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U.S. DEPARTMENT OF THE INTERIOR

PROTOTYPE OIL SHALE LEASING PROGRAM

TRACT C-b

QUARTERLY REPORT #2

(Through February 28, 1975)

Submitted to:

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Conservation District
U. S. Geological Survey
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By:

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APRIL 14, 1975

QUARTERLY REPORT #2

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Radian AQ Data (Ref 3)

RADIAN CORPORATION

RC#100-056

AIR MONITORING REPORT

FOR

C-b SHALE OIL PROJECT

DECEMBER 1974

Report No. 4

4 March 1975

Presented to:

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I. GENERAL DESCRIPTION OF AIR MONITORING PROGRAM

Radian Corporation is under contract to C-b Shale Oil Projects to provide ambient air quality monitoring. Each site measures and records the concentration of particulates, sulfur dioxide, and hydrogen sulfide. In addition, two of the sites record the amounts of nitrogen oxides, total hydrocarbons, methane, ozone, and carbon monoxide. Selected meteorological parameters such as wind speed, wind direction, temperature, and rainfall are monitored at each station. A 200-foot meteorological tower at one of the sites provides meteorological information as a function of height.

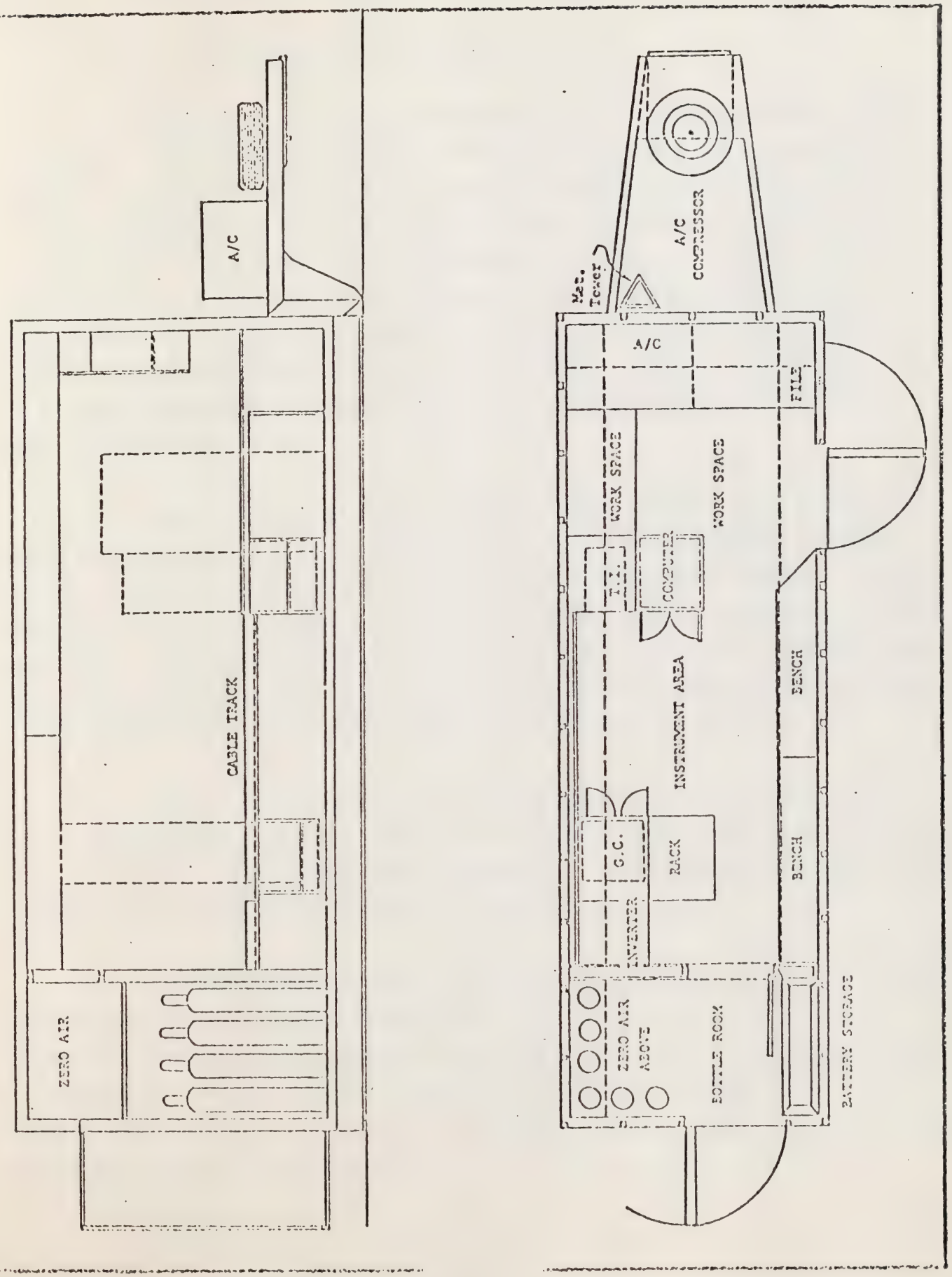

A/C
CABLE TRACK
ZERO AIR
Met. Tower
A/C COMPRESSOR
A/C
FILE
WORK SPACE
WORK SPACE
T.V.
COMPUTER
INSTRUMENT AREA
BENCH
G.C.
RACK
INVERTER
BENCH
ZERO AIR ABOVE
BOTTLE ROOM
BATTERY STORAGE

Figure 1

II. DESCRIPTION OF INSTRUMENT SYSTEMS

A. Air Quality Instrumentation

Nitrogen oxides are measured with a Meloy Model NA520 analyzer. This dual-channel analyzer is based on the chemiluminescent principle, and continuously monitors both NO_x and NO. A subtraction circuit in the instrument provides a continuous NO_2 output, but is not used in Radian's system. NO_2 is calculated once a second by the computer by subtracting the NO value from the NO_x value, thus avoiding any drift which might occur in the NO_2 output of the instrument. This instrument has a minimum detectable sensitivity of 5 ppb (parts per billion), and a linearity of 1%.

Both sulfur dioxide and hydrogen sulfide are measured with Meloy Model SA185 sulfur analyzers. The hydrogen sulfide analyzer uses a Meloy Model SO_x-1 sulfur dioxide scrubber and the sulfur dioxide analyzer uses a Meloy Model H_2S-1 hydrogen sulfide scrubber. The Model SA185 is a continuous analyzer, and utilizes the flame photometric principle of operation. The minimum detectable sensitivity is 5 ppb, and the linearity is $\pm$1%.

Ozone is measured with a Meloy Model OA350 analyzer. This instrument provides continuous measurement of ozone, and is based on the chemiluminescent principle. The minimum detectable sensitivity is 0.5 ppb and the linearity is 1%.

Total hydrocarbons, methane, and carbon monoxide are monitored with a Bendix Model 8200 gas chromatograph analyzer. This instrument uses a plume ionization detector and has a minimum detectable sensitivity of 5 ppb for all three components. The Model 8200 works on a five-minute cycle, i.e., one air sample is analyzed every five minutes.

The air sample is drawn in through a glass cane and manifold supplied by the Ace Glass Company. The system has a 25mm diameter, and a constant air flow through the system is provided by an air pump rated at 60 cfm at 0" head pressure. The manifold has sampling ports to which ¼" teflon lines to the instruments are connected. All joints in the sampling system are secured by O-ring compression fittings. The manifold is contained in a heated (100°F) chamber to prevent condensation of moisture. The teflon lines from the manifold to the instruments are insulated with 1/8" wall thickness rubber tubing.

The trailer has four heavy duty high volume particulate samplers (Hi-Vols). Fiberglass filter paper is used for collection of particulate samples, and each filter is brought to a controlled humidity before weighing. Each Hi-Vol has a flow recorder to permit correction for changes in air flow as the filter becomes loaded with particulates. Each Hi-Vol runs for a 24-hour period (midnight to midnight), and is turned on and off by the computer. The Hi-Vols were designed following guidelines recommended by the Environmental Protection Agency and were manufactured by Radian.

B. Calibration Procedures

Each trailer contains a Meloy Model RAD-1 calibration unit. This instrument provides a zero air supply, SO_2 span gas from an SO_2 permeation tube, and NO span gas obtained by precisely diluting bottled NO span gas. The calibration of all instruments is automatically performed once a day, and is controlled by the computer. Each instrument is first switched to zero, and the computer monitors the output of each channel and takes a new zero reading after a stable zero signal has been reached. This zero reading is compared by the computer to the zero reading

obtained 24 hours before, and if a drift in excess of 10ppb has occurred, an excess zero drift light for the channel in question is turned on on the System Status Panel. Next, span gas is supplied to each channel and the computer decides when a stable span value has been reached. This value is recorded and compared to the previous day's value. An excess span drift light on the System Status Panel is turned on if a drift exceeding 10ppb occurs. The instruments are then returned to the monitor mode, and after two minutes the computer resumes data taking.

The bottled NO gas used at each site was obtained from Precision Gas Products. Pre-purified grade hydrogen is used in the SO_2 analyzers.

The SO_2 permeation tubes were manufactured by Metronics Association, Inc. Their output has been verified by comparison to the output of National Bureau of Standards tube 10-42. Both SA185 analyzers in each trailer are calibrated with SO_2 from the permeation tube. This instrument responds to the number of sulfur atoms per molecule, thus SO_2 can be used to calibrate both the H_2S and SO_2 monitors

The Model OA350 ozone analyzer has its own calibration system which provides a zero check and a span check. The ozone calibration system is verified by comparison to a calibrated ozone generator maintained in Radian's laboratory in Rifle.

The Model 8200 total hydrocarbon, methane, and carbon monoxide analyzer is calibrated with undiluted span gas obtained from Airco's Rare and Specialty Gas Division. This span gas contains methane and carbon monoxide in air, the methane being used to calibrate both the total hydrocarbon channel and the methane channel. The Model 8200 is zeroed with air from a

Bendix Model 8834 zero air unit. In addition the instrument is electronically re-zeroed at the start of every five-minute cycle.

The Hi-Vol particulate samplers were calibrated using a Calibration Kit from General Metal Works.

C. Data Acquisition System

The basis of the data acquisition system is a Data General NOVA 1200 minicomputer. The NOVA which has a basic cycle time of 1.2 μsec is equipped with automatic program load and power fail/automatic restart features. The computer utilizes 16K 16-bit words of core memory. Analog-to-digital conversion is accomplished via an ADC built by Radian Corporation. The input/output unit for the system is Texas Instrument's KSR 733 keyboard/printer. This model teletype provides keyboard entry and hard copy printed output. The data are also recorded on a cassette magnetic tape unit with three drives. The cassette unit is utilized for program storage and loading as well as recording. The power to the teletype and cassette units is turned on only when the unit(s) is to be used to reduce wear on mechanical parts. Several important functions in the instruments as well as in the computer and the trailer are monitored by means of lights on a System Status Panel. These data lights are written onto cassette tape to monitor the complete status of the system every five minutes. The Data Acquisition System also monitors the presence of 110V power from the power lines. In its absence, the computer, which is powered by batteries, switches all trailer systems to battery-provided power. If the line voltage is restored before the batteries are discharged to a specified level, the trailer system is switched back to line power.

D. Meteorological Instrumentation

1. Ambient Air Monitoring Trailers

Four of the ambient air monitoring trailers are equipped with the following meteorological instrumentation: (1) dry bulb temperature (outside), (2) relative humidity, (3) wind direction, (4) wind speed, and (5) a tipping bucket, heated rain/snow gage. The temperature probe and relative humidity sensor are mounted inside a motor aspirated radiation shield, the Model 1S6 Aspirated Radiation Shield by Weather Measure, which gives an aspiration of approximately 100 cfm. The wind instrumentation and temperature and relative humidity apparatus (in the aspirated radiation shield) are all mounted atop a 33-foot crank-up meteorological tower (the WM-33, by Weather Measure) at each of the four trailer sites.

The wind instrumentation at the monitoring trailers consists of the Model W103/3L Lightweight Cup Anemometer by Weather Measure and the Model W104-2 Lightweight Vane by Weather Measure. The anemometer is a high response, low threshold wind system which offers the optimum in versatility and economy. For low threshold applications, a unique frictionless tachometer employing a high frequency oscillator and receiver is used to measure precisely wind speed. The oscillator, transmitter, and receiver are encapsulated in a small cube of epoxy for total protection against the environment. The high frequency tachometer embodies several distinct advantages over the commonly used light chopper systems. There are no light bulbs or photocells to burn out; power consumption is low; and the system is insensitive to moisture condensation or dust deposition. The solid state tachometer is essentially free from maintenance with a life of well over five years when operated continuously. The specifications of the W103 Cup Anemometer are as follows:

- Accuracy: ± 1% or .15 mph, whichever is greater.
- Bearings: Sealed and shielded precision stainless steel.
- Threshold: 0.6 miles per hour
- Distance Constant: 5 feet

The wind vane, the W104-2, is equipped with a 1000 ohm low torque potentiometer and two wipers for 0° to 540° operations. The response characteristics of this vane are:

- Dead Band: 0 degrees
- Damping Ratio: 0.4
- Distance Constant: 3.5 feet
- Threshold: 0.75 miles per hour
- Potentiometer Linearity: 0.5%

The thermistor probe used in the motor aspirated radiation shields is the Model T621-TP18X Air Temperature Premium Thermistor Probe by Weather Measure. This probe has a range of $-50^{\circ}C$ to $+50^{\circ}C$ and an interchangeability of $\pm 0.055^{\circ}C$. The output signal accuracy is $\pm 0.3^{\circ}F$.

The relative humidity sensor is the Model 2013 Remote Reading Relative Humidity System by Texas Electronics. The sensor assembly contains a newly-developed hygroscopic inorganic sensing

element. Its expansion and contraction positions the suspended core of a linear variable differential transformer (LVDT). The absence of friction inducing linkages and wiping contacts minimizes hysteresis and improves accuracy. The LVDT output signal, when processed, is directly proportional to relative humidity. The specifications of this instrument are as follows:

- Range of Indication: 0% to 100% RH

- Response: The sensor response time to a step change of 10% in relative humidity is less than 2 minutes with the sensor exposed to moving air.

- Accuracy: 5% - 15% RH; ± 5% RH
  15% - 95% RH; ± 2% RH
  95% -100% RH; ± 3% RH

- Signal Output: Analog signal of -150 mv. to +150 mv. with electrical zero at 50% RH is standard.

Each of the four monitoring trailers is equipped with a Model P511-E Remote Recording Heated Snow Gage by Weather Measure. In the case of this gage, the durability and reliability of a tipping bucket gage are combined with heavy-duty electric heaters to make this an all-purpose precipitation sensor. This gage may be used to measure snowfall and rainfall. An insulating cover of poly-vinyl chloride and a thermostatic control insure the proper gage temperature. The thermostatic control is adjustable from 0 to 35°C. Snow falling into the inlet funnel is melted. The resulting water (from rain or snow) drains into a precision tipping bucket mechanism which activates a mercury switch each time the bucket fills and tips. The gage is constructed

of durable corrosion-resistant materials to provide many years of service. The specifications of this gage are as follows:

- Orifice: 8 inches
- Calibration: 0.01 inch
- Accuracy: 0.5% (Calibrated at 0.5 in/hr)
- Sensor: Chrome plated tipping buckets
- Switch: Mercury, 0.1 second closure
- Heat Control: Thermostat adjustment, 0° to 35°C.

2. 200-Foot Meteorological Tower

The tower has instrumentation at four levels: 8 feet, 30 feet, 100 feet, and 200 feet. At all four levels, there are: wind speed, wind direction, and temperature and relative humidity sensors in a power aspirated radiation shield. Temperature difference thermistors (also in power aspirated radiation shields) and their associated circuitry take lapse rate measurements for the 30-foot to 100-foot layer and the 30-foot to 200-foot layer. In addition, this site has a Precision Spectral Pyranometer, a barometer, and a tipping bucket rain/snow gage.

The wind direction and speed apparatus used at each measurement level of the tower is the Model 1074-2 wind sensor by Meteorological Research, Inc. (MRI). This sensor has a 540° potentiometer for wind direction and a light chopper for wind speed. This sensor is rugged, with an all-weather coaxial cup and

damped vane assembly. The prototype model has been in operation for years under the most demanding weather conditions, performing continuously with the utmost reliability. All of the wind sensors on the tower have been specially treated with a black paint which will promote warming of the exposed surfaces of the sensor and thereby reduce ice and snow accumulations on the moving parts of the apparatus. The specifications on the Model 1074-2 are as follows:

Wind Speed

- Starting Threshold: 0.75 mph
- Response Distance: 18 feet (63% recovery)
- Flow Coefficient: 7.9 feet/Revolution
- Accuracy: ± 0.4 mph or 1% (whichever is greater)
- Range: 0-100 mph

Wind Direction

- Starting Threshold: 0.75 mph
- Delay Distance: 4 feet (50% recovery)
- Damping Ratio: 0.5 to 0.6
- Accuracy (540° system): ± 1%
- Range: 0° to 540°

The relative humidity and temperature sensors are mounted within a power aspirated radiation shield at each tower level. All aspirators and sensors are of the Model 840 Series by MRI. The aspirated shielded housing is designed to provide maximum radiation protection to the sensor. Ambient air is drawn into the shield and across the sensors at approximately 15 feet per second. This intake air is essentially sampled from a hemispherical space which is approximately 3-inch radius from the tube opening. Speed of the incoming air at the periphery of this hemisphere is approximately 1 mph.

The temperature sensor is comprised of a dual thermistor and resistor network. This circuit provides a linear resistance change with an air temperature change. The relative humidity sensor is placed alongside the temperature elements inside the shield where it is exposed to a constant flow of air. Circulation to both sides of the sensing element produces accurate monitoring with a good response time. The specifications of the sensing elements are as follows:

Temperature

- Accuracy: ± 0.25°C
- Range: -50°C to +50°C

Humidity

- Accuracy: ± 3.0% RH
- Range: 0% to 100% Relative Humidity

Measurements of temperature difference are taken for two layers, the 30-foot to 100-foot layer and the 30-foot to 200-foot

layer. The thermistors and circuitry used for these measurements are separate from the thermistors measuring air temperature. The use of separate thermistors and circuitry to measure ΔT allows for much greater accuracy and resolution in the measurements, which is necessary for stability assessments. Two ΔT thermistors are at the 30-foot level, one is at the 100-foot level, and one is at the 200-foot level. All of these ΔT thermistors are mounted within power aspirated radiation shields. The specifications on the ΔT instrumentation are as follows:

- Accuracy: ± 0.1°C
- Range of ΔT Circuit
  (Lower Level-Upper Level): +4°F to -8°F

All instrumentation, except at the ground level, is mounted at the end of 12-foot retractable booms. These booms are 3-inch box beams which are on rollers and can be retracted to the instrument platforms for instrument maintenance.

The meteorological tower itself is a 200-foot Rohn Model 80 Guyed Tower, designed for 40 pounds per square foot wind load with ½" of radial ice per EIA Standard RS-222-B, to support four levels of meteorological equipment. The material consists of tower sections with a tapered base, three retractable booms 12-feet long, three outside work platforms, an inside ladder for climbing, two base ground kits and one anchor ground kit. The cable-type Safety Climbing Device consists of a cable and attachment mechanisms with a locking sleeve and safety belt. The tower is lighted and painted according to FAA specifications.

The signals from the tower instrumentation are fed from multiple signal cables into transmitters mounted at the base of

the tower. After signals have been converted to analog signals, they are fed into a junction box, also at the tower base, where they are assimilated into one coaxial cable. The signals are then run underground within 3" PVC conduit to the A-to-D assembly, where they are processed. The transmitters are shielded and insulated from the elements. The signal cable is run underground in PVC conduit in order to minimize damage from the weather or various rodents in the region.

The auxiliary equipment at the tower site consists of a heated tipping bucket rain/snow gage, an analog barometer, and a Precision Spectral Pyranometer. The rain/snow gage is the Model P511-E unit by Weather Measure, with characteristics and specifications as described in Section 1. The barometer is the B242 Analog Output Barometer by Weather Measure. This barometer provides an output voltage that is linearly proportional to pressure. The specifications on this instrument, which is mounted inside the monitoring trailer at the site, are as follows:

- Range: Specially designed for the 100 millibar interval from 725 millibars to 825 millibars.

- Resolution: Infinite

- Linearity: ± 0.5 millibar, over the 100 millibar interval

The pyranometer at the site is the Eppley Precision Spectral Pyranometer. This instrument is used for the measurement of sun and sky radiation totally or in defined wavelength bands. The pyranometer is levelled and mounted atop a wooden stand 4½ feet from the ground surface. Care has been taken to

eliminate the effects from all outside influences, such as reflection or shadows, on the pyranometer. The instrument characteristics are as follows:

- Sensitivity: 5 mv. per cal/cm^2/min
- Independence: 300 ohms
- Temperature dependence: Sensitivity constant to within ± 1 percent over the ambient temperature range from -20 to +40°C
- Linearity: Response linear up to intensities of 4 cal/cm^2/min
- Response Time: 1 second (i/e signal)

All instrumentation is factory calibrated and is field-calibrated at various intervals. Sling psychrometers are used to calibrate the humidity sensors, known temperatures and/or resistances are used to calibrate the thermistors, and an rpm calibrating unit is used to calibrate the anemometers. The wind direction instrumentation is aligned to true north (reference direction) by means of a surveyor's transit.

III. MICROMETEOROLOGICAL AND TERRAIN FEATURES

The Piceance Creek Valley and C-b Oil Shale Tract are situated such that many microscale meteorological phenomena affect the region where the ambient air monitoring units are located. In particular, the three units in the Piceance Creek Valley (Trailers 020, 021, and 022) are heavily influenced by a katabatic-anabatic flow regime. Trailer 023 and its associated 200-foot meteorological tower are located atop a plateau to the south of the valley, high enough to be affected mostly by gradient flow conditions. Trailer 024, located halfway between the valley and the meteorological tower, is affected by a mixture of the gradient and mountain-valley flow regimes.

Elevations in the monitoring network range from about 6200 feet above sea level at Trailer 021, near the Rock Creek School in the valley at the westernmost end of the monitoring network, to 6940 feet at the meteorological tower site (Trailer 023) atop the plateau within the Tract C-b itself. The largest gradients in elevation in this area, of course, occur at the Piceance Creek Valley walls. However, the northern valley walls are slightly steeper than those at the southern boundary of the valley, which then slopes upward gradually toward the C-b Tract. The Piceance Creek Valley decreases in elevation from east to west in this area, so that nighttime katabatic cold-air drainage flows advect from east to west, or from Trailer 022 to Trailer 020 to Trailer 021.

As mentioned at the outset of this discussion, the terrain will have a large influence on the meteorology of this region. Considering first Trailer 022, at the eastern end of the monitoring network, a nighttime katabatic (valley or downslope) flow will exert a tremendous influence on this site.

Of the three monitoring locations in the Piceance Creek Valley, this site has the steepest valley walls in its vicinity. As a result, the nighttime katabatic flow is strongest here. That is, the downslope winds are constrained or channelled at this point such that the nighttime drainage winds often reach 15 miles per hour. In addition, the channelling effects of the Piceance Creek Valley walls normally cause surface winds to flow from one of two preferred directions. At night, the downslope winds parallel the valley contours, generally coming from 115° (east-southeast, referenced to true north). During the afternoon, or whenever suitable pressure gradient conditions exist, the winds generally come from the west-northwest because of the boundary conditions and channelling caused by the valley. This monitoring location has an elevation of approximately 6450 feet above sea level and is at the mouth of Oldland Gulch.

Trailer 020, midway down the Piceance Creek Valley near the Redd Ranch, at the mouth of Gardenhire Gulch, has an elevation of about 6320 feet above sea level. Once again, the valley walls are steeper to the north of this monitoring location. The Piceance Creek Valley widens a little from Trailer 022 to Trailer 020, so that channelling effects are not quite as great at this location. Nevertheless, a well-developed katabatic-anabatic flow cycle affects this site, with the afternoon anabatic flow being fairly well-developed at this location. The channelling effects of the valley walls cause two preferred surface wind directions, southeast and northwest. However, other wind directions are experienced here, particularly during the transition periods between downslope and upslope flows and during periods when the surface pressure gradient dictates to a large degree the surface wind direction.

Trailer 021, located near the Rock Creek School, has the lowest elevation of the three valley trailers, 6200 feet. At this point, the Piceance Creek Valley widens considerably toward the east, so that nighttime katabatic winds are rather light. Daytime anabatic winds are also rather light. However, northwesterly surface winds caused by pressure gradient forces are occasionally moderate in force because of the slight channelling effects of the valley walls to the north and northwest.

Site 023, where the 200-foot meteorological tower is located, is atop the plateau at an elevation of about 6940 feet above sea level. It is approximately 2.5 miles south of the Piceance Creek Valley. This location is relatively high compared to its surroundings, with the nearest points having elevations greater than 7000 feet being .5 miles to the south of the tower. The tower itself is on the top of a small knoll located between Scandard and Sorghum Gulches. Because of its location and the irregularities of the surrounding terrain, meteorological patterns are varied here.

Wind instrumentation is mounted at four levels of the meteorological tower: 8 feet, 30 feet, 100 feet, and 200 feet. The top level of the tower generally remains in gradient wind flow. That is, the winds at that level are normally generated by synoptic-scale features and are usually separated from terrain features and micrometeorological circulations. Occasionally, a weak anabatic flow influence is experienced. However, such is not the case with the three lowest measurement levels. To varying degrees, these levels are influenced by both the katabatic and anabatic circulation cells. However, when strong pressure gradient forces exist in the region and the synoptic-scale wind flow is strong, all four tower levels will reflect a gradient wind flow, with the winds increasing in strength with increasing height.

Trailer 024 is between the Piceance Creek Valley and the meteorological tower location, about 1 mile south of the valley itself. The elevation of this site is approximately 6740 feet. The terrain slopes downward to the west, north, and east, and slopes upward toward the south, in the direction of the meteorological tower. This site is in a transition zone between the micrometeorological effects which prevail in the valley and those meteorological phenomena affecting the tower site. As a result, the meteorological parameters measured at this location are subject to rather rapid variations. The area is generally affected by a weak katabatic (downslope) flow at night and a weak anabatic (upslope) flow during the afternoon hours. However, gradient wind flows generally take precedence over terrain-induced flows at this location.

The terrain atop the plateau is generally barren and fairly rugged, with a few scattered small trees. The topsoil dries rapidly and is very fine, resulting in blowing dust when dry, windy conditions exist. In the Piceance Creek Valley, the terrain is fairly grassy and flat, with steep valley walls on either side. Surface winds are normally rather light in this valley unless channelling effects occur.

During clear nights with rather light pressure gradient-induced winds, rapid radiational cooling will occur in the region because of the barren nature of the terrain and the generally dry character of the air in this portion of the country. As a result, the diurnal range of temperatures will be extremely large. Because of the katabatic flow in the valley, nighttime temperatures will generally be lower in the valley than on the plateau. During the winter, especially, temperatures in the valley may be 20°F lower than they are on the plateau during the early morning hours. In particular, the drainage effects will be spectacular at Trailer 021, which will often experience

temperatures 10°F cooler than those at the other valley monitoring locations during the early morning hours. This phenomenon results from the pooling of cold air in the area of Trailer 021 because of its relatively low elevation and the light nature of the winds here during the night, which thus inhibits surface mixing and promotes the strengthening of the nighttime ground-based inversion. During periods of strong gradient winds and/or cloudy skies, greater mixing of the air near the surface occurs and meteorological conditions (particularly temperature and humidity) are more uniform throughout the monitoring network (on the plateau and in the valley).

IV. OPERATING TIME ANALYSIS FOR EACH SITE

This section presents the operating statistics for each of the major subsystems contained in each monitored station. Table II shows the specific number of hours that each of these subsystems was inoperative for the month. The column labeled "DIGITIZING SYSTEM" indicates the entire data acquisition system and downtime hours appearing in this column and, therefore, means total loss of data. These instances include, in addition to computer downtime, power failures, no power available, and self-automated shutdown periods such as during air conditioner malfunctions.

Calibration time is not considered to be downtime and is, therefore, not included in the downtime figures. The amount of time used in calibrating the instruments is given at the bottom of the downtime analysis table and is reported as total calibration hours for each channel for the entire month. As is evident in the calibration figures, channels can be calibrated independently of one another. No calibration time is given for particulate monitoring since Hi-Vol calibration occurs infrequently and only during the off-duty cycle for each Hi-Vol while another Hi-Vol is taking data.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 022

DATE	DIGITIZING SYSTEM	NOX	NO	SO2	PART	H2S	THC	CH4	CO	O3	WS	WD	RH	TEMP	PRES
12/ 1	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	1.	24.
12/ 2	1.	0.	0.	0.	24.	0.	5.	5.	5.	0.	0.	0.	0.	0.	23.
12/ 3	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
12/ 4	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
12/ 5	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
12/ 6	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
12/ 7	0.	0.	0.	0.	24.	0.	0.	0.	0.	0.	1.	0.	0.	1.	24.
12/ 8	0.	1.	1.	1.	24.	2.	1.	1.	1.	1.	0.	0.	0.	1.	24.
12/ 9	1.	1.	1.	1.	0.	1.	1.	1.	17.	6.	1.	0.	0.	0.	23.
12/10	1.	11.	11.	0.	0.	0.	0.	0.	12.	0.	0.	0.	0.	0.	23.
12/11	1.	12.	12.	12.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	23.
12/12	0.	0.	0.	12.	0.	0.	1.	1.	1.	0.	0.	0.	0.	0.	24.
12/13	0.	0.	0.	0.	24.	0.	0.	0.	1.	0.	0.	0.	0.	0.	24.
12/14	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	24.
12/15	0.	1.	1.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
12/16	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	0.	0.	0.	0.	24.
12/17	1.	1.	1.	1.	0.	1.	1.	1.	1.	1.	0.	0.	0.	0.	23.
12/18	5.	1.	1.	1.	24.	1.	1.	1.	4.	0.	1.	1.	0.	1.	18.
12/19	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
12/20	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
12/21	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
12/22	14.	1.	1.	1.	24.	1.	1.	1.	1.	1.	1.	1.	0.	0.	14.
12/23	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/24	12.	1.	1.	8.	24.	1.	9.	9.	8.	1.	8.	8.	1.	1.	12.
12/25	0.	0.	0.	24.	0.	0.	24.	24.	24.	0.	24.	24.	0.	0.	24.
12/26	0.	1.	1.	24.	0.	1.	24.	24.	24.	1.	24.	24.	0.	1.	24.
12/27	0.	0.	0.	15.	0.	0.	24.	24.	24.	0.	15.	15.	0.	0.	24.
12/28	0.	1.	1.	10.	0.	1.	24.	24.	24.	1.	10.	10.	0.	1.	24.
12/29	0.	0.	0.	24.	24.	0.	24.	24.	24.	0.	24.	24.	0.	0.	24.
12/30	0.	0.	0.	24.	0.	0.	24.	24.	24.	0.	24.	24.	0.	0.	24.
12/31	0.	0.	0.	24.	0.	0.	24.	24.	24.	1.	24.	24.	0.	1.	24.
CALIBRATION TIME		3.	2.	3.		4.	3.	3.	3.	2.	0.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 321

DATE	DIGITIZING SYSTEM	SO2	PART	H2S	WS	WD	RH	TEMP
12/ 1	1.	0.	0.	0.	0.	0.	0.	2.
12/ 2	0.	0.	24.	0.	0.	0.	0.	1.
12/ 3	1.	0.	24.	0.	0.	0.	0.	1.
12/ 4	0.	1.	0.	1.	0.	0.	0.	0.
12/ 5	1.	0.	0.	0.	0.	0.	0.	0.
12/ 6	0.	0.	0.	0.	0.	0.	0.	0.
12/ 7	0.	0.	24.	0.	0.	0.	0.	1.
12/ 8	0.	0.	24.	0.	0.	0.	0.	1.
12/ 9	0.	0.	0.	0.	0.	0.	0.	2.
12/10	0.	0.	0.	1.	0.	0.	0.	1.
12/11	24.	0.	24.	0.	0.	0.	0.	0.
12/12	24.	0.	0.	0.	0.	0.	0.	0.
12/13	24.	0.	0.	0.	0.	0.	0.	0.
12/14	24.	0.	0.	0.	0.	0.	0.	0.
12/15	24.	0.	24.	0.	0.	0.	0.	0.
12/16	24.	0.	0.	0.	0.	0.	0.	0.
12/17	24.	0.	0.	0.	0.	0.	0.	0.
12/18	15.	0.	24.	0.	0.	0.	0.	1.
12/19	5.	0.	0.	0.	0.	0.	0.	0.
12/20	20.	0.	0.	0.	0.	0.	0.	0.
12/21	0.	0.	24.	0.	0.	0.	0.	0.
12/22	0.	0.	24.	0.	0.	0.	0.	0.
12/23	0.	0.	24.	0.	0.	0.	0.	1.
12/24	10.	1.	24.	0.	0.	0.	0.	1.
12/25	6.	0.	24.	0.	0.	0.	0.	0.
12/26	14.	0.	24.	0.	0.	0.	0.	0.
12/27	0.	0.	24.	0.	0.	0.	0.	1.
12/28	0.	0.	0.	0.	0.	0.	0.	1.
12/29	0.	0.	0.	0.	0.	0.	0.	0.
12/30	1.	0.	0.	0.	0.	0.	0.	0.
12/31	1.	0.	0.	0.	0.	0.	0.	1.
CALIBRATION TIME		6.		6.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 022

DATE	DIGITIZING SYSTEM	SO2	PART	H2S	WS	WD	RH	TEMP
12/ 1	10.	0.	0.	0.	0.	0.	0.	0.
12/ 2	0.	0.	0.	0.	0.	0.	0.	0.
12/ 3	0.	0.	24.	0.	0.	0.	0.	0.
12/ 4	0.	1.	24.	0.	0.	0.	0.	1.
12/ 5	0.	0.	0.	0.	0.	0.	0.	0.
12/ 6	0.	0.	0.	0.	0.	0.	0.	0.
12/ 7	0.	0.	0.	0.	0.	0.	0.	0.
12/ 8	1.	0.	0.	0.	0.	0.	0.	1.
12/ 9	0.	2.	24.	2.	0.	0.	0.	1.
12/10	0.	0.	0.	0.	0.	0.	0.	0.
12/11	0.	0.	24.	0.	0.	0.	0.	0.
12/12	0.	0.	0.	0.	0.	0.	0.	0.
12/13	0.	0.	24.	0.	1.	0.	0.	1.
12/14	0.	0.	0.	0.	0.	0.	0.	0.
12/15	0.	0.	24.	0.	0.	0.	0.	0.
12/16	0.	12.	0.	12.	0.	0.	0.	0.
12/17	0.	18.	0.	18.	0.	0.	0.	0.
12/18	2.	1.	24.	7.	0.	0.	1.	1.
12/19	0.	0.	0.	0.	0.	0.	0.	0.
12/20	0.	0.	0.	0.	0.	0.	0.	0.
12/21	0.	0.	0.	0.	0.	0.	0.	0.
12/22	0.	0.	0.	0.	0.	0.	0.	1.
12/23	1.	0.	24.	0.	0.	0.	0.	1.
12/24	9.	0.	24.	0.	0.	0.	0.	1.
12/25	0.	0.	0.	0.	0.	0.	0.	0.
12/26	0.	0.	24.	0.	0.	0.	0.	0.
12/27	0.	0.	24.	0.	0.	0.	0.	0.
12/28	0.	0.	0.	0.	0.	0.	0.	0.
12/29	0.	10.	0.	0.	0.	0.	0.	0.
12/30	0.	11.	0.	0.	0.	0.	0.	1.
12/31	0.	1.	0.	0.	0.	0.	0.	3.
CALIBRATION TIME		12.		12.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 023

DATE	DIGITIZING SYSTEM	NOX	NO	SO2	PART	H2S	THC	CH4	CO	O3	8-FT WS	8-FT WD	8-FT RH	8-FT TEMP	8-FT PYR	8-FT PRES
12/ 1	14.	0.	1.	1.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	18.
12/ 2	1.	2.	2.	2.	24.	2.	9.	9.	9.	9.	0.	0.	0.	0.	0.	23.
12/ 3	1.	1.	1.	3.	0.	1.	4.	2.	2.	1.	0.	0.	0.	1.	1.	23.
12/ 4	1.	1.	1.	1.	0.	1.	2.	1.	1.	1.	0.	0.	0.	0.	0.	23.
12/ 5	1.	0.	0.	1.	0.	0.	2.	0.	0.	0.	0.	0.	0.	0.	0.	23.
12/ 6	1.	0.	0.	0.	24.	0.	3.	3.	3.	0.	0.	0.	0.	0.	0.	23.
12/ 7	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
12/ 8	1.	1.	1.	1.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
12/ 9	1.	3.	3.	3.	0.	3.	3.	3.	3.	3.	0.	0.	0.	0.	0.	23.
12/10	0.	1.	1.	1.	0.	2.	1.	1.	1.	1.	0.	0.	0.	0.	0.	24.
12/11	1.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	23.
12/12	0.	10.	10.	1.	0.	1.	0.	0.	0.	0.	3.	0.	0.	0.	0.	24.
12/13	0.	24.	24.	0.	24.	0.	0.	0.	0.	0.	1.	0.	0.	1.	1.	24.
12/14	13.	11.	11.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	11.
12/15	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/16	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/17	15.	0.	0.	7.	24.	7.	9.	9.	9.	7.	0.	0.	0.	0.	0.	2.
12/18	4.	8.	8.	12.	24.	12.	12.	12.	12.	20.	0.	0.	0.	0.	0.	8.
12/19	1.	23.	23.	0.	24.	0.	9.	4.	0.	17.	0.	0.	0.	0.	0.	16.
12/20	6.	18.	18.	0.	24.	3.	0.	1.	1.	7.	0.	0.	0.	0.	0.	7.
12/21	0.	15.	14.	1.	0.	1.	23.	20.	20.	24.	1.	1.	0.	0.	0.	24.
12/22	10.	14.	14.	0.	24.	0.	14.	12.	13.	14.	0.	0.	0.	0.	0.	14.
12/23	14.	0.	0.	0.	24.	0.	1.	0.	0.	0.	0.	0.	0.	1.	0.	0.
12/24	20.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.
12/25	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/26	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/27	24.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/28	14.	0.	0.	0.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/29	1.	1.	1.	1.	0.	1.	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.
12/30	0.	15.	15.	15.	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
12/31	0.	0.	1.	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	24.
CALIBRATION TIME		3.	2.	3.		3.	4.	4.	4.	1.	0.	0.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER #23

DATE	DIGITIZING SYSTEM	30-FT WS	30-FT WD	30-FT RH	30-FT TEMP	100-FT WS	100-FT WD	100-FT RH	100-FT TEMP	200-FT WS	200-FT WD	200-FT RH	200-FT TEMP	DT1	DT2
2/ 1	14.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/ 2	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/ 3	1.	0.	0.	0.	0.	0.	0.	1.	0.	1.	1.	1.	0.	0.	0.
2/ 4	0.	0.	0.	0.	1.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.
2/ 5	1.	0.	0.	1.	0.	0.	0.	0.	0.	0.	1.	0.	1.	0.	7.
2/ 6	1.	0.	0.	0.	0.	0.	0.	0.	0.	2.	1.	1.	2.	4.	1.
2/ 7	0.	0.	0.	0.	0.	0.	0.	0.	1.	7.	6.	0.	8.	24.	0.
2/ 8	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	16.	0.
2/ 9	1.	0.	0.	0.	0.	5.	0.	0.	0.	0.	0.	0.	0.	8.	0.
2/10	0.	0.	0.	0.	0.	24.	0.	0.	0.	1.	1.	0.	0.	0.	0.
2/11	1.	0.	0.	0.	0.	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/12	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.
2/13	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.
2/14	13.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.
2/15	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/16	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/17	18.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/18	4.	0.	0.	0.	1.	1.	4.	0.	0.	0.	0.	0.	0.	0.	5.
2/19	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/20	6.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	3.
2/21	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	6.	1.
2/22	10.	0.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	1.	0.
2/23	14.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/24	21.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.
2/25	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/26	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/27	24.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
2/28	14.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.
2/29	1.	0.	0.	0.	0.	0.	0.	0.	1.	0.	0.	0.	1.	0.	0.
2/30	2.	0.	0.	0.	1.	0.	0.	0.	0.	0.	0.	0.	0.	4.	0.
2/31	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	24.
LIBRATION TIME		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

TABLE II.
DOWNTIME HOURS FOR C-B SHALE OIL PROJECT

TRAILER 024

DATE	DIGITIZING SYSTEM	SO2	PART	H2S	WS	WD	RH	TEMP
12/ 1	0.	0.	0.	0.	0.	0.	0.	24.
12/ 2	0.	0.	24.	0.	0.	0.	0.	24.
12/ 3	0.	0.	0.	0.	0.	0.	0.	24.
12/ 4	0.	0.	24.	0.	0.	0.	0.	24.
12/ 5	1.	0.	0.	0.	0.	0.	0.	23.
12/ 6	0.	1.	0.	0.	0.	0.	0.	24.
12/ 7	0.	19.	24.	0.	0.	0.	0.	24.
12/ 8	0.	3.	24.	0.	0.	0.	0.	24.
12/ 9	0.	0.	24.	0.	0.	0.	0.	24.
12/10	2.	8.	24.	7.	0.	0.	0.	22.
12/11	1.	15.	24.	15.	0.	0.	0.	23.
12/12	0.	0.	24.	0.	0.	0.	0.	24.
12/13	0.	1.	0.	1.	0.	0.	0.	24.
12/14	0.	0.	0.	0.	0.	0.	0.	24.
12/15	0.	0.	24.	0.	0.	0.	0.	24.
12/16	0.	0.	24.	0.	0.	0.	1.	24.
12/17	0.	0.	0.	1.	0.	0.	0.	24.
12/18	9.	0.	24.	0.	0.	0.	0.	9.
12/19	0.	0.	0.	0.	0.	0.	0.	0.
12/20	1.	14.	0.	14.	0.	0.	0.	0.
12/21	0.	14.	0.	14.	0.	0.	0.	0.
12/22	0.	11.	24.	0.	0.	0.	0.	0.
12/23	1.	11.	24.	0.	0.	0.	0.	2.
12/24	15.	1.	24.	5.	0.	0.	0.	0.
12/25	0.	0.	0.	23.	0.	0.	0.	1.
12/26	0.	0.	0.	15.	0.	0.	0.	1.
12/27	1.	0.	0.	0.	0.	0.	0.	0.
12/28	0.	0.	0.	0.	0.	0.	0.	0.
12/29	0.	0.	0.	12.	0.	0.	0.	0.
12/30	0.	2.	0.	15.	0.	0.	0.	0.
12/31	0.	0.	0.	0.	0.	0.	0.	0.
CALIBRATION TIME		12.		13.	0.	0.	0.	0.

V. MONTHLY METEOROLOGICAL SUMMARY

A. North American Summary

The month of December brought rather mild temperatures to much of the United States. Upper ridging prevailed over the western portion of the country during the first 21 days of December as the mean long wave trough position was established through the Mississippi Valley. During the last ten days of the month, the southwestern United States was dominated by a persistent upper cyclonic circulation, which brought heavy snowfalls to much of the region.

