.00447	2.65
NE	.00447	.00000	.00000	.00000	.00000	.00000	.00447	2.37
ENE	.00447	.00000	.00000	.00000	.00000	.00000	.00447	2.27
E	.00319	.00000	.00000	.00000	.00000	.00000	.00319	2.78
ESE	.00575	.00128	.00000	.00000	.00000	.00000	.00703	3.00
SE	.00575	.00256	.00000	.00000	.00000	.00000	.00831	3.09
SSE	.01086	.00256	.00000	.00000	.00000	.00000	.01342	2.87
S	.02556	.00895	.00256	.00000	.00000	.00000	.03706	3.19
SSW	.02300	.02045	.00192	.00000	.00000	.00000	.04537	3.90
SW	.01981	.03259	.00128	.00000	.00000	.00000	.05367	4.40
WSW	.01022	.01022	.00000	.00000	.00000	.00000	.02045	4.01
W	.00895	.00383	.00000	.00000	.00000	.00000	.01278	3.10
WNW	.00767	.00064	.00000	.00000	.00000	.00000	.00831	2.52
NW	.01022	.00128	.00000	.00000	.00000	.00000	.01150	2.51
NNW	.00639	.00000	.00000	.00000	.00000	.00000	.00639	2.65
TOTAL	.16741	.08435	.00575	.00000	.00000	.00000	.25751	
AVG SPD	2.47328	5.15547	7.56522	.00000	.00000	.00000		3.47

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 403

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX B

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00958	.00000	.00000	.00000	.00000	.00000	.00958	2.31
NNE	.00447	.00000	.00000	.00000	.00000	.00000	.00447	2.19
NE	.00511	.00000	.00000	.00000	.00000	.00000	.00511	1.65
ENE	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
E	.00064	.00000	.00000	.00000	.00000	.00000	.00064	.52
ESE	.00000	.00064	.00000	.00000	.00000	.00000	.00064	4.43
SE	.00447	.00000	.00000	.00000	.00000	.00000	.00447	1.75
SSE	.00319	.00064	.00000	.00000	.00000	.00000	.00383	2.49
S	.00703	.00128	.00000	.00000	.00000	.00000	.00831	2.62
SSW	.01022	.00319	.00128	.00000	.00000	.00000	.01470	3.32
SW	.01470	.00383	.00064	.00000	.00000	.00000	.01917	2.56
WSW	.00958	.00128	.00000	.00000	.00000	.00000	.01086	2.86
W	.00447	.00000	.00000	.00000	.00000	.00000	.00447	2.02
WNW	.00319	.00000	.00000	.00000	.00000	.00000	.00319	2.17
NW	.00128	.00000	.00000	.00000	.00000	.00000	.00128	1.52
NNW	.00383	.00000	.00000	.00000	.00000	.00000	.00383	1.87
TOTAL	.08179	.01086	.00192	.00000	.00000	.00000	.09457	
AVG SPD	2.03669	4.92583	8.63768	.00000	.00000	.00000		2.50

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 148

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX C

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00895	.00000	.00000	.00000	.00000	.00000	.00895	2.27
NNE	.00703	.00000	.00000	.00000	.00000	.00000	.00703	1.29
NE	.00575	.00000	.00000	.00000	.00000	.00000	.00575	1.39
ENE	.00128	.00000	.00000	.00000	.00000	.00000	.00128	1.22
E	.00256	.00000	.00000	.00000	.00000	.00000	.00256	.85
ESE	.00256	.00064	.00000	.00000	.00000	.00000	.00319	2.92
SE	.00128	.00000	.00000	.00000	.00000	.00000	.00128	2.26
SSE	.00511	.00000	.00000	.00000	.00000	.00000	.00511	1.92
S	.01022	.00192	.00064	.00000	.00000	.00000	.01278	2.39
SSW	.01214	.00192	.00064	.00000	.00000	.00000	.01470	2.14
SW	.01022	.00000	.00000	.00000	.00000	.00000	.01022	1.56
WSW	.00192	.00064	.00000	.00000	.00000	.00000	.00256	2.52
W	.00319	.00000	.00000	.00000	.00000	.00000	.00319	1.20
WNW	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
NW	.00128	.00064	.00000	.00000	.00000	.00000	.00192	3.71
NNW	.00192	.00000	.00000	.00000	.00000	.00000	.00192	2.12
TOTAL	.07540	.00575	.00128	.00000	.00000	.00000	.08243	
AVG SPD	1.64112	5.09179	7.47826	.00000	.00000	.00000		1.97