Zonal flow prevailed over the United States from December 1st through the 6th, from the 10th through the 14th, from the 18th through the 21st, and from the 25th through the 29th. Meridional flow was dominant from December 7th through the 9th, from the 15th through the 17th, from the 22nd through the 24th, and on the 31st. Split flow prevailed on the 30th.

A large closed low at upper levels dominated the eastern third of the nation on December 1st and 2nd, causing the formation of an intense surface cyclone off the Atlantic coast. This low brought very heavy snows to the Northeast and Atlantic seaboard states. Upper level cutoff lows dominated the southwestern United States from December 8th through the 11th, from the 23rd through the 26th, and from the 28th through the first two days of January.

In general, average temperatures in the United States during December were above normal, except for the southwestern portion of the country, where cloudiness prevailed during much of the month. Precipitation amounts across the country deviated

little from monthly normals. Specifically, the Northeast had average temperatures which were much higher than normal and precipitation totals which were slightly above normal for the month. The Atlantic seaboard states experienced above normal temperatures and precipitation during December, while the Southeast had above normal temperatures and slightly below normal precipitation. The northern tier of states also had above normal average temperatures during December, while experiencing slightly above normal precipitation. The central portion of the United States was affected by above normal temperatures and below normal precipitation. Both the Rocky Mountains and the Southwest (including Texas) generally experienced below normal average temperatures and slightly below normal precipitation. The western United States had above normal average temperatures and near normal precipitation. No major (extremely cold) outbreaks of continental polar air occurred in the United States during December.

B. Meteorological Statistics in Northwestern Colorado During December

The month of December brought below normal temperatures and slightly below normal precipitation to northwestern Colorado. Seven maritime polar cold fronts passed through the region during the month (December 5, 13, 17, 19, 22, 28, and 30). The cold front of the 22nd was exceptionally strong. In addition, an occluded front passed through the area on the 7th. The last ten days of December were much colder than normal in this region, and heavy snowfalls occurred on the 29th and 30th.

Grand Junction received a total of 0.32 inch of precipitation during December, which is 0.23 inch below normal for the month. The area received snow on twelve days of December (December 5th, 7th, 11th, 13th, 15th, 16th, 17th, 20th, 22nd, 29th, 30th and 31st). The heaviest snowfalls in Grand Junction occurred on the 5th and 29th. Heavy fog, which reduced horizontal visibilities to below ¼ mile, occurred on the 6th.

The area in general had twelve clear days, five partly cloudy days, and fourteen cloudy days. Sky cover by cloudiness averaged 5.6 out of a possible 10 during the period from sunrise to sunset and 5.4 out of a possible 10 during the entire 24-hour midnight to midnight period. The area received 56% of the possible sunshine during the month.

Northwestern portions of Colorado experienced some periods of poor dispersion and air stagnation during December. The valleys were particularly vulnerable to these stagnation conditions because of cold air which became entrenched in them, thus enhancing poor ventilation and trapping conditions. The

following official National Weather Service FKUS Air Stagnation Narratives pertain to northwestern Colorado during the month of December:

- December 1: "Morning dispersion conditions will be poor over a large area of Utah and Colorado southeastward to Texas on the morning of the 2nd."

- December 2: "The stagnation area over the central and southern Rocky Mountain States today will be depressed southwestward on December 3rd and 4th as a surface frontal system moves across the top of the upper ridge. High surface pressure gradients indicated on the latest prog package suggest improvement in dispersion conditions over eastern Colorado by late on the 3rd. However, locally poor dispersion is apt to persist in the valleys of New Mexico and western Colorado through Wednesday morning due to continued light winds and the trapping of cold air."

- December 3: "Stagnation conditions to diminish during the next 24 hours through the Rockies and southwestern United States as the ridge is forced southeastward. The upper ridge will continue to cause light winds through the 4th so would expect restricted night and morning dispersion conditions in that region into early on the 5th. Increased circulation through the Rockies should provide improved dispersion conditions in most of Colorado on the 4th."

- December 8: "Expected deteriorating night and morning dispersion conditions in Utah tonight and eastern Colorado late tomorrow as the upper ridge moves eastward into the Rockies...Conditions in Colorado will improve tomorrow night as the front moves through the central Rockies."

- December 11: "Poor dispersion will prevail at night and in the early morning hours under the surface high crossing the Great Basin for the next several days, but the movement of the high and forecasted positive vorticity advection should restrict periods of poor dispersion only to short periods in any one place."

- December 17: "An area of negative vorticity, associated with an upper ridge, builds into Utah and western Colorado by the morning of the 19th as a vorticity minimum shifts into that region with associated light winds. Dispersion will be restricted mainly during the morning and nighttime hours and mostly in valley locations."

- December 23: "A cold air mass moving south through the northern Rockies will cause locally restricted dispersion in portions of northern Utah and western Colorado as winds diminish and cold air becomes trapped in valleys."

- December 24: "The ridge in the far western United States is forecast to break down during the next 36 hours allowing increasing winds and circulation in the Pacific Northwest and flushing out any cold air that may have been trapped in the valleys of the northern Rockies. Area of restricted night and morning dispersion to move south into the Great Basin and portions of California by the night of the 25th."

- December 31: "The ridge building into the far western United States will spread an area of stagnation and locally restricted dispersion through Oregon, central California, Nevada, northern Utah, Wyoming, and Colorado. Stagnation will persist in the Great Basin and central California into the morning of January 2nd, with the trend toward deteriorating night and morning dispersion continuing through the entire region."

In addition to being subjected to periods of air stagnation during December, northwestern Colorado also experienced several winter storms and some extremely cold weather during the month. Travelers Advisories were issued for heavy snowfalls in northwestern Colorado on December 4th, 5th, 13th, 21st, 22nd and 29th. Heavy snow warnings were issued for the region on these same days. As much as ten inches of snow fell in portions of western Colorado on the 4th and 5th. Selected portions of the ABUS National Weather Summaries for December are as follows:

- "One inch of snow was recorded at Rifle, Colorado (December 13th)".

- "Craig, Colorado, reached a high of only four degrees today and the thermometer in many mountain valleys will dip to twenty degrees below zero tonight (December 24th)."

- "Rifle, Colorado, had the low for the nation last night, with a temperature of -9°F (December 28th)."

C. Summary of the Meteorological Conditions in the Tract C-b during December

Unseasonably cold temperatures affected the Tract C-b region during much of December, as cold polar air continually advected into the area. Temperatures were particularly cold in the Piceance Creek Valley during the nighttime hours, as the katabatic circulation reinforced the already frigid air present in this basin. Because of the persistent mean upper troughing in the region during the month, snowfall occurred in the Tract C-b area on twelve December days. Very heavy snowfalls occurred on the 5th and 29th.

The diurnal temperature range was usually much greater in the Piceance Creek Valley than it was atop the plateau during December. In particular, the nighttime minimum temperatures in the valley were often lower than the temperatures on the plateau by 20°F or more on clear nights when radiational cooling and the katabatic circulation were well-established in the region. A prime example of this phenomenon occurred on the 25th, when the temperature in the valley at Trailer 021 at 0800 hours was -34°F, while at the same time atop the plateau, Trailer 024 had a temperature of -6°F. Another implication of these frequent large variations in temperature between the valley and plateau is that an extremely strong inversion exists in the valley on these radiational cooling nights, particularly when snow cover is present. Such a situation could lead to the trapping of low-level pollutants in the valley occasionally.

Monthly average temperatures during December ranged from 11°F at Trailer 021, 12.9°F at Trailer 020, and 14.6°F at Trailer 022, all in the Piceance Creek Valley, to a temperature of about 25°F at the meteorological tower. Trailer 021 generally achieved not only the lowest nighttime minimum temperature in the

Tract C-b region, but also often had the highest daytime maximum temperature in the area, particularly on days when clear skies prevailed. Trailer 022 and the 8-foot level of the meteorological tower generally had the highest temperatures in the monitoring network on the cloudy, snowy, or windy days. Therefore, because of the very low nighttime temperatures and relatively high daytime temperatures at Trailer 021, this trailer generally had the greatest diurnal temperature range in the Tract C-b region on a day-by-day basis.

December 21st was the mildest day of the month, with daily average temperatures ranging from 30.3°F to 32.5°F in the Piceance Creek Valley (33.4°F at Trailer 024) and from 43.6°F to 44.3°F at the various meteorological tower levels. The highest temperature recorded in the valley during the month was 48°F at Trailer 021 and 022 on the 4th. The highest temperature recorded in December on the plateau was 54°F at the 30-foot level of the tower. This relatively high temperature for December was caused by the advection of warm air preceding a strong short wave on the 21st. The coldest temperature recorded in the valley during the month was -34°F at Trailer 021 at 0800 hours on the 25th, while the coldest temperatures recorded on the plateau were -8°F at Trailer 024 on the 24th at 0300 hours and -5°F at the 8-foot level of the tower at 0400 hours on the 24th. In general, the 8th, 9th, 10th, 25th, 26th, and 31st had the lowest daily average temperatures during December.

The change in temperature between tower levels did not demonstrate an identifiable pattern during the month. An inversion generally existed between 30 and 100 feet during the nighttime hours, while the temperature decreased with height during the daylight hours, a sequence which is to be expected. The temperature difference between the 30- and 200-foot levels did not exhibit an identifiable pattern, however. In fact, the

temperature difference between these two levels was often positive (inversion) during the daytime and negative at night.

Because of the frequent snowfalls during the month, the monthly average relative humidities were rather high, both at the valley sites and on the plateau. The monthly average relative humidities in the valley ranged from 71.9% at Trailer 020 to 74.4% at Trailer 021. On the plateau, Trailer 024 averaged 68.6% relative humidity, while the four tower levels ranged from 67.3% to 71.6%. December 7th, 29th, 30th, and 31st were the most humid days of the month in the Tract C-b region, while the first four days of the month were the driest in this region, particularly so on the plateau (some relatively moist air was trapped in the valley during this period, in addition to the fact that the lower nighttime temperatures in the valley on these days resulted in higher daily average relative humidities at the valley sites).

Due to the generally cloudy conditions which prevailed in the Tract C-b region during the month, in addition to the fact that solar elevations were low (winter solstice), solar radiation totals were relatively low during December. On a clear day in December, about 165 langleys should be received. The only December day when the maximum possible solar radiation was received was the 9th (downtime, especially on the 3rd, prohibits a complete evaluation of the month). The 5th and 7th of the month received only minimal amounts of solar radiation because of excessive cloud cover. The highest hourly radiation total received during the month was 36 langleys on the 3rd and 9th, from 1200 to 1300 hours, the normal period of maximum solar radiation.

Daily averages of the barometric pressure (limited data) ranged from 783.3 millibars on the 29th to 791.2 millibars on the 30th at the meteorological tower. The standard station

pressure at the altitude at which this barometer is mounted is 784 millibars, using the standard atmosphere as reference.

Winds in the Tract C-b region generally followed the same pattern during December that they had followed during the preceding months. The katabatic/anabatic circulation cell dominated the flow in the Piceance Creek Valley, while the plateau remained in gradient flow with far fewer mesoscale effects superimposed. Actually, the katabatic (downslope) circulation was much more dominant than the anabatic cell in the valley on cloudless days with weak pressure gradients because of the low solar elevations and resultant lack of insolation to power the anabatic cell.

Resultant wind directions in the valley, therefore, were east and east-southeasterly, generally following the contours of the basin. Resultant speeds ranged from 0.6 miles per hour at Trailer 021, where nighttime winds are generally rather light, to 3.1 miles per hour at Trailer 022, where the katabatic flow is strongest. Scalar wind speeds ranged from 3 miles per hour at Trailer 020 to 5 miles per hour at Trailer 022. On the plateau, the resultant wind directions on the meteorological tower ranged from 239 degrees at 30 feet to 249.9 degrees at 200 feet. The general wind flow, then, was west-southwesterly with a general veering in direction with height, as would be expected. Wind speeds, both resultant and scalar, increased with increasing height, also a normal occurrence. Resultant speeds ranged from 2.6 miles per hour at 8 feet to 4.7 miles per hour at 200 feet. Scalar speeds ranged from 5 miles per hour at the 8-foot level to 9 miles per hour at 100 feet and 200 feet. Trailer 024, between the meteorological tower and valley sites, demonstrated an intermediate wind behavior. The resultant wind direction at this site was 177.5 degrees. The resultant wind speed was 1.1 miles per hour, with a scalar average speed of 3 miles per hour.

The 21st had the highest daily average winds, particularly on the plateau, while the 9th, 29th, 30th and 31st had the lightest winds. Winds were generally light to moderate on the plateau during the month and were very light in the valley, low enough to cause impaired dispersion and ventilation on occasion. The strongest winds experienced in the Tract C-b area during December occurred during the evening of the 21st, in advance of an intense winter storm. Sustained winds of 40 miles per hour or higher were recorded at 100 feet and 200 feet for a period of about seven hours during this episode. The maximum five-minute average wind velocity recorded during this storm, and also during the entire month, was 52 miles per hour at 2005 hours on the 21st at the 200-foot level.

VI. DATA PRESENTATION AND SUMMARY

This section includes summaries for various recorded data at the monitoring sites. The data presentations indicate the variability of pollutant concentrations and meteorological parameters with location and time. In addition, the presentations indicate the functional dependence of pollutant concentration with wind direction. All data except suspended particulates (24-hour samples) are sampled once each second, but recorded as five-minute arithmetic averages of the one-second samples. This averaging technique tends to smooth instantaneous maximum values, and is especially evident when comparing wind gusts to local weather bureau data.

Inherent to any data acquisition system is random noise both from the recording instruments and quantization in the analog-to-digital conversion. The lower threshold for all analytical instruments is twice the maximum noise level generated by the instruments. This lower threshold is 5 ppb for all instruments, except for the ozone analyzer for which it is 0.5 ppb. Therefore, any values appearing in the data presentations that are less than 5 ppb indicate only a trace of pollutant in question and should not be construed to be absolute levels. In addition, when concentration levels drop below the lower threshold, the recorded quantity is simply random noise and averages tend toward zero. Thus, when concentrations are below the lower threshold of the analytical instruments they may appear as a zero entry in the data presentation which does not indicate absolute zero concentration.

— All pollutant data (except for particulate data is taken at the monitoring site in integer parts per billion (ppb) but is presented here in micrograms per cubic meter ($\mu g/m^3$)

assuming standard temperature and pressure of 25°C and 760 mmHg (1013.2 millibars), respectively. The scale factors required to convert $\mu g/m^3$ at standard conditions back to ppb for the various pollutants are given in the following table.

POLLUTANT	TO CONVERT $\mu g/m^3$ AT 25°C AND 760 mmHg TO ppb MULTIPLY BY
NO_x	.534
NO	.534
NO_2	.534
SO_2	.384
H_2S	.723
THC	1.536
CH_4	1.536
CO	.877
O_3	.512

The units of the meteorological parameters are given in the table. It should be noted here that inside temperature is monitored and recorded as a functional part of the system but is not presented in this report.

Table III displays the monthly statistics for each monitoring station for the month. To insure statistical significance, and to reduce the possibility of introducing a bias in the presentation, averages are computed only when at least 50 percent of the samples are present, except for relative humidity and temperature, in which case 75 percent of the samples are required. If less than the required samples are present for a particular parameter, that entry will be blank. The number of

samples present for a particular channel is defined as the total possible number of five-minute samples for the averaging time less the computer downtime less the channel downtime less the channel calibration time. The averages in Table III are arithmetic averages with the following exceptions:

- Wind speed and wind direction are computed using a vector averaging technique where the wind speed is treated as the vector magnitude.

- Particulate averages are computed as the geometric mean.

Table IV displays the daily averages. Again, 50 percent of the five-minute samples are required in order to compute an average except for the cases of relative humidity and temperature which require 75 percent. A blank entry indicates an insufficient number of five-minute samples present for that day. Wind speed, wind direction, and particulate averages are computed the same way as described in Table III.

Table V presents the maximum daily five-minute average retained in the data base as well as the time of occurrence. A five-minute maximum average is printed if any samples are present for that day. Therefore, the maximum five-minute average for a channel which experienced considerable downtime or calibration time during the day in question may be misrepresentative of the maximum expected for that channel on that day.

Table VI indicates the five largest averages for various averaging times. The table shows the period of time covered by the average. Maxima are chosen so that time segments

are independent. The maximum averages reported are found using a 'sliding average' technique with the exception of the 24-hour particulate average which is computed from midnight to midnight and the 3-hour hydrocarbon average which is computed from 6:00 to 9:00 a.m. only. For averaging times less than or equal to three hours, the sliding average is stepped one five-minute sample at a time. For longer averaging times the step size is twelve samples or one hour. For averaging times less than or equal to one hour 100 percent of the five-minute samples must be present to compute an average. Averaging times greater than one hour require 90 percent. Whether or not a sliding average is computed is solely determined by the number of samples present in that averaging time and is independent of daily and monthly averaging criteria.

To demonstrate the functional dependence of recorded parameters upon wind direction, Table VII shows pollutant concentration displayed in a bi-variate distribution with wind direction. The tables display the total number of five-minute samples occurring in each concentration and wind speed class. The mean concentration for all samples occurring in each wind class are also shown. This distribution demonstrates the dependence of high pollutant concentrations upon wind direction. Appendix A contains stability wind rose diagrams.

The wind speed classifications used in Appendix A are based on the Beaufort wind scale classification system. This is a system of estimating and reporting wind speeds, invented in the early nineteenth century by Admiral Beaufort of the British Navy. It was originally based on the effects of various wind speeds on the amount of canvas that a full-rigged frigate of the period could carry, but has since been modified and modernized. In its present form for international meteorological use it equates: (a) Beaufort force (or Beaufort number); (b) wind speed;

(c) descriptive term; and (d) visible effects upon land objects or the sea surface. One land adaptation is the NRM wind scale.

The six basic wind speed classifications used in the report are: 1-3 knots, 4-6 knots, 7-10 knots, 11-16 knots, 17-21 knots, and winds of greater than 21 knots. The following table is a complete description of the Beaufort Wind Scale, taken from Physical Climatology, by Helmut Landsberg, 1969.

BEAUFORT WIND SCALE FOR OBSERVATIONS AT LAND STATIONS

Force	Explanatory Title	Specification for Use	Corresponding Limits of Wind Speed at 10 meters ab. grd.				
			Mi/hr.	Knots	Km/hr.	M/sec.	Ft/sec.
0	Calm	Smoke rises vertically	<1	<1	<1	0.3	1
1	Light air	Direction of wind shown by smoke drift, but not by wind vanes	1-3	1-3	1-5	0.3-1.5	1-5
2	Light breeze	Wind felt on face; leaves rustle; ordinary vane moved by wind	4-7	4-6	6-11	1.6-3.3	6-11
3	Gentle breeze	Leaves and small twigs in constant motion; wind extends light flag	8-12	7-10	12-19	3.4-5.4	12-18
4	Moderate breeze	Raises dust and loose paper; small branches are moved	13-18	11-16	20-28	5.5-7.9	19-26
5	Fresh breeze	Small trees in leaf begin to sway; wavelets formed on inland waters	19-24	17-21	29-38	8.0-10.7	27-35
6	Strong breeze	Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty	25-31	22-27	39-49	10.8-13.8	36-45
7	High wind	Whole trees in motion; inconvenience felt when walking against wind	32-38	28-33	50-61	13.9-17.1	46-56
8	Fresh gale	Breaks twigs off trees; generally impedes progress	39-46	34-40	62-74	17.2-20.7	57-68
9	Strong gale	Slight structural damage occurs (chimney pots and slates removed)	47-54	41-47	75-88	20.8-24.4	69-80
10	Whole gale	Seldom experienced inland; trees uprooted; considerable structural damage occurs	55-63	48-55	89-102	24.5-28.4	81-93
11	Storm	Very rarely experienced; accompanied by widespread damage	64-72	56-63	103-117	28.5-32.6	94-106
12	Hurricane	.....	73-82	64-71	118-133	32.7-36.9	107-121
13	.....	.....	83-92	72-80	134-149	37.0-41.4	122-136
14	.....	.....	93-102	81-89	150-166	41.5-46.1	137-151
15	....	.....	104-114	90-99	167-183	46.2-50.9	152-166
16	.....	.....	115-125	100-108	184-201	51.0-56.0	167-183
17	.....	.....	126-136	109-118	202-220	56.1-61.2	184-201

Source: Table 36 (p. 119) in R. J. List (1951); Smithsonian Meteorological Tables; Smithsonian Miscell. Coll. Vol. 114.

Table VIII demonstrates the diurnal variation of various recorded parameters. Hourly averages are determined by arithmetically averaging five-minute samples, except for wind direction magnitudes. Totals in the diurnal wind direction tables are vector averages of the columns and rows. For all parameters, a blank entry in the diurnal variation table indicates that less than half (i.e., less than 6) of the five-minute samples for that hour are present.

It should be noted that the hydrocarbon levels presented do not represent ambient concentrations. The values are influenced by a contamination of the sampling cane. The hydrocarbon levels were significantly reduced after carefully cleaning the sampling cane apparatus.

Times given in the data presentation are Mountain Standard Time.

To facilitate comparison of recorded concentrations to ambient air quality standards, the following regulations are presented.

FEDERAL AND COLORADO STANDARDS

	Primary	Secondary	Non-Designated Area	Designated Area 1973	1976	1980
Particulate						
Annual G. M.	75 µg/m³	60 µg/m³	45 µg/m³	70 µg/m³	55 µg/m³	45 µg/m³
24 Hr. Max.*	260	150	150	200	180	150
Sulfur Oxides						
Annual	80(.03ppm)		--	60(.02ppm)	25(.009ppm)	10(.004ppm)
24 Hr. Max.*	365(.14ppm)		15(.005ppm)	300(.1ppm)	150(.05ppm)	55(.02ppm)
3 Hr. Max.*	--	1300(.5ppm)	--	--	--	--
1 Hr. Max.**	--	--	--	800(.28ppm)	300(.1ppm)	--
Oxidant						
1 Hr. Max.*	160(.08ppm)	160				
8 Hr. Max.*	--	--				
Annual	--	--				
Hydrocarbons						
3 Hr. Max.* 6-9 a.m.	160(.24ppm)	160				
Carbon Monoxide						
Max. 8 Hrs.*	10000(9ppm)	10000				
Max. 1 Hr.*	40000(35ppm)	40000				
Nitrogen Dioxide						
Annual	100(.05ppm)	100				

Units are micrograms per cubic meter and ppm in parenthesis.
*Not to be exceeded more than once per year.
**Not to be exceeded more than once per month.

TABLE III. AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

WIND SPEED

SITE	(8-FT)	(30-FT)	(100-FT)	(200-FT)
	023	023	023	023
	2.6	3.7	4.3	4.7

WIND DIRECTION

SITE	(8-FT)	(30-FT)	(100-FT)	(200-FT)
	023	023	023	023
	241.3	239.0	242.3	249.9

RELATIVE HUMIDITY

SITE	(8-FT)	(30-FT)	(100-FT)	(200-FT)
	023	023	023	023
	67.3	69.3	68.7	71.6

TEMPERATURE OUTSIDE

SITE	(8-FT)	(30-FT)	(100-FT)	(200-FT)
	023	023	023	023
	24.1	25.3	25.2	25.7

RADIAN

TABLE III. AVERAGES FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

NITROGEN OXIDES(NOX)

SITE	020	023
	7.5	

NITRIC OXIDE(NO)

020	023
0.7	

NITROGEN DIOXIDE(NO2)

020	023
6.8	

TOTAL HYDROCARBONS

SITE	020	023
	1015.7	21241.2

METHANE

020	023
918.8	1053.8

NON-METHANE HYDROCARBONS

020	023
97.4	20213.6

CARBON MONOXIDE

SITE	020	023
	676.9	2439.3

OZONE

020	023
69.3	28.0

BAROMETRIC PRESSURE

023

SULFUR DIOXIDE(SO2)

SITE	020	021	022	023	024
	1.8	1.7	0.1	6.4	1.7

PARTICULATE

020	021	022	023	024
4.3	5.4	4.2		2.9

HYDROGEN SULFIDE

SITE	020	021	022	023	024
	4.0	0.0	1.2	5.2	0.1

TOTAL PRECIPITATION (INCHES)

020	021	022	023	024
		0.02		0.01

RELATIVE HUMIDITY

SITE	020	021	022	024
	71.9	74.4	74.1	68.6

TEMPERATURE OUTSIDE

020	021	022	024
12.9	11.0	14.6	

WIND SPEED

SITE	020	021	022	024
	1.1	0.6	3.1	1.1

WIND DIRECTION

020	021	022	024
130.0	109.7	110.4	177.5

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	NITROGEN OXIDES(NOX)		NITRIC OXIDE(NO)		NITROGEN DIOXIDE(NO2)	
SITE	020	023	020	023	020	023
DATE						
12/ 1	9.7		0.2		9.6	
12/ 2	10.8	16.5	0.3	7.5	10.5	9.0
12/ 3	11.4	10.1	0.0	2.9	11.4	7.2
12/ 4	19.9	11.0	1.4	3.8	18.4	7.3
12/ 5	10.4	33.6	0.3	30.6	10.1	2.9
12/ 6	7.6	25.6	0.4	16.4	7.2	9.3
12/ 7	5.4	17.5	0.8	14.2	4.6	3.3
12/ 8	9.2	16.0	2.9	11.7	6.3	4.3
12/ 9	5.8	13.7	5.8	10.9	0.0	2.7
12/10		0.0		0.0		0.0
12/11		0.0		0.0		0.0
12/12	6.0	0.0	0.8	0.0	5.2	0.0
12/13	0.4		0.0		0.3	
12/14	1.8		0.7		1.1	
12/15	4.9		0.3		4.6	
12/16	8.4		0.7		7.7	
12/17	3.8		0.7		3.1	
12/18	10.8		0.6		10.3	
12/19	10.2		0.3		9.9	
12/20	9.0		0.1		8.8	
12/21	5.0		0.4		4.6	
12/22	0.9		0.7		0.2	
12/23						
12/24						
12/25	3.9		0.0		3.9	
12/26	5.2		0.0		5.2	
12/27	4.8		0.0		4.8	
12/28	11.0		0.0		11.0	
12/29	15.5	44.0	0.0	43.1	15.5	0.9
12/30	8.9		0.6		8.3	
12/31	5.0	39.6	0.0	25.5	5.0	14.1

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	SULFUR DIOXIDE(SO2)					PARTICULATE				
SITE DATE	020	021	022	023	024	020	021	022	023	024
12/ 1	0.0	0.0	0.0		2.1		12.0	116.0		2.0
12/ 2	0.0	5.5	0.0	0.0	1.8			8.0		
12/ 3	0.0	10.5	0.0	0.3	1.5	6.0			10.0	5.0
12/ 4	1.0	5.7	0.0	2.9	0.0	8.0	17.0		22.0	
12/ 5	3.7	4.3	0.0	7.3	0.8		2.0	8.0	2.0	8.0
12/ 6	5.0	0.0	0.0	0.0	0.4	4.0	3.0	2.0		1.0
12/ 7	5.4	0.0	0.0	0.3				2.0	2.0	
12/ 8	13.4	0.0	0.0	0.0	0.1			3.0	1.0	
12/ 9	2.5	0.0	0.2	0.0	2.4	1.0	7.0		3.0	
12/10	0.0	0.0	0.0	0.0	22.7	9.0	18.0	3.0	16.0	
12/11			0.0	0.0		9.0				
12/12	0.0		0.0	1.3	0.2	11.0	11.0	12.0	8.0	
12/13	0.1		0.6	2.0	0.0		3.0			4.0
12/14	2.2		0.0		0.0	5.0	4.0	2.0		2.0
12/15	5.8		0.0		7.7					
12/16	0.0				6.2	3.0	2.0	4.0		
12/17	0.0				0.0	6.0	4.0	3.0		3.0
12/18	0.0		0.0		0.0					
12/19	0.0	7.8	0.0	0.0	0.0	7.0	8.0	5.0		8.0
12/20	0.0		2.9	9.7		3.0	9.0	4.0		3.0
12/21	0.0	0.2	0.0	23.3		5.0		1.0	6.0	4.0
12/22	0.0	0.1	0.0	37.1	2.6			9.0		
12/23		0.0	0.0							
12/24		0.0	0.0							
12/25		0.0	0.0		0.0	3.0		4.0		1.0
12/26			0.0		0.0	2.0				7.0
12/27		0.0	0.0		0.0	2.0				1.0
12/28	0.0	1.3	0.0		0.0	3.0	3.0	3.0		2.0
12/29		0.0	0.0	12.3	0.0		4.0	4.0	1.0	3.0
12/30		0.0	0.0		0.0	4.0	5.0	1.0		4.0
12/31		0.0	0.0	23.8	0.0	4.0	4.0	5.0	4.0	3.0

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TOTAL HYDROCARBONS		METHANE		NON-METHANE HYDROCARBONS	
SITE	020	023	020	023	020	023
DATE						
12/ 1	660.5		660.5		0.0	
12/ 2	820.2	16756.1	803.1	899.5	17.1	15856.7
12/ 3	902.8	18658.8	868.3	866.3	34.5	17792.4
12/ 4	942.8	16093.0	891.5	854.4	51.2	15238.1
12/ 5	1041.6	27615.6	901.3	901.3	140.4	26714.2
12/ 6	1091.8	21459.8	950.5	907.9	141.3	20551.2
12/ 7	1048.3	19790.4	952.5	869.1	95.8	18979.6
12/ 8	1104.0	27716.7	1018.3	980.8	175.7	26827.0
12/ 9	957.5	31078.2	795.6	1026.1	161.9	30141.6
12/10	1059.9	29156.5	872.3	882.9	187.6	28275.6
12/11	1134.2	28767.6	1008.7	861.9	129.2	27905.9
12/12	1082.6	27716.2	1017.2	876.4	65.3	26839.8
12/13	955.3	24138.8	879.6	860.6	75.7	23278.2
12/14	999.4		945.2		54.1	
12/15	1055.8		1019.4		36.4	
12/16	1096.0		1037.2		58.8	
12/17	963.5		923.4		40.1	
12/18	1174.7		941.2		229.5	
12/19	1088.7	25703.9	913.4	1322.7	175.3	24591.4
12/20	981.4	43454.2	862.2	892.3	119.2	42726.5
12/21	941.4		843.8		97.6	
12/22	940.9		866.5		74.4	
12/23						
12/24						
12/25						
12/26						
12/27						
12/28						
12/29		2992.1		1972.4		1022.7
12/30		2793.8		1077.5		1716.3
12/31		2826.1		1076.5		1749.6

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATION-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; PRESSURE-MILLIBARS; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	CARBON MONOXIDE		OZONE		BAROMETRIC PRESSURE
SITE	020	023	020	023	023
DATE					
12/ 1	378.5		56.3		
12/ 2	441.6	3244.3	51.8	35.5	
12/ 3	501.4	3118.6	67.5	41.4	
12/ 4	509.9	3059.3	47.1	34.4	
12/ 5	516.0	3508.1	40.8	22.3	
12/ 6	539.6	3540.5	43.5	22.9	
12/ 7	612.4	3206.4	58.8	34.9	
12/ 8	728.7	3384.5	46.9	25.2	
12/ 9		2663.2	44.6	19.8	
12/10		1156.1	47.1	13.1	
12/11	752.5	1117.8	51.5	21.5	
12/12	754.4	1117.5	64.7	24.7	
12/13	723.2	1111.5	92.4	32.4	
12/14	771.0		93.2		
12/15	1053.2		94.8		
12/16	729.2		71.3		
12/17	737.2		73.9		
12/18	764.3		64.6		787.5
12/19	717.9	3293.6	86.1		
12/20	716.7	1271.2	85.8		
12/21	716.3		79.2		
12/22	765.5		91.5		
12/23					
12/24					
12/25			84.5		
12/26			79.9		
12/27			87.2		
12/28			83.0		
12/29		3372.2	70.6	3.1	783.3
12/30		1610.7	69.6	56.7	791.2
12/31		1807.4	74.8	55.7	

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	HYDROGEN SULFIDE					TOTAL PRECIPITATION (INCHES)				
SITE	020	021	022	023	024	020	021	022	023	024
DATE										
12/ 1	0.0	0.0	0.1		0.0					
12/ 2	0.0	0.0	1.7	0.1	0.0					
12/ 3	0.0	0.0	3.3	0.0	0.0					
12/ 4	0.0	0.0	5.0	0.0	0.0					
12/ 5	0.0	0.0	5.8	0.0	0.0					
12/ 6	0.4	0.0	6.3	0.0	0.0					
12/ 7	0.4	0.2	7.6	0.0	0.0					
12/ 8	1.4	0.5	2.8	0.0	0.0					
12/ 9	0.2	0.3	0.0	0.0	0.0					
12/10	0.0	0.0	0.0	1.7	0.0					
12/11	0.0		0.0	0.0						
12/12	0.0		0.0	2.9	0.0					
12/13	0.0		0.0	5.2	0.1					
12/14	0.0		0.0		0.0					
12/15	0.0		0.0		0.0					
12/16	0.0				0.0					
12/17	0.0				0.0					
12/18	0.0		0.0		0.0					
12/19	0.0	0.5	0.0	1.0	0.0					
12/20	0.1		0.3	2.5						
12/21	0.0	0.0	0.0	28.9						
12/22	0.0	0.0	0.0	39.7	0.0					
12/23		0.0	0.0		0.4					
12/24		0.0	0.0							
12/25	0.0	0.0	0.0							
12/26	0.0		0.0							
12/27	0.0	0.0	0.0		0.0					
12/28	0.0	0.0	0.0		0.0					
12/29	0.0	0.0	0.0	7.4				0.02		0.01
12/30	0.0	0.1	0.0	12.5						
12/31	0.0	0.0	0.0	11.9	0.0					

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	RELATIVE HUMIDITY				TEMPERATURE OUTSIDE			
SITE / DATE	020	021	022	024	020	021	022	024
12/ 1	63.8	70.3		40.9	11.8	6.9		
12/ 2	63.6	67.2	56.6	40.5	13.3	12.0	20.2	
12/ 3	44.4	54.3	47.1	32.2	24.8	21.7	26.7	
12/ 4	49.7	49.3	52.5	33.6	28.8	29.2	31.7	
12/ 5	85.7	85.1	89.8	88.9	29.3	27.8	31.9	
12/ 6	84.6	83.1	88.0	83.3	22.1	23.3	24.1	
12/ 7	88.2	88.2	94.0	93.5	19.4	19.9	20.9	
12/ 8	78.2	78.3	84.5	77.2	3.8	4.4	7.1	
12/ 9	65.1	67.2	68.5	51.6	5.5	3.6	10.3	
12/10	66.2	69.1	69.9	47.4	5.8	3.5	10.4	
12/11	66.5		64.6	60.6	13.9		10.3	
12/12	64.8		61.8	58.8	16.5		16.5	
12/13	68.4		75.5	73.0	20.2		22.4	
12/14	69.3		75.9	69.3	13.5		15.7	
12/15	78.7		85.4	78.6	16.5		18.9	
12/16	88.4		79.5	90.9	17.8		18.5	
12/17	83.0		73.7	82.5	16.7		18.7	
12/18			67.7				11.0	
12/19	62.6	63.6	69.4	64.2	16.6	17.9	18.0	23.6
12/20	72.5		72.1	73.9	19.8		22.6	24.1
12/21	60.5	59.7	65.8	64.1	30.3	32.5	31.9	33.4
12/22		69.6	70.3	67.1		12.0	12.8	14.3
12/23		84.4	87.3	86.6				
12/24								
12/25	69.9		73.2	61.9				2.1
12/26	73.4		74.6	70.4				5.7
12/27	69.1	73.8	75.4	67.5	7.5	5.5	7.2	16.3
12/28	68.6	79.7	67.8	56.0	11.2	10.0	14.1	23.3
12/29	91.2	94.8	93.2	91.1	9.9	12.6	13.1	17.8
12/30	86.3	89.5	90.0	90.1	4.4	4.5	7.6	15.0
12/31	85.1	88.4	88.8	90.9			1.7	9.5

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND SPEED				WIND DIRECTION			
SITE	020	021	022	024	020	021	022	024
DATE								
12/ 1	0.2	0.6	1.4	0.2	282.0	341.0	134.5	137.5
12/ 2	0.3	0.6	4.6	0.2	149.8	332.1	113.9	130.9
12/ 3	4.8	1.5	8.3	3.1	131.3	141.8	110.1	119.4
12/ 4	3.4	3.9	7.5	4.0	118.4	137.6	102.6	138.1
12/ 5	0.6	1.6	0.1	0.9	283.6	336.1	155.2	265.0
12/ 6	0.9	1.6	2.0	0.3	121.7	120.8	106.0	65.8
12/ 7	0.5	3.8	0.9	2.8	257.1	335.6	95.9	274.0
12/ 8	1.2	1.2	3.2	0.3	120.5	139.2	99.3	150.7
12/ 9	0.7	0.7	4.7	0.3	144.4	330.5	112.4	118.8
12/10	0.7	0.5	5.3	0.9	105.6	2.0	108.9	292.3
12/11	1.1		1.0	0.9	131.1		340.5	120.2
12/12	1.9		2.2	1.3	123.8		122.6	132.4
12/13	1.1		2.9	3.8	261.6		268.2	223.5
12/14	0.5		1.5	3.0	137.8		102.7	185.2
12/15	0.3		1.7	1.0	109.1		103.6	200.8
12/16	1.9		4.8	1.6	90.7		121.2	79.8
12/17	2.0		3.7	1.9	146.6		121.0	175.8
12/18	2.4		3.2	4.3	118.3		119.4	149.2
12/19	0.3	2.6	1.0	2.9	127.6	118.1	109.6	226.0
12/20	2.3		6.9	2.3	121.2		124.8	154.1
12/21	1.9	7.8	6.5	9.8	140.7	141.9	106.9	151.6
12/22	4.6	2.1	2.8	5.4	288.4	297.9	278.4	243.3
12/23		4.2	2.6	3.8		340.2	279.0	264.4
12/24		3.4	4.6			122.9	98.7	
12/25		3.5	5.9	0.6		332.0	109.4	80.0
12/26			2.6	0.5			100.7	231.2
12/27		4.6	9.9	4.1		146.1	107.2	96.4
12/28	2.9	0.3	5.8	1.7	126.2	28.3	102.5	111.7
12/29		0.9	0.2	0.6		339.9	96.0	239.6
12/30		0.4	2.9	0.2		59.3	95.5	6.6
12/31		0.1	2.7	1.1		355.0	107.2	250.6

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND SPEED			
	(8-FT)	(30-FT)	(100-FT)	(200-FT)
SITE	023	023	023	023
DATE				
12/ 1				
12/ 2	1.4	2.2	1.3	1.3
12/ 3	4.4	6.8	8.4	8.7
12/ 4	6.2	9.2	11.4	12.4
12/ 5	1.3	2.2	2.5	2.5
12/ 6	0.8	1.6	1.4	1.2
12/ 7	2.8	3.8	4.5	8.5
12/ 8	1.7	3.0	3.1	3.1
12/ 9	1.4	1.9	2.0	1.6
12/10	1.5	2.6		3.0
12/11	2.0	3.0		3.3
12/12	2.3	3.6	5.8	7.8
12/13	4.3	5.7	6.8	7.5
12/14				
12/15				
12/16				
12/17				
12/18	7.4	9.2	9.7	11.4
12/19	3.6	4.9	6.2	7.1
12/20	3.2	4.8	6.7	8.1
12/21	16.5	20.7	24.5	27.3
12/22	12.5	16.1	17.0	17.9
12/23				
12/24				
12/25				
12/26				
12/27				
12/28				
12/29	1.4	2.3	2.5	2.3
12/30	2.6	1.2	1.0	1.1
12/31	2.3	3.9	4.9	4.4

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND DIRECTION			
	(8-FT)	(30-FT)	(100-FT)	(200-FT)
SITE	023	023	023	023
DATE				
12/ 1				
12/ 2	209.9	215.2	203.0	188.2
12/ 3	159.7	156.6	157.9	171.2
12/ 4	176.8	178.1	181.3	187.1
12/ 5	300.8	295.5	306.2	307.7
12/ 6	255.5	243.3	249.5	270.7
12/ 7	314.5	313.9	315.5	320.7
12/ 8	247.2	246.1	266.3	278.5
12/ 9	259.5	271.4	327.0	317.3
12/10	291.7	296.9		316.8
12/11	203.0	204.7		217.6
12/12	209.8	203.4	203.0	217.8
12/13	240.0	240.3	237.2	244.3
12/14				
12/15				
12/16				
12/17				
12/18	200.3	202.2	204.8	211.8
12/19	255.5	254.1	259.4	265.3
12/20	178.0	186.3	197.7	214.0
12/21	232.8	237.4	239.8	246.0
12/22	316.7	312.9	312.9	317.0
12/23				
12/24				
12/25				
12/26				
12/27				
12/28				
12/29	268.7	266.4	286.8	302.3
12/30	235.8	224.8	250.7	279.6
12/31	287.7	278.3	296.9	308.0

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

RELATIVE HUMIDITY

SITE / DATE	(8-FT) 023	(30-FT) 023	(100-FT) 023	(200-FT) 023
12/ 1				
12/ 2	39.7	38.6	37.5	41.3
12/ 3	35.4	35.3	34.3	36.2
12/ 4	37.5	37.6	37.0	39.1
12/ 5	82.1	88.8	90.0	92.2
12/ 6	83.9	88.9	86.8	87.5
12/ 7	89.4	97.1	94.7	100.0
12/ 8	80.4	81.9	79.7	80.5
12/ 9	50.1	49.2	46.3	49.9
12/10	43.8	45.3	43.6	48.1
12/11	54.5	57.5	55.9	59.7
12/12	54.9	57.1	55.4	57.1
12/13	64.2	71.6	72.3	73.5
12/14				
12/15				
12/16				
12/17				
12/18	69.6	65.7	65.2	72.9
12/19	66.7	65.7	66.9	69.5
12/20				
12/21	73.9	75.0	75.1	78.7
12/22				
12/23				
12/24				
12/25				
12/26				
12/27				
12/28				
12/29	88.2	89.6	90.2	93.5
12/30	90.5	94.9	93.4	92.8
12/31	94.4	95.4	95.0	96.1

TABLE IV. DAILY AVERAGES FOR DEC 1 THRU 31

(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TEMPERATURE OUTSIDE			
	(8-FT)	(30-FT)	(100-FT)	(200-FT)
SITE	023	023	023	023
DATE				
12/ 1				
12/ 2	27.3	29.0	30.0	29.1
12/ 3	33.1	33.9	35.0	35.3
12/ 4	37.1	37.9	39.0	38.9
12/ 5	32.1	31.7	32.1	32.0
12/ 6	25.8	26.9	27.4	28.5
12/ 7	23.4	23.9	23.3	24.0
12/ 8	13.1	15.8	15.1	17.0
12/ 9	19.3	21.4	21.6	23.0
12/10	19.3	21.4	21.0	21.9
12/11	23.0	24.4	24.6	25.4
12/12	23.9	25.5	25.8	27.8
12/13	23.2	23.6	22.5	23.6
12/14				
12/15				
12/16				
12/17				
12/18	21.3	23.0	22.4	21.8
12/19	23.2	23.4	22.7	23.0
12/20		25.3	25.1	24.8
12/21	44.1	44.3	43.8	43.6
12/22		33.1	32.5	32.9
12/23				
12/24				
12/25				
12/26				
12/27				
12/28				
12/29	20.2	21.5	21.8	22.0
12/30	15.0	18.5	18.7	19.6
12/31	14.5	17.1	16.1	16.6

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	NITROGEN OXIDES(NOX)		NITRIC OXIDE(NO)		NITROGEN DIOXIDE(NO2)	
SITE	020	023	020	023	020	023
DATE						
12/ 1	24.3(23:25)	99.2(16:35)	5.6(0:40)	73.0(16:20)	24.3(23:25)	33.7(17:25)
12/ 2	24.3(9:10)	78.6(1:40)	13.1(10:00)	48.7(0:50)	22.5(0:35)	39.3(14:25)
12/ 3	44.9(17:30)	63.7(9:30)	3.7(17:35)	39.3(9:30)	44.9(17:30)	30.0(7:40)
12/ 4	50.2(10:50)	74.9(21:45)	26.2(10:50)	46.8(21:45)	43.1(18:15)	33.7(4:30)
12/ 5	59.9(6:00)	140.4(14:40)	26.2(6:00)	140.4(14:40)	39.3(1:50)	52.4(19:20)
12/ 6	46.6(17:55)	114.2(14:10)	20.6(17:55)	99.2(5:35)	30.0(20:00)	71.1(14:05)
12/ 7	59.3(6:30)	103.0(9:20)	39.3(6:00)	99.2(9:20)	31.8(23:15)	15.0(14:20)
12/ 8	58.0(6:25)	84.3(21:55)	31.8(6:25)	69.3(21:55)	33.7(2:10)	22.5(21:30)
12/ 9	56.2(23:00)	104.8(6:30)	56.2(23:00)	67.4(6:30)	0.0(0:00)	52.4(6:25)
12/10	11.2(2:35)	0.0(0:00)	11.2(2:35)	0.0(0:00)	0.0(0:00)	0.0(0:20)
12/11	18.7(22:20)	0.0(0:00)	5.6(15:55)	0.0(0:00)	18.7(22:20)	0.0(0:20)
12/12	35.5(3:20)	0.0(0:05)	15.0(4:10)	0.0(0:05)	31.8(3:55)	0.0(0:05)
12/13	7.5(1:50)		3.7(9:45)		7.5(1:50)	
12/14	20.6(22:55)		16.9(8:55)		20.6(22:55)	
12/15	30.0(23:10)		13.1(11:05)		30.0(23:10)	
12/16	30.0(0:35)		11.2(9:40)		30.0(0:35)	
12/17	16.9(23:45)	59.9(23:45)	7.5(7:40)	59.9(23:45)	16.9(23:45)	13.1(19:45)
12/18	20.6(0:35)	56.2(13:20)	7.5(15:20)	56.2(13:20)	20.6(0:35)	15.0(4:45)
12/19	24.3(9:00)		11.2(9:00)		20.6(9:05)	
12/20	18.7(5:30)		5.6(13:55)		18.7(5:30)	
12/21	16.9(2:40)	0.0(15:00)	7.5(16:15)	0.0(14:00)	16.9(2:40)	0.0(15:00)
12/22	5.6(6:50)		5.6(6:50)		3.7(4:05)	
12/23		119.8(14:15)		97.4(23:30)		74.9(14:20)
12/24	18.7(23:20)	123.6(3:25)	0.0(0:00)	99.2(0:25)	18.7(23:20)	78.6(3:25)
12/25	13.1(0:15)		0.0(0:00)		13.1(0:15)	
12/26	18.7(17:40)		0.0(0:00)		18.7(17:40)	
12/27	15.0(11:35)		0.0(0:00)		15.0(11:35)	
12/28	50.6(23:35)	93.6(14:05)	0.0(0:00)	93.6(14:05)	50.6(23:35)	7.5(16:30)
12/29	44.9(11:05)	129.2(13:05)	0.0(0:00)	123.6(12:25)	44.9(11:05)	56.2(15:30)
12/30	74.0(8:45)	101.1(23:15)	28.1(9:25)	76.8(23:15)	56.2(8:50)	35.6(23:20)
12/31	16.9(9:40)	174.1(10:50)	0.0(0:00)	131.1(10:50)	16.9(9:40)	46.8(2:35)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

SULFUR DIOXIDE(SO2)

SITE	020	021	022	023	024
12/ 1	0.0(0:00)	2.6(9:50)	0.0(10:15)	0.0(14:00)	5.2(7:30)
12/ 2	0.0(0:00)	33.9(19:10)	0.0(0:00)	0.0(0:00)	5.2(2:35)
12/ 3	0.0(0:00)	31.3(2:00)	0.0(0:00)	59.9(15:35)	7.8(11:55)
12/ 4	5.2(15:35)	31.3(9:50)	0.0(0:05)	15.6(22:20)	0.0(0:00)
12/ 5	10.4(2:45)	31.3(11:15)	0.0(0:00)	15.6(2:55)	5.2(20:25)
12/ 6	15.6(11:35)	0.0(0:00)	0.0(0:00)	0.0(0:00)	5.2(0:05)
12/ 7	10.4(22:30)	0.0(0:00)	13.0(12:35)	20.4(18:30)	88.5(4:40)
12/ 8	20.8(11:30)	0.0(0:00)	2.6(11:15)	0.0(0:00)	13.0(3:25)
12/ 9	18.2(0:10)	0.0(0:00)	5.2(2:40)	0.0(0:00)	10.4(19:25)
12/10	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(0:00)	161.5(7:10)
12/11	0.0(0:00)		0.0(0:00)	0.0(0:00)	0.0(16:00)
12/12	0.0(11:50)		10.4(12:50)	88.6(15:15)	7.8(17:10)
12/13	41.7(12:15)		7.8(1:25)	10.4(1:25)	0.0(0:00)
12/14	7.8(19:55)		0.0(0:00)	72.9(10:50)	0.0(0:00)
12/15	15.6(10:55)		13.0(11:15)		15.6(11:50)
12/16	0.0(0:00)		0.0(0:00)		18.2(7:00)
12/17	0.0(0:00)		0.0(17:35)	2.6(15:10)	0.0(0:00)
12/18	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(16:30)	0.0(0:00)
12/19	0.0(0:00)	28.7(15:50)	0.0(0:00)	2.6(17:55)	0.0(0:00)
12/20	0.0(0:00)	5.2(20:10)	20.8(0:10)	80.6(23:50)	67.7(0:00)
12/21	0.0(0:00)	2.6(0:05)	0.0(0:00)	119.8(2:50)	2.6(14:00)
12/22	0.0(0:05)	2.6(12:30)	0.0(0:00)	200.6(14:45)	2.6(0:00)
12/23		2.6(1:10)	0.0(0:00)	18.2(14:50)	0.0(13:00)
12/24	0.0(0:00)	0.0(0:00)	0.0(0:00)	15.6(0:10)	0.0(0:00)
12/25		0.0(0:00)	0.0(0:00)		0.0(0:00)
12/26		0.0(14:00)	0.0(0:00)		0.0(0:00)
12/27	0.0(15:10)	23.4(15:25)	0.0(0:00)		0.0(0:00)
12/28	0.0(0:00)	7.8(13:10)	0.0(0:00)	28.7(15:45)	0.0(0:00)
12/29		0.0(0:00)	0.0(0:00)	20.8(7:20)	0.0(0:00)
12/30		2.6(14:35)	0.0(11:15)	49.5(23:40)	0.0(0:00)
12/31		2.6(13:45)	0.0(0:05)	104.2(14:25)	0.0(0:00)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TOTAL HYDROCARBONS		METHANE		NON-METHANE HYDROCARBONS	
SITE DATE	020	023	020	023	020	023
12/ 1	1434.9(20:20)	62987.0(17:10)	1030.9(20:20)	1211.3(14:15)	2.0(23:40)	62042.7(23:15)
12/ 2	1114.9(20:30)	63794.5(18:40)	1096.0(20:30)	1068.0(14:15)	153.0(17:55)	62908.8(18:40)
12/ 3	1057.6(1:15)	64602.0(7:15)	1032.2(0:25)	963.8(16:00)	168.7(12:30)	63735.9(7:15)
12/ 4	2967.0(1:20)	63794.5(6:35)	1271.2(22:05)	924.7(17:15)	1820.2(1:00)	62947.9(6:35)
12/ 5	2925.3(15:55)	64803.9(23:05)	1710.1(18:40)	2097.0(9:45)	2070.9(15:55)	63879.1(23:25)
12/ 6	1521.0(20:00)	63592.6(2:50)	1492.0(20:05)	1732.3(14:55)	281.3(5:40)	62687.4(2:50)
12/ 7	1535.9(23:25)	40376.3(0:35)	1485.5(22:35)	963.8(11:00)	175.2(22:20)	39529.7(5:50)
12/ 8	1950.4(19:30)	65123.0(14:00)	1568.2(19:15)	2963.1(13:20)	1126.6(18:25)	64015.9(23:30)
12/ 9	1242.5(21:35)	65123.0(3:25)	1019.8(23:25)	1165.7(6:50)	410.9(21:35)	64100.6(13:05)
12/10	1554.3(21:10)	54846.6(21:40)	1310.9(22:35)	1042.0(17:15)	347.1(20:15)	54006.5(21:40)
12/11	1468.5(0:30)	65123.0(13:25)	1266.0(23:15)	1055.0(15:20)	263.1(0:30)	64308.9(13:25)
12/12	1826.0(3:15)	65123.0(5:45)	1745.3(3:15)	996.4(17:45)	459.8(0:20)	64263.4(12:05)
12/13	1116.9(0:25)	64107.1(23:35)	1083.0(0:25)	924.7(15:35)	831.6(12:15)	63234.4(23:35)
12/14	1334.4(8:45)	65123.0(1:55)	1275.8(8:45)	892.2(0:50)	165.4(3:10)	64243.8(1:55)
12/15	1528.4(11:30)		1422.3(23:45)		1133.8(11:30)	
12/16	1473.1(8:00)		1415.8(8:05)		146.5(3:50)	
12/17	1091.5(1:40)		1077.1(1:45)		138.7(19:40)	
12/18	1515.4(15:35)	32622.0(22:20)	1148.8(2:50)	872.6(16:30)	483.9(15:45)	31962.4(22:20)
12/19	1449.3(5:40)	64836.4(22:45)	1155.9(17:15)	1882.1(4:50)	384.9(5:40)	63924.7(22:45)
12/20	1645.0(19:05)	65123.0(0:40)	961.9(5:00)	983.4(23:10)	790.6(19:05)	64530.4(17:40)
12/21	1458.7(11:55)		884.4(5:05)	3210.6(17:35)	192.8(11:55)	
12/22	1135.5(8:30)		939.7(8:50)	3243.1(5:40)	119.2(11:50)	
12/23		61905.9(14:50)		2520.3(14:20)		59815.5(14:50)
12/24	3232.1(2:00)	37797.4(0:55)	3241.8(1:40)	1888.6(0:55)	785.4(1:00)	35908.8(0:55)
12/25						
12/26						
12/27						
12/28		4539.1(20:30)		2031.8(14:55)		2624.5(20:30)
12/29		5366.6(14:10)		2214.2(13:10)		2930.5(14:10)
12/30		3256.1(0:00)		2031.6(6:35)		2364.0(4:45)
12/31		3256.1(0:00)		1159.2(23:10)		2246.7(14:45)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

HYDROGEN SULFIDE

SITE	020	021	022	023	024
12/ 1	0.0(0:00)	0.0(0:00)	2.8(11:25)	0.0(14:00)	0.0(0:00)
12/ 2	0.0(0:00)	0.0(0:00)	5.5(16:20)	2.8(8:30)	0.0(0:00)
12/ 3	0.0(0:00)	0.0(0:00)	6.9(22:30)	0.0(0:00)	0.0(0:00)
12/ 4	0.0(0:00)	0.0(0:00)	6.9(11:50)	4.2(17:15)	0.0(0:00)
12/ 5	0.0(0:00)	0.0(0:00)	6.9(0:30)	2.8(8:50)	0.0(0:00)
12/ 6	1.4(7:45)	1.4(10:00)	8.3(10:40)	0.0(0:00)	0.0(0:00)
12/ 7	1.4(0:00)	27.7(8:25)	9.7(3:15)	1.4(10:25)	0.0(0:00)
12/ 8	2.8(5:55)	1.4(0:10)	9.7(1:40)	0.0(0:00)	0.0(0:00)
12/ 9	1.4(0:00)	1.4(0:15)	0.0(0:00)	0.0(0:00)	0.0(0:00)
12/10	0.0(0:00)	0.0(0:00)	0.0(0:00)	12.5(14:35)	0.0(0:00)
12/11	2.8(0:00)		0.0(0:00)	2.8(20:40)	0.0(16:00)
12/12	0.0(0:00)		0.0(0:00)	49.8(15:15)	2.8(15:50)
12/13	0.9(12:30)		0.0(0:00)	8.3(3:30)	27.7(15:35)
12/14	0.0(0:00)		0.0(0:00)	88.6(10:50)	0.0(0:00)
12/15	1.4(11:10)		4.2(11:15)		0.0(0:00)
12/16	0.0(0:00)		0.0(0:00)		0.0(0:00)
12/17	0.0(0:00)		0.0(17:35)	12.5(15:10)	0.0(0:00)
12/18	0.0(0:00)	0.0(0:00)	0.0(0:00)	0.0(16:30)	0.0(0:00)
12/19	0.0(0:00)	2.8(21:20)	0.0(0:00)	5.5(16:50)	0.0(0:00)
12/20	15.2(13:20)	0.0(20:00)	2.8(0:00)	6.9(20:35)	11.1(0:00)
12/21	0.0(0:00)	0.0(0:00)	0.0(0:00)	58.1(2:45)	0.0(14:00)
12/22	0.0(0:05)	0.0(0:05)	0.0(0:00)	91.3(14:35)	0.0(0:00)
12/23		0.0(0:00)	0.0(0:00)	1.4(23:05)	6.9(20:55)
12/24	0.0(0:00)	0.0(0:00)	0.0(0:00)	1.4(0:25)	8.3(2:15)
12/25	0.0(0:00)	0.0(0:00)	0.0(0:00)		
12/26	0.0(0:00)	0.0(14:00)	0.0(0:00)		0.0(16:00)
12/27	0.0(0:00)	5.5(15:25)	0.0(0:00)		0.0(0:00)
12/28	0.0(0:00)	1.4(3:25)	0.0(0:00)	16.6(18:00)	0.0(0:00)
12/29	0.0(0:00)	0.0(0:00)	0.0(0:00)	13.8(3:55)	0.0(0:00)
12/30	0.0(0:00)	2.8(10:45)	0.0(0:00)	38.7(14:25)	0.0(16:00)
12/31	0.0(0:00)	0.0(0:00)	0.0(0:05)	38.7(14:25)	0.0(0:00)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATION-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR; PRESSURE-MILLIBARS; TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	CARBON MONOXIDE		OZONE		BAROMETRIC PRESSURE	
SITE	020	023	020	023		023
DATE						
12/ 1	692.9(15:15)	4020.7(20:40)	99.6(14:10)	54.7(17:50)		
12/ 2	596.2(18:35)	5360.9(14:20)	91.8(13:15)	60.6(23:35)		
12/ 3	601.7(16:35)	4858.3(20:05)	152.4(10:50)	82.1(10:50)		
12/ 4	615.4(18:20)	4188.2(21:30)	97.7(13:45)	55.7(11:05)		
12/ 5	629.1(5:30)	4635.0(23:10)	70.3(2:05)	41.0(2:10)		
12/ 6	604.0(7:25)	5640.1(14:00)	86.0(13:45)	74.2(22:55)		
12/ 7	752.2(23:40)	4914.2(9:20)	87.9(18:05)	72.3(0:15)		
12/ 8	2342.0(16:15)	5495.4(21:40)	93.8(14:25)	39.1(3:25)		
12/ 9	742.8(0:30)	4777.4(0:45)	154.3(15:40)	37.1(1:55)		
12/10	1043.9(19:35)	1611.5(20:00)	101.6(15:30)	35.2(15:45)		
12/11	855.1(16:55)	3548.9(19:35)	109.4(13:25)	52.7(13:00)		
12/12	1134.5(12:10)	1731.1(17:25)	289.1(11:50)	52.7(13:25)		
12/13	4077.7(12:15)	1514.6(19:00)	119.2(12:25)	60.6(14:40)		
12/14	951.6(23:40)	1325.4(5:05)	115.3(13:15)	44.9(10:05)		
12/15	3488.5(11:30)		121.1(12:30)			
12/16	796.9(12:40)		95.7(10:30)			
12/17	816.0(6:15)		89.9(11:35)	11.7(15:10)		789.0(21:00)
12/18	2744.3(14:20)	1183.0(22:20)	121.1(14:10)			789.0(4:50)
12/19	784.1(9:15)	5104.5(15:45)	99.6(12:30)	50.8(19:05)		788.0(21:50)
12/20	949.3(19:10)	1597.8(23:15)	95.7(13:10)	64.5(9:50)		789.0(9:35)
12/21	796.9(13:25)	1744.8(2:45)	84.0(10:55)			
12/22	824.0(9:10)	3568.3(14:25)	101.6(4:00)			784.0(15:00)
12/23		5133.0(14:20)		3.9(13:50)		784.0(23:40)
12/24	1820.0(1:30)	3234.3(0:20)	121.1(3:40)	0.0(0:00)		785.0(2:55)
12/25			99.6(13:00)			
12/26			97.7(12:40)			
12/27			97.7(11:50)			
12/28		4515.3(14:55)	123.1(14:35)	64.5(16:25)		790.0(13:25)
12/29		4966.6(14:35)	91.8(15:00)	7.8(12:40)		788.0(21:45)
12/30		3178.5(6:35)	101.6(13:55)	84.0(13:40)		796.0(23:40)
12/31		2257.3(16:30)	97.7(14:10)	82.1(11:20)		

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

SITE	TOTAL PRECIPITATION (INCHES) 020	021	022	023	024
12/ 1					
12/ 2					
12/ 3					
12/ 4					
12/ 5					
12/ 6					
12/ 7					
12/ 8					
12/ 9					
12/10					
12/11					
12/12					
12/13					
12/14					
12/15					
12/16					
12/17					
12/18					
12/19					
12/20					
12/21					
12/22					
12/23					
12/24					
12/25					
12/26					
12/27					
12/28					
12/29		0.01(0:55)		0.01(0:55)	
12/30					
12/31					

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TEMPERATURE OUTSIDE			
SITE	020	021	022	024
12/ 1	37.0(14:25)	39.0(14:35)	39.0(13:55)	
12/ 2	38.0(14:55)	39.0(14:35)	41.0(14:10)	
12/ 3	45.0(14:55)	47.0(14:40)	47.0(12:20)	
12/ 4	46.0(11:55)	48.0(12:40)	48.0(12:15)	
12/ 5	35.0(10:10)	34.2(10:55)	37.0(10:25)	
12/ 6	32.0(15:00)	36.0(15:05)	34.0(14:30)	
12/ 7	27.0(13:25)	26.0(11:10)	29.0(12:30)	
12/ 8	23.0(14:50)	26.0(14:15)	25.0(14:00)	
12/ 9	33.0(14:25)	35.0(14:35)	35.0(14:05)	
12/10	32.0(13:55)	32.0(13:15)	35.0(14:00)	
12/11	35.0(14:05)		37.0(13:50)	
12/12	34.0(15:10)		36.0(13:45)	
12/13	29.0(5:15)		31.0(6:05)	
12/14	24.0(14:40)		25.0(13:00)	
12/15	23.0(13:00)		26.0(12:45)	
12/16	26.0(14:20)		27.0(15:20)	
12/17	35.0(12:55)		37.0(12:10)	
12/18	27.0(14:20)	26.0(15:00)	28.0(12:00)	28.0(20:10)
12/19	25.0(12:20)	29.0(15:30)	28.0(12:45)	29.0(13:00)
12/20	27.0(14:35)	28.0(23:40)	30.0(13:45)	29.0(15:10)
12/21	36.0(18:10)	38.0(18:30)	37.0(17:35)	38.0(19:25)
12/22	32.0(0:05)	35.0(0:05)	34.0(0:00)	35.0(0:00)
12/23		3.0(13:00)	7.0(13:30)	4.0(13:45)
12/24	4.0(16:10)	2.0(16:55)	11.0(6:00)	
12/25	12.0(13:35)	14.0(13:45)	16.0(13:50)	19.0(13:55)
12/26	14.0(15:40)	17.0(15:20)	15.0(15:05)	16.0(15:30)
12/27	28.0(15:10)	31.0(15:40)	27.0(14:50)	29.0(15:00)
12/28	31.0(15:45)	34.0(14:40)	33.0(14:00)	33.0(12:30)
12/29	18.0(13:40)	23.0(14:40)	20.0(15:20)	22.0(15:15)
12/30	21.0(14:00)	24.0(13:40)	24.2(14:00)	26.0(14:05)
12/31	14.0(14:20)	19.0(14:55)	16.0(14:45)	18.0(14:50)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND SPEED - WIND DIRECTION							
SITE	020		021		022		024	
2/ 1	7.0	134.0(0:15)	9.0	330.0(11:40)	11.0	116.0(21:40)	6.0	88.0(4:10)
2/ 2	8.0	132.0(21:20)	7.0	320.0(13:45)	15.0	101.0(21:45)	6.0	110.0(21:40)
2/ 3	12.0	128.0(7:25)	11.0	110.0(4:30)	17.0	116.0(6:30)	12.0	189.0(12:55)
2/ 4	12.0	118.0(2:00)	12.0	158.0(11:20)	15.0	102.0(2:20)	12.0	168.0(8:20)
2/ 5	7.0	279.0(14:20)	10.0	346.0(11:05)	11.0	116.0(0:55)	9.0	282.0(14:15)
2/ 6	9.0	130.0(22:55)	9.0	116.0(22:30)	11.0	92.0(18:40)	4.0	312.0(12:20)
2/ 7	10.0	132.0(0:55)	16.0	340.0(14:15)	12.0	113.0(1:20)	12.0	318.0(15:05)
2/ 8	7.0	279.0(14:05)	6.0	112.0(1:35)	11.0	98.0(20:20)	5.0	88.0(20:15)
2/ 9	7.0	132.0(1:05)	7.0	318.0(15:00)	14.0	117.0(1:20)	5.0	98.0(1:35)
2/10	6.0	263.0(13:20)	10.0	328.0(14:20)	13.0	116.0(2:05)	10.0	313.0(14:15)
2/11	7.0	140.0(7:20)			12.0	102.0(4:45)	6.0	110.0(4:15)
2/12	14.0	132.0(8:05)			11.0	102.0(20:40)	11.0	162.0(17:35)
2/13	14.0	265.0(12:50)			15.0	271.0(12:40)	23.0	237.0(12:55)
2/14	6.0	275.0(14:50)			9.0	108.0(9:25)	13.0	164.0(19:35)
2/15	5.0	172.0(0:40)			7.0	272.0(11:45)	12.0	171.0(0:10)
2/16	7.0	84.0(12:30)			11.0	109.0(20:55)	6.0	52.0(23:55)
2/17	18.0	296.0(15:50)			18.0	267.0(14:40)	21.0	215.0(14:45)
2/18	8.0	125.0(5:25)	10.0	127.0(17:15)	10.0	112.0(9:00)	17.0	174.0(20:10)
2/19	14.0	273.0(13:40)	11.0	255.0(2:55)	15.0	271.0(14:00)	13.0	244.0(12:25)
2/20	6.0	133.0(1:40)	9.0	137.0(21:05)	13.0	158.0(12:40)	14.0	176.0(13:35)
2/21	9.0	155.0(18:35)	16.0	154.0(19:05)	17.0	119.0(20:15)	28.0	162.0(20:00)
2/22	19.0	299.0(1:40)	16.0	314.0(0:55)	23.0	268.0(2:00)	26.0	252.0(2:40)
2/23			15.0	332.0(13:50)	11.0	264.0(12:10)	11.0	278.0(13:45)
2/24	3.0	278.0(0:00)	11.0	97.0(20:20)	12.0	117.0(23:55)	6.0	262.0(0:00)
2/25			11.0	331.0(14:00)	15.0	115.0(7:35)	7.0	56.0(1:50)
2/26			9.0	327.0(14:00)	12.0	111.0(0:15)	10.0	245.0(11:50)
2/27	11.0	110.0(16:10)	14.0	167.0(11:20)	16.0	110.0(6:35)	12.0	116.0(12:00)
2/28	12.0	124.0(2:10)	12.0	326.0(16:50)	15.0	110.0(4:05)	12.0	195.0(13:30)
2/29			5.0	124.0(3:10)	11.0	121.0(0:45)	5.0	96.0(0:25)
2/30			11.0	333.0(15:25)	10.0	96.0(4:10)	4.0	351.0(17:25)
2/31			9.0	337.0(14:15)	14.0	105.0(23:05)	7.0	267.0(13:45)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	WIND SPEED - WIND DIRECTION							
	(8-FT)		(30-FT)		(100-FT)		(200-FT)	
SITE	023		023		023		023	
ATE								
2/ 1	6.0	235.0(18:20)	8.0	234.0(18:15)	9.0	256.0(18:15)	7.0	246.0(18:10)
2/ 2	15.0	173.0(23:40)	20.0	172.0(23:35)	26.0	169.0(23:35)	24.0	178.0(23:15)
2/ 3	13.0	170.0(0:00)	19.0	168.0(0:00)	23.0	162.0(0:00)	21.0	171.0(0:00)
2/ 4	16.0	172.0(2:25)	23.0	176.0(2:25)	29.0	177.0(2:40)	30.0	183.0(2:40)
2/ 5	9.0	315.0(14:20)	12.0	312.0(14:20)	13.0	184.0(1:20)	14.0	189.0(1:20)
2/ 6	5.0	251.0(15:45)	8.0	210.0(19:45)	12.0	172.0(19:10)	15.0	219.0(21:45)
2/ 7	12.0	350.0(14:40)	16.0	352.0(14:40)	18.0	350.0(14:40)	21.0	355.0(14:40)
2/ 8	7.0	229.0(0:15)	9.0	236.0(0:10)	11.0	255.0(0:00)	13.0	264.0(0:00)
2/ 9	5.0	227.0(2:00)	8.0	220.0(2:00)	9.0	294.0(16:00)	9.0	300.0(16:00)
2/10	9.0	341.0(15:00)	14.0	340.0(15:15)			15.0	347.0(15:15)
2/11	8.0	209.0(15:25)	11.0	215.0(15:25)	12.0	215.0(15:25)	13.0	225.0(15:25)
2/12	9.0	247.0(12:15)	13.0	195.0(17:30)	17.0	193.0(17:30)	22.0	209.0(17:55)
2/13	19.0	155.0(6:50)	25.0	172.0(6:00)	29.0	173.0(6:00)	33.0	187.0(6:05)
2/14	7.0	295.0(1:50)	10.0	293.0(1:50)	12.0	293.0(1:15)	13.0	308.0(2:10)
2/15								
2/16								
2/17	19.0	255.0(15:55)	17.0	311.0(18:20)	19.0	313.0(18:20)	21.0	320.0(18:20)
2/18	19.0	209.0(19:55)	24.0	213.0(19:55)	29.0	215.0(19:55)	33.0	221.0(19:55)
2/19	13.0	202.0(0:00)	17.0	204.0(0:00)	23.0	222.0(16:50)	26.0	209.0(0:05)
2/20	11.0	189.0(9:25)	13.0	194.0(9:25)	17.0	217.0(10:20)	18.0	222.0(10:20)
2/21	35.0	233.0(19:45)	43.0	245.0(20:05)	48.0	245.0(19:45)	52.0	239.0(20:05)
2/22	28.0	347.0(2:45)	35.0	261.0(0:15)	40.0	259.0(0:15)	44.0	264.0(0:00)
2/23	12.0	324.0(13:50)	13.0	323.0(13:50)	15.0	337.0(16:20)	15.0	323.0(13:50)
2/24	6.0	302.0(0:00)	8.0	303.0(0:00)	10.0	306.0(0:00)	10.0	303.0(0:00)
2/25								
2/26								
2/27								
2/28	14.0	227.0(16:25)	18.0	227.0(16:25)	20.0	227.0(16:25)	21.0	235.0(16:25)
2/29	6.0	88.0(0:15)	8.0	85.0(0:15)	9.0	27.0(10:25)	8.0	242.0(3:15)
2/30	9.0	351.0(13:40)	8.0	204.0(4:05)	10.0	204.0(4:00)	11.0	216.0(4:05)
2/31	8.0	323.0(10:35)	10.0	339.0(13:25)	12.0	352.0(13:40)	12.0	347.0(13:40)

TABLE V. MAXIMUM FIVE MINUTE AVERAGES AND TIME OF OCCURRENCE FOR DEC 1 THRU 31
(UNITS: CONCENTRATIONS-MICROGRAMS PER CUBIC METER; WIND SPEED-MILES PER HOUR;
TEMPERATURE-DEGREES FAHRENHEIT; WIND DIRECTION-DEGREES WITH RESPECT TO THE NORTH)

	TEMPERATURE OUTSIDE			
	(8-FT)	(30-FT)	(100-FT)	(200-FT)
SITE	023	023	023	023
DATE				
12/ 1	40.0(14:30)	38.0(14:15)	38.0(14:20)	41.0(14:10)
12/ 2	42.0(14:20)	40.0(14:15)	41.0(14:20)	44.0(14:15)
12/ 3	45.0(14:40)	44.0(15:20)	44.0(15:05)	45.0(11:55)
12/ 4	47.0(12:10)	45.0(11:40)	45.0(12:10)	46.0(12:10)
12/ 5	36.0(9:40)	35.0(0:20)	35.0(0:15)	36.0(11:10)
12/ 6	33.0(14:50)	31.0(14:40)	31.0(14:35)	35.0(11:05)
12/ 7	28.0(9:55)	28.0(12:50)	29.0(1:50)	30.0(9:30)
12/ 8	25.0(14:40)	24.0(14:35)	23.0(14:40)	30.0(12:45)
12/ 9	36.0(15:10)	34.0(13:20)	34.0(14:00)	39.0(12:25)
12/10	33.0(14:30)	32.0(13:55)	31.0(14:20)	34.0(12:45)
12/11	36.0(13:00)	35.0(13:35)	34.0(13:30)	38.0(12:40)
12/12	38.0(15:15)	36.0(15:15)	36.0(15:15)	38.0(15:15)
12/13	29.0(4:05)	30.0(6:05)	29.0(6:05)	30.0(6:05)
12/14	21.0(10:35)	20.0(10:30)	18.0(10:25)	26.0(10:40)
12/15				
12/16				
12/17	33.0(15:25)	27.0(18:00)	26.0(18:00)	26.0(18:00)
12/18	31.0(11:50)	29.0(11:40)	28.0(12:35)	32.0(11:50)
12/19	29.0(12:25)	28.0(12:45)	26.0(12:25)	30.0(12:40)
12/20	36.0(23:35)	35.0(22:50)	36.0(23:25)	36.0(23:50)
12/21	53.0(19:35)	54.0(18:10)	52.0(18:30)	53.0(19:05)
12/22	47.0(0:00)	49.0(0:10)	48.0(1:00)	48.0(1:10)
12/23	7.0(13:55)	8.0(14:10)	7.0(14:40)	8.0(13:55)
12/24	0.0(0:00)	1.0(0:00)	-3.0(1:10)	-3.0(1:10)
12/25				
12/26				
12/27				
12/28	34.0(14:25)	35.0(16:00)	35.0(16:00)	35.0(14:35)
12/29	24.0(13:10)	25.0(1:15)	26.0(1:10)	26.0(14:30)
12/30	22.0(13:25)	24.0(12:05)	24.0(12:05)	32.0(14:40)
12/31	21.0(12:15)	23.0(13:15)	25.0(13:55)	26.0(12:15)

TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR DEC 1-31
(UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

NITROGEN OXIDES(NOX)
1-HOUR

SITE	020		023	
1	12/ 4(10:00-11:00)	43.1	12/23(23:25- 0:25)	104.4
2	12/ 8(6:55- 7:55)	41.7	12/24(1:05- 2:05)	103.8
3	12/30(8:30- 9:30)	37.6	12/23(22:00-23:00)	101.7
4	12/ 3(17:10-18:10)	36.4	12/23(19:50-20:50)	96.1
5	12/ 4(6:25- 7:25)	31.5	12/31(11:40-12:40)	79.9

NITRIC OXIDE(NO)
1-HOUR

SITE	020		023	
1	12/ 9(7:05- 8:05)	16.4	12/24(1:05- 2:05)	93.9
2	12/ 4(10:00-11:00)	16.2	12/23(23:25- 0:25)	92.4
3	12/ 8(7:25- 8:25)	16.2	12/23(19:50-20:50)	84.6
4	12/ 9(9:40-10:40)	15.9	12/29(12:05-13:05)	66.5
5	12/ 9(3:25- 4:25)	14.5	12/29(13:10-14:10)	61.9

NITROGEN DIOXIDE(NO2)
1-HOUR

SITE	020		023	
1	12/ 3(17:10-18:10)	36.0	12/ 6(13:10-14:10)	47.0
2	12/28(23:20- 0:20)	31.4	12/ 6(14:30-15:30)	46.3
3	12/30(8:30- 9:30)	31.0	12/23(14:00-15:00)	38.7
4	12/ 4(19:40-20:40)	30.0	12/23(15:35-16:35)	30.0
5	12/ 4(18:05-19:05)	29.8	12/31(4:15- 5:15)	26.5

TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR DEC 1-31
(UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

SULFUR DIOXIDE
1-HOUR

SITE	020		021		022	
1	12/ 8(21:40-22:40)	17.4	12/19(15:45-16:45)	25.8	12/20(1:15- 2:15)	20.8
2	12/ 8(23:55- 0:55)	17.4	12/ 2(16:40-17:40)	21.7	12/13(0:25- 1:25)	5.4
3	12/ 8(22:45-23:45)	17.1	12/19(16:50-17:50)	21.1	12/13(1:55- 2:55)	4.3
4	12/ 9(1:00- 2:00)	17.1	12/ 2(18:55-19:55)	20.8	12/20(18:55-19:55)	3.9
5	12/ 8(19:05-20:05)	16.9	12/19(17:55-18:55)	20.0	12/ 9(1:55- 2:55)	2.2

SITE	023		024	
1	12/21(1:55- 2:55)	97.9	12/10(6:20- 7:20)	128.5
2	12/31(13:25-14:25)	38.0	12/10(7:25- 8:25)	51.7
3	12/22(11:55-12:55)	36.5	12/10(8:40- 9:40)	39.5
4	12/22(2:20- 3:20)	35.8	12/10(4:20- 5:20)	34.7
5	12/30(22:40-23:40)	35.6	12/ 7(3:40- 4:40)	26.5

SULFUR DIOXIDE
3-HOUR

SITE	020		021		022	
1	12/ 9(0:05- 3:05)	17.2	12/19(15:30-18:30)	22.6	12/20(0:05- 3:05)	20.4
2	12/ 8(12:10-15:10)	15.9	12/ 2(15:05-18:05)	20.0	12/12(23:55- 2:55)	4.7
3	12/15(8:20-11:20)	13.4	12/19(16:35-21:35)	19.0	12/20(16:55-19:55)	1.8
4	12/ 8(6:25- 9:25)	11.4	12/ 2(18:55-21:55)	18.2	12/ 9(0:10- 3:10)	0.9
5	12/ 6(21:40- 0:40)	6.7	12/ 3(4:30- 7:30)	14.1	12/15(8:15-11:15)	0.4

SITE	023		024	
1	12/21(0:10- 3:10)	87.7	12/10(6:05- 9:05)	77.9
2	12/31(11:40-14:40)	32.4	12/16(7:25-10:25)	16.4
3	12/22(10:10-13:10)	32.1	12/16(0:45- 3:45)	15.1
4	12/30(22:15- 1:15)	31.6	12/15(11:45-14:45)	14.8
5	12/22(0:50- 3:50)	31.3	12/15(16:25-19:25)	14.8

TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR DEC 1-31
(UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

SULFUR DIOXIDE
24-HOUR

SITE	020		021		022	
1	12/ 8-12/ 9(3:00)	14.4	12/ 2-12/ 3(15:00)	13.6	12/19-12/20(20:00)	2.9
2	12/14-12/15(14:00)	8.2	12/ 3-12/ 4(16:00)	8.0	12/12-12/13(12:00)	0.6
3			12/ 4-12/ 5(18:00)	4.5	12/ 8-12/ 9(8:00)	0.2
4			12/27-12/28(15:00)	1.4	12/14-12/15(12:00)	0.0
5			12/20-12/21(19:00)	0.7		

SITE	023		024	
1	12/21-12/22(16:00)	31.8	12/ 9-12/10(16:00)	17.2
2	12/30-12/31(15:00)	24.2	12/15-12/16(12:00)	15.0
3	12/28-12/29(15:00)	13.6	12/ 1-12/ 2(15:00)	2.4
4	12/ 4-12/ 5(16:00)	9.9	12/21-12/22(15:00)	2.3
5	12/12-12/13(15:00)	2.8	12/ 2-12/ 3(18:00)	1.6

HYDROGEN SULFIDE(H2S)
1-HOUR

SITE	020		021		022	
1	12/ 8(7:10- 8:10)	2.2	12/ 7(8:00- 9:00)	4.6	12/ 8(0:40- 1:40)	8.4
2	12/ 8(5:05- 6:05)	1.6	12/19(21:05-22:05)	1.7	12/ 6(18:15-19:15)	8.3
3	12/ 8(8:25- 9:25)	1.5	12/19(16:30-17:30)	1.4	12/ 6(21:20-22:20)	8.2
4	12/ 6(20:35-21:35)	1.4	12/19(17:55-18:55)	1.4	12/ 7(2:50- 3:50)	8.2
5	12/ 6(21:40-22:40)	1.4	12/19(19:00-20:00)	1.4	12/ 7(10:05-11:05)	8.2

SITE	023		024	
1	12/21(1:55- 2:55)	45.3	12/24(1:55- 2:55)	7.7
2	12/22(11:15-12:15)	42.8	12/23(22:55-23:55)	3.6
3	12/22(7:25- 8:25)	40.5	12/23(20:40-21:40)	2.7
4	12/22(1:15- 2:15)	39.1	12/13(14:35-15:35)	2.3
5	12/22(5:20- 6:20)	39.0	12/19(23:00- 0:00)	0.9

TABLE VI. THE FIVE MAXIMUM AVERAGES FOR DEC 1-31
(UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

TOTAL HYDROCARBON
3-HOUR(6-9AM)

SITE	020		023	
1	12/ 8(6:00- 9:00)	1265.0	12/12(6:00- 9:00)	34141.5
2	12/16(6:00- 9:00)	1254.5	12/ 9(6:00- 9:00)	31490.6
3	12/11(6:00- 9:00)	1152.9	12/10(6:00- 9:00)	31178.9
4	12/14(6:00- 9:00)	1128.6	12/20(6:00- 9:00)	30049.6
5	12/19(6:00- 9:00)	1115.6	12/14(6:00- 9:00)	29216.7

METHANE
3-HOUR(6-9AM)

SITE	020		023	
1	12/ 8(6:00- 9:00)	1219.5	12/29(6:00- 9:00)	1925.3
2	12/16(6:00- 9:00)	1196.8	12/30(6:00- 9:00)	1114.3
3	12/15(6:00- 9:00)	1082.9	12/ 9(6:00- 9:00)	1090.8
4	12/14(6:00- 9:00)	1054.7	12/31(6:00- 9:00)	1088.1
5	12/ 7(6:00- 9:00)	1027.9	12/ 6(6:00- 9:00)	893.3

NONMETHANE HYDROCARBON
3-HOUR(6-9AM)

SITE	020		023	
1	12/19(6:00- 9:00)	179.7	12/12(6:00- 9:00)	33269.7
2	12/10(6:00- 9:00)	175.3	12/ 9(6:00- 9:00)	30399.8
3	12/11(6:00- 9:00)	173.3	12/10(6:00- 9:00)	30301.6
4	12/ 5(6:00- 9:00)	148.8	12/20(6:00- 9:00)	29157.7
5	12/ 5(6:00- 9:00)	128.5	12/14(6:00- 9:00)	28345.7

TABLE VI. THE FIVE MAXIMUM INDEPENDENT SLIDING AVERAGES FOR DEC 1-31
(UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

OZONE
1-HOUR

SITE	020		023	
1	12/12(11:45-12:45)	117.9	12/30(13:25-14:25)	68.5
2	12/15(12:00-13:00)	117.1	12/30(3:05- 4:05)	68.1
3	12/14(13:00-14:00)	114.9	12/31(13:25-14:25)	67.7
4	12/15(2:30- 3:30)	113.8	12/30(5:20- 6:20)	67.6
5	12/14(23:15- 0:15)	113.2	12/31(3:05- 4:05)	66.9

CARBON MONOXIDE
1-HOUR

SITE	020		023	
1	12/15(13:30-14:30)	1853.7	12/19(4:50- 5:50)	5061.4
2	12/15(10:50-11:50)	1711.8	12/19(6:00- 7:00)	5056.7
3	12/24(2:15- 3:15)	1679.1	12/19(8:35- 9:35)	5052.5
4	12/24(0:35- 1:35)	1658.0	12/19(9:45-10:45)	5030.3
5	12/15(4:50- 5:50)	1119.8	12/19(11:00-12:00)	5027.7

CARBON MONOXIDE
8-HOUR

SITE	020		023	
1	12/15(6:55-14:55)	1451.3	12/19(3:55-11:55)	5035.2
2	12/18(13:55-21:55)	779.9	12/ 8(4:55-12:55)	3735.7
3	12/22(5:55-13:55)	777.6	12/23(13:55-21:55)	3705.4
4	12/12(4:55-12:55)	773.8	12/29(11:55-19:55)	3612.0
5	12/11(18:55- 2:55)	771.1	12/ 5(19:55- 3:55)	3582.2

TABLE VI. THE FIVE MAXIMUM AVERAGES FOR DEC 1-31
(UNITS OF CONCENTRATIONS-MICROGRAMS PER CUBIC METER)

PARTICULATE
24-HOUR

SITE	020		021		022	
1	12/12	11.0	12/10	18.0	12/ 1	116.0
2	12/10	9.0	12/ 4	17.0	12/12	12.0
3	12/11	9.0	12/ 1	12.0	12/22	9.0
4	12/ 4	8.0	12/12	11.0	12/ 2	8.0
5	12/19	7.0	12/20	9.0	12/ 5	8.0

SITE	023		024	
1	12/ 4	22.0	12/ 5	8.0
2	12/10	16.0	12/19	8.0
3	12/ 3	10.0	12/26	7.0
4	12/12	8.0	12/ 3	5.0
5	12/21	6.0	12/13	4.0

TABLE VII

FUNCTIONAL DEPENDENCE OF RECORDED PARAMETERS
UPON WIND DIRECTION

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITROGEN OXIDES(NOX) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 600																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																		
100 - 150																		
50 - 100					1	7											9	17
LT 50	6	20	19	99	792	1060	894	118	99	44	52	53	316	478	131	41	3526	7748
TOTAL	6	20	19	99	793	1067	894	118	99	44	52	53	316	478	131	41	3535	7765
MEAN	2.	3.	3.	6.	10.	10.	7.	5.	5.	4.	1.	1.	2.	3.	3.	2.	8.	8.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITROGEN OXIDES(NOX) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 600 :																		:
550 - 600 :																		:
500 - 550 :																		:
450 - 500 :																		:
400 - 450 :																		:
350 - 400 :																		:
300 - 350 :																		:
250 - 300 :																		:
200 - 250 :																		:
150 - 200 :															4	2		: 6
100 - 150 :			1	1	1		2	1		1	6	6	18	32	25	3	2	: 99
50 - 100 :	11	8	14	12	20	25	19	17	14	40	66	42	31	84	88	36	26	: 553
LT 50 :	30	49	59	69	88	136	199	208	272	345	683	350	192	271	270	227	132	: 3580
TOTAL :	41	57	74	82	109	161	220	226	286	386	755	398	241	387	387	268	160	: 4238
MEAN	23.	22.	23.	21.	20.	21.	16.	15.	11.	14.	14.	17.	29.	34.	35.	21.	17.	20.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITRIC OXIDE(NO) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
WIND DIRECTION																		
GT 600																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																		
100 - 150																		
50 - 100																	1	1
LT 50	6	20	19	99	793	1067	894	118	99	44	52	53	316	478	131	41	3534	7764
TOTAL	6	20	19	99	793	1067	894	118	99	44	52	53	316	478	131	41	3535	7765
MEAN	0.	0.	0.	1.	1.	2.	1.	0.	1.	0.	1.	1.	0.	1.	0.	0.	0.	1.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITRIC OXIDE(NO) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	Sw	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 600																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																		
100 - 150					1			1					4	11	16	2	1	36
50 - 100	2	2	10	7	13	20	15	10	5	28	51	38	37	79	79	24	12	432
LT 50	39	55	64	75	95	141	205	216	280	357	709	360	200	296	292	242	146	3772
TOTAL	41	57	74	82	109	161	220	227	285	385	760	398	241	386	387	268	159	4240
MEAN	15.	15.	16.	15.	16.	16.	11.	9.	6.	10.	10.	13.	23.	26.	27.	15.	13.	15.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITROGEN DIOXIDE(NO2) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 600																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																		
100 - 150																		
50 - 100																	3	3
LT 50	6	20	19	99	793	1067	894	118	99	44	52	53	316	478	131	41	3532	7762
TOTAL	6	20	19	99	793	1067	894	118	99	44	52	53	316	478	131	41	3535	7765
MEAN	2.	3.	3.	6.	9.	8.	6.	5.	5.	3.	0.	0.	2.	2.	3.	2.	8.	7.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NITROGEN DIOXIDE(NO2) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION																	
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 600																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																		
100 - 150																		
50 - 100	1		1	1		1			1	3	2	1		1	4	1	1	18
LT 50	40	57	73	81	109	160	220	226	285	383	753	397	241	386	383	267	159	4220
TOTAL	41	57	74	82	109	161	220	226	286	386	755	398	241	387	387	268	160	4238
MEAN	9.	7.	7.	5.	4.	6.	5.	6.	5.	4.	4.	4.	6.	7.	8.	6.	5.	5.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

SULFUR DIXOIDE(SO2) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 700																		
650 - 700																		
600 - 650																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																		
100 - 150																		
50 - 100																		
LT 50	10	20	18	98	758	1105	924	115	94	42	51	49	322	488	127	55	1690	5966
TOTAL	10	20	18	98	758	1105	924	115	94	42	51	49	322	488	127	55	1690	5966
MEAN	2.	2.	3.	1.	1.	2.	2.	0.	0.	1.	2.	2.	2.	1.	2.	2.	2.	2.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

SULFUR DIXOIDE(SO2) C-B SHALE OIL PROJECT

TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 700																		
650 - 700																		
600 - 650																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																		
100 - 150																		
50 - 100																		
LT 50	120	140	47	23	221	527	1129	702	259	59	41	45	72	121	568	1091	715	5880
TOTAL	120	140	47	23	221	527	1129	702	259	59	41	45	72	121	568	1091	715	5880
MEAN	2.	1.	2.	3.	2.	3.	2.	2.	2.	3.	1.	0.	1.	1.	1.	2.	1.	2.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

SULFUR DIXOIDE(SO2) C-B SHALE OIL PROJECT

TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 700 :																		
650 - 700 :																		
600 - 650 :																		
550 - 600 :																		
500 - 550 :																		
450 - 500 :																		
400 - 450 :																		
350 - 400 :																		
300 - 350 :																		
250 - 300 :																		
200 - 250 :																		
150 - 200 :																		
100 - 150 :																		
50 - 100 :																		
LT 50 :	59	94	150	423	1141	2786	464	141	60	38	42	125	834	366	103	121	871	7818
TOTAL :	59	94	150	423	1141	2786	464	141	60	38	42	125	834	366	103	121	871	7818
MEAN	0.	0.	0.	0.	0.	0.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

SULFUR DIXOIDE(SO2) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 700																		
650 - 700																		
600 - 650																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250														1				1
150 - 200														2	3	1		6
100 - 150								1		1				1	1	2		6
50 - 100				6	9	5	8	7	6	11	8	2	1	2	4	4	1	74
LT 50	51	74	95	96	144	217	279	293	359	574	836	483	289	579	439	313	193	5314
TOTAL	51	74	95	102	153	222	287	301	365	586	844	485	290	585	447	320	194	5401
MEAN	8.	7.	3.	6.	8.	5.	6.	6.	4.	4.	5.	9.	7.	8.	10.	8.	1.	6.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

SULFUR DIXOIDE(SO2) C-B SHALE OIL PROJECT

TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 700																		
650 - 700																		
600 - 650																		
550 - 600																		
500 - 550																		
450 - 500																		
400 - 450																		
350 - 400																		
300 - 350																		
250 - 300																		
200 - 250																		
150 - 200																	2	2
100 - 150																	13	13
50 - 100				2	1												12	15
LT 50	9	55	277	696	818	334	151	457	229	142	303	604	466	124	41	49	2401	7156
TOTAL	9	55	277	698	819	334	151	457	229	142	303	604	466	124	41	49	2428	7186
MEAN	1.	2.	0.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	4.	3.	3.	2.