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 129

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX D

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00703	.00000	.00064	.00000	.00000	.00000	.00767	1.71
NNE	.00895	.00000	.00000	.00000	.00000	.00000	.00895	1.15
NE	.00575	.00000	.00000	.00000	.00000	.00000	.00575	.93
ENE	.00256	.00064	.00000	.00000	.00000	.00000	.00319	1.44
E	.00064	.00000	.00000	.00000	.00000	.00000	.00064	1.91
ESE	.00128	.00000	.00000	.00000	.00000	.00000	.00128	.52
SE	.00383	.00000	.00000	.00000	.00000	.00000	.00383	.64
SSE	.00895	.00064	.00000	.00000	.00064	.00000	.01022	2.91
S	.00958	.00128	.00064	.00000	.00000	.00000	.01150	2.17
SSW	.01150	.00128	.00128	.00000	.00000	.00000	.01406	2.37
SW	.00958	.00128	.00000	.00000	.00000	.00000	.01086	1.54
WSW	.00256	.00128	.00000	.00000	.00000	.00000	.00383	2.70
W	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
WNW	.00128	.00000	.00000	.00000	.00000	.00000	.00128	1.57
NW	.00064	.00000	.00000	.00000	.00000	.00000	.00064	1.74
NNW	.00256	.00000	.00064	.00000	.00000	.00000	.00319	3.17
TOTAL	.07668	.00639	.00319	.00000	.00064	.00000	.08690	
AVG SPD	1.26159	4.86087	8.55652	.00000	17.13044	.00000		1.91

NUMBER OF CALM HOURS - 0
NUMBER OF HOURS OF DATA - 136

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX E

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.00703	.00000	.00000	.00000	.00000	.00000	.00703	.67
NNE	.00703	.00064	.00000	.00000	.00000	.00000	.00767	1.38
NE	.00575	.00000	.00000	.00000	.00000	.00000	.00575	1.13
ENE	.00383	.00000	.00000	.00000	.00000	.00000	.00383	.90
E	.00511	.00000	.00000	.00000	.00000	.00000	.00511	.74
ESE	.00575	.00000	.00000	.00000	.00000	.00000	.00575	1.16
SE	.00767	.00000	.00000	.00000	.00000	.00000	.00767	.61
SSE	.00767	.00064	.00000	.00000	.00000	.00000	.00831	1.28
S	.01022	.00064	.00000	.00000	.00000	.00000	.01086	1.79
SSW	.01406	.00064	.00000	.00000	.00000	.00000	.01470	1.55
SW	.00895	.00064	.00000	.00000	.00000	.00000	.00958	1.48
WSW	.00447	.00064	.00000	.00000	.00000	.00000	.00511	1.50
W	.00000	.00000	.00000	.00000	.00000	.00000	.00000	.00
WNW	.00128	.00000	.00000	.00000	.00000	.00000	.00128	1.96
NW	.00064	.00000	.00000	.00000	.00000	.00000	.00064	.17
NNW	.00128	.00000	.00000	.00000	.00000	.00000	.00128	1.00
TOTAL	.09073	.00383	.00000	.00000	.00000	.00000	.09457	
AVG SPD	1.10533	4.89855	.00000	.00000	.00000	.00000		1.26