II C-552

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

HYDROGEN SULFIDE(H2S) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 140																		
130 - 140																		
120 - 130																		
110 - 120																		
100 - 110																		
90 - 100																		
80 - 90																		
70 - 80																		
60 - 70																		
50 - 60																		
40 - 50																		
30 - 40																		
20 - 30																		
10 - 20								1										1
LT 10	12	23	19	99	802	1142	959	118	104	45	52	53	323	484	136	55	3613	8039
TOTAL	12	23	19	99	802	1142	959	119	104	45	52	53	323	484	136	55	3613	8040
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

HYDROGEN SULFIDE(H2S) C-B SHALE OIL PROJECT

TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 140																		
130 - 140																		
120 - 130																		
110 - 120																		
100 - 110																		
90 - 100																		
80 - 90																		
70 - 80																		
60 - 70																		
50 - 60																		
40 - 50																		
30 - 40																		
20 - 30															1	1		2
10 - 20															0	0		0
LT 10	120	140	47	23	221	527	1129	701	260	59	41	45	72	121	567	1084	716	5873
TOTAL	120	140	47	23	221	527	1129	701	260	59	41	45	72	121	568	1085	716	5875
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

HYDROGEN SULFIDE(H2S) C-B SHALE OIL PROJECT

TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
WIND DIRECTION																		
GT 140																		
130 - 140																		
120 - 130																		
110 - 120																		
100 - 110																		
90 - 100																		
80 - 90																		
70 - 80																		
60 - 70																		
50 - 60																		
40 - 50																		
30 - 40																		
20 - 30																		
10 - 20																		
LT 10	59	108	164	434	1173	2824	454	124	37	29	38	126	852	396	103	123	949	7993
TOTAL	59	108	164	434	1173	2824	454	124	37	29	38	126	852	395	103	123	949	7993
MEAN	2.	1.	2.	1.	1.	1.	1.	0.	0.	1.	0.	0.	1.	2.	2.	1.	1.	1.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

HYDROGEN SULFIDE(H2S) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 140																		
130 - 140																		
120 - 130																		
110 - 120																		
100 - 110																		
90 - 100														1		1		2
80 - 90				1										2	3	2		8
70 - 80				0										1	0	0		1
60 - 70				0										0	0	0		0
50 - 60	1			1			1	2					1	0	1	1		8
40 - 50	1	2		1	5	1	1	2	1	5	5	10	3	12	4	13	1	67
30 - 40	9	8		0	4	2	3	4	5	5	38	54	3	25	20	28	1	209
20 - 30	1	1	2	0	0	1	0	1	0	13	42	34	0	6	9	10	0	120
10 - 20	0	3	0	1	2	5	11	16	18	27	105	58	58	90	64	29	3	490
LT 10	41	60	93	95	140	212	266	277	346	542	667	343	253	497	387	259	194	4672
TOTAL	53	74	95	99	151	221	282	302	370	592	857	499	318	634	488	343	199	5577
MEAN	9.	7.	2.	3.	4.	3.	3.	3.	2.	3.	6.	9.	5.	7.	6.	8.	2.	5.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

HYDROGEN SULFIDE(H2S) C-B SHALE OIL PROJECT

TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 140																		
130 - 140																		
120 - 130																		
110 - 120																		
100 - 110																		
90 - 100																		
80 - 90																		
70 - 80																		
60 - 70																		
50 - 60																		
40 - 50																		
30 - 40																		
20 - 30													1					1
10 - 20				1									0					1
LT 10	9	53	242	602	794	330	149	457	227	144	323	585	501	152	62	60	2220	6910
TOTAL	9	53	242	603	794	330	149	457	227	144	323	585	502	152	62	60	2220	6912
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

TOTAL HYDROCARBONS

C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 6000																		
5400 - 6000																		
4800 - 5400																		
4200 - 4800																		
3600 - 4200																		
3000 - 3600		1															2	3
2400 - 3000		6	2		1	7							1	1			2	20
1800 - 2400		1	0		2	7	6						4	0			5	25
1200 - 1800	2	2	1	8	75	172	68	11	11				0	1			205	556
600 - 1200	10	14	16	91	696	894	807	105	92	45	52	55	281	434	125	55	1521	5293
LT 600	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	5
TOTAL	12	24	19	99	774	1080	881	116	103	45	52	55	290	436	125	55	1736	5902
MEAN/100	11.	15.	12.	10.	10.	11.	10.	10.	9.	9.	9.	9.	10.	9.	10.	10.	10.	10.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

TOTAL HYDROCARBONS — C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 30000	16	16	25	37	44	57	75	72	74	137	176	112	84	174	157	125	70	1451
27000 - 30000	3	0	6	3	8	13	10	9	14	17	25	11	8	12	11	8	3	161
24000 - 27000	3	1	0	1	5	7	11	12	11	21	24	10	6	9	9	15	7	152
21000 - 24000	1	6	1	7	7	12	15	12	18	20	58	16	2	11	7	9	13	215
18000 - 21000	0	5	12	8	6	13	13	22	23	49	34	13	11	20	18	13	7	267
15000 - 18000	3	8	17	16	23	38	48	44	54	120	103	37	25	102	31	17	47	733
12000 - 15000	1	2	2	3	1	4	2	4	9	7	12	16	3	8	13	5	2	94
9000 - 12000	2	0	0	1	8	4	4	5	14	6	21	3	7	18	15	24	3	135
6000 - 9000	2	1	2	2	2	1	4	8	13	6	26	8	9	6	11	14	6	121
3000 - 6000	7	8	16	7	18	43	59	66	87	64	99	70	86	132	124	47	15	948
LT 3000	0	9	3	10	18	14	30	24	40	93	120	69	34	63	28	6	3	564
TOTAL	38	56	84	95	140	206	271	278	357	540	698	365	275	555	424	283	176	4841
MEAN/100	25.	21.	23.	26.	25.	22.	23.	21.	18.	22.	20.	19.	19.	20.	21.	25.	25.	21.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

METHANE(CH4) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 6000																		
5400 - 6000																		
4800 - 5400																		
4200 - 4800																		
3600 - 4200																		
3000 - 3600																	1	1
2400 - 3000		4	2		1	2											4	13
1800 - 2400		4	0		1	11	1						4				5	26
1200 - 1800	1	1	1	2	24	67	19						0				92	207
600 - 1200	11	15	16	97	748	999	860	116	103	45	52	55	267	426	125	55	1633	5623
LT 600	0	0	0	0	0	1	1	0	0	0	0	0	19	10	0	0	2	33
TOTAL	12	24	19	99	774	1080	881	116	103	45	52	55	290	436	125	55	1737	5903
MEAN/100	9.	14.	11.	9.	9.	10.	9.	9.	8.	8.	9.	8.	8.	8.	9.	9.	9.	9.

BRAUN

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

METHANE(CH4) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(11/ 1/74 TO 11/30/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 30000																		
27000 - 30000																		
24000 - 27000																		
21000 - 24000																		
18000 - 21000																		
15000 - 18000																		
12000 - 15000																		
9000 - 12000																		
6000 - 9000																		
3000 - 6000	1											1		1				3
LT 3000	36	56	88	99	151	217	278	285	357	547	671	342	258	510	410	280	177	4762
TOTAL	37	56	88	99	151	217	278	285	357	547	671	343	258	511	410	280	177	4765
MEAN	95.	101.	92.	94.	98.	97.	102.	98.	94.	96.	104.	116.	125.	116.	123.	104.	92.	105.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NON-METHANE HYDROCARBONS — C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 6000																		
5400 - 5999																		
4800 - 5400																		
4200 - 4800																		
3600 - 4200																		
3000 - 3600																		
2400 - 3000																		
1800 - 2400						1							1	1				3
1200 - 1800						0							0	0				0
600 - 1200		1			1	1	1						1	1			1	7
LT 600	12	23	19	99	773	1078	680	116	103	45	52	55	288	434	125	55	1735	5892
TOTAL	12	24	19	99	774	1080	881	116	103	45	52	55	290	436	125	55	1736	5902
MEAN	147.	169.	83.	117.	91.	93.	101.	110.	97.	79.	71.	92.	120.	87.	98.	114.	98.	97.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

NON-METHANE HYDROCARBONS — C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 34000 :	14	15	23	37	41	55	72	69	68	135	153	98	78	165	150	114	65	: 1352
7000 - 32000 :	4	1	7	1	9	7	11	9	17	14	36	16	8	16	13	14	7	: 190
4000 - 27000 :	3	0	1	3	6	12	10	9	11	21	26	11	5	8	8	10	8	: 152
1000 - 24000 :	0	6	1	3	4	8	6	11	12	16	24	5	6	9	8	12	5	: 136
8000 - 21000 :	1	1	4	10	7	9	19	13	20	31	55	17	10	12	14	13	10	: 246
5000 - 18000 :	2	13	25	16	25	47	53	58	62	145	117	42	23	114	35	19	50	: 846
2000 - 15000 :	2	2	1	3	2	4	2	4	10	4	10	9	5	3	9	2	2	: 74
9000 - 12000 :	1	0	1	2	8	6	5	6	12	8	20	10	2	11	13	19	5	: 129
6000 - 9000 :	4	1	1	2	1	0	2	7	16	7	32	7	12	17	16	23	5	: 153
3000 - 6000 :	1	2	5	2	3	3	5	6	12	7	9	5	3	3	12	6	5	: 89
LT 3000 :	6	15	15	16	34	55	86	86	117	151	210	133	118	192	143	48	14	: 1439
TOTAL :	38	56	84	95	140	206	271	278	357	539	692	353	270	550	421	280	176	: 4806
MEAN/100	24.	20.	22.	25.	24.	21.	22.	20.	17.	21.	19.	18.	17.	19.	20.	24.	24.	20.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

CARBON MONOXIDE(CO) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 2000 :									1				1	2			2	6
1800 - 2000 :			1						0				0	0			7	8
1600 - 1800 :		8	1		3	19	2		0				4	0			14	51
1400 - 1600 :		1	0		0	2	0		0				5	5	1	1	14	29
1200 - 1400 :		0	0		1	5	0		0				0	6	0	0	19	31
1000 - 1200 :		2	2		6	8	1		0				0	3	1	0	56	79
800 - 1000 :		0	0	4	19	67	20	2	1	3	4		2	5	3	4	45	179
600 - 800 :	11	12	12	90	448	594	503	84	54	28	46	53	172	268	95	48	836	3354
400 - 600 :	1	1	3	2	159	270	281	29	45	14	2	1	55	51	20	2	483	1419
200 - 400 :	0	0	0	2	58	22	13	1	2	0	0	0	27	57	3	0	182	367
LT 200 :	0	0	0	0	3	9	0	0	1	0	0	0	0	0	0	0	0	13
TOTAL :	12	24	19	98	697	996	820	116	104	45	52	54	266	397	123	55	1658	5536
MEAN/100	7.	11.	8.	7.	7.	7.	7.	7.	6.	7.	7.	7.	7.	7.	7.	7.	7.	7.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

CARBON MONOXIDE(CO) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	WIND DIRECTION S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 2000 :	27	34	52	57	89	136	170	171	210	179	384	207	181	263	290	206	80	2736
1800 - 2000 :	0	4	2	0	2	2	8	8	4	11	30	26	28	75	51	13	0	264
1600 - 1800 :	2	0	0	1	8	3	6	12	13	16	61	45	42	58	49	19	6	341
1400 - 1600 :	0	1	0	6	4	5	8	4	7	19	13	3	1	0	2	1	1	75
1200 - 1400 :	2	5	9	9	10	22	30	25	28	61	47	18	11	59	35	13	11	395
1000 - 1200 :	4	11	23	18	38	47	48	54	79	229	129	68	43	131	39	36	79	1076
800 - 1000 :	1	2	3	4	1	3	13	17	20	36	46	13	1	2	0	3	3	168
600 - 800 :	0	0	0	1	0	0	0	0	1	2	0	0	0	0	0	0	0	4
400 - 600 :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
200 - 400 :	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
LT 200 :	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL :	36	57	89	97	152	218	283	291	362	555	710	380	308	588	466	291	180	5063
MEAN/100	29.	25.	24.	24.	24.	25.	24.	24.	23.	19.	24.	26.	28.	24.	29.	29.	21.	24.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

OZONE(03) C-B SHALE OIL PROJECT

TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 160 :																	1 :	1
150 - 160 :							1						1				0 :	2
140 - 150 :							0						0				0 :	0
130 - 140 :							0						0				0 :	0
120 - 130 :							0						0				4 :	4
110 - 120 :		2	2	2	10	23	2			4	8	3	12	21	3	1	41 :	134
100 - 110 :	1	1	3	5	9	44	5	3	14	4	5	4	45	57	18	2	93 :	313
90 - 100 :	7	6	2	27	71	104	80	63	51	17	5	19	111	119	23	32	418 :	1155
80 - 90 :	0	3	3	49	148	136	212	49	32	15	25	21	80	155	52	17	1008 :	2005
70 - 80 :	1	5	2	6	57	104	120	1	4	3	8	6	20	43	17	0	564 :	961
60 - 70 :	3	7	4	3	98	149	218	2	0	2	1	1	25	20	10	3	393 :	939
50 - 60 :	0	0	3	2	77	96	93	0	0	0	0	0	19	22	2	0	334 :	648
LT 50 :	0	0	0	5	325	457	233	1	3	0	0	1	10	49	10	0	759 :	1853
TOTAL :	12	24	19	99	795	1113	964	119	104	45	52	55	323	486	135	55	3615 :	8015
MEAN	88.	83.	82.	85.	58.	58.	65.	89.	91.	92.	90.	89.	88.	83.	84.	92.	69.	69.

NUMBER OF FIVE MINUTE SAMPLES BY WIND DIRECTION AND LEVEL

OZONE(03) C-B SHALE OIL PROJECT

TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

CONCENTRATION UG/M**3	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	CALM	TOTAL
GT 160																		
150 - 160																		
140 - 150																		
130 - 140																		
120 - 130																		
110 - 120																		
100 - 110																		
90 - 100																		
80 - 90									1	1				2	2	4		10
70 - 80		1	1	3	4		1	7	2	8	13	6	23	41	24	4		138
60 - 70	2	1	6	10	12	9	8	7	13	12	12	15	19	26	28	13	2	195
50 - 60	0	3	2	4	12	9	9	22	37	34	30	33	11	34	33	11	3	287
LT 50	35	56	85	80	111	192	249	239	274	381	640	303	217	466	356	245	175	4104
TOTAL	37	61	94	97	139	210	267	275	327	436	695	357	270	569	443	277	180	4734
MEAN	23.	23.	24.	28.	29.	28.	28.	30.	34.	31.	26.	28.	30.	29.	27.	26.	21.	28.

TABLE VIII

DIURNAL VARIATION OF VARIOUS RECORDED PARAMETERS

DIURNAL VARIATION OF NITROGEN OXIDES(UG/M**3)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	10	10	*	10	15	18	13	*	*	*	*	*	*	*	12	13	15	14	13	14	16	10.
2	15	11	11	9	11	12	12	14	15	19	12	9	*	*	*		*	10	9	10	*	*	*	9	11.
3	14	11	9	9	*	*	*	*	10	*	10	*	*	*	*	*	*	31	22	19	12	13	13	17	11.
4	23	21	21	18	22	25	25	31	20	21	41	17	*		*	*	*	11	29	25	28	16	20	17	20.
5	14	23	9	*	*	*	28	21	26	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10.
6	*	*	*	*	*	*	*	11	9	9	9		*	*	*	*	*	23	10	*	17	13	*	*	8.
7	*	*	*	*	*	17	25	11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	22	5.
8	11	*	9	22	16	21	25	41	24	9	*		*	*	*	*	*	*	*	*	*	*	*	*	9.
9	*	*	*	15	12	11	12	14	16		14	10			*	*	*	*	*	*	*	*	*	*	6.
10	*	*	*	*	*	*	*	*	*	*	*	*													4.
11													*	*	*	*	*	*	*	*	10	9	11	*	5.
12	*	*	11	28	21	22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
15	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	13	12	*	*	*	9	16	21	5.
16	24	21	20	14	*	10	10	21	21	17	*		*	*	*	*	*	*	*	*	*	*	*	*	8.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	9	10	4.
18	14	13	9	11	9	*	*	10								15	13	10	9	12	*	*	10	9	11.
19	*	*	*	*	*	*	10	11	16	19	14	9	*	*	*	9	*	12	9	*	9	9	*	*	10.
20	*	9	9	*	10	9	*	9	*	9	*	*	*	*	*	11	*	9		9	*	*	10	*	9.
21	*	9	*	*	*	*	9	9	10	11	10		*	*	*	*	*	*	*	*	*	*	*	*	5.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*										1.
23																									
24	*	*	*	*													*	*	*	*	*	*	*	*	4.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4.
26	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	11	*	9	*	*	*	*	5.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*		18	20	18	20	23	23	20	22	28	11.
29	21	27	25	21	22	17	23	17	20	24	18	25	23	14	*	*	*	*	*	11	10	*	*	*	16.
30	*	*	9	*	*	*	*	*	25	29	23	18	*	*	*	*	*	11	*	*	*	*	*	*	9.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
MEAN	8.	8.	8.	9.	8.	8.	10.	11.	11.	10.	9.	6.	4.	3.	3.	4.	5.	7.	7.	7.	8.	7.	7.	9.	

TOTAL NUMBER OF OBSERVATIONS = 7722 MEAN = 7.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF NITROGEN OXIDES(UG/M**3)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															32	58	49	26	22	29	29	24	39	24	34.
2	24	24	33	13	27	12	23	17	22	25	40				13	10	*	*	*	10	11	13	*	*	17.
3	*	*	*	12	10	12	10	13	18	22	12	10	*			*	*	*	*	*	9	9	15	12	10.
4	12	12	*	10	17	16	14	*	*	11	9	9	*	*	*	*		*	*	9	14	21	18	18	11.
5	22	23	24	24	26	31	32	38	38	38	41	47	43	46	54	55		18	21	25	27	30	29	31	33.
6	27	29	34	30	29	33	21	25	29	27	20	*	26	48	89	36	15	*	9	13	16	14	22	23	26.
7	24	24	22	21	20	24	20	22	19	20	*	*	16	*	14	15	16	21	24	17	17	16	13	14	17.
8	13	17	19	20	18	21	22	24	25	36	38	32	36		*	*	*	*	*	*	*	18	10	14	16.
9	*	9	9	14	18	12	29	15	12	17	29	30	27	26	20					*	*	*	*	*	14.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*											0.
13																									
14																									
15																									
16																*	*	*	10	*	9	*	*	13	7.
17																									8.
18	*	*	9	10	12	*	*	9	*				*	9	*										
19																									
20																*	*	*	*	*	*	*	*	*	0.
21																									
22																									
23															56	29	43	57	73	90	95	93	101	100	75.
24	132	103	96																						101.
25																									
26																									
27																									
28														42	50	42	34	37	32	33	37	38	36	38	39.
29	39	40	43	42	43	40	39	38	38	45	48		68	64	54	50	40	42	34	40	34	39	35		44.
30																*	*	*	*	13	15	20	27	43	15.
31	43	46	44	49	54	44	43	52	52	43	77	73	71	68	55	*	*	*	*	12	15	21	25	41	40.
MEAN	22.	23.	23.	18.	20.	16.	19.	19.	20.	22.	24.	21.	23.	26.	30.	18.	15.	15.	15.	17.	19.	21.	22.	22.	

TOTAL NUMBER OF OBSERVATIONS = 4191 MEAN = 20.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF NITRIC OXIDE(UG/M**3)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	15	*	*		*	*	*	*	*	*	*	*	*	*	1.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
8	*	*	*	*	*	*	*	15	10	*	*		*	*	*	*	*	*	*	*	*	*	*	*	3.
9	*	*	*	15	12	11	12	14	16		14	10			*	*	*	*	*	*	*	*	*	*	6.
10	*	*	*	*	*	*	*	*	*	*	*	*													4.
11													*	*	*	*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
15	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
16	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	1.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	1.
18	*	*	*	*	*	*	*	*								*	*	*	*	*	*	*	*	*	1.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	0.
21	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*										1.
23																									
24	*	*	*	*													*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	0.	0.	0.	1.	1.	1.	2.	2.	2.	1.	2.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 7722 MEAN = 1.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

RADIAN

DIURNAL VARIATION OF NITRIC OXIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															10	37	33	15	14		17	12	16	11	19.
2	14	10	17	*	13	*	11	9	13	14	20				*	*	*	*	*	*	*	*	*	*	8.
3	*	*	*	*	*	*	*	*	*	11	*	*	*			*	*	*	*	*	*	*	*	*	3.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	12	10	11	4.
5	17	17	21	21	23	30	31	36	37	38	41	46	43	45	53	55		10	15	18	25	27	25	25	30.
6	22	25	25	24	27	27	16	24	25	18	*	*	11	15	28	*	*	*	*	9	13	11	17	20	16.
7	16	17	19	19	16	20	17	20	17	18	*	*	10	*	10	11	12	17	19	13	13	13	10	11	14.
8	9	11	13	15	14	15	16	17	17	28	28	22	25		*	*	*	*	*	*	*	12	*	11	12.
9	*	*	*	11	15	10	17	*	9	14	25	26	23	21	17					*	*	*	*	*	11.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*											0.
13																									
14																									
15																									
16																									
17																*	*	*	9	*	*	*	*	11	5.
18	*	*	*	*	*	*	*	*	*				*	*	*										6.
19																									
20																									
21															*	*	*	*	*	*	*	*	*	*	0.
22																									
23															20	*	15	32	52	71	84	77	87	89	54.
24	91	92	87																						91.
25																									
26																									
27																									
28														42	50	42	33	37	32	33	37	38	36	38	39.
29	39	40	43	42	37	36	37	38	38	45	48		68	63	54	45	40	42	34	40	34	39	35		43.
30																*	*	*	*	*	*	11	17	25	8.
31	27	24	25	34	29	24	27	36	37	32	58	51	53	46	31	*	*	*	*	*	*	12	17	24	25.
MEAN	17.	17.	18.	14.	14.	13.	14.	14.	15.	17.	18.	14.	18.	20.	18.	12.	10.	10.	11.	12.	15.	16.	16.	17.	

TOTAL NUMBER OF OBSERVATIONS = 4194 MEAN = 15.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

[illegible]

DIURNAL VARIATION OF NITROGEN DIOXIDE(UG/M**3)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	10	10	*	10	15	17	11	*	*	*	*	*	*	*	12	13	15	14	13	14	16	10.
2	15	11	11	9	11	12	12	13	15	16	10	9	*	*	*		*	10	9	10	*	*	*	9	10.
3	14	11	9	9	*	*	*	*	10	*	9	*	*	*	*	*	*	31	22	19	12	13	13	17	11.
4	23	21	20	17	22	24	24	27	16	20	25	15	*		*	*	*	11	27	25	28	16	20	17	18.
5	14	23	9	*	*	*	24	21	24	18	*	*	*	*	*	*	*	*	*	*	*	*	*	*	10.
6	*	*	*	*	*	*	*	11	9	9	9		*	*	*	*	*	20	9	*	15	12	*	*	7.
7	*	*	*	*	*	14	17	10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18	5.
8	10	*	*	17	13	16	17	26	14	*	*		*	*	*	*	*	*	*	*	*	*	*	*	6.
9	*	*	*	*	*	*	*	*	*		*	*			*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*													0.
11													*	*	*	*	*	*	*	*	9	*	10	*	4.
12	*	*	11	23	18	20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
15	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	12	11	*	*	*	9	15	21	5.
16	24	21	19	13	*	9	9	19	21	15	*		*	*	*	*	*	*	*	*	*	*	*	*	8.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	9	10	3.
18	14	13	9	9	*	*	*	9								13	11	10	9	11	*	*	9	9	10.
19	*	*	*	*	*	*	10	11	14	17	13	9	*	*	*	9	*	12	9	*	9	9	*	*	10.
20	*	9	9	*	10	9	*	9	*	9	*	*	*	*	*	11	*	9		9	*	*	9	*	9.
21	*	9	*	*	*	*	9	9	10	10	10		*	*	*	*	*	*	*	*	*	*	*	*	5.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*										0.
23																									
24	*	*	*	*													*	*	*	*	*	*	*	*	4.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4.
26	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	11	*	9	*	*	*	*	5.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*		18	20	18	20	23	23	20	22	28	11.
29	21	27	25	21	22	17	23	17	20	24	18	25	23	14	*	*	*	*	*	11	10	*	*	*	16.
30	*	*	9	*	*	*	*	*	22	21	20	18	*	*	*	*	*	11	*	*	*	*	*	*	8.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
MEAN	8.	8.	7.	8.	7.	7.	8.	9.	10.	9.	7.	5.	4.	3.	3.	4.	5.	7.	7.	7.	7.	7.	7.	8.	

TOTAL NUMBER OF OBSERVATIONS = 7722 MEAN = 7.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF NITROGEN DIOXIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															21	20	15	11	*		11	12	23	13	15.
2	10	13	15	*	14	*	12	*	*	10	19				12	10	*	*	*	*	*	*	*	*	9.
3	*	*	*	*	*	*	*	9	11	10	*	9	*			*	*	*	*	*	*	*	10	*	7.
4	*	9	*	*	10	9	*	*	*	*	*	*	*	*	*	*		*	*	*	*	9	*	*	7.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	3.
6	*	*	*	*	*	*	*	*	*	*	16	*	14	33	60	29	11	*	*	*	*	*	*	*	9.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
8	*	*	*	*	*	*	*	*	*	*	9	9	11		*	*	*	*	*	*	*	*	*	*	4.
9	*	*	*	*	*	*	11	*	*	*	*	*	*	*	*					*	*	*	*	*	3.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*											0.
13																									
14																									
15																									
16																									
17																*	*	*	*	*	*	*	*	*	2.
18	*	*	*	*	*	*	*	*	*				*	*	*										2.
19																									
20																									
21																*	*	*	*	*	*	*	*	*	0.
22																									
23															36	29	28	24	21	18	10	15	13	11	21.
24	10	10	*																						10.
25																									
26																									
27																									
28														*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*		1.
30																*	*	*	*	*	*	*	10	17	7.
31	16	22	18	15	24	20	15	16	15	10	19	22	17	21	23	*	*	*	*	*	*	*	9	16	14.
MEAN	5.	6.	5.	4.	6.	5.	5.	4.	4.	5.	6.	5.	5.	7.	11.	7.	5.	5.	4.	4.	4.	5.	5.	6.	

TOTAL NUMBER OF OBSERVATIONS = 4182 MEAN = 5.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

RADIAN

DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	1.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	4.
6	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	5.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
8	*	*	*	*	*	*	*	*	*	*	*		16	16	15	15	14	15	15	16	17	17	17	17	13.
9	17	17	17	*	*	*	*	*	*		*	*			*	*	*	*	*	*	*	*	*	*	3.
10	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*													0.
12													*	*	*	*	*	*	*	*	*	*	*	*	0.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
15	*	*	*	*	*	*	*	*	*	13	13	13	13	*	*	*	*	*	*	*	*	*	*	*	6.
16	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	0.
18	*	*	*	*	*	*	*	*								*	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	0.
21	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*										0.
23																									
24	*	*	*	*																					0.
25																									
26																									
27																*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*											0.
29																									
30																									
31																									
MEAN	2.	2.	2.	2.	1.	1.	2.	2.	2.	2.	2.	1.	2.	2.	1.	2.	2.	2.	2.	2.	2.	2.	2.	2.	

TOTAL NUMBER OF OBSERVATIONS = 5926 MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	16	19	20	18	20	15	18	13	*	6.
3	*	*	*	*	14	13	14	*	*	*	*	*	*	13	13	*	*	*	*	*	*	*	*	*	11.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	16	*	*	*	*	*	*	*	*	6.
5	*	*	*	*	*	*	*	*	*	*	*	15	*	*	*	*	*	*	*	*	*	*	*	*	4.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*					24	20	20	18	18	18	18		8.
20																					*	*	*	*	3.
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*												*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							0.
26															*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
30	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	1.	1.	1.	2.	1.	1.	1.	1.	1.	1.	1.	2.	2.	2.	2.	3.	3.	3.	2.	2.	2.	2.	2.	1.	

TOTAL NUMBER OF OBSERVATIONS = 5848 MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1											*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
13	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	1.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
16	*	*	*	*	*	*	*	*	*	*	*	*													0.
17																			*	*	*	*	*	*	0.
18	*	*	*	*	*	*	*	*	*	*		*			*	*	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	19	20	20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*	*										*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*											0.
30												*	*	*	*	*	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 7796 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															*	*	*	*	*		*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*					*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	3.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*		*	*	*	*	7.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
14	*	*	*	*	*	*	*	*	*	*	13														3.
15																									
16																*	*								1.
17																	*	*	*	*	*	*	*	*	0.
18																		*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*	*	*							*	*	*	13	33	58	67	10.
21	73	87	97	*	*	*	*	*	*	*	*	15	19		22	21	22	25	24	26	22	15	21	20	23.
22	23	29	33	31	28	27	22	33	29	23	32	26	36		124										35.
23															*	*	*	*	*	*	*	*	*	13	12.
24	*	13	13																						13.
25																									
26																									
27														*	*	16	19	19	20	19	13	*	*	*	15.
28													*	*	13	*	*	13	13	13	13	*	*		12.
29	*	*	*	*	*	*	*	*	*	*	*					*	*	*	*	14	20	24	28	35	17.
30																*	*	*	*	13	19	23	28	33	24.
31	37	25	29	25	30	23	27	27	25	28	31	23	29	33	42										
MEAN	8.	9.	10.	5.	5.	4.	4.	5.	4.	4.	6.	6.	7.	5.	11.	5.	5.	5.	5.	6.	6.	7.	9.	10.	

TOTAL NUMBER OF OBSERVATIONS = 5353 MEAN = 6.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

BRALDLEN

DIURNAL VARIATION OF SULFUR DIOXIDE(UG/M**3)
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	1.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	20																				6.
8				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
10	*	*	*	*	*		116	98	42	25	*	*	*	*	*	*									22.
11																	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
15	*	*	*	*	*	*	*	*	*	*	*		15	15	14	14	14	15	14	15	13	14	15	14	8.
16	15	15	15	15	15	15	15	16	16	16	16	15	*	*	*	*	*	*	*	*	*	*	*	*	8.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	0.
18	*	*	*	*	*	*	*	*										*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*																1.
21															*	*	*	*	*	*	*	*	*	*	2.
22	*	*	*	*	*	*	*	*	*	*	*	*	*												3.
23														*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*																	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	2.	1.	1.	2.	2.	1.	4.	5.	3.	2.	1.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	

TOTAL NUMBER OF OBSERVATIONS = 7167 MEAN = 2.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

RADIAN

DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*		*	*	*	1.
9	*	*	*	*	*	*	*	*	*		*	*			*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
16	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	0.
18	*	*	*	*	*	*	*	*							*	*	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	0.
21	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*										0.
23																									
24	*	*	*	*													*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 7998 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

RADIAN CORPORATION

DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*					*	*	*	*	*	*	*		0.
20																					*	*	*	*	0.
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*												*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*							0.
26															*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
30	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 5843 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1											*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	2.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
4	*	*	*	*	*	*	*	*	*	*	*	*	7	7	7	*	*	*	*	*	*	*	*	*	5.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7	7	7	7	7	7	7.
7	7	7	7	8	7	7	7	7	7	7	7	7	7	7	7	*	7	7	7	7	7	7	7	7	7.
8	8	8	7	*	*	*	7	7	7		*	*	*	*	*	*	*	*	*	*	*	*	*	*	3.
9	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	0.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
13	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
15	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
16	*	*	*	*	*	*	*	*	*	*	*	*													0.
17																			*	*	*	*	*	*	0.
18	*	*	*									*			*	*	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
21	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*	*	*	*	*										*	*	*	*	*	*	*	*	0.
25	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
26	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
30	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	1.	1.	1.	2.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	

TOTAL NUMBER OF OBSERVATIONS = 7966 MEAN = 1.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

ERLEDIAN

DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*				*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	7	9	10		*	*	*	*	*	*	*	2.
11	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	7	*	*	*	3.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5.
14	*	*	*	*	*	*	*	*	*	*	15														5.
15																									
16																									
17																11	10								11.
18																	*	*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	1.
20	*	*	*	*	*	*	*	*	*	*	*							*	*	*	*				3.
21	35	39	45	10	14	18	20	21	21	22	24	26	28		33	34	33	30	31	31	34	33	34	30	29.
22	33	36	37	36	34	36	36	39	37	34	36	39	39		71										39.
23															*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*																						0.
25																									
26																									
27																									
28														*	7	9	10	11	11	11	9	8	7	7	9.
29	7	7	8	7	7	*	7	7	7	7	7		7	7	7	7	7	7	7	7	7	*	7		7.
30	12	12	12	13	15	13	11	11	11	13	11	15	16	16	19	*	*	*	*	9	13	13	16	19	12.
31	11	12	12	13	14	12	12	11	11	12	10	14	15	16	19	*	*	*	*	8	12	13	15	18	12.
MEAN	5.	6.	6.	5.	5.	5.	5.	5.	5.	6.	6.	7.	7.	4.	8.	5.	5.	4.	4.	4.	4.	4.	5.	5.	

TOTAL NUMBER OF OBSERVATIONS = 5536 MEAN = 5.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

RADIAN CORPORATION

DIURNAL VARIATION OF HYDROGEN SULFIDE(UG/M**3)
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
2	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
3	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
4	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
5	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
7	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
8	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
9	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
10	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*									0.
11																	*	*	*	*	*	*	*	*	0.
12	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
13	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	0.
14	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
15	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	0.
16	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
17	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	0.
18	*	*	*	*	*	*	*	*										*	*	*	*	*	*	*	0.
19	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
20	*	*	*	*	*	*	*	*	*																0.
21															*	*	*	*	*	*	*	*	*	*	0.
22	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
23	*	*	*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	0.
24	*	*	7																						6.
25																									
26																	*	*	*	*	*	*	*	*	0.
27	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	0.
28	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
29	*	*	*	*	*	*	*	*	*	*	*	*													0.
30																	*	*	*	*	*	*	*	*	0.
31	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.
MEAN	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 6898 MEAN = 0.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF TOTAL HYDROCARBONS(UG/M**3 X 10**-2)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	6	7	6	6	6	6.
2	6	6	6	6	6	6	6	7	6	7	6						9	9	9	9	9	8	8	8	8.
3	9	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9	8	9	8	8	8	8	8.
4	8	9	8	8	8	8	8	8	8	9	9	8	8		8	8	8	9	9	9	9	9	10	9	9.
5	9	9	9	9	10	10	10	10	10	9	9	10	9	9	9	11	9	9	11	10	10	10	10	10	10.
6	10	11	10	10	11	11	10	10	10	10	10		9	9	9	9	9	11	10	11	12	10	10	10	10.
7	10	9	10	9	9	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	12	13	10.
8	11	11	11	10	10	11	12	13	11	10	10		11	11	10	10	10	12	11	16	12	13	11	11	11.
9	11	10	10		9	9	9	7	8		7	7			8	8	8	8	9	9	10	10	9	10	9.
10	9	8	9	9	9	8	9	8	8	8	7	7		10	10	10	10	11	11	12	13	13	13	13	10.
11	13	12	12	12	10	11	11	11	10	11	10	10	9	9	9	9	9	9	10	11	10	10	11	11	11.
12	10	10	11	13	12	11	10	10	10	10	9	9	9	9	9	9	9	10	10	11	10	10	10	10	10.
13	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9.
14	9	9	9	9	9	10	10	10	12	11	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9.
15	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	9	9	10	9	9	9	10	10	12	10.
16	12	12	12	11	11	12	11	12	12	10	9		9	9	9	9	9	9	9	9	10	10	9	9	10.
17	9	10	10	10	10	9	9	9	9	9	8	8	8	8	8	8	8	8		9	9	9	9	9	9.
18	10	10	11		9	8	8	8								13	14	13	12	12	12	12	11	11	11.
19	11	11	11	11	10	10	10	10	11	11	10	10	10	10	10	10	10	11	10	10	10	10	10	10	10.
20	9	9	9	10	10	9	10	10	9	9	9	9	9	9	9	9	9	9		9	9	9	9	9	9.
21	9	9	9	9	9	9	9	9	9	9	9		9	9	9	9	9	9	9	9	9	9	9	9	9.
22	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9										9.
23																									
24	20	27	25	21																					24.
25																									
26																									
27																									
28																									
29																									
30																									
31																									
MEAN	10.	10.	10.	10.	10.	10.	10.	10.	10.	9.	9.	9.	9.	9.	9.	9.	9.	10.	10.	10.	10.	10.	10.	10.	

TOTAL NUMBER OF OBSERVATIONS = 5866 MEAN = 10.

RADIAN

DIURNAL VARIATION OF TOTAL HYDROCARBONS(UG/M**3 X 10**-2)
TRAILER NO. = 23 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															140	299	251	198	181	212	213	220	188	189	210.
2	207	187	211												140	194	105	143	177	180	160	228	141	126	168.
3	155	220	145	191	184	191	182	203	216	234	224	239	211				70	104	193	227	201	161	189	190	186.
4	178	175	115	161	216	205	192	117	135	149	140	219	159	259	178	155		48	112	162	144	144	140	169	161.
5	207	224	210	200	323	305	311	294	233	249	278	341	247	299	313	251		281	239	292	306	334	307	290	273.
6	234	277	322	247	265	278	238	265	280	210	273	114				218	261	154	124	147	143	150	159	171	213.
7	175	195	207	203	124	199	169	159	174	156	37	87	190	140	250	264	274	291	243	241	246	266	230	202	197.
8	268	249	298	236	197	278	243	265	222	289	315	321	319		364	400	318	254	249	240	247	284	289	311	278.
9	285	325	287	319	325	308	334	305	303	342	369	435	410	436	463				169	124	157	217	224	238	308.
10	304	286	304	310	303	310	322	291	319	320	319	325	321	325	322	325		198	216	251	224	261	248	253	291.
11	285	255	280	286	284	257	281	305	267	284	291	297	287	460		236	282	285	237	274	263	279	281	308	287.
12	278	350	302	304	276	344	317	389	316	287	364	359	378	264	177	177	173	186	198	202	262	251	254	228	277.
13	296	256	229	219	230	222	225	225	264	221	235	249	247	230	191	181	204	203	301	256	294	255	305	241	241.
14	239	302	281	337	258	312	242	322	309	328	300														298.
15																									
16																									
17																									
18																	10	31	93	54	79	99	77	102	73.
19	109	96	165															212	251	302	310	311	325	362	244.
20	286	349	322	318	286	341	314	250	335	301	299							514	651	651	651	651	651	651	434.
21																									
22																									
23																420	401	390	382	378	376	374	374	374	385.
24	374	372	373																						374.
25																									
26																									
27																									
28														28	28	25	24	28	27	25	27	26	26	27	27.
29	25	28	30	27	26	27	27	27	28	29	32		33	34	36	32	28	28	29	29	25	30	27		29.
30	32	32	32	32	32	32	31	32	32	32	32	32	32	32	30	13	17	21	20	20	20	20	24	21	27.
31	32	32	32	32	32	32	32	32	32	32	32	32	32	32	30	16	17	21	20	20	20	20	23	22	28.
MEAN	211.	221.	216.	214.	211.	228.	216.	218.	217.	217.	221.	234.	222.	218.	189.	205.	168.	174.	197.	205.	208.	218.	213.	224.	

TOTAL NUMBER OF OBSERVATIONS = 4766 MEAN = 211.

RADIAN CORPORATION

DIURNAL VARIATION OF METHANE (UG/M**3 X 10**-2)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	5	6	6	6	6	7	6	6	6	6.
2	6	6	6	6	6	6	6	7	6	7	6						8	8	9	9	9	8	8	8	7.
3	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8.
4	8	8	8	8	8	8	8	8	8	8	8	7	7		8	8	8	8	8	9	9	9	10	8	8.
5	8	8	8	8	9	9	9	9	9	8	7	7	8	8	8	8	8	8	9	8	9	8	8	8	9.
6	8	9	9	9	9	9	9	9	8	8	8		8	8	8	8	8	10	9	10	11	9	8	8	9.
7	8	8	8	8	9	9	10	9	9	8	8	8	8	8	8	8	8	8	8	8	8	8	11	13	9.
8	11	10	10	9	10	11	11	12	10	9	9		8	8	7	8	8	9	7	12	9	10	8	8	10.
9	8	8	8		8	8	8	7	8		7	7			5	5	5	6	6	7	8	8	7	8	7.
10	7	6	7	7	7	6	7	7	6	6	5	5		8	8	8	8	9	9	10	11	11	11	11	8.
11	11	10	10	10	9	9	9	9	9	9	9	9	8	8	8	8	9	9	9	10	10	10	10	11	10.
12	9	10	10	13	11	11	10	10	9	9	8	8	8	8	8	8	8	9	9	10	10	10	9	9	10.
13	10	9	8	8	8	8	8	8	8	8	8	8	6	8	8	8	8	8	8	8	8	8	8	8	8.
14	8	8	8	8	8	9	9	9	11	10	9	8	8	8	8	8	8	9	9	9	9	9	9	9	9.
15	9	9	9	9	9	9	10	10	10	10	10	8	10	10	10	8	8	9	8	8	9	9	10	11	10.
16	12	11	11	10	11	11	10	11	11	9	8		8	8	8	8	8	8	8	9	10	10	9	9	10.
17	9	10	9	9	10	9	9	9	9	8	8	8	8	8	8	8	8	8		8	8	8	8	9	9.
18	9	9	10		8	8	7	7								9	10	9	9	9	9	9	9	9	9.
19	8	9	9	8	8	8	8	9	9	9	9	8	8	8	8	8	8	9	9	8	8	8	8	8	9.
20	8	8	8	8	8	8	8	8	8	8	8	8	8	7	8	8	8	8		8	8	8	8	8	8.
21	8	8	8	8	8	8	8	8	8	8	8		8	8	8	8	8	8	8	8	8	8	8	8	8.
22	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8										8.
23																									
24	18	25	23	18																					22.
25																									
26																									
27																									
28																									
29																									
30																									
31																									
MEAN	9.	9.	9.	9.	9.	9.	9.	9.	9.	8.	8.	8.	8.	8.	8.	8.	8.	9.	9.	9.	9.	9.	9.	9.	

TOTAL NUMBER OF OBSERVATIONS = 5867 MEAN = 9.

RADIAN

DIURNAL VARIATION OF METHANE (UG/M**3 X 10**-2)
TRAILER NO, - 23 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															10	9	9	9	9	9	9	9	9	9	9.
2	9	9	9												9	8	8	8	8	8	8	8	8	8	9.
3	8	8	8	8	8	8	8	8	8	8	8	8	7				8	8	8	8	8	8	8	8	8.
4	8	8	8	8	7	8	8	8	8	8	8	8	8	8	8	8		8	8	8	8	8	8	8	8.
5	8	8	8	8	8	8	8	8	8	9	6	8	8	8	9	9		8	8	8	8	9	8	8	9.
6	8	8	8	8	8	8	8	8	8	8	9	8				10	9	8	8	8	8	8	8	8	9.
7	8	8	8	8	8	6	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8.
8	8	8	8	8	8	8	8	8	8	8	8	8	8		11	11	10	10	10	10	10	10	10	10	9.
9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10				9	9	8	8	8	8	10.
10	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9		9	8	8	8	8	8	8	8.
11	8	8	8	8	8	8	8	8	8	8	8	8	8	8		9	9	8	8	8	8	8	8	8	8.
12	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8.
13	8	7	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8.
14	8	8	8	8	8	8	7	8	8	8	7														8.
15																									
16																									
17																									
18																	8	8	8	8	8	8	8	8	8.
19	8	8	8			18	18	18	18	18		18	18	18	18	18		9	9	9	9	9	9	9	13.
20	8	8	8	8	8	8	8	8	8	8	8							6	8	8	8	9	9	9	8.
21	9	9	9																						9.
22															13										13.
23															21	20	19	19	19	18	18	18	18	18	19.
24	18	18	18																						18.
25																									
26																									
27																									
28														18	19	19	19	19	19	19	19	19	19	19	19.
29	18	18	19	19	18	18	19	19	18	19	19		20	20	20	20	19	19	19	19	19	19	19		19.
30	10	10	10	10	10	10	11	10	10	10	10	10	10	10	10	10	10	9	10	10	10	10	10	11	10.
31	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	9	10	10	10	10	10	11	10.
MEAN	10.	10.	9.	9.	9.	10.	10.	10.	10.	10.	9.	9.	10.	11.	12.	12.	11.	10.	10.	10.	10.	10.	10.	10.	

TOTAL NUMBER OF OBSERVATIONS = 4979 MEAN = 10.

RADIAN

DIURNAL VARIATION OF NON-METHANE HYDROCARBONS(UG/M**3 X 10**-2)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
2	0	0	0	0	0	0	0	0	0	0	0						0	0	0	0	0	0	0	0	0.
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
4	0	1	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0.
5	0	0	0	0	0	0	0	0	0	0	0	2	1	0	1	2	1	1	1	1	1	1	1	1	1.
6	1	0	1	1	1	1	1	0	1	1	1		1	1	1	0	0	0	0	0	0	0	0	0	1.
7	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1.
8	0	0	0	0	0	0	0	0	0	0	0		2	2	2	2	2	2	3	2	2	2	2	2	1.
9	2	2	2		0	0	0	0	0		0	0			2	2	1	1	2	1	2	1	1	1	1.
10	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1.
11	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1.
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
13	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0.
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0.
16	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0.
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0.
18	0	0	0		0	0	0	0								3	3	3	3	2	2	2	2	2	2.
19	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1.
20	1	1	1	1	0	0	1	1	0	0	0	0	0	1	0	1	0	0		1	1	1	0	0	1.
21	0	0	0	0	0	1	0	0	0	0	0		1	0	0	0	0	0	0	0	0	0	0	0	0.
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										0.
23																									
24	1	1	1	0																					1.
25																									
26																									
27																									
28																									
29																									
30																									
31																									
MEAN	1.	1.	1.	0.	0.	0.	0.	0.	0.	0.	0.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	1.	

TOTAL NUMBER OF OBSERVATIONS = 5865 MEAN = 1.

RADIAN

DIURNAL VARIATION OF NON-METHANE HYDROCARBONS(UG/M**3 X 10**-2)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															128	288	242	189	172	202	203	211	178	180	200.
2	198	178	202												130	184	96	134	169	171	151	220	132	117	158.
3	146	211	136	182	175	182	173	194	207	225	216	230	202				61	95	184	219	192	153	180	182	177.
4	170	157	107	153	207	197	184	108	126	141	131	211	150	251	169	147		40	103	153	135	136	131	160	152.
5	191	195	201	191	314	295	302	285	224	240	269	332	237	289	303	241		272	230	284	297	325	296	281	264.
6	226	268	313	239	256	269	229	256	271	202	263	105				207	251	146	115	138	135	141	150	162	204.
7	157	186	199	195	115	191	160	150	165	159	28	78	182	131	241	255	265	283	234	232	238	257	221	193	189.
8	259	240	199	228	189	269	234	257	214	280	306	312	310		353	388	307	243	238	230	236	274	278	301	268.
9	275	314	277	309	315	298	323	294	293	332	358	424	400	425	452				159	115	147	207	227	229	298.
10	291	277	291	302	294	301	313	282	311	311	310	316	312	315	313	316		188	207	252	216	253	240	244	282.
11	276	245	271	277	275	249	273	298	259	276	283	289	279	452		226	272	276	229	265	255	270	272	299	278.
12	259	341	293	295	268	335	308	380	308	279	355	351	369	255	168	168	164	177	189	193	253	242	245	219	258.
13	287	248	221	211	222	213	216	217	255	213	226	241	238	221	182	172	195	194	292	248	286	246	297	232	232.
14	280	293	272	328	249	303	234	314	300	319	291														290.
15																									
16																									
17																									
18																	1	22	85	45	70	90	69	93	64.
19	100	88	156															203	242	293	301	302	316	353	235.
20	277	340	313	309	277	332	305	241	326	292	290							577	642	642	642	641	641	641	427.
21																									
22																									
23																400	381	370	363	359	357	356	355	355	366.
24	355	354	354																						355.
25																									
26																									
27																									
28														9	8	5	5	9	7	6	7	7	7	8	7.
29	7	9	10	8	7	6	8	7	9	9	12		12	13	16	11	8	9	9	10	5	10	7		10.
30	21	21	21	21	21	21	19	21	21	21	21	21	21	21	19	3	7	11	10	10	9	9	13	10	17.
31	21	21	21	21	21	21	21	21	21	21	21	21	21	21	19	5	7	11	10	10	9	9	12	10	17.
MEAN	204.	210.	206.	204.	202.	218.	206.	208.	207.	208.	211.	225.	212.	207.	178.	193.	157.	164.	187.	194.	197.	208.	203.	213.	

TOTAL NUMBER OF OBSERVATIONS = 4762 MEAN = 200.

DIURNAL VARIATION OF CARBON MONOXIDE(UG/M**3 X 10**-2)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3.
2	3	3	3	3	3	3	3	3	3	3	3						4	4	5	5	4	5	4	4	4.
3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5	4	4	5.
4	4	4	5	4	4	4	4	4	4	5	4	4	4		4	4	4	4	5	5	4	4	4	4	5.
5	4	4	4	4	4	4	4	4	5	5	4	4	4	4	4	4	5	5	4	4	5	4	4	4	5.
6	4	5	4	4	4	5	5	5	5	5	4		5	5	5	5	5	5	5	5	5	5	5	5	5.
7	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	5	6	6	6	6	6	6	6	6	6.
8	7	6	7	7	7	7	7	7	7	7	7		5	6	5	6	7	6	6	6	6	7	6	6	7.
9	6	6	6						1																6.
10														6	6	6	6	6	6	7	6	6	6	7	7.
11	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	6	6	7	7	7	7	7	7	7	7.
12	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	6	7	7	7	7	7	7	7	7	7.
13	7	7	7	7	7	7	7	7	7	7	7	7	11	6	6	6	6	6	6	6	6	6	6	7	7.
14	7	7	6	7	6	7	7	7	7	6	7	7	6	6	7	7	7	7	7	7	8	8	8	8	7.
15	8	9	9	10	10	10	10	11	12	12	13	16	13	16	15	6	7	6	7	7	6	6	7	7	10.
16	7	6	6	6	7	6	6	6	6	7	7		6	7	6	7	6	6	6	6	6	6	7	6	7.
17	7	7	7	7	7	7	7	7	7	7	7	7	6	6	6	6	6	6		7	6	6	7	7	7.
18	7	7	7												7	7	8	7	7	7	6	7	6	7	7.
19	6	6	7	6	7	6	6	7	7	7	7	7	6	6	6	6	6	6	6	6	6	6	6	6	7.
20	6	6	6	6	7	6	6	7	7	6	7	6	6	6	7	6	6	6		7	6	6	6	6	7.
21	6	6	6	6	6	6	6	6	6	6	6		7	7	7	7	6	6	6	6	6	6	7	6	7.
22	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7										7.
23																									
24	16	16	16	14																					16.
25																									
26																									
27																									
28																									
29																									
30																									
31																									
MEAN	7.	7.	7.	6.	6.	6.	6.	6.	6.	6.	6.	7.	7.	7.	6.	6.	6.	6.	6.	6.	6.	6.	6.	6.	

TOTAL NUMBER OF OBSERVATIONS = 5506 MEAN = 6.

II C-501

DIURNAL VARIATION OF CARBON MONOXIDE(UG/M**3 X 10**-2)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															28	31	30	30	31	30	31	31	31	31	31.
2	32	31	32												41	36	29	28	30	29	31	32	29	29	32.
3	30	30	29	31	31	31	33	32	33	33	31	31	32				26	28	28	28	30	30	30	29	31.
4	29	29	27	27	28	29	30	29	29	29	29	28	28	29	29	28		32	30	31	29	32	33	35	30.
5	34	33	34	34	36	35	33	33	32	33	34	35	35	33	36	34		34	33	33	34	36	37	35	35.
6	33	34	36	34	34	36	35	34	35	35	43	34				46	37	33	31	32	30	32	32	32	35.
7	31	32	32	30	29	32	29	31	29	32	30	28	29	30	31	31	33	34	32	32	32	33	32	32	32.
8	32	33	33	33	33	35	34	35	36	38	36	37	39		32	33	31	28	27	27	28	31	32	30	33.
9	32	30	29	31	30	30	30	29	29	30	33	32	33	33	34				12	11	10	10	10	10	26.
10	11	10	10	10	10	10	11	10	11	11	10	11	11	12	12	11		12	11	11	10	10	10	9	11.
11	12	10	10	10	9	9	9	9	9	9	10	9	9	11		12	12	11	10	13	10	11	10	10	11.
12	9	10	10	10	10	10	10	10	10	10	10	11	11	10	10	10	10	12	12	10	11	10	10	10	11.
13	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11	11	11	11	11	10	10	11	11	11.
14	10	11	11	11	11	11	11	11	11	11	10														11.
15																									
16																									
17																									
18																	11	11	11	11	11	11	11	11	11.
19	11	11	11		50	49	49	49	49	49	49	49	49	49	49	49		11	11	12	11	11	11	11	32.
20	11	12	12	11	12	12	11	11	11	11	11								10	12	13	14	14	15	12.
21	15	16	16																						16.
22															32										33.
23															41	40	38	36	35	34	33	32	32	31	36.
24	31	31	31																						31.
25																									
26																									
27																									
28														36	34	33	33	33	32	32	31	31	31	29	33.
29	31	31	32	31	31	31	32	31	32	32	32		38	39	38	37	33	33	32	32	31	32	31		33.
30	17	17	17	17	17	17	18	17	17	17	17	17	18	18	17	17	18	17	16	17	17	17	18	18	18.
31	17	17	17	17	17	17	17	17	17	17	17	17	18	18	18	17	18	17	16	17	17	17	18	18	18.
MEAN	22.	22.	22.	22.	24.	24.	24.	24.	24.	24.	24.	25.	26.	25.	30.	28.	25.	24.	22.	22.	22.	23.	23.	22.	

TOTAL NUMBER OF OBSERVATIONS = 5023 MEAN = 24.

LRAPDIAN
CLARKSON UNIV.

DIURNAL VARIATION OF OZONE(UG/M**3)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	35	29	23	20	24	18	15	18	28	31	38	41	45	48	49	46	37	21	17	16	20	20	20	20	29.
2	17	19	19	19	14	18	16	15	23	21	30	40	42	45	42		33	21	20	23	26	30	32	30	26.
3	25	27	30	32	32	33	34	33	32	36	44	51	50	50	49	48	38	14	23	23	33	31	31	28	35.
4	24	25	26	29	23	20	18	18	27	28	18	44	46		47	42	31	20	8	9	6	7	8	13	24.
5	17	13	28	23	19	16	9	6	8	18	31	30	31	32	31	29	28	19	12	9	14	21	21	22	21.
6	22	16	13	13	9	7	7	9	16	21	24		42	42	43	42	33	11	23	26	14	17	22	22	22.
7	23	25	25	24	25	13	10	14	21	24	24	30	39	42	42	42	41	41	42	43	40	36	31	13	30.
8	16	17	15	10	15	11	13	6	20	32	40	42	43	44	47	44	36	23	21	17	9	11	21	20	24.
9	22	23	22								8	20			53	52	42	24	19	18	8	10	17	11	23.
10	13	18	13	13	18	20	15	19	26	35	45	48		48	49	51	44	30	19	15	4	4	2	3	24.
11	4	9	12	14	21	21	18	21	28	21	33	37	49	53	51	48	43	35	24	18	19	19	15	16	26.
12	17	18	17	8	11	11	24	26	30	35	44	57	52	53	54	52	43	37	35	31	29	32	35	32	33.
13	31	33	40	47	48	51	51	43	46	46	44	46	52	54	55	54	53	48	51	49	49	47	45	44	47.
14	44	42	40	43	41	35	36	34	32	39	48	54	57	58	57	49	56	53	49	47	54	55	53	56	48.
15	57	57	57	57	56	53	49	42	36	39	48	58	58	52	51	48	44	44	48	47	44	42	36	31	49.
16	28	29	29	29	29	23	24	21	32	37	48		47	46	46	46	45	45	42	38	33	32	34	34	36.
17	32	34	32	32	31	33	35	33	35	39	42	44	44	44	43	43	45	44		42	37	39	34	28	38.
18	25	28	32	*	*	6	2	2							47	47	46	47	48	47	49	50	48	47	33.
19	46	43	44	49	48	42	37	34	31	35	41	48	50	50	50	50	44	42	44	45	44	42	43	45	44.
20	45	44	44	42	39	38	38	39	41	45	47	47	47	48	48	45	45	45		44	43	42	42	41	44.
21	38	38	40	39	36	35	37	40	39	40	42		42	42	42	42	42	42	41	41	41	40	40	39	40.
22	39	39	45	50	51	50	49	46	44	46	47	47	48	48	48										47.
23																									
24	36	34	31	35													40	43	41	41	42	42	42	42	40.
25	42	42	43	43	43	39	37	43	32	35	43	45	46	49	50	49	47	41	41	42	42	42	44	45	43.
26	44	43	46	46	37	35	38	39	36	38	40	46	48		48	47	42	38	36	36	37	35	37	38	41.
27	41	42	42	42	41	41	41	42	42	45	47	48	49	49	49	49	48	47	45	44	42	41	42	43	45.
28	45	47	45	44	45	46	46	44	33	35	40	42	44	44		51	47	42	35	34	34	40	40	41	42.
29	39	31	31	31	37	40	31	28	29	31	34	38	43	44	45	45	45	41	41	34	30	29	31	29	36.
30	28	33	32	33	30	26	25	26	24	24	29	33	43	50	51	50	44	38	39	38	37	37	36	38	36.
31	44	39	39	35	33	31	27	27	26	27	33	43	44	47	49	49	46	41	39	37	38	39	39	40	38.
MEAN	32.	32.	32.	32.	31.	30.	28.	28.	31.	34.	38.	44.	47.	48.	48.	47.	43.	36.	34.	33.	32.	33.	33.	32.	

TOTAL NUMBER OF OBSERVATIONS = 7976 MEAN = 35.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

BRAUN

DIURNAL VARIATION OF OZONE(UG/M**3)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															17	17	17	20	20	17	16	16	11	15	17.
2	18	17	17												15	14	15	17	17	17	17	20	22	25	18.
3	24	23	24	21	19	21	23	20	18	19	29	30	30			22	17	19	17	16	17	17	12	14	21.
4	14	15	18	14	10	12	11	19	19	17	19	21	21	22	20	18		20	19	17	16	17	19	16	18.
5	14	14	14	13	12	12	11	9	10	11	13	12	11	10	11	11		10	9	9	9	8	9	11	11.
6	11	10	11	10	10	10	9	8	9	9	10	14	9	9	5	10	11	11	11	12	11	11	13	33	12.
7	33	33	32	31	33	31	20	9	10	11	7	8	9	14	14	14	13	12	12	14	14	14	15	14	18.
8	14	14	13	13	13	13	13	13	12	11	13	14	14		15	13	12	12	13	8	11	10	13	11	13.
9	12	12	11	9	10	13	6	7	11	11	9	9	11	10	9				8	11	9	8	7	8	10.
10	6	7	4	4	4	2	3	3	1	1	3	5	9	11	13	16		7	8	7	7	7	7	8	7.
11	9	7	7	7	1	8	10	9	11	7	13	17	17	16		14	12	13	12	9	11	11	9	11	11.
12	12	11	9	12	11	13	10	10	10	12	13	13	14	19	18	11	17	11	13	12	10	11	11	11	13.
13	11	13	14	14	14	17	20	16	19	20	15	17	18	22	27	16	13	14	14	15	15	14	15	14	17.
14	14	13	15	13	14	14	14	15	12	14	15														14.
15																									
16																									
17																6	5								6.
18																									
19																		13	15	16	16	16		15	16.
20	14	13	13	11	16	16	15	20	21	24	22														17.
21																									
22																									
23															*	*	*	*	*	*	*	*	*	*	0.
24	*	*	*																						0.
25																									
26																									
27																									
28														*	1	2	5	3	3	3	1	1	1	1	2.
29	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	2	1	1	1	1	1	1		2.
30	32	33	32	33	32	33	31	32	32	32	30	33	33	34	35	17	21	21	21	23	23	25	27	23	29.
31	31	33	32	32	31	33	32	31	32	32	29	32	32	33	35	17	20	20	20	23	23	24	26	23	29.
MEAN	16.	15.	15.	15.	15.	16.	15.	14.	15.	15.	16.	16.	17.	16.	14.	12.	13.	13.	13.	12.	12.	13.	13.	15.	

TOTAL NUMBER OF OBSERVATIONS = 4699 MEAN = 14.

* DENOTES A VALID SAMPLE BELOW THE MINIMUM DETECTABLE LIMIT OF THE INSTRUMENT

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	5	0	0	0	1	0	0	0	1	2	1	3	4	3	3	2	0	0	0	1	2	1	2	1	2.
2	0	1	0	0	0	0	0	0	0	0	1	3	3	3	3		0	0	1	2	2	6	6	1	2.
3	2	1	4	4	8	9	9	11	9	7	4	4	5	2	1	3	0	1	4	4	5	7	5	2	5.
4	3	7	7	6	4	3	4	4	3	4	4	3	6		3	3	3	0	0	1	0	0	2	3	4.
5	1	0	0	0	0	0	0	0	0	0	0	3	1	2	5	4	0	0	0	0	0	0	0	0	1.
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	2	5	5	1.
7	7	7	6	3	4	0	0	0	2	1	3	6	5	3	5	4	2	4	5	0	0	0	1	0	3.
8	1	2	2	2	1	2	1	1	2	2	0	0	0	1	3	1	0	1	2	3	2	1	2	1	2.
9	3	5	1	2	0	1	2	2	2		1	0	2	4	3	3	0	0	0	0	1	2	4		2.
10	0	1	1	2	2	2	1	0	1	3	0	2		4	3	3	0	0	1	0	0	1	1	1	2.
11	1	1	1	3	4	0	1	5	3	0	2	1	0	1	1	1	0	0	0	0	0	0	0	0	1.
12	0	0	2	1	3	2	2	1	7	5	1	0	2	4	2	0	0	0	2	2	4	8	5	5	3.
13	5	5	6	8	10	7	4	2	2	2	2	6	8	10	10	6	4	5	4	3	3	2	1	1	5.
14	1	0	0	0	0	0	0	2	0	3	2	0	0	2	3	2	1	1	1	0	1	4	1	1	1.
15	2	3	0	0	0	0	0	0	0	0	0	3	0	1	0	0	1	0	0	0	0	0	0	0	1.
16	0	0	0	0	0	0	0	0	0	0	1	3	5	5	4	4	4	3	2	2	2	1	2	1	2.
17	2	5	8	8	2	3	4	4	6	10	3	2	4	6	8	5	5	3		0	0	0	0	0	4.
18	1	2	2	2	3	4	3	2							5	3	3	3	2	3	1	2	1	0	3.
19	0	0	0	1	0	0	2	1	2	3	1	1	3	7	6	3	0	1	2	2	3	1	4	3	2.
20	3	4	4	3	2	1	2	4	3	0	2	2	2	4	1	2	1	3		1	2	3	2	2	3.
21	1	3	3	1	0	0	1	3	3	2	2		2	3	4	3	3	3	5	4	5	5	3	2	3.
22	1	10	15	9	5	2	2	2	0	1	6	2	5	1	7										5.
23																									
24	1	1	1	1																					1.
25																									
26																									
27																7	9	6	7	4	0	2	0	3	5.
28	7	8	7	2	3	8	7	2	1	0	1	1	1	0											4.
29																									
30																									
31																									
MEAN	2.	3.	3.	3.	3.	2.	2.	2.	3.	3.	2.	3.	3.	3.	4.	3.	2.	2.	2.	2.	2.	3.	2.	2.	

TOTAL NUMBER OF OBSERVATIONS = 6307 MEAN = 3.

BRADSTREET CORPORATION

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	1	1	0	1	0	0	1	1	1	1	2		6	3	4	6	2	1	2	3	1	2	1	0	2.
2	1	1	0	1	1	0	0	1	0	0	1	2	4	6	6	7	3	2	3	2	0	0	1	2	2.
3	1	1	6	3	5	3	1	2	3	2	2	3	6	4	5	5	5	6	3	2	1	3	1	0	4.
4	1	5	8	4	1	2	1	1	1	3	4	8	9	9	5	6	5	5	1	2	2	2	3	2	4.
5	1	1	0	0	0	1	1	0	0	0	4	8	4	5	5	2	0	1	1	3	2	1	0	0	2.
6	0	0	0	0	0	0	0	2	1	0	1	0	1	0	1	1	1	1	3	4	5	3	6	6	2.
7	2	5	4	1	0	0	0	1	3	3	3	3	6	9	13	11	7	7	7	8	5	4	1	2	5.
8	3	4	4	3	1	0	0	1	3	2	0	0	0	1	2	3	1	2	2	2	4	2	0	1	2.
9	1	0	0	1	1	1	0	0	0	1	1	1	3	5	4	7	5	1	1	3	4	2	1	0	2.
10	0	1	0	0	0	1	1	0	0	0	0	1	2	5	8	7	2	0	2	2	2	2	0	1	2.
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																4	6	9	7	5	3	7	6	6	6.
19	3	3	3	5	2	3	3	4	5	7	1	2				7	3	1	2	5	6	6	8		4.
20																					7	8	7	5	7.
21	4	6	6	6	4	5	5	6	9	8	9	10	8	10	12	10	11	8	9	12	7	9	5	5	8.
22	7	11	10	8	7	4	3	0	1	2	4	4	5	3	6	6	5	1	1	3	1	0	1	1	4.
23	1	1	3	0	0	0	0	0	1	0	0	5	9	12	10	11	10	4	4	8	9	8	5	3	5.
24	3	1	1	3	4	3												2	2	4	9	8	5	7	4.
25	3	1	3	3	2	1	1	0	0	0	1	5	7	9	10	8	6	3							4.
26															4	1	2	2	2	1	0	1	2	1	2.
27	0	0	2	3	0	2	6	9	8	10	10	11	10	9	5	10	7	5	2	2	2	3	4	4	6.
28	2	3	3	3	5	6	5	4	1	1	0	3	5	2	3	6	10	4	2	2	4	3	1	2	4.
29	2	1	2	4	1	0	1	0	2	0	1	4	4	3	4	3	1	1	1	0	0	2	2	2	2.
30	2	1	1	2	1	0	1	2	0	0	0		1	2	4	7	6	2	2	3	4	4	4	4	3.
31	1	1	1	1	1	1	0	0	2	1	2	1		7	4	3	3	1	4	4	3	2	3	3	3.
MEAN	2.	3.	3.	3.	2.	2.	2.	2.	3.	3.	3.	4.	6.	6.	6.	6.	5.	3.	3.	4.	4.	4.	3.	3.	

TOTAL NUMBER OF OBSERVATIONS = 5955 MEAN = 4.

BRALDIAN

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1											4	6	8	6	3	1	3	0	2	4	7	8	9	8	5.
2	7	10	11	11	11	9	8	6	8	7	1	6	7	4	6	0	1	1	2	3	8	11	7	6	7.
3	5	8	12	10	11	11	14	15	15	13	8	5	5	3	2	3	2	4	9	11	11	12	9	6	9.
4	6	11	12	8	5	7	7	11	10	8	6	8	8	6	6	4	2	5	7	7	9	7	9	10	8.
5	7	4	2	4	3	2	3	1	4	4	3	5	4	5	5	5	4	0	1	2	1	0	0	0	3.
6	0	0	0	0	0	0	0	0	0	0	1	3	2	0	1	1	2	5	7	6	5	8	8	9	3.
7	9	9	9	7	7	4	6	5	4	3	3	6	6	6	6	3	3	1	5	2	0	2	3	2	5.
8	1	4	3	6	5	5	4	3	2		1	0	0	1	4	0	1	2	4	7	8	6	7	7	4.
9	10	11	12	10	10	1	1	6	6	6	0	1	3	6	3	0	0	2	3	4	8	10	10	10	6.
10	9	9	10	11	11	11	11	11	10	9	2	5	6	5	5	5	1	2	4	6	7	6	7	10	8.
11	0	0	0	1	2	1	0	1	0	0	1	3	5	3	3	8	4	1	0	1	1	0	0	1	2.
12	3	1	2	1	0	1	5	3	3	2	1	1	4	4	3	3	1	0	3	5	9	9	7	7	4.
13	5	7	6	3	2	6	5	5	3	5	4	8	11	11	12	10	8	9	8	8	7		6	6	7.
14	5	6	4	3	2	1	2	4	3	7	5	1	0	0	5	2	4	4	4	4	2	3	5	2	4.
15	3	4	2	2	2	0	0	0	0	2	1	3	2	2	1	2	3	3	2	3	2	1	2	2	2.
16	1	3	1	0	0	0	0	3	1	4	5	7	7	7	6	6	6	6	5	7	9	8	9	7	5.
17	4	4	10	11	11	11	6	11	9	9	9	7	7	6	6	4	5	5	4	2	1	0	0	2	7.
18	3	3	1	2	2	1	1	2	2	8		6			5	5	3	4	2	3	3	6	4	3	4.
19	1	0	0	3	5	1	1	0	1	5	3	2	6	10	10	4	0	3	7	7	8	6	8	9	5.
20	6	6	6	7	6	7	7	7	6	8	9	9	10	7	7	6	6	7	6	8	7	7	6	6	7.
21	4	7	5	5	1	2	3	6	4	5	5	5	5	5	5	4	6	9	13	11	12	13	11	6	7.
22	3	13	20	13	9	3	2	0	0	0	6	5	8	4	6	7	0	0	2	5	2	4	6	5	6.
23	0	0	1	4	3	1	1	0	0	0	6	4	8	7	7	7	6	2	1	4	5	5	4	3	4.
24	4	3	6	5	0	0	0										5	3	5	7	8	8	8	9	5.
25	10	8	8	7	7	8	12	13	13	11	7	0	3	6	4	5	1	2	3	8	8	9	10	9	8.
26	7	9	9	8	8	2	1	3	2	0	1	5	7	4	4	0	0	1	4	4	5	3	6	6	5.
27	9	9	11	12	11	11	14	8	9	7	9	9	7	8	5	8	6	4	8	12	14	13	13	11	10.
28	9	8	12	12	11	10	7	4	5	10	9	5	1	1	2	0	2	1	3	6	4	9	8	7	7.
29	8	6	1	1	7	6	5	2	0	4	4	3	2	3	5	3	2	0	0	0	0	0	0	1	3.
30	2	6	5	5	8	5	4	1	0	0	1	1	0	0	1	1	2	0	1	1	4	6	7	7	3.
31	7	7	6	5	3	3	0	0	2	1	5	7	4	5	3	3	0	2	5	7	8	10	11	12	5.
MEAN	6.	6.	7.	6.	6.	5.	5.	5.	5.	6.	5.	5.	5.	5.	5.	4.	3.	3.	5.	6.	6.	7.	7.	7.	

TOTAL NUMBER OF OBSERVATIONS = 8594 MEAN = 5.

BRAUN

DIURNAL VARIATION OF WIND SPEED(MPH)
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	2	3	1	0	2	0	0	0	0	0	0	1	3	2	2	1	0	1	1	0	0	0	1	2	1.
2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	0	0	1	3	3	3	1.
3	2	4	5	3	4	4	4	4	2	1	5	6	8	7	4	6	2	1	1	5	5	4	4	3	4.
4	5	3	6	3	2	2	4	5	8	7	6	8	8	8	8	7	5	6	5	1	3	4	1	4	5.
5	2	3	1	1	0	0	1	0	0	0	1	4	4	3	7	4	3	0	0	0	0	0	1	3	2.
6	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	1	0	1	2	2	2	1.
7	2	2	1	1	0	0	0	1	0	0	1	5	6	7	8	7	6	4	8	6	4	6	5	5	4.
8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	2	1	0	1	3	3	2	0	1.
9	0	3	1	4	1	0	0	0	0	0	0	0	0	2	1	2	3	0	0	0	1	3	1	0	1.
10	0	0	0	0	0	0	0	0	0	0	2	2	4	6	8	1		0	0	0	0	0	0	0	1.
11	0	0	2	2	4	1	1	3	1	0	0	1	1	2	4	3	0	0	0	0	0	0	0	0	1.
12	2	1	2	2	2	2	2	3	2	0	0	0	4	5	4	2	5	10	6	3	3	4	4	2	3.
13	4	4	4	5	8	7	7	6	7	10	10	9	14	14	13	9	5	6	7	6	6	6	5	7	8.
14	5	6	7	6	0	0	0	0	0	1	3	0	0	0	3	6	6	6	7	11	9	7	4	8	4.
15	9	6	5	1	0	0	1	2	3	0	1	3	3	0	0	0	1	0	0	0	0	0	0	0	2.
16	0	0	0	0	0	0	0	0	0	1	2	3	3	3	3	2	2	2	2	2	2	2	4	4	2.
17	3	3	3	4	3	4	3	3	3	5	5	7	9	12	16	9	9	11	8	2	2	0	0	0	6.
18	2	0	1	1	0	3	3	2										7	0	6	14	10	10	9	5.
19	7	7	5	2	7	0	1	1	4	3	4	6	9	11	10	5	3	1	1	0	0	1	1	3	4.
20	2	2	0	0	1	0	0	1	0		7	10	11	10	5	5	3	1	0	0	1	1	0	1	3.
21	0	1	0	1	0	6	9	8	3	3	2	7	7	12	5	2	12	23	23	22	25	23	21	19	10.
22	15	15	21	16	9	5	5	7	0	4	9	6	8	3	9	6	2	0	0	0	0	0	0	0	6.
23	1	0	0	0	0	0	0	0	2	4	5		8	8	8	8	7	3	5	5	6	6	6	5	4.
24	2	1	0																	2	4	4	4	5	3.
25	4	4	5	3	2	2	0	2	0	0	0	0	0	2	2	4	2	1	1	0	0	0	0	1	2.
26	0	0	0	0	0	0	0	0	0	0	0	5	7	4	3	0	1	3	0	1	2	2	3	2	2.
27	3	4	4	3	4	3	2	3	2	5	6	6	8	7		7	8	3	1	4	2	2	1	5	4.
28	7	4	4	2	3	4	4	1	1	0	0	0	0	7	4	3	5	3	2	1	0	1	2	3	3.
29	2	0	0	0	0	0	0	0	0	1	1	3	2	3	3	1	0	0	0	0	0	0	0	0	1.
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0.
31	0	0	0	0	0	0	0	0	0	1	4	5	3	4	2	1	3	2	0	0	0	0	0	0	1.
MEAN	3.	3.	3.	2.	2.	2.	2.	2.	2.	2.	3.	4.	5.	5.	5.	4.	4.	4.	3.	3.	3.	3.	3.	3.	

TOTAL NUMBER OF OBSERVATIONS = 8515 MEAN = 3.

DIURNAL VARIATION OF WIND SPEED AT 8 FEET(MPH)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															3	3	1	3	3	2	0	1	1	2	2.
2	1	1	2	2	2	2	1	1	0	0	1		3	3	3	2	3	2	2	2	2	4	5	12	3.
3	9	4	6	4	4	4	4	4	3	2	8	7	9		6	8	5	5	4	5	5	5	3	4	6.
4	5	5	12	5	2	3	3	11	10	7	8	10	10	11	9	9	8	6	5	3	3	5	5	4	7.
5	3	3	3	2	1	1	3	2	1	1	3	5	5	4	7	5	3	1	1	1	2	1	3	5	3.
6	1	1	0	1	1	2	2	2	2	2	2	2	3	1	2	2	1	2	3	3	1	1	2	2	2.
7	2	2	1	2	2	1	1	1	1	0	4	6	8	9	9	9	6	6	8	4	4	5	5	4	5.
8	5	4	3	1	3	1	2	0	1	1	1	2	1		3	3	2	3	2	1	2	1	2	2	2.
9	1	1	2	1	2	0	1	1	0	1	1	2	2	3	3	4	4	5	4	4	2	1	1	3	2.
10	1	2	1	1	1	1	2	0	1	0	2	4	4	4	6	7	2	3	2	2	3	2	1	1	3.
11	2	1	2	2	2	2	2	3	1	1	3	4	3	4		5	1	4	2	1	2	2	1	2	3.
12	4	3	2	3		3	3	2	3	2	4	3	6	6		4	6	7	6	6	3	3	2		4.
13	4		5	8	6	9	12	9	12	11	9	9	11	12	12	8	5	5	6	5	5	5	4	5	8.
14	4	5	5	4	3	2	2	1	1	2	3														3.
15																									
16																									
17																11	10	11	9	7	4	4	2	2	7.
18	3	3	3	3	2	3	2	2	1				9	10	11		13	11	8	13	14	11	12	11	8.
19	10	8	6	3	8	4	2	2	5	6	4	6	8	10	10	6		3	3	3	3	3	3	4	6.
20	2	2	2	1	2	3	3	5	6	9	9							3	4	3	2	4	5	3	4.
21	3	5	5	7	10	13	13	14	12	12	9	15	16		11	17	28	30	29	29	31	30	26	25	18.
22	24	20	22	17	14	11	10	11	7	11	13	14	16		16										15.
23															8	8	7	3	5	7	6	6	5	5	6.
24	3	2	2	2																					3.
25																									
26																									
27																									
28														10	7	8	9	4	4	4	2	3	3	2	5.
29	4	3	1	2	3	2	2	2	2	2	4	4	4	5	3	2	1	2	2	2	2	2	2		3.
30	2	2	2	3	3	2	2	2	3	4	6	5	5	6	4	2	3	3	2	2	2	3	2	2	4.
31	2	2	2	2	2	2	2	2	3	4	5	5	5	6	3	2	3	2	1	2	1	2	2	2	3.
MEAN	5.	4.	5.	4.	4.	4.	4.	4.	4.	4.	5.	7.	7.	7.	7.	6.	6.	6.	5.	5.	5.	5.	5.	5.	

TOTAL NUMBER OF OBSERVATIONS = 5940 MEAN = 5.

DIURNAL VARIATION OF WIND SPEED AT 30 FEET(MPH)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															5	4	3	5	5	2	2	2	1	3	4.
2	3	3	4	3	3	4	3	3	2	2	2		4	4	4	4	4	4	3	2	2	6	8	17	5.
3	14	9	10	7	7	6	7	7	6	4	11	11	11		8	11	7	8	8	9	9	8	5	6	9.
4	8	8	18	8	4	5	6	17	14	9	11	14	13	14	13	12	11	10	9	6	6	8	8	7	10.
5	5	5	5	5	3	3	5	3	3	3	4	8	8	6	10	7	5	3	3	3	4	3	5	7	5.
6	3	3	2	3	3	4	4	5	5	4	3	4	5	3	3	3	3	2	5	6	4	3	4	4	4.
7	5	4	4	4	4	4	3	4	3	2	5	8	11	12	13	12	9	9	12	8	7	9	8	7	7.
8	8	7	5	3	6	4	4	2	3	3	3	3	3		5	4	4	5	4	2	4	3	4	4	5.
9	2	2	4	2	4	2	2	2	1	2	3	3	4	5	4	6	7	7	6	6	4	2	2	4	4.
10	3	4	2	2	2	2	3	2	2	2	4	6	6	7	9	12	6	6	4	3	5	3	2	2	5.
11	2	3	3	4	3	3	3	4	3	3	5	6	5	6	7	7	2	7	5	2	4	4	3	5	5.
12	8	6	4	5	4	6	6	5	6	4	6	5	8	8	7	6	9	11	10	10	6	6	5	5	7.
13	7	10	8	12	9	13	17	13	16	15	12	12	15	17	16	11	8	7	9	8	8	8	7	8	12.
14	7	8	8	7	5	4	4	2	3	3	5														6.
15																									
16																									
17																			11	9	5	6	3	3	7.
18	5	4	4	4	2	4	3	3	2				11	12	14		12	14	10	17	18	14	15	14	10.
19	13	11	8	5	11	6	4	4	7	8	5	8	10	12	12	8		5	4	4	4	3	3	6	7.
20	3	3	2	2	4	4	4	7	8	11	12							5	6	5	4	7	7	5	6.
21	5	7	7	10	13	16	16	18	16	15	12	17	19	26	14	21	35	37	36	35	38	38	33	32	22.
22	30	24	27	21	18	14	14	14	9	15	16	17	20		19										19.
23															11	11	10	6	7	9	8	8	8	7	9.
24	4	4	3																						4.
25																									
26																									
27																									
28														12	10	10	12	6	6	5	4	4	5	4	7.
29	6	4	3	4	4	3	3	3	3	4	5	5	6	7	5	4	2	3	3	3	4	4	3		4.
30	3	3	3	4	5	3	3	3	3	2	3	3	2		3	2	6	4	3	4	3	3	5	3	4.
31	3	3	4	5	4	5	4	4	5	6	7	7	7	8	5	3	5	5	3	4	4	5	4	3	5.
MEAN	7.	7.	7.	6.	6.	6.	6.	6.	6.	6.	7.	8.	9.	10.	10.	8.	9.	8.	8.	8.	7.	7.	7.	8.	