NUMBER OF CALM HOURS - 1
NUMBER OF HOURS OF DATA - 148

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX F

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.01086	.00000	.00000	.00000	.00000	.00000	.01086	.75
NNE	.01214	.00000	.00000	.00000	.00000	.00000	.01214	.57
NE	.01086	.00000	.00000	.00000	.00000	.00000	.01086	.51
ENE	.00767	.00000	.00000	.00000	.00000	.00000	.00767	.67
E	.02173	.00000	.00000	.00000	.00000	.00000	.02173	.62
ESE	.03706	.00000	.00000	.00000	.00000	.00000	.03706	.63
SE	.05879	.00000	.00000	.00000	.00000	.00000	.05879	.73
SSE	.04920	.00064	.00000	.00000	.00000	.00000	.04984	.81
S	.05048	.00128	.00000	.00000	.00000	.00000	.05176	1.19
SSW	.03962	.00064	.00000	.00000	.00000	.00000	.04026	1.28
SW	.03706	.00192	.00000	.00000	.00000	.00000	.03898	1.43
WSW	.01278	.00064	.00000	.00000	.00000	.00000	.01342	1.47
W	.01342	.00000	.00000	.00000	.00000	.00000	.01342	1.08
WNW	.00958	.00064	.00000	.00000	.00000	.00000	.01022	1.00
NW	.00511	.00000	.00000	.00000	.00000	.00000	.00511	.93
NNW	.00192	.00000	.00000	.00000	.00000	.00000	.00192	1.01
TOTAL	.37827	.00575	.00000	.00000	.00000	.00000	.38403	
AVG SPD	.89997	4.48309	.00000	.00000	.00000	.00000		.95

NUMBER OF CALM HOURS - 2
NUMBER OF HOURS OF DATA - 601

MONTANA PROJECT
LITTLE CHERRY

JOINT FREQUENCY DISTRIBUTION
(WIND SPEED, DIRECTION, AND STABILITY)

STABILITY INDEX ALL

FROM JULY 1 1988 THROUGH SEPTEMBER 30 1988

DIRECTION	+------WIND SPEED CLASSES (KNOTS)-------+ 0-3	4-6	7-10	11-16	17-21	>21	TOTAL	AVERAGE WIND SPEED
N	.06006	.00000	.00064	.00000	.00000	.00000	.06070	1.88
NNE	.04409	.00064	.00000	.00000	.00000	.00000	.04473	1.31
NE	.03770	.00000	.00000	.00000	.00000	.00000	.03770	1.18
ENE	.01981	.00064	.00000	.00000	.00000	.00000	.02045	1.22
E	.03387	.00000	.00000	.00000	.00000	.00000	.03387	.88
ESE	.05240	.00256	.00000	.00000	.00000	.00000	.05495	1.16
SE	.08179	.00256	.00000	.00000	.00000	.00000	.08435	1.03
SSE	.08498	.00511	.00000	.00000	.00064	.00000	.09073	1.53
S	.11310	.01534	.00383	.00000	.00000	.00000	.13227	2.09
SSW	.11054	.02812	.00511	.00000	.00000	.00000	.14377	2.54
SW	.10032	.04026	.00192	.00000	.00000	.00000	.14249	2.72
WSW	.04153	.01470	.00000	.00000	.00000	.00000	.05623	2.80
W	.03003	.00383	.00000	.00000	.00000	.00000	.03387	1.98
WNW	.02300	.00128	.00000	.00000	.00000	.00000	.02428	1.75
NW	.01917	.00192	.00000	.00000	.00000	.00000	.02109	2.08
NNW	.01789	.00000	.00064	.00000	.00000	.00000	.01853	2.24
TOTAL	.87029	.11693	.01214	.00000	.00064	.00000	1.00000	
AVG SPD	1.42693	5.07341	7.98627	.00000	17.13044	.00000		1.94

NUMBER OF CALM HOURS - 3
NUMBER OF MISSING HOURS - 643
NUMBER OF HOURS OF DATA - 1565

APPENDIX D
DERIVATION OF EVAPORATION DATA

Calculation of hourly evaporation is based on empirical relationships between evaporation and commonly measured meteorological parameters as compiled by Dr. H. L. Penman (Penman, 1947 and 1954) (included in reference list). These meteorological parameters are:

- Wind speed
- Solar radiation
- Ambient temperature
- Relative humidity

Total evaporation is composed of contributions from solar energy (radiation) and the combined drying effect of wind speed and relative humidity. The general equation describing this relationship is:

$$E_o + \frac{\Delta/\delta \; H_o + E_a}{\Delta/\delta + 1}$$

Where:

Δ/δ - weighting factor, assigned the value of 2 based on studies in northwest Europe

H_o - evaporation induced by solar energy

E_a - evaporation induced by "drying power" of the air (i.e., wind and relative humidity)

Thus, assuming Δ/∂ as 2 results in a weighted average of evaporation induced solely by solar energy and evaporation induced solely by the "drying power" of the air where the solar energy contribution is given greater weight. The resultant equation is:

$$E_o = \frac{2H_o + E_a}{3}$$

The solar energy term, H_o, is computed by considering the following physical relationship which can be referenced in numerous scientific handbooks:

> 1 calorie of heat supplies the energy required to evaporate 1.85658×10^{-3} cubic meter (M^3) of water

Solar radiation is measured as an hourly average in langleys per minute at the site where a langley is equivalent to calories per square centimeter (CM^2). To obtain the hourly solar radiation, the measured value is multiplied by 60 (60 minutes per hour). The hourly evaporation contribution from solar radiation, converted to millimeters (mm), is computed by the equation:

$$H_o = S_R \times 60 \text{ min/hr} \times 1.85658 \times 10^{-3} \text{ cm}^3 \times 10 \text{ mm/cm}$$
(in mm)

Where:

> S_R = the hourly averaged solar radiation expressed as langleys (cal/cm^2) per minute

The general equation for E_a, evaporation induced by the "drying power" of the air is:

$$E_a = f(u)\ (e_o - e_d)$$

Where:

> $f(u)$ = a function relating evaporation to the wind speed, u

e_o = saturation vapor pressure (in mm)

e_d = ambient vapor pressure (in mm)

Penman has empirically estimated f(u) to be:

$$f(u) = 0.35\ (0.5 + U_2/100)$$

Where:

U_2 = wind run, in miles per day, as referenced at a height of 2 meters above ground

The power law relationship between wind speed measured at two different heights is generally:

$$U_R = \left(\frac{h_r}{h_m}\right)^a U_m$$

Where:

U_R = wind speed measured at reference height, 2 meters in this case

h_r = reference height wind speed in meters, 2 meters, in this case

U_m = measured wind speed

h_m = height of measured wind speed

a = exponent dependent on stability

Since on-site wind speed is measured at 10 meters and the exponent, a, can be estimated as 0.14254 by assuming long-term stability as nearly neutral,

the resultant coefficient to multiply wind speeds measured at 10 meters to obtain an equivalent wind speed at 2 meters is:

$$(2/10)^{.14254} = 0.795$$

Thus, on-site wind speed is multiplied by 0.795 to get the equivalent wind speed at 2 meters as required by the equation for E_a.

The equivalent wind run, miles per day, is calculated by multiplying the hourly-averaged wind speed estimated at 2 meters by 24 (24 hours per day). Values for e_o and e_d are computed by using the following equation referenced in meteorological textbooks.:

$$e_T = 4.583 \exp [5415.29332 (\frac{1}{273.15} - \frac{1}{T})$$

Where:

e_T = water vapor pressure at air temperature, T, in mm

T = air temperature in °K

The coefficient, 4.583, is the water vapor pressure, in mm, at 0°C or 273.15°K. The number, 5415.29332, is computed from:

$$\frac{M_V L}{R^*} = \frac{(18.026 \text{ gm/gm-mole})(597.3 \text{ cal/g})}{1.987142 \text{ cal/gm-mole } ^oK} = 5415.29332$$

Where:

M_v = molecular weight of water vapor
L = latent heat of evaporation
R* = ideal gas constant

The hourly E_a is finally calculated by dividing daily E_a by 24 since U_2 is expressed as a daily wind run.

The computed values of H_o and E_a are substituted into the expression for E_o and divided by 25.4 to convert mm to inches (in.) of evaporation for a particular hour.

These relationships were computerized to produce the results shown in the text and tables.

APPENDIX E
CALIBRATION DATA

HIGH VOLUME SAMPLER CALIBRATION DATA SHEET

Project: U S Borax Station: Barney Creek #1 Date: 7/1/88

Instrument Description: [illegible]

Model No.: [illegible] Serial No: 28-[illegible] Performed by: [illegible]

Orifice No.: [illegible] Orifice Calibration Date: [illegible]

Comments: Initial calibration

AMBIENT CONDITIONS

Station Temperature: Ta = _____ °F = 20.5 °C at 1809 MST

Station Barometric Pressure:

1. Station Elevation = _____ Feet ASL
2. Altitude Temperature Correction = + _____ Feet
   - _____ Feet
3. Temperature Corrected Altitude = _____ Feet ASL
4. Barometric Pressure at Temperature Corrected Altitude = 25.80 "Hg