TOTAL NUMBER OF OBSERVATIONS = 5967 MEAN = 7.

II C-609-C

BRALDIAN

DIURNAL VARIATION OF WIND SPEED AT 100 FEET(MPH)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															5	4	3	4	6	2	2	2	1	3	4.
2	2	3	2	2	2	3	4	1	1	1	2		4	4	4	4	4	3	2	2	3	7	11	22	4.
3	17	10	11	9	8	9	10	10	8	4	12	12	12		9	13	8	9	9	11	11	10	5	8	10.
4	9	9	22	9	5	7	8	21	17	11	13	15	15	16	14	14	13	12	10	7	8	13	10	9	12.
5	5	6	5	6	3	3	5	4	3	3	5	8	8	7	11	7	6	4	4	5	6	3	6	9	6.
6	4	3	3	4	4	5	3	3	4	4	3	4	5	3	4	4	4	2	5	10	7	7	4	3	5.
7	5	5	4	2	6	5	3	4	3	2	5	9	13	13	15	15	11	11	14	9	9	10	9	9	8.
8	9	8	7	5	6	3	5	3	3	3	3	4	3		6	5	5	4	2	2	3	3	2	3	5.
9	3	3	3	2	4	3	3	2	1	2	3	3	4	6	5	6	8	7							4.
10																									
11																9	2	9	7	3	5	6	2	6	6.
12	12	9	7	7	3	7	7	8	7	5	6	5	9	9	7	6	11	15	14	13	7	7	7	6	9.
13	7	12	9	14	10	15	19	15	19	18	14	14	18	19	18	13	9	9	11	10	9	9	9	9	13.
14	8	10	10	9	7	4	5	3	1	4	6														6.
15																									
16																									
17																			13	11	7	8	4	5	8.
18	5	3	3	3	2	4	3	3	2				11	13	16			16	12	21	22	17	19	18	11.
19	16	14	10	6	13	8	6	6	10	9	6	9	12	14	14	10		6	5	5	6	4	3	7	9.
20	5	2	2	2	5	4	6	9	10	13	14							7	9	7	6	10	10	6	7.
21	7	7	8	12	16	20	20	21	18	17	13	19	22	29	16	23	39	42	41	40	44	44	39	38	25.
22	36	22		23	20	16	16	15	11	17	17	19	22		20										20.
23															12	12	12	8	9	11	10	9	10	9	11.
24	5	4	4																						5.
25																									
26																									
27																									
28														15	11	12	15	8	7	6	4	4	6	5	9.
29	6	5	3	5	3	4	3	3	4	5	6	6	6	7	5	5	3	4	5	3	4	4	4		5.
30	3	4	3	5	6	4	4	4	2	2	3	3	2			3	8	4	3	2	4	4	4	3	4.
31	3	3	4	6	5	6	6	6	7	7	8	8	7	9	6	4	6	7	3	3	3	4	4	3	6.
MEAN	9.	8.	7.	7.	7.	7.	8.	8.	8.	8.	8.	10.	11.	12.	11.	9.	10.	10.	9.	9.	9.	9.	9.	9.	

TOTAL NUMBER OF OBSERVATIONS = 5413 MEAN = 9.

II C-601

LRALDIAD

DIURNAL VARIATION OF WIND SPEED AT 200 FEET(MPH)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															4	3	2	3	5	1	0	1	0	1	2.
2	1	1	1	1	1	1	2	0	0	1	1		3	3	3	2	3	1	1	1	2	6	11	22	3.
3	17	10	11	7	7	8	8	10	5	4	12	11	13			13	9	9	8	10	10	10	7	9	10.
4	10	10	23	9	5	8	12	24	18	13	13	16	15	16	14	14	14	11	8	8	9	13	11	10	13.
5	5	6	4	5	3	3	4	3	2	2	4	7	8	6	9	6	6	3	3	5	6	3	6	10	5.
6	5	4	2	3	4	4	2	1	1	3	3	4	5	3	3	3	4	2	5	9	10	11			5.
7								4	2	1	5	8	13	14	16	15	12	11	15	10	10	12	9	9	10.
8	10	9	8	5	6	4	5	3	3	2	3	3	2		5	4	5	4	2	2	3	2	2	3	5.
9	2	3	2	1	2	2	3	2	1	2	1	2	3	5	4	5	8	6	7	5	3	1	3	3	4.
10	3	4	4	3	1	2	3	3	3		3	5	5	6	10	13	7	9	4	2	1	2	2	2	5.
11	1	2	2	3	3	4	3	5	2	3	6	7	6	7	8	9	2	9	9	3	6	7	3	6	5.
12	11	9	7	9	3	5	8	12	9	6	7	5	9	8	8	7	13	19	18	17	9	8	11	6	10.
13	7	12	11	17	11	16	21	17	22	20	15	15	19	22	19	13	9	9	11	10	11	10	10	10	14.
14	9	11	12	10	8	6	5	2	1	3	5														7.
15																									
16																									
17																			14	13	8	9	5	6	10.
18	5	4	1	2	4	3	5	3	2				12	14	17		14	18	14	25	25	20	21	21	12.
19	20	17	11	7	15	10	7	7	11	10	6	9	11	13	13	10		6	4	4	6	4	2	5	9.
20	5	2	2	3	5	5	8	11	12	14	15							9	10	9	7	9	12	6	8.
21	9	8	8	13	19	24	23	24	19	17	12	20	23	31	16	26	43	47	45	44	49	49	44	42	28.
22	39	28	31	25	20	17	16	16	12	18	17	19	22		20										22.
23															12	12	13	9	10	11	10	10	9	8	11.
24	5	5	4																						5.
25																									
26																									
27																									
28														16	11	12	15	9	6	5	5	2	6	5	9.
29	3	3	2	4	2	2	4	2	4	2	5	6	6	6	4	4	3	4	5	3	4	4	4		4.
30	3	3	3	5	7	3	3	3	1	2	1	3	1			2	7	3	2	2	3	2	4	3	4.
31	2	2	2	5	5	5	5	6	6	6	7	6	6	8	5	3	6	9	2	3	2	3	3	3	5.
MEAN	9.	8.	8.	7.	7.	7.	8.	8.	7.	7.	8.	9.	10.	12.	11.	9.	10.	10.	10.	9.	9.	9.	9.	10.	

TOTAL NUMBER OF OBSERVATIONS = 5831 MEAN = 9.

BRADLEY

DIURNAL VARIATION OF WIND DIRECTION
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	133	41	360	87	309	38	99	87	98	289	296	287	289	284	276	281	346	91	87	93	96	95	105	103	50.
2	89	94	7	356	90	25	54	84	58	306	299	283	280	276	282		58	108	103	104	102	126	122	92	62.
3	94	93	119	129	128	127	128	129	131	134	127	182	178	170	174	183	143	98	101	129	123	123	120	99	132.
4	109	115	114	113	102	95	101	105	111	109	101	174	162		144	130	108	97	95	109	86	73	98	101	111.
5	96	87	104	28	324	66	93	55	93	116	150	292	338	291	279	275	309	63	50	360	319	308	287	301	10.
6	53	12	340	311	15	24	61	100	114	91	43	337	21	88	49	119	86	102	105	105	112	113	122	127	72.
7	131	132	130	122	136	102	124	109	123	137	280	280	297	317	321	329	317	285	274	316	314	308	7	108	337.
8	111	113	109	104	99	109	105	102	127	125	95	53	124	284	259	263	26	92	136	127	123	91	113	99	109.
9	115	133	112	115	321	106	103	109	104		295	296	288	270	280	271	310	94	87	90	99	109	130	101	104.
10	96	99	101	111	106	118	92	92	115	136	148	282		272	349	344	354	75	108	108	114	107	116	118	100.
11	113	113	117	130	140	350	101	128	129	347	122	219	47	113	185	258	23	340	75	97	99	107	104	54	102.
12	81	91	109	98	109	100	109	102	132	131	127	307	292	275	291	271	75	78	102	95	110	132	118	116	107.
13	114	127	128	123	117	104	308	102	106	181	226	269	269	279	308	294	284	291	281	287	296	292	285	284	263.
14	287	294	305	330	65	109	120	131	90	124	125	97	294	290	283	242	214	148	106	88	91	107	111	104	114.
15	102	110	71	78	85	91	90	347	333	95	3	285	19	117	108	114	109	103	92	120	98	108	118	118	89.
16	123	111	84	35	347	65	89	114	128	115	82	84	88	90	89	78	83	86	112	107	98	95	107	94	92.
17	104	115	132	131	111	112	98	98	123	131	129	164	172	222	243	299	298	295		308	21	50	84	100	120.
18	95	95	105	104	95	117	133	103							183	151	115	97	112	103	161	136	96	83	115.
19	95	74	54	278	346	103	103	97	99	102	101	324	301	275	283	317	61	104	119	131	128	113	119	97	87.
20	116	133	132	132	122	117	124	131	126	119	158	149	160	168	135	100	136	76		85	77	78	86	89	120.
21	123	103	89	94	83	94	99	86	113	109	110		135	140	157	122	101	166	163	158	237	207	240	222	131.
22	263	325	282	286	301	314	328	302	52	310	282	270	267	131	271										293.
23																									
24	331	44	111	109																					67.
25																									
26																									
27																126	116	120	123	134	102	98	91	110	114.
28	122	116	128	117	118	132	119	94	308	317	302	304	301	342											89.
29																									
30																									
31																									
MEAN	105.	98.	270.	270.	84.	90.	99.	100.	106.	117.	122.	275.	284.	254.	254.	244.	59.	93.	106.	104.	101.	105.	109.	103.	

TOTAL NUMBER OF OBSERVATIONS = 6320 MEAN = 102.

RADIAN
CORPORATION

DIURNAL VARIATION OF WIND DIRECTION
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	5	353	92	136	32	117	137	140	126	338	332		319	317	327	319	325	23	146	138	139	142	149	109	72.
2	74	128	113	134	137	120	134	138	131	354	335	331	316	321	321	317	338	114	135	147	153	115	7	154	101.
3	51	159	115	128	123	347	23	356	350	341	335	319	177	166	166	156	144	121	153	162	159	172	103	33	119.
4	163	123	100	135	143	148	167	13	155	132	122	154	156	151	149	145	139	134	139	124	142	135	144	80	137.
5	115	328	8	64	21	145	116	358	70	62	336	342	318	324	333	344	81	96	109	327	323	342	347	329	13.
6	81	135	354	2	339	75	135	128	135	93	123	129	49	213	130	165	146	136	133	117	117	138	118	116	117.
7	136	105	325	343	112	335	32	345	328	331	332	335	341	341	344	339	335	328	327	333	297	301	54	138	345.
8	137	127	135	146	158	164	141	170	142	86	304	267	275	327	317	290	341	130	138	144	125	167	141	151	155.
9	172	182	76	16	24	126	141	136	68	6	331	339	334	320	317	315	328	346	141	137	135	165	175	29	53.
10	79	119	117	121	132	65	43	96	131	144	270	340	330	320	329	341	321	91	132	143	137	131	147	149	102.
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																126	134	124	127	137	120	142	132	128	130.
19	125	113	238	279	286	116	133	128	123	109	105	94				324	303	126	103	101	118	113	121		120.
20																					134	133	140	127	134.
21	124	121	135	129	123	121	119	127	139	132	144	148	148	156	139	147	138	153	153	152	152	158	140	140	142.
22	134	312	287	298	320	326	165	143	295	181	261	270	239	203	283	352	345	25	127	136	156	96	18	305	276.
23	63	88	122	145	100	142	4	36	334	323	320	338	337	338	339	344	342	330	330	336	344	342	329	305	353.
24	255	58	129	139	132	168												44	141	141	96	108	131	121	124.
25	334	19	348	345	336	348	136	73	86	347	336	332	330	324	327	326	334	348							349.
26															326	340	329	318	133	126	47	79	103	51	41.
27	67	130	350	344	15	352	99	114	124	138	144	167	154	164	165	151	156	133	136	167	144	158	171	164	136.
28	173	344	360	144	148	139	145	340	330	310	276	342	330	326	301	281	328	346	124	138	135	134	104	195	327.
29	333	350	131	140	159	151	334	32	344	210	331	332	309	322	345	329	315	337	318	360	7	97	135	145	350.
30	101	158	86	343	342	31	136	135	134	116	56		331	329	331	337	330	345	100	136	136	146	136	139	82.
31	152	169	80	328	304	26	71	36	345	338	339	320		336	320	310	313	33	127	141	158	162	153	159	20.
MEAN	107.	108.	82.	93.	83.	100.	114.	87.	92.	52.	331.	327.	314.	308.	320.	322.	338.	59.	130.	133.	129.	133.	123.	126.	

TOTAL NUMBER OF OBSERVATIONS = 5931 MEAN = 95.

RADIAN CORPORATION

DIURNAL VARIATION OF WIND DIRECTION
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1											259	267	280	274	264	255	96	74	78	92	112	115	116	112	137.
2	113	116	115	114	117	114	119	118	118	116	118	279	285	275	276	217	62	76	69	81	108	105	101	104	111.
3	89	107	113	109	110	114	112	111	110	105	106	129	138	236	227	130	123	77	101	105	107	105	105	92	114.
4	97	110	108	101	74	74	84	110	108	98	95	110	122	113	119	106	90	89	85	90	104	102	104	107	101.
5	102	103	99	99	85	92	97	71	97	106	176	277	298	266	266	279	285	292	294	291	284	256	255	257	257.
6	257	257	257	257	257	257	257	257	257	257	335	274	255	165	252	129	102	91	101	85	104	106	112	114	221.
7	113	112	116	110	114	103	108	107	106	106	7	279	289	287	294	295	283	324	296	310	34	22	3	22	31.
8	58	89	91	104	98	95	71	48	42		114	174	116	232	266	161	103	73	97	107	100	107	116	116	102.
9	110	110	110	113	109	41	57	104	121	119	197	236	259	275	273	259	103	82	80	82	108	113	115	117	114.
10	108	117	115	113	112	111	111	111	114	106	97	278	276	253	7	292	32	51	75	101	107	104	104	109	99.
11	157	134	155	159	355	49	103	115	307	356	338	328	332	323	313	329	329	314	111	135	149	336	91	134	32.
12	137	134	149	165	167	153	127	142	183	87	329	103	207	288	255	293	150	150	133	111	104	103	102	103	141.
13	83	86	96	90	102	113	128	107	84	117	260	272	271	273	288	275	266	280	269	273	273	277	276	275	255.
14	272	267	276	278	340	62	61	83	65	108	109	105	145	110	119	202	117	112	104	84	68	98	114	85	100.
15	105	114	75	107	82	48	32	69	41	81	89	280	78	133	117	116	110	86	95	107	98	97	97	98	91.
16	130	115	5	344	80	133	133	109	119	132	127	125	127	127	126	131	135	140	117	109	107	112	110	120	117.
17	141	154	109	98	86	86	106	106	99	115	143	158	167	184	220	321	325	297	283	240	330	148	123	135	136.
18	122	135	148	159	150	170	185	181	168	109		113			122	118	120	105	83	79	110	115	79	72	127.
19	74	67	243	248	249	78	56	41	72	79	89	288	269	271	267	304	75	79	112	107	104	109	97	94	81.
20	138	115	121	122	117	121	118	112	127	134	140	142	153	149	139	122	122	118	134	131	99	97	98	99	124.
21	93	95	93	98	85	77	81	96	100	102	111	124	107	105	116	95	73	94	124	118	113	116	112	100	102.
22	89	283	270	277	286	281	280	136	347	58	274	279	276	258	270	334	30	55	51	92	69	110	104	104	333.
23	343	55	83	87	79	83	84	77	143	151	291	285	276	279	278	287	282	279	320	270	260	260	267	285	294.
24	13	42	99	97	115	131	112										90	78	105	108	109	104	110	113	98.
25	109	108	111	113	106	100	111	112	109	107	95	145	269	279	278	278	185	66	80	106	112	110	107	139	113.
26	103	106	106	106	105	297	72	81	330	313	342	285	279	281	276	283	104	79	89	93	86	70	94	108	69.
27	109	104	110	109	104	110	108	99	101	98	105	103	111	100	110	112	110	102	109	108	109	112	106	102	107.
28	98	102	103	103	105	105	98	77	81	106	107	281	261	3	131	321	261	112	59	97	103	107	109	107	97.
29	111	102	69	66	103	108	103	273	258	286	277	283	278	291	286	282	280	278	331	61	339	67	89	66	343.
30	52	106	95	94	103	110	106	35	8	299	76	92	100	212	108	67	9	66	78	88	78	101	101	102	84.
31	111	108	108	92	84	94	302	285	94	88	281	293	277	271	242	252	76	69	87	101	100	105	105	107	97.
MEAN	104.	108.	110.	112.	102.	100.	100.	100.	97.	103.	104.	236.	242.	248.	242.	259.	91.	78.	88.	100.	98.	104.	105.	105.	

TOTAL NUMBER OF OBSERVATIONS = 8596 MEAN = 106.

DIURNAL VARIATION OF WIND DIRECTION
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	92	94	79	84	68	48	85	37	74	312	280	272	262	255	270	242	258	219	167	67	57	81	88	89	74.
2	86	67	152	1	19	307	57	51	81	32	354	275	264	270	269	257	235	206	9	81	94	108	92	71	40.
3	122	121	105	90	84	82	91	89	83	68	141	177	196	173	169	166	135	108	86	98	95	73	52	57	109.
4	56	72	66	62	38	78	95	90	143	154	144	159	159	153	154	153	160	155	156	115	185	179	87	86	123.
5	102	61	82	108	91	68	55	52	87	102	172	258	294	278	275	260	238	228	167	307	314	279	260	277	261.
6	313	16	15	241	264	323	231	224	56	356	240	32	326	52	107	84	186	66	115	62	58	76	63	57	39.
7	62	74	55	46	81	20	73	67	70	57	290	261	282	308	299	309	294	273	265	258	225	245	233	224	318.
8	236	295	297	95	58	72	96	81	85	59	90	330	37	292	251	228	229	219	20	89	87	95	102	63	68.
9	89	89	69	93	126	49	58	109	91	56	295	326	290	276	267	263	223	273	230	87	79	93	88	332	64.
10	25	66	99	45	86	94	12	40	44	346	268	258	258	298	313	340		309	72	284	39	308	47	31	9.
11	41	73	94	89	101	74	87	87	85	91	63	358	169	188	175	176	5	159	21	65	71	69	113	117	91.
12	121	44	121	70	95	128	80	72	74	37	360	301	239	248	265	244	186	163	149	73	72	68	58	75	91.
13	75	80	72	80	54	109	172	132	156	167	193	210	225	231	274	266	260	261	257	262	256	256	258	258	214.
14	259	257	251	248	295	55	165	90	91	66	64	7	48	12	223	199	188	168	161	160	158	156	152	160	160.
15	168	152	178	181	96	61	192	262	238	210	223	269	342	93	342	52	70	35	41	76	59	62	80	65	96.
16	68	70	35	228	230	177	32	79	136	114	97	85	98	97	85	72	63	64	66	85	79	59	72	58	83.
17	61	90	95	64	70	73	67	98	74	79	134	133	174	179	193	228	267	265	262	269	254	311	316	327	116.
18	196	57	101	70	77	76	71	70										137	124	154	170	160	158	159	118.
19	152	163	221	223	215	164	255	219	223	240	214	233	251	258	258	272	244	336	64	78	99	68	85	76	209.
20	55	65	83	78	82	86	84	114	94		174	171	171	168	170	176	162	101	60	84	65	74	70	60	104.
21	52	67	74	77	95	161	162	173	126	129	145	168	165	162	132	108	150	161	161	161	162	169	165	172	141.
22	175	267	255	254	270	275	271	248	208	233	238	228	227	244	231	288	355	64	65	66	56	85	85	254	248.
23	242	212	82	55	52	312	342	211	236	239	254		275	277	271	274	286	267	253	268	273	260	254	257	265.
24	239	280	27																	71	62	63	63	54	48.
25	65	65	69	73	70	75	39	78	75	16	309	288	293	253	256	244	248	220	195	64	40	82	80	90	56.
26	340	72	71	64	17	28	32	19	121	25	42	266	245	237	228	273	305	285	93	104	73	87	84	64	41.
27	65	52	63	73	73	70	87	68	90	102	102	121	126	134		121	98	90	68	98	101	100	75	91	91.
28	87	87	83	66	75	62	34	60	62	33	5	298	334	196	171	167	199	177	104	247	68	94	94	98	85.
29	81	74	67	71	89	76	86	171	322	244	249	250	227	236	252	260	245	347	236	290	224	221	124	106	218.
30	94	99	75	90	159	221	130	59	64	61	33	355	32	351	75	193	342	360	105	328	71	71	314	64	60.
31	67	113	38	353	17	29	32	264	301	242	259	245	246	261	248	241	234	253	51	157	55	76	66	89	326.
MEAN	87.	79.	78.	77.	75.	70.	77.	90.	94.	69.	213.	260.	246.	237.	235.	229.	229.	207.	110.	90.	84.	92.	88.	80.	

TOTAL NUMBER OF OBSERVATIONS = 8508 MEAN = 96.

BRALORNE

DIURNAL VARIATION OF WIND DIRECTION AT 8 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															311	286	257	221	224	209	224	243	151	224	234.
2	211	69	243	199	189	227	189	190	169	347	2		318	337	324	299	270	219	212	198	207	179	139	172	220.
3	157	159	155	126	114	107	119	118	110	102	199	193	219		206	200	174	167	125	142	129	137	54	115	145.
4	107	138	167	118	8	125	97	175	177	175	178	191	190	185	185	175	177	175	173	193	212	213	152	150	167.
5	315	139	97	134	154	102	52	280	113	105	205	302	322	313	311	301	256	254	230	333	342	282	299	326	284.
6	314	342	318	293	295	321	225	224	214	260	263	318	347	115	90	189	231	222	220	215	207	174	50	60	256.
7	94	112	83	65	178	293	105	95	107	150	311	300	327	347	337	345	336	311	309	279	268	266	249	243	319.
8	239	241	241	189	230	221	213	206	137	356	303	322	11		286	290	272	220	221	246	209	150	211	220	237.
9	152	228	168	264	257	151	5	196	165	72	347	350	337	309	312	296	271	233	234	231	195	218	246	227	245.
10	246	208	95	247	236	265	236	155	13	36	325	308	295	311	326	344	343	308	220	230	226	213	130	208	265.
11	223	193	193	174	174	224	177	160	195	98	152	217	228	216		207	323	214	228	81	196	226	170	214	192.
12	213	195	181	177	129	204	209	130	154	200	260	317	268	295	284	285	206	199	195	158	99	98	101	75	191.
13	63	94	108	143	95	153	201	174	193	200	221	243	254	262	301	308	290	295	289	299	287	290	293	291	249.
14	294	291	287	287	297	260	232	133	199	118	93														253.
15																									
16																									
17																242	296	310	300	266	292	277	297	246	280.
18	215	216	211	230	215	164	239	240	44				203	197	199		187	178	192	208	209	197	197	200	204.
19	199	227	250	236	246	248	281	257	251	262	268	293	305	300	307	319		342	98	211	173	141	178	154	247.
20	128	94	112	86	170	153	153	192	197	199	205							185	205	176	124	147	214	129	161.
21	145	123	159	201	236	234	229	222	209	220	229	234	237		213	221	235	240	239	238	241	241	244	250	222.
22	255	348	341	334	342	9	357	301	275	304	310	298	302		310										317.
23															314	315	331	302	298	313	312	304	300	298	308.
24	270	259	230	228																					246.
25																									
26																									
27																									
28														238	210	200	226	182	168	229	213	168	142	142	193.
29	198	187	54	185	140	124	216	144	119	285	302	300	280	300	308	304	280	293	268	241	247	245	257		251.
30	163	234	240	279	265	268	287	294	301	307	314	301	315	333	316	300	290	267	230	234	222	238	188	176	268.
31	154	234	240	279	265	267	291	293	300	306	313	300	315	332	315	299	289	266	230	234	222	239	187	182	268.
MEAN	195.	181.	274.	274.	214.	213.	214.	195.	177.	217.	270.	286.	289.	290.	292.	277.	265.	241.	224.	227.	220.	215.	199.	198.	

TOTAL NUMBER OF OBSERVATIONS = 5975 MEAN = 231.

BRADLEY/AIN

DIURNAL VARIATION OF WIND DIRECTION AT 30 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																							
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															309	281	246	219	230	211	141	301	105	241	238.
2	214	72	253	208	225	243	221	216	190	339	358		316	336	320	293	269	235	237	176	189	166	145	172	233.
3	164	159	151	128	117	116	126	118	110	104	200	196	221		211	203	182	169	126	136	122	138	76	118	146.
4	113	141	170	122	360	145	150	181	184	170	182	195	194	187	188	176	179	174	166	193	208	213	159	150	171.
5	302	138	103	140	178	194	63	281	107	111	208	298	321	311	310	300	262	252	239	321	343	279	297	330	278.
6	314	342	305	292	299	325	234	217	213	258	255	310	348	125	160	200	233	231	188	198	199	209	65	76	246.
7	107	119	120	74	178	287	110	105	114	187	308	299	328	347	339	347	337	311	310	282	272	270	257	251	307.
8	249	250	254	210	223	216	213	206	146	358	293	315	354		286	287	274	227	210	27	196	240	212	216	244.
9	105	235	163	329	274	304	25	188	195	79	341	342	333	308	308	292	276	238	247	237	196	50	260	235	274.
10	255	226	74	327	312	303	244	32	289	241	291	306	290	310	322	341	343	318	232	232	224	211	149	179	280.
11	223	354	183	161	191	216	220	135	207	111	159	217	213	223	201	211	294	217	223	103	204	225	182	209	200.
12	213	196	179	179	113	191	198	169	157	206	259	316	258	293	282	283	211	201	193	163	118	114	143	85	194.
13	75	122	108	144	99	158	207	176	201	206	227	245	257	263	301	306	287	293	288	292	285	288	288	290	247.
14	287	289	284	285	294	267	241	138	195	123	98														251.
15																									
16																									
17																			295	264	285	275	294	268	280.
18	218	221	235	219	202	148	217	235	26				211	199	202		191	179	197	211	212	201	200	202	203.
19	203	210	250	237	246	247	280	258	251	257	262	289	303	299	305	318		338	94	210	182	150	179	155	247.
20	144	129	130	82	185	165	184	199	203	205	210							189	207	184	142	156	217	142	171.
21	181	144	167	212	239	236	230	227	212	221	236	234	238	242	211	227	240	245	244	242	246	250	250	256	227.
22	261	344	331	327	335	5	359	301	283	300	305	298	299		311										315.
23															312	314	330	303	297	312	311	303	299	296	307.
24	270	257	247																						258.
25																									
26																									
27																									
28														238	216	204	230	211	165	217	219	149	131	118	193.
29	121	177	269	217	150	121	224	194	66	280	297	295	279	298	302	295	267	289	273	245	249	251	259		256.
30	226	178	173	189	248	248	212	95	227	275	28	39	12			291	354	33	188	227	221	193	240	162	218.
31	116	238	234	230	262	264	283	281	293	296	303	295	307	327	311	281	285	282	242	246	228	230	198	131	268.
MEAN	200.	190.	270.	270.	225.	224.	215.	194.	193.	222.	264.	286.	289.	279.	279.	276.	264.	243.	224.	225.	214.	219.	206.	192.	

TOTAL NUMBER OF OBSERVATIONS = 5950 MEAN = 232.

BRADLEY

DIURNAL VARIATION OF WIND DIRECTION AT 100 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															320	293	250	229	256	265	36	359	42	281	297.
2	253	119	72	247	188	296	260	293	133	329	40		329	343	330	306	280	272	319	127	151	163	152	170	265.
3	158	158	153	135	127	124	130	120	112	112	199	198	224		216	206	189	173	129	131	120	141	144	148	153.
4	129	156	176	138	207	174	165	179	181	177	183	196	197	189	190	177	183	173	164	197	214	221	171	139	178.
5	124	127	101	151	189	212	66	290	84	113	211	301	326	317	314	305	269	265	260	331	357	309	310	338	295.
6	348	355	341	316	323	343	289	255	235	290	262	310	353	104	106	174	241	349	167	183	196	202	165	131	271.
7	126	132	118	101	189	266	125	122	123	153	314	307	333	351	343	350	342	317	317	296	285	280	271	266	303.
8	261	266	271	239	242	248	227	248	159	10	306	322	4		288	291	285	265	235	15	179	245	175	270	264.
9	92	96	189	57	323	4	6	40	67	85	8	354	340	314	314	299	289	269	280	268	250	64	58	48	359.
10	39	249	315	12	58	10	328	125	304	243	295	304	292	314	323	341	349	334	87	311	254	247	226	50	321.
11	14	7	73	181	37	63	288	131	184	92	158	223	223	218	190	212	347	211	216	161	210	234	218	206	193.
12	200	205	197	199	86	193	196	199	175	213	262	318	273	297	285	286	212	198	188	170	146	146	179	125	203.
13	103	118	120	150	111	162	206	174	201	207	227	244	257	265	302	305	289	295	290	294	286	290	290	292	243.
14	291	292	287	288	298	289	275	44	178	118	100														287.
15																									
16																									
17																			300	269	286	280	298	298	288.
18	248	252	194	245	229	134	169	126									190	182	203	215	215	204	204	206	202.
19	227	215	255	240	252	252	287	274	260	261	266	293	307	304	311	325		340	100	233	203	178	202	153	255.
20	171	139	159	231	197	179	206	204	207	209	213							194	212	199	168	167	220	172	192.
21	228	191	183	221	242	240	231	228	217	224	236	238	244	246	226	235	239	246	244	243	246	250	251	258	233.
22	252	340	330	329	337	7	360	309	293	304	310	298	302		313										318.
23															317	320	336	315	306	319	317	311	306	304	315.
24	279	281	292																						284.
25																									
26																									
27																									
28														235	217	204	231	216	160	192	250	128	115	147	192.
29	90	132	2	248	182	104	174	185	97	279	300	302	282	302	306	301	269	311	302	287	282	277	282		278.
30	216	171	183	226	236	273	211	89	256	226	13	52	36			311	360	26	143	204	254	212	283	241	235.
31	181	321	252	298	280	280	299	289	305	304	310	301	307	332	321	295	292	320	322	284	269	256	246	158	289.
MEAN	192.	185.	270.	272.	225.	243.	234.	194.	187.	219.	269.	289.	298.	292.	292.	284.	272.	265.	236.	241.	235.	230.	224.	204.	

TOTAL NUMBER OF OBSERVATIONS = 5917 MEAN = 246.

DIURNAL VARIATION OF WIND DIRECTION AT 200 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															317	289	233	254	267	268	16	358	29	4	310.
2	295	148	100	40	59	24	290	7	344	259	73		330	332	316	301	264	321	12	78	122	173	168	177	356.
3	165	170	165	156	151	142	147	139	126	128	205	203	228			209	197	182	142	142	134	158	184	188	166.
4	156	174	182	164	222	189	182	187	185	184	190	200	200	193	194	181	186	177	168	202	218	224	181	136	186.
5	250	134	86	164	217	226	81	262	88	128	221	312	336	333	327	320	283	294	298	337		337	314	341	300.
6	358	355	350	325	333	349	359	342	268	301	279	320	353	90	103	219	241	16	149	183	213	216	210		311.
7							7	152	126	29	317	308	329	351	345	350	342	320	321	305	295	292	284	280	325.
8	275	280	278	262	258	262	240	267	189	1	302	320	360		294	289	285	298	10	44	144	82	82	294	293.
9	156	107	109	97	53	23	319	227	278	83	37	8	343	317	314	305	304	285	291	276	272	46	82	87	354.
10	123	285	277	277	134	350	277	237	252	261	287	304	296	322	327	347		338	37	3	6	314	284	137	306.
11	277	17	58	183	109	99	304	168	139	87	169	236	238	233	224	223	2	214	213	243	233	259	262	213	215.
12	213	225	229	230	182	222	216	216	233	228	271	305	267	295	281	284	220	208	199	187	174	178	199	149	223.
13	133	144	158	166	128	176	208	184	211	217	234	252	266	276	315	318	304	309	305	310	300	305	305	306	252.
14	308	308	304	306	317	311	309	16	351	122	112														326.
15																									
16																									
17																			310	277	280	271	286	299	287.
18	265	283	45	286	250	149	182	239	162				215	207	208		203	189	212	220	221	212	211	213	216.
19	213	224	253	252	250	260	299	292	272	270	276	303	311	297	303	317		320	90	248	220	238	231	158	256.
20	221	221	222	253	218	211	220	215	216	216	220							202	220	215	194	190	229	209	215.
21	248	223	229	234	248	246	238	236	230	231	240	244	250	250	230	235	246	249	249	249	251	254	256	261	242.
22	265	352	345	343	352	19	352	312	286	297	308	289	292		306										319.
23															312	315	332	317	307	317	315	309	303	304	312.
24	282	292	302																						291.
25																									
26																									
27																									
28														242	223	211	238	231	169	199	302	145	108	161	203.
29	52	108	63	264	250	86	131	158	79	309	288	305	281	302	306	298	261	323	321	340	300	295	299		308.
30	229	178	185	242	215	271	225	115	3	254	2	45	36			315	353	10	86	55	298	261	302	305	299.
31	345	355	312	306	287	294	312	296	314	311	309	298	313	329	320	298	291	330	10	306	328	291	268	226	309.
MEAN	241.	225.	270.	270.	230.	254.	262.	228.	228.	247.	267.	292.	295.	290.	293.	285.	269.	282.	276.	267.	257.	255.	252.	227.	

TOTAL NUMBER OF OBSERVATIONS = 5827 MEAN = 264.

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	67	73	87	87	86	91	91	89	79	70	57	48	40	34	30	28	29	35	50	65	68	71	73	72	64.
2	77	82	83	88	90	87	89	89	80	79	65	50	40	33	30		29	35	50	61	61	58	53	54	64.
3	54	57	58	57	56	56	57	57	55	48	38	27	25	24	24	23	24	28	36	44	47	50	52	53	44.
4	55	57	58	56	58	62	64	64	57	51	45	33	27		25	25	25	29	40	51	58	67	69	63	50.
5	65	66	69	74	76	79	82	83	84	78	75	78	81	86	90	94	96	97	98	98	100	100	100	99	86.
6	98	99	99	100	100	99	100	97	94	91	87	74	66	61	58	54	58	76	79	80	86	88	88	87	85.
7	86	84	84	87	92	95	97	96	96	94	96	95	85	76	75	74	80	91	89	84	83	85	89	92	88.
8	93	92	92	91	89	89	89	89	88	86	76	64	59	56	51	46	47	62	75	81	84	87	87	88	78.
9	88	85	87	86	90	91	89	87	85		67	49	39	33	29	28	28	31	39	58	71	76	77	80	65.
10	81	83	83	84	84	83	84	83	78	68	53	46		34	32	31	31	35	48	64	72	78	82	84	66.
11	86	87	88	88	87	88	90	87	82	84	71	57	43	35	32	32	33	37	45	58	64	65	66	73	66.
12	84	83	85	86	86	87	86	86	79	70	56	45	40	36	34	32	34	43	56	69	71	69	66	65	65.
13	57	65	56	46	39	38	43	73	74	71	75	71	69	58	54	76	72	71	74	75	85	92	93	95	68.
14	94	95	93	90	92	93	93	92	90	85	77	61	51	45	41	40	42	44	51	66	60	54	53	52	69.
15	48	48	66	96	97	98	98	98	98	97	86	66	59	52	50	50	56	63	73	95	98	98	97	96	79.
16	95	97	97	98	98	98	98	97	95	93	84	79	76	74	74	72	72	72	79	90	94	93	92	92	88.
17	93	92	91	88	92	92	92	91	87	78	65	56	51	48	50	85	93	79		91	90	93	98	98	83.
18	97	95	95	93	93	91	90	90							40	42	44	46	47	47	45	48	50	49	67.
19	46	54	54	74	76	87	91	92	93	86	71	54	44	38	36	34	35	41	49	59	64	72	73	72	63.
20	75	77	78	79	81	82	80	76	72	66	57	57	56	58	64	59	60	65		81	82	86	86	81	73.
21	81	82	77	76	77	76	72	68	70	66	60	55	54	52	51	51	51	49	48	46	44	43	44	45	60.
22	45	57	93	90	87	78	66	65	62	58	51	49	45	47	44										64.
23																									
24	86	85	87	87													51	51	59	70	75	76	76	77	74.
25	78	78	78	78	78	81	84	82	84	79	67	60	54	49	46	45	45	49	57	71	79	83	83	82	70.
26	82	82	80	78	82	84	81	79	80	76	69	62	58	54	52	51	52	62	72	77	78	85	87	87	73.
27	84	83	81	81	80	78	80	76	75	69	62	56	52	50	46	45	49	53	60	68	76	81	80	78	69.
28	69	64	68	73	76	73	68	65	79	78	71	67	61	53		36	38	56	73	81	85	81	82	80	69.
29	89	86	92	92	87	82	86	87	88	88	88	92	95	92	92	90	90	95	97	96	95	95	95	96	91.
30	94	93	93	91	91	93	94	94	92	91	84	83	77	66	62	64	71	80	90	92	91	92	91	89	86.
31	87	86	85	87	89	89	90	89	90	88	86	81	76	73	70	69	73	84	89	91	91	90	89	88	85.
MEAN	78.	79.	82.	83.	83.	84.	84.	84.	82.	78.	70.	62.	57.	53.	50.	51.	52.	58.	64.	73.	76.	78.	79.	79.	

TOTAL NUMBER OF OBSERVATIONS = 8153 MEAN = 72.

LRAPA/DEQ

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	93	95	94	94	94	94	94	94	94	76	64		38	30	26	26	25	29	41	68	78	91	86	92	71.
2	95	95	95	93	93	95	95	95	93	76	63	50	37	30	27	25	25	29	43	65	69	72	74	72	67.
3	67	72	63	66	63	90	93	78	83	71	53	37	25	22	22	22	22	25	33	46	56	62	61	68	54.
4	52	55	52	53	58	65	66	69	69	49	37	30	25	23	23	23	24	27	34	51	57	67	75	75	49.
5	72	72	73	75	75	82	85	90	84	78	73	83	89	94	94	79	82	94	94	94	93	93	93	93	85.
6	93	93	93	93	93	90	93	93	93	83	88	70	64	60	55	50	54	72	92	92	93	92	93	92	83.
7	92	92	93	93	92	93	93	93	93	93	93	93	86	76	70	78	92	93	90	77	75	79	92	92	88.
8	92	92	92	92	92	92	92	92	92	92	75	60	54	47	43	41	49	56	74	88	92	92	92	92	78.
9	92	93	92	92	92	92	92	92	91	76	65	50	39	33	28	26	26	29	36	53	73	79	79	84	67.
10	91	92	92	92	92	92	92	92	92	76	60	45	37	32	30	28	29	32	45	64	74	79	90	93	69.
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																44	43	45	47	46	44	45	47	47	46.
19	46	48	50	65	71	83	92	92	92	85	63	63				34	33	37	46	54	59	66	70		64.
20																					90	89	92	92	91.
21	90	91	78	77	76	73	69	70	66	64	56	53	51	50	50	48	49	49	47	46	43	42	42	43	60.
22	44	60	92	93	89	88	86	74	71	60	50	46	43	41	36	40	49	60	78	93	93	91	92	92	70.
23	92	92	92	92	92	92	92	92	92	92	86	76	77	74	70	65	65	78	88	77	77	77	89	92	84.
24	93	93	93	93	93	93												52	63	74	76	76	77	77	81.
25	85	94	94	94	94	95	95	95	95	93	72	63	53	47	44	44	44	48							75.
26															47	48	52	61	73	87	94	94	94	94	75.
27	94	94	94	94	94	94	93	77	71	67	62	53	50	47	45	43	42	51	58	69	89	95	94	92	74.
28	88	94	87	92	93	89	75	94	95	92	77	67	59	50	46	40	51	66	79	94	95	95	95	93	80.
29	93	95	95	95	95	95	95	95	95	93	94	95	95	95	94	94	95	95	95	95	95	95	95	95	95.
30	95	95	95	95	95	95	95	95	94	94	93		75	67	59	62	80	93	95	95	95	95	95	95	89.
31	95	95	95	95	95	95	95	95	95	89	93	79		68	64	61	67	86	94	94	94	94	94	94	89.
MEAN	85.	86.	86.	87.	88.	90.	89.	89.	88.	80.	71.	62.	55.	52.	49.	47.	50.	57.	66.	74.	79.	81.	83.	85.	

TOTAL NUMBER OF OBSERVATIONS = 5954 MEAN = 74.

BRALDIAN

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1											50	46	41	39	33	32	35	41	51	56	59	62	64	66	49.
2	67	69	69	71	74	75	75	75	70	60	51	45	41	36	33	34	36	43	53	55	54	54	53	53	57.
3	53	55	55	55	57	59	61	63	62	55	44	32	28	27	27	27	27	31	36	43	49	55	59	58	47.
4	57	59	61	62	63	65	69	65	61	60	52	35	30	29	28	28	29	33	43	54	60	65	69	69	53.
5	65	70	76	80	83	86	88	87	87	84	84	84	87	91	95	99	100	100	100	100	100	100	100	100	90.
6	99	98	99	100	100	100	99	99	96	94	90	73	70	66	58	62	78	85	86	86	90	92	93	92	88.
7	92	91	91	95	98	99	100	100	99	96	97	99	89	81	82	82	83	93	97	96	98	97	96	96	94.
8	98	98	96	94	95	99	98	96	95		81	69	63	59	57	54	65	81	86	88	89	91	91	92	84.
9	91	90	89	88	87	90	90	88	81	74	63	41	42	36	33	33	34	40	52	69	77	79	83	83	69.
10	86	86	87	85	88	87	87	86	81	75	61	49	44	40	38	36	37	44	60	72	78	83	88	89	70.
11	82	82	82	82	83	82	82	82	82	82	79	65	49	38	32	32	32	35	41	52	62	66	66	71	65.
12	80	82	75	82	82	82	82	82	79	68	61	45	38	34	31	29	30	40	55	66	60	66	62	60	62.
13	71	75	64	54	47	44	50	78	80	79	77	76	77	65	61	81	79	79	84	83	97	99	100	100	76.
14	99	98	98	98	97	97	97	97	94	90	85	71	56	50	53	52	59	63	63	61	59	58	58	57	76.
15	59	57	86	100	100	100	98	99	99	97	90	79	67	59	58	61	69	76	89	99	100	100	100	99	85.
16	83	83	83	83	83	83	83	83	83	82	79	73	72	72	72	70	72	74	79	82	82	82	82	82	79.
17	82	82	82	82	82	82	73	82	80	72	57	48	45	41	51	82	77	71	84	80	82	82	81	82	74.
18	83	82	82	82	82	82	82	83	82	79		62			49	51	54	54	52	55	54	56	55	52	68.
19	55	59	62	84	86	91	95	97	99	90	83	59	49	42	40	39	40	48	57	68	73	77	82	83	69.
20	74	74	75	76	78	79	78	74	70	61	56	57	53	54	64	57	59	68	69	78	90	95	95	90	72.
21	91	89	86	85	84	79	74	73	74	72	65	60	60	58	57	56	58	55	52	49	47	46	48	50	65.
22	50	58	95	95	89	82	72	73	74	69	58	54	49	48	44	42	51	67	80	85	85	84	85	88	70.
23	92	95	95	94	93	94	94	93	92	91	86	89	82	74	72	72	73	78	85	90	88	87	90	91	87.
24	89	89	88	74	65	56	53										59	64	71	77	81	83	84	84	75.
25	83	84	83	83	84	84	85	84	82	77	70	62	54	51	48	47	49	55	67	77	82	84	86	85	73.
26	84	84	83	80	79	82	82	80	79	77	71	63	60	55	55	54	61	70	74	77	77	81	85	87	75.
27	89	88	88	88	89	86	86	86	81	80	67	61	57	55	53	52	54	61	72	77	81	82	82	83	75.
28	84	83	83	83	82	80	75	70	66	61	57	55	60	53	42	40	40	43	56	70	80	84	84	81	68.
29	79	81	88	90	87	85	82	88	92	90	93	96	98	98	98	95	96	100	99	99	98	97	98	99	93.
30	96	95	95	94	92	92	92	95	94	93	88	85	80	71	68	78	80	88	96	98	96	94	94	94	90.
31	91	90	90	91	92	93	92	93	94	91	88	84	79	76	71	71	83	93	93	92	93	93	92	91	89.
MEAN	82.	81.	83.	84.	84.	84.	83.	85.	83.	79.	72.	64.	60.	55.	54.	55.	59.	64.	71.	76.	78.	80.	81.	81.	

TOTAL NUMBER OF OBSERVATIONS = 8604 MEAN = 74.

BRADLEY

DIURNAL VARIATION OF RELATIVE HUMIDITY
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	40	55	42	43	43	45	49	51	51	48	46	42	37	34	31	29	28	29	31	33	35	39	44	48	41.
2	48	49	49	48	49	49	50	49	49	48	44	40	37	33	30	29	29	29	30	32	34	35	35	35	40.
3	35	34	35	36	37	38	39	40	38	35	30	26	25	25	26	25	25	26	28	29	30	31	34	35	32.
4	36	37	39	39	38	37	35	35	35	32	30	27	26	26	25	26	26	28	30	32	34	36	41	47	34.
5	55	68	77	80	81	81	84	83	83	83	87	87	92	94	96	100	100	100	100	100	100	100	100	99	89.
6	96	93	92	94	95	94	93	92	93	94	90	74	71	68	63	59	57	61	68	80	87	90	91	89	83.
7	90	89	89	90	95	98	100	100	100	97	98	99	95	85	84	83	89	97	97	91	90	89	94	95	93.
8	97	98	99	99	95	95	94	93	93	88	80	71	61	56	55	50	49	50	53	65	71	75	75	78	77.
9	81	73	76	69	66	75	74	70	64	58	51	45	37	32	29	28	28	30	32	35	39	41	42	43	52.
10	47	49	51	50	52	53	52	55	52	47	44	41	37	36	35	35		36	38	41	45	52	59	63	47.
11	68	74	80	84	84	83	86	83	76	75	67	53	42	37	36	45	48	40	44	46	46	49	50	51	61.
12	54	64	66	70	71	71	80	82	76	65	55	49	44	41	38	37	40	47	55	60	62	62	60	57	59.
13	57	56	50	46	43	43	51	81	78	79	80	80	76	70	61	86	83	80	80	82	91	97	97	95	73.
14	97	96	89	89	91	95	84	87	91	83	74	63	54	50	44	45	47	50	55	56	54	53	53	51	69.
15	50	52	57	93	97	98	96	97	99	93	80	69	58	52	51	50	55	60	72	97	97	98	98	99	79.
16	94	97	99	99	100	99	99	100	97	93	88	86	84		68	81	83	86	85	85	88	88	89	90	91.
17	90	91	90	89	90	82	86	83	81	72	63	60	58	57	62	82	99	78	93	93	92	96	94	89	83.
18	76	78	81	85	90	91	89	88										45	38	40	42	50	51	51	66.
19	52	51	57	83	86	86	80	78	80	73	66	59	50	43	40	39	40	47	49	62	74	80	78	78	64.
20	76	78	74	71	69	66	66	64	63		62	64	64	66	69	65	68	74	75	86	92	93	90	86	74.
21	85	88	83	77	70	67	68	71	74	68	62	61	61	60	58	58	57	56	55	52	49	48	49	50	64.
22	50	52	95	96	95	86	73	62	61	59	54	52	50	49	43	40	49	65	69	72	75	79	80	82	67.
23	88	86	85	90	88	87	89	85	85	83	82		85	84	80	78	75	79	90	93	91	91	93	94	87.
24	94	94	94																	65	73	74	74	74	81.
25	73	74	73	74	73	72	71	71	68	64	60	55	50	47	45	44	44	46	48	51	57	66	72	74	62.
26	76	76	74	73	71	71	75	72	69	70	62	58	59	56	55	55	56	62	65	72	83	86	89	90	70.
27	87	83	78	73	72	69	69	74	74	73	67	61	57	55		51	53	59	64	64	64	63	64	62	67.
28	64	62	63	62	65	62	59	52	48	47	47	46	46	43	40	40	39	42	45	53	73	77	80	80	56.
29	77	76	85	86	82	79	76	81	84	89	93	96	97	97	96	94	95	98	99	100	100	99	99	99	91.
30	98	98	96	95	95	97	97	98	97	95	90	85	74	73	66	65	80	85	88	93	96	97	98	97	90.
31	96	96	95	94	94	96	94	95	96	96	92	87	82	80	77	73	75	83	88	93	96	97	97	97	91.
MEAN	72.	74.	75.	76.	76.	76.	76.	76.	75.	72.	68.	62.	59.	56.	54.	55.	58.	60.	63.	67.	70.	72.	74.	74.	

TOTAL NUMBER OF OBSERVATIONS = 8501 MEAN = 69.

BRALORIAN

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 8 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															36	34	34	38	43	42	42	43	44	45	41.
2	44	43	43	43	44	45	46	45	45	43	39		36	32	32	32	33	36	37	36	37	37	37	36	40.
3	35	35	37	38	40	40	40	40	39	35	30	28	28		30	30	31	32	34	35	37	36	38	37	36.
4	38	38	38	37	38	36	37	37	35	34	32	30	30	31	31	33	34	37	39	40	43	46	45	49	37.
5	53	60	66	70	71	72	75	75	76	76	79	80	83	86	88	91	94	94	96	96	97	98	98	96	82.
6	95	95	91	92	92	91	93	92	91	91	86	77	75	75	71	67	66	71	78	80	81	83	84	85	84.
7	85	85	85	86	87	89	93	94	94	91	92	93	90	84	83	82	86	91	93	90	88	89	92	93	89.
8	94	95	96	95	95	94	95	94	94	92	88	81	73		63	58	58	62	66	67	68	70	71	73	81.
9	71	72	72	70	68	66	65	63	60	54	48	43	35	29	26	26	30	35	39	43	45	45	45	44	50.
10	42	43	43	43	42	42	42	42	43	45	43	41	39	38	37	37	38	41	44	47	50	51	52	54	44.
11	56	58	59	61	62	66	67	65	66	66	60	47	41	40		42	43	45	48	49	50	52	53	54	55.
12	55	58	59	60	61	62	64	65	65	58	52	49	45	43	41	42	46	52	54	54	56	58	55	54	55.
13	55	54	48	45	44	46	51	66	68	68	68	70	68	66	58	70	71	69	70	70	73	76	78	78	64.
14	79	79	77	76	77	77	76	73	78	75	70														77.
15																									
16																									
17																74	93	87	88	92	91	91	94	90	90.
18	88	86	85	85	85	86	86	85	83				55	56	57		58	59	56	55	55	61	57	57	70.
19	57	58	62	76	80	80	79	80	80	75	71	66	55	47	45	46		61	60	69	71	71	72	71	67.
20	70	73	69	66	65	64	65	64	63	63	64							69	71	78	85	84	82	84	72.
21	84	87	82	78	75	75	77	78	79	76	73	73	73	72	72	71	71	71	70	68	65	64	65	64	74.
22	64	74	94	95	94	92	85	76	77	71	66	64	61		52										77.
23															74	73	72	75	79	80	81	81	82	82	78.
24	82	82	81	82																					82.
25																									
26																									
27																									
28														49	50	50	51	56	58	65	72	75	77	78	63.
29	79	79	81	83	82	80	79	79	82	83	86	89	90	91	91	92	93	95	95	96	96	96	96		88.
30	94	93	93	93	94	93	93	93	93	93	93	90	86	84	84	82	83	85	87	89	91	91	92	93	90.
31	93	92	92	93	94	93	93	93	92	92	92	90	85	84	83	81	82	84	86	88	91	91	91	93	90.
MEAN	69.	71.	71.	72.	71.	71.	72.	72.	72.	69.	67.	66.	61.	60.	58.	58.	60.	63.	65.	67.	68.	69.	70.	69.	

TOTAL NUMBER OF OBSERVATIONS = 5993 MEAN = 67.

II C-61

BRADLEAN

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 30 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															33	31	31	36	39	40	41	43	44	44	39.
2	42	42	41	41	42	43	45	45	44	43	40		37	33	32	32	33	35	35	35	34	33	36	35	39.
3	34	34	35	38	40	41	41	41	40	36	29	28	27		30	30	31	32	34	35	37	36	38	38	35.
4	39	38	37	38	39	37	38	37	35	34	32	31	30	31	31	32	34	36	38	40	42	46	46	52	38.
5	56	56	74	78	79	80	83	82	84	85	88	91	95	97	99	100	100		100	100	100	100	100	100	89.
6	100	100	100	100	100	100	100	100	99	99	96	83	81	80	76	70	68	70	73	78	85	89	90	91	89.
7	93	91	91	93	94	98	100	100	100	100	100	100	99	95	93	92	96	99	100	99	97	97	99	100	97.
8	100	100	100	99	98	97	98	97	98	96	92	84	75		64	59	58	59	59	64	67	70	72	72	82.
9	71	71	70	67	67	62	63	61	56	53	47	43	35	28	25	25	28	33	37	42	44	46	46	45	49.
10	45	45	46	46	43	45	46	46	47	48	45	43	41	39	38	39	39	41	44	46	48	51	54	54	45.
11	57	62	64	66	68	71	74	74	72	70	64	49	42	40	40	42	44	46	50	51	52	54	54	54	57.
12	55	60	62	62	64	65	64	68	68	62	55	51	47	44	42	41	47	55	58	57	59	60	58	57	57.
13	56	56	49	47	45	47	53	73	75	77	78	79	76	75	66	81	82	78	79	80	84	89	92	91	72.
14	93	92	89	88	87	87	84	84	87	82	77														87.
15																									
16																									
17																			88	95	94	94	95	90	93.
18	86	80	78	77	81	83	81	82	80				49	51	52		56	56	53	52	52	60	55	54	66.
19	55	56	60	76	83	83	81	81	80	76	72	64	51	42	40	40		59	58	69	71	71	72	71	66.
20	71	71	66	64	64	64	65	63	64	63	65							71	73	83	87	88	86	86	72.
21	87	86	84	80	77	78	80	81	82	79	76	75	75	74	73	72	71	71	70	67	63	62	63	63	75.
22	64	73	96	99	99	98	92	79	80	73	67	65	62		51										79.
23															80	77	76	79	84	86	86	86	87	88	83.
24	88	87	87																						88.
25																									
26																									
27																									
28														43	43	44	45	50	53	59	68	72	74	76	58.
29	77	77	79	81	80	77	76	76	80	83	88	91	95	96	96	96	98	99	100	100	100	100	100		89.
30	100	100	99	98	96	99	100	100	99	99	97	95	89			71	83	88	91	94	95	98	97	99	95.
31	99	99	98	99	99	99	99	99	99	99	99	98	92	89	87	84	85	88	90	93	95	96	97	99	95.
MEAN	72.	73.	73.	73.	74.	74.	75.	75.	75.	73.	71.	69.	63.	61.	58.	58.	60.	61.	66.	68.	70.	72.	73.	71.	

TOTAL NUMBER OF OBSERVATIONS = 5946 MEAN = 69.

BRADDOCK

DIURNAL VARIATION OF RELATIVE HUMIDITY AT 100 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															34	32	33	35	38	40	40	41	43	42	38.
2	41	40	38	37	39	41	43	45	44	41	40		37	34	33	33	34	33	34	35	34	32	34	32	38.
3	31	33	34	36	37	38	38	38	38	35	30	28	28		31	31	32	32	34		35	34	37	37	34.
4	38	37	35	37	37	36	38	35	34	31	32	31	31	31	32	33		36	37	39	41	42	45	52	37.
5	59	70	77	81	81	83	85	85	86	88	88	88	93	96	98	100	100	100	100	100	100	100	100	100	90.
6	100	100	99	98	98	95	95	95	93	92	92	86	82	81	77	71	68	69	70	71	81	87	88	88	87.
7	90	86	86	89	90	97	100	99	100	98	99	100	99	90	88	88	92	98	100	96	92	93	95	96	95.
8	97	98	97	95	94	94	93	94	95	93	90	87	78		66	60	57	59	57	61	62	64	68	68	80.
9	67	65	63	61	59	57	54	52	50	51	46	44	35	28	26	25	28	32	36	40	43	46	44	41	46.
10	41	40	41	42	42	41	42	42	43	46	45	41	41	39	38	38	39	41	44	45	47	49	52	54	44.
11	56	58	60	62	65	68	72	72	68	65	59	49	43	41	46	43	44	46	49	50	51	52	53	53	56.
12	53	56	59	59	61	61	61	63	61	60	56	52	48	44	43	42	48	55	56	55	57	57	56	55	55.
13	55	52	47	45	44	47	53	75	77	79	81	82	79	78	66	84	85	81	81	82	87	89	88	87	72.
14	89	89	89	90	89	87	84	85	87	84	80														87.
15																									
16																									
17																			87	91	90	90	89	89	90.
18	84	79	78	76	80	79	76	79	77				53	53	54		51	57	53	52	52	61	55	55	66.
19	56	56	62	80	86	86	83	83	83	79	75	66	52	42	40	40		61	59	67	70	70	70	70	67.
20	69	67	65	64	63	64	64	63	63	64	66							73	76	86	89	89	87	87	73.
21	87	87	84	81	77	77	80	81	82	80	77	76	76	74	74	72	71	71	70	67	62	61	63	62	75.
22	63	74	93	97	98	96	88	78	79	72	66	63	60		50										77.
23															84	81	80	83	89	91	91	92	88	86	87.
24	85	86	86																						86.
25																									
26																									
27																									
28														45	45	45	47	52	55	59	71	75	76	76	60.
29	77	76	78	81	80	78	77	77	86	89	88	91	95	96	97	97	99	100	100	100	100	100	100		90.
30	100	99	97	95	91	97	99	99	97	96	93	92	87			75	86	89	88	89	93	94	95	96	94.
31	97	97	97	99	98	98	98	98	97	98	98	98	97	89	88	89	89	89	87	91	93	94	94	96	95.
MEAN	72.	71.	71.	72.	72.	73.	73.	74.	74.	72.	70.	69.	64.	62.	59.	59.	62.	64.	66.	69.	69.	70.	71.	70.	

TOTAL NUMBER OF OBSERVATIONS = 5936 MEAN = 69.

BRADLEY

DIURNAL VARAITON OF RELATIVE HUMIDITY AT 200 FEET
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															34	33	34	37	41	43	47	50	51	52	43.
2	51	49	45	45	47	48	50	52	50	41	36		33	31	33	33	35	36	38	40	39	36	35	33	41.
3	33	34	37	39	40	40	39	39	37	35	31	30	30			33	34	35	37	37	37		39	40	36.
4	39	40	37	39	40	39	40	36	36	36	34	33	33	33	34	35	37	38	40	41	44	44	48	53	39.
5	59	70	76	83	86	88	90	90	90	90	93	95	99	100	100	100	100	100	100	100	100	100	100	100	92.
6	100	100	100	100	100	100	100	100	100	100	92	73	74	74	71	66	67	74	76	74	81	92	94		87.
7	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100.
8	100	100	100	100	100	100	100	100	100	94	82	73	59		57	54	56	60	64	68	70	70	74	76	81.
9	74	75	74	73	68	65	62	59	52	41	37	34	31	29	28	28	30	33	40	45	50	53	54	49	50.
10	47	47	46	47	49	50	50	50	49	45	43	41	40	39	40	40	41	44	47	51	54	58	60	64	48.
11	67	69	71	72	74	75	79	80	73	66	59	48	42	40	40	44	46	48	50	53	53	52	55	55	60.
12	57	59	61	61	65	69	68	65	63	58	53	49	45	44	43	43	49	57	57	57	60	60	59	58	57.
13	58	56	51	49	47	50	55	73	76	77	76	74	73	73	65	84	88	81	85	85	89	94	97	96	73.
14	98	98	94	94	93	90	89	89	89	75	67														89.
15																									
16																									
17																			95	100	100	100	100	97	99.
18	93	93	94	98	95	95	92	92	92				50	51	54		59	60	57	55	55	63	58	58	73.
19	58	59	64	83	92	95	90	91	90	75	71	63	52	44	42	43		65	63	66	70	71	74	74	70.
20	71	69	70	69	68	69	68	66	66	65	66							73	76	89	95	93	92	92	76.
21	94	94	91	89	82	84	87	88	89	82	74	75	74	74	73	73	73	74	73	70	66	65	67	67	79.
22	58	78	99	100	100	99	95	81	80	72	66	64	58		48										80.
23															79	81	78	87	93	95	95	95	96	96	90.
24	96	96	96																						96.
25																									
26																									
27																									
28														45	45	46	48	56	62	67	75	85	90	87	65.
29	89	89	87	89	89	88	83	86	91	89	91	95	95	99	98	98	100	100	100	100	100	100	100		93.
30	100	100	100	100	100	100	100	100	100	100	84	71	68		57	61	77	91	98	100	100	100	100	100	93.
31	100	100	100	100	100	100	100	100	100	100	99	95	85	84	84	78	86	94	97	99	100	100	100	100	96.
MEAN	75.	76.	77.	78.	78.	79.	78.	78.	77.	72.	68.	66.	61.	61.	59.	59.	62.	66.	70.	72.	74.	77.	78.	74.	

TOTAL NUMBER OF OBSERVATIONS = 5927 MEAN = 72.

RADIAN

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	7		- 3	- 3	- 5	- 8	- 9	- 7	3	9	18	24	30	34	36	36	29	20	15	13	11	8	6	6	12.
2	3	1	0	- 2	- 4	- 3	- 4	- 4	4	9	17	24	28	35	36		30	22	18	16	15	16	18	16	13.
3	15	12	13	13	13	13	12	12	16	24	36	42	43	42	43	44	36	28	24	22	24	21	20	20	25.
4	20	19	20	21	19	18	17	19	24	28	32	43	45		44	43	41	33	30	29	27	24	24	25	29.
5	27	29	31	29	27	26	28	28	29	32	34	34	32	32	31	30	29	29	28	27	26	26	26	25	29.
6	25	24	24	23	23	21	19	17	18	20	24	27	27	29	30	31	28	22	20	18	14	13	12	13	22.
7	14	17	18	19	19	20	20	20	21	22	21	23	25	26	25	24	23	22	19	17	16	13	9	4	19.
8	1	- 1	- 4	- 6	- 5	- 6	- 7	- 9	- 5	3	10	15	18	20	21	22	18	10	6	3	0		- 3	- 5	4.
9	- 7	- 6	- 7	- 7	-13	-14	-12	-11	- 6		11	20	26	30	32	31	26	16	10	5	3	1	0	- 2	6.
10	- 3	- 5	- 6	- 8	- 9	- 9	-10	- 9	- 4	4	15	20		29	31	31	26	18	12	10	7	3	1	0	6.
11	- 1	- 2	- 3	- 3	- 3	- 6	- 7	- 3	1	3	15	24	32	33	35	33	30	26	23	22	21	22	21	18	14.
12	12	10	7	6	4	3	3	2	7	14	24	28	31	31	32	32	27	21	19	15	14	14	15	14	16.
13	14	15	19	25	26	27	25	22	22	23	23	23	22	23	21	19	19	18	17	16	14	14	14	14	20.
14	13	13	13	12	9	6	5	4	3	6	13	17	20	22	22	17	19	17	13	10	13	15	14	16	13.
15	17	17	15	14	13	13	13	11	7	9	16	18	21	22	22	21	20	19	19	17	16	16	15	15	16.
16	15	15	15	16	16	16	15	15	15	16	19	21	23	24	25	26	26	26	23	16	11	10	8	7	18.
17	5	5	5	5	3	4	6	6	9	17	26	31	30	34	32	26	23	23		19	19	18	15	10	17.
18	3	M	- 2	- 3	- 6	- 5	- 5	- 8							26	24	22	21	21	21	23	23	22	22	11.
19	22	21	21	20	19	13	9	7	5	9	17	23	25	25	24	24	19	15	14	13	12	10	10	11	17.
20	12	12	12	12	11	10	11	13	16	20	22	23	24	25	25	26	26	25		23	24	24	24	25	20.
21	25	25	26	26	24	24	24	24	24	27	31	33	33	34	34	34	33	34	35	35	35	33	32	32	30.
22	31	27	19	15	14	13	12	11	11	12	12	12	14	12	15										16.
23																									
24	- 9	-14	-21	-23													- 2	- 3	-11	-15	-15	-16	-18	-18	-14.
25	-19	-19	-19	-19	-21	-24	-27	-25	-30	-20	- 6	0	6	10	11	11	7	- 3	- 9	-12	-17	-20	-21	-20	-12.
26	-19	-21	-17	-13	-17	-16	-12	- 9	- 9	- 5	0	4	5	8	10	12	9	4	1	- 1	- 1	- 6	- 7	- 7	-5.
27	- 6	- 6	- 4	- 5	- 4	- 2	- 5	- 1	3	10	16	19	22	23	25	26	22	18	13	9	4	1	2	3	8.
28	10	12	9	6	5	7	10	11	2	5	10	14	20	25		30	25	16	9	3	1	3	2	5	11.
29	7	2	- 1	- 2	3	6	4	4	5	7	10	12	14	16	17	17	16	16	16	14	11	10	11	10	10.
30	7	6	3	3	4	3	2	- 2	- 6	- 3	4	9	15	19	21	20	17	11	2	- 1	- 3	- 5	- 9	- 8	5.
31	- 4	- 2	- 1	- 1	- 2	- 3	- 5	- 3	- 2	- 1	3	8	11	12	13	13	9	3	- 2	- 5	-10	-12	-15	-16	-1.
MEAN	8.	7.	6.	6.	6.	5.	5.	5.	7.	11.	17.	21.	24.	25.	27.	26.	23.	19.	15.	13.	11.	10.	9.	9.	

TOTAL NUMBER OF OBSERVATIONS = 8062 MEAN = 13.

RADIAN

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1	0	- 3	- 5	- 5	-10	-11	-11	-10	- 6	4	13		31	35	38	36	31	22	15	9	7		4	2	9.
2		- 2	- 4	- 5	- 4	- 5	- 6	- 6	- 1	6	16	23	32	36	37	36	30	22	17	14	13	10	10	11	12.
3	10	9	14	11	10	0	0	2	4	12	25	38	44	42	44	45	39	30	24	21	20	20	18	15	22.
4	19	23	24	21	19	16	16	14	18	32	36	43	45	45	46	43	41	35	31	28	27	25	21	23	29.
5	24	25	25	25	25	25	25	25	26	29	31	31	30	30	30	30	31	31	29	27	26	26	26	25	28.
6	26	25	25	25	24	21	20	20	17	20	24	29	30	31	31	32	29	23	19	18	15	14	15	15	23.
7	15		15	15	19	21	20	18	19	20	22	25	25	25	25	26	25	22	20	19	18	15	11	6	20.
8	2	0	- 2	- 5	- 5	- 8	-10	-10	- 5	2	11	15	20	22	25	25	17	11	6	4	1	0	- 4	- 7	5.
9	- 7	- 6	- 7	-13	-15	-16	-16	-16	-12	- 3	8	18	25	30	33	32	26	19	10	4	1			- 4	4.
10	- 9	-11	-12	-14	-16	-16	-16	-16	-12	0	11	21	26	30	31	30	26	20	9	9	5	2	0	- 3	4.
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																	25	21	21	22	24	25	24	24	24.
19	23	22	24	22	19	15	9	9	8	11	21	21				27	25	21	19	17	15	14	14		18.
20																					26	26	27	27	27.
21	27	27	28	28	26	26	26	25	27	30	34	35	36	37	37	36	36	36	37	37	37	36	35	34	32.
22	34	28	21	18	16	14	13	12	11	14	16	15	17	18	20	16	13	8	0	- 3	- 3	- 2	- 4	- 6	12.
23	- 9	-11	-11	-11	-15	-17	-19	-18	-16	-11	- 5		1	1	2	2	1	0	- 1	- 1	- 1	- 2	- 3	- 4	-7.
24	- 6	-12	-18	-24	-27	-31												- 2	- 9	-13	-13	-13	-15	-16	-16.
25	-23	-26	-28	-30	-32	-32	-33	-34	-30	-19	- 9	0	8	12	13	13	9	1							-14.
26															13	16	11	7	2	- 2	- 4	- 5	- 9	-13	2.
27	-15	-16	-14	-20	-19	-16	- 9	1	6	13	19	22	23	25	27	30	26	18	17	11	2	0	0	2	6.
28	4	- 4	2	2	2	4	8	- 2	1	5	10	18	23	28	31	31	24	19	12	4	- 1	0	0	5	10.
29	5	3	0	- 2	1	5	6	6	7	10	12	15	18	21	22	21	21	20	20	19	17	15	14	13	13.
30	8	8	6	1	4	6	4	- 4	- 9	- 8	1		18	22	24	22	16	11	5	0	- 3	- 4	- 7	-10	5.
31	- 6	- 3		- 3	- 5	- 9	-12	- 7	- 6	- 2	3	11		16	17	17	13	6		- 6	-10	-13	-16	-16	-2.
MEAN	5.	4.	4.	2.	1.	-0.	1.	0.	2.	9.	15.	23.	26.	27.	27.	28.	24.	18.	15.	12.	10.	10.	8.	6.	

TOTAL NUMBER OF OBSERVATIONS = 5756 MEAN = 11.

RADIAN

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1											24	30	34	35	38	36	28	23	19	18	16	14	13	12	25.
2	11	10	10	9	8	8	8	7	11	18	26	29	34	38	40	36	30	24	21	20	20	19	20	19	20.
3	18	16	16	16	15	14	13	12	15	23	35	45	46	45	44	44	39	30	27	25	24	22	22	22	27.
4		22	22	22	21	21	20	22	24	26	34	45	47	46	46	45	43	36	32	31	31	29	28	28	32.
5	33	33	32	32	32	31	31	31	32	34	35	36	34	33	32	32	31	31	30	30	30	28	28	28	32.
6	27	27	26	26	25	24	22	19	21	23	27	29	29	31	30	30	26	23	21	19	17	15	14	14	24.
7	16	18	19	20	21	21	22	22	23	25	25	26	25	28	27	26	25	23	21	18	15	13	8	5	21.
8	1	0	0	1	0	1	- 2	- 5	- 3		14	18	21	23	23	22	16	10	8	5	3	1	- 1	- 2	7.
9	- 4	- 4	- 4	- 2		- 4	- 4	- 3	1	8	18	24	30	33	33	31	25	18	14	10	8	5	3	2	11.
10	0	0	- 2	- 4	- 5	- 5	- 6	- 5	- 2	5	16	24	29	32	34	32	27	19	16	13	11	8	5	4	11.
11	- 4	- 6	- 4	- 6	- 8	-12	-13	-11	- 5	0	7	16	24	33	35	31	29	25	25	21	20	20	20	16	11.
12	10	7	4	4	4	3	4	4	6	15	20	29	30	33	35	34	28	20	17	15	15	15	16	16	16.
13	15		20	24	27	29	27	24	25	26	26	26	25	24	23	21	21	20	19	18	16	16	16	16	22.
14	15	15	15	13	12	9	7	5	4	7	13	19	22	24	21	22	19	18	16	16	17	18	17	19	16.
15	18	20	17	16	16	17	16	14	11	15	19	21	23	24	24	23	21	21	20	18	18	18	18	18	19.
16	15	15	14	15	17	15	15	14	15	18	20	23	26	25	26	26	25	25	21	19	15	12	10	9	18.
17	6	4	4	5	6	10	11	9	13	20	29	33	36	36	33	26	26	26	21	20	20	20	15	9	19.
18	4	0	- 4	- 6	- 8	- 8	- 6	- 6	- 6	3		24			26	25	23	23	23	22	24	24	24	25	11.
19	23	23	23	22	21	16	13	9	7	12	17	24	26	27	26	25	19	15	15	13	13	11	10	12	18.
20	15	15	16	15	14	14	14	16	19	23	24	26	27	28	28	29	29	27	27	26	24	24	25	26	23.
21	26	26	27	27	26	27	27	27	26	29	32	34	34	35	36	35	35	36	37	37	37	35	33	33	32.
22	32	29	21	18	16	15	15	13	13	14	14	14	17	15	17	16	12	6	1	- 1	- 1	- 1	- 1	- 3	13.
23	- 7	-11	-11	-12	-13	-14	-15	-14	-11	-10	- 4	0	3	4	3	2	1	0	- 2	- 2	- 2	- 1	- 4	- 6	-5.
24	-11	-15	-19	- 4	3	8	9										0	- 5	- 8	-12	-15	-16	-17	-17	-8.
25	-18	-18	-18	-19	-19	-20	-22	-21	-19	-12	- 3	4	10	14	15	13	7	0	- 5	- 9	-11	-15	-18	-17	-9.
26	-16	-17	-15	-10	- 8	- 9	- 6	- 3	- 3	- 1	4	7	8	12	12	13	7	4	5	3	4	1	0	- 3	-0.
27	- 5	- 5	- 5	- 5	- 6	- 4	- 6	- 3	1	5	17	20	23	23	25	24	22	16	12	9	6	5	4	4	8.
28	2	3	3	4	4	6	9	11	14	17	20	20	20	27	32	31	30	22	15	11	7	5	6	9	14.
29	11	10	5	4	6	9	12	9	9	10	12	14	16	18	19	19	18	18	17	16	13	13	14	12	13.
30	8	8	5	6	8	8	7	3	0	2	8	14	17	21	22	18	18	11	4	- 1	0	- 1	- 4	- 5	8.
31	- 3	- 1	0	0	0	0	1	2	3	4	8		12	13	15	14	9	1	0	- 2	- 6	- 9	-12	-12	2.
MEAN	9.	8.	8.	8.	8.	8.	8.	7.	9.	14.	19.	24.	26.	27.	28.	26.	23.	19.	17.	15.	13.	11.	10.	10.	

TOTAL NUMBER OF OBSERVATIONS = 8457 MEAN = 15.

RADIAN

DIURNAL VARIATION OF TEMPERATURE(DEG F)
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1																									
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									
16																									
17																									
18																			25	26	27	25	26	26	26.
19	25	26	25	23	23	22	22	22	21	23	25	26	27	28	28	27	25	24	22	21	20	18	17	16	24.
20	17	17	18	19	19	20	20	22	23		22	25	25	26	27	28	28	27	27	26	26	27	27	28	24.
21	28	28	29	29	30	29	29	28	28	32	34	35	35	36	36	36	36	37	37	37	37	36	35	35	33.
22	34	33	21	17	16	15	14	14	14	14	14	14	15	16	18	17	13	11	9	7	4	2	1	0	14.
23	- 1	- 1	- 3	- 4	- 3	- 3	- 5	- 5	- 5	- 3	- 1		2	3	3	2	2	0	0	0	- 2	- 2	- 3	- 4	-2.
24	- 5	- 6	- 8																	- 4	- 6	- 5	- 5	- 6	-6.
25	- 5	- 5	- 5	- 6	- 5	- 5	- 5	- 6	- 4	0	5	10	15	17	18	16	13	10	6	3	- 1	- 1	- 2	- 2	3.
26	- 4	- 2	- 3	- 1	0	0	- 1	0	2	3	8	9	8	12	14	16	16	13	13	10	7	6	5	3	6.
27	5	6	7	8	7	9	9	9	13	18	20	23	25	26		28	24	20	18	18	19	18	18	19	16.
28	18	18	19	18	16	18	20	24	25	25	26	28	29	32	32	32	32	29	25	20	15	15	15	17	23.
29	18	17	14	13	14	16	17	16	16	15	16	17	19	20	21	21	20	19	19	19	18	18	18	17	18.
30	16	14	12	12	11	11	11	10	10	12	17	20	23	23	25	25	20	16	15	12	10	10	6	7	15.
31	7	7	7	6	7	7	7	8	7	9	10	12	14	15	16	17	15	13	11	8	5	5	3	0	9.
MEAN	12.	12.	11.	12.	12.	12.	12.	12.	13.	14.	17.	20.	21.	22.	22.	23.	21.	19.	18.	15.	14.	13.	12.	12.	

TOTAL NUMBER OF OBSERVATIONS = 3527 MEAN = 15.

RADIAN

DIURNAL VARIATION OF TEMPERATURE AT 30 FEET(DEG F)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															37	37		31	29	28	27	25	25	24	30.
2	24	24	24	23	21	21	20	21	22	25	29		35	38	39	38	35	32	32	31	32	32	30	31	29.
3	31	30	29	27	27	26	27	27	29	35	40	41	42		42	42	39	37	35	34	32	33	32	33	34.
4	31	33	34	33	33	35	33	36	37	38	41	43	44	43	44	42	41	40	38		37	35	36	33	38.
5	33	33	33	33	33	33	32	33	32	33	33	33	32	31	31	31	31	31	29	29	29	28	28	28	32.
6	27	27	27	27	26	26	25	24	24	25	27	28	29	29	30	31	30	29	28	25	23	23	22	23	27.
7	24	24	25	25	25	25	23	24	24	25	25	25	27	28	27	26	25	24	22	20	20	18	16	15	24.
8	14	13	12	11	11	10	9	9	10	12	16	18	20		23	23	23	21	21	17	16	14	13	13	16.
9	14	15	14	15	12	13	12	13	15	19	24	27	31	33	34	33	30	27	25	22	22	21	19	18	21.
10	18	15	15	15	15	14	13	14	14	16	21	24	27	30	31	31	29	27	25	24	23	22	19	19	21.
11	19	16	17	16	16	15	14	16	17	18	25	30	32	33	34	33	32	30	29	28	27	27	27	26	24.
12	24	23	22	21	20	21	20	19	19	25	28	30	31	32	32	33	30	27	26	25	23	23	24	25	26.
13	24	24	27	28	27	28	27	24	25	25	25	25	25	24	24	21	21	21	20	19	18	18	18	18	24.
14	17	18	18	17	16	16	16	15	15	17	19														17.
15																									
16																									
17																			25	23	23	23	22	21	23.
18	20	20	20	20	16	16	16	15	16				29	29	28			24	25	26	26	25	26	26	23.
19	25	25	24	22	22	21	21	21	21	23	23	25	27	27	27	26		24	23	21	21	20	19	20	23.
20	20	20	22	22	22	22	22	23	24	24	25							26	26	25	28	30	33	34	25.
21	35	36	37	38	38	38	38	39	39	43	45	46	47	48	48	47	49	49	49	49	49	49	47	47	44.
22	47	42	35	32	31	30	30	29	29	29	29	30	31		33										33.
23															6	6	6	5	4	4	3	2	2	1	4.
24	1	0																							1.
25																									
26																									
27																									
28														32	33	33	33	30	29	26	21	21	21	22	28.
29	21	22	19	18	19	22	21	21	21	20	20	21	22	23	23	23	22	22	21	21	20	20	20		22.
30	20		18	19	18	16	16	16	15	17	18	21	23			21	20	17	17	19	18	18	17	15	18.
31	15	15	17	15	16	16	16	16	15	15	16	18	19	21	20	18	19	17	16	16	16	15	16	14	17.
MEAN	24.	23.	24.	23.	23.	22.	22.	22.	23.	25.	27.	29.	31.	32.	31.	30.	29.	27.	26.	25.	25.	24.	24.	23.	

TOTAL NUMBER OF OBSERVATIONS = 5901 MEAN = 25.

II C-021

RADIAN

DIURNAL VARIATION OF TEMPERATURE AT 100 FEET(DEG F)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															37	37	37	34	30	29	27	27	26	26	31.
2	25	25	26	26	23	23	21	21	23	25	29		35	38	39	38	36	34	33	32	34	34	32	32	30.
3	32	31	31	29	29	28	28	28	30	35	40	41	42		42	43	40	38	36	36	34	34	34	35	35.
4	33		35	34	35	36	34	37	38	39	42	43	44	43	44	43	42	42	40	41	39	38	34	34	39.
5	34	33	33	33	34	33	34	34	33	34	33	33	31	31	31	31	30	31	30	30	29	29	28	27	32.
6	27	28	27	27	27	26	25	25	25	25	27	28	28	29	30	31	31	29	29	28	23	24	24	24	27.
7	25	26	26	26	26	25	24	24	25	25	23	25	25	26	25		23	23	21	19	18	17	15	14	23.
8	13	12	11	11	10	8	8	8	9	10	14	17	19		22	22	22	21	21	18	17	15	13	12	15.
9	14	15	16	15	13	13	12	13	14	18	23	27	30	32	33	33	30	27	25	22	21	21	20	19	22.
10	18	16	15	14	14	15	13	14	13	16	20	23	26	29	30	29	29	27	25	24	23	21	20	19	21.
11	19	17	17	17	17	16	14	16	18	19	24	29	32	33	33	32	32	30	29	28	28	27	27	27	25.
12	26	25	23	22	21	22	22	20	20	24	27	29	30	31	32	33	30	26	26	25	24	23	25	25	26.
13	24	25	26	27	27	27	26	23	24	24	24	24	24	22	22		20	19	18	18	17	16	16	16	23.
14	15	16	16	16	16	15	15	14	14	15	17														16.
15																									
16																									
17																			24	22	22	22	21	21	22.
18	20	20	20	19	17	18	18	16	16				27	27	26		24	23	24	25	25	24	25	25	22.
19	24	24	23	21	21	21	21	21	21	21	22	24	25	26	26	25		23	22	21	21	20	20	20	23.
20	24	24	21	21	22	22	22	23	23	23	24							25	26	25	29	31	34	35	25.
21	37	37	38	39	38	38	39	39	39	42	44	45	46	47	47	47	47	48	49	49	49	47	46	46	44.
22	46	42	34	31	30	29	29	29	29	29	29	29	30		32										33.
23															4	4	4	3	2	1	0	0	0	0	2.
24		- 2	- 2																						-2.
25																									
26																									
27																									
28															33	33	32	31	30	29	21	21	22	23	28.
29	23	23	21	19	21	22	21	22	22	20		20	21	22	23	23	22	22	21	21	20	20	20		22.
30	20	19	19	19	19	17	16	16	16	17	19	20	22			22	20	17	17	19	18	18	17	15	19.
31	16	16	17	16	15	15	15	15	14	13	14	15	18	20	19	17	18	16	15	15	15	14	15	14	16.
MEAN	25.	23.	23.	23.	23.	23.	22.	22.	23.	24.	26.	28.	30.	31.	30.	31.	29.	27.	26.	26.	25.	24.	24.	24.	

TOTAL NUMBER OF OBSERVATIONS = 5885 MEAN = 25.

RADIAN

DIURNAL VARIATION OF TEMPERATURE AT 200 FEET(DEG F)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															40	40	38	33	29	26	23	21	21	21	30.
2	21	21	22	22	20	20	20	18	22	29	35		40	39	41	40	36	32	29	28	30	32	32	33	29.
3	33	31	31	29	29	28	29	30	32	37	41	43	44			43	40	37	36	36	31	34	34	34	35.
4	33	33	36	35	33	34	34	38	38	39	41	43	45	43	44	43	42	41	40	40	39	38	37	35	39.
5	34	33	33	33	33		33	33	33	34	35	34	31	31	31	30	30	30	30	30	29	29	28	28	32.
6	27	27	27	27	26	26	24	23	25	26	30	33	31	31	33	34	32	28	27	29	25	25			29.
7								26	27	29	26	27	27	27	27	25		24	22	21	19	18	17	16	24.
8	15	13	12	11	10	9	8	9	13	19	21	24	28		26	26	24	21	18	16	16	14	12	12	17.
9	13	13	13	13	13	12	13	13	18	25	31	36	38	37	37	36	32	28	25	23	20	17	17	18	23.
10	18	17	15	14	12	11	13	12	16	21	26	28	31	33	33	32	31	28	25	23	21	19	19	17	22.
11	16	15	15	16	16	16	14	16	20	22	27	33	36	37	37	34	33	31	30	29	29	29	28	27	25.
12	27	26	24	23	20	21	22		24	28	31	33	34	34	34	35	32	28	27	26	24	24	25	25	28.
13	24	24	27	27	28	28	28	24	25	26	26	27	26	24	24	21	21	20	20	19	17	18	17	17	24.
14	17	18		17	17	17	16	16	16	21	25														18.
15																									
16																									
17																			24	22	22	22	21	21	22.
18	19	18	15	15	15	14	16	15	15				31	30	28		21	23	24	25	25	24	25	25	22.
19	24	24	24	22	21	19	20	20	21	24	25	26	27	27	27	25		23	22	21	21	20	19	20	23.
20	20	20	20	21	21	21	21	23	23	24	25							25	25	25	28	31	33	34	25.
21	35	37	37	38	38	38	38	39	39	42	44	46	47	47	48	47	46	47	48	48	48	46	45	45	44.
22	45	42	34	31	30	29	29	29	29	30	30	30	33		34										33.
23															6	5	4	3	2	1	0	0	0	0	3.
24		- 2	- 2																						-2.
25																									
26																									
27																									
28															33	33	33	29	27	26	21	18	20	23	27.
29	23	22	20	19	20	21	22	22	23	23		21	23	23	24	23	22	22	21	20	20	20	20		22.
30	19	19	18	18	19	19	16	15	16	21	29	29	30			27	21	16	13	15	16	15	15	14	19.
31	15	15	16	16	16	15	15	15	14	15	18	20	24	24	22	21	19	15	14	12	12	11	12	11	17.
MEAN	24.	23.	22.	23.	22.	21.	22.	22.	24.	27.	30.	32.	33.	33.	32.	31.	30.	27.	26.	25.	24.	23.	23.	23.	

TOTAL NUMBER OF OBSERVATIONS = 5758 MEAN = 26.