FLOW RATE CALCULATION

STP Correction Factor $= \left(\frac{Pa}{Ps} \times \frac{Ts}{Td}\right)^{1/2} = \left(\frac{[illegible]\ \text{"Hg}}{29.92\ \text{"Hg}} \times \frac{298°K}{273°K + [illegible]°C}\right)^{1/2} = .936$

Flow Rate As Found $\Delta P \equiv$ _____ cmm^x _____ = scmm = _____ scfm

Flow Rate As Left: 40 scfm^x $\frac{1}{.936}$ = 42.7 cfm

= 1.210 cmm $\equiv$ 5.8 "H_2O ΔP

(.028317 X CFM = CMM)

MANOMETER READINGS

ΔP As Found = _____ "H_2O ΔP As Left = 5.8 "H_2O

ROTAMETER/FLOWMETER READINGS

Plate Holes:	None	5	7	10	13	18
Manometer Reading ("H_2O):	____	____	____	____	____	____
Rotameter Reading :	____	____	____	____	____	____

HIGH VOLUME FIELD CALIBRATION

Record Sheet

Location of Sampler: Montana Silver Venture Ramsey Creek

ORIFICE #	8071586
Date of Calibration	7/1/88
Calibrated By	MWS
Temperature	20.5
Barometric Pressure	25.80
High Volume Unit #	1
Length of Power Cord	10'

New Items	Yes or No
Brushes	new Hi-vol
Motor	✓
Motor Cushion	✓
Tubing	✓
Pressure Transducer Pen	✓
Motor Case	✓
Extension Cord	✓
Filter Gaskets	✓

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer	Q_1
18					
13					
10					
7					
5					

Q_1 = Flow (m^3/min) from orifice curve

Inspection	Ok or Not Ok
Timer	ok
Transformer	✓
Shelter	✓
Platform	✓
Pressure Transducer	✓
Power Cord	✓

Description of other maintenance work performed

PreMaintenance Span

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer
18				

HIGH VOLUME SAMPLER CALIBRATION DATA SHEET

Project: USFWS Station: [illegible] Date: [illegible]

Instrument Description: [illegible] 10

Model No.: [illegible] Serial No: [illegible] Performed by: [illegible]

Orifice No.: [illegible] Orifice Calibration Date: [illegible]

Comments: Initial cal

AMBIENT CONDITIONS

Station Temperature: Ta = _____ °F = 20.5 °C at 1820 MST

Station Barometric Pressure:

1. Station Elevation = _____ Feet ASL
2. Altitude Temperature Correction = + _____ Feet
   - _____ Feet
3. Temperature Corrected Altitude = _____ Feet ASL
4. Barometric Pressure at Temperature Corrected Altitude = 25.8 "Hg

FLOW RATE CALCULATION

STP Correction Factor $= \left(\frac{Pa}{Ps} \times \frac{Ts}{Td}\right)^{1/2} = \left(\frac{25.8 \text{ "Hg}}{29.92 \text{ "Hg}} \times \frac{298°K}{273°K + \_\_°C}\right)^{1/2} =$ [illegible]

Flow Rate As Found $\Delta P \equiv$ _____ cmm^x _____ = scmm = _____ scfm

Flow Rate As Left: 40 scfm^x $\frac{1}{.936}$ = 42.7 cfm

= 1.210 cmm $\equiv$ 5.8 "H_2O ΔP

(.028317 X CFM = CMM)

MANOMETER READINGS

ΔP As Found = _____ "H_2O ΔP As Left = 5.8 "H_2O

ROTAMETER/FLOWMETER READINGS

Plate Holes:	None	5	7	10	13	18
Manometer Reading ("H_2O):	____	____	____	____	____	____
Rotameter Reading :	____	____	____	____	____	____

HIGH VOLUME FIELD CALIBRATION

Record Sheet

Location of Sampler: Montana Silver Venture Ramsey Creek

ORIFICE #	8071586
Date of Calibration	7/1/88
Calibrated By	MWS
Temperature	20.5
Barometric Pressure	25.8
High Volume Unit #	2
Length of Power Cord	10'

New Items	Yes or No
Brushes	New hibol
Motor	
Motor Cushion	
Tubing	
Pressure Transducer Pen	
Motor Case	
Extension Cord	
Filter Gaskets	

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer	Q_1
18					
13					
10					
7					
5					