11-0-62

RADIAN

HOURLY TOTAL SOLAR RADIATION(LANGLEY)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

DAY	HOUR 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	TOTAL
1															19	6	0	0	0	0	0	0	0	0	25.
2	0	0	0	0	0	0	0	0	0	10	20		29	15	21	2	0	0	0	0	0	0	0	0	97.
3	0		0	0	0	0	0	0	4	16	24	33	36		12	10	0	0	0	0	0	0	0	0	135.
4	0	0	0	0	0	0	0	0	0	0	7	27	33	12	4	0	0	0	0	0	0	0	0	0	83.
5	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0	0	0	0	0	0	0	0	0	0	8.
6	0	0	0	0	0	0	0	0	0	0	17	22	9	11	10	4	0	0	0	0	0	0	0	0	73.
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.
8	0	0	0	0	0	0	0	0	0	15	22	28	34		16	4	0	0	0	0	0	0	0	0	119.
9	0	0	0	0	0	0	0	0	7	20	24	34	36	24	15	4	0	0	0	0	0	0	0	0	164.
10	0	0	0	0	0	0	0	0	2	13	24	27	31	24	16	5	0	0	0	0	0	0	0	0	142.
11	0	0	0	0	0	0	0	0	0	1	13	27	32	24		0	0	0	0	0	0	0	0	0	97.
12	0	0	0	0	0	0	0	0	2	13	24	28	32	24	18	6	0	0	0	0	0	0	0	0	147.
13	0	0	0	0	0	0	0	0	0	0	3	13	3	0	0	0	0	0	0		0	0	0	0	19.
14	0	0	0		0	0	0	0	4	16	25														45.
15																									
16																									
17																0	0	0	0	0	0	0	0	0	0.
18	0	0	0	0	0	0	0	0	2				33	24	11		0	0	0	0	0	0	0	0	70.
19	0	0	0	0	0	0	0	0	2	7	11	16	33	31	13	2		0	0	0	0	0	0	0	115.
20	0	0	0	0	0	0	0	0	0	0	0							0	0	0	0	0	0	0	0.
21	0	0	0	0	0	0	0	0	0	13	12	12	14	13	12	4	0	0	0	0	0	0	0	0	80.
22	0	0	0	0	0	0	0	0	0	11	12	13	34		32										102.
23															12	9	0	0	0	0	0	0	0	0	21.
24	0	0	0	0																					0.
25																									
26																									
27																									
28														12	13	3	4	0	0	0	0	0	0	0	32.
29	0	0	0	0	0	0	0	0	0	0	5	10	8	1	6	0	0	0	0	0	0	0	0		30.
30	0	0	0	0	0	0	0	0	0	10	14	25	28	14	24	19	3	0	0	0	0	0	0	0	138.
31	0	0	0	0	0	0	0	0	0	9	14	26	28	13	24	19	3	0	0	0	0	0	0	0	136.
TOTAL	0.	0.	0.	0.	0.	0.	0.	0.	23.	154.	274.	347.	453.	242.	278.	97.	10.	0.	0.	0.	0.	0.	0.	0.	

TOTAL NUMBER OF OBSERVATIONS = 5959 TOTAL = 1878.

RADIAN

TEMPERATURE CHANGE FROM 30' TO 100' (DEG F/10)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															-10	- 5	0	19	9	6	8	14	11	20	8.
2	18	21	32	32	31	26	19	13	13	2	- 5		-12	-10	- 7	- 3	0	9	8	9	16	15	18	20	12.
3	19	13	21	21	23	25	20	22	12	- 3	-12	-12	-11		-27	- 5	0	4	8	20	19	16	19	14	10.
4	12	10	17	11	18	5	7	13	3	0	- 1	- 6	- 8	- 4	- 2	0	2	10	14	11	17	27	5	6	7.
5	4	0	1	2	1	2	5	1	1	- 2	- 3	- 4	- 2	- 2	- 2	- 1	0	0	3	1	0	0	0	0	0.
6	0	0	0	0	0	1	9	11	11	6	- 9	- 6	- 3	- 3	- 4	- 4	0	8	16	36					4.
7																									
8																		- 4	- 2	6	12	9	8	0	4.
9	- 2	14	18	8	15	11	8	7	-10	-20									- 2	- 3	- 3	- 9	1	11	3.
10	6	10	- 3	- 5	- 1	11	3	2	2	-17	-24	-25	-26	-26	-25	-20	-15	- 9	- 6	- 8	- 3	- 4	3	- 5	-8.
11	- 2	10	4	10	6	7	0	1	12	7	-12	-26	-26	-26	-29	-19	-18	-12	-10	-14	-10	- 6	-11	- 4	-7.
12	10	11	- 2	5	0	10	18	11	10	-12	-24	-25	-26	-25	-25	-20	-16	- 7	- 2	- 5	0	2	- 5	-10	-6.
13	- 6	0	-10	-14	-14	-13	-15	-14	-14	-16	-18	-21	-19	-15	-16	-16	-15	-15	-15	-15	-14	-14	-14	-14	-14.
14	-14	-14	-12	-12	-11	- 8	- 9	-12	- 7	-20	-21														-13.
15																									
16																									
17																			- 9	- 9	- 8	- 8	- 4	- 2	-7.
18	2	1	- 1	3	6	17	23	13	5				-17	-16	-13		- 9	- 7	- 8	- 8	- 8	- 8	- 8	- 8	-2.
19	- 8	- 6	- 9	-10	- 9	- 4	- 4	- 4	- 5	-13	-14	-16	-21	-19	-15	- 9		- 7	- 8	- 3	- 2	- 1	1	- 1	-9.
20	- 1	4	- 6	- 7	- 6	- 6	- 5	- 7	-10	-11	-13							-11	-10	-10	- 5	- 4	- 3	- 1	-6.
21	- 1	4	- 3	- 4	- 5	- 1	0	0	0	- 6		- 8			- 7	- 5	- 3	- 2	- 1	- 1	- 1				-3.
22		- 2	- 1	- 1	- 1	- 1	0	0	0	- 2	- 2	- 2	- 4		- 4										-2.
23															-23	-22	-18	-15	-17	-18	-18	-17	-17	-16	-19.
24	-16	-12	- 8																						-13.
25																									
26																									
27																									
28														-14	-13	-11	-10	- 6	- 3	17	- 1	- 2	4	13	-2.
29	15	10	13	7	5	0	- 2	1	7	0	-10	-12	-12	-13	-13	-11	- 8	- 8	- 7	- 6	- 4	- 3	- 6		-3.
30	- 4	- 3	1	0	11	6	- 1	0	6	1	- 2	-12	-16			-13	- 9	- 4	- 3	4					-2.
31	- 1	0	- 5	- 6	- 7	- 8	- 6	- 8	- 9	-13	-15	-24	-25	-20	-18	-19	-13	- 5	- 7	- 7	- 6	- 3	- 1	- 1	-10.
MEAN	2.	4.	2.	2.	3.	4.	4.	3.	1.	-7.	-12.	-15.	-16.	-15.	-14.	-11.	- 8.	- 3.	- 3.	0.	-1.	0.	0.	1.	

TOTAL NUMBER OF OBSERVATIONS = 5185 MEAN = -3.

BRADLEY

TEMPERATURE CHANGE FROM 30' TO 200' (DEG F/10)
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

	HOUR																								
DAY	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	MEAN
1															45	40	36	23	6	-27	-39	-39	-39	-36	-3.
2	-39	-33	- 5	-13	- 4	1	1	-28	8	48	61		45	36	29	20	9	-17	-39	-39	-26	0	19	29	2.
3	28	17	17	19	25	28	25	35	36	21	6	8	17		-21	5	2	0	5	17	10	12	20	6	16.
4	18	2	22	11	1	- 3	8	25	6	1	- 2	0	4	0	- 1	0	1	5	12	6	11	29	4	10	7.
5	3	1	0	1	0	0	4	0	2	5	7	2	- 3	- 1	- 2	3								7	2.
6	7		0	0	0	- 2	0	-12	8	17	21	31	18	16	17	18	3	-36	-20	31	29	19	25	54	11.
7	- 9	-12	-18	-13	-18	-15	-22	-33	-39	-33	-36	-39	-39	-39	-39	-39	-39	-39	-39	-39	-39	-39	-39	-39	-32.
8	- 9	0	0	- 2	- 3	- 7	-17	-14	19	70	58	51	73		22	19	5	- 9	-39	-26	- 7	- 4	- 7	-14	6.
9	-17	-31	- 1	-21	9	-15	13	- 7	29	55	66	71	54	24	23	12	11	6	4	- 1	-39	-39	-39	- 3	7.
10	- 8	11	- 9	-11	-30	-39	-20	-35	25	45	36	28	24	12	1	1	7	5	-11	-39	-39	-36	-20	-39	-6.
11	-39	-24	-39	- 7	-14	6	-14	- 8	27	37	13	16	27	21	14	2	0	4	6	- 2	4	15	3	2	2.
12	22	29	8	18	-18	- 4	19	34	43	27	21	26	20	7	7	10	10	11	12	7	2	8	0	- 1	14.
13	1	- 4	0	- 4	- 3	- 4	0	- 2	- 5	- 2	1	10	4	0	- 1	- 4	- 4	- 4	- 5	- 5	- 4	- 4	- 4	- 3	-2.
14	- 3	- 4	- 3	- 2	- 1	3	1	0	5	38	51														7.
15																									
16																									
17																			- 3	- 7	- 6	- 3	- 4	0	-4.
18		-22	-37	-34	-10	-19	6	- 2	-11								-12	-13	-12	-12	- 9	-10	-10	-11	-14.
19	-20	-17	-12	0	-18	-28	-12	- 5	13	19	1	20	14	2	15	11		- 8	2	-13	-11	-16	-20	-16	-4.
20	1				- 5	-10	- 4	-10	-10	- 9	- 8							-10	-10	- 9	6	3	- 6	3	-5.
21	4	2		-12	-11	- 9	- 7	-10	- 8	- 3	4	0	- 3	- 6	- 1	- 8	-12	-11	-11	-10	- 9	- 9	-11	-13	-7.
22	-13	- 8	-13	-15	-15	-13	-13	-11	- 6	- 3	0	- 3	15		9										-7.
23															-12	-19	-19	-24	-24	-24	-24	-24	-23	-23	-22.
24	-22	-20	-15																						-19.
25																									
26																									
27																									
28														7	2	- 6	- 1	-15	-30	1	2	-26	-15	12	-7.
29	24	6	7	15	3	- 5	1	5	24	42	23	10	15	0	8	3	- 6	- 7	- 6	- 7	- 2	- 1	- 4		7.
30	-11	- 9	- 6	- 7	21	23	5	- 2	11	40	70	69	69			34	2	- 7	-28	-38	-31	-38	-26	-19	5.
31																									
MEAN	-4.	-6.	-6.	-4.	-5.	-6.	-1.	-4.	10.	22.	21.	19.	20.	5.	6.	6.	-0.	-8.	-11.	-11.	-10.	-10.	-9.	-5.	

TOTAL NUMBER OF OBSERVATIONS = 5454 MEAN = -0.

APPENDIX A

STABILITY WIND ROSE DIAGRAMS

APPENDIX A
STABILITY WIND ROSE DIAGRAMS

According to the data presented in AEC Safety Guide No. 23, the relationships between stability classes and σ_θ are as follows (the values shown are averages for each stability classification...σ_θ is the standard deviation of horizontal wind direction fluctuations).

Stability Classification	Pasquill Categories	Average Values σ_θ (degrees)
Extremely Unstable	A	25.0°
Moderately Unstable	B	20.0°
Slightly Unstable	C	15.0°
Neutral	D	10.0°
Slightly Stable	E	5.0°
Moderately Stable	F	2.5°

Stability wind roses obtained at the trailers in the monitoring network are displayed in the following tables. Because of the relatively low heights above the surface (9 meters) at which the wind data is taken, the stability distributions are skewed toward the unstable end of the spectrum. That is, the unstable classes (A, B, and C) have a much higher frequency of occurrence than would be obtained with the Pasquill method of stability categorization (or with instruments at higher levels).

Table 1 depicts the frequency distribution of Pasquill stability categories based on σ_θ from data collected by M. M. Pendergast and T. V. Crawford at the Savannah River Plant ("Actual Standard Deviations of Vertical and Horizontal Wind Direction Compared to Estimates from Other Measurements", Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974). Three distinct range patterns of stability class

distributions were observed: low, mid, and high, according to the height at which the σ_θ measurements were taken.

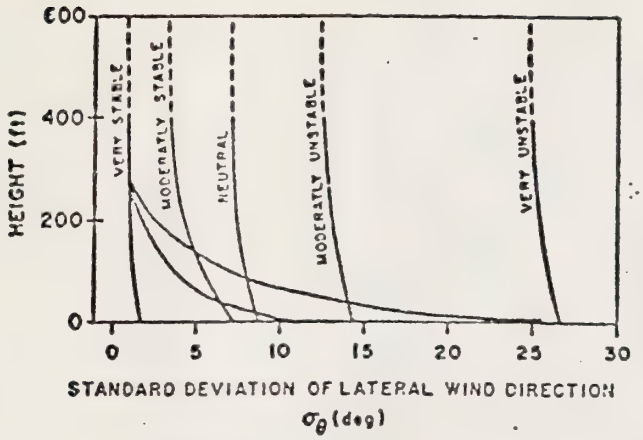
TABLE 1

Frequency distribution of Pasquill Stability Categories

Height, m	Stability Categories based on σ_θ							
	A σ_θ >23	B 18 ≤σ_θ <23	C 13 ≤σ_θ <18	D 8 ≤σ_θ <13	E 4 ≤σ_θ <8	F 2 ≤σ_θ <4	G σ_θ <2	
10	22.6	13.9	21.8	28.9	8.9	0.4	3.5	LOW RANGE
36	19.3	11.8	19.4	32.4	15.9	0.7	0.5	
91	9.6	6.7	13.5	21.7	29.6	16.4	2.5	MID RANGE
137	9.3	5.8	11.7	20.8	28.5	18.4	5.5	
182	7.0	2.9	6.8	17.1	25.9	25.6	14.7	
243	7.7	4.3	9.4	17.7	27.6	22.9	10.4	HIGH RANGE
304	7.2	3.7	8.0	17.2	28.7	23.9	11.3	

Also, Figure 1 (from D. H. Slade, Meteorology and Atomic Energy, 1968, p. 52) demonstrates that the line representing very stable conditions (which by their nature are associated with light winds) branches into three separate lines near the ground. The curve at the left represents the smallest values of σ_θ usually observed. The curve that branches off to the right reflects the contribution of very low-level wind direction meander to the total standard deviation. These meandering oscillations decrease in amplitude very rapidly with height under stable conditions. The central curve represents typical inversion conditions. Actually, for a given stability condition, values of σ_θ will always be greater when the wind is light than when it is strong. This phenomena is most noticeable in the lowest layers.

Figure 1



The vertical variation of the lateral wind-direction standard deviation (σ_θ) for various stability regimes. The curves represent average or typical conditions with the exception of the two outer "very stable" lines, which represent extremes.

The large surface values of σ_θ for unstable conditions do not decrease very rapidly with height. As in the case of very stable conditions, the greatest lateral fluctuations during a very unstable thermal structure occur with very light winds. As a general rule, for a given insolation condition, increasing wind speeds are associated with profiles of σ_θ that tend toward neutral stability.

The majority of the trailers in the network recorded very light winds throughout the month. Therefore, the stability distributions had a predominance of high σ_θ values and, hence, unstable classifications. Those trailers with the highest average winds (and fewest nearby obstacles to the flow) generally had the more reasonable and representative low-level stability class distributions.

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18					4						1	4	2	1			12
7 - 12		1	2	2	26	56	5	3	2	9	6	17	8	6			143
3 - 7	2	1	10	53	121	182	49	47	15	20	19	34	48	26	19	7	653
LT 3	9	13	29	176	434	246	87	73	37	22	39	53	105	48	29	14	1414
TOTAL	11	15	41	231	585	484	141	123	54	51	65	108	163	81	48	21	2222

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 802(36.09 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24												1	1				2
12 - 18						1						4	4	1			10
7 - 12		1	2	2	20	25	3	2	1			19	10	3			88
3 - 7	2	1	10	41	103	105	17	15	5	3	6	41	61	15	6	4	435
LT 3	3	1	10	88	183	65	13	12	5	11	1	31	98	30	11	3	565
TOTAL	5	3	22	131	306	196	33	29	11	14	7	96	174	49	17	7	1100

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 238(21.64 %)

BRADBURN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24													1				1
12 - 18					2	6						4	3	2			17
7 - 12				2	27	98	1					15	11	5			159
3 - 7	3	1	28	140	154	130	3	5			4	99	89	9	2	1	668
LT 3	6	4	36	259	249	100	2	2	1	3	1	54	135	18	0	1	871
TOTAL	9	5	64	401	432	334	6	7	1	3	5	172	239	34	2	2	1716

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 370(21.56 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24													1				1
12 - 18				1	1	3							5				10
7 - 12				0	12	66						11	6	1			96
3 - 7	2		4	71	77	77					1	26	35	3			296
LT 3	6	1	8	248	162	68			1		0	19	59	14			586
TOTAL	8	1	12	320	252	214	0	0	1	0	1	56	106	18	0	0	989

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 264(26.69 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18						3											3
7 - 12					1	25						2	1				29
3 - 7				10	12	13						2	1				38
LT 3				61	46	22	2					2	1				134
TOTAL	0	0	0	71	59	63	2	0	0	0	0	6	3	0	0	0	204

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 97(47.55 %)

PRELIMINARY

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 20 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24																	
18 -	24												1	3				4
12 -	18				1	7	13					1	12	14	4			52
7 -	12		2	4	6	86	270	9	5	3	9	6	64	36	15			515
3 -	7	9	3	52	315	467	507	69	67	20	23	30	202	234	53	27	12	2090
LT	3	25	20	90	846	1073	488	93	79	40	35	38	175	425	112	38	18	3595
TOTAL		34	25	146	1168	1633	1278	171	151	63	67	75	454	712	184	65	30	6256

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 1771(28,31 %)

PERCENTAGE OF A STABILITY - 35,52 %
PERCENTAGE OF B STABILITY - 17,58 %
PERCENTAGE OF C STABILITY - 27,43 %
PERCENTAGE OF D STABILITY - 15,81 %
PERCENTAGE OF E STABILITY - 3,26 %

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18						6	11	5				3	1	3			29
7 - 12				5	55	45	61	17	1		2	2	10	21	15		234
3 - 7	2	2	1	12	74	169	80	49	16	7	7	15	14	41	54	15	558
LT 3	46	33	13	49	79	201	169	100	39	32	25	27	50	60	126	66	1115
TOTAL	48	35	14	66	208	421	321	171	56	39	34	47	75	125	195	81	1936

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 321(16.58 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18					2	3	12							2	1		20
7 - 12	1			2	31	26	42	3			2	4	5	27	15		158
3 - 7	3			1	58	110	78	35	2	2	3	10	13	55	43	9	422
LT 3	23	5	2	11	23	84	86	43	4	2	8	10	11	39	61	27	439
TOTAL	27	5	2	14	114	223	218	81	6	4	13	24	29	123	120	36	1039

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 91(8.76 %)

ERRATUM

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24 :																	
18 - 24 :																	
12 - 18 :						7	8										15
7 - 12 :				3	42	78	27	2				2	1	24	24	2	205
3 - 7 :	4	1		6	99	170	85	16	1	4	3	4	13	71	59	14	550
LT 3 :	27	7	2	13	27	125	80	21	4	0	0	2	9	51	62	41	471
TOTAL :	31	8	2	22	168	380	200	39	5	4	3	8	23	146	145	57	1241

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 102(8.22 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18						9	2							2	38		51
7 - 12				11	21	35	7							48	170	4	296
3 - 7	2			25	42	94	13	2	1				9	111	191	23	513
LT 3	32	5	1	60	14	86	27	8	0			1	2	77	108	57	478
TOTAL	34	5	1	96	77	224	49	10	1	0	0	1	11	238	507	84	1338

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 109(8.15 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18															7		7
7 - 12				9	8	6								3	18		44
3 - 7	3	1		7	7	17	1							9	46	10	101
LT 3	15	0		39	4	14	7	1						3	32	38	153
TOTAL	18	1	0	55	19	37	8	1	0	0	0	0	0	15	103	48	305

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 47(15.41 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 21 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24																	
18 -	24																	
12 -	18					2	25	33	5				3	1	7	46		122
7 -	12	1			30	157	190	137	22	1		4	8	16	123	242	6	937
3 -	7	14	4	1	51	280	560	257	102	20	13	13	29	49	287	393	71	2144
LT	3	145	51	18	173	149	516	371	170	46	33	32	39	71	241	396	232	2683
TOTAL		160	55	19	254	588	1291	798	299	67	46	49	79	137	658	1077	309	5886

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 670(11.38 %)

PERCENTAGE OF A STABILITY - 32.89 %
PERCENTAGE OF B STABILITY - 17.65 %
PERCENTAGE OF C STABILITY - 21.08 %
PERCENTAGE OF D STABILITY - 22.73 %
PERCENTAGE OF E STABILITY - 5.18 %

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24												2					2
12 - 18				8	144	7	1				1	12	2				175
7 - 12			13	111	437	86	38	11	1		5	40	37	2		1	782
3 - 7	14	19	100	180	258	152	18	20	17	10	24	109	55	23	5	5	1009
LT 3	23	65	105	135	166	123	62	46	25	30	34	59	36	31	28	16	984
TOTAL	37	84	218	434	1005	368	119	77	43	40	64	222	130	56	33	22	2952

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 339(11.48 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24												4	1				5
12 - 18				1	51		2					12	9				75
7 - 12	1		5	54	239	36	7				2	99	44	3			490
3 - 7	7	14	37	116	134	48	10	1	1	9	24	131	62	10	4	3	611
LT 3	12	32	35	76	57	41	28	9	3	6	13	63	38	17	10	9	449
TOTAL	20	46	77	247	481	125	47	10	4	15	39	309	154	30	14	12	1630

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 188(11.53 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24												6					6
12 - 18				6	92							14	1				113
7 - 12		1	5	88	450	31	3	1			3	103	34		1		720
3 - 7	15	17	79	202	207	33	3	0		2	21	158	59	7	9	7	819
LT 3	13	38	58	123	73	35	19	1		0	16	45	25	14	11	16	487
TOTAL	28	56	142	419	822	99	25	2	0	2	40	326	119	21	21	23	2145

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 198(9.23 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24																	
18 -	24												2					2
12 -	18				6	116	1						4	1				128
7 -	12	1	1	6	73	404	17	1				1	22	8	2	12	1	549
3 -	7	20	2	39	107	140	10	1	1	1		2	50	28	14	24	15	454
LT	3	12	8	31	89	62	17	5	1	0	2	4	25	10	6	13	19	304
TOTAL		33	11	76	275	722	45	7	2	1	2	7	103	47	22	49	35	1437

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 129(8.98 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18					48												48
7 - 12	1			5	112	6						5	2				131
3 - 7	8		2	15	19	1					2	12	6			5	70
LT 3	5		3	34	18	0	1	1			4	11	7		1	6	91
TOTAL	14	0	5	54	197	7	1	1	0	0	6	28	15	0	1	11	340

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 70(20.59 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 22 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24																	
18 -	24												14	1				15
12 -	18				21	451	8	3				1	42	13				539
7 -	12	3	2	29	331	1642	176	49	12	1		11	269	125	7	13	2	2672
3 -	7	64	52	257	620	758	244	32	22	19	21	73	460	210	54	42	35	2963
LT	3	64	146	239	455	378	221	118	60	29	40	73	205	117	70	65	66	2346
TOTAL		131	200	525	1427	3229	649	202	94	49	61	158	990	466	131	120	103	8535

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 924(10.83 %)

PERCENTAGE OF A STABILITY - 34.59 %
PERCENTAGE OF B STABILITY - 19.10 %
PERCENTAGE OF C STABILITY - 25.13 %
PERCENTAGE OF D STABILITY - 16.84 %
PERCENTAGE OF E STABILITY - 3.98 %

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24										13	17				3		33
18 -	24										4	5		2	2	12	4	29
12 -	18	2							6	17	17	10	2	15	11	5	4	89
7 -	12	3				2	1	4	36	42	12	9	5	15	22	24	13	188
3 -	7	6	14	24	25	57	49	50	36	59	46	34	44	115	76	33	11	679
LT	3	10	28	33	49	59	50	51	48	53	37	31	25	44	39	25	24	606
TOTAL		21	42	57	74	118	100	105	126	171	129	106	76	191	150	102	56	1624

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 82(5,05 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24										13	33				2		48
18 -	24	2						1		1	1	4	3	5	1	3		21
12 -	18	1						3	31	56	27	12	3	8	10	7	5	163
7 -	12	2				1	8	16	51	97	43	25	16	15	16	20	3	313
3 -	7	6	9	7	16	32	50	58	35	90	184	81	51	102	54	13	7	795
LT	3	8	5	12	14	19	18	22	28	52	97	49	28	20	18	14	8	412
TOTAL		19	14	19	30	52	76	100	145	296	365	204	101	150	99	59	23	1752

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 24(1.37 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24										3	23						26
18 -	24										3	5	1	4		2		15
12 -	18							1	16	13	23	8	0	5	8	2		76
7 -	12	2				1	6	16	29	52	22	16	13	29	52	17	3	258
3 -	7	3	12	5	16	24	52	39	31	70	209	68	65	171	99	31	7	902
LT	3	8	7	6	12	11	27	19	19	28	92	51	54	44	17	11	12	418
TOTAL		13	19	11	28	36	85	75	95	163	352	171	133	253	176	63	22	1695

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 17(1.00 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24								1									1
12 - 18							1	7	3	2				3	1		17
7 - 12							4	13	11	2	1		10	35	24	2	102
3 - 7	8	8	7	11	12	16	14	9	17	57	27	24	84	63	30	6	393
LT 3	6	5	2	11	11	13	14	3	13	44	15	18	15	18	15	16	219
TOTAL	14	13	9	22	23	29	33	33	44	105	43	42	109	119	70	24	732

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 8(1.09 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18																	
7 - 12							1	4									5
3 - 7	1	2	2	2	2	3	2	2	1	14	4	1		2	1	3	42
LT 3	8	3	1	2	1	2	0	2	3	8	1	0		3	0	8	42
TOTAL	9	5	3	4	3	5	3	8	4	22	5	1	0	5	1	11	89

WIND DIRECTION

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 10(11.24 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 23 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24										29	73				5		107
18 -	24	2						1	1	1	8	14	4	11	3	17	4	66
12 -	18	3						5	60	89	69	30	5	28	32	15	9	345
7 -	12	7				4	15	41	133	202	79	51	34	69	125	85	21	866
3 -	7	24	45	45	70	127	170	163	113	237	510	214	185	472	294	108	34	2811
LT	3	39	48	54	88	100	110	107	100	151	286	151	128	126	97	67	68	1720
TOTAL		75	93	99	158	231	295	317	407	680	981	533	356	706	551	297	136	5915

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 141(2,38 %)

PERCENTAGE OF A STABILITY - 27,46 %
PERCENTAGE OF B STABILITY - 29,62 %
PERCENTAGE OF C STABILITY - 28,66 %
PERCENTAGE OF D STABILITY - 12,38 %
PERCENTAGE OF E STABILITY - 1,50 %

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24							24	2									26
18 -	24							28	9		2	10	4					53
12 -	18							13	24	2	1	7	11	1				59
7 -	12				5	16	35	184	49	8	6	14	25	5	1			348
3 -	7	4	21	57	127	45	63	98	35	19	27	49	35	18	3	2	2	605
LT	3	26	81	256	308	172	156	176	80	57	75	122	113	60	20	21	28	1751
TOTAL		30	102	313	440	233	254	523	199	86	111	202	188	84	24	23	30	2842

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 1278(44,97 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24							4	2									6
18 - 24							7	5		1		2					15
12 - 18					1		8	20	7	13	5	4					58
7 - 12			1	3	7	5	65	31	18	26	35	15					206
3 - 7	3	20	31	72	33	8	13	47	29	63	108	56	15	4	3	3	508
LT 3	15	31	78	121	44	16	8	30	40	128	141	83	32	6	6	6	785
TOTAL	18	51	110	196	85	29	105	135	94	231	289	160	47	10	9	9	1578

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 446(28.26 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24							2				1						3
18 - 24							2	2		1	3	1					9
12 - 18							11	8	2	5	11	12	3				52
7 - 12		4	5	12	11	2	30	28	7	17	73	92	31	16			328
3 - 7	2	21	65	137	43	3	7	16	16	57	174	117	25	8	3	3	697
LT 3	20	29	112	183	85	6	4	15	34	98	149	122	39	6	12	13	927
TOTAL	22	54	182	332	139	11	56	69	59	178	411	344	98	30	15	16	2016

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 475(23.56 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24											1						1
18 - 24							2	4			0						6
12 - 18							7	0	1		2	3		1			14
7 - 12	2	11	10	15	8	1	8	10	3	4	12	14	6	7	1		112
3 - 7	4	64	192	131	37	3	5	8	1	6	29	27	6	8	0	2	523
LT 3	9	101	308	219	80	3	4	7	5	13	35	27	7	7	10	5	840
TOTAL	15	176	510	365	125	7	26	29	10	23	79	71	19	23	11	7	1496

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 459(30,68 %)

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18																	
7 - 12		5	2	2	1		1										11
3 - 7	4	33	44	38	11		0	1	3	1	3	1			1	1	141
LT 3	11	62	125	82	34		0	0	2	5	2	0			0	5	328
TOTAL	15	100	171	122	46	0	1	1	5	6	5	1	0	0	1	6	480

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 203(42.29 %)

II C-66

STABILITY WIND ROSE DIAGRAM

ATLANTIC RICHFIELD COMPANY
TRAILER NO. - 24 PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
							WIND DIRECTION										
GT 24							30	4			2						36
18 - 24							39	20		4	13	7					83
12 - 18					1		39	52	12	19	25	30	4	1			183
7 - 12	2	20	18	37	43	43	288	118	36	53	134	146	42	24	1		1005
3 - 7	17	159	389	505	169	77	123	107	68	154	363	236	64	23	9	11	2474
LT 3	83	311	898	923	408	136	133	121	138	346	501	376	139	40	51	57	4661
TOTAL	102	490	1305	1465	621	256	652	422	254	576	1038	795	249	88	61	68	8442

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 2861(33.89 %)

PERCENTAGE OF A STABILITY - 33.67 %
PERCENTAGE OF B STABILITY - 18.69 %
PERCENTAGE OF C STABILITY - 23.88 %
PERCENTAGE OF D STABILITY - 17.72 %
PERCENTAGE OF E STABILITY - 5.69 %

BRADTAN

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 8 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24 :											13	17				3 :	33
18 -	24 :	1										4	5		2	2	12 :	26
12 -	18 :	2	2							6	17	17	10	2	15	11	5 :	87
7 -	12 :	2	3				2	1	4	36	42	12	9	5	15	22	24 :	177
3 -	7 :	3	6	14	24	25	57	49	50	36	59	46	34	44	115	76	33 :	671
LT	3 :	13	10	28	33	49	59	50	51	48	53	37	31	25	43	39	25 :	594
TOTAL	:	21	21	42	57	74	118	100	105	126	171	129	106	76	190	150	102 :	1588

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 82(5.16 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 8 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS = B

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24 :											13	33				2 :	48
18 - 24 :		2						1		1	1	4	3	5	1	3 :	21
12 - 18 :	2	1						3	31	56	27	12	3	8	10	7 :	160
7 - 12 :	2	2				1	8	16	51	97	43	25	16	15	16	20 :	312
3 - 7 :	4	6	9	7	16	32	50	58	35	90	184	81	51	102	54	13 :	792
LT 3 :	5	8	5	12	14	19	18	22	28	52	97	49	28	20	18	14 :	409
TOTAL :	13	19	14	19	30	52	76	100	145	296	365	204	101	150	99	59 :	1742

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 24(1,38 %)

PRELIMINARY

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE.
LEVEL = 8 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24											3	23					26
18 - 24											3	5	1	4		2	15
12 - 18								1	16	13	23	8	0	5	8	2	76
7 - 12	1	2				1	6	16	29	52	22	16	13	29	52	17	256
3 - 7	4	3	12	5	16	24	52	39	31	70	209	68	65	171	99	31	899
LT 3	4	6	7	6	12	11	27	19	19	28	92	51	54	44	17	11	410
TOTAL	9	13	19	11	28	36	85	75	95	163	352	171	133	253	176	63	1682

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 17(1.01 %)

REDACTED

STABILITY WIND ROSE DIAGRAM

A C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 8 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24									1								1
12 - 18								1	7	3	2				3	1	17
7 - 12								4	13	11	2	1		10	35	24	100
3 - 7	1	8	8	7	11	12	16	14	9	17	57	27	24	84	63	30	388
LT 3	9	6	5	2	11	11	13	14	3	13	44	15	18	15	18	15	212
TOTAL	10	14	13	9	22	23	29	33	33	44	105	43	42	109	119	70	718

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 8(1.11 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 8 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18																	
7 - 12								1	4								5
3 - 7	2	1	2	2	2	2	3	2	2	1	14	4	1		2	1	41
LT 3	3	7	3	1	2	1	2	0	2	3	8	1	0		3	0	36
TOTAL	5	8	5	3	4	3	5	3	8	4	22	5	1	0	5	1	82

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 10(12.20 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 8 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24											29	73				5	107
18 -	24	1	2						1	1	1	8	14	4	11	3	17	63
12 -	18	4	3						5	60	89	69	30	5	28	32	15	340
7 -	12	5	7				4	15	41	133	202	79	51	34	69	125	85	850
3 -	7	14	24	45	45	70	127	170	163	113	237	510	214	185	472	294	108	2791
LT	3	34	39	48	54	88	99	110	107	100	150	286	151	128	126	97	67	1684
TOTAL		58	75	93	99	158	230	295	317	407	679	981	533	356	706	551	297	5835

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 141(2.42 %)

PERCENTAGE OF A STABILITY - 27.22 %
PERCENTAGE OF B STABILITY - 29.85 %
PERCENTAGE OF C STABILITY - 28.83 %
PERCENTAGE OF D STABILITY - 12.31 %
PERCENTAGE OF E STABILITY - 1.41 %

CONFIDENTIAL

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 30 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS = A

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18																	
7 - 12																	
3 - 7																	
LT 3																	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE = 0(0.00 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 30 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18																	
7 - 12																	
3 - 7																	
LT 3																	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 30 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18																	
7 - 12																	
3 - 7																	
LT 3																	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 30 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH		WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24	:																	:
18 - 24	:																	:
12 - 18	:																	:
7 - 12	:																	:
3 - 7	:																	:
LT 3	:																	:
TOTAL	:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	: 0

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 30 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 16																	
7 - 12																	
3 - 7																	
LT 3																	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 30 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24																	
18 - 24																	
12 - 18																	
7 - 12																	
3 - 7																	
LT 3																	
TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

PERCENTAGE OF A STABILITY - 0.00 %
PERCENTAGE OF B STABILITY - 0.00 %
PERCENTAGE OF C STABILITY - 0.00 %
PERCENTAGE OF D STABILITY - 0.00 %
PERCENTAGE OF E STABILITY - 0.00 %

RADIAN

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 100 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24								7	1	10	60	14	1		5	1	99
18 -	24							2	5	17	11	16	6	12	16	2	4	91
12 -	18	4			1	2	6	15	9	25	23	12	7	13	17	16	5	155
7 -	12	0	3	1	9	9	14	14	17	43	17	11	16	95	12	6	3	270
3 -	7	8	17	24	26	54	50	27	55	30	27	27	40	25	29	26	18	483
LT	3	8	15	13	12	8	22	10	10	7	7	8	8	11	15	6	9	169
TOTAL		20	35	38	48	73	92	68	103	123	95	134	91	157	89	61	40	1267

WIND DIRECTION

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

BRAIDWOOD

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 100 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24	1							1	2	7	23	2	2	2	4		44
18 - 24	1						1	6	22	30	8	1	5	8	3	5	90
12 - 18	1			1		3	5	25	55	33	10	6	3	15	13	6	176
7 - 12	0			3	3	6	21	23	45	37	27	49	41	15	4	0	274
3 - 7	7	6	9	11	19	15	21	28	40	57	86	45	36	24	25	12	441
LT 3	3	1	5	2	2	6	3	2	6	3	5	10	5	2	6	4	65
TOTAL	13	7	14	17	24	30	51	85	170	167	159	113	92	66	55	27	1090

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0,00 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 100 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24							1	3	1	3	11		4		1		24
18 - 24							3	16	17	16	14		5	4	1		76
12 - 18	3				2	4	8	59	45	13	9	15	16	32	6	8	220
7 - 12	0	1		5	21	30	38	31	53	26	16	64	87	62	9	2	445
3 - 7	6	5	8	16	21	12	19	32	45	46	57	97	77	75	42	17	575
LT 3	2	5	6	3	5	6	2	2	3	5	2	5	3	2	9	5	65
TOTAL	11	11	14	24	49	52	71	143	164	109	109	181	192	175	68	32	1405

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0,00 %)

RADIAN

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 100 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24							2	4			4	2				1	13
18 - 24							4	9	2	7	3	1	3	1		1	31
12 - 18					8	1	17	30	24	6	2	0	4	23	12	5	132
7 - 12	1		2	4	22	30	29	13	29	15	8	18	37	52	32	1	293
3 - 7	11	9	7	8	13	14	7	5	18	11	7	23	42	35	43	14	267
LT 3	7	3	5	1	2	1	0	0	0	0	0	0	2	4	1	6	32
TOTAL	19	12	14	13	45	46	59	61	73	39	24	44	88	115	88	28	768

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 100 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24								2									2
18 - 24							1	3									4
12 - 18					1	1	2	8	4				1	13	15		45
7 - 12	3	1			5	9	6	3	8	2		3	19	64	6	10	139
3 - 7	9	3		1	4	3	1	1	1	4	1	16	18	1	5	16	84
LT 3	5	6	3	0	2	0	0	0	0	1	0	0	0	1	0	4	22
TOTAL	17	10	3	1	12	13	10	17	13	7	1	19	38	79	26	30	296

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 100 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH	WIND DIRECTION N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24	1						3	17	4	20	98	18	7	2	10	2	182
18 - 24	1						11	39	58	64	41	8	25	29	6	10	292
12 - 18	8			2	13	15	47	131	153	75	33	28	37	100	62	24	728
7 - 12	4	5	3	21	60	89	108	87	178	97	62	150	279	205	57	16	1421
3 - 7	41	40	48	62	111	94	75	121	134	145	178	221	198	164	141	77	1850
LT 3	25	30	32	18	19	35	15	14	16	16	15	23	21	24	22	28	353
TOTAL	80	75	83	103	203	233	259	409	543	417	427	448	567	524	298	157	4826

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 0(0.00 %)

PERCENTAGE OF A STABILITY - 26.25 %
PERCENTAGE OF B STABILITY - 22.59 %
PERCENTAGE OF C STABILITY - 29.11 %
PERCENTAGE OF D STABILITY - 15.91 %
PERCENTAGE OF E STABILITY - 6.13 %

RADIAN

STABILITY WIND ROSE DIAGRAM

(C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 200 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - A

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24	1							4	3	2	24	6	1	1	9	5	56
18 -	24	3						6	8	15	10	13	7	9	10	8	1	90
12 -	18	4				2	7	9	10	21	40	12	4	17	21	5	2	154
7 -	12	0			1	14	11	18	33	38	53	19	23	39	64	20	1	334
3 -	7	5	15	10	17	27	33	30	31	53	52	41	61	72	63	51	29	590
LT	3	24	43	23	23	22	19	17	15	14	17	12	32	22	40	28	39	390
TOTAL		37	58	33	41	65	70	80	101	144	174	121	133	160	199	121	77	1614

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 16(0.99 %)

RELEASED

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 200 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - B

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24									6	21	51	17	5		3	1	104
18 -	24	1							20	43	33	18	4	10	3	10	2	144
12 -	18	1	1					1	28	63	40	21	10	19	16	18	7	225
7 -	12	0	0				8	12	35	48	58	34	44	66	53	18	2	378
3 -	7	7	4	8	8	14	12	15	11	40	52	48	59	62	57	32	14	443
LT	3	9	4	21	13	10	3	1	5	4	3	7	7	7	10	13	14	131
TOTAL		18	9	29	21	24	23	29	99	204	207	179	141	169	139	94	40	1425

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 3(0,21 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 200 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - C

WIND SPEED MPH	WIND DIRECTION																
	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24 :	1							9	2	6	35	10	5	1	6	3	78
18 - 24 :	2						3	15	25	18	10	3	6	3	1	7	93
12 - 18 :	1				1	1	12	30	46	38	11	25	24	25	30	13	257
7 - 12 :	0		1		5	26	36	26	29	34	14	43	59	63	15	6	357
3 - 7 :	8	7	6	15	26	23	15	8	14	22	36	59	65	72	36	25	437
LT 3 :	17	16	10	12	10	1	1	1	1	1	2	2	10	8	8	18	118
TOTAL :	29	23	17	27	42	51	67	89	117	119	108	142	169	172	96	72	1340

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 6(0.45 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 200 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - D

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24								9		1	13						23
18 -	24								10	3	4	2		1	1		2	23
12 -	18						5	10	20	18	10	0	3	7	16	2	4	95
7 -	12					1	14	17	15	17	10	5	4	14	42	19	0	158
3 -	7	5	4	7	5	13	8	8	5	4	4	5	11	31	58	24	9	201
LT	3	16	13	6	6	0	1	0	0	0	0	3	2	2	4	10	17	80
TOTAL		21	17	13	11	14	28	35	59	42	29	28	20	55	121	55	32	580

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 12(2,07 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 200 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - E

WIND SPEED MPH	N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT 24								1	1								2
18 - 24							1	6	0								7
12 - 18						1	4	4	3	5							17
7 - 12	1					4	6	6	2	0			1	2	1	6	29
3 - 7	2					1	2	1	0	0	1		1	2	2	8	20
LT 3	12	6		2	1	0	0	0	0	0	0		0	0	1	12	34
TOTAL	15	6	0	2	1	6	13	18	6	5	1	0	2	4	4	26	109

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 10(9.17 %)

STABILITY WIND ROSE DIAGRAM

C-B SHALE OIL PROJECT METEOROLOGICAL TOWER SITE
LEVEL = 200 FEET PERIOD(12/ 1/74 TO 12/31/74)

STABILITY CLASS - TOTAL

WIND SPEED MPH		WIND DIRECTION																
		N	NNE	NE	ENE	E	ESE	SE	SSE	S	SSW	SW	WSW	W	WNW	NW	NNW	TOTAL
GT	24	2							23	12	30	123	33	11	2	18	9	263
18 -	24	6						10	59	86	65	43	14	26	17	19	12	357
12 -	18	6	1			3	14	36	92	151	133	44	42	67	78	55	26	748
7 -	12	1	0	1	1	20	63	89	115	134	155	72	114	179	224	73	15	1256
3 -	7	27	30	31	45	80	77	70	56	111	130	131	190	231	252	145	85	1691
LT	3	77	83	61	57	45	25	20	22	20	22	27	46	44	65	61	98	773
TOTAL		119	114	93	103	148	179	225	367	514	535	440	439	558	638	371	245	5088

TOTAL NUMBER OF CALMS DISTRIBUTED ABOVE - 47(0.92 %)

PERCENTAGE OF A STABILITY - 31.72 %
PERCENTAGE OF B STABILITY - 28.01 %
PERCENTAGE OF C STABILITY - 26.34 %
PERCENTAGE OF D STABILITY - 11.40 %
PERCENTAGE OF E STABILITY - 2.14 %