Q_1 = Flow (m^3/min) from orifice curve

Inspection	Ok or Not Ok
Timer	ok
Transformer	
Shelter	
Platform	
Pressure Transducer	
Power Cord	

Description of other maintenance work performed

PreMaintenance Span

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer
18				

HIGH VOLUME SAMPLER CALIBRATION DATA SHEET (TSP)

Project: 22134 Station: Little Cherry Ck. #3 Date: 7/1/88

Instrument Description: GMW Hi Vol

Model No.: 2310-10-8000 Serial No: 28-7 Performed by: MWS

Orifice No.: 8071586 Orifice Calibration Date: 5/2/88

Comments:

AMBIENT CONDITIONS

Station Temperature: Ta = _____ °F = 27.4 °C at 1509 MST

Station Barometric Pressure:

1. Station Elevation = _____ Feet ASL
2. Altitude Temperature Correction = + _____ Feet
   - _____ Feet
3. Temperature Corrected Altitude = _____ Feet ASL
4. Barometric Pressure at Temperature Corrected Altitude = 26.80 "Hg

FLOW RATE CALCULATION

STP Correction Factor $= \left(\frac{Pa}{Ps} \times \frac{Ts}{Td}\right)^{1/2} = \left(\frac{26.80 \text{ "Hg}}{29.92 \text{ "Hg}} \times \frac{298°K}{273°K + 22.4°C}\right)^{1/2} = .943$

Flow Rate As Found $\Delta P \equiv$ 1.275 cmm × .943 = 1.202 = scmm = 42.5 scfm

Flow Rate As Left: 40 scfm × $\frac{1}{.943}$ = 42.4 cfm

= 1.201 cmm ≡ 5.7 "H_2O ΔP

(.028317 X CFM = CMM)

MANOMETER READINGS

ΔP As Found = 6.4 "H_2O ΔP As Left = 5.7 "H_2O

ROTAMETER/FLOWMETER READINGS

Plate Holes:	None	5	7	10	13	18
Manometer Reading ("H_2O):	6.7	1.9	2.9	4.0	4.8	5.5
Rotameter Reading :	38	20	27	31	33	35

HIGH VOLUME FIELD CALIBRATION

Record Sheet

Location of Sampler:	Montana Silver Venture Little Cherry
ORIFICE #	8071586
Date of Calibration	7/6/88
Calibrated By	MLS
Temperature	27.4 °C
Barometric Pressure	26.8
High Volume Unit #	3
Length of Power Cord	10'

New Items	Yes or No
Brushes	new
Motor	
Motor Cushion	
Tubing	
Pressure Transducer Pen	
Motor Case	
Extension Cord	
Filter Gaskets	

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer	Q_1
18					
13					
10					
7					
5					

Inspection	Ok or Not Ok
Timer	
Transformer	
Shelter	
Platform	
Pressure Transducer	✓
Power Cord	✓

Q_1 = Flow (m^3/min) from orifice curve

Description of other maintenance work performed

PreMaintenance Span

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer
18				

HIGH VOLUME SAMPLER CALIBRATION DATA SHEET (PM10)

Project: 22134 Station: Little Cherry Ck #4 Date: 7/1/88

Instrument Description: PM10

Model No.: IP10 8000 Serial No: 28-7 Performed by: MWS

Orifice No.: 807-586 Orifice Calibration Date: 5/2/88

Comments: Dixon chart NG

AMBIENT CONDITIONS

Station Temperature: Ta = _____ °F = 27.6 °C at 1532 MST

Station Barometric Pressure:

1. Station Elevation = _____ Feet ASL
2. Altitude Temperature Correction = + _____ Feet
   - _____ Feet
3. Temperature Corrected Altitude = _____ Feet ASL
4. Barometric Pressure at Temperature Corrected Altitude = 26.80 "Hg

FLOW RATE CALCULATION

STP Correction Factor $= \left(\frac{Pa}{Ps} \times \frac{Ts}{Td}\right)^{1/2} = \left(\frac{26.80\ \text{"Hg}}{29.92\ \text{"Hg}} \times \frac{298°K}{273°K + 22.2°C}\right)^{1/2} = .942$

Flow Rate As Found $\Delta P \equiv$ 1.182 cmm × .942 = 1.113 = scmm = 39.3 scfm

Flow Rate As Left: 40 scfm × $\frac{1}{.942}$ = 42.5 cfm

= 1.202 cmm ≡ 5.7 "H_2O ΔP

(.028317 X CFM = CMM)

MANOMETER READINGS

ΔP As Found = 5.5 "H_2O ΔP As Left = 5.7 "H_2O

ROTAMETER/FLOWMETER READINGS

Plate Holes:	None	5	7	10	13	18
Manometer Reading ("H_2O):	6.2				4.7	5.3
Rotameter Reading :	~~NR~~ 35				31	32

HIGH VOLUME FIELD CALIBRATION

Record Sheet

Location of Sampler:	Montana · Silver Venture Little Cherry
ORIFICE #	8071586
Date of Calibration	7/1/88
Calibrated By	MWS
Temperature	27.6°C
Barometric Pressure	26.8
High Volume Unit #	4
Length of Power Cord	10'

New Items	Yes or No
Brushes	New
Motor	
Motor Cushion	
Tubing	
Pressure Transducer Pen	
Motor Case	
Extension Cord	
Filter Gaskets	

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer	Q_1
18					
13					
10					
7					
5					

Q_1 = Flow (m^3/min) from orifice curve

Inspection	Ok or Not Ok
Timer	
Transformer	
Shelter	
Platform	
Pressure Transducer	
Power Cord	

Description of other maintenance work performed

PreMaintenance Span

Plate	Manometer Left	Manometer Right	Total	Pressure Transducer
18				

MET TOWER P.M.

Calibrated By: MWS
Date 7/1/88
Job name: MSV
Job No. 22134
Tower Location: Ramsey Creek
Scheduled Maintenance ✓ Audit ✓ Break Down
Sensor Height 10m
Crossarm orientation 19½° Declination (Crossarm SN): 2986

Direction	DAS Direction	Voltage
N	4	
E	87	
S	179	
W	270	

Temp.	DAS	Voltage
Ice Bath		
Ambient ( )	68.36	66.5
Temp Bath		

W.D. jig SN

Wind Speed

Synchronous Motor RPM		Equivalent MPH	DAS	Voltage
120	=	6.1	5.1	
0	=	0	0	
300	=	14.1	13.3	

TORQUE METER READINGS

Wind Speed

Clockwise (gm/cm)
4.2
4.2
4.2
4.2
Average 4.2

Allowable Limit .12

Torque Watch SN 4278

Wind Direction

Clock wise (gm/cm)	counter clockwise (gm/cm)
3	3
3	3
3	3
3	3
Average 3	3

Allowable Limit 10 10

Torque Watch SN 4257

Comments: Met sensors on line @ 1950 MDT

MET TOWER P.M.

Calibrated By: KBE
Date 7/1/88
Job name: U.S. Borax
Job No. 22134
Tower Location: Little Cherry Creek
Scheduled Maintenance ✓ Audit ✓ Break Down
Sensor Height 10m
Crossarm orientation 19.5° Declination (Crossarm SN): 2960

Direction	DAS Direction	Voltage
N	3	
E	87	
S	178	
W	270	

W.D. jig SN 11

Temp.	DAS	Voltage
Ice Bath		
Ambient (74)	24.6	
Temp Bath		

R.H sling psy 30%
DAS 27.5%

Wind Speed

Synchronous Motor RPM		Equivalent MPH	DAS	Voltage
0	=	0	0	
120	=	~~[illegible]~~ 6.1	5.2	
300	=	~~[illegible]~~ 14.1	13.5	

TORQUE METER READINGS

Wind Speed

Clockwise (gm/cm)
0
0
0
0
Average 0

Allowable Limit .12

Torque Watch SN 4270

Wind Direction

Clock wise (gm/cm)	counter clockwise (gm/cm)
0	0
0	0
0	0
0	0
Average 0	0

Allowable Limit 10 10

Torque Watch SN 4237

Comments: Met station went on line at 1530

fmAOnet/tls/lh (FRM)

APPENDIX F
QA/QC PRECISION CALCULATIONS

APPENDIX F
QA/QC PRECISION CALCULATIONS

The precision of the third quarter 1988 trace elements data was evaluated by comparing the primary and replicate analyses. The Relative Percent Deviation (RPD) of these samples used to determine the data precision was calculated as follows:

$$RPD = \frac{|X_1 - X_2|}{\bar{X}} \times 100$$

where,

RPD = Relative Percent Deviation

X_1 and X_2 = primary and replicate measurements

$\bar{X}$ = mean of primary and replicate measurements

The RPD analysis is presented in Table F-1.

The precision assessment for the co-located PM 10 samplers was evaluated by calculating the percent difference between the primary (Sampler No. 1) and co-located (Sampler No. 2) results, the mean and standard deviation of the percent differences, and the upper and lower 45 percent confidence limits. These limits are defined by the following equations:

Upper 95% limit = Mean + 1.96 (standard deviation/$(2)^{1/2}$)

Lower 95% limit = Mean - 1.96 (standard deviation/$(2)^{1/2}$)

This precision assessment is presented in Table F-2. Three sample sets showed poor repeatability (sample sets collected on August 1, August 31 and September 18, 1988). A complete review of the sample collection procedures, the laboratory analysis, and the calculation procedures revealed no systematic errors. For comparative purposes, the precision assessments were recalculated without these three outlying sample sets. This assessment is presented in Table F-3.

TABLE F-1

PRECISION OF THE TRACE ELEMENT ANALYTICAL METHODS

Element	Sample Date	Concentration (ng/m^3) Primary	Replicate	RPD
Antimony	8/7/88	0.03	ND	--
	10/6/88	0.02	ND	--
Arsenic	8/7/88	0.11	0.11	0.0
	10/6/88	0.09	0.13	36.4
Cadmium	8/7/88	ND	ND	--
	10/6/88	ND	ND	--
Chromium	8/7/88	ND	ND	--
	10/6/88	ND	ND	--
Copper	8/7/88	52.03	45.52	13.3
	10/6/88	68.71	65.19	5.3
Iron	8/7/88	281.82	262.31	7.2
	10/6/88	72.24	79.28	9.3
Lead	8/7/88	ND	ND	--
	10/6/88	ND	ND	--
Zinc	8/7/88	ND	ND	--
	10/6/88	ND	ND	--

ND Below Analytical Detection Limit
-- Calculation not done because one or both concentrations below analytical detection limit

TABLE F-2

PRECISION ASSESSMENT OF THE RAMSEY CREEK PM 10 DATA

Sample Date	Ramsey No. 1 ()g/m^3)	Ramsey No. 2 ()g/m^3)	Percent Difference
7/02/88	***	***	--
7/08/88	***	***	--
7/14/88	***	***	--
7/20/88	11	13	18.2
7/26/88	8	13	62.5
8/01/88	18	35	94.4
8/07/88	7	11	57.1
8/13/88	14	14	0.0
8/19/88	12	12	0.0
8/25/88	24	23	-4.2
8/31/88	13	25	92.3
9/06/88	157	153	-2.6
9/12/88	5	8	60.0
9/18/88	9	32	255.6
9/24/88	***	***	--
9/30/88	8	***	--
			Mean = 57.6
			Std. Dev. = 75.8

Upper 95% limit = 57.6 + 1.96 (75.8/ $(2)^{1/2}$) = 162.6%
Lower 95% limit = 57.6 - 1.96 (75.8/ $(2)^{1/2}$) = -47.5%

*** Missing Sample
-- Calculation not done because one or both samples missing.

TABLE F-3

PRECISION ASSESSMENT OF THE RAMSEY CREEK PM 10
DATA WITH OUTLYING SAMPLES EXCLUDED

Sample Date	Ramsey #1 ()g/m^3)	Ramsey #2 ()g/m^3)	Percent Difference
7/02/88	***	***	--
7/08/88	***	***	--
7/14/88	***	***	--
7/20/88	11	13	18.2
7/26/88	8	13	62.5
8/07/88	7	11	57.1
8/13/88	14	14	0.0
8/19/88	12	12	0.0
8/25/88	24	23	-4.2
9/06/88	157	153	-2.5
9/12/88	5	8	60.0
9/24/88	***	***	--
9/30/88	8	***	--
			Mean = 23.9
			Std. dev. = 30.6

Upper 95% limit = 23.9 + 1.96 (30.6/ $(2)^{1/2}$) = 66.3%
Lower 95% limit = 23.9 - 1.96 (30.6/ $(2)^{1/2}$) = -18.5%

*** Missing Sample
-- Calculation not done because one or both samples missing.

22134 (22134r2FT3 02-22-89) (*2P-RPT)